

CALIFORNIA HIGH-SPEED TRAIN PROJECT EIR/EIS

REPORT

Merced to Fresno Section
**Draft Relocation Impact Report
(DRIR)**

Prepared by:

**California High-Speed Rail Authority and
Federal Railroad Administration**

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List of Abbreviated Terms

Authority	California High-Speed Rail Authority
Caltrans	California Department of Transportation
CDOF	California Department of Finance
CEDD	California Employment Development Department
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
DRIR	Draft Relocation Impact Report
EIR	environmental impact report
EIS	environmental impact statement
FRA	Federal Railroad Administration
FTE	full-time equivalent
GIS	geographic information system
HHS	U.S. Department of Health and Human Services
HMF	heavy maintenance facility
HST	high-speed train
mph	miles per hour
MSA	metropolitan statistical area
NAICS	North American Industry Classification System
NEPA	National Environmental Policy Act
RTP	regional transportation plan
sf	square feet or square foot
SR	State Route
Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended



Glossary

Alignment: The horizontal and vertical route of a transportation corridor or path.

Alternative: All project components for a given alignment, including guideway, bridges, elevation profiles, and stations.

At-Grade: At ground surface level; used to describe roadways, river crossings, and track profiles.

California High-Speed Rail Authority (Authority): A state governing board that has responsibility for planning, designing, constructing, and operating the California High-Speed Train (HST). Its mandate is to develop a high-speed rail system coordinating with the state's existing transportation network, which includes intercity rail and bus lines, regional commuter rail lines, urban rail and bus transit lines, highways, and airports.

Easement: An interest in land owned by another individual or organization that entitles its holder to a specific limited use.

Environmental Impact Report (EIR): A detailed informational document that analyzes a project's potential significant effects and identifies mitigation measures and reasonable alternatives to avoid the significant effects. This document is part of the CEQA environmental review process.

Environmental Impact Statement (EIS): A detailed informational document that analyzes a project's potential significant effects and identifies mitigation measures and reasonable alternatives to avoid the significant effects. This document is part of the NEPA environmental review process.

Environmental Justice: Identifying and addressing the potential for disproportionately high and adverse effects of programs, policies, and activities on minority and low-income populations.

Ethnicity: A grouping or category of people based on shared cultural traits such as ancestral origin, language, custom, or social attitude.

Grade Crossing: The intersection of a railroad and a highway at the same elevation (grade); an intersection of two or more highways; an intersection of two railroads.

Guideway: Defined by the Orange County Transportation Authority as *a track or riding surface that supports and physically guides transit vehicles specially designed to travel exclusively on it.*

Heavy Maintenance Facility (HMF): A maintenance facility that supports delivery, testing, and commissioning on the first completed portion of the network and performs the following functions: trainset assembly, testing and commissioning, train storage, inspection, maintenance, retrofitting, and overhaul.

High-Speed Train System: The system that includes the HST tracks, structures, stations, traction-powered substations, and maintenance facilities and trains able to travel 220 mph.

High-Speed Train (HST): A train designed to operate safely and reliably at speeds near 220 mph.

HST Alignment Alternatives: General location for HST tracks from the 2005 and 2008 program documents, and structures and systems for the HST system between logical points within study corridors; they are generally configured along or adjacent to existing rail transportation facilities.

No Project Alternative: Represents the region's (and state's) transportation system (highway, air, and conventional rail) as it is today and with implementation of programs or projects that are in regional transportation plans (RTPs) and have identified funds for implementation by 2035. The No Project Alternative represents the baseline conditions for comparison with the project alternatives.

Parcel: A distinct, continuous portion or tract of land.

Poverty Level: An income at which a family or individual is considered poor. For example, in 2009 the U.S. Census Bureau defined the poverty level for a family of four as an income of \$21,954 or less.

Right-of-Way: A legal right of passage over a defined area of real property. In transit usage, it refers to the corridor along a roadway or track alignment that is controlled by a transit or transportation agency/authority.

Wye Connection: HST track connecting different HST sections. The transition to a wye would require splitting two tracks into four tracks crossing over one another before the wye legs can diverge in opposite directions to allow bidirectional travel.

1.0 Introduction

This report has been prepared in support of the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Merced to Fresno Section of the proposed California High-Speed Train (HST) System. The report evaluates the existing conditions (such as, population characteristics and demographics) of the study area and the replacement requirements of potentially displaced residences and businesses.

1.1 Project Background

The California HST System, as shown in Figure 1-1, is planned to provide intercity, high-speed service on more than 800 miles of tracks throughout California, connecting the major population centers of Sacramento, the San Francisco Bay Area, the Central Valley, Los Angeles, the Inland Empire, Orange County, and San Diego. The HST System is envisioned as a state-of-the-art, electrically powered, high-speed, steel-wheel-on-steel-rail technology, which would include contemporary safety, signaling, and automated train-control systems. The trains would be capable of operating at speeds of up to 220 miles per hour (mph) over a fully grade-separated, dedicated track alignment.

Definition of HST System

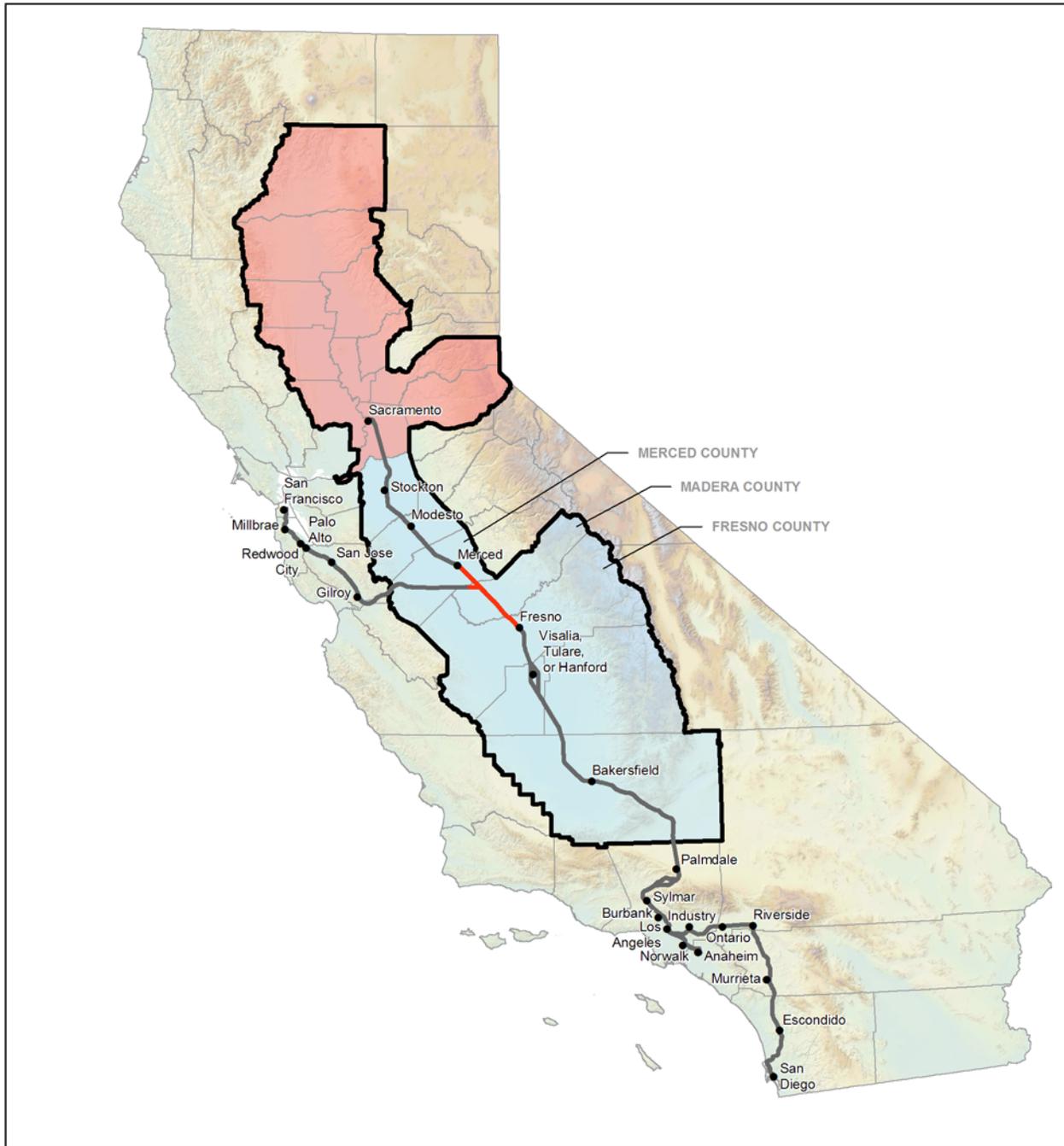
The system that includes the HST tracks, structures, stations, traction-powered substations, and maintenance facilities and train vehicles able to travel 220 mph.

The California HST System is being planned, designed, constructed, and operated under the direction of the California High-Speed Rail Authority (Authority), a state governing board formed in 1996. The Authority's statutory mandate is to develop a high-speed rail system that is coordinated with the state's existing transportation network, which includes intercity rail and bus lines, regional commuter rail lines, urban rail and bus transit lines, highways, and airports. The Merced to Fresno HST Section is a critical Phase 1 link connecting the Bay Area HST sections to the northern and southern portions of the system.

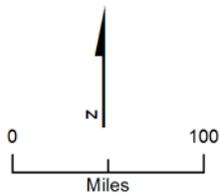
The Council on Environmental Quality provides for National Environmental Policy Act (NEPA) decision-making through a phased process. This process is referred to as *tiered* decision-making. This phased decision-making process provides for a broad level programmatic decision to inform more specific decisions using a tiered approach. A first tier programmatic environmental impact statement (EIS) addresses one large project with one overall purpose and need that would be too extensive to analyze in a traditional project EIS. The California Environmental Quality Act (CEQA) also encourages tiering and also provides for first-tier and second-tier EIRs.

The Merced to Fresno Section Project Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) is a second-tier EIR/EIS that builds upon and further refines work completed earlier as part of the two first-tier program EIR/EIS documents. The 2005 *Final Program EIR/EIS for the Proposed California High-Speed Train System* (Statewide Program EIR/EIS) provided a first-tier analysis of the general effects of implementing the HST System across two-thirds of the state. The *Final Bay Area to Central Valley HST Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS)* (Authority and Federal Railroad Administration [FRA] 2008), and the *Bay Area to Central Valley HST Revised Final EIR* (Authority 2010) were also first-tier and programmatic documents but focused on the Bay Area to Central Valley region. As a result of CEQA litigation, the Authority rescinded its 2008 programmatic decision, prepared a Revised Final Program EIR, and made a new decision on the Bay Area to Central Valley route in 2010. A second legal challenge resulted in the Authority preparing a Partially Revised Final Program EIR. The Authority is expected to rescind its 2010 decisions and make a new set of decisions for the Bay Area to Central Valley connection prior to considering the Merced to Fresno HST Final Project EIR/EIS. The Authority's rescission of the 2008 and 2010 programmatic decisions does not invalidate FRA's federal decisions on the 2005 and 2008 Program EIR/EISs.

First-tier EIR/EIS documents provided the Authority and FRA with the environmental analysis necessary for evaluation of the overall HST System and for making broad decisions about general HST alignments and station locations for further study in second-tier EIR/EISs. These documents are available on the



MF_EIS_Sect01_02 Oct 20, 2010



- Merced to Fresno Section
- Statewide HST System
- Potential Station
- Counties Commonly Associated with the Central Valley
- Sacramento Valley
- San Joaquin Valley

Authority's website: www.cahighspeedrail.ca.gov. This technical report has been prepared to support the Merced to Fresno Section Project EIR/EIS process, which analyzes the environmental impacts and benefits of implementing the HST in the more geographically limited area between Merced and Fresno and is based on more detailed project planning and engineering. The analysis therefore incorporates the earlier decisions and program EIR/EISs, and it provides more site-specific and detailed analysis.

For the assessment of potential relocation impacts, the Statewide Program EIR/EIS and the Bay Area to Central Valley Program EIR/EIS recommended a project-level relocation impact analysis for potentially displaced residences and businesses. This Draft Relocation Impact Report (DRIR) was prepared to help meet that recommendation.

Building and operating the Merced to Fresno Section of the HST System would require the acquisition of public and private properties for the HST guideway and facilities, as well as the relocation of displaced residential, commercial, and public uses. This DRIR provides an overview of the potential displacement areas and specific discussions regarding population characteristics, economic conditions, and land uses where relocations are expected. The overview of the potential displacement areas includes existing uses in and adjacent to areas where property acquisition may be required; the overview also summarizes likely property acquisitions based on current designs and their impacts. The anticipated acquisition presented in this report is representative, based on the conceptual design. As the project design is refined, the list would be updated. The acreage of acquisition for new real estate and right-of-way could be reduced. The estimates reflect the existing conditions at the time of the analysis (November 2009 through March 2012). Properties that are currently underdeveloped or vacant could be developed before construction of the HST Project; therefore, the quantity and type of displacements could vary from those described in this DRIR.

This DRIR provides support and a detailed analysis of relocation issues under the No Project Alternative and the HST alternatives. It describes existing conditions, the range of possible impacts of each alternative, and the measures to avoid, minimize, or, if necessary, mitigate the impacts of the HST alternatives. The analysis is based on an approximately 15% design of the HST alternatives and was conservatively performed to quantify and qualify impacts; however, impacts may change with subsequent design changes.

The purpose of the document is to identify the number and type of potential displacees and determine the amount and type of available housing and commercial space, which will allow for development of a preliminary budget for the relocations.

After completion of the environmental review process and consideration of public input, the Hybrid Alternative and the Mariposa Street Station Alternative in Downtown Fresno were selected as the Preferred Alternative. The DRIR will be updated and finalized as design continues and right-of-way and land surveys are conducted for the Preferred Alternative. The DRIR will also be revised and finalized to reflect updated timeframes, market conditions, appraisal data, the number of potential displacees and available houses, and commercial space, and to develop a preliminary budget for the relocations. Information gathered by any interviews conducted will be included in the Final Relocation Impact Report (FRIR). Chapter 10 of the *Right-of-Way Manual* (Caltrans 2009) describes these procedures.

1.2 Study Areas

The Statewide Program EIR/EIS (Authority and FRA 2005) and the Bay Area to Central Valley Program EIR/EIS (Authority and FRA 2008) concluded that potential land use displacements and property acquisitions would be avoided to the extent feasible by adjusting the alignment and making project-level design changes. The documents also concluded that design strategies, such as over- or undercrossing designs, would be developed for application at the project level to avoid or minimize the temporary or permanent acquisition of residential and nonresidential property.

The study areas for the Merced to Fresno Section include the project's proposed ground disturbance footprint (e.g., guideway, stations, substations, equipment storage areas, maintenance facility, temporary



construction staging areas, and areas disturbed for roadway modifications). The study areas discussed in this DRIR are the following:

- The relocation and displacement study area (see Section 3.0, Overview of Relocation and Displacement Study Area)
- The acquisition/displacement study area (see Section 4.0, Estimates of Residential and Nonresidential Displacements)
- The relocation replacement study area (see Section 6.0, Relocation Resources Available to Displacees)

The purpose of Section 3.0 is to present and evaluate information for the affected environment in the general area of the Merced to Fresno Section of HST. Therefore, the study area for the relocation and displacement area is broader than those in Sections 4.0 and 6.0. The study area (discussed in Section 3.0) is a region that includes the counties and local jurisdictions where the HST project would be located. The discussion of alternative specific areas (such as the UPRR/SR 99 Alternative), also discussed in Section 3.0, includes the area within 0.5 mile of the proposed HST stations and within 0.25 mile of the proposed HST alignment. Analysts collected data for the relocation and displacement study area from various sources, including the U.S. Census Bureau and local agencies, to evaluate the affected environment setting for the HST project.

The acquisition/displacement study area (discussed in Section 4.0), used to determine the number of acquisitions and displacements that would result from the project, is the construction footprint. The construction footprint is the total area that might be disturbed during construction. It includes the right-of-way for the project components as well as portions of parcels beyond the necessary right-of-way that would be acquired because they are too small to sustain current use without other modifications. The project components include the proposed HST right-of-way and associated facilities such as traction-power substations, switching and paralleling stations, and wye connections, as well as the shifts in roadway rights-of-way that would be associated with those facilities, including overcrossings and interchanges, that would be modified or shifted to accommodate the HST project. The area of permanent effect would include the following:

- HST Right-of-Way – would vary between 100 feet for rural areas and as little as 50 feet in constrained urbanized areas.
- Traction Power Substations – would each require a 30,000-square-foot (sf), or 200-foot by 160-foot, site adjacent to the HST alignment and a 20-foot-wide access to the nearest roadway.
- Switching and Paralleling Stations – each would need a site approximately of 9,600 sf (generally 80 by 120 feet) adjacent to the proposed HST alignment, and a 20-foot-wide access lane to the nearest roadway.
- Wye Design Option – the wye connection would include an area of four tracks with a maximum width of 160 feet extending up to 2 miles (see Section 2.0, Project Description, for a more detailed description).
- HST Stations – the stations and associated structures, including parking, are analyzed as city blocks (see Section 2.1, No Project Alternative, for a more detailed description).
- Heavy Maintenance Facility (HMF) Alternatives – depending on the site, each HMF may encompass up to 230 acres and generally be 10,560 feet long by 3,000 feet wide at the widest portion. Two access tracks would diverge from the through tracks (four tracks total) on either side of the HMF, requiring a 160-foot HST right-of-way along the access tracks.
- Project roadway modifications of varying right-of-way and distance from the HST right-of-way, including the following:

- New two-lane overcrossings over the HST right-of-way
- Shifts of frontage roads (two to four lanes, with shoulders) that parallel the HST right-of-way
- Shift of SR 99 two-lane overcrossings and interchanges and associated two-lane roadway connections, and a shift of SR 99 in Fresno and two new interchanges

The relocation replacement area (discussed in Section 6.0, Relocation Resources Available to Displacees) includes the neighborhoods where impacts would occur and adjacent neighborhoods with similar characteristics in the cities of Atwater, Merced, Chowchilla, Le Grand, Madera, and Fresno. Research included the replacement availability within the limits of each city. The relocation replacement areas in unincorporated rural portions of the counties are within a 30-mile radius of the proposed HST alignment. Both Le Grand and Fairmead are unincorporated.

1.3 Methodology

The displacement and relocation methodology follows guidance provided in the *Right-of-Way Manual – Relocation Assistance and Housing Program* (California Department of Transportation [Caltrans] 2009) for relocation impact documents and the *Community Impact Assessment, Caltrans Environmental Handbook, Volume 4* (Caltrans 1997).

The analysis described in this report is based on the draft 15% baseline engineering design plans provided by AECOM in May and June 2010 and cost savings revisions provided by AECOM in February, March, and April 2011 using a worst-case scenario, at-grade vertical profile, and revised 15% baseline design plans provided in November 2011, January 2012, and February 2012. URS provided the 15% and 30% design plans for the area in Fresno between Clinton Avenue and the Downtown Fresno Station. Per agreement with the Program Management Team, two methodologies, the “full method” and the “abbreviated method,” (to meet the schedule) were used for data collection and acquisition/displacement determinations. The full method was used for the May and June 2010 draft 15% baseline engineering design plans and the abbreviated method was used for the February, March, and April 2011 cost savings revisions and the June/July 2011 alignment update revision (including Hybrid with Ave 21 Wye and additional roadways). The abbreviated method was also used for the March 2012 alignment update revisions. Onsite field inspections provided information to formulate assumptions regarding affected property. Field inspections included drive-by surveys and a review of aerial maps, tax assessor records, and property information obtained from other county records. Field inspections were conducted in 2009 and 2010 for the preliminary footprints. Aerial photographs and a review of public records and broker information provided additional information, when available. Aerial photographs and reviews of public records were the primary sources of information to determine use and other details of properties that were added to the preliminary footprints as the engineering design plans developed. The abbreviated method reviews of parcels were conducted for the cost saving revisions to the preliminary engineering design plans. Field inspections were not conducted; however, aerial maps and aerial photographs were reviewed.

Surveys that delineate the Preferred Alternative right-of-way required for the Merced to Fresno Section of the HST Project are in progress. Final determination of right-of-way impacts may change during engineering and design of the HST facilities. The HST Project would relocate displaced residents and businesses in suitable areas and provide just compensation per the statutory guidelines described below.

The Statewide Program EIR/EIS and the Bay Area to Central Valley Program EIR/EIS state that the project-level analysis would consider relocation assistance in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). All acquisition and relocation activities would be coordinated with local jurisdictions and performed in accordance with all applicable federal, state, and local laws and regulations, including the Uniform Act and the California Relocation Act. Relocation resources would be available to all displacees without discrimination. Several informational brochures are available to assist potential displacees (Authority and FRA, 2011a, b, c).

The Uniform Act (Title 49 Code of Federal Regulations [CFR] Part 24), as amended, is a federal requirement; therefore, compliance is assumed as part of the HST project due to federal funding. The Uniform Act and its amendments provide mandatory rules and requirements on how government agencies compensate for impacts on property owners or tenants who need to relocate if they are displaced by a federally funded project (Authority and FRA, 2011a, b, c). Site visits conducted on November 11 and 17-18, 2009; January 5-7 and 25-26, 2010; April 20-23 and 26-28, 2010; and May 4, 2010 identified residential and nonresidential properties, or portions thereof, in the construction footprint. Parcel information collected in the field included observed land use, business names, number of structures on parcels, and number of units in the structures. Site visits were conducted from roadways and publicly accessible areas adjacent to the parcels. Analysts used aerial photographs to obtain information for private properties not visible from adjacent roadways.

1.3.1 Data Collection and Analysis

Analysts used geographic information system (GIS) data layers, including construction footprint, county-provided parcel boundaries, and aerial photographs to identify parcels located within the construction footprint. In many cases, county-provided parcel boundary layers had not been orthorectified (i.e., corrected to actual locations) and required adjustment. Data and information from county sources (e.g., land use designations) were often incomplete; in these cases, analysts used field observations, aerial photographs, and various mapping programs to obtain supplemental information.

Analysts determined whether the acquisition of parcels within the construction footprint would be full or partial and the potential number of displaced structures. The anticipated boundaries of the acquisitions were digitized using GIS to determine the total acreage and number of parcels to be acquired. Data such as the number of displaced structures, number of units, observed land uses, size of property to be acquired, and type of acquisition (full or partial) were entered into a Microsoft Access database. Units are defined as areas within a structure that are likely to be occupied by residents or employees; for example, apartments within an apartment building and businesses within a shopping mall.

Analysts used data regarding the average household size within the relocation study area to estimate the number of residential occupants. Information regarding the ethnic composition of the neighborhood population helped identify special needs issues for residents who do not speak English or speak English as a second language. To estimate the number of employees for each business, analysts considered the size of the building (using aerial photographs) and the type of business occupying the building (using assessor records and field research). Commercial displacements were estimated using U.S. Census data for the number of employees per establishment. This average value (averaged for all North American Industry Classification System [NAICS] codes) was applied to each commercial, industrial, or municipal (office) unit displaced (U.S. Census Bureau 2012).

1.3.2 Acquisition and Displacement Determination

At this stage of project planning, determining the individual circumstances for each of the potential parcel acquisitions and displacements is not possible. The following assumptions and methodologies were employed to provide consistency, where possible, in the determinations.

Analysts assessed all parcels having a boundary that crosses the construction footprint to determine whether they would qualify for full or partial acquisition. If the entire parcel was located within the construction footprint, the parcel was counted as a full acquisition and all structures were considered displacements. Parcels only partly located in the construction footprint were determined to be full acquisitions if the remaining land would be too small to provide any value or if access to the remainder was limited. For large agricultural property, analysts assumed that road and infrastructure access to relatively large remainder property would be adequate or would be provided. Analysts considered property ownership in the determination for cases where a relatively small remainder would result but an adjoining property was owned by the same party. In these cases, the remainder would not be acquired. Some parcels were determined to be partial acquisitions but because of size or location of the remainder, acquired land extended beyond the construction footprint to the parcel boundary.

As explained above, all structures located on a fully acquired parcel were considered displacements. Only structures within the portion of the parcel to be acquired on partially acquired parcels were considered displacements. In those cases, relocation within the same parcel might be possible; however, to be conservative, they were included as displacements. On partially acquired parcels, access to structures and proximity of structures to the construction footprint were not considered in the displacement determination. To be conservative, if any part of the structure was within the area to be acquired it was considered a displacement. Residential parcels within the construction footprint that were less than 0.25 acre were considered full acquisitions, regardless of the size of the portion of the parcel within the construction footprint. Many areas, such as roadways, were not associated with an assessor's parcel number or parcel boundaries in the data obtained from the counties. The acreage of acquisitions for this property was included in the partial acquisition count for the municipal land use category.

The alternatives avoid existing UPRR operational rights-of-way and active rail spurs. In several locations, the HST guideway would be elevated to cross over the UPRR operational right-of-way. In rare cases, the HST alignment would be located on property owned by UPRR but outside of the existing UPRR operational right-of-way. Additionally, the current level of design would potentially necessitate the acquisition of small portions of UPRR right-of-way. The methodology for determining acquisitions used a conservative approach by including parcels that may not need to be acquired in later design.

This assessment presents data for permanent and temporary effects. Property within the acquisition footprint would be acquired prior to the commencement of construction activity. The area between the permanent impact area and the property acquisition footprint could be sold, leased, or transferred after construction, in accordance with local guidelines and excess property transaction policies. This area is considered a temporary impact for the purposes of this report. Appendix A summarizes permanent and temporary right-of-way acquisitions.

1.4 Report Organization

The organization of the remainder of this DRIR is as follows:

- Section 2.0, Project Description.
- Section 3.0, Overview of Relocation and Displacement Study Area.
- Section 4.0, Estimates of Residential and Nonresidential Displacements.
- Section 5.0, Competing Displacement Needs.
- Section 6.0, Relocation Resources Available to Displacees.
- Section 7.0, Relocation Policy and Impact Mitigation.
- Section 8.0, References Cited.
- Section 9.0, Preparer Qualifications.
- Appendix A, Displacement Summary.

2.0 Project Description

The approximately 65-mile-long corridor between Merced and Fresno is an essential part of the statewide HST System. The Merced to Fresno Section is the location where the HST would intersect and connect with the Bay Area and Sacramento branches of the HST System; it would provide a potential location for the heavy maintenance facility (HMF) where the HSTs would be assembled and maintained, as well as a test track for the trains; it would also provide Merced and Fresno access to a new transportation mode and would contribute to increased mobility throughout California.

2.1 No Project Alternative

The No Project Alternative refers to the projected growth planned for the region through the 2035 time horizon without the HST Project and serves as a basis of comparison for environmental analysis of the HST build alternatives. The No Project Alternative includes planned improvements to the highway, aviation, conventional passenger rail, and freight rail systems in the Merced to Fresno project area. Many environmental impacts would result under the No Project Alternative. As projected in the regional transportation plan (RTP) (Council of Fresno County Governments 2007), population in the region comprising the counties of Merced, Madera, and Fresno will grow at a much faster rate than the rest of the state between 2010 and 2035. The RTP projects that population will rise 59% to 104% and that jobs will increase 56% to 82% in the three counties.

The No Project Alternative includes construction of many planned transportation, housing, commercial, and other development projects by the year 2035. These projects have been planned or approved to accommodate projected growth. Land development to accommodate growth includes roadways, other support infrastructure, commercial, industrial uses, parks, and institutional uses, and the residential units constitute approximately 45% of total developed lands. The U.S. Census Bureau (2000a, b) reported that these three counties recorded an average of 3.25 persons per dwelling unit. Applying the average residential units per acre required for the projected population growth, Merced could accommodate nearly 64,000 new dwelling units and almost 8,000 acres of land for housing, Madera would accommodate approximately 49,000 new dwelling units and 10,500 acres of land for housing, and Fresno could accommodate slightly over 174,000 dwelling units and 21,700 acres of land for housing. Collectively, for housing alone, this would result in 40,200 acres of land to accommodate projected housing needs. With supporting infrastructure, including commercial, office, transportation, parks, and schools, a typical density for an area similar to the San Joaquin Valley would result in 8 to 10 people per acre of land development. Under this "unconstrained" scenario, the total three-county growth projections would result in approximately 93,000 acres of development. This becomes the basis for comparing the HST alternatives.

The No Project Alternative also represents the state's transportation system (highway, air, and conventional rail) as it is currently and as it would be after implementation of programs or projects that are currently projected in RTPs, that have identified funds for implementation, and that are expected to be in place by 2035, as well as any major planned land use changes. Most notably, by 2020, Caltrans will expand State Route (SR) 99 between Merced and Fresno with full access interchanges and additional auxiliary lanes. However, even with these improvements, Caltrans expects SR 99 to be congested by 2030 (Caltrans 2009).

There are several environmental impacts that would result under the No Project Alternative, such as worsening congestion of roadways. Worsening congestion typically results in degradation of air quality; however, the air quality regulatory boards are establishing higher emission standards that may help counter some of these effects. With more people, more vehicles, and more activity, there will be higher noise levels in urbanized areas. Vibration is a localized event, but more households may experience vibration from an increased number of truck deliveries. Although electromagnetic interference would not be an issue under the No Project Alternative, growth will require more utility and energy resources to the region.

Higher consumption of land area would reduce overall open lands for wildlife, result in fewer habitat areas for rare grasslands plants, and likely affect wetlands as well. The growth would also likely remove farmlands from production. Although there are regulations and development ordinances to protect open streams and water resources, larger amounts of roads and pavement would increase the amount of pollutants in the stormwater. Additionally, more households and businesses would tap increasingly scarce water reserves, and increasing amounts of impervious surface may reduce the replenishment of groundwater reserves. On the positive side, growth in the regional economy may result in more jobs for existing residents, more civil services (such as safety officers), and more schools, parks, and recreational opportunities.

2.2 High-Speed Train Alternatives

As shown in Figure 2-1, there are three HST alignment alternatives proposed for the Merced to Fresno Section of the HST System: the UPRR/SR 99 Alternative, which would primarily parallel the UPRR railway; the BNSF Alternative, which would parallel the BNSF railway for a portion of the distance between Merced and Fresno; and the Hybrid Alternative, which combines features of the UPRR/SR 99 and BNSF alternatives. In addition, there is an HST station proposed for both the City of Merced and the City of Fresno, there is a wye connection (see text box on page 2-4) west to the Bay Area, and there are five potential sites for a proposed HMF.

The Authority and FRA have identified the Hybrid Alternative as their preferred alternative for the north-south alignment between Merced and Fresno. The Hybrid Alternative would connect to San Jose to the west along one of three wye design options. The San Jose to Merced Section Project EIR/EIS will fully evaluate the east-west alignment alternatives and wye configurations, including the Ave 24 Wye, the Ave 21 Wye, and another wye design option, the SR 152 Wye, which has not been reviewed in this document. A decision regarding the preferred east-west alignment, including the preferred wye design option, will take place after circulation of the San Jose to Merced Section Project EIR/EIS; that decision will finalize the alignment and profile of the Hybrid Alternative. In addition, the Authority and FRA have identified the Mariposa Street Station Alternative as their preferred alternative for an HST station in Downtown Fresno.

2.2.1 UPRR/SR 99 Alternative

This section describes the UPRR/SR 99 Alternative, including the Chowchilla design options, wyes, and HST stations.

2.2.1.1 North-South Alignment

The north-south alignment of the UPRR/SR 99 Alternative would begin at the HST station in Downtown Merced, located on the west side of the UPRR right-of-way. South of the station and leaving Downtown Merced, the alternative would be at-grade and cross under SR 99. Approaching the City of Chowchilla, the UPRR/SR 99 Alternative has two design options: the East Chowchilla design option, which would pass Chowchilla on the east side of town, and the West Chowchilla design option, which would pass Chowchilla 3 to 4 miles west of the city before turning back to rejoin the UPRR/SR 99 transportation corridor. These design options would take the following routes:

- **East Chowchilla design option:** This design option would transition from the west side of the UPRR/SR 99 corridor to an elevated structure as it crosses the UPRR railway and N Chowchilla Boulevard just north of Avenue 27, continuing on an elevated structure away from the UPRR corridor along the west side of and parallel to SR 99 to cross Berenda Slough. Toward the south side of Chowchilla, this design option would cross over SR 99 north of the SR 99/SR 152 interchange near Avenue 23½ south of Chowchilla. Continuing south on the east side of SR 99 and the UPRR corridor, this design option would remain elevated for 7.1 miles through the communities of Fairmead and Berenda until reaching the Dry Creek Crossing. The East Chowchilla design option connects to the HST sections to the west via either the Ave 24 or Ave 21 wyes (described below).

- West Chowchilla design option:** This design option would travel due south from Sandy Mush Road north of Chowchilla, following the west side of Road 11¾. The alignment would turn southeast toward the UPRR/SR 99 corridor south of Chowchilla. The West Chowchilla design option would cross over the UPRR and SR 99 east of the Fairmead city limits to again parallel the UPRR/SR 99 corridor. The West Chowchilla design option would result in a net decrease of approximately 13 miles of track for the HST System compared to the East Chowchilla design option and would remain outside the limits of the City of Chowchilla. The West Chowchilla design option connects to the HST sections to the west via the Ave 24 Wye, but not the Ave 21 Wye.

The UPRR/SR 99 Alternative would continue toward Madera along the east side of the UPRR south of Dry Creek and remain on an elevated profile for 8.9 miles through Madera. After crossing over Cottonwood Creek and Avenue 12, the HST alignment would transition to an at-grade profile and continue to be at-grade until north of the San Joaquin River. After the San Joaquin River crossing, the HST alignment would require realignment (a mostly westward shift) of Golden State Boulevard and of a portion of SR 99 to create right-of-way adjacent to the UPRR railroad that would not preclude future expansion of these roadways. After crossing the San Joaquin River, the alternative would rise over the UPRR railway on an elevated guideway, supported by straddle bents, before crossing over the existing Herndon Avenue and again descending into an at-grade profile and continuing west of and parallel to the UPRR right-of-way. After elevating to cross the UPRR railway on the southern bank of the San Joaquin River, south of Herndon Avenue, the alternative would transition from an elevated to an at-grade profile. Traveling south from Golden State Boulevard at-grade, the alternative would cross under the reconstructed Ashlan Avenue and Clinton Avenue overhead structures. Advancing south from Clinton Avenue between Clinton Avenue and Belmont Avenue, the HST guideway would run at-grade adjacent to the western boundary of the UPRR right-of-way and then enter the HST station in Downtown Fresno. The HST guideway would descend in a retained-cut to pass under the San Joaquin Valley Railroad spur line and SR 180, transition back to at-grade before Stanislaus Street, and continue to be at-grade into the station. As part of a station design option, Tulare Street would become either an overpass or undercrossing at the station.

2.2.1.2 Wye Design Options

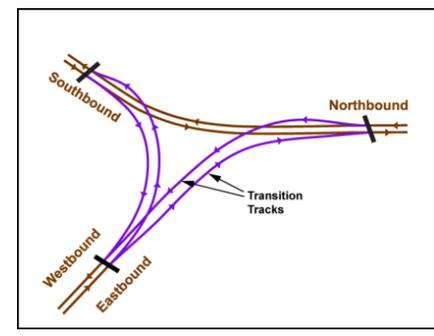
The following text describes the wye connection from the San Jose to Merced Section to the Merced to Fresno Section. There are two variations of the Ave 24 Wye for the UPRR/SR 99 Alternative because of the West Chowchilla design option. The Ave 21 Wye does not connect to the West Chowchilla design option and therefore does not have a variation.

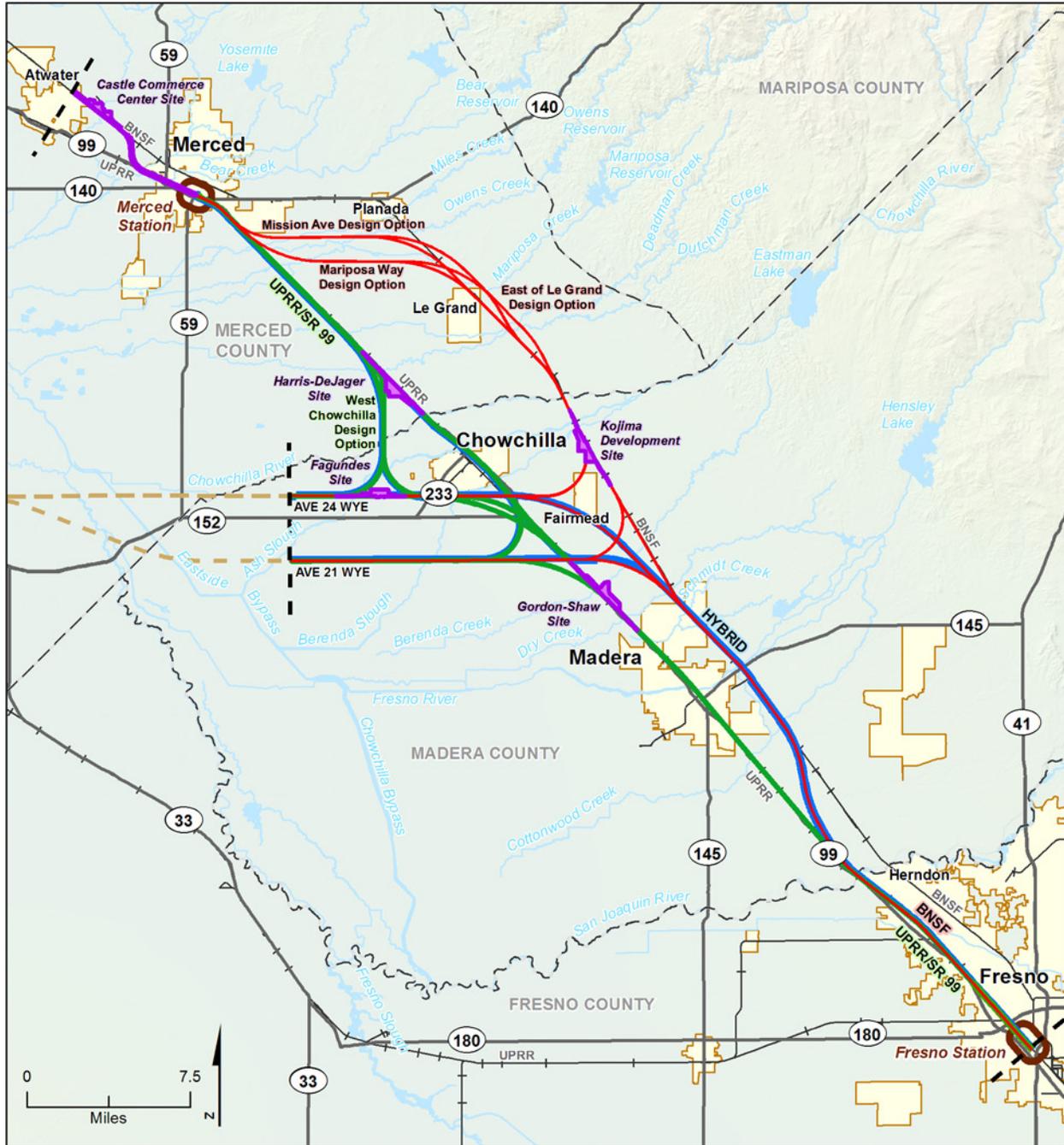
Ave 24 Wye

The Ave 24 Wye design option would travel along the south side of eastbound Avenue 24 toward the UPRR/SR 99 Alternative and would begin diverging onto two sets of tracks west of Road 11 and west of the City of Chowchilla. Under the East Chowchilla design option, the northbound set of tracks would travel northeast across Road 12, joining the UPRR/SR 99 north-south alignment on the west side of the UPRR right-of-way just north of Sandy Mush Road. Under the West Chowchilla design option, the northbound set of tracks would travel northeast across Road 12 and would join the UPRR/SR 99 north-south alignment just south of Avenue 26. The southbound HST guideway would continue east along Avenue 24, turning south near SR 233 southeast of Chowchilla, crossing SR 99 and the UPRR railway to connect to the UPRR/SR 99 Alternative north-south alignment on the east side of the UPRR near Avenue 21½. Under the West Chowchilla design option, the southbound tracks would turn south near Road 16 south of Chowchilla, crossing SR 99

What is a “Wye”?

The word “wye” refers to the “Y”-like formation that is created where train tracks branch off the mainline to continue in different directions. The transition to a wye requires splitting two tracks into four tracks that cross over one another before the wye “legs” can diverge in opposite directions to allow bidirectional travel. For the Merced to Fresno Section of the HST System, the two tracks traveling east-west from the San Jose to Merced Section must become four tracks—a set of two tracks branching to the north and a set of two tracks branching to the south.





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- BNSF Alternative
- UPRR/SR 99 Alternative
- Hybrid Alternative
- Project Limit
- Connection to Other Section
- Station Study Area
- Potential Heavy Maintenance Facility
- City Limit
- County Boundary
- Railroad
- State / US Highway

Figure 2-1
 Merced to Fresno Section
 HST Alternatives

and the UPRR to connect to the UPRR/SR 99 north-south alignment on the east side of the UPRR adjacent to the city limits of Fairmead.

Figure 2-2a shows the wye alignment for the East Chowchilla design option and Figure 2-2b shows the alignment for the West Chowchilla design option. Together, the figures illustrate the difference in the wye triangle formation for each design option connection. The north-south alignment of the West Chowchilla design option between Merced and Fresno diverges along Avenue 24 onto Road 12, on the north branch of the wye, allowing the HST alternative to avoid traveling through Chowchilla and to avoid constraining the city within the wye triangle.

Ave 21 Wye

The Ave 21 Wye would travel along the north side of Avenue 21. Just west of Road 16, the HST tracks would diverge north and south to connect to the UPRR/SR 99 Alternative, with the north leg of the wye joining the north-south alignment at Avenue 23½ and the south leg at Avenue 19½.

2.2.1.3 HST Stations

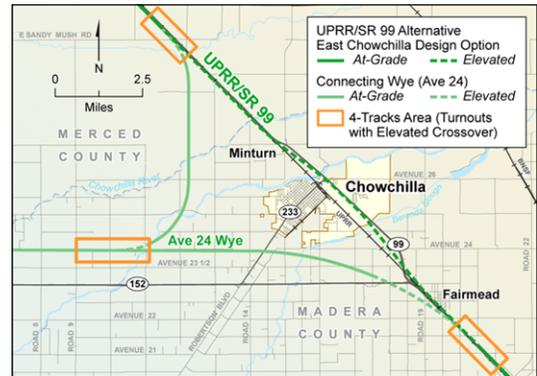
The Downtown Merced and Downtown Fresno station areas would each occupy several blocks, to include station plazas, drop-offs, a multimodal transit center, and parking structures. The areas would include the station platform and associated building and access structure, as well as lengths of platform tracks to accommodate local and express service at the stations. As currently proposed, both the Downtown Merced and Downtown Fresno stations would be at-grade, including all trackway and platforms, passenger services and concessions, and back-of-house functions.

Downtown Merced Station

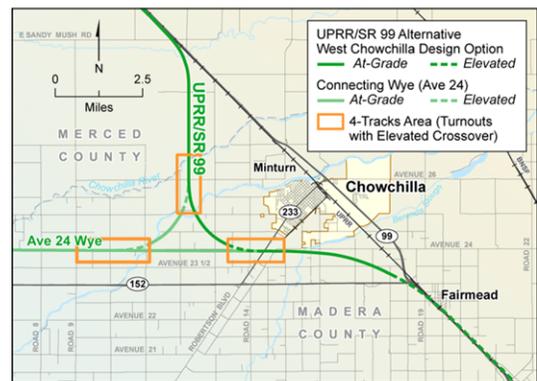
The Downtown Merced Station would be between Martin Luther King Jr. Way to the northwest and G Street to the southeast. The station would be accessible from both sides of the UPRR, but the primary station house would front 16th Street. The major access points from SR 99 include V Street, R Street, Martin Luther King Jr. Way, and G Street. Primary access to the parking facility would be from West 15th Street and West 14th Street, just one block east of SR 99. The closest access to the parking facility from the SR 99 freeway would be R Street, which has a full interchange with the freeway. The site proposal includes a parking structure that would have the potential for up to 6 levels with a capacity of approximately 2,250 cars and an approximate height of 50 feet.

Downtown Fresno Station Alternatives

There are two station alternatives under consideration in Fresno: the Mariposa Street Station Alternative and the Kern Street Station Alternative. The Authority and FRA have identified Mariposa Street Station as their preferred alternative.



(a) Ave 24 Wye with the East Chowchilla Design Option



(b) Ave 24 Wye with the West Chowchilla Design Option

Figure 2-2a and b
 Ave 24 Wye and Chowchilla Design Options

Mariposa Street Station Alternative (Preferred Alternative)

The Mariposa Street Station Alternative is located in Downtown Fresno, less than 0.5 mile east of SR 99. The station would be centered on Mariposa Street and bordered by Fresno Street on the north, Tulare Street on the south, H Street on the east, and G Street on the west. The station building would be approximately 75,000 square feet, with a maximum height of approximately 60 feet. The two-level station would be at-grade, with passenger access provided both east and west of the HST guideway and the UPRR tracks, which would run parallel with one another adjacent to the station. Entrances would be located at both G and H Streets. The eastern entrance would be at the intersection of H Street and Mariposa Street, with platform access provided via the pedestrian overcrossing. The main western entrance would be located at G Street and Mariposa Street.

The majority of station facilities would be located east of the UPRR tracks. The station and associated facilities would occupy approximately 18.5 acres, including 13 acres dedicated to the station, bus transit center, surface parking lots, and kiss-and-ride accommodations. A new intermodal facility would be included in the station footprint on the parcel bordered by Fresno Street to the north, Mariposa Street to the south, Broadway Street to the east, and H Street to the west. The site proposal includes the potential for up to 3 parking structures occupying a total of 5.5 acres. Two of the three potential parking structures would each sit on 2 acres, and each would have a capacity of approximately 1,500 cars. The third parking structure would have a slightly smaller footprint (1.5 acres), with 5 levels and a capacity of approximately 1,100 cars. Surface parking lots would provide approximately 300 additional parking spaces.

Kern Street Station Alternative

The Kern Street Station Alternative for the HST station would also be in Downtown Fresno and would be centered on Kern Street between Tulare Street and Inyo Street. This station would include the same components and acreage as the Mariposa Street Station Alternative, but the station would not encroach on the historic Southern Pacific Railroad depot just north of Tulare Street and would not require relocation of existing Greyhound facilities. Two of the 3 potential parking structures would each sit on 2 acres and each would have a capacity of approximately 1,500 cars. The third structure would have a slightly smaller footprint (1.5 acres) and a capacity of approximately 1,100 cars. Like the Mariposa Street Station Alternative, the majority of station facilities under the Kern Street Station Alternative would be east of the HST tracks.

2.2.2 BNSF Alternative

This section describes the BNSF Alternative, including the Le Grand design options and wyes. It does not include a discussion of the HST stations, because the station descriptions are identical for each of the three HST alignment alternatives.

2.2.2.1 North-South Alignment

The north-south alignment of the BNSF Alternative would begin at the proposed Downtown Merced Station. This alternative would remain at-grade through Merced and would cross under SR 99 at the south end of the city. Just south of the interchange at SR 99 and E Childs Avenue, the BNSF Alternative would cross over SR 99 and UPRR as it begins to curve to the east, crossing over the E Mission Avenue interchange. It would then travel east to the vicinity of Le Grand, where it would turn south and travel adjacent to the BNSF tracks.

To minimize impacts on the natural environment and the community of Le Grand, the project design includes four design options:

- **Mission Ave design option:** This design option would turn east to travel along the north side of Mission Avenue at Le Grand and then would elevate through Le Grand adjacent to and along the west side of the BNSF corridor.
- **Mission Ave East of Le Grand design option:** This design option would vary from the Mission Ave design option by traveling approximately 1 mile farther east before turning southeast to cross

Santa Fe Avenue and the BNSF tracks south of Mission Avenue. The HST alignment would parallel the BNSF for a half-mile to the east, avoiding the urban limits of Le Grand. This design option would cross Santa Fe Avenue and the BNSF railroad again approximately one-half mile north of Marguerite Road and would continue adjacent to the west side of the BNSF corridor.

- **Mariposa Way design option:** This design option would travel 1 mile farther than the Mission Ave design option before crossing SR 99 near Vassar Road and turning east toward Le Grand along the south side of Mariposa Way. East of Simonson Road, the HST alignment would turn to the southeast. Just prior to Savana Road in Le Grand, the HST alignment would transition from at-grade to elevated to pass through Le Grand on a 1.7-mile-long guideway adjacent to and along the west side of the BNSF corridor.
- **Mariposa Way East of Le Grand design option:** This design option would vary from the Mariposa Way design option by traveling approximately 1 mile farther east before turning southeast to cross Santa Fe Avenue and the BNSF tracks less than one-half mile south of Mariposa Way. The HST alignment would parallel the BNSF to the east of the railway for a half-mile, avoiding the urban limits of Le Grand. This design option would cross Santa Fe Avenue and the BNSF again approximately a half-mile north of Marguerite Road and would continue adjacent to the west side of the BNSF corridor.

Continuing southeast along the west side of BNSF, the BNSF Alternative would begin to curve just before Plainsburg Road through a predominantly rural and agricultural area. One mile south of Le Grand, the HST alignment would cross Deadman and Dutchman creeks. The alignment would deviate from the BNSF corridor just southeast of S White Rock Road, where it would remain at-grade for another 7 miles, except at the bridge crossings, and would continue on the west side of the BNSF corridor through the community of Sharon. The HST alignment would continue at-grade through the community of Kismet until crossing at Dry Creek. The BNSF Alternative would then continue at-grade through agricultural areas along the west side of the BNSF corridor through the community of Madera Acres north of the City of Madera; in the vicinity of Madera Acres, the HST Project would provide a grade separation of Road 26 and Road 28, which would cross over both the existing BNSF tracks and the new HST guideway. South of Avenue 15 east of Madera, the alignment would transition toward the UPRR corridor, following the east side of the UPRR corridor near Avenue 9 south of Madera, then continuing along nearly the same route as the UPRR/SR 99 Alternative over the San Joaquin River to enter the community of Herndon. After crossing the San Joaquin River, the alignment would be the same as for the UPRR/SR 99 Alternative

2.2.2.2 Wye Design Options

The Ave 24 Wye and the Ave 21 Wye would be the same as described for the UPRR/SR 99 Alternative (East Chowchilla design option), except as noted below.

Ave 24 Wye

As with the UPRR/SR 99 Alternative, the Ave 24 Wye would follow along the south side of Avenue 24 and would begin diverging into two sets of tracks (i.e., four tracks) beginning west of Road 17. Two tracks would travel north near Road 20½, where they would join the north-south alignment of the BNSF Alternative on the west side of the BNSF corridor near Avenue 26½. The two southbound tracks would join the BNSF Alternative on the west side of the BNSF corridor south of Avenue 21.

Ave 21 Wye

As with the UPRR/SR 99 Alternative, the Ave 21 Wye would travel along the north side of Avenue 21. Two tracks would diverge, turning north and south to connect to the north-south alignment of the BNSF Alternative just west of Road 21. The north leg of the wye would join the north-south alignment just south of Avenue 24 and the south leg would join the north-south alignment just east of Frontage Road/Road 26 north of the community of Madera Acres.



2.2.3 Hybrid Alternative (Preferred Alternative)

This section describes the Hybrid Alternative, which generally follows the alignment of the UPRR/SR 99 Alternative in the north and the BNSF Alternative in the south. It does not include a discussion of the HST stations because the station descriptions are identical for each of the three HST alternatives. The Authority and FRA have identified the Hybrid Alternative as their preferred alternative.

2.2.3.1 North-South Alignment

From north to south, generally, the Hybrid Alternative would follow the UPRR/SR 99 alignment with either the West Chowchilla design option with the Ave 24 Wye or the East Chowchilla design option with the Ave 21 Wye. Approaching the Chowchilla city limits, the Hybrid Alternative would follow one of two options:

- In conjunction with the Ave 24 Wye, the HST alignment would veer due south from Sandy Mush Road along a curve and would continue at-grade for 4 miles parallel to and on the west side of Road 11¾. The Hybrid Alternative would then curve to a corridor on the south side of Avenue 24 and would travel parallel for the next 4.3 miles. Along this curve, the southbound HST track would become an elevated structure for approximately 9,000 feet to cross over the Ave 24 Wye connection tracks and Ash Slough, while the northbound HST track would remain at-grade. Continuing east on the south side of Avenue 24, the HST alignment would become identical to the Ave 24 Wye connection for the BNSF Alternative and would follow the alignment of the BNSF Alternative until Madera.
- In conjunction with the Ave 21 Wye connection, the HST alignment would transition from the west side of UPRR and SR 99 to an elevated structure as it crosses the UPRR and N Chowchilla Boulevard just north of Avenue 27, continuing on an elevated structure along the west side of and parallel to SR 99 away from the UPRR corridor while it crosses Berenda Slough. Toward the south side of Chowchilla, the alignment (with the Ave 21 Wye) would cross over SR 99 north of the SR 99/SR 152 interchange near Avenue 23½ south of Chowchilla. It would continue to follow along the east side of SR 99 until reaching Avenue 21, where it would curve east and run parallel to Avenue 21, briefly. The alignment would then follow a path similar to the Ave 21 Wye connection for the BNSF Alternative, but with a tighter 220 mph curve. The alternative would then follow the BNSF Alternative alignment until Madera.

Through Madera and until reaching the San Joaquin River, the Hybrid Alternative is the same as the BNSF Alternative. Once crossing the San Joaquin River, the alignment of the Hybrid Alternative becomes the same as for the UPRR/SR 99 Alternative, including the westward realignments of Golden State Boulevard and SR 99.

2.2.3.2 Wye Design Options

The wye connections for the Hybrid Alternative follow Avenue 24 and Avenue 21, similar to those of the UPRR/SR 99 and BNSF alternatives.

Ave 24 Wye

The Ave 24 Wye is the same as the combination of the UPRR/SR 99 Alternative with the West Chowchilla design option, and the Ave 24 Wye for the BNSF Alternative.

Ave 21 Wye

The Ave 21 Wye is similar to the combination of the UPRR/SR 99 Alternative with the Ave 21 Wye on the northbound leg and the BNSF Alternative with the Ave 21 Wye on the southbound leg. However, the south leg under the Hybrid Alternative would follow a tighter, 220 mph curve than the BNSF Alternative, which follows a 250 mph curve.

2.2.4 Heavy Maintenance Facility Alternatives

The Authority is studying five HMF sites (see Figure 2-1) within the Merced to Fresno Section, one of which may be selected. (The sponsor of the Harris-DeJager site withdrew its proposal from the Authority's consideration of potential HMF sites [Kopshever 2011]. However, to remain consistent with previous analysis and provide a basis of comparison among the HMFs, evaluation of the site continues in this document.)

- **Castle Commerce Center HMF site** – A 370-acre site located 6 miles northwest of Merced, at the former Castle Air Force Base in northern unincorporated Merced County. It is adjacent to and on the east side of the BNSF mainline, 1.75 miles south of the UPRR mainline, off of Santa Fe Drive and Shuttle Road, 2.75 miles from the existing SR 99 interchange. The Castle Commerce Center HMF would be accessible by all HST alternatives.
- **Harris-DeJager HMF site (withdrawn from consideration)** – A 401-acre site located north of Chowchilla adjacent to and on the west side of the UPRR corridor, along S Vista Road and near the SR 99 interchange under construction. The Harris-DeJager HMF would be accessible by the UPRR/SR 99 and Hybrid alternatives if coming from the Ave 21 Wye and the UPRR/SR 99 Alternative with the East Chowchilla design option and the Ave 24 Wye.
- **Fagundes HMF site** – A 231-acre site, located 3 miles southwest of Chowchilla on the north side of SR 152, between Road 11 and Road 12. This HMF would be accessible by all HST alternatives with the Ave 24 Wye.
- **Gordon-Shaw HMF site** – A 364-acre site adjacent to and on the east side of the UPRR corridor, extending from north of Berenda Boulevard to Avenue 19. The Gordon-Shaw HMF would be accessible from the UPRR/SR 99 Alternative.
- **Kojima Development HMF site** – A 392-acre site on the west side of the BNSF corridor east of Chowchilla, located along Santa Fe Drive and Robertson Boulevard (Avenue 26). The Kojima Development HMF would be accessible by the BNSF Alternative with the Ave 21 Wye.

3.0 Overview of Relocation and Displacement Study Area

This section provides an overview of the affected environment within the broad relocation and displacement study area (see Section 1.2, Study Areas). The following subsections describe population characteristics, household characteristics, economic characteristics, and land use and community facilities within the broad study area to establish the conditions of the affected environment.

The Merced to Fresno Section of the HST System is located primarily within agricultural lands in the rural areas of Merced and Madera counties. The HST corridor also travels through urban areas in the cities of Atwater (with the Castle Commerce Center HMF), Merced, Chowchilla, Madera, and Fresno. Land uses adjacent to the alignment through these cities are primarily commercial and industrial. Within the 0.5-mile radius around the proposed Merced and Fresno HST stations, the land use types are industrial, commercial, institutional, residential (single-family and multifamily), and parks and recreation. Figures 3-1 through 3-4 show the proposed corridor and HST station study areas.

3.1 Population Characteristics

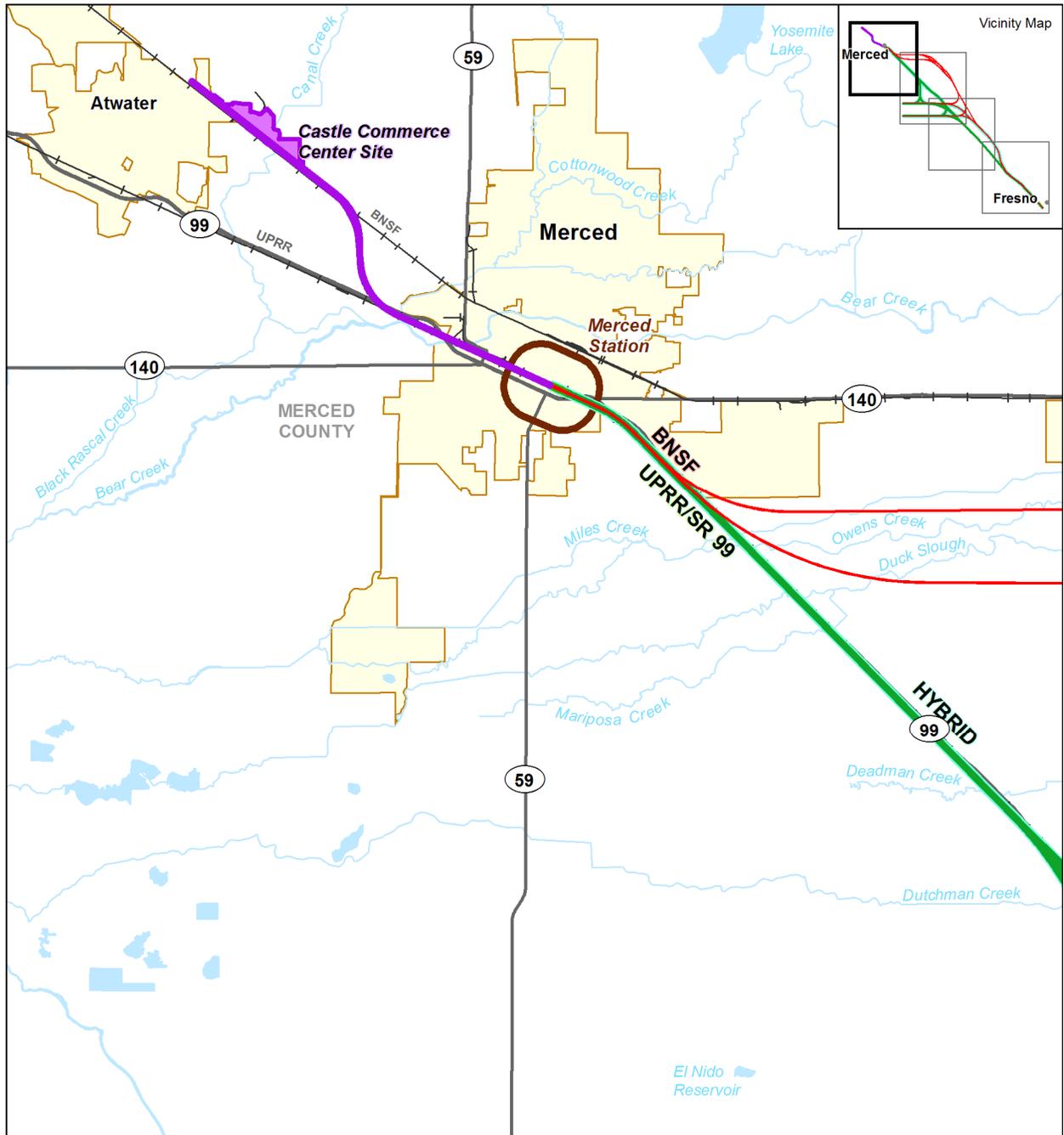
This section describes the population characteristics in the relocation and displacement study area for the baseline year (2010) and projected year (2035).

Table 3-1 shows the population in the relocation and displacement study area for 2000 and 2010 as well as the projections for 2035 based on data from the California Department of Finance (CDOF). The last column lists the percentage change in projected population between 2010 and 2035 in Merced, Madera, and Fresno counties. These counties have grown at a faster rate than the state, and they are anticipated to grow at a higher average annual rate than California over the next 25 years. Of the three counties, Madera is expected to have the highest population increase during this period.

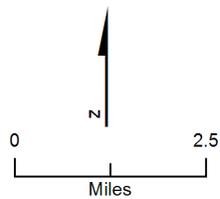
Table 3-1
 Past, Present, and Projected Relocation and Displacement Study Area Population

Area	2000	2010	2035	Change in Population 2010 to 2035 (%)
Merced County	210,554	258,495	465,500	80
Madera County	123,109	153,655	313,250	104
Fresno County	799,407	953,761	1,519,325	59

Sources: CDOF (2010a, b).

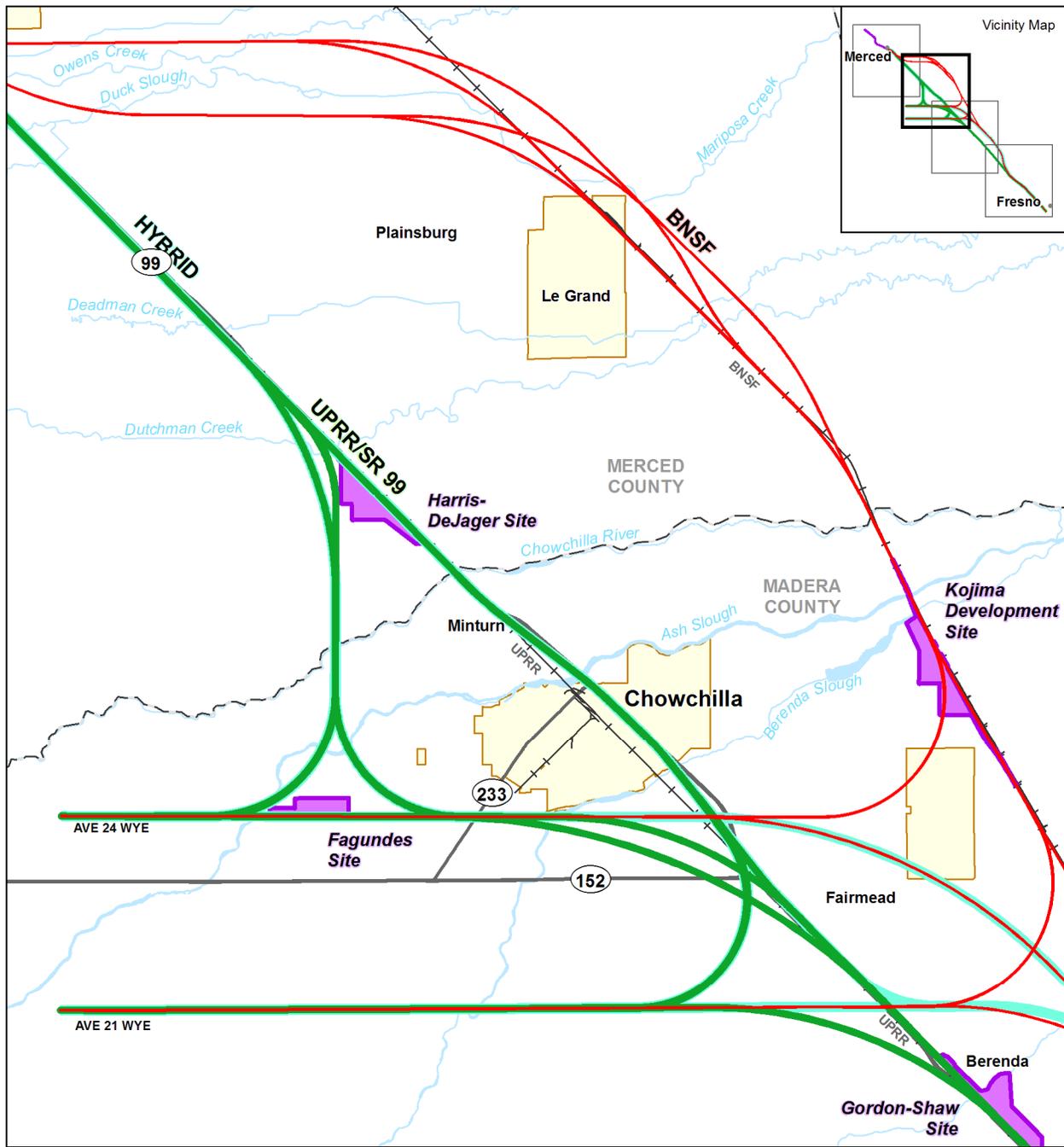


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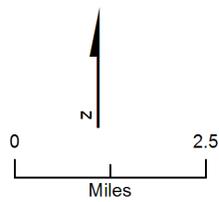


- UPRR/SR 99 Alternative
- BNSF Alternative
- Hybrid Alternative
- Potential Heavy Maintenance Facility
- Station Study Area
- City Limit
- - - County Boundary
- + - Railroad

Figure 3-1
 Merced Project Vicinity

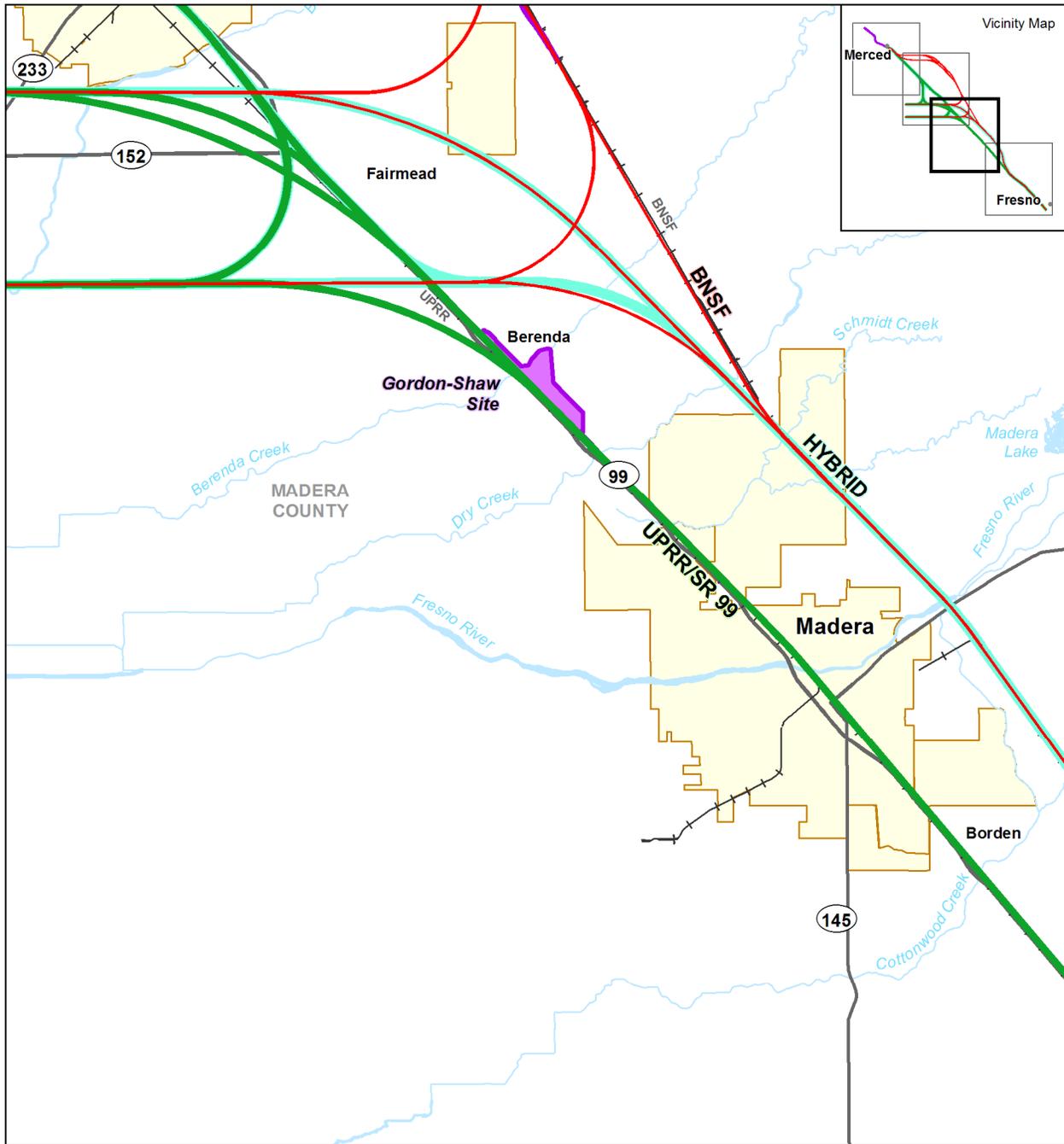


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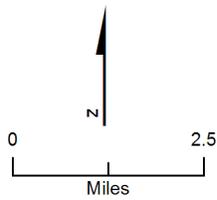


- UPRR/SR 99 Alternative
- BNSF Alternative
- Hybrid Alternative
- Potential Heavy Maintenance Facility
- Station Study Area
- City Limit
- - - County Boundary
- +— Railroad

Figure 3-2
 Chowchilla Project Vicinity

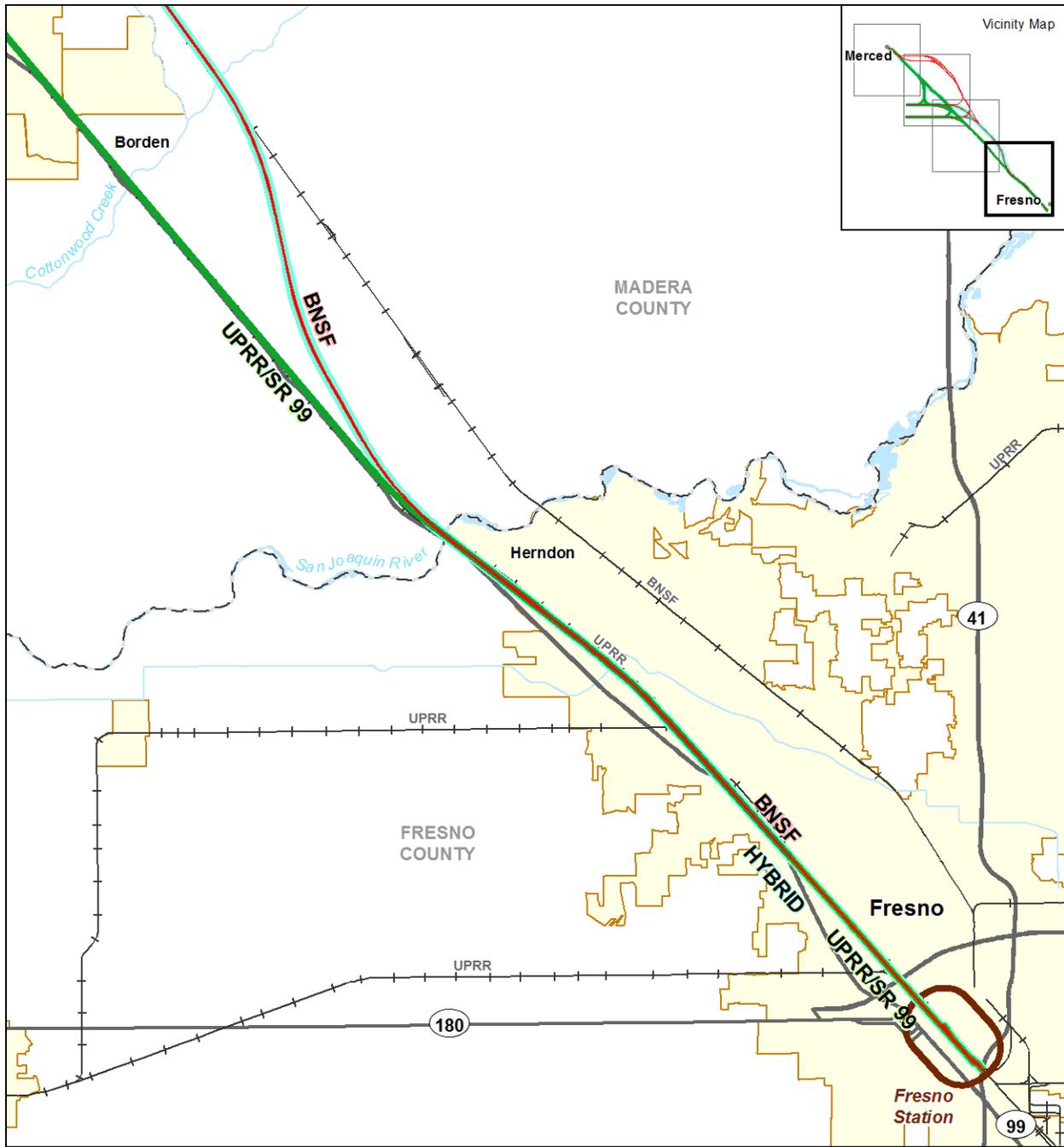


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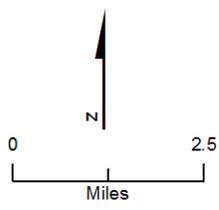


- UPRR/SR 99 Alternative
- BNSF Alternative
- Hybrid Alternative
- Potential Heavy Maintenance Facility
- Station Study Area
- City Limit
- - - County Boundary
- +— Railroad

Figure 3-3
 Madera Project Vicinity



MF_TR_REL_01-04_d Jun 05, 2012



- UPRR/SR 99 Alternative
- BNSF Alternative
- Hybrid Alternative
- Potential Heavy Maintenance Facility
- Station Study Area
- City Limit
- - - County Boundary
- +— Railroad

Figure 3-4
 Fresno Project Vicinity

Table 3-2 shows relocation and displacement study area demographics, including population (2010); the percentage of elderly (2010), disabled (2000), and minority persons (2010); and the percentage of the population below the poverty level (2006 to 2010).

The UPRR/SR 99 Alternative has the highest combined population at 113,562, followed by the Hybrid Alternative at 84,268 and the BNSF Alternative at 80,509.

The percentage of individuals over the age of 65 in the cities ranges from 7% in Chowchilla to 10.4% in Atwater. The highest percentage of elderly in the counties is 11.4% for Madera County. The Hybrid Alternative has the highest percentage of elderly residents at 7.8% versus 7.7% and 7.5% for the UPRR/SR 99 and BNSF alternatives, respectively.

The percentage of disabled residents ranges from 22% for the Hybrid Alternative to 23.3% for the UPRR/SR 99 Alternative. Madera County has a higher percentage of disabled residents at 22.6% as compared to 21.3% for Fresno County and 20.9% for Merced County. Le Grand has the highest percentage of disabled residents at 24.5% as compared to the other cities.

Within the three counties, the Hispanic population comprises the largest percentage of the population (above 50%). The Caucasian, non-Hispanic population represents about 35% of the population. The *Merced to Fresno Section Community Impact Assessment* (Authority and FRA 2012) provides complete information on race and ethnicity characteristics. The UPRR/SR 99 Alternative has the highest percentage of minority residents at 76% as compared to the BNSF Alternative at 17% and the Hybrid Alternative at 73%. Merced County has the highest percentage of minority residents at 68% as compared to the other counties (67% for Fresno County and 62% for Madera County).

The percentage of individuals living below the poverty level ranges from approximately 18% to 26% (see Table 3-2). The majority of the low-income populations are located in the urban areas, primarily in the cities of Merced, Madera, and Fresno.

Table 3-2
 Relocation and Displacement Study Area Population Demographics

Area	Population	Elderly (age 65 and over) (%)	Disabled (age 5 and over) (%)	Minority (%)	Population below Poverty Level (%)
UPRR/SR 99 Alternative^a	113,562	7.7	23.3	76	34.1
UPRR/SR 99 Alternative Regional Data by City and County					
Merced County	255,793	9.4	20.9	68	21.8
Atwater	28,168	10.4	21.0	64	23.4
Merced	78,958	8.8	22.1	70	26.2
Madera County	150,865	11.4	22.6	62	19.3
Chowchilla	18,720	7.0	21.0	58	18.4
Madera	61,460	7.6	22.9	83	25.7
Fresno County	930,450	10.0	21.3	67	22.5
Fresno	494,665	9.3	22.1	70	24.9

Area	Population	Elderly (age 65 and over) (%)	Disabled (age 5 and over) (%)	Minority (%)	Population below Poverty Level (%)
BNSF Alternative^a	80,509	7.5	22.3	75	26.4
BNSF Alternative Regional Data by City and County					
Merced County	255,793	9.4	20.9	68	21.8
Atwater	28,168	10.4	21.0	64	23.4
Merced	78,958	8.8	22.1	70	26.2
Le Grand	1,659	9.8	24.5	50	22.8
Madera County	150,865	11.4	22.6	62	19.3
Fresno County	930,450	10.0	21.3	67	22.5
Fresno	494,665	9.3	22.1	70	24.9
Hybrid Alternative^a	84,268	7.8	22.0	73	26.6
Hybrid Alternative Regional Data by City and County					
Merced County	255,793	9.4	20.9	68	21.8
Atwater	28,168	10.4	21.0	64	23.4
Merced	78,958	8.8	22.1	70	26.2
Madera County	150,865	11.4	22.6	62	19.3
Madera	61,460	7.6	22.9	83	25.7
Fresno County	930,450	10.0	21.3	67	22.5
Fresno	494,665	9.3	22.1	70	24.9
^a Within a 0.5-mile radius of the HST stations and within 0.25 mile of the HST alignment. Sources: CDOF (2010a, b); U.S. Census Bureau (2010 a, b); ACS 2006-2010 poverty data available at the census tract level.					

3.2 Household Characteristics

Table 3-3 shows the relocation and displacement study area household characteristics, including the total number of households, average household size, percentage of family households, and median household income.

Table 3-3
 Relocation and Displacement Study Area Household Characteristics

Area	Total Number of Households	Average Household Size	Family Households (%)	Median Household Income (2006-2010 \$)
UPRR/SR 99 Alternative^a	12,719	3.3	75.8	38,560
UPRR/SR 99 Alternative Regional Data by City and County				
Merced County	75,642	3.32	77.7	43,844
Atwater	8,838	3.18	77.2	42,226
Merced	24,899	3.13	71.6	36,269
Madera County	43,317	3.28	78.7	46,039
Chowchilla	3,673	3.08	75.6	39,902
Madera	15,938	3.82	80.9	40,889
Fresno County	289,391	3.15	74.1	46,430
Fresno	158,349	3.07	70.4	43,124
BNSF Alternative^a	12,899	3.4	77.0	38,741
BNSF Alternative Regional Data by City and County				
Merced County	75,642	3.32	77.7	43,844
Atwater	8,838	3.18	77.2	42,226
Merced	24,899	3.13	71.6	36,269
Le Grand	458	3.62	85.4	35,694
Madera County	43,317	3.28	78.7	46,039
Fresno County	289,391	3.15	74.1	46,430
Fresno	158,349	3.07	70.4	43,124
Hybrid Alternative^a	14,208	3.4	77.1	38,420
Hybrid Alternative Regional Data by City and County				
Merced County	75,642	3.32	77.7	35,532
Atwater	8,838	3.18	77.2	37,344
Merced	24,899	3.13	71.6	30,429
Madera County	43,317	3.28	78.7	46,039
Madera	15,938	3.82	80.9	40,889

Area	Total Number of Households	Average Household Size	Family Households (%)	Median Household Income (2006-2010 \$)
Fresno County	289,391	3.15	74.1	46,430
Fresno	158,349	3.07	70.4	43,124

^a Within a 0.5-mile radius of the HST stations and within 0.25 mile of the HST alignment.

Source: U.S. Census Bureau (2010a, b).

Table 3-4
 2010 Relocation and Displacement Study Area Housing Stock Inventory

Area	Single Family	Multifamily	Mobile Homes	Total Housing Units	Vacancy Rate (%)
Merced County					
Merced County	65,810	13,634	5,815	85,259	6.7
Merced	19,141	8,255	710	28,106	5.6
Unincorporated	23,257	1,486	4,111	28,854	8.2
Madera County					
Madera County	40,520	5,524	3,761	49,805	10.1
Chowchilla	3,252	675	36	3,963	5.5
City of Madera	12,446	3,821	379	16,646	4.3
Unincorporated	24,822	1,028	3,346	29,196	14.1
Fresno County					
Fresno County	220,957	79,667	14,134	314,758	6.4
City of Fresno	109,668	57,443	3,923	171,034	6.0
Unincorporated	49,912	3,311	7,463	60,686	10.7
State of California	8,747,293	4,247,635	596,938	13,591,866	5.9

Source: CDOF (2010a).

Table 3-5 shows the trend in housing stock in the study area. Between 2000 and 2010, the percentage of single-family residential units increased slightly in all three counties. Vacancy rates in 2010 declined slightly from 2000.

Table 3-5
 Trend in Relocation and Displacement Study Area Housing Stock Inventory

	2000	%	2010	%
Merced County				
Single Family	50,538	73.9	65,810	77.2
Multifamily	12,586	18.4	13,634	16.0
Mobile Homes	5,249	7.7	5,815	6.8
Total Housing Units	68,373	100.0	85,259	100.00
Vacancy Rate		6.67		6.71
Madera County				
Single Family	32,212	79.8	40,520	81.4
Multifamily	4,798	11.9	5,524	11.1
Mobile Homes	3,377	8.4	3,761	7.5
Total Housing Units	40,387	100.0	49,805	100.00
Vacancy Rate		10.48		10.14
Fresno County				
Single Family	185,433	68.5	220,957	70.2
Multifamily	71,992	26.6	79,667	25.3
Mobile Homes	13,342	4.9	14,134	4.5
Total Housing Units	270,767	100.0	314,758	100.00
Vacancy Rate		6.58		6.42
State of California				
Single Family	8,720,779	64.5	8,747,293	64.4
Multifamily	4,213,013	31.1	4,247,635	31.2
Mobile Homes	596,927	4.4	596,938	4.4
Total Housing Units	13,530,719	100.0	13,591,866	100.00
Vacancy Rate		5.83		5.90
Source: CDOF (2010a).				

Table 3-6 summarizes the housing characteristics within the relocation and displacement study area. According to these data, approximately one-half of the total housing units are owner-occupied, and the vacancy rates for these housing units are lower than the rates for rented housing units. Overall vacancy rates are highest in Madera County (12.3%) and lowest in Fresno County (9.4%). Most of the housing units have 3 to 4 bedrooms; the median number of rooms is 5.3. Approximately one-half of all housing units were built before 1980.

Table 3-6
 2009 Relocation and Displacement Study Area Housing Characteristics

	Merced	Madera	Fresno
Total Housing Units	84,034	49,477	310,115
Owner-Occupied	39,947 (54%)	27,746 (64%)	152,504 (54%)
Rented	34,219 (46%)	15,647 (36%)	128,342 (46%)
Vacant	9,868 (12%)	6,084 (12%)	29,269 (9%)
Vacancy Rates	11.7	12.3	9.4
Homeowner Vacancy Rates	5.8	5.9	2.9
Rental Vacancy Rates	6.3	3.9	7.0
Number of Rooms			
1 to 2 Rooms	2,255	1,793	17,169
3 to 4 Rooms	20,418	8,847	81,719
5 to 6 Rooms	41,771	24,751	140,557
7 Rooms and More	19,590	14,086	70,670
Median Rooms	5.3	5.4	5.2
Number of Bedrooms			
No Bedrooms	1,169 (1.4%)	1,112 (2.2%)	9,929 (3.2%)
1 to 2 Bedrooms	25,671 (30.5%)	11,327 (22.9%)	108,192 (34.9%)
3 to 4 Bedrooms	54,153 (64%)	35,281 (71.3%)	181,723 (58.6%)
5 or More Bedrooms	3,041 (3.6%)	1,757 (3.6%)	10,271 (3.3%)
Occupied Units Paying Rent			
\$0 to \$499	4,166	1,664	14,592
\$500 to \$749	9,764	3,733	33,127
\$750 to \$999	8,985	3,907	35,778
\$1,000 to \$1,499	7,651	3,646	28,492
\$1,500 or More	1,111	988	10,081
Median Rent	\$808	\$826	\$830
Age of Housing Units			
Built 2005 or Later	6,038 (7.2%)	5,747 (11.6%)	21,426 (6.9%)
Built 2000 to 2004	11,620	6,925	25,234

	Merced County	Madera County	Fresno County
	(13.8%)	(14.0%)	(8.1%)
Built 1990 to 1999	12,201 (14.5%)	7,775 (15.7%)	43,909 (14.2%)
Built 1980 to 1989	12,752 (15.2%)	7,419 (15.0%)	47,311 (15.3%)
Built before 1980	41,423 (49.3%)	21,611 (43.7%)	172,235 (55.5%)
Source: U.S. Census Bureau (2009).			

3.3 Economic Characteristics

Table 3-7 shows the 2009 and projected 2016 employment totals and top industries within the study area. The service industry is projected to be the top employment sector in 2016 for all metropolitan statistical areas (MSAs) in the study area. Table 3-8 shows 2009 employment and 2016 projected employment by industry for the study area.

Economic growth projections indicate that the relocation and displacement study area will continue to have an active residential and commercial real estate market. Employment growth will drive the absorption of existing and new building space in the market place and generate residential construction.

Table 3-7
 Employment in the Relocation and Displacement Study Area

	2010 Employment	2016 Projected Employment	2010 Top Employment Industry	2016 Projected Top Employment Industry
Merced MSA	63,900	82,900	Government	Service
Madera-Chowchilla MSA	42,700	47,800	Service	Service
Fresno MSA	326,900	369,100	Service	Service
Source: California Employment Development Department (CEDD) (2010a, b).				

Table 3-8
 Employment by Industry in the Relocation and Displacement Study Area

Industry	Merced MSA		Madera MSA		Fresno MSA	
	2010	2016 Projected	2010	2018 Projected	2010	2018
Agriculture	10,500	11,800	10,300	10,100	47,100	47,600
Natural Resources, Mining, and Construction	1,600	3,000	1,100	1,900	12,100	18,700
Manufacturing	8,200	9,600	2,800	3,400	24,900	27,600



Industry	Merced MSA		Madera MSA		Fresno MSA	
	2010	2016 Projected	2010	2018 Projected	2010	2018 Projected
Trade	9,200	9,800	4,000	4,900	44,200	50,900
Transportation, Warehousing, and Utilities	2,300	2,400	900	1,000	10,700	12,300
Information	1,200	1,300	400	500	3,600	5,300
Financial Activities	1,600	1,800	700	800	13,300	15,800
Services	15,400	17,300	12,000	13,700	103,800	119,000
Government	15,900	16,900	10,600	11,500	67,200	71,900
Total	63,900	82,900	42,700	47,800	326,900	369,100

Source: CEDD (2010a, b).

3.4 Land Use and Community Facilities

The north-south alignments for the HST alternatives travel through rural and urban areas in Merced, Madera, and Fresno counties. The urban areas consist of the jurisdictions of Atwater, Merced, Le Grand, Chowchilla, Madera, and Fresno. Most of the north-south alignment alternatives are in the rural and unincorporated areas of Merced and Madera counties, where the existing land uses adjacent to the alignments are predominantly agricultural land interspersed with small pockets of single-family residential and commercial uses. In much of the rural area, the north-south alignment alternatives parallel existing transportation-related land uses along the UPRR, SR 99, and BNSF rights-of-way. Table 3-9 describes the general land uses in the relocation and displacement study area by geographic location.

Table 3-9
 Land Uses in the Relocation and Displacement Study Area

Area ^a	General Land Use Description
UPRR/SR 99 Alternative	
Merced	Industrial and commercial uses are most common
Between Merced and Chowchilla	Primarily agricultural
Chowchilla	Primarily industrial, with commercial land uses in the western portion of the City of Chowchilla
Between Chowchilla and Madera	Primarily agricultural, except in a portion of the community of Fairmead, where the land uses are residential and agricultural
Madera	Residential and commercial uses through the downtown area; transitions to industrial and agricultural uses at the city limits
Between Madera and Fresno	Predominantly agricultural
Fresno	Open space, single-family residential, industrial, and commercial

Area ^a	General Land Use Description
Ave 24 and 21 Wyes	Primarily agricultural with some rural residential uses
BNSF Alternative (where it differs from the UPRR/SR 99 Alternative)	
Merced to Le Grand	Primarily agricultural
Le Grand	Residential uses west of the BNSF and industrial uses east of the BNSF
Le Grand to Madera	Primarily agricultural
Madera	Single-family residential
Madera to UPRR/SR 99	Single-family residential, agricultural, and industrial
Hybrid Alternative (where it differs UPRR/SR 99 and BNSF Alternatives)	
Between Merced and Madera	Primarily agricultural with some rural residential uses
^a Within a 0.5-mile radius of the HST stations and within 0.25 mile of the HST alignment.	

The following sections describe the neighborhoods, land uses, and community facilities in the study area, defined as being within a 0.5-mile radius of the HST stations and within 0.25 mile of the HST alignments, by alternative. This section provides a description of the area where the project would occur; facilities and land uses mentioned are not limited to those within the property acquisition footprint.

3.4.1 UPRR/SR 99 Alternative

Table 3-10 identifies community services and facilities within the study area. The *Merced to Fresno Section Community Impact Assessment* (Authority and FRA 2012a) provides a complete list and illustrations of these facilities, most of which are within urban areas. The UPRR/SR 99 Alternative north-south alignment begins in the City of Merced. Much of the growth in Merced has been occurring north of the downtown area because of the agricultural land uses west and east of the city and the airport to the south. As growth has occurred northward, areas of Downtown Merced now include vacant or underused parcels.

Table 3-10
 Number of Community Facilities – UPRR/SR 99 Alternative

Community	Cemetery	Cultural	Government Services ^a	Medical	Public Services ^b	Religious	Schools	Social Services ^c	Total
Merced	1	1	2	1	6	16	10	10	47
Le Grand	0	0	0	0	0	0	0	0	0
Chowchilla	0	1	1	0	0	5	2	0	9
Madera	1	2	2	1	3	18	8	6	41
Fresno	0	7	4	1	4	36	17	7	76
Total	2	11	9	3	13	75	37	23	173

Land uses on both sides of the UPRR and SR 99 corridors are primarily commercial and industrial. There are relatively few residential areas adjacent to the UPRR and SR 99 corridors. Most residential land uses are either outside of the study area boundaries or near the outer edges of the study area boundaries.

Community services and facilities include schools (public and private), religious institutions, parks and recreational facilities, government facilities (e.g., courthouse, city hall, post office, and libraries), cemeteries, fire and police stations, hospitals, social institutions (e.g., community centers, senior facilities, and food banks), and cultural locations (e.g., entertainment and museums). The facilities are concentrated within the urbanized parts of the study area, with only a few community facilities located in the rural and unincorporated areas.

There are 25 schools within the study area. Public school districts serving the displacement study area include the following:

- Atwater Elementary School District
- Merced City School District
- Merced Union High School District
- Plainsburg Union Elementary School District
- Weaver Union School District
- Chowchilla School District
- Madera Unified School District
- Fresno County Central Unified
- Fresno Unified School District

Within the cities of Merced, Madera, and Fresno there are several city and county government facilities, including courthouses and city halls. These facilities are close to the UPRR corridor because the train stations associated with the Southern Pacific Railroad were the focus for historical development in these cities. Because the project is located in primarily rural and unincorporated areas or adjacent to transportation corridors in primarily commercial and industrial parts of the urban areas, there are few parks, recreation areas, or open spaces nearby.

The following sections describe the neighborhoods, land uses, and facilities within the study area (within a 0.5-mile radius of the proposed HST stations and within 0.25 mile of the HST alignment). Study areas are not limited to the property acquisition footprint.

3.4.1.1 Downtown Merced Station

Downtown Merced is primarily commercial, with residential neighborhoods located beyond the downtown. Schools, neighborhood parks, and religious facilities are located within the residential neighborhoods. Cultural facilities are located in the downtown core.

Land uses adjacent to the UPRR corridor are primarily industrial, with commercial uses adjacent to the industrial areas. On the northern side of the UPRR corridor, there are several city and county government facilities and the downtown central business district. This area includes several small retail stores, restaurants, and cultural facilities.

There is limited residential development within the downtown core. Large residential areas are located at least 1,000 feet from the UPRR corridor to the north and south and are buffered from the railroad corridor by industrial and commercial land uses.

West of the UPRR corridor are the Merced Senior Community Center and the McCombs Youth Center (operated by the Boys & Girls Club of Merced). Other facilities located in the study area include several churches, food banks, and cultural facilities including the Merced Multicultural Arts Center and the Merced Theatre. There are eight parks or recreation areas within the study area.

City and county facilities located within the study area include the Merced County Superior Court, the Merced County Sherriff's Office main station and jail, city offices, and the Merced Civic Center. The

Merced County Fairgrounds, Mercy Medical Center Merced, and several medical-related offices are located in the southern half of the study area. The closest fire station to the downtown area is Fire Station No. 51, and the nearest police stations are the Central Station located in Downtown Merced and the South Station, which serves the area south of SR 99.

South of SR 99, there is a residential area with a mixture of single-family and multifamily properties and several rental properties. Many of the properties are in poor condition. The area includes parks and churches; there are small convenience stores in the residential areas and businesses along the busier arterial roads.

3.4.1.2 South of Downtown Merced Station

South of the Downtown Merced Station, the alignment associated with the East Chowchilla design option travels through the unincorporated communities of Athlone and Minturn before entering the town of Chowchilla in Madera County. The economy of Madera County is primarily based on agricultural-related industries. As the proposed alignment enters unincorporated Madera County, the adjacent land uses are agricultural; there are no community facilities or services until the proposed alignment enters Chowchilla. The UPRR corridor is approximately 1,500 feet to the west of the proposed HST alignment, and Downtown Chowchilla is approximately 2,500 feet to the west of the proposed HST alignment. In this area, there are no neighborhoods or community facilities nearby. Land uses consist of auto-related commercial business and industrial uses. Community facilities and services are located to the south, in the downtown core of Chowchilla, which is outside of the study area. To the east of SR 99 is a planned development area for commercial and residential uses. The planned commercial uses will focus on the highway interchange. A planned residential area, The Lakes at Pheasant Run, will be a gated community with a golf course, recreational vehicle park, and clubhouse facilities. The residences will be separated from SR 99 by a large earthen berm. The West Chowchilla design option bypasses Chowchilla and travels through agricultural land west of the city. The West Chowchilla design option would also avoid the unincorporated community of Minturn.

The unincorporated Community of Fairmead, south of Chowchilla, consists of older single-family residences and a few places for the residents to gather, including a church, elementary school, and a playground.

As the proposed alignment continues southward, it travels through the rural and unincorporated areas of Madera County adjacent to the SR 99 and UPRR transportation corridors and primarily agricultural-related land uses; there are commercial land uses that focus on automobile traffic at the interchanges. As the proposed alignment nears Madera, there are adjacent areas of commercial and industrial land uses. Before entering the City of Madera, SR 99 curves to the west, away from the UPRR corridor. At this point, the proposed alignment is immediately east of the UPRR corridor. There are no residential land uses until immediately before the proposed alignment enters the City of Madera, where there are a few old single-family residential properties but no established neighborhoods.

Agriculture is important for the economy of Madera County. The City of Madera is the county seat and the economic and cultural hub for Madera County, with several community facilities and services in the downtown area. There is a mixture of commercial and residential uses in Downtown Madera; park facilities include Sharon Avenue Linear Park, Rotary Park, and Riverview Park.

As the UPRR/SR 99 Alternative alignment crosses the Fresno River, land uses transition from agriculture to industrial and commercial. Around the commercial and industrial areas in Downtown Madera are older single-family residences. These residential areas include churches and parks and are close to downtown businesses. Community facilities within Downtown Madera are located on both sides of the proposed alignment, with several city and county government facilities, a park, and a library located to the east. To the east, there are also several churches and service facilities including the Heartland Opportunity Center, the Mexican American Activity Center, and the Frank A. Bergon Senior Center. In addition, the downtown area includes several small businesses, such as beauty salons, banks, and restaurants where residents interact.



As the alignment travels south, there are newer residential subdivisions to the east. Much of the area includes empty lots and homes for sale because of the downturn in the economy and the housing market. The homes are situated around cul-de-sacs that reduce connectivity. With limited community facilities, there likely is limited community cohesion. South of Madera, the unincorporated community of Parksdale lies to the east of the UPRR corridor, and the unincorporated community of Parkwood lies to the west of the SR 99 corridor. Continuing south, there are industrial and commercial uses that transition to agricultural uses, with only a few residences within the study area.

As the proposed alignment crosses the San Joaquin River, it enters Fresno County and the City of Fresno. Fresno County is one of the largest agricultural trade centers in the United States. The City of Fresno is the economic hub of the Central San Joaquin Valley, with many support industries for the agricultural industry in Fresno County. Downtown Fresno is a draw for residents of the city and county because of the government offices and cultural facilities located there. Growth in Fresno has been occurring north of the downtown area, towards the San Joaquin River. As growth has occurred northward, parcels within the downtown area have become vacant or underutilized.

The study area to the west of SR 99 is within unincorporated Fresno County for approximately 2 miles. The area is primarily vacant or associated with commercial-land uses. Within the city limits of Fresno, the proposed alignment follows the UPRR corridor. In this portion of the study area, SR 99 is located west of the UPRR corridor.

The City of Fresno is divided into nine community areas, with smaller neighborhoods within these community areas. Of the nine community areas, five are within or adjacent to the study area: Bullard, West Area, Fresno High-Roeding, Edison, and Central Area. The following community and specific plan areas apply within the study area:

- The Bullard Community is bounded by the San Joaquin River to the north and the UPRR corridor to the west, and it includes the unincorporated community of Herndon. Residential neighborhoods separated from the rail corridor by vacant land (zoned as industrial) are newer and contain cul-de-sacs with sidewalks on one side of the street.
- The West Area Community is bounded on the east by the UPRR corridor and SR 99, and it includes the Highway City Neighborhood. Roeding Regional Park, a 159-acre regional park that includes the Fresno Chaffee Zoo, is located here. The Highway City Neighborhood, which is bounded by SR 99, the UPRR corridor, and Shaw Avenue, is an older neighborhood with a mixture of residential, commercial, and industrial land uses.
- The Fresno High-Roeding Community also includes the Tower District Neighborhood. The northern section is mainly industrial land use, including the UPRR rail yard. In the southern section, the study area includes mainly single-family residences that are older and on small lots. There are a number of older motels (Fresno Motor Lodge, Storyland Inn, Flamingo Inn, Paradise Inn Motel, Sands Motel, Relax Inn, Holiday Motel, Town House Motel, and Fresno Motel) located along Golden State Boulevard. The Tower District Neighborhood includes six historical districts that primarily contain residential buildings of historical significance because of their architectural style.

3.4.1.3 Downtown Fresno Station

The Downtown Fresno Station would be located in the Central Area Community, which is generally bounded by SR 180 to the north, SR 41 to the south and east, and SR 99 to the west. The Central Community Area is primarily associated with commercial and industrial land uses, including Downtown Fresno east of the UPRR corridor. Several properties are vacant in Downtown Fresno.

There are three neighborhoods in the Central Area Community: Chinatown, Fulton, Lowell. The Chinatown neighborhood is one of the most ethnically diverse in the City of Fresno and includes a mixture of commercial- and industrial-related land uses and several historical buildings that are listed on the local register of historic properties. The Fulton neighborhood is associated with commercial and industrial land uses and includes the Cultural Arts District and several county government facilities. The



Lowell neighborhood is primarily a residential neighborhood consisting of old, primarily single-family homes.

- The Edison Community is west of SR 99 and is the location of Fresno's original population. Industrial and commercial land uses are located along the UPRR corridor, and there is limited residential development within the Downtown Fresno study area. The majority of the residential development is to the west, in the Edison Community and the Lowell neighborhood. There are several community facilities, including churches, parks, and public schools, in the residential neighborhoods of the Edison Community that provide opportunities for gathering and interacting. The small-scale commercial developments located along the busier roadways serve residents in the area.

Fulton Mall and the Armenian Town neighborhood are within the Central Area Community. Fulton Mall is a six-block-long pedestrian walkway that extends from Tuolumne Street to Inyo Street in the central business district. The mall was part of a major urban renewal project in 1964. The mall attracts residents from around the region. There are numerous shops, services, office spaces, and open space in the mall, and there is a farmers market every Wednesday and Friday. Fulton Mall is the location of the annual Cinco de Mayo Festival.

- Development of the Community Regional Medical Center, an acute care facility that includes a teaching hospital, resulted in the removal of much of the Armenian Town neighborhood. Over the years, several buildings in the neighborhood were demolished and replaced by government facilities, parking lots, and new buildings. Today, what remains of the neighborhood is centered on Ventura Street and includes the Holy Trinity Armenian Apostolic Church, the Armenian Community Center, and several Armenian restaurants.

3.4.1.4 Ave 24 Wye and Ave 21 Wye

The Ave 24 and Ave 21 wyes are located within rural unincorporated Madera County, in agricultural areas. There are no community facilities or neighborhoods and few residences in these areas.

3.4.2 BNSF Alternative

Information on community and neighborhood characteristics for Downtown Merced and Downtown Fresno and the Ave 24 and Ave 21 wyes are the same as those described under the UPRR/SR 99 Alternative. Because much of the study area for the BNSF Alternative is located in rural and unincorporated areas of Merced and Madera counties where agricultural land uses predominate, there are few residences and community services within much of the BNSF Alternative study area. The following sections describe the characteristics specific to the BNSF Alternative. Table 3-11 shows the number of community facilities by type within the BNSF Alternative study area.

Table 3-11
 Number of Community Facilities – BNSF Alternative

Community	Cemetery	Cultural	Government Services ^a	Medical	Public Services ^b	Religious	Schools	Social Services ^c	Total
Merced	1	1	2	2	6	16	11	10	49
Le Grand	0	0	2	0	1	1	3	0	7
Chowchilla	0	0	1	0	0	0	0	0	1
Madera	0	0	0	0	0	1	1	0	2
Fresno	0	7	4	1	4	36	17	7	76
Total	1	8	9	3	11	54	32	17	135

^a Government services include facilities such as post offices, courthouses, and city hall.
^b Public services include police departments, fire departments, and libraries.
^c Social services include homeless shelters, community centers, and youth and elderly centers.

After leaving the City of Merced, the proposed north-south alignment for the BNSF Alternative curves to the east to connect to the BNSF corridor via one of four design options: (1) Mission Ave, (2) Mission Ave East of Le Grand, (3) Mariposa Way, or (4) Mariposa Way East of Le Grand. The following sections describe the neighborhoods, land uses, and facilities surrounding the displacement study area where they differ from those in the UPRR/SR 99 Alternative.

3.4.2.1 Merced County Design Options

All of the Merced County design options would occur within the same community setting. There are few residences and no community facilities or services in the study area outside of the unincorporated Community of Le Grand. Le Grand is a small farming community with an area of approximately 3.6 square miles. The residential areas primarily comprise smaller single-family homes and affordable housing developments and include parks, schools, and small retail establishments. The Mission Ave and Mariposa Way design options parallel the BNSF corridor through Le Grand, bisecting a portion of the community. The area to the west of the BNSF corridor contains community facilities, the majority of the residential land uses, and the majority of the businesses in Le Grand.

The Mission Avenue East Le Grand and Mariposa Way East of Le Grand design options are similar to the Mission Ave and Mariposa Way design options except that the proposed alignments east of Le Grand bypass the community by traveling through agricultural land rather than paralleling the BNSF through Le Grand.

3.4.2.2 SOUTH OF LE GRAND

South of Le Grand, the alignment passes through agricultural land in Merced and Madera counties. In Madera County, the proposed alignment passes the unincorporated community of Sharon, where there are a few single-family residences close to the BNSF corridor. The agricultural uses change to residential as the proposed alignment travels through Madera Acres, an unincorporated community east of Madera. Madera Acres consists primarily of single-family residences and is divided by the BNSF corridor.

South of Madera Acres, there are a few single-family residential areas adjacent to the BNSF corridor. The proposed alignment curves to the west about 7 miles north of the Madera–Fresno county line and joins the UPRR corridor north of the county line. From this point to the site of the Downtown Fresno Station,

the community and neighborhood information is the same as described under the UPRR/SR 99 Alternative.

3.4.3 Hybrid Alternative

From the site of the Downtown Merced Station to south of Chowchilla, community and neighborhood characteristics are the same as those described under the UPRR/SR 99 Alternative with the West Chowchilla design option or the UPRR/SR 99 Alternative with the East of Chowchilla design option, depending on the wye connection. The alignment then travels east along the Ave 24 Wye or Ave 21 Wye through agricultural land and joins the BNSF corridor. From that point (north of Madera Acres or north of Fairmead) south to the site of the Downtown Fresno HST Station, community and neighborhood characteristics are the same as those described for the BNSF Alternative.

Table 3-12 shows the number of community facilities by type within the Hybrid Alternative displacement study area.

Table 3-12
 Number of Community Facilities – Hybrid Alternative

Community	Cemetery	Cultural	Government Services ^a	Medical	Public Services ^b	Religious	Schools	Social Services ^c	Total
Merced	1	1	3	1	3	14	8	10	41
Le Grand	0	0	0	0	0	0	0	0	0
Chowchilla	0	0	1	0	0	0	0	0	1
Madera	1	0	0	0	0	7	6	2	16
Fresno	0	7	4	0	4	36	17	7	75
Total	2	8	8	1	7	57	31	19	133

^a Government services include facilities such as post offices, courthouses, and city hall.
^b Public services include police departments, fire departments, and libraries.
^c Social services include homeless shelters, community centers, and youth and elderly centers.

3.4.4 Heavy Maintenance Facility Alternatives

3.4.4.1 Castle Commerce Center HMF – UPRR/SR 99, BNSF, and Hybrid Alternatives

The proposed Castle Commerce Center HMF site is in an area that was part of the former Castle Air Force Base. Land uses adjacent to the proposed site include agriculture to the east, Castle Airport to the north, Castle Commerce Center to the west, and the BNSF corridor to the south. The guideway that would connect the HMF to the Downtown Merced Station would pass through the unincorporated community of Franklin-Beachwood, in Merced County. Adjacent to that guideway alignment, there are residential land uses (including the Merced Mobile Estates mobile home park) and areas associated with agricultural and commercial land uses. There are eight community facilities within the study area, including four schools (one located adjacent to the guideway) and one cultural, one religious, one medical, and one public service facility.

3.4.4.2 Harris-DeJager, Fagundes, and Gordon-Shaw HMFs – UPRR/SR 99 and Hybrid Alternatives; and Kojima Development HMF –BNSF Alternative

The proposed Harris-DeJager, Fagundes, Gordon-Shaw, and Kojima Development HMF sites are located in areas where the land uses are primarily agricultural. There are few residential properties and no community facilities or services close to these proposed HMF sites; therefore, no communities of concern exist in these areas and no impacts on communities of concern are anticipated.

4.0 Estimates of Residential and Nonresidential Displacements

Table 4-1 provides initial estimated ranges of parcel acquisitions, by land use, that would be required under the UPRR/SR 99, BNSF, and Hybrid alternatives and the HMFs. Table 4-1 and the discussion below are based on a range of estimated impacts that would result under the wye alternatives and design options for each of the HST alternatives. Appendix A includes figures of the permanent (operational) footprint and property acquisition (temporary) footprint, as well as impact tables presenting the number of acquired parcels, acres of acquisition, number of structures, and number of units by land use and alternative. As discussed in Section 1.2, Study Area, the study area used to determine the number of acquisitions and displacements is the construction footprint. The acreage of permanent and temporary acquisitions is also presented in Appendix A. Structures and units within the property acquisition right-of-way are considered permanently displaced. Overall, the BNSF Alternative has the potential to require the acquisition of the most land, ranging from 2,688 to 2,963 acres. The Hybrid Alternative would require the acquisition of 2,513 to 2,739 acres. The UPRR/SR 99 Alternative would require the acquisition of 2,398 to 2,459 acres. The largest acquisitions under all three alternatives would be for agricultural, agricultural/residential, municipal, commercial, and single-family residence land use types. The BNSF Alternative would require the most agricultural and agricultural/residential acquisitions, with impacts ranging between 1,580 and 1,881 acres.

Existing regional and local roadways and rights-of-way under municipal ownership are characteristic of the municipal land use category. Depending on the design option, the BNSF Alternative would require the most municipal acquisitions, ranging from 554 to 633 acres. Commercial land use acquisitions would be comparable for all of the alternatives, with the UPRR/SR 99 Alternative resulting in a slightly greater amount, ranging from 165 to 174 acres. Depending on wye design option, the BNSF Alternative would potentially require acquisition of the most single-family residential property, with impacts ranging from 105 to 117 acres.

The Harris-DeJager HMF site would require the most acquired property, approximately 400 acres. Almost all of the property acquired for the site would be agricultural and agricultural/residential. The Kojima-Development HMF site would require the acquisition of approximately 395 acres, mostly agricultural and agricultural/residential land. The Gordon-Shaw HMF site would require the acquisition of approximately 381 acres of mostly agricultural land. The Castle Commerce Center HMF site would require acquisition of approximately 343 acres of mostly commercial and agricultural/residential property. The Fagundes HMF site would require the least property, approximately 231 acres of agricultural and agricultural/residential land.

Table 4-1
 Estimated Right-of-Way Acquisitions (acres)

Land Use Type ^a	HST Alternative Range of Impacts			HMF Alternatives				
	UPRR /SR 99	BNSF	Hybrid	Castle Commerce Center	Harris-DeJager	Fagundes	Gordon-Shaw	Kojima Development
Ag-Full	51 to 58	49 to 53	50 to 53	0	0	0	4	128
Ag-Partial	789 to 894	953 to 1185	895 to 1109	16	118	86	332	158
Ag/Res-Full	5 to 11	1 to 14	5 to 11	84	0	0	6	0

Land Use Type ^a	HST Alternative Range of Impacts			HMF Alternatives				
	UPRR /SR 99	BNSF	Hybrid	Castle Commerce Center	Harris-DeJager	Fagundes	Gordon-Shaw	Kojima Development
Ag/Res-Partial	425 to 523	577 to 629	543 to 588	17	278	132	1	95
Ag/Com-Full	0	0	0	0	0	0	0	0
Ag/Com-Partial	9 to 10	0	0	0	0	0	0	0
Ag/Ind-Full	0	0	0	0	0	0	0	0
Ag/Ind-Partial	43 to 71	23 to 24	17 to 41	0	0	0	10	0
Com-Full	105 to 111	97 to 104	97 to 103	32	0	0	1	0
Com-Partial	60 to 63	51 to 57	50 to 54	125	0	0	0	0
Com/Ind-Full	2	0	0	0	0	0	0	0
Com/Ind-Partial	1 to 3	0	0 to 2	0	0	0	0	0
Com/MFR-Full	0	0	0	0	0	0	0	0
Com/MFR-Partial	2	2	2	16	0	0	0	0
Com/SFR-Full	0	0	0	0	0	0	0	0
Com/SFR-Partial	8 to 10	5 to 6	6 to 8	0	0	0	0	0
Comm/Park-Full	0	0	0	2	0	0	0	0
Comm/Park-Partial	3	3	3	4	0	0	0	0
Health/Hospital-Full	0	0	0	0	0	0	0	0
Health/Hospital-Partial	9	9	9	0	0	0	0	0
Ind-Full	12 to 13	12 to 15	12 to 15	5	0	0	0	0
Ind-Partial	24 to 28	23 to 26	15 to 16	0	0	0	1	0
MFR-Full	1	0	0	0	0	0	0	0
MFR-Partial	5	5	5	1	0	0	0	0
Mun-Full	20 to 21	18 to 22	18 to 19	3	0	0	0	0
Mun-Partial	521 to 563	536 to 611	495 to 523	25	4	13	24	13
Religious/Church-Full	0	0	0	0	0	0	0	0
Religious/Church-Partial	1	0	0 to 1	1	0	0	0	0
School-Full	0	0	0	17	0	0	0	0

Land Use Type ^a	HST Alternative Range of Impacts			HMF Alternatives				
	UPRR /SR 99	BNSF	Hybrid	Castle Commerce Center	Harris-DeJager	Fagundes	Gordon-Shaw	Kojima Development
School-Partial	0	0	0	0	0	0	0	0
SFR-Full	22 to 30	65 to 68	40 to 45	3	0	0	1	0
SFR-Partial	20 to 22	40 to 49	40	2	0	0	1	0
Utility/Railroad-Full	11 to 18	7 to 15	7 to 14	0	0	0	0	0
Utility/Railroad-Partial	62 to 64	42 to 81	64 to 67	3	0	0	0	0
Vacant-Full	32 to 39	27 to 34	25 to 30	0	0	0	0	0
Vacant-Partial	43 to 51	52 to 56	44 to 52	3	0	0	0	0
Totals								
Full	262 to 290	284 to 317	264 to 280	147	0	0	13	128
Partial	2,136 to 2,169	2,400 to 2,646	2,249 to 2,459	197	400	231	368	267
Total	2,398 to 2,459	2,688 to 2,963	2,513 to 2,739	343	400	231	381	395

^a Land use type abbreviations:

Notes:

Ag=Agricultural

Comm/Park=Community/Park

Ag/Res=Agricultural/Residential

Ag/Com=Agricultural/Commercial

Ag/Ind=Agricultural/Industrial

Ind=Industrial

Com=Commercial

MFR=Multifamily Residential

Com/Ind=Commercial/Industrial

Mun=Municipal

Com/MFR=Commercial/Multifamily Residential

SFR=Single-Family Residential

Com/SFR=Commercial/Single-Family Residential

Utility/Railroad=Utility/Railroad

The data in this table are preliminary and will be refined for the final property acquisition effort as design progresses.

Values are rounded to the nearest whole number.

Includes permanent and temporary acquisitions.

Table 4-2 provides estimated ranges of displaced residential units and number of displaced residents by location under the HST alternatives and HMFs. The ranges include possible wye alternatives, design options, and stations. Appendix A includes impact tables presenting the number of displaced residential units and residents for each alternative, with the wye alternatives, design options, and stations shown separately for each alternative. Land uses with displaced residential units include single-family residential and multifamily residential, as well as the combined residential land uses that have residential unit displacements such as agricultural/residential and commercial/residential.

Table 4-2
 Estimated Number of Displaced Residential Units and Number of People

City/County	Displaced Residential Units	Displaced People
UPRR/SR 99 Alternative Range of Impacts		
Merced County	2 to 3	7 to 10
Merced	43	135
Le Grand	0	0
Madera County	37 to 66	121 to 216
Chowchilla	0 to 2	0 to 6
Madera Acres	0	0
Madera	61 to 65	233 to 248
Fresno	50 to 51	154 to 157
Total	193 to 228	650 to 773
BNSF Alternative		
Merced County	15 to 24	50 to 80
Merced	43	135
Le Grand	1 to 12	4 to 43
Madera County	54 to 64	177 to 210
Chowchilla	0 to 1	0 to 3
Madera Acres	50	190
Madera	0	0
Fresno	50	154
Total	215 to 244	716 to 815
Hybrid Alternative		
Merced County	2 to 3	7 to 10
Merced	43	135
Le Grand	0	0
Madera County	50 to 81	164 to 266
Chowchilla	0 to 1	0 to 3
Madera Acres	36 to 39	137 to 148
Madera	0	0
Fresno	50 to 51	154 to 157
Total	186 to 213	614 to 701
HMF Sites		
Castle Commerce Center Site		
Merced County	33	110
Merced	2	6
Le Grand	0	0

City/County	Displaced Residential Units	Displaced People
Madera County	0	0
Chowchilla	0	0
Madera Acres	0	0
Madera	0	0
Fresno	0	0
Total	35	116
Harris-DeJager Site		
Merced County	2	7
Merced	0	0
Le Grand	0	0
Madera County	0	0
Chowchilla	0	0
Madera Acres	0	0
Madera	0	0
Fresno	0	0
Total	2	7
Fagundes Site		
Merced County	0	0
Merced	0	0
Le Grand	0	0
Madera County	5	16
Chowchilla	0	0
Madera Acres	0	0
Madera	0	0
Fresno	0	0
Total	5	16
Gordon-Shaw Site		
Merced County	0	0
Merced	0	0
Le Grand	0	0
Madera County	4	13
Chowchilla	0	0
Madera Acres	0	0
Madera	0	0
Fresno	0	0
Total	4	13

City/County	Displaced Residential Units	Displaced People
Kojima Development Site		
Merced County	0	0
Merced	0	0
Le Grand	0	0
Madera County	2	7
Chowchilla	0	0
Madera Acres	0	0
Madera	0	0
Fresno	0	0
Total	2	7

Notes:
 All values are approximate.
 These statistics are based on findings from several field observations, a review of aerial photography, and tax assessor data for individual sites. No interview or survey of occupants, properties, or building structures was performed.
 Station and design option data are included as a worst-case scenario for the north-south alignments.
 The number of displaced persons are based on the following estimated averages of displaced people per residential unit:
 Merced County: 3.32
 Merced: 3.15
 Le Grand: 3.62
 Madera County: 3.28
 Chowchilla: 3.08
 Madera Acres: 3.80
 Madera: 3.82
 Fresno: 3.07
 Residential displacements for combined land uses such as agricultural/residential, commercial/multifamily, commercial/residential (single-family residential) included when units displaced are identified as residential.
 The data in this table are preliminary and will be refined for the final property acquisition effort as design progresses.

The BNSF Alternative has the potential for the most displaced residential units and residents (215 to 244 units/716 to 815 residents). The fewest displacements for this alternative would occur with the Mission Ave East of Le Grand design option and the Ave 21 Wye, which would result in 215 residential units displaced (716 residents). The UPRR/SR 99 Alternative would result in 193 to 228 units and 650 to 773 residents displaced. The fewest residential displacements under the UPRR/SR 99 Alternative would occur with the West of Chowchilla design option and Ave 24 Wye. The Hybrid Alternative would have the fewest residential displacements (186 to 213 units/614 to 701 residents). The Hybrid Alternative with Ave 24 Wye would result in the fewest residents being displaced. There would be 3 residential units and approximately 9 residents displaced under both of the Mariposa Street and Kern Street Station Alternatives in Fresno. Most displacements for all alternatives would occur in the City of Merced, Madera County, Madera Acres, and Madera.

The Castle Commerce Center HMF site would result in the most residential displacements (30 units/ 116 residents), followed by Fagundes (5 units/16 residents), Gordon-Shaw (4 units/13 residents), and Kojima Development and Harris-DeJager (both would have 2 units/6 residents).

Table 4-3 presents the number of displaced residential units for each alternative by type, including single-family residence, multifamily residence, and mobile home. The Hybrid Alternative would result in the fewest single-family residential and multifamily residential displacements. The BNSF Alternative would result in the fewest mobile home displacements.

Table 4-3
 Estimated Number of Displaced Residential Units by Type^a

Alternative^b	Single-Family	Multifamily	Mobile Home
UPRR/SR 99	141	14	52
BNSF	177	3	51
Hybrid	79	5	48

^a Results were determined by using the abbreviated review methodology, which did not include the separate identification of mobile homes. Values reflect March 2, 2012, property acquisition footprint results with parcels having mobile homes included for the mobile home category.

^b Data presented include worst-case scenario for the north-south alignment design options, stations, and wyes; data do not include HMF values.

Notes:
 All values are approximate.
 These statistics are based on findings from several field observations, a review of aerial photography, and tax assessor data for individual sites.
 The data in this table are preliminary and will be refined for the final property acquisition effort as design progresses.

Table 4-4 provides initial estimated ranges of nonresidential displacements that would be required under the HST alternatives and HMF sites. Appendix A includes impact tables presenting the number of displaced nonresidential units and employees by alternative, with design options and HST stations shown separately for each alternative. For the purpose of this discussion, nonresidential (businesses) includes commercial (retail/office), municipal (office), and industrial (manufacturing/distribution/warehouse) land uses. Displaced units for other land uses such as schools, hospitals, and churches are included in the tables in Appendix A. Displaced units for these land uses would be identical for all alternatives. Agricultural displacements are discussed below.

Table 4-4
 Estimated Number of Displaced Nonresidential Units and Displaced Employees

County	Displaced Nonresidential Units	Displaced Employees
UPRR/SR 99 Alternative		
Merced County	1	19
Merced	46	736
Le Grand	0	0
Madera County	15 to 18	180 to 216
Chowchilla	0 to 3	0 to 33
Madera Acres	0	0
Madera	62 to 64	744 to 768
Fresno	157 to 166	2512 to 2656
Total	284 to 295	4,230 to 4,388
BNSF Alternative		
Merced County	0 to 1	0 to 19
Merced	46 to 47	736 to 752
Le Grand	0 to 3	0 to 54
Madera County	13 to 20	156 to 240
Chowchilla	0	0

County	Displaced Nonresidential Units	Displaced Employees
Madera Acres	0	0
Madera	0	0
Fresno	158 to 166	2,528 to 2,656
Total	217 to 237	3,420 to 3,721
Hybrid Alternative		
Merced County	1	19
Merced	46	736
Le Grand	0	0
Madera County	8 to 10	96 to 120
Chowchilla	0 to 3	0 to 33
Madera Acres	0	0
Madera	0	0
Fresno	157 to 166	2,512 to 2,656
Total	212 to 226	3,363 to 3,564
HMF Sites		
Castle Commerce Center Site		
Merced County	19	361
Merced	24	384
Le Grand	0	0
Madera County	0	0
Chowchilla	0	0
Madera Acres	0	0
Madera	0	0
Fresno	0	0
Total	43	745
Harris-DeJager		
Merced County	0	0
Merced	0	0
Le Grand	0	0
Madera County	0	0
Chowchilla	0	0
Madera Acres	0	0
Madera	0	0
Fresno	0	0
Total	0	0
Fagundes		
Merced County	0	0
Merced	0	0
Le Grand	0	0

County	Displaced Nonresidential Units	Displaced Employees
Madera County	0	0
Chowchilla	0	0
Madera Acres	0	0
Madera	0	0
Fresno	0	0
Total	0	0
Gordon-Shaw		
Merced County	0	0
Merced	0	0
Le Grand	0	0
Madera County	4	76
Chowchilla	0	0
Madera Acres	0	0
Madera	0	0
Fresno	0	0
Total	4	76
Kojima Development		
Merced County	0	0
Merced	0	0
Le Grand	0	0
Madera County	0	0
Chowchilla	0	0
Madera Acres	0	0
Madera	0	0
Fresno	0	0
Total	0	0

Notes:

All values are approximate.

These statistics are based on findings from several field observations, a review of aerial photography, and tax assessor data for individual sites. No interview or survey of occupants, property, or buildings was performed.

The data in this table are preliminary and will be refined for the final property acquisition effort as design progresses.

Station and design option data represent a worst-case scenario for the north-south alignments.

Non-residential displacements include commercial, industrial, and municipal land uses and combined land uses that include them (e.g., commercial/industrial and commercial/residential). Land uses that are not representative of business or employee displacements (e.g., religious/church and community/park) are not included.

The number of displaced employees was determined by using averages of the number of employees per establishment for all NAICS codes by county and by zip code. Values and sources are listed below (U.S. Census Bureau 2011).

- Merced County: 19 employees per establishment (Merced County census data, 2009).
- Merced: 16 employees per establishment (average of census data for City of Merced zip codes touched by the project [95340, 95341, 95348], 2009).
- Le Grand: 18 employees per establishment (2009 Census data for zip code 95833).
- Madera County: 12 employees per establishment (Madera County Census Data, 2009).
- Chowchilla: 11 employees per establishment (Census data for zip code 93610).

County	Displaced Nonresidential Units	Displaced Employees
<ul style="list-style-type: none"> • Madera Acres: 14 employees per establishment (2009 Census Data for zip code 93638). • Madera: 12 employees per establishment (average of 2009 Census data for zip codes 93636, 93637, 93638). • Fresno: 16 employees per establishment (average of 2009 Census data for Fresno zip codes touched by the project [93701, 93705, 93706, 93721, 93722, 93728]). <p>Agricultural displacements are discussed separately.</p>		

The UPRR/SR 99 Alternative would result in the most displaced businesses, ranging from 284 to 295 units and 4,230 to 4,380 employees. The UPRR/SR 99 Alternative with the East Chowchilla design option and the Mariposa Street Fresno HST Station Alternative would result in the most nonresidential unit displacements. The UPRR/SR 99 Alternative with the West Chowchilla design option, with Ave 24 Wye, and the Kern Street Fresno HST Station Alternative would result in the fewest nonresidential unit displacements. The most displaced nonresidential units under the UPRR/SR 99 Alternative would occur in the City of Fresno, ranging from 157 to 166.

The Hybrid Alternative would have the potential to result in the fewest displaced businesses and employees; the range would be from 212 to 226 units and 3,363 to 3,564 employees. The BNSF Alternative would range from 217 to 237 units and 3,420 to 3,721 employees. The most displaced nonresidential units under the Hybrid and BNSF alternatives would also occur in the City of Fresno, with 157 to 166 displaced units under the Hybrid Alternative and 158 to 166 displaced units under the BNSF Alternative. The Castle Commerce Center HMF would result in the most nonresidential unit and employee displacements (43 units/745 employees). The Gordon-Shaw HMF site would result in 4 displaced nonresidential units and approximately 76 employees. The Harris-DeJager, Fagundes, and Kojima Development HMF sites would not result in nonresidential displacements.

Table 4-5 presents a summary of the nonresidential displacements for each alignment by land use type. The Hybrid Alternative would have the fewest displaced commercial, industrial, and agricultural business/farm units.

Table 4-5
 Estimated Number of Displaced Nonresidential Units by Type^a

Alternative^b	Commercial^c	Industrial/ Manufacturing^d	Agricultural Business/Farms^e
UPRR/SR 99	268	27	48
BNSF	219	25	75
Hybrid	211	21	60

^a Data do not include schools, hospitals, or nonprofit organizations (displaced units for these land use types would be the same for all alternatives).

^b Data include north-south alignment and worst-case scenario for design options, stations, and wyes. Does not include HMF values.

^c Data are conservative and may include residential units or unoccupied structures on commercial properties. Includes commercial, commercial/industrial, commercial/multifamily residential, commercial/single-family residential, and municipal land uses.

^d Includes industrial land uses. Agricultural related industry and commercial unit displacements are reflected in the Agricultural Business/Farms column.

^e Data are conservative and may include residential units or unoccupied structures on agricultural properties, such as dairies. Does not include agricultural property without structures and/or unit displacements. Includes agricultural/residential, agricultural/commercial, and agricultural industrial land uses.

Notes:

All values are approximate.

These statistics are based on findings from several field observations, a review of aerial photography, and tax assessor data for individual sites.

The data in this table are preliminary and will be refined for future versions of this DRIR as design progresses.

Table 4-1 includes agricultural displacements data. See Appendix A for impact tables presenting the number of acquired parcels, acres of acquisition, number of structures, and number of units by land use and alternative.

The largest land acquisitions are the agricultural and agricultural/residential land uses. Agricultural/commercial and agricultural/industrial land uses include agricultural-related businesses such as wineries, hulling, and distribution facilities. Residential displacements in the agricultural/residential land uses are included in the previous discussion of residential displacements.

The BNSF Alternative has the potential to result in the largest permanent acquisition of agricultural land (land acquisition for all agricultural land uses), ranging as high as 1,561 acres. An estimated 410 acres of land would be temporarily acquired and could potentially be sold, leased, or transferred after construction. The UPRR/SR 99 Alternative permanent acquisitions could range as high as 1,201 acres with approximately 398 temporarily acquired acres of land. The Hybrid Alternative permanent acquisitions could range as high as 1,470 acres of agricultural land. Temporarily acquired land for the Hybrid Alternative could range as high as 362 acres.

5.0 Competing Displacement Needs

Preliminary research and supporting documentation regarding future planned or proposed projects in the displacement study area do not indicate any substantial competing relocations or displacements by the year 2035. Planned projects in the cities and counties of Madera and Merced and in the City of Fresno are expected to increase the number residential and commercial units available in these locations. Current planned projects propose more than 360 dwelling units in Merced County (Newman 2010), 9,500 dwelling units in the City of Merced (Espinoza 2009, 2010), 59,600 dwelling units in Madera County (Treber 2010), 2,042 dwelling units in the City of Chowchilla (City of Chowchilla 2011), 1,200 dwelling units in the City of Madera (Randall 2010), and 2,905 dwelling units in the City of Fresno (Quad Knopf 2007). Planned projects in the City of Merced include 1.1 million sf and an additional 116 acres of commercial development (Espinoza 2009, 2010). Planned projects in Madera County include 13 million sf and an additional 700 acres of commercial development (Treber 2010).

Table 5-1 lists 32 surface transportation improvements planned in the displacement study area, some of which could result in a small number of displacements. Figures 5-1 through 5-3 illustrate the locations of these projects in Merced, Madera, and Fresno, respectively, corresponding to the location/map numbers in Table 5-1 (Authority and FRA 2012b). Specifically, there are transportation improvements planned along SR 99 throughout much of the displacement study area, and two new roads are being constructed in Merced. However, the number of displacements would not affect the overall availability of dwellings or replacement sites for residential or commercial uses to the extent that availability would be inadequate.

Table 5-1
 Planned Transportation Projects in the Displacement Study Area

Location/ Map No. ^a	Routes	Planned Improvements
Merced		
1	SR 99	Convert to six-lane freeway between a location north of Atwater and Arena Way; remove at-grade road crossings; build new interchange at Westside Blvd (Completed)
2	SR 99	Widen freeway to six lanes from Atwater through downtown Merced; upgrade interchanges in downtown area
3	SR 99 interchange at SR 140	Improve interchange (Completed)
5	SR 99	Convert to six-lane freeway between McHenry Road and Buchanan Hollow Road; eliminate at-grade road crossings; build new interchange at Arboleda Road
6	SR 99	Convert to six-lane freeway between Buchanan Hollow Road and Merced/Madera County line; eliminate at-grade road crossings; build new interchange at Plainsburg Road
7	Atwater–Merced Expressway	Build new four-lane expressway between SR 140 and SR 59; realign SR 59; remove at-grade road crossings; build new interchange at SR 99 and Santa Fe Avenue
8	SR 140	Upgrade arterial from Parsons Avenue to Tower Road
9	Campus Parkway	Build Campus Parkway between SR 99 and Yosemite Avenue in Madera County (Completed)

Location/ Map No. ^a	Routes	Planned Improvements
Madera		
10	SR 99 interchange at SR 233	Reconstruct interchange
11	SR 99	Convert to six-lane freeway between Merced–Madera County line and SR 152; reconstruct interchange at Avenue 24
12	SR 99 interchange at SR 152	Build new interchange and rail crossing
13	SR 99	Widen freeway between SR 152 and south of Avenue 21½; build interchange at Avenue 22
14	SR 99	Convert to six-lane freeway between Avenue 17 and Ellis Street; reconstruct interchange at Avenue 17
15	SR 99	Convert to six-lane freeway between Ellis Street and Avenue 12; reconstruct interchange at Ellis Street
16	SR 99 interchange at 4th Street	Reconstruct interchange
17	SR 99 interchange at SR 145	Improve interchange
18	Interchange SR 99 at Avenue 12	Reconstruct interchange
19	SR 99	Convert to six-lane freeway between Avenue 12 and Avenue 7
20	SR 99	Convert to six-lane freeway between Avenue 7 and Ashlan Avenue in Fresno County
Fresno		
21	SR 145	Widen to four lanes between SR 99 and Yosemite Avenue
22	SR 99 interchange at proposed Veterans Blvd	Build new interchange and rail crossings and new Veterans Blvd extension from Shaw Avenue to Herndon Avenue
23	SR 99 interchange at Grantland Avenue	Improve interchange
24	SR 99	Widen to 10-lane freeway (2 phases) between Clinton Avenue and Ashlan Avenue
25	SR 41	Build southbound auxiliary lane between El Paso Avenue and Friant Road
26	SR 41	Build northbound auxiliary lane between Bullard Avenue and Herndon Avenue
27	SR 99 interchange at Shaw Avenue	Improve interchange
28	SR 41	Build northbound auxiliary lane between Ashlan Avenue and Shaw Avenue
29	SR 41	Build auxiliary lanes between O Street and Shaw Avenue

Location/ Map No. ^a	Routes	Planned Improvements
30	SR 41	Widen interchange ramps between McKinley Avenue and Shields Avenue
31	SR 180	Build braided ramp between SR 41 and SR 168
32	SR 99	Update closed bridge structure
33	SR 99	Widen to six lanes between Ashlan Ave and Madera County Line

^a Figures 5-1 through 5-3 show location/map numbers.
 Source: Authority and FRA (2012b).



Figure 5-1
 No Project Alternative Planned Improvements in Merced



February 5, 2010

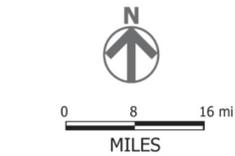


- Proposed Roadway Improvements
- Proposed Interchange Improvements
- ⑥ Location/Map Number (reference Table 5-1)

Figure 5-2
 No Project Alternative Planned Improvements in Madera



February 5, 2010



- Proposed Roadway Improvements
- Proposed Interchange Improvements
- Location/Map Number (reference Table 5-1)

Figure 5-3
 No Project Alternative Planned Improvements in Fresno

6.0 Relocation Resources Available to Displacees

This preliminary analysis shows that there would be impacts on mobile homes, senior housing facilities, and single-family and multifamily residences under all HST alternatives. Displacement impacts on parks, churches, day-care centers, city and county agencies, warehouse distribution centers, manufacturing facilities, and retail establishments would also occur under all HST alternatives. As shown in Tables 4-2 through 4-5, the range of residential and business displacements would be less under the Hybrid Alternative than the other two HST alternatives because the Hybrid Alternative would pass through more rural, less-populated areas. Although the UPRR/SR 99 Alternative would more closely follow an existing transportation corridor, that corridor would travel through the City of Madera and in an area that is heavily commercialized, which would result in a greater number of business displacements. Displacement information is the same for the Merced and Fresno HST stations, regardless of the HST alignment alternative. The *Merced to Fresno Section Community Impact Assessment* (Authority and FRA 2012a) provides additional information on displacements.

The initial evaluation of replacement facilities found that there is a sufficient number of suitable residential and business properties for nearly all displaced occupants in the cities of Atwater, Merced, Le Grand, Chowchilla, Madera, and Fresno, and in the rural areas of Merced and Madera counties. The number of affected residences equals 0.07% of the overall existing housing stock in Merced and Madera counties and the City of Fresno (only 0.06% of housing stock if planned new housing is considered). Within Merced County, Madera County, and the City of Fresno, approximately 2,600 residential properties are available, with comparable price, size, and type. Within the cities of Merced, Chowchilla, Madera, and Fresno, there are 1,841 residential properties available (1,175 of those are in Fresno). There are also properties in foreclosure in these areas, which are either already for sale, have auction dates posted, or will be available in the near future. In addition, residential properties are for rent in the cities of Merced, Madera, and Fresno that are comparable in price, size, and type. Because there are a sufficient number of suitable residential properties, no construction of replacement housing would be required.

The relocation replacement areas in the communities of Atwater, Merced, Chowchilla, Le Grand, Madera, and Fresno include neighborhoods where impacts would occur and adjacent neighborhoods that have similar characteristics. Research included the replacement availability within the borders of each city. The relocation replacement areas in unincorporated rural portions of the counties include the area within a 30-mile radius of the proposed HST alignments.

Preliminary research also indicates that there is a sufficient supply of available sites in the counties to accommodate displaced businesses. Because of siting requirements and land availability constraints, agricultural enterprises, farm businesses, and specialized industries including quarries, granaries, and processor facilities may be unable to relocate or would require more time to relocate.

6.1 Availability

An evaluation of properties for sale and lease in March 2012 and current real estate market trends indicate an adequate quantity and quality of replacement properties for residential and business displacements. The replacement properties are within the citywide relocation replacement areas and within a 30-mile radius in unincorporated portions of the counties. This is true under all alternatives, at this time. Future availability may vary depending on market trends, population growth, and planned development.

Merced, Madera, and Fresno counties have grown at a faster rate than the state of California since the 2000 Census, and they are anticipated to grow at a higher average annual rate than the state over the next 25 years. The population in Fresno County is projected to increase by 59%; Merced County is projected to increase by 80% and Madera County by 104%. A major reason for the growth in the area is

the overflow of people from urban coastal areas seeking affordable housing near major metropolitan areas (Authority and FRA 2012a).

Planned development projects in the cities and counties of Madera and Merced and in the City of Fresno will increase the number of residential and commercial units available in these locations. Current planned development projects propose more than 360 dwelling units in Merced County, 9,500 dwelling units in the City of Merced, 59,600 dwelling units in Madera County, 2,042 dwelling units in the City of Chowchilla, 1,200 dwelling units in the City of Madera, and 2,905 dwelling units in the City of Fresno. Planned projects in the City of Merced include 1.1 million sf of commercial development and an additional 116 acres of commercial development with an undetermined building area. Planned projects in Madera County include 13 million sf and an additional 700 acres of commercial development with an undetermined building area.

On the basis of current vacancy rates and planned development projects, the number of available housing units compared with the projected population growth indicates that adequate housing will be available during the next 10 years in Merced and Madera counties to accommodate both the projected population growth and the residents potentially displaced by the HST System. However, considering the current vacancy rates and planned new developments, the expected population growth beyond 10 years is higher than can be accommodated. Residential vacancy rates (see Section 3.2, Household Characteristics) indicate that the market is not tight, with available housing stock and new planned developments to accommodate a range of household characteristics and incomes.

In most instances, adequate residential replacements are in an immediate neighborhood or within adjacent neighborhoods that have similar characteristics. In some instances, there were not enough adequate residential replacements within the immediate neighborhood or in adjacent similar neighborhoods. In each of those cases, there are adequate residential replacements within the city.

Research conducted in March 2012 identified available replacement commercial and industrial sites in the study area that are comparable in size, type, and price to the affected buildings. Data indicate a sufficient supply for light industrial, warehousing, commercial, and vacant land. The replacement properties are for lease or sale within the study area at comparable prices. Because of the siting requirements and land availability constraints, agricultural enterprises and farm businesses may be unable to relocate.

The following sections provide lists of available replacement properties that are comparable in size, type, and price to the affected properties, by alternative.

6.1.1 No Project Alternative

The No Project Alternative would require fewer property acquisitions and displacements to accommodate transportation improvements than would the HST alternatives.

6.1.2 UPRR/SR 99 Alternative

This section does not separately discuss the Ave 24 Wye and Ave 21 Wye because their replacement areas would be the same as those for the north-south alignment.

6.1.2.1 Residential Relocations

Under the UPRR/SR 99 Alternative, most residential impacts would occur in Madera County and the cities of Madera and Fresno. Tables 6-1 through 6-4 provide preliminary lists of replacement dwellings for sale or rent in these cities. Table 6-5 provides a summary of replacement dwellings for sale by city and county. The dwellings listed for sale are of comparable price, size, and type, and are in the same or similar adjacent neighborhoods as the affected dwellings. Currently, residential availability is not adequate in the Community of Fairmead (only one house is for sale), but residents in this location could either relocate to nearby communities in rural areas of the county or in the cities of Chowchilla and Madera, which provide a greater number of housing options. However, the *Fairmead Specific Plan*



(Madera County, no date) calls for an increase of 1,700 dwelling units in the community. Depending on market conditions and timing, some of these units could be available when the displacements occur.

Table 6-1
 List of Residential Properties for Rent – City of Madera

Address	Bedroom/Bath	Monthly Rent (\$)	Type
951 Perkins Road	3/2	1,095	Single-family house
624 E South Street	2/1	675	Single-family house
725 S Madera Apt 112	2/1	550	Apartment
725 S Madera Apt 135	1/1	500	Apartment
1021 Sonora Street	1/1	350	Multifamily house
100 W Cleveland Avenue	2/1	675	Single-family house
Replacement properties within the citywide relocation replacement areas and within a 30-mile radius in unincorporated portions of the counties at the time of the evaluation (March 2012). NA = Not available. Source: www.zillow.com (March 2012).			

Table 6-2
 List of Residential Properties for Sale – City of Madera

Address	Bedroom/Bath	Price	Year Built	Area (sf)
E Cleveland Avenue to Riverside Drive; Sharon Blvd to N Lake Street				
1019 Nebraska	3/2	41,500	1947	1,393
1016 Columbia Street	3/1	59,000	1963	1,328
W Olive Avenue to Mango Avenue; S Pine Street to Road 28¼				
729 Bernardi Avenue	4/2	119,900	2007	1,330
2060 Tangerine Avenue	3/2	109,900	2006	1,281
27114 Parkwood Avenue	3/2	79,900	1973	1,520
1030 Perkins Road	4/2	130,000	2006	1,833
1044 San Ramon Avenue	4/3	160,000	2006	2,249
763 Macadamia Avenue	3/2	115,000	2006	1,565
397 W Pecan Avenue	3/2	124,900	1962	2,070
647 San Angelo Avenue	3/2	129,900	2007	1,534

Address	Bedroom/Bath	Price	Year Built	Area (sf)
841 Macadamia Avenue	3/2	127,900	2006	1,565
506 Deerwood Drive	3/2	90,000	1996	1,458
216 Park Street	3/1	69,900	1965	1,338
721 Merlot Avenue	3/2	112,900	1997	1,469
828 Gamay Avenue	3/2	139,900	2006	1,860
109 El Dorado Drive	3/2	80,000	1978	1,261
117 Cypress Street	N/A	1,025,000	1972	N/A
209 Cypress Street	4/2	99,950	N/A	1,300
119 Santa Cruz Street	3/2	73,900	1964	1,472
516 S K Street	4/2	130,000	1961	1,741
402 Wawona Court	4/2	95,500	2005	1,300
604 El Monte	4/2	92,500	N/A	1,344
1043 San Jose Avenue	4/3	149,992	2006	2,053
27320 San Jose Avenue	3/2	95,000	1980	1,510
918 Saunders Road	3/2	120,000	2006	1,606
1003 Navel Avenue	4/2.5	99,900	2005	1,833
1625 Lemon Avenue	4/2	119,900	2005	1,833
1726 Tangerine Avenue	3/2	120,000	2006	1,587
27289 San Carlos Avenue	3/2	75,900	1980	1,650
1382 Alexis Way	4/2	117,900	2007	1,729
1432 Seneca Drive	2/2	67,500	1990	1,144
1326 Concord Avenue	3/2	89,300	1994	1,112
209 Cypress Street	4/2	99,950	N/A	1,300
119 Santa Cruz Street	3/2	73,900	1964	1,472
516 S K Street	4/2	130,000	1961	1,741
402 Wawona Court	4/2	95,500	2005	1,300
604 El Monte	4/2	92,500	N/A	1,344
1043 San Jose Avenue	4/3	149,992	2006	2,053
27320 San Jose Avenue	3/2	95,000	1980	1,510
918 Saunders Road	3/2	120,000	2006	1,606

Address	Bedroom/Bath	Price	Year Built	Area (sf)
1003 Navel Avenue	4/2.5	99,900	2005	1,833
1625 Lemon Avenue	4/2	119,900	2005	1,833
1726 Tangerine Avenue	3/2	120,000	2006	1,587
27289 San Carlos Avenue	3/2	75,900	1980	1,650
1382 Alexis Way	4/2	117,900	2007	1,729
1432 Seneca Drive	2/2	67,500	1990	1,144
1326 Concord Avenue	3/2	89,300	1994	1,112
Replacement properties within the citywide relocation replacement areas and within a 30-mile radius in unincorporated portions of the counties at the time of the evaluation (March 2012). NA = Not available. Source: www.zillow.com (March 2012).				

Table 6-3
List of Residential Properties for Rent – City of Fresno

Address	Bedroom/Bath	Monthly Rent (\$)	Type
1122 N Arthur Avenue	3/1	825	Single-family house
610 N Wilson Avenue	2/1	800	Single-family house
1022 N Thorne Avenue	2/1	550	Single-family house
725 N Harrison Avenue	2/1	695	Single-family house
709 N Harrison Avenue	3/1	700	Single-family house
522 N Farris Avenue Apt B	1/1	390	Apartment
914 N Wilson Avenue	3/1	750	Single-family house
806 N Ferger Avenue	3/1	1000	Multifamily house
525 N Safford Avenue	2/1	675	Single-family house
910 N Arthur Avenue	3/1	800	Single-family house
711 N Roosevelt Avenue	2/1	675	Single-family house
Replacement properties within the citywide relocation replacement areas and within a 30-mile radius in unincorporated portions of the counties at the time of the evaluation (March 2012). Source: www.zillow.com (March 2012).			

Table 6-4
 List of Residential Properties for Sale – City of Fresno
 (E Olive Avenue to E Belmont Avenue; N Weber Avenue to N Wishon Avenue)

Address	Bedroom/Bath	Price (\$)	Year Built	Size (sf)
961 N Safford Avenue	3/1	74,900	1933	1,414
814 N Safford Avenue	2/1	53,000	1925	1,166
732 E Dudley Avenue	3/2	59,000	1918	1,956
546 N Echo Avenue	3/2	114,900	1922	2,028
1105 N Broadway Street	2/2	115,000	1937	1,187
805 N Echo Avenue	3/2	149,950	1959	1,920
405 E Olive Avenue	N/A	199,950	N/A	N/A
938 N Wilson Avenue	5/2	119,000	1930	1,704
1027 N Wilson Avenue	4/2	179,900	1925	1,749
703 N Safford Avenue	3/1.5	89,000	1938	1,586
1024 N Fruit Avenue	3/1	99,900	1927	1,306
912 N Thorne Avenue	3/1	94,900	1927	1,006
705 N Farris Avenue	3/1	72,900	1927	1,302
715 N Thorne Avenue	2/1	69,900	1940	1,073
805 N Adoline Avenue	3/2	69,900	1937	1,588
Replacement properties within the citywide relocation replacement areas and within a 30-mile radius in unincorporated portions of the counties at the time of the evaluation (March 2012).				
Source: www.zillow.com (March 2012).				

Table 6-5 lists the number of residences currently for sale in each of the cities and counties in and adjacent to the relocation replacement study area.

Table 6-5
 Summary of Residential Properties for Sale by City and County

City or County	Number of Single-Family Homes	Number of Condos ^a	Price Range (\$)	Number of Dwellings 1,200 sf or More	Number of Dwellings with Three Bedrooms or More	Number of Homes in Foreclosure ^b
City of Atwater	122	3	46,000 - 650,000	107	120	425
City of Merced	339	3	34,000 - 2,490,000	279	101	665
City of Chowchilla	76	0	30,000 – 1,500,000	58	66	164
City of Madera	251	7	20,000 – 2,900,000	222	239	636

City or County	Number of Single-Family Homes	Number of Condos ^a	Price Range (\$)	Number of Dwellings 1,200 sf or More	Number of Dwellings with Three Bedrooms or More	Number of Homes in Foreclosure ^b
City of Fresno	1,175	61	21,900 – 2,490,000	1,001	1,099	3,981
Merced County	876	8	28,000 – 1,750,000	735	830	1,317
Madera County	562	12	20,000 – 3,700,000	536	546	1,006

^a Includes condos, town-homes, row homes, and co-ops.
^b Includes homes in foreclosure currently for sale and homes not yet listed as for sale.
 Replacement properties within the citywide relocation replacement areas and within a 30-mile radius in unincorporated portions of the counties at the time of the evaluation (March 2012).
 Source: [RealtyTrac](#) (2012)

6.1.2.2 Nonresidential Relocations

The relocation replacement study areas within the cities of Merced and Fresno are active commercial and industrial areas; suitable replacement sites are on the market. The relocation replacement study areas within Atwater and Chowchilla also have a sufficient supply of available sites to accommodate the anticipated quantity of potential displacements.

New construction trends in the cities of Merced, Madera, and Fresno have mirrored those of the state of California. Commercial construction patterns show a buildup to the boom years of 2004–2006, followed by a sharp decline.

The projected increases in employment in the area will drive long-term commercial and industrial development. Projections show that the retail trade, leisure and hospitality, professional and business services, transportation, warehousing, and utility sectors will experience the largest growth through 2020. The expansion of the University of California at Merced, California State University at Fresno, and government-related services in Fresno County could accelerate these projections.

There would likely be some special relocation needs in the replacement study areas. The project could displace several businesses because of special site conditions and logistical needs of the businesses, the permanency of operation and inability to re-establish elsewhere, loss of clientele, or lack of suitable alternate locations. Agricultural enterprises and farm businesses in particular would experience difficulty relocating because of the inherent function of their operations, site requirements and the limited availability of additional farmland. The relocation replacement study areas have very few sites available for other specialized industries, such as sand/gravel/rock quarries, granaries, and processor facilities. In some cases, division of farmland or other land use would make it difficult to continue the existing land use. Table 6-6 shows businesses with special relocation needs.

Table 6-6
 Preliminary List of Potentially Permanently Displaced Businesses – UPRR/SR 99 Alternative^a

Land Use Type, Location	Business Type	Comment
Industrial, Merced	Concrete processor	Limited relocation site availability
Industrial, Fresno	Cement distributor	Facility appears to use existing rail lines; there may be limited availability of relocation sites with rail access.
Industrial, Fresno	Grain and milling processor/distributor	Facility appears to use existing rail lines; there may be limited availability of relocation sites with rail access.
Industrial, Fresno	Food processor/distributor	Facility appears to use existing rail lines; there may be limited availability of relocation sites with rail access.
Industrial, Fresno	Food processor/distributor	Facility appears to use existing rail lines; there may be limited availability of relocation sites with rail access.
Transportation, Fresno	Railway station	Facility appears to use existing rail lines (would be displaced by the Fresno Mariposa Street Station Alternative); there may be limited availability of relocation sites with rail access.
Transportation, Fresno	Transportation station	Close proximity to existing rail lines; there may be limited availability of relocation sites that are close to existing rail.

^a A detailed examination of acquisition/relocation needs and impacts will occur as design progresses. Determination of relocation needs is based on review of aerial mapping, preliminary site visits, and review of potentially available sites.

Tables 6-7 through 6-17 identify the available type, location, size, and price of commercial and retail properties and vacant land for lease or sale in the cities of Merced, Chowchilla, Madera, and Fresno.

Table 6-7
 List of Commercial Properties for Lease – City of Merced

Property Location	Property Type	Size Range (sf)		Lease Terms
		Minimum	Maximum	Annual Rent per sf (\$)
El Portal Business Park, 155 W El Portal, Merced, CA 95348	Office Building	2,400	4,800	15.60
Professional office space, 652 W 20th Street, Merced, CA 95340	Office Building	6,673	6,673	10.80
Medical Office Complex, 3313 G Street, Suite A, Merced, CA 95340	Office Building	2,878	2,878	19.80
El Portal Plaza, 3381 G Street, Bldg M, Suite B, Merced, CA 95340	Medical Office	3,200	3,200	19.80
Park Olive Plaza, 625 W Olive Avenue, Merced, CA 95348	Office Building	500	7,431	12.00
Park Olive Plaza, 645 W Olive Avenue, Merced, CA 95348	Office Building	680	6,420	12.00

Property Location	Property Type	Size Range (sf)		Lease Terms
		Minimum	Maximum	Annual Rent per sf (\$)
Merced Community Shopping Center, 3144 G Street, Merced, CA 95340	Shopping Center	1,600	64,000	15.00
Miles Business Park, 1748 Miles Court, Merced, CA 95348	Office Building	1,752	9,307	9.00
Merced Center Garage, 1811 M Street, Merced, CA 95340	Street Retail	1,015	4,060	15.60
Mercy Medical Pavilion, 301 E 13th Street, Merced, CA 95341	Medical Office	4,409	4,409	23.40
Sierra Point Professional Centre, 2926 North G Street, Merced, CA 95340	Office Building	752	3,430	19.80 - 21.00
Southwest corner of Olive and R Streets, Merced, CA 95340	Office Building	761	2,936	16.80 - 19.80
Shopping Center adj. Hwy 99, 1735 Hwy 140, Merced, CA 95341	Retail	1,200	5,400	negotiable
Yosemite Pkwy near Parsons Avenue, Merced, CA 95340	Retail (Other)	3,000	13,000	negotiable
College Green Shopping Center, 20 W Olive, Merced, CA 95341	Retail (Other)	1,300	8,400	10.80 - 15.00
Merced Shopping Center, 661 Fairfield Drive, Merced, CA 95340	Retail (Other)	9,000	9,000	15.00
Courtesy Chevrolet Service Center, 1405 W Main Street, Merced, CA 95340	Retail - Vehicle	6,000	30,000	3.00
Bear Creek Village, 2969 G Street, Merced, CA 95340	Shopping Center	1,200	4,200	negotiable
Thorington Building, 1640 N Street, Merced, CA 95340	Office Building	3,750	7,500	7.80 - 9.00
Research conducted in March 2012 identified available replacement commercial and industrial sites in the study area that are comparable in size, type, and price to the affected buildings. Source: CoStar Group (2012).				

Table 6-8
 List of Retail Properties for Sale – City of Merced

Property, Location	Property Type	Size	Price (\$)
The Pavilion, 240 W Main Street, Merced, CA 95340	Street Retail	11,000	285,000
398 W 16th Street, Merced, CA 95340	Street Retail	33,000	1,475,000
Downtown Merced Retail Lot, 843 W Main, Merced, CA 95340	Street Retail	7,500	75,000
1610 W 16th Street, Merced, CA 95340	Retail - Vehicle	23,325	124,582
Home Depot Shopping Center, 1725 West Highway 140, Merced, CA 95341	Retail (Other)	5,400	750,000

Property, Location	Property Type	Size	Price (\$)
840 W Olive Avenue, Suite E, Merced, CA 95348	Medical Office	1,450	200,000
900 Loughborough Drive, Suite A, Merced, CA 95340	Retail (Other)	12,000	2,299,000
London Plaza, 1-87 Alexander Avenue, Merced, CA 95348	Shopping Center	91,476	3,500,000
San Simeon Professional Center, 3351 M Street, Suite #115, Merced, CA 95348	Medical Office	2,177	350,000
Rascal Creek Medical Center, 3315 N M Street, Merced, CA 95340	Medical Office	1,395	215,000
Research conducted in March 2012 identified available replacement commercial and industrial sites in the study area that are comparable in size, type, and price to the affected buildings. Source: CoStar Group (2012).			

Table 6-9
 List of Vacant Land for Sale – City of Merced

Property, Location	Property Type	Size (acre)	Price (\$)
Hwy 59/Cardella, 3893 N Hwy 59, Merced, CA 95348	Commercial	40.00	Not disclosed
Hwy 59 / Cardella, 3894 N Hwy 59, Merced, CA 95348	Industrial	40.00	Not disclosed
Highway 59 at Santa Fe, Merced, CA 95340	Commercial	7.50	1,975,000
2 Austin, Merced, CA 95340	Commercial	1.60	699,000
879 E Gerard Avenue, Merced, CA 95340	Commercial	6.24	350,000
Merced Airport Industrial Park, Riggs/West Street, Merced, CA 95340	Industrial	2.04	235,000
Undeveloped Commercial Property, 16th Street and Q Street, Merced, CA 95340	Commercial	1.70	1,475,000
M&O Merced, Wardrobe, Merced, CA 95341	Industrial	5.30	494,000
Skyview Industrial Park Lots 3, 4, 5, Cessna Court, Merced, CA 95340	Industrial	2.59	30,000 - 50,000
612 W Main Street, Merced, CA 95340	Commercial	0.11	225,000
Skyview Industrial Park Lot 6, Cessna Way, Merced, CA 95341	Industrial	3.55	40,000
843 W Main, Merced, CA 95340	Commercial	0.17	75,000
Southwest corner, 15th & O Streets, Merced, CA 95340	Commercial	0.52	270,000
Mussotto Property, 1380 NW Bear Creek Drive, Merced, CA 95348	Residential	2.50	199,000



Property, Location	Property Type	Size (acre)	Price (\$)
1010 W 13th Street, Merced, CA 95341	Commercial	0.17	95,000
1004 W 13th Street, Merced, CA 95341	Commercial	0.17	95,000
Research conducted in March 2012 identified available replacement commercial and industrial sites in the study area that are comparable in size, type, and price to the affected buildings. Source: CoStar Group (2012).			

Table 6-10
 List of Commercial Properties for Lease – City of Chowchilla

Property, Location	Property Type	Size Range (sf)		Lease Terms
		Minimum	Maximum	Annual Rent per sf (\$)
Fig Tree Plaza, 1225 E Robertson Blvd, Chowchilla, CA 93610	Shopping Center	1,080	7,930	negotiable
Country Wood Shopping Center, 1780 Robertson Blvd, Chowchilla, CA 93610	Shopping Center	1,050	53,650	negotiable
Professional office space, 1421 Robertson Blvd, Chowchilla, CA 93610	Office Building	1,200	1,200	10.00
Research conducted in March 2012 identified available replacement commercial and industrial sites in the study area that are comparable in size, type, and price to the affected buildings. Source: CoStar Group (2012).				

Table 6-10A
 List of Retail Properties for Sale – City of Chowchilla

Property, Location	Property Type	Size (sf)	Price (\$)
Former Auto Dealership, 321 Prosperity Blvd, Chowchilla, CA 93610	Warehouse	24,805	2,750,000
1001-1009 W Robertson Blvd, Chowchilla, CA 93610	Retail (Other)	4,000	299,900
Research conducted in March 2012 identified available replacement commercial and industrial sites in the study area that are comparable in size, type, and price to the affected buildings. Source: CoStar Group (2012).			

Table 6-11
List of Vacant Land for Sale – City of Chowchilla

Property, Location	Property Type	Size (acre)	Price (\$)
Genoa Lake Way, Chowchilla, CA 93610	Commercial	36.30	1,975,000
West Robertson Blvd, Chowchilla, CA 93610	Commercial	0.48	187,000
705 3rd Street, Chowchilla, CA 93610	Industrial	2.80	400,000
Chowchilla Res. Prosperity Blvd. & Robinson, Chowchilla, CA 93610	Commercial	13.21	2,589,424
Research conducted in March 2012 identified available replacement commercial and industrial sites in the study area that are comparable in size, type, and price to the affected buildings. Source: CoStar Group (2012)			

Table 6-12
List of Commercial Properties for Lease – City of Madera

Property, Location	Property Type	Size Range (sf)		Lease Terms
		Minimum	Maximum	Annual Rent per sf (\$)
1120 N Gateway Drive, Madera, CA 93637	Retail (Other)	2,174	2,174	15.12
Northeast corner Cleveland and Schnoor, Madera, CA 93637	Retail (Other)	1,356	3,466	negotiable
Medical Office, 1050 E Almond Avenue, Madera, CA 93637	Office Building	2,560	2,560	16.20
483 E Almond Avenue, Madera, CA 93637	Office Building	2,150	2,150	18.00
Halmark Town Center, W Cleveland Avenue, W of State Hwy 99, Madera, CA 93637	Medical Office	2,100	2,100	negotiable
1157 Country Club Drive, Madera, CA 93638	Shopping Center	1,970	3,940	18.00
Bethard Square Shopping Center, 301 W. Olive Avenue, Madera, CA 93637	Shopping Center	3,600	21,000	negotiable
1628 Howard Road, Madera, CA 93637	Shopping Center	1,800	3,800	12.00 - 18.00
450 S Madera Avenue, Madera, CA 93637	Office Building	717	5,059	6.00
321 W Yosemite Avenue, Madera, CA 93637	Office Building	789	3,090	15.60

Property, Location	Property Type	Size Range (sf)		Lease Terms
		Minimum	Maximum	Annual Rent per sf (\$)
<p>Research conducted in March 2012 identified available replacement commercial and industrial sites in the study area that are comparable in size, type, and price to the affected buildings.</p> <p>Source: CoStar Group (2012).</p>				

Table 6-13
List of Retail Properties for Sale – City of Madera

Property, Location	Property Type	Size (sf)	Price (\$)
Mearl's Grocery, 13384 Road 29, Madera, CA 93638	Retail (Other)	4,000	375,000
Former Mervyn's Anchor Store, 1467 Country Club Drive, Madera, CA 93638	Retail	59,720	Not Disclosed
1120 N Gateway Drive, Madera, CA 93637	Retail (Other)	2,174	549,000
2200 W Cleveland Avenue, Madera, CA 93637	Retail	20,521	3,450,000
First American Title Building, 2377 W Cleveland Avenue, Madera, CA 93637	Office Building	5,832	1,294,704
Johnny Quick, 1204 W Olive, Madera, CA 93637	Service / Gas Station	2,200	1,950,000
Cleveland Plaza, 2365 W Cleveland Avenue, Madera, CA 93637	Office Building	5,424	1,084,800
<p>Research conducted in March 2012 identified available replacement commercial and industrial sites in the study area that are comparable in size, type, and price to the affected buildings.</p> <p>Source: CoStar Group (2012).</p>			

Table 6-14
List of Vacant Land for Sale – City of Madera

Property, Location	Property Type	Size (acre)	Price (\$)
876 E. Olive Ave., Madera, CA 93638	Commercial	10.32	1,200,200
Highway Commercial, Knox Street and Road 28, Madera, CA 93637	Commercial	4.92	925,000
Golden States Blvd Lots, Madera, CA, Madera, CA 93637	Commercial	3.68	299,000
32289 Avenue 11 1/4, Madera, CA 93636	Commercial	5.00	350,000



Property, Location	Property Type	Size (acre)	Price (\$)
Madera Commercial (3.5 to 4.92 acres), corner of Road 28 and S Knox Street, Madera, CA 93637	Commercial	8.62	925,000
17703 Road 24, Madera, CA 93638	Industrial	12.45	690,000
Golden State Commercial, 9664 Golden State Blvd, Madera, CA 93637	Commercial	8.39	300,000
Madera Agricultural Lots (5-acre minimum), Highway 99 & Avenue 20½, Madera, CA 93637	Agricultural	65.00	6,500,000
1100 Madera Avenue, Madera, CA 93638	Commercial	8.21	1,450,000
Airport Drive, Madera, CA 93637	Commercial	1.14	596,040
30360 Avenue 10½, Madera, CA 93636	Commercial	31.07	500,000
Rancho de Vina Com Lots (1.04 to 1.9 acres), 32749 Avenue 7, Madera, CA 93637	Retail	17.00	543,624 - 1,489,752
Madera Commercial Lot, E Olive Avenue and Road 28, Madera, CA 93638	Commercial	5.00	1,089,000
Neighborhood Commercial, 2616 Howard Road, Madera, CA 93637	Retail	5.03	1,750,000
Avenue 21 at Road 21, Chowchilla, CA 93610	Agricultural	18.92	275,000
Rancho de Vina Com Lots (1.05 to 1.9 acres), 10600 Hwy 99, Madera, CA 93637	Retail	8.00	686,070 - 1,489,752
Avenue 18½ @ Hwy 99, Madera, CA 93638	Industrial	16.00	960,000
Howard Road, Madera, CA 93637	Commercial	1.76	135,000
Madera Highway Commercial, Southwest Corner Avenue 12 & Hwy 99, Madera, CA 93637	Commercial	6.71	2,300,000
<p>Research conducted in March 2012 identified available replacement commercial and industrial sites in the study area that are comparable in size, type, and price to the affected buildings.</p> <p>Source: CoStar Group (2012).</p>			

Table 6-15
List of Commercial Properties for Lease – City of Fresno

Property, Location	Property Type	Size Range (sf)		Lease Terms
		Minimum	Maximum	Annual Rent per sf (\$)
Woodward Village Shopping Center, 7705-7799 N First Street, Fresno, CA 93720-0962	Shopping Center	1,200	2,632	18.00

Property, Location	Property Type	Size Range (sf)		Lease Terms
		Minimum	Maximum	Annual Rent per sf (\$)
Fig Garden Village, 5082 N Palm Avenue, Fresno, CA 93704	Shopping Center	413	4,440	negotiable
Northeast corner of Gettysburg Avenue, 4352 N Brawley Avenue, Fresno, CA 93722	Office Building	2,850	2,850	6.00
Channing Court, 1690 W Shaw Avenue, Fresno, CA 93711	Office Building	957	13,848	18.60
Civic Center Square Campus, 2300 Tulare, Fresno, CA 93721	Office Building	504	8,600	18.00 - 21.00
West Shaw Business Center, 4201 W Shaw Avenue, Fresno, CA 93722	Office Building	3,418	5,011	11.40
Shaw V Business Center, 4705 N Sonora Avenue, Fresno, CA 93722	Office Building	634	1,170	4.80 - 7.80
4-Story Class A Professional Office, 2440 Tulare Street, Fresno, CA 93721	Office Building	928	9,978	21.00
3475 W Shaw Avenue, Fresno, CA 93722	Office Building	1,036	1,036	7.20
Daycare, 3626 W Gettysburg Avenue, Fresno, CA 93722	Institutional / Governmental	4,980	4,980	12.05
4589 N Marty Avenue, Fresno, CA 93722	Warehouse	2,872	2,889	7.20
Gateway Plaza, 1941 Gateway Blvd, Fresno, CA 93728	Office Building	850	3,328	10.20
2021 E Divisadero Street, Fresno, CA 93701-2013	Medical Office	1,600	3,200	12.00
3855 N West Avenue, Fresno, CA 93705	Office Building	760	2,481	12.00
Manchester North Plaza, 3730 N Blackstone Avenue, Fresno, CA 93726	Shopping Center	1,063	10,000	11.00 - 19.00
Class A Office Building, 907-911 Santa Fe Avenue, Fresno, CA 93721	Office Building	2,965	2,965	18.60
1036 W Clinton Avenue, Fresno, CA 93705	Office Building	1,000	1,000	9.00
2625 Divisadero Street, Fresno, CA 93711	Office Building	6,000	19,053	15.00
Warehouse, 4704 N Sonora Avenue, Fresno, CA 93722	Warehouse	7,000	25,000	4.80
Granite Park Building E, 3950 N Cedar Avenue, Fresno, CA 93726	Restaurant	2,571	8,621	negotiable

Property, Location	Property Type	Size Range (sf)		Lease Terms
		Minimum	Maximum	Annual Rent per sf (\$)
516 W Shaw Avenue, Fresno, CA 93704	Office Building	1,257	6,059	18.00
Two-story medical office complex, 302 Fresno Street, Fresno, CA 93706-3600	Office Building	639	1,098	9.00
4321 West Avenue, Fresno, CA 93705	Office Building	1,244	4,400	negotiable
The Grove, 4025 - 4045 W Figarden Drive, Fresno, CA 93720	Shopping Center	1,452	6,575	18.00
Professional office space, 4545 N West Avenue, Fresno, CA 93705	Office Building	991	991	10.20
Two-story office building, 5104 N Blythe Avenue, Fresno, CA 93722	Office Building	4,000	51,264	13.20
5168 N Blythe Avenue, Fresno, CA 93722-6429	Office Building	1,700	4,200	10.80
550 E Shaw Avenue, Fresno, CA 93710	Office Building	200	3,581	19.20
135 W Shaw Avenue, Fresno, CA 93704	Office Building	724	1,438	12.96
Ash Tree Square, 1029 E Shaw Avenue, Fresno, CA 93710	Shopping Center	15,817	15,817	negotiable
Country Club Plaza, 10069 North Maple Avenue, Fresno, CA 93730	Shopping Center	1,000	3,000	18.00
Shawstone, 4915 - 4983 N Blackstone Avenue, Fresno, CA 93704	Shopping Center	10,000	20,000	12.00
River Bluff, 8080 N Palm Avenue, Fresno, CA 93711	Office Building	5,243	5,243	23.40
Civic Center Square, 2445 Capitol Street, Fresno, CA 93721	Office Building	7,698	7,698	19.80
Mission Village Shopping Center, 4965 N Fresno Street, Fresno, CA 93726	Restaurant	4,783	4,783	negotiable
764 P Street, Fresno, CA 93721	Office Building	300	7,500	12.00 - 15.00
120 N Diamond Street, Fresno, CA 93721	Retail (Other)	7,033	7,033	negotiable
NE Gettysburg & Blackstone, 1727 E Gettysburg Avenue, Fresno, CA 93726	Retail (Other)	9,405	9,405	9.00
2150 Tulare Street, Fresno, CA 93721-2133	Office Building	4,648	4,648	18.00
1155 W Shaw Avenue, Fresno, CA 93711	Office Building	1,595	1,595	18.60
125 E Barstow Avenue, Suites 130-139, Fresno, CA 93710	Office Building	872	872	15.00

Property, Location	Property Type	Size Range (sf)		Lease Terms
		Minimum	Maximum	Annual Rent per sf (\$)
2000 Fresno Street, Fresno, CA 93721	Office Building	6,700	7,020	12.00
Mission Village, 335 E Shaw Avenue, Fresno, CA 93710	Shopping Center	1,400	4,783	negotiable
6700 N First, Fresno, CA 93711	Retail (Other)	3,990	3,990	9.60
Shaw Blackstone Center, 5060 Blackstone, Fresno, CA 93710	Retail (Other)	2,211	4,573	negotiable
The Crossing Shopping Center, Herndon and Milburn, Fresno, CA 93722	Retail (Other)	4,480	30,700	negotiable
Ash Tree Square, 1053 E Shaw Avenue, Fresno, CA 93710	Shopping Center	1,300	15,500	negotiable
<p>Research conducted in March 2012 identified available replacement commercial and industrial sites in the study area that are comparable in size, type, and price to the affected buildings.</p> <p>Source: CoStar Group (2012).</p>				

Table 6-16
List of Retail Properties for Sale – City of Fresno

Property, Location	Property Type	Size	Price (\$)
The Granite Park, Building A, N Cedar Avenue, Fresno, CA 93650	Office Building	5,325	850,000
The Granite Park, Building B, N Cedar Avenue, Fresno, CA 93650	Office Building	5,200	830,000
The Granite Park, Building C, N Cedar Avenue, Fresno, CA 93650	Office Building	6,000	955,000
The Granite Park, Building D, N Cedar Avenue, Fresno, CA 93650	Office Building	4,500	716,000
The Granite Park, Building E, N Cedar Avenue, Fresno, CA 93650	Office Building	6,100	970,000
The Granite Park, Building G, N Cedar Avenue, Fresno, CA 93650	Office Building	6,000	95,000
The Granite Park, Building H, N Cedar Avenue, Fresno, CA 93651	Office Building	5,850	931,000
Formerly Wilson's Motorcycles, 443 Broadway, Fresno, CA 93701	Service / Gas Station	6,970	350,000
755 Van Ness Avenue, Fresno, CA 93721	Retail (Other)	55,670	1,341,100
Tower District, 139 E Belmont Avenue, Fresno, CA 93701	Office Building	9,750	675,000

Property, Location	Property Type	Size	Price (\$)
Princeton Square Shopping Center, 2701 N Blackstone Avenue, Fresno, CA 93703	Shopping Center	29,960	3,600,000
3003 N Blackstone Avenue, Fresno, CA 93703	Office Building	7,296	495,000
2100 E Clinton Avenue, Fresno, CA 93703	Medical Office	2,915	220,000
3850 E Ventura Avenue, Fresno, CA 93702	Restaurant	2,135	375,000
Historical Building, 1101 Fulton Mall, Fresno, CA 93721	Office Building	65,244	1,875,000
727 Van Ness Avenue, Fresno, CA 93721	Retail (Other)	21,140	511,000
2000 Fresno Street, Fresno, CA 93721	Medical Office	21,060	2,400,000
824 F Street, Fresno, CA 93706	Restaurant	7,225	68,900
3808 N West Avenue, Fresno, CA 93705	Retail (Other)	1,647	175,000
ARCO AMPM, 3060 Tulare Street, Fresno, CA 93710	Service / Gas Station	2,300	3,500,000
1650 N Blackstone Avenue, Fresno, CA 93703	Retail (Other)	16,166	2,795,000
Shields Medical Center, 3150 E Shields Avenue, Fresno, CA 93726	Medical Office	5,496	495,000
3141 E Tulare Street, Fresno, CA 93702	Retail	1,868	225,000
3210 E Belmont, Fresno, CA 93702	Retail (Other)	6,660	260,000
Former Gottschalks Dept Store, 840-860 Fulton Mall, Fresno, CA 93721	Retail (Other)	100,200	6,250,000
<p>Research conducted in March 2012 identified available replacement commercial and industrial sites in the study area that are comparable in size, type, and price to the affected buildings.</p> <p>NA = Not available.</p> <p>Source: CoStar Group (2012).</p>			

Table 6-17
List of Vacant Land for Sale – City of Fresno

Property, Location	Property Type	Size (acre)	Price (\$)
5525 W Shaw, Fresno, CA 93722	Retail	0.74	375,000
2393 Blythe Avenue, Fresno, CA 93722	Commercial	3.12	258,000
5689 N Golden State Blvd, Fresno, CA 93722	Industrial	3.03	825,000
Northwest corner of Herndon & Brawley, Fresno, CA 93711	Industrial	8.57	3,359,781
3282 N Marks Avenue, Fresno, CA 93722	Industrial	4.63	390,000
Beverly Plaza, 3018 W. Clinton Avenue, Fresno, CA 93722	Retail	0.87	600,000

Property, Location	Property Type	Size (acre)	Price (\$)
Whitesbridge Avenue, Fresno, CA 93706	Industrial	4.76	933,000
Southwest corner of Central & Cedar, 1777 E Central, Fresno, CA 93725	Industrial	5.30	650,000
Herndon & Weber NWC, Fresno, CA 93722	Commercial	5.61	2,688,000
Shaw Westgate Office Center, 3441 W Shaw Avenue, Fresno, CA 93711	Commercial	0.24	275,000
McKinley & Golden State NWC, Fresno, CA 93728	Industrial	5.39	380,000 - 450,000
Roeding Business Park, Nielsen & Hughes, Fresno, CA 93706	Industrial	15.35	1,842,000
1300 E Central Ave, Fresno, CA 93725	Industrial	2.09	156,750
1133 G Street, Fresno, CA 93706	Commercial	0.25	135,000
Annadale Ave, Fresno, CA 93706	Commercial	0.41	72,500
2810 S. Elm Ave, Fresno, CA 93706	Commercial	1.24	220,000
2892 E. Dorothy Ave., Fresno, CA 93706	Industrial	1.85	482,850
Southeast corner, Cecelia & Sierra Ave, Fresno, CA 93722	Commercial	4.80	299,000
604-630 S. Fruit Ave., Fresno, CA 93706	Industrial	3.14	320,000
2929 E. Dorothy Ave., Fresno, CA 93706	Industrial	2.27	544,000
2878 S. Elm Avenue, Fresno, CA 93706	Commercial	3.33	450,000
5988 E. Belmont Ave., Fresno, CA 93727	Commercial	0.57	900,000
Northwest corner, Brawley Avenue & Shields Avenue, Fresno, CA 93722	Commercial	10.00	3,500,000
Northwest corner, Shaw & Valentine, Fresno, CA 93711	Commercial	0.85	450,000
4588 W. Shaw Ave., Fresno, CA 93722	Commercial	2.71	1,595,000
Northeast corner Vine and Elm	Industrial	1.46	445,000
Northwest corner Blackstone & Lewis, 902 N. Blackstone Avenue, Fresno, CA 93703	Commercial	10.00	130,000
Research conducted in March 2012 identified available replacement commercial and industrial sites in the study area that are comparable in size, type, and price to the affected buildings. Source: CoStar Group (2012).			

6.1.3 BNSF Alternative

This section discusses only the differences between the replacement areas under the UPRR/SR 99, BNSF, and Hybrid alternatives. In addition, there is no discussion regarding the Ave 24 Wye and Ave 21 Wye or the proposed HMF sites, except for the Castle Commerce Center site. The replacement areas for these would be the same as those shown for the north-south alignment.

6.1.3.1 Residential Relocations

Under the BNSF Alternative, most residential impacts would occur in Madera County, the community of Madera Acres in the City of Madera, and Fresno. Tables 6-1 through 6-5 include preliminary lists of replacement dwellings for sale and lease in the cities of Madera and Fresno.

The BNSF Alternative would affect a different portion of the City of Madera than the UPRR/SR 99 Alternative. Table 6-18 provides a preliminary list of replacement dwellings in the affected portion of Madera (Madera Acres). These dwellings are of comparable price, size, and type, and they are in the same neighborhood or a similar adjacent neighborhood.

At the time of this analysis, residential availability was not adequate in the rural area immediately surrounding the Mission Ave and Mariposa Way design options, in Le Grand, or in the rural area south of the City of Madera. Affected residents in these areas could relocate farther away in the county or in nearby cities and towns. In most cases, affected farm residences could be relocated to another site on the same property. Residential availability within the cities of Merced and Madera is adequate to accommodate displaced residents from the entire BNSF Alternative alignment.

Table 6-18
 List of Residential Properties for Sale – Madera Acres Neighborhood in the City of Madera

Location	Bedroom/Bath	Price (\$)	Year Built	Size (sf)
Madera Acres Neighborhood				
26463 Fonda Avenue	4/3	238,000	2002	2,641
25605 Sybil Way	4/2	115,000	1978	1,584
25347 Tremaine Avenue	3/2	130,000	1978	1,552
18802 Road 27	3/2	124,900	1999	1,516
18477 El Paso Road	3/2	128,000	1985	1,469
18385 Daley Road	3/2	54,900	1980	1,250
26240 Avenue 17	4/2	109,000	1990	1,300
18283 Mcrae Road	3/2	75,000	1992	1,052
26803 Fonda Avenue	3/2	153,900	1989	1,515
17445 Road 26	3/2	89,000	2004	1,264
26943 Frisco Way	5/3	159,900	1986	1,771
26972 Avenue 18	3/2.5	235,000	N/A	2,688
26369 Old Mill Drive	3/2	108,000	1990	1,170
18622 Shell Drive	4/3	149,500	1977	2,279
26972 Avenue 18¼	3/2.5	235,000	2006	2,688
18421 Fairfield Drive	3/2	125,000	1984	1,150
26331 Cullen Way	3/2	139,000	N/A	2,100
25269 Avenue 18½	4/2.5	97,000	1988	1,501
18120 Ridgedale Drive	2/2	89,900	1982	1,000

Location	Bedroom/Bath	Price (\$)	Year Built	Size (sf)
25632 Walden Avenue	3/2	89,818	1989	1,136
26095 El Paso Place	4/3	169,900	1984	2,566
26407 Club Drive	3/2	325,000	1962	2,353
17019 Crystal Drive	3/2	95,000	2002	1,402
17333 Road 26	3/2	98,000	2003	N/A
Replacement properties within the citywide relocation replacement areas and within a 30-mile radius in unincorporated portions of the counties at the time of the evaluation (March 2012). N/A = Not available. Source: www.zillow.com (March 2012).				

6.1.3.2 Nonresidential Relocations

Similar to the UPRR/SR 99 Alternative, there would likely be special relocation issues under the BNSF Alternative. Table 6-19 identifies businesses with special relocation needs.

The replacement areas and preliminary list of replacement properties under the BNSF Alternative would be the same as those under the UPRR/SR 99 Alternative.

Table 6-19
 List of Potentially Permanently Displaced Businesses – BNSF Alternative^a

Land Use Type, Location	Business Type	Comment
Industrial, Merced	Concrete processor	Limited relocation site availability
Industrial, Fresno	Cement distributor	Facility appears to use existing rail lines; there may be limited availability of relocation sites with rail access.
Industrial, Fresno	Grain and milling processor/distributor	Facility appears to use existing rail lines; there may be limited availability of relocation sites with rail access.
Industrial, Fresno	Food processor/distributor	Facility appears to use existing rail lines; there may be limited availability of relocation sites with rail access.
Industrial, Fresno	Food processor/distributor	Facility appears to use existing rail lines; there may be limited availability of relocation sites with rail access.
Transportation, Fresno	Railway station	Facility appears to use existing rail lines (would be displaced with Fresno Mariposa Street Station Alternative); there may be limited availability of relocation sites with rail access.
Transportation, Fresno	Transportation station	Close proximity to existing rail lines; there may be limited availability of relocation sites that are close to existing rail.
^a A detailed examination of acquisition/relocation needs and impacts will occur as design progresses. Determination of relocation needs are based on review of aerial mapping, preliminary site visits, and review of potentially available sites.		

6.1.4 Hybrid Alternative

This section discusses only the differences between the replacement areas under the Hybrid, BNSF, and UPRR/SR 99 alternatives. In addition, there is no discussion regarding the Ave 24 Wye and Ave 21 Wye or the proposed HMF sites. The replacement areas for these would be the same as those for the UPRR/SR 99 Alternative and BNSF Alternative north-south alignments.

6.1.4.1 Residential Relocations

Under the Hybrid Alternative, most residential impacts would occur in Madera County and in Fresno. Tables 6-1 through 6-5 (see Section 6.1.2.1, Residential Relocations) include preliminary lists of replacement dwellings for sale and lease in the cities of Madera and Fresno.

The Hybrid Alternative would affect the same portion of the City of Madera as the BNSF Alternative (Madera Acres). Table 6-18 provides a preliminary list of replacement dwellings in the affected portion of Madera. These dwellings are of comparable price, size, and type, and they are in the same neighborhood or a similar adjacent neighborhood.

Residential availability within the cities of Merced and Madera is adequate to accommodate displaced residents from the entire Hybrid Alternative alignment.

6.1.4.2 Nonresidential Relocations

Similar to the UPRR/SR 99 and BNSF alternatives, there would likely be special relocation issues under the Hybrid Alternative. Table 6-20 identifies businesses with special relocation needs.

Table 6-20
 List of Potentially Permanently Displaced Businesses – Hybrid Alternative^a

Land Use Type, Location	Business Type	Comment
Industrial, Merced	Concrete processor	Limited relocation site availability
Industrial, Fresno	Cement distributor	Facility appears to use existing rail lines; there may be limited availability of relocation sites with rail access.
Industrial, Fresno	Grain and milling processor/distributor	Facility appears to use existing rail lines; there may be limited availability of relocation sites with rail access.
Industrial, Fresno	Food processor/distributor	Facility appears to use existing rail lines; there may be limited availability of relocation sites with rail access.
Industrial, Fresno	Food processor/distributor	Facility appears to use existing rail lines; there may be limited availability of relocation sites with rail access.
Transportation, Fresno	Railway station	Facility appears to use existing rail lines (would be displaced with Fresno Mariposa Street Station Alternative); there may be limited availability of relocation sites with rail access.
Transportation, Fresno	Transportation station	Close proximity to existing rail lines; there may be limited availability of relocation sites that are close to existing rail.
^a A detailed examination of acquisition/relocation needs and impacts will occur as design progresses. The determination of relocation needs is based on review of aerial mapping, preliminary site visit, and review of potentially available sites.		

The replacement areas and preliminary lists of replacement properties under the Hybrid Alternative would be the same as those under the UPRR/SR 99 and BNSF alternatives.

6.2 Heavy Maintenance Facility – Castle Commerce Center

This section discusses only the Castle Commerce Center HMF site. All other HMF sites would share the same replacement areas as those discussed under the UPRR/SR 99 and BNSF alternatives. Tables 6-21 through 6-25 provide information about properties in the City of Atwater, where the Castle Commerce Center HMF site is located.

Table 6-21
 List of Residential Properties for Rent – City of Atwater

Address	Bedroom/Bath	Monthly Rent	Type
2695 Winton Way	1/1	500	Apartment
2653 Winton Way	2/1	575	Apartment
1065 Poppy Hills Drive	3/1	750	Apartment
398 Leslie Drive	3/1	1,050	Apartment
1103 Kelso Street	2/1	475	Apartment
1177 Kelso Street	1/1	375	Apartment
3009 Secretariat Drive	3/2	900	Apartment
2906 Determine Drive	2/1	450	Apartment
1101 Kelso Street	2/1	525	Apartment
Replacement properties within the citywide relocation replacement areas and within a 30-mile radius in unincorporated portions of the counties at the time of the evaluation (March 2012).			
Source: Zillow (March2012).			

Table 6-22
 List of Residential Properties for Sale – City of Atwater
 (Santa Fe Dr to E Juniper Avenue, N Winton Way to N Buhach Road)

Address	Bedroom/Bath	Price (\$)	Year Built	Size (sf)
3124 Larch Drive	4 / N/A	165,000	1988	2,114
529 Independence Court	3/2	96,000	1990	N/A
177 Judy Drive	3/2	119,000	1978	1,504
2651 Stone Creek Drive	5/4	195,000	2006	2,814

Address	Bedroom/Bath	Price (\$)	Year Built	Size (sf)
3153 Waterfall Drive	3/2	149,900	1993	1,446
1325 Quince Avenue	3/1	79,900	1955	1,184
1100 Magnolia Court	3/2	90,000	1997	1,042
2661 Stone Creek Drive	4/4	202,000	2006	2,652
2968 Hillcrest Street	3/2	109,900	1974	1,596
2491 7th Street	3/2	109,900	1995	1,708
2021 Glen Abbey Street	4/2	106,500	1997	1,539
1350 Redwood Avenue	3/2	96,800	1955	1,384
260 Manzanita Drive	3/2	132,000	1987	1,575
187 Menlo Avenue	3/2	110,500	1960	1,176
5910 N Krotik Court	5/4	459,000	2006	3,346
227 Peninsula Drive	4/2	125,000	1997	1,613
3370 Harness Drive	3/2	219,900	2005	2,375
3431 Shipwright Avenue	4/3	224,900	2006	2,121
1970 Rancho Del Rey Drive	3/2	115,000	1977	1,504
1053 Huntingdale Way	4/2	98,100	1996	1,539
2002 Glen Abbey Street	4/2	79,900	1994	1,299
920 Sandpiper Way	3/1	99,900	1997	983
2109 Wexford Lane	4/2	121,000	2001	1,553
364 Della Drive	3/2	95,000	1978	1,504
N/A	3/3	315,000	2007	3,065
2900 Tori Ct	4/2	105,000	1996	1,496
3105 Larch Dr	3/2	164,000	1987	1,876
3029 Mermaid Dr	3/2	125,000	1998	1,902
3340 Harness Dr	4/2.5	215,000	2005	2,770
344 Caron Way	3/2	229,900	2006	2,462

Replacement properties within the citywide relocation replacement areas and within a 30-mile radius in unincorporated portions of the counties at the time of the evaluation (March 2012).

N/A = Not available.

Source: www.zillow.com (2012).



Table 6-23
 Preliminary List of Commercial Properties for Lease – City of Atwater

Property, Location	Property Type	Size Range (sf)		Lease Terms
		Minimum	Maximum	Annual Rent per sf (\$)
Applegate Ranch Shopping Center, Applegate Road and Hwy 99, Atwater, CA 95301	Retail	1,052	19,200	Negotiable
1851 Freedom Lane, Atwater, CA 95301	Office Building	4,021	4,021	15.00
Source: CoStar Group(March 2012)				

Table 6-24
 Preliminary List of Retail Properties for Sale – City of Atwater

Property, Location	Property Type	Size	Price (\$)
4614 Buhach, Atwater, CA 95301	Retail	N/A	400,000
N/A = Not available.			
Source: CoStar Group(March 2012)			

Table 6-25
 Preliminary List of Vacant Land for Sale – City of Atwater

Property, Location	Property Type	Size (acre)	Price (\$)
Parcel 7, Southwest Corner of Juniper and Buhach, Atwater, CA 95301	Commercial	8.54	2,135,000
1800 Fruitland Avenue, Atwater, CA 95301 Atwater Land – Northeast Quadrant, Bellevue and Winton Way	Residential	4.66	1,050,000
Atwater Marketplace, 1813 Bellevue Road, Atwater, CA 95301	Retail-pad	0.92	1,000,000
Parcel 12, Northwest Corner of Juniper and Buhach, Atwater, CA 95301	Commercial	20.2	5,050,000
Atwater Commercial, 3037 Bell Street, Atwater, CA 95301	Commercial	10.95	3,250,000
Ferrari Ranch Development, 4814 W Clover Avenue, Atwater, CA 95301	Commercial	13.3	2,900,000
1833 Bell Lane, Atwater, CA 95301	Commercial	N/A	98,000
1883 Sycamore Avenue, Atwater, CA 95301	Commercial	N/A	415,000
N/A = Not available.			
Source: Merced Sun Star (2010).			

7.0 Relocation Policy and Impact Mitigation

7.1 Overview of Impacts

The proposed project would cause *nonresidential* impacts on commercial/retail establishments, warehouse and distribution centers, manufacturing facilities, public and private parks, and local city and county public agencies. The project also would cause *residential* impacts on mobile homes, housing facilities, and single-family and multifamily residences.

A preliminary analysis of replacement inventory showed that an adequate supply of suitable residential, nonresidential, and commercial properties for purchase or lease exists for nearly all potentially displaced occupants within the cities and communities of Atwater, Merced, Le Grand, Chowchilla, Madera, and Fresno, and in the rural areas of Merced and Madera counties. Because of siting requirements and land availability constraints, agricultural enterprises, farm businesses, and specialized industry establishments including sand/gravel/rock quarries, granaries, and processor facilities may be unable to relocate. Businesses that can move would require more time to relocate.

A sufficient number of comparable replacement dwellings in the affected and neighboring communities meet standards for decency, safety, and sanitary conditions. Finding replacement housing for owner-occupied or tenant-occupied residences would not present unusual problems in most cases. The exceptions would be people displaced from farm-related housing and mobile homes. Displaced farm-related housing would likely be constructed onsite; displaced mobile home occupants may need to relocate to single-family houses because of the limited availability of replacement mobile homes. One option would be to relocate occupants of displaced manufactured homes into slightly larger single-family residences. This would result in a *housing-of-last-resort* entitlement; the replacement housing payment would exceed the entitlement limits for owners and tenants (\$22,500 and \$5,250, respectively). Such payments primarily are a result of the lack of available manufactured homes for replacement housing. Housing-of-last-resort payments and resources for finding suitable single-family residential and multifamily replacement housing are necessary. Funding should account for these larger-than-customary replacement housing payments.

According to demographic data (U.S. Census Bureau 2000 a,b), the percentage of the population over age 65 is 7.7% in the UPRR/SR 99 Alternative study area, 7.5% in the BNSF Alternative study area, and 7.8% in the Hybrid Alternative study area. Among the disabled population, the percentage over age 5 is 23.3% in the UPRR/SR 99 Alternative study area, 22.3% in the BNSF Alternative study area, and 22% in the Hybrid Alternative study area. Displaced populations may need special services to assist them with relocation. According to demographic data, 53% to 60% of people in the study area are Hispanic; therefore, it is reasonable to anticipate a moderate need for Spanish-speaking agents to provide advice to displaced residents, conduct interviews, and facilitate the relocation claims process. There is no indication that the relocations would be unusually slow.

There are Section 8 properties within the acquisitions/displacements study area. The U.S. Department of Housing and Urban Development would likely be involved in Section 8 tenant relocations, if necessary. Relocation surveys would help identify special relocation challenges. Consistent with project milestones, there would be a phased approach to relocating residential and nonresidential occupants. Field offices in several affected communities would assist displaced residents and businesses with relocation.

7.2 Relocation Assistance Program

In some cases, it would be necessary to acquire buildings or other structures within a parcel proposed for acquisition. When buildings or structures are occupied, it would be necessary to relocate the occupants to a replacement site. All acquisition and relocation activities would be conducted in accordance with the Uniform Act. Relocation resources would be available without discrimination. (Authority and FRA 2011a, b, c)

The Uniform Act provides for financial and advisory assistance to help affected residents and businesses relocate. The benefits are available to both owner-occupants and tenants of residential or business properties. In some situations, only personal property must be moved from the real property, and this is also included in the relocation program. As soon as feasible, a general written description of the displacing agency's relocation program (a notice of relocation eligibility) would be provided that explains, at a minimum, the details of eligibility requirements, advisory services, assistance, payments, and the appeal process. The written description would also inform displaced individuals that they would not be required to move without at least a 90-day advance written notice. For displaced residents, this notice cannot be provided until a written offer to acquire the subject property has been presented, and at least one comparable replacement dwelling has been made available. (Authority and FRA 2011a, b, c)

Eligible persons, regardless of race, color, religion, sex, or national origin, are eligible for relocation benefits, which must satisfy the requirements of Title VI of the Civil Right Act of 1964, Title VIII of the Civil Rights Act of 1968, and Executive Order 11063. (Authority and FRA 2011a, b, c)

The following sections provide information from in Chapter 10, Relocation Assistance and Housing Programs, of the *Right-of-Way Manual- Relocation Assistance and Housing Program* (Caltans 2009).

7.3 Residential Occupant Relocation Benefits and Assistance

Displaced property owners, occupants, and tenants must be provided with the following:

- General Information Notice, including the information previously discussed and disclosure that potentially displaced persons must have at least a 90-day advance written notice before the move.
- An initial interview by a relocation agent to clarify replacement needs for a comparable replacement dwelling. The displaced interviewee would be requested to show documentation of the length of occupancy at their current location, their income, information regarding public assistance, and other relevant information.
- Market research relative to available replacement housing in the area, with conditions specified or identified in the initial interview. A final decision regarding the cost of the replacement dwelling, based on available comparable market data, would be provided, and each household would receive a Conditional Entitlement Letter that explains the specific benefits to which they are entitled.
- A 90-day advance written notice informing the person to be displaced of the earliest date by which he or she may be required to move (which cannot be sooner than 90 days from receipt of the notice). The occupant may choose to move before that date but would not be required to move before that date by the displacing agency. The notice would include a list of comparable available replacement sites in the area and explain the vacating policies.
- Residential occupants would regularly receive referrals for available replacement dwellings in the area.
- The assigned relocation agent would explain the payment procedures and provide the claim forms needed to properly relocate, while working with prospective landlords, realtors, brokers, and the client.
- The relocation agent must inspect any replacement sites for the displaced person to check that they pass standards for decency, safety, and sanitary conditions.

A dwelling must comply with the following criteria to meet standards for decency, safety, and sanitary conditions:

- Contain a safe heating system that provides a healthy temperature.
- Be structurally sound, weathertight, clean, maintained, and in overall good condition.
- Contain safe electrical wiring adequate for lighting and other necessary devices.
- Have windows free of barriers that may prevent egress, ingress, or use of the site.
- Have a separate, well-lighted, and ventilated bathroom that contains a bathtub or shower, sink and toilet in working condition, and properly installed water and sewage system.
- Have a living area suitable to occupant needs that accommodates no more than two people per room.

7.3.1 Residential Moving Assistance

Every displaced person is entitled to moving expense payments that are based on his or her current dwelling condition and personal property. Payment can be a *fixed move* or an *actual move* payment. Fixed-move payments are based on the number of rooms containing furniture or other personal property to be moved. The fixed-move payment is based on Federal Highway Administration schedules, which are updated every 3 years and maintained by Caltrans, as shown in Table 7-1.

Table 7-1
 Fixed Move Payment Schedule

Occupant Owns Furniture – Number of Rooms of Furniture (\$)								Occupant Does Not Own Furniture (\$)	
1	2	3	4	5	6	7	8	1	Additional Room
625	800	1,000	1,175	1,425	1,650	1,900	2,150	400	65
Source: Federal Highway Administration (2008).									

Displaced households also would have the option to receive an *actual reasonable moving expense payment*. Under this payment option, they could have a licensed, professional mover perform the move, and the displacing agency would pay for the actual cost of the move up to 50 miles, including reasonable charges for packing, unpacking, insurance, and utility connections. The payment would be disbursed directly to the mover or as reimbursement to the displaced household.

7.3.2 Replacement Housing Payments

Displaced persons are entitled to rental assistance/down payment assistance, as well as last resort housing payments. Such payment is for reasonable and necessary expenses related to replacement housing. The following sections provide specific information regarding these payments.

7.3.2.1 Rental Assistance/Down Payment Assistance

Displaced households who are residential tenants and who have established residency within the study area for a minimum of 90 days prior to the *initiation of negotiations* would be eligible for rental assistance



payments and moving expense payments. Initiation of negotiations is defined as the first written offer to buy the property from which the household would be displaced. Except in the case of last resort housing payments, rental assistance payments would be limited to a maximum of \$5,250 based on the monthly housing need over a 42-month period. In addition, households may opt to apply the payment toward the purchase of a replacement dwelling. Tenants must occupy a replacement dwelling within 1 year of the date on which the household vacates the acquired dwelling.

7.3.2.2 Last Resort Housing Payments for Tenants

When an adequate supply of replacement housing is available but at an increased monthly rental cost, there may be a need to provide last resort housing payments to tenants. Last resort housing payments are authorized by statute if affordable comparable replacement housing cannot be found for the displaced tenant household (i.e., housing is not more than 30% of the household's average monthly income). In this case, payments may exceed the \$5,250 statutory cap for up to 42 months of rental assistance. The supplemental increment beyond \$5,250 may be paid in installments or in a lump sum at the discretion of the agency. If a household chooses to purchase a replacement dwelling rather than rent, the household can request a lump sum payment of the entire balance to which it is entitled.

7.4 Business Occupant Relocation Benefits and Assistance

Each property owner or occupant in a business unit will be required to provide the following:

- General information notice, including the information previously noted.
- An initial interview by a relocation agent to clarify replacement needs for a comparable replacement unit. The interviewee would be requested to provide documentation concerning current site use, existing lease agreements, and business ownership.
- A 90-day notice to vacate that includes a list of referrals of available replacement sites in the area and explanation of the vacating policies. It is important to schedule the project to not displace businesses with less than a 90-day notice to relocate.
- Occupants would regularly receive current referrals for available replacement sites in the area.
- The assigned relocation agent would explain the payment procedures and claim forms needed to relocate properly, while working with prospective lessors, brokers, and the client.
- Re-establishment expenses for a business would not exceed \$10,000 for the cost of repair or improvements to the replacement site, including the cost to replace business signs, advertisement of new location, permits, licenses, or increased operating costs for the first 2 years.
- Advisory assistance to minimize potential hardships that are a direct result of the relocation; assistance would be in the form of counseling, additional sources of benefits and housing, disaster loans, and other helpful programs.

7.4.1 Business Moving Assistance

According to federal regulations, "Any business, farm operation, or non-profit organization (nonresidential) which qualifies as a displacee, is entitled to relocation benefits if the acquisition of the property in whole or part causes a need to relocate the operation and/or personality to another location" [49 CFR 24.2 (a)(9)]. Relocation benefits available to an eligible displaced business include advisory assistance, actual moving and related expenses, and re-establishment payments. A displaced person who qualifies for relocation benefits would be entitled to payment for the cost of moving and any re-establishment fees acquired through the displacement process.

The relocation program provides support to affected business owners with payments and advisory services and assistance. The services offered conform with the requirements outlined by the Uniform Act, the standards and provisions set forth in Government Code Section 7260 et seq., the Guidelines, California Health and Safety Code Section 33410 et seq., if applicable; and other applicable regulations and requirements.

Throughout the business relocation process, each business owner would receive equal treatment without regard to race, nationality, color, religion, national origin, sex, marital status, family status, or disability. These rights are protected by the Federal Fair Housing Amendments Act, the Americans with Disabilities Act, Title VI of the Civil Rights Act of 1964, Title VIII of the Civil Rights Act of 1968, and the Uniform Act.

7.4.2 Loss of Business Good Will

Affected businesses may be eligible or entitled to receive loss-of-business goodwill payments because of project activities. Further issues would be addressed for each individual business by the relocation agent.

7.4.3 In Lieu Option

Business owners who choose the in lieu option accept a payment instead of relocation benefits, including moving expenses. The in lieu option is based on the average net income at the affected location for the last 2 tax years, which is not to be less than \$1,000 and not to exceed \$20,000. Also, the business must (1) not have more than three other entities under the same ownership that are affected by the project, (2) be solely renting to others, and (3) have at least \$1,000 in gross income for the last 2 taxable years.

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9.0 Preparer Qualifications

Name	Education	Experience
Mark Gander, AICP AECOM	M.A. Urban Planning, University of California, Los Angeles; B.A. Politics and Economics, University of California, Santa Cruz	24 years
Lyna Black, Environmental Planner CH2M HILL	M.S. Geosciences, California State University, Chico; B.S. Biological Sciences, California State University, Chico	17 years
Colleen Roberts, Environmental Planner CH2M HILL	B.A., Art History, Yale University	12 years