Valley Link
Connecting People, Housing, and Jobs

Chapter 4: Other CEQA-Required Analysis

4 Other CEQA-Required Analysis

4.1 Introduction

California Environmental Quality Act (CEQA) Guidelines Section 15126 requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the Environmental Impact Report (EIR) must also identify 1) significant environmental effects of the Proposed Project, 2) significant environmental effects that cannot be avoided if the Proposed Project is implemented, 3) significant irreversible environmental changes that would result from implementation of the Proposed Project, 4) growth-inducing impacts of the Proposed Project, 5) mitigation measures proposed to minimize significant effects, and 6) alternatives to the Proposed Project (discussed in Chapter 5).

This chapter provides additional analyses and information required under CEQA and includes the following.

- Cumulative Impact Analysis
- Significant and Unavoidable Environmental Impacts of the Proposed Project
- Significant and Irreversible Environmental Changes
- Growth-Inducing Impacts
- Public Agency Involvement
- List of Preparers

4.2 Cumulative Impacts

A cumulative impact analysis looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor to collectively substantial impacts taking place over a period of time. The scale or geographic scope of related projects used for cumulative analysis varies for each impact category. A cumulative impact analysis is provided only for those thresholds that result in less than significant, potentially significant, or significant and unavoidable impacts. A cumulative impact analysis is not provided for those thresholds where no impact is identified.

4.2.1 Regulatory Setting

CEQA Guidelines Section 15130 mandates that an EIR discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects, as discussed in CEQA Guidelines Section 15064. When the project's incremental effect is not cumulatively considerable, the effect is not considered significant; however, the basis for concluding that the incremental effect is not cumulatively considerable must be briefly described.

CEQA Sections 15130(b)(1)(a) and (b) identify the following two methodologies for assessing cumulative impacts: 1) a list of past, present, and probable future projects producing related or cumulative impacts; or 2) a summary of projections contained in an adopted local, regional, or statewide plan, or related planning document that describes or evaluates conditions contributing to the cumulative effect. Such plans may include a General Plans, regional transportation plan (RTP), or plans for reducing Greenhouse Gas Emissions (GHG).

CEQA Section 15126.2(e) also requires an assessment of the ways in which the project could promote economic or population growth in the vicinity of the project. Growth inducement may be said to occur if "the project fosters economic or population growth or the construction of additional housing either directly or indirectly." Projects that remove "obstacles to population growth," or that have characteristics that may "encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively" are included. It is further stated that it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

4.2.2 Approach and Methodology

There are several steps involved in analyzing cumulative impacts. The initial steps involve analyzing direct and indirect impacts followed by the application of those

results to cumulative impacts. Cumulative impacts refer to two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. As previously discussed in Chapter 2 (Project Description), the cumulative impact of several projects is the change in the environment that results from the incremental impact of the project when added to other, closely related past, present, or reasonably foreseeable, probable future projects.

The tentative year of construction of the initial operating phase could start as early as 2025 with full operational service by 2040. Due to the long-term nature of Proposed Project implementation, the list of projects analyzed in assessing cumulative impacts is highly speculative. For purposes of this analysis, a good faith attempt has been made to identify relevant possible public works and private projects. However, it was necessary to rely considerably on long-term plans and to make planning-level assumptions about future development.

The approach to the cumulative impacts analysis varies by discipline. Analyses whose cumulative impacts would accrue on a regional basis, such as regional traffic and air quality, are based on applicable planning documents designed to evaluate regional and area-wide conditions and rely on regional projections prepared and adopted by the County of Alameda and the County of San Joaquin. For those disciplines where cumulative impacts are more localized (e.g., visual and aesthetic impacts), the analysis also considers specific development projects, which may also have localized impacts, at or adjacent to the Proposed Project, that may contribute to cumulative impacts.

In addition, pursuant to CEQA Guidelines Section 15130(a)(1), an EIR should not discuss cumulative impacts that do not result at least in part from the project being evaluated in the EIR. Thus, cumulative impact analysis is not provided for any environmental issue where the Proposed Project would have no environmental impact. Analysis of cumulative impacts is, however, provided for all Proposed Project impacts that are evaluated within this Subsequent Environmental Impact Report (SEIR).

4.2.3 Cumulative Development Scenario

Section 15355 of CEQA Guidelines defines "cumulative impacts" as "two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts." In general, these impacts occur in conjunction with other related developments' impacts, which might compound or interrelate with those of the project under review.

In order to analyze the cumulative impacts of the Proposed Project in combination with existing development and other expected future growth, the amount and location of growth expected to occur (in addition to the Proposed Project) must be considered. Section 15130(b) of the CEQA Guidelines allows the following two methods of prediction:

- The cumulative effects of development without the project are not significant and the project's additional impact is substantial enough, when added to the cumulative effects, to result in a significant impact; or
- The cumulative effects of development without the project are already significant and the project contributes measurably to the effect.

For the purposes of this SEIR, the potential cumulative effects of the Proposed Project are based upon a list of projects identified by the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and the City of Tracy as well as buildout of the General Plans or other criteria, which is dependent upon the specific impact being analyzed. To accomplish the evaluation, past, current, and probable future projects with the potential to produce related or cumulative impacts were identified and presented in Table 4-1 and Table 4-2 and shown in Figure 4-1 and Figure 4-2. These tables summarize the related projects in the vicinity of the Proposed Project that have the potential to create cumulative considerable effects in conjunction with the Proposed Project. The approximate locations of the cumulative projects are shown Figure 4-1 and Figure 4-2. Several of the transportation projects listed in Table 4-1 and Table 4-2 are studies of potential projects that are anticipated in the foreseeable future.

Table 4-1: Planned Development Projects

Map Number	Name	Location	Description
1	Amador Station	6501 Golden Gate Drive, Dublin, CA 94568	Affordable housing development with 300 affordable units to be built in two phases. Will also include ground floor retail, amenity space, and parking.
2	H Mart Supermarket	7884 Dublin Boulevard, Dublin, CA 94568	Expansion of an existing 27,237-square foot commercial space to construct an 8,552-square foot addition for a food hall, 3,187-square-foot outdoor seating area with play area, façade modifications, new trash enclosure, and related site improvements.
3	Avalon West (St. Patrick Way)	6700 Golden Gate Drive, Dublin, CA 94568	Demolition of an existing 200,000-square foot warehouse and construction of a 499-unit residential apartment complex.
4	Regional Street Senior Affordable Housing	6541 Regional Street, Dublin, CA 94568	113-unit senior housing development in the Downtown Dublin Specific Plan area, including amenity space and parking.
5	BASIS Independent School (Corrie Center)	7950 Dublin Boulevard, Dublin, CA 94568	Development of a private school serving up to 800 middle and high school students. Includes construction of façade improvements to an existing 81,985-square foot office building that will be converted into a school, and construction of a 9,134-square foot gymnasium building, outdoor recreational play field, trash enclosure, and associated site improvements
6	McDonald's SDR	7145 Dublin Boulevard, Dublin, CA 94568	Demolition of an existing McDonald's restaurant and construction of a new 4,394 square foot building, drive thru, trash enclosure, and site improvements.
7	Boulevard (Dublin Crossing) Phase 1	Dublin Boulevard, Dublin, CA 94568	Multi-phased development comprised of up to 1,995 residential units, up to 200,000 square feet of commercial uses, 35 acres of public parkland, and a 12-acre elementary school site and related infrastructure. Phases 2 and 3 propose a total of 795 units in 12 neighborhoods. Phase 1 of the project includes 453 units and landscape improvements.
8	Boulevard (Dublin Crossing) Phase 2 & 3	1 Dublin Boulevard, Dublin, CA 94568	Multi-phased development comprising up to 1,995 residential units, up to 200,000 square feet of commercial uses, 35 acres of public parkland, and a 12-acre elementary school site and related infrastructure. Phases 2 and 3 propose a total of 795 units in 12 neighborhoods. Phase 2 includes 508 units on approximately 36.25 acres and Phase 3 includes 283 units on approximately 18.22 acres.

Map Number	Name	Location	Description
9	Boulevard (Dublin Crossing) – Phase 4 & 5	Dublin Boulevard, Dublin, CA	Phases 4 and 5 of the Boulevard project include 510 units and landscape improvements. On May 8, 2018, the Planning Commission approved Phases 4 and 5. The current status of Phases 4 and 5 are: Venice – Neighborhood 19 (Lennar): includes 91 attached duets/single-family homes; construction is underway. Melrose – Neighborhood 20 (Brookfield Homes): includes 75 townhomes; construction is underway. Ivy – Neighborhood 21 (Brookfield Homes): includes 62 townhomes; construction is underway. Vine – Neighborhood 22 (Brookfield Homes): includes 92 townhomes; construction is underway. Avalon – Neighborhood 23 (Lennar): includes 90 townhomes; construction is underway.
10	Dublin Transit Center Parking Garage	Campus Drive, Dublin, CA 94568	Proposed parking structure development with 500 parking spots, including priority vanpool parking and electric vehicle (EV) charging stations.
11	Hacienda Crossings Drive-Through Restaurant (Chick-fil-A)	4814 Dublin Boulevard, Dublin, CA 94568	Demolition of an existing building and construction of a new 2,781-square-foot drive-through restaurant, new trash enclosure, parking, and related site improvements.
12	Infiniti Dealership	3200 Dublin Boulevard, Dublin, CA 94568	Development of a 10,461 square foot Infiniti automobile showroom and service center.
13	Kaiser Commercial – Nissan	Dublin Boulevard, Dublin, CA 94568	Rezoning and development of a new Nissan dealership.
14	Nissan Commercial Car Wash	3200 Dublin Boulevard, Dublin, CA 94568	Development of a 3,574 square foot self-service car wash.
15	Righetti Property	Collier Canyon Road, Dublin, CA 94568	Project to establish zoning regulations and development standards for future development of up to 96 homes, approximately 372,350 square feet of industrial uses and approximately 321,125 square feet of campus office/light industrial uses.
16	Branaugh Property	1881 Collier Canyon Road, Dublin, CA 94568	Rezoning, stage two redevelopment plan, and parcel map for a residential neighborhood containing 78 to 97 units and industrial development.
17	Downtown Hines North Commercial Redevelopment	7200 Amador Plaza Road, Dublin, CA	Demolition of the two existing commercial buildings totaling 35,427 square feet and construction of a new 34,995-square-foot multi-tenant commercial building.

Map Number	Name	Location	Description
18	Hexcel Redevelopment	11711 Dublin Boulevard, Dublin, CA	Overton Moore Properties proposes to redevelop an 8.81-acre, including demolishing an existing 62,715-square-foot research and development building and constructing a new 125,304-square-foot light industrial, advanced manufacturing and life sciences building with 217 parking stalls and related site improvements. Requested approvals include a Planned Development Rezone with a related Stage 1 and Stage 2 Development Plan, Site Development Review Permit and Heritage Tree Removal Permit.
19	The Whitford of Dublin (Dublin Senior Living)	5751 Arnold Road, Dublin, CA	South Bay Partners proposes to develop a community care facility on a 5.74-acre site. The project consists of a two-story, 152-unit licensed residential care facility for the elderly, including 114 assisted living units, 38 memory care units, and a total of 174 beds. Common space amenity areas—and associated site, frontage, and landscape improvements—are also proposed. Requested approvals include a Planned Development Rezone with a related Stage 1 and Stage 2 Development Plan and a Site Development Review Permit.
20	The Dublin Center "The DC"	Tassajara Road, Dublin, CA	The applicant has submitted a Pre-Application for a Site Development Review Permit and Tentative Parcel Map(s) to develop 54-acres of the SCS Dublin site (north of Dublin Boulevard).
21	Dublin Fallon 580	Croak Road, Dublin, CA	Dublin Fallon 580 project consists of a Large Lot Vesting Tentative Tract Map (VTTMs) to subdivide the approximately 192-acre parcel into ten parcels that generally coincide with the existing land use designations, two Small Lot VTTMs for the 6.5-acre and 7.12-acre Medium High Density Residential parcels, Planned Development Rezone with a Stage 2 Development Plan and Development Agreement.
22	Francis Ranch (East Ranch)	4038 Croak Road, Dublin, CA	The applicant, Trumark Homes, LLC, filed applications for the development of 165.5-acre site with a 573-unit residential project within six neighborhoods, two neighborhood parks 11.5 acres, and a two-acre Semi-Public site. The design and use of the Semi-Public site has not been determined.
23	Quarry Lane School – Performing Arts Center	6237 Tassajara Road, Dublin, CA	Application for a conditional use permit for a minor amendment to the Stage 1 and Stage 2 Development Plan for the Quarry Lane School (Ordinance No. 12-14) and a Site Development Review Permit to construct a new 13,800-square foot building comprised of a performing arts center and other support spaces, including a new parking lot, within the newly acquired southern portion of the school property, which was formerly used as a landscaping supply business and currently contains a single-family home and associated outbuildings.

Map Number	Name	Location	Description
24	Dublin Boulevard Extension	Dublin Boulevard and Fallon Road, Dublin, CA	This project is planned for the 1.5-mile extension of Dublin Boulevard from Fallon Road to North Canyons Parkway in Livermore. The extension is planned to have four to six travel lanes, bike lanes, sidewalks, curb and gutter, traffic signals, street lighting, landscaped raised median islands, bus stops, and all city street utilities.
25	Lester/Hidden Valley Project	10807, 11033 and the two western parcels on Dublin Canyon Road, Pleasanton, CA	Applications for: 1) annexation of four parcels totaling approximately 128.5-acres; 2) amend General Plan Land Use designations to correspond to proposed residential and open space areas; 3) rezone the property from unincorporated and pre-zoned Agriculture to Low Density Residential and Open Space; 4) a Planned Unit Development (PUD) development plan to construct 33 single-family homes, including demolition and replacement of two existing homes, with private open space, and dedication of 72.1-acres of land to the East Bay Regional Park District (EBRPD), and construct an EBRPD staging area with trail connections to the Pleasanton Ridge.
26	Greek Orthodox Church	11300 Dublin Canyon Rd. Pleasanton, CA	Application for PUD Major Modification, Minor Subdivision, and conditional use permit to construct and operate a 9,742-square-foot Greek Orthodox Church and 24,971-square-foot community center at 11300 Dublin Canyon Road.
27	Johnson Drive Economic Development Zone	Johnson Drive Economic Development Zone	Develop a commercial corridor that capitalized on this location at the intersection of the I-580 and Interstate 680 (I-680) freeways. Project includes roadway improvements, two new hotels, Costco, and other commercial land uses.
28	Two Hotels	7280 Johnson Drive, Pleasanton, CA	Application for Design Review to construct two new hotels with 231 rooms and a drive-through coffee shop. Application is on hold and will be reconsidered by the City Council in late 2019 pending completion of supplemental environmental review for the Johnson Drive Economic Development Zone.
29	Bicycle and Pedestrian Master Plan High Priority Corridor	Pleasanton, CA	The Pedestrian and Bicycle Master Plan, created in January 2010 was updated and adopted by City Council in June 2017. The update created an "All users and abilities" approach to facility design and provided a corridor construction priority. West Las Positas Boulevard was identified as the highest priority corridor and design is underway to develop bicycle and pedestrian improvements along the corridor.
30	680 Express Lanes	I-680, Pleasanton, CA	The second phase of the I-680 Express Lane Project will extend the express lane northward from SR 84 to Acosta Boulevard. The California Department of Transportation (Caltrans) has agreed to split their rehab project into northbound and southbound directions. The plan is to move forward with the northbound rehabilitation as a standalone project. The southbound rehabilitation would be combined with the southbound express lane project.

Map Number	Name	Location	Description
31	Ponderosa Homes	6900 Valley Trails Dr. Pleasanton, CA	Development plan and to demolish the existing structures on the site, subdivide the approximately 9-acre site, and construct 36 detached single-family homes and a private clubhouse with related site improvements.
32	3200 Hopyard Road	3200 Hopyard Road, Pleasanton, CA	Design Review and Tentative Tract Map to demolish an existing church and daycare facility and construct 57 multi-family residential units (48 condominium and 9 affordable rental) with associated site improvements pursuant to Senate Bill 330 State law provisions; and Affordable Housing Agreement at 3200 Hopyard Road.
33	AvalonBay Communities	4452 Rosewood Drive, Pleasanton, CA	Modification to the approved Residences at California Center on a currently vacant site identified as 4452 Rosewood Drive in Hacienda for the following: 1) modifying site layout including on-site circulation, parking, and open spaces areas; 2) updating exterior elevations of all buildings; 3) changing the retail use of the corner building to a daycare center subject to a conditional use permit approval, and 4) modifying related on- and off-site improvements. Zoning for the site is Planned Unit Development/ High Density Residential District.
34	2025 Santa Rita Road	2025 Santa Rita Road, Pleasanton, CA	Housing Site Compliance Review pursuant to Senate Bill 330 and Tentative Tract map to demolish an existing motel and construct a housing development consisting of 42 three-story townhome style condominiums ranging from three to four bedrooms with approximately 1,400 to 1,700 square feet with associated site improvements pursuant to Senate Bill 330 State law provisions; and Affordable Housing Agreement at 2025 Santa Rita Road.
35	Valley Ave at Northway Rd Traffic Signal Installation	Valley Avenue at Northway Rd, Pleasanton, CA	This project will install a new traffic signal at the intersection of Valley Ave and Northway Road, next to Harvest Park Middle School. Curb extensions will be added to the southeast and southwest corners to reduce crosswalk lengths. This location is the next intersection in the signal priority list. The overall work will improve pedestrian/bicycle safety and improve traffic operations.
36	3300 Busch Road	3300 Busch Road, Pleasanton, CA	A project consisting of 306 new single-family residential units (approximately 809,515 square feet total) with 57 junior accessory dwelling units and 84 new affordable multi-family units (approximately 68,600 square feet total) with related roadway and infrastructure improvements and an approximately 2.1-acre neighborhood park at the approximately 51.37-acre site located at 3300 Busch Road.

Map Number	Name	Location	Description
37	East Pleasanton Specific Plan	East Pleasanton, Pleasanton, CA	The East Pleasanton Specific Plan will provide a comprehensive long-range land use plan for an approximately 1,100-acre area on the east side of the city, extending into unincorporated Alameda County. The Pleasanton General Plan indicates that a specific plan should be prepared for this area; a planning process was originally initiated in 2012 under the guidance of a task force but was "paused" in 2015. In 2019 the City Council identified the East Pleasanton Specific Plan as a work plan priority, and in March 2020, provided direction to proceed with the planning effort, and that the City Council, Planning Commission, and City staff initiate a "clean slate" approach to the planning for East Pleasanton, which would consider multiple land use options for the entire area through the public process.
38	Stoneridge Mall Housing Project	1008 and 1700 Stoneridge Mall Road, Livermore, CA 94588	Development of 360 apartment units and a parking structure on a site designated for housing at Stoneridge Mall.
39	Stoneridge Mall Road	1700 Stoneridge Mall Road, Livermore, CA	Demolition of an existing Sears Department store (approximately 176,151 square feet) and construction of up to 255,420-square-feet (79,269 square feet of net increase) of new retail, cinema, specialty, and health club facility uses.
40	Master Planned Campus	1701 Springdale Drive 10X Genomics, Livermore, CA	Rezoning and development plan to 1) demolish the existing approximately 163,500-square foot commercial buildings; 2) rezone the subject parcel from Regional Commercial - peripheral sites District to Planned Unit Development - Commercial-Office District; and 3) construct up to three new multi-story research and development, office and laboratory buildings totaling approximately 381,000 square feet, a parking structure, and related site improvements over multiple phases.
41	Costco	7200 Johnson Drive, Livermore, CA	Construction of a new 148,613-square-foot Costco.
42	6455 Owens Dr.	6455 Owens Drive, Livermore, CA	Demolition of an existing restaurant building at 6455 Owens Drive. and construction of a single-story multi-tenant commercial building totaling approximately 10,000 square feet in area.
43	AvalonBay Communities	4452 Rosewood Drive, Livermore, CA	Application to modify the approved Residences at California Center on a currently vacant site identified as 4452 Rosewood Drive in Hacienda.
44	Chrysler-Jeep-Dodge-Ram Parking Lot	2694 Stoneridge Drive, Livermore, CA	Construction of a 201-stall parking lot for vehicle display/inventory.
45	Mountain House Subdivision	22261 South Mountain House Parkway, Tracy, CA	A planned major subdivision in the Mountain House Community.

Map Number	Name	Location	Description
46	Eliot Quarry (SMP-23) Reclamation Plan Amendment Project	1544 Stanley Boulevard, Pleasanton, CA	The applicant proposes a Revised Reclamation Plan that serves to adjust reclamation boundaries and contours, enhance drainage and water conveyance facilities, incorporate a pedestrian and bike trail, and achieve current surface mining reclamation standards
47	Altamont Pass Wind Resource Area Repowering -Golden Hills Project	12243 Flynn Road N, Livermore, CA	The applicant proposes to repower an existing wind energy facility in the program area, pursuant to the 2010 Agreement to Repower Turbines in the Altamont Pass Wind Resource Area. The proposed Golden Hills Wind Energy Facility Repowering Project (Golden Hills Project) would decommission and remove 775 existing wind turbines on the site, install up to 52 new 1.7-megawatt (MW) GE turbines, make improvements to related infrastructure, and yield a nameplate capacity of 88.4 MW. The project site encompasses 38 separate parcels on more than 4,500 acres, on which there are seven Conditional Use Permits currently in effect.
48	Golden Hills North Wind Energy Repowering Project	9989 Altamont Pass Road, Livermore, CA	The applicant proposes to repower part of an existing wind energy facility in Alameda County to replace old technology wind turbine generators with fewer and more efficient modern wind turbine generators.
49	Armstrong Industrial	2301 Armstrong St, Livermore, CA	The project is an industrial building with 52,140 square feet of warehouse space and approximately 4,000 square feet of office space. The project includes on-site parking, landscaping, and storm water treatment improvements.
50	Vineyard 2.0	North Livermore Avenue between Railroad Avenue and Junction Avenue, Livermore, CA	Mixed-use community that will include permanent supportive housing, a community kitchen, and human services. The community will include 23 new unites of studio and one-bedroom apartments, with on-site supportive services and property management, plus one two-bedroom manager's apartment. The housing will be 100 percent affordable to extremely low-income households, with a portion of the units designated for individuals with disabilities and/or who have experience homelessness. The project includes a Resource Center with approximately 6,200 square feet of offices, meeting rooms, and a multi-purpose assembly space, laundry room and showers.
51	Downtown Hotel	2205 Railroad Avenue, Livermore, CA	The project is a four story, 133-room boutique hotel with additional amenities including bar/lounge, meeting space, fitness center, and an outdoor pool, courtyard, and patio.
52	Avance	4240 First Street, Livermore, CA	44 affordable apartments to provide supportive housing for adults with developmental disabilities. The project consists of seven buildings, including one multi-purpose building and six residential buildings, ranging from one to two stories on a 2.3-acre site. The project includes 24 parking spaces.

Map Number	Name	Location	Description
53	Trevarno Road, Sewer and Water Improvement Project	Trevarno Road in Livermore, CA	Installation of 8" water line along the south side of Trevarno Road and 8" sewer line along the north side of Trevarno Road. Project includes demolition and replacement of fire hydrants, laterals, cleanouts, and water meters.
54	New Shopping Complex in Mountain House, CA	1140 S Vecindad St, Mountain House, CA	An Administrative Use Permit application for the construction of a shopping complex to include seven buildings. A 2,500-square-feet grocery store, a 2,500-square-feet day care, five 1,500-square-feet retail spaces, and a 2,400-square-feet retail space.
55	Proposed Land Use Change, Trimark Communities	334 S De Anza Blvd, Mountain House, CA	The project consists of multiple applications to be processed concurrently: a General Plan Amendment, three Mountain House Master Plan Amendments, a Zone Reclassification, and Three Major Tentative Subdivision Map Applications. Proposed amendments are intended to accommodate the following land use and zoning changes. A major subdivision for single-family residential units is proposed for each of the three areas.
56	Proposed Land Use Change, Trimark Communities	145 S Tradition St, Mountain House, CA	Continuation of Trimark Communities project described above.
57	Sand Hill Wind Project	14640 Altamont Pass Road Tracy, CA	This project would take place on 15 parcels in San Joaquin County. The project would install up to 40 new wind turbines. It is tiered off of the Altamont Pass Wind Resource Area Repowering Program EIR, which the County of Alameda certified in December 2014.
58	Mulqueeny Ranch Wind Repowering Project	17374 Patterson Pass Road Tracy, CA	This project would take place on a 4,600-acre site across 29 parcels in the Altamont Pass Wind Resource Area. The project would replace approximately 518 old generation wind turbines installed in the 1980s with up to 36 new wind turbines.
59	Prologis c/o Warehouse and Distribution Center Project	14320 W Schulte Rd, Tracy, CA	The project would construct a new industrial development with approximately 5.36 million square feet of development, as well as new water and sewer treatment facilities. In addition, the project would construct extensions to planned roadways, Promontory Parkway and Pavilion Parkway, which would be continuations from proposed development west of the site, at International Park of Commerce Phase 1.
60	Griffith Energy Storage Project	20042 W Patterson Pass Rd, Tracy, CA	The project would construct and operate a 400-megawatt battery energy storage system to provide reliable and flexible power to the local electrical system, interconnecting at the Tesla Substation immediately adjacent to the site in Alameda County via a 230-kilovolt interconnection generation tie line. The energy storage facility is anticipated to house lithium-ion batteries totaling 400 megawatts of energy. Project construction would be in 2024 and is anticipated to come online in 2025 or later. Construction is expected to be completed in approximately 12 months.

Map Number	Name	Location	Description
61	Schack & Company Redevelopment Project	22261 S Mountain House Pkwy, Tracy, CA	The project consists of a Master Plan Amendment, a Specific Plan III Amendment, and two major subdivision applications. In addition, a Specific Plan I Amendment and Specific Plan II Map Amendment are proposed and focus on ancillary changes to these documents to conform to, and be consistent with, proposed changes.
62	Major Subdivision, Revisions of Approved Actions PA-0500838 & PA-0600161	22261 S Mountain House Pkwy, Tracy, CA	A revisions of Approved Actions application for 2 previously approved Major Subdivisions to amend Condition of Approval number I.4. Agricultural Mitigation Fee.
63	I-205/International Parkway Interchange Project	I-205/ Mountain House Parkway Interchange, Tracy, CA	I-205 at Mountain House Parkway/ International Parkway Interchange is located near the Cordes Ranch Specific Plan area. The Project would convert the existing hybrid tight-diamond/loop interchange into a partial cloverleaf interchange.
64	I-580/International Parkway Interchange Project	I-580/Patterson Pass Road Interchange, Tracy, CA	I-580 and International Parkway/Patterson Pass Road is next to the Cordes Ranch Specific Plan area. The project would convert the existing tight-diamond interchange to a diverging diamond interchange. The project would require minor realignment to the existing on and off ramps. The proposed diverging diamond interchange would divert traffic in both directions to the opposite side of the road while crossing over the I-580 ramps. Traffic signals direct vehicles safely to the opposite side of the bridge within the diverging diamond interchange.
65	Street Light Installation Project	Tracy, CA	The project is at various locations throughout the City of Tracy. The project generally includes the following work to be done. Installation of streetlights, installation of streetlight poles and installation of streetlight conduits at various locations throughout the City of Tracy.
66	I-205/Lammers Road/Eleventh Street Interchange Project	Lammers Road/Eleventh Street, Tracy, CA	The City of Tracy proposes to construct a new interchange, freeway auxiliary lanes and connecting roadway network at the junction of Route 205 and Lammers Road in San Joaquin County. The interchange would be a minimum of one mile between the existing interchanges at Eleventh Street (formerly Old US 50)/Route 205 and Grant Line Road/Route 205. The new roadway segment would extend Lammers Road south from Byron Road, north of a proposed extension of Grant Line Road, and would cross Route 205 with a grade separated interchange, extending south to the existing intersection of Lammers Road/Eleventh Street in the City of Tracy.

Map Number	Name	Location	Description
67	I-580 and I-205	Along I-580 and 1-205, Alameda County	Caltrans proposes to construct the I-580 and I-205 Roadside Safety Improvement Project to improve maintenance worker safety along I-580 and 1-205. This will be accomplished by extending and paving gore areas and constructing maintenance vehicle pullouts at 14 locations from North Vasco Road in the City of Livermore in Alameda County to the Alameda/San Joaquin County line (post mile 0.0 to R9.7 on I-580, and post mile L0.0 to 0.5 on I-205).
68	I-580 Safety Lighting and Power	I-580 from West Grant Line Road Undercrossing to North Flynn Road Overcrossing near the City of Livermore in Alameda County	Caltrans proposes the I-580 Safety Lighting and Power Supply Installation project to improve existing roadway conditions and enhance traffic safety by installing lighting along eastbound (EB) I-580 from West Grant Line Road Undercrossing to North Flynn Road Overcrossing near the City of Livermore in Alameda County (postmile R1.3 to R6.0). The total length of the project is 4.7 miles.
69	I-580 Storm Damage Permanent Restoration Project	I-580, postmile R4.3, east of Livermore and West of Tracy, in an unincorporated area of Alameda County	Caltrans proposes to restore the function of an existing storm drain system and preserve the structural integrity of the surrounding embankment and highway along EB I-580 in Alameda County. The project scope includes the replacement of corrugated metal pipe, grading and shoring of the existing slope, and backfill of the eroded embankment at postmile 4.3.
70	I-680 Express Lanes from	I-680 from State Route 84 to Alcosta Boulevard Project	Caltrans, in cooperation with the ACTC, proposes to construct High Occupancy Vehicle/express lanes (HOV/express lanes) on northbound and southbound I-680 from SR-84 (Vallecitos Road) in Alameda County to north of Alcosta Boulevard in Contra Costa County. The Proposed Project extends for approximately 9 miles along I-680 from post mile R10.6 to R21.9 in Alameda County and from post mile R0.0 to R1.1 in Contra Costa County. The new HOV/express lanes would pass in or near the cities of Pleasanton, Dublin, and San Ramon, and the community of Sunol.
71	I-205 Smart Corridor – Phase 2	I-205	The project will add on to previous Intelligent Transportation System projects, which installed vehicle detection and a communications infrastructure, and complete an instrumented corridor that can better manage traffic through the region. The primary focus of this project is to install ramp meters at on-ramps on I-205. Ramp meters will automatically control vehicle access onto the freeway system during peak times. By restricting vehicle demand, the onset of congestion on the mainline would be delayed and the overall level of congestion observed would be reduced.

Map Number	Name	Location	Description
72	I-580 Iron Horse Parkway Interchange	I-580 at Iron Horse Parkway, Dublin, CA	The Iron Horse Parkway Project consists of the construction of an interchange along I-580 at the undercrossing that currently connects Hansen Road north of I-580 to the private properties south of the interstate. The project will widen the existing facility to a 2-lane structure. The first alternative will be in a narrow diamond interchange configuration. The second one will be a spread diamond type. The third alternative will be identical to the spread diamond interchange, but with an additional loop ramp to connect southbound Iron Horse Parkway traffic to I-580 Eastbound mainline.
73	I-580/Lammers Road Undercrossing Project	I- 580 approximately 1.6 miles west of the I-580/Corral Hollow Road Interchange	The City of Tracy proposes to extend a local road (Lammers Road) under I-580 approximately 1.6 miles west of the I-580/Corral Hollow Road Interchange (I-580/Lammers Undercrossing project). Residential, commercial, and mixed-use development within the Tracy Hills Specific Plan (THSP) area are planned on either side of I-580 in this area of San Joaquin County. In order to support circulation for this development, Lammers Road will need to be extended under I-580 to connect new local street networks being completed as a part of the THSP on both sides of I-580 and provide an alternative crossing of I-580 to the adjacent and existing Corral Hollow Road. The project will provide a new local roadway and shared use path for pedestrians and bicyclists within Caltrans right-of-way under existing bridges along the EB and WB I-580 mainline.
74	10 South Grant Line Road Service Station and Convenience Store Project	I-580/Grant Line Road, Unincorporated Alameda County	The Project is a proposed service station and convenience store on an approximately one-acre vacant site, located to the southeast of the Interstate I-580 and Grant Line Road interchange, immediately south of the eastbound on-ramp. The Project's objective is to replace a previously existing Chevron service station that operated on the site between 1971 and 1986 and was demolished in 1991. The Project would occupy a total footprint of 35,675 square feet.
75	Arroyo Lago Residential Project	3030 Mohr Avenue, Pleasanton	The Proposed Project includes construction of 194 single-family homes, with approximately 25 percent (49 homes) being designed with deed-restricted accessory dwelling units (ADUs). The dwelling units would be approximately 26 to 30 feet in height. The approximately 26.6-acre site would be developed with an approximate density of 7.3 dwelling units per gross acre. The Proposed Project is expected to include approximately 694 residents. The Proposed Project would construct seven internal streets (Streets A-F and Loop A) to provide internal circulation within the site. The Proposed Project would also include several off-site improvements including the development of a water storage and booster pump facility with a 400,000-gallon capacity, a recycled water storage facility with a 900,000-gallon capacity, a sewer treatment plant that would treat approximately 37,400 gallons of wastewater per day, and approximately 9 acres of agricultural irrigation fields.

Map Number	Name	Location	Description
76	Interstate 580 Permanent Storm Damage Restoration Project	Along Interstate (I) 580 at post mile (PM) 4.3 within unincorporated area of Alameda County. The Project site is located between the City of Livermore and the City of Tracy directly along the EB shoulder of I-580	This Proposed Project involves restoring an existing storm drain system and repairing the storm-damaged embankment slide slope at PM 4.30 on the EB side of I-580 to preserve the structural integrity of the side slope and highway. Activities include repairs to the failed asphalt lined drainage ditch, the installation of a down-drain from the highway shoulder to the toe-of-slope, and the installation of additional features to secure the down-drain and dissipate energy at the terminus. Rock slope protection (RSP) will be installed at the terminus of the down-drain and imported borrow material will be utilized in conjunction with the above features to secure the embankment and prevent further storm erosion.
77	SMP 38/SMP 39/SMP 40 Project	Located west of Isabel Avenue/State Route (SR) 84, north of Stanley Boulevard, south of West Jack London Boulevard, and east of El Charro Road.	On SMP 38, the Proposed Project includes a Sphere of Influence Amendment to include SMP 38 within the City of Livermore Sphere of Influence and remove it from City of Pleasanton's Sphere of Influence. The City of Livermore General Plan land use designation for SMP 38 would remain Limited Agriculture and Open Space/Sand and Gravel and the Alameda County zoning designation would remain Agriculture. Development of SMP 38 is not proposed. For SMP 39, the Proposed Project would include development of a total of up to six light industrial buildings, consisting of up to approximately 755,500 square feet (sf) of new building space, and associated internal roadways and other improvements; for SMP 40, the Proposed Project would include development of two industrial buildings containing up to 759,275 sf of new building space with related internal roadways and other improvements
78	Zero-Emission Bus Manufacturing Ramp-Up in the State of California	451 Discovery Drive, Livermore, CA 94551	The Project will expand an existing electric bus manufacturing line and adding resources necessary for the production launch and scaling of its third-generation battery-electric bus located at 451 Discovery Drive, Livermore, CA 94551. Beneficiaries of this Proposed Project will include members of local communities due to job creation as a result of this project.
79	Monte Vista Memorial Gardens	3656 Las Colinas Road, Livermore, CA in unincorporated Alameda County.	The Project would include a funeral home with crematorium, burial lots, an entry plaza, internal roadways, parking, landscaping, and other associated infrastructure and improvements. Development of the Project would occur on approximately 47 acres in the southern portion of the ±104-acre parcel (Assessor's Parcel Number 099-0015-016-03) just north of the City of Livermore between the North Livermore Avenue and North First Street exits. Development of the Project would occur in phases; Phase 1 buildout of the Project would occur over approximately 5 years and Phase II buildout would occur over approximately 100 years.

Map Number	Name	Location	Description
80	Tassajara Road Widening	Tassajara Road, between North Dublin Ranch Drive and Quarry Lane School	This project provides for design and construction of street improvements on Tassajara Road, between North Dublin Ranch Drive and Quarry Lane School. The project will widen Tassajara Road to a four-lane arterial standard, with bike lanes, sidewalks, landscaped median, stormwater treatment areas, and other associated street improvements. Portions of Tassajara Road have been improved by adjacent development projects and this work will complete the street improvements consistent with the 'city's General Plan and Complete Streets Policy.
81	Garaventa Hills Project	Western terminus of Bear Creek Drive and north of Altamont Creek Elementary School and Altamont Creek Park. (37.725875, -121.717803)	The Project includes 38 detached single-family units, six attached, affordable single-family residential units, an open space buffer around the perimeter of the site, two open space knolls, public trails, and a privately owned street.
82	L Street Parking Garage	S. L St. and Veterans Way	The new garage will add 452 parking spaces and will include ADA, electric vehicle, and bicycle spaces. Another 40 spaces will be in the adjacent surface lot. New parking technology will provide added convenience for drivers with signs displaying real-time parking availability and a parking app that communicates open parking spaces right in the palm of your hand.
83	Blacksmith Square Expansion	Livermore Ave. and Veterans Way	the planned expansion of Blacksmith Square will include three new buildings for a total of 13,200 square feet of new retail and restaurant spaces. The new building at the corner of Livermore Ave. and Veterans Way includes plans for both a rooftop and 2nd story seating area overlooking Stockmen's Park. The historic building on the corner of Livermore and Railroad avenues will remain and serve as a design reference for the three new buildings.
84	I-580/Vasco Road Project	N Vasco Road Bridge over I-580	I-580/Vasco Road Project will consist of removal of the existing overcrossing and replacing it with a wider and taller bridge, reconstructing the on and off ramps, and will include new traffic signals and safety elements. The proposed bridge will carry 9 travel lanes and will be approximately 300' long and 155' wide with a 19' vertical clearance in the median at the centerline of the proposed Valley Link Rail Project (Proposed Project) alignment and will include Class VI Bicycle and Pedestrian Facilities consistent with the City's Bicycle, Pedestrian and Trails Active Transportation Plan.
85	Vasco Road Widening Project	Vasco Road between Garaventa Ranch Road and Dalton Avenue	The project will widen northbound Vasco Road from one lane to two lanes to improve existing traffic operations and safety and provide bicyclist and pedestrian facilities.

Map Number	Name	Location	Description
86	Montage Trail Connection to Collier Canyon Road	intersection of Collier Canyon Road and Las Positas College's Campus Loop Road	The project consists of installation of an off-road paved asphalt concrete and on road concrete trail, sidewalk, curb and gutter, curb ramps, and will replace existing curb ramps to comply with current ADA regulations. It includes landscaping, traffic lane striping and signage, pedestrian crosswalks, buffered bike lanes, and new parking spaces on Collier Canyon Road
87	Foley Road Realignment	E. Vineyard Avenue and Vallecitos Road	This project will design and construct the realignment of Foley Road to the new signalized intersection of E. Vineyard Avenue and Vallecitos Road to make a four-leg intersection
88	North Canyons Parkway / Dublin Boulevard Connection	Between Dublin Boulevard and North Canyons Parkway Doolan Canyon Rd Intersection	Connection of North Canyons Parkway and Dublin Boulevard as a four-lane major roadway between Doolan Canyon Road and the east Dublin City limits. The project will have a bridge crossing over Cottonwood Creek within the jurisdiction of Alameda County and will require coordination with Alameda County. The City of Dublin is the lead agency.
89	Jack London Boulevard Widening	Jack London Boulevard from Isabel Avenue to El Charro Road.	Converting Jack London Boulevard to a four-lane road.
90	Las Positas Road Widening Hilliker Place to First Street	Las Positas Road between Hilliker Place and First Street.	Widen Las Positas Road (approximately 1.8 miles) from two to four lanes
91	Isabel Ave. / I-580 Interchange, Phase 2	Interchange at I-580 and Isabel Ave.	The ultimate improvements at the I-580/Isabel Avenue-SR 84 Interchange are to provide six lanes over I-580 at the Isabel Avenue-SR 84 Interchange and four lanes over I-580 at the Portola Avenue overcrossing.
92	Alameda Grant Line Solar 1	16801-16999 W Grant Line Rd, Tracy, CA 95391	Soltage, LLC is proposing to construct, install, operate, and maintain an approximately 2-megawatt (MW) alternating current (AC) solar photovoltaic (PV) facility known as the Alameda Grant Line Solar 1 Project. The project is located on a 23.07-acre site, half of which would be covered with photovoltaic solar panels in rows approximately 650' feet in length in a north/south axis

Map Number	Name	Location	Description
93	Jess Ranch Compost Facility	15850 Jess Ranch Road	The Proposed Project would receive and process organic materials, primarily green waste, food waste, and biosolids, but would also receive untreated scrap wood, natural fiber products, non-recyclable paper waste, and inert material, such as sediment, gypsum, wood ash, and clean construction debris. Non-hazardous liquid wastes may also be accepted as a substitute for the water that is added for efficient composting. The project would process organic material utilizing a covered windrow system that would be a combination of aerated static pile with either positive or negative aeration, and covered windrow composting technology. Initially, the Project would realize a daily throughput of up to 500 tons per day, increasing up to a maximum of 1,000 tons per day, producing compost-based soil amendments for agricultural, horticultural, erosion control and land reclamation uses. Alameda County is the approving agency for the conditional use permit, which constitutes the project action or Proposed Project under CEQA.
94	Conditional Use Permit No. 2100238	I-580/Patterson Pass Road Interchange, Tracy, CA	I-580 and International Parkway/Patterson Pass Road is located next to the Cordes Ranch Specific Plan area. The project would convert the existing tight-diamond interchange to a diverging diamond interchange. The project would require minor realignment to the existing on-off ramps. The proposed diverging diamond interchange would divert traffic in both directions to the opposite side of the road while crossing over the I-580 ramps. Traffic signals direct vehicles safely to the opposite side of the bridge within the diverging diamond interchange.
95	I-205 Managed Lanes Project	Interstate 580 and the West Grant Line Road interchange in Alameda County to the Interstate 205 and the Interstate 5 interchange in San Joaquin County	Caltrans, in cooperation with the San Joaquin Council of Governments (SJCOG), proposes to install managed lanes on Interstate 205 through the City of Tracy, accommodate transit hubs, and improve interchanges between post mile R1.7 on Interstate 580 and post mile R13.5 on Interstate 5.
96	Mountain House Subdivision	22261 South Mountain House Parkway, Tracy, CA	A planned major subdivision in the Mountain House Community.

Sources: Alameda County 2023, Caltrans 2023a and 2023b, City of Dublin 2023; City of Pleasanton 2023a, 2023b; City of Livermore 2023, City of Tracy 2023, San Joaquin County 2023a and 2023b.

Table 4-2: Planned Rail Projects

Project Name	Description	Estimated Construction Schedule	Location
ACE Extension Lathrop to Ceres/Merced	Extension of ACE commuter service between Lathrop and Ceres (Phase I); and Lathrop and Merced (Phase II)	The Ceres Extension is estimated to be constructed between 2022 and 2024; anticipated commencement of ACE service to Merced in 2025	Lathrop, Ceres, Merced
Valley Rail Sacramento Extension Project	Improved passenger rail service to Sacramento from the San Joaquin Valley	Operational by 2024/2025	San Joaquin Valley and Sacramento
California High-Speed Rail (Merced to Sacramento Section)	High speed rail service between San Francisco and Los Angeles (Phase I) and Sacramento to San Diego (Phase II)	Merced to Bakersfield segment anticipated to be operational between 2030 and 2033	Northern California, Central Valley, Southern California

Sources: San Joaquin Regional Rail Commission 2024; California High-Speed Rail Authority 2024.

ACE = Altamont Corridor Express

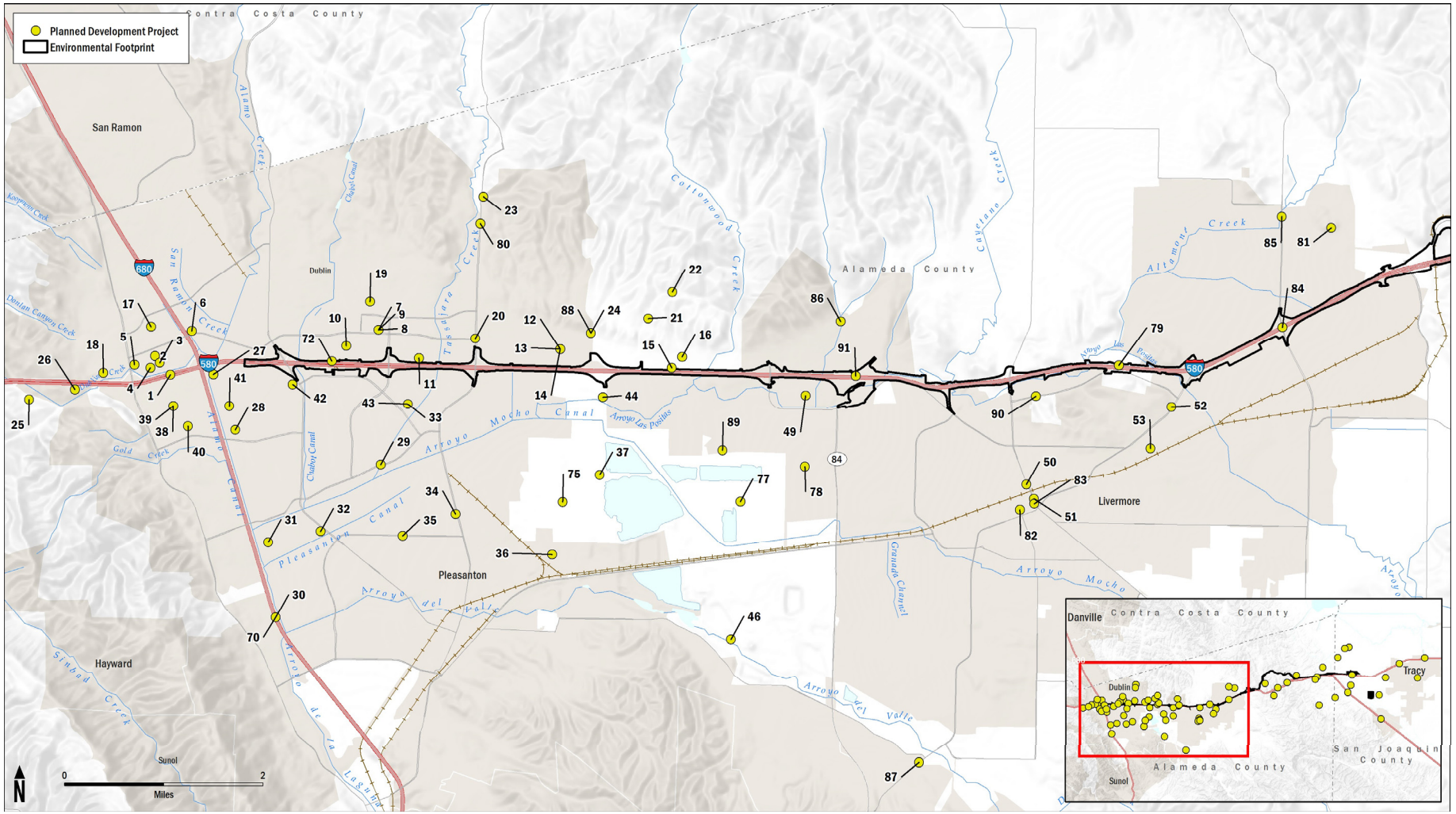

Figure 4-1: Location of Related Projects (1 of 2)

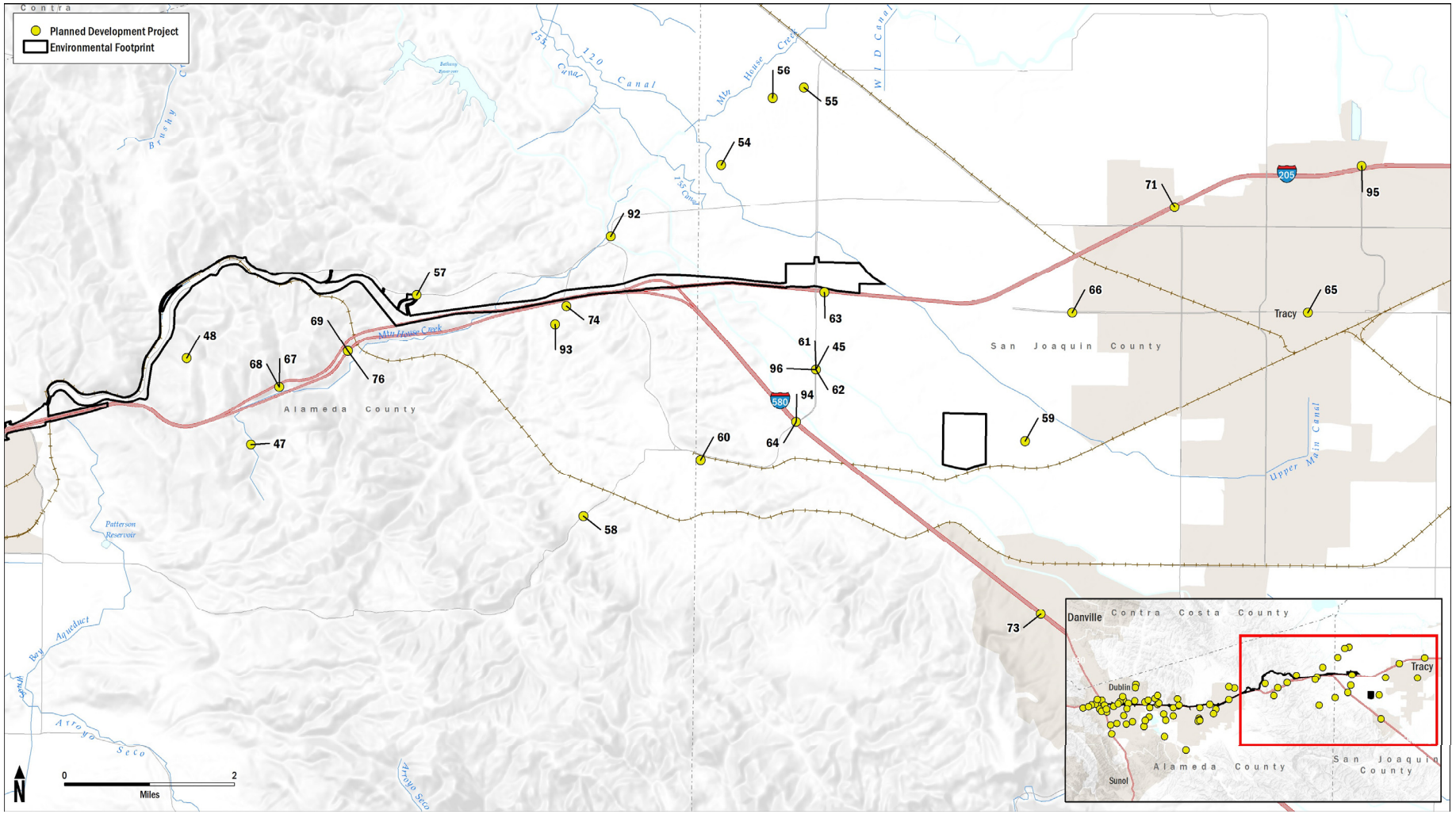

Figure 4-2: Location of Related Projects (2 of 2)

4.2.4 Cumulative Impact Analysis

The cumulative impact analysis below is guided by the requirements of 2024 CEQA Guidelines Section 15130. As discussed above, cumulative impacts identified for the Proposed Project are those impacts that result from past, present, and reasonably foreseeable future projects within the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, City of Tracy, and the surrounding area. This section discusses potential impacts to various resources that could occur as a result of implementation of the Proposed Project, together with the related projects listed in Table 4-1 and Table 4-2, as applicable.

Though not currently anticipated, if multiple projects are built during the same general time frame, localized construction-related traffic congestion, construction air emissions, and noise impacts would likely increase. The Authority would work with other lead agencies to ensure that construction from multiple projects in the same vicinity would be managed to avoid or lessen cumulative impacts.

4.2.4.1 Aesthetics

The geographic context for the analysis of cumulative aesthetic impacts is the viewshed from public areas that can view the project corridor and from locations that can be viewed from the project corridor, as represented by the anticipated cumulative developments listed in Table 4-1 and Table 4-2.

Impact C-AES-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on aesthetics. (Less than Considerable Impact with Mitigation)

As described in Section 3.1 (Aesthetics), visual changes associated with project construction activities would be temporary for the Proposed Project. Construction of the proposed alignments would generally occur in a linear fashion and along the corridor. Construction would affect all viewers adjacent to or in the construction corridor. However, due to the temporary nature of construction and implementation of mitigation measures MM-AES-1, MM-AES-2, MM-AES-3, and MM-AES-4, project construction impacts would be reduced to less than significant levels. Thus, the Proposed Project's contribution to cumulative impacts on aesthetics from construction would be less than considerable with mitigation.

The analysis in Section 3.1 (Aesthetics) indicates that visual changes resulting from operation of the Proposed Project could substantially degrade the existing visual character or quality of the project corridor and its surroundings, including scenic vistas, in urbanized and nonurbanized areas This would result in a potentially significant impact. The planned developments identified in Table 4-1 and Table 4-2 could further contribute to the permanent alteration of views along these areas. However, implementation of MM-AES-5, MM-AES-6, MM-AES-7, MM-AES-8, and MM-AES-9 would reduce impacts to less than significant levels for the Proposed Project. Therefore, cumulative operational contributions to visual changes would be less than considerable with mitigation.

4.2.4.2 Agricultural Resources

The analysis of cumulative impacts to agricultural and forestry resources includes all cumulative development within the geographic area that includes the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, City of Tracy, and related project identified in Table 4-1 and Table 4-2

The geographic context for the analysis of cumulative agricultural resources impacts includes the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy and is represented by full implementation of the *General Plans for the counties and cities.*

Impact C-AG-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on agricultural resources. (Less than Considerable Impact with Mitigation)

Construction of the Proposed Project could temporarily convert Important Farmland to nonagricultural uses where needed for construction access, material laydown, and staging areas. In addition, preconstruction and construction activities that occur on active farmland (i.e., land currently being prepared or used for agricultural production) would temporarily disrupt existing agricultural operations, remove land from agricultural

production, and result in a temporary loss in agricultural productivity. If temporary staging areas are not timely restored to former agricultural use (preconstruction condition) after construction, disruption in agricultural use would become permanent and result in permanent conversion of Important Farmland to nonagricultural use. However, the implementation of MM-AG-1 would reduce impacts from temporary use of Important Farmland during construction to less than significant levels by requiring any Important Farmland temporarily used for construction access, mobilization, material laydown, and staging to be returned to a condition equal to the preconstruction condition. As such, the Proposed Project's contribution to cumulative impacts on agricultural resources as a result of construction activities would be less than considerable.

Areas in the Proposed Project footprint include parcels designated as Prime Farmland and Unique Farmland. Implementation of the Proposed Project would result in conversion of approximately 7.7 acres of Prime Farmland and 5.5 acres of Unique Farmland to nonagricultural use. The conversion would represent a significant impact. However, implementation of mitigation measure MM-AG-2 would reduce this impact to a less than significant level. Construction and operation associated with the related projects and other future development in the surrounding area would be subject to all state laws, plans, policies, and regulations regarding agricultural resources. It is also anticipated that future development projects would be required to implement measures necessary. As such, the Proposed Project's contribution to cumulative impacts related to the conversion of Prime Farmland and Unique Farmland would be less than considerable.

4.2.4.3 Air Quality

Impact C-AQ-1: The Proposed Project could expose sensitive receptors to cumulative health risks from increased exposure to DPM and $PM_{2.5}$ concentrations. (Less than Considerable Impact with Mitigation)

Multiple existing sources of cumulative emissions are located within 1,000 feet of the Valley Link alignment and sensitive receptors. When combined with TAC emissions (predominantly DPM) from construction, receptors may be exposed to cumulative health risks exceeding air district thresholds. BAAQMD has established cumulative risk thresholds, whereas SJVAPCD considers risks in excess of project-level thresholds to result in a cumulatively considerable impact. Therefore, an assessment of combined existing and project-level health risks in SJVAPCD was not performed, consistent with SJVAPCD guidance. However, cumulative health risk impacts in SJVAPCD are discussed below based on the results of the project-level analysis presented in Impacts AQ-4 and AQ-5.

Valley Link spans approximately 21 miles in BAAQMD and traverses numerous densely populated areas with various stationary, roadway, and rail sources. For completeness, health risks from all sources within 1,000 feet of the entire alignment were evaluated as part of the HRA.

For the cumulative health risk analysis, the aggregation of health impacts from the Proposed Project sources and existing sources were determined for resident, worker, student, and child sensitive receptors. The MEI for these sensitive receptors within the BAAQMD during construction from the Proposed Project sources were used as the locations of the cumulative analysis. Existing health risks at these same project-MEI locations were added to the Proposed Project values to compute the cumulative value for cancer and chronic risks and $PM_{2.5}$ concentrations.

Existing conditions due to existing sources were obtained using BAAQMD's screening tools for roadway and rail sources. Data from the screening tools were published in December 2022 and January 2023 for road and rail sources, respectively.

Table 4-3 summarizes cumulative cancer risk, chronic health hazard, and $PM_{2.5}$ concentrations at the sensitive receptor MEIs in BAAQMD during construction. The table presents the Proposed Project and existing (road and rail) contribution to the cumulative risk. Refer to Appendix G, *Air Quality and Greenhouse Gas Emissions Technical Report*, for detailed information on the individual sources included in the existing risk estimate.

As shown in Table 4-33, total cumulative health risks at all MEI sensitive receptors located near the Proposed Project during construction and operation would not exceed BAAQMD's cumulative health risk thresholds and the impact is less than significant. The results of the cumulative cancer risk analysis included in Appendix G indicate that more than 95 percent of the cumulative impact is attributed to existing on-road sources along I-

580. The Proposed Project's contribution to the cumulative impact at the maximum exposed residential receptor is less than five percent. Cumulative impacts at each of the analyzed receptors (i.e., residential, worker, and child/student) are all below the respective cumulative BAAQMD thresholds. Chronic risks are all well below the cumulative BAAQMD threshold at all maximum receptors. Cumulative $PM_{2.5}$ concentrations are less than 25 percent of the cumulative BAAQMD threshold (0.8 µg/m³) at the resident and worker maximum receptors. At the maximum child/student cumulative $PM_{2.5}$ concentration receptor, the cumulative impact is approximately 90 percent of the cumulative BAAQMD threshold, with 90 percent of that cumulative impact from existing road sources. Additional details are provided in Appendix G. This cumulative impact would be less than cumulatively considerable, and no mitigation is required.

Table 4-3. Estimated Cumulative Inhalation Cancer Risk, Chronic Hazard Index, and $PM_{2.5}$ Concentration from Proposed Project Construction and Operation in the BAAQMD

Sensitive Receptor/Source	Cancer Risk (per million) [1]	Chronic HI	$PM_{2.5}$ Concentration (µg/m³)	Sensitive Receptor
Construction (with mitigation)	0.66	4.57E-04	0.05	MEI – Resident
I-580 Lane Shift[2]	2.77	1.00E-02	0.07	MEI – Resident
Existing Road[3]	69.71	2.20E-01	<0.01	MEI – Resident
Existing Rail[4]	0.09	4.20E-05	<0.01	MEI – Resident
Total Cumulative	*73.23*	*2.30E-01*	*0.13*	MEI – Resident
Construction (with mitigation)	0.08	1.17E-03	0.14	MEI – Worker
I-580 Lane Shift[2]	2.77	1.00E-02	0.07	MEI – Worker
Existing Road[3]	33.20	8.13E-03	0.05	MEI – Worker
Existing Rail[4]	0.04	5.63E-04	<0.01	MEI – Worker
Total Cumulative	*36.09*	*9.87E-02*	*0.26*	MEI – Worker
Construction (with mitigation)	0.40	2.89E-04	0.01	MEI – Child/Student
I-580 Lane Shift[2]	2.77	1.00E-02	0.07	MEI – Child/Student
Existing Road[3]	35.60	8.40E-02	0.64	MEI – Child/Student
Existing Rail[4]	0.09	2.30E-05	<0.01	MEI – Child/Student
Total Cumulative	*38.86*	*9.44E-02*	*0.72*	MEI – Child/Student
BAAQMD Threshold	***100***	***10.0***	***0.8***	

[1] Maximum excess cancer risk is based on the location of the MEI from project sources. The grid cell from BAAQMD's existing cancer risk data were then extracted and paired with the Proposed Project cancer risk to arrive at the cumulative value (rounded to the nearest hundredth).

[2] Valley Link Draft Environmental Impact Report (December 2020) Table 3.3-26a, Highest Residential Cancer Risk https://www.valleylinkrail.com/_files/ugd/95df9a_e67d8285e1df4d6e83dd2310fb062484.pdf

[3] Source: Existing Cancer Risk from BAAQMD Roadway Screening Tool (December 2022), https://data.bayareametro.gov/Environment/CEQA-Roadway-Screening-Tool-Cancer-Risk/kz4a-ueki

[4] Source: Existing Cancer Risk from BAAQMD Rail Screening Tool (January 2023), https://data.bayareametro.gov/Environment/CEQA-Rail-Screening-Tool-Cancer-Risk/6eut-z6mm

$PM_{2.5}$ = particulate matter 2.5 microns in diameter and smaller
HI = hazard index
µg/m³ = micrograms per cubic meter
< = less than
BAAQMD = Bay Area Air Quality Management District
MEI = Maximum exposed individual

The Authority does not have the jurisdiction to address existing sources of pollution. The Proposed Project contributions to the cumulative impacts are limited and thus there is no feasible mitigation that would reduce these cumulative impacts. However, even with the relatively high ambient conditions, cumulative impacts within the BAAQMD would be less than significant.

As discussed in Section 3.4 (Air Quality), neither construction nor operation of the Proposed Project would result in health risks to sensitive receptors more than SJVAPCD's thresholds of significance. SJVAPCD considers risks greater than project-level thresholds to result in a cumulatively considerable impact. Accordingly, since the Proposed Project would not exceed SJVAPCD's project-level thresholds, cumulative health risks within the SJVAPCD would be less than significant.

4.2.4.4 Biological Resources

Unless otherwise identified below, the geographic context for the analysis of cumulative biological impacts includes the "Region" as defined by the County of Alameda and County of San Joaquin. The analysis accounts for all anticipated cumulative growth within this geographic area as represented by full implementation of the County of Alameda General Plan (1994 and 2014), County of San Joaquin General Plan (2016), City of Dublin General Plan (2016), City of Pleasanton General Plan (2019), City of Livermore General Plan (2021), and City of Tracy General Plan (2011).

The primary effects of the Proposed Project, when considered with other projects in the region (as defined above), would be the cumulative direct loss of open space, vegetation associations important to raptors, loss of sensitive or special-status wildlife species, and regional movement corridors. Specifically, present and probable future projects in the vicinity of the Proposed Project are anticipated to permanently remove plant and wildlife resources which could affect special-status species, nesting habitat for resident and migratory avian species, wildlife movement corridors, and/or local policies or ordinances protecting biological resources.

Impact C-BIO-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on biological resources. (Less than Considerable Impact with Mitigation)

Although the portions of the Proposed Project would be constructed within the existing transportation rights-of-way, alignments, stations, parking lots, and support facilities would be constructed in undeveloped areas. Construction activities would result in a loss of biological resources due to grading, excavation, and habitat degradation (i.e., removal of shrubs, trees, water features, and natural habitat such as riparian communities). Aquatic resources such as seasonal wetlands, creeks, and ponds could be degraded from accidental oil spills and sedimentation or be affected by changes in hydrology. Construction activities for the projects identified in Table 4-1 and Table 4-2 could also result in the loss of biological resources due to grading, paving, and tree removal where sensitive biological resources are present.

As described in Section 3.4 (Biological Resources), the Proposed Project could have significant construction impacts on special-status species, riparian habitats or other sensitive natural communities, and protected wetlands or waters and to trees along the Proposed Project corridor. Additional development projects located in the vicinity of the Proposed Project could also contribute to cumulative construction impacts to biological resources when combined with the Proposed Project. However, implementation of the mitigation measures described in Section 3.4 (Biological Resources) would reduce construction impacts to biological resources to less than significant levels. In addition, compliance with regulatory requirements and mitigation measures described in Section 3.10 (Hydrology and Water Quality) would minimize potential impacts to biological resources related to water quality. Thus, with mitigation, the Proposed Project's residual construction impacts would be limited in scale and extent. Adherence to the mitigation measures described in Section 3.4 would render the Proposed Project's contribution to biological resources related to construction less than considerable.

Operational impacts to biological resources would be limited to maintenance activities such as tree removal and trimming, potential use of pesticides and rodenticides,

and restrictions on wildlife movement. Implementation of the mitigation measures described in Section 3.4 would render the Proposed Project's contribution to biological resources related to operation less than considerable.

4.2.4.5 Cultural Resources

The geographic context for the analysis of cumulative cultural impacts varies by threshold. Thus, the geographic context scenarios are presented individually for the various potential cumulative impacts identified below. The analysis accounts for all anticipated cumulative development within these geographic areas, as represented by full implementation of the County of Alameda General Plan (1994 and 2014), County of San Joaquin General Plan (2016), City of Dublin General Plan (2016), City of Pleasanton General Plan (2009), City of Livermore General Plan (2004), City of Tracy General Plan (2011), and those development projects within these geographic areas identified as anticipated cumulative developments listed in Table 4-1 and Table 4-2.

Impact CUL-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on cultural resources. (Less than Considerable Impact with Mitigation)

The study area encompasses areas that contain built environment historic architectural resources (built resources) that may be directly or indirectly affected by the cumulative condition. This study area is assumed to include built resources that are eligible, or could become eligible, for listing on national, state, and local registers of historic resources in the reasonably foreseeable future.

The cumulative study area has a long history of human occupation. Therefore, the potential exists that built resources are present. In a dense urban area, such as the cumulative study area, where the entire landscape has been used historically, continued urbanization and development projected under the cumulative condition could result in removal of or damage to built resources. Impacts on built resources are typically individual in nature and specific to the context of the resource and to the aspects of integrity that contribute to a resource's eligibility for listing in the California Register of Historical Resources or the National Register of Historic Places. Nevertheless, because their individual significance is unknown until analyzed, potential impacts on cultural resources caused by cumulative projects can collectively contribute to loss of cultural resources. Indirect cumulative noise and vibration impacts on built resources could combine to result in cumulative impacts if the cumulative projects are close enough that noise and vibration generated during construction or operation overlap.

As described in Section 3.5 (Cultural Resources), construction of the Proposed Project could not affect historical resources within the cultural resources study area. Construction of the cumulative developments listed in Table 4-1 and Table 4-2 that overlap with the Proposed Project footprint or that would occur adjacent to or in the immediate vicinity of the Proposed Project could result in adverse changes to a listed or list-eligible property in the national, California, or local registers. Adverse changes to such resources would result in a significant cumulative impact on built environment historical resources. While these reasonably foreseeable future projects would be subject to federal and state cultural resource regulations, which require identification, evaluation, and assessment of direct and indirect affects to historical resources, there is the potential for significant and unavoidable impacts to historical resources associated with these cumulative developments. However, Proposed Project contributions to cumulative impacts on historical resources would be less than considerable.

The projects and plans listed in Table 4-1 and Table 4-2 were reviewed to determine whether they, in combination with the Proposed Project, would result in cumulative impacts to archaeological resources and human remains. None of the projects or plans would intersect with known archaeological resources or human remains within the footprint of the Proposed Project. Therefore, there would not be a significant cumulative impact to known archaeological resources or human remains. However, ground-disturbing construction activities such as excavation always present the potential for the discovery of currently unknown resources, including human remains. Implementation of mitigation measures MM-CUL-1 through MM-CUL-5 would ensure that such resources would be appropriately treated in the event of inadvertent discoveries during Proposed Project

construction. Therefore, the Proposed Project's contribution to such impacts would not be considerable.

Once construction is completed, operation of the Proposed Project would not require further ground disturbance. Therefore, operations would not result in impacts on historic or archaeological resources or human remains in the Proposed Project footprint. Similarly, it is not expected that the projects and plans identified in Table 4-1 and Table 4-2 would require substantial operational ground disturbance. Therefore, there would be no significant cumulative operational period impact to cultural resources.

4.2.4.6 Energy

The geographic context for the analysis of potential contributions to cumulative impacts on energy resources is the service areas of the energy providers that would serve the Proposed Project during construction and operation.

Impact C-EN-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, would not result in a significant cumulative impact on energy resources. (Less than Considerable Impact with Mitigation)

Operations of the Proposed Project, as well as the other passenger rail projects identified in Table 4-2, would all require fuel energy to operate. Other identified projects, such as residential and commercial development, would also require energy to operate. Collectively, these could result in a significant cumulative energy impact. However, passenger rail projects are expected to result in overall reduced energy use from a reduction in automobile vehicle miles traveled (VMT) and, subsequently, overall savings in automobile fuel consumption from the modal shift from personal vehicle use to mass rail transit.

In addition, as described in Section 3.6 (Energy), based on the calculated operational energy consumption, it is anticipated that the Proposed Project would result in net savings of approximately 614,818 million Btu per year by 2040. The Proposed Project would reduce petroleum fuel consumption by 5,940,191 gallons per year by 2040, thus substantially reducing fossil fuel usage and encouraging mode switch toward zero emission transportation. Therefore, the Valley Link Project's contribution to any cumulatively significant operational energy impact would not be considerable; in fact, the Proposed Project would result in energy savings that would be an environmental benefit.

4.2.4.7 Geology and Soils

The geographic context for the analysis of cumulative impacts resulting from geologic hazards is generally site-specific, because each project site has a different set of geologic considerations that would be subject to specific site development and construction standards. Soil and geologic conditions are site-specific, and there is little, if any, cumulative relationship between the Proposed Project and other areas in the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy. As such, the potential for cumulative impacts to occur is geographically limited for many impact explanations; however, variations from a site-specific cumulative context have been identified.

Impact C-GEO-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on geology, soils, and unique paleontological/geologic resources. (Less than Considerable Impact with Mitigation)

Construction of the Proposed Project, or any of the projects listed in Table 4-1 and Table 4-2, could result in cumulatively significant erosion impacts unless construction activities are controlled. All new projects that disturb one or more acres must comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, which requires substantive controls to prevent erosion during project construction, including preparation of a Stormwater Pollution Prevention Plan (SWPPP). As a result, no significant cumulative erosion impact would occur.

As described in Section 3.7 (Geology, Soils, Mineral, and Paleontological Resources), some project facilities would be sited in areas with known seismic, geologic, and soil hazards with the potential for surface fault rupture, strong seismic ground shaking, liquefaction, subsidence, and landslides; along with unstable, expansive, and

corrosive soils; and soils unsuitable for conventional septic systems. However, the Proposed Project would be designed and constructed in accordance with the California Building Standards Code, Alquist-Priolo Act requirements, and industry design and engineering standards and guidelines, which are designed to protect structural integrity and human safety to the maximum extent practicable. Septic systems for Proposed Project facilities would be designed and operated in accordance with the Alameda and San Joaquin County Local Agency Management Programs, which are designed to prevent water quality degradation to the maximum extent practicable. Therefore, there would be no significant cumulative seismic, geologic, or soil hazard impacts.

Construction of the Proposed Project, and any of the proposed rail, road, and land use development projects listed in Table 4-1 and Table 4-2 that are located on geologic units with high or undetermined paleontological sensitivity, have potential to result in cumulative impacts to paleontological resources as a result of ground-disturbing construction activities. Where geologic units with high paleontological sensitivity are present, construction-related ground disturbance—particularly excavation and grading—could result in disturbance, damage, or loss affecting significant (scientifically important but non-unique) paleontological resources. Ground disturbance by projects located within these sensitive geologic units presents a similar potential to disturb, damage, or lose such resources. However, implementation of mitigation measure MM-GEO-1 would require paleontological monitoring, resource evaluation, and the preparation of recovery plans for found resources. Incorporation of this measure would provide ample protection for paleontological resources during construction, and the Proposed Project's contribution to cumulative impacts on paleontological resources or unique geologic features as a result of construction would be less than considerable.

While operational activities are generally not ground disturbing, maintenance activities can involve ground disturbance such as vegetation removal, which could result in erosion that may expose or damage paleontological resources. However, because ground disturbance associated with maintenance generally takes place on land previously disturbed during project construction, no significant cumulative operational impact on paleontological resources is expected to occur.

4.2.4.8 Greenhouse Gas Emissions

The geographic context for cumulative impacts on GHG emissions is the planet. All the projects in Table 4-1 and Table 4-2 are included in the analysis as well as cumulative GHG emissions from California, the U.S., and the rest of the world.

Impact C-GHG-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, could result in a significant GHG emissions impact. However, net GHG emission reductions would be an environmental benefit and would assist the state in meeting larger statewide GHG reduction goals. (Less than Considerable Impact)

As described in Section 3.8 (Greenhouse Gas Emissions), operation of the Proposed Project would increase existing operational GHG benefits, resulting in even greater GHG reductions, relative to the No Project Alternative (see Impact GHG-1). Operational GHG reduction benefits from the Proposed Project would offset the short-term construction increase in GHG emissions in a few years. Emissions savings achieved thereafter would contribute to reductions in GHG emissions and more than offset the GHG emissions of the Proposed Project during the construction period. This reduction would be an environmental benefit and as a result, the Proposed Project's contribution to cumulative GHG emissions during operations would be less than considerable (beneficial).

4.2.4.9 Hazardous Materials

Risks associated with hazardous materials impacts are generally localized and site-specific, except those resulting from transporting hazardous materials. Because these risks are generally site-specific, the cumulative context for this analysis depends on the threshold being analyzed. For example, cumulative impacts associated with transporting hazardous materials would be analyzed for projects along the transportation route, while the context for the use of hazardous materials would be limited to the area immediately surrounding the project site. Cumulative impacts associated with the accidental release of hazardous materials into the environment

would also likely be limited to the Proposed Project and the immediately surrounding properties.

The geographic context for the analysis of cumulative impacts related to hazardous materials includes the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy. The analysis accounts for all anticipated cumulative growth within this geographic area, which includes cumulative developments listed in Table 4-1 and Table 4-2.

Impact C-HAZ-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact from hazardous materials. (Less than Considerable Impact with Mitigation)

As described in Section 3.9 (Hazardous Materials), construction activities would involve use of common hazardous materials such as fuels, paints, and lubricants. Compliance with local, state, and federal regulations for handling hazardous materials would address potential impacts associated with construction-related handling of hazardous materials. In addition, demolition, grading, and excavation activities for the Proposed Project could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. However, because both the Proposed Project and identified projects listed in Table 4-1 and Table 4-2 would be required to comply with applicable regulations to reduce hazardous materials impacts, potential impacts would collectively be significantly reduced. Thus, with adherence to these regulations and incorporation of mitigation measures, the Proposed Project's contribution to cumulative impacts related to hazardous materials because of construction would be less than considerable with mitigation.

In addition, compliance with mitigation measure MM-HAZ-1 would ensure that construction-period impacts related to exposure to contaminated soil and/or groundwater would be reduced to less-than-significant levels.

Operation and maintenance activities associated with the Proposed Project would involve the routine use of potentially hazardous materials that could result in the exposure of workers, the public, and/or the environment to hazardous materials if the materials are not properly managed or are accidentally released. Because the Proposed Project and all identified projects would be required to adhere to federal and state regulations, including the California Environmental Protection Agency Unified Program, the operational risk of exposure to hazardous materials, as well as the risk of accidental release of hazardous materials, including risks to K through 12 school children, would be minimized. Thus, the Proposed Project's contribution to cumulative impacts related to hazardous materials because of operations would be less than considerable, assuming mitigation and adherence to all applicable regulatory requirements.

4.2.4.10 Hydrology and Water Quality

The analysis of cumulative impacts to hydrology and water quality includes all cumulative development within the geographic area that includes the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, City of Tracy, and related projects identified in Table 4-1 and Table 4-2.

Impact C-HYD-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on hydrology and water quality. (Less than Considerable Impact with Mitigation)

During construction activities, projects within the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy would be subject to the requirements of an NPDES Construction General Permit and NPDES Municipal Stormwater Permit. The Construction General Permit requires that a SWPPP be prepared for any construction project that would disturb more than one acre of land surface and for significant redevelopment projects. Municipal Stormwater Permit conditions are required to be codified in the local agency/municipality codes and ordinances. Potential construction dewatering would be subject to either a General Permit for discharge of low-threat waters or individual Waste Discharge Requirements.

Monitoring and reporting programs explicitly required in the area-wide Municipal Stormwater Permit would

ensure that the stormwater management program is adequately protecting water quality or would be adjusted to meet water quality protection goals. Compliance with federal, state, and local regulations would ensure that the Proposed Project would not contribute considerably to cumulative impacts, and cumulative impacts on water quality standards or Waste Discharge Requirements would be less than considerable.

The Proposed Project, as well as all of the projects listed in Table 4-1 and Table 4-2, would involve the creation of new impervious surfaces that could impede groundwater recharge because stormwater would run off of the impervious surfaces rather than infiltrating the ground surface and recharging aquifers. Stormwater runoff would be conveyed either to local surface drainage ways, where it would percolate through the ground back into the groundwater aquifer or would be conveyed via underground pipelines to larger streams and rivers. Surface water in streams and rivers is a major source of groundwater recharge in Alameda and San Joaquin counties. Therefore, although new impervious surfaces would impede on-site groundwater recharge, the stormwater runoff would ultimately still contribute to groundwater recharge via percolation from local and regional creeks, streams, and rivers. Furthermore, all of the projects listed in Table 4-1 and Table 4-2 would be required to implement low-impact development features as part of state and local Municipal Separate Storm Sewer System (MS4) permits, such as the incorporation of on-site vegetated swales, permeable pavement, and soil amendments, which are designed to infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall. Thus, the Proposed Project's contribution to cumulative groundwater recharge impacts would be less than considerable.

The creation of new impervious surfaces and stormwater drainage systems could alter drainage patterns and create new sources of runoff. If stormwater control systems are not appropriately designed for these improvements, stormwater runoff could exceed the capacity of stormwater drainage systems and result in degradation of water quality. However, compliance with existing regulations, including post-construction requirements of the State Water Resources Control Board (SWRCB's) NPDES Construction General Permit and hydromodification management requirements of applicable MS4 permits would minimize stormwater runoff. Thus, the Proposed Project's contribution to cumulative operational impacts on exceedance of stormwater drainage systems and water quality would be less than considerable with mitigation.

Operation of the Proposed Project would result in increased use of petroleum products (e.g., oil and grease), metal, and herbicide pollutants. Under typical operating conditions, the amount of these pollutants released by modern trains is minimal (i.e., only minor drips) because trains undergo regular inspections and maintenance to prevent and fix leaks. The storage, use, and disposal of herbicides is heavily regulated at the federal, state, and local level; these regulations are specifically designed to reduce the potential for adverse human health or environmental effects. The Proposed Project would also increase the amount of impervious surface areas to accommodate vehicle parking, stations and platforms, train maintenance, and fueling activities. Pollutants that accumulate on impervious surfaces would enter stormwater during rain events; however, design of stormwater control systems in compliance with existing regulations (e.g., the SWRCB's NPDES Construction General Permit; Caltrans' NPDES permit; requirements for Small MS4 Permits; and Industrial General Permits) would ensure that stormwater runoff from the Proposed Project would not cause erosion and sedimentation in receiving waters and that runoff from impervious surface areas would be managed and treated to remove contaminants. Furthermore, all projects listed in Table 4-1 and Table 4-2 would also be required to comply with applicable NPDES/MS4 permits during operations. Thus, the Proposed Project's contribution to cumulative operational impacts on water quality and stormwater runoff would be less than considerable with mitigation.

The generation of new impervious surfaces could also result in an increased rate and/or volume of stormwater runoff that could result in on-site or off-site downstream flooding. Compliance with the applicable MS4/NPDES permits, including post-construction requirements of the Construction General Permit, requires that Proposed Project improvements be designed to minimize increases in stormwater runoff compared to existing conditions. However, Proposed Project operation could still result in stormwater runoff that results in downstream flooding. The implementation of mitigation measure MM-HYD-1 would reduce this potentially significant impact to a less than significant level. As such, operational impacts

related to downstream flooding would be less than considerable with mitigation.

A portion of the Proposed Project is located within the dam failure inundation zone for failure of the Del Valley Dam and the Patterson Dam at Livermore Avenue and east to Livermore Avenue. The U.S. Army Corps of Engineers (USACE) regularly inspects and maintains all their facilities as required by the National Dam Inspection Act (Public Law 92-367), which is intended to eliminate or reduce any risks caused by dam failure. If an unlikely event of a dam failure were to occur, including from potential seismic activity, the USACE adopted Emergency Action Plan and counties' and cities' Hazard Mitigation Plans would provide adequate warning for evacuation. In addition, the General Plans of the counties and cities set guidance and restrictions for development within a dam inundation zone. As the likelihood of a dam failure is remote, and with existing governing counties' and cities' policies, the Proposed Project would not contribute significantly to cumulative impacts, and the potential cumulative impacts associated with dam failure are less than significant.

Portions of the Proposed Project are located in a designated 100-year flood hazard area Zone AE and Zone AH near Pleasanton and Livermore. Cumulative growth and development could result in the introduction of new development within flood hazard areas. The counties and cities have regulations and requirements for potential development within flood hazard areas. It is anticipated that applicable state and local regulations would prevent the placement of housing and structures in 100-year flood hazard areas unless flood control improvements are made to reduce the risk from 100-year floods. In addition, it is anticipated that applicable policies related to flooding from the General Plans of each jurisdiction would ensure that development would be protected against potential flood hazards. The Proposed Project's contribution to cumulative impacts associated with flood hazards would not contribute considerably to cumulative impacts**.**

4.2.4.11 Land Use and Planning

The cumulative analysis for division of an established community is site-specific and localized and would include the cumulative, related projects identified in Table 4-1 and Table 4-2. With regard to conflict with adopted plans and policies, the geographic context for the analysis of cumulative land use and planning impacts includes the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy.

Impact C-LU-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, would not result in a significant cumulative impact on land use and planning. (Less than Considerable Impact)

The construction of the projects identified in Table 4-1 and Table 4-2, along with the Proposed Project, could result in temporary land use impacts adjacent to the Proposed Project corridor because of temporary construction disruptions to existing land uses. However, the listed transportation projects would either occur within existing railroad or roadway rights-of-way or on vacant lands adjacent to such features. Land use development projects would displace the parcel's existing land use(s) with a new use but would have to go through local land use permitting processes to ensure consistency with local plans and policies. Therefore, none of the cumulative projects, in combination with the Proposed Project, are expected to result in a significant cumulative impact due to temporary disruption in construction related to divisions of a community or conflicts with land use plans, policy, or regulations for the purpose of avoiding or mitigating an environmental effect.

Most of the Proposed Project would occur within or alongside existing Caltrans and County of Alameda rights-of-way in developed areas. These existing transportation corridors already function as physical barriers. Thus, operation of the Proposed Project within these corridors would not result in new barriers that would divide existing communities beyond current conditions. Proposed Project components that would be located outside of these corridors involve new parking lots, extended station platforms, at-grade and above-grade pedestrian crossings, and new track connections. These components would not alter or impede community connectivity and access in their proposed locations, sever existing roads or crossings, or displace community uses. Therefore, the Proposed Project is not expected to contribute substantially to any cumulative impacts related

to any such divisions that may occur, and the Proposed Project's contribution would be less than significant.

The Proposed Project would generally be consistent with regional and local plans and policies. Therefore, the Proposed Project's potential contribution to cumulative land use impacts would be less than significant.

4.2.4.12 Noise and Vibration

The geographic context for potential cumulative noise and vibration-related impacts consists of the areas adjacent to and in the vicinity of the Valley Link Project alignment. Projects within this geographic context include the projects listed in Table 4-1 and Table 4-2.

Impact C-NV-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, would not result in a significant cumulative impact on Noise and Vibration. (Less than Considerable Impact)

As described in Section 3.12 (Noise and Vibration), during construction, an increase in noise and vibration levels would affect sensitive receptors along the Proposed Project corridor. Noise and vibration impacts during construction would primarily result from simultaneous construction of different projects in the same location at the same time; however, where construction occurs in quick succession in the same area, there could also be a cumulative impact due to the extended duration of construction-related noise. There are also numerous land development projects with planned or potential construction periods that would also overlap with construction of the Proposed Project. With multiple projects close to each other and overlapping construction schedules, there is the potential for significant cumulative construction noise and vibration impacts to sensitive receptors close to construction activities.

Implementation of mitigation measures MM-NV-1 and MM-NV-2 would reduce Proposed Project construction noise and vibration levels to a less-than-significant level. In addition, although there could be other projects simultaneously under construction adjacent to the Proposed Project, unlike noise, vibration levels do not tend to accumulate. Thus, the Valley Link's contribution to cumulative noise and vibration impacts because of construction would be less than considerable with mitigation.

Minor increases in future transportation noise levels at noise-sensitive land uses with the Proposed Project are predicted levels and, in some cases, minor decreases in noise levels would result due to traffic lanes moving away from receptors. No receptors are predicted to experience noise impacts resulting from the additive effects of project operations to the existing noise environment. Therefore, impacts associated with noise due with project operations would be less than significant and the Proposed Project would not contribute to cumulative noise impacts.

Based upon the FTA vibration significance criteria, vibration-sensitive receptors along the Proposed Project would not be exposed to perceptible vibration and would not expose buildings to vibration levels of possible cosmetic or structural damage. The findings of the FTA Noise and Vibration Technical Report indicate that the vibration criteria would not be exceeded at vibration-sensitive uses more than 50 feet from the centerline of the nearest project rails. Because no vibration-sensitive uses are known or expected to be within this distance, impacts associated with vibration generated by project operation would be less than significant. Thus, the Proposed Project's contribution to cumulative vibration impacts because of operations would be less than considerable.

4.2.4.13 Population and Housing

The geographic context for the analysis of cumulative population and housing impacts is the future buildout of the General Plans for the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy and the related projects identified in Table 4-1 and Table 4-2. The cumulative impact analysis considers cumulative growth with respect to the population and housing projections.

Impact C-POP-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, would not result in a significant cumulative impact on population and housing. (Less than Considerable Impact)

As described in Section 3.13 (Population and Housing), construction of the Proposed Project would result in new

temporary employment opportunities during construction. However, employment opportunities are anticipated to be filled by local workers who already reside in the general vicinity and, as such, would not need to relocate to the Proposed Project area. As a result, growth projections identified by the U.S. Census Bureau, the Association of Bay Area Government's RTP/Sustainable Communities Strategy (SCS), the SJCOG's RTP/SCS, and Eberhardt School of Business would not be exceeded. Employment opportunities generated by construction of the Proposed Project and other identified projects are not anticipated to generate permanent population growth in improvement areas. Thus, the cumulative impacts on population growth due to construction would be less than significant.

Operation of the Proposed Project would not result in substantial changes to the existing population in the Proposed Project area. The Proposed Project would not include development of new housing or businesses that would directly induce population growth. However, operation of the Proposed Project could indirectly induce local population growth and development, particularly but not exclusively in the immediate areas around proposed stations because stations would introduce or expand access to transit services that could make station areas more desirable locations for residences and businesses, encouraging growth and economic development in the surrounding communities.

However, while the Proposed Project would expand transit service in the region, which could facilitate development around station areas, any development that could result in the vicinity of the proposed stations would be consistent with local polices and requirements and with local growth projections and would be subject to separate environmental review and approval processes. Therefore, operation of the Proposed Project would not induce substantial unplanned population growth, either directly or indirectly, and would not contribute to a cumulative impact.

4.2.4.14 Public Services

The geographic context for the analysis of cumulative impacts to fire and police protection services, schools, and other public facilities is the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy as well as the related projects identified in Table 4-1 and Table 4-2.

Impact C-PS-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, would not result in a significant cumulative impact on public services. (Less than Considerable Impact)

As described in Section 3.14 (Public Services), the Proposed Project would not result in the need for new or expanded public services since the Proposed Project would not result in a permanent increase in unplanned population growth. Additionally, the Proposed Project would have no significant impacts on service ratios, or other performance objectives for schools and other public facilities, because construction would be temporary and would not generate growth beyond creating temporary employment opportunities. As such, construction and operation of the Proposed Project, in combination with the projects listed in Table 4-1 and Table 4-2, would not result in a significant cumulative impact.

4.2.4.15 Recreation

The geographic context for the analysis of cumulative impacts to parks and recreation facilities is the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy, as well as the related projects identified in Table 4-1 and Table 4-2.

Impact C-REC-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, would not result in a significant cumulative impact on recreational resources. (Less than Considerable Impact)

As described in Section 3.15 (Recreation), construction-related impacts to recreational resources would be less than significant. Therefore, the Proposed Project's contribution to cumulative impacts on recreational resources because of construction would be less than considerable.

Operation of the Proposed Project would have a less than significant impact on access to recreational resources and the quality of these resources. As described in Section 3.13 (Population and Housing), the implementation of the Proposed Project would not induce substantial unplanned population growth, either directly or indirectly, and therefore, would not create new demands

on existing parks and recreational facilities. The Proposed Project does not have the potential to increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Project impacts associated with parks and recreation services would be less than significant. Therefore, the Proposed Project's contributions to cumulative impacts on recreational resources would be less than considerable.

4.2.4.16 Safety and Security

The geographic context for the analysis of cumulative impacts related to safety and security is the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy, as well as the related projects identified in Table 4-1 and Table 4-2.

Impact C-SAF-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, would not result in a significant cumulative impact on safety and security. (Less than Considerable Impact)

Construction and operation associated with the related projects in the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy, and the surrounding area would not interfere with adopted emergency response or evacuation plans. It is anticipated that future development projects would be required to implement measures necessary to mitigate potential impacts. The Local Hazard Mitigation Plans for counties and cities address procedures for large-scale emergency situations, such as natural disasters and technological incidents and not normal day-to-day emergencies. These emergency preparedness documents are for large-scale emergency situations, such as an earthquake that would be applicable to the counties and cities, including the Proposed Project site. The counties and cities have prepared for such emergencies; as part of standard development procedures; plans would be submitted as appropriate to the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy for review and approval to ensure that all new development has adequate emergency access, including turning radius, in compliance with existing regulations for the counties and cities. Therefore, the cumulative impact would be less than considerable.

Construction and operation activities under the Proposed Project with respect to emergency response or evacuation plans due to temporary construction barricades or other obstructions that could impede emergency access would be subject to counties and cities permitting process, which coordinates with the police and fire departments to ensure that emergency access is maintained at all times. Furthermore, the potential for any increased delays along evacuation routes from the incremental increase in new workers and patrons resulting from implementation of the Proposed Project would be considered less than significant. As a result, the cumulative impact would be less than considerable.

Cumulative impacts associated with wildfire risk would be limited to development in the vicinity of wildfire risk areas. As additional development occurs, there may be an overall increase in the risk of wildfires. Construction and operation associated with the related projects and other future development in the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy and the surrounding area would be subject to all state laws, plans, policies, and regulations regarding wildfire prevention and suppression. Construction and operation activities for new development would be subject to the permitting process of the counties and cities and also would be subject to evaluation of wildfire risks for those projects within wildfire hazard zones. The incremental effect of the Proposed Project on this impact would not be cumulatively considerable, and the cumulative impact on wildfire risk would be less than considerable.

Construction and operation associated with the related projects and other future development in the counties and cities, and the surrounding area would not interfere with adopted emergency response or evacuation plans. It is anticipated that future related projects would be required to implement measures necessary to mitigate potential impacts. The Hazard Mitigation Plan for counties and cities for wildfire emergency preparedness documents are for large-scale emergency situations that would be applicable to the entire counties and cities, including the Proposed Project site. Therefore, the cumulative impact would be less than considerable.

4.2.4.17 Transportation and Traffic

This cumulative impact analysis considers development of the Proposed Project, in conjunction with the other development in the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy and as listed in Table 4-1 and Table 4-2.

Impact C-TRA-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on transportation and traffic. (Less than Considerable Impact with Mitigation)

During construction of the Proposed Project, identified projects could disrupt transit, roadway, bicycle, or pedestrian facilities, which could conflict with programs, plans, ordinances, or policies addressing the circulation system; substantially increase hazards; and/or result in inadequate emergency access. In general, potential effects would be more substantial for transportation projects, which may require substantial, if temporary, changes to the circulation system to accommodate construction activities. However, land use development and other identified non-transportation projects could also result in effects in cases where such projects similarly propose substantial changes to the circulation system to facilitate construction (e.g., temporary roadway closures).

Considering the Proposed Project in conjunction with identified projects, potential effects on transportation and traffic may be amplified where construction activities are in close proximity or when they take place concurrently. Standard construction practices and regulations require construction contractors to work with relevant parties (e.g., public works departments, transportation agencies, transit service providers) to coordinate construction activities and identify, avoid, and minimize disruptions to the circulation system. Despite these requirements, it is possible that cumulative construction effects could reach the level of a significant impact.

As discussed in Section 3.17 (Transportation and Traffic), the construction-related impacts on transportation and traffic were determined potentially significant, in recognition of potential disruptions during construction to the circulation system, mainline (freight and passenger) rail operations along the Union Pacific Railroad-owned right-of-way, and Bay Area Rapid Transit (BART) operations. Therefore, the Proposed Project's contribution to the aforementioned significant cumulative construction impacts would be considerable. However, implementation of mitigation measures MM-TRA-1, MM-TRA-2, and MM-TRA-3, as described in Section 3.17 (Transportation and Traffic), involves measures to be implemented by the Authority to mitigate Proposed Project-specific construction impacts to less than significant. These mitigation measures would reduce the Proposed Project's contribution to the impact to less than considerable.

As shown in Section 3.17 (Transportation and Traffic), the Proposed Project is expected to result in an average weekday vehicle miles traveled (VMT) reduction of approximately 477,700 vehicle miles in 2040. Therefore, the Proposed Project would not represent a considerable contribution to any cumulative VMT impact.

A project would not contribute to a significant cumulative impact with respect to hazardous geometric design features if the project, in combination with related projects with access points proposed along the same block(s), would result in significant impacts. As discussed in Section 3.17 (Transportation and Traffic), the Proposed Project would not substantially increase hazards on the existing circulation network due to any design features or incompatible uses. In addition, similar to the Proposed Project, all related projects would be individually responsible for complying with local and regional design requirements to address potential safety conflicts. Therefore, Proposed Project impacts with respect to hazardous geometric design features would not be cumulatively considerable.

With regard to emergency access, the Proposed Project is located in an established area that is well served by the surrounding roadway network, and multiple routes exist in the area for emergency vehicles and evacuation. Drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic. Similar to the Proposed Project, related projects would implement Traffic Management Plans to ensure adequate emergency access is maintained in and around the related project sites throughout all construction activities. Coordination of these plans will ensure construction activities of the concurrent related projects and

associated hauling activities are managed in collaboration with one another and the Proposed Project.

As with the Proposed Project, related projects would be reviewed by the counties and cities to ensure compliance with applicable design criteria pertaining to emergency vehicle access, as well as the California Fire Code standards. Furthermore, since modification to emergency access and circulation plans are largely confined to a project site and the immediate surrounding area, a combination of impacts with other related projects that could potentially lead to cumulative impacts is not expected. Therefore, the incremental effect of the Proposed Project on emergency access would not be cumulatively considerable.

4.2.4.18 Utilities and Services Systems

This cumulative impact analysis considers development of the Proposed Project, in conjunction with the other development in the County of Alameda, County of San Joaquin, City of Dublin, City of Pleasanton, City of Livermore, and City of Tracy, and as listed in Table 4-1 and Table 4-2.

Impact C-USS-1: Implementation of the Proposed Project, in combination with other foreseeable projects in the surrounding area, would not result in a significant cumulative impact on utilities and service systems. (Less than Considerable Impact)

Construction of the Proposed Project and other projects listed in Table 4-1 and Table 4-2 could disrupt utilities or require utilities to be relocated. However, the agencies affiliated with these projects would work with local utility service providers to address the potential for utility disruption during construction and to minimize service interruptions. Projects would also be required to comply with all noticing and coordination requirements pertaining to utility services. Due to these requirements, there would not be a significant cumulative impact related to utility disruption during construction.

The construction of the Proposed Project, as well as the projects listed in Table 4-1 and Table 4-2, would require water and electric power, and would generate wastewater and stormwater runoff. The specific amount of water use during construction of the Proposed Project is unknown at this phase; however, construction of Proposed Project improvements is not expected to require a substantial amount of water. Local water providers have available capacity to serve the temporary, incremental demands associated with construction of the Proposed Project. The electric power required for construction would be minimal and would not be expected to require the construction of new or expanded electric power facilities. Wastewater generated during construction would be accommodated at existing wastewater treatment facilities and would not require new or expanded water or wastewater treatment facilities. These increases, as well as water and power service needs anticipated for identified project construction, are not expected to be substantial, would often be served locally by water tanks and generators, and would be temporary in nature. Thus, there would not be a significant cumulative impact related to demand for utilities infrastructure during construction.

Construction activities generate construction and demolition waste such as concrete, rubble, fill, and different types of building materials. State and local standards require that contractors divert construction and demolition waste from landfills by reusing or recycling construction and demolition materials. Per CALGreen (Cal. Code Regs. Title 24, Part 11, Section 5.408.1, Construction Waste Diversion) requires that 65% of construction and demolition waste generated during construction be recycled or diverted from the waste stream. Compliance with CALGreen requirements would assist in the attainment of solid waste reduction goals and would reduce the amount of solid waste that would be disposed of in landfills during construction of both the Proposed Project and identified projects subject to the same regulatory requirements. Furthermore, landfill facilities in the Proposed Project vicinity, including the Vasco Road Landfill and Foothill Sanitary Landfill, have sufficient remaining capacity (or a throughput) to accommodate the demand for waste disposal. Therefore, there would not be a significant cumulative impact related to landfill capacity.

Operation of the Proposed Project and the projects listed in Table 4-1 and Table 4-2 would result in increased electricity, natural gas, and water demands, as well as increased wastewater and stormwater generation.

The Proposed Project is estimated to result in only a slight increase in electricity demand resulting from new stations (night lighting) and support facilities. The amount of natural gas needed to heat the Altamont Maintenance-

of-Way, Mountain House Layover Facility, and the Tracy Operations and Maintenance Facility / Operations Support Site is anticipated to be very minor, as the on-site buildings (maintenance and operations buildings) are not anticipated to be very large. Therefore, the Proposed Project would not have a cumulatively considerable operational contribution to demand for electric power or natural gas infrastructure. Landscaping and maintenance for the Proposed Project would not contribute to a substantial increase in water demand, as proposed stations would be served by recycled water systems, as required by the municipalities pursuant to statewide Green Building Standards and water-efficient landscape ordinances. Proposed stations would not include restrooms and are not expected to generate substantial wastewater that would require conveyance and treatment. Proposed Project support facilities would require construction of septic systems, but these systems would generally be small in scale, and users would be restricted to operational staff. Local water providers and wastewater treatment plants would have available capacity to serve the incremental demands associated with landscape irrigation at new stations. Given the low water demand and wastewater generation as described above, the Proposed Project would not have a cumulatively considerable operational contribution to demand for water and wastewater infrastructure.

For the Proposed Project and all identified projects, stormwater treatment facility design would be required to comply with all state and local requirements for storm drain design, including integration of site-specific post-construction stormwater controls. Because all identified projects would be required to meet stormwater requirements, there would not be a significant cumulative impact related to stormwater generation.

4.3 Significant and Unavoidable Environmental Impacts

CEQA Guidelines Section 15126.2(b) requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. In such cases where an impact cannot be mitigated to a level considered less than significant, a Statement of Overriding Considerations must be prepared prior to approval of a project, and in accordance with CEQA Guidelines Sections 15091 and 15093.

As discussed throughout Chapter 3 (Environmental Impact Analysis) of this SEIR, all impacts identified related to the Proposed Project would be either less than significant or would be mitigated to a less-than-significant level. Chapter 3 identifies all significant and potentially significant environmental impacts related to implementing the Proposed Project; identifies feasible mitigation measures that could avoid or reduce these significant and potentially significant impacts; and presents a determination whether these mitigation measures would reduce these impacts to less-than-significant levels. Section 4.2 (Cumulative Impacts) includes a description of potential cumulative impacts related to the Proposed Project. Based on the environmental analyses in this SEIR, the Authority has determined that implementation of the Proposed Project would not result in significant and unavoidable environmental impacts.

4.4 Significant Irreversible Changes

CEQA Guidelines Section 15126.2(c) requires a discussion of any significant irreversible environmental changes that the Proposed Project would cause. Specifically, Section 15126.2(c) states:

> *Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts, and particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified. Section 15126.3(c).*

The construction and implementation of the Proposed Project would entail the commitment of energy, human resources, and building materials. This commitment of energy, personnel, and building materials will be commensurate with that of other projects of similar magnitude, and none of these commodities are in short supply. Manpower would also be committed for the construction of buildings and public facilities necessary to support the new development.

Ongoing maintenance and operation of the project would entail a further commitment of energy resources in the form of natural gas, electricity, and water resources. Long-term impacts would also result from an increase in vehicular traffic, and associated air pollutant and noise emissions. This commitment of energy resources will be a long-term obligation in view of the fact that, practically speaking, it is impossible to return the land to its original condition once it has been developed. However, as established in Section 4.13 (Utilities and Service Systems), the impacts of increased energy usage are not considered significant adverse environmental impacts.

In summary, implementation of the Proposed Project would involve the following irreversible environmental changes to existing on-site natural resources:

- Commitment of energy and water resources as a result of the operation and maintenance of the Proposed Project.

4.5 Growth-Inducing Impacts

CEQA Guidelines Section 15126.2(d) requires that this section discuss the ways in which the Proposed Project could foster economic, population, or housing growth, either directly or indirectly, in the surrounding environment. Growth-inducing impacts are caused by those characteristics of a project that tend to foster or encourage population and/or economic growth. Inducements to growth include the generation of construction and permanent employment opportunities in the service sector of the economy. A project could also induce growth by lowering or removing barriers to growth or by creating an amenity that attracts new population or economic activity. The following activities have the potential to result in growth inducement:

- Extension of public facilities, such as roads, electrical lines, gas lines, sewers, and water
- Generation of employment opportunities, including short-term, construction employment opportunities

A project's growth-inducing potential does not automatically result in growth, whether it is a portion of growth or actually exceeds projected levels of growth. Growth at the local level is fundamentally controlled by the land use policies of local municipalities or counties, which are determined by the local politics in each jurisdiction. As described in Section 3.13 (Population and Housing), implementation of the Proposed Project would not induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure). The Proposed Project would expand transit service in the region, which could facilitate development around station areas. Any development that could result in the vicinity of the proposed stations would be consistent with local polices and requirements and with local growth projections and would be subject to a separate environmental review and approval process. Therefore, operation of the Proposed Project would not induce substantial unplanned population growth, either directly or indirectly.

The Proposed Project would require expansion of sewer, water, and gas lines on-site for the operation and maintenance facilities. These systems would connect to the existing infrastructure located on-site or adjacent to the site. No new trunk lines or utility corridors would be established that could serve as connections for future projects. However, the construction of new electrical facilities on-site or adjacent to the site would be required to serve the Proposed Project. Expansion of these facilities would not result in the extension of services to undeveloped areas other than the Proposed Project.

Development of the Proposed Project would generate short-term, construction-related employment opportunities. These opportunities would occur over the duration of the construction period. Given the supply of construction workers in the local work force, it is likely that these workers would come from within the County of Alameda and the County of San Joaquin area; no in-migration of workers would be anticipated. Due to the nature of construction activities, the employment opportunities resulting from construction would not be considered permanent.

In addition, development of the Proposed Project would generate long-term employment opportunities within the stations and the operation and maintenance facilities. The Proposed Project would be anticipated to provide permanent jobs for these support facilities. Any additional long-term employment generated from the Proposed Project would be small and would not be considered a substantial growth-inducing impact to the region.

4.6 Public Agency and Public Involvement

The current CEQA phase of the Proposed Project builds upon a foundation of previous planning and environmental phases that included robust public, stakeholder, and agency engagement. Development of the Valley Link Project Feasibility Report, which was published in October 2019, included extensive public outreach and community engagement such as outreach meetings, pop-ups, advisory and steering committees, and one-on-one meetings throughout 2018 and 2019. These activities and the corresponding feedback and outcomes are discussed in detail in the Valley Link Project Feasibility Report (October 2019). The report culminated in a 45-day public review period and a final report responding to the extensive comments received by key stakeholders and the public.

The Authority further progressed the Proposed Project through development of an EIR, completed in 2021, which also included a robust public, agency, and stakeholder outreach process.

Public engagement activities related to the CEQA process are ongoing, including project website updates at key milestones (www.getvalleylinked.com) and maintenance of a stakeholder email list that is utilized for notable project announcements. Public and stakeholder engagement activities are being conducted in compliance with the Authority's Public Participation Plan (March 2021), Language Assistance Plan for Individuals with Limited English Proficiency (March 2021), and Sustainability Policy (December 2018)—all of which outline extensive engagement methods, guiding principles, and specific focus on disadvantaged communities and overall accessibility.

4.6.1 Scoping Meetings, Noticing, and Circulation of the Draft SEIR

As part of the initiation of the CEQA process in 2022 and 2023, the Authority reengaged the public and stakeholders to solicit input. In compliance with CEQA, a NOP was filed with the State Clearinghouse on November 14, 2022, for a SEIR for the Proposed Project. The filing of the NOP began a 30-day public scoping period. Two public scoping meetings were held on December 5 and 6, 2022. The meeting presentation materials were available in both English and Spanish and live language interpretation provided attendees the opportunity to listen and participate in either language.

As part of the scoping process, the public was invited to submit written comments on the scope and content of the environmental document during the public comment period that began on November 14, 2022, and ended on December 19, 2022. During this period, the Authority received a total of 17 written comment letters by mail, email, and through the online comment submission form on the project website. Of these submissions, nine were received from individuals, community organizations and businesses and a total of eight public agencies submitted written letters of comment.

A summary of these written comments is presented below:

- Evaluation regarding biological resources, land use/agriculture, noise, hazardous materials, geological, traffic, energy, GHG emissions, and visual impacts
- Consider Mountain House Community access
- Consider other alternatives such as connecting the Altamont Corridor Express (ACE) to BART, establishing a well-integrated network of long-distance and express buses
- Hydrogen as a power source
- Impacts of Proposed Project on private properties, property access, property acquisitions, and compensation
- Early cooperating agency consultation

During the period leading up to the NOP, and in combination with the NOP formal scoping period, approximately 250 meetings with stakeholders took place, which resulted in additional refinements to the Proposed Project to be responsive to this feedback.

This Draft SEIR has been released for a 45-day public review period. The public will be advised of the availability of this Draft SEIR through advertisements placed in local newspapers, sent by email and direct mailing, and announced through the project webpage. Public open house hearings will be held during that time to further inform the public on the draft document and gather comments. The comments received will be documented and addressed in the Final SEIR and the CEQA decision document.

4.6.2 Stakeholders

Throughout the preliminary planning and environmental process for the Proposed Project—extending back to 2018, through the 2021 EIR development process, and ongoing now during the development of this Draft SEIR—the Authority has conducted ongoing outreach activities with local agencies, organizations, and stakeholders identified along the project corridor.

A comprehensive stakeholder database has been maintained, and stakeholders have received email updates throughout the entirety of the planning process regarding project milestones, public meetings, and opportunities for input. Numerous meetings and presentations have been conducted with local agencies, jurisdictions, community organizations, and stakeholders since the start of the Valley Link planning process in 2018. This includes meetings with cities and counties along the Valley Link corridor; Metropolitan Transportation Commission and San Joaquin Council of Governments; the Authority Board of Directors; BART planning staff; San Joaquin County Regional Rail Commission; and other local organizations, such as community groups and professional networks.

Appendix A, *Scoping Report*, provides a summary of the stakeholders with whom the Authority has consulted leading up to and since the NOP for this Draft SEIR.

4.6.3 Outreach to Disadvantaged Communities

The public engagement activities for the Proposed Project include a specific emphasis on engaging low-income, minority, and disadvantaged communities. Ongoing and forthcoming outreach methods for the Proposed Project align with policies and guidance provided in the Authority's Public Participation Plan (March 2021), Language Assistance Plan for Individuals with Limited English Proficiency (March 2021), and Sustainability Policy (December 2018). Collectively, these policies identify the following goals regarding equitable access:

- Encourage engagement in planning and decision-making for the Proposed Project to ensure a meaningful level of participation from disadvantaged communities and low-income communities and households.
- Strive to maximize benefits to disadvantaged communities and low-income communities and households in Proposed Project planning and design.

Dating back to the Authority's Project Feasibility Study in 2019, environmental justice- and equity-focused outreach has included pop-up meetings and community briefings at local events in potentially disadvantaged communities, a bilingual community survey in English and Spanish, and multi-lingual notifications and project materials during the 2021 EIR process.

The current project website, www.getvalleylinked.com, has translation options for Spanish and the Authority's five Safe Harbor languages (i.e., Chinese, Tagalog, Vietnamese, Korean, and Arabic). The NOP published for the 2022 CEQA scoping period provided information about requesting translation accommodations for the Safe Harbor languages and was translated to Spanish and published in the *El Observador* newspaper. Live Spanish translation of the presentation occurred at both scoping meetings, and the scoping meeting presentation was translated to Spanish and available on the project website. The NOP, scoping meeting links, and instructions on how to provide comments were also sent to an email list that included cities and counties containing disadvantaged communities as defined by Senate Bill 535. Similar processes will be followed for project materials and engagement opportunities throughout the CEQA process. Key notifications about project updates or publicly available materials will be translated to Spanish and will include information about how to obtain other translation accommodations if needed.

4.7 List of Key Preparers

This SEIR was prepared by AECOM, under contract to the Tri-Valley–San Joaquin Valley Regional Rail Authority (Authority). Assisting AECOM in this task was one subconsultant (ICF), the General Engineering Consultant, and the Authority staff members. The individuals listed below were the key preparers directly involved in the preparation of this SEIR. In addition, Caltrans is a CEQA Responsible Agency for the Proposed Project, and as such, has participated in the preparation and review of this Draft SEIR.

4.7.1 Lead Agency, Tri-Valley – San Joaquin Valley Regional Rail Authority

The Tri-Valley–San Joaquin Valley Regional Rail Authority is the CEQA Lead Agency on the Valley Link Project and is responsible for implementing all mitigation measures and project design strategies. The following individuals led Authority efforts for the Proposed Project:

Kevin Sheridan	Executive Director
William Ridder	Deputy Director, Financial Planning and Programming
Marianne Payne	Director of Policy, Planning and Environmental
Bill O'Hair, P.E.	Director, Rail Engineering, Construction and Operations

4.7.2 AECOM

Jen McNeil Dhadwal, AICP	Project Manager
Mark Lippert, AICP	Deputy Project Manager
Michael Kay	Environmental Project Manager
Angie Bauer-Fellows	Environmental Project Manager
Jennifer J. Lee	Transportation Project Manager
David DeRosa	Transportation Planning Manager
Jaime Guzman	Senior Project Manager Transit
Divya Gandhi, PTP	Transportation Planner III
Stephanie Heimstead	Transportation Planner II
Lauren Lockwood	Environmental Planner III
Celia Miars	Transportation Planner III
Jenifer King	Senior Environmental Scientist
Suzanne McFerran	Environmental Planner IV
Paola Pena	Air Quality Scientist IV
Mary Kaplan	Air Quality Scientist IV
Christopher Warren	Air Quality Scientist III
Alexandra Haisley	Air Quality and Greenhouse Gas Emissions Specialist
Karin Beck	Archaeologist IV
Chandra Miller	Senior Architectural Historian
Heather Miller	Historian III
Chris Kaiser	Senior Acoustics & Noise Control Specialist
Issa Mahmodi	Environmental Scientist III
Broden Farazmand	Environmental Scientist II
George Hitterman	Acoustician II
Wanda Farmer	Project Manager II
Nikita Subramanian	Environmental Planner II
Catherine Clark	Environmental Planner
Kat Lee	Transportation Planner III
Jessica Koon	Transportation Planner III

Yara Jasso	Transportation Planner IV
Rashanda Davis	Transportation Planner II
Edgar Mejia	Transportation Planner II
Stephanie Osby	Environmental Planner III
Andrew Fisher	Wildlife Biologist
Andrew Borcher	Senior Biologist
Loren Merrill	Biologist IV
Emily Biro	Environmental Planner III
Christine Schneider	Environmental Planner V
Jason Green	Transit/Transportation Planner
Rachel Seiberg	Transportation Planner
Jason Leung	Transportation Planner
Laura Adleman	Senior Outreach and Engagement Specialist
Andrew Jones	Visualization Manager
Lynnae Jackson	Technical Editor/Writer
Katie DeSandro	Technical Editor/Writer
Hiroko Koike	Graphic Design Specialist III
Alexander Remar	GIS Supervisor
Stefan Voge	GIS Specialist II
Katie Brown	GIS Specialist III
Sally Shatford	GIS Specialist IV
Patrick Coleman, P.E.	Modeling Lead
Nagaraju Kashayi	Travel Demand Modeler
Andrew Walker	Travel Demand Modeler

4.7.3 ICF

Keith Lay	Managing Director, Air Quality and Climate Change
Ryan Hallman	Air Quality & Climate Change Specialist
Darrin Trageser	Air Quality & Climate Change Specialist

4.7.4 General Engineering Consultant

Arash Monsefan, P.E.	PGH Wong Engineering, Inc.
Ted Axt, P.E.	WSP

4.7.5 Program Management Support Services

Sheena Patel, P.E.	Senior Project Manager, Gray-Bowen-Scott
Carl Haack, P.E.	Principal Project Manager, Gray-Bowen-Scott