

3.12 Socioeconomics and Communities

This section describes the regulatory setting and the affected environment for socioeconomics and communities; the impacts that would result from implementation of the Fresno to Bakersfield Locally Generated Alternative (F-B LGA); and mitigation measures applicable to the F-B LGA that would reduce these impacts, Chapter 5 of this Draft Supplemental Environmental Impact Report/Environmental Impact Statement (EIR/EIS) provides an analysis of potential impacts to environmental justice populations. Demographic analysis of socioeconomics; communities, including race, ethnicity, income, and housing characteristics; and property displacements and relocation impacts are provided in the *F-B LGA: Community Impact Assessment Technical Report* (California High-Speed Rail Authority [Authority] and Federal Railroad Administration [FRA] 2017).

This section presents the population trends, demographic characteristics, housing, household income, fiscal resources, and agricultural industry characteristics of the study area. The methodologies used to collect and compile data for the affected environment section are summarized below and detailed in Appendix A of the *F-B LGA: Community Impact Assessment Technical Report* (Authority and FRA 2017). The detailed data used to describe the affected environment are presented in the community profiles provided in Appendix B of the *F-B LGA: Community Impact Assessment Technical Report* (Authority and FRA 2017).

3.12.1 Regulatory Setting

Federal, state, and local laws, regulations, orders, or plans relevant to socioeconomics and communities affected by the project are listed below, and are presented in detail in Section 3.12.2 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA, 2014a: pages 3.12-2 through 3.12-4). All federal laws presented in Section 3.12.2.1 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA, 2014a: pages 3.12-5) are applicable to the F-B LGA. Additionally, all state laws presented in Section 3.12.2.2 of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA, 2014a: pages 3.12-4 and 3.12-5) are applicable to the F-B LGA.

3.12.1.1 Federal

- Procedures for Considering Environmental Impact (64 Federal Register 28545)
- Improving Access to Services for Persons with Limited English Proficiency (USEO 13166)
- Protection of Children from Environmental Health Risks and Safety Risks (USEO 13045)
- Americans with Disabilities Act (42 U.S.C. §§ 12101–12213)
- Uniform Relocation Assistance and Real Property Acquisition Policies Act (42 U.S.C. § 61)
- United States Environmental Protection Agency School Siting Guidelines
- Farmland Protection Policy Act of 1981 (7 U.S.C. §§ 4201–4209 and 7 C.F.R. Part 658)

3.12.1.2 State

- California Relocation Act (California Government Code Section 7260 et seq.)
- California High-Speed Rail Authority Title VI Plan
- California High-Speed Rail Authority Limited English Proficiency Policy and Plan
- California Land Conservation Act of 1965 (California Government Code Section 51200 et seq.)

3.12.1.3 Regional and Local

Section 3.0, Regulatory Setting, in the Fresno to Bakersfield Section Community Impact Assessment Technical Report (Authority and FRA 2012a) provides a discussion of applicable regional and local regulations related to socioeconomic and community issues applicable to the

HSR project, including the F-B LGA. Such regulations include the Kern County General Plan (2007), Kern County Bicycle Facilities Plan, the Kern County Economic Development Strategy, 2007 Regional Housing Assessment, City of Shafter General Plan, City of Shafter Municipal Code, Metropolitan Bakersfield General Plan, Downtown Bakersfield Redevelopment Plan, Southeast Bakersfield Redevelopment Plan, and the Bakersfield Zoning Plan. Detailed review and a list of local regulations associated with socioeconomic and community issues from those agencies within the F-B LGA study area that were changed, updated, or added since publication of the Fresno to Bakersfield Section Community Impact Assessment Technical Report (Authority and FRA 2012) are provided in Section 3, Regulatory Setting, of the F-B LGA Community Impact Assessment (Authority and FRA 2017).

3.12.2 Methods for Evaluating Impacts

The process for evaluating impacts to socioeconomics and communities followed the methodology that was used for the Fresno to Bakersfield Section Community Impact Assessment Technical Report (Authority and FRA 2012) in order to maintain comparability between the F-B LGA and the high-speed rail (HSR) project alternatives presented in the Final EIR/EIS for the Fresno to Bakersfield Section (Fresno to Bakersfield Section Final EIR/EIS) (Authority and FRA 2014). Specific details on the methodologies used for this analysis can be found in Section 5.1.4.1 of the F-B LGA: Community Impact Assessment Technical Report (Authority and FRA 2017). In most cases, the methodology is the same as in the Fresno to Bakersfield Section Final EIR/EIS but is presented again to ensure clear understanding.

The following sections summarize the methodologies that were used in the analysis for socioeconomic and community issues. Specific details on these methodologies can be found in the F-B LGA: Community Impact Assessment Technical Report (Authority and FRA 2017), as well as the Fresno to Bakersfield Section: Community Impact Assessment Technical Report (Authority and FRA 2012a) and the Fresno to Bakersfield Section: Draft Relocation Impacts Report (Authority and FRA 2012b).

3.12.2.1 Community Effects

Disruption or Division of Established Communities

Operation of the F-B LGA could potentially divide adjacent communities by physically removing homes, businesses, and important community facilities. This could disrupt established patterns of interactions among community residents, isolate one part of a community from another, or disrupt residents' access to community facilities and services. In addition, other environmental impacts on communities or neighborhoods—such as substantial increases in noise or traffic—could similarly disrupt established patterns of community members' interactions in the project vicinity. Similarly, substantial changes in visual quality or aesthetics could also result in a perceived change to community character or the quality of life experienced in affected neighborhoods. (Refer to Section 3.2, Transportation; Section 3.4, Noise and Vibration; and Section 3.16, Aesthetics and Visual Resources of this Draft Supplemental EIR/EIS for a full discussion of such impacts in the communities located along the F-B LGA alignment.)

Initially, potential impacts were identified through intensive review of aerial photographs and GIS layers showing the spatial relationship between the proposed alternative and existing community resources. Census information, the assessor's parcel data, and other databases were used to identify the number and types of community facilities that may be displaced or disrupted. Secondary research, such as a review of local planning documents and city web sites, was conducted on the unique attributes and resources of the affected communities. Potential impact findings were verified through field research and discussions with persons knowledgeable about local community conditions and neighborhood characteristics, such as local elected officials, service providers, city planners, and community residents.

Temporary or permanent barriers that could be created by the project were identified to determine whether they would isolate portions of a community, separate residents from important community facilities or services, or alter access to such resources. For the purpose of this

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analysis, a community is defined as "a population rooted in one place, where the daily life of each member involves contact with and dependence on other members," and community cohesion is defined as "the degree to which residents have a 'sense of belonging' [...] and the degree of interaction among the individuals, groups, and institutions that make up the community" (Caltrans 1997).

Children's Health and Safety

The analysis consisted of conducting a demographic analysis and review of the F-B LGA alignment, station, and heavy maintenance facility locations to qualitatively assess whether the F-B LGA would result in children's environmental health and safety risks. The analysis is based on the environmental documentation provided in the Fresno to Bakersfield Section Final EIR/EIS and other sections of this Draft Supplemental EIR/EIS. The following sections were reviewed because these resources would have the greatest potential to affect children's health and safety: Section 3.2, Transportation; Section 3.3, Air Quality and Global Climate Change; Section 3.4, Noise and Vibration; Section 3.5 Electromagnetic Fields and Electromagnetic Interference; Section 3.8, Hydrology and Water Resources; Section 3.10, Hazardous Materials and Wastes; Section 3.11, Safety and Security; Section 3.12, Socioeconomics, Communities, and Environmental Justice; Section 3.15 Parks, Recreation, and Open Space; and Section 3.19, Cumulative Impacts. For the purposes of this analysis, children are defined as the population within the study area under the age of 18.

Displacement of Local Residents, Commercial and Industrial Businesses and Agricultural Land

Full and partial acquisitions of parcels required for the F-B LGA were identified using aerial photographs, conceptual engineering plans, profiles, and right-of-way data showing potential parcel acquisitions. Potential full and partial acquisitions were tabulated for the project alternatives. A potential full parcel acquisition was identified if the project would displace existing structures or acquire enough of a property to affect the property's intended use.

At this stage of project design, identifying the individual circumstances surrounding each partial acquisition of parcels is not possible. To be conservative and to avoid underestimating displacements and relocations, all residences and businesses on partially acquired parcels, including those that may ultimately be temporarily affected—for example, impacts associated with construction that are not expected to last through project operation—are counted as full displacements requiring relocation. This assumption allows for a worst-case assessment of potential property acquisition impacts.

Displacement of Community Facilities

The analysis of directly affected parcels containing community facilities includes evaluation of the affected facilities to determine if they would be "displaced" or "affected" by the HSR project. Community facilities are identified as displaced if the HSR project facilities would displace existing structures or require acquisition of a substantial portion of the property that would affect its long-term continued use. Community facilities that would be able to continue operating on a parcel that is directly affected by the HSR project but not fully acquired were determined to be affected facilities, and are evaluated separately from displaced facilities.

Impacts on Sensitive Populations

In communities with high numbers of projected displacements, the demographics of the residents relocated were obtained to identify populations that may require special relocation services. These sensitive populations are in addition to identification of minority and low-income populations. Census 2010 or 2013 data, depending on the data set, were collected to identify elderly (over 65), disabled, female head of household, and linguistically isolated populations, and to determine if there would be a construction impact resulting from the relocation of a high number of these sensitive populations. This analysis was performed with 2010 and 2013 Census data, the most recent data available, to obtain community level data representative of the cities of

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Shafter and Bakersfield and the community of Oildale, where high numbers of residential displacements occur.

3.12.2.2 Economic Effects

The methodologies for examining the potential economic effects are provided below.

Economic Effects on Agriculture

The project would acquire agricultural land and convert it to HSR use; therefore, some agricultural production would be lost. Compensation for any lost production would be incorporated into the property acquisition compensation paid to owners. However, some production would probably not be easily relocated, and the production that is relocated would take time to become re-established. Therefore, some short-term and long-term reduction in agricultural production could occur.

A dollar-value estimate of reduced agricultural production was calculated and state and county data on jobs generated per dollar of revenue were used to estimate the corresponding potential direct agricultural job loss for these revenue reductions. These losses would be a result of both direct land acquisition for project right-of-way and indirect land acquisition near the project to provide new access roads along the edge of fields. Data addressing the locations of particular crop production and animal operations were obtained from county agricultural sources (Kern County 2008). The value of agricultural production affected by property acquisition was estimated using county price data for affected crops and animals.

This methodology to assess the economic effects on the agricultural industry provides an indication of impacts across the region and allows for the comparison of the HSR project alternatives. Some individual agricultural operations would be affected more than others, and this cost to agricultural operations would be considered on a case-by-case basis during the land acquisition phase of the project.

In order to perform a direct comparison between the May 2014 Project and the F-B LGA, displacement data for the May 2014 Project was updated to account for any changes that have occurred since the analysis performed for the Fresno to Bakersfield Section Community Impact Assessment Technical Report (Authority and FRA 2012). This updated information is provided in Section 5 of the F-B LGA: Community Impact Assessment Technical Report (Authority and FRA 2017) and the side-by-side comparison using 2015/2016 data is provided in Technical Appendix 8-A.

Changes in School District Funding

The assessment of the potential financial impacts on school districts was based on possible changes in school district funding due to shifts in student populations in communities with substantial numbers of residential displacements. The examination of property tax revenue changes, as described above, provides an understanding of the potential effects to school district funding resulting from property acquisition. In addition, school district funding in California is dependent on student attendance; therefore, relocation of large populations of students outside of affected school districts would reduce district funding. To determine the potential likelihood of any such effects, areas with large numbers of residential displacement were examined to determine if relocation outside of current school district boundaries would be necessary. The total number of housing units that may be displaced in a school district was compared with the number of vacant housing units in the same school district to determine if a substantial number of families with enrolled students may be forced to relocate outside of their current school district.

Employment

The project is anticipated to improve state and regional interconnectivity, while creating job opportunities across many sectors of the regional economy. This job creation would occur both during the short-term construction and long-term operation of the project. Analysis was conducted to determine whether project-related job creation could be expected to be filled by the region's existing labor force or whether the new jobs would attract labor to the region.

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To estimate short-term construction employment, the Bureau of Economic Analysis RIMS II direct-effect multipliers were used to estimate the region-wide potential direct, indirect, and induced job creation resulting from project spending in the construction and manufacturing sectors.¹ The estimated long-term employment expansion resulting from the operation of the HSR was previously studied by others and is summarized in this analysis (Cambridge Systematics 2010). The long-term increase in employment would occur as new businesses are attracted to California and businesses already in the state expand. Regionally, the spatial reallocation of employment would be based on changes in business location by firms benefiting from the increased statewide mobility that the HSR project provides.

Property and Sales Tax Revenue Changes

Overall, property and sales tax revenues are expected to increase as a result of the project. Short-term reductions in property tax revenues caused by private property being acquired for a public transportation purpose, and related sales tax revenue reductions associated with relocating businesses will cause a tax revenue reduction. These revenue losses, however, are expected to be more than offset by both short-term increases in sales tax revenues from construction spending and long-term increases in the regional property and sales tax bases resulting from increased property values and new economic development through improved connectivity of the region to the rest of the state.

The assessed values of agricultural lands took into consideration the taxed values as set under Williamson Act contract. The resulting estimated tax-revenue reductions were then compared with the entire county tax base to assess the intensity and context of this change.

The assessment of changes in sales tax revenues examined effects during the first few years of the project after the start of construction, as well as the anticipated long-term change in sales tax revenues during operation. The first analysis assessed whether or not the short-term temporary changes in sales tax revenues from the acquisition of commercial and industrial properties would be substantial as these businesses relocate and re-establish themselves. The long-term assessment of sales tax revenues examined the ongoing sales tax revenues that would result from the purchase of goods and services associated with the continued operation and maintenance of the HSR.

3.12.2.3 Data Sources

Detailed descriptions of the data sources used in the analysis here can be found in the F-B LGA Community Impact Assessment Technical Report, Appendix A (Authority and FRA 2017).

Data sources include the 2000 and 2010 decennial censuses and 2013 American Community Survey (ACS). As the decennial census has the largest data set (100 percent of the population), it is considered the most reliable. Decennial census data was therefore used for this analysis whenever possible. For information not available from the decennial census (e.g., poverty, disability, and language statistics), 2013 ACS 5-Year estimates data was used, as this was the most recently released ACS data at the time the F-B LGA Community Impact Assessment (Authority and FRA 2017) was prepared. Although the sample size for the ACS is smaller, based on a survey of approximately one-sixth of the population, the data is released annually and generally provides the most up-to-date information available. The 5-year estimates data is also appropriate because it provides 5-year averages, which provide more accuracy than annual data when considering small areas where annual data may have a high margin of error.

In order to make comparisons between data from different years, the correct data sets must be used. Data is generally comparable between the 2000 and the 2010 decennial censuses SF1

¹ Direct job creation is a measure of those new construction-related jobs that result from building the project itself. Indirect job creation is a measure of new jobs generated in businesses in the area that would supply goods and services to the project construction, such as equipment suppliers, construction companies, and maintenance firms. Induced job creation is a measure of new jobs in new or existing businesses, such as retail stores, gas stations, banks, restaurants, and service companies, which may supply goods and services to these new direct and indirect workers and their families.

100-percent data sets. Data from the 2000 decennial Census SF3 sample data set, on the other hand, is generally comparable to the ACS 5-Year estimates data sets from 2009 and later. The SF3 sample data set includes more detailed socioeconomic information than the SF1 and SF2 100-percent data sets, as this data was collected via the "long-form" questionnaire. The U.S. Census Bureau stopped collecting SF3 sample data as part of the decennial census after the 2000 Census. The 5-Year ACS includes this long-form community data, however, and has been published for every year since 2009. Most data is comparable between the two data sets, with the exception of disability information, as the questions used to generate these statistics were updated in 2008. This analysis uses SF1 100-percent data and SF3 sample data from 2000 in order to provide information on changes that occurred between that time and the year of the most recent data (2010 or 2013).

All 2010 decennial Census data for this analysis are from the SF-1: DP-1 data set, while data from the 2000 decennial Census were obtained from the SF-1: DP-1 data set, as well as the following data sets from SF-1 and Summary File 3 (SF-3):

- SF-1: Sex by Age (P012)
- SF-3: Profile of Selected Economic Characteristics (DP-3)
- SF-3: Profile of Selected Housing Characteristics (DP-4)
- SF-3: Household Language by Linguistic Isolation (P020)
- SF-3: Employment Status by Sex (QT-P24)

Data from the ACS 5-year estimates used for this analysis are from the following data sets:

- Industry by Occupation for the Civilian Employed Population 16 Years and Over (C24050)
- Selected Economic Characteristics (DP03)
- Selected Housing Characteristics (DP04)
- Household Language by Household Limited English Speaking Status (B16002)
- Poverty Status in the Past 12 Months (S1701)
- Disability Characteristics (S1810)
- Median Income in the Past 12 Months (in 2013 Inflation-Adjusted Dollars) (S1903)

3.12.2.4 Methods for Evaluating Effects under NEPA

In the Fresno to Bakersfield Section Final EIR/EIS, analysts applied specified thresholds for each resource topic to assess whether the intensity of each impact is negligible, moderate, or substantial for the Build Alternatives, and provided a conclusion of whether the impact was "significant". Since the Fresno to Bakersfield Section Final EIR/EIS does not evaluate the May 2014 Project as a discrete subsection of the Fresno to Bakersfield Project (as it did for example for the Allensworth Bypass), it does not provide conclusions using intensity thresholds for the May 2014 Project. Therefore, intensity thresholds are not used for the F-B LGA. Instead, the evaluation of impacts under NEPA in this Draft Supplemental EIR/EIS focuses on a comprehensive discussion of the project's potential impacts in terms of context, intensity, and duration and provides agency decision makers and the public with an apples-to-apples comparison between the May 2014 Project and the F-B LGA.

3.12.2.5 Methods for Evaluating Effects under CEQA

Under California Environmental Quality Act (CEQA) Guidelines, the project would have a significant impact if it would:

- Physically divide an established community.
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Relocate substantial numbers of people, necessitating the construction of replacement housing elsewhere.
- Result in substantial adverse physical impacts associated with the provision of new or physically altered community and governmental facilities or with the need for new or



physically altered community and governmental facilities, the construction of which could cause significant environmental impacts.

This section also discusses project impacts on the agricultural economy of the study area. In accordance with Section 15064(e) of the CEQA Guidelines, "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Therefore, no CEQA significance conclusions are provided for economic and social impacts that do not result in physical changes to the environment. This section does not address the conversion of agricultural land to nonagricultural uses (see Section 3.14, Agricultural Lands, of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA, 2012: pages 3.14-1 through 3.14-66).

3.12.3 Affected Environment

3.12.3.1 Summary of the May 2014 Project Affected Environment

For the May 2014 Project, the Affected Environment consists of a comparison of the F-B LGA to the complementary portion of the Preferred Alternative that was identified in the Fresno to Bakersfield Section Final EIR/EIS. As discussed in Section 1.1.3 of this Draft Supplemental EIR/EIS, the complementary portion of the Preferred Alternative consists of the portion of the BNSF Alternative from Poplar Avenue to Hageman Road and the Bakersfield Hybrid from Hageman Road to Oswell Street (further referenced as the "May 2014 Project" in this Draft Supplemental EIR/EIS). Within Kern County, the May 2014 Project directly affects two urban areas and one suburban area: the incorporated cities of Shafter and Bakersfield, and the unincorporated community of Crome. Unincorporated portions of Kern County are also included in the resource study area.

Since the Fresno to Bakersfield Section Final EIR/EIS does not evaluate the May 2014 Project as a discrete subsection of the Fresno to Bakersfield Project (as it did for example for the Allensworth Bypass), affected environment and impact summary discussion included in this section for the May 2014 Project has been extrapolated from the available information contained within the Fresno to Bakersfield Section Final EIR/EIS. Please refer to the F-B LGA Community Impact Assessment Technical Report (Authority and FRA 2017) for a more detailed discussion of the affected environment for the May 2014 Project.

3.12.3.2 Fresno to Bakersfield Locally Generated Alternative

This section focuses on the F-B LGA affected environment, which encompasses the regional and local area where the F-B LGA would be located.

The study area for the socioeconomics and communities analysis consists of portions of Kern County and is generally defined as the project corridor for the F-B LGA, running south from the northern end of the City of Shafter through unincorporated portions of Kern County, into the City of Bakersfield. Figure 3.12-1 provides a map of the F-B LGA and communities in the study area. Figure 3.12-2 provides a map of the May 2014 Project and surrounding communities, and includes the F-B LGA for comparison.



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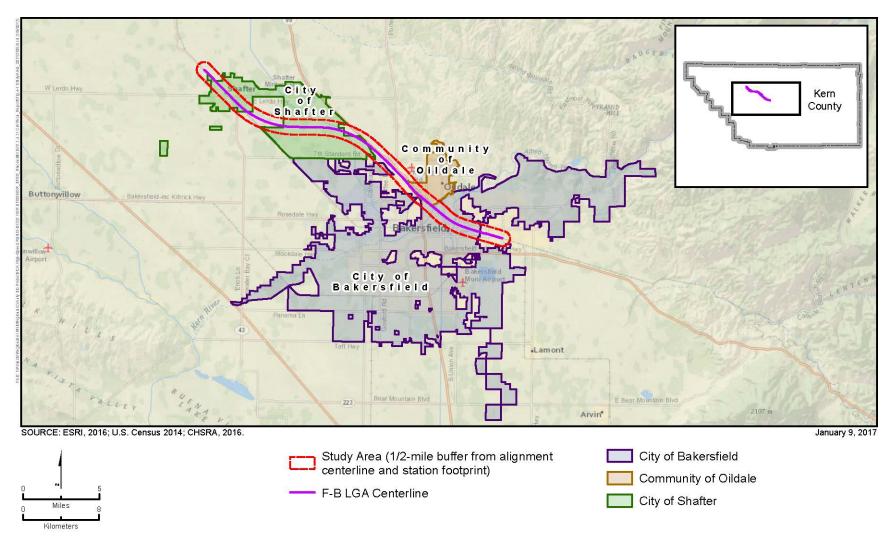


Figure 3.12-1 Study Area and Geographic Areas Considered for the F-B LGA



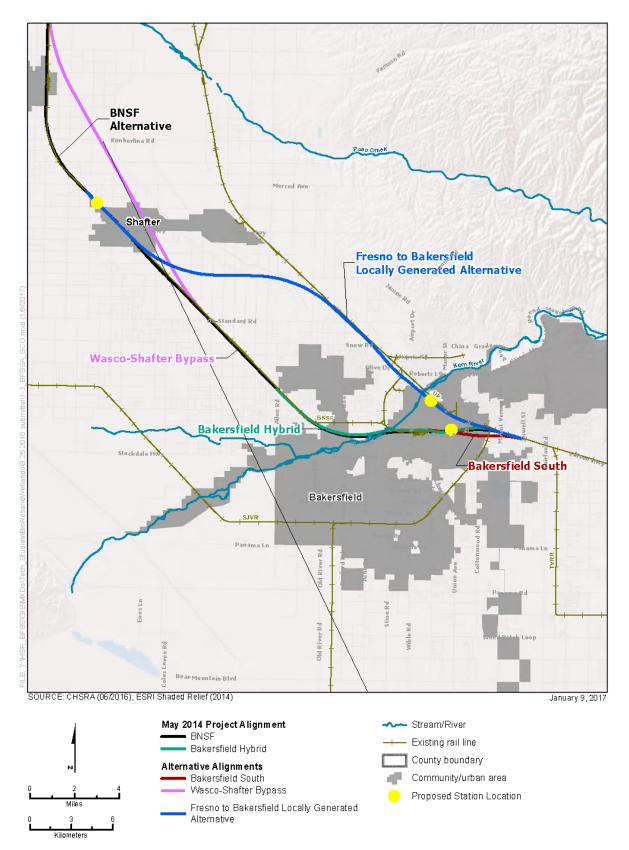


Figure 3.12-2 Fresno to Bakersfield Locally Generated Alternative and Alternative Alignments

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The analysis presented in this section uses three different study areas, depending on the specific resource being analyzed. These study areas are defined as follows:

- **Study Area**: The area within a 0.5-mile buffer from the centerline of the alignment and the footprint of the F Street Station location. This study area is used in analysis of demographic, economic, and infrastructure impacts.
- **Property Acquisition Study Area**: The area comprising all properties (or parcels) that fully or partially overlie the F-B LGA footprint.² This study area is used in analysis of relocations of households and businesses, as well as income and property tax analysis.
- Agricultural Study Area: The area comprising the HSR project footprint and all noneconomic remnant parcels, a 25-foot buffer from these areas, and a 100-foot buffer from the centerline of the alignment.³ This study area is used in analysis of economic impacts of agricultural conversions.

Outside of these study areas, introduction of the California HSR system is not likely to result in a substantial change to socioeconomics and community conditions.

In Kern County, the F-B LGA directly affects two urban areas and one suburban area: the incorporated cities of Shafter and Bakersfield, and the unincorporated community of Oildale. Unincorporated portions of Kern County are also included in the study area. In order to describe the existing setting, the two cities, the unincorporated community of Oildale, and unincorporated Kern County areas were each summarized based on Census data for each of these areas.

The majority of the F-B LGA alignment runs along major highways and existing railroad tracks, and in some areas lies between neighborhoods. The alignment runs alongside the Union Pacific Railroad (UPRR) corridor through Shafter and Oildale. When the alignment first enters Bakersfield, it would be on raised viaduct structures parallel to State Route (SR) 99, between Bakersfield's Northwest and Northeast Districts, as defined in the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014) and Section 1.3 of the Fresno to Bakersfield Section Community Impact Assessment Technical Report (Authority and FRA 2012). Raised viaducts are designed with standard span lengths to clear existing intersections and facilities, maintaining community access. As the F-B LGA continues through the Central Bakersfield District and into the eastern portion of the Northeast Bakersfield District, it would follow SR 204 and then the existing at-grade railroad corridor that traverses the city. The railroad corridor predates the incorporation of the City of Bakersfield, and the city has developed for over a century on either side of this corridor. Likewise, SR 99 and SR 204 are historic roadways.

Given that a pre-existing division already exists along the F-B LGA alignment in Bakersfield, the F-B LGA would not introduce a new division through these neighborhoods. SR 99 and SR 204 are four- to six-lane arterial roadways that present a significant division between neighborhoods. Additionally, the area northeast of SR 99 and SR 204 supports industrial and commercial uses that further divide the residential communities on either side. Through the southern portion of F-B LGA alignment, the UPRR corridor and surrounding uses present a substantial existing division between the neighborhoods on either side. Between Union Avenue and Beale Avenue, the corridor includes two tracks and is surrounded by industrial uses; between Beale Avenue and Virginia Street the rail yard spans approximately 600 feet and does not allow for passage through this area; and south of Virginia Street, the F-B LGA alignment is adjacent to Edison Highway, which is four lanes wide, creating a substantial existing division between the neighborhoods on either side uses in a new division of or further contribute to an existing division of existing neighborhoods in Bakersfield, this analysis evaluates U.S. Census

² The F-B LGA footprint is defined as the alignment right-of-way, construction areas, and road crossings.

³ A noneconomic remnant parcel is an agricultural parcel that is severed from an agricultural property by the HSR project and is less than 20 acres in size, and therefore too small to be farmed economically.

data for the city as a whole.⁴ Section 3.12.4 provides a qualitative analysis of the potential division of neighborhoods. A quantitative analysis of minority and low-income communities is provided for all U.S. Census blocks along the F-B LGA in Chapter 5, Environmental Justice, of this Draft Supplemental EIR/EIS.

3.12.3.3 Population and Characteristics

Population characteristics presented in this section include total population and ethnicity, age distribution, income, household types, linguistic isolation, and disabilities. This data is provided for the region (the four-county area of Fresno, Kings, Tulare, and Kern counties), which was considered in the Fresno to Bakersfield Section Final EIR/EIS, and for each of the communities in the study area: Kern County, the cities of Shafter and Bakersfield, and the community of Oildale. This section presents updated data for the four-county region to allow for a comparison of community data with regional data, thereby providing analysis that is consistent with that of the Fresno to Bakersfield Section Final EIR/EIS. Population characteristics data are not available for the study area itself, which, as stated above, is the area within 0.5 mile of the alignment and station footprints. Therefore, data will be presented from the communities through which the study area passes, and information about the study area will be extrapolated.

Population and demographic characteristics provide information about the region's social context. Age, household, and disability characteristics are discussed to identify potential special relocation needs. Information regarding race and income is presented to identify minority and low-income populations. (See Section 4.1 of the F-B LGA: Community Impact Assessment Technical Report [Authority and FRA 2017] for detailed population-characteristic profiles.)

Population, Ethnicity, and Race

Study Area Overview

The population in the four-county region has increased by 20.8 percent in the last decade, growing from 1,958,534 to 2,365,242 people between 2000 and 2010 as shown in Table 3.12-1.

Area	Population in 2000	Population in 2010	Change
Four-county Region	1,958,534	2,365,242	20.8%
Kern County	661,645	839,631	26.9%
City of Shafter	12,736	16,988	33.4%
Community of Oildale	27,885	32,684	17.2%
City of Bakersfield	247,057	347,483	40.6%

Table 3.12-1 Total Population in 2000 and 2010

Sources: U.S. Census, 2000a and 2010

Located at the southern end of California's Central Valley and to the north of Los Angeles, Kern County has experienced significant economic and population growth in recent years, but its communities are varied in character and have experienced growth in different ways. The City of Bakersfield, with a population of over 300,000 people, is home to forty percent of county residents. The remainder of the study area population is located in the City of Shafter, the suburban community of Oildale, and unincorporated areas of the county. There has been a

⁴ Division of the City of Bakersfield into districts for analysis was an approach developed for the Fresno to Bakersfield Section Community Impact Assessment Technical Report (Authority and FRA 2012), and was intended to allow detailed analysis of the community division along alternatives, including those which make up the May 2014 Project. The F-B LGA was designed in part to avoid as much division as feasible, and therefore travels along existing rail and highway corridors. As the F-B LGA would not traverse city neighborhoods, unlike the May 2014 Project, analysis does not require segmentation.



significant increase in the number of persons of Hispanic and Latino ethnicity in the City of Bakersfield, and the County as whole, in the last 10 years. Overall, the diversity of the County is growing as a majority of races and Hispanics have increased and the white population has decreased.

In the four-county region in 2010, persons of Hispanic and Latino ethnicity represented 51.9 percent of residents (Table 3.12-2). Over the 10-year period between 2000 and 2010, the Hispanic and Latino population increased faster than the total population in the region, with an increase of 44.5 percent relative to 20.8 percent. In line with current trends, it is expected that the Hispanic and Latino population will continue to increase at a faster rate than the rest of the population in the region and will represent over 60 percent of the population in Kern County by 2050 (Kern Council of Governments 2015, California Department of Finance 2014).

Area	Hispanic and Latino Population in 2000 (% of total population)	Hispanic and Latino Population in 2010 (% of total population)	Change
Four-county Region	848,979 (43.3%)	1,227,034 (51.9%)	44.5%
Kern County	254,036 (38.4%)	413,033 (49.2%)	62.6%
City of Shafter	8,667 (68.1%)	13,634 (80.3%)	57.3%
Community of Oildale	2,828 (10.1%)	6,301 (19.3%)	122.8%
City of Bakersfield	80,170 (32.5%)	158,205 (45.5%)	97.3%

Sources: U.S. Census, 2000a and 2010

The U.S. Census Bureau designates minority populations as all individuals who are considered to be part of a minority based on their race, ethnicity, or both. Under the U.S. Census Bureau definition of ethnicity, Hispanic or Latino is considered an ethnicity independent of race. As such, an individual who is Hispanic or Latino is also included in one of the categories that define race (e.g., White, Black, African-American, etc.). Under this definition, the minority population represents the entire population less individuals who are both White and non-Hispanic/Latino. The demographic makeup of Kern County and the City of Bakersfield is similar to that of the region, with total minority populations of 61.4 and 62.2 percent in 2010, respectively, relative to the region's 65.1 percent as shown in Table 3.12-3. The minority population of the City of Shafter is much higher, at 83.0 percent, while it is much lower in the community of Oildale, at 24.9 percent. These minority populations increased over the 10-year period from 2000 to 2010, with a majority of the population increase occurring among Hispanic and Latino communities.

Kern County

The population of Kern County increased by 26.9 percent, from 661,645 to 839,631 residents, in the period from 2000 to 2010 as shown in Table 3.12-1. This percentage increase is higher than that experienced in the region (20.8 percent). Kern County's minority population, which represented 50.5 percent of residents in 2000, increased to 61.4 percent of residents in 2010 as shown in Table 3.12-3. This level of minority representation is similar to that of the region, where 65.1 percent of residents are minorities.

Area	White	Black or African American	American Indian & Alaska Native	Asian	Other, including Two or More Races	Hispanic or Latino ¹	Minority ²
Minority Groups in 20	00						
Four-county Region	57.4%	5.0%	1.6%	5.2%	30.7%	43.3%	56.5%
Kern County	61.6%	6.0%	1.5%	3.4%	27.4%	38.4%	50.5%
City of Shafter	44.5%	1.6%	1.2%	0.3%	52.3%	68.1%	71.0%
Community of Oildale	89.0%	0.3%	2.2%	0.3%	8.2%	10.1%	15.1%
City of Bakersfield	61.9%	9.2%	1.4%	4.3%	23.2%	32.5%	48.9%
Minority Groups in 20	10						
Four-county Region	57.6%	4.9%	1.6%	6.1%	29.7%	51.9%	65.1%
Kern County	59.5%	5.8%	1.5%	4.2%	28.9%	49.2%	61.4%
City of Shafter	48.0%	1.3%	1.2%	0.7%	48.9%	80.3%	83.0%
Community of Oildale	84.0%	0.8%	1.8%	1.0%	12.5%	19.3%	24.9%
City of Bakersfield	56.8%	8.2%	1.5%	6.2%	27.4%	45.5%	62.2%

Table 3.12-3 Minority Group Representation in the Region

Sources: U.S. Census, 2000a and 2010

¹ Hispanic or Latino is considered an ethnicity and is independent of race. These figures, therefore, represent individuals who are of Hispanic or Latino ethnicity of any race.

² The minority population was calculated as the entire population minus all individuals who are White and non-Hispanic/Latino.

City of Shafter

The City of Shafter's population of 12,736 residents in 2000 had increased to 16,988 by 2010, which amounts to an increase of 4,252 residents (33.4 percent) as shown in Table 3.12-2. This percentage increase is higher than that of the region (20.8 percent) or of Kern County (26.9 percent), and can be attributed to both changes within the city's jurisdictional boundaries as well as the expansion of those boundaries between 2000 and 2010. Shafter's minority population, which represented approximately 71.0 percent of residents in 2000 and reached 83.0 percent by 2010, is a higher percentage of the total population than is seen in the region (65.1 percent) and Kern County (61.4) in 2010 as shown in Table 3.12-3.

Community of Oildale

The unincorporated community of Oildale lies in the area between the cities of Bakersfield and Shafter and is included in the 2010 Census as a Census Designated Place. The population of this community grew by 17.2 percent, from 27,885 in 2000 to 32,684 in 2010. This percentage increase is slightly below that experienced in the region and Kern County, which experienced population increases of 20.8 and 26.9 percent over this period, respectively as shown in Table 3.12-1. During the same period, the Hispanic and Latino population increased at a much faster rate, increasing by 122.8 percent, from 2,828 to 6,301 as shown in Table 3.12-2. This growth contributed to the increase in the percentage of minorities in the community from 15.1 to 24.9 percent, which is still far below that of the county (61.4 percent).

City of Bakersfield

The City of Bakersfield's population of 247,057 increased to 347,483 during the period from 2000 to 2010, a total increase of 100,426 residents (40.6 percent) as shown in Table 3.12-1. This percentage increase is higher than that of both Kern County (26.9 percent) and the region (20.8 percent), and can be attributed to both changes within the city's jurisdictional boundaries, as well as the expansion of those boundaries between 2000 and 2010. Bakersfield's minority population, which represented 48.9 percent of residents in 2000, increased to 62.2 percent of

November 2017

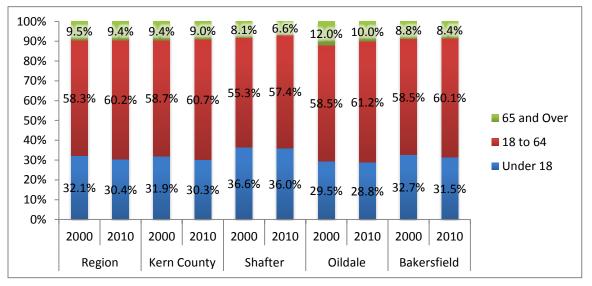
residents in 2010 as shown in Table 3.12-2. The percentage of minority representation in Bakersfield is similar to that of Kern County (61.4 percent) and the region (65.1 percent).

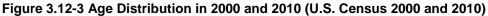
Age Distribution

Age distributions across the communities analyzed for the study area are similar, with middleaged groups making up the highest concentration of the population as shown in Table 3.12-4 and Figure 3.12-3. Data across Kern County and the cities and community analyzed for the study area show that between 2000 and 2010 there was a reduction in the percentage of people under the age of 18 and over the age of 65, while there was an increase in the percentage of people between the ages of 18 and 65. These trends have been seen across the region as well.

Area	Age Distribut	Age Distribution in 2000			Age Distribution in 2010		
	Under 18	18 to 64	65 and over	Under 18	18 to 64	65 and over	
Four-county Region	32.1%	58.3%	9.5%	30.4%	60.2%	9.4%	
Kern County	31.9%	58.7%	9.4%	30.3%	60.7%	9.0%	
City of Shafter	36.6%	55.3%	8.1%	36.0%	57.4%	6.6%	
Community of Oildale	29.5%	58.5%	12.0%	28.8%	61.2%	10.0%	
City of Bakersfield	32.7%	58.5%	8.8%	31.5%	60.1%	8.4%	

Sources: U.S. Census, 2000b and 2010





Income

Between the years 1999 and 2012, the increase in median annual household income in the communities analyzed for the study area was greater than in the state, with Kern County and the cities of Shafter and Bakersfield experiencing increases of 37.0, 42.2, and 40.6 percent, respectively, as compared to the state with a 28.6 percent increase as shown in Table 3.12-5. The growth in median income for the communities analyzed for the study area was also higher than those experienced over this period in the other three counties in the region, with increases of 31.2 percent in Fresno County, 34.6 percent in Kings County, and 25.7 percent in Tulare County. One exception to this trend is the community of Oildale, which experienced less growth in median income over this period, increasing by 23.2 percent.

Area ¹	Median Household Income in 1999	Median Household Income in 2012	Change
State of California	\$47,493	\$61,094	28.6%
Fresno County	\$34,725	\$45,563	31.2%
Kings County	\$35,749	\$48,133	34.6%
Tulare County	\$33,983	\$42,708	25.7%
Kern County	\$35,446	\$48,552	37.0%
City of Shafter	\$29,515	\$41,974	42.2%
Community of Oildale	\$27,041	\$33,305	23.2%
City of Bakersfield	\$39,982	\$56,204	40.6%

Table 3.12-5 Median Household Income in 1999 and 2012

Sources: U.S. Census, 2000c and 2013c)

¹Median household income data cannot be averaged across the four counties and is not available from the Census at the four-county level. Because the median is the middle number and not an average, it cannot be calculated using a weighted average. Because the approach of using a weighted average is not mathematically sound, a median for the four-county region cannot be calculated. Statewide data has been provided for comparison.

In 2012, the median annual household incomes in all four counties in the region were below the state's median of \$61,094, with median incomes of \$45,563 in Fresno County, \$48,133 in Kings County, \$42,708 in Tulare County, and \$48,552 in Kern County as shown in Table 3.12-5. The geographic areas considered in this analysis also had median incomes below that of the state, with \$41,974 in Shafter, \$33,305 in Oildale, and \$56,204 in Bakersfield.

Households

Study Area Overview

The number of households in the region increased by 18.0 percent in the period from 2000 to 2010, for a total of 715,586 households in 2010 as shown in Table 3.12-6. The cities of Shafter and Bakersfield experienced even higher percentage increases in the number of households. The increase in the number of households in Shafter and Bakersfield can be attributed to both changes within the city's jurisdictional boundaries as well as the expansion of those boundaries between 2000 and 2010. The number of households in the community of Oildale also increased, but the percentage increase was lower than experienced in the region. The average household size in the region also increased 2.7 percent from 3.11 to 3.19 persons per household over the same period. The cities of Shafter and Bakersfield and the community of Oildale experienced higher percentage increases in the average household size that amount to 5.2, 6.2, and 7.1 percent, respectively.

Nonfamily

Area	Total Households in 2000	Total Households in 2010	Change		Average Size in 2010	Change
Four-county Region	606,395	715,586	18.0%	3.11	3.19	2.7%
Kern County	208,652	254,610	22.0%	3.03	3.15	4.0%
City of Shafter	3,293	4,230	28.5%	3.67	3.86	5.2%
Community of Oildale	10,983	12,023	9.5%	2.53	2.71	7.1%
City of Bakersfield	83,441	111,132	33.2%	2.92	3.10	6.2%

Table 3.12-6 Total Households and Household Size

Sources: U.S. Census, 2000a and 2010

Approximately 75.6 percent of all households in the region are family households as shown in Table 3.12-7. The percentage of married-couple households has decreased in the region since 2000, with an increase in the percentage of households headed by a single female or a single male.

Table 3.12-7 Type of Households in the RegionAreaFamilyMarried
Couple
FamilyMale
Householder
(no wife
present)Female
Householder
(no husband
present)

	Households	Couple Family	no wife present)	Householder (no husband present)	Households	Living Alone
Households in 2000						
Four-county Region	75.4%	54.6%	6.0%	14.8%	24.6%	19.7%
Kern County	75.0%	54.6%	5.9%	14.5%	25.0%	20.3%
City of Shafter	83.8%	61.7%	6.8%	15.3%	16.2%	13.3%
Community of Oildale	64.5%	40.1%	6.7%	17.7%	35.5%	28.9%
City of Bakersfield	73.1%	52.1%	5.5%	15.5%	26.9%	21.5%
Households in 2010	÷					
Four-county Region	75.6%	51.8%	7.5%	16.3%	24.4%	18.9%
Kern County	75.3%	52.1%	7.4%	15.7%	24.7%	19.3%
City of Shafter	86.2%	60.6%	8.6%	17.0%	13.8%	10.5%
Community of Oildale	65.9%	37.2%	9.0%	19.7%	34.1%	25.8%
City of Bakersfield	74.8%	51.5%	7.0%	16.2%	25.2%	19.6%

Sources: U.S. Census, 2000a and 2010

Kern County

The number of households in Kern County increased by 22.0 percent in the period from 2000 to 2010, matching the 18.0 percent increase in the region over the same period as shown in Table 3.12-6. The average household size also increased 4.0 percent from 3.03 to 3.15 persons per household in Kern County over the same period, slightly higher than the region's increase of 2.7 percent. In 2010, approximately 75.3 percent of all households in Kern County were family households as shown in Table 3.12-7. Similar to trends seen in the region, the percentage of married-couple households has decreased in the county between 2000 and 2010 and there was an increase in the percentage of households headed by a single female or a single male.

California High-Speed Rail Authority

Householder

City of Shafter

The 3,293 households in the City of Shafter in 2000 had an average size of 3.67 people. By 2010, both the number of households and the average household size had increased, to 4,230 and 3.86, respectively as shown in Table 3.12-6. The average household size for Shafter is higher than that of the region (3.19) and Kern County (3.15). The percentage of family households is higher in Shafter, at 86.2 percent, than in the region, Kern County at 75.6 and 75.3 percent, respectively as shown in Table 3.12-7. Shafter experienced a similar trend as the region and county between 2000 and 2010 in terms of a slight reduction in the percentage of married-couple families and an increase in the percentage of family households headed by men and women with no spouse present.

Community of Oildale

The community of Oildale experienced an increase of 9.5 percent in the number of households between 2000 and 2010, from 10,983 to 12,023. This percentage increase was lower than that of the region, at 18.0 percent. The community also experienced an increase in the average household size, from 2.53 to 2.71 persons per household as shown in Table 3.12-6. Although this percentage increase (7.1 percent) is the same order of magnitude as the percentage increase experienced in Kern County (4.0 percent), the average household size of 2.71 persons per household size of 2.71 persons per household is substantially lower than in the county (3.15 persons per household).

This community is composed of 65.9 percent family households, which is a lower percentage than is seen in the region (75.6 percent) and Kern County (75.3 percent) as shown in Table 3.12-7. The community has experienced a reduction in the percentage of married-couple families, from 40.1 percent in 2000 to 37.2 percent in 2010, with a subsequent increase of 2.3 percent in the percentage of family households headed by men, and an increase of 2 percent in the percentage of family households headed by women with no spouse present.

City of Bakersfield

The City of Bakersfield had 83,441 households in 2000, with an average household size of 2.92 people as shown in Table 3.12-6. By 2010, both the number of households and the average household size had increased to 111,132 households and 3.10 people per household. Bakersfield's average household size is smaller than those of the region and Kern County, which are 3.19 and 3.15 people per household, respectively.

The makeup of households in Bakersfield has changed slightly since 2000, with family households increasing from 73.1 percent of the total to 74.8 percent by 2010 as shown in Table 3.12-7. The percentage of married-couple families decreased slightly, from 52.1 to 51.5 percent during this period, with increases in the percentage of family households headed by men and women with no spouse present.

Limited English Speaking Households

According to the U.S. Census Bureau, the percentage of limited English speaking households, previously referred to as "linguistically isolated" households, increased in the region between 2000 and 2013 as shown in Table 3.12-8. The U.S. Census Bureau defines a limited English-speaking household as one in which no member 14 years old and over (1) speaks only English or (2) speaks a non-English language and speaks English "very well." In other words, in limited English speaking households, all household members 14 years old and over have at least some difficulty with English. The percentage of limited English speaking households in Kern County was slightly below that of the region in 2013, with 9.1 percent in Kern County and 10.3 percent in the region. In contrast, the City of Bakersfield and community of Oildale were much lower, with 6.7 and 1.7 percent, respectively. The percentage of limited English speaking households in Shafter is substantially higher than the surrounding areas, at 23.5 percent, which can be attributed to the large Hispanic and Latino population (80.3 percent of residents). Also, between the years 2000 and 2013 this percentage has increased more in Shafter (6.4 percentage points) than in Kern County (1.0 percentage points) or the region (0.9 percentage points).



Area	% of Households in 2000	% of Households in 2013	% Increase
Four-county Region	9.4%	10.3%	0.9%
Kern County	8.1%	9.1%	1.0%
City of Shafter	17.1%	23.5%	6.4%
Community of Oildale	1.3%	1.7%	0.4%
City of Bakersfield	5.7%	6.7%	1.0%

Table 3.12-8 Limited English Speaking Households in 2000 and 2013

Sources: U.S. Census, 2000e and 2013b

Disabilities

Data is collected by the U.S. Census Bureau for sensory disability, mental disability, self-care disability, going outside the home disability, and employment disability. New questions for determining disability status were introduced in 2008, along with new questions on the categories Health Insurance, Marital History, and Veterans' Service-connected Disability Ratings. Because of the changes to the questions, the new American Community Survey (ACS) disability questions should not be compared to the previous ACS disability questions or the Census 2000 disability data. This analysis does not, therefore, include such a comparison, and only presents the most recent disability information.

Disabled populations tend to rely more heavily on community services due to issues with mobility and accessibility. Across all geographic areas considered in this analysis, the percentage of the population that is disabled is significantly greater in the population that is age 65 and older compared to the 5 to 64 age segment of the population as shown in Table 3.12-9. Among seniors in Kern County in 2013, 41.3 percent reported some sort of disability, including self-care limitation and low-mobility issues. This percentage is similar to the region's disabled seniors, which represent 41.8 percent of the population. The percentages of disabled seniors in the cities of Shafter and Bakersfield and the community of Oildale are within a few percentage points of that for the region, with 45, 42.7, and 38.7 percent of the population being disabled, respectively.

Area	Ages 5 to 64	Ages 65 and Over	Total Population
Four-county Region	9.0%	41.8%	11.4%
Kern County	9.6%	41.3%	11.8%
City of Shafter	9.7%	45.0%	11.3%
Community of Oildale	17.5%	38.7%	18.2%
City of Bakersfield	8.7%	42.7%	10.9%

Table 3.12-9 Percentage of the Population with a Disability by Age Group in 2013

Source: U.S. Census, 2013d

The percentage of residents with disabilities between the ages of 5 and 64 in the region is 9 percent. This percentage is similar for Kern County (9.6 percent) and the cities of Shafter and Bakersfield (9.7 and 8.7 percent, respectively). The community of Oildale, however, has a much higher percentage of disabled residents between the ages of 5 and 64, with 17.5 percent of these individuals having disabilities. The highest percentage of residents between the ages of 5 and 64 with disabilities occurs in the community of Oildale (17.5 percent), while the highest percentage of seniors (age 65 and older) with disabilities occurs in the City of Shafter (45 percent).

3.12.3.4 Housing Setting

Housing characteristics are presented below for the four-county region, Kern County as a whole, the cities of Shafter and Bakersfield, and the community of Oildale.

Study Area Overview

Between 2000 and 2013, the region experienced housing growth of 20.1 percent, with the predominant housing type being the single-family detached home, accounting for 73.1 percent of existing units in the region in 2013. Multifamily units and mobile homes account for 20.8 and 5.9 percent of the remaining housing stock, respectively. The largest increase in housing stock in the region occurred in single-family homes, with a total increase of 108,054 homes, which accounts for 81.8 percent of all new homes. Table 3.12-10 provides a summary of housing characteristics for 2000 and 2013, including vacancy rates for the region.

Area	Single Family Units		Multi Family Units		Mobile	Total Units	
	Detached	Attached	2 to 4	5 Plus	Homes		Vacant
Housing Units in 2000					·		
Four-county Region	444,969	25,333	55,851	83,148	47,703	658,533	7.9%
Kern County	156,358	8,383	23,463	23,302	22,483	231,564	9.9%
City of Shafter	2,724	177	281	238	191	3,631	9.2%
Community of Oildale	7,441	379	1,552	1,191	1,410	12,028	8.1%
City of Bakersfield	57,582	3,221	9,993	14,855	2,502	88,189	5.4%
Housing Units in 2013							
Four-county Region	557,785	20,571	74,867	89,629	46,720	790,695	9.3%
Kern County	203,973	7,195	27,678	25,292	21,278	285,895	10.7%
City of Shafter	3,603	128	593	295	155	4,781	3.5%
Community of Oildale	8,316	412	2,316	1,290	1,051	13,436	8.7%
City of Bakersfield	84,171	2,888	13,203	15,600	2,584	118,474	7.2%

Table 3.12-10 Type	es of Housing Units	s in the Region in 200	0 and 2013
--------------------	---------------------	------------------------	------------

Sources: U.S. Census, 2000d and 2013c

The rate of home ownership for the region as a whole has decreased from 59.3 percent of all occupied housing units in 2000 to 57.4 percent in 2010, consistent with the trends seen in Kern County and the cities of Shafter and Bakersfield as shown in Table 3.12-11. The community of Oildale experienced an even larger reduction in home ownership over this period.

Area	Percent of Total Occupied U	Change	
	2000	2010	
Four-county Region	59.3%	57.4%	-1.9%
Kern County	62.1%	60.0%	-2.1%
City of Shafter	60.8%	58.4%	-2.4%
Community of Oildale	50.7%	43.3%	-7.4%
City of Bakersfield	60.5%	59.7%	-0.8%

Sources: U.S. Census, 2000a, 2010



The length of occupancy can be used as an indicator of community stability. Based on 2013 5-Year ACS estimates, residents of the region, on average, have inhabited their homes for longer periods than residents in the study area, with a lower percentage of housing units having been occupied for the short-term (moved into in 2010 or later) and mid-term (moved into between 2000 and 2009), and a higher percentage having been occupied for the long-term (moved into in 1999 or earlier) in the region than in Kern County, the cities of Shafter and Bakersfield and the community of Oildale as shown in Table 3.12-12.

Area				
	Short Term (moved into 2010 or later)	Mid Term (moved into 2000 to 2009)	Long Term (moved into 1999 or earlier)	
Four-county Region	20.9%	49.4%	29.7%	
Kern County	21.9%	50.5%	27.6%	
City of Shafter	21.1%	50.4%	28.6%	
Community of Oildale	28.0%	49.4%	22.6%	
City of Bakersfield	24.4%	53.9%	21.7%	

Table 3.12-12 Length of Occupancy in 2013

Source: U.S. Census, 2013c

Kern County

Between 2000 and 2013, the number of housing units in Kern County increased by 23.5 percent, slightly more than the region's 20.1 percent increase. Similar to the region, the predominant housing type across Kern County is the single-family home, accounting for 73.8 percent of existing units in the county in 2013. Multifamily units and mobile homes account for 18.5 percent and 7.4 percent of the remaining housing stock, respectively. As in the region, the largest increase in housing stock in Kern County occurred in single-family homes, accounting for 85.5 percent of new homes.

The rate of home ownership for the county has decreased from 62.1 percent of all occupied housing units in 2000 to 60.0 percent in 2010. Based on 2013 5-Year ACS estimates data, on average, residents of Kern County have inhabited their homes for slightly shorter periods than residents of the region as a whole, with a higher percentage of housing units having been occupied for the short- and mid-term and a lower percentage having been occupied for the long-term in Kern County than in the region as shown in Table 3.12-12.

City of Shafter

Consistent with trends seen in the county and the region, the largest increase in the Shafter housing stock between 2000 and 2013 was in single-family homes, which accounted for 72.2 percent of the increase in housing stock. The composition of the local housing stock is slightly different than that of the county and region, with single-family homes making up 78.1 percent of housing units, in contrast to Kern County's 73.8 percent and the region's 73.1 percent. Housing vacancy rates in the city were 9.2 percent in 2000 and dropped to 3.5 percent by 2013. The 2013 vacancy rate is substantially below that of the county (10.7 percent) and the region (9.3 percent), as well as the neighboring City of Bakersfield (7.2 percent).

The rate of home ownership in 2010 in Shafter was 58.4 percent of occupied housing units, which was similar to but slightly lower than that of the City of Bakersfield (59.7 percent) and Kern County (60.0 percent), and slightly above that of the region (57.4 percent) as shown in Table 3.12-11. Based on occupancy data in 2013, 21.1 percent of the occupied housing units in Shafter have been occupied in the short-term and 50.4 percent have been occupied for the mid-term, while 28.6 percent of households were more established, having been occupied in the long-term

as shown in Table 3.12-12. These values are similar to those for the county (21.9, 50.5, and 27.6 percent) over the same period (U.S. Census Bureau 2000a and 2010).

Community of Oildale

The community of Oildale experienced an 11.7 percent increase in its housing stock, substantially less than Kern County (23.5 percent) and the region (20.1 percent). Although much of this increase occurred in single-family houses, a large portion occurred in multi-family units as well. The increase in single- and multi-family homes was tempered by a substantial reduction in the number of mobile homes. The community experienced a vacancy rate of 8.7 percent in 2013, slightly below that of the county (10.7 percent) and the region (9.3 percent).

Homeownership in Oildale is substantially lower than in the surrounding communities, with 43.3 percent of occupied housing units being owned by the occupants in 2010, relative to the county's 60.0 percent and the region's 57.4 percent. Homeownership was already relatively low in this community in 2000, at 50.7 percent of occupied housing units, but it decreased by an additional 7.4 percentage points between 2000 and 2010.

The rate of turnover is higher and the percentage of more established residents is lower in Oildale than in the county and region. Relative to all geographic areas considered in this analysis, Oildale has the highest percentage of occupied housing units that have been occupied short-term (28 percent), suggesting a newer population and a potentially less stable community base than in other areas of the county and region. A portion of this shift may, however, be related to residents moving from mobile homes into single- and multi-family units (U.S. Census Bureau 2000a and 2010).

City of Bakersfield

The observed increase in the number of housing units in the City of Bakersfield of 34.3 percent between 2000 and 2013 was greater than that of Kern County and the region, which experienced housing growth of 23.5 and 20.1 percent, respectively. This increase can be attributed to both changes within the city's jurisdictional boundaries as well as the expansion of those boundaries between 2000 and 2013. As with the county and region, the largest increase in the Bakersfield housing stock occurred in single-family homes. The composition of the city's housing stock is similar to that of Kern County and the region in terms of the percentage of single-family homes. The city does, however, have a smaller percentage of mobile homes and a greater percentage of multi-family units than the county and region. Housing vacancy rates in Bakersfield were 5.4 percent in 2000 and increased to 7.2 by 2013. This 2013 vacancy rate is lower than the rates of both the county (10.7 percent) and the region (9.3 percent).

The rate of homeownership in Bakersfield has decreased by 0.8 percentage points from 60.5 percent in 2000 to 59.7 percent in 2010. This decrease is consistent with and slightly reduced from the changes seen in the county and region over this period, which experienced 2.1 and 1.9 percentage point declines in homeownership, respectively.

Based on occupancy data from 2013, 24.4 percent of occupied housing units in Bakersfield have been occupied short-term, while only 21.7 percent of the housing units have been occupied long-term. The rate of turnover is higher and the percentage of more established residents is lower in Bakersfield than in the county and region, where 21.9 and 20.9 percent of occupied housing units have been occupied short-term and 27.6 and 29.7 percent of occupied housing units have been occupied long-term, respectively. These rates may suggest a newer population and a potentially less stable community base than in other areas of the county and region (U.S. Census 2000a and 2010).

3.12.3.5 Economic Setting

The economic recession of 2008-2009 had substantial effects on employment and income in California, especially in the Central Valley, which includes the region considered in this analysis. The Central Valley has generally experienced a weaker and more volatile economic trajectory compared to the state. It also experienced a substantially greater economic downturn as a result of the great recession of 2008-009, and it has undergone a much weaker recovery since then



compared to the rest of the state. By almost every common economic measure—income, poverty, and unemployment—the Central Valley economy lags far behind the broader state economy. More recently, the Central Valley has experienced a severe drought, which has created its own set of impacts and economic challenges (Authority 2015).

Kern County has experienced relatively strong recovery compared to the Four-county Region. Following the recession, each of the four counties experienced different rates of recovery in terms of incomes and employment. This difference may be attributed to the county's mix of industries, which includes energy generation and a number of spinoff industries such as wind generation, increased oil production, agribusiness, and commercial warehousing (Authority 2015).Fresno County's recovery has been the fastest among the Four-county Region with a substantial increase in business activity and hiring, and interest from other companies that are exploring the possibility of relocating to Fresno County. The economy in Kings County is improving, but there are concerns related to how water constraints will affect future growth since the economy is agriculturally driven. Tulare County is experiencing a slow but steady economic recovery as existing businesses have started expanding. Relatively few new business, however, have chosen to move into the county.

Study Area Overview

The following discussion related to income, employment/unemployment, and poverty focuses on Kern County, within which all other areas in the study area fall. The regional information provided here is used as context for the discussions of the more specific cities and urbanized areas that follow.

Unemployment rates have fluctuated throughout the region, especially during the recession of 2008-2009. In the period between 2000 and 2013, much of the state experienced a substantial increase in unemployment, with the state as a whole experiencing an increase from 7.0 to 11.5 percent as shown in Table 3.12-13. Levels of employment in the region have historically lagged behind those in other parts of the state. Between 2000 and 2013, however, while the state's unemployment rate increased by 4.5 percentage points, the region experienced a smaller increase of 2.1 percentage points to a total unemployment rate of 14.3 percent. As a result, the unemployment rate for the region was closer to that of the state in 2013 than in previous years.

Area	Unemployment Rate (Change	
	2000	2013	
State of California	7.0%	11.5%	4.5%
Four-county Region	12.1%	14.3%	2.2%
Kern County	12.0%	13.7%	1.7%
City of Shafter	21.1%	11.8%	-9.3%
Community of Oildale	12.6%	17.4%	4.8%
City of Bakersfield	8.5%	12.3%	3.8%

Table 3.12-13 Unemployment Rates in 2000 and 2013

Sources: U.S. Census, 2000f, 2013c

Although the unemployment rate increased slightly between 2000 and 2013, the number of civilians employed in the region rose by 193,998 people (27.4 percent) over this same period; on a percentage basis, this increase is much higher than that experienced in the state as a whole (13.0 percent).

The regional economy relies heavily on the agricultural industry, with 14.1 percent of the region's employment in the North American Industry Classification System-defined industry of "agriculture, forestry, fishing and hunting, and mining" as shown in Table 3.12-14. These jobs represent a large portion of the state's 2.3 percent of total employment in this industry. The largest industry in terms of total number of jobs in the region, as in the state as a whole, is "educational services, and health care and social assistance," representing 21.5 percent of the region's employment. The two industries that support a substantially smaller percentage of jobs in the region than in the state are "manufacturing" and "professional, scientific, and management, and administrative and waste management services".

Industry	State of California	Four- county Region	Kern County	City of Shafter	Community of Oildale	City of Bakersfield
Agriculture, forestry, fishing and hunting, and mining	387,511	126,875	50,488	2,027	1,168	14,929
	(2.3%)	(14.1%)	(15.9%)	(34.0%)	(10.0%)	(10.3%)
Construction	996,922	49,316	19,232	319	964	8,381
	(6.0%)	(5.5%)	(6.1%)	(5.4%)	(8.3%)	(5.8%)
Manufacturing	1,659,850	59,728	18,133	365	596	7,854
	(10.0%)	(6.6%)	(5.7%)	(6.1%)	(5.1%)	(5.4%)
Wholesale trade	525,795	33,777	9,550	320	211	4,856
	(3.2%)	(3.7%)	(3.0%)	(5.4%)	(1.8%)	(3.4%)
Retail trade	1,850,696	97,238	34,479	513	1,679	16,650
	(11.1%)	(10.8%)	(10.9%)	(8.6%)	(14.4%)	(11.5%)
Transportation and warehousing, and utilities	773,145	44,258	16,459	295	1,005	7,642
	(4.6%)	(4.9%)	(5.2%)	(5.0%)	(8.6%)	(5.3%)
Information	471,345	10,141	3,483	32	62	2,104
	(2.8%)	(1.1%)	(1.1%)	(0.5%)	(0.5%)	(1.5%)
Finance and insurance, and real estate and rental and leasing	1,068,711	39,495	13,335	123	508	7,859
	(6.4%)	(4.4%)	(4.2%)	(2.1%)	(4.4%)	(5.4%)
Professional, scientific, and management, and administrative and waste management services	2,099,358 (12.6%)	68,879 (7.6%)	24,651 (7.8%)	288 (4.8%)	1,033 (8.9%)	11,726 (8.1%)
Educational services, and health care and social assistance	3,497,445	194,144	62,026	872	2,471	33,019
	(21.0%)	(21.5%)	(19.6%)	(14.6%)	(21.2%)	(22.8%)
Arts, entertainment, and recreation, and accommodation and food services	1,628,085	73,053	26,371	403	736	12,850
	(9.8%)	(8.1%)	(8.3%)	(6.8%)	(6.3%)	(8.9%)
Other services, except public administration	893,566	40,977	14,803	303	602	7,172
	(5.4%)	(4.5%)	(4.7%)	(5.1%)	(5.2%)	(4.9%)
Public administration	783,425 (4.7%)	63,489 (7.0%)	24,037 (7.6%)	94 (1.6%)	626 (5.4%)	9,859 (6.8%)

Table 3.12-14 Em	ploved Civilian	Population b	v Industrv	in 2013 ¹
			,	

Source: U.S. Census, 2013b

¹ This data set represents the total employed civilian population over the age of 16 by industry; any person with more than one occupation is classified into their primary occupation and counted only once.



Kern County

The income, unemployment, and poverty rates give an indication of Kern County's recovery following the recession, as shown in Figure 3.12-4. The average income declined from \$62,201 in 2007 to \$60,436 in 2011. In 2012, however, the average income rose to \$63,091, and continued rising in 2013 and 2014. The median income in the county returned to the 2007 level of \$47,105 by 2014, when the median income rose to \$47,644. As seen in this data, income levels in the county have returned to pre-recession levels (U.S. Census Bureau 2005, 2006, 2007, 2008, 2009, 2010a, 2011, 2012, 2013a, 2014).

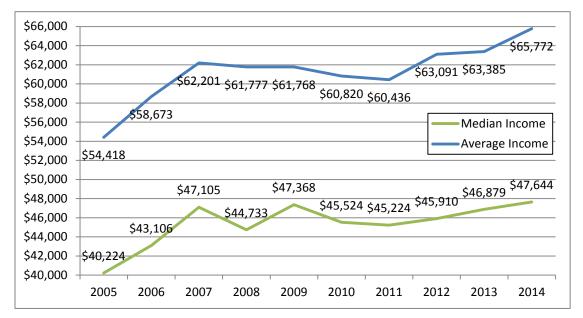


Figure 3.12-4 Average and Median Income in Kern County (U.S. Census Bureau 2005, 2006, 2007, 2008, 2009, 2010a, 2011, 2012, 2013a, 2014)

Levels of unemployment in Kern County have been similar to those in the region. As shown in Figure 3.12-5, unemployment rates in the county show a similar trend of recovery following the 2008 through 2009 recession. These rates, however, have not yet fully returned to pre-recession levels. The unemployment rate in 2007 was 10.0 percent. Unemployment peaked at 15.0 percent in 2011, and has since dropped to 11.0 percent in 2014 (U.S. Census Bureau 2005, 2006, 2007, 2008, 2009, 2010a, 2011, 2012, 2013a, 2014). Between 2000 and 2013, the number of civilians employed in the county rose by 84,586 people (36.4 percent) (U.S. Census Bureau 2000f and 2013b).

Poverty rates have risen across Kern County following the recession and have not returned to pre-recession levels, as seen in Figure 3.12-5. In 2007, 18.1 percent of Kern County residents were living below the poverty level, as defined by the U.S. Census Bureau. This percentage rose during the recession to 21.0 percent in 2008 and 22.4 percent in 2009. As illustrated in Figure 3.12-5, by 2014, 24.8 percent of people were living below the poverty level (U.S. Census Bureau 2005, 2006, 2007, 2008, 2009, 2010a, 2011, 2012, 2013a, 2014).

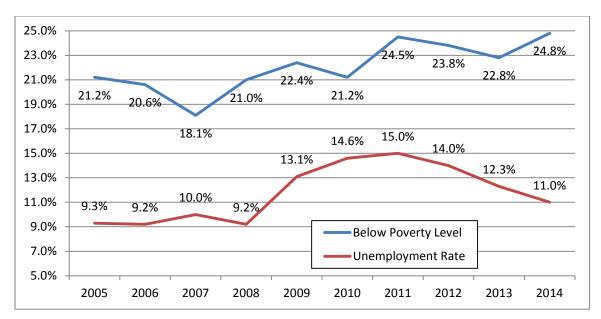


Figure 3.12-5 Unemployment and Poverty Rates in Kern County (U.S. Census Bureau 2005, 2006, 2007, 2008, 2009, 2010a, 2011, 2012, 2013a, 2014)

This data indicates that Kern County's economy has been recovering from the recession of 2008through 2009, with incomes returning to pre-recession levels and unemployment rates approaching pre-recession levels. The percentage of people below the poverty line, however, has been increasing, indicating a shift in the distribution of income. This change may be related to changes in the types of jobs available. In recent history, the agricultural industry has been the fastest growing source of jobs in Kern County. Although these jobs support a large portion of the community, they are generally low-paying and often seasonal, with annual wages averaging \$24,200 dollars in 2013 (Milken Institute 2015). Overall, the county has largely recovered from the recession, but still faces some economic challenges.

Kern County has both rich agricultural soils as well as substantial oil reserves, and as a result, the county's economy has been driven by farming and oil and gas production, with 15.9 percent of the county's occupations being in the Census-defined industry of "agriculture, forestry, fishing and hunting, and mining." As in the region, the largest industry in terms of total number of jobs in the county is "educational services, and health care and social assistance," representing 19.6 percent of the county's occupations (U.S. Census Bureau 2013b).

Kern County produces more oil than any other county in the continental United States, hosting approximately 78 percent of all active California wells and making up over 70 percent of oil production and 60 percent of natural gas production in the state. In terms of total national and world oil supply, Kern County production accounts for 5 and 1 percent, respectively. The county has also started to grow its alternative energy industry. It now leads the country in wind power generation and has several large solar power projects on the horizon. Energy and natural resource production are the largest income-generating industries in the county and offer high-paying jobs to area residents, with average annual wages over \$91,000 in 2013 (Milken Institute 2015).

In addition to its strong energy and natural resource production industries, Kern County is the second largest producer of agricultural goods, leading the nation in production of pistachios, as well as growing a large percentage of the country's almonds, grapes, potatoes, lettuce, garlic, onions, tomatoes, bell peppers, and watermelons. In recent history, the agricultural industry has been the fastest growing source of jobs in Kern County, helping the county to recover from the 2008-2009 recession. Although these jobs support a large portion of the community, they are



generally low-paying and often seasonal, with annual wages averaging \$24,200 in 2013 (Milken Institute 2015).

City of Shafter

Between 2000 and 2013, the number of workers in the City of Shafter's labor force increased by 73.2 (2,516 workers), far above that experienced in the county (36.4 percent) or the region (27.4 percent). Much of this increase can be attributed to growth in the area's agricultural jobs over this period. This increase in employment also led to a decline in the unemployment rate, which dropped from 21.1 to 11.8 percent over this period. Although the city experienced a large improvement in employment, the unemployment rate in 2000 was high relative to the county and region. The new level of unemployment in 2013 is, therefore, only slightly below the rate experienced in the county (13.7 percent) and region (14.3 percent) (U.S. Census Bureau 2000f and 2013c).

The occupational profile of the City of Shafter is dominated by the agricultural industry with 34 percent of the city's occupations being in the industry of "agriculture, forestry, fishing, and hunting, and mining" as shown in Table 3.12-14. This percentage is substantially higher than that of the county (15.9 percent) or region (14.1 percent). Between 2000 and 2013, this industry grew from supporting 828 jobs to 2,027, an increase of 145 percent. Much of this increase is due to the opening of the Bidart Brothers apple-packing facility and the expansion of Grimmway's citrus- and carrot-packaging facilities in Shafter. With the majority of jobs being in the agricultural industry, the city has a lower percentage of residents engaged in other occupations that are more highly represented in the county, including the following industries: "educational services, and health care and social assistance;" "public administration;" "professional, scientific, and management, and administrative and waste management services;" "retail trade;" and "finance and insurance, and real estate and rental and leasing."

Community of Oildale

The community of Oildale experienced a similar increase in its unemployment rate between 2000 and 2013 to the neighboring City of Bakersfield. This community started, however, with a much higher unemployment rate in 2000 than Bakersfield. As a result, the 4.8 percentage point increase experienced over this time period led to an overall unemployment rate of 17.4 percent in 2013, far above that of Bakersfield (12.3 percent), Kern County (13.7 percent), or the region (14.3 percent). The overall number of workers in the community's labor force grew by 1,623 (16.2 percent) during this period (U.S. Census Bureau 2000f and 2013b).

Oildale's occupational profile is similar to that of the City of Bakersfield, with 10.0 percent of occupations in "agriculture, forestry, fishing and hunting, and mining" and 21.2 percent in "educational services, and health care and social assistance." Relative to the county, this community has meaningfully higher representation (over 2 percentage points higher) in terms of occupations in "construction," "retail trade," and "transportation and warehousing, and utilities" (U.S. Census Bureau 2013b).

City of Bakersfield

The City of Bakersfield's economy has traditionally been more diversified than others in the region, with both the oil and gas industry and agriculture playing major roles. Between 2000 and 2013, the number of workers in Bakersfield's labor force increased by 42,900 (42.1 percent). During the same period, however, the unemployment rate increased from 8.5 to 12.3 percent. This change is similar to that experienced by the state as a whole, where the unemployment rate increased from 7.0 to 11.5 percent. Although the increase in the unemployment rate in Bakersfield was larger than that experienced in Kern County or the region, the overall unemployment rate in the city was below that of both the county and region in 2013 (U.S. Census Bureau 2000f and 2013b).

The occupational profile of Bakersfield is similar to that of Kern County. A smaller percentage of the workforce, however, participates in agricultural-related activities than the rest of the county, as defined by the Census-designated industry of "agriculture, forestry, fishing and hunting, and

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mining," with agricultural-related activities representing 10.3 percent of occupations, relative to the county's 15.9 percent. Accordingly, Bakersfield has a higher percentage of residents engaged in occupations that are not as highly represented in the rest of the county. As in the county and the region, the industry with the highest percentage of employment is "educational services, and health care and social assistance," representing 22.8 percent of the city's occupations (U.S. Census Bureau 2013b).

3.12.3.6 Tax Revenues

State and local governments have faced substantial reductions in their tax revenues as a result of the recession of 2008–2009. During this period, home prices fell due to surplus inventory and home foreclosures. As a result, property taxes reset to lower levels than before the recession began. In addition, local governments experienced substantial reductions in revenues from sales taxes as reduced incomes and increased unemployment rates led to decreased consumer spending. Most local governments in the region responded to the reduction in tax revenue by reducing staff, cutting services, and furloughing employees. Consistent with this trend, Kern County experienced a reduction of \$34 million (9 percent) in its tax revenue between the 2008–2009 and 2009–2010 fiscal years. Similarly, the City of Bakersfield experienced an approximately \$20 million reduction in tax revenues (16 percent) in the same period (Kern County 2015; City of Bakersfield 2015a).

Many jurisdictions, including Kern County and the City of Bakersfield, have been gradually recovering after being impacted by the statewide economic slump. Both of these jurisdictions have returned to their pre-recession levels of tax revenue; however, in the case of Bakersfield, this growth has been in sales tax revenue, as property tax revenue is still below that of the 2008–2009 fiscal years. Although sales tax revenues have rebounded from prior-year amounts, they continue to be volatile. Nevertheless, Bakersfield continues to show signs of improvement, including year-over-year improvements in new home construction. The city attributes the continued gradual improvement in the local economic environment primarily to the strong agricultural and oil production industries in the area (Kern County 2015; City of Bakersfield 2015a).

Table 3.12-15 presents fiscal characteristics for the county and cities that overlay the study area for the most recently available fiscal year, including the percentage of the budget that is made up of property and sales taxes.

Area ¹	Budget Year ²	Annual Budget	Percentage of	Sales Tax as a Percentage of Budget
Kern County	2013/14	2,009,429,118	13.4%	2.2%
City of Shafter	2013/14	50,633,741	2.1%	29.2%
City of Bakersfield	2013/14	475,096,387	14.0%	15.2%

Table 3.12-15 County and City Fiscal Conditions

Sources: County of Kern 2015a, City of Bakersfield 2015a, and City of Shafter 2015a

¹ Tax revenue gains would occur based on local construction spending in the short-term and local operation and maintenance spending in the long term. Tax revenue losses would occur based on displacement of residential and commercial uses. These effects would occur in the jurisdictions in which the project spending and displacements would occur, which include Kern County and the cities of Shafter and Bakersfield. Therefore, only the affected jurisdictions are listed.

² The budget year represents the most recent year for which actual final data is available.

³ Property tax data does not include property tax revenues paid in lieu of vehicle licensing fees.

3.12.3.7 Communities and Neighborhoods

Study Area Overview

The locations of community facilities are of primary concern for the socioeconomics and communities analyses, because community facilities greatly contribute to community cohesion.

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These community facilities, shown in Figure 3.12-6, include public buildings; public safety, fire, and police stations; medical services; schools; places of worship; and parks. In addition to those amenities that give local communities a unique sense of place, other amenities may be of a more regional interest. For example, California State University, Bakersfield, draws students from throughout the region and beyond, and Meadows Field Airport serves more than 700,000 people in the region (County of Kern 2013). Kern County also has many recreational resources of regional and statewide importance, including Inyo National Forest, Giant Sequoia National Monument, Isabella Lake, and numerous other state-run historic parks, recreation areas, and game preserves. These resources are enjoyed by residents and visitors alike.

The community facilities of interest located in the study area for the F-B LGA are shown on Figure 3.12-6. In some cases, the community facilities appear to extend outside the study area boundary; however, in each of these cases, at least a portion of the parcel containing the community facility is located within the study area boundaries.

City of Shafter

Shafter's city limits, which encompass a substantial amount of farmland and open space, extend eastward to SR 99 and southeast almost to the Bakersfield city limits. The city is bisected from northwest to southeast by both SR 43 and the BNSF Railway railroad tracks so that most of the relatively small urbanized area of the city falls within the study area boundaries. Shafter has several public buildings that serve the needs of the community, including the administrative offices of the city, the local library, and two museums. All of the city's police and fire stations, as well as its public schools, are located within the study area. Six city-owned parks are located in Shafter, and four are in the study area.

The Shafter police and fire stations, as well as the three medical facilities in the city, are located in the study area. Other public services buildings and facilities located in the study area in Shafter include the Kern County government office, the Richland School District office, the Shafter Depot Museum, the Shafter branch of the Kern County Library, the Green Hotel (museum), Shafter City Hall (also houses administrative offices of the City), the Shafter Post Office, and the Shafter Modified Community Correctional Facility.

Healthcare facilities located in the study area in Shafter include the Golden Living Center and Joy Carino Kimpo Women's Health Center, which are certified by the California Office of Statewide Health Planning. The Shafter Community Health Center is also located in the study area in Shafter.

The five public schools in Shafter are all located in the study area. Richland Union Elementary School District has a total enrollment of approximately 3,453 students in its three elementary schools and one junior high school. Shafter High School has an enrollment of 1,440 students, and Central Valley Continuation High School has an enrollment of 98 students (Education Data Partnership 2015c). Other schools in the study area include Free Will Christian Academy, Redwood Elementary School, Richland Junior High School, Sequoia Elementary, and Golden Oak Elementary School.

Numerous religious facilities provide for a wide range of faiths in Shafter. Churches and religious facilities located in the study area include Shafter Missionary Baptist Church, Ebenezer Reformed Church, First Mexican Baptist Church, Shafter Christian Fellowship, W.C. Walker Senior Center, Mennonite Brethren Church, Home Fellowship Church, First Southern Baptist Church, First Assembly of God Church, Church of Christ, Valley Bible Church, Free Will Baptist Church, St. Mark's Episcopal Church, Spanish Assembly of God, Bible Truth Tabernacle, Congregational Church of Shafter, Kingdom Hall of Jehovah's Witnesses, and New Hope Community Church.

The Town Square Park is on Central Avenue and provides shaded seating and a stage for special events. Stringham Park provides tables, benches, tot lots, and an open grass area. Kirschenmann Park largely serves as a baseball field with stadium seating and night lighting, and also provides a large grass area for other recreational activities. Mannel Park has a gazebo and shaded grass areas. Town Square, Stringham Park, and Kirschenmann Park would be separated from the F-B LGA by the existing heavy railroad transportation right-of-way and SR 43 (Central Valley Highway) (City of Shafter 2015b).

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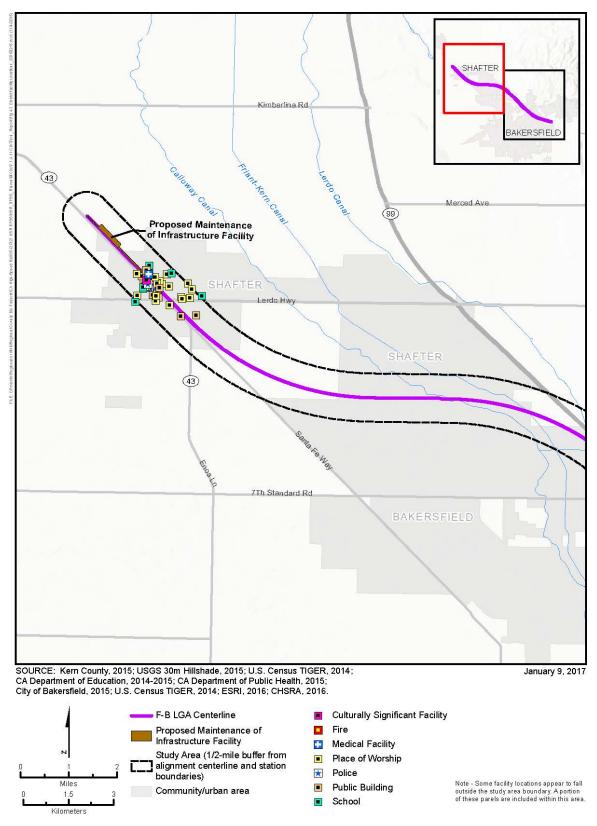


Figure 3.12-6 Community Facilities in the Study Area (Sheet 1 of 2)

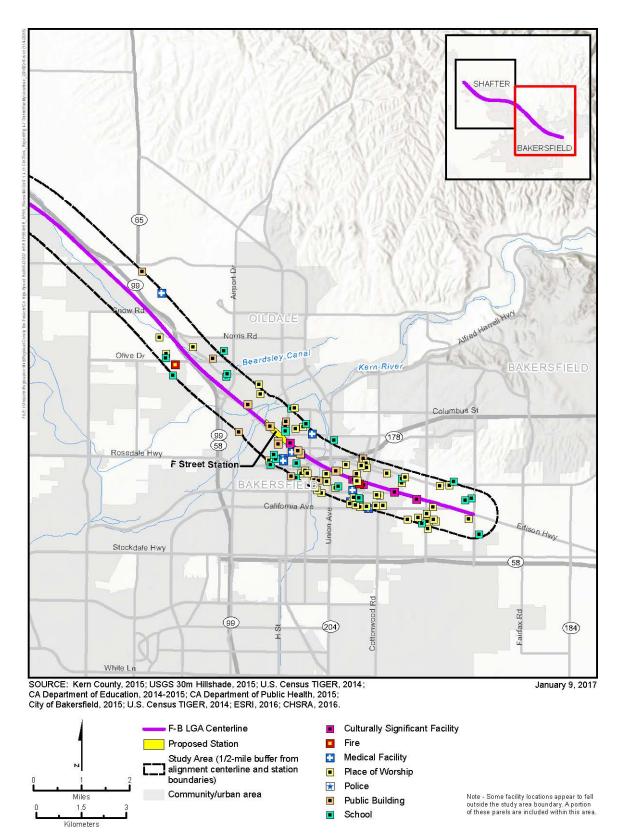


Figure 3.12-6 Community Facilities in the Study Area (Sheet 2 of 2)



Community of Oildale

The community of Oildale is an unincorporated suburban town located 3.5 miles north-northwest of downtown Bakersfield across the Kern River, west of the Kern River Oil Field and east of SR 99 (Figure 3.12-5). Few public resources are located within the study area in this community, with the exception of three public schools, a small portion of Riverview Park, and two religious facilities, as described below.

The Standard Elementary School District operates three elementary schools and one middle school in Oildale, with a total 2013-14 academic year enrollment of 2,947 students (Education Data Partnership 2015b). Three of these schools are located in the study area: Beardsley Elementary School, North Beardsley School, and Beardsley Intermediate and Junior High School.

Public services in the community of Oildale are provided by Kern County. No police, fire, or medical facilities are located in the study area in the community of Oildale.

Recreational facilities in the community of Oildale are maintained by the North of the River Recreation and Parks District, and include the approximately 20-acre Riverview Park, a small portion of which is in the study area (North of the River Recreation and Park District 2015). In addition, two religious facilities are located in the community within the study area.

City of Bakersfield

The City of Bakersfield is the largest city and main commercial center in Kern County and is located at the southern end of the San Joaquin Valley, equidistant from Fresno to the north and Los Angeles to the south. Bakersfield offers a wide array of community facilities and amenities compared with the smaller communities in the region. The study area includes the Central, Northeast, and Northwest districts of the City of Bakersfield.

Bakersfield offers a wide array of outdoor recreation and cultural amenities. The city has a convention center, a symphony orchestra, a planetarium, an art museum, a natural history museum, the California Living Museum (Bakersfield Zoo), the Metropolitan Recreation Center, Lori Brock Children's Museum, and the Kern County Museum, which includes Pioneer Village and the Historic Reference Library. The city also has its own professional baseball, football, basketball, and hockey teams, as well as three public golf courses and numerous private country clubs. The city is home to the 40-acre Kern County Soccer Park, with 24 playing fields. The city maintains 53 local parks offering a variety of recreational resources, as well as miles of biking and hiking trails, including a portion of the Kern River Parkway. Other local points of interest include Old Town, with a concentration of Basque restaurants, the Buck Owens Crystal Palace, the Majestic Fox Theater, and other theater and music venues.

A community facility of particular note in the City of Bakersfield is the Mercado Latino Tianguis (Mercado), a shopping complex in the city's Northeast District that re-creates the feel of a Mexican village market. This facility is not a single business entity; rather, it rents stall space to approximately 105 small businesses and microbusinesses that cater to Kern County's Hispanic population.

Public safety facilities in the city limits include four police stations and County Sheriff facilities that include a station, jail, and crime lab. In addition, two federal law enforcement agencies have offices in the study area—the Federal Bureau of Investigation and the Federal Bureau of Alcohol, Tobacco and Firearms. Bakersfield's 26 fire stations are spread throughout the city, with one located in the study area, approximately 0.4 miles from the proposed alignment. Other public service buildings and facilities located in the study area in Bakersfield include U.S. Department of Veterans Affairs, Kern County Government Office, Kern County Parks and Recreation Department, and the State of California Government Office.

The City of Bakersfield has 71 licensed healthcare facilities (10 hospitals, 23 hospices, 10 longterm care, and 28 clinics) (California Health and Human Services Agency 2015). Healthcare facilities located in the study area in Bakersfield include the San Joaquin Community Hospital, Bakersfield Healthcare Center, Pegasus Dialysis LLC, East Bakersfield Dental Clinic, Bakersfield

Health Services, All Kids Dental Surgery Center, Old Town Kern Community Health Center, and Adventist Health Home Care Services of Bakersfield.

The Bakersfield City School District and the Kern High School District are the largest in the Bakersfield area, with 41 elementary and middle schools in the Bakersfield City School District serving 29,684 students in the 2013–14 academic year and 24 high schools in the Kern High School District, 19 of which are located in Bakersfield, serving 37,100 students during the same period (Education Data Partnership 2015a). Several other school districts serve the area, including Rosedale Unified (5,384 students), Fruitvale Elementary (3,313 students), Fairfax Elementary (2,405 students), and Edison Elementary (1,108 students) (Education Data Partnership 2015a). Bakersfield schools in the study area include Horace Mann Elementary School, Vista East High School, Mount Vernon Elementary School, Sierra Middle School, Virginia Avenue Elementary School, Bethel Apostolic Academy, Bethel Christian School, Stella Hills Elementary School, Pioneer Drive Elementary School, Ramon Garza Elementary School, Downtown Elementary School, International South Sikaran Academy, Bakersfield Adult School, Valley Oaks Charter School, Williams Elementary School, and San Lauren Elementary School.

Seven city-owned parks are located in the study area for the F-B LGA in Bakersfield, two of which the F-B LGA would cross over: the Kern River Parkway and Weill Park (see Section 3.15, Parks, Recreation and Open Space, of this Draft Supplemental EIR/EIS). The Kern River Parkway is a 1,033-acre, 32-mile linear community park with bike paths, pedestrian, and equestrian facilities. Other recreational facilities include a fishing pond, fitness parcourse, horseshoe pit, skate park, and picnic tables. The park facility at the proposed alignment crossing consists of an asphalt bike path located on top of an earthen levee and a pedestrian footpath. The parkway connects several city parks along the Kern River. The F-B LGA would also cross over Weill Park, a 1.6-acre park with grass areas and trees. The three remaining parks that are in the study area include Joshua Park, providing a grass area; Central Park, offering a volleyball court, picnic tables, and a tot lot; and Uplands of the Kern River Parkway, a 14-acre park with overlook platforms, an equestrian trail, and natural walking paths (City of Bakersfield 2015b).

3.12.4 Environmental Consequences

This section describes the impact analysis relating to socioeconomics and communities for the F-B LGA. Section 3.12.12 of the Fresno to Bakersfield Section Final EIR/EIS describes the impact analysis relating to socioeconomics and communities for all of the previously studied alternatives, which include the May 2014 Project. The analysis here will focus on the impacts of the F-B LGA and the impacts of the May 2014 Project, and is based in the work undertaken for the F-B LGA Community Impact Assessment Technical Report (Authority and FRA 2017).

Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) impacts accompany each impact discussion. The socioeconomics and communities analysis prepared for this Draft Supplemental EIR/EIS includes a review of the data and impact analyses in Section 3.2, Transportation; Section 3.3, Air Quality and Global Climate Change; Section 3.4, Noise and Vibration; Section 3.11, Safety and Security; Section 3.13, Station Planning, Land Use, and Development; Section 3.14, Agricultural Lands; Section 3.15, Parks, Recreation, and Open Space; Section 3.16, Aesthetics and Visual Resources; Section 3.17, Cultural Resources; and Section 3.18, Regional Growth, of the Draft Supplemental EIR/EIS.

This chapter provides analysis of the socioeconomic and communities impacts of the F-B LGA, including the following:

 Impacts from disruption or division of communities and neighborhoods,⁵ including the regional agricultural community

⁵ This disruption could include interference with established patterns of interactions among community residents, isolation of one part of a community from another, or disruption of residents' access to community facilities and services.



- Impacts to children's health and safety
- Impacts from displacement of residential properties, commercial and industrial businesses, and agricultural land
- Impacts on displaced and affected community facilities
- Impacts on sensitive populations (elderly, disabled, linguistically isolated, and female head of household)
- Impacts on agricultural access
- Impacts on school districts
- Impacts on employment
- Impacts on the fiscal accounts of county and city governmentsPhysical deterioration of communities

Impacts are presented by topic for communities and neighborhoods, properties, and economic impacts and effects. These sections contain analysis of both short-term (construction) and long-term (operation) impacts.

3.12.4.1 Summary of Analysis for the May 2014 Project

Potential impacts that would result from construction and operation of the May 2014 Project include the disruption, division, and deterioration of communities, effects on children's health and safety, effects on sensitive populations and agricultural access, effects on tax, employment and school funding and access. Many of these impacts are related to the displacement and relocation of residences, businesses, agricultural operations, and community facilities as a result of property acquisitions for the May 2014 Project. Because property acquisition and displacement of homes and businesses would result in permanent changes to communities, these impacts are addressed below under Project Operation Impacts (rather than under Construction Period Impacts). This section provides a summary of those effects of the May 2014 Project using information from the Fresno to Bakersfield Section Final EIR/EIS.

Construction Period Impacts

Disruption or Division of Communities – Construction Impacts

Construction impacts resulting from the May 2014 Project would consist of noise, dust, visual changes, and changes in traffic patterns. While these impacts would not affect most aspects of community cohesion, they would temporarily affect residents' access to community facilities and services. In most cases, detours and altered access would allow community facilities and services to remain open during construction. Impacts would be less than significant under CEQA.

Construction Effects on Children's Health and Safety

Construction of the May 2014 Project would not significantly affect schools districts in the region, since Avoidance and Minimization Measures from Section 3.2.5 (TRA-AM#1-11) would be incorporated into the project to prevent conflicts with other vehicles, pedestrians, and bicyclists. Additionally, construction emissions during construction would be reduced since Avoidance and Minimization Measures from Section 3.3.7 (AQ-AM#1-4) would be incorporated into the project. Impacts would be less than significant under CEQA.

Construction-Related Effects on Employment Growth

Construction spending for the May 2014 Project would generate direct, indirect, and induced jobs in Kern County. Direct employment refers to jobs created to construct the project and primarily involves jobs created in the construction sector. Indirect employment refers to jobs created in existing businesses in the county (e.g., material and equipment suppliers) that provide goods and services to project construction. Induced employment refers to jobs created in new or existing businesses (e.g., retail stores, gas stations, banks, restaurants, service companies) that supply

goods and services to workers and their families. This analysis includes estimates of the number of direct, indirect, and induced jobs that would be created in one-year full-time job equivalents. Short-term job creation was estimated by evaluating construction spending by industry and estimating the number of jobs this spending would support. The U.S. Department of Commerce, Bureau of Economic Analysis (BEA) Regional Input-Output Modeling System (RIMS II) Type II annual final demand employment multipliers were used to estimate employment over the construction period of the project (June 2019 to July 2024). For a detailed description of the methodology used for this analysis, refer to Section A.4, Short-Term Job Creation Methodology, of Appendix A of the F-B LGA Community Impact Assessment Technical Report (Authority and FRA 2017).

The number of one-year full-time job equivalents that would be created directly as a result of May 2014 Project construction spending over the entire construction period would be approximately 6,230. The total number of indirect and induced one-year full-time job equivalents that would be created in Kern County over this period would be approximately 5,644. The total number of one-year full-time job equivalents that would be created in the county over the entire construction period, including direct, indirect, and induced jobs, would be approximately 11,874. During the peak construction years, an additional 3,265 jobs would be created in the county, 1,713 of which would be direct.

Annual average unemployment across Kern County was 13.7 percent in 2013, amounting to approximately 85,300 persons out of work (U.S. Census Bureau 2015). Employment in the construction industry fell by 3,937 jobs (17 percent) between 2005 and 2013, with 23,169 jobs in 2005 and 19,232 jobs in 2013 (U.S. Census Bureau 2005 and 2013). Given this decline in the construction industry, many of the unemployed workers in Kern County likely possess the necessary skills to fill new construction jobs created by the May 2014 Project.

Additionally, in December 2012 the Authority implemented the Community Benefits Agreement, which includes special recruitment, training, and job set-aside programs designed to assist local small businesses and job seekers in finding or obtaining construction contracts, jobs, and training. This program prioritizes residents of economically disadvantaged areas along the alignment and residents designated as Disadvantaged Workers, including veterans (Authority 2015b). This program would help further ensure that jobs are filled by the existing underemployed, local workforce.

As with any large construction project, some influx of population is expected as workers arrive in the area seeking jobs. Given the high level of unemployment in the communities analyzed for the study area and the large number of construction workers in the job market, however, the majority of these new construction jobs would be filled by residents of the area who possess the necessary construction skills. As a result, construction of the May 2014 Project would not result in a large influx of workers to the area, and therefore construction of additional community facilities would not be required to support this workforce, and impacts would be less than significant under CEQA.

Construction-Related Effects on Tax Revenue

Regional construction expenditures on materials and supplies across the entire Fresno to Bakersfield section of the HSR project are estimated to be around \$773.4 million, with \$343.1 million of this spending attributable to the May 2014 Project. The total local sales tax revenue gains generated from this spending would be approximately \$3.79 million, amounting to average annual gains of \$632,000 per year over the six-year construction period. The sales tax revenues lost from displaced businesses under the May 2014 Project are approximately \$523,000 per year (Table 5-35). Given the sales tax gains from construction activities would outweigh sales tax losses from displaced businesses by \$109,000 per year during the construction period, construction of the May 2014 Project portion of the Fresno to Bakersfield section of the HSR project would have an overall positive impact on sales tax revenues collected by local governments during the construction period.



Operational Impacts

Disruption or Division of Communities – Operation Impacts

Adverse effects from operation of the May 2014 Project include the potential to divide adjacent communities by physically removing homes, businesses, and community facilities and placing a new linear project through the community outside of and away from the existing railroad right-of-way. Overall, the May 2014 Project would result in the displacement of community facilities including the Mercado Latino Tianguis (Mercado), Bakersfield Homeless Center, Kern County Mental Health Facility, a Mercy Hospital medical complex building, and several religious facilities. Therefore, the impacts to these communities would be significant under CEQA.

Operational Effects on Children's Health and Safety

Operation of the project is not expected to impact children's safety. During operation, the Fresno to Bakersfield HSR including the May 2014 Project would have beneficial effects on air quality because reduced traffic congestion would lower emissions. Operation of the Fresno to Bakersfield section HSR with the May 2014 Project would benefit children's health as a result of improvements in air quality throughout the HSR project area, including the study area for the May 2014 Project. Much of the area adjacent to the May 2014 Project alignment is associated with agriculture, industrial, and commercial uses, which are typically not areas where children congregate. No acutely hazardous materials would be required to operate the passenger rail service except potentially at the maintenance of infrastructure facility, and there are no schools located within 0.25 mile of the proposed maintenance of infrastructure facility, therefore there would be no impacts to schools. Overall, impacts to children's health and safety would be less than significant under CEQA.

Residential, Commercial and Industrial, and Agricultural Displacements

As shown in Table 3.12-16, The May 2014 Project would result in the displacement of an estimated 384 residential units, which correlates to an estimated 1,205 residents. The displaced residential units would include 251 single-family homes and 133 multi-family units, and would not include any mobile homes. The majority of these displacements would occur in unincorporated Kern County and the City of Bakersfield. This alternative does not cross though the community of Oildale, and therefore no displacements would occur in this area.

Location	Residential Units Displaced	Estimated Residents to be Relocated
City of Shafter	4	15
City of Bakersfield	143	443
Unincorporated Kern County	237	747
Total	384	1,205

Table 3.12-16 Residential Displacements under the May 2014 Project

Sources: County of Kern 2016, U.S. Census Bureau 2010b

Although the May 2014 Project would displace existing housing units and relocate existing residents, a sufficient number of comparable replacement residences are available in areas that would be affected by relocations under the May 2014 Project. Some residents, however, would need to move to neighboring communities to relocate into existing replacement housing.

As shown in Table 3.12-17, in total along the May 2014 Project, an estimated 392 commercial and industrial businesses would be relocated prior to construction, corresponding to an estimated 2,857 relocated employees in total. Businesses in unincorporated Kern County would account for nearly half of these relocations, with many of these relocations occurring in the Bakersfield metropolitan area, but outside the city's incorporated boundary. Businesses in the incorporated cities of Bakersfield and Shafter account for 185 and 10 business relocations, respectively. As

with residential units, no business relocations would occur in the community of Oildale under the May 2014 Project because this alternative does not cross through this area.

Location	Businesses Relocated	Estimated Employees Relocated
City of Shafter	10	222
City of Bakersfield	185	1,590
Unincorporated Kern County	197	1,044
Total	392	2,857

Table 3.12-17 Commercial and Industrial	Relocations under the Ma	2014 Project
Table 3.12-17 Commercial and muusula	Relocations under the Ma	

Sources: County of Kern 2016, Reference USA 2015.

As described in Section 5.1.1.3, Commercial and Industrial Business Displacements of the F-B LGA: Community Impact Assessment Technical Report (Authority and FRA 2017), there are sufficient replacement properties available for all sectors except automotive repair and services and accommodation, food service, and other non-automotive services. For the displaced automotive, accommodation, food service, and other non-automotive businesses, other types of commercial facilities would need to be modified or reconfigured to meet the specific needs of the displaced businesses.

The May 2014 Project would result in an estimated 10 agricultural parcels being split into two or more pieces, as well as the displacement of one parcel that houses an agricultural storage facility. The temporary business interruption during relocation and consolidation of these operations and this storage facility could result in temporary increases in business costs and lost revenues.

Impacts from residential, commercial and industrial, and agricultural displacements due to the May 2014 Project would be significant under CEQA.

Displaced or Affected Community Facilities

As discussed in Section 5.2.5, Community Facilities, of the Fresno to Bakersfield Section Community Impact Assessment Technical Report (Authority and FRA 2012), the HSR project alignments considered under all of the alternatives, including the May 2014 Project, would avoid most community facilities and other properties that provide public services, and would not result in direct effects to police or fire stations, libraries, post offices, or civic centers.

Overall, the May 2014 Project would displace 11 community facilities in the study area, with 8 located in the City of Bakersfield and 3 located in unincorporated Kern County. These facilities include the 7th Standard Pentecostal Church of God/ India Pentecostal Assembly (a religious facility), Korean Presbyterian Church, California Department of Water Resources, Bakersfield Solid Waste/ Garbage Pickup, Mercy Hospital medical complex, Planned Parenthood, CityPlace Affordable Housing, Kern County Mental Health Services, Kern County Probation Department, Bakersfield Homeless Center, and Mercado.

The May 2014 Project would also directly affect an additional nine community facilities in the study area, including the Grace Baptist Church, Chinmaya Mission Bakersfield (a religious facility), Interim Health Care of Bakersfield, Kern County Department of Human Services (two locations), Volunteer Center of Kern County, Rabobank Arena Theater and Convention Center (parking), and two city/county owned facilities: the City of Bakersfield Police Department's vehicle maintenance yard and Kern County Services' parking lot (including parking for Kern County Sheriff's Office). The nine affected facilities would remain on parcels that are partially acquired by the HSR project. Section 5.2.5, Community Facilities, of the Fresno to Bakersfield Community Impact Assessment Technical Report offers detailed information about some of the specific properties housing community facilities that would be displaced/affected by the May 2014 Project.



Because the May 2014 Project would displace key facilities providing important community services to Bakersfield's homeless population (e.g., Bakersfield Homeless Center, Kern County Mental Health Services), this impact would be significant under CEQA.

Relocations of Sensitive Populations

High numbers of residential unit displacements associated with construction of the HSR project could result in the relocation of high percentages of sensitive populations, including the elderly (age 65 and over), the disabled, female heads of household, and linguistically isolated residents. The anticipated residential unit displacements resulting from construction of the HSR system, including those that would occur under the May 2014 Project, are not expected to disproportionately displace sensitive populations. It is expected, however, that sensitive populations would be among those relocated by the HSR project. Relocation plans and resources would take this into account and address special needs of such households accordingly.

As discussed in Section 5.4.1, Relocation of Sensitive Populations, of the Fresno to Bakersfield Community Impact Assessment Technical Report (Authority and FRA 2012a), the May 2014 Project may affect high numbers of disabled, female heads of household, and linguistically isolated populations in the Northeast District. Relocation plans and resources provided would take the special needs of these populations into account, and therefore impacts to sensitive populations would be less than significant under CEQA.

Economic Effects on Agriculture

The May 2014 Project would have moderate short-term impacts on agricultural production in Kern County. The estimated annual total loss in agricultural production value and employment under the May 2014 Project would be approximately \$3.8 million and 16 employees. Overall, this estimated dollar value loss represents a small percentage (0.1 percent) of the total annual agricultural production in Kern County (See the F-B LGA Community Impact Assessment Technical Report, Authority and FRA 2017).

School District Funding and School Access

Some of the short-term reductions in property and sales tax revenues discussed below may occur as a result of land acquisition and the removal of properties from county tax rolls, which have the potential to affect school district funding. Most residences and businesses would have the opportunity to relocate within the same tax jurisdiction because a suitable amount of vacant replacement housing is available in the zip codes corresponding with anticipated displacements that would occur under the May 2014 Project. Although zip code areas do not necessarily align with school district boundaries, this is an indication that families would be able to relocate in close proximity to their existing homes. Students, therefore, would likely have the opportunity to remain in their current school districts, and any effect on school district funding would be small. Therefore, the potential losses would be a small percentage of the annual tax revenues collected by local jurisdictions. In the context of a challenging regional economic climate, the impact would be less than significant under CEQA.

During construction, pedestrian, bicycle, transit, and vehicular access to schools could be interrupted. However, traffic management plans would be implemented to maintain route access, including detours and rerouting transit. Emergency access to schools would be maintained. Therefore, impacts related to school access would be less than significant under CEQA.

Operation-Related Property and Sales Tax Revenue Effects and Employment Growth

Along the May 2014 Project, displacement of residences, businesses, community facilities, and agricultural lands would result in estimated annual losses of \$4.2 million in property tax revenue to county and city budgets in the region. This estimated amount represents approximately 1.2 percent of the total 2013/14 fiscal year property tax revenue of the county and cities in the study area. The total annual losses in Kern County would be approximately \$3,418,000, while losses in the cities of Shafter and Bakersfield would be approximately \$18,000 and \$715,000, respectively. Property tax losses could be balanced over the long run by the increased property tax revenues

associated with the intensification of land uses and ensuing increased property values resulting from the HSR project.

The May 2014 Project would result in a total loss of approximately \$523,000 in annual sales tax revenues to the local jurisdictions impacted by this alternative, amounting to approximately 0.4 percent of the total sales tax collected in these jurisdictions. The largest percentage effect would occur in Shafter, where annual sales taxes revenue losses to the city would amount to approximately \$237,000, or 1.6 percent of the city's total sales tax revenue receipts. This effect is due to potential effects to large industrial companies, including Farm Pump and Irrigation Company Inc., IFCO Systems, Helena Chemical Company, and Wilbur-Ellis Company. Annual sales tax revenue losses in unincorporated Kern County and the city of Bakersfield would be approximately \$108,000 and \$178,000, respectively.

These sales tax revenue losses would generally be temporary because they would occur during the time when affected businesses are closed for HSR project construction or while displaced businesses relocate to a new location. Given that appropriate replacement properties are available for most displaced businesses, many are expected to relocate in the same county, possibly reopening in the same city. Once the businesses reopen, sales tax revenue generation would resume. Overall, these percentages would present a small impact, though for jurisdictions confronting revenue shortfalls and budget constraints, even a minor loss of annual revenue could cumulatively have a considerable effect.

Operation of the HSR project under all alternatives, including the May 2014 Project, would result in annual sales tax gains for local jurisdictions in Kern County of approximately \$477,000. Sales tax losses associated with displacements that would occur as a result of the project would begin to decrease as displaced businesses become re-established at new locations and new businesses move in to replace those that did not reopen. Project operation, therefore, is expected to have an overall positive impact on sales taxes collected by local governments under the May 2014 Project.

The HSR project, including the May 2014 Project, would result in the creation of long-term jobs associated with operation and maintenance of the project. These long-term employment effects from the HSR project were estimated in a 2010 study conducted by Cambridge Systematics Inc., which found that all of the alternatives studied in the Fresno to Bakersfield Section Final EIR/EIS would result in the creation of approximately the same number of regional long-term jobs (Cambridge Systematics Inc. 2010). For a description of projected long-term job creation related to the HSR project, please see Section 5.1.2.2, Long-term Job Creation, of the Fresno to Bakersfield Community Impact Assessment Technical Report (Authority and FRA 2012). Given that these employment effects are regional, job inducement would be similar under the May 2014 Project and F-B LGA as well.

Physical Deterioration of Communities

Although the May 2014 Project would cause the displacement of homes, businesses and community facilities, none of these displacement or the resulting social and economic consequences of the May 2014 Project would result in physical deterioration of communities. The Truxtun Avenue station would encourage area growth including commuter and traveler oriented business and services. However, context sensitive design will be applied to the station as part of the Authority's Urban Design Guidelines. Overall, the potential effects identified would not lead to any foreseeable physical deterioration within the communities along the May 2014 Project. Impacts would be less than significant under CEQA.

3.12.4.2 Fresno to Bakersfield Locally Generated Alternative

A complete definition of the F-B LGA is provided in Chapter 2 of this Draft Supplemental EIR/EIS.

Construction Period Impacts

Project construction is expected to be completed within 6 years extending from the beginning of the first phase of construction and through operational testing of the HSR system. Heavy-construction activities (e.g., grading, excavating, and laying the HSR railbed and trackway) are



expected to be accomplished within a 5-year period. Construction would require property acquisition and displacement of homes and businesses resulting in permanent changes to communities. As a consequence, these impacts are addressed below under Project Operation Impacts (rather than under Construction Period Impacts).

Impact SO #1 – Disruption to Community Cohesion or Division of Existing Communities from Project Construction

The construction of the F-B LGA would result in temporary impacts to communities. Community cohesion refers to residents' sense of belonging to their neighborhood, their level of commitment to their community, or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time. This disruption could include interference with established patterns of interactions among community residents, isolation of one part of a community from another, or disruption of residents' access to community facilities and services. In general, construction would occur primarily outside (but in some areas adjacent to) established residential neighborhoods, in areas associated with agricultural, commercial, or industrial uses.⁶ Where these alternatives lie adjacent to existing transportation corridors, construction would not bisect or isolate established communities or change the existing community character. However the following impacts to community cohesion as defined here could occur: disruption of established patterns via noise and visual changes, as well as traffic circulation; disruption of access to community facilities and emergency services; and the introduction of construction-period workers on the HSR alignment and station areas. These potential impacts are discussed below.

Construction impacts would include temporary increases in noise and dust, visual changes, and traffic congestion related to road closures or detours. Construction noise impacts on residential properties would be greater during nighttime construction. Activities related to construction of the F-B LGA would include receiving and moving equipment and materials, clearing and exposing soils, introducing lights for nighttime work, storing construction materials, and other changes to the project landscape. Construction would occur from the beginning of the first phase of construction through operational testing of the HSR system. It is expected that heavy construction activities (e.g., grading, excavation, construction of the HSR railbed, development of the F Street Station, and laying the trackway) would be accomplished within a 6-year period. As much as possible, construction would occur within the right-of-way acquired for the F-B LGA, although some areas outside the right-of-way would be used for staging.

Construction noise and vibration along the rail corridor, at the station, the maintenance of infrastructure facility, and other utility facilities could impact residential and commercial properties. Without pile driving, residential properties within 156 feet from the construction boundary would be exposed to noise levels greater than 80 dBA L_{eq}, which is the Federal Transit Authority's residential construction boundary could be impacted. With pile driving, properties within 316 feet of the construction boundary could be impacted. Overall construction noise impacts and construction vibration impacts on both residential and commercial properties would be nominal in terms of community cohesion. Noise impacts would not alter community interactions, access to community services and facilities, nor would it isolate any part of the community. In depth construction noise and vibration impact analysis is provided in the *F-B LGA: Noise and Vibration Technical Report* (Authority and FRA 2016a).

Adverse construction impacts related to local roadway modifications and construction may temporarily disrupt community circulation patterns, particularly in the Bakersfield station area. Access to some neighborhoods would be disrupted and detoured for short periods during construction. Any roadways that would require realignment would be realigned before the closure of the existing roadway. Construction would also require an increase in truck trips that could intensify congestion and adversely affect pedestrians, bicyclists, and transit due to detours,

⁶ Impacts associated with displacement and relocation are addressed in Section 5.1.1, Property Displacements and Relocations.

delays, or increased safety risks. See the *F-B LGA: Transportation Technical Report* for additional details (Authority and FRA 2016b).

Construction would require a large number of employees but is not expected to have any negative effects related to temporary population increases such as overcrowding, housing shortages, or inadequate services, and there is not a projected need for increased housing and services that could disrupt existing community cohesion. Unemployment in the region remains relatively high (14.3 percent in the region and 11.8 to 17.4 percent in the local communities) (U.S. Census Bureau 2013b), so project-related construction jobs are expected to be filled by residents in the region who have the necessary skills. Because most of the jobs would be filled by area residents, no additional housing or services would be required, therefore avoiding the strain of an influx of new workers to communities in the area that would disrupt existing community cohesion.

Emergency vehicle access for police and fire protection services would be maintained at all times. Law enforcement, fire, and emergency services could experience increased response times due to construction-related road closures, detours, and increased traffic congestion in some locations. Delays could be longer in rural areas where temporary road closures could result in several miles of out-of-direction travel in order to access roads crossed by the F-B LGA (see Section 3.11, Safety and Security, of this Draft Supplemental EIR/EIS).

Access to some community facilities could be modified temporarily during construction with the potential to inconvenience patrons and affect community cohesion by temporarily disrupting use of these community facilities. However, access would not be eliminated (except in cases where facilities would be relocated). Table 3.12-18 shows a complete list of the community facilities displaced and affected by the F-B LGA. In addition, noise, dust, and glare could limit the use of community facilities, including schools and parks; thereby affecting community cohesion by changing patterns of community interaction and interrupting access to community facilities and services. Construction impacts associated with noise, dust and glare are addressed in other sections of this Draft Supplemental EIR/EIS and would be mitigated to less than significant with measures identified in those sections (see Section 3.3 Air Quality, Section 3.4 Noise and Vibration, and Section 3.16 Aesthetics and Visual Resources, of this Draft Supplemental EIR/EIS).

Name	Address	Jurisdiction	Туре	Impact
Displaced Facilities				
Golden Empire Transit District	1830 Golden State Avenue	Bakersfield	City/County Facility	Displaced
Valley Oaks Charter School	3501 Chester Avenue	Bakersfield	Charter School	Displaced (partially)
Bakersfield Department of Motor Vehicles	3120 F Street	Bakersfield	Government Office	Displaced
Golden Empire Gleaners	1326 30th Street	Bakersfield	Food Bank	Displaced
City-owned Storage Facility	130 Sumner Street	Bakersfield	City/County Facility	Displaced
Bakersfield Homeless Center	1600 East Truxtun Avenue	Bakersfield	Homeless Services	Displaced
Mercado Latino Tianguis	2105 Edison Highway	Kern County	Cultural Center/ Market	Displaced

Table 3.12-18 Community Facilities Affected by the Fresno to Bakersfield Locally Generated Alternative



Name	Address	Jurisdiction	Туре	Impact			
Affected Facilities							
City-owned Maintenance Yard	intersection of Shafter Avenue and Tulare Avenue	Shafter	City/County Facility	Affected			
Golden Living Center	140 East Tulare Avenue	Shafter	Nursing Facility	Affected			
Kern County Water Agency	811 Nadine Lane	Oildale	City/County Facility	Affected			
State of California and Kern County Offices State Board of Equalization, Department of Industrial Relations, (including Workers' Compensation Appeals Board), and Kern County Children's Dental Health Network	1800 30th Street	Bakersfield	Government Office	Affected			
Kern County Parks and Recreation Department	2820 M Street	Bakersfield	Government Office	Affected			
Kern County Veterans Service Department	1120 Golden State Avenue	Bakersfield	Government Office	Affected			
Iglesia de Dios Pentecostes La Hermosa	822 Baker Street	Bakersfield	Religious Facility	Affected			

Source: GIS analysis of the F-B LGA footprint and community facilities.

Although construction of the F-B LGA would impact individuals and property owners, these impacts would be temporary and would not substantially affect community cohesion. Therefore, potential construction-period impacts from the F-B LGA related to disruption of community cohesion or division of existing communities would be would be less than significant under CEQA.

Impact SO #2 – Construction Effects on Children's Health and Safety

As described further below, much of the area adjacent to the F-B LGA alignment is associated with agriculture, industrial, and commercial areas, which are typically not areas where children congregate; therefore, the potential for construction of the F-B LGA to affect children's health and safety is minimal. Potential construction-related impacts that could affect children's health and safety (e.g., air emissions, traffic hazards, and use of hazardous materials in proximity to schools) are described further below.

Construction of the F-B LGA would have the potential to cause temporary and significant localized air quality impacts, including the exceedance of applicable *de minimis* thresholds for specific criteria pollutants (see Section 3.3 Air Quality and Global Climate Change of this Draft Supplemental EIR/EIS for information on construction emissions and mitigation measures to reduce fugitive dust and exhaust from construction and on-road vehicles, as well as offsets for certain criteria pollutants). Construction emissions have the potential to cause elevated criteria pollutant concentrations. These elevated concentrations may cause or contribute to exceedances of the National Ambient Air Quality Standards and California Ambient Air Quality Standards, which are established concentrations of criteria pollutants that provide public health protection. Sensitive receptors (such as schools, residences, and health-care facilities) are located near the construction areas in Bakersfield. During construction, sensitive receptors would be exposed to increased concentrations of Toxic Air Contaminants, such as diesel particulate matter, which may present cancer risks. However, the health risk assessment concludes that the incremental increase in cancer risk associated with the diesel particulate matter emissions from construction equipment exhaust would not exceed the applicable threshold of 10 in 1 million. Therefore,

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implementation of the F-B LGA would not cause or contribute to exceedances of the National Ambient Air Quality Standards and California Ambient Air Quality Standards. Further, the mitigation measures identified in Section 3.3 of this Draft Supplemental EIR/EIS would be implemented to minimize potential air quality impacts during construction. Therefore, effects to children's health resulting from construction-related air emissions would be less than significant under CEQA.

Though implementation of the F-B LGA would involve the construction of road overcrossings that could affect school bus transportation routes and the safety of children bicycling or walking to school, pedestrian crossings and bicycle access for school children would be maintained to ensure safe passage during construction (see Section 3.11, Safety and Security, of this Draft Supplemental EIR/EIS). Standard construction procedures related to traffic management would be used to maintain or minimize impacts on traffic flow, including school bus routes, during peak travel periods, including identification of when and where temporary closures and detours would occur. For example, in those areas where a new crossing would be required, detours would be built, clear signage would be installed, and traffic would be diverted. After construction activities have been completed, traffic would be diverted to the new roadway alignment (e.g., overcrossing, undercrossing, or road realignment), and local school area circulation and pedestrian and bicycle access would be less than significant under CEQA.

Construction of the F-B LGA would involve transporting, using, and disposing of constructionrelated hazardous materials and wastes, which could result in accidental spills or releases of such materials in proximity to schools. (See Section 3.10, Hazardous Materials and Wastes, of this Draft Supplemental EIR/EIS for information on regulatory requirements and project mitigation measures that would reduce the potential for impacts from these materials.) The best management practices described in the mitigation measures identified in Section 3.10 of this Draft Supplemental EIR/EIS would be implemented to ensure that the use of hazardous substances or mixtures, in a quantity equal to or greater than the state threshold quantity, would not occur within 0.25 mile of a school. Therefore, effects to children's health, as they relate to the transport, use, and disposal of hazardous materials during construction, would be less than significant under CEQA.

Impact SO #3 – Construction-Related Property Tax Revenue Reductions

Short-term reductions in property tax revenues could occur as a result of perceived lower property values caused by nearby construction activities. Sales prices of properties that change ownership in advance of planned construction or during the construction period may be lower than currently assessed values and may result in lower property tax revenues which could indirectly lead to deterioration of public service facilities (such as fire protection, police protection, schools, parks, and other public facilities). These impacts would be temporary and indirect, and would be only one of the many factors influencing the ultimate market value of any particular property. Thus, the effect would be difficult to quantify, but would mostly impact areas adjacent to F-B LGA construction activities. The reduction in property tax revenues due to project land acquisition is addressed in Impact SO #12 – Operation-Related Property and Sales Tax Revenue Effects.

Construction of the F-B LGA is not anticipated to result in any negative effects on school district funding as a result of reduced property tax revenues. Property acquisitions would occur prior to construction, and as such would be considered a long-term impact, addressed under Project Operations Impacts (Impact SO #14 – Changes in School District Funding and School Access).

Impact SO #4 – Construction-Related Sales Tax Revenue Gains

In the county, the sales tax revenues that would be realized during construction of the F-B LGA would result in a negligible economic effect. Potential sales tax losses as a result of business displacements and closures are discussed in Impact SO #10, below.

As of July 1, 2015, the State of California has a base sales tax rate of 7.50 percent on all taxable goods. This sales tax revenue is broken up such that 4.44 percent goes to the state, while the

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remaining 3.06 percent goes to local government funds for transportation, public safety, and local health and human services. Of the 3.06 percent of sales tax that is returned to local jurisdictions, 1.0 percent is returned to the jurisdiction where it was collected and 2.06 percent goes into a state fund that is redistributed based on population. For the 2.06 percent that is distributed based on population, the total sales tax revenue gains are based on total local construction expenditures on materials and supplies across the entire Fresno to Bakersfield section of the HSR project and Kern County's relative percentage of the statewide population. For the 1.00 percent that is distributed directly to the local jurisdictions in which it is collected, the total sales tax revenue gains are based on local construction expenditures on materials and supplies across the study area for this analysis (California State Board of Equalization 2015).

Local construction expenditures on materials and supplies under the F-B LGA are estimated to be \$318.7 million, while regional construction expenditures, which include the local expenditures, are estimate to be around \$749.0 million. The associated local sales tax revenue gains generated from this spending would be approximately \$3.53 million, amounting to average annual gains of \$589,000 per year over the six-year construction period. The sales tax revenues lost from displaced businesses under this alternative are approximately \$653,000 per year (Table 3.12-27). The sales tax losses from displaced businesses would outweigh sales tax gains from construction activities by \$64,000 per year during the construction period. Construction of the F-B LGA portion of the Fresno to Bakersfield section of HSR project would therefore have an overall negative impact on sales tax revenues collected by local governments during the construction period. However, this net loss in sales tax equates to a 0.05 percent reduction in sales tax collected in the region, which would result in a negligible impact when compared to the total sales tax collected in the region.

Impact SO #5 – Temporary Construction Employment

Construction spending for the HSR project would generate direct, indirect, and induced jobs in the region. Direct employment refers to jobs created to construct the project and primarily involves jobs created in the construction sector. Indirect employment refers to jobs created in existing businesses in the region (e.g., material and equipment suppliers) that provide goods and services to project construction. Induced employment refers to jobs created in new or existing businesses (e.g., retail stores, gas stations, banks, restaurants, service companies) that supply goods and services to workers and their families.

Short-term job creation was estimated by evaluating construction spending by industry and estimating the number of jobs this spending would support using the U.S. Department of Commerce, Bureau of Economic Analysis Regional Input-Output Modeling System Type II annual final demand employment multipliers. The resulting estimates include the number of direct jobs created by project construction and the associated indirect and induced employment. For a detailed description of the methodology used for this analysis, refer to Section A.3, Short-Term Job Creation Methodology, of Appendix A of the F-B LGA: Community Impact Assessment Technical Report (Authority and FRA 2017).

Under 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. During the peak construction years, an additional 3,033 jobs would be created in the county, 1,591 of which would be direct. Annual average unemployment across the region was 14.3 percent in 2013, amounting to approximately 338,230 persons out of work (U.S. Census Bureau 2010, 2013b). As with any large construction project, some influx of population is expected as workers arrive in the area seeking jobs. However, given the high level of unemployment in the region and the large number of construction workers available for employment, the majority of these new construction jobs would be filled by current residents of these communities who possess the necessary construction skills. As a result, there would be no need to expand existing or construct new community or government facilities to maintain acceptable service ratios, response times, or other performance objectives for public

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services, including fire protection, police protection, schools, parks, or other public facilities. The potential physical impacts from the short-term provision of new or altered public services to accommodate the construction workforce would be less than significant under CEQA.

Project Operation Impacts

Overall, the F-B LGA has the potential to result in both beneficial and adverse long-term effects on social conditions and the quality of life experienced by residents of the communities and neighborhoods in the study area. The F-B LGA would result in the disruption and division of communities; displacement and relocation of residences, businesses, and agricultural facilities; and economic effects. Although property acquisitions would occur before construction, the impacts would be permanent and are discussed under Impacts SO #9, 10 & 11 in this section.

Impact SO #6 – Disruption to Community Cohesion or Division of Existing Communities from Project Operation

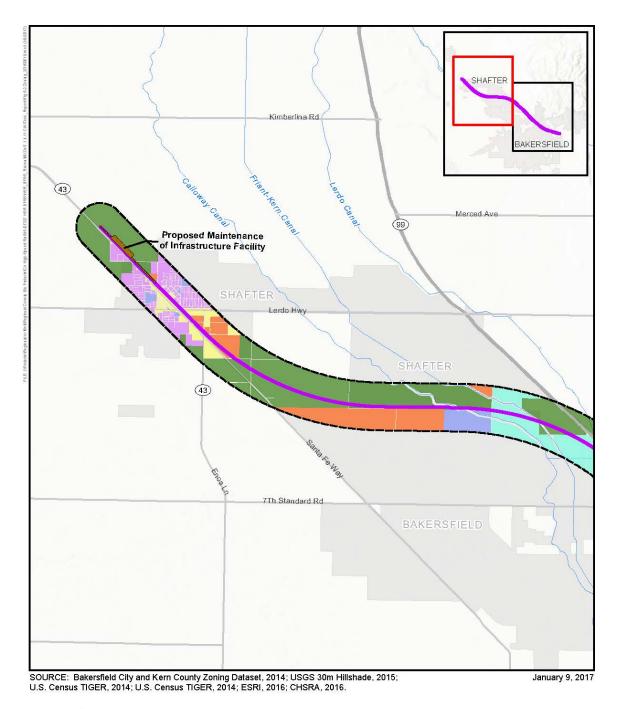
The HSR system, including the F-B LGA, would bring social benefits to the region through improved access to jobs and community amenities, reduced travel times, reduced traffic congestion, and the provision of new employment opportunities during project construction and operation. Although employment effects would be regional, the other benefits would likely occur in the neighborhood where the new HSR station would be constructed. The F-B LGA would facilitate stimulation of redevelopment efforts in the location of the proposed station, which would potentially strengthen community cohesion as well as improving area transit and employment. The people who live or work in the general vicinity of the proposed station location would likely benefit the most from the improved access provided by the new HSR facilities.

The F-B LGA would primarily follow existing and long-established highway and railroad corridors that traverse the study area. The alignment would pass through the cities of Shafter and Bakersfield and unincorporated areas of Kern County, including the community of Oildale. Historically, these communities have developed on either side of the existing heavy rail corridors and on either side of the area's major highways, which divide existing neighborhoods in the cities of Shafter and Bakersfield as well as the urbanized areas of unincorporated Kern County, therefore, the F-B LGA would not contribute to further community division or disruptions of patterns of community interactions.

As shown in Figure 3.12-7, the F-B LGA primarily traverses areas zoned for industrial or commercial use that further divide communities located on either side of the highways and/or railroad tracks. Given that these communities are already divided by existing transportation corridors, construction and operation of the F-B LGA would not result in the disruption or division of existing communities or bring about changes in community character that could alter social interactions or affect community cohesion.

A portion of the F-B LGA crosses through agriculturally zoned land north of and in the city of Shafter and in the unincorporated area of Kern County between Shafter and Bakersfield (Figure 3.12-6). Through these areas, the alignment runs either adjacent to existing highway and railroad corridors or through agricultural lands. Where the alignment follows an existing transportation corridor, it would not divide an existing community because the project would not introduce a new barrier. In the agricultural areas where the alignment runs through existing fields, it has the potential to divide fields such that individual farmers must adjust operations, but it would not result in a division of the community. Although the F-B LGA would not divide communities in the unincorporated areas, it could affect perceptions of quality of life by introducing an incongruous feature into the community with associated noise and visual impacts.





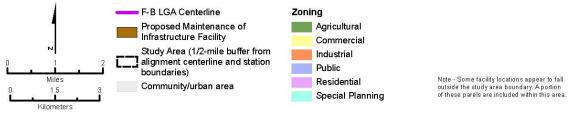
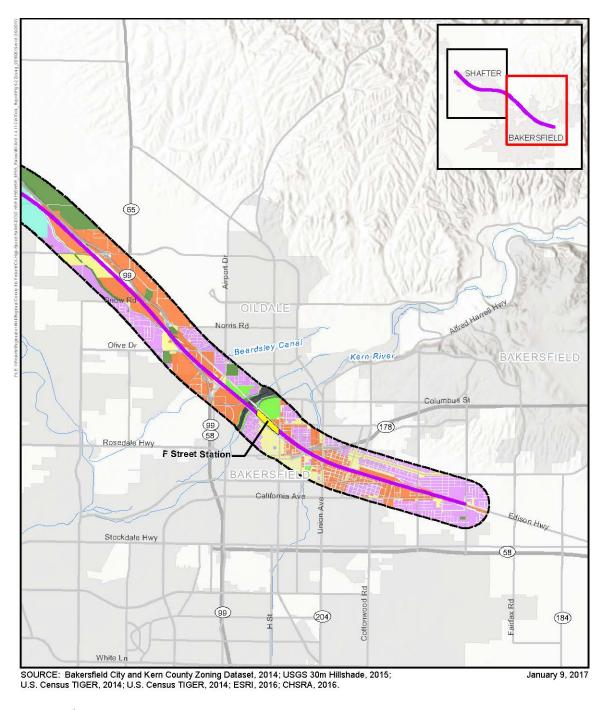
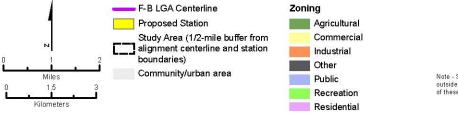


Figure 3.12-7 Zoning Within the Study Area (Sheet 1 of 2)





Note - Some facility locations appear to fall outside the study area boundary. A portion of these parels are included within this area.

Figure 3.12-7 Zoning Within the Study Area (Sheet 2 of 2)

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The F-B LGA would traverse approximately 23.1 miles in Kern County, starting at the north end of the city of Shafter and extending south through unincorporated Kern County and the city of Bakersfield. It would result in the displacement of residences, businesses, and community facilities along the alignment. The following discussion evaluates the number and types of facilities that would be affected in each section of the alignment, including the segments through the city of Shafter, the rural and industrial areas in unincorporated Kern County between Shafter and Oildale, the community of Oildale, the incorporated city of Bakersfield, and the unincorporated areas of Kern County that are within the Bakersfield metropolitan area.

The F-B LGA would pass through downtown Shafter on an elevated guideway that would follow the F-B LGA right-of-way, which is parallel and adjacent to the BNSF railroad corridor in this area. As part of the F-B LGA, the elevated structure would be constructed such that the BNSF railroad tracks would be elevated on the structure as well. Elevating the BNSF railroad tracks would allow for increased connectivity of existing communities that reside on either side of these tracks. The elevated structure would span a distance of about 2.7 miles through downtown Shafter and extending southeast out of the city, crossing over all streets from Tulare Avenue in the north to Cherry Avenue in the south. In total, the facilities and related road and utility work under the F-B LGA would displace 3 homes and 25 businesses and result in direct effects to three community facilities in the city of Shafter.

In the rural areas of Shafter that are east of Cherry Avenue and in the rural unincorporated areas of Kern County between Shafter and Bakersfield, the F-B LGA would run through existing farmland elevated on embankment. Although some individual farming operations would be affected, there would be no other displacements of homes, businesses, or community facilities through this section of the F-B LGA.

Properties in the industrial area that runs parallel to the west side of SR 99 in the unincorporated area of Kern County just north of Bakersfield would be affected. Northwest of 7th Standard Road, the F-B LGA would remain on retained fill and would affect several industrial properties. Southeast of 7th Standard Road, the F-B LGA would transition from being situated on retained fill to being elevated on a viaduct structure, passing over Fruitvale Avenue and then Snow Road. Additionally, properties along 7th Standard Road on either side of SR 99 would be affected by roadway improvements. In total, along this section 32 businesses would be displaced. There would be no displacement of homes or community facilities.

Through the community of Oildale, the F-B LGA generally parallels the existing SR 99 corridor for SR 99 and is elevated on a viaduct structure. The F-B LGA crosses over SR 99 just south of its intersection with Norris Road, and then generally parallels SR 99 on the east side of the highway. The F-B LGA would result in the displacement of 23 homes and 42 businesses in the community of Oildale. No community facilities would be displaced in this community, but one would be directly affected.

Entering the city of Bakersfield, the F-B LGA would transition from paralleling the northeast side of SR 99 to paralleling the southwest side of the UPRR corridor. These two transportation corridors are approximately 400 to 700 feet apart and run generally parallel to each other through the northern portion of Bakersfield. The properties between the two corridors are primarily industrial. The rail line would remain elevated on a viaduct structure and would generally parallel the UPRR corridor throughout the portion of the F-B LGA that traverses the city of Bakersfield. Along Sumner Street and Edison Highway, the rail line would be elevated on viaduct directly above these streets. The F-B LGA would not, therefore, block passage on any of the streets that cross the F-B LGA through the city, and existing connections and linkages between neighborhoods would be maintained.

The F Street Station would be located in the city of Bakersfield, between Golden State Avenue and the UPRR railroad tracks, in the area south of the Kern River Parkway and north of Chester Avenue. This area is currently divided from other areas by the freeway, railroad tracks, and park, and does not currently support any residences or community facilities. Several commercial and industrial facilities are located on the site; these facilities would be fully displaced by the F-B LGA. In order to accommodate access to the station, circulation improvements are planned in the areas

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surrounding the station. These improvements would result in displacement of residences, businesses, and community facilities.⁷

The F-B LGA would result in displacements in both incorporated and unincorporated areas of the Bakersfield metropolitan area. Through the incorporated area of the city, the F-B LGA would result in displacement of a total of 29 homes, 118 businesses, and 6 community facilities, including the Mercado Latino Tianguis, an important cultural center and marketplace that would be partially displaced by the F-B LGA. The F-B LGA would also directly affect four additional community facilities. In the unincorporated areas in Bakersfield's metropolitan area, an additional 31 homes, 160 businesses, and one community facility would be displaced. No additional community facilities would be directly affected.

Given existing natural divisions between communities located on either side of the F-B LGA and minimal impacts to residentially zoned properties, the F-B LGA would not introduce a new feature that further divides these communities. Rather, the F-B LGA would have minor impacts on the edges of neighborhoods that have developed in the vicinity of the existing rail corridor and highways over the past decades, displacing a relatively small number of the homes, businesses, and community amenities that currently occupy land near the railroad tracks and highways. As the alignment would not physically divide existing neighborhoods, and would be elevated through urban areas where people may travel between neighborhoods, it would not affect non-motorized circulation such that it would affect community cohesion. Given the location of the alignment, the majority of impacts would occur on industrially zoned land, minimizing impacts to existing residential communities. Therefore, these impacts would be less than significant under CEQA.

Impact SO #7 – Effects to the Regional Agricultural Community

As shown in Figure 3.12-7, approximately 40 percent of the F-B LGA study area consists of agriculturally zoned land. The majority of this land is located within the jurisdiction of the City of Shafter and unincorporated Kern County as shown in Table 3.12-19. In these agriculturally zoned areas, the alignment would run either adjacent to existing highway and railroad corridors or through agricultural lands. In areas where the alignment travels through existing fields within agricultural areas, the F-B LGA would have the potential to divide agricultural fields such that individual farmers would be required to modify operations to account for farming on smaller parcels. An estimated 33 agricultural parcels would be split along the entire F-B LGA alignment and 1 agricultural storage facility would be displaced; no parcels containing agricultural facilities would be displaced. This division may impact individual farming operations and could affect perceptions about the quality of life by introducing an incongruous new feature into this agricultural area with associated noise and visual impacts.

Place	Industrial	Commercial	Residential	J	Recreation/ Open Space	Other ¹
City of Shafter	1316	193	692	1099	333	1095
City of Bakersfield	1097	402	654	100	214	22
Unincorporated Kern County	1460	181	1223	3602	70	-
Total	3873	776	2569	4801	617	1117

Table 3.12-19 Zoning within the Study Area by Location (in acres)

Source: Authority 2012

¹ Special planning districts in the City of Shafter, which represent 1,097 acres of the city, are classified in "Other."

⁷ These numbers reflect the total number of displacements in unincorporated Kern County outside of the community of Oildale less the total number of displacements (32 businesses) in the unincorporated area between Shafter and Oildale (i.e., the industrial area that runs parallel to the west side of SR 99).



Under the F-B LGA, residential displacements include a total of 54 displaced homes in the unincorporated areas of the study area – 23 in the community of Oildale and 31 in unincorporated Kern County. Although some individual farming operations would be affected, there would be no displacements of homes, businesses or community facilities in the rural areas of Kern County between Shafter and Bakersfield. In Oildale, lands along the alignment are primarily zoned for industrial or residential use; therefore, displacements in this area would not affect rural communities or land zoned for agriculture.

The displacement of land zoned for Agriculture in a region that takes pride in its agricultural heritage and where agriculture is a dominant economic activity would cause disruption not only to the individual property owners but also to the wider agricultural community. Rural neighbors often rely on each other for assistance (e.g., for responding to an emergency, lending resources in the event of unexpected equipment failure, finding extra hands at harvest). This interdependence can build community cohesion, even in areas with low population density, especially where the same families may have been neighbors for many years. Displacement of rural homes can cause substantial disruption to families faced with having to move or replace their established home, along with outbuildings, gardens, irrigation and fencing systems, mature landscaping, and other improvements that have been built over decades or several generations. The broader farming community can also suffer disruption from the displacement of multiple neighbors-who may or may not decide to continue farming in proximity to a new high-speed train line—and through having other farming operations in the area divided by a new linear feature. In following an existing transportation corridor, the F-B LGA would not divide an existing community because the project would not introduce a new barrier into the community. Further, because the F-B LGA would not result in significant displacement of rural homes or agricultural facilities, the broader farming community would not be disrupted from operation of the F-B LGA. This impact would be less than significant under CEQA.

Impact SO #8 – Effects of Project Operations on Children's Health and Safety

Much of the area adjacent to the F-B LGA footprint has agricultural, industrial, and commercial uses, typically not areas where children congregate. As is true of the Fresno to Bakersfield Project Section as a whole (Refer to Section 3.3, Air Quality and Global Climate Change, of this Draft Supplemental EIR/EIS for complete information.), implementation of the F-B LGA would benefit children's health as a result of improvements in air quality over the No Project Alternative.

The F-B LGA would be designed to prevent conflicts with vehicles, pedestrians, and bicyclists, thus providing a safety benefit for children in the study area. (Refer to Section 3.11, Safety and Security, of this Draft Supplemental EIR/EIS for complete information on safety plans and procedures.) The F-B LGA also includes construction of roadway overpasses in communities, allowing for access over the project and the existing railway corridor. These overpasses would improve safety for children by eliminating conflicts between the HSR, vehicles, rail (including elimination of at-grade BNSF Railway crossings in Shafter), and pedestrians/bicyclists.

California Code of Regulations (Cal. Code Regs.) Title 5, Section 14010, provides siting standards for new schools. These standards provide an indication of when impacts may occur to school employees and students. Specifically relevant to this project, these regulations call for consideration of proximity of schools to transmission lines and the implementation of a safety study for schools near railroad track easements.

Cal. Code Regs. Section 14010(c) calls for a separation between schools and power transmission lines of 100 feet for 50- to 133-kilovolt lines, 150 feet for 220- to 230-kilovolt lines, and 350 feet for 500– 550-kilovolt lines. The overall HSR Project would be powered by a 25-kilovolt system: therefore, per Cal. Code Regs. Section 14010(c), a separation between schools and power transmission lines would not be required. The F-B LGA would not require the construction of new power transmission lines in the vicinity of existing or future planned schools. For these reasons, the electrification of the F-B LGA would have no safety effect on school employees and students.

Cal. Code Regs.14010(d) requires a safety study for school sites within 1,500 feet of a railroad track easement. Derailment of a train during a seismic event or other natural disaster could be a substantial safety hazard to these schools if the train left the HSR right-of-way and collided with other structures or people on adjacent properties. This hazard is associated with the physical mass and speed of the train. No safety hazard would be associated with HSR cargo or fuel because the HSR would only carry passengers and would be electric-powered. A basic design feature of an HSR system is to contain train sets within the operational corridor (FRA 1993). Strategies to ensure containment include operational and maintenance plan elements that would ensure high-quality tracks and vehicle maintenance to reduce the risk of derailment. Also, physical elements, such as containment parapets, check rails, guard rails, and derailment walls, would be used in specific areas with a high risk of or high impact from derailment. Thus, if a derailment were to occur, the train would remain within the HSR right-of-way (see 3.11, Safety and Security, of this Draft Supplemental EIR/EIS.). Therefore, Valley Oaks Charter School, the only school located adjacent to the F-B LGA footprint, would be subject to this safety risk due to its location along and partially within the HSR right-of-way. As discussed above, a basic design feature of an HSR system is to contain train sets within the operational corridor. Thus, if a derailment were to occur next to a school, the train would remain within the HSR right-of-way. Implementation of the F-B LGA would not substantially increase hazards to nearby schools because the train would be contained in the HSR right-of-way and would not contain cargo or fuel that would result in a fire or explosion.

Overall, the effect of project operation is considered to have negligible intensity on children's health and safety. (Refer to, Appendix 3.12-C, Children's Health and Safety Risk Assessment, of this Draft Supplemental EIR/EIS for complete information.)

Displacement and Relocation of Local Residences and Businesses

Impact SO #9 – Residential Displacements

The F-B LGA would be approximately 23 miles long and would cross both urban and rural lands. To comply with the HSR system project objective to use existing transportation corridors where feasible, the F-B LGA would primarily be sited adjacent to the existing BNSF Railway and Union Pacific Railroad corridors. In some cases, engineering constraints and avoidance of environmental impacts would require deviation from the existing railway corridors. Where the F-B LGA would diverge from the BNSF Railway and Union Pacific Railroad corridors, the potential for property acquisition and potential displacement and relocation of local residences and businesses would occur. This impact would result from the need to acquire land for the placement of track, maintenance facilities, detours, overpasses, and associated structures. Guidance for impacted parties is provided in several documents detailing the relocation assistance programs provided by the Authority, including:

- Your Rights and Benefits as a Displacee under the Uniform Relocation Assistance Program (Residential).
- Your Rights and Benefits as a Displacee under the Uniform Relocation Assistance Program (Mobile Home).
- Your Rights and Benefits as a Displaced Business, Farm, or Nonprofit Organization under the Uniform Relocation Assistance Program.

This guidance differs depending on whether the affected party is a farmer, business owner, homeowner, or mobile home owner (See Appendix 3.12-A of the Fresno to Bakersfield Section Final EIR/EIS for guidance for all relocation assistance programs).

In total along the entire F-B LGA, an estimated 86 residential units and 262 residents would be displaced (Table 3.12-20). The displaced residential units would include 13 single-family homes, 55 multi-family units, and 18 mobile homes. These displacements would occur throughout the study area, and include 3 units and 12 residents in the City of Shafter, 23 units and 62 residents in the community of Oildale, 29 units and 90 residents in the City of Bakersfield, and 31 units and 98 residents in the remaining portions of unincorporated Kern County.



Location	Residential Units Displaced	Estimated Residents to be Relocated
City of Shafter	3	12
Community of Oildale	23	62
City of Bakersfield	29	90
Unincorporated Kern County ¹	31	98
Total	86	262

Table 3.12-20 Residential Displacement under the F-B LGA

Sources: County of Kern 2015b, Reference USA 2015, United States Census Bureau 2010b

¹ This area represents unincorporated Kern County less the portion included in the community of Oildale.

F-B = Fresno to Bakersfield Locally Generated Alternative

An examination of suitable replacement housing alternatives based on January 2016 data finds that a sufficient number of comparable replacement residences are available in the study area. Some residents, however, would need to move to neighboring communities to relocate into existing replacement housing. Table 3.12-21 shows the gap analysis of single-family residential properties and rental units (single-or multi-unit buildings) that were available for relocation in December 2015.

Location	Residential Units Displaced (Single/Multi/Mobile)	Single Family Homes Available	Size of Surplus ¹	Rental Units Available	Size of Surplus ¹
City of Shafter	3 (3/0/0)	13	10	1	2
Community of Oildale	23 (0/5/18)	148	125	99	76
City of Bakersfield	29 (5/24/0)	99	70	92	63
Unincorporated Kern County ²	31 (5/26/0)	226	195	45	14
Total	86 (13/55/18)	486	400	237	155

Table 3.12-21 Gap Analysis of Residential Displacements under the F-B LGA

Sources: County of Kern 2015b, Reference USA 2015, Zillow 2016

¹ The size of surplus for each type of replacement property (single-family home versus rental units) indicates the difference between the total number of residential units displaced and the total number of the respective property type, in order to provide a conservative analysis which assumes that displaced residents may choose to either purchase or rent a replacement unit.

² This area represents unincorporated Kern County less the portion included in the community of Oildale.

F-B = Fresno to Bakersfield Locally Generated Alternative

Based on January 2016 housing vacancies, all geographic areas considered in this analysis have housing vacancies for single-family homes in excess of the estimated displacement figures noted above, with capacity to accommodate displaced residents in their jurisdictions. With the exceptions of the city of Shafter, all geographic areas also have sufficient rental units available to accommodate displaced residents in each jurisdiction. A total of 3 single-family residential homes would be displaced in the city of Shafter, where there are 13 single-family homes available for sale and 1 available for rent. The surplus in the number of homes available for sale would, therefore, be 10 while there would be a deficiency of 3 residential units for rent. Residents of single-family homes, however, are more likely to own their homes and seek out replacement homes for purchase than for rent. Given that there are 13 single-family homes for sale, a sufficient number of replacement homes are available for purchase to accommodate the displaced residents.

In the community of Oildale, 148 single-family homes are available for sale and 99 rental units are available for occupancy, where 23 units would be displaced, representing a surplus of 125 and 76, respectively. In the City of Bakersfield, 99 single-family homes are available for sale and

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92 rental units are available for occupancy, where 29 units would be displaced, representing a surplus of 70 and 63, respectively. Similarly, in the remaining portion of unincorporated Kern County there are 226 single-family homes available for sale and 45 rental units available for occupancy, representing a surplus of 195 and 14, respectively. In total, the existing supply of vacant residences (including both single-family homes and rental units) would be greater than necessary to house relocated residents from these jurisdictions, with a total surplus of 400 single-family homes and 155 rental units.

U.S. Department of Housing and Urban Development Aggregated United States Postal Service Administrative Data on Address Vacancies in January 2016 confirms the findings that residential vacancies would be sufficient to accommodate relocated residents. This data, however, reflects a higher number of vacant, potentially available residential units. In the City of Shafter, U.S. Department of Housing and Urban Development United States Postal Service data indicates that approximately 2.1 percent of all residences are vacant, amounting to 144 of the city's 6,724 residential units being vacant. This number of vacancies would be sufficient to support the three displacements in this city. In the Bakersfield zip code areas affected by the F-B LGA, approximately 3.9 percent of all residences are vacant, or 901 of 15,828 total units identified. This ratio is comparable for unincorporated Kern County and the community of Oildale, which have vacancy rates equivalent to 3.4 and 2.5 percent, respectively. In all cases, the number of available units far exceeds the number of residential displacements expected from the alternative. This data does not indicate how many of these vacant units are available for sale versus for rent, but it confirms there are sufficient vacant units available in the area to accommodate residents displaced by the F-B LGA.

In the zip code areas traversed by the F-B LGA, the market values of potential replacement housing units are comparable to the values of the displaced properties, as shown in Table 3.12-22. Note that replacement housing is assessed per zip code areas, which do not fully align with municipal boundaries.

Affected Study Area Zip Codes ¹	Property V Average	alue	Under \$100,000		\$100,000 \$200,000		\$200,000 \$550,000	
	Displaced	Available	Displaced	Available	Displaced	Available	Displaced	Available
City of Shafter Zip Codes	\$174.883	\$220,703	0	2	2	4	1	7
Community of Oildale Zip Codes	\$29,449	\$181,611	23	42	0	51	0	55
City of Bakersfield Zip Codes	\$68,487	\$175,248	26	25	2	50	1	24
Unincorporated Kern County ² Zip Codes	\$46,102	\$262,703	28	36	2	44	1	146
Total	\$53,689	\$219,160	77	105	6	149	3	232

Table 3.12-22 Property Valuation Comparison – F-B LGA

Sources: County of Kern 2015b, Reference USA 2015, Zillow 2016

¹ The affected area includes the zip codes in the municipality/community that are affected by the HSR project alignment, and does not necessarily represent the entirety of the municipality/community.

² Data for unincorporated Kern County does not include the community of Oildale, which is presented separately.

F-B = Fresno to Bakersfield Locally Generated Alternative

The communities in the study area have sufficient available housing to accommodate displaced residents. For residential units, housing costs were considered because they provide a good measure of the suitability of replacement housing since they are based on important attributes, such as size, quality, and neighborhood amenities. Replacement housing was identified in the same price categories as displacement housing, for comparability; these categories are the same as those used in the Fresno to Bakersfield Section Community Impact Assessment Technical



Report and include the following: below \$100,000, between \$100,000 and \$200,000, and between \$200,000 and \$550,000. Average property values for both displaced and replacement housing are also presented. In the City of Shafter, community of Oildale, and remaining portions of unincorporated Kern County there are more houses available for sale than would be displaced in all categories (below \$100,000, between \$100,000 and \$200,000, and between \$200,000 and \$550,000). In the City of Bakersfield, there are sufficient properties to accommodate displaced residents in the categories of between \$100,000 and \$200,000 and between \$200,000 and \$550,000, but there is a deficiency of one unit in the category of below \$100,000. Given that 24 of the 26 residential displacements in Bakersfield with values below \$100,000 are multi-family homes, which are generally expected to seek rental units, the 25 available units in this category would be sufficient for accommodating displacements in Bakersfield. Given that the total number of available units in all categories is higher than the number of displacements in the study area, there is sufficient housing to accommodate displacements in the study area as a whole.

Many of the census blocks in the affected communities in the study area qualify as minority or low-income populations. Relocations of sensitive populations (e.g. the elderly (age 65 and over), the disabled, female heads of household, low-income occupants, and linguistically isolated residents) are discussed below. Low-income and/or sensitive populations would garner special attention in the relocation process, and would receive assistance to minimize adverse impacts to residents and the community.

Multi-family displacements would include 5 units in Oildale, 24 units in the City of Bakersfield, and 26 units in the remaining areas of unincorporated Kern County. Under the assumption that a large percentage of those living in multi-family housing would not purchase a home, these residents would seek available houses and apartments for rent. Also, renters housed in single-family residences could add to this need for rental units. In the community of Oildale, City of Bakersfield, and the remaining portions of Kern County there are sufficient rental units available to house relocated renters in these areas, as there are more rental units available than the total number of displacements in these communities. Given that the total number of existing rental units available in the study area is higher than the total number of displacements, it is not likely that new housing would need to be constructed to house these individuals.

In the community of Oildale, a mobile home park that currently supports a total of 18 homes would be displaced, resulting in 18 residential unit displacements. The special characteristics of mobile home parks can make it difficult to relocate residents within the same vicinity. Therefore, special consideration would be included in the project relocation plan to address the unique needs of these residents.

Some displacements in Shafter and unincorporated Kern County are likely to be single-family residential households on working agricultural lands. As under all HSR alternatives, special consideration would be included in the project relocation plan to address the unique needs of these residents.

Given the large number of available properties in the study area as shown in Table 3.12-21 and Table 3.12-22 (486 single family homes and 237 rental units) compared to the total number of residential units displaced (86), the project would not displace substantial numbers of existing housing or people along this alternative alignment and thus would not require the construction of replacement housing elsewhere. Impacts would be less than significant under CEQA.

Impact SO #10 – Commercial and Industrial Business Displacements

In total along the F-B LGA, an estimated 377 commercial and industrial businesses, corresponding with 3,132 employees, would be relocated (Table 3.12-23). Businesses in unincorporated Kern County, not including Oildale, would account for 192 of these relocations, with many of these relocations occurring in the Bakersfield metropolitan area, but outside the city's incorporated boundary. Businesses in the incorporated cities of Bakersfield and Shafter account for 118 and 25 of the business relocations, respectively. There would also be 42 business relocations in the community of Oildale.

Table 3.12-23 Commercial and Industrial Relocations under the F-B LGA

Location	Businesses Relocated	Estimated Employees Relocated
City of Shafter	25	317
Community of Oildale	42	673
City of Bakersfield	118	820
Unincorporated Kern County ¹	192	1,322
Total	377	3,132

Sources: County of Kern 2015b and Reference USA 2015

¹ The total number of displacements includes businesses associated with the Mercado, a single structure that houses 105 small businesses. This area represents unincorporated Kern County less the portion included in the community of Oildale.

F-B = Fresno to Bakersfield Locally Generated Alternative

Examination of the North American Industry Classification System information for relocated commercial and industrial businesses reveals that the types of businesses being relocated along the F-B LGA include: automotive repair; agriculture, forestry, fishing, and hunting; mining, quarrying, and oil and gas extraction; wholesale and retail trade; finance and insurance; real estate rental and leasing; professional, scientific and technical services; educational services; accommodation and food services; utilities; construction; manufacturing; transportation and warehousing; information; health care and social assistance; arts, entertainment, and recreation; administrative and support, and waste management and remediation services; public administration; and other services.

In December 2015, a county-wide assessment was conducted in Kern County to determine the number of businesses that would be relocated and the suitability of available properties as relocation sites for these businesses as a result of the F-B LGA and the May 2014 Project. The availabilities are the same for both alternatives since a county-wide assessment area was used for this analysis (Table 3.12-24).

Table 3.12-24 Number of Business Displacements and Available Vacant Business Properties in Kern County – F-B LGA

Description and NAICS Codes	Number of Displaced Businesses ¹	Number of Vacant Properties	Size of Surplus
Agricultural: 11	5	11	6
Agricultural and Industrial (Construction/ Manufacturing/ Utilities/ Mining): 21, 23, 31-33	52	147	95
Commercial / Wholesale / Retail / Offices1: 42, 44-45, 51-56	199	572	373
Transportation and Warehousing: 48-49	13	114	101
Automotive Repair and Services: 811	34	1	-33
Accommodation, food service, other non-automotive services: 61-62, 71-72, other 81 codes, 99	74	76	2
Total	377	921	544

Sources: LoopNet 2016, Authority (2012), County of Kern 2015b, Reference USA 2015

¹ The total number of displacements includes businesses associated with the Mercado, a single structure that houses 105 small businesses. F-B LGA = Fresno to Bakersfield Locally Generated Alternative

NAICS = North American Industry Classification System.

This analysis determined that there are a sufficient number of replacement properties available for all sectors except automotive repair and services, which would have a deficiency of 33 relocation properties. As there is an overall surplus of 544 commercial and industrial properties

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and rental units, there is enough space to accommodate relocations under this alternative. Some of these properties, however, would need to be modified or reconfigured to meet the specific needs of automotive businesses. As discussed in Section 3.12, Socioeconomics, Communities, and Environmental Justice of the Fresno to Bakersfield Final EIR/EIS (page 3.12-87), automotive repair and services businesses are particularly important in this area of Kern County, and special consideration would be given to these relocations during the acquisition and relocation process.

U.S. Department of Housing and Urban Development Aggregated United States Postal Service Administrative Data on Address Vacancies for January 2016 was also evaluated to assess business location availability in individual zip code areas traversed by the F-B LGA. This data show overall business vacancies in the City of Bakersfield and the unincorporated areas of Kern County (excluding Oildale) are approximately 11.5 and 10.9 percent of existing business locations, based on 277 vacant units in Bakersfield and 195 vacant units in unincorporated Kern County. These numbers indicate that there are more vacant units in the affected zip codes in Bakersfield and unincorporated Kern County than the number of displaced businesses (118 and 192, respectively). The displaced businesses in unincorporated Kern County are primarily located in the Bakersfield metropolitan area, and therefore vacant properties in the City of Bakersfield could also accommodate these displaced businesses without resulting in long commutes for workers. In total, there are 472 vacant business properties in the affected zip codes in the City of Bakersfield and unincorporated Kern County, which is greater than the total number of displaced businesses in these areas (310). Therefore, although the majority of displacements would occur in the Bakersfield metropolitan area, there are numerous opportunities for businesses to relocate and, if necessary, for employees to find new jobs at other businesses in the area.

The City of Shafter and community of Oildale are smaller communities where there are fewer alternatives for displaced businesses and workers. The total numbers of civilian workers in these communities are 6.749 for the City of Shafter and 14,116 for the community of Oildale (U.S. Census Bureau 2013d). The business displacements in Shafter and Oildale would affect 317 and 673 employees, respectively, which represent 4.7 percent of the workforce in Shafter and 4.8 percent of the workforce in Oildale. According to the U.S. Department of Housing and Urban Development Aggregated United States Postal Service Administrative Data on Address Vacancies, business vacancies in the City of Shafter and the community of Oildale total approximately 5.0 and 4.2 percent of existing business locations, based on 38 vacant units and 90 vacant units in these communities, respectively. This number of vacancies should be able support the displaced businesses in Shafter (23) and Oildale (43), depending on the size and type of facilities available. In some cases, modification may need to be made to these properties in order to accommodate the specific type of businesses that would be relocated. As the majority of businesses would likely be able to relocate into these vacant properties, they would be relocating within the same communities. This would allow for workers in these communities to retain jobs at these relocated businesses and remain in the same communities without having to commute long distances for new jobs.

The F-B LGA would result in a considerable number of relocations, totaling 378 businesses and 3,109 employees, most of which would be located in the incorporated and unincorporated areas of the Bakersfield metropolitan area. Although there is sufficient replacement space for businesses in these communities, it represents the majority of all commercial and industrial relocations along the entire Fresno to Bakersfield Section of the HSR project. Given the high number of relocations and the need for property improvements to accommodate some of these relocations, the impact of on business operations would be substantial.

As outlined in Section 3.12.2, the Uniform Relocation Assistance and Real Property Acquisition Policies Act, as amended (Uniform Relocation Act), ensures that persons displaced as a result of a federal action or by an undertaking involving federal funds are treated fairly, consistently, and equitably. This procedure helps to ensure persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Each relocated person would work with a relocation agent from the Authority. If the HSR project would require that a considerable number of people be relocated, the Authority will establish a temporary relocation field office to serve the affected residents. Project relocation offices will be open during

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convenient hours and evening hours, if necessary. In addition to these services, the Authority is required to coordinate its relocation activities with other agencies causing displacements to ensure that all displaced persons receive fair and consistent relocation benefits.

Impact SO #11 – Project Effects on Agricultural Businesses

Agricultural parcels account for the largest percentage of acreage to be acquired for the project. Agricultural parcels would be reduced in size or potentially divided into two or more separate parcels due to required right-of-way acquisition. In addition, agricultural facilities - structures used for various operational functions, including processing, product and equipment storage, and irrigation infrastructure would be displaced by the project.

When agricultural parcels are split, the resulting new parcels could be rearranged and agricultural operations could remain in effect either under existing or new ownership. This process could take some time and therefore, short-term effects would be expected as this rearranging takes place. In these cases, there would also likely be added operational expenses to farm this land-new equipment, new infrastructure installation, and increased access costs incurred as additional labor hours and extra gasoline for tasks such as irrigation, pesticide application, harvesting, and other field management operations. In addition, any existing lease agreements on affected lands would need to be examined during parcel acquisition. Impact Avoidance and Minimization Measures have been developed to aid in this process. In particular, AG-IAMM#1: Restoration of Land Used for Temporary Staging Areas, AG-IAMM#2: Farmland Consolidation Program, and AG-IAMM#3: Permit Assistance are all aimed at maintaining the quality of agricultural land temporarily used by the F-B LGA, administering programs to help with the consolidation of split parcels, and the continuity of agricultural operations. Compensation for expenses associated with split parcel consolidation would be determined on a case-by-case basis during the property acquisition phase of the project. Counting these split parcels provides insight into the relative potential adverse disruptions and costs incurred by agricultural operations under the F-B LGA.

The number of agricultural facilities that would be displaced by the F-B LGA provides a measure of the potential disruption to agricultural business operations. These facilities are used for functions such as processing, product and equipment storage, and irrigation infrastructure. The greater the number of these types of facilities that are disturbed by the project, the greater the expected short-term effect will be on agricultural operations needing to relocate these structures.

In total along the entire F-B LGA, an estimated 22 agricultural parcels would be split; and one parcel containing agricultural facilities would be displaced. Farm operations that are not rearranged to incorporate these split parcels could incur additional operational expenses (e.g., labor hours, extra gasoline) associated with access to and movement between fields for irrigation, pesticide, application, harvesting, and other farm equipment operations.

In January 2016 there were 96 agricultural properties for sale in Kern County, indicating that there is suitable agricultural land available in the region for any of the partially acquired agricultural operations and the single displaced parcel containing agricultural facilities that are required to relocate as a result of the F-B LGA (LoopNet 2016). There is the potential for temporary disruptions to agricultural operations when split parcels are reallocated among owners and facilities are relocated, if desired. However, once these reallocations/relocations are complete, agricultural operations would continue; therefore, no permanent impacts to agricultural operations would occur.

Impact SO #12 – Displacement of Community Facilities

The F-B LGA would avoid most community facilities and other properties that provide public services. The visual interpretation and parcel-by-parcel analysis found that the F-B LGA would not result in the full or partial acquisition of any land associated with police or fire stations, libraries, post offices, or civic centers.

As shown in Table 3.12-18, the F-B LGA would displace seven community facilities in the study area, all of which are located in Bakersfield's metropolitan area: six in the incorporated city and one in unincorporated Kern County. These facilities would include the Golden Empire Transit

District, Valley Oaks Charter School (one of the buildings), Bakersfield Department of Motor Vehicles, Golden Empire Gleaners (a food bank), Bakersfield Homeless Center, Mercado, and a city-owned storage facility.

This F-B LGA would directly affect eight additional community facilities: the Golden Living Center (a nursing facility), Shafter Depot Museum, Kern County Water Agency, Kern County Parks and Recreation Department, Kern County Veterans Service Department, Iglesia de Dios Pentecostes La Hermosa (a religious facility), an office building housing state and county government agencies, and a city-owned maintenance yard in Shafter.

Because the F-B LGA would displace key facilities providing important community services to Bakersfield's homeless population (e.g., Bakersfield Homeless Center, Golden Empire Gleaners), this impact would be significant under CEQA.

Impact SO #13 – Relocations of Sensitive Populations

The highest numbers of residential displacements under the F-B LGA would occur in unincorporated Kern County (excluding Oildale) (31 units), followed by the city of Bakersfield (29 units), the community of Oildale (20 units), and then the city of Shafter (1 unit). According to data from the 2010 decennial Census, the city of Shafter has the highest percentage of households that are linguistically isolated at 23.5 percent. The percentages of linguistically isolated households in the remaining geographic areas are much lower at 9.1 percent in Kern County, 6.7 percent in Bakersfield, and 1.7 percent in Oildale as shown in Table 3.12-25. In terms of elderly populations, Oildale has the largest percentage of residents that are 65 and over, at 10.0 percent. This percentage is similar to, but slightly higher than the percentage of residents that are over 65 in the city of Bakersfield (8.4 percent) and Kern County (9.0 percent). Shafter has the smallest percentage of elderly residents at 6.6 percent. The community of Oildale also has a higher percentage of households with a female head of household (19.7 percent) than the cities of Shafter (17.0 percent) and Bakersfield (16.2 percent) and Kern County (15.7 percent). Relative to the neighboring cities of Shafter and Bakersfield and Kern County, the community of Oildale has a substantially higher percentage of disabled residents, with 18.2 percent of residents reporting a disability. The disabled populations in Shafter, Bakersfield, and Kern County account for 11.3, 10.9, and 11.8 percent of the total population, respectively.

Area	Percent Age 65 and Over (2010)	Percent Disabled (2013)	Percent Female Head of Household	Percent Linguistically Isolated
Kern County	9.0%	11.8%	15.7%	9.1%
City of Shafter	6.6%	11.3%	17.0%	23.5%
Community of Oildale	10.0%	18.2%	19.7%	1.7%
City of Bakersfield	8.4%	10.9%	16.2%	6.7%

Table 3.12-25 Sensitive Populations in the Communities Overlain by the Study Area

Sources: U.S. Census Bureau 2010b, 2013b, 2013e.

Data Sets: Data for "Percent Age 65 and Over" and "Percent Female Head of Household" is from the 2010 decennial Census, while data for "Percent Disabled" and "Percent Linguistically Isolated" is from the 2013 ACS 5-Year estimates data.

These comparisons suggest that the residential displacement from Shafter has a relatively high potential to be a linguistically isolated household, while the 20 residential displacements from Oildale may include a large percentage of disabled residents and households with a female head of household. As these populations are considered sensitive, relocation plans and resources would take into account and address special needs of such households accordingly. Therefore, impacts to sensitive populations would be less than significant.

Impact SO #14 – Economic Effects on Agriculture

As described above, implementation of the F-B LGA would result in the division of approximately 22 agricultural parcels and the displacement of one agricultural storage facility.

Many factors contribute to the agricultural revenue generated on 1 acre of farmland. Two key factors are the quality of farmland and the type of crop raised or type of animal operation conducted on the particular parcel. Section 5.1.1.4 of the F-B LGA Community Impact Technical Report (Authority and FRA 2017) examines these two factors and estimates the amount of agricultural revenue and the number of agricultural jobs that would potentially be lost as a result of the project displacing agricultural production.

The F-B LGA would have moderate short-term impacts on agricultural production in Kern County, with total estimated annual losses of \$3.7 million in agricultural production value and 17 agricultural jobs. This estimated dollar value loss represents a small percentage (0.1 percent) of the total annual agricultural production in Kern County.

Consistent with the *Statewide Program EIR/EIS* mitigation strategy, that was approved under the *Fresno to Bakersfield Section Mitigation and Monitoring Enforcement Plan* (Authority and FRA 2014b) found in Appendix C of the Record of Decision for California High-Speed Train Fresno to Bakersfield, the Authority would place lands that are currently not under any type of farmland conservation easement into a new easement that would permanently protect the farmland from future conversion to nonagricultural uses. The performance standards for this measure are to preserve Important Farmland in an amount commensurate with the quantity and quality of the converted farmlands, within the same agricultural regions as the impacts occur, at a replacement ratio of not less than 1:1 for lands that are permanently converted to nonagricultural use by the project.

Impact SO #15 – Changes in School District Funding and School Access

The potential impact of high numbers of residential unit displacements on school districts was considered based on potential reduction in school funding resulting from declines in student populations in communities with high numbers of relocations. School district funding is dependent on student attendance, and the relocation of large populations of students outside existing school districts could therefore reduce funding for the affected school districts.

As described above in "*Impact SO #9 – Residential Displacements,*" an adequate amount of vacant replacement housing is available in the vicinity of all anticipated displacements and students would likely have the opportunity to remain in their current school districts. Any effect on school district funding would therefore be negligible.

Impact SO #16 - Employment Growth

The F-B LGA would result in the creation of long-term jobs associated with operation and maintenance of the project. Implementation of the F-B LGA would generate new jobs associated with businesses attracted to the region as a result of the project, existing businesses in the region that expand as a result of the project, and spatial reallocation of employees taking advantage of the increased mobility provided by the HSR Project. These long-term employment effects from the HSR Project were estimated in a 2010 study conducted by Cambridge Systematics Inc., which found that the May 2014 Project would result in the creation of approximately the same number of regional jobs (Cambridge Systematics Inc. 2010). The projected statewide and regional population and employment growth trends were updated as part of this Draft Supplemental EIR/EIS to determine how the F-B LGA could influence these trends, either directly or indirectly (see Section 3.18, Regional Growth, of this Draft Supplemental EIR/EIS). Given that these employment effects are regional and the number of workers needed to operate the HSR would not change substantially between alternatives, job inducement under the F-B LGA would be similar to the May 2014 Project.

The historical trends and overall levels of unemployment in the region, discussed in Section 3.12.3.4, indicate that unemployment rates will likely remain higher in Kern County and the communities analyzed for the study area than in the rest of the state. The workforce, therefore,



currently exists to support many of the jobs expected to result from the operation of the HSR project, including the F-B LGA. Given the unique ability of an HSR system to alter mobility patterns, however, some amount of population influx is also expected.

For all HSR alternatives, including F-B LGA, the workforce to support the number of jobs created by the HSR project currently exists in the region, the provision of new or altered government, public facilities would be minimal, and there would be no associated physical impacts.

Impact SO #17 – Operation-Related Property and Sales Tax Revenue Effects

This section provides estimates for the potential impacts of the F-B LGA on property tax revenues collected by county and city jurisdictions. Reduced property tax revenues would be an effect of the project that would result from acquisition of land for project construction. Reduced property tax revenues would also be a direct effect of project operation because of the potential reductions in property values associated with train nuisances (e.g., noise, visual impacts). Revenue from sales tax is important, as it is one of the largest sources of revenue for the state and local jurisdictions.

Along the F-B LGA, property displacements would result in estimated annual losses of \$3.6 million in property tax revenue to county and city budgets in the region, representing approximately 1.1 percent of the total 2013/14 fiscal year property tax revenue of the county and cities in the county as shown in Table 3.12-26. The total annual losses would be approximately \$2,945,000 in Kern County and \$16,000 and \$617,000 in the cities of Shafter and Bakersfield, respectively. Property tax losses could be balanced over the long run by the increased property tax revenues associated with the intensification of land uses and ensuing increased property values that result from the HSR project.

Area	Lost Property Tax Revenues	Lost Property Tax Revenues (%)
Kern County	\$2,945,962	1.09%
City of Shafter	\$15,842	1.52%
City of Bakersfield	\$616,605	0.93%
Total	\$3,578,410	1.06%

Table 3.12-26 Property Tax Revenues Lost during Operation – F-B LGA (in 2015 dollars)

Sources: City of Bakersfield 2015a, City of Shafter 2015a, County of Kern 2015 and 2016 F-B LGA = Fresno to Bakersfield Locally Generated Alternative

The F-B LGA would result in a total loss of approximately \$653,000 in annual sales tax revenues to the local jurisdictions impacted by this alternative, amounting to approximately 0.5 percent of the total sales tax collected in these jurisdictions as shown in Table 3.12-27.

Table 3.12-27 Estimated Annual Sales Tax Losses by Jurisdiction under the F-B LGA (in 2015 dollars)

Area	Lost Sales Tax Revenues	Lost Sales Tax Revenues (%)
Unincorporated Kern County	\$324,664	0.73%
City of Shafter	\$245,745	1.66%
City of Bakersfield	\$82,840	0.11%
Total	\$653,249	0.50%

Sources: California State Board of Equalization 2015, City of Bakersfield 2015a, City of Shafter 2015a, County of Kern 2015a and 2016, Reference USA 2015, United States Census Bureau 2010b

F-B LGA = Fresno to Bakersfield Locally Generated Alternative

These sales tax revenue losses would generally be temporary because they would occur during the time when affected businesses are closed for HSR project construction or while displaced businesses relocate to a new location, in many cases in the same taxing jurisdiction. Once the

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businesses reopen, sales tax revenue generation would resume. Overall, these percentages would present a small impact, though for jurisdictions confronting revenue shortfalls and budget constraints, even a minor loss of annual revenue could cumulatively have a considerable effect.

Annual sales tax revenue gains (examples include locally purchased gasoline, oil, paint, parts, and light bulbs) during operation of the F-B LGA were estimated using the sales tax rate for Kern County (as of September 1, 2015) and the estimated local expenditures on tangible assets during operation of the project.

Table 3.12-28 shows the total annual local operation and maintenance expenditures for tangible assets for the entire alignment between Fresno and Bakersfield, the portion of these expenditures that would occur in Kern County, and the resulting local annual sales tax revenue gains.

Table 3.12-28 Annual Sales Tax Revenues during Operation

Fresno to Bakersfield Section	Within Kern County	Annual Local Sales Tax Revenues in Kern County (in millions of 2015 dollars)
120.20	42.10	0.477

Sources: Authority and FRA, 2012; California State Board of Equalization, 2015; U.S. Department of Labor, 2015; U.S. Census Bureau, 2010b

The sales tax rate for Kern County is 7.5 percent, but the County and local jurisdictions only receive a portion of these taxes, as detailed in Impact SO #4, above. The estimated sales tax revenues calculated for this analysis are based on each county's relative percentage of the statewide population, as described in Impact SO #4 above.

Operation of the HSR project including the F-B LGA would result in annual sales tax gains for local jurisdictions in Kern County of approximately \$477,000. The sales tax lost from displacements would begin to decrease as the displaced businesses become reestablished at new locations and new businesses move in to replace those that did not reopen.

Project operation is expected to have an overall positive impact on sales tax revenues collected by local governments. Similar to the May 2014 Project, as a result of implementation of the F-B LGA property and sales tax revenues would increase over the long term from operation of the F-B LGA.

Impact SO #18 – Potential for Physical Deterioration

The potential impacts related to physical deterioration are similar for the May 2014 Project and F-B LGA. For a description of potential impacts related to physical deterioration, including both community and economic effects related to construction and operation of the project, please see Section 5.4.5, Physical Deterioration, of the Fresno to Bakersfield Section Community Impact Assessment Technical Report (Authority and FRA 2012). This analysis concludes that special consideration is required to ensure that businesses in the Mercado Latino Tianguis in Bakersfield are able to continue to operate without considerable disruption while the market is either rebuilt or relocated. Given that the F-B LGA would also require special consideration and mitigation for the Mercado Latino Tianguis, and that the F-B LGA would not impact any new community facilities of this scale, the potential effects identified under F-B LGA also would not lead to physical deterioration.

3.12.5 Avoidance and Minimization Measures

The Authority and FRA have considered avoidance and minimization measures. Measures considered to be part of the project are summarized in Chapter 3.12 of the Fresno to Bakersfield Section Final EIR/EIS on pages 3.12-1 through 3.12-113). The applicable list is provided in Technical Appendix 2-G Mitigation Monitoring and Enforcement Plan. Technical Appendix 2-H describes how implementation of these measures reduces adverse effects on socioeconomics and communities. Chapter 5, Environmental Justice, of this Draft Supplemental EIR/EIS addresses the effects of the F-B LGA on minority and low-income communities, including those



with limited English proficiency, and identifies the avoidance and minimization measures pertinent to environmental justice.

3.12.6 Mitigation Measures

3.12.6.1 Mitigation Measures Identified in the Fresno to Bakersfield Section Final EIR/EIS

During project design and construction, the Authority and FRA would implement measures to reduce impacts on socioeconomics and communities. The following mitigation measures were approved under the Fresno to Bakersfield Section Final EIR/EIS. All of the measures are applicable to the F-B LGA and are summarized in Table 3.12-29. These measures are discussed in further detail in Table 1 of the *Fresno to Bakersfield Section Mitigation and Monitoring Enforcement Plan* (Authority and FRA 2014).

Chapter 5, Environmental Justice, of this Draft Supplemental EIR/EIS addresses the effects of the F-B LGA on minority and low-income communities, including those with limited English proficiency, and identifies the mitigation measures pertinent to environmental justice.

Number	Description
SO-MM#4	In cases where partial-property acquisitions result in division of agricultural parcels, the Authority will evaluate with property owner input the effectiveness of providing overcrossings or undercrossings of the HSR track to allow continued use of agricultural lands and facilities. This would include the design of overcrossings or undercrossings to allow farm equipment passage. (Refer to Section 3.14, Agricultural Lands, for additional information.) This mitigation measure will be effective because it will maintain access to farmlands for farmers whose property is divided.
SO-MM#5	The Authority will work with the communities on the design of project features consistent with Technical Memorandum 200.6, Aesthetic Guidelines for Non-Station Structures (Authority 2011). The guidelines for station and non-station structures allow for contextual design responses to site-specific or unique conditions, or "context sensitive solutions." Context sensitive solutions mean structural aesthetics must respond to local settings with concern for the human scale, building scale, and the vantage points from which the structures will be viewed. Included in the Authority's design principles is the requirement that the structures enhance local environments and community context. Landscaping will be used to visually integrate project structures into the local context with plantings that recreate the natural setting into which they are placed. The aesthetic design of project structures, in combination with landscape and urban design that serve the local community can create a positive contribution to the surrounding visual context and minimize the potential for physical deterioration.

Table 3.12-29 Mitigation Measures Applicable to the F-B LGA

Mitigation Measure SO-MM #4 addresses partial-property acquisitions via measures that will design overcrossings and under crossings to allow farm equipment passage where feasible (Impact SO #7). This mitigation measure will be effective because it will maintain access to farmlands for farmers whose property is bisected. In the event that Mitigation Measure SO-MM #4 will require the construction of overcrossings or undercrossings on agricultural parcels to maintain access for affected farmers, there could be potential impacts on the physical environment. The impacts of this mitigation would be similar to those resulting from construction of other overcrossing or undercrossing structures along the F-B LGA, including emissions and fugitive dust from construction equipment, construction-related noise, visual impacts associated with new structures. Any new overcrossings or undercrossings would be designed and constructed to be consistent with local land use plans, and would be subject to separate analysis under CEQA, including measures to mitigate impacts to a less than significant level. For this reason, it is expected that impacts of mitigation would be less than significant under CEQA.

Mitigation Measure SO-MM #5 addresses physical deterioration via measures that will design station and non-station structures to allow for contextual design responses to site-specific or unique conditions (Impact SO #18). Modifications to areas underneath the elevated guideway and along the edges of the right-of-way under Mitigation Measure SO-MM #5 could result in potential impacts on the physical environment. The intention of this mitigation measure is to lessen the aesthetic impacts from the introduction of new structures by improving the visual quality of the surroundings. Creating gardens and trails and planting trees will require temporary use of excavation equipment and other landscaping tools. Impacts of this mitigation measure could include noise, emissions, and fugitive dust from construction-related activities. Any new recreation facilities would be designed and constructed to be consistent with local land use plans, and would be subject to separate analysis under CEQA, including measures to mitigate impacts to a less-than-significant level. For this reason, it is expected that impacts of mitigation would be less than significant under CEQA.

3.12.6.2 Mitigation Measures Specific to F-B LGA

With the implementation of Mitigation Measures SO-MM#4 and SO-MM#5, described above, adverse effects associated with split agricultural parcels, disruption to rural agricultural communities, and physical deterioration of community facilities would be mitigated by providing undercrossings/overcrossings to maintain access for affected farmers and lessen the aesthetics impacts of the introduction of new structures associated with the F-B LGA.

In addition, to ensure appropriate mitigation for displaced residences in agricultural areas and impacts to community facilities, Mitigation Measures SO-MM#1 and SO-MM#3 in Table 3.12-30 would also be implemented. These mitigation measure were previously approved as described in the *Fresno to Bakersfield Section Mitigation and Monitoring Enforcement Plan* (Authority and FRA 2014: 1-50), but have been revised for applicability to resources affected by the F-B LGA.

Number	Description
	The California High-Speed Rail Authority (Authority) will minimize impacts associated with the <u>F-B</u> <u>LGA</u> in the rural residential areas <u>around the community of Oildale</u> as well as in urban residential areas in Shafter and Bakersfield by conducting special outreach to affected homeowners and residents to fully understand their special relocation needs. The Authority will make every effort to locate suitable replacement properties that are comparable to those currently occupied by these residents, including constructing suitable replacement facilities if necessary. In cases where residents wish to remain in the immediate vicinity, the Authority will take measures to purchase vacant land or buildings in the area, and consult with local authorities over matters such as zoning, permits, and moving of homes and replacement of services and utilities, as appropriate. Before land acquisition, the Authority will conduct community workshops to obtain input from those homeowners whose property would not be acquired, but whose community would be substantially altered by construction of high-speed rail (HSR) facilities, including the loss of many neighbors, to identify measures that could be taken to mitigate impacts on those who remain (including placement of sound walls and landscaping, and potential uses for remnant parcels that could benefit the community in the long term).
	The Authority will minimize impacts resulting from the disruption to key community facilities, including the Mercado Latino Tianguis, Golden Empire Transit District, Valley Oaks Charter School, Bakersfield Department of Motor Vehicles, Golden Empire Gleaners (a food bank), Bakersfield Homeless Center, the Golden Living Center (a nursing facility), Kern County Veterans Service Department, Iglesia de Dios Pentecostes La Hermosa (a religious facility) The Authority will consult with the appropriate respective parties before land acquisition to assess potential opportunities to reconfigure land use and buildings and/or relocate affected facilities, as necessary, to minimize the disruption of facility activities and services, and also to ensure relocation that allows the community currently served to continue to access these services. Because many of these community facilities are located in Hispanic communities, the Authority will

Table 3.12-30 Mitigation Measures Applicable to the F-B LGA



Number	Description
	continue to implement a comprehensive Spanish-language outreach program for these communities as land acquisition begins. This program will facilitate the identification of approaches that would maintain continuity of operation and allow space and access for the types of services currently provided and planned for these facilities. Also, to avoid disruption to these community amenities, the Authority will ensure that all reconfiguring of land uses or buildings, or relocating of community facilities is completed before the demolition of any existing structures.

Mitigation Measure SO-MM #1 addresses disruption to community cohesion and division of existing rural communities during operations (Impact SO #6). This measure both addresses relocation through locating suitable replacement properties comparable to those currently occupied by the residents, as well as suitable replacement facilities, if necessary. Additionally in cases where residents wish to remain there are measures in place to purchase vacant land or buildings in the area, and outreach to determine how communities may be substantially altered by construction of the Project. This mitigation measure includes plans to conduct outreach activities in affected communities and to consult with property owners; these activities will result in no impacts on the physical environment.

Mitigation Measure SO-MM #3 addresses disruption to and physical deterioration of community facilities, including the Mercado Latino Tianguis, during construction and operation of the F-B LGA (Impacts SO #1 and SO #18). This mitigation measure will be effective in minimizing the impacts of the project by completing new facilities before necessary relocations, and by involving affected facilities in the process of identifying new locations for their operations. Mitigation Measure SO-MM#3 will require the reconfiguration of land or construction of replacement structures for community facilities impacted by the F-B LGA. Potential impacts on the physical environment from this mitigation would result from construction activities, including emissions and fugitive dust from construction equipment, construction-related noise, visual impacts associated with new structures. Any new facilities would be designed and constructed to be consistent with local land use plans, and would be subject to separate site-specific analysis under CEQA, including measures to mitigate impacts to a less-than-significant level. For this reason, it is expected that impacts of mitigation would be less than significant under CEQA.



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