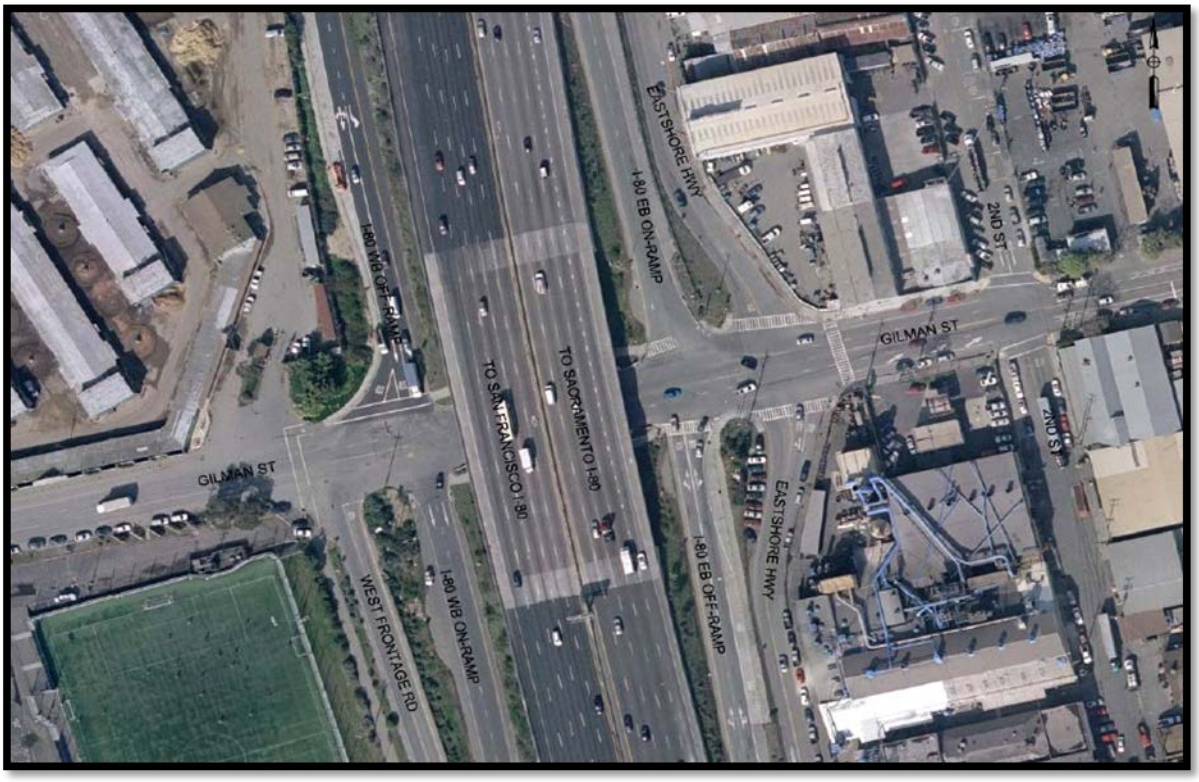
I-80/Gilman Street Interchange Improvement Project



Community Impact Assessment

Caltrans District 04

04-ALA-80 PM 6.38/6.95

EA 04-0A7700 / Project ID 0400020155

August 2018

I-80 GILMAN INTERCHANGE IMPROVEMENT PROJECT

Caltrans

ALAMEDA County Transportation Commission

CITY OF BERKELEY

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Summary

This study assesses potential land use, community, social, economic, and environmental justice impacts that could result from various alternatives considered to meet the proposed project objective. The study was prepared using the guidance provided in Chapter 24 (Community Impacts) and Volume 4 (Community Impact Assessment) of the California Department of Transportation (Caltrans) Standard Environmental Reference (SER).

Land Use and Planning

Minor direct land use impacts would result through the acquisition of right-of-way (ROW) required to construct the project; however, the project would be consistent with State, regional, and local planning documents. There are no farmlands, timberlands, or wild and scenic rivers in the project study area. The Build Alternative includes improvements within the San Francisco Bay Conservation and Development Commission (BCDC) jurisdiction; and temporary and permanent impacts to the coastal zone are anticipated. For a project within any portion of BCDC jurisdiction, a permit from BCDC may be required. Section 2.3, Coastal Zone, discusses impacts in the coastal zone.

Additionally, the proximity of the study area to the San Francisco Bay could make the area vulnerable to future sea level rise.

Growth

As determined during the first-cut screening, project-related growth is not reasonably foreseeable, and further growth analysis is not warranted. Thus, no growth-related impacts are anticipated.

Community Character and Cohesion

The communities in the study area are currently divided by a multi-lane highway, and the addition of structures associated with the roundabouts and pedestrian/bicycle overcrossing would not further divide existing communities or neighborhoods. The Build Alternative does not involve construction of a new roadway; all improvements are along existing roadways. Thus, the study area would not experience a direct disruption in community character or cohesion from the activities proposed under the Build Alternative. The Build Alternative would enhance community cohesion with the addition of improved bicycle and pedestrian access.

Relocation and Real Property Acquisition

The Build Alternative does not require relocation of any households or businesses, nor does it require the acquisition of entire properties. The Build Alternative would also not affect any residential properties within the study area. It would only require partial acquisitions along commercial and recreational property frontages in the project limits. The operations and use of the properties would not be permanently affected by the property acquisitions.

Environmental Justice

The census tracts in the project study area are composed of a large percentage of minority and low-income populations. There are residences within the study area, including University Village in the northeast of the project study area; single-family and medium-density residences in the southeast; high-density residential south of Gilman Street (between 3rd and 4th streets); shelter residents (at Harrison House, an emergency shelter at Harrison and 4th streets); and temporary residents (horse racing laborers, also known as "backstretchers") living above the horse stables in Golden Gate Fields. The horse racing laborers and shelter residents are not included in census data. As discussed in Section 4.1.2, Environmental Consequences, there would be no effects on neighborhood integrity and community cohesion. Impacts associated with the Build Alternative would not be predominantly borne by a minority or low-income population, nor would these impacts be appreciably more severe or greater in magnitude than those experienced by non-minority or non-low-income populations. No environmental justice impacts are identified.

Community Service Facilities

Under the Build Alternative, no community services or facilities would be displaced. Existing Pacific Gas & Electric (PG&E) overhead electric lines along Gilman Street, West Frontage Road, and Eastshore Highway would be relocated under the Build Alternative. Some of these overhead lines may be placed underground. An existing East Bay Municipal Utility District (EBMUD) recycled water transmission line would be relocated and extended as part of the project. Approximately 1,100 feet of a new 12-inch recycled water transmission pipeline within Eastshore Highway from Page Street to Gilman Street and approximately 1,050 feet of new pipeline within Gilman Street from 2nd Street to the Buchanan Street extension are part of the Build Alternative. A separation device would be installed underground along Gilman Street to separate trash, mercury, and polychlorinated biphenyls (PCBs). A tidal flap gate would be installed at the existing headwall of the 60-inch reinforced concrete pipe at the west end terminus of Gilman Street. Minor drainage modifications would also be required to conform to the new roundabout alignment and to accommodate the two-way cycle track along Gilman Street.

The Build Alternative would improve circulation and access by reducing congestion and vehicle conflicts, which could also improve the performance of transit routes. The Build Alternative would also improve pedestrian and bicycle facilities in the study area by constructing the following facilities: a shared-use Class I path for pedestrians and bicyclists on the south side of the Gilman Street undercrossing; a two-way cycle track on the south side of Gilman Street between the eastern roundabout and 4th Street; a bicycle/pedestrian overcrossing over Interstate 80 (I-80); a bicycle route with sharrows (painted shared lane markings) from 4th Street to Harrison Street to 5th Street, connecting to Codornices Creek; and an extension of the San Francisco Bay Trail (Bay Trail) west along the south side of Gilman Street and north along Gilman Street Extension.

Existing vegetation is sparse in the project footprint and consists of ornamental plantings or ruderal vegetation. The Build Alternative would remove existing landscaping and trees on the sidewalk along Eastshore Highway from Page Street to Gilman Street. In addition, trees and/or shrubs would be removed at the I-80 off-ramps, westbound I-80 on-ramp, and from along the Bay Trail. Opportunities for new landscaping or artwork would be available in the center of each roundabout. Opportunities for tree replacements onsite will be available.

Economics

There would be no impacts to local tax revenue or property revenues under the Build Alternative. Selection of the Build Alternative would have a beneficial impact on the local economy due to demand for goods and services. In addition to direct construction jobs, employment opportunities would be created offsite due to the demand for construction-related goods and services.

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Acronyms

AADT	average annual daily traffic
ABAG	Association of Bay Area Governments
AC Transit	Alameda-Contra Costa Transit District
ACS	American Community Survey
ADA	Americans with Disabilities Act
AMI	average median income
BART	Bay Area Rapid Transit
BCDC	San Francisco Bay Conservation and Development Commission
BMPs	Best Management Practices
Caltrans	California Department of Transportation
CCC	California Coastal Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	*Code of Federal Regulations*
CIA	Community Impact Assessment
CTC	County Transportation Commission
CZMA	Coastal Zone Management Act of 1972
EBMUD	East Bay Municipal Utility District
EBRPD	East Bay Regional Park District
EO	Executive Order
FHWA	Federal Highway Administration

GIS	geographic information system
I-80	Interstate 80
LBNL	Lawrence Berkeley National Laboratory
mph	miles per hour
MTC	Metropolitan Transportation Commission
MWWTP	Main Wastewater Treatment Plant
PCBs	polychlorinated biphenyls
NEPA	National Environmental Policy Act of 1969
PG&E	Pacific Gas & Electric
RAP	Relocation Assistance Program
ROW	right-of-way
SER	Standard Environmental Reference
TMP	Transportation Management Plan
U.S.C.	United States Code
UCB	University of California, Berkeley

Chapter 1 Introduction

This Community Impact Assessment (CIA) has been prepared for the Interstate 80 (I-80)/ Gilman Street Interchange Improvement Project by the California Department of Transportation (Caltrans), in accordance with Caltrans policies, procedures, and guidance as defined in the Standard Environmental Reference (SER). The information in this document has been prepared as a "blended" assessment to comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act of 1969 (NEPA) and other substantive environmental laws applicable to the subjects addressed in this document.

1.1 What is a Community Impact Assessment

The purpose of this report is to provide information regarding social, economic, and land use effects of the project so that final transportation decisions will be made in the public interest. The report is intended to clearly describe the relevant existing conditions and the potential socioeconomic impacts of the project.

CEQA and NEPA require consideration of social and economic impacts of projects in the preparation of environmental documents.

1.2 Regulatory Setting

NEPA, as amended, established that the federal government use all practicable means to ensure that all Americans have safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [U.S.C.] 4331[b][2]). The Federal Highway Administration (FHWA), in its implementation of NEPA (23 U.S.C. 109[h]), directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under CEQA, an economic or social change by itself is not to be considered a significant effect on the environment; however, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Because this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the effects of the project.

Caltrans' Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 *Code of Federal Regulations* (CFR) Part 24. The purpose of the RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 U.S.C. 2000d, *et seq.).*

All projects involving a federal action (i.e., funding, permit, or land) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President William J. Clinton on February 11, 1994. This EO directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2016, this was $24,300 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. Caltrans' commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement.

1.3 Assessment Process and Methodology Used

Various datasets were obtained as part of the information collection efforts development of the sections of this report, including community cohesion, land use, and parks. Among data sources used were the U.S. Census Bureau, Metropolitan Transportation Commission and Association of Bay Area Governments (MTC and ABAG), City of Berkeley, City of Albany, and Alameda County. Additional information was derived as a result of site visits, windshield surveys, desktop analysis, a community open house meeting, and stakeholder interviews and workshop meetings. Demographic information was obtained from the U.S. Census Bureau, in addition to the 2013 ABAG *Population, Housing Unit, and Employment Forecasts*, the MTC and ABAG 2018 *Plan Bay Area Projections 2040, DRAFT*, and area planning documents.

Once data were obtained and a community profile was developed for the communities within the project area, county and regional data were used to compare demographics and trends in population characteristics and growth within the area.

1.4 Proposed Project

This CIA is being prepared for the I-80/Gilman Street Interchange Improvement Project. The project proposes to improve traffic, pedestrian, and bicycle operations at the I-80/Gilman Street interchange in the cities of Berkeley and Albany in Alameda County. The Build Alternative addresses the deficiencies related to existing intersection controls. The existing intersection controls, roadway geometry, and high volumes of local and regional traffic on Gilman Street result in poor traffic operation at and near the interchange. The general project vicinity is shown in Figure 1-1; the specific project location is shown in Figure 1-2.

Two alternatives are under consideration for the proposed project – the No Build Alternative and the Build Alternative, a Roundabout Alternative shown in Figure 1-3. The Roundabout Alternative includes the reconfiguration of I-80 ramps and intersections at Gilman Street with roundabouts.

The Roundabout Alternative includes construction of pedestrian and bicycle facilities. A shared-use Class I path for pedestrians and bicyclists would be constructed on the south side of the Gilman Street undercrossing from 2nd Street to the eastern roundabout. The at-grade shared-use path would continue on the south side of Gilman Street under I-80 and terminate at the San Francisco Bay Trail (Bay Trail) that runs parallel to West Frontage Road. The Class I path at the eastern roundabout would also extend south along I-80, where it would then connect to a proposed bicycle/pedestrian overcrossing. The overcrossing would be constructed over I-80, merging on the west side of I-80 into the existing Bay Trail.

The Roundabout Alternative also includes a two-way cycle track on the south side Gilman Street between the eastern roundabout and 4th Street. Improvements would be made along 4th Street to Harrison Street to 5th Street to provide bicycle connectivity between Codornices Creek Path and the two-way cycle track on Gilman Street. The improvements include pedestrian-scale lighting, sidewalk and curb improvements, bicycle signage, and sharrows (painted shared-lane markings). West of the I-80/Gilman Street interchange, the existing Bay Trail would be extended approximately 660 feet west along the south side of Gilman Street from its current terminus at the intersection of West Frontage Road and Gilman Street to just beyond the Berkeley city limits.

The purpose of the project is to simplify and improve navigation, mobility, and traffic operations; reduce congestion, vehicle queues, and conflicts; improve local and regional bicycle connections and pedestrian facilities; and improve safety at the I-80/Gilman Street interchange.

This project contains several standardized project measures that are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections and are identified as Project Features.

1.5 Study Area

The geographical area evaluated by this study covers the area that would potentially be directly or indirectly affected by the I-80/Gilman Street Interchange Improvement Project activities. The direct impact area consists of the area immediately adjacent to the I-80/Gilman Street interchange that is subject to direct effects, such as disruption from construction activities. The direct impact area also extends west towards the San Francisco Bay and north along Gilman Street Extension, east on Gilman Street, south on 2nd Street, and north on 4th Street to Harrison Street to 5th Street. Direct impact areas also include areas proposed as temporary construction easements and areas identified as potential staging areas. Indirect, secondary impact areas would be dispersed and include areas likely to experience increased vehicle movements associated with construction-driven detour traffic.

The 184-acre project study area is located within Berkeley and Albany and includes the area of direct and indirect impacts. The study area for the socioeconomic analysis presented in Subsections 4.1, Population and Housing; 4., Economic Conditions; and 4.5, Environmental Justice, follows census tract boundaries and is different than the project study area used for other topical areas of environmental analysis. Figure 4-1 depicts the socioeconomic study area with blue shading, while the project study area for all other areas of analysis is depicted with a black border.

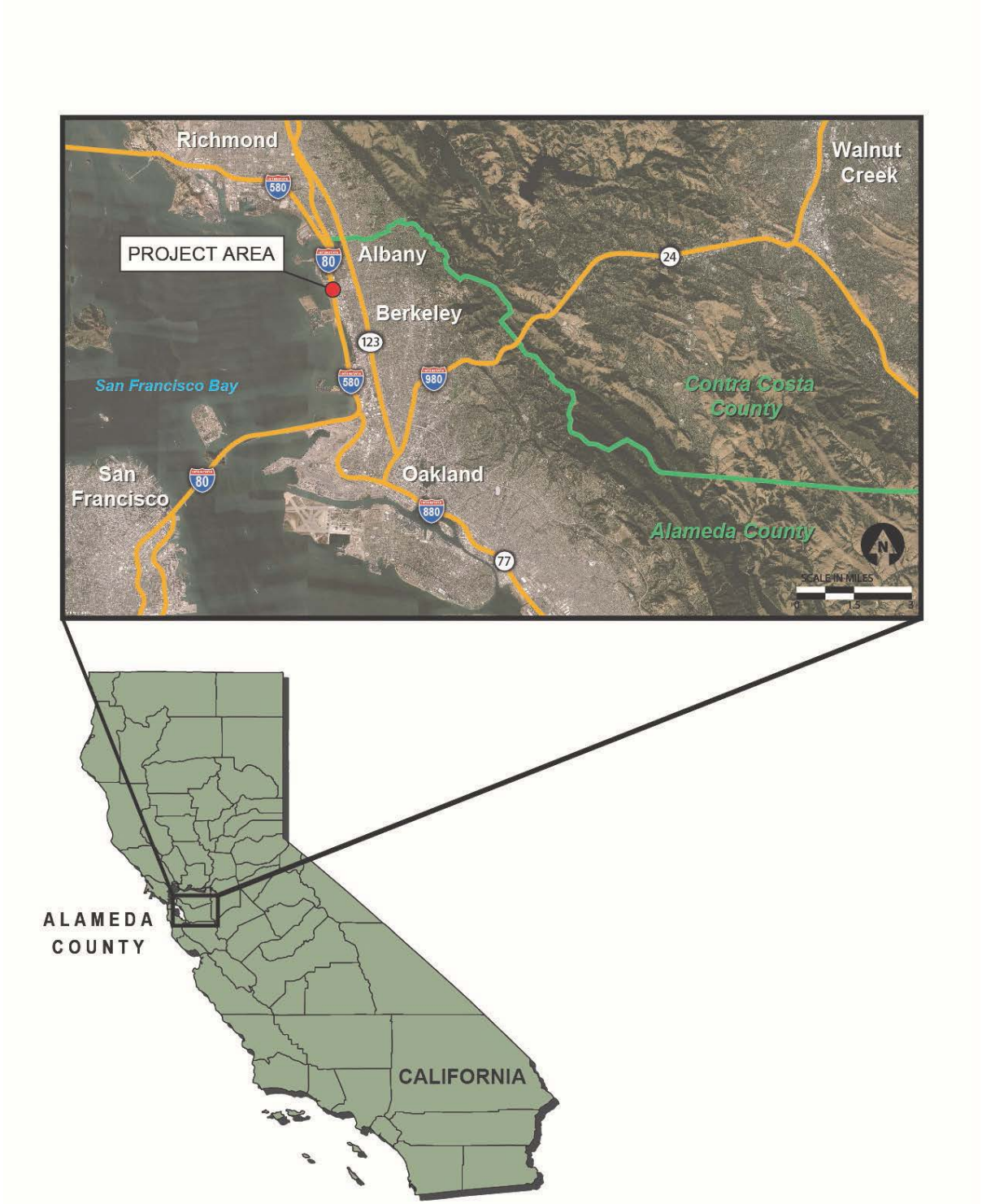

Figure 1-1: Project Vicinity

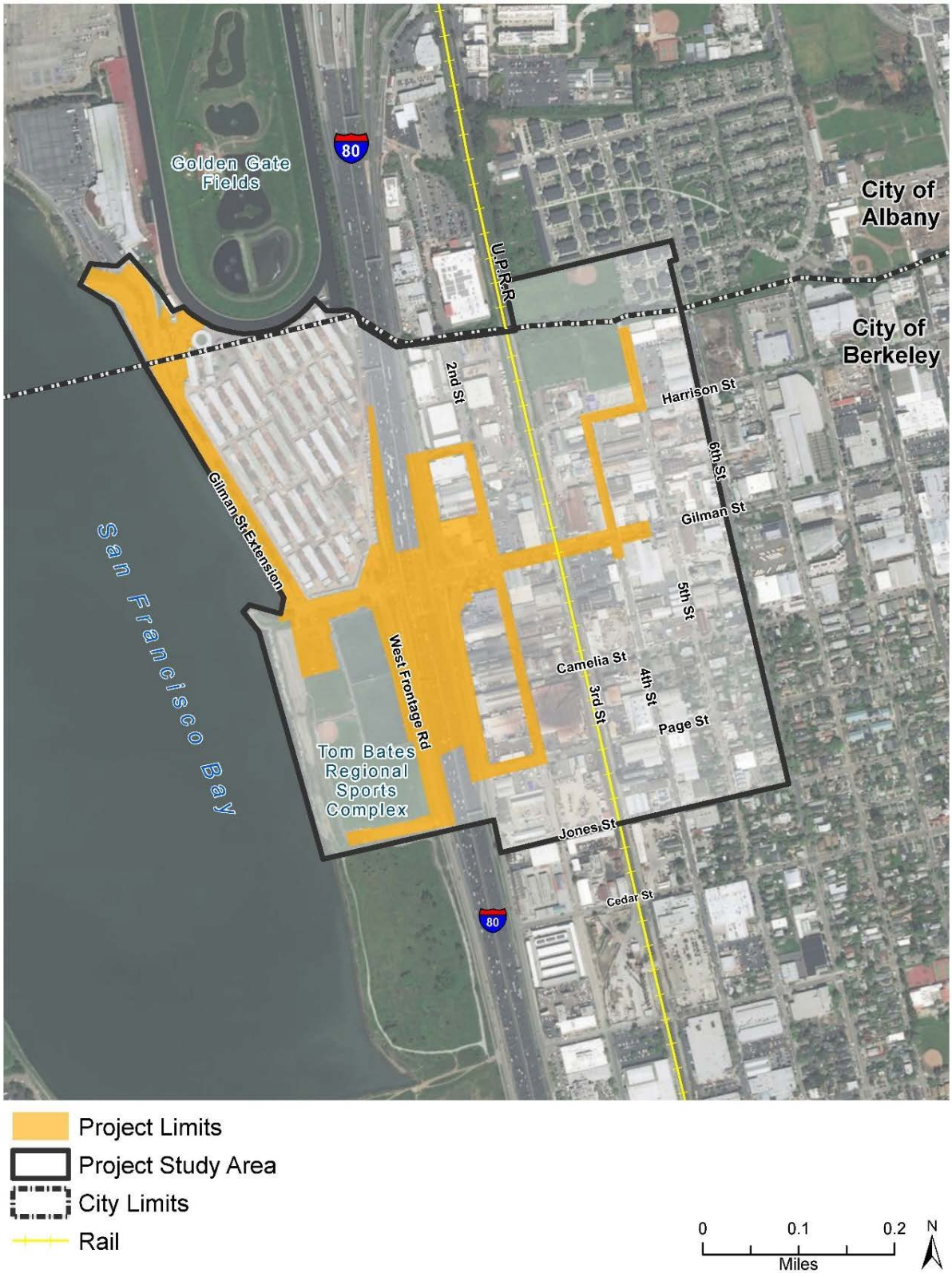

Figure 1-2: Project Location

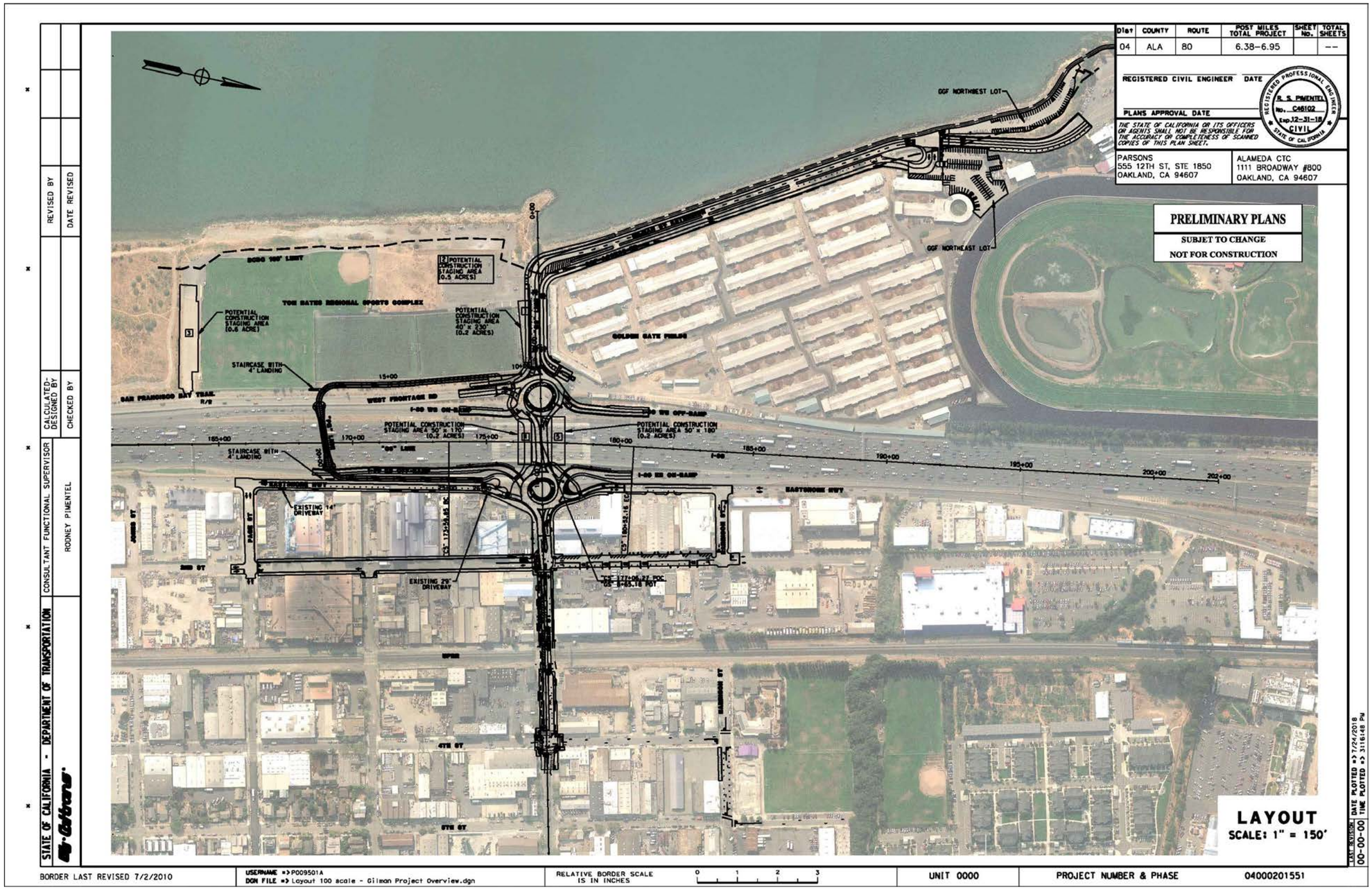

Figure 1-3: Roundabout Alternative

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Chapter 2 Land Use

2.1 Existing and Future Land Use

2.1.1 Affected Environment

Existing Land Use

The project study area is located within Alameda County, which is located on the eastern shore of San Francisco Bay. The county has a total area of 739 square miles. The study area is located within the neighborhoods of West Berkeley (City of Berkeley) and Waterfront and Oceanview (City of Albany). The city of Emeryville is located to the south and outside of the project study area.

According to the City of Berkeley General Plan (West Berkeley Plan), the West Berkeley Plan area represents approximately 17 percent of Berkeley's 10.5 square miles of land area and 7.2 square miles of water. West Berkeley extends the length of the city in a strip near the city's western edge (adjacent to I-80) and is bordered to the north by Albany, on the west by the waterfront and the Berkeley Marina, on the south by Emeryville and Oakland, and on the east (east of San Pablo Avenue) by South Berkeley and Central Berkeley. Within the study area, land uses are heavy manufacturing, light manufacturing and wholesaling, other industrial, office based, residential, and live-work.

According to the City of Albany General Plan (Albany 2035 General Plan, 2016), the Waterfront is the planning area west of I-80 and includes McLaughlin Eastshore State Park and Golden Gate Fields. East of I-80 is the Oceanview neighborhood, which includes the University of California Berkeley family study housing, called University Village, and a commercial mixed-use area. North of Oceanview are the Solano Hills and Eastshore neighborhoods; west is the Dartmouth neighborhood. Golden Gate Fields is located in the project study area and is zoned as Commercial Recreation. Other land uses within the study area are parks and open space and medium-density residential.

Existing land uses in the study area are shown in Figure 2-1. Major employers in Berkeley and Albany include the University of California, Berkeley (UCB), Lawrence Berkeley National Laboratory (LBNL), Golden Gate Fields, Target, Alta Bates Medical Center, Bayer Corporation, Pacific Steel Casting Company, and Berkeley Bowl. Additionally, many recreational facilities are located near in the study area, including the Bay Trail, Golden Gate Fields, Tom Bates Regional Sports Complex, Harrison Park, and Fielding Fields

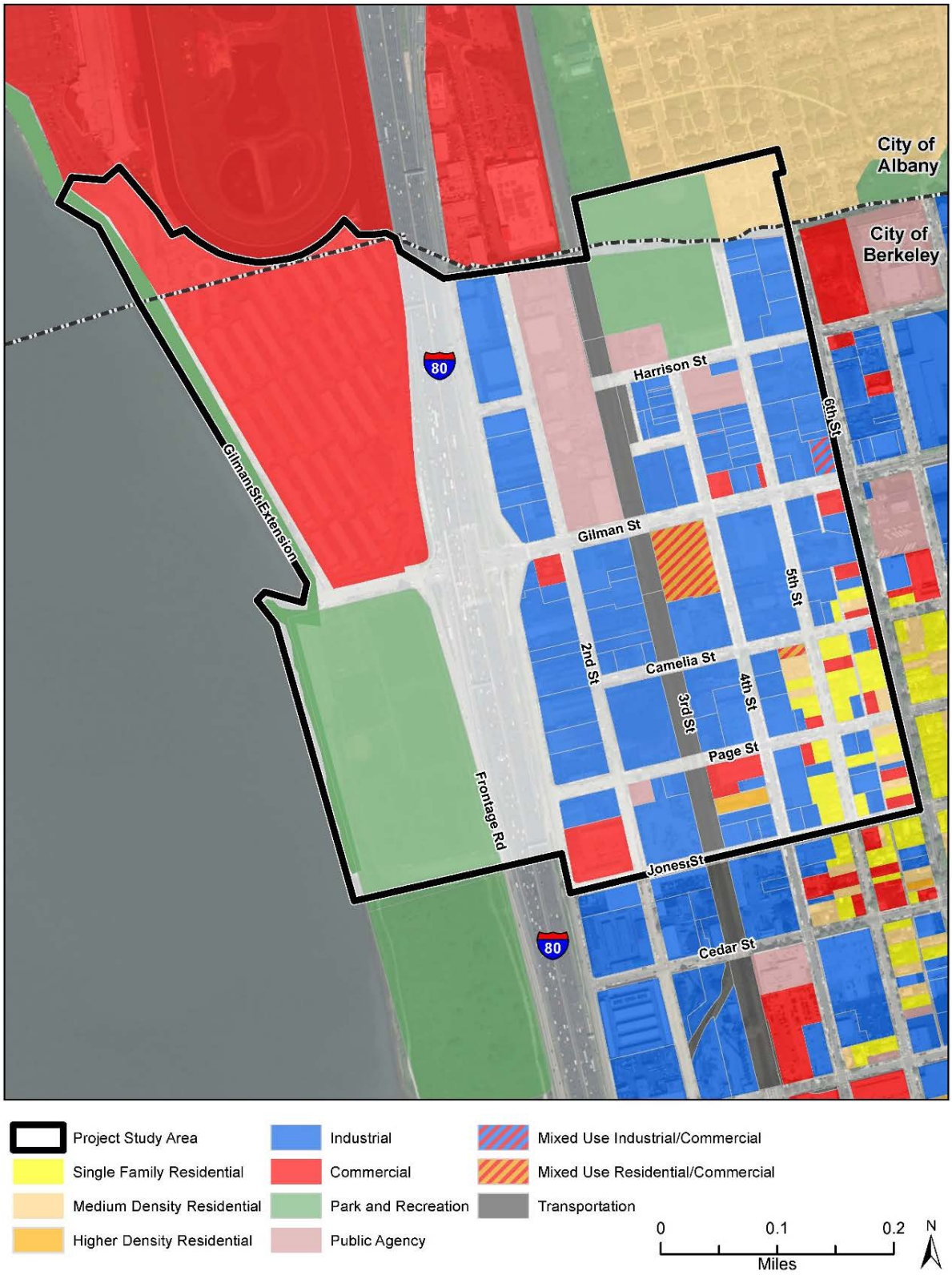

Figure 2-1: Existing Land Use

Development Trends

Based on 2018 MTC and ABAG population, housing, and employment forecasts, Alameda County is expected to experience continued population growth over the next 35 years at a slightly higher rate than the region and above the average rate compared to other Bay Area counties. The projected population for Alameda County between 2015 and 2040 is projected to increase by 28.7 percent, while the projected population growth for the region is 27.1 percent during the same time period. Job growth in Alameda County is projected to increase at a lower rate, compared to the average rate in the region. The projected job growth for Alameda County between 2015 and 2040 is projected to increase by 14.2 percent, while the projected job growth for the region is 17.2 percent. Alameda County is expected to continue to see population and household growth due to job growth within and outside the county. In particular, job growth in Silicon Valley to the south, combined with high housing prices, is expected to lead to an increase in the number of commuters traveling within the San Francisco Bay Area.

As a result of this projected growth, Alameda County and its cities share challenges in providing an adequate supply and range of housing opportunities; developing economic and employment opportunities; locating housing and jobs in proximity to one another; and maintaining the quality of life for residents.

Berkeley currently is experiencing low to moderate population growth, which is expected to continue in the future. From 2000 to 2010, Berkeley experienced a 3.5 percent increase in the number of residents living in the city. According to MTC and ABAG 2018 projections, Berkeley's population is projected to grow 17.9 percent between 2015 and 2040, to approximately 140,930 people. At the same time, Albany is projected to have a modest 6.9 percent population growth from 2015 to 2040, to approximately 20,425 people.

According to the 2015 Berkeley Housing Element, the city's age trends between 2000 and 2010 continued along their previous trajectory. Berkeley's population of those aged 55 and over rose from 19 to 23 percent, while those aged 18-24 rose from 22 to 27 percent. People aged 18 to 24 comprise the largest portion of the population in Berkeley, largely due to the presence of UCB.

According to the Housing Element, between 2010 and 2015, the total population and the number of households in Berkeley increased, but the average household size remained the same at 2.17 persons per household. In 2010, 41 percent of housing units were owner-occupied compared to 43 percent in 2000. Of all the households in Berkeley in 2010, 41 percent of them were deemed family households.

Development in Berkeley and Albany, like in other portions of the Bay Area, will continue to be driven by the ongoing need and demand for multi-residential properties. According to the 2015 Berkeley Housing Element, in 2012 almost half of all of Berkeley's housing stock was comprised of single-family units, and roughly 43 percent of Berkeley's housing units are owner-occupied. Of the multi-family units, an estimated 7,398 units are in buildings with 20 or more units. The limited supply of remaining residentially zoned vacant land will require the City to focus on infill development in the urban core and along major transportation corridors, including San Pablo Avenue and University Avenue.

Major Approved and Active Projects

Major recently completed, approved, and active projects within 1 mile of the study area are listed in Table 2-1.

Table 2-1: Major Projects within 1 Mile of the Study Area

Name	Jurisdiction (Location)	Proposed Uses	Status
Transportation Projects			
University Ave Overcrossing (Increase Vertical Clearance Project, EA 2K830)	City of Berkeley	This project will increase the vertical clearance at the I-80/University Avenue Overcrossing to current standard (16.5 feet) by either raising or replacing the existing structure. This will require raising or replacing the on- and off-ramps, as well as the adjacent bridge to match the new elevation.	Planning
Interstate 80/Ashby Avenue (SR-13) Interchange Improvements	City of Berkeley and City of Emeryville	The project will reconstruct the Ashby Avenue interchange, which is bordered by Frontage Road and San Francisco Bay to the west, an industrial/commercial/residential section of Emeryville to the southeast and Berkeley's Aquatic Park to the northeast. This project will provide a direct connection between westbound Interstate 80 (I-80) and Emeryville by way of Shellmound Street and will include: • A new bridge to replace existing bridges • A roundabout interchange • Provision of bicycle and pedestrian access over the I-80 freeway at the Ashby Avenue interchange	Project approval and environmental document to be completed in late 2019/early 2020
MBGR Replacement Project Between University and Ashby in Berkeley (EA 4G230)	City of Berkeley	This project would replace sections of guard rail, temporary railing, and concrete barrier with new concrete barriers with chain link fences on I-80 between Potter Street on-ramp and University Ave off-ramp.	Certificate of Environmental Compliance signed, April 2018

Table 2-1: Major Projects within 1 Mile of the Study Area

Name	Jurisdiction (Location)	Proposed Uses	Status
I-80 Safety Lighting & Median Barrier (EA3J700)	Alameda County	The purpose of this project is to improve nighttime visibility thereby enhancing safety and reducing the potential and severity of collisions along this stretch of I-80. The project would install a median concrete barrier to mitigate glare impact, double luminaire mast arm lighting, and high mast light poles to provide uniform luminosity on I-80 between the Ashby Avenue Overcrossing and the northern boundary of Alameda County.	First administrative draft environmental document review completed
Park and Recreation Projects			
Aquatic Park Improvement Program	City of Berkeley	The Aquatic Park Improvement Program consists of a series of capital improvements to Aquatic Park that will improve the hydrology and water quality of the lagoons, wetland and upland habitat, and user amenities, such as improved pathways, seating, overlooks, and interpretive signage. Phase I addresses the water quality and some of the habitat improvements by increasing the water circulation and tidal exchange to bring cooler, more saline Bay water into the lagoons, which will improve habitat for invertebrates and fish, and the birds that feed on them. Phase I also includes removing invasive non-native plant species and replanting with appropriate native plants. Phases 2 through 4 will further improve the upland habitat and provide user amenities.	Planning and Design Phase (Draft Environmental Impact Report 2012, Final Environmental Impact Report under preparation)
Proposed Fieldhouse at Tom Bates Regional Sports Complex	City of Berkeley	The preliminary vision of the fieldhouse building consists of a restroom, a meeting room, and a storage area, with priority on ease of access from the fields, minimal impact to parking, and good security.	Planning and Design Phase
McLaughlin Eastshore State Park Brickyard Construction	City of Berkeley	Plans are in development for walking trails, picnic areas, restrooms, and parking.	Construction begins fall 2018, completion summer 2019
Berkeley Marina Capital Improvement Program	City of Berkeley	Transformative and impactful projects are in progress at the Berkeley Waterfront, and more are on their way. The University Avenue realignment and reconfiguration will improve the road that is the gateway to the Waterfront. Evaluations of the beloved Berkeley Pier are in progress, studying options that would allow this resource to be reopened to the public. A new public restroom, windsurfing area, and	Design and Construction

Table 2-1: Major Projects within 1 Mile of the Study Area

Name	Jurisdiction (Location)	Proposed Uses	Status
		landscaped parking lot are under construction at the South Cove Sailing Basin. The Bay Trail is being extended to the Adventure Playground. In fiscal years 2018 and 2019, proposed projects focus on dock and restroom improvements, as well as landscape and real estate planning efforts.	
Albany Beach Restoration and Public Access Project	Cities of Albany and Berkeley	The project involves construction of a 4,983-foot-long (0.94-mile) segment of the Bay Trail between the termini of Buchanan and Gilman streets; expansion of a recreational beach; and improvement of associated park facilities. The project is currently in Phases 2 and 3, which are expected to be completed in 2018. Phase 2 is focused on improving the Albany Beach area, including dune and wetland restoration, restrooms, parking and other improvements. Phase 3 is focused on extending the San Francisco Bay Trail between Buchanan and Gilman streets west of Golden Gate Fields.	Phase 1 (Albany Neck improvements) completed June 2016; Phase 2 (Albany Beach area) and 3 (Bay Trail extension) permitting and construction is scheduled to be completed in 2018
Residential Projects			
1461-1463 Fifth Street	City of Berkeley	New townhomes	Completed
600 Addison Street	City of Berkeley	The project applicant is requesting approval of a master use permit to allow redevelopment of the project site with up to 475,000 gross square feet of research and development uses and office uses with associated parking, circulation, utility, and landscaping improvements. In addition, the project is requesting the conversion of approximately 8,000 square feet of protected warehouse space that was previously removed from the site. Two potential development schemes are currently proposed, with a varied number of buildings and parking and circulation improvements; both schemes, referred to as Scheme 1 (which includes seven buildings) and Scheme 2 (includes five buildings) will be evaluated fully in the Environmental Impact Report.	Notice of Preparation review ended November 27, 2017
Multi-Use Development Projects			
1900 Fourth Street	City of Berkeley	Redevelopment of the site with a mix of residential and commercial uses totaling 207,590 gross square feet, as well as associated parking and circulation (148,200 gross square feet), open space and	Draft Environmental Impact Report (end of review March 2017)

Table 2-1: Major Projects within 1 Mile of the Study Area

Name	Jurisdiction (Location)	Proposed Uses	Status
		landscaping (16,090 square feet), and utility improvements. The proposed uses would be located within two separate buildings, a three-story building at the corner of Fourth Street and Hearst Avenue, and a one- to five-story building on the balance of the site. Approximately 118,370 square feet of residential uses (135 dwelling units) would be located on the second level and above; commercial uses would total approximately 33,080 gross square feet and would be located on the ground level.	
1320 Ninth Street	City of Berkeley	Create a laboratory/manufacturing facility within existing warehouse.	Permit Issued
1285 Eastshore Highway	City of Berkeley	Installation of new Verizon cell tower.	Completed
2100 San Pablo Avenue Residential Care Facility for the Elderly	City of Berkeley	The project involves demolishing the existing two single-story commercial buildings, and constructing 75,064 square feet, including 96 residential units (67 studio suits, 20 one-bedroom suites, and 9 two-bedroom suites), group dining and activity rooms, admission offices, staff lounge, wellness and meditation rooms, caregiver stations, a lobby/great room, and a cafeteria. Outdoor space would include a center courtyard measuring 2,174 square feet and outdoor decks on each floor measuring 5,049 total square feet. The center courtyard would abut and be level with the R-1 residential zoning district at the western property line. The proposed commercial component of the project, which would be on the ground floor fronting San Pablo Avenue, would include a beauty salon (319 square feet), an art and craft studio (654 square feet), and a geriatric wellness center (853 square feet) intended to serve both residential of the Residential Care Facility for the Elderly and the elderly in general. In addition, a corner restaurant (1,500 square feet) would serve both the Residential Care Facility for the Elderly residents and the general public. Construction would occur over approximately 18 to 22 months.	Negative Declaration, review ended November 13, 2017
1740 San Pablo Avenue Mixed-Use Project	City of Berkeley	The project would demolish the existing buildings on the project site and construct a new five-story mixed-use building. The proposed building would have the following characteristics: five stories and 59.5 feet in height, 48 dwelling units, 3 live work units, and an approximately 800-square-foot cafe,	Negative Declaration (January 2018)

Table 2-1: Major Projects within 1 Mile of the Study Area

Name	Jurisdiction (Location)	Proposed Uses	Status
		42,073 square feet of gross floor area, a parking garage with 53 parking spaces, including 6 electronic vehicle charging ready spaces, and 48 bicycle spaces.	
University Village Retail Mixed Use Project, 1080 Monroe Avenue	City of Albany	The 6.3-acre project site in University Village is located to the northwest and southwest of the Monroe Street/San Pablo Avenue intersection. The proposed project includes a 27,500-square-foot grocery store, 18,000 square feet of retail space, a 175-unit senior housing project, and associated improvements.	Completed

Source: City of Berkeley Planning Department, 2016 and 2018; ceganet.com, 2016 and 2018; City of Albany Planning Department, 2018; City of Berkeley Parks Recreation and Waterfront Department, 2018; East Bay Regional Park District, 2018; Caltrans 2018; Alameda CTC 2018, BCDC 2018.

2.1.2 Environmental Consequences

Project-Level Impacts

Build Alternative

The Build Alternative would require the acquisition of property, as discussed further in Section 4.4, Relocation and Real Property Acquisition. The Build Alternative would convert 0.08 acre of commercial land to transportation use for the western roundabout interchange; 0.15 acre of parkland along Gilman Street Extension to the new Bay Trail extension and utility use; and 0.3 acre of parkland along Frontage Road to transportation use for the pedestrian and bicycle overcrossing. Overall, this conversion of land would be minor (0.023% of commercial land and 0.2% of park land within Berkeley) compared to the total amount of land in the study area (184 acres) and within Alameda County (739 square miles). In addition, these changes in land use towards transportation-related use may prove to be beneficial by providing infrastructure for surrounding land uses, improved access to businesses and recreational land uses, and linkages between West Berkeley, Albany, and Emeryville.

The Build Alternative is not expected to result in a shift in land use patterns or change land uses beyond the minor land acquisition needed to construct the proposed roundabouts. The applicable general plans indicate that the present land uses should continue in the future; therefore, the Build Alternative would not have an adverse effect on existing or future land uses.

No Build Alternative

The No Build Alternative would not convert any existing land uses to transportation uses, nor would it have direct effects on land uses in the study area. Furthermore, the location, characteristics, and uses of existing transportation facilities generally would not change.

Construction Impacts

Build Alternative

The Build Alternative would require temporary construction easements for construction activities, equipment storage, staging, and access. The Build Alternative would temporarily acquire 10.52 acres of land for these activities. The majority (8.15 acres) would be within Golden Gate Fields along Gilman Street Extension.

No Build Alternative

The No Build Alternative would not temporarily acquire any existing property, nor would it affect land uses in the study area. Furthermore, the location, characteristics, and uses of existing transportation facilities generally would not change.

2.1.3 Avoidance, Minimization, and/or Mitigation Measures

The project alignment has been designed to fit within the existing right-of-way (ROW) where feasible. In addition, the measures identified in Section 4.4, Relocations and Real Property Acquisition, Avoidance, Minimization, and/or Mitigation Measures, also apply. Additional avoidance and minimization measures are not required.

2.2 Consistency with State, Regional, and Local Plans

2.2.1 Affected Environment

This section identifies existing regional, local, and area plans and policies that apply to the study area. Future growth and development in the study area are guided by land use policies and programs set forth in numerous planning documents, as described in the following sections. In addition, several other location or element-specific plans are considered important planning tools and are briefly summarized below.

Metropolitan Transportation Commission (MTC) Plan Bay Area MTC's *Plan Bay Area,* adopted in 2013, is a long-range integrated transportation and land-use/housing strategy through 2040 for the San Francisco Bay Area. *Plan Bay Area* marks the nine-county region's first long-range plan to meet the requirements of California's landmark 2008 Senate Bill 375,

which calls on each of California's 18 metropolitan areas to develop a Sustainable Communities Strategy to accommodate future population growth and reduce greenhouse gas emissions from cars and light trucks.

City of Berkeley General Plan The *City of Berkeley General Plan* is a comprehensive, long-range statement of policies for the development and preservation of Berkeley that was adopted in 2003. The General Plan is a statement of community priorities and values to be used to guide public decision making in future years and is a compilation of goals, objectives, policies, and actions designed to manage change within Berkeley. The General Plan is designed to work in concert with the City's more detailed Area Plans, such as *The West Berkeley Plan.* The General Plan's goals are implemented through decisions and actions consistent with the objectives, policies, and actions of each of the nine Plan Elements. The goals and associated policies and actions are intended to work together to establish and maintain Berkeley as a sustainable community that promotes social equity, environmental quality, and economic prosperity.

The West Berkeley Plan The land use concept of *The West Berkeley Plan* (1993) is designed specifically to support the economic, environmental, transportation, urban design/historic preservation, and housing goals of *The West Berkeley Plan.* This plan restructured West Berkeley's land use/zoning districts to support appropriate economic development. *The West Berkeley Plan's* land use concept is designed to support the balanced economic development approach of multiple business sectors within the area by targeting different locations for different uses. There are seven distinct land use districts within *The West Berkeley Plan* area: mixed use/light industrial, manufacturing, mixed manufacturing, mixed use/residential, commercial, residential, and live work. The Transportation Element presents a strategy for maintaining and improving the efficiency and environmental soundness of transportation in West Berkeley. The Physical Form Element identifies West Berkeley's entry corridors and how they could be improved to establish a locality's identity.

Berkeley Pedestrian Master Plan Adopted in June 2010, the *Berkeley Pedestrian Master Plan* establishes specific goals and recommendations to ensure that walking in Berkeley is safe, attractive, easy, and convenient for people of all ages and abilities. Berkeley has a strong tradition of pedestrian travel; according to the U.S. Census Bureau, 2012 American Community Survey (ACS), approximately 17 percent of Berkeley adults walk to work on a daily basis compared to the national, state, and Alameda County averages of approximately 3 percent.

As well as identifying citywide infrastructure improvement projects and improvements at specific intersections, the *Berkeley Pedestrian Master Plan* recommends changes to the City's zoning and design review to enhance the pedestrian environment, provides design standards that integrate innovative best practice for improved pedestrian experience, and calls for public education campaigns and increased law enforcement. Consistent with the plan, over the last 2 years City staff in the Public Works and Police Departments have joined forces, along with Alameda County Safe Routes to Schools, to conduct pedestrian safety and enforcement activities.

Berkeley Bicycle Plan The goal of the 2005 *Berkeley Bicycle Plan* is to make bicycling safer and more convenient for bicyclists of all ages and skill levels. Because bicycling is nonpolluting and energy efficient, it is the preferred mode for many individuals, ranging from cash-strapped students to environmentally conscious families. Implementing the bicycling improvements identified in the Plan should boost the number of people using a bike for work trips and utilitarian trips. Berkeley has the highest percentage of bike commuters in Alameda County, with goals to increase it even further.

Eastshore State Park General Plan The McLaughlin Eastshore State Park extends 8.5 miles along the East Bay shoreline from the Bay Bridge to Richmond. It includes 1,854 acres of uplands and tidelands along the waterfronts of Oakland, Emeryville, Berkeley, Albany, and Richmond. McLaughlin Eastshore State Park parallels the most heavily traveled corridor in the East Bay, making it a highly visible, highly accessible area of parkland.

The East Bay Regional Park District (EBRPD), acting as agent for the State, used funds from EBRPD's 1988 Measure AA and state park bonds to acquire the property and clean up contaminated areas at a cost of more than $33 million. The *Eastshore State Park General Plan* identifies the future preservation, conservation, and recreation uses and improvements for the park.

2.2.2 Environmental Consequences

Land-use impacts would occur if proposed project effects would either conflict with General Plan land use designations or zoning, or with applicable environmental plans and policies.

Project-Level Impacts

Build Alternative

Planning goals and policies of the county affected by the proposed project are described in Table 2-2. The table also presents planning goals and policies included in regional and area transportation plans.

Table 2-2: Consistency with State, Regional, and Local Plans and Programs

Actions/Goals/Policies	Build Alternative	No Build Alternative
Metropolitan Transportation Commission (MTC) Plan Bay Area		
Investment Strategy 4: Boost Freeway and Transit Efficiency.	**Consistent.** The Build Alternative would improve the efficiency of the I-80 on- and off-ramps, as well as Gilman Street, by reducing congestion and delay.	**Not Consistent.** Under the No Build Alternative, the I-80 on- and off-ramps, as well as Gilman Street, would not undergo any improvements. Delay would continue to worsen, as would the efficiency of the ramps.
City of Berkeley General Plan		
Policy LU-11 Pedestrian- and Bicycle-Friendly Neighborhoods: Ensure that neighborhoods are pedestrian- and bicycle-friendly with well-maintained streets, street trees, sidewalks, and pathways.	**Consistent.** The Build Alternative includes the implementation of a pedestrian/bicycle overcrossing, which provides a safer way for pedestrians and bicyclists to travel through the I-80/Gilman Street interchange. It also includes a two-way cycle track between 2nd and 4th streets and an extension of the Bay Trail.	**Not Consistent.** The No Build Alternative does not include any improvements to pedestrian or bicycle facilities in the study area.
Policy LU-34 Industrial Protections: Protect industrial uses in West Berkeley.	**Consistent.** The Build Alternative would not affect existing industrial land uses in West Berkeley.	**Consistent.** The No Build Alternative would not affect existing industrial land uses in West Berkeley.
Transportation Objective 6: Create a model bicycle- and pedestrian-friendly city where bicycling and walking are safe, attractive, easy, and convenient forms of transportation and recreation for people of all ages and abilities.	**Consistent.** The Build Alternative includes the implementation of a pedestrian/bicycle overcrossing, which provides a safer way for pedestrians and bicyclists to travel through the I-80/Gilman Street interchange. It also includes a two-way cycle track between 2nd and 4th streets and an extension of the Bay Trail.	**Not Consistent.** The No Build Alternative does not include any improvements to pedestrian or bicycle facilities in the study area.
Policy T-22 Traffic Circles and Roundabouts: Encourage the use of landscaped traffic circles to calm traffic in residential areas. **Action: A.** Consider roundabouts as a viable traffic-calming device, especially at the Shattuck and Adeline intersection, the Gilman Street Freeway on- and off-ramps, and at other appropriate intersections in the city.	**Consistent.** The Build Alternative includes a roundabout at the I-80/Gilman Street on- and off-ramps.	**Not Consistent.** Under the No Build Alternative, roundabouts would not be implemented at the I-80/Gilman Street interchange.

Table 2-2: Consistency with State, Regional, and Local Plans and Programs

Actions/Goals/Policies	Build Alternative	No Build Alternative
Policy T-29 Infrastructure Improvements: Facilitate mobility and the flow of traffic on major and collector streets (shown on the Vehicular Circulation Network map at the end of the Element), reduce the air quality impacts of congestion, improve pedestrian and bicycle access, and speed public transportation throughout the city by making improvements to the existing physical infrastructure. **F.** Improve freeway approaches and interchanges at Ashby Avenue (including removal of Potter Street ramp) and Gilman Street (to improve pedestrian and bicycle circulation to the waterfront and facilitate truck access to West Berkeley).	**Consistent.** The Build Alternative includes a roundabout at the I-80/ Gilman Street on- and off-ramps to improve mobility and the flow of traffic, which also helps reduce air quality impacts from idling vehicles. The Build Alternative also includes a pedestrian/bicycle overcrossing, which provides a safer way for pedestrians and bicyclists to travel through the I-80/Gilman Street interchange, a two-way cycle track between 2nd and 4th streets, and an extension of the Bay Trail. These pedestrian and bicycle improvements improve pedestrian and bicycle access in the area.	**Not Consistent.** Under the No Build Alternative, roundabouts would not be implemented at the I-80/Gilman Street interchange, and congestion, delay, and air quality would continue to worsen. In addition, no pedestrian or bicycle facilities would be implemented, which would hinder access in the area.
Policy OS-10 Access Improvements: Improve transit, bicycle, disabled, and pedestrian access to and between open space and recreation facilities, including regional facilities such as the Berkeley Marina, UCB open space, EBRPD lands, the McLaughlin Eastshore State Park, and recreational facilities in other cities.	**Consistent.** The Build Alternative includes a pedestrian/bicycle overcrossing, which provides a safer way for pedestrians and bicyclists to travel through the I-80/ Gilman Street interchange, a two-way cycle track between 2nd and 4th streets, and an extension of the Bay Trail. These pedestrian and bicycle improvements improve access to Tom Bates Regional Sports Complex, owned by EBRPD, and to the Bay Trail.	**Not Consistent.** Under the No Build Alternative, no pedestrian or bicycle facilities would be implemented, which would not improve access to recreational facilities in the area.
The West Berkeley Plan		
Environmental Quality Goal 5: Enhance air quality in West Berkeley.	**Consistent.** The Build Alternative would reduce congestion, delay, and the occurrence of idling vehicles, all of which contribute to increased air quality emissions. By reducing these, the Build Alternative would enhance air quality in the study area.	**Not Consistent.** Under the No Build Alternative, congestion and delay would continue to worsen, which would lead to additional idling vehicles and, over time, deteriorating air quality.

Table 2-2: Consistency with State, Regional, and Local Plans and Programs

Actions/Goals/Policies	Build Alternative	No Build Alternative
Transportation Goal 1: Improve traffic flow and air quality by reducing reliance on single-occupant automobiles, by encouraging use of alternative means of transportation.	**Consistent.** As part of the Build Alternative, double roundabouts would be implemented to reduce congestion and delay, which would enhance air quality in the study area. In addition, to encourage alternative means of transportation, the Build Alternative includes a pedestrian/bicycle overcrossing, which provides a safer way for pedestrians and bicyclists to travel through the I-80/Gilman Street interchange, a two-way cycle track between 2nd and 4th streets, and an extension of the Bay Trail.	**Not Consistent.** Under the No Build Alternative, congestion and delay would continue to worsen, which would lead to additional idling vehicles and, over time, deteriorating air quality. In addition, no pedestrian or bicycle facilities would be implemented.
Transportation Goal 3: Improve the circulation system where necessary, particularly around Ashby Avenue.	**Consistent.** The Build Alternative includes a roundabout at the I-80/ Gilman Street on- and off-ramps to improve mobility and the flow of traffic.	**Not Consistent.** Under the No Build Alternative, roundabouts would not be implemented at the I-80/Gilman Street interchange, and congestion and delay would continue to worsen.
Transportation Goal 6: Improve pedestrian and bicycle access in and around West Berkeley.	**Consistent.** The Build Alternative includes the implementation of a pedestrian/bicycle overcrossing, which provides a safer way for pedestrians and bicyclists to travel through the I-80/Gilman Street interchange. It also includes a two-way cycle track between 2nd and 4th streets and an extension of the Bay Trail. Sidewalk improvements, shared-use path, shortened intersection crossings, and pedestrian-friendly signal improvements would be included throughout the project limits.	**Not Consistent.** The No Build Alternative does not include any improvements to pedestrian or bicycle facilities in the study area.
Physical Form Goal 2: Improve major entry corridors throughout West Berkeley.	**Consistent.** The Build Alternative would simplify the complicated entry into the Industrial and Manufacturing Districts of West Berkeley. Additional improvements, such as uniform landscaping and relocation of utilities, would improve the overall image of Gilman Street.	**Not Consistent.** The No Build Alternative would not improve the Gilman Street Entry Corridor.

Table 2-2: Consistency with State, Regional, and Local Plans and Programs

Actions/Goals/Policies	Build Alternative	No Build Alternative
Berkeley Pedestrian Master Plan		
Goal 1: Plan, Build, and Maintain Pedestrian Supportive Infrastructure.	**Consistent.** The Build Alternative includes a pedestrian/bicycle overcrossing, which provides a safer way for pedestrians to travel through the I-80/Gilman Street interchange. Sidewalk improvements, shared-use path, shortened intersection crossings, and pedestrian-friendly signal improvements would be included throughout the project limits.	**Not Consistent.** Under the No Build Alternative, no additional pedestrian facilities would be implemented.
Policy 2.1 Disabled Access: Improve pedestrian access for the entire disabled community.	**Consistent.** The pedestrian/bicycle overcrossing, intersections, and sidewalks would be designed to be American with Disabilities Act (ADA) compliant, which would improve access for the disabled community.	**Not Consistent.** Under the No Build Alternative, no pedestrian facilities would be implemented, which would not improve access for the disabled community.
Policy 2.2 Pedestrian Safety and Accessibility: Provide safe and convenient pedestrian crossings throughout the city.	**Consistent.** The Build Alternative includes a pedestrian/bicycle overcrossing, which provides a safer way for pedestrians to travel through the I-80/Gilman Street interchange. Sidewalk improvements, shared-use path, shortened intersection crossings, and pedestrian-friendly signal improvements would be included throughout the project limits.	**Not Consistent.** Under the No Build Alternative, no additional pedestrian facilities would be implemented. Currently, the project area lacks ADA curb ramps and other pedestrian safety features.
Policy 2.3 Intersection with Severe or High Collision Rates: Reduce pedestrian and bicycle collisions, injuries, and fatalities.	**Consistent.** Under the Build Alternative, a pedestrian/bicycle overcrossing would be implemented, which provides a safer way for pedestrians to travel through the I-80/Gilman Street interchange. Sidewalk improvements, shared-use path, shortened intersection crossings, and pedestrian-friendly signal improvements would be included throughout the project limits. This would help reduce the occurrence of accidents.	**Not Consistent.** Under the No Build Alternative, no additional pedestrian facilities would be implemented, which would not improve safety in the study area.

Table 2-2: Consistency with State, Regional, and Local Plans and Programs

Actions/Goals/Policies	Build Alternative	No Build Alternative
Berkeley Bicycle Plan		
Policy D-1: Design a Low Stress Bikeway Network suitable for the "Interested but Concerned" cyclists, which would include people of all ages and ability levels riding bicycles in Berkeley. **Policy D-1 Action:** Design a network of continuous Low Stress Bikeways as identified in the Berkeley Bicycle Plan.	**Consistent.** The Build Alternative includes implementation of a pedestrian/bicycle overcrossing, which provides a safer way for bicyclists to travel through the I-80/ Gilman Street interchange. It also includes a two-way cycle track between 2nd and 4th streets, re-designed low-stress crossings at 2nd, 3rd, and 4th Streets, low stress crossings between Codornices Creek area and the Gilman Street cycle track, and an extension of the Bay Trail.	**Not Consistent.** The No Build Alternative does not include any improvements to bicycle facilities in the study area. The existing high stress intersections would not be improved.
Policy PD-1: Construct projects within the Bicycle Plan utilizing all available internal and external resources.	**Consistent.** The bicycle improvements included under the Build Alternative are fully funded from available resources.	**Not Consistent.** The No Build Alternative does not include any improvements to bicycle facilities in the study area.
Albany 2035 General Plan, Transportation Element		
Action T-3.C, Bicycle and Pedestrian Access to the Waterfront: Pursue the long-term development of a grade-separated bicycle and pedestrian crossing of the Union Pacific Railroad and I-80 to better connect Albany to its waterfront. Such a project could be collaboratively funded by multiple jurisdictions. Also, work with the City of Berkeley and Caltrans to facilitate access to the waterfront via Gilman Street.	**Consistent:** The Build Alternative includes implementation of a pedestrian/bicycle overcrossing, which provides a safer way for bicyclists and pedestrians to travel through the I-80/Gilman Street interchange. The overcrossing, and the bicycle and pedestrian improvements at grade, both provide improved access to the waterfront via Gilman Street.	**Not Consistent.** The No Build Alternative does not include any improvements to bicycle and pedestrian access to the waterfront via Gilman Street.
Policy T-3.8: Bicycle and Pedestrian Connectivity: Improve the connectivity of Albany's pedestrian and bicycle networks by removing obstacles to pedestrian travel and linking major pathways, such as the Ohlone Greenway and the Bay Trail, to each other and to community facilities.	**Consistent:** The Build Alternative includes implementation of a pedestrian/bicycle overcrossing, which provides a safer way for bicyclists and pedestrians to travel through the I-80/Gilman Street interchange. The overcrossing, and the bicycle and pedestrian improvements at grade, both provide improved access to the waterfront via Gilman Street. The Build Alternative also improves and extends the Bay Trail. and closes a gap in the trail which improves connections between Albany and Berkeley.	**Not Consistent.** The No Build Alternative does not include any improvements to bicycle and pedestrian access to the waterfront via Gilman Street. The No Build Alternative does not improve access to the Bay Trail or improve connections between Albany and Berkeley.

Table 2-2: Consistency with State, Regional, and Local Plans and Programs

Actions/Goals/Policies	Build Alternative	No Build Alternative
Policy T-5.10, UC Village Circulation: Provide a safe, pedestrian-oriented circulation system within UC Village that emphasizes walking, bicycling, and transit use; decreases internal vehicle traffic, accommodates recreational trips, reinforces a sense of community, and seamlessly integrates with Albany's transportation system.	**Consistent:** The Build Alternative supports the pedestrian- and bicycle-oriented circulation plan for UC Village by connecting UC Village to the Gilman cycle track via 5th Street, Harrison Street, and 4th Street, with new painted shared lane markings (sharrows) for bicyclists and curb/sidewalk improvements for pedestrian and other non-motorized vehicles.	**Not Consistent:** The No Build Alternative does not include any improvements to bicycle and pedestrian circulation plans for UC Village.
San Francisco Bay Conservation District's San Francisco Bay Plan		
Transportation Policy 5: Transportation projects on the Bay shoreline and bridges over the Bay or certain waterways should include pedestrian and bicycle paths that will either be a part of the Bay Trail or connect the Bay Trail with other regional and community trails. Transportation projects should be designed to maintain and enhance visual and physical access to the Bay and along the Bay shoreline.	**Consistent:** The Build Alternative would include pedestrian and bicycle paths that would be part of the Bay Trail and connect with other regional and community trails. The Build Alternative would create new access to the Bay and along the Bay shoreline.	**Not Consistent:** The No Build Alternative would not include pedestrian and bicycle connectivity improvements to the Bay Trail or other regional and community trails.
Public Access Policy 5: Public access should be sited, designed, managed and maintained to avoid significant adverse impacts from sea level rise and shoreline flooding.	**Consistent:** The Build Alternative would create new access for bicyclists, pedestrians, and other non-motorized vehicles by extending the Bay Trail south from the Berkeley-Albany border to Gilman Street and Frontage Road. The Build Alternative incorporates project elements designed to minimize impacts from shoreline flooding.	**Not Consistent:** The No Build Alternative would not extend the Bay Trail or increase access for bicyclists, pedestrians, and other non-motorized vehicles in the study area. The existing 18 informal parking spaces would continue to provide motorized access to San Francisco Bay resources. This area would continue to be vulnerable to sea level rise and shoreline flooding.
Public Access Policy 9: Access to and along the waterfront should be provided by walkways, trails, or other appropriate means and connect to the nearest public thoroughfare where convenient parking or public transportation may be available. Diverse and interesting public access experiences should be provided which would encourage users to remain in the designated access areas to avoid or minimize potential adverse effects on wildlife and their habitat.	**Consistent:** The Build Alternative would extend the Bay Trail, which would provide access to San Francisco Bay resources for bicyclists, pedestrians, and other non-motorized vehicles. The new trail would provide a diverse and interesting public access route to the San Francisco Bay and encourage users to continue along the Bay Trail by completing a gap in the trail system.	**Not Consistent:** The No Build Alternative would not extend the Bay Trail or increase access to bicyclists, pedestrians, and other non-motorized vehicles. The No Build Alternative would not provide a new trail that would encourage users to continue riding along the Bay.

Table 2-2: Consistency with State, Regional, and Local Plans and Programs

Actions/Goals/Policies	Build Alternative	No Build Alternative
Public Access Policy 10: Roads near the edge of the water should be designed as scenic parkways for slow-moving, principally recreational traffic. The roadway and right-of-way design should maintain and enhance visual access for the traveler, discourage through traffic, and provide for safe, separated, and improved physical access to and along the shore. Public transit use and connections to the shoreline should be encouraged where appropriate.	**Consistent:** The Build Alternative would re-design the Gilman Street Extension adjacent to the Bay to provide access for automobile and truck traffic entering Golden Gate Fields at the service entrance, while also maintaining public access and parking in the area. .	**Consistent:** The No Build Alternative does not alter public access near the edge of the water.
Public Access Policy 11: Federal, state, regional, and local jurisdictions, special districts, and the Commission should cooperate to provide appropriately sited, designed and managed public access, especially to link the entire series of shoreline parks, regional trail systems (such as the San Francisco Bay Trail) and existing public access areas to the extent feasible without additional Bay filling and without significant adverse effects on Bay natural resources. State, regional, and local agencies that approve projects should assure that provisions for public access to and along the shoreline are included as conditions of approval and that the access is consistent with the Commission's requirements and guidelines002E.	**Consistent:** The Build Alternative extends the Bay Trail and would provide a link between existing sections of the Bay Trail, while also linking the Albany Bulb and Tom Bates Regional Sports Complex shoreline parks.	**Not Consistent:** The No Build Alternative does not complete a link in the regional trail system or add linkages between shoreline parks.
Recreation Finding (l): Completing the San Francisco Bay Trail and the Bay Area Ridge Trail and linking these regional trail systems will provide the public with better access to the Bay and to parks along the Bay shoreline. The goal of the San Francisco Bay Trail Project is to create a continuous, multiple-use trail around San Francisco Bay which can be used for hiking, jogging, bicycling and other non-motorized uses and which connects shoreline parks.	**Consistent:** The Build Alternative expands shoreline access to bicyclists, pedestrians, and other non-motorized vehicles along waterfront parks identified in the BCDC Bay Plan. The Build Alternative would extend the Bay Trail south from the Berkeley-Albany border to Gilman Street and Frontage Road, which would complete a link of the Bay Trail. Additionally, the extended Bay Trial would link separated recreational areas of McLaughlin Eastshore State Park with other shoreline parks, including Albany Bulb and Tom Bates Regional Sports Complex.	**Not Consistent:** The No Build Alternative would not contribute to completing the Bay Trail and would not link shoreline parks with a continuous multi-use trail.

Table 2-2: Consistency with State, Regional, and Local Plans and Programs

Actions/Goals/Policies	Build Alternative	No Build Alternative
Recreation Finding (p): Roads, trails, public transit service and conveniently located areas where vehicles can be parked for more than short periods of time in waterfront parks and other water-oriented recreational facilities are needed to provide the public with full access to the Bay.	**Consistent:** The Build Alternative would provide increased access for bicyclists, pedestrians, and other non-motorized vehicles, but would eliminate some on-street parking. The Build Alternative would eliminate 18 informal on-street parking spaces along the Gilman Street Extension for the Bay Trail. On-street parking would still be available along a portion of the Gilman Street Extension.	**Consistent:** The No Build Alternative would not impact existing parking which provides access to Bay resources. The No Build Alternative would not extend the Bay Trail and would not provide improved access for bicyclists, pedestrians, and other non-motorized vehicles.
Recreation Policy 5: Bay resources in waterfront parks and, where appropriate, wildlife refuges should be described with interpretive signs. Where feasible and appropriate, waterfront parks and wildlife refuges should provide diverse environmental education programs, facilities and community service opportunities, such as classrooms and interpretive and volunteer programs.	**Consistent:** The Build Alternative would include interpretive signs along the extension of the Bay Trail where appropriate and if requested by BCDC.	**Not Consistent:** The No Build Alternative would not extend the Bay Trail or provide interpretive signage.
Eastshore State Park General Plan		
CIRC-2: Design a circulation system that separates vehicular from nonvehicular traffic as much as possible in order to enhance nonvehicular modes and reduce potential conflicts.	**Consistent.** The Build Alternative includes implementation of a pedestrian/bicycle overcrossing, which separates vehicular from nonvehicular traffic and provides a safer way for bicyclists and pedestrians to travel through the I-80/Gilman Street interchange. It also includes a two-way cycle track between 2nd and 4th streets and an extension of the Bay Trail, which would be physically separated from traffic. These improvements aim to reduce the number of potential conflicts between vehicular and nonvehicular traffic.	**Not Consistent.** The No Build Alternative does not include any improvements to bicycle or pedestrian facilities in the study area. Vehicular and nonvehicular traffic would not be further separated, and the number of conflicts would not be reduced.
CIRC-9: In order to improve access to and through the park project, support neighboring jurisdictions in their efforts to expedite the completion of the Bay Trail as set forth in ABAG's Bay Trail Master Plan.	**Consistent.** The Build Alternative includes an extension of the Bay Trail and closes a gap in the trail.	**Not Consistent.** Under the No Build Alternative, the Bay Trail would not be extended.

As shown in Table 2-2, the Build Alternative is consistent with planning goals and policies in local and regional plans and studies because the project aims to reduce congestion, improve safety, and encourage alternative transportation modes (pedestrian and bicycle).

No Build Alternative

The No Build Alternative would not support achievement of the goals described above in Table 2-2 because congestion and delay would continue to worsen, and pedestrian and bicycle facilities would not be constructed.

Construction Impacts

Build Alternative

Construction impacts of the Build Alternative related to policy consistencies would be the same as described above under project-level impacts. The Build Alternative would be consistent with the stated objectives of these jurisdictions.

No Build Alternative

No construction impacts on consistency with State, regional, and local plans and programs would occur under the No Build Alternative.

2.2.3 Avoidance, Minimization, and/or Mitigation Measures

The project alignment for the Build Alternative has been adjusted to fit within existing ROW where feasible, which helps to ensure consistency with State, regional, and local plans by minimizing land use conversion. No other avoidance, minimization, or mitigation measures are required.

2.3 Coastal Zone

The Coastal Zone Management Act of 1972 (CZMA) is the primary federal law enacted to preserve and protect coastal resources. The CZMA sets up a program under which coastal states are encouraged to develop coastal management programs. States with an approved coastal management plan are able to review federal permits and activities to determine if they are consistent with the state's management plan.

California developed a coastal zone management plan and enacted its own law, the California Coastal Act of 1976, to protect the coastline. The policies established by the Act are similar to those for the CZMA, including the protection and expansion of public access and recreation; the protection, enhancement, and restoration of environmentally sensitive areas;

the protection of agricultural lands; the protection of scenic beauty; and the protection of property and life from coastal hazards. The California Coastal Commission (CCC) is responsible for implementation and oversight under the California Coastal Act.

Just as the federal CZMA delegates power to coastal states to develop their own coastal management plans, the California Coastal Act delegates power to local governments (15 coastal counties and 58 cities) to enact their own local coastal programs. Local coastal programs determine the short- and long-term use of coastal resources in their jurisdiction consistent with the California Coastal Act goals.

The San Francisco Bay Conservation and Development Commission (BCDC), created prior to the California Coastal Act, retains oversight and planning responsibilities for development and conservation of coastal resources in the Bay Area. The regulatory authority for BCDC is the McAteer-Petris Act and the Suisun Marsh Protection Act.

On August 12, 2015, CCC unanimously adopted the *Sea Level Rise Policy Guidance* document as interpretive guidelines for Local Coastal Programs and Coastal Development Permit applicants. The Guidance is intended to assist in the preparation for sea level rise within the context of the California Coastal Act. Significant revisions applicable to the project study area included:

- A new section on using scenario-based analysis to approach sea level rise planning.
- A new section on storms, extreme events, abrupt change, and sea level rise.
- A new section on sea level rise adaptation planning and environmental justice, as well as the unique challenges faced by low-income communities.
- A revised chapter on sea level rise adaptation strategies, including additional strategies.
- New text clarifying the scope of the document and potential applicability to other planning documents.
- New text recognizing the increasing demand for funding for sea level rise adaptation planning.

BCDC regulates, and establishes policy for, Bay fill, use of the Bay and shoreline area, and public access to and along the Bay. BCDC jurisdiction includes the open water, marshes, and mudflats of the greater San Francisco Bay; portions of most creeks, rivers, sloughs, and other tributaries subject to tidal action that flow into San Francisco Bay; and salt ponds, managed wetlands, and a shoreline band that extends inland for 100 feet from the San Francisco Bay shoreline. For a project within any portion of BCDC jurisdiction, a permit from BCDC may be required.

The San Francisco Bay Plan (Bay Plan) was completed and adopted by the San Francisco Bay Conservation and Development Commission in 1968, with updates through 2012, and includes policies for managing use of the Bay and shoreline. The Bay Plan also identifies Priority Use Areas on and around the Bay.

2.3.1 Affected Environment

The BCDC jurisdictional line used for the Project includes the Bay and Shoreline Band jurisdiction, as shown in Figure 2-2. Additionally, the majority of the Tom Bates Regional Sports Complex is included in the map because it is designated as a "Waterfront Park/Beach" Priority Use Area under the Bay Plan. Priority use areas can extend past the BCDC 100-foot shoreline band and restrict the type of projects that can occur in those areas. Finally, the I-80 corridor in the study area is designated as a Scenic Drive in BCDC's San Francisco Bay Plan (2012).

2.3.2 Environmental Consequences

Project-Level Impacts

Build Alternative

The Build Alternative includes improvements within BCDC jurisdiction. Dredging and fill activities within BCDC jurisdiction are described in the *Natural Environment Study* (2018).

There would be temporary impacts associated with installation, operation, and removal of a sheet pile cofferdam within BCDC's Bay jurisdiction, and there would be permanent impacts associated with removing and replacing a headwall and wingwalls, and adjacent rock slope protection, at an existing 60-inch culvert outfall into San Francisco Bay.

There would be permanent impacts to public access to coastal zone resources. The Build Alternative would eliminate 18 informal on-street parking spaces on Gilman Street Extension where the new Bay Trail extension would be constructed. The decrease in access to coastal zone resources due to the elimination of parking spaces would be made up for by the increase in access to coastal zone resources for bicyclists, pedestrians, and other non-motorized transport that would use the new Bay Trail extension.

Figure 2-2: BCDC Jurisdiction and Designations

The proximity of the study area to the San Francisco Bay and the elevation of the project site would make the area susceptible to inundation from future sea level rise. According to City of Berkeley's *2014 Local Hazard Mitigation Plan,* West Berkeley is low lying and potentially vulnerable to sea level rise, especially when rising seas are compounded with severe storms.

Sea level rise at the project site was estimated using projections from the March 2013 update of the *State of California Sea-Level Rise Guidance Document* (Coastal and Ocean Working Group of the California Climate Action Team, 2013). This document estimates upper projections for sea level rise to be 2.0 feet by the year 2050 and 5.48 feet by the year 2100 on the California coast south of Cape Mendocino. There is a local low point at a drain inlet on the southwestern edge of the westbound traffic circle with an elevation of approximately 10.4 feet, and another local low point at a drain inlet on Gilman Street Extension right before the ingress/egress point to Golden Gate Fields with an approximate elevation of 10.9 feet. The area around these low points would be especially susceptible to impacts from sea level rise during the 100-year Water Surface Elevation due to backflow through the drainage system or from overland tidal inundation. A tidal flap gate is proposed at the Gilman Street outfall to prevent tidal backflow from entering into the project area. More information about the tidal flap gate is discussed in Section 4.2 of the *Location Hydraulic Study* (2018). In addition, the road surface elevations and the storm drain inlet elevations around the 2nd Street and Gilman Street intersection, the Gilman Street Extension, and the Golden Gate Fields northwest (lower) and northeast (upper) parking lots range from 9.0 to 15.0 feet. These areas are susceptible to backflow through the storm drain system or overland tidal inundation when accounting for sea level rise.

No Build Alternative

Under the No Build Alternative, no improvements at the I-80/Gilman Street interchange would occur; therefore, there would be no impacts to the coastal zone. Sea level rise would impact the No Build Alternative in the same manner as the Build Alternative.

Construction Impacts

Build Alternative

Construction activities for the Build Alternative, including staging areas and construction access, include areas within BCDC jurisdiction; therefore, there would be temporary impacts on public access to the shoreline of San Francisco Bay. Construction activities may temporarily limit vehicular and pedestrian access to the waterfront at the terminus of Gilman

Street and along Gilman Street Extension. There would also be a permanent reduction in the number of informal vehicular parking spaces near the San Francisco Bay shoreline.

Although there would be temporary and permanent impacts on public access to San Francisco Bay, the project would permanently increase multimodal access to the shoreline of San Francisco Bay. The project would extend the Bay Trail from its current terminus at the intersection of West Frontage Road and Gilman Street to the west toward San Francisco Bay, then to the north along Gilman Street Extension to just beyond the Berkeley city limits. Additionally, a pedestrian overcrossing would be constructed over I-80 to connect a shared-use path along Eastshore Highway with the Bay Trail along West Frontage Road.

Sea level rise is a long-term concern; it would not affect construction activities for the Build Alternative.

No Build Alternative

Under the No Build Alternative, no improvements at the I-80/Gilman Street interchange would occur; therefore, there would be no impacts to the coastal zone nor from sea level rise.

2.3.3 Avoidance, Minimization, and/or Mitigation Measures

Because the Build Alternative includes proposed improvements and construction within BCDC jurisdiction, impacts on the coastal zone would occur. If required, compensatory mitigation for impacts on BCDC jurisdiction would be determined during the permitting process with BCDC. Any required compensatory mitigation would likely be included as a condition within the BCDC permit.

Identification of the local low points in the westbound traffic circle and on Gilman Street Extension indicates the potential for future projected sea level rise to impact the project area. There are no feasible measures to prevent inundation in this location because this area is in a floodplain; therefore, adding fill to this area is not advisable. The project does not propose any adverse impacts to the floodplain; therefore, mitigation measures are not necessary for this project. The project proposes avoiding blocking coastal flood flows and minimizing fill in the floodplain by balancing the cut and fill work in the floodplain. Additionally, drainage systems will be designed to capture and convey runoff from the design storm, as defined by the *Highway Design Manual* (Caltrans 2015) in the project area.

2.4 Wild and Scenic Rivers

There are no wild and scenic rivers within the study area, as defined by the National Wild and Scenic Rivers System (National Wild and Scenic Rivers System, 2016); therefore, no impact to this resource is anticipated, and it will not be discussed further in this document.

2.5 Parks and Recreation

2.5.1 Affected Environment

The City of Berkeley has 52 parks within the city. The City of Albany has 13 designated park, recreation, and open space areas. The closest parks to the project area are Tom Bates Regional Sports Complex, located at 400 Gilman Street; Harrison Park, which includes Berkeley Skate Park and Gabe Catalfo Fields, located at 1104 4th Street; and Fielding Field, which is located in Albany to the north of Harrison Park, as shown in Figure 2-3. The Bay Trail runs through the study area and currently terminates at the I-80/Gilman Street interchange. Additionally, there are more than 8 miles of shoreline trails at McLaughlin Eastshore State Park, which is located just west of the project study area. Several parks are located within 1 mile of the project study area, including James Kenney Park and Recreation Center, which is located southeast of the project site on 8th Street, and Berkeley Aquatic Park, which is south of the project site on Bolivar Way.

2.5.2 Environmental Consequences

Project-Level Impacts

No Build Alternative

There would be no impacts to parks and recreation facilities under the No Build Alternative.

Build Alternative

Under the Build Alternative, access would be improved in the area, which would benefit the users of park and recreational facilities, particularly for Tom Bates Regional Sports Complex, Harrison Park, Fielding Field, and the Bay Trail. The Build Alternative would require acquisition of 0.45 acre of the Tom Bates Regional Sports Complex for the project. This portion of land would be acquired from EBRPD from the City of Berkeley to construct the pedestrian and bicycle overcrossing, extend the Bay Trail, and install a separation device underground along Gilman Street to separate trash, mercury, and polychlorinated biphenyls (PCBs). The land for the pedestrian and bicycle overcrossing is not currently used by EBRPD or Tom Bates Regional Sports Complex. Access to the facility is anticipated to be maintained at all times during project construction and operation. The access benefits that would accrue from construction of the overcrossing would outweigh the impact of land acquisition.

Figure 2-3: Parks and Recreational Facilities

The proposed Bay Trail extension would extend the Bay Trail approximately 660 feet west along the south side of Gilman Street from its current terminus at the intersection of West Frontage Road and Gilman Street to just beyond the Berkley city limits. On-street parking would be reduced by approximately 18 informalspaces at the end of Gilman Street as a result of the new trail extension. These parking spaces are adjacent to the Tom Bates Regional Sports Complex. The new bicycle and pedestrian facilities would improve connectivity along the Bay Trail and increase safety.

Construction Impacts

No Build Alternative

There would be no construction impacts to parks and recreation facilities under the No Build Alternative.

Build Alternative

The Build Alternative would require temporary acquisition of 1.27 acres of land from Tom Bates Regional Sports Complex for four temporary construction easements. This would temporarily reduce the amount of parking available for users of the sports complex by approximately 125 spaces. Caltrans, Alameda County Transportation Commission (CTC), and the City of Berkeley would coordinate with the operators of Tom Bates Regional Sports Complex to minimize event scheduling impacts.

Construction of the pedestrian overcrossing would result in closures of 800 feet of the Bay Trail for limited periods of time. Approximately 370 feet of this closure would be for a retaining wall for the bicycle and pedestrian overcrossing, and approximately 430 feet of this closure would be for constructing columns for the bicycle and pedestrian overcrossing. Public access along the Bay Trail would be maintained at all times. Sporadic closures would be required during construction and could occur day or night depending on construction activities. A signed detour within the project footprint would be constructed to maintain public access and allow for full ingress/egress to Tom Bates Regional Sports Complex.

2.5.3 Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measure will be implemented to reduce impacts to parks and recreational facilities:

- **AMM COM-1**: Caltrans, Alameda CTC, and the City of Berkeley Office of Parks, Recreation, and Waterfront (510-981-6700) will coordinate with the operators of Tom

Bates Regional Sports Complex to minimize event scheduling impacts due to the reduction of parking from staging areas during construction.

2.6 Farmlands/Timberlands

Important farmland is categorized as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. Prime Farmland is farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Farmland of Statewide Importance is farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Unique Farmland is land other than Prime Farmland that has a special combination of unique characteristics needed to economically produce sustained high yields of a specific crop. Farmland of Local Importance is land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. Farmland of Local Importance is either currently producing, or has the capability of production, but does not meet the criteria of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. Analysis of Important Farmland indicates there is no Important Farmland within the project study area; therefore, no impacts are anticipated (California Department of Conservation, 2016).

In addition, there are no timberlands within the study area; therefore, no impacts to these resources are anticipated. Because there are no farmlands or timberlands in the study area, these resources will not be discussed further in this document.

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Chapter 3 Growth

The growth impacts assessment examines the relationship of the proposed project to future economic and population growth. Growth can lead to the need for additional housing and supporting infrastructure and services in a project area. The assessment focuses on the potential for a project to facilitate or accelerate growth beyond those contemplated in local development plans or identify if growth shifts from elsewhere in a region.

3.1 Regulatory Setting

The Council on Environmental Quality (CEQ) regulations, which implements NEPA, requires evaluation of the potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations, 40 CFR 1508.8, refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are elements of growth.

CEQA also requires the analysis of a project's potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents *"…discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment…"*

3.2 Affected Environment

3.2.1 First-Cut Screening

The first-cut screening process presented in the Caltrans SER outlines a step-by-step procedure to determine whether a transportation project has the potential for growth-related impacts. The initial step of the screening process is to determine whether the project has the potential to change accessibility. If the project has such potential, then further analysis is warranted. The succeeding step calls for an analysis of factors, including project type, project location, and growth pressures in the project area. Based on this information, it is determined whether project-related growth is reasonably foreseeable. If growth is reasonably foreseeable, further analysis is conducted to determine the effect of this additional growth on resources of concern.

Accessibility

The Build Alternative would simplify and improve the navigation, mobility, and operations of the I-80/Gilman Street interchange, while reducing congestion and vehicle queues and conflicts. It would also improve local and regional bicycle connections and pedestrian facilities. These improvements could change the accessibility of the area by making this interchange a more attractive travel option (e.g., reduced congestion, aesthetics), which could encourage some businesses to locate in the study area instead of other places in the region. In addition, implementation of the pedestrian/bicycle overcrossing, the two-way cycle track between 2nd and 4th streets, sharrows on 4th Street to Harrison Street to 5th Street to Codornices Creek, and an extension of the Bay Trail would improve accessibility of the Bay Trail, Tom Bates Regional Sports Complex, and other recreational facilities in the area. This improved accessibility would bring additional bicyclists and pedestrians into the study area.

Project Type, Project Location, and Growth-Pressure

Some project types are more likely to cause growth-related impacts than others. Projects not likely to cause growth-related impacts are typically projects on an existing facility that do not increase capacity or increase accessibility. The project type for the Build Alternative is an interchange improvement, which could create new and/or improved access to nearby roadways, recreational facilities, and businesses in the area.

The project location is in a highly urban area. The likelihood of a project causing growth-related impacts in an urban area is typically low because of its built-out land use pattern.

Growth pressure, the amount and intensity of development in an area, can also be an indicator for growth-related impacts. If there is little active development because of a built-out land use pattern, there is likely low opportunity for growth, whereas proposed or ongoing construction activity, growth-control debates in newspapers, and the presence of tracts of undeveloped land likely indicate a high opportunity for growth. Within the study area, there are restrictive land use controls. Local planning documents aim to keep the open space and recreational areas intact, as well as maintain industrial land uses in Berkeley. There are no undeveloped tracts of land ripe for development in the study area. In addition, there are physical constraints for growth in the study area, in the form of the San Francisco Bay to the west of the study area.

"Reasonably Foreseeable" Project-Related Growth

Despite the project changing accessibility, it is located in an urban area with a lack of growth pressures (i.e., restrictive land use controls). Therefore, it can be determined that project-

related growth is not reasonably foreseeable, and further growth analysis is not warranted; No growth-related impacts are anticipated.

3.3 Environmental Consequences

3.3.1 Build Alternative

As determined during the first-cut screening, project-related growth is not reasonably foreseeable, and further growth analysis is not warranted; therefore, no growth-related impacts are anticipated.

3.3.2 No Build Alternative

The I-80/Gilman Street interchange would not experience any improvements under the No Build Alternative (including accessibility improvements), and congestion and delays would continue to increase. Thus, there would be no growth impacts under the No Build Alternative.

3.4 Avoidance, Minimization, and/or Mitigation Measures

Because growth impacts are not anticipated, no avoidance, minimization, and/or mitigation measures are required under the Build Alternative.

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Chapter 4 Community Character

4.1 Population and Housing

Per Volume 4 of the Caltrans Environmental Handbook – Community Impact Assessment, population and housing characteristics were used to provide a descriptive account of the physical and social characteristics of the affected community. A study area for the community in the project area was defined based on available U.S. Census data and compared to the greater region in which it exists. U.S. Census demographic information for the socioeconomic study area includes population, ethnicity/race, age, and income data. Housing characteristics include housing density and household size. These socioeconomic data are available at the census tract level. Census Tract 4220 covers the portion of project limits and study area that is within the city of Berkeley, and the census tract stretches beyond the study area largely to the south. Census Tract 4204 covers the portion of the project limits and study area that is within the city of Albany, and the census tract continues north and east. For the analysis of socioeconomic considerations, including population and housing, the study area is defined as Census Tracts 4220 and 4204, as shown in Figure 4-1. Census Tract 4220 has two block groups, Block Group 1 and Block Group 2, with the block group numbers shown in parenthesis. Census Tract 4204 has one block group, Block Group 1, also shown in parenthesis. There is no block group level analysis in this report, but the block groups are displayed for informational purposes.

One aspect of community character is community cohesion. Community cohesion is defined as the degree to which residents have a sense of belonging to their neighborhood, a level of commitment of the residents to the community, or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time. Cohesion also refers to the degree of interaction among the individuals, groups, and institutions that make up a community.

4.1.1 Affected Environment

The project is located in the cities of Albany and Berkeley within Alameda County. Demographic characteristics of the socioeconomic study area, including population, housing, and employment growth; household size and composition; ethnic composition; and household income, were derived from the 2010 U.S. Census; 2018 MTC and ABAG *Bay Area Projections 2040*; and area planning documents. The study area for population and housing is defined as Census Tract 4220 and Census Tract 4204, as shown with blue shading in Figure 4-1.

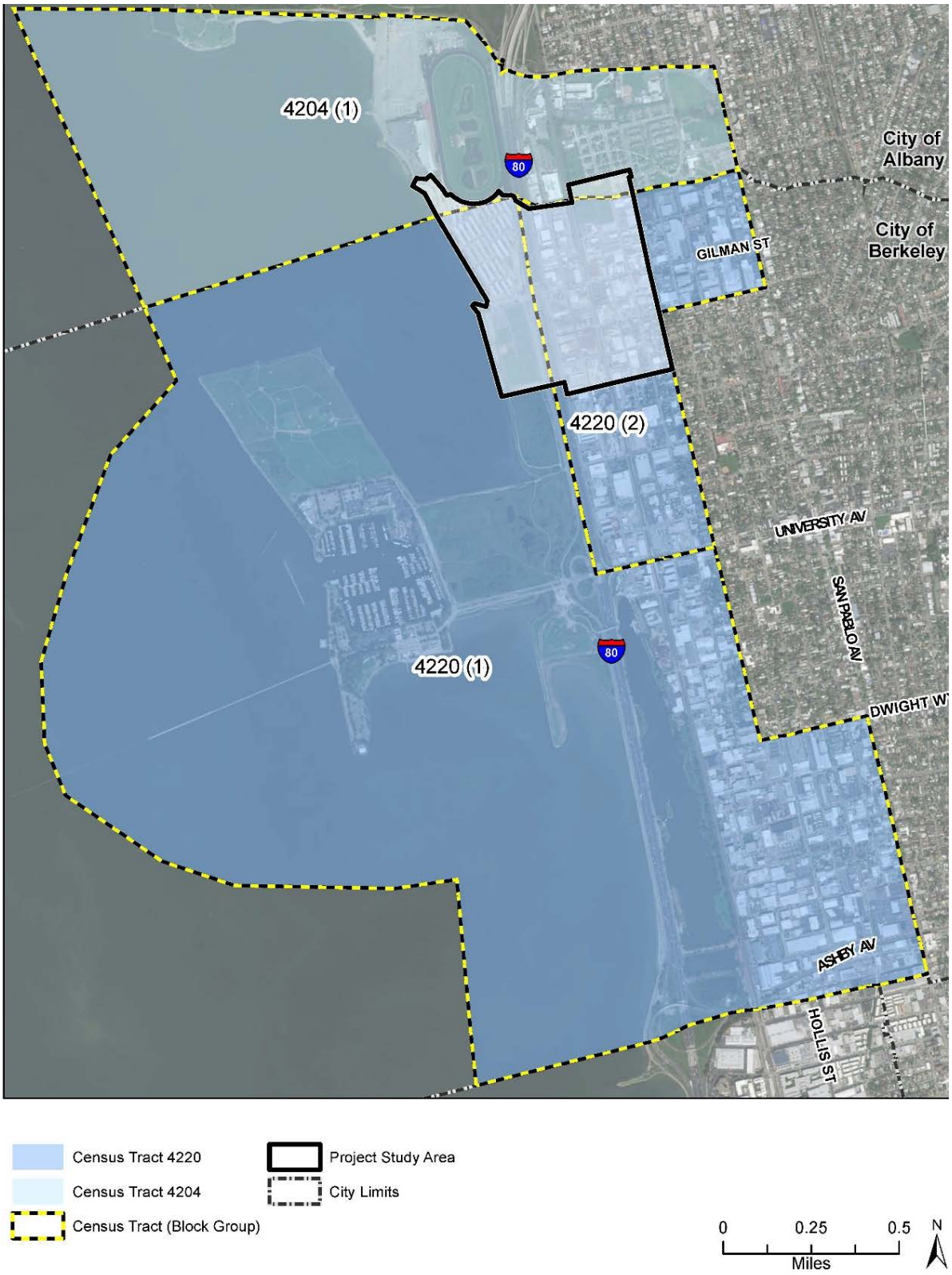

Figure 4-1: Socioeconomic Study Area

Regional Population Characteristics

MTC and ABAG (2018) provides population, housing, and employment projections for Bay Area counties and cities in the Plan Bay Area reports. Population, housing, and employment growth trends within Alameda County, Albany, and Berkeley are discussed below and summarized in Table 4-1.

Table 4-1: 2010-2040 Population, Households, and Employment Growth

	Population			Households			Employment		
Location	2010	2040	% Change	2010	2040	% Change	2010	2040	% Change
Alameda County	1,515,185	2,092,335	38.1	545,105	734,185	34.7	723,780	1,022,005	41.2
Berkeley	112,660	140,930	25.1	46,025	55,370	20.3	58,620	75,980	29.6
Albany	18,625	20,425	9.7	7,400	7,850	6.1	9,505	10,765	13.3

Source: Metropolitan Transportation Commission and Association of Bay Area Governments. May 2018. Plan Bay Area Projections 2040, Draft. Electronic data tables.

Population Growth

According to MTC and ABAG (2013 and 2018), the population of Alameda County is expected to continue growing over the next 25 years. The population of Alameda County in 2010 was 1,515,185, an increase of 71,444 people (4.9 percent) over 2000. Between 2010 and 2020, Alameda County's average annual growth in population is projected to increase by 1.3 percent, then trend slightly lower (1.1 percent) on an annual basis through 2040.

Population in Berkeley is projected to increase from 112,660 in 2010 (ABAG and MTC, 2018) to 140,930 in 2040. Most of this population growth would occur in the commercial corridors (San Pablo Avenue, University Avenue) due to the availability of housing and additional housing development. Population in Albany is projected to experience modest growth, from 18,625 in 2010 (ABAG and MTC, 2018) to 20,425 in 2040.

Household Growth

According to ABAG and MTC data, Alameda County had 545,105 households in 2010, while Berkeley had 46,025 households and Albany had 7,400 households. Based on ABAG and MTC's 2018 projections, by 2040, Alameda County would have 734,185 households, an increase of 34.7 percent, while Berkeley would have 55,370 households, an increase of 20.3 percent, and Albany would have 7,850 households, an increase of 6.1 percent.

According to Berkeley's 2015 Housing Element, Berkeley's commercial corridors (San Pablo Avenue, University Avenue) have experienced the greatest amount of mixed-use residential development in past years. For this reason, City staff estimate the greatest capacity for new residential units will be on the remaining underutilized sites in the commercial districts. The total estimated capacity for new units on the commercial corridors through the year 2023 is 2,461 units. Specifically, the two major commercial districts in Berkeley extend north and south along San Pablo Avenue and east to west along University Avenue.

Employment Growth

Based on ABAG and MTC's 2018 projections, employment in Alameda County between 2010 and 2040 is expected to increase by 247,395 jobs, an increase of 35.1 percent over 2010. Within Berkeley, employment is projected to increase from 90,350 in 2010 to 121,670 in 2040, an increase of 34.7 percent. Within Albany, employment is projected to increase from 4,415 in 2010 to 5,190 in 2040, an increase of 17.6 percent.

These projections indicate continued demand for travel and access along the I-80 mainline to local and regional employment centers.

Population and Age

Table 4-2 summarizes the total population and the race and ethnic composition of the population within the socioeconomic study area compared with Berkeley, Albany, and Alameda County.

Based on the 2010 U.S. Census, the total population within the study area is 4,880, which is roughly approximately 3.7 percent of the total population of Albany and Berkeley. The study area has a median age of 32.9, which is slightly higher than the median age of Berkeley (31) and higher than the median age of Albany (37) and Alameda County (36.6). The population growth rate within the study area/ is approximately 59.8 percent, which is much higher compared to Berkeley's growth rate of 9.6 percent and Albany's growth rate of 12.7 percent. Distribution of population within Berkley is dispersed throughout the city; however, population densities are highest in the residential core areas, between Dwight Way and Camelia Street and from 6th Street to just west of San Pablo Avenue.

Table 4-2: Ethnic Composition of the Study Area

Category	Tract 4204*		Tract 4220*		Study Area		Albany		Berkeley		Alameda County	
	Number of Residents	%	Number of Residents	%	Number of Residents	%	Number of Residents	%	Number of Residents	%	Number of Residents	%
2000 Total Population	1,721	100	1,333	100	3,054	100	16,444	100	102,743	100	1,443,741	100
2010 Total Population	3,124	100	1,756	100	4,880	100	18,539	100	112,580	100	1,510,271	100
Population Growth Rate (2000-2010)	1,403	81.5	423	31.7	1,826	59.8	2,095	12.7	9,837	9.6	66,530	4.6
2010 Median Age	29.2		39.6		32.9**		37		31		36.6	
19 Years and Under	944	30.2	326	18.6	1,270	26.0	4,900	26.4	23,341	20.7	383,662	25.4
20 to 64 Years	2,161	69.2	1,282	73.0	3,443	70.6	11,792	63.6	76,063	67.6	958,863	63.5
65 Years and Over	19	0.6	148	8.4	167	3.4	1847	10.0	13,176	11.7	167,746	11.1
Ethnicity and Race												
White	870	27.8	761	43.3	1631.0	33.4	9,136	49.3	61,539	54.7	514,559	34.1
Black or African-American	118	3.8	491	28.0	609.0	12.5	621	3.3	10,896	9.7	184,126	12.2
American Indian and Alaska Native	27	0.9	3	0.2	30.0	0.6	44	0.2	228	0.20	4,189	0.3
Asian	1,513	48.4	170	9.7	1683.0	34.5	5,754	31.0	21,499	19.1	390,524	25.9
Native Hawaiian and Other Pacific Islander	16	0.5	5	0.3	21.0	0.4	32	0.2	170	0.2	11,931	0.8
Some Other Race	20	0.6	12	0.7	32.0	0.7	105	0.6	503	0.4	4,191	0.3
Two or More Races	136	4.4	92	5.2	228.0	4.7	956	5.2	5,536	4.9	60,862	4.0
Hispanic	424	13.6	222	12.6	646.0	13.2	1,891	10.2	12,209	10.8	339,889	22.5
Total Minority	2,254	72.2	995	56.7	3,249	66.6	9,403	50.7	51,041	45.3	995,712	65.9

* Census Tracts 4204 and 4220, depicted in blue shading with a black border in Figure 4-1, represent the project study area for socioeconomic analysis including population and housing, economic conditions, and environmental justice.

** Weighted mean of 2010 median age for Census Tracts 4204 and 4220.

Source: U.S. Census Bureau, 2010.

There have previously been a number of homeless encampments within the project area along Gilman Street underneath the I-80 undercrossing. In 2016, efforts were made to discourage homeless occupants in the project area. It is difficult to quantify the population who were living in the encampments, but estimates range from 10 to 30 people. According to the annual January count of homeless people in Alameda County, conducted in the City of Berkeley by EveryOne Home, as of January 2017, it is estimated that the homeless population in Berkeley is approximately 1,000 persons. Currently, there are only occasional occurrences of homeless individuals in the project area. Providing adequate services and accommodations for the homeless is a high priority for the City of Berkeley.

Ethnicity and Race

Table 4-2 shows the ethnic composition in the study area compared to Albany, Berkeley, and Alameda County. The ethnic categories used are White, Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, Some Other Race, Two or More Races, and Hispanic or Latino (of any race).

Population growth in Alameda County between 2000 and 2010 was accompanied by a change in ethnic composition. According to ABAG 2013, countywide, the percentage of White residents declined by approximately 13 to 34 percent of the population, while the percentage of Hispanic residents increased by approximately 24 percent to total almost 23 percent of the county's population. In addition, the number of Asian residents increased by 33 percent to total 26 percent of the County's population, with other ethnic groups making up the remaining 17 percent.

In Berkeley, the percentage of White residents increased during the period from 2000 to 2010 by approximately 9 percent, for a total of 55 percent of the total population in 2010, with Asian, Black or African American, and Hispanic populations of 19, 10, and 11 percent, respectively. In Albany, the percentage of White residents is 49 percent, with Asian, Black or African American, and Hispanic populations of 31, 3, and 10 percent, respectively.

The study area has a Hispanic population that is slightly larger than both Albany and Berkeley, and that is similar to the percentage in Alameda County. For the Non-Hispanic Black population, the study area displays a higher percentage than Albany or Berkeley and a similar percentage compared to Alameda County. The study area has a lower percentage of Non-Hispanic White population compared to Albany and Berkeley. The study area has a higher percentage of Non-Hispanic Asians compared to Albany and Berkeley. The percentages of Non-Hispanic American Indian and Alaska Native, Non-Hispanic Native Hawaiian and Other Pacific Islander, Non-Hispanic Some Other Race, and Non-Hispanic Two or More Races are similar to the percentages in Albany, Berkeley, and Alameda

County. The Non-Hispanic Asian population is the majority demographic group and accounts for 35 percent of the population within the study area for this project.

The CEQ has established definitions for NEPA analysis, in which "minority individuals" are defined as members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black; or Hispanic. For the study area, the total minority population is approximately 67 percent (3,249), as shown in Table 4-2. Also see discussion of minority populations in Section 4.3, Environmental Justice.

Household Size and Composition

The U.S. Census Bureau defines a household as a group of people, related or not, living together in a dwelling unit. A family household is defined as two or more people (one of whom is the householder) related by birth, marriage, or adoption residing in the same housing unit. Table 4-3 compares household characteristics in the project study area to those of Albany, Berkeley, and Alameda County.

Table 4-3: Household Characteristics-2010

Geographic Area	Number of Households	Average Household Size	% of Family Households
Tract 4204*	1,094	2.82	86
Tract 4220*	667	2.18	47
Study Area	1,761	2.58	71
Albany	7,401	2.49	67
Berkeley	46,029	2.17	20
Alameda County	545,138	2.70	34

* Census Tracts 4204 and 4220, depicted in blue shading with a black border in Figure 4-1, represent the project study area for socioeconomic analysis including population and housing, economic conditions, and environmental justice.

Source: U.S. Census Bureau, 2010.

In 2010, there were 545,138 households in Alameda County, with an average household size of 2.70 persons. Thirty-four (34) percent of these were family households with children. Berkeley and Albany had lower average household sizes (2.17 persons and 2.49, respectively), and the percentage of family households was considerably lower in Berkeley, at 20 percent, and considerably higher in Albany, at 67 percent. Within the study area, there are 1,761 households with an average household size of 2.58, which is slightly higher than Albany and Berkeley, but lower than within Alameda County. In addition, the percentage of family households in the study area is 71 percent, much higher than Berkeley and Alameda County, and slightly higher than Albany, which indicates more families living in the study area compared to the other jurisdictions.

Household Income

The median household income and poverty status of the population within the study area compared with Albany, Berkeley, and Alameda County are presented in Table 4-4. Information regarding income levels is not available from the 2010 U.S. Census at the census tract level. As a result, income information for all geographic areas was obtained from the 2010–2014 American Community Survey (ACS), which is an estimate over a 5-year period provided by the U.S. Census.

Table 4-4: Income

Geographic Area	Median Household Income	Percent Individuals below Poverty Threshold
Tract 4204*	$42,061	27.0
Tract 4220*	$51,283	33.2
Study Area	$45,554**	29.0
Albany	$78,769	10.7
Berkeley	$65,283	20.0
Alameda County	$73,775	12.9

* Census Tracts 4204 and 4220, depicted in blue shading with a black border in Figure 4-1, represent the project study area for socioeconomic analysis including population and housing, economic conditions, and environmental justice.

** Weighted mean of median incomes for Census Tracts 4204 and 4220.

Source: ACS, 2014.

The U.S. Census Bureau defines household income as the income of the householder and all other individuals 15 years or older in the household, whether they are related to the householder or not. As shown in Table 4-4, median household income was $73,775 in Alameda County, $78,769 in Albany, and $65,283 in Berkeley, all of which are much greater than the median income in the study area of $45,554. The study area also has a higher percentage of individuals below the poverty level (29.0 percent) compared to the percentages in Albany (27 percent), Berkeley (20 percent), and Alameda County (12.9 percent). According to ABAG data, between 2000 and 2010, the median household income in Berkeley increased by 1.4 percent but decreased in Alameda County by 6.2 percent.

Labor Force Characteristics

Table 4-5 shows the labor force characteristics of the study area compared with Albany, Berkeley, and Alameda County. The labor force characteristics of the study area in most labor sectors have percentages that are similar to or lower than the percentages of Albany, Berkeley, and Alameda County; however, the study area has higher percentages of educational, health, and social services (43.3 percent) and professional, scientific, management, administrative, and waste management (21.2) compared to Albany, Berkeley,

and Alameda County, and lower percentages in construction (0.7 percent), manufacturing (3.0 percent), and wholesale trade (0.6 percent) compared to the percentages in Albany, Berkeley, and Alameda County.

The labor force is also characterized by exceptionally high educational levels. Within the study area, 73.6 percent of the labor force has a Bachelor's degree or higher. Within Albany, 75.3 percent of the labor force has a Bachelor’s degree or higher, while in Berkeley, 74.8 percent of the labor force has a Bachelor's degree or higher. In Alameda County, 47.5 percent of the population has a Bachelor's degree or higher.

Table 4-5: Labor Force by Industry for Civilians, Aged 16+ (2014)

Labor Force Sector	Tract 4204		Tract 4220*		Study Area		Albany		Berkeley		Alameda County	
	Number	Percent**	Number	Percent**	Number	Percent*	Number	Percent**	Number	Percent**	Number	Percent**
Agriculture, forestry, fishing and hunting, and mining	0	0	0	0	0	0	165	0.3	165	0.3	2,933	0.4
Construction	8	0.7	7	0.7	15	0.7	1,523	2.7	1,523	2.7	37,828	5.0
Manufacturing	14	1.2	49	5.2	63	3.0	2,488	4.4	2,488	4.4	79,593	10.6
Wholesale trade	12	1.0	0	0	12	0.6	673	1.2	673	1.2	21,204	2.8
Retail trade	37	3.2	144	15.5	181	8.6	3,856	6.9	3,856	6.9	74,951	10.0
Transportation and warehousing, and utilities	13	1.1	25	2.7	38	1.8	972	1.7	972	1.7	36,705	4.9
Information	0	0.0	63	6.8	63	3.0	2,420	4.3	2,420	4.3	22,656	3.0
Finance, insurance, real estate and rental and leasing	28	2.4	70	7.5	98	4.7	2,810	5.0	2,810	5.0	45,812	6.1
Professional, scientific, management, administrative, and waste management	233	19.9	213	22.9	446	21.2	10,951	19.5	10,951	19.5	125,361	16.7
Educational, health and social services	763	65.3	147	15.8	910	43.3	20,995	37.3	20,995	37.3	169,199	22.6

Table 4-5: Labor Force by Industry for Civilians, Aged 16+ (2014)

Labor Force Sector	Tract 4204		Tract 4220*		Study Area		Albany		Berkeley		Alameda County	
	Number	Percent**	Number	Percent**	Number	Percent*	Number	Percent**	Number	Percent**	Number	Percent**
Arts, entertainment, recreation, accommodation and food services	43	3.7	103	11.1	146	6.9	4,695	8.4	4,695	8.4	67,563	9.0
Other services (except Public Administration)	18	1.5	73	7.8	91	4.3	2,676	4.8	2,676	4.8	38,731	5.2
Public Administration	0	0	38	4.1	38	1.8	1,840	3.3	1,840	3.3	27,250	3.6
Employed Labor Force	1,169	100	932	100	2,101	100	56,064	100	56,064	100	749,786	100
TOTALS												
Employed Labor Force	1,169	92.7	932	88.9	2,101	91.0	8,969	92.4	56,064	91.7	749,786	90.4
Unemployed Labor Force	92	7.3	116	11.0	208	9.0	736	7.6	5,045	8.3	79,503	9.6
Total Labor Force	1,261	100	1,048	100	2,309	100	9,705	100	61,109	100	829,289	100

* Census Tracts 4204 and 4220, depicted in blue shading in Figure 4-1, represent the project study area for socioeconomic analysis including population and housing, economic conditions, and environmental justice.

Source: ACS, 2014.

Community Cohesion

Table 4-6 summarizes the stability index within the study area compared with Albany, Berkeley, and Alameda County. Approximately 10 percent of the occupied housing units within the study area are owner occupied compared with 46 percent in Albany, 42 percent in Berkeley, and 53 percent in Alameda County. Single-family homes, which are classified as one-unit detached structures, make up approximately 8 percent of the total housing units in the study area compared with 51 percent in Albany, 43 percent in Berkeley, and 53 percent in Alameda County. Of the owner-occupied housing units within the study area, households whose members have lived within the same housing unit prior to the year 2000 consist of approximately 62 percent of the total households, which is equal to the percentage in Berkeley but higher compared with Albany (54 percent) and Alameda County (51 percent). The percentage of owner-occupied housing units, single-family homes, and long-term residents is relatively high within Berkeley and Alameda County. Within the study area, the situation is different – there is a low percentage of owner-occupied housing units and single-family homes, but the number of long-term residents in owner-occupied housing units is the same as in Berkeley.

Table 4-6: Stability Index

Geographic Area	Percent of Occupied Housing Units that are Owner Occupied	Percent of Single-Family Homes	Percent of Owner-Occupied Households in Same Housing Unit (Move in Prior to Year 2000)
Tract 4204*	0	1	NA (No Owner-Occupied Housing Units)
Tract 4220*	26	19	62
Study Area	10	8	62
Albany	46	51	54
Berkeley	42	43	62
Alameda County	53	53	51

* Census Tracts 4204 and 4220, depicted in blue shading in Figure 4-1, represent the project study area for socioeconomic analysis including population and housing, economic conditions, and environmental justice.
Source: ACS, 2014.

Neighborhoods/Communities/Community Character

On a regional level, West Berkeley is located in the center of the expansive East Bay industrial belt, which extends from Hayward in the south, through Oakland and Berkeley to Richmond and as far north as Crockett. The area of West Berkeley is known for its wide variety of land uses, including light manufacturing, general manufacturing, retailing, offices, residences, arts and crafts, and recreational uses (west of I-80). Land use in West Berkeley is characterized by a much wider range of activities than in any other section of Berkeley and is

home to steel foundries, scientific instrument makers, book distributors, and other manufacturing, wholesale trade, and industrial type uses. West Berkeley is also unique because of its varied land parcels, ranging in size from 2,500 square feet to 25 acres. Most of West Berkeley's housing units are found in the residential core areas between Dwight Way and Camelia Street and from 6th Street to just west of San Pablo Avenue. In Albany, just north of West Berkeley, University Village provides family student housing for University of California Berkeley students. University Village is connected to West Berkeley in the project study area by 6th Street, as well as by a series of multi-use paths that cross Codornices Creek (the Albany-Berkeley border). University Village is a 58-acre complex — with 974 one-, two-, and three-bedroom apartments, and two-bedroom townhouses. It also includes its own recreational and community center, a café, laundry rooms, and child care center.

The west side of the project study area is comprised mostly of recreational facilities. These facilities include Golden Gate Fields, Tom Bates Regional Sports Complex, McLaughlin Eastshore State Park, and the Bay Trail. The Bay Trail is a regional effort to provide a continuous multiuse path around San Francisco and San Pablo bays. Tom Bates Regional Sports Complex is composed of two state-of-the-art sports fields. Planning for the sports complex was a joint planning and funding effort that involved the cities of Berkeley, Richmond, El Cerrito, Albany, and Emeryville. McLaughlin Eastshore State Park runs 8.5 miles along the East Bay shoreline from the Bay Bridge to the city of Richmond. The park includes 1,854 acres of uplands and tidelands along the waterfronts of Oakland, Emeryville, Berkeley, Albany, and Richmond. The park also parallels the I-80 corridor, making it a highly visible, highly accessible area of parkland.

The I-80/Gilman Street interchange is an important route into West Berkeley for the industrial and manufacturing districts. Heading east on Gilman Street, the freeway interchange is followed by a series of industrial buildings. Gilman Street is identified in the West Berkeley Plan as an entry corridor.

Housing

This section focuses on housing needs and characteristics in the study area defined as Census Tract 4220 and Census Tract 4204 (see Figure 4-1), and it highlights key trends that will affect housing growth and development in the future. By law, every city and county in California must adopt a Housing Element as part of its General Plan. The purpose of the Housing Element is to ensure that local governments adequately plan to meet the housing needs of all people within the community, regardless of their income. The underlying premise of Housing Element law is that, for the private market to adequately address housing

needs and demand, local governments must adopt land use plans and regulatory systems that provide opportunities for, and do not unduly constrain, housing development.

Between 2014 and 2022, ABAG (2013) estimates that Alameda County will need to add 44,036 housing units, with Berkeley needing 2,959 housing units during this same period. In comparison, it is estimated Oakland will need to add 14,765 housing units between 2014 and 2022.

Housing Characteristics

Housing characteristics, including housing types, costs, and occupancy rates in the study area, are shown in Table 4-7. The owner-occupied housing in this study area accounts for approximately 9 percent compared to 42 percent in Albany, 39 percent in Berkeley, and 50 percent in Alameda County. Renter-occupied housing units comprise 85 percent of the study area, which is higher than the percentages in Albany, Berkeley, and Alameda County. The average home value in the study area is $551,700, which is significantly lower compared to $675,000, $741,900, and $543,100 in Albany, Berkeley, and Alameda County as a whole, respectively. Most of the housing units in the study area are located east, south, and north of the project, outside the study area.

Alameda County and its cities and communities continue to face common challenges in providing an adequate supply and range of housing. Because of the limited supply of remaining residentially zoned vacant land in the study area, housing production will likely occur in urbanized areas, particularly as infill development, such as those areas along University Avenue and San Pablo Avenue. In addition, alternative housing types, such as live/work units, mixed-use developments, housing cooperatives, and comparable options, will be important in fulfilling housing needs within the study area. Additionally, University Village in Albany continues to provide family student housing for University of California, Berkeley.

Housing Affordability and Availability

Housing affordability and availability are critical issues throughout the San Francisco Bay area, including the study area, where median income levels are not sufficient to purchase median-priced homes.

According to the National Association of Home Builder's *Housing Opportunity Index*, in the third quarter of 2015, the Oakland-Fremont-Hayward metropolitan area was the 12th least affordable area of the western United States, with 56 percent of families of median income able to afford a home.

Table 4-7: Residential Characteristics

Geographic Area	Tract 4204*		Tract 4220*		Study Area		Albany		Berkeley		Alameda County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Housing Units	1,322		935		2257		7,852		49,671		589,858	
Owner Occupied	0	0	203	21.7	203.0	9.0	3,285	41.8	19,583	39.4	294,644	50.0
Renter Occupied	1,272	96.2	644	68.9	1916.0	84.9	4,092	52.1	26,334	53.0	264,263	44.8
Total Vacant	50	3.8	88	9.4	138.0	6.1	475	6	3,754	7.6	30,951	5.2
Mobile Home	0	0	0	0.0	0	0.0	4	0.1	128	0.3	7,079	1.2
Median Household Value	Not Applicable		$551,700		$551,700		$675,000		$741,900		$543,100	
Median Gross Rent	$1,687		$1,473		$1,615**		$1,627		$1,262		$1,367	

* Census Tracts 4204 and 4220, depicted in blue shading in Figure 4-1, represent the project study area for socioeconomic analysis including population and housing, economic conditions, and environmental justice.

** Weighted mean of Median Gross Rent for Census Tracts 4204 and 4200.

Source: U.S. Census Data, 2010; ACS, 2015.

According to the 2015 Berkeley Housing Element, a 2010 analysis of the affordability of for-sale housing in Berkeley indicated that single-family homes and condominiums in Berkeley were largely unaffordable for low-income households earning less than 80 percent of the average median income (AMI). Moderate-income households earning up to 120 percent of AMI had substantially greater ability to purchase single-family homes and condominiums in Berkeley. In 2014, an analysis demonstrated there were fewer market rate condominiums that were affordable for those households with moderate and lower incomes over 2010 affordability levels. This decrease in affordability was in conjunction with a recovery of home prices in the San Francisco Bay Area that began in 2012.

The overall trend is similar in the West Berkeley area, where housing prices have increased faster than household incomes, with the result that many households are paying a larger share of their income for housing. From 2002 to 2007, the median sale price of a single-family residence increased 46 percent to $799,000 in Berkeley. As of 2009, only above-moderate income households could afford to purchase townhomes or single-family homes. With the economic recovery underway, finding affordable housing remains difficult for many area residents.

The disparities between income and housing prices in the Bay Area are expected to continue into the future. As households look beyond the study area to purchase a home or find an affordable rental, employers may have a harder time attracting or retaining workers concerned about the high cost of housing in the area. Employees moving to surrounding communities and commuting to work will compound traffic congestion in the region. However, cities within the region recognize the problem of lack of affordable housing; this issue is addressed in the Housing Element of the General Plan of each respective city.

4.1.2 Environmental Consequences

Project-Level Impacts

No Build Alternative

As traffic and congestion continue to worsen at the I-80/Gilman Street interchange area, users of I-80 could divert to other freeway entrances and exits to the north and south of the study interchange, causing increased congestion in surrounding communities. This could adversely affect the quality of life in these communities.

Build Alternative

Implementation of the Build Alternative would result in several new structures associated with the roundabouts and the pedestrian/bicycle overcrossing, none of which would divide or

introduce a new physical barrier to the communities and neighborhoods in the study area. These communities and neighborhoods in the study area are already divided by a multi-lane highway; therefore, the addition of structures associated with the roundabouts and pedestrian/bicycle overcrossing would not further divide any communities or neighborhoods. In addition, the study area would not experience a direct disruption in community character or cohesion from the activities proposed under the Build Alternative because the Build Alternative does not involve construction of a new roadway; all improvements are along existing roadways.

The Build Alternative would not change the character of the area because it is already an urban, industrial area that supports a major interstate and associated facilities. The Build Alternative would further the urban design of the Gilman Street entry corridor with visual improvements such as landscaping and lighting, and relocation of utilities. The Build Alternative would benefit the neighborhoods and communities in Albany and West Berkeley by reducing congestion and travel time. The improvements, including the pedestrian/bicycle overcrossing, would provide a safer connection between the eastern and western sides of the study area and improve access to recreational facilities, which could help to further link these communities together, increasing community cohesion for the area.

In 2016, efforts were made to discourage homeless occupants in the area. Currently, there are only occasional occurrences of homeless individuals in the project area. Within the project area, there is an emergency shelter, Harrison House, on Harrison Street and 4th Street. Relocation of any re-established homeless encampments along Gilman Street would not result in a disproportionate impact to the homeless population of Berkeley.

If homeless encampments re-establish in the project area, the project would displace the encampments along Gilman Street underneath I-80, which is owned by Caltrans. The area would be needed temporarily for construction staging areas and would be permanently needed for implementation of the roundabouts and sidewalks. While these homeless encampments are not legally permitted to be on Caltrans property, public outreach to address the concerns of the homeless populations would be conducted prior to displacement.

If at a future date, homeless individuals need to be relocated from the ROW, then established procedures will be followed. These procedures, which are usually carried out by Caltrans District Maintenance staff accompanied by State or local law enforcement, include providing a “Notice to Vacate,” which provides an advance notice of the date on which belongings will be officially removed, information on where belongings will be stored and for how long, and information on where to access human and community services. Avoidance and

minimization measures addressing the homeless encampment communities can be found in Section 4.1.3, Avoidance, Minimization, and/or Mitigation Measures.

Providing adequate services and accommodations for the homeless is a high priority for Berkeley. Independent of this project, Berkeley is in the process of considering how the homeless living in the Caltrans ROW along Gilman Street under I-80 can be relocated to locations with improved conditions.

Indirect impacts to community cohesion are also unlikely to occur. Existing access to I-80 and Gilman Street would not change, nor would access to any community services be curtailed. Circulation and quality of life would improve under the Build Alternative due to the reduction in congestion. Increased urbanization and growth are also unlikely to occur due to restrictive land use controls.

Partial ROW acquisitions would be required, but these are fairly minor in scope. None of the partial acquisitions would change the use of the existing structure (discussed in more detail in Section 4.3). All property owners would be treated in accordance with the Uniform Relocation Act and Real Property Acquisition Policies Act of 1970, as amended.

Construction Impacts

No Build Alternative

Under the No Build Alternative, no construction would occur and, as such, no impacts from project construction-related activities would occur.

Build Alternative

During construction, there would be periods during which businesses adjacent to the project study area would likely experience inconvenience and temporary loss of connectivity from the local transportation network. Community members would still be able to utilize local businesses and community services during the construction period; however, there would be some inconvenience due to construction activities, intermittent and temporary partial lane closures on Gilman Street, and detours with alternative traffic routing. With a continuing public outreach program to keep the area residents and businesses informed of the project construction schedule, adverse impacts can be reduced.

Construction impacts would also include noise and fugitive dust from construction activities, which would have greater effects on businesses located in the immediate project area than on I-80 users. In addition, while the potential construction staging areas would not remove any travel lanes on Gilman Street, some of them would be located within and near Tom Bates Regional Sports Complex, which would temporarily reduce some available parking. Caltrans,

Alameda CTC, and the City of Berkeley will coordinate with the operators of Tom Bates Regional Sports Complex to minimize event scheduling impacts.

Lastly, construction period impacts from partial or full lane or ramp closures could result in longer queues on the I-80 freeway mainline during reconfiguration of the associated ramps. If full on- or off-ramp closures are required during construction, alternative routes and noticing will be required.

Project Features

The following project features would be implemented as part of the Build Alternative:

- **PF COM-1:** Adhere to Caltrans's standard specifications for noise control and dust abatement and construction best management practices (BMPs) for noise and fugitive dust control.
- **PF COM-2:** During the design phase of the project, prepare a Transportation Management Plan (TMP) that includes plans for traffic rerouting, a detour plan (if required), and public information procedures with participation from local agencies, transit services, local communities, business associations, and affected drivers. Early and well-publicized announcements and other public information measures will be implemented prior to and during construction to minimize confusion, inconvenience, and traffic congestion. If detours are required, detour routes will be planned in coordination with Caltrans and the City of Berkeley traffic department and will be noticed to emergency service providers, transit operators, and I-80 users in advance.
- **PF COM-3:** During construction of the project, some on-street parking restrictions may be required on a temporary basis, especially along Gilman Street. A public outreach program will be implemented throughout the construction period to keep the public informed of the construction schedule and scheduled parking and roadway closures, including detour routes and, if available, alternative parking.
- **PF COM-4**: The contractor will be responsible for securing all work zones in and around the construction sites, including staging areas within Caltrans and Berkeley ROW. Security of the project work zones will be the responsibility of the contractor until completion of construction.

4.1.3 Avoidance, Minimization, and/or Mitigation Measures

To minimize and avoid impacts to communities in the study area, the following avoidance and minimization measures will be implemented:

- **AAM COM-2:** Prior to construction activities, public notices will be placed throughout the project area and other nearby social service locations to notify those living in the

homeless encampments within the project footprint of the dates of clean-up and construction activities.

4.2 Economic Conditions

4.2.1 Affected Environment

The project area is located in West Berkeley and Albany. West Berkeley supports approximately one-third of the private sector jobs and 25 percent of the total jobs in Berkeley. Commercial establishments in the project area consist of both small and large, with employee numbers ranging from just a couple employees (commercial and light industry) to 50 to 75 employees (manufacturing and commercial). No relocation of businesses in Albany or West Berkeley would be required for the proposed project.

According to Alameda County (2015), in fiscal year 2013-2014, collected secured and unsecured property taxes for Alameda County totaled $418,683.000. Sales tax revenue for the City of Berkeley in 2014 was $16,500,324, with total revenue of $155,216,143.

4.2.2 Environmental Consequences

Local Tax Revenue

Project-Level and Construction Impacts

No Build Alternative

Under the No Build Alternative, revenue losses associated with property acquisitions would not occur.

Build Alternative

The Build Alternative would not be expected to have potential tax revenue impact to the City of Berkeley because there would be no conversion of private residences or business property to public ROW for project use. All ROW acquisitions would be small slivers that would not affect the use of the business.

Creation of Jobs and Economic Activity

Project-Level and Construction Impacts

No Build Alternative

The economic benefits associated with improved operational efficiency and travel time savings in the study area would not be realized under the No Build Alternative and, over time, the increasing congestion would likely have adverse economic impacts in terms of lost productivity; however, this cannot be quantified.

Build Alternative

Selection of the Build Alternative would have a beneficial impact on the local economy due to demand for goods and services. It is anticipated that construction of the project would occur over the course of 12 to 24 months. In addition to direct construction jobs, employment opportunities are created offsite due to the demand for goods and services.

There are also monetary savings that the study area would realize from the improvement in operating efficiency, mobility, and safety of vehicular, pedestrian, and bicycle travel. Improvements in operating efficiency include such user benefits as savings in fuel, oil, tire, repair and maintenance, and depreciation; mobility savings include travel time savings; and safety savings include reduction in property damage and fatal injury accidents.

Property Values

Project-Level and Construction Impacts

No Build Alternative

There would be no impacts to property values under the No Build Alternative.

Build Alternative

The Build Alternative would not require permanent relocation of any residences or businesses in the study area; therefore, it would not negatively affect property values.

4.2.3 Avoidance, Minimization, and/or Mitigation Measures

Under the Build Alternative, no avoidance, minimization, and/or mitigation measures are required because project construction would be short in duration and would not require relocation of any residences or businesses.

4.3 Community Facilities and Services

4.3.1 Affected Environment

Community facilities and services are discussed below, shown in Figure 4-2, and listed in Table 4-8.

Emergency and Protective Services

The Berkeley Police Department, located at 2100 Martin Luther King Jr. Way, serves the project area. The Berkeley Police Department provides service to approximately 102,743 residents over 10.16 square miles. The Berkeley Police Department currently has approximately 170 sworn officers and 100 civilian staff. The staffing ratio is 1.8 officers per 1,000 residents, and the total

personnel staffing ratio is 2.7 personnel per 1,000 residents. The project site is located within Beat Area 4. The boundaries of Beat 4 include the Berkeley/Albany border to the north, Delaware Street to the south, California Street to the east, and San Francisco Bay to the west. The Albany Police Department, located at 1000 San Pablo Avenue, also serves the project area.

The Berkeley Fire Department headquarters is located at 2100 Martin Luther King Jr. Way. The Berkeley Fire Department is composed of seven fire stations, one drill tower, and administrative offices. The project study area is located in Fire Prevention District E6. The Albany Fire Department, located at 1000 San Pablo Avenue, also serves the project area.

The Berkeley Fire Department also is responsible for emergency medical services and ambulance service in Berkeley. The fire department staffs and maintains three ambulances around the clock. Each ambulance is staffed with two firefighters who are also trained paramedics. The Berkeley Fire Department also has agreements with neighboring fire departments (Albany, Piedmont, Alameda) and American Medical Response who can respond during high-volume periods should the need arise. According to the Berkeley Fire Department, existing staffing and equipment levels at the fire stations are adequate to accommodate the current demand for fire protection services.

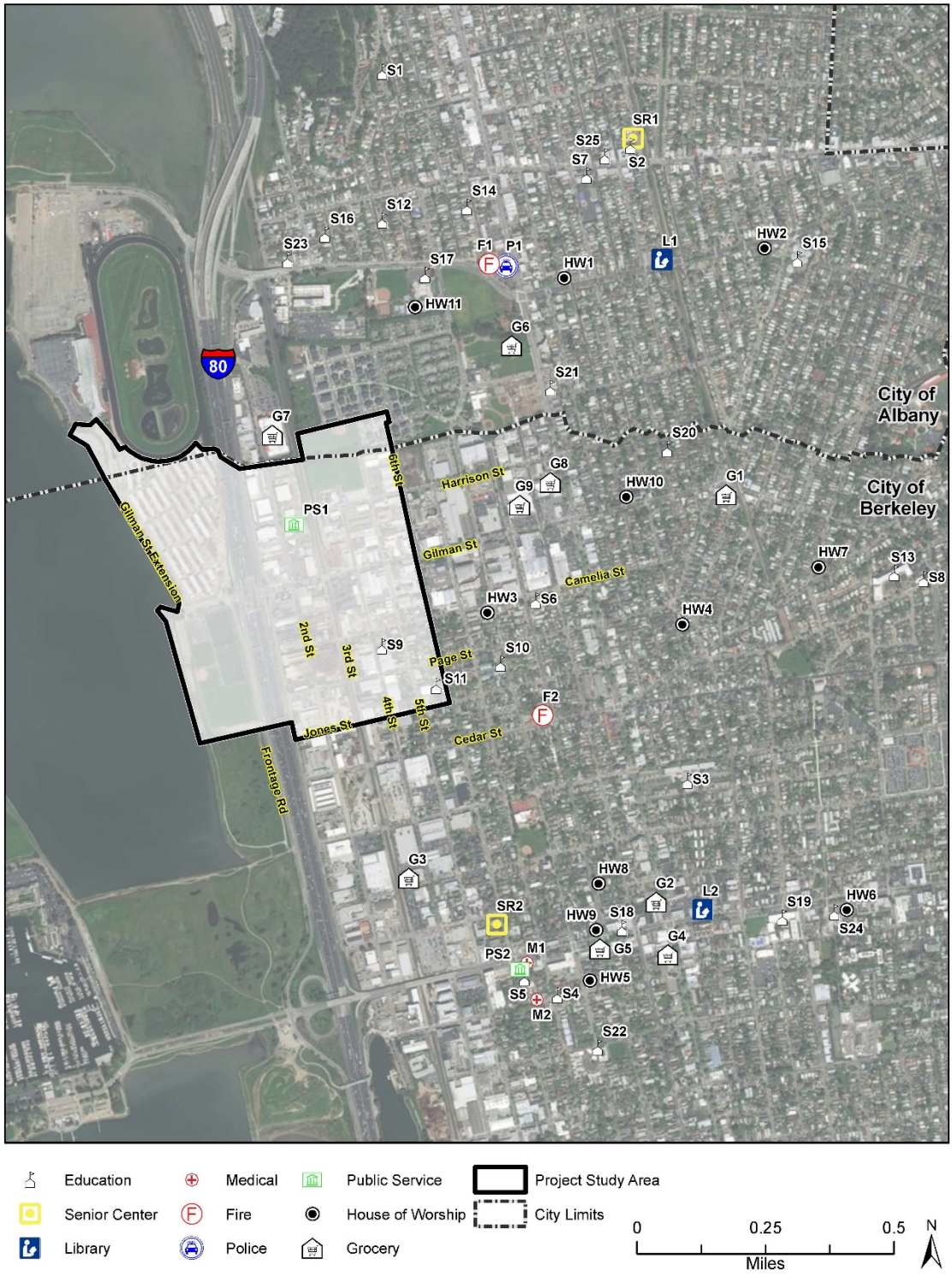

Figure 4-2: Community Facilities and Services

Table 4-8: Community Facilities within 1 Mile of the Study Area

Map Label	Community Facility	Facility Type
F1	Albany Fire Department	Fire
F2	Berkeley Fire Department #6	Fire
G1	Berkeley Natural Grocery Company	Grocery
G2	Halal Food Market	Grocery
G3	Market Hall Foods Berkeley	Grocery
G4	Middle East Market	Grocery
G5	Milan Market	Grocery
G6	Sprouts Farmers Market	Grocery
G7	Target	Grocery
G8	Tokyo Fish Market	Grocery
G9	Whole Foods	Grocery
HW1	Albany United Methodist Church	House of Worship
HW2	Berkeley Buddhist Priory	House of Worship
HW3	Berkeley Mt Zion Baptist Church	House of Worship
HW4	Church For Today	House of Worship
HW5	Church Without Walls	House of Worship
HW6	Congregation Netivot Shalom	House of Worship
HW7	Evangel Bible Church of Berkeley	House of Worship
HW8	Good Shepherd Episcopal Church	House of Worship
HW9	Liberty Hill Baptist Church	House of Worship
HW10	Saint Ambrose Church	House of Worship
HW11	Solano Community Church	House of Worship
L1	Albany Library	Library
L2	Berkeley Public Library West	Library
M1	Ann Chandler Public Health Center	Medical
M2	Lifelong Medical Care	Medical
P1	Albany Police Department	Police
P2	Berkeley Police Department	Police
PS1	Berkeley Recycling Center & Transfer Station	Public Service
PS2	City of Berkeley WIC Program	Public Service
S1	Albany Children's Center	Education
S2	Albany Preschool	Education
S3	Berkeley Adult School	Education
S4	Black Pine Circle Day School	Education
S5	Black Pine Circle Upper School	Education
S6	Centro VIDA	Education
S7	Cornell Elementary School	Education
S8	Crowden Music Center	Education

Table 4-8: Community Facilities within 1 Mile of the Study Area

Map Label	Community Facility	Facility Type
S9	Duck's Nest Inc Preschool	Education
S10	Franklin Preschool	Education
S11	Golden Gate Kids Preschool	Education
S12	Japanese Schoolhouse (Preschool/After School)	Education
S13	Jefferson Elementary School	Education
S14	Little Lamb Bilingual Preschool/Childcare	Education
S15	Marin Elementary School	Education
S16	My Little World / Mi Pequeno Mundo	Education
S17	Ocean View Elementary School	Education
S18	Realm High School	Education
S19	Realm Middle School	Education
S20	Redwood Garden Preschool	Education
S21	Rising Sun Montessori School	Education
S22	Rosa Parks Elementary School	Education
S23	Tanghulu Preschool	Education
S24	The Berkeley School	Education
S25	Tilden Preparatory School	Education
SR1	Albany Senior Center	Senior Center
SR2	West Berkeley Senior Center	Senior Center

Educational Facilities

There are many public and private schools within Berkeley; two preschools are located within the study area: Duck's Nest Inc. Preschool and Golden Gate Kids Preschool. Within 1 mile of the study area, there are seven public schools (Jefferson Elementary, Rosa Parks Elementary, Marin Elementary School, Ocean View Elementary School, Albany Preschool, Cornell Elementary School, and Berkeley Adult School) and many private schools, including many small preschools such as Rising Sun Montessori School, Black Pine Circle School, The Crowden School, and REALM Charter School. Public schools are within jurisdiction of the Berkeley Unified School District and Albany Unified School District.

Senior Centers

There are no senior centers with the study area. Two senior centers are within 1 mile of the study area, the Albany Senior Center and the West Berkeley Senior Center, both approximately 0.5 mile from the project.

Health and Medical Services

There are no hospitals or medical service facilities within the study area. Lifelong Medical Care, a community health center, is located at 837 Addison Street; Ann Chandler Public Health Center, a community health center, is located at 830 University Avenue. The closest hospitals to the study area are Alta Bates Summit Medical Center (Alta Bates Campus) at 2450 Ashby Drive, located approximately 3 miles southwest of the study area, and Alta Bates Summit Medical Center (Herrick Campus) at 2001 Dwight Way, located approximately 2 miles southwest of the study area.

Cultural Resources and Other Public Facilities

Berkeley has one main library and four neighborhood branch libraries. The closest library branch to the project study area is located at 1125 University Avenue, approximately 1 mile from the project study area. The Albany Library is located approximately 0.75 mile to the northeast of the project area. There are several museums in Berkeley, with many of them associated with UCB; however, due to the industrial nature of the study area, no museums are present in the project study area. South of Gilman, between 3rd Street and 6th Street in the project study area, there is an active art scene, with artist studios, galleries, and other art spaces open to the public. Art galleries include Zughaus Gallery, SHOH Gallery, Shibumi Gallery, and Brushstrokes Studio. Other art spaces and organizations include Poetry Flash, Berkeley Potters Guild, and Fifth Street Farms.

Grocery Stores

There are no grocery stores within the project study area. There are a variety of grocery stores located within 1 mile of the project study area, including Sprouts Farmers Market, located in University Village, on San Pablo Avenue, and Whole Foods, located at 1025 Gilman Street, at 9th Street.

Houses of Worship

There are no houses of worship or cemeteries located within the study area; however, there are 11 houses of worship located within 1 mile of the study area, as shown in Table 4-9. These facilities serve as community focal points within Albany and Berkeley.

Table 4-9: Houses of Worship within 1 Mile of the Study Area

Map Label	Name	Address
HW1	Albany United Methodist Church	980 Stannage Avenue, Albany
HW2	Berkeley Buddhist Priory	1358 Marin Avenue, Albany
HW3	Berkeley Mt Zion Baptist Church	1400 8th Street, Berkeley
HW4	Church For Today	1449 Cornell Avenue, Berkeley
HW5	Church Without Walls	2023 8th Street, Berkeley
HW6	Congregation Netivot Shalom	1316 University Avenue, Berkeley
HW7	Evangel Bible Church of Berkeley	1343 Hopkins Street, Berkeley
HW8	Good Shepherd Episcopal Church	1823 9th Street, Berkeley
HW9	Liberty Hill Baptist Church	997 University Avenue, Berkeley
HW10	Saint Ambrose Church	1145 Gilman Street, Berkeley
HW11	Solano Community Church	1000 Jackson Street, Albany

Utilities

There are numerous utility lines within the project area, including overhead electrical and transmission lines; underground electrical, gas, sanitary sewer, water, TV/cable, telephone, and storm drains.

Water Service

East Bay Municipal Utility District (EBMUD) provides water service for Berkeley residents and businesses, including the project study area. EBMUD's water supply begins at the Mokelumne River watershed in the Sierra Nevada and extends 90 miles to the East Bay.

Wastewater Treatment

The City's collection system includes approximately 254 miles of City-owned sanitary sewers, 7,200 manholes and other sewer structures, 7 sewage pump stations, and approximately 31,600 service laterals. The City is responsible for maintenance and repair of the lower portion of the service laterals (located within the public ROW) from the property line cleanout to the connection to the City's sewer main. The collection system serving the UCB campus, located within Berkeley, is owned and maintained by the University but discharges to the City's sewer system, as do the sewer systems serving the LBNL and Golden Gate Fields. The City's system also receives wastewater from small adjacent areas of the City of Albany, City of Oakland, and the Stege Sanitary District (Kensington) (City of Berkeley, 2014).

Wastewater generated in the City's collection system is conveyed to the EBMUD wastewater interceptor system and is treated at EBMUD's Main Wastewater Treatment Plant (MWWTP) located near the eastern terminus of the San Francisco-Oakland Bay Bridge.

Solid Waste Disposal and Recycling

The City of Berkeley is one of the few cities in northern California to operate its own refuse collection system. The City has the exclusive responsibility to collect garbage from all premises in Berkeley. The City operates collection programs for residential and commercial establishments, government facilities, and schools. The City also owns and operates the Transfer Station, which is located on 2nd Street north of Gilman Street. At the Transfer Station, collected refuse is transferred to long-haul trucks for delivery to a disposal site. Currently, the City has a contract with Republic Services to dispose waste at the Vasco Road Landfill in eastern Alameda County (City of Berkeley, 2004).

Recycling collection and processing programs in Berkeley are primarily operated by three entities: the City Public Works Department, Solid Waste Management Division, which operates the commercial recycling collection program; the Ecology Center, which under contract with the City operates the residential curbside program; and the Community Conservation Centers, which, also under contract with the City, operates the buy-back and drop-off programs and processes materials collected by the City and the Ecology Center at the 2nd Street and Gilman Street site. Other recycling in Berkeley occurs through the actions and efforts of residents, businesses, and franchised commercial waste collectors (City of Berkeley, 2004).

The City's Solid Waste Management Division operates the organics collection programs, which collects green waste from residences and food waste from commercial establishments. Grover Landscape Services is under contract with the City to transport and compost organic materials, which are consolidated at the Transfer Station (City of Berkeley, 2004).

Other Utilities

Pacific Gas & Electric (PG&E) provides gas and electricity services in the study area. AT&T maintains the local telephone service, and Comcast is the main cable service provider.

4.3.2 Environmental Consequences

Project-Level Impacts

No Build Alternative

There would be no impacts to community services and facilities under the No Build Alternative.

Build Alternative

Under the Build Alternative, no community services or facilities would be displaced. Some of the local changes in circulation would have an effect on travel patterns to and from these facilities. The long-term effect of the proposed project would be to reduce congestion and thereby enhance mobility within the project area, which would benefit the community facilities identified in Section 4.3. This would be especially true for emergency service providers, who would greatly benefit from reduced congestion at the I-80/Gilman Street interchange because response times could be reduced. In addition, access would be improved in the area, which would benefit the users of parks and recreational facilities, particularly for Tom Bates Regional Sports Complex and the Bay Trail. A portion of land would be acquired from EBRPD to construct the pedestrian and bicycle overcrossing, but as discussed in Section 2.5.2, this land is not currently used by EBRPD or Tom Bates Regional Sports Complex. The access benefits that would accrue from construction of the overcrossing would outweigh the impact of land acquisition.

Under the Build Alternative, there may not be sufficient space for an emergency vehicle to pass other vehicles queued to enter the roundabout. According to FHWA's *Roundabouts: An Informational Guide*, drivers should be educated about how to properly respond when an emergency vehicle is approaching the roundabout to minimize potential delays to emergency response (NCHRP, 2010). The guide includes the following advice for drivers:

> "Do not enter a roundabout when an emergency vehicle is approaching on another leg. This will allow traffic within the roundabout to clear in front of the emergency vehicle. When an emergency vehicle is approaching, be sure to proceed beyond the splitter island of your approach leg to ensure the emergency vehicle has adequate room to turn and exit the roundabout at any approach."

To minimize delays to emergency response, a minimization measure for driver education has been included below. With implementation of this measure, no permanent impacts to emergency services would occur.

Construction Impacts

No Build Alternative

There would be no construction impacts to community services and facilities under the No Build Alternative.

Build Alternative

No impacts to education facilities, health and medical services, cultural resources and other public facilities, and houses of worship would result from construction of the Build Alternative because none are located within the project limits. Project construction would be staged to maintain through traffic at the I-80/Gilman Street interchange, although temporary lane closures and traffic rerouting would occur. These lane closures and traffic rerouting could interfere with emergency service providers; however, the impact can be minimized with the measures discussed in Section 5.3. Construction staging would be required in a portion of the parking lots at Tom Bates Regional Sports Complex. This would temporarily reduce the amount of parking available for users of the sports complex. Caltrans, Alameda CTC, and the City of Berkeley will coordinate with the operators of Tom Bates Regional Sports Complex to minimize event scheduling impacts.

Utilities

Project-Level Impacts

No Build Alternative

The No Build Alternative would not impact existing utilities.

Build Alternative

Existing PG&E overhead electric lines along Gilman Street, West Frontage Road, and Eastshore Highway would be relocated under the Build Alternative. Some of these overhead lines may be placed underground. Minor drainage modifications would also be required to conform to the new roundabout alignment. Utility relocations and new drainage systems may require trenching to a depth of approximately 6 feet. Light pole foundations would be 2 feet in diameter and would range from 5 to 13 feet deep in the vicinity of the roundabout. An existing EBMUD recycled water transmission line would be relocated and extended as part of the project. Approximately 1,100 feet of a new 12-inch recycled water transmission pipeline within Eastshore Highway from Page Street to Gilman Street and approximately 1,050 feet of pipeline within Gilman Street from 2nd Street to the Buchanan Street extension are part of the Build Alternative. The maximum excavations for the pipe trench would be approximately 24 inches by 60 inches deep. Approximately 1,100 feet of an existing 10-inch EBMUD recycled water pipeline located within Caltrans ROW along the eastbound Gilman Street off-ramp shoulder would be abandoned in place or removed. A new City of Berkeley sewer line would be installed underneath Gilman Street beginning at a point east of the interchange and ending on the west side of I-80 at the approximate entrance to the Tom Bates Regional Sports Complex parking lots. A separation device would be installed underground

along Gilman Street to separate trash, mercury, and PCBs. Installation of the separation device would require trenching up to a depth of 14 feet. The conversion of 2nd Street to one-way would change access to the City-owned Transfer Station on 2nd Street. Vehicles wanting to access the Transfer Station from the south would need to travel north on 4th Street, west on Gilman Street, then north on 2nd Street.

Construction Impacts

No Build Alternative

The No Build Alternative would not impact existing utilities.

Build Alternative

Construction of the Build Alternative could result in temporary impacts to utilities, such as an increase in utility demand and solid waste volume. Access to the City-owned Transfer Station on 2nd Street would remain open during construction. Caltrans and the City of Berkeley would coordinate with all utility providers during the design phase of the project so that effective design treatments and construction procedures are incorporated to avoid adverse impacts to existing utilities during construction and to ensure that work is in accordance with the appropriate requirements and criteria. Design, construction, and inspection of utilities relocated for the project would be done in accordance with Caltrans requirements.

Nonetheless, the potential exists for construction activities to encounter unexpected utilities within the area of roadway improvements. In addition, utility relocations may require short-term, limited interruptions of service. Any short-term, limited service interruptions of known utilities would be scheduled well in advance and appropriate notification provided to users. It is expected that the local community would not be adversely affected by temporary service interruptions during construction.

Project Features

The following project features would be implemented as part of the Build Alternative:

- **PF COM-5:** Caltrans will coordinate relocation work with the affected utility companies to minimize disruption of services to customers in the area during construction. If previously unknown underground utilities are encountered, Caltrans will coordinate with the utility provider to develop plans to address the utility conflict, protect the utility if needed, and limit service interruptions. Any short-term, limited service interruptions of known utilities will be scheduled well in advance, and appropriate notification will be provided to users.

- **PF COM-6:** Caltrans will coordinate with emergency service providers and through the public information program to avoid emergency service delays by ensuring that all providers are aware well in advance of lane closures. A TMP will also be developed as part of the project to address traffic impacts from staged construction, lane closures, and specific traffic handling concerns such as emergency access during project construction.

4.3.3 Avoidance, Minimization, and/or Mitigation Measures

The project features described in Section 4.1.2, PF COM-1, PF COM-2, and PF COM-3, will help to reduce potential impacts to community services and facilities. In addition to these features, the following will be implemented:

- **AMM COM-3:** If the Build Alternative is selected as the preferred alternative, a public education campaign will be implemented to inform area drivers and residents about the new roundabout to minimize potential accidents and disruptions to emergency service providers, and it will include information on how drivers should respond when emergency vehicles are approaching the roundabout. The campaign will include measures such as:
  - Holding public meetings prior to opening the roundabout to traffic and/or giving presentations at local organization meetings;
  - Preparing news releases detailing what motorists and pedestrians can expect during and after construction; and
  - Distributing an informational brochure to residents explaining how to navigate roundabouts (both in a vehicle and as a pedestrian or bicyclist).

4.4 Relocation and Real Property Acquisition

Caltrans' RAP is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 CFR Part 24. The purpose of the RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole.

4.4.1 Affected Environment

The project is located in the cities of Berkeley and Albany, within Alameda County. The study area is made up primarily of industrial and manufacturing businesses, with some government/institutional businesses, commercial businesses, and recreational facilities as well. Some of the businesses and recreational facilities include Tom Bates Regional Sports Complex, Golden Gate Fields, Berkeley Forge & Tool, and Pacific Steel Casting. There are also some government/institutional businesses in the study area, including the Berkeley Solid

Waste Management Office, Berkeley Recycling Center, and the Berkeley Transfer Station. Commercial businesses in the study area include Budget Car Rental, Public Storage, The North Face Outlet, New Pieces Quilt Shop, Teak Me Home Furniture, Don's Tire Service, and U-Haul.

4.4.2 Environmental Consequences

Project-Level Impacts

No Build Alternative

No permanent property acquisitions or relocations would occur under the No Build Alternative.

Build Alternative

The Build Alternative does not require relocation of any households or businesses, nor does it require the acquisition of entire properties. The Build Alternative would also not affect any residential properties within the study area.

The Build Alternative would require partial acquisitions along property frontages in the project study area. Permanent partial property acquisitions and temporary construction easements are shown in Figures 4-3 and 4-4 and identified in Tables 4-10 and 4-11. Temporary construction easements are further discussed in the next section. Additionally, Caltrans would relinquish 0.18 acres of property to City of Berkeley for the eastern approach of the bicycle/pedestrian overcrossing, which is included in Table 4-10.

Figure 4-3: Proposed Property Acquisitions

Figure 4-4: Proposed Property Acquisitions – Detail of Gilman Street Area

Table 4-10: Proposed Partial Property Acquisitions

APN	Location	Type of Property	Total (acres)
60-2535-1	Golden Gate Fields	Commercial	0.08
N/A	City of Berkeley	Transportation	0.62
N/A	City of Berkeley	Transportation	0.80
Total to Caltrans			**1.50**
60-2529-1-3	EBRPD, Tom Bates Regional Sports Complex	Recreation	0.45
N/A	Caltrans	Transportation	0.18
Total to City of Berkeley			**0.63**
Total New Right-of-Way			**2.13**

Table 4-11: Proposed Temporary Construction Easements

APN	Type of Property	Total (acres)
60-2529-1-3	Recreation (Tom Bates Regional Sports Complex)	0.56
60-2529-1-3	Recreation (Tom Bates Regional Sports Complex)	0.50
60-2529-1-3	Recreation (Tom Bates Regional Sports Complex)	0.13
60-2529-1-3	East Bay Regional Park	0.08
N/A	Transportation (Caltrans)	0.20
N/A	Transportation (Caltrans)	0.21
60-2362-1-8	Public Agency (City of Berkeley)	0.003
60-2362-1-10	Public Agency (City of Berkeley)	0.009
60-2535-1	Commercial (Golden Gate Fields)	0.24
60-2535-1	Commercial (Golden Gate Fields)	8.15
60-2361-22-3	Industrial	0.01
60-2361-17-3	Commercial	0.01
60-2360-19-1	Commercial	0.003
59-2346-1-1	Commercial	0.004
59-2344-5-1	Industrial	0.003
59-2344-7	Industrial	0.008
59-2341-3-2	Industrial	0.003
59-2341-5	Industrial	0.003
59-2344-4-1	Industrial	0.008
59-2345-10	Transportation (UPRR)	0.19
59-2344-2-1	Commercial	0.02
Total		**10.344**

Note: Document protocol is to use numerical precision to two decimal places; however, in some instances numerical precision is expanded to three decimal places to accurately reflect the proposed property impact.

Partial acquisitions of commercial and recreational properties would be required under the Build Alternative. This would entail permanently acquiring small portions along property from Golden Gate Fields, the City of Berkeley, and EBRPD. These acquisitions would not

affect operations of the property because they do not include the acquisition of any structures or buildings necessary for operation.

The proposed improvements for the Build Alternative would require reconstruction of the entrance/exit to Golden Gate Fields located on Gilman Street north of the West Frontage Road for which a small area of private ROW, approximately 0.08 acre, would be required. Caltrans would purchase this land from Golden Gate Fields.

The Build Alternative would combine the frontage road intersections currently owned by the City of Berkeley with Caltrans' ramp intersections into roundabout intersections. It is anticipated that Caltrans would maintain a minimum of 50 feet of access control over the roundabout intersections. These roundabout intersections would lie entirely within Caltrans ROW after completion of the project; therefore, Caltrans would require approximately 1.42 acres of additional public ROW from the City of Berkeley.

The Build Alternative includes construction of a pedestrian overcrossing along the south side of the Gilman Street interchange. Caltrans would require that the overcrossing approaches be owned and maintained by the City of Berkeley. Currently, the eastern approach is owned by Caltrans and the western approach is owned by EBRPD. It is assumed that approximately 0.18 acre of additional public ROW would be required from Caltrans and 0.45 acre of ROW would be required from EBRPD.

Construction Period Impacts

No Build Alternative

No temporary property acquisitions or relocations would occur under the No Build Alternative.

Build Alternative

Temporary construction easements would be required under the Build Alternative from some of the adjacent parcels to construct the project. These temporary acquisitions are identified in Table 4-11 and shown in Figure 4-3. All temporary construction easements would be from property frontages; no buildings or structures would be acquired. Temporary construction easements would be required for construction equipment storage and laydown from Tom Bates Regional Sports Complex, which would reduce the number of parking spaces available for patrons. To minimize impacts to patrons, Caltrans, Alameda CTC, and the City of Berkeley will coordinate with the operators of Tom Bates Regional Sports Complex to minimize event scheduling conflicts.

Project Features

Property acquisition will be conducted in compliance with Title VI of the Civil Rights Act (42 U.S.C. 2000d, *et seq.*), the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended), and Title 49 CFR Part 24. Compensation for property to be acquired would be based on fair market value and would be part of the ROW acquisition phase. In addition to AMM COM-2, described in Section 4.1.3, the following project feature will be implemented for the Build Alternative to minimize the effects of property acquisition on property owners:

- **PF COM-10:** Access to all properties for property owners and users will be maintained by the contractor during construction.

4.4.3 Avoidance, Minimization, and/or Mitigation Measures

Under the Build Alternative, no avoidance, minimization, and/or mitigation measures are required because project impacts would be minimal with implementation of the project features identified above.

4.5 Environmental Justice

This project has been developed in accordance with Title VI of the Civil Rights Act of 1964, as amended, and EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. Title VI states that "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Executive Order 12898 requires each federal agency (or its designee) to take the appropriate and necessary steps to identify and address "disproportionately high and adverse" effects of federal or federally funded projects on minority and low-income populations. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2018, this was $25,100 for a family of four.

Caltrans' commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement, signed by the Director.

4.5.1 Affected Environment

The presence of low-income and minority populations was determined through the use of U.S. Census Bureau Population and Housing data. Demographic data were obtained for the socioeconomic study area, as identified in Table 4-2. The study area for population and

housing is defined as Census Tracts 4204 and 4220, as shown with blue shading in Figure 4-1. Census data for the census tracts were compared to the local cities and countywide demographics to help determine where disproportionate impacts on low-income and minority residents may occur. Minority individuals, as defined by the CEQ, include members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black; or Hispanic. FHWA guidance defines environmental justice populations as any readily identifiable minority and/or low-income persons who live in geographic proximity and geographically dispersed persons of those groups, who could be affected by the project. There would be a potential for environmental justice impacts if the population in an affected area met or exceeded either of the following criteria:

- The affected area contained 50 percent or more minority or low-income population; or
- The percentage of minority or low-income population in the affected area was more than 10 percentage points greater than the average in the city and/or county in which the affected area is located.

The affected area for this project is Census Tracts 4204 and 4220. Table 4-12 summarizes the combined percentages of minority populations and low-income populations within this socioeconomic study area compared to their respective city and county (see additional tables with demographic composition breakdowns in Section 4.1.1). The study area has a minority population of 66.6 percent, which is higher than that of Albany (51 percent) and Berkeley (40 percent), and similar to that of Alameda County (65.9 percent). In addition, the study area has a low-income population of 29.0 percent, which is higher than the percentages of low-income individuals in Albany (10.7 percent), Berkeley (20.0 percent), and Alameda County (12.9 percent). Because of the high percentage of minority and low-income individuals in the study area, it is considered an environmental justice community.

Table 4-12: Minority and Low-Income Populations in Study Area

Geographic Area	Percent Minority	Percent Low-Income
Tract 4204*	72.2	27
Tract 4220*	56.7	33.2
Study Area	66.6	29.0
Albany	50.7	10.7
Berkeley	45.3	20.0
Alameda County	65.9	12.9

* Census Tracts 4204 and 4220, depicted in blue shading in Figure 4-1, represent the project study area for socioeconomic analysis including population and housing, economic conditions, and environmental justice.

Source: U.S. Census 2010; ACS, 2014.

4.5.2 Environmental Consequences

EO 12898 requires each federal agency (or its designee) to take the appropriate and necessary steps to identify and address "disproportionately high and adverse" effects of federal projects on the health and environment of minority and low-income populations to the greatest extent practicable and permitted by law. This analysis determines if any disproportionately high and adverse effects from the Build Alternative or No Build Alternative would be predominantly borne by minority or low-income populations, or would be appreciably more severe or greater in magnitude to minority or low-income populations compared to the effects on non-minority or non-low-income populations.

The analysis below examines the ways in which impacts associated with the Build Alternative, including the No Build Alternative, may affect minority and low-income populations, and a determination is then made whether the alternative results in disproportionately high and adverse effects.

Project-Level and Construction Impacts

No Build Alternative

Given the absence of new transportation infrastructure, certain impacts would be less substantial than the effects described below for the Build Alternative; however, certain adverse effects on minority or low-income populations in the study area would arise as a result of transportation needs left unmet by the No Build Alternative. These effects would include direct impacts and indirect effects that are typically caused by traffic congestion and impaired mobility, longer travel times, and increased air pollution and noise. The economic and transportation benefits associated with implementation of the project would also not be realized. Under the No Build Alternative, there would be some adverse impacts to pedestrian and bicycle circulation from continued congestion along local streets, especially along Gilman Street. The proposed improvements for pedestrian and bicyclists in the area would not be constructed, thereby maintaining the unsafe conditions in the study area. This would impact regional pedestrians and bicyclists, as well as residents within the study area that are bicyclists and pedestrians. Because these effects would not be concentrated in any particular location, minority and low-income and non-minority and non-low-income populations would be similarly affected. Therefore, impacts associated with the No Build Alternative would not be predominantly borne by a minority or low-income population, nor would these impacts appear to be appreciably more severe or greater in magnitude than those experienced by non-minority or non-low-income populations.

Build Alternative

Although the effects of the project would occur in an area having a large percentage of minority and low-income populations, these effects cannot reasonably be considered disproportionately high and adverse under the circumstances. The census tracts in the project study area are composed of a large percentage of minority and low-income populations; however, the Build Alternative constitutes a relatively small area of the census tracts. Most of the residents within the census tracts through which the project would traverse are not likely to be directly affected by the proposed Build Alternative. Additionally, as discussed in Section 4.1.2, Environmental Consequences, there would be no effects on neighborhood integrity and community cohesion.

The Build Alternative would not require the relocation of any businesses or residences; only small partial acquisitions would be required. These partial acquisitions would not affect the function or operations of the affected property, and existing access to I-80 and Gilman Street would be maintained. Access to community services and resources would not be degraded. A disproportionate impact would not occur due to the property acquisitions required under the Build Alternative.

Other resource areas with potential impacts include noise, visual, and air quality. The effects of increased noise and changes in visual character are not confined to limited areas but rather dispersed over the length of the project and are not in themselves expected to affect the overall character of the environmental justice population areas. Additionally, any potential visual and noise impacts would be minimized with avoidance and minimization measures described in the *Visual Impact Assessment* and *Noise Study Report*, respectively. Potential impacts from air quality would be temporary during the construction period, and they would be minimized with the avoidance and minimization measures described in the *Air Quality Study Report.* Impacts from other resource areas are not expected to result in impacts on the community, including minority and low-income populations.

As it would for other community members who are not members of the minority or low-income population groups, the Build Alternative would also provide benefits for the minority and low-income populations within the study area. Goals of the project are to reduce congestion, provide operational enhancements, improve safety and access, and enhance pedestrian and bicycle facilities. The Build Alternative would include improvements to bicycle and pedestrian facilities. These benefits would be shared among all of the study area populations.

Therefore, with implementation of avoidance and minimization measures, adverse impacts associated with the Build Alternative would not be predominantly borne by a minority or low-income population, nor would these impacts be appreciably more severe or greater in magnitude than those experienced by non-minority or non-low-income populations.

4.5.3 Avoidance, Minimization, and/or Mitigation Measures

Based on the above discussion and analysis, the Build Alternative would not cause disproportionately high and adverse effects on any minority or low-income populations per EO 12898 regarding environmental justice. Although the project would not cause disproportionately high and adverse effects on any minority or low-income populations, the following minimization measures and other measures proposed in other technical reports for this project would minimize impacts on all of the local communities, including low-income and minority populations.

- **AMM COM-4:** A Public Outreach Plan for Environmental Justice Populations will be developed to identify specific methods of communication. Effective communication methods include distributing flyers within the project area, at The Hub (1901 Fairview Street, Berkeley), and at the local homeless shelters, community center, houses of worship, and grocery stores, and posting information on vehicles, bus stops, and other locations frequented by low-income and minority populations.

Chapter 5 Traffic and Transportation/ Pedestrian and Bicycle Facilities

5.1 Affected Environment

5.1.1 Access, Circulation, and Parking

FHWA directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 CFR 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all users who share the facility.

Caltrans and FHWA are committed to carrying out the ADA by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility, and safety available to the general public will be provided to persons with disabilities.

This section describes the existing and planned transportation system within the study area, including the roadway network, transit services, and bicycle and pedestrian facilities, as discussed below.

Roadway Network

Interstate Routes

I-80 is a primary transcontinental freeway serving drivers and goods movement between the San Francisco Bay Area, northern California, ports and transshipment facilities, transcontinental highway networks, the Midwest, Canada, and the eastern United States. It is the principal east-west route through northern California and the sole freeway crossing of the Sierra Nevada range. According to Caltrans (2014), within the project area, I-80 is a 10-lane freeway with average annual daily traffic (AADT) in 2014 from approximately 267,000 at the southern project limit near Gilman Street to approximately 274,000 at the northern limit near Gilman Street.

Arterial Roads

Gilman Street connects I-80 to the west and runs eastward into Berkeley. West of 3rd Street, Gilman Street has two lanes in each direction, while east of 3rd Street, Gilman Street has one lane in each direction with on-street parking. Both configurations provide curb-to-curb distances of approximately 50 feet. Land uses along Gilman Street are primarily manufacturing and industrial, and the current speed limit is 35 miles per hour (mph).

Collector Roads

Eastshore Highway runs parallel to I-80 along the western portion of the study area. This roadway serves as an access road to several commercial businesses and collector streets in the study area. Its location west of the railroad tracks can create obstruction for east/west access to and from the rest of the study area. Direct access to Eastshore Highway can be achieved at the eastbound I-80 off-ramp. At this intersection with Hearst Avenue, the roadway becomes a one-way, northbound-only street; southbound traffic is forced to turn east. Eastshore Highway has one lane in each direction and a current speed limit of 25 mph.

2nd Street runs parallel to I-80, one block east of the I-80/Gilman Street interchange. North of Gilman Street, on 2nd Street, the City owns and operates the Transfer Station, a local recycling center.

4th Street runs parallel to I-80, three blocks east of the I-80/Gilman Street interchange. The street is part of the proposed route linking pedestrians and bicyclists commuting from the University Village area in Albany to the Tom Bates Regional Sports Complex and other coastal recreation activities.

5th Street runs parallel to I-80, four blocks east of the I-80/Gilman Street interchange. The street is part of the proposed route linking pedestrians and bicyclists commuting from the University Village area in Albany to the Tom Bates Regional Sports Complex and other coastal recreation activities.

Harrison Street runs parallel to Gilman Street and dead ends from the east at 3rd Street and the Union Pacific Railroad. The street is part of the proposed route linking pedestrians and bicyclists commuting from the University Village area in Albany to the Tom Bates Regional Sports Complex and other coastal recreation activities.

Gilman Street Extension continues west from Gilman Street and veers north running between Golden Gate Fields and the San Francisco Bay. This street is a private street owned by Golden Gate Fields with a public easement for coastal access.

Rail Service

The Union Pacific Railroad tracks are an important non-highway circulation element in West Berkeley. They serve primarily as a freight route, but they also support passenger train traffic running north to Oregon and Washington, east to Chicago, and south to southern California. There are 15–19 round-trip passenger trains per day that pass through the Gilman and 3rd Street intersection (Caltrans 2017a), and projected freight traffic of 36–50 trains per day by the year 2040 (Caltrans 2017b). In addition to long-haul trains, there are several short-haul services to Sacramento that traverse through the project area.

The railroad restricts access in the northern part of West Berkeley, with University, Hearst, Virginia, Cedar, Camelia, and Gilman streets being the only streets that cross the tracks. In addition, there are several mostly abandoned rail spurs that once served individual plants and industries in the area.

Parking

There is sufficient on-street parking, much of it unmetered, within the project study area. The Tom Bates Regional Sports Complex has approximately 185 onsite parking spaces. According to the 2009 Transportation Demand Management Report, there are few areas in West Berkeley other than the 4th Street commercial district where on-street parking is metered. The lack of metered parking in West Berkeley, including the project study area, is because demand for parking has not yet reached levels that typically exceed supply.

Due to the industrial nature of the study area, much of the needed parking for employees is supplied by the businesses in the area. Additional street parking is available along adjacent streets in the area, including 2nd Street, Camelia Street, Gilman Street, Eastshore Highway, and 3rd Street, adjacent to the UPRR tracks.

5.1.2 Transit

The Alameda-Contra Costa Transit District (AC Transit) is the third-largest public bus system in California, serving 13 cities (including Berkeley), as well as adjacent unincorporated areas of Alameda and Contra Costa counties. AC Transit operates several urban collector, express, and urban local bus feeder routes in the study area, as well as express bus routes to and from San Francisco. The closest major bus/transit terminal to the project study area is the North Berkeley Bay Area Rapid Transit (BART) station located at 1750 Sacramento Street, approximately 1.4 miles from the project study area. Specific AC Transit lines within the study area are described below.

H Line – This limited-stop, weekday bus line originates in Richmond north of Berkeley and terminates in San Francisco at the Transbay Terminal. Morning trips to San Francisco begin at 6:10 a.m. from Barrett Avenue and San Pablo in Richmond, with trips every 20 minutes and the last trip departing at 8:15 a.m. (8 trips total). Afternoon trips begin at 4:15 p.m. departing the Transbay Terminal every 20 to 30 minutes, with the last trip departing at 7:20 p.m. (9 trips total).

Z Line – This limited-stop, weekday bus line originates in San Francisco at the Transbay Terminal and terminates in Albany, north of Berkeley, with five stops en route to Albany. Morning trips to Albany depart the Transbay Terminal at 7:26 a.m. and 8:26 a.m. (2 runs total). Afternoon trips depart at 4:45 p.m. and 5:45 p.m. from San Pablo Avenue and Marin Avenue in Albany, arriving in San Francisco at 5:30 p.m. and 6:30 p.m. (2 runs total).

L Line – This limited-stop, weekday bus line originates in Kensington and terminates in San Francisco at the Transbay Terminal. Morning trips to San Francisco begin at 5:30 a.m., with trips every 15 to 20 minutes and the last trip departing at 8:10 a.m. (10 trips total). Afternoon trips to Kensington from San Francisco depart at 3:10 p.m., with trips every 15 to 30 minutes and the last trip departing at 7:00 p.m. (12 runs total). Three additional non-express trips from San Francisco to Kensington via the LC Line depart at 7:30 p.m., 8:00 p.m., and 9:00 p.m. (3 trips total).

LA Line – This limited-stop, weekday bus line originates in El Sobrante, north of Berkeley, and terminates in San Francisco at the Transbay Terminal. Morning trips to San Francisco begin at 5:23 a.m., with trips every 20 minutes and the last trip departing at 8:29 a.m. (9 trips total). Afternoon trips to El Sobrante from San Francisco depart at 3:30 p.m., with trips every 15 minutes and the last trip departing at 7:15 p.m. (12 trips total).

5.1.3 Bicycle and Pedestrian Facilities

Bicycle Facilities

The City of Berkeley Transportation Division manages implementation of the City's Bicycle Plan (2000, 2005, 2017). According to the 2000 Plan, its purpose is to make Berkeley a model bicycle-friendly city where bicycling is a safe, attractive, easy, and convenient form of transportation and recreation for people of all ages and bicycling abilities. The Plan includes goals, policies, and recommendations for bikeways, bicycle parking, promotion programs, and safety education programs. According to the 2000 Census, 5.6 percent of Berkeley residents commuted to work by bike, up from 4.9 percent in 1990. This change represented a 15 percent increase in the percentage of bicycle commuters in Berkeley from 1990 to 2000. Over the same time period, the percentage of bike commuters in Alameda County remained

stable at approximately 1.2 percent. In 2014, 8.5 percent of Berkeley residents commuted to work by bike, representing a 52 percent increase in the number of percentage of bicycle commuters in Berkeley between 2000 and 2014. The City of Berkeley updated its 2005 Bicycle Plan in 2017.

The purpose of the updated 2017 Bicycle Plan is to make Berkeley a model bicycle-friendly city where bicycling is a safe, comfortable, and convenient form of transportation and recreation for people of all ages and abilities.

The existing bicycle network in Berkeley is comprised of Class I, II, and III bike paths located throughout the city, including Gilman Street (Class II). These classes are defined below.

1. Class I bikeways (bike paths), which provide a separated ROW for the exclusive use of bicycles, pedestrians, and other non-motorized uses;
2. Class II bikeways (bike lanes), which provide a striped lane for one-way travel on a street or highway; and
3. Class III bikeways (bike routes), which provide for shared use with motor vehicle traffic, and may include shared lane markings (sharrows); and
4. Class IV bikeways (cycle track), which is a separated/protected bikeway that is on-street but is physically separated from motor vehicle traffic by a vertical element or barrier.

However, due to limitations with the City's existing roadway infrastructure (e.g., narrow street widths, adjacent development), the 2005 Bicycle Plan focused on a fourth type of bikeway, the Bicycle Boulevards, which became part of the integrated bicycle network.

A bicycle boulevard is defined by the City as a low-speed, low-volume street that has been optimized for bicycle traffic. These bicycle boulevards discourage cut-through motor vehicle traffic but allow local motor vehicle traffic. They are designed to provide better conditions for bicycles while maintaining the neighborhood character and necessary emergency vehicle access and are intended to serve as Berkeley's primary bikeways or "bike arterials."

The City has seven bicycle boulevards that serve as the backbone of the bikeway network, providing safe, direct, and convenient routes across Berkeley:

- Virginia Street
- Channing Way
- Russell Street

- 9th Street
- California/King
- Milvia Street
- Hillegass Avenue/Bowditch Street

The closest bicycle boulevards to the project study area include 9th Street and Virginia Street. The 2017 Bicycle Plan recommends five new bicycle boulevards. These include:

- Addison Street
- Derby Street/Parker Street
- Fulton Street
- Harmon Street/65th Street
- Kains Avenue
- Mabel Street
- Rose Street/Camelia Street
- Woolsey Street

The closest propose bicycle boulevards to the project study area include Kains Avenue and Rose Street/Camelia Street.

Virginia Street Bicycle Boulevard

The Virginia Street Bicycle Boulevard extends between the 4th Street Shopping District and Northside. It travels its entire length on Virginia Street. The boulevard begins on the east end of Euclid Avenue, three blocks north of the entrance to UCB. At 5th Street, the boulevard ends, and bicyclists are directed along 5th Street. This boulevard provides a connection to the Bicycle-Pedestrian Bridge and Aquatic Park.

9th Street Bicycle Boulevard

The 9th Street Bicycle Boulevard travels from Albany, north of Gilman Street to Emeryville through West Berkeley. At the north end, it begins on 8th Street at the entrance to UC Village. It continues three blocks to Camelia Street, where it jogs one block east to 9th Street. The boulevard continues on 9th Street to Heinz Avenue at the southern city border.

Kains Avenue

The Kains Avenue Bicycle Boulevard would extend north from the Virginia Street Bicycle Boulevard and provide a connection into the city of Albany's bikeway network east of San Pablo Avenue.

Rose Street/Camelia Street

The Rose Street/Camelia Street Bicycle Boulevard would be an east-west corridor following Camelia Street, Cornell Avenue, Rose Street and Walnut Street. It would link the residential and retail areas of the Gilman District with Cedar-Rose Park, Jefferson Elementary, Martin Luther King, Jr. Middle School, Live Oak Park, and Oxford Elementary. This bikeway would connect with the 9th Street, California Street, and Milvia Street Bicycle Boulevards, as well as the Ohlone Greenway.

Pedestrian Facilities

Within Berkeley, sidewalks and pathways provide residents with a pedestrian network. The City's residents place a high value on maintaining and enhancing a pedestrian-friendly environment. The *Pedestrian Master Plan* (2010) guides the development and enhancement of the pedestrian environment within Berkeley. The plan includes recommendations for design guidelines that will raise the caliber of the existing pedestrian environment, enticing people to walk more for shorter trips, enhancing the environment for people with disabilities and children walking to school, and leading to an overall increase in the number of pedestrian trips. The Plan focuses on enhancing pedestrian safety in crosswalks and along streets, and it provides an opportunity for improving quality of life for residents by creating a more sustainable environment through the reduction of traffic, noise, and energy consumption. The *Berkeley General Plan* sets the framework for the physical development of the city.

Berkeley has approximately 400 miles of sidewalks, including sidewalks on both sides of each street separately. According to geographic information system (GIS) data collected for the 2010 *Pedestrian Master Plan,* sidewalks are present in all but approximately 40 miles of the potential pedestrian network in Berkeley. Almost the entire city has sidewalks except for two sections: the residential areas in the north Berkeley hills and sections of northwest Berkeley's industrial area, which includes the study area.

The project study area is located within the northwest Berkeley pedestrian network (see Figure 5-1), which is bounded by San Pablo Avenue, Cedar Street, 6th Street, and Gilman Street. Due to the areas past and present industrial nature, the study area has many missing sidewalk segments, especially along Gilman Street. As industrial land is redeveloped, sidewalks adjacent to those properties are added or improved. While no plan exists to systematically complete the pedestrian network in this northwest network area, the City's Public Works Department is developing a plan to install ADA-compliant pedestrian facilities in the area.

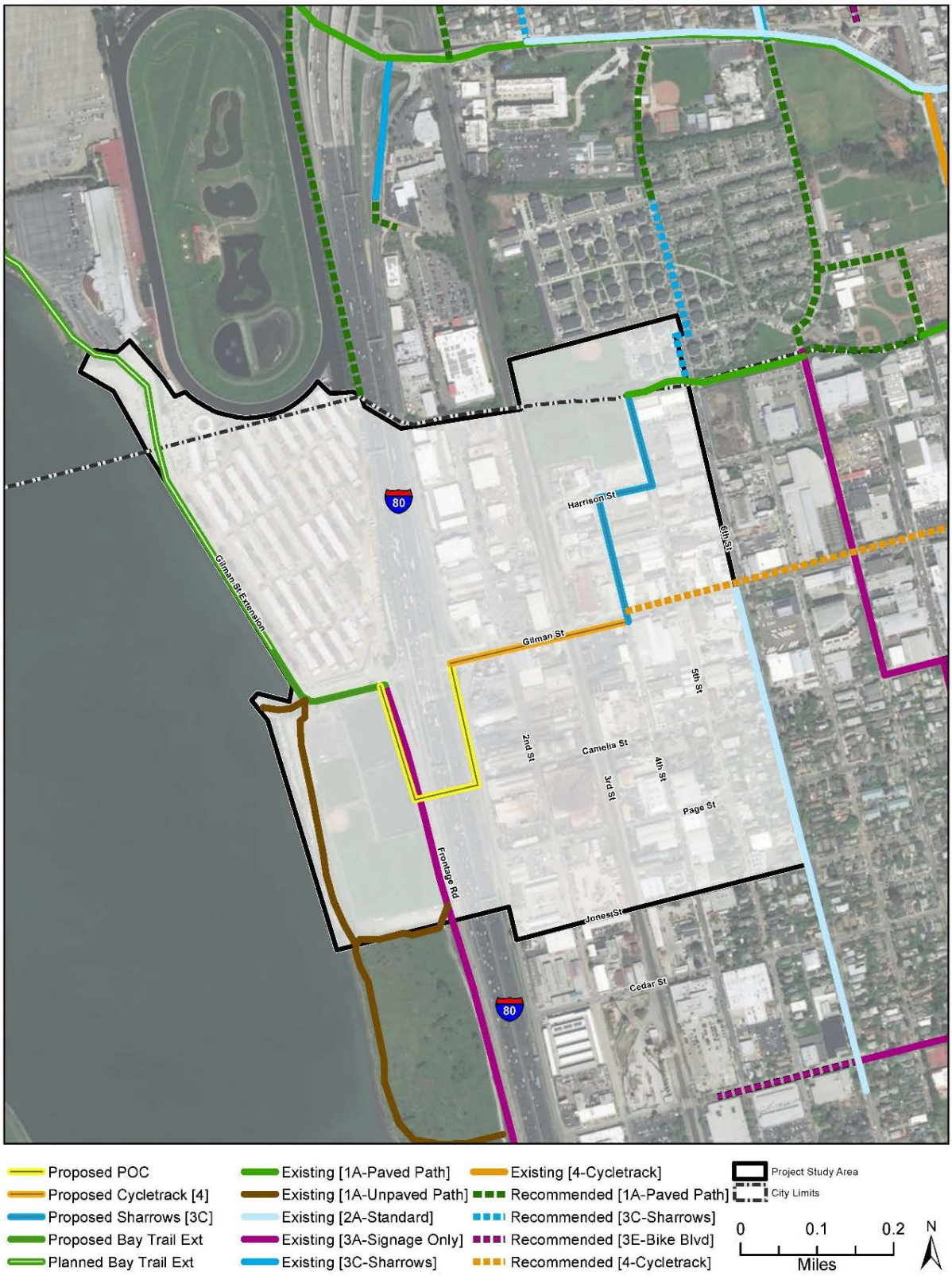

Figure 5-1: Bicycle Routes and Pedestrian Facilities

The Bay Trail is the only pedestrian pathway located in the project study area. The Bay Trail is a regional effort to provide a continuous multiuse path around San Francisco and San Pablo bays. The goal of the trail network is to provide public access to the bay's shore, in addition to augmenting facilities for recreation and commuting. The 7.3-mile-long Bay Trail segment in Berkeley is located west of I-80 along West Frontage Road. The trail enters Berkeley from Emeryville and ends at Gilman Street. The Berkeley segment of the Bay Trail can be accessed via the I-80/University Avenue pedestrian/bicycle bridge. The City of Berkeley is designing a spur trail segment that would extend from the pedestrian/bike bridge to the facilities of the Berkeley Marina. EBRPD is also working on a proposed 2-mile segment at the north end of the Bay Trail, which is needed to close the gap between Gilman Street and the Albany Bulb, and around Golden Gate Fields. The proposed project would extend the Bay Trail from Gilman Street and Frontage Road to just beyond the Berkeley city limit and would connect to the EBRPD Bay Trail project, which extends the Bay Trail south from the Albany Bulb.

5.2 Environmental Consequences

5.2.1 Access, Circulation, and Parking

Project-Level Impacts

No Build Alternative

Under the No Build Alternative, circulation and access would continue to worsen in the study area due to increasing congestion. No private or public parking spaces would be removed under the No Build Alternative.

Build Alternative

A *Traffic Operations Report* (2016) was prepared as part of this project. Results of the analysis demonstrate that congestion in the I-80/Gilman Street interchange area has caused substantial numbers of vehicles to divert to local arterial streets, which in turn results in congestion on the local street system and compromises local access and circulation. This condition is expected to worsen as travel demand through the study area increases over time; however, the Build Alternative would improve circulation and access by reducing congestion and vehicle conflicts.

Under the Build Alternative, 18 on-street informal parking spaces would be eliminated on Gilman Street west of I-80, for the construction of the Bay Trail extension. Additionally, on Harrison Street, between 4th Street and 5th Street, 12 informal perpendicular parking spaces would be lost and replaced with 4 parallel spaces, with a net loss of 8 parking spaces. This is

due to the 125 feet of new curb and sidewalk that would be part of the project along the south side of Harrison Street.

The Golden Gate Fields northeast (upper) parking lot would be reconfigured and restriped to allow room for the Gilman Street Extension/Golden Gate Fields Access Road intersection. The Golden Gate Fields northwest (lower) parking lot would be restriped to maximize the parking spaces. There would be no net loss of parking for Golden Gate Fields.

Construction Impacts

No Build Alternative

There would be no impacts to circulation and access under the No Build Alternative. There would be no impacts to public or private parking under the No Build Alternative.

Build Alternative

Construction of the Build Alternative could result in temporary roadway obstruction by construction equipment and vehicles. Temporary lane closures may be required, resulting in access restriction to some local businesses. Adjacent streets may also experience episodes of increased congestion as a result of construction within the study area. Any such effects would be localized, temporary, and of short duration. A TMP would be developed and implemented to minimize circulation and access impacts. The TMP would identify and provide alternate traffic detour routes, pedestrian routes, and residential and commercial access routes to be used during the construction period.

During the construction phase of the project, parking restrictions may be required on a temporary basis, especially along Gilman Street. Parking for Tom Bates Regional Sports Complex would be temporarily reduced by approximately 125 spaces during construction due to staging areas. Caltrans, Alameda CTC, and the City of Berkeley will coordinate with the operators of Tom Bates Regional Sports Complex to minimize event scheduling impacts. In addition, a public outreach program would be implemented throughout the construction period to keep the public informed of the construction schedule and the scheduled parking and roadway closures, including the detour routes and alternative parking, if available.

5.2.2 Transit

Project-Level Impacts

No Build Alternative

The No Build Alternative assumes no major construction in the I-80/Gilman Street interchange area other than planned and programmed improvements as part of the SMART

Program, along with continued routine maintenance. By 2035, without capacity or operational enhancements to the I-80/Gilman Street interchange, capacity, congestion, and travel time through this area would worsen considerably. Buses and carpools would be subjected to very congested travel conditions.

Build Alternative

The long-term impacts of the proposed project on bus travel would generally be positive because of the reduction of traffic delay and congestion along Gilman Street and surrounding intersections within the project area. One AC Transit bus stop would be removed from the southwest corner of 4th Street and Gilman Street to provide space for the cycle track. This bus stop would not be replaced. The next eastbound bus stop is located at 7th Street and Gilman Street, three blocks east of 4th Street and Gilman Street. The project team met with AC Transit to determine onboarding and offboarding numbers at this stop and concluded that eliminating this bus stop at 4th Street would not result in an adverse impact to the community.

The Build Alternative proposes installation of two roundabouts at the I-80/Gilman Street interchange area, along with reconfiguration of the on- and off-ramps to improve circulation conditions during peak commute hours. The Build Alternative also would include Transportation System Management and Transportation Demand Management measures, including signage, lighting, and pavement striping. These enhancements would provide improved highway conditions for carpooling or transit use compared to no-build conditions; however, it is anticipated that these facility improvements would not be sufficient to encourage increased transit service frequencies and ridership along the I-80 corridor.

Construction Impacts

No Build Alternative

There would be no impacts to the transit system under the No Build Alternative.

Build Alternative

During the construction phase of the project, bus service near the I-80/Gilman Street interchange area could be disrupted by construction vehicles and equipment. Some rerouting may be required. A public outreach program would be implemented throughout the construction period to keep the public informed of the construction schedule and the scheduled roadway closures, including any necessary detour routes.

5.2.3 Pedestrian and Bicycle Facilities

The I-80/Gilman Street interchange currently poses a circulation obstacle to some pedestrians and bicyclists due to the volume of vehicle traffic in the area. Facilities modified or provided under the Build Alternative respond to the project purpose to provide safe pedestrian and bicycle access to the west side of the study area. This section reports on the impacts and benefits of the project alternatives to nonmotorized travel.

Project-Level Impacts

No Build Alternative

Under the No Build Alternative, there would be some adverse impacts to pedestrian and bicycle circulation from continued congestion along local streets, especially along Gilman Street. The proposed improvements for pedestrian and bicyclists in the area would not be constructed, thereby maintaining the unsafe and higher stress conditions in the study area.

Build Alternative

The Build Alternative would improve pedestrian and bicycle facilities in the study area. Bicyclists and pedestrians coming from all directions into the interchange would be able to cross through at grade. A shared-use Class I path for pedestrians and bicyclists would be constructed on the south side of Gilman Street from 2nd Street to the eastern roundabout. The shared-use path would extend south along Eastshore Highway, where it would then connect to a proposed bicycle/pedestrian overcrossing. The overcrossing would be constructed over I-80, merging into the existing Bay Trail that runs parallel to West Frontage Road. The at-grade shared-use path would continue on the south side of Gilman Street under I-80 and terminate at the Bay Trail on the west side of the interchange. From the eastern roundabout, the shared use path would join a two-way cycle track and the existing sidewalk.

The Build Alternative includes a two-way cycle track on the south side of Gilman Street between the eastern roundabout and 4th Street. The addition of the two-way cycle track would require installation of a traffic signal at the intersection of 4th Street and Gilman Street. The two-way cycle track is separated from vehicle traffic with a 2-foot-wide, 6-inch high median. This facility would connect the bicycle lanes to the pedestrian overcrossing and to the existing Class I Bay Trail facility along West Frontage Road.

West of the interchange, the existing Bay Trail would be extended approximately 600 feet west along the south side of Gilman Street from its current terminus at the intersection of West Frontage Road and Gilman Street to just beyond the Berkeley city limits. The proposed Bay Trail extension would be 10 feet wide and unstriped, with 2-foot-wide unpaved

shoulders on either side of the trail. On-street parking would be reduced by approximately 18 informal spaces at the end of Gilman Street. This extension would connect to a project that EBRPD is undertaking to extend the Bay Trail from the north, terminating at Golden Gate Fields.

The bicycle/pedestrian overcrossing would be similar to the existing bicycle/pedestrian overcrossing over I-80 at University Avenue. It would be a Class I facility, 15.5 feet wide, with sufficient space for bicycle lanes and a lane for pedestrians. The structure would have a minimum of three spans with a maximum span length of approximately 230 feet over I-80. There would be two staircases incorporated into the overcrossing, one on each side of I-80.

The intersection of 2nd Street would have new curbs and ADA standard curb ramps. Additional pedestrian improvements include high-visibility paint marking crosswalks and a stamped concrete median between traffic lanes on Gilman Street. Design elements intended to alert drivers to pedestrians and bicyclists include converting 2nd Street to a one-way street to minimize conflicts, high visibility markings for the cycle track, a raised median between the cycle track and 2nd Street, and shortened intersection crossing distances for pedestrians.

Additional pedestrian and bicycle roadway crossing improvements include upgrading the 3rd Street/Union Pacific Railroad crossing at Gilman Street to accommodate the cycle track. Improvements would include relocating the gate and flashing beacons, addition of a bicycle signal, installation of medians, and improved striping and signage. All improvements would be approved by Union Pacific Railroad and the California Public Utilities Commission.

The intersection of 4th Street and Gilman Street would have new curbs and ADA standard curb ramps. The intersection would allow room for a two-stage bicycle turn box for bicyclists who want to transition from the Class II bicycle lanes to the Class IV cycle track. A two-stage bicycle turn box provides a safe way for bicyclists to make turns across multi-lane roadways. A new signal at the intersection would provide pedestrian/bicycle countdowns.

Improvements would also be made along 4th Street to Harrison Street to 5th Street to provide bicycle connectivity between the Codornices Creek Path and the two-way cycle track on Gilman Street. These improvements would consist of painted shared-lane markings, also known as sharrows, on the pavement throughout this corridor. Bicycle signage and lighting would be included as part of the improvements.

Approximately 125 feet of new curb, gutter, and sidewalk beginning at the corner of Harrison Street and 4th Street and ending half-way down the block towards 5th Street would be constructed. Parallel parking would be added along this new section of curb and sidewalk.

Construction Impacts

No Build Alternative

There would be no impacts to bicycle and pedestrian facilities under the No Build Alternative.

Build Alternative

During construction of the project, some existing bicycle and pedestrian facilities could be disrupted by construction equipment and vehicles (e.g., the Bay Trail). A TMP would be developed and implemented to minimize circulation and access impacts. The TMP would identify and provide alternate traffic detour routes, pedestrian routes, and residential and commercial access routes to be used during the construction period.

5.3 Avoidance, Minimization, and/or Mitigation Measures

The project features and avoidance and minimization measures described in Section 4.1.2, PF COM-2 and PF COM-3, will help reduce potential impacts to traffic and transportation, bicycle, and pedestrian facilities.

Chapter 6 Public Involvement

The project has had extensive public outreach since its inception in 2005. The forums for public outreach activities are described in the following sections.

6.1 Scoping Meetings

Public scoping meetings were held periodically by the City of Berkeley and Caltrans between 2005 and 2009, as various alternatives were explored for the study area to introduce the general public to the project concepts and elicit their comments.

6.2 Stakeholder Interviews

As part of the initial public outreach process, stakeholder interviews were held with representatives from public agencies, nongovernmental organizations, and local business owners who have an interest in the project or who may be affected by the project. Meeting participants included representatives from the following entities:

- City of Berkeley Recycling/Berkeley Transfer Station
- EBRPD
- City of Albany
- Friends of Five Creeks
- Bike East Bay
- Bay Trail/ABAG
- Toyota of Berkeley
- Golden Gate Collision
- Red D Arc Welderentals
- Orton Development Inc.
- West Berkeley Artisans and Industrial Companies
- Trumer Brauerei
- Terminal Manufacturing Company, LLC
- Golden Gate Fields

During the scoping process, concerns were raised regarding the location of the bicycle and pedestrian overcrossing. As a result, the project team conducted additional stakeholder meetings and presentations (see Section 6.4, Stakeholder Coordination), which modified the project design.

6.3 Public Open House Meetings

A Public Open House Meeting was held on April 27, 2016, from 6:30 to 8:30 p.m. at the North Berkeley Senior Center at 1901 Hearst Avenue in Berkeley, California. The open house was held to provide residents and business owners near the interchange, as well as other stakeholders, a greater understanding of the project. Attendees were encouraged to sign in, take a project fact sheet, and visit the seven stations set up around the room that displayed detailed information on poster boards. A brief presentation was given by the project's outreach consultant. An overview of the meeting format, the project background and schedule, and the existing traffic conditions, as well as the alternative being studied, were provided. Participants were encouraged to write their comments on comment cards provided at Station 1. Of the 35 attendees who signed in, 19 provided comments. Comments were made on the following topics:

- Northbound vehicular traffic on Eastshore Highway
- Two-way traffic on 2nd Street
- Roundabout design
- Transit usage and access
- Timing of the project
- Pedestrian and bicycle access
- Homeless encampments

An additional public meeting and open house was held on February 7, 2018 from 10:00 a.m. to 12:00 p.m. at Albany City Hall at 1000 San Pablo Avenue in Albany, California. The public meeting was held to update business owners and the public on changes that had been made to the project design since the 2016 public meeting and to provide an opportunity for the public to learn about the project. Approximately 52 business owners in Berkeley, from Golden Gate Fields to the west and 5th Street to the east, and 18 business owners along the Frontage Road in Albany were sent post card mailer notifications for the meeting. Caltrans and Alameda CTC reviewed and approved the mailing radius. Business owners were identified as those most likely to be affected and interested in the proposed project. A PowerPoint presentation was given by the project's outreach consultant. An overview of the meeting format, project background and schedule, existing traffic conditions, refined alternative being studied, potential impacts of the project on local businesses, and project constraints were provided. Participants were encouraged to email comments to a general email set up specifically for the project. Comments were made on the following topics:

- Stormwater measures

- Ingress and egress to Gilman Street and changes to access to 2nd Street in relation the Berkeley Transfer Center
- Impacts to Target

6.4 Stakeholder Coordination

During the scoping process, concerns were raised regarding the planned location of the bicycle/pedestrian overcrossing and the safety for bicyclists and pedestrians at various street crossings on the east side of Gilman Street. As a result of feedback from community stakeholders, the project team conducted 18 bicycle/pedestrian overcrossing workshops and with community members, community groups, Alameda CTC, and various representatives from the cities of Berkeley and Albany, the Berkeley Transportation Commission, and Caltrans to fully vet alternative alignments for the bicycle/pedestrian crossing. A project update meeting targeting the public and local businesses was held on February 7, 2018. Updated project information was presented at an Albany City Council meeting on February 15, 2018 and at the Berkeley Transportation Commission on February 15, 2018. The team also met with other stakeholders multiple times including Golden Gate Fields, PG&E, Union Pacific Railroad, East Bay Regional Park District, Albany Strollers and Rollers, the City of Berkeley, and the Alameda CTC Bicycle and Pedestrian Advisory Committee to discuss specific concerns and present information on project design updates.

Eleven additional design workshops have been conducted with a similar set of community and agency representatives to work out design refinements covering safety and access concerns for pedestrians and non-motorized vehicles traveling in the project limits. Each intersection the project limits was evaluated and refinements added to increase safety elements. The project footprint expanded to include sharrows along 4th Street, Harrison Street, and 5th Street and to safely connect users of recreational facilities in the Codornices Creek area to the Gilman Street cycle track. Critical stakeholder input resulted in intersection crossing modifications designed to decrease the level of traffic stress ranking for specific street crossings, using the City of Berkeley level of traffic stress ranking system (City of Berkeley 2017). For each crossing, specific design elements were considered to improve (lower) that crossing's level of traffic stress ranking with intersections generally reduced from current conditions. The pedestrian and bicycle design elements that are the result of this outreach are discussed in Section 5.2.3, Pedestrian and Bicycle Facilities. Other improvements integrated into the design with input from stakeholders included landscaping and lighting elements on 2nd Street, north of Gilman Street, improvements of the at grade crossing, and constructing the Bay Trail between Frontage Road and the planned EBRPD's Bay Trail extension from the Albany Bulb that would terminate at or near the Albany-Berkeley city limits.

Ten meetings have been held to date with Golden Gate Fields to address the redesign of the entrance access to the stables from the western roundabout. This process included working collaboratively with Golden Gate Fields to design a solution for truck and traffic ingress and egress and to design the changes with no net loss of parking for Golden Gate Fields.

6.5 Public Meeting

Upon release of the draft environmental document, there will be one public meeting to receive public comments and answer questions about the project alternatives and environmental impacts. During this public review period, members of the public can submit formal comments regarding the project, which will be responded to in the final environmental document.

6.6 Media

Information about the project has been made available through mailers, newsletters, and a project website. An informational mailer was sent to all properties located within a 0.5-mile radius of the interchange to notify them of the April 2016 Open House Meeting (approximately 1,650 addresses). An informational flyer was posted on the project webpage hosted on Alameda CTC's website, as well as on the City of Berkeley website. Alameda CTC's website also included an announcement about the open house and a link to the project fact sheet. A postcard was mailed to approximately 70 businesses within study area to notify them of the February 2018 Open House Meeting and the meeting information was posted on Alameda CTC's website.

6.7 Public Outreach Plan for Environmental Justice Populations

As discussed in Section 4.5.3, although the project would not cause disproportionately high and adverse effects on any minority or low-income populations, a Public Outreach Plan for Environmental Justice Populations would be prepared.

Effective communication methods include distributing flyers within the project area, The Hub (1901 Fairview Street, Berkeley), and at the local community center, homeless shelters, houses of worship, and grocery stores, and posting information on vehicles, bus stops, and other locations frequented by low-income and minority populations. Prior to construction and during construction activities, public notices will be placed throughout the project area and other nearby social service locations to notify those living in the homeless encampments of the dates of clean-up and construction activities.

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