

## Memorandum

**To:** Bruce Brubaker and Janet Chang, PlaceWorks

**From:** Matt Kowta, MCP, Principal  
Amanda Wallace, MCRP, Associate  
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**Date:** May 9, 2017

**Re:** Comparative Economic Impacts of Gilroy HSR Alignment Options

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The City of Gilroy requested that BAE prepare a comparative assessment of the potential property and business impacts associated with construction and operation of the High-Speed Rail (HSR) project, involving each of three potential right-of-way (ROW) alignments: the aerial alignment through Downtown (Viaduct to Downtown/Alternative 1), the modified-at-grade (“embankment”) alignment through Downtown (Embankment to Downtown/Alternative 2) and the embankment alignment through East Gilroy (East Gilroy/Alternative 3). This memo presents the research, analysis, and findings from this assessment.

BAE’s assessment included review of a parcel database compiled by PlaceWorks that identified parcels fully and partially affected by the HSR construction project under each alignment alternative. These parcels represent the primary focus of BAE’s study; however, this analysis considers potential impacts to these parcels in the context of the surrounding land uses, extending roughly one-half mile from the alternative alignments. BAE’s additional research involved a windshield survey and walking tour conducted by BAE staff in the alternative alignment areas, to observe building placement, physical conditions, and existing business activity on the affected parcels; review of City business license data regarding business activity on the affected parcels; and review of aerial imagery for the affected areas.

For the purposes of the analysis, PlaceWorks used the following methodology to identify fully and partially affected parcels:

- Fully Affected: (1) Where a significant portion of the structure or structures comprising the property’s principal dwelling or business facility would be required permanently for the project infrastructure or a temporary construction easement and (2) where a property’s structures were not impacted but another component critical to a property’s intended use such as parking, access, or open space used for storage of goods or equipment would be required for the project.

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- Partially Affected: Where the area required for the project appeared not to be critical to the property's primary function as a residence or business and/or the remaining portion of the property could be reconfigured to continue serving its purpose without significant disruption to occupants.

## **A. Summary of Results**

The analysis that BAE conducted for this memo covered three broad topics, including the comparative potential impacts of the three alignment alternatives on property that would be located in the HSR ROW due to construction impacts, potential impacts on existing businesses due to construction impacts, and potential long-term impacts on businesses due to alternative HSR station locations and potential changes in business activity associated with the station locations. In addition to detailed discussions regarding the different impacts to properties and businesses under the different HSR alignment alternatives, BAE ranked the three alternatives as follows. As discussed further below, each alignment alternative has the potential to create both adverse and beneficial impacts; thus, the ranking system assigns a rank of "Lesser" when an alternative represents the alternative with the least adverse impacts and/or most beneficial effects for a given evaluation topic and a rank of "Higher" represents the alternative with the most adverse and/or least beneficial impacts. A rank of "Moderate" indicates the alternative this is ranked between the Lesser and Higher ranked alternatives. Table 1, on the following page, summarizes the rankings.

The overall rankings of the three ROW alignment alternatives will depend upon the relative importance placed on each of the three broad assessment topics summarized above. BAE has not assigned weighting factors to the different topics. It is up to the reader to determine the importance of the ranking for each topic, relative to the importance of the other topics. Nevertheless, it can be generalized that the East Gilroy alignment would be preferable if the priority is to limit construction impacts and long-term impacts on property owners and existing businesses within the City of Gilroy. The trade-off with this alternative is potential impacts on agricultural operations and the possibility that an East Gilroy HSR station could divert activity that otherwise might have helped to stimulate economic activity in the downtown area.

Downtown alignment alternatives would be preferable if the priority is long-term stimulus for creation of a vibrant mixed-use downtown, but with a recognition that it would bring potential for notable property takings and dislocation of existing downtown residences and businesses to accommodate HSR. In this regard, the Viaduct to Downtown alignment appears to offer the potential for reduced impacts in comparison to the Embankment to Downtown alignment, given the larger footprint needed for the embankment, and the fact that construction of the embankment would be more disruptive to traffic patterns during the construction project. Over the long-term, the Embankment to Downtown alignment may offer one advantage over the Viaduct to Downtown alignment due to eliminating at-grade rail crossings in the downtown area, which could help improve traffic circulation.

**Table 1: Summary of High-Speed Rail Alignment Alternatives**

	Level of Negative Impact (a)		
	Lesser	Moderate	Higher
<b>Economic Impacts to Property During Construction</b>			
Alternative 1 - Viaduct to Downtown		X	
Alternative 2 - Embankment to Downtown			X
Alternative 3 - East Gilroy	X		
<b>Economic Impacts to Businesses During Construction</b>			
Alternative 1 - Viaduct to Downtown		X	
Alternative 2 - Embankment to Downtown			X
Alternative 3 - East Gilroy	X		
<b>Long-Term Impacts to Businesses (a)</b>			
Alternative 1 - Viaduct to Downtown	X		
Alternative 2 - Embankment to Downtown		X	
Alternative 3 - East Gilroy			X

Note:

(a) For consistency with the PlaceWorks comparative analysis, this report utilizes the "Lesser", "Moderate", and "Higher" ranking system for alignment alternatives, in terms of their potential to create negative impacts; however, in the case of Long-Term Impacts to Businesses, the identified impacts for a given alternative may include positive impacts as well as negative impacts. For this category of impacts, an overall ranking of "Lesser" indicates the alternative that offers the best combination of positive impacts while minimizing negative impacts. An overall ranking of "Higher" indicates the alternative with the least desirable combination of negative impacts and limited positive impacts, while a ranking of "Moderate" indicates the alternative ranked in between the "Lesser" and "Higher" ranked alternatives.

Sources: PlaceWorks, 2017; BAE, 2017.

## B. Rail Alignment Alternatives

This memo evaluates three alternatives under consideration by the CHSRA for the HSR segment through Gilroy. The alternatives differentiate in both vertical and horizontal alignments and include two western vertical alignment alternatives through Downtown Gilroy and one eastern vertical alignment option. The western and eastern horizontal alignments also each propose a new maintenance facility along the alignment. The alternatives are the following:

**Viaduct to Downtown (Alternative 1)** - Viaduct to Downtown Gilroy. A HSR station and primarily viaduct/aerial western alignment.

North of Tenth Street, the rail would be on a viaduct, which is an elevated track structure above grade level. The viaduct alignment would transition to an embankment alignment (raised earth structure at a lower level than the viaduct) south of Tenth Street, then to a trench to pass under Luchessa Avenue and Highway 101, and rising again to grade level at the maintenance facility south of Highway 101.

***Embankment to Downtown (Alternative 2)*** - Embankment to Downtown Gilroy. A HSR station and primarily embankment/modified at-grade western alignment.

For the embankment/modified-at-grade alignment, the tracks would be at grade level north of Las Animas Avenue and on an embankment alignment from south of Las Animas Avenue to south of Tenth Street. As in Alternative 1, the embankment/modified-at-grade alignment would transition to a trench alignment to pass under Luchessa Avenue and Highway 101, rising again to grade level at the maintenance facility south of Highway 101.

***East Gilroy (Alternative 3)*** - A HSR station and primarily embankment/modified at-grade alignment through the east side of Gilroy.

The eastern alignment would include a viaduct north of Buena Vista Avenue. South of Buena Vista Avenue, the tracks would be on an embankment.

More detail about the alignments can be found in the Comparative Environmental and Land Use Assessment memorandum by PlaceWorks.

## **C. Construction Impacts to Properties**

This section of the memo discusses the impacts on properties due to construction of the HSR project under each of the three alignment options. To identify affected properties in each of the three ROW alternative areas, BAE utilized a GIS database compiled by PlaceWorks that identifies the affected properties by Assessor's parcel number, land use type (i.e., office, commercial, etc.), and the level of impact anticipated from the HSR project, for each of the three alignment alternatives.

### ***C.1 Viaduct to Downtown***

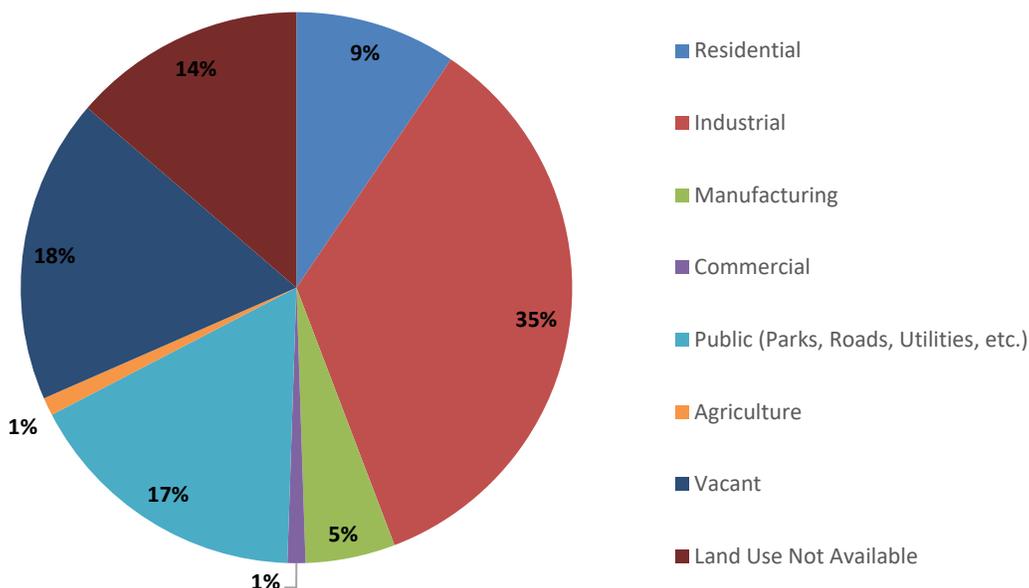
#### ***Fully Affected Parcels***

PlaceWorks estimates that a total of approximately 100 parcels will be fully affected, amounting to a total of roughly 270 acres. As shown in Figure 1, based on land use information provided by the City of Gilroy, roughly one-third of the fully affected parcels are designated for industrial use, with another nine percent designated for residential use. While only one commercially-designated parcel is anticipated to be fully impacted by this alignment scenario, the discussion below regarding impacts to existing businesses will highlight all of the commercial activity occurring on fully affected parcels.

In addition to industrial, residential, and commercial uses, the majority of the remaining parcels are designated for public infrastructure, including roads and utilities (approximately 20 parcels; 33.5 acres), or are currently vacant (approximately 20 parcels; 25.3 acres). While

only one parcel is designated for agricultural use, the parcel’s area, roughly 45 acres, accounts for 16.8 percent of the total acreage that is fully affected under this alternative.

**Figure 1: Viaduct to Downtown Alignment, Distribution of Fully Impacted Parcels by Land Use Designation**



Sources: PlaceWorks, 2017; BAE, 2017.

#### *Partially Affected Parcels*

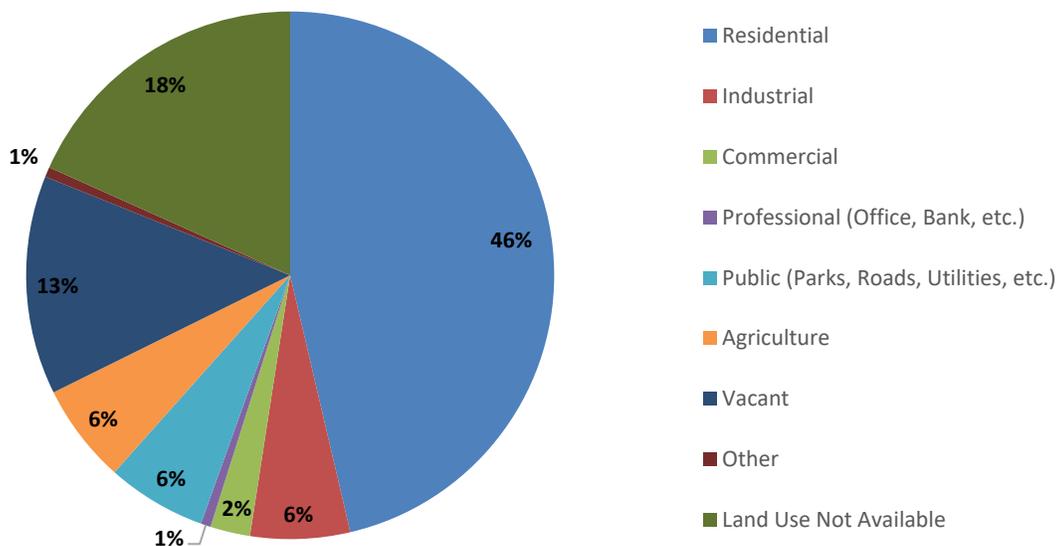
Approximately 160 additional parcels, accounting for roughly 1,350 acres, will be partially affected by the Viaduct to Downtown alignment. Based on the windshield survey conducted by BAE staff, the Viaduct to Downtown alignment will potentially have minor impacts on parcels in the main commercial corridor, along Monterey Street, within downtown Gilroy. BAE staff noted the significant business activity occurring on Monterey Street between Old Gilroy Street to the south, and I.O.O.F. Avenue to the north. Given that the proposed Viaduct to Downtown alignment runs roughly one block east of Monterey Street in this area, it is likely that this alignment scenario will have some minor construction period impacts on partially affected parcels, due to impaired circulation and other construction-related impacts.

Broken down by land use designation, a significant portion of the partially affected parcels in the Viaduct to Downtown alignment scenario are designated for residential use. More specifically, as shown in Figure 2, residential parcels account for roughly 46 percent of all partially affected parcels, though they only account for two percent of the total acreage impacted. The most significantly impacted land use designation, in terms of total acreage that is partially affected, is agricultural land, totaling roughly 580 partially affected acres. Based on review of aerial maps, it appears that most of the agricultural parcels will likely be able to continue operation during construction, as the potential rail corridor only passes through small portions of the parcels. Also, notable in terms of acreage, are parcels for which BAE was

provided with insufficient land use designation information. Further analysis indicates that these parcels are typically located on the outskirts of the sphere-of-influence, are significant in acreage, and likely used either for agricultural production or open space.

Based on the windshield survey and additional analysis of aerial imagery, the partially impacted parcels can generally be categorized into two subsets: small parcels that are generally within one block from the corridor, and large parcels where the rail corridor would pass through a small portion of the parcel. The former includes parcels that will likely experience some impacts due to construction and potential infrastructure work associated with the HSR project, though they will likely not be required to relocate or adjust operations significantly. The latter category includes parcels predominantly located in the northern and southern end of the Viaduct to Downtown alignment. Under this alternative, the railway would typically intersect these large parcels near their existing boundaries and thus may have minor impacts on current operations.

**Figure 2: Viaduct to Downtown Alignment, Distribution of Partially Impacted Parcels by Land Use Designation**



Sources: PlaceWorks, 2017; BAE, 2017.

## C.2 Embankment to Downtown

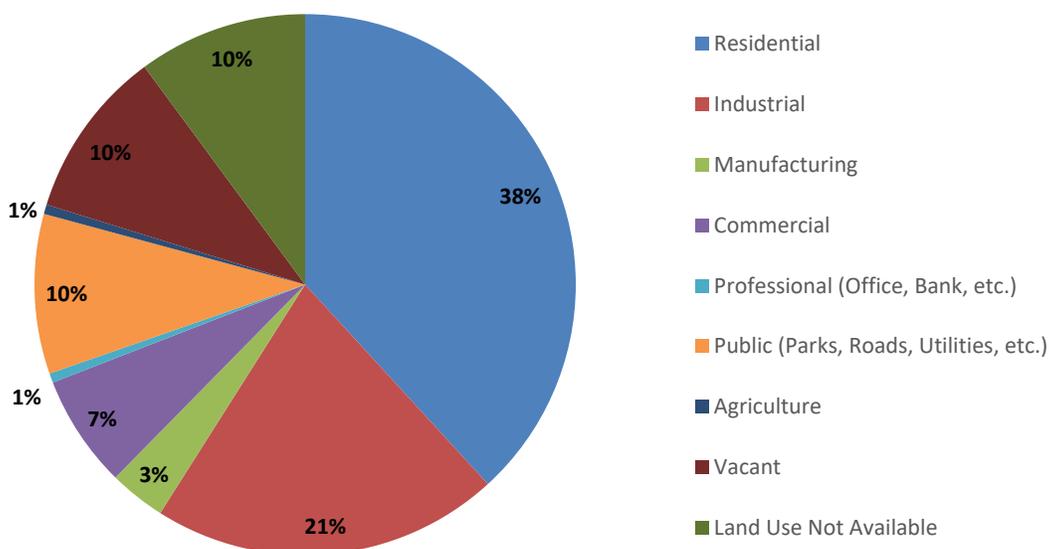
### Fully Affected Parcels

The proposed Embankment to Downtown alignment follows the same path as the Viaduct to Downtown alignment, though the impacted parcels vary between the two scenarios, with more parcels affected by the Embankment to Downtown option. The proposed Embankment to Downtown alignment will fully impact roughly 180 parcels, accounting for roughly 315 acres. Broken down by designated land use, the Embankment to Downtown alignment will fully impact a notably higher number of residential parcels (approximately 70 parcels; 32.5 acres)

when compared to the Viaduct to Downtown alignment. In addition to residential uses, another significant concentration of affected parcels is designated for industrial use, representing about 40 parcels or roughly 75 acres. Although commercial parcels account for a fairly small overall percentage of fully affected parcels, the Embankment to Downtown alignment impacts a significantly higher number of commercial parcels compared to the Viaduct to Downtown alignment. More specifically, a total of about ten parcels designated for commercial uses, amounting to approximately eight acres, are anticipated to be fully impacted by the Embankment to Downtown alignment.

The Embankment to Downtown alignment will fully affect all of the parcels that would be fully affected under the Viaduct to Downtown alignment. In addition, the Embankment to Downtown alignment may fully affect additional parcels located adjacent to the cross streets that would be grade-separated to pass under the High Speed and Union Pacific rail lines. In the downtown area, those cross streets include Leavesley Road, I.O.O.F. Avenue, Lewis Avenue, Sixth Street, Seventh Street, and Tenth Street. The grade-separated cross streets will be reconstructed to maintain the existing street right-of-way and pavement width. However, direct vehicular access to the adjacent parcels from the depressed streets may not be possible, resulting in those parcels being partially or fully affected. Also, in limited circumstances, the construction process for the underpasses may require acquisition of temporary construction easements over portions or all of the adjacent parcels. In such instances, the adjacent parcels may be fully or partially affected. The High Speed Rail Authority has indicated that every effort will be made to minimize the need for those construction easements and impacts to adjacent parcels.

**Figure 3: Embankment to Downtown Alignment, Distribution of Fully Impacted Parcels by Land Use Designation**



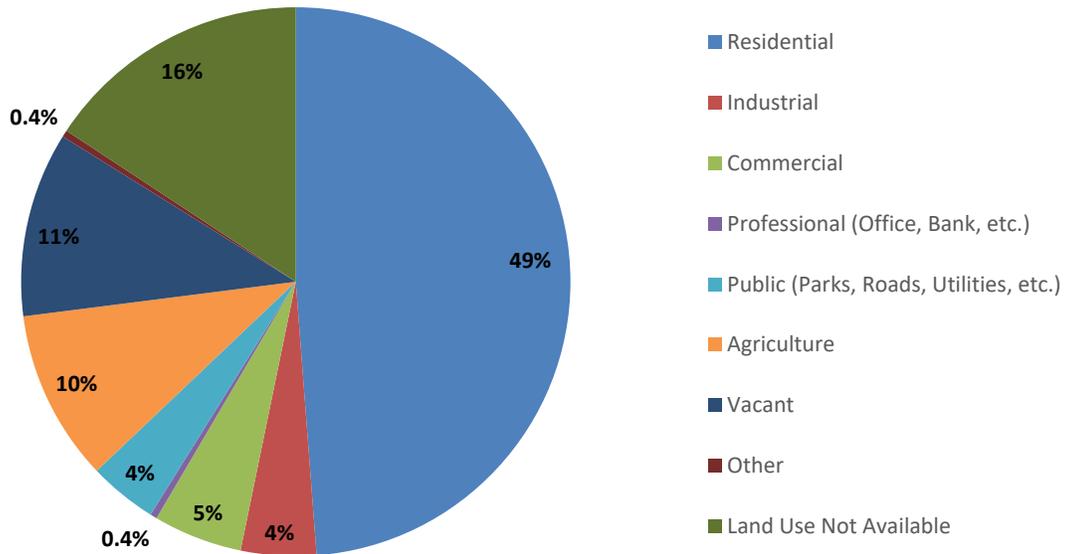
Sources: PlaceWorks, 2017; BAE, 2017.

### *Partially Affected Parcels*

Under the Embankment to Downtown alignment, approximately 250 parcels, or 1,700 acres, are assumed to be partially impacted. Similar to the Viaduct to Downtown alignment, a significant number of the partially affected parcels are designated for residential uses, accounting for almost half of all partially impacted parcels. Land with an agriculture use designation accounts for 10.1 percent of all partially affected parcels, as shown in Figure 4, though the total area accounts for 48.4 percent of the total acreage associated with partially affected parcels. In addition to the previously noted uses, about 30 vacant parcels account for roughly 100 acres of the partially impacted land, while about 10 commercial parcels comprise 8.4 acres of impacted land.

Even more pronounced than the Viaduct to Downtown alignment, the Embankment to Downtown ROW covers a significant number of large parcels, mainly agriculture or residentially designated, where the proposed rail corridor would pass through the parcel but would likely allow any existing use to continue without significant disruption. That being said, the Embankment to Downtown scenario does impact a number of parcels within the downtown area where some existing structures may require physical modifications to accommodate the ROW, which may cause some disruption of current business activity. As an example, BAE staff noted the two mixed-use properties on the corner of Monterey Street and Lewis Street, home to several residences and businesses. Based on the windshield survey, it appears that the existing businesses facing Lewis Street may be impacted due to HSR infrastructure upgrade work which could interfere with their storefront entrances; however, these businesses could retain their sidewalk access over the long-term as long as the sidewalk remained at the existing grade level, although they would lose on-street parking, and have reduced visibility to Lewis Street traffic, which would travel below grade under this alignment configuration. Unlike the Viaduct to Downtown alignment, in which these parcels are assumed to not be impacted, the Embankment to Downtown alignment will potentially require minor remodeling to accommodate changes in the surrounding infrastructure.

**Figure 4: Embankment to Downtown Alignment, Distribution of Partially Impacted Parcels by Land Use Designation**



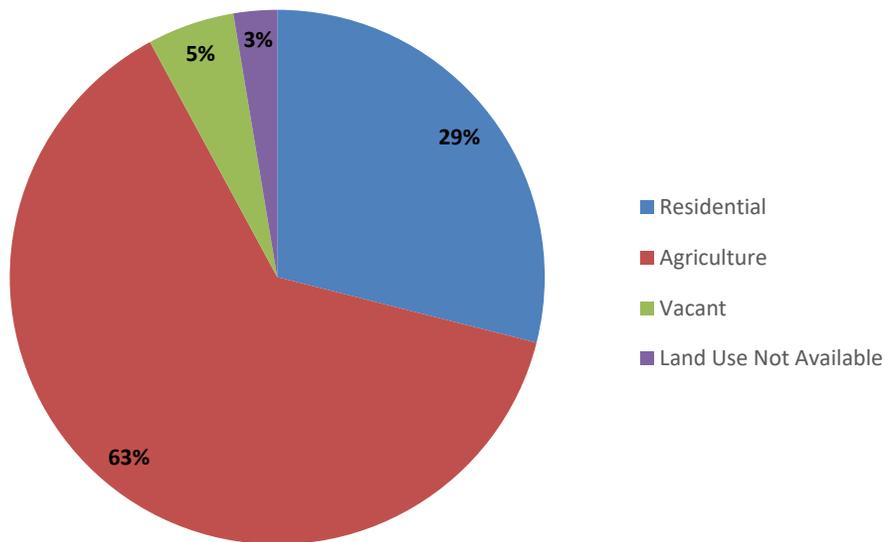
Sources: PlaceWorks, 2017; BAE, 2017.

### C.3 East Gilroy

#### *Fully Affected*

The East Gilroy alignment runs predominantly outside of the Gilroy city limits, while still within the City’s Sphere of Influence. As a result, the parcels impacted by this proposed alignment are notably larger and are concentrated in residential and agricultural designations. A total of about 40 parcels, amounting to 642 acres, would be fully affected by the East Gilroy alignment. While the number of affected parcels is significantly lower than both the Downtown alignments, the total acres impacted is more than two times larger than the impacted acres associated with either downtown alignment. Based on the distribution of parcels by land use designation, agriculture accounts for roughly 65 percent of the fully affected parcels, as shown in Figure 5, and 90 percent of the fully affected acres. The majority of the remaining parcels and acreage are designated for residential uses, including about 10 parcels summing to roughly 48.5 acres.

**Figure 5: East Gilroy Alignment, Distribution of Fully Impacted Parcels by Land Use Designation**



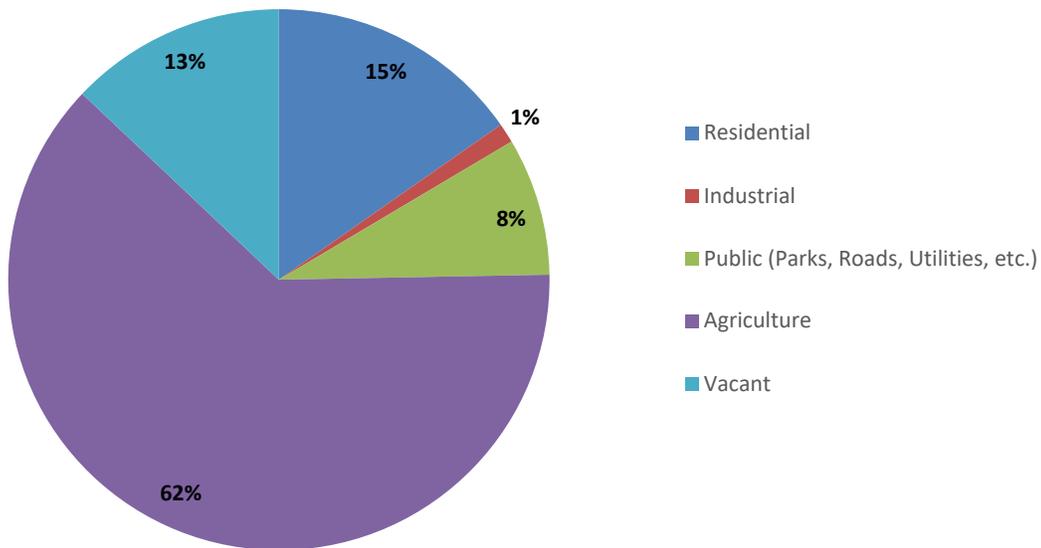
Sources: PlaceWorks, 2017; BAE, 2017.

#### *Partially Affected*

The parcels that would be partially affected by the East Gilroy alignment follow a similar distribution as those that will be fully impacted. In total, approximately 90 parcels, accounting for over 2,000 acres, will be partially affected. Roughly 62 percent of the partially affected parcels are designated for, and appear to be used for, agricultural use, while 13 percent of the partially affected parcels are currently vacant. The remaining parcels are distributed between public uses, such as roads and utilities, residential uses, and one industrial parcel.

As previously mentioned, information regarding the degree to which partially affected parcels will be impacted is limited, though based on PlaceWorks' definition of partially affected parcels, plus in-person surveying and review of aerial maps, BAE generally estimates that most if not all partially affected parcels along the proposed East Gilroy alignment will be able to accommodate the construction of the rail corridor without significant disruption of existing activities. More specifically, given the high concentration of agricultural uses and large-lot single-family residential uses, combined with the fact that the rail corridor under this scenario would generally intersect these parcels near their edges, it is likely that the existing agricultural operations and residences will be able to accommodate the corridor without ceasing of operations or displacement of existing uses.

**Figure 6: East Gilroy Alignment, Distribution of Partially Impacted Parcels Land Use Designation**



Sources: PlaceWorks, 2017; BAE, 2017.

#### **C.4 Ranking of Alternatives**

Based on the above information regarding the fully and partially affected parcels for the three rail alignment scenarios, the East Gilroy alignment will affect the lowest number of parcels. That said, the East Gilroy alignment will impact the largest quantity of acres, predominantly agriculture in use, which may have significant impacts on other elements of the Gilroy economy. Of the Downtown alignment options, the Viaduct to Downtown alignment would involve the least impact, both in terms of the number of parcels and total affected acres. This means the Embankment to Downtown would have the greatest impact on existing parcels and is thus the lowest ranking option. BAE’s ranking of the three alignment alternatives, in terms of physical impacts on parcels, with “Lesser” assigned to the alternative with the least adverse impacts and “Higher” assigned to the alternative with the most adverse impacts, is as follows:

- Lesser: East Gilroy Alignment
- Moderate: Viaduct to Downtown Alignment
- Higher: Embankment to Downtown Alignment

#### **D. Construction Impacts to Businesses**

This section relies on three different types of information to assess the effects from potential direct physical impacts on businesses due to the HSR construction project. The first utilizes data from the City of Gilroy’s business license data to identify the number of impacted businesses, impacted businesses types, and aggregate gross receipts. The City categorizes businesses based on business license billing category. For example, retail, wholesale, and business-to-business establishments are included in the merchandise sales category, while businesses like attorneys and dentists are included in professional services. Because

information for individual business licenses is confidential, this section only presents City business license information at the aggregate level for each alignment scenario. The second type of information used for this section is observations made by BAE staff in undertaking a windshield survey and walking tour of the parcels affected under the Viaduct to Downtown and Embankment alignment alternatives and the East Gilroy alignment. The third information type is the traffic study completed by Hexagon Transportation Consultants in 2008 to analyze traffic circulation and vehicular access impacts associated with the HSR project. Although the study was completed nearly a decade ago, Hexagon consultants indicate the study is reflective of current conditions as the economy is returning to pre-recession levels similar to those studied in 2008. BAE only analyzed potential traffic impacts on partially impacted businesses because fully impacted businesses are assumed to be acquired by CHSRA and removed.

In addition to this section, the Long-Term/Permanent Impacts section of this memo provides additional qualitative discussion of potential impacts on businesses due to indirect impacts from the HSR project under the different alternatives that relate to changes in parking and traffic circulation.

#### ***D.1 Viaduct to Downtown***

##### *Fully Affected*

In total, 56 businesses are located on parcels that would be fully affected by the Viaduct to Downtown alignment. According to business license data, merchandisers (e.g., retail, wholesale, business to business, etc.) account for the largest number of businesses fully affected by the Viaduct to Downtown alignment, followed by service related businesses (e.g., automotive services, repair, landscaping, waste management, etc.). Collectively the fully impacted merchandiser businesses generate roughly \$66.1 million annually in gross receipts, highlighting the need for efforts to assist impacted businesses with finding suitable replacement sites elsewhere in the City, to ensure the revenue generated by these establishments is kept within the City. Based on the business license data, approximately 32 merchandisers would be fully affected by the Viaduct to Downtown alignment, accounting for 57 percent of fully affected businesses. Most of these affected merchandisers are in the industrial areas just outside the downtown commercial corridor, and offer larger products, such as furniture, pool covers, and lumber, to name a few. Roughly 13 service related businesses would be fully affected, accounting for 23 percent of all fully affected businesses under this alignment scenario. Nine construction businesses (e.g., contractors, flooring installers, electricians, etc.), or 16 percent of fully affected businesses, would be fully affected, followed by two professional businesses (e.g., architects, finance and insurance agents, etc.) accounting for four percent of fully affected businesses. The Viaduct to Downtown alignment would not affect establishments in the non-profit and exempt (from business license tax) categories.

Buildings on parcels identified as fully affected by PlaceWorks are assumed to require CHSRA acquisition and demolition in preparation for HSR. Based on observations made by BAE staff during the windshield survey, buildings affected by the Viaduct to Downtown alignment tend to be in average physical condition. Businesses located in affected industrial areas are generally older, but well maintained tilt-up or corrugated metal buildings, whereas standalone industrial buildings, such as those on Railroad Street or Monterey Street south of East 10<sup>th</sup> Street, generally appear older and exhibit signs of deferred maintenance.

BAE conducted the windshield survey on a weekday during normal business hours, and observed that the fully affected businesses tend to generate automobile traffic, but very limited pedestrian traffic. For example, parking lots and street parking appeared full; however, few pedestrians were present. This is likely attributable to the products offered by businesses located on parcels that would be fully affected under the Viaduct to Downtown alignment scenario. Merchandisers offering large products, such as furniture or cement, require large buildings on large parcels that are generally un conducive to pedestrians, while the products offered generally require automobiles for transport.

#### *Partially Affected*

Business license data indicate that a total of 20 businesses are located on parcels that would be partially affected by the Viaduct to Downtown alignment. Like fully affected businesses, merchandise is the most frequently impacted business type (11 businesses, 52 percent of partially affected businesses). As a group, the merchandiser businesses on partially affected properties generate approximately \$108 million in annual gross receipts. Unlike fully affected businesses, construction is the second most frequently impacted business type (5 businesses; 24 percent). Services is the third most frequently impacted business type (3 businesses; 14 percent). One non-profit and one professional service establishment are located on parcels that would be partially impacted under this alignment scenario.

In addition to the building types and conditions discussed above in the Fully Affected subsection, a number of vacant buildings are located on parcels that the Viaduct to Downtown alignment would partially affect. Like fully impacted businesses, businesses on partially affected parcels appear to generate automobile activity, but limited pedestrian activity.

As mentioned previously, based on the PlaceWorks definition of partially affected parcels, dislocation of businesses located on partially affected parcels should be minimal; however, this is not to say there would be no impact. BAE staff generally assessed the potential level of impact based on the situation of buildings on parcels. BAE staff assumed that businesses in buildings on partially affected parcels that are situated near the existing Caltrain/UPRR line are likely to be affected to a greater degree than those businesses in buildings that are set further back from the ROW. For example, because the former Garlic City Casino and Restaurant building is roughly 90 feet from the existing Caltrain/UPRR lines, it will likely be impacted to a greater degree than various buildings that have greater quantities of parking lot

separating them from the Caltrain/UPRR lines and have alternative street access. Generally, it appears that businesses in buildings located on partially affected parcels will not be impacted sufficiently to cause them to cease operations entirely or relocate, since most are located far enough away from the Caltrain/UPRR line and have frontages and access facing towards adjacent streets; however, existing businesses that require large amounts of unsheltered storage, such as truck rental or recycling facilities, could lose storage space.

**Traffic Circulation Impacts.** With the Viaduct to Downtown alignment, the HSR tracks would be elevated above the ground on a viaduct running through Downtown, with concrete columns spaced to avoid streets and other obstacles. The construction impact on vehicle connections under this alternative would be less than under the Embankment to Downtown alignment because all cross streets would remain open, except for short closings when bridge structures are hoisted in place, and the temporarily closed lengths would be shorter than under the Embankment to Downtown alignment.

## ***D.2 Embankment to Downtown***

### *Fully Affected*

The Embankment to Downtown alignment would accommodate four rail lines rather than the two that the Viaduct to Downtown alignment would accommodate, resulting in more affected businesses. A total of 80 businesses would be fully affected, with 47 businesses, or nearly 60 percent, being merchandisers. Together, these fully affected merchandiser businesses generate \$71.1 million in gross receipts annually. Services comprise the second largest grouping of businesses that would be fully affected by the Embankment to Downtown alignment (17 businesses; 21 percent of fully affected businesses), followed by construction (12 businesses; 15 percent) and professional services (4 businesses; 5 percent). Non-profits and businesses exempt from paying business tax would not be impacted. The Embankment to Downtown alignment would impact more community-serving businesses along Monterey Street than the Viaduct to Downtown alignment would, though the majority of affected businesses would be larger retail, wholesale, and business to business establishments, as discussed in the Aerial Alignment section. Like the Viaduct to Downtown alignment, businesses on fully affected parcels appear to generate automobile traffic, but very limited pedestrian traffic.

In addition to building conditions discussed previously in the Viaduct to Downtown alignment section, a number of new or renovated buildings and proposed projects would be affected by the Embankment to Downtown alignment. Included in the newer developments that will be impacted is one recently rehabilitated downtown multi-tenant commercial building and a newer shopping center on Leavesley Road between Forest Street and Murray Avenue, in addition to two recently completed housing projects at the intersection of Monterey Street and Sturla Way.

### *Partially Affected*

Keeping in mind that the definition of partially affected parcels is such that only limited impacts on businesses on these parcels would be expected, it is estimated that 35 businesses are located on parcels that would be partially affected by the Embankment to Downtown alignment, 15 of which (43 percent) are merchandisers. Based on the City of Gilroy's business license data, the merchandise sales businesses on partially affected parcels generate a combined \$103.6 million in annual gross receipts. Although the Embankment to Downtown alignment partially impacts more parcels than the Viaduct to Downtown alignment, the total receipts on partially impacted parcels is lower than the Aerial alignment. This is due to a few high revenue-generating businesses that are fully impacted under the Embankment to Downtown alignment, thus included in the above discussion, but are located on parcels that are only partially impacted by the Viaduct to Downtown alignment, thus increasing the total receipts included in the partially impacted business discussion for that alignment alternative.

Broken down by type, services account for seven businesses on partially affected parcels (20 percent); professional and construction businesses account for five each (14 percent each); non-profits account for two establishments (six percent), and there is one establishment exempt from paying business tax located on a parcel that would be partially affected.

The majority of buildings on parcels that would be partially affected by the Embankment to Downtown alignment would also be impacted by the Viaduct to Downtown alignment, and have already been discussed in the Viaduct to Downtown alignment section. Those additional buildings that would be partially affected by the Embankment to Downtown alignment tend to be in average to excellent condition. Most notably, the two recently constructed commercial/residential mixed-use buildings on the northeast and southeast corners of the Lewis Street and Monterey Street intersection are on parcels that would be partially impacted by the Embankment to Downtown alignment. Using the same methodology to assess the level of impact discussed in the Viaduct to Downtown alignment section, the greatest impact to these buildings would likely stem from construction and road closure impacts necessary to lower Lewis Street to cross below the elevated tracks. As a result, access to businesses with frontage along Lewis Street, and access to residences above could be limited during the construction process. Over the long-term, some businesses along Lewis Street in the vicinity of the embankment would lose visibility and vehicular access due to dropping the roadway below grade.

**Traffic Circulation Impacts.** For the Embankment to Downtown alignment, all cross-street connections would slope under the tracks. Therefore, in the long term, traffic crossings of the UPRR and HSR tracks would not be interrupted by trains; however, the construction impacts of this alternative are more extensive than under the Viaduct to Downtown alignment. There are 15 existing crossings within the City of Gilroy and the City's Sphere of Influence. Twelve crossings would remain open after construction, three would remain closed, and one would remain closed to vehicular traffic, but open to bicycles and pedestrians.

There are two approaches to phasing of construction of the street crossings: street crossings could be fully closed for a shorter time, or (in the case of Leavesley and Tenth only) partially closed for a longer time. Partial closure would entail closing one-half of the street, either closing one direction for a two-lane street or a reduction from four lanes to two lanes for wider streets, and construction would take about two years. Full closure would entail the closing of the entire street, and construction would take about one year. The construction of the 12 street crossings would be staggered to allow the best possible vehicle circulation during construction. For example, the two major access points to Downtown, Leavesley Road and 10<sup>th</sup> Street, would likely be closed during alternate construction phases rather than simultaneously.

Closure of Leavesley Road and 10<sup>th</sup> Street would likely affect downtown businesses to a greater degree than other planned road closures. Data from Hexagon's 2008 traffic study show that Leavesley Road and 10<sup>th</sup> Street carry approximately 32,000 and 20,000 daily vehicular trips, respectively. However, it is likely that only a portion of these trips are direct trips to the downtown businesses. Rather, the majority of these trips are likely by those who work downtown or live west of US 101. Those traveling to and from work will likely continue to do so during HSR construction, though they may need to find alternative routes, and will continue to access downtown businesses on Monterey Avenue as they do now by walking or short vehicle trips. Regional trips to downtown Gilroy are likely much less than to other regional shopping destinations throughout the city; however regional shoppers that do shop downtown would probably patronize other destinations due to construction. Larger shopping centers along 10<sup>th</sup> Street between the railway and US 101 are more likely to be impacted by HSR construction road closure than downtown businesses. Currently many travelers to and from residences on the west side of Gilroy use those streets to commute, and if 10<sup>th</sup> or Leavesley are closed the businesses will likely suffer. Some limited business could still occur from travelers getting off and back on 101.

### ***D.3 East Gilroy***

Note that business license data are only available for businesses that operate within the City of Gilroy, so this section for the East Gilroy alignment relies on the observations from the BAE windshield survey, walking tour, and review of aerial imagery covering the East Gilroy alignment.

#### ***Fully Affected***

As discussed in the Impacts to Property section, of the three alignment scenarios, the East Gilroy alignment affects the smallest number of parcels. Unlike parcels impacted by the Downtown alignment alternatives, which tend to have multiple businesses per parcel, parcels that would be affected by the East Gilroy alignment are agricultural in nature and a single business may be spread across multiple parcels. BAE estimates that less than 38 businesses are located on parcels that would be fully or partially affected by the East Gilroy alignment;

however, due to the lack of business license data for businesses outside the City limits, business revenue generated on these potentially affected parcels is unavailable. Nevertheless, even without quantitative data available it can be assumed that the economic activity generated by these agricultural businesses is significant, and that there would be some reduction in activity due to the full or partial impacts on businesses.

#### *Partially Affected*

The majority of activities on parcels that would be partially affected by the East Gilroy alignment are residential or agricultural in nature. Generally, the proposed right-of-way for the East Gilroy alternative intersects portions of properties that could be acquired by the CHSRA without the need to cease existing business operations completely; however, in some cases, it appears that large portions of the partially affected properties could be left inaccessible. This is especially the case with properties on the north side of SR 152, between Frazier Lake Road and Holsclaw Road. Overall, commercial activity on the partially affected parcels is limited, given the residential and agricultural nature of the area; however, circulation in and around the area will likely impact shipping, deliveries, and farm stand activities during construction.

**Traffic Circulation Impacts.** The East Gilroy alignment has fewer street crossings than the other alternatives - a total of ten crossings versus 15 for the Viaduct to Downtown and Embankment to Downtown alignments. The amount of existing street traffic in East Gilroy is also less than downtown streets, except for SR 152, which carries 52,000 daily trips east of US 101. The vertical alignment configuration for the tracks is an aerial/viaduct north of Buena Vista Avenue and an embankment south of Buena Vista Avenue. Where it is a viaduct, the streets would cross under the tracks. Streets crossing over the tracks would be major projects that would involve more extensive street re-routings and closings. The new crossing of Highway 152 over the UPRR and HSR tracks would be a major structure, about 1.5 miles long. Highway 152 would be realigned south from the existing route through Old Gilroy and elevated high enough to cross over the HSR tracks and a proposed HSR maintenance facility, about 50 feet above existing grade at the high point. Frazier Lake Road would also be realigned and elevated to connect to the elevated roadway. Since SR 152 is a state highway and a major route through the Pacheco Pass, it would likely not close completely, or would close for a very limited amount of time. Rather, detour routes would probably be used to continue the flow of traffic, albeit, at a slower pace. Overall, traffic circulation impacts during HSR construction would be minor under this alternative.

#### ***D.4 Ranking of Alternatives***

Based on the above information regarding the fully and partially affected parcels for the three rail alignment scenarios, the East Gilroy alignment appears to affect the lowest number of businesses (less than 38). It appears that agriculture would be the most impacted business type, though the total impact that the East Gilroy alignment would have on business revenue is unavailable. Of the downtown alignment options, the Viaduct to Downtown alignment would have the least impact on businesses, both in terms of number of businesses and revenue of

affected merchandiser businesses. The Viaduct to Downtown alignment would impact 77 total businesses and 43 merchandiser businesses, with roughly \$174.2 million in gross receipts. Comparatively, the Embankment to Downtown alignment would impact 116 total businesses and 63 merchandiser businesses, generating roughly \$176.2 million in gross receipts. The ranking of alignment alternatives in terms of impacts on businesses, with “Lesser” representing the alternative with the least adverse impacts, and “Higher” representing the alternative with the most adverse impacts, is as follows:

- Lesser: East Gilroy Alignment
- Moderate: Viaduct to Downtown Alignment
- Higher: Embankment to Downtown Alignment

## **E. Long-Term/Permanent Impacts**

This section provides qualitative discussion of the potential long-term impacts that could occur under the different Gilroy HSR alignment alternatives.

### ***E.1 Viaduct to Downtown***

When assessing the long-term impacts in all of the alignment alternatives, BAE assumes that all parcels designated as “fully affected” in the above discussion will be completely dedicated for the rail corridor, indicating that all existing structures will be removed and current business activity will cease or be relocated. This assumption is based on BAE’s windshield survey and on in-depth review of aerial images of the rail corridor and selected parcels, both of which show the rail corridor running directly through the “fully affected” parcels and existing structures on those parcels. Given this finding, BAE staff paid particular attention to the “partially affected” parcels during the windshield survey, since the impacts to these parcels and any businesses located on them will be more nuanced. For the Viaduct to Downtown alignment, the partially affected parcels located in the southern portion of the corridor, predominantly agricultural uses, all tend to have their structures located further away from the proposed alignment. Nevertheless, some businesses in this area may be impacted indirectly by long-term changes in traffic circulation.

As the corridor approaches downtown Gilroy from the south, the Viaduct to Downtown alignment would intersect a number of industrial parcels. Using the same assessment technique as previously noted, it appears that the corridor would run through the undeveloped storage lots of various industrial parcels. While these storage lots may be imperative to the success of the existing industrial businesses, it is likely that the existing structures’ use will be able to continue with a possible reconfiguration of the parcel boundaries due to the HSR project. This suggests that the use of the buildings can continue, but the impact to those existing businesses utilizing the storage lots may be consequential.

As the Viaduct to Downtown alignment travels through the downtown Gilroy area, the number of partially affected parcels is quite limited. Except for a portion of the existing Caltrain

parking lot, in addition to a vacant gas station and vacant building that formerly housed a casino, the Viaduct to Downtown alignment would pass through the core downtown area with minimal long-term impact, aside from those businesses that would be fully affected. At the intersection of Railroad Street and Lewis Street, the Viaduct to Downtown alignment would intersect the western boundary of a currently vacant parcel. There is an approved project for this vacant parcel and the project would be designed to not encroach on the needed ROW for the HSR alignment.

Between downtown Gilroy and the northern boundary of the Viaduct to Downtown alignment study area, the partially affected parcels include a mixture of industrial and vacant parcels. Similar to the southern area under this alignment alternative, the industrial buildings on parcels partially impacted by the corridor generally appear to be outside of the actual railway ROW footprint, suggesting that the existing structures will likely experience little to no impacts that would be ongoing.

While the negative impacts to existing businesses is a major concern, the added benefit of a new station and the associated increase in potential consumer demand from commuters and other high-speed rail users would be significant, especially in the Downtown alignment scenarios. Given that the potential downtown station would be located adjacent to the existing Caltrain station, all high-speed rail users would be within one-half mile of the core downtown area, as well as in close proximity to many other businesses. Estimates of the potential ridership indicate that between 4,900 (base case) and 6,200 (high scenario) riders per day will board the high-speed rail system at the downtown station by the year 2040.<sup>1</sup> This represents a significant number of potential consumers that will access the downtown station when they board and when they exit the train on their return trips, representing a significant number of potential patrons for downtown businesses. For example, if HSR patrons using the station spent an average of \$5 per person in the downtown area, this would represent \$24,500 in daily sales, or \$8.9 million in annual sales potential, under the base case HSR ridership scenario.

Not only will this proximity to downtown help attract additional consumers from elsewhere in the City of Gilroy and other communities who would access the HSR system at the Gilroy station, it may also generate increased demand for office, retail, and housing within walking distance of the rail station. More specifically, BAE's estimates, prepared for the Downtown Gilroy Station Area Plan Alternative Analysis Report, published in May of 2016, indicate the greater downtown region could experience the addition of between 1,600 and 2,400 housing units, 400,000 to 600,000 square feet of commercial space, and between 200,000 and 1,000,000 square feet of office space at build-out. The potential increase in office space would expand the number of daytime workers in the downtown area - individuals who would be

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<sup>1</sup> Personal communication. E-mail from Matthew Henley, CHSRA, to Janet Chang, PlaceWorks, April 27, 2017.

likely to make purchases near their work location. Like new office space, new housing development would increase the number of residents within walking distance of downtown shops, thus providing a “captive” source of increased demand to support downtown establishments. To the extent that an HSR station stimulates office and residential development, new daily expenditure figures would increase substantially above the HSR patron expenditure potential mentioned above, as new employees and residents would make significant purchases in nearby stores and restaurants over the course of a year. As additional spending occurs in the downtown area, it is possible that new tenants will seek retail space, triggering the need for new development or renovation of antiquated space which could, in turn, help the downtown area to achieve a critical mass of retail activity to bolster its status as a shopping and dining destination for residents of Gilroy and the surrounding areas.

### ***E.2 Embankment to Downtown***

Much of the previous discussion regarding the Viaduct to Downtown alignment holds true for the Embankment to Downtown alignment. More specifically, both alignments affect the same parcels and businesses between the southern boundary and Old Gilroy Street/E. 7<sup>th</sup> Street. For that reason, this discussion will focus mainly on the additional parcels and businesses that would be partially affected by the Embankment to Downtown alignment, given that all of the partially affected parcels in the Viaduct to Downtown alignment are also impacted in the Embankment to Downtown alignment. As noted above, the Embankment to Downtown alignment would partially affect additional parcels north of Old Gilroy Street/E. 7<sup>th</sup> Street.

While the direct physical impact on parcels and businesses along Monterey Street would be limited under this alignment scenario it would partially affect a few additional important parcels. As discussed previously, BAE staff identified the two parcels located at the northeast and southeast corners of Monterey Street and Lewis Street as newer downtown mixed-use properties, which would lose visibility, street frontage, and vehicular access due to the lowering of Lewis Street below grade to accommodate the embankment crossing. In addition to the existing businesses, BAE staff noted that the access point for all second and third floor residential units face Lewis Street, so it is possible that existing residential tenants may be impacted due to a need for reconfiguration of the building entrances under the Embankment to Downtown scenario. While the impact on these specific parcels is of interest due to their central downtown location and more recent development, it is worth noting that similar impacts on visibility and street frontage will affect businesses on I.O.O.F. Avenue, 10<sup>th</sup> Street, and other Lewis Street properties, from lowering streets under this alternative.

As the corridor progresses north out of downtown, the partially affected parcels generally correspond to those affected by the Viaduct to Downtown alignment, including a number of industrial parcels. However, when the corridor intersects Las Animas Avenue, the number of partially affected parcels expands both to the east and west of the parcels that would be partially affected by the Viaduct to Downtown alignment. For the most part, the additional parcels generally consist of agriculture and vacant land, though BAE staff did identify a

residential subdivision under construction at the intersection of Monterey Street and Cohansey Avenue, in addition to a small number of construction companies and RV storage facilities on parcels along Monterey Street that would be partially impacted. If the residential subdivision has not been planned to accommodate the proposed infrastructure upgrades associated with the Embankment to Downtown alignment, the impacts on this development may be significant. As for the businesses, similar to the rest of the discussion, the long-term impacts will likely be a function of the impact on automotive circulation and infrastructure upgrades that would impact access to the existing businesses.

As mentioned in the discussion of the Viaduct to Downtown alignment, the downtown Gilroy station will potentially stimulate the downtown area with the increase in automobile and foot traffic in close proximity to downtown businesses. The positive impacts of the Embankment to Downtown would likely mirror those mentioned in the above section on the Viaduct to Downtown alignment, though it may be worth noting that the Embankment to Downtown alignment would negatively impact a few more critical downtown locations. For both alignments to downtown, the City would need to ensure that a cohesive core of businesses remains in the downtown core, and that the future mix of businesses would be adequate to draw the new HSR riders from the station itself into the surrounding downtown area. The City could try to facilitate this by working with owners of vacant downtown spaces to recruit new retail businesses that would complement existing retailers. If resources are available, this could include façade improvement assistance, and other incentives for the attraction of retailers to the downtown area. Timing for these efforts should coincide with completion of the HSR project, if a downtown alignment is selected.

One potential long-term benefit of the Embankment to Downtown alignment versus the Viaduct to Downtown alignment is the long-term effect of eliminating the at-grade crossings for the UPRR through downtown. This may improve traffic circulation and convenience by eliminating the traffic delays when trains move through the downtown area. This may also create operational benefits for emergency services, for which traffic delays caused by train crossings may be critical. However, one disadvantage of the Embankment to Downtown alignment is the loss of on-street parking on side streets to Monterey Street that would experience closures during construction and would lose on-street parking on a permanent basis due to lowering the roadway to cross beneath the rail tracks.

### ***E.3 East Gilroy***

As noted in the previous sections, the potential long-term direct physical impacts due to the East Gilroy alignment scenario appear limited in terms of disturbing existing business structures. The proposed East Gilroy alignment predominantly runs through agricultural land, which may be generating significant revenue through the sale of produce, but, based on review of aerial imagery, it appears many of the agricultural producers would likely be able to adjust their operations to accommodate the rail corridor. This is because the aerial imagery indicates that the ROW under this alternative would intersect most partially affected properties at their

edges, which would mean that although some property may be lost to the rail project, the remainder of the properties could most likely continue in agricultural production. More significant impacts could occur if the HSR ROW interferes with access to parcels, or parts of parcels, by machinery needed for agricultural operations.

As discussed briefly in the Viaduct to Downtown section above, the proposed East Gilroy Station, which would be located one-half mile east of the City boundary along Leavesley Road, may increase the number of consumers visiting the retail stores and restaurants east of the Leavesley Road intersection with Highway 101. The increase in spending at these locations is difficult to estimate, given the majority of these stores are more oriented to destination shopping and draw from a regional consumer base. While there could be some potential increases in spending at existing East Gilroy businesses due to the proximity of the HSR station under the East Gilroy alignment alternative, placing the HSR station in this location will spur pressure to expand the urban growth boundary and approve new development in the area, including housing and other uses. To the extent that this occurs, this shifting of growth could impede the revitalization of downtown Gilroy. Given that most downtown retailers depend on local spending, drawing additional activity and development away from downtown could undermine efforts to revitalize downtown Gilroy.

While the East Gilroy station would be located roughly one-half mile from the existing Gilroy Premium Outlets, this shopping center currently performs at a high level, and may not benefit from the increased activity associated with a nearby HSR station in the same way that downtown Gilroy could benefit from the increased activity associated with an HSR station located directly in the downtown area. Nevertheless, the area surrounding the potential East Gilroy station site does include a number of fast food and other restaurants that may benefit somewhat from the increase in daily traffic from people who are driving to or from the HSR station and may stop en route.

#### ***E.4 Ranking of Alternatives***

Based on the above summary of the potential long-term negative impacts of the three rail alignment alternatives, in conjunction with the potential positive impacts from the associated station locations, BAE ranks the three alternatives as follows, with “Lesser” representing the alternative with the least adverse impacts and the most beneficial impacts and “Higher” designating the alternative with the most adverse impacts and the least beneficial impacts:

- Lesser: Viaduct to Downtown Alignment
- Moderate: Embankment to Downtown Alignment
- Higher: East Gilroy Alignment