

3.17 Transportation and Traffic

3.17.1 Introduction

This section describes the regulatory setting and environmental setting for transportation and traffic in the vicinity of the Proposed Project (including all track variants, technology variants, and the Greenville and Mountain House initial operating segments [IOS]) and the alternatives analyzed at an equal level of detail (Southfront Road Station Alternative, Stone Cut Alignment Alternative, West Tracy Operation and Maintenance Facility [OMF] Alternative, Mountain House Station Alternative, and Downtown Tracy Station Parking Alternatives 1 and 2). It also describes the impacts on transportation and traffic that would result and mitigation measures that would reduce significant impacts, where feasible.

There would be no differences in the physical impacts related to hydrology and water quality due to the diesel multiple unit (DMU), hybrid battery multiple unit (HBMU), battery-electric multiple unit (BEMU), or diesel locomotive haul (DLH) technology variants, so the discussion in this section does not discuss those variants. Potential impacts associated with implementation of the Proposed Project and the alternatives analyzed at an equal level of detail assume the larger environmental footprint at proposed and alternative stations associated with a potential IOS (i.e., Greenville IOS, Mountain House IOS, Southfront Road Station Alternative IOS, and Mountain House Alternative IOS) and/or the expanded parking in 2040. As such, the analysis of the Proposed Project and the alternatives analyzed at an equal level of detail below considers the potential impacts associated with a potential IOS and/or the expanded parking in 2040.

Additional consideration of transportation and traffic is presented in Section 3.15, *Recreation*, which describes impacts on pedestrian and bicycle trails, and Section 3.16, *Safety and Security*, which addresses impacts on emergency response. Cumulative impacts from identified projects on transportation and traffic, in combination with planned, approved, and reasonably foreseeable projects, are discussed in Chapter 4, *Other CEQA-Required Analysis*.

3.17.2 Regulatory Setting

This section summarizes federal, state, regional, and local regulations related to transportation and traffic and applicable to the Proposed Project and alternatives analyzed at an equal level of detail.

In accordance with Senate Bill 743, the California Natural Resources Agency has adopted changes to the California Environmental Quality Act (CEQA) Guidelines that “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses,” as described under Section 21099(b)(1) of the California Public Resources Code. With these changes, vehicle miles traveled (VMT) has been identified as the most appropriate metric for evaluating a project’s transportation impact, and automobile delay—as measured by “level of service” or similar measures of vehicular capacity of traffic congestion—generally no longer constitutes a significant environmental effect under CEQA (Governor’s Office of Planning and Research 2018). Therefore, components of the regulatory setting referring to automobile delay (e.g., level of service) are not applicable to the analysis of the Proposed Project’s transportation impacts and are not discussed further in this section.

3.17.2.1 Federal

The Federal Railroad Administration (FRA) is responsible for the development and enforcement of regulations governing the safety of freight and passenger rail systems, including the design, operation, and maintenance of railroads. Examples include issuing guidance on compliance with the Americans with Disabilities Act (ADA) in the design of passenger station platforms and overseeing compliance with the Rail Safety Improvement Act of 2008 in the implementation of positive train control systems. The FRA also published a National Rail Plan in 2010 that describes a vision for a nationwide network of passenger and freight rail (FRA 2010).

At (highway–rail) grade crossings, the design of traffic control devices for traffic, transit, bicycle, and pedestrian activity is addressed by the Federal Highway Administration, through the Manual on Uniform Traffic Control Devices (MUTCD) (Federal Highway Administration 2012). The California Department of Transportation (Caltrans) issues a modified version of the MUTCD for use within California.

The Federal Transit Administration (FTA) is primarily responsible for administering federal grant programs to create and enhance public transportation, as well as providing technical assistance and planning support for transit systems and conducting technology research. However, the FTA also has some regulatory roles in transit safety oversight, including publishing safety rules and guidance (directives, advisories, and bulletins). One example is the Public Transportation Agency Safety Plan Final Rule, which generally requires all operators of public transportation systems that are recipients or sub-recipients of FTA grant funds to adopt safety plans. FTA also has some responsibilities for oversight regarding ADA compliance, including the provision of paratransit service. In general, a public entity operating a fixed-route transit system is required to provide comparable complementary paratransit service, but these requirements do not apply to commuter bus, commuter rail, or intercity rail systems (49 Code of Federal Regulations § 37.121).

3.17.2.2 State

Caltrans is generally responsible for planning and oversight of the statewide transportation system within California, and is also directly responsible for certain specific components of the system, including the design, construction, operation, and maintenance of the highway and freeway networks and the operation of intercity rail services. Caltrans publishes the California Transportation Plan, which establishes a vision for the statewide transportation system, comprised of six goals (and supporting policies): improving multimodal mobility and accessibility for all people; preserving the multimodal transportation system; supporting a vibrant economy; improving public safety and security; fostering livable and healthy communities and promoting social equity; and practicing environmental stewardship (California Department of Transportation 2016).

The California Transportation Plan also incorporates and references several detailed mode-specific plans, including the California State Rail Plan, which describes a vision for the state's passenger and freight rail system and identifies necessary improvements and investments. The vision for passenger rail service in Northern California includes a regional rail service connecting a "Stockton Area Hub" and a "Tri-Valley Hub" operating as frequently as every 30 minutes during the peak periods by 2040, with timed connections in the Tri-Valley. Among its shortlisted projects, the plan also specifically includes connectivity in the Tri-Valley between Bay Area Rapid Transit (BART) and the statewide rail network and increased passenger and goods movement capacity in

the Altamont Corridor, with an eventual integrated regional rail service using the Altamont Corridor (California Department of Transportation 2018), Other statewide mode-specific plans address elements such as freight mobility, public transit, and biking and walking.

The California Public Utilities Commission (CPUC) is responsible for rail safety in California, including safety for both passenger/freight railroads and urban rail transit systems (e.g., light rail, subways). One of the CPUC’s key regulatory roles is in grade crossing safety, including issuance of general orders and rules governing grade crossings and reviewing requests to construct new crossings or modify existing crossings.

3.17.2.3 Regional and Local

Appendix I, *Regional Plans and Local General Plans*, provides a list of applicable goals and objectives from regional and local programs, plans, ordinances, and policies, focusing on those jurisdictions in which the Valley Link improvements are proposed. Section 15125(d) of the CEQA Guidelines requires an environmental impact report to discuss “any inconsistencies between the Proposed Project and applicable general plans, specific plans, and regional plans.” These programs, plans, ordinances, and policies were considered during the preparation of this analysis and were reviewed to assess whether the Proposed Project would be consistent with these elements of the regulatory setting.¹

Table 3.17-1 provides a summary of the elements of the regional and local regulatory setting that have been identified, reviewed, and considered for the preparation of this section, including regional plans; congestion management programs; county general plans; city general and specific plans; and other programs, plans, ordinances, and policies addressing the circulation system. For a list of applicable transportation and traffic goals and objectives from these documents, please see Appendix I, *Regional Plans and Local General Plans*.

Table 3.17-1. Regional and Local Regulatory Setting Regarding Transportation and Traffic

Jurisdiction / Agency	Title of Program, Plan, Ordinance, or Policy
Regional Plans	
Alameda County	Plan Bay Area 2040 (2017), Metropolitan Transportation Commission
San Joaquin County	2018 Regional Transportation Plan/Sustainable Communities Strategy (2018a), San Joaquin Council of Governments
	San Joaquin County Regional Blueprint (2010a), San Joaquin Council of Governments
Congestion Management Programs	
Alameda County	Congestion Management Program (2017), Alameda County Transportation Commission
San Joaquin County	San Joaquin County Regional Congestion Management Program: 2018 Update (2018b), San Joaquin Council of Governments
County General Plans	
Alameda County	Alameda County General Plan (various dates)
	East County Area Plan (2000)

¹ An inconsistency with regional or local plans is not necessarily considered a significant impact under CEQA, unless it is related to a physical impact on the environment that is significant in its own right.

Jurisdiction / Agency	Title of Program, Plan, Ordinance, or Policy
San Joaquin County	San Joaquin County General Plan (2016)
City General and Specific Plans	
Alameda County	
City of Dublin	City of Dublin General Plan (2017) Eastern Dublin Specific Plan (2016)
City of Pleasanton	Pleasanton General Plan 2005–2025 (2015) Stoneridge Drive Specific Plan (1989)
City of Livermore	City of Livermore General Plan 2003 – 2025 (2014)
San Joaquin County	
City of Tracy	City of Tracy General Plan (2011a) Tracy Residential Areas Specific Plan (2018) Northeast Industrial Specific Plan (2012b) Tracy Industrial Areas Specific Plan (1988)
City of Lathrop	Comprehensive General Plan for the City of Lathrop, California (2004) South Lathrop Specific Plan (2015) Lathrop Gateway Business Park Specific Plan (2010) West Lathrop Specific Plan (2002)
Active Transportation (Bicycle and Pedestrian)	
Alameda County	
Alameda County Transportation Commission	Countywide Active Transportation Plan (2019)
City of Dublin	City of Dublin Bicycle and Pedestrian Master Plan (2014)
City of Pleasanton	City of Pleasanton Bicycle & Pedestrian Master Plan (2018) City of Pleasanton Trails Master Plan (2019)
City of Livermore	Livermore Bicycle, Pedestrian, & Trails Active Transportation Plan (2018)
San Joaquin County	
San Joaquin Council of Governments	Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan (2012)
City of Tracy	City of Tracy Bikeways Master Plan (2005)
City of Lathrop	City of Lathrop Bicycle Transportation Plan (1995)
Public Transit	
Alameda County	
Metropolitan Transportation Commission	San Francisco Bay Area Regional Rail Plan (2007) Coordinated Public Transit - Human Services Transportation Plan (2018)
San Francisco Bay Area Rapid Transit District	FY19 Short Range Transit Plan and Capital Improvement Program (2018) BART Strategic Plan Framework (2015) BART Station Access Policy (2016)
Alameda County Transportation Commission	Alameda Countywide Transit Plan (2016c)

Jurisdiction / Agency	Title of Program, Plan, Ordinance, or Policy
Livermore Amador Valley Transit Authority	Short Range Transit Plan: FY 2016–2025 (2016)
	Wheels Strategic Plan Framework (FY14) (2012)
	Wheels Strategic Plan (2006)
San Joaquin County	
San Joaquin Council of Governments	Regional Transit Systems Plan (2015)
San Joaquin Regional Transit District	San Joaquin Regional Transit District Short Range Transit Plan: Fiscal Years 2018/19–2027/28 (2019)
	San Joaquin County Coordinated Transportation Plan (2012)
San Joaquin Regional Rail Commission	FY2012–FY2021 Short Range Transit Plan (2012)
	2019/2020 Work Program & Budget (2019)
San Joaquin Joint Powers Authority	2019 Business Plan Update (2019)
City of Tracy	City of Tracy Short Range Transit Plan (2009)
General or Other Transportation	
Alameda County	
Alameda County Transportation Commission	Alameda Countywide Transportation Plan (2016d)
	Alameda Countywide Multimodal Arterial Plan (2016b)
	Alameda County Goods Movement Plan (2016a)
	Complete Streets Policy for One Bay Area Grant, Local Transportation Sales Tax, and Vehicle Registration Fees (2012)
City of Dublin	Complete Streets Policy of the City of Dublin (2012)
City of Pleasanton	Complete Streets Policy (2012)
City of Livermore	Complete Streets Policy for the City of Livermore (2013)
San Joaquin County	
San Joaquin Council of Governments	Travel Demand Management Plan (2010b)
	Interregional Transportation Demand Management Action Plan (2015)
	Park-and-Ride Lot Master Plan (2007)
City of Tracy	Citywide Roadway & Transportation Master Plan (2012a)
Sustainability and Climate Action	
Alameda County	
Alameda County	Alameda County (Unincorporated Areas) Community Climate Action Plan (2014)
City of Dublin	City of Dublin Climate Action Plan Update (2013)
City of Pleasanton	Climate Action Plan
City of Livermore	Livermore Climate Action Plan (2012)
San Joaquin County	
City of Tracy	Sustainability Action Plan (2011)

3.17.3 Environmental Setting

This section describes the environmental setting related to transportation and traffic by geographic segment. For the purposes of this analysis, the study area for transportation and traffic extends

beyond the environmental footprint of the Proposed Project. The study area includes areas of indirect impacts, including areas of potential disturbance associated with construction; regional highways (Interstate [I-] 205, I-580, etc.) and local streets; and other transit, roadway, bicycle, or pedestrian facilities, generally within 1.0 mile of proposed stations, that could be affected by construction or operation of the Proposed Project or any of its alternatives or variants.

3.17.3.1 Tri-Valley Segment

The Tri-Valley segment of the study area for transportation and traffic follows I-580, stretching between I-680 in the west and the overcrossing the Union Pacific Railroad (UPRR)/ Alameda County Transportation Corridor ROW (east of Greenville Road) in the east. This segment includes the Tri-Valley Alignment, as well as the proposed Dublin/Pleasanton Station, Isabel Station, Greenville Station, and Southfront Road Station Alternative.

Public Transit

The west end of the Tri-Valley segment includes a new station at the existing Dublin/Pleasanton BART Station, the eastern terminus of BART’s Blue (Dublin/Pleasanton) line. The station currently consists of a single center (i.e., “island”) platform served by one track on either side, located within the median of I-580, immediately west of the overpass over the Iron Horse Regional Trail. Primary access to and from the station is provided by the Iron Horse Regional Trail and a parallel station access road underneath I-580. Bus bays and automobile parking are provided on both the north and south sides of the station.

BART’s Blue line operates at 15-minute headways during the weekday AM peak, midday, and PM peak periods and at 20-minute headways during weekday evenings and on weekends. The two revenue service tracks at the station extend east past Hacienda Drive as tail tracks for train storage and layover, with a double (“scissors”) crossover approximately 750 feet east of the platform end to allow trains to switch to and from either track. The tail tracks extend approximately 2,800 feet east of the crossover. The closest alternative crossover is a scissors crossover immediately east of West Dublin/Pleasanton Station.

Within the Tri-Valley area, local public transportation is primarily provided by Wheels, operated by the Livermore Amador Valley Transportation Authority (LAVTA). Public transit service along the Tri-Valley Alignment includes multiple Wheels routes, as summarized in Table 3.17-2.

Table 3.17-2. Tri-Valley Segment—Key Existing Bus Routes

Route	Type	Route Description	Approximate frequency (minutes)				Week-ends
			Weekdays				
			AM peak period	Mid-day	PM peak period	Evening	
10R	Rapid	(East) Dublin/Pleasanton Station (BART) - Downtown Livermore via Santa Rita Rd. and Stanley Blvd.	15	15	15	30-60	30-60

Route	Type	Route Description	Approximate frequency (minutes)				
			Weekdays				Week-ends
			AM peak period	Mid-day	PM peak period	Evening	
11	Local	Downtown Livermore – Vasco Road Station (ACE) via First St., Las Positas Rd., Greenville Rd., and National Dr.	60		60		
14	Local	(East) Dublin/Pleasanton Station (BART) – Downtown Livermore via Stoneridge Dr. and Jack London Blvd.	30–45	60	30–45	60	60
15	Local	Downtown Livermore – Springtown – Downtown Livermore via Junction Ave., North Livermore Ave., and Las Positas Rd.	15	15	15	30–60	30–60
20X	Express	(East) Dublin/Pleasanton Station (BART) – Lawrence Livermore National Laboratory – Downtown Livermore via I-580 (no stops), Vasco Rd., East Ave., North Mines Rd., and First St.	*		*		
30R	Rapid	West Dublin/Pleasanton Station (BART) – (East) Dublin/Pleasanton Station (BART) – Las Positas College – Downtown Livermore – Lawrence Livermore National Laboratory via Dublin Blvd., I-580, North Canyons Pkwy., Portola Ave., and East Ave.	15	15	15	30–60	60
580X	Express	(East) Dublin/Pleasanton Station (BART) – Downtown Livermore via I-580 (no stops) and North Livermore Ave.	30–60		30–60		

* Route 20X operates weekday peak periods only, in commute direction only (two eastbound trips in the morning and two westbound trips in the afternoon/evening).

In addition to the above routes paralleling portions of the Tri-Valley segment, Wheels also provides additional routes at the western end of the segment in Dublin and Pleasanton, most of which connect with BART at either West Dublin/Pleasanton Station or (East) Dublin/Pleasanton Station. The County Connection, operated by the Central Contra Costa Transit Authority, also provides weekday-only bus service in this portion of the segment on one local route (35) and two peak-period-only express routes (92X and 97X), connecting with either BART (at [East] Dublin/Pleasanton Station) or Altamont Corridor Express (ACE) (at Pleasanton Station) and serving San Ramon, Danville, and Walnut Creek. Private employer-run shuttle services within the segment include routes for Polycom, Safeway, and Clorox Corporation (at ACE’s Pleasanton Station) and for Lawrence Livermore National Laboratory (at ACE’s Vasco Road Station). LAVTA also administers Go Dublin!, a promotional rideshare program that offers a 50-percent discount (up to \$5 total) for uberPOOL or Lyft Line rides.

ACE operates south of the Tri-Valley Alignment, primarily serving regional commute trips from San Joaquin County into the San Francisco Bay Area (Bay Area), as well as from the Tri-Valley area to the East Bay and South Bay. Within the Tri-Valley area, ACE has stations at Vasco Road (beneath Vasco Road between Brisa Street and Patterson Pass Road), Livermore (Livermore Transit Center, near the First Street/Railroad Avenue intersection in Downtown Livermore), and Pleasanton (near the Pleasanton Avenue/Bernal Avenue intersection in Downtown Pleasanton). ACE operates during weekday peak periods only, with four westbound trips in the morning and four eastbound trips in the afternoon/evening.

Bicycle/Pedestrian Facilities in Station Areas

Existing bicycle and pedestrian access at each of the proposed stations on the Tri-Valley segment is described below:

- **Dublin/Pleasanton Station:** Dedicated bicycle access is provided by a Class I bikeway (shared multi-use recreational path) along the Iron Horse Regional Trail, which passes directly underneath I-580 and the station.² Connecting Class II bikeways (on-street bicycle lanes) are provided along Dublin Boulevard north of the station and along Owens Drive and Willow Road south of the station. Pedestrian access is provided by the Iron Horse Regional Trail and the surrounding street network, including DeMarcus Boulevard, Hamlet Lane, and Iron Horse Parkway north of the station and Owens Drive and Willow Road south of the station. Sidewalks and crosswalks generally provide clearly marked paths of travel along these streets, as well as through and around the BART surface parking lots north and south of the station.
- **Isabel Station:** There is no existing dedicated bicycle access along East Airway Boulevard or Rutan Drive, although wide shoulder lanes are provided along a short segment of East Airway Boulevard adjacent to I-580, immediately to the east of the proposed station location. Class II bikeways are provided along Isabel Avenue, as well as connecting segments of Portola Avenue north of the station and Airway Boulevard (west of Isabel Avenue) south of the station. Pedestrian access is currently limited, as portions of East Airway Boulevard in the vicinity of the station site have not been improved with sidewalks. Sidewalks are currently not provided along the east side of Rutan Drive, and there is no marked crosswalk across East Airway Boulevard at Rutan Drive or anywhere between Isabel Avenue and Portola Avenue (the closest marked crosswalk is at Isabel Avenue, where there is only one crosswalk, across the west leg).

² Bikeways are typically grouped into one of four classes:

- **Class I:** Dedicated paths or trails. These facilities are usually, but not always, paved and may be designated either for the exclusive use of bicyclists or shared with other users such as walkers, runners, hikers, and horseback riders, depending on the context.
- **Class II:** Dedicated road space in the paved right-of-way. These facilities are most frequently associated with marked bicycle lanes and may include treatments such as high-visibility paint or painted buffer zones to provide added safety for bicyclists. They may also feature focused treatments such as flexible delineator posts and other protective barriers typically associated with Class IV facilities.
- **Class III:** Shared road space in the paved right-of-way, operating in mixed flow with other vehicles such as cars, buses, and trucks. Typically known as bicycle routes, these facilities offer little physical protection for bicyclists, but are usually accompanied by signage and pavement markings such as sharrows.
- **Class IV:** Separated bikeway for the exclusive use of bicyclists. More commonly known as cycle tracks, these facilities are characterized by separation from adjacent motorized traffic. The separation may be provided by grade separation, flexible posts, inflexible physical barriers, on-street parking, or other means.

- Southfront Road Station Alternative:** There is no existing dedicated bicycle access along Southfront Road, nor through the nearest I-580 crossings at the First Street/Springtown Boulevard and Vasco Road interchanges. Pedestrian access is currently limited, as much of Southfront Road has not been improved with sidewalks, and there are no marked crosswalks across Southfront Road anywhere between First Street and Preston Avenue/Vasco Road.
- Greenville Station:** Dedicated bicycle access is provided by Class II bikeways along Greenville Road, as well as along Las Positas Road south of the station. There is no dedicated bicycle access provided along Altamont Pass Road north of the station, nor along Southfront Road. Pedestrian access is currently limited, as much of Greenville Road and all of Altamont Pass Road have not been improved with sidewalks. There are no marked crosswalks across Altamont Pass Road, and the closest marked crosswalks across Greenville Road are at Southfront Road and Las Positas Avenue.

3.17.3.2 Altamont Segment

The Altamont segment of the study area encompasses the portion of the proposed alignment over the Altamont Pass, stretching from the east end of the Tri-Valley segment (the I-580 overcrossing above the Alameda County Transportation Corridor right-of-way [ROW]) to immediately east of the proposed Tracy OMF in San Joaquin County. This segment includes the Altamont Alignment; the two variants for the Owens-Illinois Industrial Lead; the Interim OMF; the OMF and alternative (Tracy OMF and West Tracy OMF Alternative); the proposed Mountain House Station; the Stone Cut Alignment Alternative; and the Mountain House Station Alternative.

Public Transit

Public transportation in the Altamont segment is limited, as the area is largely undeveloped. However, the San Joaquin Regional Transit District (RTD) operates two bus routes serving Mountain House, at the eastern end of the segment in unincorporated San Joaquin County, as summarized in Table 3.17-3.

Table 3.17-3. Altamont Segment—Key Existing Bus Routes

Route	Type	Route Description	Approximate frequency (minutes)				
			Weekdays				Week-ends
			AM peak period	Mid-day	PM peak period	Evening	
99	County Hopper	Mountain House – Tracy	*		*		
Direct Connection	County Hopper	Mountain House – Vasco Road Station (ACE)	**		**		

Notes:

“County Hopper” routes provide limited-stop service countywide or in unincorporated areas of the county.

* Route 99 operates four trips in each direction during each of the morning and afternoon/evening, approximately every 90 minutes.

** Direct Connection operates one westbound trip (connecting to ACE) in the morning and two eastbound trips (connecting from ACE) in the afternoon/evening.

ACE currently operates on UPRR’s Oakland Subdivision, in a separate alignment paralleling the Altamont Alignment, generally north of the alignment west of the crest (at Altamont) and south of

the alignment east of the crest. There are no ACE stations within this segment, however, with the nearest stations being Vasco Road or Tracy.

Bicycle/Pedestrian Facilities in Station Areas

Both the proposed Mountain House Station and the Mountain House Station Alternative are located in mostly rural areas where existing uses are light industrial or agricultural in nature. Roadways serving the two station sites—including Via Nicolo Road and West Patterson Pass Road for the proposed Mountain House Station and Hansen Road for the Mountain House Station Alternative—are rural in nature, and have not been improved with dedicated bikeways for bicyclists or with sidewalks or marked crosswalks for pedestrians.

Railroad–Roadway Collisions

As the Altamont Alignment involves re-activating a disused (former SPRR) rail ROW, there are no currently active grade crossings or existing (freight or passenger) rail service within the Alameda County portion of the alignment. However, this portion of the alignment roughly parallels the existing ACE route on UPRR’s Oakland Subdivision, which includes several grade crossings on the segment between the I-580 overpass (east of Greenville Road) and the Alameda County line. Of the 54 reported incidents at grade crossings within Alameda County between January 2014 and March 2019, none were located on this portion of UPRR’s Oakland Subdivision (Federal Railroad Administration 2019).

Within San Joaquin County, the Altamont Alignment includes portions of both the disused ROW as well as an active ROW used by freight trains (the Owens-Illinois Industrial Lead). Of the 49 reported incidents at grade crossings within San Joaquin County between January 2014 and March 2019, none were located on the Owens-Illinois Industrial Lead or on the roughly parallel portions of UPRR’s Oakland Subdivision currently used by ACE (Federal Railroad Administration 2019).

3.17.3.3 Tracy to Lathrop Segment

The Tracy to Lathrop segment of the study area extends from the east end of the Altamont segment (immediately east of the proposed Tracy OMF) to the end of the corridor at the proposed North Lathrop Station. This segment includes the two variants for the Tracy to Lathrop Alignment, as well as the proposed Downtown Tracy Station (including the two parking alternatives at the Downtown Tracy Station), River Islands Station, and North Lathrop Station.

Public Transit

Public transportation in southwestern San Joaquin County is primarily provided by RTD (which operates bus service countywide and in unincorporated areas of the county) and the City of Tracy’s Tracer service. Public transit service within the Tracy to Lathrop segment includes multiple RTD routes, as summarized in Table 3.17-4.

Table 3.17-4. Tracy to Lathrop Segment—Key Existing Bus Routes

Route	Type	Route Description	Approximate frequency (minutes)				Week-ends
			Weekdays				
			AM peak period	Mid-day	PM peak period	Evening	
90	County Hopper	San Joaquin Delta College – Downtown Stockton – Lathrop – Tracy (Walmart)	Irregular headways; 8 westbound trips and 9 eastbound trips daily				
97	County Hopper	Downtown Stockton – Downtown Lathrop – Downtown Tracy (Tracy Transit Center)	Irregular headways; 3 westbound trips and 4 eastbound trips daily				
797	County Hopper	Stockton – Lathrop – Manteca – Tracy					120
150	Commuter	Stockton – Lathrop – Tracy – Dublin/Pleasanton Station (BART)	60–120	*	60	*	*
		Manteca – Tracy – Dublin/Pleasanton Station (BART)**	60		60		
152	Commuter	Stockton – Lathrop – Livermore (Lawrence Livermore National Laboratory)	***		***		
172	Commuter	Stockton – Lathrop – Manteca – Tracy – Sunnyvale (Lockheed Martin Transit Center)	***		***		
173	Commuter	Stockton – Manteca – Tracy – Pleasanton – Sunnyvale (Lockheed Martin Transit Center and Northrop Grumman California Ave. Gate)	***		***		

Notes:

“County Hopper” routes provide limited-stop service countywide or in unincorporated areas of the county.

* The Stockton branch of Route 150 operates a limited number of trips in the late morning, early afternoon, and evening on weekdays. On weekends, headways are irregular, with a total of 5 trips in each direction.

** Buses on the Manteca branch operate only between Manteca and Tracy. At Tracy Transit Center, passengers using the Manteca branch must transfer to/from the connecting bus on the Stockton branch, which provides service west of Tracy.

*** Routes 152, 172, and 173 each operate one westbound trip in the AM peak period and one eastbound trip in the PM peak period.

In addition to the fixed-route bus service described above, RTD also operates Van Go!, an on-demand van service operating within four discrete zones (Stockton, Lathrop/Tracy, Lodi, and Manteca/Escalon/Ripon).

Within Tracy, the City of Tracy also operates Tracer, a system of six local bus routes connecting various neighborhoods and destinations with Downtown Tracy and the Tracy Transit Center. Four of the routes operate daytime (morning, midday, and early evening) service on weekdays and Saturdays, while the remaining two routes are school “commuter” routes operating only a limited number of trips in the early morning and afternoon periods on weekdays when school is in session.

In addition, both the Modesto Area Express (MAX) and Stanislaus Regional Transit (StaRT) operate regional/intercity commuter express bus service that parallels much of the alignment.

- **MAX to BART:** Modesto (Downtown Transit Center) – Dublin/Pleasanton Station (BART). Weekdays only, three trips in each direction in the morning and two trips in each direction in the afternoon/evening.
- **MAX to ACE:** Modesto (Vintage Faire Mall) – Lathrop Station (ACE), with some trips extended to serve Modesto’s Downtown Transit Center. Weekdays only, three trips in each direction in the morning and four trips in each direction in the afternoon/evening.
- **StaRT Commuter:** Turlock Transit Center – Patterson (Walmart) – Dublin/Pleasanton Station (BART). Weekdays only, one westbound trip in the AM peak period and one eastbound trip in the PM peak period.

ACE currently operates on UPRR’s Oakland Subdivision, in a separate alignment to the south/east of (and paralleling) the Tracy to Lathrop Alignment. ACE currently has two stations on this segment of its route: Tracy (at the South Tracy Boulevard/West Linne Road intersection in south Tracy) and Lathrop/ Manteca (at the intersection with West Yosemite Avenue on the border between Lathrop and Manteca).

Bicycle/Pedestrian Facilities in Station Areas

Existing bicycle and pedestrian access at each of the proposed stations in the Tracy to Lathrop segment is described below:

- **Downtown Tracy Station:** Dedicated bicycle access is provided by Class II bikeways along North Central Avenue south of the station. However, these bikeways continue only as far as Sixth Street north of the station, where they become Class III bikeways (shared mixed-flow travel lanes). Additional Class III bikeways are provided along connecting portions of Mount Diablo Avenue, 3rd Street, Sixth Street, and 10th Street. Pedestrian access is provided by the surrounding street network, most of which has been improved with sidewalks and marked crosswalks. However, sidewalks and/or marked crosswalks may be missing in some locations, including along alleys (e.g., King Alley) and at intersections with alleys or minor streets (e.g., North Central Avenue/Fourth Street).
- **River Islands Station:** The proposed River Islands Station would be located at the southern corner of the River Islands development. Currently, however, the area is mostly rural, where existing uses are light industrial or agricultural in nature. Surrounding roadways, including Manthey Road, are mostly rural in nature, and have not been improved with dedicated bikeways for bicyclists or with sidewalks or marked crosswalks for pedestrians.
- **North Lathrop Station:** Dedicated bicycle access is provided by Class II bikeways along West Lathrop Road. Additional Class II bikeways are provided along connecting portions of Fifth Street. Pedestrian access is provided by the surrounding street network, including West Lathrop Road and Fifth Street, although some other streets have not been improved with dedicated bikeways for bicyclists or with sidewalks or marked crosswalks for pedestrians.

Railroad–Roadway Collisions

The Tracy to Lathrop Alignment would follow portions of several active ROWs currently used by freight trains. From the eastern end of the Altamont Alignment, the Proposed Project would continue

on the Owens-Illinois Industrial Lead to Tracy Junction, the junction with the “Mococo” (short for Mountain Copper Company) Line, part of UPRR’s Tracy Subdivision. East of the junction, the alignment would follow UPRR’s Tracy Subdivision to the Lathrop Wye, where the Tracy Subdivision merges into UPRR’s Fresno Subdivision. From there, the route would continue for a short distance on the Fresno Subdivision to the proposed terminus at North Lathrop Station. ACE operates on UPRR’s Oakland Subdivision, which runs roughly parallel south/east of the proposed alignment.

Overall freight traffic on these segments is minimal, and does not include daily freight service, but includes periodic traffic to and from track spurs serving customers (e.g., Owens-Illinois) and short-line trains to and from the California Northern Railroad West Side Line between Tracy and Los Banos. There is currently no passenger rail service along the Tracy to Lathrop Alignment, except along the short segment on UPRR’s Fresno Subdivision. On this particular segment, ACE trains (eight trains per day) on UPRR’s Oakland Subdivision switch to and from the Fresno Subdivision—via a turnout at Control Point Hicks, where the Oakland and Fresno Subdivisions cross—and take the Lathrop Wye for the approach into and out of Stockton.

Of the 49 reported incidents at grade crossings within San Joaquin County between January 2014 and March 2019, most were concentrated within the city of Stockton. There were no reported incidents within the extents of the proposed alignment, and only one incident (at Corral Hollow Road) reported on the parallel portion of UPRR’s Oakland Subdivision. Slightly beyond the northern extent of the proposed alignment (i.e., North Lathrop Station), there were four additional incidents during this period on UPRR’s Tracy Subdivision through Lathrop and French Camp, consisting of two incidents each at Roth Road and Ash Street/East Mathews Road (Federal Railroad Administration 2019).

3.17.4 Impact Analysis

This section describes the environmental impacts of the Proposed Project and alternatives analyzed at an equal level of detail on transportation and traffic, including the station alternatives (Southfront Road Station Alternative, Mountain House Station Alternative, Downtown Tracy Station Parking Alternative 1, and Downtown Station Tracy Parking Alternative 2), the Stone Cut Alignment Alternative, and the West Tracy OMF Alternative. It describes the methods used to evaluate the impacts and the thresholds used to determine whether an impact would be significant. Measures to mitigate significant impacts are provided, where appropriate.

3.17.4.1 Thresholds of Significance

State CEQA Guidelines Appendix G (14 California Code of Regulations, § 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts related to transportation and traffic.

An impact would be considered significant if construction or operation of the Proposed Project would have any of the following consequences.

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- Result in inadequate emergency access

3.17.4.2 Impacts and Mitigation Measures

Impact TRA-1: Construction and operation of the Proposed Project could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Level of Impact Prior to Mitigation	<p>Potentially significant (mitigation required)</p> <p><u>Construction of the Proposed Project</u></p> <p>Tri-Valley Alignment Dublin/Pleasanton Station Isabel Station Greenville Station Altamont Alignment Owens-Illinois Industrial Lead Variant 1, Single Track Owens-Illinois Industrial Lead Variant 2, Double Track Interim OMF Mountain House Station Tracy OMF Tracy to Lathrop Alignment Variant 1, Single Track Tracy to Lathrop Alignment Variant 2, Double Track Downtown Tracy Station River Islands Station North Lathrop Station</p> <p><u>Construction of the Alternatives Analyzed at an Equal Level of Detail</u></p> <p>Southfront Road Station Alternative Stone Cut Alignment Alternative Mountain House Station Alternative West Tracy OMF Alternative Downtown Tracy Station Parking Alternative 1 Downtown Tracy Station Parking Alternative 2</p> <p>Less than significant (beneficial)</p> <p><u>Operation of the Proposed Project</u></p> <p>Tri-Valley Alignment Dublin/Pleasanton Station Isabel Station Greenville Station Altamont Alignment Owens-Illinois Industrial Lead Variant 1, Single Track Owens-Illinois Industrial Lead Variant 2, Double Track Interim OMF Mountain House Station Tracy OMF Tracy to Lathrop Alignment Variant 1, Single Track Tracy to Lathrop Alignment Variant 2, Double Track Downtown Tracy Station River Islands Station North Lathrop Station</p>
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Operation of the Alternatives Analyzed at an Equal Level of Detail

Southfront Road Station Alternative

Stone Cut Alignment Alternative

Mountain House Station Alternative

West Tracy OMF Alternative

Downtown Tracy Station Parking Alternative 1

Downtown Tracy Station Parking Alternative 2

Mitigation Measures TRA-1.1: Transportation management plan for project construction.
 TRA-1.2: Mainline railway disruption control plan for project construction.
 TRA-1.3: BART disruption control plan for project construction.

Level of Impact after Mitigation **Less than significant**

Impact Characterization

Section 3.17.2, *Regulatory Setting*, provides a summary of the Proposed Project's regulatory setting, including relevant programs, plans, ordinances, and policies addressing the circulation system at the federal, state, and regional/local levels.

Impact Detail and Conclusions

Operation of the Proposed Project (including all track variants, technology variants, and the Greenville and Mountain House IOS), the station alternatives (Southfront Road Station Alternative, Mountain House Station Alternative, Downtown Tracy Station Parking Alternative 1, and Downtown Tracy Station Parking Alternative 2), the Stone Cut Alignment Alternative, and the West Tracy OMF Alternative, would expand the reach and connectivity of the local and regional public transit network, allowing passengers to transfer with BART and ACE. Stations would include bus bays for connecting bus and shuttle services, as well as new parking facilities to accommodate park-and-ride passengers. As described in Chapter 2, *Project Description*, the Proposed Project would also include new access roads and/or improvements to adjacent roadway segments and intersections as needed to provide adequate multimodal access in the immediate vicinity of the proposed stations.

Forecasted ridership for the Proposed Project and alternatives analyzed at an equal level of detail is summarized in Table 3.17-5 for reference. Additional information on ridership forecasts for the Proposed Project is provided in Appendix F, *Valley Link Ridership Technical Memorandum - Revised*.

Proposed Project

As shown in Table 3.17-5, the Proposed Project would serve up to approximately 12,700 passengers on an average weekday under 2025 Build conditions. Of the approximately 5,910 average weekday boardings at Dublin/Pleasanton Station, approximately 5,260 boardings would be transfers from BART, or about 10,520 total passengers transferring between Valley Link and BART. Average weekday ridership due to transfers with ACE would be approximately 410 boardings (820 total passengers) at Greenville Station and 270 boardings (540 total passengers) at North Lathrop Station.

Table 3.17-5. Forecasted Ridership for Proposed Project and Alternatives (2025 Build)

Station	Average Weekday Boardings (2025 Build)					
	Full Build		Initial Operating Segment (IOS)			
	Proposed Project (Greenville Station)	Southfront Road Station Alternative	Greenville Station IOS*	Southfront Road Station IOS	Mountain House Station IOS With Greenville Station	Southfront Road Station Alternative
Dublin/Pleasanton	5,907	6,507	4,100	4,931	4,795	5,413
↳ Transfers from BART	5,260	5,790	3,590	4,360	4,210	4,790
Isabel	816	832	1,130	538	589	639
Southfront Road		1,177		4,588		1,493
Greenville	1,030		3,142		683	
↳ Transfers from ACE	410		410		410	
Mountain House**	1,231	921			3,878	3,557
Downtown Tracy	1,107	1,067				
River Islands	865	871				
North Lathrop	1,750	1,982				
↳ Transfers from ACE	270	350				
Total	12,704	13,356	8,372	10,057	9,944	11,101

Notes:

* For the Greenville Station IOS, the reported values reflect a parking constraint at Greenville Station. Unconstrained ridership would require more parking than is practicable to provide at the station.

** Ridership forecasts conducted for Mountain House Station only. Ridership would be similar for the Mountain House Station Alternative in lieu of the Mountain House Station.

As mentioned under Impact TRA-2, the Proposed Project would reduce VMT and associated greenhouse gas (GHG) emissions under all IOS and Full Build scenarios—and, under the Full Build scenarios, associated GHG emissions—by inducing a mode shift from automobiles to environmentally sustainable public transit, particularly for longer-distance commute trips by San Joaquin County residents to workplaces in the Tri-Valley or elsewhere within the greater Bay Area. This mode shift would also reduce traffic congestion along I-580, particularly through the Tri-Valley and Altamont segments, benefitting goods movement between the Central Valley and the Bay Area.

As discussed under Impact TRA-3, design, construction, and operation of the Proposed Project would also comply with applicable standards from Caltrans and local city and county agencies (for changes to the roadway network, including freeways, local streets, and grade crossings) and from the FRA and/or CPUC (for the Proposed Project’s rail elements).

Additional discussion of specific Project effects is provided below.

Impacts on I-580

Due to SB 743, impacts related to traffic delay/congestion are no longer considered potential significant impacts under CEQA. As such, the discussion below concerning construction effects to I-580 and traffic is provided for informational purposes only.

As described in Chapter 2, *Project Description*, construction and widening of local roadways, freeways, the realignment of freeway ramps, and replacement of bridges would include removal of existing features such as concrete barriers, retaining walls, portions of bridge structures, curbs and gutters, sidewalks, signs (roadway and overhead), street lights, express lane electronic toll system (ETS), and traffic signals. Work may also include relocation of existing overhead and underground utilities. Proposed work would include clearing and grubbing, embankment construction, earthwork excavation, grading and compaction, aggregate base, hot mix asphalt, and pavement marking and striping. Proposed structural work would include construction of new bridges and the extension of box culverts. Retaining walls would be constructed in several locations within the Project limits to minimize ROW impacts, to avoid impacts on existing interchange overcrossing structures, and to support the ramp approaches and roadway embankments. Caltrans standard concrete barriers would be constructed in the center median for about 12 miles on both sides of the Valley Link rail alignment, as well as between local roadways and the freeway in areas where outside widening would occur. Median concrete barrier would be modified to accommodate overhead signs, dynamic message sign, variable toll message sign (VTMS), and toll gantry structures to carry ETS equipment. The location of VTMS and toll gantries for ETS would require close coordination with Alameda County Transportation Commission (ACTC) and Caltrans. The train signal and system equipment would also be installed on the median concrete barrier. Construction site preparation activities would include installation of environmentally sensitive area fencing; vegetation removal; and installation of water quality construction best management practice features such as slit fence, fiber rolls, and drainage inlet protection systems.

Special haul roads would not be required for the I-580 widening and improvement. A detailed stage construction and traffic handling plans would be developed in the final design phase along with transportation management plans (TMP) for contractor use. The TMP would include, lane closure charts, detour plans, nighttime and weekend lane and ramp closures to support various construction activities. Temporary K-rail with other traffic control devices would be used to separate the work area from the moving traffic, close travel lanes, sidewalks, and other areas as needed to provide construction staging areas. The following four potential staging areas have been identified in the Tri-Valley segment:

- North of I-580 between Campus Drive and Hacienda Drive in Dublin
- South of I-580 east of the Las Colinas Road overcrossing in Livermore
- Along Northfront Road adjacent to the westbound I-580 on-ramp from North Vasco Road
- Along Southfront Road adjacent to the eastbound I-580 off-ramp to South Vasco Road

The contractor would be responsible for identifying and obtaining environmental clearance for additional staging areas as needed outside of the Project-identified construction staging area.

The need for further construction encroachment permits for any work undertaken outside State ROW would be evaluated during the Plans, Specifications & Estimate design phase of the Proposed Project. The Tri-Valley–San Joaquin Valley Regional Rail Authority (Authority) would coordinate with applicable regulatory agencies for permits for construction and other activities, as needed. The early Plans, Specifications & Estimate phase of the Proposed Project would also include a detailed constructability review in conjunction with both Caltrans and ACTC.

After construction, I-580 and its on and off ramps would have the same capacity as they do at present. While some lanes and ramps would be realigned in order to accommodate the rail lines and stations, I-580 capacity would not be changed.

Impacts on Freight Rail

The Proposed Project could result in significant indirect impacts related to air quality, noise, or GHG emissions if construction of the Proposed Project or operation disrupts existing freight rail operation such that freight traffic is diverted to other modes (e.g., trucks). However, construction and operation of the Proposed Project within ROW owned by UPRR, including the Owens-Illinois Industrial Lead and segments of the route to the east along the Tracy and Fresno Subdivisions, would comply with relevant UPRR guidelines and requirements. While substantial disruptions to freight rail operation are unlikely given the minimal existing and expected future freight train activity along the proposed alignment, some temporary and minor disruptions could still occur during construction of the Proposed Project, such as nighttime track closures/shutdowns, slow zones, and other effects.

Regular coordination meetings between the Authority and UPRR would take place throughout the entire design and construction phases of the Proposed Project and would address construction-related effects on existing freight operation, such as scheduling of construction activities within the ROW. Servicing of local freight customers by UPRR would be given priority, and a memorandum of understanding (MOU) would be in place between the Authority and UPRR to address construction activity.

Under Tracy to Lathrop Alignment Variant 1, Single Track, for the Owens-Illinois Industrial Lead and the Tracy to Lathrop Alignment, a single main track would be provided for the Owens-Illinois Industrial Lead and the Tracy to Lathrop Alignment, to be shared by both Valley Link and mainline freight trains. Under Tracy to Lathrop Alignment Variant 2, Double Track, a second main track would be constructed parallel to the existing UPRR main track. For both Variant 1 and Variant 2, the MOU between the Authority and UPRR would include operating protocols, track-sharing arrangements, and other provisions. Under both variants, grade crossing safety upgrades and other components of the Proposed Project within the Owens-Illinois Industrial Lead and other portions of active UPRR-owned ROW would also generally benefit freight rail operation and safety.

Impacts on Passenger Rail

The only segment of the Proposed Project used by existing mainline passenger trains is the short segment between the north end of the Lathrop Wye and the proposed North Lathrop Station, formally part of UPRR's Fresno Subdivision. However, passenger traffic on this segment is minimal, and consists exclusively of ACE commuter rail trains operating between Stockton and San Jose (eight trains per day, including four southbound/westbound trains in the morning and four northbound/eastbound trains in the afternoon/evening). With two main tracks north of the Lathrop Wye, there would be sufficient capacity to accommodate Valley Link trains together with the existing (minimal) freight and passenger train activity on this segment.

In terms of ridership, the Proposed Project is expected to result in a shift in some existing ACE riders to Valley Link, which would provide bi-directional service at a higher frequency, throughout the day on weekdays and on weekends and holidays, as opposed to ACE's current weekday-focused service during the peak periods only and in the commute direction only. As

indicated in Table 3.17-5 and the accompanying discussion, the Proposed Project would result in some passenger transfer activity at both Greenville Station and North Lathrop Station. While some of these transfers may represent new riders who would not otherwise have taken ACE, the Proposed Project is still expected to result in an overall reduction in ACE ridership. Average weekday ridership for ACE is forecasted to drop from approximately 10,990 passengers under 2025 No Build conditions to 7,100 passengers under 2025 Build conditions (i.e., with the Proposed Project).

It should be noted, however, that the ability to expand ACE service along its existing route is largely constrained by the number of train slots granted by UPRR. Therefore, to the extent that the Proposed Project shifts riders off of ACE, it would create additional capacity for ACE within the existing slots and timetable to accommodate longer-distance riders, such as those coming from Modesto, Merced, and Sacramento (as envisioned under the Valley Rail Sacramento Extension Project, for example).

Vasco Road Station

With the proposed station at Greenville, it is possible that the San Joaquin Regional Rail Commission (SJRRRC) may decide to end ACE service at the Vasco Station, which is approximately 2.5 track miles from the proposed Greenville Station. There is a tradeoff between ridership gains of adding new stations versus ridership losses due to the additional travel time. It is also possible that SJRRRC may decide to service both stations. Any decision about ACE service to the Vasco Station will be up to the SJRRRC, not the Authority. Given that there is the possibility that SJRRRC might choose to no longer provide ACE service to the Vasco Station, the analysis in this EIR has assumed potential closure of the Vasco Station in order to examine the potential effects on the ACE service.

The Greenville Station would be located northeast of Vasco Road Station, but along the edge of Livermore city limits, further away from most of the existing developed areas within the city of Livermore than the current ACE station at Vasco Road. However, in the event that ACE no longer stopped at the Vasco Road Station, with the Proposed Project, existing riders would continue to have ACE service via the Greenville Station. ACE riders who disembark at the new Greenville Station would likely have to travel slightly longer distances to/from the station to their destinations in east Livermore. ACE riders commuting into Lawrence Livermore National Laboratory, for example, would continue to have access, except via Lawrence Livermore National Laboratory's East Gate at Eastgate Drive and Greenville Road, instead of the West Gate at Westgate Drive and Vasco Road which would be approximately 1.1 miles longer. Shuttles from a new Greenville Station to the Laboratory East Gate would take perhaps 2 minutes longer for ACE riders compared to the time it takes for shuttles to go from Vasco Station to the Laboratory West Gate. Residents of eastern Livermore who currently take ACE at Vasco Road Station would likely need to travel slightly further to and from the Greenville Station, or could also access ACE at the Downtown Livermore Station.

An intermodal Greenville Station would provide a direct platform-to-platform transfer between ACE and Valley Link. The connection at the Greenville Station would provide ACE riders with a BART connection in the Tri-Valley area, and would provide connections to and from ACE for areas not directly served by ACE's existing route, such as Downtown Tracy or Mountain House. There would be approximately 670 parking spaces at the Greenville Station (under the 2025 full build scenario) (compared to 136 parking spaces at the existing ACE Vasco Road Station), which may, therefore, capture additional riders among residents in eastern Livermore compared to the existing Vasco Road Station.

Impacts on BART

Analysis of a project's transportation impacts should consider effects on transit access or operation, but the addition of new transit users is generally not considered an adverse impact, as significance criteria for evaluating a project's transportation impacts must promote GHG emissions reductions and the "development of multimodal transportation networks", as described above under Section 3.17.2, *Regulatory Setting*. To the extent that the increased ridership demand requires new or additional transit infrastructure, however, this could result in indirect significant impacts (Governor's Office of Planning and Research 2018).

The Authority has coordinated extensively with BART during the preliminary design and planning of the Proposed Project. At the Dublin/Pleasanton Station, improvements or changes to existing BART equipment/facilities and construction of new BART equipment/facilities—such as concourse areas, ticketing (e.g., faregates, ticket vending machines, and other automatic fare collection equipment), and other elements—would be designed according to BART Facilities Standards and other applicable standards, such as the California Building Code and National Fire Protection Association 130 (Standard for Fixed Guideway Transit and Passenger Rail Systems). The preliminary design of improvements at the Dublin/Pleasanton Station reflects ridership projections for transfer activity between Valley Link and BART. As indicated in Table 3.17-5 and the accompanying discussion, there would be approximately 10,520 total passengers transferring between the two systems at the Dublin/Pleasanton Station on an average weekday under 2025 Build conditions. This activity would be spread over the course of the day, although the majority would occur during the weekday morning and afternoon/evening commute periods and be concentrated in the commute directions (westbound in the morning and eastbound in the afternoon/evening).

Based on these ridership forecasts, BART has determined that no additional BART train capacity is needed to accommodate added ridership due to Valley Link in 2025, even if BART continues to operate service at the existing headway of 15 minutes (as opposed to reducing headways to 12 minutes, which would increase capacity on the Blue Line).

All construction activities within or adjacent to BART facilities and ROW would be coordinated directly with BART to minimize any effects on BART service or operation.

Alternatives Analyzed at an Equal Level of Detail

Forecasted ridership for the alternatives analyzed at an equal level of detail is summarized in Table 3.17-5 for reference. Additional information on ridership forecasts for the alternatives is provided in Appendix F, *Valley Link Ridership Technical Memorandum - Revised*. Ridership under each of the alternatives is discussed in more detail below:

- **Southfront Road Station Alternative.** As shown in Table 3.17-5, average weekday ridership would be approximately 13,360 passengers, which would be higher than the Proposed Project (12,700 passengers).
- **Stone Cut Alignment Alternative.** No effect on ridership.
- **Mountain House Station Alternative.** Ridership would be similar to Mountain House Station under the Proposed Project. The stations are in close proximity to each other, such that any differences in ridership would likely be marginal.
- **West Tracy OMF Alternative.** No effect on ridership.

- **Downtown Tracy Station Parking Alternatives 1 and 2.** Ridership for the Downtown Tracy Station Parking Alternatives 1 and 2 would likely be similar to what is shown for Downtown Tracy Station under the Proposed Project, as the ridership forecasts are not constrained by parking capacity at Downtown Tracy. While the two parking alternatives would provide additional onsite parking capacity beyond what is provided under the Proposed Project, the majority of these additional spaces are expected to be filled by riders shifting from offsite parking (e.g., offsite structures and lots or on-street parking) or from other access modes (e.g., kiss-and-ride, transit, biking) under the Proposed Project. Any net incremental increase in Valley Link ridership due to either parking alternative at Downtown Tracy Station would likely be marginal.

In general, there would be minor differences in the geographical location and extent of impacts under the various alternatives compared to the Proposed Project:

- **Southfront Road Station Alternative.** Access to and from the station would generally be similar to Greenville Station or Isabel Station. In general, employees and visitors arriving at the station by Valley Link would be expected to take connecting transit/shuttles, walk, or bike to their final destination, while residents arriving to board Valley Link trains would be spread over these modes and automobiles (single-occupancy, carpool, or pick-up/drop-off).

With the Southfront Road Station Alternative, it is likely that SJRRC would continue service to the Vasco Station. In this situation, transfers to/from ACE would largely be limited to the North Lathrop Station. Passengers further to the west who would have transferred at Greenville Station under the Proposed Project would be expected to shift to other stations under the Southfront Road Station Alternative.

For example, a passenger boarding Valley Link at Downtown Tracy and transferring to ACE at Greenville Station under the Proposed Project would generally be expected to take ACE directly from ACE's Tracy Station under the Southfront Road Station Alternative. Similarly, an ACE passenger boarding at ACE's Tracy Station who would have transferred to Valley Link at Greenville Station under the Proposed Project would generally be expected to take Valley Link directly from the Downtown Tracy Station. Similar effects can be expected at Mountain House Station, where riders would have the option of taking Valley Link and transferring at Greenville Station under the Proposed Project, but would be more likely to drive over the Altamont Pass and access ACE directly at Vasco Road Station under the Southfront Road Station Alternative. These effects are already accounted for in the ridership forecasts summarized in Table 3.17-5, which show higher ridership under the Southfront Road Station Alternative compared to the Proposed Project.

- **Stone Cut Alignment Alternative.** There would be localized effects to freight and passenger rail service due to construction of the Proposed Project along the portions of UPRR's Oakland Subdivision that would be adjacent to the proposed bypass alignment. While these would be new effects not present under the Proposed Project, they would not be substantially different in nature from similar construction-related effects elsewhere along the Proposed Project's alignment within or adjacent to UPRR ROW, such as the Tracy to Lathrop segment. Similarly, there would be some localized effects due to construction of the Proposed Project along I-580 at the intersection with the proposed bypass, but these effects would not be substantially different in nature from similar construction-related effects elsewhere along the Proposed Project's alignment within or in proximity to I-580, such as near Greenville Station.

- **Mountain House Station Alternative.** Although ridership would be similar to Mountain House Station under the Proposed Project, differences in station access may result in some localized effects during construction of the Proposed Project and operation along West Schulte Road and Hansen Road (in lieu of Patterson Pass Road and Via Nicolo Road under the Proposed Project). There would also be localized effects within the UPRR ROW due to construction and operation of the Proposed Project. In general, however, any localized effects under the Mountain House Station Alternative would be similar in nature to the effects associated with Mountain House Station under the Proposed Project. As with the proposed Mountain House Station, passenger access to and from the Mountain House Station Alternative would require passing an at-grade crossing at the east end of the station.
- **Downtown Tracy Station Parking Alternatives 1 and 2.** With the additional parking capacity at Downtown Tracy Station under the two parking alternatives, there may be some localized effects along South Central Avenue and surrounding streets due to construction of the Proposed Project and operation.
 - Downtown Tracy Station Parking Alternative 1 would involve constructing a new parking structure on the site of an existing surface parking lot (for the Tracy Transit Center) at the northeast corner of the North Central Avenue/West 4th Street intersection, with access via the existing driveway along the east side of North Central Avenue immediately south of the UPRR grade crossing and a new driveway along the north side of West 4th Street. There may be localized effects within the UPRR ROW and adjacent segments of 4th Street during construction of the Proposed Project to accommodate realignment of the spur track leading south that serves the American Truck & Trailer Body property at 100 West Valpico Road.
 - Downtown Tracy Station Parking Alternative 2 would be similar to the Proposed Project, and would involve constructing a new parking structure at the southwest corner of the North Central Avenue/West 6th Street intersection, with access via new driveways along the west side of North Central Avenue and the south side of West 6th Street.

Overall, these differences would be minor, and any localized effects under these alternatives would generally be similar to those under the Proposed Project. While the additional parking capacity may result in slightly increased vehicle traffic on the surrounding streets, at least some of the additional parking spaces would likely be occupied by riders shifting from offsite parking or from passenger drop-off/pick-up (i.e., kiss-and-ride), and would not necessarily represent a net increase in vehicles on the roadway network.

- **West Tracy OMF Alternative.** Due to differences in station access, there may be localized effects during construction of the Proposed Project and operation along Patterson Pass Road, Via Nicolo Road, and the surrounding roadway network, as well as along the adjacent sections of UPRR ROW. However, these effects would generally be similar in nature to the effects associated with the Tracy OMF under the Proposed Project.

Similar to the Proposed Project, the alternatives analyzed at an equal level of detail would also reduce VMT (as discussed in more detail under Impact TRA-2) and associated GHG emissions, as well as traffic congestion, which would have secondary benefits for goods movement. Similar to the Proposed Project, the design, construction, and operation of the alternatives analyzed at an equal level of detail would also comply with applicable Caltrans and local city and county agencies (for changes to the roadway network) and from FRA and/or CPUC (for rail elements).

Additional discussion of specific effects of the Proposed Project is provided below.

Impacts on I-580

As discussed above, both the Southfront Road Station Alternative and the Stone Cut Alignment Alternative may result in some localized effects along I-580 during construction. Although these effects would not be present under the Proposed Project, they would be similar in nature to the effects at other locations elsewhere along the Proposed Project alignment within or in proximity to I-580 under the Proposed Project. As with the Proposed Project, construction of all applicable components of the alternatives analyzed at an equal level of detail would be coordinated with Caltrans and would comply with Caltrans requirements and guidelines.

In terms of Project operation, the overall average weekday VMT reduction in 2025 would be slightly higher with the Southfront Road Station than with the Proposed Project, as discussed under Impact TRA-2.

Impacts on Freight Rail

As discussed above, the Stone Cut Alignment Alternative, Mountain House Station Alternative, West Tracy OMF Alternative, Downtown Tracy Station Parking Alternative 1 may result in some localized effects within UPRR ROW during construction and/or operation. These effects would be similar in nature to the effects at other locations elsewhere along the Proposed Project alignment within UPRR ROW under the Proposed Project. As with the Proposed Project, construction and operation of all applicable components of the alternatives analyzed at an equal level of detail would comply with UPRR guidelines and requirements, and there would be regular coordination between the Authority and UPRR, as well as an MOU between both parties to address construction activity.

Impacts on Passenger Rail

Like the Proposed Project, the Southfront Road Station Alternative would also result in an overall reduction in ACE ridership, from approximately 10,990 passengers under 2025 No Build conditions to 6,550 passengers under 2025 Build conditions. This would be a slightly larger reduction in ridership than with the Proposed Project (7,100 passengers). As mentioned earlier, however, this reduction in demand would free up capacity within ACE's existing slots on UPRR-owned tracks to accommodate longer-distance riders originating from beyond the Stockton area.

As discussed above, the Stone Cut Alignment Alternative may result in some localized effects during construction along adjacent portions of UPRR's Oakland Subdivision, which is used by ACE passenger trains. Although these particular effects would not be present under the Proposed Project, they would be similar in nature to construction-related effects at other locations in proximity to ROW used by passenger rail service under the Proposed Project, such as at Greenville Station.

Impacts on BART

Direct effects on BART facilities and operation would be as described under the Proposed Project, as none of the alternatives analyzed at an equal level of detail would be located adjacent to or in proximity to BART. However, there may be some indirect effects associated with ridership differences under certain station alternatives, as discussed briefly above. In particular, the Southfront Road Station Alternative would result in slightly higher ridership overall compared to Greenville Station. This increase would also be reflected in passenger transfer activity between Valley Link and BART at Dublin/Pleasanton Station. As indicated in Table 3.17-5, transfers from BART on an average weekday would be approximately 5,790 boardings, or, equivalently, about 11,580 total passengers transferring between the two systems. This is a slight increase above the

5,260 boardings (10,520 total passengers) with the proposed Greenville Station, and, when spread over the course of a weekday, would not represent a substantial increase in the magnitude of ridership-related effects compared to the Proposed Project.

Significance Conclusion and Mitigation Measures

Significance Prior to Mitigation

Given the above considerations, the Proposed Project would conform to—and not conflict with—programs, plans, ordinances, and policies addressing the circulation system, and impacts of Proposed Project operation related to the regulatory setting would be less than significant. Likewise, operation-related impacts for the alternatives analyzed at an equal level of detail would be less than significant.

In recognition of potential disruptions during construction of the Proposed Project to the circulation system, to mainline (freight and passenger) rail operation along UPRR-owned ROW, and to BART operation, however, the impacts of construction of the Proposed Project have been conservatively deemed significant. Likewise, construction-related impacts for the alternatives analyzed at an equal level of detail have been conservatively deemed significant.

Mitigation Measures

Mitigation Measure TRA-1.1: Transportation management plan for project construction.

The Authority will coordinate with Caltrans and with public works and transportation departments of local jurisdictions to develop a TMP that will mitigate construction impacts on transit, roadway, bicycle, and pedestrian facilities, while allowing for expeditious completion of construction. Measures that will be implemented throughout the course of construction of the Proposed Project will include, but will not be limited to, the following:

- Limit number of simultaneous street closures and consequent detours of transit and automobile traffic within each immediate vicinity, with closure timeframe limited as much as feasible for each closure, unless alternative routes are available.
- Implement traffic control measures to minimize traffic conflicts for all roadway users (regardless of mode) where lane closures and restricted travel speeds will be required for longer periods.
- Provide advance notice of all construction-related street closures, durations, and detours to local jurisdictions, emergency service providers, and motorists.
- Provide safety measures for motorists, transit vehicles, bicyclists, and pedestrians to ensure safe travel through construction zones.
- Limit sidewalk (and pedestrian walkway/path) and bikeway closures to one location within each vicinity at a time, with closure timeframe limited as much as feasible for each closure, unless alternative routes are available.
- Provide designated areas for construction worker parking wherever feasible to minimize use of parking in residential or business areas.

Mitigation Measure TRA-1.2: Mainline railway disruption control plan for project construction.

The Authority will make efforts to contain and minimize disruption to freight and tenant passenger (ACE) services during project construction, while allowing for expeditious completion of construction. Measures that will be implemented throughout the course of Project construction will include, but will not be limited to, the following:

- Limit number of simultaneous track closures within each immediate vicinity, with closure timeframe limited as much as feasible for each closure, unless bypass tracks or alternative routes are available.
- Provide safety measures for freight and passenger rail operation through construction zones.
- Require contractors to coordinate with rail dispatch to minimize disruption of rail service in the corridor.
- Where feasible, limit closure of any tracks for construction activities to periods when passenger service is not scheduled or is less frequent (e.g., weekends, or midday and late evening periods on weekdays).
- Where feasible, maintain acceptable service access for passenger and freight operation.
- Where one open track cannot be maintained for passenger or freight use, limit multi-track closures to one location at a time, as much as feasible.
- Where multi-track closures result in temporary suspension of passenger rail service, work with local and regional transit providers to provide alternative transit service around the closure area (e.g., increased bus and shuttle service).
- Where multi-track closures result in temporary suspension of freight rail service, work with UPRR and freight users to schedule alternative freight service timing to minimize disruption to freight customers. Where such closures will result in substantial diversion to trucks, the Authority or its construction contractor will coordinate with local jurisdictions and freight carriers to determine preferred truck routes to minimize the effect on the circulation system.
- Provide advance notice of construction-related track closures to all affected parties.
- Provide advance notice to transit riders of any temporary disruption in passenger rail service.
- Coordinate with UPRR in advance and during any potential disruption to freight operation and/or UPRR facilities and maintain emergency access for UPRR for the duration of construction.

Mitigation Measure TRA-1.3: BART railway disruption control plan for project construction.

The Authority will make efforts to contain and minimize disruption to BART service during construction of the Proposed Project, while allowing for expeditious completion of construction. Measures that will be implemented throughout the course of construction of the Proposed Project will include, but will not be limited to, the following:

- Provide safety measures for BART operation through construction zones.
- Require contractors to coordinate with BART dispatch to minimize disruption of BART service.
- Where feasible, limit closure of any tracks for construction activities to periods when BART service is not scheduled or is less frequent (e.g., weekends or weekday evenings).
- Where feasible, maintain acceptable service access for BART operation.
- While not anticipated, where track closures result in temporary suspension or substantial disruption to BART service, work with local and regional transit providers to provide alternative transit service around the closure area (e.g., increased bus and shuttle service).
- Provide advance notice to transit riders of any temporary suspension of or substantial disruption to BART service.
- Coordinate with BART in advance and during any potential disruption to BART operation and/or BART facilities, and maintain emergency access for BART for the duration of construction.

Significance with Application of Mitigation

Implementation of Mitigation Measure TRA-1.1, TRA-1.2, and TRA-1.3 would address construction-related effects on the circulation system, on mainline railway operation along UPRR-owned ROW, and on BART operation, and would reduce these impacts to less than significant.

Likewise, Mitigation Measures TRA-1.1, TRA-1.2, and TRA-1.3 would reduce these impacts to less than significant under all alternatives analyzed at an equal level of detail.

Comparison of Alternatives

There would be no substantial difference in impact significance among the alternatives analyzed at an equal level of detail. While there may be localized effects under specific alternatives that would not be present under the Proposed Project, these effects would not be substantially different from effects already identified for the Proposed Project at other locations due to other Project components. While there may also be slight differences in ridership and the amount of avoided VMT under some of the alternatives analyzed at an equal level of detail, overall impacts under the various alternatives analyzed at an equal level of detail would generally be comparable to those under the Proposed Project. None of the alternatives analyzed at an equal level of detail would alter the overall nature of the Proposed Project or its impacts such that there would be substantial conflicts with the regulatory framework, and all of the alternatives analyzed at an equal level of detail would still generally conform with programs, plans, ordinances, and policies addressing the circulation system.

Like the Proposed Project, however, the impacts of construction of the alternatives analyzed at an equal level of detail on the circulation system, on mainline railway operation along UPRR-owned ROW, and on BART operation under all the alternatives analyzed at an equal level of detail are conservatively deemed significant. Implementation of Mitigation Measure TRA-1.1, TRA-1.2, and TRA-1.3 would reduce these impacts to less than significant under all alternatives analyzed at an equal level of detail.

Impact TRA-2: The Proposed Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Level of Impact	<p>Less than significant</p> <p><u>Proposed Project</u></p> <p>Tri-Valley Alignment</p> <p>Dublin/Pleasanton Station</p> <p>Isabel Station</p> <p>Greenville Station</p> <p>Altamont Alignment</p> <p>Owens-Illinois Industrial Lead Variant 1, Single Track</p> <p>Owens-Illinois Industrial Lead Variant 2, Double Track</p> <p>Interim OMF</p> <p>Mountain House Station</p> <p>Tracy OMF</p> <p>Tracy to Lathrop Alignment Variant 1, Single Track</p> <p>Tracy to Lathrop Alignment Variant 2, Double Track</p> <p>Downtown Tracy Station</p> <p>River Islands Station</p> <p>North Lathrop Station</p> <p><u>Alternatives Analyzed at an Equal Level of Detail</u></p> <p>Southfront Road Station Alternative</p> <p>Stone Cut Alignment Alternative</p> <p>Mountain House Station Alternative</p> <p>West Tracy OMF Alternative</p> <p>Downtown Tracy Station Parking Alternative 1</p> <p>Downtown Tracy Station Parking Alternative 2</p>
Mitigation Measures	None Required

Impact Characterization

CEQA Guidelines Section 15064.3, subdivision (b) specifies applicable criteria for analyzing transportation impacts. Specifically, it states the following:

Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements.

Impact Detail and Conclusions

Proposed Project

The Proposed Project is a transportation project (and, specifically, a transit project), and would reduce VMT by inducing a mode shift from personal (household) automobiles to public transit. While there would be localized vehicle traffic (and associated VMT) traveling to/from the proposed stations, including park-and-ride passengers and drop-off/pick-up (e.g., kiss-and-ride, taxi, and

transportation network company) passengers,³ the Proposed Project would remove substantial vehicle traffic on the regional roadway network, particularly on the I-580 corridor within and between San Joaquin County and the Tri-Valley, resulting in a net reduction in VMT.

Estimates of average weekday VMT for No Build and Build conditions in 2025 were developed based on the forecasted ridership between each station pair on the Valley Link route. The net reduction in VMT can then be derived by comparing the Build scenarios against the No Build scenario. The results of this analysis are summarized in Table 3.17-6.

As shown in Table 3.17-6, the Proposed Project would result in an average weekday VMT reduction of approximately 202,300 VMT in 2025.

The Proposed Project would also make various changes to the roadway network as described in detail in Chapter 2, *Project Description*:

- **Tri-Valley Alignment:** Realignment of the I-580 mainline and on- and off-ramps at selected interchanges (including replacement/reconstruction of existing over- and undercrossings); realignment of frontage roads; and modifications to existing roadway structures, such as construction, widening, or replacement/reconstruction of bridges and construction of new retaining walls and concrete barriers.
- **Altamont Alignment:** Modifications to the Altamont Pass Road/Dyer Road intersection.

Throughout all three alignment segments (Tri-Valley, Altamont, and Tracy to Lathrop), the Proposed Project would also make modifications to provide roadway access for proposed stations and OMFs (e.g., new access roads, new driveways/intersections) and ensure adequate safety at grade crossings. However, none of these changes would involve increasing roadway capacity to allow the roadway network to accommodate more vehicle traffic. Consistent with the provisions of CEQA Guidelines Section 15064.3, subdivision (b), the Proposed Project is presumed to have a less-than-significant impact.

Table 3.17-6. Average Weekday VMT Reduction for Proposed Project and Alternatives (2025 Build)

Scenario	Average Weekday VMT		Average Weekday VMT Reduction
	No Build	Build	
Full Build			
Proposed Project (Greenville Station)	176,750,000	176,548,000	202,300
Southfront Road Station Alternative	176,750,000	176,544,000	206,100
Initial Operating Segment (IOS)			

³ Vehicle traffic to and from the stations would be a function of several factors, including but not necessarily limited to the cost, availability, and convenience of (automobile) parking and the quality of connecting transit service, bikeways, and pedestrian routes. An initial estimate of the parking demand can be derived from the ridership forecasts and the assumption that up to approximately 72 percent of Valley Link riders would drive to/from stations (based on data from ACE ridership surveys) in 2025, and the assumption that approximately 50 percent of Valley Link riders would drive to/from stations in 2040. In cases such as Greenville Station under the Greenville Station IOS, however, the amount of proposed parking for passengers is additionally restricted by the size and availability of nearby parcels that could be purposed for parking facilities. For stations serving rail-to-rail transfers, the proposed parking supply has been further reduced accordingly (e.g., Valley Link ↔ ACE transfers at North Lathrop Station and Greenville Station) or no parking has been proposed (e.g., Valley Link ↔ BART transfers at Dublin/Pleasanton Station).

Scenario	Average Weekday VMT		Average Weekday VMT Reduction
	No Build	Build	
Greenville Station IOS*	176,750,000	176,682,000	68,800
Southfront Road Station IOS	176,750,000	176,670,000	79,900
Mountain House Station IOS (Greenville Station)	176,750,000	176,666,000	85,100
Mountain House Station IOS (Southfront Rd. Station Alt.)	176,750,000	176,660,000	90,300

Notes:

* For the Greenville Station IOS, the reported values reflect a parking constraint at Greenville Station. Unconstrained ridership would require more parking than is practicable to provide at the station.

Alternatives Analyzed at an Equal Level of Detail

Similar to the Proposed Project, the alternatives analyzed at an equal level of detail would result in a net VMT reduction. Estimates of the average weekday VMT reduction under the alternatives analyzed at an equal level of detail are summarized in Table 3.17-6 and discussed in more detail below:

- **Southfront Road Station Alternative.** As shown in Table 3.17-6, the average weekday VMT reduction in 2025 would be approximately 206,100 VMT, slightly higher than for the Proposed Project (202,300 VMT).
- **Stone Cut Alignment Alternative.** No effect on VMT.
- **Mountain House Station Alternative.** Average weekday VMT reduction would be similar to the Proposed Project. Both the proposed Mountain House Station and the Mountain House Station Alternative are located in close proximity to each other, such that any differences in VMT would likely be marginal.
- **West Tracy OMF Alternative.** No effect on VMT.
- **Downtown Tracy Station Parking Alternatives 1 and 2.** Average weekday VMT reduction would be similar to the Proposed Project, as the ridership forecasts are not constrained by parking capacity at Downtown Tracy. While the two parking alternatives would provide additional onsite parking capacity beyond what is provided under the Proposed Project, the majority of these additional spaces are expected to be filled by riders shifting from offsite parking (e.g., offsite structures/lots or on-street parking) or from other access modes (e.g., kiss-and-ride, transit, biking, etc.) under the Proposed Project. Any net incremental increase in Valley Link ridership (and associated effect on VMT) due to either parking alternative at Downtown Tracy Station would likely be marginal.

Similar to the Proposed Project, there may be localized changes to the roadway network under the alternatives analyzed at an equal level of detail to provide access for proposed station and OMF alternatives (e.g., new access roads, new driveways/intersections) and ensure adequate safety at grade crossings, as described in Chapter 2, *Project Description*. However, none of these changes would involve increasing roadway capacity to allow the roadway network to accommodate more vehicle traffic. There would be no difference in impact significance among the alternatives analyzed at an equal level of detail; impacts would be less than significant.

Impact TRA-3: The Proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Level of Impact	Less than significant
	<u>Proposed Project</u>
	Tri-Valley Alignment
	Dublin/Pleasanton Station
	Isabel Station
	Greenville Station
	Altamont Alignment
	Owens-Illinois Industrial Lead Variant 1, Single Track
	Owens-Illinois Industrial Lead Variant 2, Double Track
	Interim OMF
	Mountain House Station
	Tracy OMF
	Tracy to Lathrop Alignment Variant 1, Single Track
	Tracy to Lathrop Alignment Variant 2, Double Track
	Downtown Tracy Station
	River Islands Station
	North Lathrop Station
	<u>Alternatives Analyzed at an Equal Level of Detail</u>
	Southfront Road Station Alternative
	Stone Cut Alignment Alternative
	Mountain House Station Alternative
	West Tracy OMF Alternative
	Downtown Tracy Station Parking Alternative 1
	Downtown Tracy Station Parking Alternative 2
Mitigation Measures	None Required

Impact Detail and Conclusions

Proposed Project

The Proposed Project would involve construction and operation of a new rail service, including re-activation of a disused ROW and upgrades within an active ROW (replacement of existing track, construction of new track and sidings, etc.). Along the disused ROW, the Proposed Project would establish new grade crossings and introduce new train traffic. Within the active ROW, the Proposed Project would upgrade existing grade crossings and substantially increase the amount of train traffic (relative to existing, freight-only train traffic). However, new railroad signal and train control systems would be upgraded as needed to facilitate train operation, including controlling train and crossing street traffic (including transit, traffic, bicycle, and pedestrian activity) at grade crossings and controlling passenger and freight trains on tracks shared with freight trains. Design, construction, and operation of the Proposed Project's rail elements, including track improvements, stations, signaling systems, and other components, would also comply with applicable standards from the FRA and/or CPUC. At two specific crossings—namely, Carroll Road and Dyer Road in the Altamont segment—the Proposed Project also specifically includes construction of a new grade-separation (undercrossing) beneath Carroll Road and reconfiguration of the Altamont Pass Road/Dyer Road intersection.

As described above under Impact TRA-2, the Proposed Project would also involve changes to the roadway network, including various modifications to the I-580 mainline and associated ramps and crossings; realignment of frontage roads; new or modified roadways and driveways/intersections to provide vehicle, bicycle, and pedestrian access to/from proposed stations and OMFs; and new or upgraded (highway–rail) grade crossings. Design, construction, and operation of the Proposed Project would comply with applicable standards from Caltrans and local city and county agencies. During construction, for example, temporary traffic control devices would comply with the California MUTCD, as described in Chapter 2, *Project Description*.

Given these considerations, the Proposed Project would not substantially increase hazards due to a geometric design feature or incompatible uses, and the Proposed Project’s hazard-related impacts would be less than significant.

Alternatives Analyzed at an Equal Level of Detail

In general, there would be minor differences in the geographical location and extent of impacts under the various alternatives, as discussed in more detail under Impact TRA-1. However, the nature of these effects would be similar to effects at other locations as described above for the Proposed Project, and would include new or modified grade-crossings (and other rail components), as well as changes to the roadway network (including both freeways and local streets). Similar to the Proposed Project, the design, construction, and operation of these project components would comply with applicable standards from the FRA, CPUC, and Caltrans and local city and county agencies.

There would be no difference in impact significance among the alternatives analyzed at an equal level of detail; impacts would be less than significant.

Impact TRA-4: The Proposed Project would not result in inadequate emergency access.

Level of Impact	Less than significant
	<u>Proposed Project</u>
	Tri-Valley Alignment
	Dublin/Pleasanton Station
	Isabel Station
	Greenville Station
	Altamont Alignment
	Owens-Illinois Industrial Lead Variant 1, Single Track
	Owens-Illinois Industrial Lead Variant 2, Double Track
	Interim OMF
	Mountain House Station
	Tracy OMF
	Tracy to Lathrop Alignment Variant 1, Single Track
	Tracy to Lathrop Alignment Variant 2, Double Track
	Downtown Tracy Station
	River Islands Station
	North Lathrop Station
	<u>Alternatives Analyzed at an Equal Level of Detail</u>
	Southfront Road Station Alternative
	Stone Cut Alignment Alternative
	Mountain House Station Alternative

	West Tracy OMF Alternative
	Downtown Tracy Station Parking Alternative 1
	Downtown Tracy Station Parking Alternative 2
Mitigation Measures	None Required

Impact Detail and Conclusions

Proposed Project

The existing roadway network within the study area enables emergency vehicle response. Emergency vehicles often identify and use multiple routes dependent on time of day and traffic conditions. Peak period traffic congestion generally does not cause obstructions for emergency vehicles, which have the right-of-way and often utilize multi-lane major arterials for access. Emergency vehicles also are permitted to use transit-only lanes or other vehicle-restricted lanes, if necessary.

Near proposed stations and OMFs, the Proposed Project would construct new (or modify existing) driveways and intersections to provide vehicle, bicycle, and pedestrian access, and may redistribute and/or increase vehicle, bicycle, and pedestrian activity. These changes may cause some minor effects on emergency vehicle response in some situations, but emergency vehicles would not be subject to traffic control devices such as stop signs or traffic signals, and would be able to bypass other vehicles, which would be required to yield right-of-way per California Vehicle Code Section 21806. At new or upgraded railroad at-grade crossings, there may be an occasional increase in response times for some emergency vehicles due to the greater frequency of gate-down events with the Proposed Project, likely on the order of approximately one minute per event for each such instance.

Despite these localized effects, emergency vehicle response times are a function of travel along the entire path between their origin and destination (e.g., police station to incident location, incident location to medical center). As described under Impact TRA-2, the Proposed Project would substantially reduce overall VMT within the Valley Link corridor by approximately 202,300 vehicle-miles/day in 2025 (relative to No Build Conditions), which would correspond to a general reduction in overall traffic congestion on the roadway network. This broad-based congestion improvement is expected to more than offset the localized effects at individual station/OMF sites or grade crossings, resulting in a net improvement in emergency response times relative to No Project Conditions.

Even along the disused ROW within the Altamont segment, where the Proposed Project would establish new at-grade crossings, the potential for disruptions to emergency vehicle response is expected to be minimal. Emergency vehicle activity along Altamont Pass Road and connecting rural roads in the Altamont segment is limited, as the area is largely undeveloped. Given the proposed frequency of train service, train activity at grade crossings is unlikely to result in substantial conflicts with emergency vehicles.

As described above under Impact TRA-1, a construction TMP would be developed to minimize effects on the transportation system during construction of the Proposed Project. The construction TMP would include provisions to maintain access for emergency response vehicles for the duration of construction.

Given these considerations, the Proposed Project would not result in inadequate emergency access, and the Proposed Project's impacts related to emergency access would be less than significant.

Alternatives Analyzed at an Equal Level of Detail

In general, there would be minor differences in the geographical location and extent of impacts under the various alternatives analyzed at an equal level of detail, as discussed in more detail under Impact TRA-1. While these effects may result in minor differences in emergency vehicle response under specific alternatives analyzed at an equal level of detail, they would still be similar in nature to effects at other locations as described above for the Proposed Project and would not result in inadequate emergency access. In particular, the alternatives analyzed at an equal level of detail would still contribute to a net reduction in VMT with the Proposed Project (which would represent an overall benefit in emergency response times) and would not result in substantial conflicts with emergency vehicles. There would be no difference in impact significance among the alternatives analyzed at an equal level of detail; impacts related to emergency access would be less than significant.