

3.13 Station Planning, Land Use, and Development

Since publication of the Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS), the following substantive changes have been made to this section:

- Section 3.13.2.3, Regional and Local Plans and Policies, was updated to include citations for the *Plan Bay Area* and the *San Joaquin Valley Blueprint Planning Process Summary Report*.
- A section was added to Section 3.13.2.1, Federal, regarding the Federal Railroad Administration (FRA) Procedures for Considering Environmental Impacts. Footnotes were added regarding FRA's Environmental Procedures and the updated Council on Environmental Quality (CEQ) regulations issued after release of the Draft EIR/EIS.
- Section 3.13.4.5, Method for Determining Significance under CEQA, clarified the location in this EIR/EIS of analysis of environmental impacts that would result from a conflict with plans, policies, or regulations adopted for the purpose of mitigating or avoiding an environmental impact.
- Under the Monterey Corridor Subsection heading of Section 3.13.5.1, Existing Land Uses, the description of the project alternatives' locations relative to the Caltrain and Union Pacific Railroad (UPRR) right-of-way was corrected.
- Figure 3.13-1 was updated to reflect recent high-density residential developments at 808 W. San Carlos Street and 333 Sunol Street, a greater extent of park land at Del Monte Park, and commercial uses on the east side of State Route (SR) 87.
- Under the Morgan Hill and Gilroy Subsection heading, Alternative 3, of Section 3.13.5.1, Existing Land Uses, the text was clarified to reference the East Gilroy station.
- The discussion of the Google project, which is also referred to as the Downtown West Mixed-Use Plan, was expanded in Section 3.13.5.2, Planned Development.
- Under the Alternatives 1 and 2 subsection of the Morgan Hill and Gilroy Subsection subheading of Section 3.13.5.2, the word "unzoned" was revised to "unincorporated," and text was added to clarify that planning associated with the Downtown Gilroy Station Area Plan began in 2015 and remains under development.
- A table note of Table 3.13-3 was revised to clarify the date that information related to the Google campus was available.
- Reference to Mitigation Measure LU-MM#1 was removed, as this mitigation measure was already included as an impact avoidance and minimization feature (IAMF). This change was made to Section 3.13.7, Mitigation Measures, and in Section 3.13.9, CEQA Significance Conclusions, in the Impact LU#4 row of Table 3.13-9 and under the Impact LU#4 heading.
- Under Impact LU#1, "Granite Rock Recycling Service" was corrected to "Graniterock."
- Additional discussion of permanent roadway closures and modifications within the Morgan Hill and Gilroy Subsection was added to Impact LU#3.
- A statement referencing LU-IAMF#1 was removed from the discussion of the San Jose Diridon Station Approach Subsection under Impact LU#4. A statement referencing a cooperative agreement between the City of San Jose and the California High-Speed Rail Authority (Authority) was also clarified in Impact LU#4. In addition, the CEQA conclusion for Alternative 3 was modified to indicate that there is no feasible mitigation for this significant impact.
- In Table 3.13-9, Impact LU#4 was revised to clarify that, for Alternative 3, land use patterns would be substantially altered. The Mitigation Measures column for this impact was revised to state that, for Alternatives 1, 2, and 4, no mitigation measures are required, and, for Alternative 3, no mitigation measures have been identified.

- Impact LU#5 was modified to address intermittent noise and to remove a statement about new noise sources not being as noticeable in rural portions of the alignment relative to areas along existing transportation corridors. In addition, the discussion of intermittent noise in the California Environmental Quality Act (CEQA) conclusion for Impact LU#5 was expanded.
- Impact LU#7 was revised to clarify the status of station planning efforts.
- Analysis about the Diridon design variant (DDV) and tunnel design variant (TDV), which was included in Section 3.20 in the Draft EIR/EIS, has been incorporated into this Final EIR/EIS in Section 3.13.6.2, Alteration of Land Use Patterns (in the introduction to the Construction Impacts subsection), and under Impact LU#2, Impact LU#5, and Impact LU#6. In each case, the revised text states that the findings of the analysis with the DDV or TDV did not change any findings compared to the alternatives without the design variants.
- Where appropriate, the verb “would,” when used specifically to describe IAMFs or mitigation measures, as well as their directly related activities, was changed to “will,” indicating their integration into project design.

3.13.1 Introduction

This section describes land use patterns—both existing and planned—as well as their character and intensity in the land use resource study area (RSA). Critical land use issues along the San Jose to Central Valley Wye Project Extent (project or project extent) of the California High-Speed Rail (HSR) System include the lack of land available for development in the northern portion of the project extent in San Jose, the limited right-of-way in San Jose and Gilroy in which to construct and operate the project, the scale of the project and its impacts on land uses in the communities along the project extent, the conversion of agricultural land and introduction of incompatible uses that could alter land use patterns, and the proximity of sensitive land uses (e.g., residential, parks, schools, hospitals) in the more urban sections of the project extent. By following existing transportation corridors as much as possible, the project design would reduce land use conflicts. In some locations, the project would incorporate an elevated guideway into its design, reducing right-of-way impacts and minimizing traffic impacts that could affect land use.

This analysis considers short- and long-term conflicts with adjacent land uses, the potential alteration of land use patterns in the RSA through direct conversion of land uses or the introduction of incompatible uses, and the inducement of substantial population growth beyond planned levels. Land uses along the existing Caltrain corridor between San Jose and downtown Gilroy, as well as areas currently undeveloped or in agricultural production, would experience long-term land use changes from the introduction of HSR and its associated infrastructure. Overall land use patterns could change as a result of conversion of land uses. In some areas, HSR would introduce a transportation-related use incompatible with existing land uses, which could alter land use patterns. Development of the Gilroy maintenance of way facility (MOWF) and the maintenance of way siding (MOWS) facility near Turner Island Road could also result in a long-term change to existing and planned land uses. Short-term land use changes would be associated with construction staging areas at the HSR stations and along the rail alignment that store the equipment and materials used to construct the project as well as the introduction of temporary construction access roads and roadway closures.

HSR stations can become a focal point of economic activity as public and private investment seeks to capture the travel-related benefits of increased intercity accessibility. Beneficial effects are anticipated in the area surrounding the San Jose Diridon and Downtown Gilroy stations because HSR service would attract a new market of intercity travelers and increase statewide accessibility to jobs, goods, and services. HSR station improvements would create new passenger throughput capacity, increase capacity for future travel demand, and expand travel capacity for future residential and employment growth.

What is Transit-Oriented Development?

Transit-oriented development (TOD) is a pattern of dense, diverse, pedestrian-friendly land uses near transit nodes that, under the right conditions, translates into higher transit patronage (Transit Cooperative Research Program 2004).

The following appendices in Volume 2 of this Final EIR/EIS provide additional details on station planning, land use, and development:

- Appendix 2-D, Applicable Design Standards, describes the relevant design standards for the project.
- Appendix 2-E, Project Impact Avoidance and Minimization Features, provides the list of all IAMFs incorporated into the project.
- Appendix 2-J, Regional and Local Plans and Policies, provides a list by resource of all applicable regional and local plans and policies related to station planning, land use, and development.
- Appendix 2-K, Policy Consistency Analysis, provides a summary by resource of project inconsistencies and reconciliations with local plans and policies.
- Appendix 3.13-A, General Plan Land Use Maps—San Jose to Central Valley Wye Project Extent RSA, provides maps showing general plan land use designations in the RSA for all subsections.

As a resource topic, station planning, land use, and development encompasses a range of factors that contribute to an area’s land use character. The following eight Final EIR/EIS resource sections provide additional information related to station planning, land use, and development:

- Section 3.2, Transportation, evaluates changes in circulation and access resulting from construction and operation of the project.
- Section 3.3, Air Quality and Greenhouse Gases, evaluates the project’s contribution to air quality and greenhouse gas emissions resulting from construction and operation.
- Section 3.4, Noise and Vibration, evaluates the project’s contribution to temporary and permanent increased levels of ambient noise and vibration.
- Section 3.12, Socioeconomics and Communities, evaluates changes to demographics, property, economic factors, and affected communities and neighborhoods as a result of land conversions, including the division and disruption of communities and the displacement of residences and businesses.
- Section 3.14, Agricultural Farmland, evaluates the conversion of agricultural lands to transportation-related uses that would result from construction of the project.
- Section 3.15, Parks, Recreation, and Open Space, evaluates project-related impacts on parks and recreation areas.
- Section 3.16, Aesthetics and Visual Quality, evaluates changes in the visual environment as a result of construction and operation of the project.
- Section 3.18, Regional Growth, evaluates impacts on regional growth, employment during construction and operation, and the potential for the project to induce growth.

3.13.2 Laws, Regulations, and Orders

Federal and state laws, regulations, and orders applicable to station planning, land use, and development affected by the project are presented below. The Authority would implement the entire HSR project, including the project extent, in compliance with all federal and state regulations. Regional and local plans and policies relevant to station planning, land use, and development considered in the preparation of this analysis are provided in Appendix 2-J.

3.13.2.1 Federal

Federal Railroad Administration, Procedures for Considering Environmental Impacts (64 Fed. Reg. 28545)

On May 26, 1999, FRA released *Procedures for Considering Environmental Impacts* (FRA 1999). These FRA procedures supplement the Council on Environmental Quality Regulations (40 C.F.R.

Part 1500 et seq.) and describe the FRA's process for assessing the environmental impacts of actions and legislation proposed by the agency and for the preparation of associated documents (42 U.S. Code 4321 et seq.).^{1,2} The FRA *Procedures for Considering Environmental Impacts* states that “the EIS should identify any significant changes likely to occur in the natural environment and in the developed environment. The EIS should also discuss the consideration given to design quality, art, and architecture in project planning and development as required by U.S. Department of Transportation Order 5610.4.” These FRA procedures state that an EIS should consider possible impacts on land use and development.

3.13.2.2 State

Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375, Chapter 728)

This statute requires regional planning agencies to include a sustainable communities strategy (SCS) or alternative planning strategy in the next version of their regional transportation plans (RTP). The SCS coordinates land use, housing needs, and transportation/transit planning to meet the regional target for the reduction of greenhouse gas emissions from automobiles and light trucks established by the California Air Resources Board.

Coordination is enforced by requiring transportation projects identified in the RTP to comply with the SCS to be eligible to receive state and federal funding through the regional housing needs allocation. The requirements of Senate Bill 375 are reflected in the 2014 RTPs adopted by the (Santa Clara) Valley Transportation Authority (VTA), the Council of San Benito County Governments, and the Merced County Association of Governments.

California State Planning and Zoning Law (California Government Code §§ 65000–66037)

This law delegates most of the state's local land use and development decisions to cities and counties and describes laws pertaining to the regulation of land uses by local governments, including the general plan requirement, specific plans, subdivisions, and zoning.

3.13.2.3 Regional and Local Plans and Policies

Regional and local plans relevant to station planning, land use, and development included *Plan Bay Area* (Association of Bay Area Governments and Metropolitan Transportation Commission 2017); the *San Joaquin Valley Blueprint Planning Process Summary Report* (San Joaquin Valley Regional Policy Council 2010); Santa Clara, San Benito, and Merced County general plans; and the general plans, zoning codes, and specific plans of the Cities of Santa Clara, San Jose, Morgan Hill, and Gilroy. Appendix 2-J lists the regional and local plans and describes the policies adopted by the cities and counties in the RSA that were identified and considered in the preparation of this analysis.

3.13.3 Consistency with Plans and Laws

The CEQA and CEQ National Environmental Policy Act (NEPA) regulations require a discussion of inconsistencies or conflicts between a proposed undertaking and federal, state, regional, or local plans and laws. Accordingly, this Final EIR/EIS describes the inconsistency of the project alternatives with federal, state, regional, and local plans and laws to provide planning context.

The state laws and implementing regulations listed in Section 3.13.2.2 that regulate land use and development and are applicable to this Final EIR/EIS are the Sustainable Communities and Climate

¹ While this EIR/EIS was being prepared, FRA adopted new NEPA compliance regulations (23 C.F.R. 771). Those regulations only apply to actions initiated after November 28, 2018. See 23 C.F.R. 771.109(a)(4). Because this EIR/EIS was initiated prior to that date, it remains subject to FRA's Environmental Procedures rather than the Part 771 regulations.

² The Council on Environmental Quality issued new regulations on July 14, 2020, effective September 14, 2020, updating the NEPA implementing procedures at 40 C.F.R. Parts 1500-1508. However, this project initiated NEPA before the effective date and is not subject to the new regulations, relying on the 1978 regulations as they existed prior to September 14, 2020. All subsequent citations to Council on Environmental Quality regulations in this environmental document refer to the 1978 regulations, pursuant to 40 C.F.R. 1506.13 (2020) and the preamble at 85 Fed. Reg. 43340.

Protection Act of 2008 and the California State Planning and Zoning Law. Impacts on agricultural lands are described in Section 3.14, Agricultural Farmland. As described in Section 3.14, federal and state acts that deter the development of agricultural lands and open spaces include the federal Farmland Protection Policy Act and the California Land Conservation Act.

The Authority, as the lead agency proposing to construct and operate the HSR system, is required to comply with all federal and state laws and regulations and secure all applicable federal and state permits prior to initiating construction on the selected alternative.

The Authority is not required to comply with local land use and zoning regulations; however, it has endeavored to design and construct the HSR project so that it is compatible with land use and zoning regulations. For example, the project alternatives incorporate IAMFs to avoid or minimize impacts on agricultural land and address multimodal connectivity. A total of 17 plans and 87 policies are listed in Appendix 2-J. The project alternatives are consistent with 81 policies and ordinances and inconsistent with 6 policies and ordinances set forth in the following regional and local plans and laws:

- *Merced County Year 2030 General Plan* (County of Merced 2013)—Policy LU-2.3. Construction of the project would introduce transportation-related use into Agricultural and Foothill Pasture areas.
- *Santa Clara County General Plan* (County of Santa Clara 1994)—Policies R-LU 2, R-LU 3, R-LU 11. Construction of the project would remove unincorporated rural farmlands outside of Urban Service areas that are designated as a type of Resource Conservation Area and would introduce a non-allowable use into agricultural zones.
- *Morgan Hill 2035 General Plan* (City of Morgan Hill 2016)—Policy NRE-1.4. Construction of the project would remove existing open space areas.
- *San Benito County 2035 General Plan* (County of San Benito 2015)—Policy NCR-1.1. Construction of the project would reduce the amount of open space land.

Appendix 2-K further details the project’s inconsistency with these local and regional land use policies. It also includes a discussion of approaches the Authority has committed to take to reconcile any inconsistency as well as the rationale for carrying forth the project where it remains inconsistent with the policy despite these approaches. Although the project alternatives would be inconsistent with these specific provisions, they would be consistent with the overall land use and development objectives of these ordinances and plan policies.

3.13.4 Methods for Evaluating Impacts

The evaluation of impacts on land use and development is a requirement of NEPA and CEQA. This section defines the RSA and describes the methods used to analyze the existing and planned land uses along the project extent and around the HSR station sites and determine the construction and operations impacts on these land uses. As summarized in Section 3.13.1, Introduction, other resource sections in this Final EIR/EIS provide additional information related to station planning, land use, and development.

3.13.4.1 Definition of Resource Study Area

As explained in Section 3.1, the RSA is the geographic boundary in which the environmental investigations specific to each resource topic were conducted. The RSA for impacts on land use and development encompasses the areas directly or indirectly affected by construction and operation of the project. Direct short-term land use impacts would result from the construction laydown areas used to store equipment and materials as well as from temporary road closures. Direct long-term impacts reflect a permanent conversion of lands to transportation-related uses, such as development of the Gilroy MOWF.

Indirect long-term impacts could include permanent changes in land use development patterns near HSR stations that are incompatible with current uses. Indirect short-term construction impacts related to noise, dust, transportation, and aesthetics would reflect a change in patterns of use

during construction. The RSA for analyzing direct and indirect impacts (construction-related noise and vibration, transportation, and aesthetics and visual quality impacts; operational noise and light and glare impacts) is the area within 0.5 mile of the project footprint. It is assumed that direct impacts would be confined to the project footprint, while indirect impacts could extend to the limits of the RSA. Table 3.13-1 shows the RSA for station planning, land use, and development.

Table 3.13-1 Definition of Station Planning, Land Use, and Development Resource Study Area

Type	Boundary Definition
Direct and indirect impacts	Areas within 0.5 mile of the project footprint ¹

Source: Authority and FRA 2017

¹ The project footprint includes all areas required to construct, operate, and maintain all permanent HSR facilities, including permanent right-of-way, permanent utility and access easements, and temporary construction easements.

3.13.4.2 Impact Avoidance and Minimization Features

IAMFs are project features that are considered to be part of the project and included, as applicable, in each of the alternatives for purposes of the environmental impact analysis. The full text of the IAMFs that are applicable to the project is provided in Appendix 2-E. The following IAMFs are applicable to the station planning, land use, and development analysis:

- LU-IAMF#1: HSR Station Area Development: General Principles and Guidelines
- LU-IAMF#2: Station Area Planning and Local Agency Coordination
- LU-IAMF#3: Restoration of Land Used Temporarily During Construction
- AG-IAMF#1: Restoration of Important Farmland Used for Temporary Staging Areas
- AG-IAMF#2: Permit Assistance
- AG-IAMF#3: Farmland Consolidation Program
- AG-IAMF#4: Notification to Agricultural Property Owners
- AG-IAMF#5: Temporary Livestock and Equipment Crossings
- AG-IAMF#6: Equipment Crossings

This environmental impact analysis considers these IAMFs as part of the project design. In Section 3.13.6, Environmental Consequences, each impact narrative describes how these project features are applicable and, where appropriate, effective at avoiding or minimizing potential impacts to less than significant under CEQA.

3.13.4.3 Methods for Impact Analysis

This section describes the sources and methods the Authority used to analyze potential impacts on land use and development from implementing the project alternatives. These methods apply to both the NEPA and CEQA analyses unless otherwise indicated. Refer to Section 3.1.6.4, Methods for Evaluating Impacts, for a description of the general framework for evaluating impacts under NEPA and CEQA. Inconsistencies with regional and local plans and policies regulating land use and development (discussed further in Appendix 2-K) were also considered in this analysis.

Data collected from local municipalities, such as local and regional land use plans, transportation plans, subarea plans, and other relevant planning documents, established the planned development along the project extent and around HSR station sites. General plan land use maps generally illustrate the overall land use patterns envisioned by the governing city or county and can be indicative of existing land uses. General plan land use maps illustrating the land use patterns along the project extent and around HSR station sites are included in Appendix 3.13-A for reference. The discussion of land uses in the RSAs was informed through community engagement and coordination with the local governments, which included engagement with local agencies and the public to identify key land use issues related to the design and alignment of the project.

The proposed station sites have been planned in collaboration with the cities, along with the public, to identify key HSR site planning concepts regarding station location, land area, access, connectivity, circulation, and parking. For a review of outreach activities, such as technical working group meetings with agency, city, and county staff members; meetings with local stakeholder groups; and community workshops, refer to Chapter 9, Public and Agency Involvement.

For the purposes of this analysis, existing land uses in the RSAs were determined by reviewing the general plan land use maps and corroborating with aerial imagery and geographic information system (GIS) data. Analysts developed dominant land use categories from the GIS data to standardize the classification of land uses among the governing jurisdictions. Planned land uses were derived from zoning maps of the jurisdictions, which specify development standards such as height and bulk limits, setback, and allowed and prohibited uses for each identified zone. Zoning is consistent with the general plan land use designation for specific parcels and controls and most closely represents the planned development that is expected to occur in the RSA.

The impact analysis considers whether the proposed project would (1) disrupt existing or planned development or cause changes in travel patterns and accessibility or (2) substantially alter land use patterns through conversion of agricultural land and/or introduction of incompatible uses. For example, the analysis considers whether the HSR stations in San Jose and Gilroy would change the development trends or character of the station area and whether the project would introduce incompatible uses that would alter land use patterns. GIS tools and aerial photographs facilitated the assessment of land use compatibility and helped identify sensitive land uses (e.g., residential areas, schools). Analysts also used GIS tools to quantify the conversion of existing land uses to a transportation-related use that would result from constructing the project as well as property acquisitions required to construct the project.

3.13.4.4 Method for Evaluating Impacts under NEPA

CEQ NEPA regulations (40 Code of Federal Regulations [C.F.R.] Parts 1500–1508) provide the basis for evaluating project effects (as described in Section 3.1.6.4). As described in Section 1508.27 of these regulations, the criteria of context and intensity are considered together when determining the severity of the change introduced by a project.

- **Context**—For this analysis, the context includes adopted local plans, policies, and regulations; existing and planned land use types, patterns, and densities within the RSA for direct and indirect impacts; and the relative sensitivity of surrounding land uses to construction or operational land use changes.
- **Intensity**—For this analysis, intensity was determined by assessing the degree to which the project would result in changes to land uses in the RSA, including direct and indirect changes to the type, pattern, or density of land uses; incompatibility with regional and local land use plans, including the disruption of existing or planned development; and the duration of the effect.

3.13.4.5 Method for Determining Significance under CEQA

CEQA requires an EIR to identify the significant environmental impacts of a project (CEQA Guidelines § 15126). One of the primary differences between NEPA and CEQA is that CEQA requires a threshold-based impact analysis. Significant impacts are determined by evaluating whether project impacts would exceed the significance thresholds established for the resource (as presented in Section 3.1.6.4, Methods for Evaluating Impacts). For this analysis, the project would result in a significant impact on station planning, land use, and development if it would:

- Cause a substantial change in land use patterns by introducing incompatible land uses
- Induce substantial population growth in an area beyond planned levels, either directly or indirectly

Physical division of an established community is discussed in Section 3.12. In addition, Appendix G of the State CEQA Guidelines recommends an evaluation of whether the project would “cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.” Even when a project is

inconsistent with a plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, CEQA is concerned with the physical environmental impacts that would result from the inconsistency and not the inconsistency itself. Whether the project would conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect is discussed in each resource section of Chapter 3, Affected Environment, Environmental Consequences, and Mitigation Measures, of this EIR/EIS. Unless otherwise stated, environmental impacts that would result from a conflict with plans, policies, or regulations adopted for the purpose of mitigating or avoiding an environmental impact are also analyzed in the other resource sections of this EIR/EIS.

3.13.5 Affected Environment

This section describes existing land uses and planned development (in accordance with zoning) in the RSA from north to south by subsection. This information provides the context for the environmental analysis and evaluation of impacts.

3.13.5.1 Existing Land Uses

San Jose Diridon Station Approach Subsection

The project extent begins at Scott Boulevard in the city of Santa Clara and travels south to San Jose Diridon Station in an existing historical rail corridor, largely within the Caltrain alignment. The San Jose Diridon Station was opened in 1935; the Caltrain stations in south San Jose, Morgan Hill, and San Martin were constructed in the 1990s. The Southern Pacific Railroad, which used the corridor historically, arrived in Gilroy in 1869. Immediately adjacent to the station areas in Santa Clara, San Jose, and Gilroy, development was influenced by activities associated with the railroad stations, including the creation of active downtown areas and employment hubs.

The RSA for this subsection is the same for all four project alternatives. At the northern end of the subsection, between Scott Boulevard and the San Jose Diridon Station, land uses within the RSA include areas of commercial and industrial uses on the northeast side of the existing tracks and residential neighborhoods and commercial areas southwest of the alignment. Immediately north of the San Jose Diridon Station, land uses are generally a mix of large industrial and civic uses such as the SAP Center at San Jose and Caltrain's 20-acre Central Equipment and Maintenance Facility, interspersed with lower-density residential uses. Northeast of the alignment is Norman Y. Mineta San Jose International Airport.

Between the San Jose Diridon and Tamien Stations, single-family and multifamily residential uses predominate. The guideway would pass between residential neighborhoods and vacant land along the Guadalupe River, then cross over the river on an elevated structure. At that point, the alignment would continue through residential neighborhoods. At the existing Tamien Caltrain station, multifamily residential uses are located east of the alignment, and SR 87 is located west of the alignment, with commercial uses adjacent to the tracks.

San Jose Diridon Station Area

The existing San Jose Diridon Station, a multimodal transit facility, is located in an urbanized area on the western edge of downtown San Jose. The station connects to VTA bus and light-rail service; Altamont Corridor Express, Amtrak, and Caltrain's Capitol Corridor commuter rail service; airports; and highways. Large surface parking lots surround both the SAP Center at San Jose and the San Jose Diridon Station.

Diverse land uses—ranging from single- and multifamily residential units to service-commercial, office, institutional, parks, and industrial uses—surround the San Jose Diridon Station (Figure 3.13-1). Transportation and public/quasi-public-related uses as well as surface parking lots also dominate the area. In addition to the San Jose Diridon Station, prominent land uses in the area include Guadalupe River Park, Cahill Park, the Children's Discovery Museum, and the SAP Center at San Jose sports arena with its associated parking. Commercial, industrial, and residential uses are located side by side, and older residential and industrial buildings are intermixed with commercial uses and higher density housing. In general, mid- and larger-scale

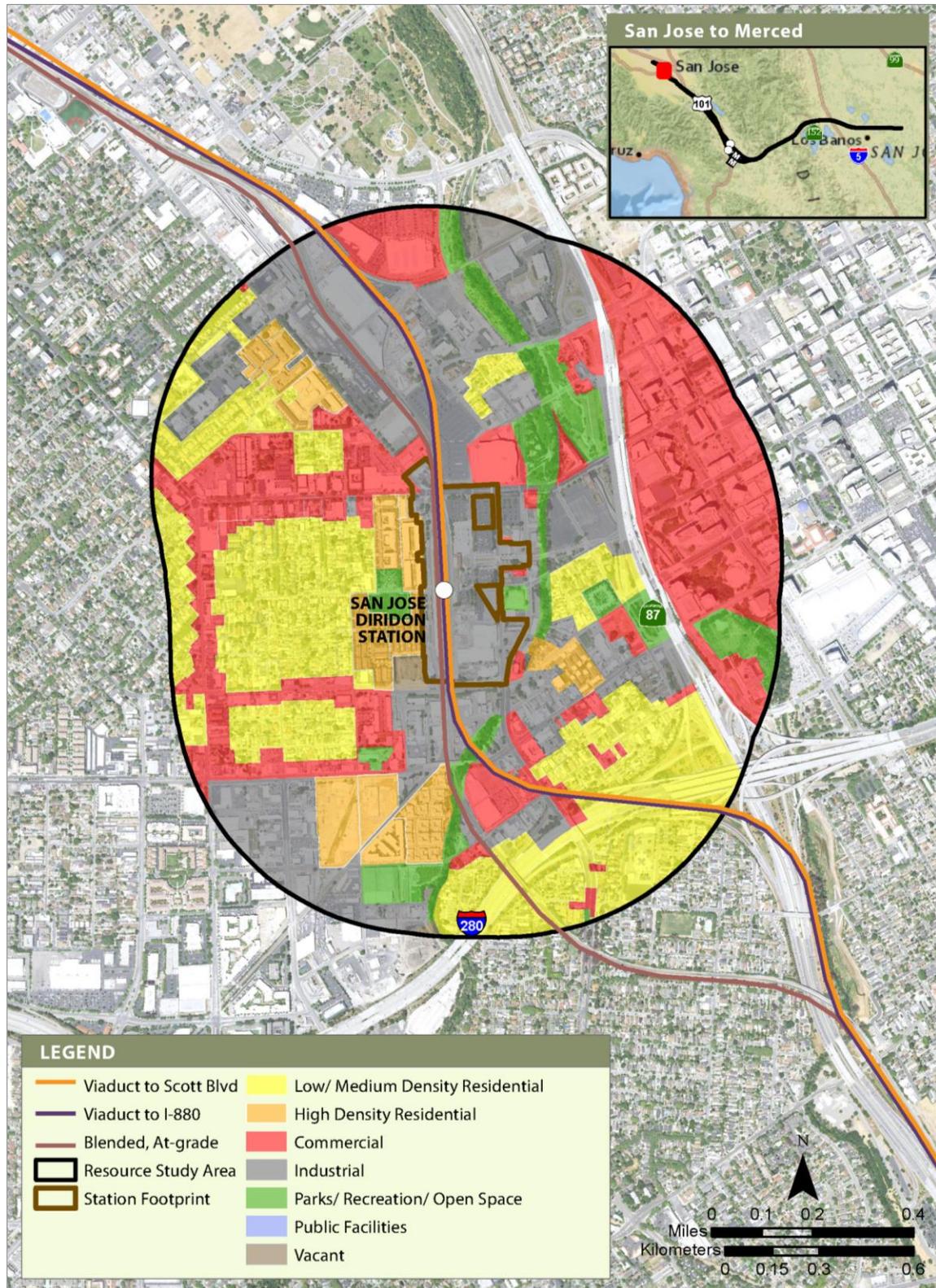
industrial and commercial uses are located to the north along Julian Street and Stockton Avenue north to Coleman Avenue, and smaller-scale residential and nonresidential uses are located to the south around the San Carlos Street area. Single- and multifamily residential neighborhoods flank the existing San Jose Diridon Station to the west with industrial and park uses to the east.

Monterey Corridor Subsection

The RSA for this subsection is similar for all four project alternatives. Alternatives 1, 2, and 3 would be on the east side of the UPRR alignment within the median of Monterey Road, and Alternative 4 would be located within the Caltrain and UPRR right-of-way. This would result in an approximately 200-foot shift in the RSA to the west for Alternative 4 and to the east for Alternatives 1, 2, and 3.

At West Alma Avenue, near Tamien Station, the guideway would continue through land uses that transition from urban to suburban development, following SR 87 through industrial land uses on the east side of the corridor and multifamily and small-lot single-family homes west of SR 87. Industrial and light industrial uses and mobile-home parks are located on both sides of SR 87. The project alignment would continue through the Communications Hill area where single- and multifamily housing developments and manufactured home developments are separated by large areas of open space.

As the alignment approaches Monterey Road, it would pass through industrial areas before entering an area of single- and multifamily land uses on the east side of Monterey Road and a drive-in movie theater to the west. Continuing along Monterey Road, south of Capitol Expressway, the alignment would enter an area characterized by suburban uses; nearly all the development in this area is either single- or multifamily residential, with scattered commercial development and one isolated section of industrial land use.



Source: City of San Jose 2011, 2014

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Figure 3.13-1 Existing Land Uses – San Jose Diridon Station Area

Land uses along the corridor south of Branham Lane to Blossom Hill Road are also suburban in character and include large mobile-home parks as well as single- and multifamily residential developments. The Dolce Hayes Mansion resort, a large resort hotel with expansive open space grounds, lies within a residential area west of the Monterey Corridor Subsection near Edenvale Avenue. South of the intersection of Blossom Hill Road and Monterey Road are commercial and industrial land uses that serve nearby U.S. Highway (US) 101 as well as single-family neighborhoods to the east. New multifamily residential neighborhoods are in development south of the existing industrial area and west of the corridor between Monterey Road and SR 85. Single-family residences and a mobile-home park are located between Blossom Hill Road and SR 85, west of the corridor along Monterey Road. A mix of hotel and office uses are west of the proposed alignment and southeast of the developing neighborhoods, along Monterey Road, with single-family residential uses immediately northwest of Bernal Way.

Morgan Hill and Gilroy Subsection

The RSA for this subsection follows an alignment through downtown Morgan Hill and an alignment that bypasses Morgan Hill (see Chapter 2, Figure 2-46). All of the project alternatives would travel on the same alignment between Bernal Way and a point just north of Barnhart Avenue where the Alternative 2 and Alternative 4 alignments would continue through downtown Morgan Hill, while the Alternative 1 and Alternative 3 alignments would bypass downtown Morgan Hill to the east and then continue south parallel to US 101. South of Morgan Hill, Alternative 1 would rejoin the Alternative 2 and Alternative 4 alignment and continue to downtown Gilroy, while Alternative 3 would diverge east and continue through east Gilroy. At Lovers Lane, all project alternatives would rejoin and follow the same alignment to cross SR 152 traveling northeast.

Alternatives 1, 2, and 4

Just southeast of Bernal Way, the RSA includes single-family residential neighborhoods. Southeast of these developments, the existing land use transitions from single-family residential to open space near the intersection of Monterey Road and Metcalf Road. Beyond the electrical facilities and the area north of Morgan Hill, land uses along the corridor are predominantly rangeland and agricultural, with scattered rural residential uses. However, there is a cluster of commercial uses on both sides of Monterey Road between Blanchard Road and Emado Avenue. Land uses south of Emado Avenue are primarily vacant until Bailey Avenue. South of Bailey Avenue, Alternatives 1, 2, and 4 would travel past the Charter School of Morgan Hill, the community of Coyote southwest of the Coyote Creek Golf Club, and a recreational vehicle park. Where the alignment would pass through northern Morgan Hill, land uses consist predominantly of single- and multifamily residential areas. At Ogier Avenue, Alternatives 2 and 4 would continue south through downtown Morgan Hill, while Alternative 1 would bypass downtown Morgan Hill just north of Barnhart Avenue.

Just north of Barnhart Avenue, Alternative 1 would bypass downtown Morgan Hill to the east on viaduct through agricultural land and scattered rural residential uses and then travel south along the west side of US 101, beginning at Burnett Avenue. South of Burnett Avenue, land uses transition to predominantly commercial/industrial. South of Half Road, there are suburban residential uses on the west side of US 101. South of Diana Avenue, land uses again transition to commercial/industrial and vacant; a single-family residential neighborhood is south of San Pedro Avenue on the west side of US 101. South of Barrett Avenue, land uses are predominantly vacant, with sparse rural residential uses south until Alternative 1 would rejoin the Alternative 2 and Alternative 4 alignments at Atherton Way. Alternative 1 would remain on viaduct from Atherton Way to the Downtown Gilroy Station.

Beginning just north of Barnhart Avenue, Alternative 2 would travel on embankment to downtown Gilroy, while Alternative 4 would continue at grade in blended service. Land uses south of Barnhart Avenue consist predominantly of vacant and agricultural land, then transition to scattered commercial and industrial uses on the west side of Monterey Road. Beginning at Madrone Avenue, land uses include industrial and commercial along both sides of Monterey Road. Suburban residential uses begin at approximately Tilton Avenue, on the east side of Monterey Road, and extend south to downtown Gilroy; commercial uses are present along

Monterey Road on the east side of the alignment. Alternative 2 would remain on embankment from Atherton Way to the Downtown Gilroy Station, and Alternative 4 would remain at grade in blended service to downtown Gilroy.

Continuing south from Atherton Way, Alternatives 1, 2, and 4 would pass through areas of commercial and industrial land uses as well as areas of vacant land, emerging into rural Santa Clara County. Farther south, through the unincorporated community of San Martin, land uses along the Monterey Road corridor are predominantly single-family residential, with some commercial and industrial uses. Between San Martin and Gilroy, parks, recreation, and open space as well as agriculture remain the predominant land uses, with some scattered areas of industrial and rural residential uses. Nearer Gilroy, land use becomes denser, with single-family residential, commercial, and light industrial uses. In downtown Gilroy, there are dense urban commercial and residential uses on both sides of Monterey Road. Gilroy Prep School is south of Leavesley Road, on the east side of the proposed alignment of Alternatives 1, 2, and 4.

Downtown Gilroy Station Area

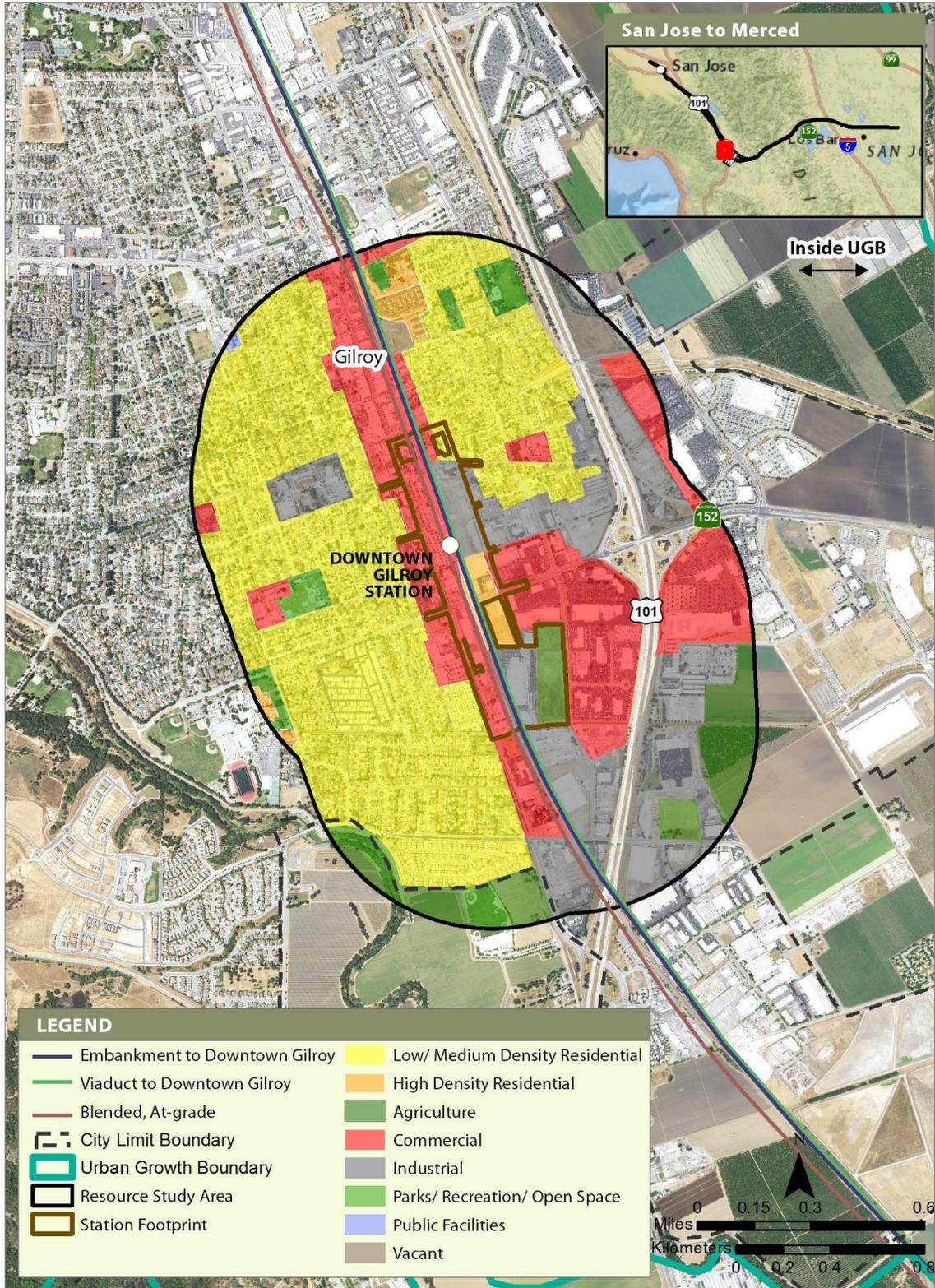
Surrounding land uses in the downtown Gilroy area range from single- and multifamily residential to commercial and industrial (Figure 3.13-2). The existing Caltrain station currently serves as the Gilroy Transit Center, a regional intermodal transit center that connects to Caltrain's Capitol Corridor commuter rail service, VTA bus service, Amtrak's Monterey-San Jose Express Amtrak Thruway Bus, Greyhound bus service, and San Benito County Express bus service. Commercial and office uses, including restaurants, retail, and other commercial services, are located immediately across Monterey Road and the proposed station site. Commercial, industrial, and single-family residential uses are located north of the proposed site. Industrial use is dominant southeast of the existing Caltrain station along East 10th Street. Beyond the commercial and industrial land uses surrounding the station, single- and multifamily residential uses dominate the landscape along Monterey Road and West 10th Street.

South Gilroy MOWF

Under Alternatives 1, 2, and 4, land uses surrounding the proposed MOWF site in south Gilroy are composed primarily of agricultural operations as well as open space. There is an industrial area approximately 0.25 mile southwest of the proposed MOWF site for Alternatives 1 and 2, on the south side of Bolsa Road. Similar land uses are adjacent to the proposed MOWF site for Alternative 4, because it would be in the same general area as the MOWF for Alternatives 1 and 2. There are scattered rural residences east of the South Gilroy MOWF sites. Figure 3.13-3a illustrates the existing land uses around the proposed South Gilroy MOWF for Alternatives 1 and 2, and Figure 3.13-3b illustrates the existing land uses around the proposed South Gilroy MOWF for Alternative 4. The proposed MOWF sites for Alternatives 1 and 2 are partially within city limits and the urban growth boundary (UGB). The proposed MOWF site for Alternative 4 is not within the city limits or the UGB.

Alternative 3

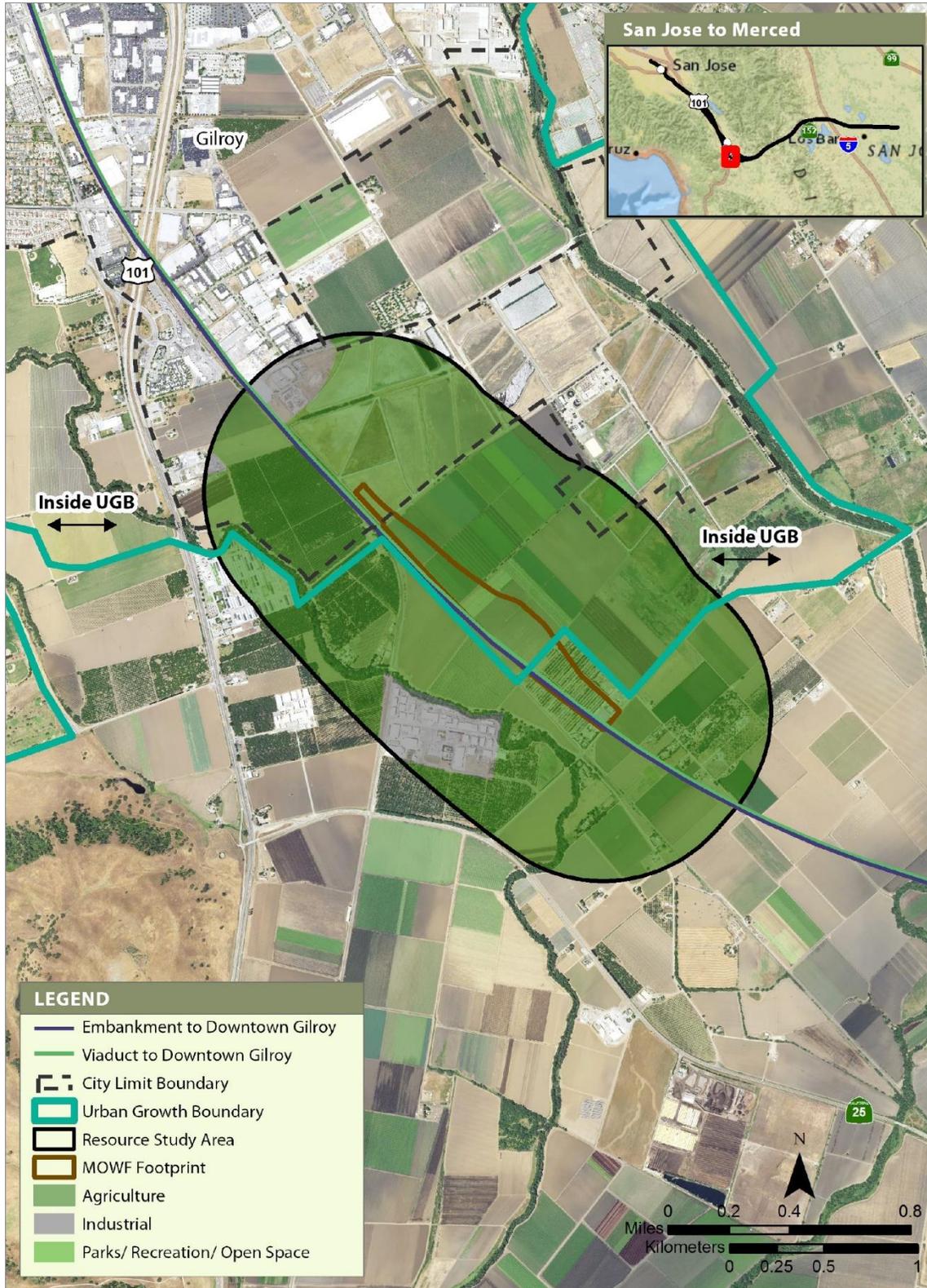
Alternative 3 would follow the same alignment as Alternative 1, bypassing downtown Morgan Hill; land uses to Church Avenue would be as described for Alternatives 1, 2, and 4. South of Morgan Hill, Alternative 3 would travel on viaduct on the same alignment as Alternatives 1, 2, and 4 to Church Avenue where it would veer east and then south through east Gilroy. Much of the surrounding land along the alignment of Alternative 3 is in unincorporated Santa Clara County. Alternative 3 would travel on viaduct through predominantly agricultural and vacant land, bypassing scattered rural residences south of Market Street. South of Buena Vista Avenue, the alignment would again bypass scattered residential uses, cross agricultural land, then pass adjacent to a residence and orchard operation. At Gilman Road, the alignment would travel through an existing orchard. The East Gilroy Station would be constructed at Leavesley Road. South of the proposed station, the alignment would cross over Holsclaw Road through agricultural lands and Old Gilroy where there are clustered single-family residential uses. Gavilan Hills Academy is in Old Gilroy west of Alternative 3. Two additional schools, San Ysidro Elementary and Anchorpoint Christian High School, are on the east side of the Alternative 3 alignment in Old Gilroy.



Sources: City of Gilroy 2002, 2005

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Figure 3.13-2 Existing Land Uses—Downtown Gilroy Station Area (Alternatives 1, 2, and 4)



Source: City of Gilroy 2002

AUGUST 2019

Figure 3.13-3a Existing Land Uses—South Gilroy MOWF (Alternatives 1 and 2)

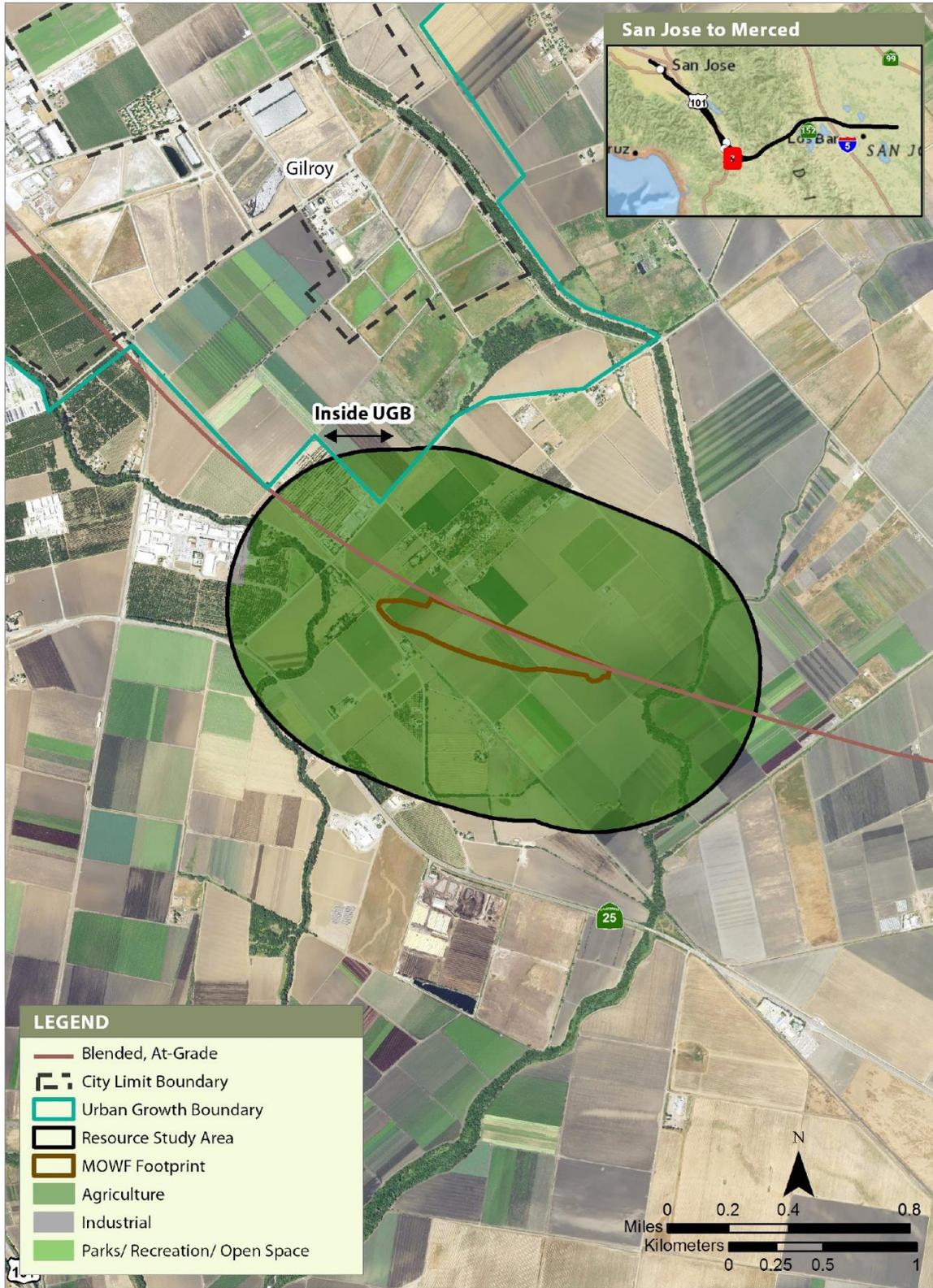


Figure 3.13-3b Existing Land Uses—South Gilroy MOWF (Alternative 4)

The HSR alignment south and east of Gilroy would travel through primarily agricultural lands, interspersed with small rural communities and scattered residences on large acreages. The Morgan Hill and Gilroy Subsection ends just past the second crossing of SR 152; HSR would exit the first tunnel at Casa de Fruta. The area between the East Gilroy station and Casa de Fruta is primarily agricultural and open space.

East Gilroy Station Area

The proposed East Gilroy Station site is in an agricultural area east of the urbanized area of Gilroy and partially within the city limits and the UGB (Figure 3.13-4). No rail or bus facilities or services currently exist at the East Gilroy Station site; the nearest bus stops are approximately 0.5 mile west of the site on San Ysidro Avenue. There are a few rural residences immediately east of the site on the west side of Marcella Avenue. Prominent commercial land uses in east Gilroy include the Gilroy Premium Outlet Mall, approximately 0.4 mile west on Leavesley Road. Industrial, commercial, and residential uses also occur within the East Gilroy Station RSA southwest of the proposed station site.

East Gilroy MOWF

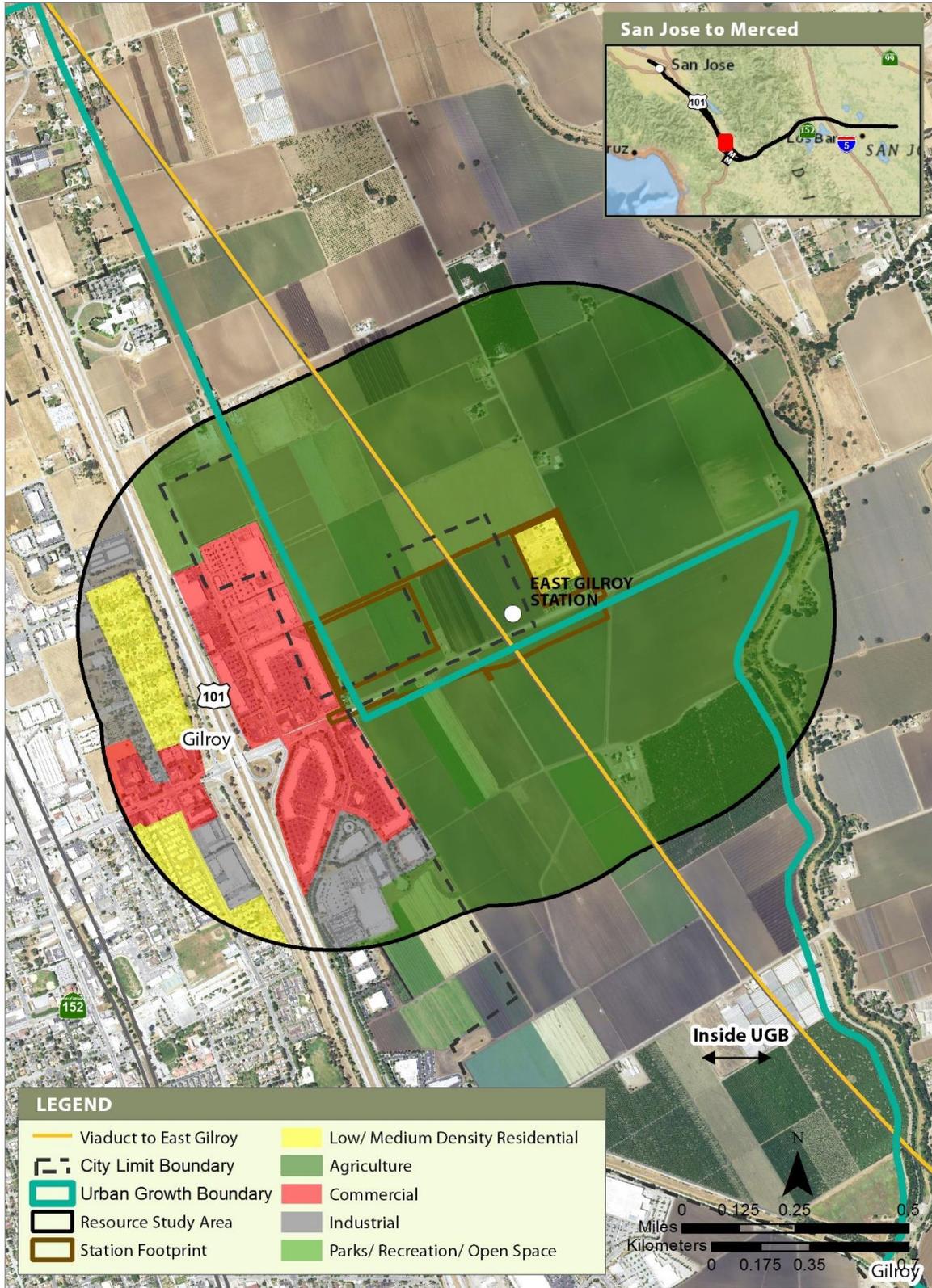
Land uses surrounding the East Gilroy MOWF site include residential uses and agricultural operations. Within the RSA, there are three schools (Gavilan Hills Academy, San Ysidro Elementary, and Anchorpoint Christian High School) and scattered small farms and residences along Frazier Lake Road. Alternative 3 would include the East Gilroy MOWF west of the HSR mainline and south of the community of Old Gilroy. The MOWF, encompassing approximately 100 to 110 acres, would extend 1 mile along the west side of the HSR alignment from approximately Pacheco Pass Highway (SR 152) to north of Bloomfield Avenue. The site is near Holsclaw Road and within the Soap Lake floodplain. Figure 3.13-5 illustrates the land uses surrounding the site of the proposed East Gilroy MOWF.

Pacheco Pass Subsection

The RSA for this subsection is the same for all four project alternatives. South and east of Casa de Fruta, the project alignment would generally follow SR 152 through the Pacheco Pass, a mountainous area where the dominant land use is natural habitat/open space, with scattered residential and agricultural uses. The guideway would enter an underground tunnel north of San Luis Reservoir, under Pacheco State Park and the Cottonwood Creek Wildlife Area. The guideway would continue primarily on embankment, passing north of the O'Neill Forebay Wildlife Area, a large solar farm, and SR 152 before crossing over Interstate (I-) 5 north of Santa Nella. Continuing east along the project alignment, into the San Joaquin Valley, the predominant land use is farmland, with some commercial services such as gas stations and cafes near I-5 north of Santa Nella.

San Joaquin Valley Subsection

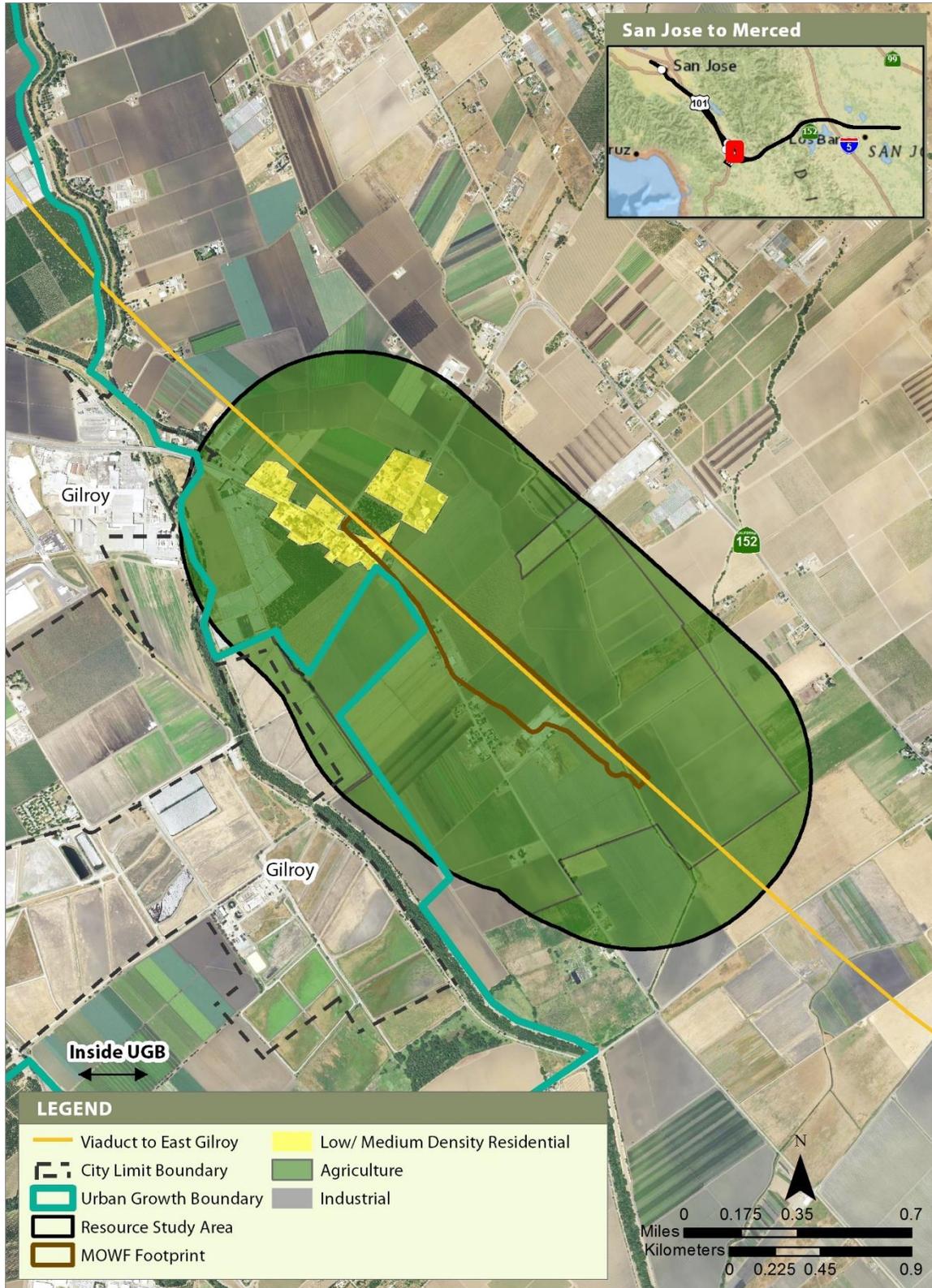
The RSA for this subsection is the same for all four project alternatives. Between I-5 just north of Santa Nella Village and Carlucci Road in Merced County, land uses are mostly agriculture-related uses: orchards, crops, dairy farms, and rural residential. Numerous agricultural irrigation canals are present in this area, as are electrical transmission lines, a small substation, the San Luis Wasteway, the Volta Wildlife Area, the Grasslands Ecological Area, the Los Banos State Wildlife Area, and the main channel of the San Joaquin River. This area is entirely agricultural, with agricultural support facilities (barns, silos, and tanks) directly south of the proposed alignment west of Carlucci Road. The MOWS for all four project alternatives would be constructed near Turner Island Road (Figure 3.13-6) in an agricultural area.



Source: City of Gilroy 2002

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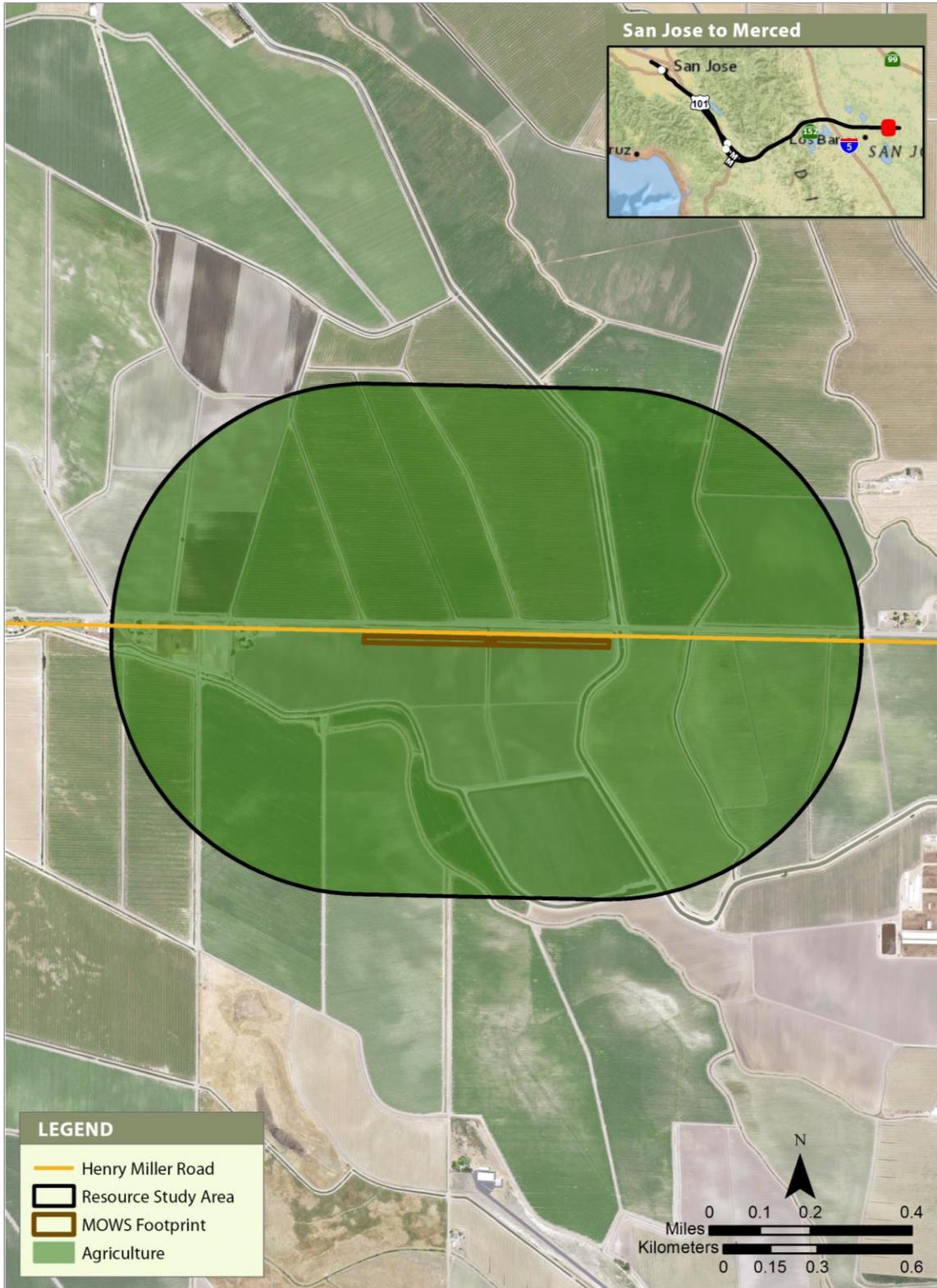
Figure 3.13-4 Existing Land Uses—East Gilroy Station Area (Alternative 3)



Source: City of Gilroy 2002

AUGUST 2019

Figure 3.13-5 Existing Land Uses—East Gilroy MOWF (Alternative 3)



Source: County of Merced 2013

MARCH 2019

Figure 3.13-6 Existing Land Uses—MOWS near Turner Island Road (All Project Alternatives)

3.13.5.2 *Planned Development*

California law requires that each county and city in the state develop and adopt a general plan. The general plan consists of a statement of development policies and includes a map or maps and text setting forth goals and policies. It is a comprehensive long-term plan for the physical development of the individual city or county. General plan land use maps designate areas for various uses, primarily to avoid incompatibilities of land use. In some areas, existing land uses are not consistent with the general plan land use designations, particularly where certain land uses existed prior to the current land use designations and are considered legal nonconforming uses and where land is currently undeveloped but is designated for certain uses in the future. For example, in the Communications Hill area, although the majority of land is currently vacant, it is designated for future mixed-use/industrial uses. Legal nonconforming uses are allowed to continue unless redevelopment is planned, in which case the new use would have to conform to the general plan land use designation. General plan land use maps illustrating the land use patterns along the project extent and around HSR station sites are included in Appendix 3.13-A for reference.

The project provides an opportunity to improve and expand local transit systems connecting to the HSR stations and offer additional job and housing growth at key central locations around stations. Local and regional plans relevant to the project identify the need to improve mobility and reduce dependency on automobile travel by improving transit accessibility and encouraging the use of alternative transportation modes. Specifically, the San Jose, Gilroy, and Los Banos general plans include policies that specifically support the implementation of HSR, as do the RTPs for the three-county region. San Jose and Gilroy have already embraced transit-oriented development (TOD) by including TOD policies in their respective planning documents.

The project would connect employment centers in the San Francisco Bay Area and Merced with each other as well as with the area served by the overall transit system, including the major metropolitan employment centers in Los Angeles. The project would be adjacent to existing transportation corridors to the greatest extent feasible, helping to preserve open space, avoid sensitive environmental areas, and support environmental resource management by prioritizing development of transportation infrastructure in areas of existing development as much as possible.

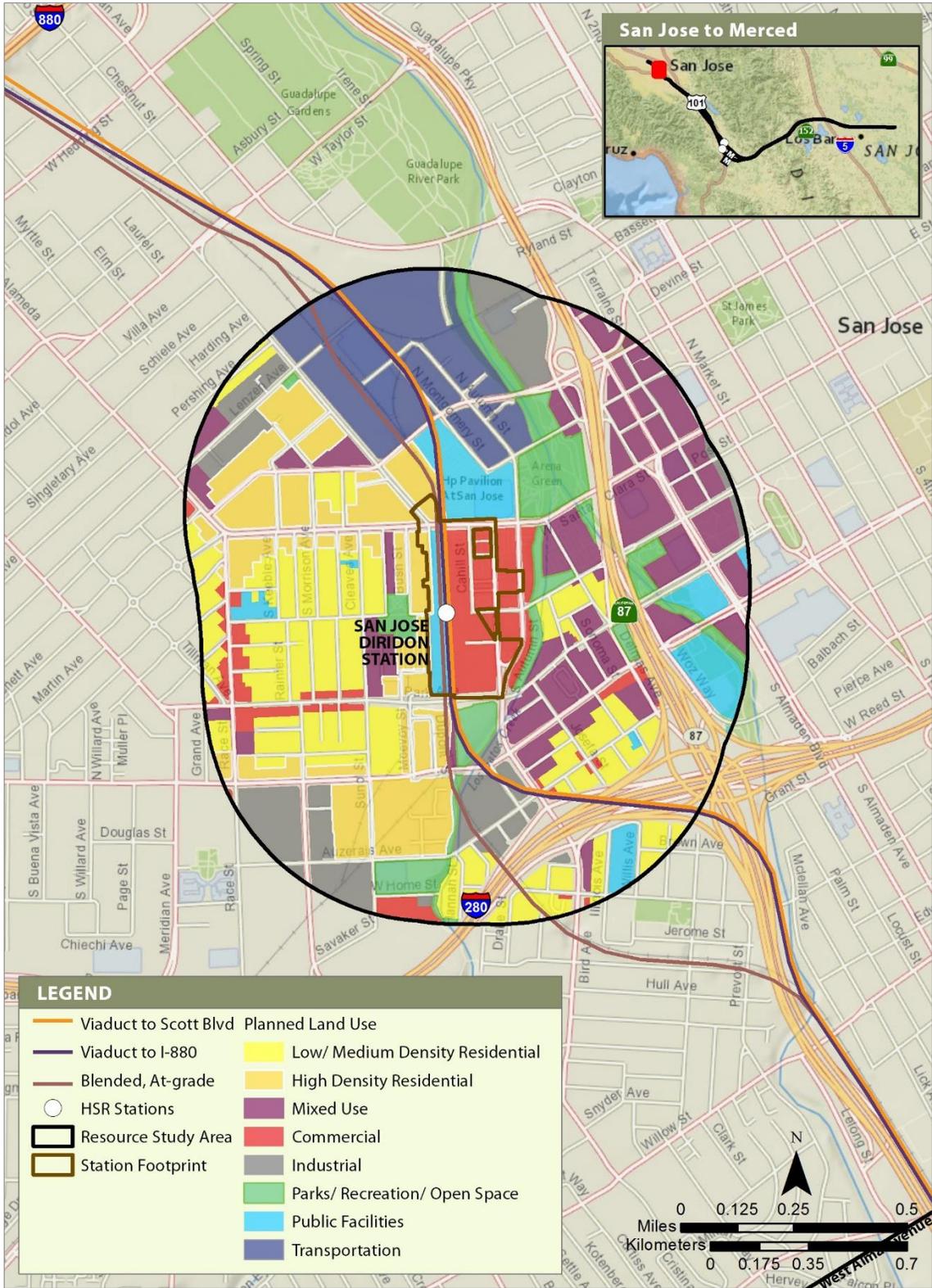
Employment and housing growth can advance the implementation of TOD plans for the surrounding station areas, fostering transit-oriented sustainable growth. Experience in the U.S. demonstrates that major changes in land development near stations (typically within 0.25 mile) have taken place concurrently with development of new transit facilities. Jurisdictions with supportive policies, land use controls, and direct incentives can facilitate TOD near transit stations (Transit Cooperative Research Program 2004). The referenced study considered development within 0.25 mile of the station for a typical light-rail transit project.

TOD generally occurs under three conditions:

- Policies and regulations of local agencies encourage or allow TOD in station areas
- Stations are located in prime regional and community activity centers that attract investment
- Regional and local real estate markets are active

Figure 3.13-7 through Figure 3.13-9b illustrate the planned land uses within 0.5 mile of the stations. This analysis of existing land uses and zoning opportunities, shown in Table 3.13-2, indicates that the station RSAs are anticipated to experience increased densities.

This section discusses planned development by subsection along the project alignment, around the station areas and maintenance facilities, and in other areas along the project extent where land use patterns have the potential to be affected, such as along Monterey Road in the Monterey Corridor Subsection. Land use plans and objectives, planned development projects, and the current zoning provide the context for this discussion.



Source: City of San Jose 2014

JUNE 2019

Figure 3.13-7 Planned Land Uses (Current Zoning)—San Jose Diridon Station RSA

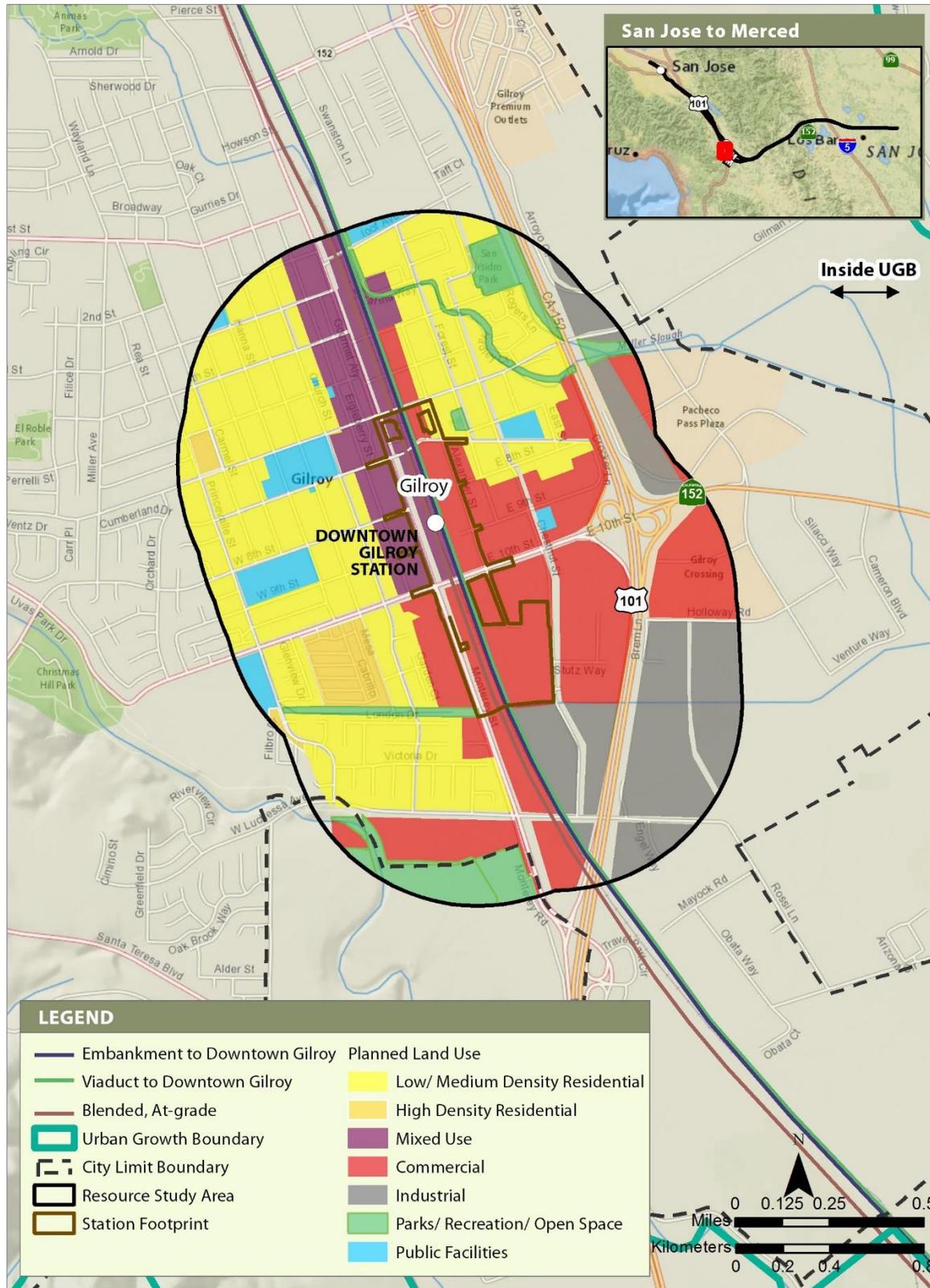
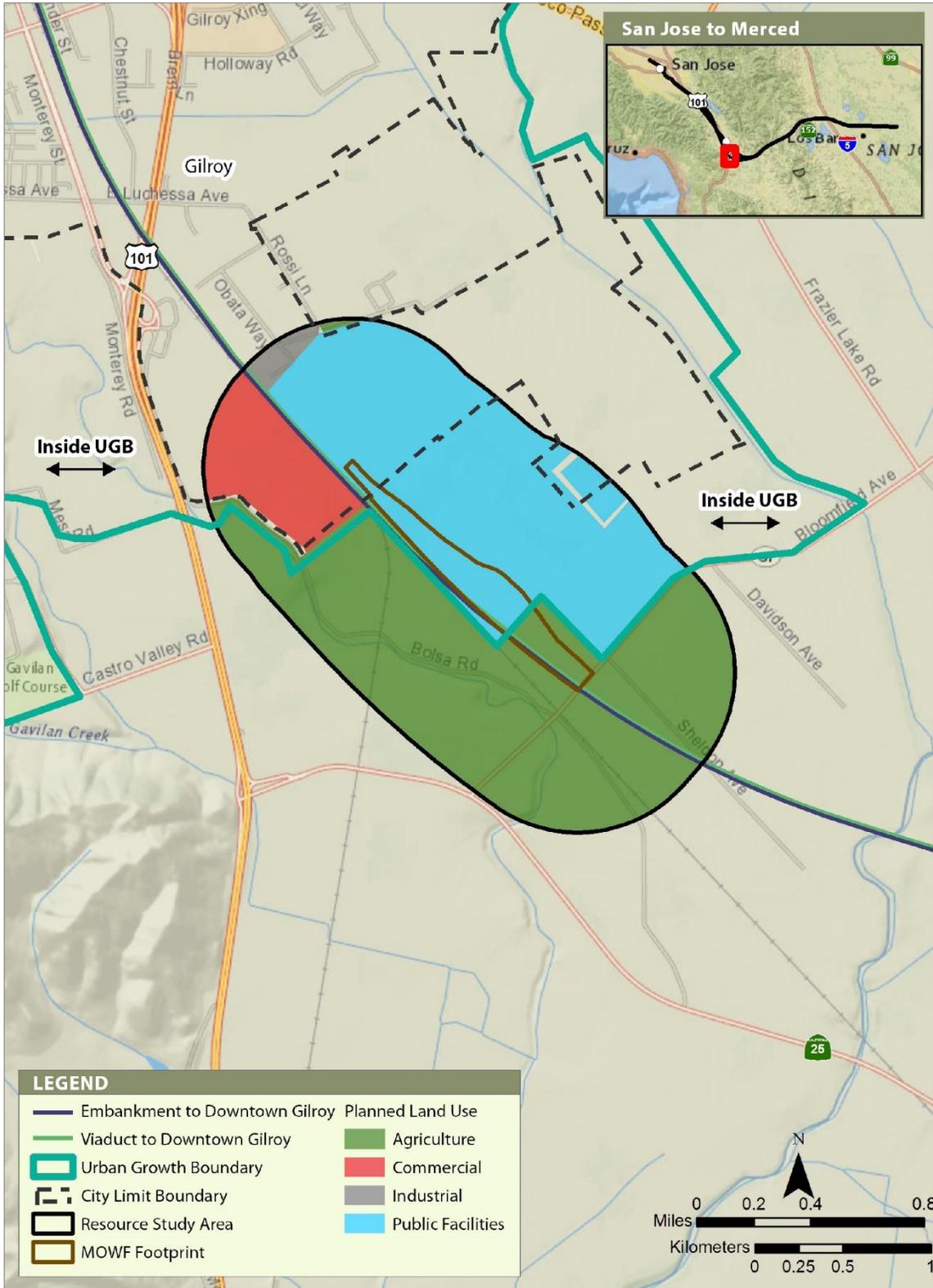


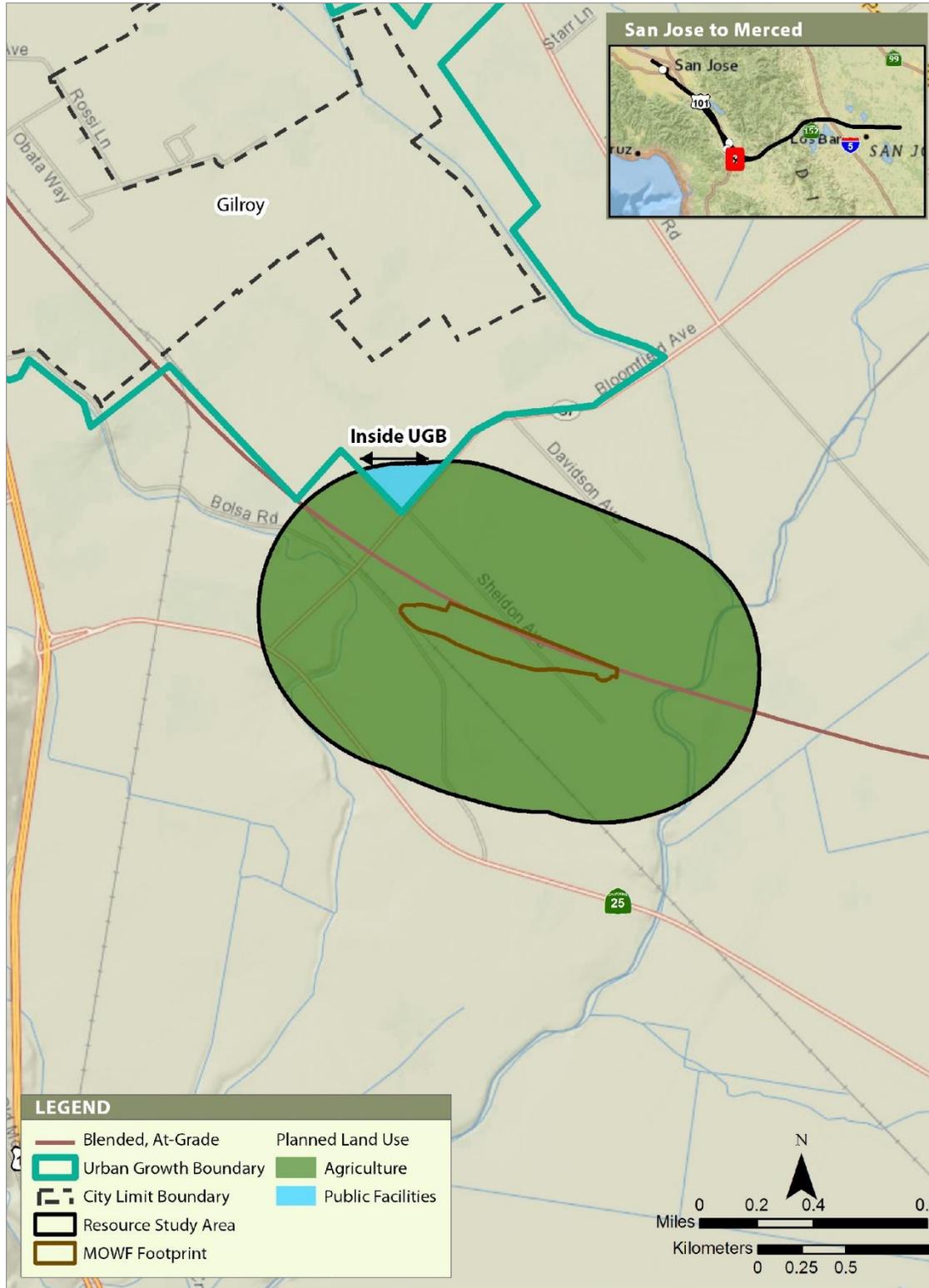
Figure 3.13-8 Planned Land Uses (Current Zoning)—Downtown Gilroy Station RSA



Sources: City of Gilroy 2002, 2005; County of Merced 2013

AUGUST 2019

Figure 3.13-9a Planned Land Uses (Current Zoning)—South Gilroy MOWF RSA (Alternatives 1 and 2)



Sources: City of Gilroy 2002, 2005; County of Merced 2013

AUGUST 2019

Figure 3.13-9b Planned Land Uses (Current Zoning)—South Gilroy MOWF RSA (Alternative 4)

Table 3.13-2 Distribution of Existing Land Uses and Current Zoning Opportunities within the HSR Station Areas

HSR Station	Existing Land Uses	Zoning	Anticipated Changes from HSR
San Jose Diridon Station	Residential—37% Commercial—9% Industrial—11% Mixed Use—16% Parks/Open Space—8% Public Facilities—8% Transportation—11%	Residential—29% Commercial—13% Industrial—54% Mixed Use—2% Parks/Open Space—1% Public Facilities—1% Transportation—0%	Increased density of commercial and industrial uses; decreased density of residential, mixed use, parks/open space, and public facilities uses
Downtown Gilroy Station	Residential—40% Commercial—27% Industrial—15% Mixed Use—8% Parks/Open Space—5% Public Facilities—3%	Cannery District—3% Civic/Cultural Art District—2% Expansion District—4% Gateway District—2% Historic District—3% Residential—42% Commercial—9% Industrial—17% Mixed Use—13% Parks/Open Space—5% Public Facilities—0%	Increased mixed-use development planned; decrease in planned commercial uses
East Gilroy Station	Agriculture—76% Residential—3% Commercial—12% Industrial—5% Parks/Open Space—0% Public Uses—5%	Agriculture—3% Residential—4% Commercial—13% Industrial—7% Mixed Use—1% Parks/Open Space—72% Public Facilities—0%	No increased density expected

Sources: City of San Jose 2014; City of Gilroy 2002; City of Gilroy 2005

San Jose Diridon Station Approach Subsection

The San Jose Diridon Station is in an urban area of downtown San Jose. As discussed in Section 3.13.2.3, Regional and Local Plans and Policies, and Appendix 2-J, the *Envision San Jose 2040 General Plan* (San Jose General Plan) and the *Diridon Station Area Plan* call for land use changes in the downtown station area. As illustrated in Figure 3.13-7, the City of San Jose has adopted a zoning code that reflects the San Jose General Plan (2011), the *Midtown Specific Plan* (1992), and the *Diridon Station Area Plan* (2014), envisioning a variety of development types that would support transit use and complement the existing high-density development near the San Jose Diridon Station. These plans, which have overlapping boundaries, call for increased density of land uses in the greater downtown area, including a mix of residential, office, commercial, business service, ballpark,³ open space, light industrial, and hotel uses in a pedestrian- and transit-oriented environment. The *Diridon Station Area Plan* provides for employment, retail, and entertainment uses close to the station to support transit activity and establish the area as a

³ The EIR for the ballpark project was certified in July 2017, and the project is proceeding to building permits.

region-wide destination, with denser mixed-use residential and commercial uses north and south of the Diridon Station. The objective of the *Diridon Station Area Plan* is to shape a vibrant, mixed-use and transit-oriented destination that identifies San Jose as the center of Silicon Valley and attracts new residents, workers, and visitors to the station area.

The City of San Jose has adopted plans for substantial TOD near the station that would bring thousands of new jobs and residents to the area. Planned development projects in the San Jose Diridon Station RSA include residential uses. North of Diridon Station, a seven-story, mixed-use development is planned on Stockton Avenue. Other pending development projects include a mixed-use condominium and office project east of the station on Delmas Avenue and another planned mixed-use development with 1.04 million square feet of office/retail uses and 355 multifamily residential units on Delmas Avenue. An underground parking garage is proposed under the historic San Jose Waterworks east of Diridon Station on West Santa Clara Street. A four- or five-story, mixed-use development is planned at the intersection of Delmas and Park Avenues, and 120 condominiums are proposed for Delmas Avenue between West San Carlos Street and Auzerais Avenue south of the station (City of San Jose 2017). As part of the Downtown West Mixed-Use Plan, which would expand the downtown core westward, Google is planning between 6 and 8 million square feet of offices in the vicinity of the Diridon Station and the SAP Center at San Jose. The Downtown West Mixed-Use Plan also includes 3,000 to 5,900 units of housing, 300,000 to 500,000 square feet of active uses (e.g., retail, cultural, arts), 100,000 square feet of event space, hotel use and limited-term corporate accommodations, infrastructure, utilities, and public space. An additional 1-million-square-foot office complex is planned by other development partners near the proposed Google complex on 5.4 acres north of the SAP Center at San Jose. Several transit expansions are also planned, including the Bay Area Rapid Transit (BART) Phase II extension, which would bring BART trains into the San Jose Diridon Station. In addition, the Authority, Caltrain, the City of San Jose, and the VTA have formed a partnership to initiate a concept plan to transform San Jose Diridon Station.

For those areas in the RSA not surrounding the San Jose Diridon Station, the San Jose General Plan supports significant amounts of planned growth capacity for employment and housing. Much of this growth capacity is planned for specifically identified growth areas, which have a high degree of access to transit and other infrastructure, are near retail and other services, and are in strategic locations that support surrounding neighborhoods. These growth areas are also planned to develop at higher densities and with a mix of land uses to foster walking, bicycle and transit use, and the formation of community identity. Significant job growth is planned through intensification of each of San Jose's Employment Land Areas, including the Monterey Corridor and North Coyote Valley.

The *Tamien Station Area Specific Plan* directs the development of vacant and underutilized sites near the Caltrain Tamien Station (City of San Jose 1995). This plan identifies a number of high-density housing sites, with an approximate capacity of up to 1,700 dwelling units, adjacent to existing neighborhoods consisting of older single-family housing and large, relatively new condominium and apartment projects. The plan includes station-area housing, a park, small-scale commercial uses, and a childcare center within walking distance of heavy- and light-rail transit facilities.

Monterey Corridor Subsection

Between West Alma and Umbarger Road, the predominant zoning on both sides of Monterey Road is commercial/industrial. Residential zoning occurs south of Umbarger Road on the east side of Monterey Road, primarily behind the commercial and industrial uses lining Monterey Road. At Hillsdale Avenue, residential zoning begins on both sides of Monterey Road; the zoning remains predominantly residential south to Chynoweth Avenue. At Chynoweth Avenue, commercial and industrial zoning occurs and is the predominant zoning on the west side of Monterey Road to Bernal Way.

Morgan Hill and Gilroy Subsection

Alternatives 1 and 2

South of Bernal Way, the primary zoning on both sides of Monterey Road is residential; scattered agricultural zoning can be found south of the Los Paseos neighborhood in the Communications Hill area on the west side of Monterey Road. Traveling south along Monterey Road, the zoning is primarily residential and agricultural/open space, with a large area for planned development south of Blanchard Road. Zoning throughout the remainder of this subsection to Morgan Hill is predominantly rural residential, with interspersed large unincorporated areas. Zoning in Morgan Hill is primarily residential along Monterey Road, with some neighborhood commercial intermixed. The alignment diverges from Monterey Road just north of Madrone Parkway and follows the existing Caltrain railroad corridor west of Monterey Road for a short distance, then crosses over and continues east of Monterey Road.

Along Alternative 1, which bypasses downtown Morgan Hill, existing zoning consists almost exclusively of residential uses and open space to Madrone Parkway, then predominantly residential with small pockets of commercial zoning south to the Morgan Hill city limits. The unincorporated area of Santa Clara County along US 101 and south to Gilroy is zoned R-1. Along Alternative 2, Morgan Hill's business commercial district begins south of Main Avenue and includes an area of multifamily residential zoning on the southeast corner of Main Avenue and Monterey Road; commercial zoning continues along both sides of Monterey Road to Dunne Avenue. South of Dunne Avenue, zoning again transitions briefly to residential use; zoning west of the intersection of Dunne Avenue and Monterey Road is primarily mixed use, while zoning on the east side of the intersection is multifamily residential. Traveling south along Railroad Avenue, zoning becomes mostly planned unit development and manufacturing/industrial, then increasingly residential and open space before leaving the city limits.

The City of Gilroy has adopted a zoning code that reflects the land uses presented in the *City of Gilroy 2020 General Plan (2002)* and the *Downtown Gilroy Specific Plan (2005)*, envisioning a variety of development types that would support transit use and encourage higher-density, mixed-use development than existing conditions around the existing downtown station (Figure 3.13-8). Zoning districts in the downtown Gilroy area include the City's Gateway, Historic, Cannery, Civic/Cultural Arts, and Expansion districts. Mixed-use development is prioritized in the downtown districts. Other development types in these districts include commercial, entertainment, residential, and office development. Most of the downtown area, including the commercial corridor along Monterey Road, is built out with a broad range of land uses. However, a few parcels present near-term potential for infill development. Outside the 2005 *Downtown Gilroy Specific Plan* boundaries but within the general plan boundaries, there are pockets of vacant parcels, industrial buildings, and other underutilized areas, particularly in the areas between Eighth Street and Luchessa Avenue, east and west of the alignments for Alternatives 1 and 2. These areas present potential for new development.

The Authority has entered into a Station Area Planning agreement with the City of Gilroy, the purpose of which is to plan for HSR circulation, access, and economic development around the station. The Downtown Gilroy Station Area Plan, planning for which commenced in 2015 and remains under development, would be both an update to the existing *Downtown Gilroy Specific Plan*, which was adopted in November 2005, and a continuation of the Gilroy high-speed train visioning process, which helped the community identify the best possible location for HSR in Gilroy. The Downtown Gilroy Station Area Plan would act as a tool to guide private development and public improvements in downtown Gilroy, with a focus on the area near the future HSR station and tracks. Because of the Great Recession, little development under the *Downtown Gilroy Specific Plan* has come to fruition to date. Recently, Golden State Brewery obtained a downtown use permit to operate a restaurant, tasting room, and outdoor eating area on Monterey Road, including the city's first parklet in the downtown area. Gilroy has a number of other pending projects, including a four-story apartment complex in the Cannery District, a mixed multifamily residential and commercial use development along Monterey Road, two new single-family

subdivisions, a new fire station, a 350,000-square-foot distribution center, and new office and self-storage uses.

In 2016, the voters of Gilroy adopted Measure H, amending the City's general plan to establish a UGB and designate land outside the UGB as open space. An objective of the UGB is to reduce sprawl and concentrate development within existing developed areas in the city. In the land outside the UGB designated as open space, only limited development is allowed (i.e., public parks; public educational facilities; specific job-producing industrial projects; affordable housing, if needed; and public wastewater, sewer, storm drain, and water recycling facilities). Land uses cannot be changed without voter approval until at least 2040. The South Gilroy MOWF for Alternatives 1, 2, and 4 would be in South Gilroy between Carnadero Road and Bloomfield Road to accommodate the machinery and inspection and maintenance staff. The MOWF would cover approximately 100 to 110 acres. The MOWF site for Alternatives 1 and 2 would be partially within the city limits and UGB and partially outside. The MOWF site for Alternative 4 would be outside of city limits and predominantly outside of the UGB. Planned development in this area includes agricultural, commercial, and public facility uses (Figure 3.13-9a and Figure 3.13-9b).

Alternative 3

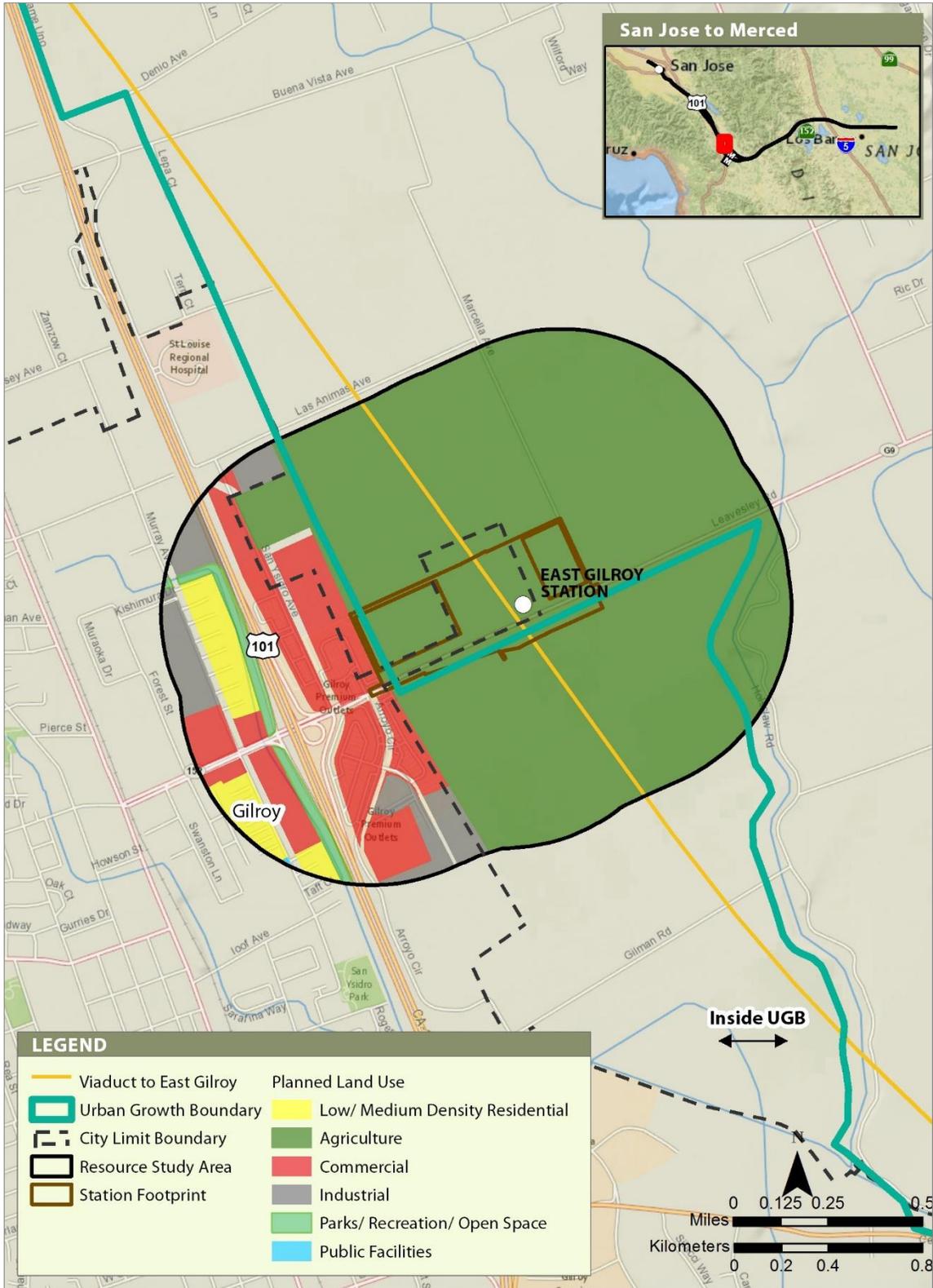
Existing zoning for the areas traversed by Alternative 3 north of Church Avenue are the same as described for Alternatives 1 and 2. Although the East Gilroy Station site is partially within Gilroy's city limits, the land immediately surrounding the site is in unincorporated Santa Clara County. Thus, land development in the East Gilroy Station RSA is guided not only by the *City of Gilroy 2020 General Plan* (2002) but also by the *Santa Clara County General Plan* (1994). The East Gilroy Station site and a connecting area between the site and the rest of Gilroy is currently zoned for agricultural use, while commercial and industrial uses are planned for areas within Gilroy west of the station site (Figure 3.13-10). Planned use of these lands is continued agricultural use and open space. Current zoning in the east Gilroy area is a mix of agricultural, commercial, and industrial designations.

As noted previously, Measure H amended the City's general plan to establish a UGB and designate land outside the UGB as open space. The UGB limits the potential for TOD adjacent to and within 0.5 mile of the East Gilroy Station because the station is partially within the UGB boundary. The City's zoning designation for the East Gilroy Station site is A1 rural residential.

The East Gilroy MOWF would be located west of the HSR mainline, south of the community of Old Gilroy and extend along the HSR alignment from Pacheco Pass Highway (SR 152) to Bloomfield Avenue. Current zoning in this area includes general industrial and commercial uses (Figure 3.13-11). The East Gilroy MOWF for Alternatives 1 and 2 is outside the city limits of Gilroy, the urban service area, and the UGB.

Alternative 4

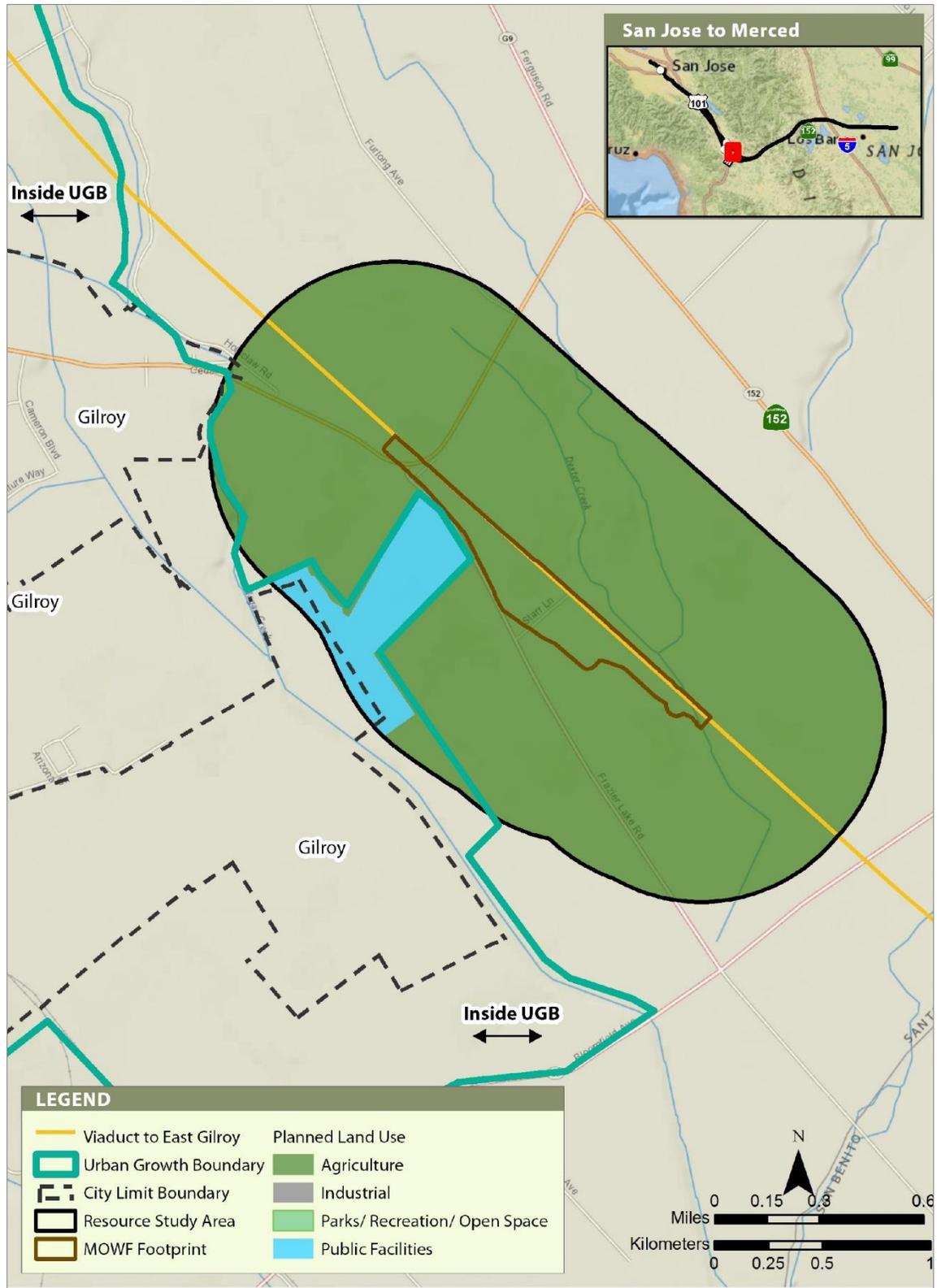
Existing zoning for the areas traversed by Alternative 4 to downtown Gilroy are the same as described for Alternatives 1 and 2. The South Gilroy MOWF for Alternative 4 (Figure 3.13-9b) near Bloomfield Road would require approximately 100 to 110 acres; the program and layout would be as described for Alternatives 1 and 2. In contrast to Alternatives 1 and 2, the MOWF for Alternative 4 would be on the west side of the tracks. It would be between Carnadero Avenue and the Pajaro River. This configuration would require realignment of the UPRR Hollister Subdivision. HSR mainline and MOWF lead track would pass over UPRR Coast Subdivision tracks. The MOWF under Alternative 4 would be located predominantly outside city limits, the urban service area, and the UGB.



Sources: City of Gilroy 2002, 2005; County of Merced 2013

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Figure 3.13-10 Planned Land Uses (Current Zoning)—East Gilroy Station RSA



Sources: City of Gilroy 2002, 2005; County of Merced 2013

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Figure 3.13-11 Planned Land Uses (Current Zoning)—East Gilroy MOWF RSA

Pacheco Pass Subsection

The area within unincorporated Santa Clara County in this subsection is zoned R-1. The Santa Clara County General Plan designates the area on both sides of the alignment as agriculture or open space.

San Joaquin Valley Subsection

The entire area along Henry Miller Road is in unincorporated Merced County and designated agricultural. There is no planned development in the area proposed for the MOWS near Turner Island Road (Figure 3.13-12).

Summary of Planned Development Projects within Station and Maintenance Facility RSAs

The growth discussed in this section represents the development activity that is planned or has recently occurred to implement the applicable specific plans in the vicinity of the station and maintenance facility RSAs. This discussion presents proposed development data to indicate the extent to which local governments have implemented their various area plans.

Table 3.13-3 shows the development activity planned for the station and maintenance facility RSAs. Local jurisdictions provided this information, reflecting planned development as of October 2016; these data presented in Table 3.13-3 may not represent a complete accounting of planned development in the station and maintenance facility areas. A full inventory of planned development projects assessed for this project is presented in Appendix 3.19-A, Nontransportation Plans and Projects List.

Table 3.13-3 Summary of Planned Development Projects within Station and Maintenance Facility RSAs

Station/Maintenance Facility Area	Residential Units	Commercial (square feet)	Industrial (square feet)	Other ¹ (square feet)
San Jose Diridon Station	2,588	6,387,500	0	8,000,000 ³
Downtown Gilroy Station	759 ²	394,914	0	0
East Gilroy Station	0	0	0	0
East Gilroy MOWF	0	0	0	0
South Gilroy MOWF (Alts 1 and 2)	0	0	0	0
South Gilroy MOWF (Alt 4)	0	0	0	0
MOWS near Turner Island Road	0	0	0	0
Total	3,347	6,782,414	0	8,000,000

Sources: City of San Jose 2014; City of Gilroy 2002, 2005; County of Merced 2013

¹ Other land uses include hospitals, medical facilities, governmental offices, and mixed-use areas.

² Entire Downtown Gilroy Specific Plan Area

³ This includes the proposed Google campus of up to 8,000,000 square feet, as available since the April 2020 publication of the Draft EIR/EIS.

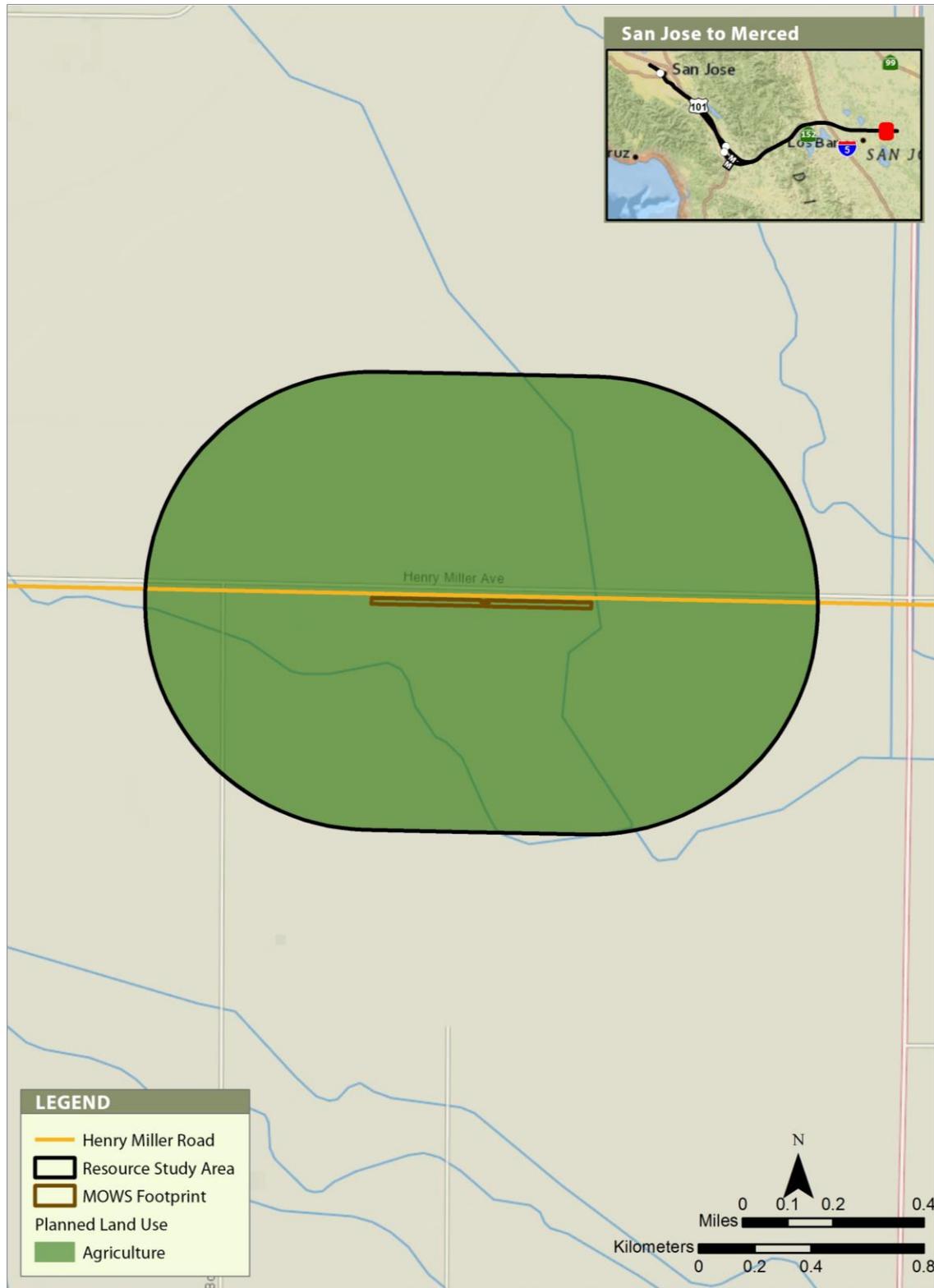
Alt(s) = alternative(s)

MOWF = maintenance of way facility

MOWS = maintenance of way siding

RSA = resource study area

Although planned development varies by jurisdiction, San Jose accounts for the bulk of overall planned development. Approximately 14.4 million square feet of commercial development, including the proposed Google campus, is planned for the San Jose Diridon Station area (City of San Jose 2017), 97.3 percent of the total planned commercial development in the HSR station areas. The remaining projected commercial space in the project is approximately 395,000 square feet in the Downtown Gilroy Station area. There are no other planned developments in the remaining station area and maintenance facility RSAs.



Source: County of Merced 2013

MARCH 2019

Figure 3.13-12 Planned Land Uses (Zoning)—MOWS near Turner Island Road RSA

Anticipated housing development, which includes rental and ownership housing, assisted-living units, and student housing, is similarly concentrated in San Jose. San Jose accounts for 77.3 percent of the planned housing development in the station and maintenance facility areas, while the remainder is primarily in the *Downtown Gilroy Specific Plan* area.

3.13.6 Environmental Consequences

3.13.6.1 Overview

This section discusses the potential impacts related to station planning, land use, and development that could result from implementing the project alternatives. The discussion considers the potential for the project to (1) alter land use patterns by introducing incompatible land uses and (2) induce population growth beyond planned levels. Each topic area discusses potential impacts from the No Project Alternative and the project alternatives. Refer to Appendix 2-J for a description of applicable land use plans and policies and Appendix 2-K for a discussion of inconsistencies with applicable policies. Refer to Sections 3.12, 3.14, 3.15, and 3.16 for impacts and mitigation measures related to the displacement of residences, businesses, and community facilities; the acquisition of agricultural and parkland; and impacts on visual character and quality associated with project implementation.

3.13.6.2 Alteration of Land Use Patterns

The project alternatives would convert existing land uses—residential, commercial, mixed use, industrial, park/open space, public facility, and agricultural—to a transportation land use associated with HSR. Construction and operation of the project alternatives could result in temporary and permanent changes to land use patterns. Existing areas of residential, commercial, industrial, and agricultural uses would be temporarily or permanently acquired for construction of the project alternatives. Areas of temporary acquisitions, such as construction easements, will in some cases revert to their previous uses after construction of the project is complete and the land is returned to its former condition (LU-IAMF#3). In other cases, a new business or use could occupy the parcel after construction is complete, and existing zoning would govern redevelopment of the parcel.

Land permanently acquired would not be returned to its former use but would be permanently converted to transportation-related uses. Land use patterns could be permanently altered if the project introduces a use that would be incompatible with adjacent existing land uses or with the zoning designations of adjacent uses.

No Project Impacts

As described in Chapter 2, Alternatives, and Section 3.18, Regional Growth, the populations of Santa Clara, San Benito, and Merced Counties, as well as the cities within them, are expected to grow substantially by 2040. All three counties have experienced pressure to convert agricultural land to other uses in recent years. Adopted regional and local plans and policies encourage compact growth and infill development; however, not enough infill parcels are available to accommodate all the growth anticipated through 2040. Therefore, the conversion of agricultural and open space lands to developed uses is expected to continue. With or without the HSR project, much of this growth would be focused in or adjacent to the urbanized areas of the RSA.

The No Project Alternative represents the foreseeable local and regional development projects that are expected to be implemented in the RSA by 2040, regardless of whether the project is constructed. Chapter 2 describes the No Project Alternative; foreseeable projects include a wide range of office, commercial, industrial, residential, recreation, and transportation projects. The No Project Alternative considers the effects of conditions forecast by current plans related to land use and transportation in the vicinity of the San Jose to Merced Section, including planned improvements to highway, aviation, conventional passenger rail, freight rail, and port systems through the 2040 planning horizon for the environmental analysis if the proposed project is not built. With no project, there would be a greater number of vehicle miles traveled, resulting in increased pressure to improve capacity for all transportation modes throughout the area. The Authority estimates that additional highway and airport projects (up to 4,300 highway lane miles,

115 airport gates, and 4 airport runways) would be planned and constructed to achieve equivalent capacity and relieve this increased pressure (Authority 2012). A full list of anticipated future development projects is provided in Volume 2 in Appendix 3.19-A, Nontransportation Plans and Projects List, and Appendix 3.19-B, Transportation Plans and Projects List.

Many of the projects under the No Project Alternative encourage TOD, which would increase the density of both residential and commercial development around transit hubs. As described in Section 3.13.5.2, Planned Development, the Cities of San Jose and Gilroy have adopted plans and policies that would support transit use and complement the existing environment near the San Jose Diridon Station and the Downtown Gilroy Station. Under the No Project Alternative, TOD in the form of infill development, increased density, reduced parking demand, and better access to transit would be expected. Existing and planned uses include mixed-use, residential, commercial, office, business service, and light industrial development. The area around the East Gilroy Station site is not currently planned for TOD, and, as noted previously, Measure H allows very limited development outside the UGB, which is adjacent to the station site. Therefore, limited TOD development is anticipated around the East Gilroy Station site under the No Project Alternative without a future change in zoning or repeal of Measure H.

Other development projects along the project extent include residential, commercial, and industrial uses as well as transportation improvements. Infill development is expected to occur within the RSA under the No Project Alternative, and existing land use patterns would continue. Plans have been approved (but not yet funded) to construct a new alignment of SR 152 from SR 156 to US 101 in Santa Clara and San Benito Counties. SR 237 express lanes and Central, Montague, and San Tomas Expressway improvements are also planned. SR 156 is proposed as a four-lane expressway and widening of Fairview Road and SR 25 is also proposed. In Merced County, a new four-lane construction/extension is planned for Memorial Drive between Santa Ana and Flynn Road, a new four-lane expressway bypassing the city of Los Banos is planned from west of Volta Road to SR 165 south of Henry Miller Road, and freeway conversion from the Santa Clara County line to the Madera County line is planned to include three new interchanges at West SR 152, SR 165, and East SR 152. All of these planned developments have been required or will be required to undergo design review and individual project approval, during which time the decision-makers will determine consistency with applicable land use plans and policies, including zoning, as well as compatibility with adjacent land uses. Although individual projects need not be consistent with each and every policy of applicable land use plans, jurisdictions require consistency with the general vision of the land use plans and most of its policies; projects that are not consistent with land use plans would require an amendment to the land use plan in order to proceed. Planned development that would proceed through 2040 with or without implementation of the project would be generally consistent with plans and zoning and compatible with adjacent land uses and therefore would not substantially alter land use patterns.

Project Impacts

Construction Impacts

Construction of any of the project alternatives would require temporary use of land outside the permanent rights-of-way for construction laydown and staging areas that mobilize personnel, stockpile materials, and store equipment for building the HSR or related improvements. All of the alternatives would include staging areas, ranging from less than an acre to almost 40 acres. A total of seven temporary precasting yards, ranging in size from approximately 11 to 78 acres, are proposed. These would be needed under Alternatives 1 and 3 for the casting, storage, and preparation of precast concrete segments for the viaduct structures; temporary spoil storage; workshops; and temporary storage of delivered construction materials. Alternatives 2 and 4 would require fewer precasting yards because of the smaller number of aerial structures. The precasting yards would include concrete batching and steel fabrication activities. Field offices and temporary jobsite trailers would also be located at the staging areas. The amount of construction with the design variants would be essentially the same as the alternatives without the DDV and the TDV. A detailed description of construction activities is provided in Chapter 2, Alternatives.

In addition to the standard construction period, 2 years of additional construction would be required after the initial Phase I start-up to re-conductor the existing Spring to Llagas and Green Valley to Llagas Pacific Gas and Electric (PG&E) power lines. That work would begin in 2030 and be completed within approximately 24 months. These activities would not require any land acquisitions. Re-conducting activities on the existing PG&E network would require temporary use of approximately 53.7 acres of land for the entire project; temporary disruptions in access for adjacent landowners would be minimal. Thus, the electrical network upgrades would not require new land acquisitions, introduce incompatible uses, or disrupt existing uses that would lead to alteration of land use patterns.

Impact LU#1: Temporary Alteration of Land Use Patterns from Land Use Conversion and Introduction of Incompatible Land Uses

Main construction staging areas would occupy large areas for extended periods and could displace some business operations (refer to Table 2-17 in Chapter 2). Project features specify restoration of lands temporarily used for construction to their previous use (AG-IAMF#1 and LU-IAMF#3), and other project features provide for coordination with local landowners, permit assistance, and temporary equipment and livestock crossing features (AG-IAMF#2, AG-IAMF#3, AG-IAMF#4, AG-IAMF#5, and AG-IAMF#6). These features have been incorporated into the project design, particularly in the Morgan Hill and Gilroy and San Joaquin Valley Subsections. Preliminary staging areas have been identified, which are confined primarily to existing vacant parcels adjacent to commercial or industrial uses; adjacency to residential areas and community facilities has been avoided to the maximum extent feasible.

Temporary construction easements (TCE) would be required along the entire length of the alignment to accommodate access, safety fencing, and construction equipment; these TCEs would be approximately 25 feet wide on average on either side of the proposed track. After the conclusion of construction, the TCEs and staging, laydown, and precasting areas would be restored to pre-construction condition. The acreage and type of land temporarily used (construction staging areas and TCEs) would vary by project alternative; these temporary impacts are shown in Table 3.13-4. Alternative 2 would require the most temporary land use for construction (approximately 1,807 acres), followed by Alternative 3 (approximately 1,531 acres), Alternative 1 (approximately 1,522 acres), and Alternative 4 (approximately 1,110 acres). The land uses that would be converted temporarily for construction vary from predominantly industrial uses in the San Jose Diridon Station Approach and Monterey Corridor Subsections to agricultural and open space in the Morgan Hill and Gilroy Subsection, open space in the Pacheco Pass Subsection, and agricultural in the San Joaquin Valley Subsection. Among all alternatives, the greatest amount of land converted under all project alternatives would be agricultural, followed by open space and industrial uses. Alternative 3 would result in the greatest temporary conversion of agricultural land of all four project alternatives, while Alternative 2 would result in the greatest temporary conversion of parks and open space lands. Refer to Chapter 2, Alternatives for a complete listing of the proposed sizes and locations of construction staging and fabrication sites for each alternative.

Project features incorporated into the design of all project alternatives require the design-build contractor to restore affected lands to as close to pre-construction conditions as possible (LU-IAMF#3). It is anticipated that most existing uses would continue or reopen following completion of construction; some parcels temporarily acquired could be redeveloped with new uses, which would need to be consistent with applicable zoning.

Table 3.13-4 Temporary Use of Land outside the Permanent HSR Right-of-Way for the Project Alternatives

Project Component	Existing Land Use Category (acres)									
	Low-/Medium-Density Residential	High-Density Residential	Mixed Use	Commercial	Industrial	Public Facilities	Parks/Recreation/Open Space	Agriculture ¹	Transportation	Total
Alternative 1										
San Jose Diridon Station Approach Subsection										
TCE/Staging	0.4	1.0	0.3	0.2	10.2	10.1	4.3	0.0	21.4	47.9
San Jose Diridon Station	0.0	0.3	0.0	8.4	0.0	0.0	0.0	0.0	0.0	8.7
Monterey Corridor Subsection										
TCE/Staging	3.4	0.0	2.7	1.5	96.7	0.0	11.5	0.0	0.0	115.8
Morgan Hill and Gilroy Subsection²										
TCE/Staging	39.0	6.2	6.0	24.7	50.6	13.7	255.7	265.7	0.0	661.6
Downtown Gilroy Station	0.1	0.0	5.1	8.2	0.0	0.0	0.0	0.0	0.0	13.4
Pacheco Pass Subsection										
TCE/Staging	0.0	0.0	0.0	1.5	0.0	0.0	219.6	49.2	0.0	270.3
San Joaquin Valley Subsection²										
TCE/Staging	0.0	0.0	0.0	3.1	0.5	0.0	0.0	400.2	0.0	403.8
TOTAL	42.9	7.5	14.1	47.6	158.0	23.8	491.1	715.1	21.4	1,521.5
Alternative 2										
San Jose Diridon Station Approach Subsection										
TCE/Staging	1.9	1.0	0.5	0.1	23.3	9.2	5.2	0.0	25.5	66.7
San Jose Diridon Station	0.0	0.3	0.0	7.6	0.0	0.0	0.0	0.0	0.0	7.9
Monterey Corridor Subsection										
TCE/Staging ³	12.2 (12.3)	0.0 (0.0)	4.7 (4.7)	5.5 (5.5)	48.2 (46.0)	0.0 (0.6)	13.6 (13.6)	0.0 (0.0)	0.0 (0.0)	84.2 (82.7)

Project Component	Existing Land Use Category (acres)									
	Low-/Medium-Density Residential	High-Density Residential	Mixed Use	Commercial	Industrial	Public Facilities	Parks/Recreation/Open Space	Agriculture ¹	Transportation	Total
Morgan Hill and Gilroy Subsection²										
TCE/Staging	167.0	10.8	21.3	45.2	119.5	20.0	279.4	293.6	0.0	956.8
Downtown Gilroy Station	1.4	0.0	6.2	9.9	0.0	0.0	0.0	0.0	0.0	17.5
Pacheco Pass Subsection										
TCE/Staging	0.0	0.0	0.0	1.5	0.0	0.0	219.6	49.2	0.0	270.3
San Joaquin Valley Subsection²										
TCE/Staging	0.0	0.0	0.0	3.1	0.5	0.0	0.0	400.2	0.0	403.8
TOTAL³	182.5 (182.6)	12.1	32.7	72.9	191.5 (189.3)	29.2 (29.8)	517.8	743.0	25.5	1,807.2 (1,807.7)
Alternative 3										
San Jose Diridon Station Approach Subsection										
TCE/Staging	1.9	1.0	0.5	0.1	23.3	9.2	5.2	0.0	25.5	66.7
San Jose Diridon Station	0.0	0.3	0.0	7.6	0.0	0.0	0.0	0.0	0.0	7.9
Monterey Corridor Subsection										
TCE/Staging	3.4	0.0	2.7	1.5	96.7	0.6	11.5	0.0	0.0	116.4
Morgan Hill and Gilroy Subsection²										
TCE/Staging	58.4	6.2	0.1	7.8	23.6	1.2	219.7	335.7	0.0	652.7
East Gilroy Station	0.0	0.0	0.0	0.1	0.0	0.0	0.0	13.5	0.0	13.6
Pacheco Pass Subsection										
TCE/Staging	0.0	0.0	0.0	1.5	0.0	0.0	219.6	49.2	0.0	270.3

Project Component	Existing Land Use Category (acres)									
	Low-/ Medium- Density Residential	High- Density Residential	Mixed Use	Commercial	Industrial	Public Facilities	Parks/ Recreation/ Open Space	Agriculture ¹	Transportation	Total
San Joaquin Valley Subsection²										
TCE/Staging	0.0	0.0	0.0	3.1	0.5	0.0	0.0	400.2	0.0	403.8
TOTAL	63.7	7.5	3.3	21.7	144.1	11.0	456.0	798.6	25.5	1,531.4
Alternative 4										
San Jose Diridon Station Approach Subsection										
TCE/Staging	0.3	0.1	0.0	0.0	9.3	0.1	0.0	0.0	1.5	11.3
San Jose Diridon Station	0.0	0.6	0.0	8.2	0.0	1.8	0.0	0.0	0.0	10.6
Monterey Corridor Subsection										
TCE/Staging	2.4	0.0	0.6	0.0	3.7	0.0	0.9	0.0	0.0	7.6
Morgan Hill and Gilroy Subsection²										
TCE/Staging	50.8	6.7	2.8	10.8	37.4	4.8	199.9	106.4	0.0	419.6
Downtown Gilroy Station	0.0	0.0	2.5	7.7	0.0	0.0	0.1	0.0	0.0	10.3
Pacheco Pass Subsection										
TCE/Staging	0.0	0.0	0.0	1.5	0.0	0.0	219.5	49.2	0.0	270.2
San Joaquin Valley Subsection²										
TCE/Staging	0.0	0.0	0.0	3.1	0.5	0.0	0.0	376.5	0.0	380.1
TOTAL	53.5	7.4	5.9	31.3	50.9	6.7	420.4	532.1	1.5	1,109.7

Sources: City of Santa Clara 2010; City of San Jose 2011; County of Santa Clara 1994; City of Morgan Hill 2016; City of Gilroy 2002, 2005; County of Merced 2013; County of San Benito 2015

¹ Some land uses along the project extent designated as agricultural also contain rural residential uses.

² There are no temporary impacts associated with the East Gilroy MOWF, the South Gilroy MOWF, or the MOWS near Turner Island Road. Therefore, they are considered part of the track construction (TCE/Staging).

³ Alternative 2 has two design variants: Skyway Drive Variant A is presented first, with Skyway Drive Variant B shown in parentheses.

TCE = temporary construction easement

San Jose Diridon Station Approach Subsection

Temporary land use conversions for project construction in the San Jose Diridon Station Approach Subsection would consist mainly of small construction easements on industrial uses along the northeast side of the proposed HSR right-of-way and within existing transportation rights-of-way. The primary construction staging site in this subsection for Alternative 1 would be between the Caltrain/UPRR mainline and the UPRR Warm Springs Subdivision Lenzen Wye, the current site of two large industrial warehouses north of West Julian Street. Alternative 4 staging would be east of Lafayette Street; staging for Alternatives 2 and 3 would be in this general area as well. The current site consists of two commercial businesses and an open field on Reed Street. Construction staging for the Diridon Station would be southeast of the existing station, between Otterson Street and Park Avenue, on land designated as commercial and currently the site of two warehouses. Construction of the project alternatives would occur within the existing transportation right-of-way where land use patterns are already related to transportation use and construction of HSR would not introduce incompatible land uses. TCEs would not substantially alter the land use patterns in this subsection because the area is completely developed, and adjacent existing uses would continue to operate.

Monterey Corridor Subsection

In the Monterey Corridor Subsection, temporary land use conversions for project construction would consist of small construction easements on industrial and commercial uses along the proposed HSR right-of-way and within existing transportation rights-of-way. A large precast site (approximately 67 acres) would be located in this subsection under Alternatives 1 and 3, along the west side of Monterey Road between Hillsdale Avenue and Capitol Expressway. This site would accommodate concrete and steel-beam manufacturing, heavy equipment parking, administration buildings and associated parking, and an access road. Land uses within the footprint of the precast site are designated as combined industrial and commercial uses. The site currently accommodates Graniterock and a drive-in movie theater. Land uses surrounding the precast site are industrial, residential/neighborhood, mixed-use neighborhood, and neighborhood/community. Under Alternative 2, which would not require a precasting yard for construction, the northern portion of this same site (approximately 15 acres) would be used for construction staging. Six additional construction sites would be located in this subsection for Alternatives 1, 2, and 3, east of Capitol Expressway (two 1.4-acre sites) and between Hillsdale Avenue, Caltrain/UPRR, and Granite Rock Way (two 1.7-acre, one 2.3-acre, and one 1.8-acre site). Alternative 4 would not have a dedicated construction site in this subsection. The project alternatives would be constructed within the existing Caltrain right-of-way in the Monterey Corridor Subsection and thus would be compatible with existing land uses. Therefore, there would be no alteration of land use patterns in this subsection under any of the project alternatives.

Morgan Hill and Gilroy Subsection

Commercial, industrial, residential, and agricultural uses on both sides of the alignment are almost exclusively in existing transportation corridors north of Gilroy. The exception to this is a very small area of agricultural land and open space where Alternatives 1 and 3 bypass downtown Morgan Hill. Temporary land use conversions for construction of the project alternatives in this subsection would consist of small and large construction easements located predominantly on agricultural uses or in open spaces in Coyote Valley and San Martin.

The primary construction site for Alternatives 1 and 3 in this subsection would be a 78.1-acre precasting site east of the Monterey Road and Live Oak Avenue intersection. A second 36.2-acre precasting site for Alternative 1 would be east of Monterey Road and south of Buena Vista Avenue and two other precasting yard sites for Alternative 3 on two 10.8- and 27.1-acre sites east of US 101 between Cohansey Avenue and Las Animas Avenue. These precasting sites would not be necessary under Alternatives 2 or 4. However, Alternative 2 would require a greater amount of temporary land use conversion for construction staging areas to store the earthen fill materials needed for construction of the predominantly embankment profile and construction of the extensive roadway modifications along Monterey Road necessary to maintain road network

connectivity. All four project alternatives would require precasting yards northeast of the San Felipe Road and SR 152 intersection (27 acres for a precasting yard and batch plant) and east of SR 152 and just south of Casa de Fruta Parkway (14 acres for combined staging and precasting yard). Alternatives 1, 2, and 4 would utilize a combined precasting yard (9.6 acres) west of SR 152 and Casa de Fruta Parkway. Multiple staging areas would be required in this subsection under all project alternatives. Southeast of Gilroy, where the proposed alignment would cross SR 152 and transition to tunnel, all three project alternatives would require a large temporary construction staging site (28 acres) adjacent to the portal for Tunnel 1, east of the intersection of SR 152 and San Felipe Road, on land designated as ranchlands.

Alternatives 1, 2, and 4 would be constructed completely within existing transportation rights-of-way and would not introduce incompatible land uses that would alter land use patterns. Under Alternative 3, acquisition of agricultural land and open space for TCEs will not alter land use patterns because adjacent agricultural and rangeland uses will continue to operate during the construction period; following construction, the TCE sites will be restored to as close to pre-construction conditions as possible (LU-IAMF#3).

Pacheco Pass Subsection

In the Pacheco Pass Subsection, much of the alignment would be in tunnel under all four project alternatives. Substantial construction staging areas are proposed at the portals to accommodate equipment, and mass soil excavation would be required for tunnel construction. Those portions of the project that would travel above ground through the Pacheco Pass Subsection would pass almost exclusively through rangeland and open space with sparse rural residential uses, which would be avoided for construction staging. The only major temporary land use conversions would be just west of the Tunnel 2 portal on lands designated as ranchlands. This construction staging site would be used to stage construction equipment, materials, and spoils from tunnel construction and be adjacent to the permanent tunnel portal site and associated facilities. Several smaller construction staging areas would be on agricultural lands east of Tunnel 2 near I-5. A combined staging/batch plant/precasting yard (13.9 acres) would be south of SR 152, west of the tunnel portal, under all four project alternatives. All land uses in the Pacheco Pass Subsection are agricultural, rangeland, or open space, and TCEs would not alter land use patterns.

San Joaquin Valley Subsection

In the San Joaquin Valley Subsection three construction staging areas would be needed: a 36.7-acre staging area west of Los Banos Creek, a 7.3-acre staging area northeast of the intersection of Henry Miller Road and Mercey Springs Road, and a 3.5-acre staging area southwest of the intersection of Henry Miller Road and Mercey Springs Road. Staging sites would require the temporary use of land designated as agricultural. Staging sites would be compatible with and would not permanently alter land use patterns.

CEQA Conclusion

The impact under CEQA would be less than significant for all four project alternatives because the use of land for construction staging, laydown, fabrication, and reconditioning would be temporary, lands would be restored to their pre-construction state, and the project would not result in substantial changes to land use patterns outside the permanent rights-of-way. Project features specify restoration of lands temporarily used for construction to their previous use (AG-IAMF#1) and as close to pre-construction conditions as possible (LU-IAMF#3). Other project features (AG-IAMF#2 through AG-IAMF#6) provide for coordination with local landowners, permit assistance, and temporary equipment and livestock crossings. These features have been incorporated into the project design, particularly in the Morgan Hill and Gilroy and San Joaquin Valley Subsections. Additional project features identified in Final EIR/EIS Sections 3.2, 3.3, 3.4, and 3.16 will minimize temporary construction impacts. With these project features, no hardships on residents, farms, or businesses adjacent to the construction footprint would be anticipated that would cause people to relocate, change the use of their land, or abandon properties. Therefore, CEQA does not require mitigation.

Impact LU#2: Temporary Alteration of Land Use Patterns from Increased Traffic, Noise, Air Quality Emissions, and Visual Changes

Construction of the project would generate increased noise levels, dust and other air pollutants, visual changes, and traffic that could indirectly affect land uses within the RSA. Construction activities would require temporary roadway closures or modifications, lane closures, and underground utility work, resulting in temporary changes in vehicle circulation and increased travel times. Electrical network upgrades could require short-term lane closures that could temporarily disrupt access for adjacent landowners. The precasting yards for all project alternatives would support such activities as steel fabrication and concrete batching. The precasting yards would be located away from sensitive uses in areas of vacant or industrial land. These construction conditions would affect residents, businesses, and sensitive uses such as schools within 0.5 mile of the project footprint in the cities and communities along the project extent. The amount of construction with the design variants would be essentially the same as the alternatives without the DDV and TDV. Project features will minimize impacts by providing continuous property access, maintaining traffic flow, minimizing fugitive dust emissions, minimizing impacts from noise and vibration, and restoring construction staging areas to their original condition after construction. All impacts associated with traffic, air quality, noise, and visual quality are discussed in detail in Sections 3.2, 3.3, 3.4, and 3.16 of this Final EIR/EIS. The project incorporates features identified in each of these Final EIR/EIS sections that will take place prior to and during construction to avoid or minimize project construction impacts on these resources.

Temporary increases in noise, dust, and traffic and the visual and aesthetic changes caused by construction would vary among the four project alternatives because of the different construction activities and the equipment that would be required for viaduct as opposed to embankment construction. Construction of the project would be expected to last for approximately 1.5 years at any given location (the precasting sites and larger staging areas would remain in use during the entire construction period) and could be considered a hardship on residences, farms, and businesses adjacent to the project footprint. These conditions would not affect land use types, unless adjacent properties become vacant primarily as a result of construction impacts.

Construction-related air quality emissions (Section 3.3, Air Quality and Greenhouse Gases) would be greatest under Alternatives 2 and 4, primarily because of embankment activities in the Morgan Hill and Gilroy Subsection, in contrast to viaduct construction under Alternatives 1 and 3, which would require less earthmoving, less equipment, and fewer vehicles. Substantial visual changes (Section 3.16) associated with construction would occur along the entire length of the alignment but would be greatest under Alternatives 1 and 3, which would construct 20 miles of additional aerial profile relative to Alternative 2. Alternative 4 would be blended at-grade construction between San Jose and the Downtown Gilroy Station. Construction activities and temporary road closures (Section 3.2) would generate substantial traffic along Monterey Road under all project alternatives; however, traffic conditions would worsen to the greatest extent under Alternative 2, which would require substantial reconstruction of existing transportation facilities and the construction of numerous overcrossings and undercrossings.

CEQA Conclusion

The impact would be less than significant under CEQA for all four project alternatives because temporary hardships on property owners adjacent to the project footprint would not result in substantial changes to land use patterns because residents or businesses would not be required to relocate because of the temporary dust, noise, or traffic that would accompany construction. Project actions identified in Final EIR/EIS Sections 3.2, Transportation, 3.3, Air Quality and Greenhouse Gases, 3.4, Noise and Vibration, and 3.16, Aesthetics and Visual Quality, would minimize or avoid incompatibility of construction with adjacent land uses by providing continuous property access for residences and businesses, maintaining traffic flow in construction areas, minimizing fugitive dust emissions, minimizing impacts from noise and vibration, and restoring construction staging areas to their original condition after construction is completed. Construction of the project alternatives would not prevent the continued use of adjacent properties or introduce

conditions that would trigger relocations or conversions that would cause substantial changes in land use patterns. Therefore, CEQA does not require mitigation.

Impact LU#3: Temporary and Permanent Alteration of Land Use Patterns from Permanent Roadway Closures and Modifications

Numerous temporary and permanent right-of-way modifications would be required along the alignment, including roadway realignments, grade separations, and replacement bridges. These are shown in detail in Appendix 2-A, Roadway Crossings, Modifications, and Closures, and a summary of road closures and grade separations are identified in Table 2-8 in Chapter 2, Alternatives. The project alternatives would follow or cross SR 87, SR 89, SR 152, and I-880, crossing over these routes in some locations and under the routes in others. In some instances, the at-grade HSR guideway may cross the roadway approaches of these highway overcrossings and interchange elements. The project alignment through parts of the Monterey Corridor and the Morgan Hill and Gilroy Subsections under Alternatives 1, 2, and 3 is designed to follow the existing UPRR corridor adjacent to the UPRR mainline right-of-way; Alternative 4 would operate in blended service in these same areas. In several locations, the HSR guideway would be elevated to cross over the UPRR operational right-of-way. In these instances, the guideway would maintain the required horizontal and vertical clearance over UPRR's operational right-of-way to avoid or minimize impacts on other UPRR rights-of-way, spurs, and facilities. Alternative 4 would be constructed entirely within the existing railroad corridor to operate in blended service through downtown Gilroy, and no new grade separations would be required. All design options would avoid the existing UPRR operational right-of-way and active rail spurs to the greatest extent possible.

Construction of the project would entail temporary detours and replacement of some major state facilities, overcrossings, and interchanges to avoid traffic impacts during construction. These modifications could affect access to existing land uses along the project extent. The impact of obstructed access would vary, depending on location and design option. In the urbanized portions of the alignment, such as San Jose and Morgan Hill, numerous alternate routes are available to accommodate local traffic diverted because of temporary and permanent road closures and modifications. Where the corridor would pass through rural regions, it would affect existing local frontage roads used by small communities and farm operations. Where these frontage roads would parallel the HSR alignment, they would be shifted and reconstructed to maintain their function. Where roads would be perpendicular to the alignment, over or undercrossings would be planned approximately every 2 miles. Some roads between these crossings may be closed. Substantially more roadway closures and grade separations would be required under Alternative 2 than under Alternatives 1, 3 and 4 because of the grade separations necessitated by the more extensive embankment profile. Alternative 4 would have the fewest road closures and grade separations (two less road closure than Alternatives 1 and 3).

In the San Jose Diridon Station Approach Subsection, lengthy straddle bent construction would be used to bridge the I-280/SR 87 interchange for Alternatives 1 through 3. Footings for the viaduct would be constructed near the ramps and in the median of I-280. Construction would be staged to minimize disruption of these facilities. Cahill Street would be extended to Park Avenue, and lanes would be converted to transit-only use. These construction activities would not substantially alter land use patterns because alternate routes would be provided to allow continuation of existing uses.

In the Monterey Corridor Subsection, Monterey Road between Capitol Expressway and Blossom Hill Road would be permanently narrowed from six to four lanes for Alternatives 1 through 3. Some midblock turn lanes would be closed under Alternatives 1 through 3. Alternatives 1 and 3 would maintain the existing road network along Monterey Road, while Alternative 2 would require construction of grade separations and road realignments. Alternative 4 would utilize existing at-grade crossings throughout this subsection and would not result in the narrowing of Monterey Road. Road closures and realignment activities would temporarily block access to some commercial and residential areas. Such impacts could be pronounced in the Monterey Corridor Subsection, which contains a mix of single- and multifamily residential uses as well as

commercial uses along both sides of the corridor approaching its transition to the Morgan Hill and Gilroy Subsection. For Alternatives 1, 3, and 4, some access points into existing commercial centers would be temporarily closed, and some turn lanes into shopping centers along Monterey Road would be permanently closed. These activities could result in enough inconvenience to cause permanent relocation of businesses and residents along this stretch of Monterey Road; however, alternative routes would be provided during construction, which would allow continued access to existing land uses. Modifications to the existing road network would therefore not be expected to result in alteration of land use patterns.

In the Morgan Hill and Gilroy Subsection, permanent road closures would vary substantially by alternative. Alternative 1 would entail predominantly viaduct construction within this subsection, with all HSR track and systems grade-separated from existing transportation infrastructure. Limited closures of some roadways would be necessary to build Alternative 1, including US 101 just south of downtown Gilroy for one or a limited number of weekends. Construction of the embankment for Alternative 2 would require the most road closures and new grade separations. New interchanges and overcrossings would be necessary at Bailey Avenue, Palm Avenue, Live Oak Avenue, Madrone Parkway, Monterey Road, Main Avenue, East Dunne Avenue, San Pedro Avenue, Tennant Avenue, East Middle Avenue, West San Martin Avenue, Church Avenue, Masten Avenue, Rucker Avenue, Buena Vista Avenue, Las Animas Avenue, Leavesley Road, East 6th Street, East 7th Street, East 9th Street, and East 10th Street. In order to reconstruct these overcrossings and interchanges, either new temporary facilities would need to be built or the roadways would need to be closed. Alternative 3 would be similar to Alternative 1 in that it would be fully grade-separated from existing and planned transportation infrastructure. However, Alternative 3 would be routed through east Gilroy rather than through downtown, thereby affecting fewer and less-traveled transportation facilities. Alternative 4 would build a blended at-grade system that runs through downtown Gilroy. New four-quadrant gates would be installed at existing at-grade crossings, but no new grade separations would be constructed. Permanent roadway closures and modifications within the Morgan Hill and Gilroy Subsection would be greatest under Alternative 2. However, under each project alternative, permanent changes to the roadway network would not substantially alter land use patterns because alternate routes would be provided to allow continuation of existing uses. North Romeo Road would be realigned for all project alternatives in the Pacheco Pass Subsection. In the San Joaquin Valley Subsection, eight road closures and five grade separations would be required. Grade separations would be constructed at Henry Miller Road, Mercey Springs Road, Delta Road, and Turner Island Road. A new grade separation would be built at Carlucci Road, and the intersection access to Henry Miller Road would be reconfigured. Road closures and realignment activities would temporarily block access to canal access roads. Road modifications in the Pacheco Pass and San Joaquin Valley Subsections would not substantially alter land use patterns because existing uses adjacent to construction would continue to operate and either alternate access would be provided or properties would be acquired.

CEQA Conclusion

The impact would be less than significant under CEQA for all four project alternatives because continued access to the affected areas would be provided by maintaining alternative routes in the urban areas or by relocating existing access roadways in the rural regions. All four project alternatives would result in temporary and permanent roadway modifications and closures. Alternative 2 would result in the greatest number and extent of modifications because of its larger footprint and the need for grade separations, followed by Alternative 3. Some temporary road modifications would last only a short time, while others may be in place for the entire construction period. Permanent road modifications would be most pronounced in the Monterey Corridor Subsection. Because these temporary and permanent roadway modifications would provide for alternate access to properties and roads, these changes in access would not result in alteration of land use patterns, and the impact would be less than significant for all four project alternatives. Therefore, CEQA does not require mitigation.

Impact LU#4: Permanent Alteration of Land Use Patterns from Land Use Conversion and Introduction of Incompatible Uses

Each of the project alternatives would require acquisition of land for permanent conversion to transportation use. As shown in Table 3.13-5, Alternative 2 would require the greatest amount of land for permanent acquisition, followed by Alternatives 3 and 4 and then Alternative 1. However, it should be noted that all four project alternatives would require relatively similar acquisition amounts, ranging from approximately 2,997 acres under Alternative 1 to approximately 3,306 acres under Alternative 2. For all project alternatives, agricultural and parks/recreation/open space land uses would constitute the greatest proportion of land acquisitions. Alternative 2 would result in the largest total conversion of all land use types. Conversely, Alternative 3 would result in the least conversion of all nonagricultural land use types. Alternatives 1 and 3 would affect downtown Morgan Hill to a lesser extent than Alternatives 2 and 4 because they would bypass that community before rejoining the common alignment north of San Martin, even though the least acquisition would occur with Alternative 4. However, Alternatives 2 and 3 would affect more agricultural land in the Morgan Hill area than Alternatives 1 and 4. Alternative 3 would avoid land use impacts on commercial uses in downtown Gilroy, instead affecting predominantly agricultural lands through east Gilroy. Alternative 4 would affect the greatest amount of acreage of commercial uses compared with the other three project alternatives. Table 3.13-6 compares the total amount of land permanently converted for each of the project alternatives by type of land use. Alternatives 1 and 4 would permanently displace a similar amount of acreage, while Alternative 3 would result in a slightly higher permanent land use acquisition. Alternative 2 would result in the highest permanent land use acquisition.

Table 3.13-5 Land Use Permanently Converted by the Project Alternatives

Project Component	Existing Land Use Category (acres)									
	Low-/Medium-Density Residential	High-Density Residential	Mixed Use	Commercial	Industrial	Public Facilities	Parks/Recreation/Open Space	Agriculture ¹	Transportation	Total
Alternative 1										
San Jose Diridon Station Approach Subsection										
Track alignment	2.7	2.2	0.4	0.5	46.4	2.6	3.4	0.0	28.5	86.7
San Jose Diridon Station	0.0	2.2	0.0	12.6	0.0	8.7	0.0	0.0	0.0	23.5
Monterey Corridor Subsection										
Track alignment	0.8	0.0	0.5	2.4	24.7	0.0	10.8	0.0	0.0	39.3
Morgan Hill and Gilroy Subsection										
Track alignment	45.0	0.0	5.6	19.8	41.6	60.7	326.9	326.9	0.0	826.7
Downtown Gilroy Station	0.0	0.0	8.9	39.2	0.0	0.0	0.0	0.0	0.0	48.1
South Gilroy MOWF	0.0	0.0	0.0	0.0	0.0	50.7	0.0	20.7	0.0	71.4
Pacheco Pass Subsection										
Track alignment	0.0	0.0	0.0	8.6	0.0	0.0	1,102.1	205.7	0.0	1,316.4
San Joaquin Valley Subsection										
Track alignment	0.0	0.0	0.0	4.2	0.2	0.0	0.0	575.9	0.0	580.3
MOWS near Turner Island Rd	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4.0
TOTAL	48.8	4.4	15.4	87.3	112.9	122.7	1,443.2	1,133.2	28.5	2,996.4

Project Component	Existing Land Use Category (acres)									
	Low-/ Medium- Density Residential	High- Density Residential	Mixed Use	Commercial	Industrial	Public Facilities	Parks/ Recreation/ Open Space	Agriculture ¹	Transportation	Total
Alternative 2										
San Jose Diridon Station Approach Subsection										
Track alignment	1.8	2.2	0.4	0.7	38.1	3.2	3.4	0.0	32.1	81.8
San Jose Diridon Station	0.0	2.2	0.0	12.6	0.0	8.7	0.0	0.0	0.0	23.5
Monterey Corridor Subsection										
Track alignment ²	4.9 (4.9)	0.0 (0.0)	0.8 (0.8)	4.2 (4.2)	27.8 (29.8)	0.3 (0.8)	12.5 (12.5)	0.0 (0.0)	0.0 (0.0)	50.5 (53.0)
Morgan Hill and Gilroy Subsection										
Track alignment	99.7	2.6	13.4	35.1	93.1	62.6	393.0	428.2	0.0	1,127.7
Downtown Gilroy Station	0.0	0.0	8.9	39.2	0.0	0.0	0.0	0.0	0.0	48.1
South Gilroy MOWF	0.0	0.0	0.0	0.0	0.0	50.7	0.0	20.7	0.0	71.4
Pacheco Pass Subsection										
Track alignment	0.0	0.0	0.0	8.6	0.0	0.0	1102.1	205.7	0.0	1316.4
San Joaquin Valley Subsection										
Track alignment	0.0	0.0	0.0	4.2	0.2	0.0	0.0	575.9	0.0	580.3
MOWS near Turner Island Rd	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4.0
TOTAL²	106.4 (106.4)	7.0 (7.0)	23.5 (23.5)	104.6 (104.6)	159.2 (161.2)	125.5 (126.0)	1,511.0 (1,511.0)	1,234.5 (1,234.5)	32.1 (32.1)	3,303.8 (3,306.3)

Project Component	Existing Land Use Category (acres)									
	Low-/Medium-Density Residential	High-Density Residential	Mixed Use	Commercial	Industrial	Public Facilities	Parks/Recreation/Open Space	Agriculture ¹	Transportation	Total
Alternative 3										
San Jose Diridon Station Approach Subsection										
Track alignment	1.8	2.2	0.4	0.7	38.1	3.2	3.4	0.0	32.1	81.8
San Jose Diridon Station	0.0	2.2	0.0	12.6	0.0	8.7	0.0	0.0	0.0	23.5
Monterey Corridor Subsection										
Track alignment	0.8	0.0	0.5	2.4	24.7	0.0	10.8	0.0	0.0	39.3
Morgan Hill and Gilroy Subsection										
Track alignment	48.8	0.0	0.0	14.6	14.6	19.2	309.5	510.4	0.0	917.1
East Gilroy Station	0.0	0.0	0.0	0.2	0.0	0.0	0.0	48.0	0.0	48.2
East Gilroy MOWF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.7	0.0	73.7
Pacheco Pass Subsection										
Track alignment	0.0	0.0	0.0	8.6	0.0	0.0	1,102.1	205.7	0.0	1,316.4
San Joaquin Valley Subsection										
Track alignment	0.0	0.0	0.0	4.2	0.2	0.0	0.0	575.9	0.0	580.3
MOWS near Turner Island Rd	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4.0
TOTAL	51.4	4.4	0.9	43.3	77.6	31.1	1,425.8	1,417.7	32.1	3,084.3

Project Component	Existing Land Use Category (acres)									
	Low-/Medium-Density Residential	High-Density Residential	Mixed Use	Commercial	Industrial	Public Facilities	Parks/Recreation/Open Space	Agriculture ¹	Transportation	Total
Alternative 4										
San Jose Diridon Station Approach Subsection										
Track alignment	7.2	2.6	1.1	0.0	34.5	1.9	4.3	0.0	28.2	79.8
San Jose Diridon Station	0.0	1.4	0.0	11.1	0.0	6.9	0.0	0.0	0.0	19.3
Monterey Corridor Subsection										
Track alignment	16.7	0.0	7.6	0.0	32.7	0.0	19.3	0.0	0.0	76.3
Morgan Hill and Gilroy Subsection										
Track alignment	55.3	0.5	8.1	56.0	56.9	5.7	339.5	311.9	0.0	833.9
Downtown Gilroy Station	0.0	0.0	9.7	35.6	0.0	0.0	0.0	0.0	0.0	45.3
South Gilroy MOWF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.6	0.0	47.6
Pacheco Pass Subsection										
Track alignment	0.0	0.0	0.0	8.6	0.0	0.0	1102.1	205.7	0.0	1,316.4
San Joaquin Valley Subsection										
Track alignment	0.0	0.0	0.0	4.2	0.2	0.0	0.0	575.9	0.0	580.3
MOWS near Turner Island Rd	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4.0
TOTAL	79.2	4.5	26.5	115.5	124.2	14.5	1,465.3	1,145.1	28.2	3,003.0

Sources: City of Santa Clara 2010; City of San Jose 2011; County of Santa Clara 1994; City of Morgan Hill 2016; City of Gilroy 2002, 2005; County of Merced 2013; County of San Benito 2015

¹ Some land uses designated as agricultural along the project extent also contain rural residential uses

² Alternative 2 has two design variants: Skyway Drive Variant A is presented first, with Skyway Drive Variant B shown in parentheses.

MOWF = maintenance of way facility

MOWS = maintenance of way siding

Table 3.13-6 Summary of Permanent Land Conversion by Project Alternative

Alternative	Existing Land Use (acres)									
	Low-/Medium-Density Residential	High-Density Residential	Mixed Use	Commercial	Industrial	Public Facilities	Parks/ Recreation/ Open Space	Agriculture	Transportation	TOTAL
1	44.8	4.4	15.4	87.3	112.9	122.7	1,443.2	1,133.2	28.5	2,996.4
2 ¹	106.4 (106.4)	7.0 (7.0)	23.5 (23.5)	104.6 (104.6)	159.2 (161.2)	125.5 (126)	1,511.0 (1,511.0)	1,234.5 (1,234.5)	32.1 (32.1)	3,303.8 (3,306.3)
3	51.4	4.4	0.9	43.3	77.6	31.1	1,425.8	1,417.7	32.1	3,084.3
4	79.2	4.5	26.5	115.5	124.2	14.5	1,465.3	1,145.1	28.2	3,003.0

¹ Alternative 2 has two design variants: Skyway Drive Variant A is presented first, with Skyway Drive Variant B shown in parentheses.

Land use patterns could be altered by introduction of a use incompatible with existing or planned land uses. All of the project alternatives would be near some residential areas, but none is expected to result in changes in residential land use patterns because the project alternatives would not create new physical divisions or barriers between residential areas (as discussed in Section 3.12); many of the residential areas are already adjacent to state and federal highways and railroad rights-of-way. In these areas, the project would add to an existing transportation corridor but would not change the function or land use designation of adjacent land uses.

San Jose Diridon Station Approach Subsection

All project alternatives would be constructed in existing rail rights-of-way and transportation corridors in the San Jose Diridon Station Approach Subsection. Modifications to the existing stations, track realignments, and right-of-way improvements would require 110.2 acres of land acquisition for permanent conversion under Alternative 1, 105.3 acres under Alternatives 2 and 3, and 99.1 acres under Alternative 4, but these modifications would not impede the continuation of existing uses on adjacent lands or substantially alter land use patterns. Indirect land use impacts related to parking are discussed in Section 3.2.6.3, Parking.

Because the San Jose Diridon Station would be located at the urbanized site of an existing transit facility, it would not substantially change the site's land use. As described previously, San Jose has recognized and incorporated mixed use or TOD into its general plan and the *Diridon Station Area Plan* (City of San Jose 2014). The *Diridon Station Area Plan* in San Jose permits higher density development than currently exists around the station. The Authority has entered into a Station Area Planning agreement with the City of San Jose, the purpose of which is to advance implementation of the *Diridon Area Station Plan*. Major elements of the agreement include an implementation strategy, financial analysis, intermodal station planning, parking and station access, and development planning. The HSR station would be expected to stimulate residential, industrial, and commercial development on adjacent land that is consistent with current uses and land use plans and policies. There would be no substantial change in land use patterns. Moreover, construction of the HSR station would be consistent with applicable land use plans and strategies and would not result in alterations of the planned land use patterns. LU-IAMF#1 will avoid incompatibility of HSR infrastructure and the San Jose Diridon Station with adjacent land uses. In addition, the *San Jose Visual Design Guidelines for California High-Speed Rail Infrastructure*, developed in January 2012, establishes guidelines for high-quality aesthetic design for HSR infrastructure that fits the evolving physical character and unique cultural context of San Jose (City of San Jose 2012). The guidelines state that HSR travel and infrastructure are integral to the development of San Jose's vision for its future growth. A Cooperative Agreement between the City of San Jose and the Authority, approved by the City Council and the Authority Board of Directors, sets forth in more detail mutual commitments between the Authority and the City of San Jose regarding cooperation, public outreach, quality of design, construction, funding, implementation, decision-making, and long-term maintenance. Implementation of the design guidelines would reduce potential incompatibility of HSR infrastructure with adjacent land uses, thereby minimizing changes to existing or planned uses.

Monterey Corridor Subsection

The project alternatives through the Monterey Corridor Subsection would be constructed in the existing railroad right-of-way. Permanent acquisitions would range from approximately 39.3 acres under Alternatives 1 and 3 to 76.3 acres under Alternative 4. Alternative 2 would require permanent acquisition of approximately 52.9 acres in this subsection. These acquisitions would constitute less than 3 percent of the total acquisitions for all alternatives. Because the overall land acquisition would be relatively small and the project alternatives would be constructed in an existing transportation corridor, alteration of land use patterns would not be expected.

Morgan Hill and Gilroy Subsection

Alternatives 1 and 2

Under Alternatives 1 and 2, the project would be constructed predominantly in existing transportation corridors. Because most of Alternative 1 would be constructed on viaduct in the

existing transportation corridor, it is not anticipated that there would be substantial alteration of land use patterns. Agricultural uses could continue adjacent to the viaduct and would not be incompatible with HSR, and few residential uses would be affected.

Under Alternative 2, because it would be constructed primarily at grade on embankment, several intersections along the alignment in Morgan Hill—Madrone Parkway, East Main Avenue, East Dunne Avenue, San Pedro Avenue, Church Street, and Tennant Avenue—would require realignment and new grade separations. Beginning at Burnett Avenue north of Madrone Parkway, embankment construction would require acquisition of numerous commercial parcels, predominantly on the east side. At Tennant Avenue, acquisition would consist primarily of vacant land. There is a large suburban residential development on the west side of the alignment at Madrone Parkway. Sixteen homes along Peppermint and Cinnamon Avenues in Morgan Hill would be demolished to accommodate the slope for a new underpass of Madrone Parkway, eliminating a row of homes along either side. Although this new roadway would physically divide the existing residential neighborhood, it would be compatible with the adjacent residential uses. The existing land uses would be anticipated to remain despite the introduction of HSR because the acquisitions would occur in a large, established residential neighborhood, and overall land use patterns would not be altered. Any future development on the vacant parcels on the east side of the alignment would follow existing zoning (i.e., commercial and planned unit development), which would be compatible with HSR. Thus, Alternative 2 acquisitions would not alter overall land use patterns.

At Main Avenue, permanent acquisitions for the new grade separation under Alternative 2 would involve primarily commercial businesses, with a row of three high-density residential buildings acquired along the south side of East Main Avenue. Zoning in this area is a mix of high-density residential, community commercial, and central business district. The introduction of HSR into the existing Caltrain corridor would not be incompatible with existing land uses because the existing residential neighborhoods were constructed adjacent to the existing rail corridor. Similarly, construction of the new grade separation at Dunne Avenue would require acquisition of multifamily residential buildings on both sides of the alignment. The area on the east side of the alignment is zoned medium-density residential; the zoning along West Dunne Avenue includes public facility (a community center) and mixed uses. Again, because the project would be constructed in an existing rail corridor, it would not introduce incompatible uses in this area that could lead to alteration of land use patterns.

In San Martin, land uses on both sides of the alignment are primarily established residential neighborhoods. Most of the permanent acquisitions would be commercial or industrial business, with two residential parcels and one agricultural business also displaced. The parcels on both sides of the alignment are zoned by Santa Clara County as rural residential in the central portion of San Martin and agricultural at the northern and southern edges of San Martin. However, because the project would be constructed within an existing transportation corridor and would not require permanent acquisition of a substantial number of parcels (Section 3.12), it would not be incompatible with existing uses and would not alter land use patterns.

The adopted *Downtown Gilroy Specific Plan* (City of Gilroy 2005) supports higher-density, mixed-use residential or commercial development around the existing Caltrain station and has defined land use opportunities for TOD planning, using land use overlay zones and identifying services for transit passengers (e.g., restaurants, retail). These plans and policies related to the HSR station bring additional incentive for infill development that would encourage the higher densities of commercial and residential development and help reduce development pressure on the area's agricultural lands. LU-IAMF#1 would apply to the Downtown Gilroy Station area and will avoid the potential for land use incompatibility in the station area.

Both Alternatives 1 and 2 would entail acquisition of commercial and residential properties on both sides of the alignment north of the downtown Gilroy Caltrain station and expand transportation uses in downtown Gilroy. Zoning in downtown Gilroy is a mix of commercial and residential, with the goal of increasing the amount of TOD in the station area. Alternatives 1 and 2 would convert approximately 40 acres of commercial uses to transportation use but would not

substantially alter land use patterns. Acquired businesses could relocate elsewhere in downtown; residential and commercial uses would be expected to continue in downtown. The increased transportation-related uses would remain compatible with adjacent land uses, some of which are existing transportation uses associated with the downtown Caltrain station.

Alternative 3

Alternative 3 would follow the same alignment as Alternative 1 until Church Avenue where it would travel southeast to east Gilroy. Under Alternative 3, the alignment would pass through east Gilroy, a predominantly agricultural area. HSR would not be incompatible with the existing open space and agricultural use and would not be expected to alter land use patterns. The area of the East Gilroy Station is zoned agricultural and primarily within the Gilroy city limits and the UGB.

As noted previously, open lands to the north, east, and southeast of the East Gilroy Station site are subject to Measure H. Given the constraints of Measure H for these remaining vacant lands, the East Gilroy Station would not be expected to spur higher-density development and TOD in the area. The HSR station would introduce a use incompatible with the residential uses immediately adjacent to the station site on Marcella Avenue northeast of the station footprint but would not alter land use patterns regulated by Measure H. The East Gilroy Station site would be adjacent to a small row of single-family residences and agricultural land. Construction of the East Gilroy Station would convert agricultural land to a transportation use and introduce a use incompatible with these types of existing land uses. Although LU-IAMF#1 will reduce the potential for land use incompatibility in east Gilroy, incompatible uses would be present in the station area.

Alternative 4

Alternative 4 would be constructed in the existing rail corridor through downtown Gilroy. No new grade separations would be constructed. Alternative 4 would require the least permanent land acquisition in this subsection compared with the other three project alternatives. LU-IAMF#1 will avoid potential incompatibility in the Downtown Gilroy Station area. Similar to Alternatives 1 and 2, agricultural uses could continue adjacent to the rail corridor that would not be incompatible with HSR, and few residential uses would be affected. Alternative 4 would require permanent acquisition of commercial and residential properties on both sides of the alignment north of the Downtown Gilroy Caltrain station and conversion of a total of approximately 200 acres from residential and commercial uses to transportation use. This project alternative would also encourage development of TOD in the station area. Alternative 4 would not cause a substantial change in land use patterns by introducing incompatible land uses in downtown Gilroy.

South Gilroy MOWF (Alternatives 1, 2, and 4)

The South Gilroy MOWF under Alternatives 1 and 2 would be located partially within city limits and the UGB and partially outside these limits. The South Gilroy MOWF under Alternative 4 would be entirely outside these boundaries, but the RSA would be partially within the UGB. All three MOWF sites are subject to Measure H. The Authority would coordinate with the City of Gilroy to bring the selected MOWF site within city limits so as to provide necessary urban services such as water, power, and wastewater treatment. This assumption is reasonable because providing stand-alone water, power, and wastewater services for a state-owned facility would result in greater environmental impacts, particularly under Alternative 3, with the MOWF constructed in the floodplain. It would very likely be infeasible to permit a self-contained wastewater treatment facility in a floodplain. With anticipated incorporation of the MOWF site into Gilroy city limits and the urban service area, the project alternatives would not introduce incompatible land uses that would permanently alter land use patterns.

Construction of the South Gilroy MOWF would require acquisition and permanent conversion of land that is currently industrial, vacant, or agricultural. The permanent acquisition of land in this area would impede a small number of existing industrial uses at the northern end of the proposed MOWF. Existing lands on and adjacent to the MOWF site are predominantly vacant; construction of the MOWF would not substantially impede the continuation of existing uses outside the footprint of the MOWF. The maintenance facility would entail a conversion to industrial use but would have little, if any, influence on adjacent development patterns because planned development in the MOWF area within the UGB is commercial or industrial, as set forth in the *Gilroy 2020 General Plan* (City of Gilroy 2002).

East Gilroy MOWF (Alternative 3)

The East Gilroy MOWF would require acquisition and permanent conversion of 73.7 acres of land, which are in agricultural production, and realignment of SR 152. Consequently, the East Gilroy MOWF would be constructed in areas that are not zoned for transportation uses. The maintenance facilities could spur development of some limited supporting uses, such as welding shops, but land use patterns would not be expected to change substantially, if at all, in the surrounding areas because any supporting development would be limited by zoning restrictions and would not result in substantial additional development to support workers (e.g., lunch facilities, daycare) such that land use patterns would be altered.

Pacheco Pass Subsection

The project in the Pacheco Pass Subsection under all project alternatives would be primarily in tunnel. Existing land uses are open space and rangeland, and the project would not introduce an incompatible land use that would alter land use patterns.

San Joaquin Valley Subsection

The project under all project alternatives in the San Joaquin Valley Subsection would cross open space and agricultural areas and then parallel Henry Miller Road. Existing development along Henry Miller Road consists of scattered residences, agricultural support structures such as barns and silos, agricultural fields, and local roadside commercial uses; no future development is planned for this area. Construction of the MOWS near Turner Island Road would require a small amount of acquisition and permanent conversion of agricultural land but, similarly, would have little, if any, influence on adjacent development patterns. Agricultural uses are expected to continue in this area. As noted previously, project features will coordinate equipment crossings to facilitate continuance of agricultural operations during long-term project operation. The project would not introduce an incompatible land use in the San Joaquin Valley Subsection and existing residential and agricultural uses would be able to continue.

CEQA Conclusion

The impact would be less than significant under CEQA for Alternatives 1, 2, and 4 because there would be no introduction of incompatible uses that would result in substantial alteration of land use patterns at San Jose Diridon Station or the Downtown Gilroy Stations. Therefore, CEQA does not require mitigation. Under Alternative 3, however, the impact under CEQA would be significant because the East Gilroy Station would introduce transportation-related uses to a predominantly agricultural area (adjacent to some residential uses) that would be incompatible with these existing uses, thereby altering land use patterns. Further, land acquisitions for Alternative 1 and 2 would occur primarily within existing transportation rights-of-way or constitute small acquisitions along the entire alignment that would not alter the overall land use patterns.

The Authority designed the project alternatives to follow existing transportation rights-of-way to the maximum degree feasible. Construction of Alternatives 1 and 2 in or adjacent to existing transportation corridors between Santa Clara and Gilroy would minimize changes to existing land uses as much as possible but would not avoid them altogether. Although the aerial viaduct and embankment would be constructed primarily within the existing Caltrain/I-280/SR 87/US 101 and Monterey Road rights-of-way or adjacent to the UPRR corridor, minimizing the need for additional right-of-way, some residential, commercial, and industrial land would be converted to transportation-related use under Alternatives 1 and 2. Alternative 4 would be constructed in the existing railway corridor between Santa Clara and Gilroy.

Modifications to the existing stations, track realignments, and right-of-way improvements would require land acquisition and permanent easements but would not impede the continuation of existing uses on adjacent lands or substantially alter land use patterns. South of Gilroy, predominantly agricultural land would be converted for the HSR guideway. Under Alternative 3, a greater amount of agricultural land would be converted than under Alternatives 1, 2, and 4 because of its route through east Gilroy rather than through urbanized downtown Gilroy. The site for the East Gilroy Station and MOWF under Alternative 3, as well as the two different locations for the South Gilroy MOWF under Alternatives 1, 2, and 4, are outside Gilroy's UGB and are

subject to Measure H. Measure H severely limits new development outside the UGB; therefore, construction of the East Gilroy Station and the Gilroy MOWF under all project alternatives would not be expected to stimulate new development that could alter land use patterns without repeal of Measure H and a change in zoning.

In the Pacheco Pass and San Joaquin Valley Subsections, the guideway would be the same for all four project alternatives and constructed outside existing transportation corridors. The acquired land would constitute a small portion of the total land in the three counties and would not result in material changes in regional or local land uses or development patterns. The combined size of Santa Clara, San Benito, and Merced Counties is approximately 3 million acres (834,560, 889,600, and 1.27 million acres, respectively). The footprint of the entire project would require approximately 0.1 percent of the three-county area and would not result in a substantial change to regional land use patterns.

Although LU-IAMF#1 will reduce the potential for incompatibility of the East Gilroy Station under Alternative 3 with adjacent land uses in east Gilroy, the impact would remain. No mitigation measure has been identified that would reduce this impact.

Operations Impacts

Impact LU#5: Permanent Indirect Impacts on Land Use Patterns from Increased Noise, Light, and Glare

Project operations would involve scheduled train service along the HSR guideway, as well as inspection and maintenance along the railroad right-of-way; at stations and structures; and on fencing, power system, positive train control, and communications facilities. Operational activities are described in Chapter 2, Alternatives. All of the project alternatives would be operated in existing transportation corridors north of Gilroy. Alternatives 1, 2, and 4 would continue in an existing rail corridor to downtown Gilroy, while Alternative 3 would travel east through east Gilroy across agricultural lands. Land uses adjacent to existing rail corridors have been historically exposed to increased levels of noise from train and vehicular traffic and these land uses have continued to operate. HSR train noise would be intermittent and of short duration at any given location as HSR trains travel along the alignment; for those portions on viaduct, train noise would be very low, reduced to less than 100 decibels at 15 feet from the source (see Section 3.4 for a full discussion of train noise). For those portions on embankment, noise would diminish to less than 100 decibels 75 feet from the source. Although noise barriers would be constructed where appropriate to shield sensitive receptors, severe noise impacts would remain at some locations. For Alternative 4, the new four-quadrant gates at the existing at-grade crossings through the Monterey Corridor and Morgan Hill and Gilroy Subsections would require the use of train horns. Intermittent train noise from HSR service would not result in a substantial change in land use patterns, such as the conversion of residential or agricultural land uses to other land uses. Mitigation measures to reduce noise and vibration impacts are discussed in Section 3.4.7, Mitigation Measures, of this Final EIR/EIS.

The Gilroy MOWF (either the south Gilroy sites or east Gilroy) and the MOWS near Turner Island Road would operate primarily during off-peak hours. The MOWF is an extensive facility, would be brightly lit (though lighting would be directed inward), and would also be a source of additional noise in the area. Because the predominant land uses in the vicinity of the proposed maintenance facilities are industrial (for the South Gilroy MOWF sites) or vacant/agricultural (for the East Gilroy MOWF), nighttime activities, noise, and light would not be expected to result in changes in land use patterns (Section 3.14, Agricultural Farmland). The MOWS is a smaller facility. The MOWS also has lighting (directed inward) and additional noise and is located in an agricultural setting, but the additional light and noise would not be expected to result in any change in dominant land use patterns, as it would be an isolated facility along Henry Miller Road that would not result in any activities that would cause change in adjacent agricultural use.

The DDV would not introduce any additional incompatible uses that would result in substantial alteration of land use patterns compared to the alternatives without the DDV and TDV. The TDV

would not change the footprint of the project and would result in no change in land use patterns compared to the alternatives without the DDV and TDV.

CEQA Conclusion

The impacts on existing land use patterns from increased noise, light, and glare would be less than significant under CEQA for all alternatives because existing transportation corridors are already exposed to increased levels of noise from train and vehicular traffic, and intermittent noise from HSR service is not anticipated to cause changes in land use patterns by introducing incompatible uses. HSR train noise would be intermittent and of short duration at any given location, and the predominant land uses in the vicinity of the proposed brightly lit maintenance facilities are industrial or vacant/agricultural lands and would not be sensitive to increases in light and glare.

3.13.6.3 Inducement of Population Growth beyond Planned Levels

Construction and operation of the project could induce population growth that would exceed planned levels. Increases in population could result from increased development density, beyond planned levels, and increased employment opportunities as a result of the project.

No Project Impacts

Construction of planned development and transportation projects identified in Section 3.19, Cumulative Impacts, would generate short-term construction employment in the region and a number of long-term permanent jobs to maintain new and expanded facilities. A comprehensive analysis of regional growth is presented in Section 3.18. Table 3.13-7 shows the RSA county population estimates for 2015 and projections for 2040. The land use plans of Santa Clara, San Benito, and Merced Counties encourage infill and higher-density development in urban areas and concentration of uses around transit corridors to accommodate future population growth and provide more modal choices for residents and workers. These policies are being implemented in the region regardless of whether the project is constructed. Under the No Project Alternative, San Jose and Gilroy would not have HSR stations and thus may have a more difficult time encouraging higher-density development closer to downtown areas without the demand for growth downtown near stations created by HSR riders, and fewer transportation choices would be available. The No Project Alternative would not contribute to inducing population growth beyond planned levels.

Table 3.13-7 Population Projections 2015–2040

Geographic Area	Population in 2015	Population in 2040	Change 2015–2040	Annual Average Growth Rate
Santa Clara County	1,903,974	2,331,887	22.5%	0.8%
San Benito County	56,445	82,969	47.0%	1.6%
Merced County	269,280	389,934	44.8%	1.5%
Region ¹	2,229,699	2,804,790	25.8%	0.9%
California	38,907,642	47,233,240	21.4%	0.8%

Sources: CDOF 2014, 2016

¹The region is the three-county area (Santa Clara, San Benito, and Merced Counties combined).

Project Impacts

Construction Impacts

Impact LU#6: Temporary Induced Population Growth

Construction of the project could induce population growth that would exceed planned levels. Increases in population could result from increased employment opportunities driven by the

project if temporary workers were to increase demand for housing such that new housing would be constructed to accommodate them.

Each of the four project alternatives would be expected to increase local and regional employment beyond what would be experienced under the No Project Alternative. As noted in Section 3.18, Regional Growth, Alternative 3 is estimated to result in the greatest employment, generating almost 45,000 total job-years, followed by Alternative 1, with more than 43,000 job-years. Alternative 4 is estimated to result in 28,200 total job-years, the smallest employment of the alternatives. The estimated combined total employment for construction activity associated with the guideway, stations, and maintenance facilities (direct and indirect and induced jobs) is roughly 6,510 to 11,280 jobs in the peak year, 2024, under each alternative. If added to the three-county region's projected total employment for 2024 (about 1,228,000 without the project), these peak construction-period jobs would add about 0.5 to 0.9 percent to the total projected employment in the region. This level of impact would not be substantial in the context of the three-county region's overall economy. With the DDV and TDV, there would be no change in anticipated population growth during construction compared to the alternatives without the DDV and TDV.

As noted in Section 3.18, Regional Growth, the vast majority of construction workers would be residents of the larger region, who would drive or carpool to active project construction sites and return home at the end of the day. A small number of specialized workers could come to the region for short periods but would most likely stay in area motels. There would be no construction worker camps established in the project footprint. It is unlikely that many construction workers would compete for traditional owner-occupied or rental units in the region to seek employment opportunities that would be created by the HSR project alone. It is also unlikely that many construction workers would relocate their families to communities in the immediate three-county project vicinity solely in pursuit of local HSR construction jobs. Construction of the project would, therefore, not induce substantial population growth beyond planned levels.

CEQA Conclusion

The impact on population growth from employment opportunities generated by the project would not exceed planned levels and would therefore be a less than significant impact under CEQA for all alternatives. Construction of the project alternatives would not induce substantial population growth or growth that would exceed planned levels because peak construction jobs would add less than 1 percent to the total projected employment in the region. Most construction workers would be residents of the larger region and would not relocate into the three-county project vicinity. A small number of specialized workers could come to the region for short periods but would most likely stay in area motels. This small increase to the population would not be substantial in the context of the region's overall economy and would be less than significant. Therefore, CEQA does not require mitigation.

Operations Impacts

Impact LU#7: Permanent Induced Population Growth

Alternatives 1, 2, and 4

Increased density stimulated by operation of the HSR stations in San Jose and downtown Gilroy would result in population growth. However, as discussed above, increased density in the vicinity of the proposed HSR stations under Alternatives 1, 2, and 4 would not induce development intensity beyond planned levels because San Jose and Gilroy both have or are currently preparing station area plans to accommodate TOD. Increased development density could result in the area of the South Gilroy MOWF sites; this area is zoned primarily open space, and any future development in this area stimulated by maintenance facility operation would not be consistent with existing land use plans and zoning. It is unlikely that residential uses would be developed around the maintenance facility because it would be an incompatible use; industrial uses that may develop around the MOWF would most likely be uses supporting the facility, such as metal working and fabrication, which would be compatible with the industrial uses adjacent to the maintenance facility on the north. It is anticipated that the approximately 75 to 150 new maintenance facility workers would either commute to the site or reside in existing vacant housing. Any population growth that might be induced by the increased employment opportunities

would not be considered substantial or exceed planned levels citywide or regionally. The increase in employment would be beneficial to the local economy, but because adopted or planned station area and specific plans encourage TOD, Alternatives 1, 2, and 4 would not induce growth beyond planned levels.

Alternative 3

As discussed previously, operation of the East Gilroy Station and the East Gilroy MOWF would not stimulate TOD or other development in the vicinity beyond planned levels. Measure H places substantial constraints on development outside the UGB, which is adjacent to the station and MOWF sites. Because no TOD would be expected in the east Gilroy area as a result of Alternative 3, nor would new development be stimulated by project operations, there would be no substantial induced population growth under Alternative 3.

CEQA Conclusion

The increased population growth generated by the project would not exceed planned levels and would therefore be a less than significant impact under CEQA for all alternatives. Population increases at the Diridon and Downtown Gilroy Stations have been anticipated in the adopted or planned station area plans for these sites. Population growth at the East Gilroy Station would be prevented by Measure H constraints, and development around maintenance facility sites would be restricted by the existing zoning at these sites. Because there would be no anticipated population growth beyond planned levels as a result of project operations, the impact would be less than significant. Therefore, CEQA does not require mitigation.

3.13.7 Mitigation Measures

No significant station planning, land use, and development impacts requiring mitigation measures were identified; therefore, no station planning, land use, and development-related mitigation measures apply. The exception is for Impact LU#4 under Alternative 3; no mitigation measures have been identified to mitigate potential impacts on land use under this alternative.

3.13.8 Impact Summary for NEPA Comparison of Alternative

As described in Section 3.1.6.4, Methods for Evaluating Impacts, the effects of the project alternatives under NEPA are compared to the no-project condition when evaluating the impact of the project on the resource. The determination of effect was based on the context and intensity of the change that would be generated by construction and operation of the project. Table 3.13-8 shows comparisons of the impacts by project alternative, followed by a summary of the impacts.

3.13.8.1 Alteration of Land Use Patterns

The project would minimize the potential incompatibility of construction areas with adjacent land uses by providing continuous property access for residences and businesses, maintaining traffic flow in construction areas, minimizing fugitive dust emissions, minimizing impacts from noise and vibration, and restoring construction staging areas to their original condition after construction is completed.

Construction of the project would result in temporary direct impacts on land use patterns because staging, laydown, and fabrication areas would occupy large areas for 1.5 years and displace some business operations and residences. Impacts from construction staging, laydown and fabrication areas, and reconductoring would not result in changes to land use patterns outside the permanent rights-of-way. The project would restore any temporary disruptions or conversions of land outside the permanent rights-of-way to the uses in place before construction.

Construction of the project would result in temporary indirect impacts on land use patterns from the increase in noise and dust and changes in traffic patterns. The construction impacts would be greatest under Alternatives 1 and 3, which use more aerial structures and therefore require a larger number of precasting yards than Alternatives 2 and 4.

Table 3.13-8 Comparison of Project Alternative Impacts for Station Planning, Land Use, and Development

Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Alteration of Land Use Patterns				
Impact LU#1: Temporary Alteration of Land Use Patterns from Land Use Conversion or Introduction of Incompatible Land Uses	Construction of the project would temporarily convert 1,521.5 acres, but land use patterns would not be substantially altered.	Construction of the project would temporarily convert 1,807.2 (1,807.7) ¹ acres, but land use patterns would not be substantially altered.	Construction of the project would temporarily convert 1,531.4 acres, but land use patterns would not be substantially altered.	Construction of the project would temporarily convert 1,109.7 acres, but land use patterns would not be substantially altered.
Impact LU#2: Temporary Alteration of Land Use Patterns from Increased Traffic, Noise, Air Quality Emissions, and Visual Changes	Seven precasting yards would be required as well as 20 additional miles of aerial profile. The project would provide continuous property access by maintaining traffic flow; managing fugitive dust emissions, noise, and vibration; and restoring construction staging areas to their original condition.	Alternative 2 would include 20 additional miles of embankment rather than aerial profile. Project features would be the same as Alternative 1.	Same as Alternative 1.	Alternative 4 would be constructed entirely within the existing rail corridor through downtown Gilroy. Four precasting yards would be required. Temporary indirect impacts on land use patterns would be less than under Alternatives 1 through 3.
Impact LU#3: Temporary and Permanent Alteration of Land Use Patterns from Roadway Closures and Modifications	Seventeen permanent road modifications and seven new grade separations. Road closures and modifications would not result in large-scale relocations leading to altered land use patterns.	Twenty-nine permanent road closures and 32 new grade separations. Similar to Alternative 1, although substantially more road closures and grade separations.	Seventeen permanent road closures and 10 new grade separations, similar to Alternative 1.	Fifteen permanent road closures and six new grade separations, similar to Alternative 1.
Impact LU#4: Permanent Alteration of Land Use Patterns from Land Use Conversion and Introduction of Incompatible Uses	Construction of Alternative 1 would result in the permanent conversion of 2,996.4 acres, but the project would improve connectivity to neighboring communities. For the majority of the alignment, Alternative 1 would not substantially alter land use patterns.	Construction of Alternative 2 would result in the permanent conversion of 3,303.8 (3,306.3) ¹ acres but, with the same project features as under Alternative 1, would not substantially alter land use patterns.	Construction of Alternative 3 would result in the permanent conversion of 3,084.3 acres and introduce an incompatible use at the station site in east Gilroy, and with the same project features as Alternative 1, would substantially alter land use patterns.	Construction of Alternative 4 would result in the permanent conversion of 3,003.0 acres but, with the same project features as under Alternative 1, would not substantially alter land use patterns.

Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Impact LU#5: Permanent Indirect Impacts on Land Use Patterns from Increased Noise, Light, and Glare	The project would avoid or minimize noise and lights from operations. Although some residents may choose to relocate away from the alignment, such relocations would not result in a substantial change in land use patterns.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.
Inducement of Population Growth beyond Planned Levels				
Impact LU#6: Temporary Induced Population Growth	Population growth that might be induced by increased employment opportunities for construction would not be considered substantial or exceed planned levels locally or regionally. The increase in employment would be beneficial to the local economy.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.
Impact LU#7: Permanent Induced Population Growth	Population growth that might be induced by increased employment opportunities for HSR operations would not be considered substantial or exceed planned levels locally or regionally. The increase in employment would be beneficial to the local economy. Because adopted and planned station area and specific plans encourage TOD, Alternative 1 would not induce population growth beyond planned levels.	Same as Alternative 1.	Operation of the East Gilroy HSR station and the East Gilroy MOWF would not stimulate population growth in the vicinity beyond planned levels.	Same as Alternative 1.

¹ Alternative 2 has two design variants: Skyway Drive Variant A is presented first, with Skyway Drive Variant B shown in parentheses.
 HSR = high-speed rail
 MOWF = maintenance of way facility
 TOD = transit-oriented development
 UGB = urban growth boundary

Construction of the project would not result in permanent impacts on land use patterns from conversion of land uses under Alternatives 1 and 2; Alternative 4 would require limited new rights-of-way between San Jose and Gilroy. Although the permanent conversion of land to transportation and industrial uses for the project alternatives would be a change in specific locations, none of the project alternatives would substantially alter existing land use patterns. The Authority would coordinate with local transit agencies and the cities to develop connectivity to neighboring communities, minimizing the potential for incompatibility and disruption of existing land use patterns. The East Gilroy Station under Alternative 3 would change land use patterns and introduce a use incompatible with the residential uses immediately adjacent to the station site.

Construction of the project would not result in substantial permanent impacts on land use patterns from road closures and modifications. Primary differences among alternatives would occur in the Monterey Corridor and the Morgan Hill and Gilroy Subsections, where Alternative 2 would require additional roadway modifications and realignments. Alternative 4 would not require narrowing of Monterey Road. Permanent road closures and roadway modifications could result in closure of some businesses and residential relocation in response to permanent changes in access. The effects of obstructed access would vary, depending on location and design option, but such obstructions would not be expected to result in enough inconvenience to cause permanent relocation of a substantial number of businesses and residents such that land use patterns could be altered. These displacements and relocations are discussed in more detail in Section 3.12, Socioeconomics and Communities, and in the *San Jose to Merced Project Section Draft Relocation Impact Report* (Authority 2019).

Operation of the project would not result in altered land use patterns. The project would avoid or minimize noise and lights from operations. Although some residents may choose to relocate away from the alignment, such relocations would not result in a substantial change in land use patterns.

3.13.8.2 Induced Population Growth

Operation of the project at the San Jose Diridon Station and Downtown Gilroy Station would support increased employment, population, recreation, and community cohesion, while incompatible changes in land use patterns or intensities would be avoided. Services for construction workers and station and maintenance facility personnel would be provided by local businesses, and the project would not induce population growth beyond planned levels. Alternative 3, which includes construction of a new East Gilroy Station, would not induce population growth.

Operation of the project would not result in increased density or changes to TOD at the Gilroy MOWF or the MOWS near Turner Island Road. The project would not be expected to induce development, with the exception of potentially inducing related industrial uses. Existing zoning around the MOWS site is agricultural and rural residential, and construction and operation of the MOWS would not induce population growth beyond planned levels.

3.13.9 CEQA Significance Conclusions

As described in Section 3.1.6.4, Methods for Evaluating Impacts, under the Method for Determining Significance under CEQA subsection, the impacts of project actions under CEQA are evaluated against thresholds to determine whether a project action would result in no impact, a less than significant impact, or a significant impact. Table 3.13-9 shows the CEQA significance determination for each impact discussed in Section 3.13.6, Environmental Consequences. A summary of the significant impacts, mitigation measures, and factors supporting the significance conclusion after mitigation follows the table.

Table 3.13-9 CEQA Significance Conclusions and Mitigation Measures for Station Planning, Land Use, and Development

Impacts	Impact Description and CEQA Level of Significance	Mitigation Measure(s)	CEQA Level of Significance after Mitigation
Alteration of Land Use Patterns			
Impact LU#1: Temporary Alteration of Land Use Patterns from Land Use Conversion or Introduction of Incompatible Land Uses	Less than significant for all project alternatives. Use of land for construction activities would be temporary and would not result in substantial changes to land use patterns outside the permanent rights-of-way.	No mitigation measures are required.	Not applicable
Impact LU#2: Temporary Alteration of Land Use Patterns from Increased Traffic, Noise, Air Quality Emissions, and Visual Changes	Less than significant for all project alternatives. Project features will minimize impacts by providing continuous property access, maintaining traffic flow, minimizing fugitive dust emissions, minimizing impacts from noise and vibration, and restoring construction staging areas to their original condition after construction.	No mitigation measures are required.	Not applicable
Impact LU#3: Temporary and Permanent Alteration of Land Use Patterns from Permanent Roadway Closures and Modifications	Less than significant for all project alternatives. Temporary and permanent road closures and modifications would not result in substantial changes to land use patterns.	No mitigation measures are required.	Not applicable
Impact LU#4: Permanent Alteration of Land Use Patterns from Land Use Conversion and Introduction of Incompatible Uses	Less than significant for Alternatives 1, 2, and 4. There would be no introduction of incompatible uses that would result in substantial alteration of land use patterns. Significant for Alternative 3. The project would convert agricultural land to nonagricultural use and introduce an incompatible transportation-related land use into this predominantly agricultural area, which would substantially alter land use patterns.	For Alternatives 1, 2, and 4, no mitigation measures are required. For Alternative 3, no mitigation measures have been identified.	Significant and Unavoidable for Alternative 3
Impact LU#5: Permanent Indirect Impacts on Land Use Patterns from Increased Noise, Light, and Glare	Less than significant for all project alternatives. Project operations would not substantially alter land use patterns.	No mitigation measures are required.	Not applicable
Induced Population Growth			
Impact LU#6: Temporary Induced Population Growth	Less than significant for all project alternatives. The anticipated population growth would not exceed planned levels during construction of the project.	No mitigation measures are required.	Not applicable

Impacts	Impact Description and CEQA Level of Significance	Mitigation Measure(s)	CEQA Level of Significance after Mitigation
Impact LU#7: Permanent Induced Population Growth	Less than significant for all project alternatives. The anticipated population growth would not exceed planned levels as a result of operation of the project.	No mitigation measures are required.	Not applicable

Impact LU#4 Permanent Alteration of Land Use Patterns from Land Use Conversion and Introduction of Incompatible Uses

The adopted *Downtown Gilroy Specific Plan* (City of Gilroy 2005) supports higher-density, mixed-use residential or commercial development around the existing Caltrain station and has defined land use opportunities for TOD planning, using land use overlay zones and identifying services for transit passengers (e.g., restaurants, retail). These plans and policies related to the HSR station bring additional incentive for infill development that would encourage the higher densities of commercial and residential development and help reduce development pressure on the area's agricultural lands. Alternatives 1 and 2 would entail acquisition of commercial and residential properties on both sides of the alignment north of the Downtown Gilroy Caltrain Station and expand transportation uses in downtown Gilroy.

Zoning in downtown Gilroy is a mix of commercial and residential, with the goal of increasing the amount of TOD in the station area. TOD in the downtown area would be consistent with land use plans and policies for future redevelopment of the area, and Alternatives 1 and 2 would not alter land use patterns in downtown Gilroy. Although HSR in downtown Gilroy would be consistent with the applicable land use plan, it would require removal of a substantial amount of residential and commercial uses. However, there are existing transportation-related uses in downtown Gilroy that would be compatible with commercial and residential development, and the expansion of transportation-related uses in downtown Gilroy would not substantially alter land use patterns. Commercial and residential uses would continue. The impact under CEQA would be less than significant for Alternatives 1, 2, and 4. Alternative 3 would convert agricultural land to nonagricultural use and introduce an incompatible transportation-related land use into this predominantly agricultural area; there would be a significant and unavoidable impact under Alternative 3. No mitigation measure has been identified that would reduce this impact.