

# East Bay Greenway Multimodal Project: Implementing a Community Vision

2023 RAISE Grant Application



Alameda County Transportation Commission  
1111 Broadway, Suite 800  
Oakland, CA 94607  
[www.AlamedaCTC.org](http://www.AlamedaCTC.org)  
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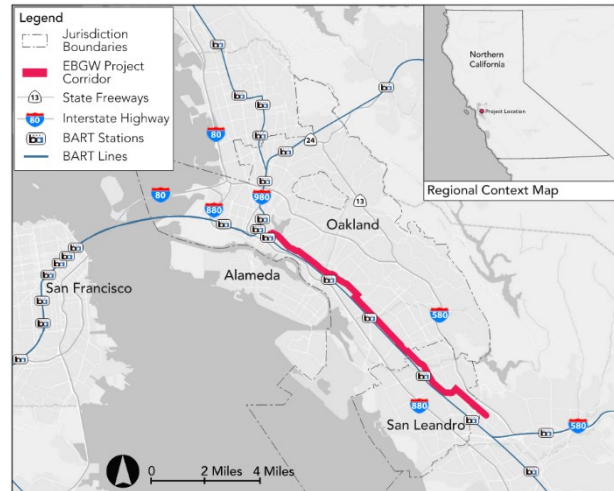
## Attachments

- [Attachment 1: Letters of Support](#)
- [Attachment 2: Project Location File](#)
- [Attachment 3: Grant Application Full-size Figures](#)
- [Attachment 4: Existing Conditions Photos](#)
- [Attachment 5: East Bay Greenway Funding Commitments](#)
- [Attachment 6: Outreach Summary Reports](#)
- [Attachment 7: Benefit-Cost Analysis Narrative](#)
- [Attachment 8: Benefit-Cost Analysis Calculation File](#)

# 1 Project Description

## 1.1 Project Overview

The East Bay Greenway Multimodal Project (EBGW) will create a regional “all ages and abilities” trail facility through heavily urbanized areas of Oakland and San Leandro. Running parallel and connecting to five San Francisco Bay Area Rapid Transit District (BART) rail stations (Figure 1-1). The EBGW will address hazardous safety conditions and increase the desirability of walking, biking, and riding transit. The EBGW will close a major gap in the regional active transportation network and connect users to important community destinations and job opportunities. Urban greening and placemaking elements, such as planting trees, installing benches, creating parklets, and installing wayfinding signage, are key program elements. The EBGW will provide greater mobility and access for all residents with a focus on serving the most vulnerable — children, the elderly, and people with mobility issues and devices, such as wheelchairs.



**Figure 1-1. Project Vicinity Map**

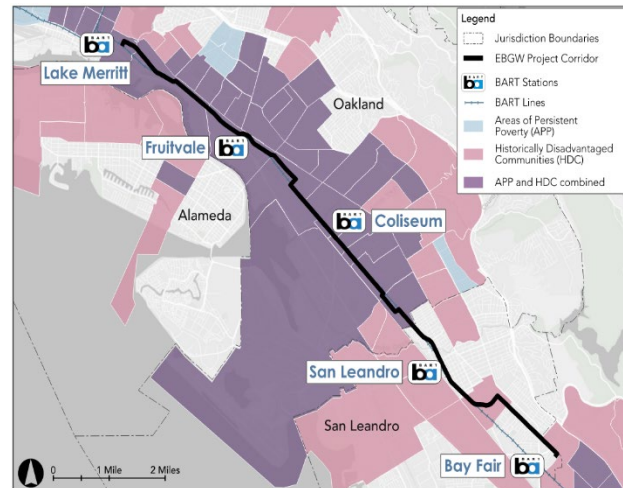
With the advice and participation of the corridor residents, the EBGW will construct approximately 10.6 miles of a major north-south bicycle and multimodal corridor on local arterial streets and a State conventional highway that will ultimately extend to South Hayward in Alameda County. The project will add a multi-use pathway (Class I), buffered bike lane (Class II), traffic-calmed neighborhood bike route (Class III), and separated bikeway (Class IV) facilities between five BART stations beginning at the Lake Merritt Station in Oakland and ending near the Bay Fair Station in San Leandro. The project will also include pedestrian crossing improvements, transit stop elements, and overall safety improvement measures, such as new signals and medians.

The EBGW will connect residents to economic opportunities by linking to K-12 schools and Laney Community College, and it will provide middle-wage job pathways and opportunities. Most importantly, the EBGW will reinvest in the corridor neighborhoods, implementing a long-standing community vision for a safe, accessible urban trail.

The EBGW corridor is home to diverse communities that share a history of underinvestment, exclusionary policies, and environmental injustices. The corridor traverses residential, commercial, and industrial areas and distinct ethnic neighborhoods, including Asian American Eastlake, African American Deep East Oakland, and the Latino community of Fruitvale. These neighborhoods have long been a landing place for refugees from war-torn Central America, Asia, and other parts of the

world. Despite their differences, these communities face common challenges of poverty, high exposure to pollution, limited mobility, and infrastructure shortcomings.

Located entirely within the San Francisco-Oakland urbanized area, the EBGW corridor traverses nine Historically Disadvantaged Community census tracts (40.33, 40.60, 40.61, 40.73, 40.88, 40.94, 40.93, 43.31, 43.38) and seven Area of Persistent Poverty census tracts (40.33, 40.60, 40.61, 40.73, 40.88, 40.94, 40.93), comprising 70% and 56% of the project corridor, respectively, as illustrated in Figure 1-2. Eleven percent of Alameda County's population is below the federal poverty level.<sup>1</sup>



**Figure 1-2. Areas of Persistent Poverty and Historically Disadvantaged Community Census Tracts**

A host of elected officials, stakeholders, and community-based organizations recognize the need to deliver this project to the community as soon as possible, and they strongly support the project with the letters of support submitted with this application. The EBGW has been identified as a local and regional priority and a community-led and supported priority since 2008. Letters of support are included as [Attachment 1](#).

## 1.2 Project Location

The EBGW is located in the cities of Oakland and San Leandro in Alameda County, California (refer to Figure 1-1 and the Project Location File in [Attachment 2](#)). The project corridor's northern limit is the Lake Merritt BART Station at Oak and E. 9th streets in Oakland, and the southern limit is at E. 14th Street and Plaza Drive, adjacent to the Bayfair Center shopping mall. Arterials slated for improvement include E. 10th, E. 8th, E. 12th, and San Leandro streets in Oakland and San Leandro Boulevard and E. 14th Street in San Leandro. Note: full-size maps are included as [Attachment 3](#).

## 1.3 Transportation Challenges

The project corridor is characterized by a roadway network that was not designed for safe travel by pedestrians, bicyclists, and other non-motorized travel. Sidewalks are non-existent in some areas and in disrepair in others. Intersections were designed with the driver in mind, and the wide arterials encourage speeding and reckless driving. This outdated and substandard infrastructure discourages active transportation and limits access to the corridor's abundant rail and bus transit options.

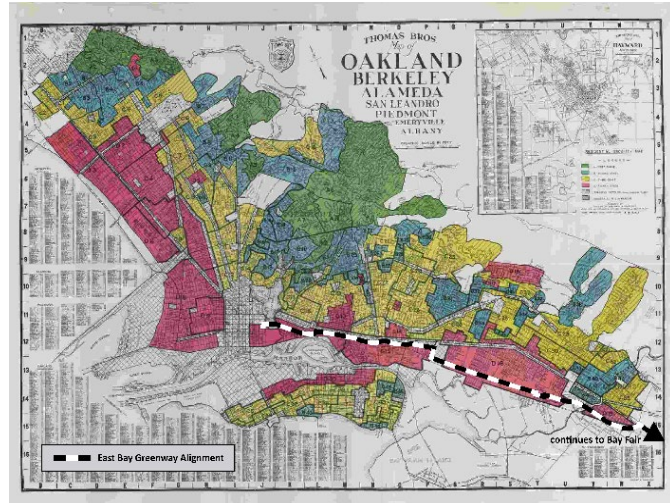
The EBGW corridor runs through areas of the East Bay that were subjected to the detrimental effects of redlining, the systematic practice of denying services — particularly home ownership — to people in specific areas, generally along racial lines, leading to

<sup>1</sup> 2000 Census Data, available at: <https://www.census.gov/data/tables/time-series/dec/census-poverty.html>

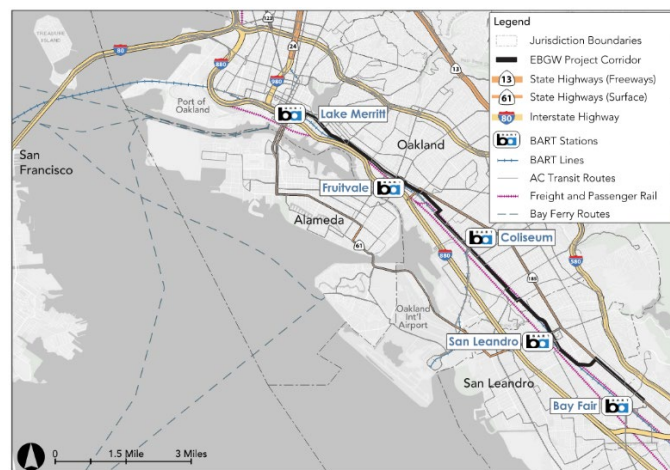
segregation and discrimination. In 1937, the Home Owners Loan Corporation created maps of “residential security” to determine who was eligible to receive New Deal government-backed home loans (refer to Figure 1-3 with the EBGW alignment added). The racial makeup of the project neighborhoods today is not much different than those in the redlining maps of the 1930s.<sup>2</sup>

The EBGW lies in the heart of the East Bay (as illustrated in Figure 1-4), yet the communities in the project corridor have borne the brunt of past transportation infrastructure and development projects without realizing much benefit. Although the area surrounding the EBGW corridor provides residents with economic opportunities and transportation connections, it is congested and has access challenges for non-motorized users. For example, the Oakland International Airport and the Port of Oakland support over 1 million jobs, but they generate significant traffic congestion and air and noise pollution. I-880 provides a vital lifeline and goods movement link for the region and nation, carrying over 100,000 vehicles per day and providing the primary truck route between the Port, Airport, and Central Valley. However, it also generates noise and air emissions, and it forms a barrier between the EBGW corridor neighborhoods and the waterfront. Major freight rail lines operate within the project corridor, providing a critical supply chain link to the Central Valley and to the south while creating dangerous stopped cross traffic and rail crossing conditions.

The EBGW corridor neighborhoods face common challenges of poverty, high exposure to pollution, limited mobility, and the neglect of existing and the absence of accessible transportation infrastructure. Regionally, residents along the EBGW corridor are among the lowest income and have the lowest auto ownership, and they are additionally burdened with high rates of asthma, low access to parks and open spaces, and recurring challenges with safety and crime.



**Figure 1-3. 1937 Thomas Brothers Redlining Map**



**Figure 1-4. Transportation Network within the Project Vicinity**

<sup>2</sup> [Segregation by Design – Oakland: Redlining and Demographics](#)

Nearly half of the corridor is without bicycle facilities, and none that exist are “low stress,” which are characterized by a bikeway that is comfortable for all ages and abilities, and that is separated from traffic. There are significant gaps in the sidewalk network, with three that are more than 1,000 feet each, that collectively span 1.3 miles. The EBGW corridor has numerous locations where crossing opportunities are either too infrequent for the level of pedestrian activity or lack safety elements appropriate for the high speeds and traffic volumes. Pedestrians must often walk up to a quarter mile out of their way to get to a marked crosswalk. In addition, the project corridor generally lacks intersection designs that are Americans with Disabilities Act (ADA) compliant. Existing conditions photos are included as [Attachment 4](#). Significant portions of the corridor overlap with the Alameda County High Injury Network (HIN) as described further in [Section 3.1](#).

#### EBGW TRANSPORTATION CHALLENGES

- Heavy arterial traffic, wide streets
- Major cross traffic
- Significant air and noise pollution
- Lack of first/last mile connections to transit
- Incomplete or nonexistent bicycle paths
- Dangerous gaps in the sidewalk network
- Lack of accessible and ADA-compliant crossings
- Poorly designed intersections
- Poor or nonexistent lighting

## 1.4 Implementing an Equitable Community Vision

The EBGW was developed through deep community engagement that acknowledges and responds to the corridor’s transportation challenges and barriers. Urban Ecology, a local, community-based organization, first proposed the project concept and engaged with the community in 2008 to understand their interests and concerns. Residents advocated for a safe, accessible, and well-maintained bicycle/pedestrian trail; new recreational, health, and greening opportunities; and ways to make their local-serving, ethnic neighborhoods a destination. The resulting [East Bay Greenway Concept Plan](#) proposed a shared-use path in the BART/Union Pacific Railroad (UPRR) Oakland Subdivision (Figure 1-5) to be modeled on the highly successful Ohlone Greenway in northern Alameda County.

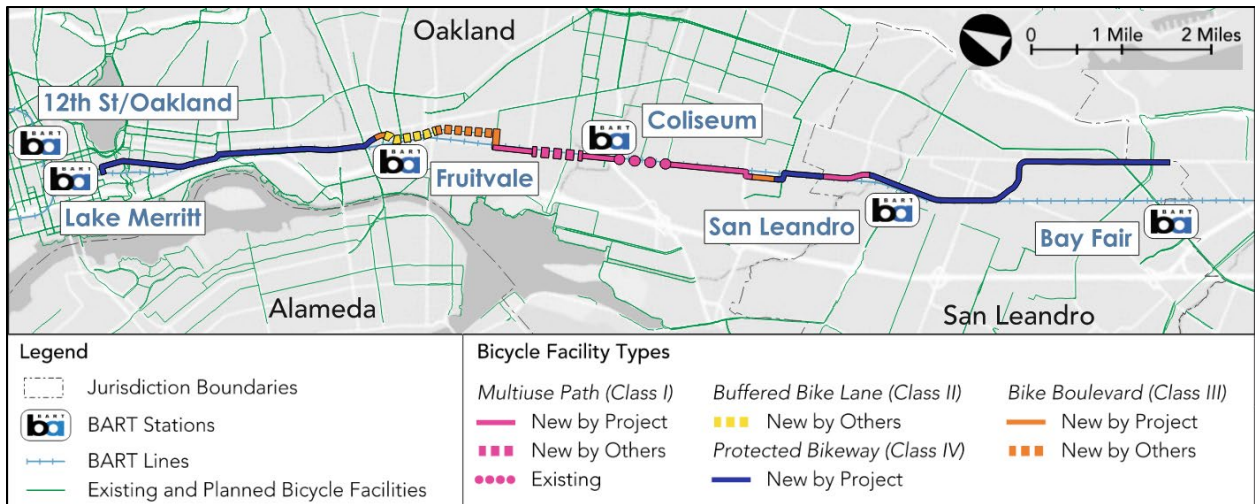


**Figure 1-5. Grassroots Community Planning Informed the EBGW Vision**

The Alameda County Transportation Commission (Alameda CTC) studied and environmentally cleared this project from 2016 to 2018. In 2021, due to the high cost and need to acquire right-of-way from UPRR and in response to significant community demand to deliver safety and multimodal connectivity benefits in a short frame timeline, Alameda CTC developed an EBGW Multimodal Phase 1 project concept that uses parallel streets to avoid encroachments into UPRR’s right-of-way. It stays true to the community vision of a safe and inviting bicycle and pedestrian pathway that provides connections throughout the EBGW communities and to BART stations along the corridor.

## 1.5 Statement of Work

The EBGW is the first major segment of a transformative corridor vision with the explicit goals of promoting mode shift and increasing use of alternate travel modes, improving safety and sustainability, and supporting housing and job growth as the corridor transitions from an auto-oriented thoroughway to a multimodal community street. An initial EBGW segment, from the Coliseum BART Station to 85th Avenue in Oakland, was constructed in 2018. In addition, the City of Oakland is administering the design and construction of two segments that form a comprehensive corridor of enhanced active transportation facilities and connectivity within the project limits.



**Figure 1-6. New Routes Location Map**

The EBGW will improve the bicycling and pedestrian environment by creating a new “all ages and abilities” north-south active transportation spine that provides a vital link in the East Bay cycling network. It will consist of multi-use paths, protected/separated bike lanes, buffered bike lanes, and limited sections of traffic-calmed bike routes. To upgrade the pedestrian network, it will close sidewalk gaps along San Leandro Street and San Leandro Boulevard from Castro Street to south of Marina Boulevard.

The EBGW will install new traffic signals and pedestrian hybrid beacons (PHB), upgrade existing traffic signal system equipment, and provide additional crossing opportunities along stretches of roadway without any marked crosswalks or traffic signals.

It will also implement numerous safety and accessibility improvements, including upgrading curb ramps to be ADA-compliant; adding pedestrian-scale lighting; installing protected intersections, curb bulbouts, and median refuges; removing slip lanes; implementing placemaking elements, such as benches, bicycle parking, and street banners; and implementing transit signal priority and queue jump lanes.

## 1.6 Current Design Status of the Project

Alameda CTC is currently completing the preliminary engineering and environmental review and clearance phase, and it has procured a consultant for the final design phase who will proceed with the project following environmental clearance.



## 2 Project Budget

Table 2-1 is the project funding plan, including this RAISE grant request and other federal and nonfederal funding sources. The East Bay Greenway Multimodal Project (EBGW) seeks \$25 million in RAISE funds to be used toward construction that will be matched with other funds to fully fund the \$120 million project cost. RAISE grant funds will comprise approximately 21% of the total project costs and approximately 16% of the project construction costs. The project construction costs are estimated based on concept design plans (approximately 15% level of design) and include allowances for 30% contingency, 13% construction engineering, and escalation to a 2025 construction year. The project budget does not include any previously incurred expenses.

**Table 2-1. Project Funding Plan**

FUNDING SOURCE	FUNDING AMOUNT (\$ X 1,000)			% CONTRIBUTION
	Design <sup>1</sup>	Construction	Total Funding <sup>2</sup>	
<b>RAISE Funds</b>		\$25,000	\$25,000	21%
<b>Other Federal Funds</b>				
CA Active Transportation Program Cycle 6 (mix of state and federal sources)		\$19,500	\$19,500	16%
<b>Non-federal Funds</b>				
CA Solutions for Congested Corridors Program		\$39,375	\$39,375	33%
Alameda County Measure BB	\$8,153	\$28,075	\$36,228	30%
<b>TOTAL</b>	<b>\$8,153</b>	<b>\$111,950</b>	<b>\$120,103</b>	<b>100%</b>

1. Design costs incurred between time of award and obligation may not be eligible for reimbursement.

2. Does not include costs/funding for the Planning/Environmental Phase (\$844,000 in local funds).

The project funding plan assumes receiving \$19.5 million of California Active Transportation Program (ATP) Cycle 6 funding for construction in Fiscal Year (FY) 2024/25, which received regional approval by the Metropolitan Transportation Commission (MTC) in January 2023 and is awaiting final adoption by the California Transportation Commission in June 2023. The EBGW funding plan also assumes a \$39.375 million California Solutions for Congested Corridors Program (SCCP) grant, which is a partnership application between the Alameda County Transportation Commission (Alameda CTC) and the California Department of Transportation (Caltrans) District 4; a programming decision on this application is expected in spring/summer 2023. If this application is unsuccessful, the balance of construction costs will be funded by Alameda CTC-administered funds. Refer to [Attachment 5](#) for funding commitment documentation.

Alameda CTC collects and administers local sales tax and vehicle registration fee revenues, and the EBGW is highlighted as one of three major regional trails to receive

funds within the 2014 Measure BB Transportation Expenditure Plan. Alameda CTC’s FY 2022/23 budget estimates over \$360 million in sales tax revenues. As such, it has sufficient financial reserves to cover both the balance of the project funding plan and any potential construction shortfalls.

For the ATP funding, projects must be awarded within six months of receiving a construction allocation, and construction activities must be completed within 36 months of award. However, extensions to these deadlines may be requested.

To be eligible for SCCP funds, projects must be ready to start construction by December 31, 2025.

Table 2-2 is a breakdown of project costs across the census tracts adjacent to the EBGW.

**Table 2-2. Project Costs per Census Tracts**

CENSUS TRACT	PROJECT COSTS PER CENSUS TRACT (\$ X 1,000)
4033.02	\$4,484
4060.00	\$21,389
4061.00	\$13,979
4073.00	\$6,331
4088.00	\$4,204
4094.00	\$13,897
4093.00	\$7,012
4323.00	\$5,623
4326.01	\$9,606
4331.04	\$11,831
4331.03	\$10,522
4331.02	\$6,982
4330.00	\$530
4338.01	\$3,712
<b>TOTAL PROJECT COST: \$120,102</b>	

## 3 Merit Criteria

### 3.1 Safety

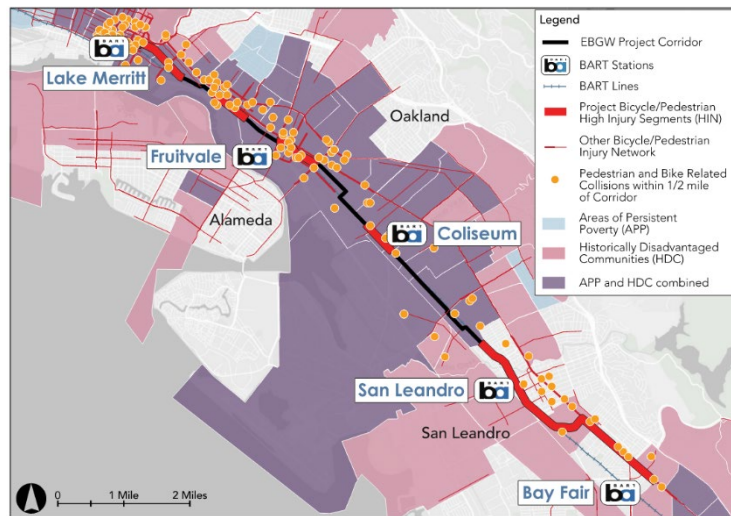
Improved safety in the corridor is a primary purpose of the East Bay Greenway Multimodal Project (EBGW). Its focus is to provide a safe corridor for all users, including the most vulnerable users, by addressing excessive speed and reckless driving, implementing countermeasures to address the most frequent collision types, protecting bicyclists and pedestrians, and slowing overall traffic speeds. The EBGW's goal is to provide safer streets at safer speeds for a safer community.

**Protecting travelers and communities.** Currently, the EBGW corridor has many obstacles and deficiencies that prohibit safe travel. Significant portions of the project corridor overlap with the countywide pedestrian and bicycle High Injury Network (HIN), as illustrated in Figure 3-1.<sup>3</sup> Within Alameda County, 4% of county roadways account for 65% of bicycle-involved and 59% of pedestrian-involved collisions.

The wide, high-speed street design and scarcity of crossings make the streets themselves a barrier to mobility. Failure to yield is the highest cause of pedestrian-involved collisions (43%). Crossing the street is particularly difficult for those who walk at a slower speed, such as students, seniors, people with strollers, and people with disabilities, and they may choose an unsafe crossing option rather than walking a longer distance to a safe crossing. Difficulties crossing the street may also lead bicyclists to ride on the wrong side of the road, which is the most common cause of bicycle-involved collisions (23%).

Crash data from [Safe Oakland Streets](#) highlights the inequities that exist within the EBGW corridor:

- 35% of Oakland's HIN is located within the EBGW project area.
- 26% of all bicycle and pedestrian fatalities in the city occur within the project area.
- Of those deaths, 75% comprise people of color.

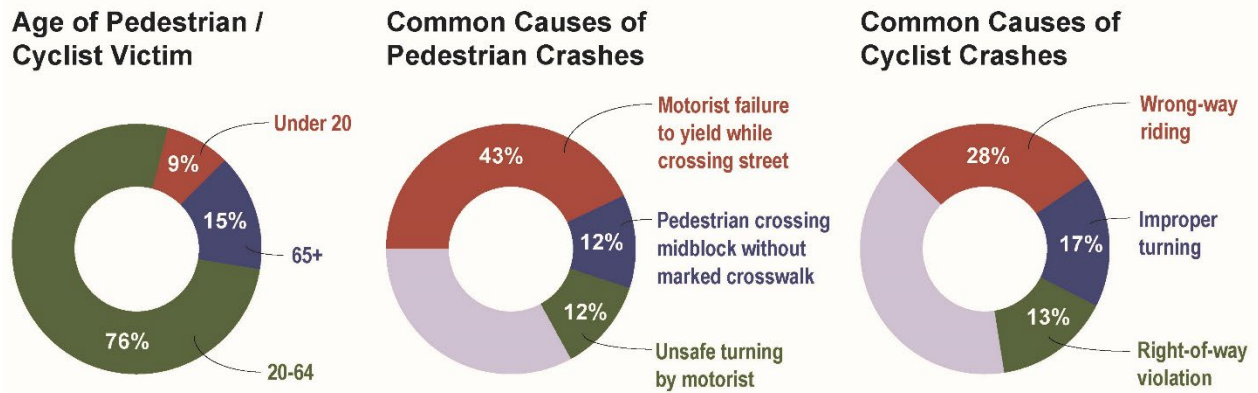


**Figure 3-1. Bicycle/Pedestrian Safety Map**

<sup>3</sup> The HIN evaluates crashes that result in fatalities, severe or visual injury, or property damage, weighing crash rate on a particular segment by severity. The HIN is based on crash data from the California [Statewide Integrated Traffic Records System](#) (SWITRS) database for the 5-year period from 2012 to 2016. Other accident data cited are based on the 5-year period from 2015 to 2019.

Key crash data findings from 2015 to 2019 are illustrated in Figure 3-2.

**From 2015-2019, the project area saw 106 injury / fatal crashes involving pedestrians and cyclists, including 3 fatalities and 12 severe injuries.**



**Figure 3-2. Corridor Crash Data Analysis**

**Reducing fatalities and injuries.** Consistent with the [National Roadway Safety Strategy](#), the project team has analyzed crash data history to inform the selection of countermeasures to protect nonmotorized travelers and to reduce fatalities and serious injuries, as indicated in Table 3-1.

**Table 3-1. Project Improvement Measures**

ISSUE	IMPROVEMENT MEASURES
Motorist failure to yield at uncontrolled crossings	<ul style="list-style-type: none"> <li>▪ Median refuge islands</li> <li>▪ Pedestrian hybrid beacons (PHBs)/rectangular rapid flashing beacons (RRFBs)</li> <li>▪ Lighting enhancements</li> <li>▪ High-visibility crosswalks</li> <li>▪ Speed management street design measures – narrower lanes, tighter cross section to increase reaction time</li> </ul>
Pedestrians crashing outside of crosswalks	<ul style="list-style-type: none"> <li>▪ New, enhanced crossings in areas with long spacing between crossing opportunities</li> </ul>
Pedestrian and bicycle crashes from motorist unsafe turning	<ul style="list-style-type: none"> <li>▪ Leading pedestrian intervals (LPIs)</li> <li>▪ Protected intersections (to force slower turning movements, eliminate bicycle weaving, and improve sight lines)</li> </ul>
Bicycle wrong-way riding crashes	<ul style="list-style-type: none"> <li>▪ New Class I and Class IV bike facilities (to address wrong-way riding associated with sidewalk riding)</li> <li>▪ Crossing improvements (new PHBs/RRFBs) to make it easier for cyclists to get to the correct side of street</li> </ul>
Pedestrian crashes at signalized intersection	<ul style="list-style-type: none"> <li>▪ LPIs</li> <li>▪ High-visibility crosswalks</li> <li>▪ Bulb outs</li> </ul>

**Proven, high-impact countermeasures.** The EBGW includes safety treatments that have proven effective at reducing frequent crash types along the corridor, as summarized in Table 3-2. Many of these countermeasures are specifically targeted at vulnerable road users, and they are all demonstrated by national research, including the Federal Highway Administration’s (FHWA) Proven Safety Countermeasures database, to be effective at reducing crashes. As part of a systemic safety approach, these countermeasures are applied throughout the EBGW corridor where crash risk exists, not just at locations where a crash previously happened.

**Table 3-2. Safety Countermeasures**

COUNTERMEASURE	DOCUMENTED EFFECTIVENESS
Separated Bike Lanes	45% reduction in bicycle/pedestrian crashes
Pedestrian Hybrid Beacons (PHBs)	55% reduction in pedestrian crashes 15% reduction in serious injury/fatality crashes
Rectangular Rapid Flashing Beacons (RRFBs)	47% reduction in pedestrian crashes 98% yielding improvement
Median Refuges	56% reduction in pedestrian crashes
Lighting Enhancements	42% reduction in nighttime injury pedestrian crashes 33–38% reduction in nighttime crashes at intersections
Leading Pedestrian Intervals (LPIs)	13% reduction in pedestrian-vehicle crashes at intersections
Protected Intersections	Widely demonstrated as an international best practice in cycling nations, such as the Netherlands

Sources: [FHWA Proven Safety Countermeasure initiative \(PSCi\) database, 2022](#); [Caltrans Local Road Safety Manual, 2022](#)

**Towards zero deaths.** The EBGW is part of a larger commitment by the project partners to seek to eliminate major traffic crashes as part of the national Towards Zero Deaths/Vision Zero movement. In 2021, the City of Oakland adopted its [Safe Oakland Streets](#) initiative, which seeks to prevent serious and fatal traffic crashes and to eliminate crash inequities in Oakland. The City of San Leandro passed a resolution in April 2022 adopting Vision Zero as a local policy and completed a Local Road Safety Plan in fall 2022. The Alameda County Transportation Commission (Alameda CTC) conducted safety network planning/mapping analysis, facilitated information sharing and resource exchanges between local agencies around safety, and included safety as one of its core legislative goals and one of three Alameda CTC priorities in 2022 and 2023.

**Safer people, safer roads, safer speeds.** The EBGW is consistent with key pillars of the [National Roadway Safety Strategy](#). As noted in [Section 1.3](#) Transportation Challenges, nearly half of the project corridor has no bicycle facilities, and none are “low stress” paths. There are significant sidewalk gaps throughout the project corridor with numerous locations where crossings are dangerous due to a lack of marked crossings and wide

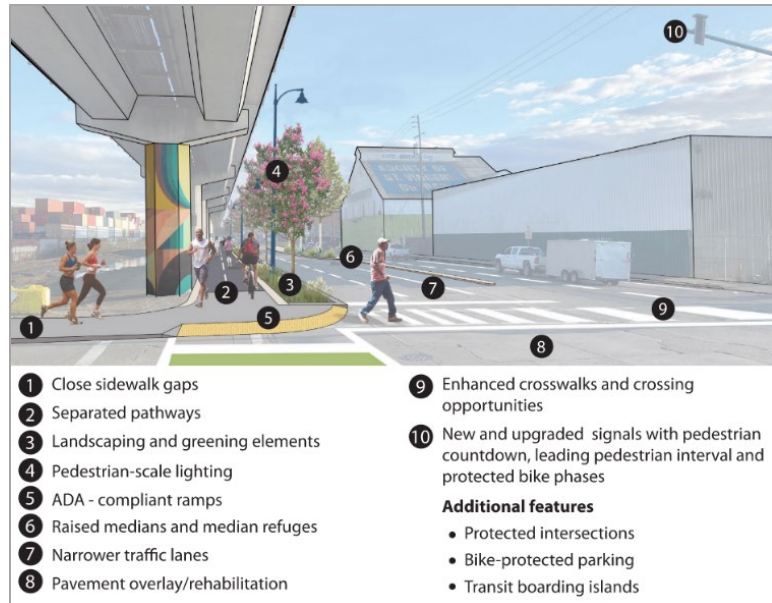
streets. Other safety and accessibility features, such as pedestrian-scaled lighting and Americans with Disabilities Act (ADA) compliant curb ramps, are sorely lacking.

The EBGW will implement features to slow traffic speeds, improve sight lines along the corridor, enhance lighting, and provide protected zones for pedestrians and bicyclists. Specific project components are detailed in Table 3-1 and in Figure 3-3.

The EBGW prioritizes the safety of all users of the transportation network in the corridor, and it specifically focuses on providing safety and comfortable travel for pedestrians, bicyclists, the elderly, those who use wheelchairs and mobility devices, people with strollers, transit riders, and children. As stated previously, the project implements proven safety countermeasures that directly respond to the most common crash types in the corridor, particularly those that lead to bicyclist and pedestrian injuries and fatalities. Safety measures, such as median refuges and flashing beacons, are particularly beneficial to seniors, children, and others seeking to cross the street who walk at a slower speed and have a more challenging time finding a “gap” to cross.

The main arterials in the corridor are wide and primarily four-lanes with posted speeds of 35 to 40 miles per hour (mph) (with 85th percentile speeds as high as 48 mph) and carry daily traffic volumes of up to 18,000 vehicles per day.<sup>4</sup> Crashes at higher speeds are likely to result in severe or fatal injuries, especially for pedestrians and bicyclists. The project will implement several roadway reconfigurations that will reduce high-speed traffic, including narrowing lanes. In addition, new signals will break up long stretches of roadway where drivers can accumulate significant speed before encountering another signal.

The EBGW also proposes the addition of raised median treatments along wide arterial roadways in East Oakland that have been the location of sideshow activities. Sideshows are large gatherings of youth, sometimes with hundreds of attendees, where reckless driving stunts are performed. The wide expanse of pavement along the project streets makes them a desirable location, but they have a history of turning violent and necessitating law enforcement response. By physically prohibiting sideshows by adding landscaped medians, the EBGW will offer an alternate, non-confrontational means to deter this activity.



**Figure 3-3. Improved Intersection Safety Features**

<sup>4</sup> Traffic counts and speed survey data were obtained from the City of Oakland, 2022.

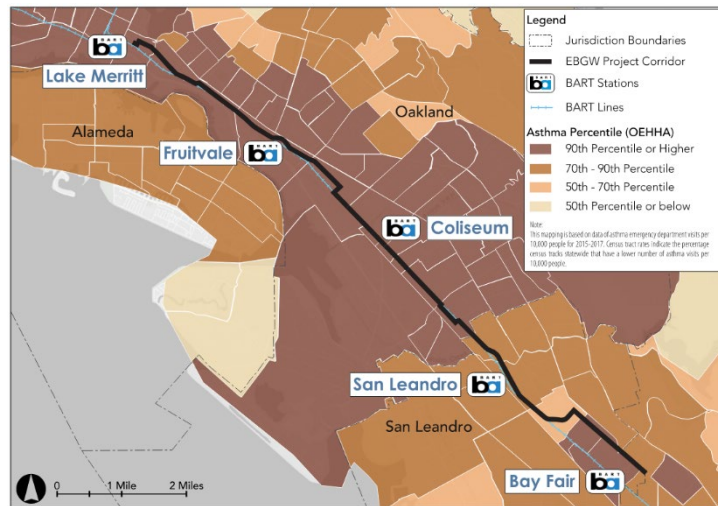
## 3.2 Environmental Sustainability

The EBGW seeks to provide significant environmental sustainability benefits, including reduced greenhouse gas (GHG) emissions and air pollution, and increased green space along a historically underserved and high emission exposure corridor.

### Addressing environmental justice issues.

The construction of the I-880 freeway in the 1950s and numerous nearby industrial facilities have created significant air and noise pollution and community division/displacement impacts that continue to this day.

According to the [California Healthy Places Index](#) mapping, the project census tracts are collectively in the 10th percentile statewide in exposure to diesel particulate matter (with all tracts in the 25th percentile or below) and have a combined asthma emergency room admission rate that places them in the 8th percentile statewide (worse than 92% of census tracts). Children are especially susceptible to the negative effects of air pollution and represent more than 20% of the area's population. The EBGW will provide clean transportation alternatives to driving, helping to reduce GHG emissions and noise in communities that bear the brunt of exposure to these pollutants and that suffer resultant health consequences.



**Figure 3-4. Air Quality Map – Asthma Percentile**

**Alignment with California's decarbonization plan.** The EBGW is in complete alignment with the State of California's decarbonization plan, and it will advance its adopted goals. In November 2022, the California Air Resources Board (CARB) adopted its [2022 Scoping Plan for Achieving Carbon Neutrality](#). This ambitious plan establishes a target of reducing anthropogenic (human-caused) emissions to 85% below 1990 levels by 2045, and it calls for the implementation of sustainable active transportation options to reduce reliance on cars and their associated expenses.

Reinforcing CARB's goals is California's [Climate Action Plan for Transportation Infrastructure](#) (CAPTI), which details the state's recommendations for investing billions of discretionary transportation dollars annually to aggressively combat and adapt to climate change while supporting public health, safety, and equity.

Driving alone accounts for 87% of trips along the EBGW corridor, and most trips through the EBGW corridor are local and relatively short: 28% are two miles or less, and 55% are five miles or less.<sup>5</sup> The prevalence of short driving trips indicates a viable market for mode shift in that shorter trips are easier to make by walking or biking. The EBGW will provide high quality, comfortable, connected walking and bicycling facilities

<sup>5</sup> [Oakland Mobility Action Plan](#), 2022

to enable this mode shift, helping to fight climate change, improve resiliency within a corridor susceptible to sea level rise, and create a more sustainable transportation infrastructure.

**Encouraging transportation-efficient land use and design.** A major goal of the EBGW is to create safe, walkable neighborhoods that provide access to local-serving daily destinations. The project, as discussed in Section 3.3, reinforces the connection between active transportation and transit-oriented development (TOD), including both housing and commercial development. Continued investment in the corridor, coupled with urban greening elements, will prove attractive to local patrons and businesses, and it will enliven the public space.

**Encouraging mode shift and reducing vehicle miles traveled (VMT).** As noted in the Statement of Work ([Section 1.5](#)) and Safety (Section 3.1) sections, the EBGW encourages mode shift from automobiles to active transportation and transit. The project is estimated to reduce daily VMT by nearly 38,000 miles daily. The project's benefit-cost analysis also estimates that carbon dioxide emissions — the most prevalent GHG in the atmosphere — will be reduced by over 180 tons per year, on average.

**Protecting the environment.** The EBGW corridor includes several urban creeks and waterways, such as the Lake Merritt Channel, that drain to the San Francisco Bay, and they are home to many bird, aquatic, and animal species. Several of these, such as Ridgway's Rail and coho salmon, are protected under the federal Endangered Species Act. The project will implement green infrastructure components, such as bioswales, rain gardens, and stormwater runoff, as part of the overall greening of the corridor. As described in Section 3.5 Economic Competitiveness, the EBGW has retained the services of the Local Conservation Corps to oversee the creation and construction of the proposed urban greening elements. The project will avoid adverse impacts on the environment, and it will improve and enhance the natural environment for all.



**Figure 3-5. Lake Merritt Channel**

### 3.3 Quality of Life

**Unmet mobility needs.** The EBGW corridor is among the lowest income and lowest auto ownership in the Bay Area and the State of California. More than 80% of the census tracts in the corridor have median household incomes (MHI) of \$60,188 or less, and many other tracts within the corridor have MHIs of \$48,902 or less. While these MHI figures may seem high elsewhere in the country, the San Francisco Bay Area's high cost of living means this income level is close to the federal poverty line for a 4-person household.

While access to automobiles is limited, many residents rely on cars to get to work. In the corridor's 15 census tracts, only 84% of households have access to an automobile, and 11 of the 15 tracts are in the 25th percentile statewide or below. Despite the lack of



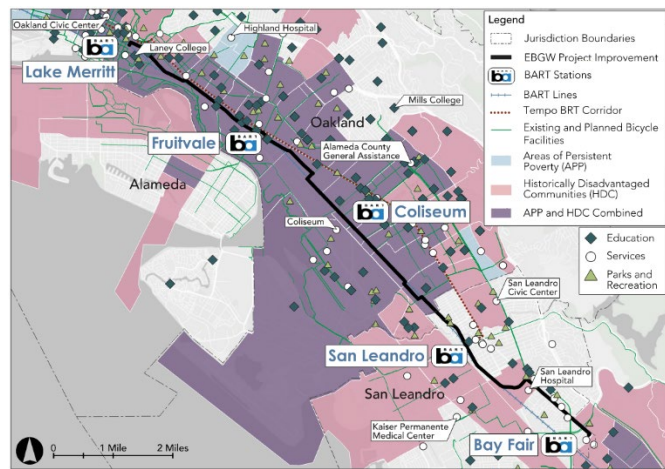
access to a car, data from the 2022 [East Oakland Mobility Action Plan](#) shows that over half of East Oaklanders drive alone to work, and nearly three-quarters of residents carpool or drive alone for all trips. Reliance on cars to get to work or for other daily activities suggests that existing alternatives are not meeting residents’ needs, and they may be unable to get to needed destinations or may be making significant sacrifices to share limited numbers of vehicles.

**Increased access to affordable multimodal choices.** The EBGW includes important improvements to ensure safe and convenient access to/from San Francisco Bay Area Rapid Transit District (BART) stations, and it makes notable improvements to the roadway and bus loading areas to provide convenient access to bus transit, as detailed in [Section 1 Project Description](#). The corridor cities are also constructing bike paths on intersecting streets that provide east-west connections.

**Reducing cost burdens for equity communities.** The EBGW will help reduce transportation and housing cost burdens for equity communities by increasing access to reliable, safe, and affordable transit, thereby improving access to local community services, and by integrating affordable housing and mixed-use developments into the community.

The EBGW corridor is rich in affordable transit options and access to both rail and bus transit will be improved by this project. Both BART and AC Transit offer discounted transit fares for persons with disabilities, youth, and seniors, and they participate in the region’s Clipper Start pilot program, which provides substantial transit fare discounts for low-income residents (those with household incomes of 200% of the federal poverty level or less). These programs reduce the cost burden of transportation for residents.

Enhanced multimodal options can also enable residents to accomplish daily needs while avoiding the costs of owning and maintaining a vehicle. As illustrated in Figure 3-6, the EBGW corridor contains a myriad of important community destinations.



**Figure 3-6. Access to Community Destinations Map**

**Strengthening transportation, housing, and land use connections.** The EBGW will support the integration of transportation with existing and new affordable housing choices by creating an active transportation “spine and improving connections to transit.” This integration is supported regionally by MTC’s Plan Bay Area 2050 (the regional long-range transportation-land use plan) that identifies the entire length of the project corridor as Priority Development Areas, which is a locally nominated area with high-frequency transit service that is designated for infill housing and jobs.

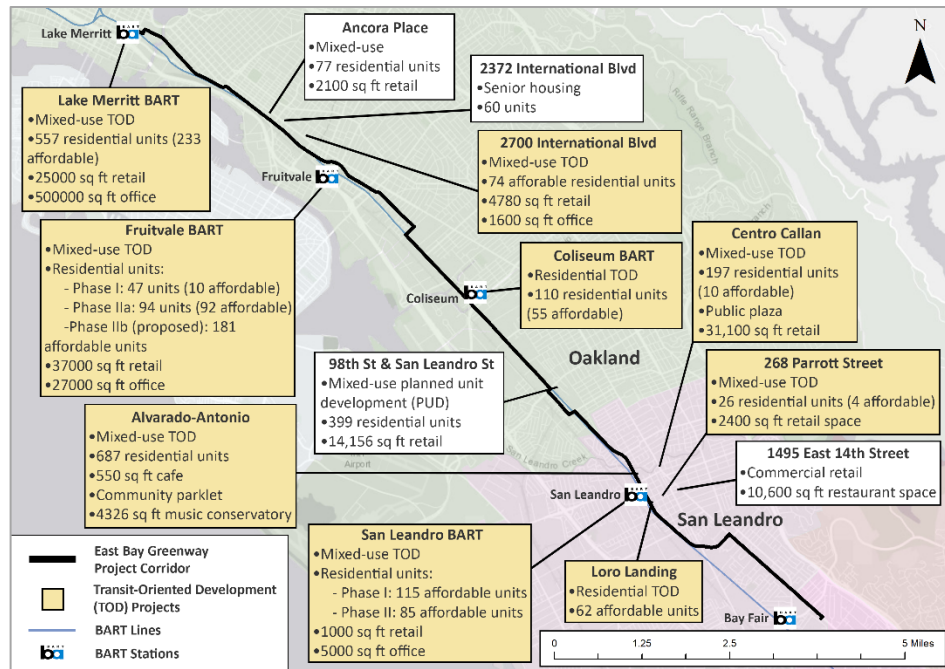
The EBGW is supported by all relevant regional and local land use, transportation, community-based, and bicycle-pedestrian plans conducted in the past 15 years, including, as noted, Plan Bay Area 2050, Alameda Countywide Transportation Plan 2020, and the cities' general plans and housing elements. BART has included the EBGW in its station area plans as a key factor in mandating denser affordable housing projects and lowering parking minimums for station development.



**Promoting TOD.** The EBGW improves the quality of life for corridor residents by expanding alternative and active transportation options. These improvements support investments by the cities and regional partners to construct a range of market rate and affordable housing along the corridor and job-focused development projects. Significant housing growth is completed, underway, and anticipated along the EBGW. More than 800 units of affordable housing have been completed or are being developed at the five BART stations in the project area (Figure 3-7). The project will complement affordable housing that is being constructed in transit station areas by providing expanded mobility options for

residents of these developments. In doing so, it will help prevent displacement by helping residents stay in the Bay Area despite the region's high cost of living.

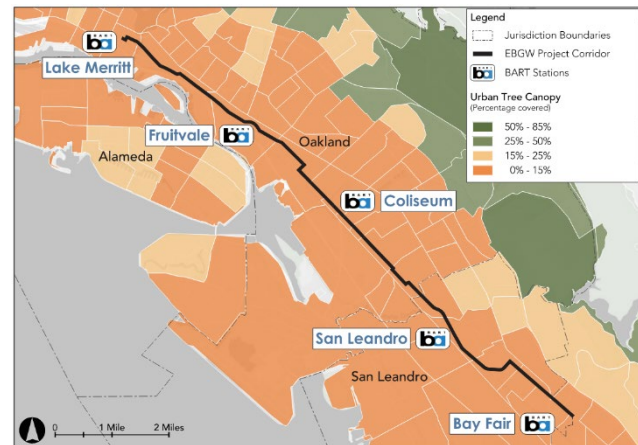
Many other mixed-use projects are planned for the corridor that provide residential and commercial opportunities.



**Figure 3-7. Planned Mixed-Use Projects in the Corridor**

**Improving public health.** As noted in Section 3.2 Environmental Sustainability, the project area disproportionately suffers from high rates of air and noise pollution. It should be noted that more than 20% of the population in the project area are school-age children<sup>6</sup> (under 18 years of age); children are more susceptible than adults to the adverse health consequences of pollution and inactivity. Encouraging walking and bicycling among residents will improve the overall health of individuals and the community. The potential mode shift to active transportation and transit will result in reduced VMT and pollution-related impacts.

**Greening the corridor and providing access to open space.** The EBGW proposes several components in this heavily urbanized environment with the goal of fostering a sense of place by creating welcoming and attractive green spaces, which will mitigate urban heat islands, provide refuge from hot or inclement weather, and improve the attractiveness of the corridor. Some green and sustainable approaches that are under consideration for integration in the EBGW design include green stormwater infrastructure, low water landscaping, pervious and permeable pavers, pervious concrete, and porous asphalt; energy efficient lighting and use of solar power and “smart” lighting controls; street trees; and new urban green spaces. Corridor residents and visitors currently lack access to green spaces and parks. As illustrated in Figure 3-8, the corridor has less tree canopy (0-15%) than other parts of Oakland and the surrounding communities. Oakland also ranks low in available open space, scoring just 45 out of 100 in acres of parks due to low median park size, according to the [Trust for Public Land](#). The EBGW provides better access to regional recreational activities, such as the Bay Trail, which currently includes 350 miles of an all-abilities bicycle and pedestrian trail that hugs the shoreline of the San Francisco Bay. Martin Luther King Regional Shoreline Park, a wetland shoreline preserve, lies a little more than two miles west of the project corridor. The project will proactively address equity by ensuring that disadvantaged neighborhoods share in access to green space and outdoor recreation opportunities.



**Figure 3-8. Urban Tree Coverage in the Corridor**

<sup>6</sup> Derived from the [American Community Survey 2016-2020 5-Year Data Release](#)

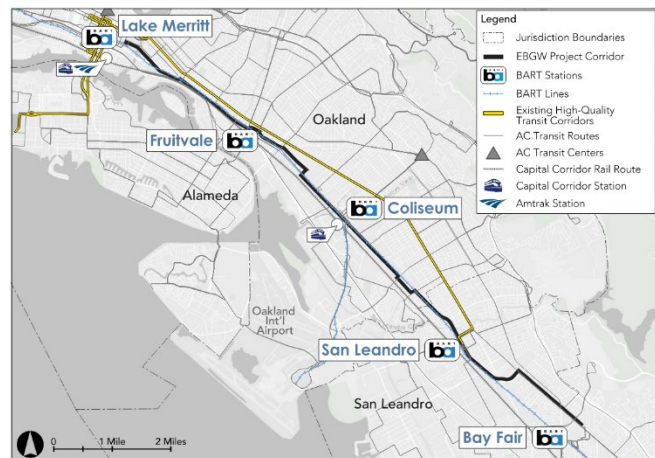
**Reflecting the local community through art.** Oakland has a significant local arts community and a high level of interest in public art and murals (Figure 3-9). It also has a community-focused program to permit roadway art murals called “Paint the Town!” San Leandro also has funded local art projects. As the project proceeds, it will pursue opportunities to collaborate with local artists to incorporate formal public art and informal community-based programs.



**Figure 3-9. East Bay Community Rejuvenation Project Mural by Matley Hurd, Korner Oakland, Fruitvale and San Leandro (one block from 12th Street)**

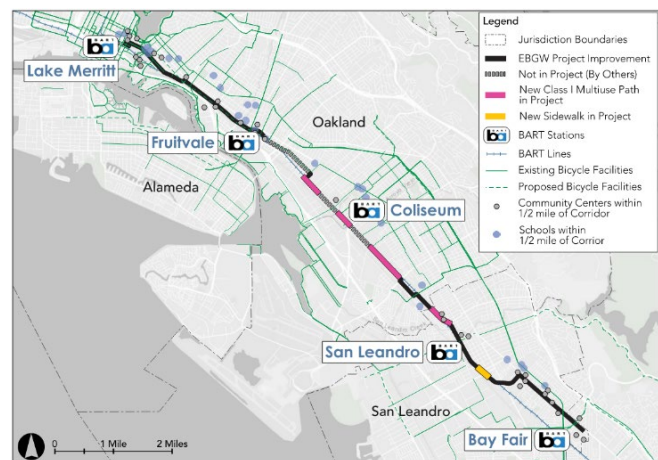
### 3.4 Mobility and Community Connectivity

**Maximizing regional connectivity.** The EBGW corridor is transit-rich with local, transbay, and rapid bus service, urban rail service (BART), and intercity rail service (Capitol Corridor/Amtrak). The project will provide enhanced first- and last-mile access to the five BART stations, one Capitol Corridor station, and bus stops along the route. The project corridor is also served by shared micromobility services (bikes, e-bikes, and scooters), and the project provides linkages to the regional bicycle and trail network, such as the Bay Trail.



**Figure 3-10. Access to Multimodal Choices**

**Addressing community-identified needs and gaps.** The EBGW meets community needs identified in a range of community planning efforts, including the Alameda CTC Community-Based Transportation Plan, East Oakland Mobility Action Plan, East Oakland Neighborhood Initiatives, and Oakland and San Leandro Bicycle and Pedestrian Master Plans. These plans have identified a significant gap in the regional transportation network along the BART corridor, where there is no continuous, low-stress, north-south bicycling route. As illustrated in Figure 3-11, the project



**Figure 3-11. Gap Closure Map**

will close significant gaps in the bicycle and pedestrian network. These plans have also identified a significant community interest in improving overall traffic safety, providing more urban greening and community gathering spaces, and lifting up the identities and histories of the neighborhoods.

**Removing barriers to reconnect communities.** As noted in Section 3.1 Safety, the EBGW will introduce elements to slow traffic and to provide safe crossings along streets that currently have a wide, auto-centric, high-speed design, which will enhance the cohesiveness of corridor neighborhoods. The project will make it easier and safer for residents to walk or bike across the street to access schools, services, and destinations.

**Accessibility and universal design.** The project scope includes upgrades to achieve and exceed compliance with ADA requirements throughout, including upgrading all curb ramps to the latest standards, achieving requirements for cross slopes and running slopes, removing obstructions as part of pathway design, and upgrading traffic signal systems to include accessible pedestrian signals. The project also will include the creation of new paratransit loading zones and add accessible parking spaces to ensure continued access to needed destinations for users of mobility devices who may need to drive. The City of Oakland's ADA Coordinator and AC Transit Accessibility Advisory Committee have been engaged as key stakeholders, and they will continue to inform the design process. Notably, Oakland was the first city in the nation to offer adaptive bike share.

**Serving all users through a Complete Streets approach.** Alameda County has been a national leader in [Complete Streets](#) policy adoption and implementation. A decade ago, all jurisdictions in Alameda County adopted Complete Streets policies, which are modeled on those developed by the [National Complete Streets Coalition](#). The project lives up to the policy directive to serve all modes and all users. In addition to features to serve bicyclists and pedestrians (new pathways, protected bike facilities, and safer intersection design), the project also includes upgrades to serve transit users (bus loading islands, transit signal priority, and shelter enhancements), measures to improve safety for motorists (new signals, median treatments, and lighting upgrades), and improvements to serve people with disabilities.

### 3.5 Economic Competitiveness

Community residents have long voiced the desire for more robust economic support and activity to maintain their community-serving businesses, reduce displacement, and provide access to good paying jobs. The EBGW seeks to improve the safety and attractiveness of the corridor for all users and uses, as well as providing access to education, jobs, and job-supporting services, such as day care, and attracting and supporting robust neighborhood-serving restaurants, entertainment venues, and businesses. New investment in the communities will spur greater public and private investment in the corridor.

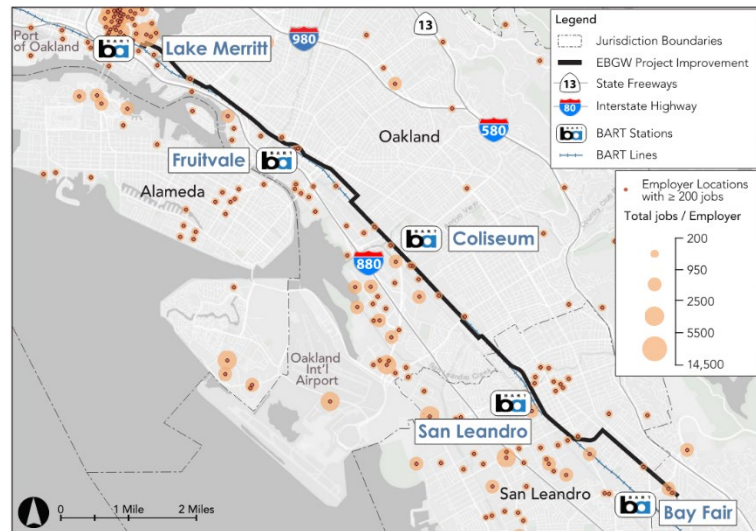
**Inclusive project contracting.** Project construction contracting will comply with the federal Disadvantaged Business Enterprise (DBE) Program in accordance with federal regulations 49 CFR Part 26. Project construction contracting will comply with State of California prevailing wage requirements and DBE programs to ensure support for good-paying jobs and small businesses. Alameda CTC has its own Local Business Contract Equity (LBCE) Program that ensures support for small businesses, funds stay in the

local economy, and all project planning and design professional services have been procured through the LBCE Program.

**Providing ladders of economic opportunity.** In delivering the EBGW, Alameda CTC will contract with the [California Association of Local Conservation Corps](#) (CALCC), a nonprofit organization that provides corps members with on-the-job experience and skills training, often leading to valuable certifications to help people move forward in their careers. Corps members are paid stipends and often receive educational scholarships upon completing their service. Alameda CTC will contract with CALCC for urban greening components, including planting trees and installing benches and wayfinding signage.

The EBGW will also connect individuals to education hubs and job training, including Laney Community College, which offers more than 60 associate degree programs (enrollment is approximately 85% students of color).<sup>7</sup> Improved access to the extensive regional transportation network will expand employment opportunities.

**Linking to job centers.** The EBGW directly connects to several major job centers, including downtown Oakland (home to more than 100,000 jobs across a range of economic sectors), downtown San Leandro, the Fruitvale and East 14th Commercial Districts, and the Coliseum Area Industrial District (Figure 3-12). The Coliseum Area features major regional employers (regional entertainment venue, international airport) as well as numerous blue-collar jobs in manufacturing, production/distribution/repair, and transportation/logistics sectors.



**Figure 3-12. Major Employers within the Corridor**

**Promoting robust job creation.** Jobs created through infrastructure spending include three categories: direct jobs, which represent people whose work is directly billed to the project; indirect jobs, which represent employees working for producers of materials, equipment, and services that are used on the project; and induced jobs, which are created when employees go out and spend their increased incomes on consumer goods and services. It is estimated that total employment (direct, indirect, and induced) is increased by 10 job-years for every \$1 million in direct spending.<sup>8</sup> For the EBGW, this equates to the creation of over **1,000 job-years** — a significant benefit to the local and regional economy.

<sup>7</sup> [Laney College Campus Overview Fact Sheet](#)

<sup>8</sup> [Updated employment multipliers for the U.S. economy | Economic Policy Institute \(epi.org\)](#)

**Facilitating tourism opportunities.** The EBGW corridor includes a number of points of interest to visitors and tourists, including downtown Oakland, which includes a convention center, multiple hotels, and burgeoning dining scene; destination areas, such as the Uptown District, Fruitvale, and downtown San Leandro, which feature vibrant mixes of ethnic food, shopping, farmers' markets, and pub scenes; Lake Merritt, a jewel of an urban park and the oldest urban wildlife refuge in the U.S.; and the Oakland Coliseum and Oakland Arena, which host sporting and entertainment events. These points of interest are already connected by regional transit (BART, Capitol Corridor, and Tempo Bus Rapid Transit, which are easily useable with the Clipper regional transit fare payment system), and the project will further enable visitors and patrons to travel to these destinations via an easy and comfortable bike ride. Oakland already features a mix of shared micromobility options (BayWheels docked bikeshare system and various dockless bike share and scooter services) that visitors can use to explore the corridor. The EBGW also connects directly to the Oakland International Airport via the Coliseum BART Station/Oakland Airport Connector.

**Improved intermodal and/or multimodal freight mobility.** By shifting commuters to more accessible modes of transit, the EBGW will provide congestion relief along I-880, thereby helping improve the flow of Port of Oakland and freight traffic through the congested Bay Area. Unimpeded truck and freight movement is critical to maintaining the national supply chain and related jobs.

### 3.6 State of Good Repair

**Restoring and modernizing aging transportation infrastructure.** Due to years of neglect and the high levels of auto and truck traffic in the corridor, the existing transportation infrastructure — particularly the arterials and intersections — is in dismal condition. Damaged pavement, aging traffic signal systems that do not meet current standards, and weed-choked, broken sidewalks are typical conditions. The EBGW will restore and modernize the existing aging infrastructure, much of which was installed decades ago. In addition to the bicycle, pedestrian, and transit elements, the project scope also includes pavement rehabilitation, modernized traffic signals, and sidewalk repair in conjunction with ramp upgrades.

**Reducing maintenance burdens.** The EBGW's arterial, pavement, and lighting upgrades will be state-of-the-art and, to the extent possible, include low-maintenance alternatives and energy-saving technologies, as described in Section 3.3 Quality of Life. Segments of the EBGW corridor will be converted from paved areas to landscaped areas and medians, thereby reducing future pavement rehabilitation needs. The project will also use drought-tolerant and native landscaping and tree species consistent with the Urban Forestry Master Plans for each city, to reduce ongoing operations and maintenance costs. Alameda CTC is working closely with the corridor cities of Oakland and San Leandro to ensure ongoing maintenance of the new facilities. The agency will also work with the cities to incorporate murals and public art by local artists, elements which have been shown to reduce graffiti and to enhance a sense of community stewardship and pride.

**Fix it first policy approach.** The San Francisco metropolitan region has long adopted a "fix it first" policy approach, which emphasizes reinvesting in and fixing existing aging

infrastructure instead of expanding the freeway and local roadway networks. The EBGW fits within the “fix it first” framework because it will accommodate future growth in the corridor by fixing and reconfiguring existing roadways to better accommodate more spatially efficient modes as an alternative to vehicle capacity adding projects.

### 3.7 Partnership and Collaboration

**Community and stakeholder engagement.** The EBGW has had deep ties with the diverse people and communities within the corridor for over 15 years. As noted in [Section 1 Project Description](#), the vision for the EBGW started in 2008 with a community-based planning effort. Over the years, the proposed safety and access improvements have been reconfirmed by a number of additional engagement activities, including the [East Oakland Mobility Action Plan](#) and the Alameda CTC’s [Community-Based Transportation Plan](#). Improved safety for pedestrians and bicyclists was cited as a top transportation priority in these planning efforts while urban greening was also as a key theme.

The project team has closely coordinated with stakeholders that are vital to its implementation, the corridor cities of Oakland and San Leandro as well as BART, AC Transit, and Caltrans. Summaries of the outreach conducted for each city are included as [Attachment 6](#).

**Meaningful public involvement practices.** Significant community input has been sought during recent project conceptual planning (2021 to 2022) using many engagement techniques and strategies that are consistent with the U.S. Department of Transportation’s (USDOT) [Promising Practices for Meaningful Public Involvement in Transportation Decision-Making](#) guide:

- Presentations to policy boards (Alameda CTC), city councils, and community advisory committees (local and countywide bicycle and pedestrian advisory committees)
- Translation of materials into Spanish and Chinese
- Focus groups with community organizations and representatives of different modal interests
- Use of multiple methods designed to reach people “where they are,” including online and in-person outreach
- Pop-ups at popular community destinations, such as transit stations, festivals, and farmers markets (Figure 3-13)
- [Project website](#) with comprehensive information
- Door-to-door outreach in business districts



**Figure 3-13. Public Outreach Event at the San Leandro Farmer's Market**



- Mailers to residents and businesses along the corridor
- Partnerships with community-based organizations
- Development of a community participation plan to articulate shared goals

**Incorporating community feedback.** Several community member suggestions have directly led to the incorporation of new elements into the project design. Examples include adding additional midblock pedestrian crossing opportunities in the E. 14th commercial district, adding raised medians to prevent reckless driving and to create space for landscaping along San Leandro Street, and designing protected bikeways that are narrow at openings to prevent cars from parking in them but wider at midblock to allow for social riding (multiple people riding side-by-side so they can converse).

**Ongoing community engagement.** During project delivery, Alameda CTC will continue engaging and collaborating in meaningful ways with local community-based organizations; stakeholders; social justice and religious leaders; bicycle, pedestrian, and transit advocacy groups; youth and tribal organizations; and the community at large.

### **3.8 Innovation**

The project scope includes innovative technology elements that will deliver multimodal benefits. The project includes transit signal priority, which will include vehicle-to-infrastructure components that allow transit vehicles to communicate with traffic signal systems to truncate red lights and to extend green lights and keep buses moving quickly and efficiently. The project scope also includes upgrades to pedestrian and bicycle detection technology, including pedestrian-actuated supplemental safety lighting at uncontrolled crossings and bicycle video detection at traffic signals. Lastly, the project will include multimodal design treatments, such as protected intersections and bike lanes that are emerging treatments nationally, and the implementation of these treatments will advance multimodal design practices.

## 4 Project Readiness

### 4.1 Environmental Risk

The project team prepared a risk register that identifies potential risks and mitigation strategies and that is regularly evaluated and updated. The East Bay Greenway Multimodal Project (EBGW) is entirely within an existing, highly developed, urbanized area, and it consists of safety improvements to existing facilities. As such, it poses no major environmental risks. It also does not propose any major utility relocations or road closures during construction, and it is fully in the public right-of-way, so no easements or right-of-way acquisitions are required.

In addition, the project cost estimate includes contingencies to ensure any unexpected delays will not put RAISE funds at risk of expiring before they are obligated.

### 4.2 Project Schedule

The EBGW is currently at a 35% design level. Environmental clearance for the National Environmental Policy Act (NEPA) under a Categorical Exclusion (CE) is underway in coordination with the California Department of Transportation (Caltrans) on behalf of the Federal Highway Administration (FHWA) under the state’s NEPA assignment. The California Environmental Quality Act (CEQA) clearance under a Categorical Exemption (CE) is also in process, and both clearances are expected by summer 2023. The project will be fully designed and ready to advertise for construction by 2025.

**Table 4-1. Project Schedule**

PROJECT SCHEDULE	DATES
Begin Environmental/Preliminary Engineering Phase	01/01/2022
End Environmental/Preliminary Engineering Phase	06/30/2023
Begin Final Design Phase	09/01/2023
End Final Design Phase (Ready to List for Advertisement Milestone)	12/05/2024
Begin Right-of-Way Phase	05/09/2024
End Right-of-Way Phase (Right-of-Way Certification Milestone)	11/06/2024
Allocate Construction Funds	03/26/2025
Begin Construction Phase (Construction Contract Award Milestone)	07/30/2025
End Construction Phase (Construction Contract Acceptance Milestone)	07/30/2027
Begin Closeout Phase	08/01/2027
End Closeout Phase (Closeout Report)	06/30/2028

Throughout the history of the project, as discussed in [Section 3.7](#) Partnership and Collaboration, the project team actively engaged the surrounding community with special attention to environmental justice and historically disadvantaged communities along the project corridor. The input to date has led to meaningful changes and improvements to the EBGW's development and design. Outreach to these communities and local business owners will continue into the design phase, with the goal of keeping the community informed on project progress and to solicit additional feedback on design enhancements. All necessary activities will be completed in advance of the administrative deadline (June 30, 2027) to fulfill RAISE grant fund obligations.

## 4.3 Required Approvals

### 4.3.1 Environmental Permits and Reviews

The EBGW is located in a highly urbanized area, and it will be built on existing public right-of-way. It will not require any federal or state permits. Section 106 compliance is required as part of NEPA, and a review of Section 106 of the National Historic Preservation Act is underway, but it is not expected to require State Historic Preservation Officer Review.

#### CEQA/NEPA Documentation Type and Status

As noted in Section 4.2, a CE is currently underway in coordination with Caltrans. The Alameda County Transportation Commission (Alameda CTC) has been regularly coordinating with the Caltrans Office of Local Assistance to meet NEPA requirements. Caltrans requested a limited set of technical studies to support the CE findings, which are currently underway. State Historic Preservation Office review is not expected as the project incorporated measures to avoid known archaeological resources within the project footprint as part of the design.

CEQA clearance under a CE is also in process. The EBGW was specifically designed to avoid impacting sensitive resources. Supporting technical studies are currently underway and are expected to be complete by May 2023. Although tribal outreach and consultation is not required under CEQA for CEs, the project team also conducted state-level tribal consultation to keep tribes informed of project progress and to solicit specific feedback on known sensitive archaeological resources.

### 4.3.2 State and Local Approvals

#### Consistency with Plans

The project is included in a wide range of adopted local, county, and regional plans, including the following:

- [Plan Bay Area 2050](#): Regional Transportation Plan ID 21-T08-060
- [MTC Transportation Improvement Program](#) (2023, Draft): ID ALA230007
- [Countywide Transportation Plan 2020](#): ID #18
- [Community Based Transportation Plan](#) (2020)
- [Countywide Active Transportation Plan](#) (2019)
- [City of Oakland Pedestrian Master Plan](#) (2017)

- [City of Oakland Bicycle Master Plan](#) (2019)
- [City of San Leandro Bicycle and Pedestrian Master Plan](#) (2018)
- Caltrans District 4 [Bicycle](#) and [Pedestrian Plans](#) (2018, 2021)

EBGW's consistency with adopted plans and the comprehensive outreach done in the corridor speak to its broad support.

### State Approvals

As the owner of a portion of E. 14th Street (State Route 185), the following approvals will be required from Caltrans:

- Approval of a Design Engineering Evaluation Report and supporting project development documentation
- Review and approval of Plans, Specifications, and Estimates
- Execution of a Maintenance Agreement
- Utility and right-of-way certification
- Encroachment permit for construction
- Stormwater Pollution Prevention Plan in compliance with California's Construction General Permit Order 200-0009-DWQ

### Local Permits

Minor, local permits expected during the design phase include the following:

- Encroachment Permits: San Francisco Bay Area Rapid Transit District (BART), Cities of Oakland and San Leandro
- Tree Removal Permits: Cities of Oakland and San Leandro

Local permit acquisition is expected to be routine as the project team meets regularly with the cities, BART, and Caltrans, and they have a clear understanding of the permit requirements process for submittal. Early in the development process, the project team reviewed requirements for tree removals and revised the project to minimize removal as much as possible and to avoid heritage tree removals. The team is planning to replace trees at or beyond the required minimum replacements.

#### 4.3.3 Federal Transportation Requirements Affecting State and Local Planning

As noted in Section 4.3, the EBGW will meet all federal transportation requirements affecting state and local planning. It is included in the relevant state, metropolitan, and local planning documents.

#### 4.3.4 Assessment of Project Risks and Mitigation Strategies

A risk register is being maintained through project development. The following sections includes risks to the EBGW, along with associated risk levels and mitigations. Risk is assessed primarily on the potential to increase project costs or to result in delays to project implementation.

## Public Controversy

**Risk Level – Low:** The EBGW is **not** expected to generate public controversy, given its long support by communities and businesses in the corridor. A portion of the alignment was previously included in the 2018 East Bay Greenway: Lake Merritt BART to South Hayward BART CEQA Initial Study/Mitigated Negative Declaration (IS/MND). None of the public comments on the IS/MND expressed opposition to the EBGW, which developed a project-specific public outreach and communications plan in coordination with Alameda CTC and the Cities of Oakland and San Leandro. While the project proposes some parking and circulation changes that will have localized effects, it will provide substantial mobility, public health, air quality, and safety benefits to low-income and minority populations. No disproportionately high and adverse impacts are anticipated on low-income and minority populations.

**Risk Mitigation Strategy:** Alameda CTC recently undertook a fresh round of outreach efforts to inform the local community, including posting project information on agency websites and social media; mailing postcards about the project to residents and businesses along the corridor; conducting pop-up events at BART stations along the corridor and at popular cultural, community, and sporting events; holding focus groups with community stakeholders; and distributing surveys. The project team also prepared a Race and Equity Impact Assessment of the project in Oakland that included establishing key performance indicators and feedback reporting for continued community input as the project advances, and securing a [resolution of support](#) for the project from the San Leandro City Council. The project team is currently working with the City of Oakland to secure a similar resolution of support.

## Utility Conflicts and Agreements

**Risk Level – Low:** There are several utility owners along the City- and Caltrans-owned streets; however, the nature of the project is such that conflicts and the need for utility relocations are relatively minor. Utility agreements may be needed to adjust utility access holes or covers to grade with the proposed improvements.

**Risk Mitigation Strategy:** Early coordination with utility owners and extensive potholing will be conducted to identify potential utility conflicts. This schedule and cost risk will be proactively monitored during the design phase to avoid delays and to identify the potential for increased costs.

## Hazardous Materials

**Risk level – Low to Medium:** An Initial Site Assessment was prepared to assess the EBGW's potential to impact hazardous waste and materials on its alignment. The draft Initial Site Assessment identified 11 sites in the project area that represent Recognized Environmental Conditions listed on the Hazardous Waste and Substances Sites List (Cortese list). Of the 11 sites, all but three sites are located adjacent to but not on the direct, project footprint.

**Risk Mitigation Strategy:** A Phase II Environmental Site Assessment will be required during the design phase, and it will be used to determine the presence of hazardous materials or petroleum products above the relevant environmental screening levels for soils and groundwater. Samples will be collected in locations where subsurface

excavations are planned near Recognized Environmental Conditions. Following the Phase II testing, design modifications may be required to minimize the potential to impact hazardous waste and materials.

### **Cultural (Archaeological) Resources**

**Risk level – Low to Medium:** Archeological resources were identified within the corridor; however, the EBGW is specifically designed to avoid known archaeological resources.

**Risk Mitigation Strategy:** Archaeological monitors will be used during construction to ensure all protective fencing and signage are in good order. Native American consultation is ongoing, and preliminary discussions resulted in a commitment to support tribal monitors in specific areas of interest.

## **4.4 Technical Capacity**

Alameda CTC has an exceptional project delivery record, having delivered express lanes, major freeway interchange reconstructions, and other multimillion dollar, regionally significant projects. Over the past 10 years, the agency has delivered \$1.3 billion in projects that include innovative designs to provide safe facilities for bicyclists, pedestrians, and transit users. Alameda CTC routinely delivers projects with state and federal grants, such as the I-80 SMART Corridor project (\$79 million bi-county Intelligent Transportation Systems project, completed in 2015), I-580 express lanes (12-mile-long express lanes project, completed in 2016), I-80 Gilman Interchange Project (\$85 million federally funded interchange modernization, currently under construction), and 7th Street Grade Separation East Project (\$365 million project, including more than \$175 million in external grant funds, currently in construction). Alameda CTC routinely works with federal agencies (FHWA, Federal Transit Administration, and resource agencies) and has adopted and implemented policies and procedures for complying with [Title VI](#).

## **4.5 Financial Completeness**

The project funding plan includes various external grants in addition to the RAISE request, including one that is secured (State Active Transportation Program) and one that is pending (State Solutions for Congested Corridors Program), which is a partnership application with Caltrans. Alameda CTC has the capacity to fully fund the project beyond the RAISE contribution with Measure BB local transportation sales tax funds as the Measure BB Transportation Expenditure Plan includes a funding program of \$264 million specifically for three major trails, including the EBGW. EBGW construction costs are based on concept design plans (approximately 15% level of design), but they include prudent assumptions regarding contingency, construction administration, and escalation. The estimate assumes a 30% contingency and escalation to 2025. In addition, Alameda CTC maintains a reserve to cover cost overruns across its entire portfolio of capital projects, which provides additional reserves over and above those assumed as part of the project estimate/funding plan. Alameda CTC has an exceptional financial record, including routinely receiving a [AAA credit rating](#) from major reporting agencies and receiving [awards for excellence](#) in financial reporting.

## 5 Benefit-Cost Analysis

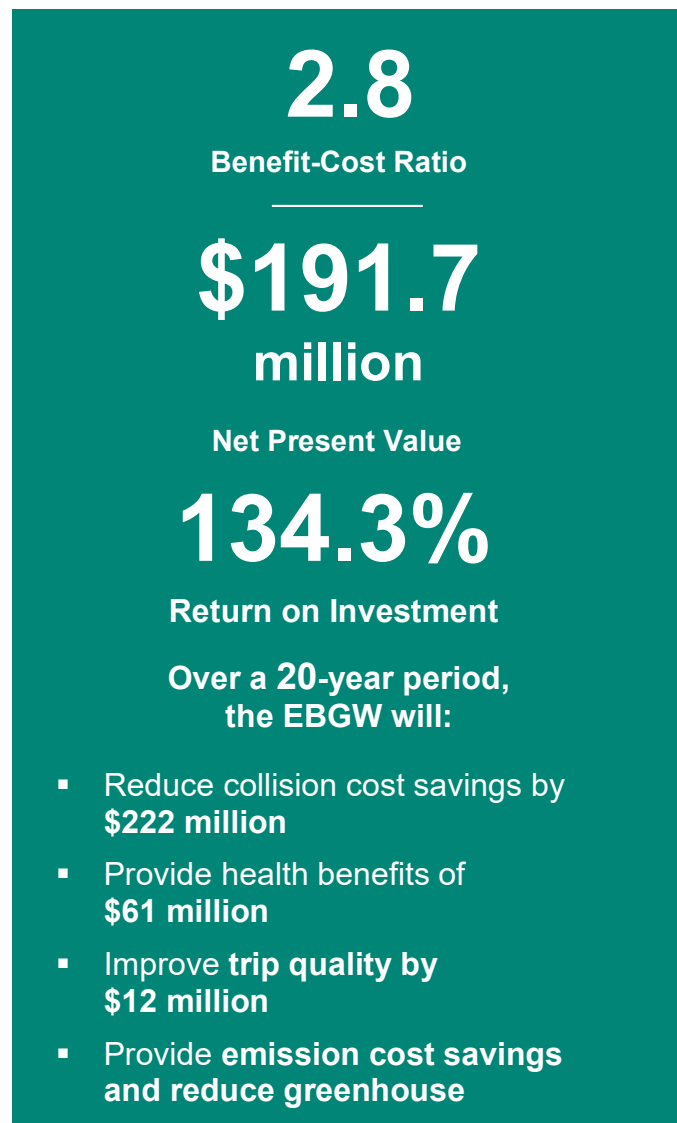
A Benefit-Cost Analysis (BCA) was conducted to provide a quantitative analysis of the benefits the East Bay Greenway Multimodal Project (EBGW) will generate, specifically the direct benefits (due to health and safety improvements). In addition, some indirect benefits (due to improved recreational and health outcomes) were also calculated. The BCA was conducted in accordance with the latest RAISE guidance from the United States Department of Transportation (USDOT) Notice of Funding Opportunity and the USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs (2023). The BCA used the California Life-Cycle Benefit/Cost Analysis Active Transportation model.

After discounting, over 20 years the total direct benefit is expected to be nearly \$200 million. The total Benefit-Cost Ratio for the project will be 2.8. Most of the monetary benefits from the project result from safety and health benefits. The safety benefits will derive from the expected increase in safety with improved intersections and crossings, separation of pedestrians and bicyclists from vehicular traffic, and traffic calming. This will lead to fewer opportunities for accidents and fatalities per mile traveled.

The health benefits are accrued through reduced absenteeism that is generated by induced walking and cycling commuters. The benefits are monetized by higher productivity due to fewer sick days.

Improvements in the quality of the trip for pedestrians and bicyclists arise from a greater feeling of safety, comfort, aesthetics, and other types of improvements, and they generate benefits for current and induced trips.

In summary, it is likely the benefits of the EBGW will significantly outweigh the costs of bringing the project to fruition. Full details on the BCA are included in the BCA Narrative document and supporting calculation file, included as [Attachments 7](#) and [8](#), respectively.



## Attachments

- Attachment 1: Letters of Support
- Attachment 2: Project Location File
- Attachment 3: Grant Application Full-size Figures
- Attachment 4: Existing Conditions Photos
- Attachment 5: East Bay Greenway Funding Commitments
- Attachment 6: Outreach Summary Reports
- Attachment 7: Benefit-Cost Analysis Narrative
- Attachment 8: Benefit-Cost Analysis Calculation File



## **Attachment 1: Letters of Support**

- US Senator Alex Padilla
- US Members of Congress Barbara Lee and Eric Swalwell
- California State Senator Nancy Skinner
- California Assemblymember Liz Ortega
- Metropolitan Transportation Commission
- City of Oakland Department of Transportation
- City of San Leandro
- BART
- AC Transit
- Transform
- Bike East Bay

January 18, 2023

The Honorable Pete Buttigieg  
Secretary  
Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

**RE: Alameda CTC RAISE Application – East Bay Greenway Multimodal Project**

Dear Secretary Buttigieg:

I write in support of the Alameda County Transportation Commission's (Alameda CTC) RAISE grant application requesting \$25 million for the East Bay Greenway Multimodal North Segment project. The project will construct a regional trail bikeway facility and complete street improvements for 10.6 miles along streets parallel and intersecting with Bay Area Rapid Transit (BART). The project will provide significant benefits to the communities that travel between the Lake Merritt and Bay Fair BART stations while helping meet local, state, and federal goals to improve transportation safety.

It is my understanding that the East Bay Greenway will provide a bikeway "spine" that connects neighborhood residents to destinations of need including transit, commercial districts, affordable housing, community colleges, regional open spaces, schools, social services, parks, hospitals, and job centers. The project will provide significant safety benefits for vulnerable bicyclists and pedestrians along streets that have been identified as part of the countywide high-injury network. The project will also improve healthy and affordable mobility options in areas that are identified as regional equity priority communities and have low levels of access to automobiles and high asthma rates.

I urge your full and fair consideration of Alameda CTC's application consistent with all applicable laws, rules, and regulations. Please keep my office informed of the status of this application, and if I can be of further assistance, please contact my Deputy State Director, Daniel Chen, at (650) 533-2207. Thank you for your consideration.

Respectfully submitted,



ALEX PADILLA  
United States Senator

# Congress of the United States

Washington, DC 20515

February 27, 2023

The Honorable Pete Buttigieg  
Secretary of the United States Department of  
Transportation (USDOT)  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg,

We write to express support for the Alameda County Transportation Commission's (Alameda CTC) RAISE grant application for the East Bay Greenway Multimodal – North Segment project. The project will construct a regional trail bikeway facility and complete street improvements along streets parallel and connecting to the Bay Area Rapid Transit (BART) line through the Cities of Oakland and San Leandro, spanning 10.6 miles. The project will provide significant benefits to the communities that it traverses between the Lake Merritt BART station and the Bay Fair BART station while helping to meet local, state, and national goals to improve transportation safety.

According to the Alameda County Transportation Commission, the East Bay Greenway will provide an all ages and abilities bikeway “spine” that connects neighborhoods to destinations of need including transit, commercial districts, affordable housing, community colleges, regional open spaces, schools, social services, parks, hospitals, and job centers.

This project will provide significant safety benefits for vulnerable bicyclists and pedestrians along streets that have been identified as part of the countywide high injury network. The project will also provide healthy and affordable mobility options in communities that are identified as regional equity priority communities and have low levels of access to automobiles and high asthma rates. Alameda CTC is requesting \$25 million in RAISE funds which will be matched with state and local transportation funds to fully fund the \$121 million project.

We encourage you to give this application full and fair consideration, consistent with applicable law and regulations.

Sincerely,



Barbara Lee  
Member of Congress



Eric Swalwell  
Member of Congress

CAPITOL OFFICE  
1021 O STREET  
SUITE 8630  
SACRAMENTO, CA 95814  
TEL (916) 651-4009  
FAX (916) 651-4909

DISTRICT OFFICE  
1515 CLAY STREET  
SUITE 2202  
OAKLAND, CA 94612  
TEL (510) 286-1333  
FAX (510) 286-3885

SENATOR.SKINNER@SENATE.CA.GOV

# California State Senate

SENATOR  
NANCY SKINNER  
NINTH SENATE DISTRICT



CHAIR  
BUDGET & FISCAL REVIEW  
CHAIR  
CALIFORNIA LEGISLATIVE  
WOMEN'S CAUCUS  
COMMITTEES  
ENERGY, UTILITIES AND  
COMMUNICATIONS  
ENVIRONMENTAL QUALITY  
GOVERNANCE AND FINANCE  
HOUSING  
PUBLIC SAFETY

February 8, 2023

The Honorable Pete Buttigieg  
Secretary of the United States Department of Transportation (USDOT)  
1200 New Jersey Avenue, SE  
Washington, DC 20590

**Subject: Support for Rebuilding America's Infrastructure with Sustainability and Equity (RAISE) Grant Application for East Bay Greenway Multimodal Project**

Dear Secretary Buttigieg,

I am writing to express support for the Alameda County Transportation Commission's (Alameda CTC) RAISE grant application for the East Bay Greenway Multimodal – North Segment project. The project will construct a regional trail bikeway facility and will complete street improvements along streets parallel and connecting to the Bay Area Rapid Transit (BART) line through the cities of Oakland and San Leandro, spanning 10.6 miles. The project will provide significant benefits to the communities that it traverses, between the Lake Merritt BART station and the Bay Fair BART station, while helping to meet local, state, and national goals to improve transportation safety.

The East Bay Greenway will provide an all ages and abilities bikeway "spine" that connects neighborhoods to destinations of need, including transit, commercial districts, affordable housing, community colleges, regional open spaces, schools, social services, parks, hospitals, and job centers. The project will provide significant safety benefits for vulnerable bicyclists and pedestrians along streets that have been identified as part of the countywide high injury network. The project will also provide healthy and affordable mobility options in communities that are identified as regional equity priority communities and have low levels of access to automobiles and high asthma rates. Alameda CTC is requesting \$25 million in RAISE funds, which will be matched with state and local transportation funds to fully fund the \$121 million project.

For these reasons, I request that the USDOT approve Alameda CTC's RAISE grant application request.

Sincerely,

A handwritten signature in cursive script that reads "Nancy Skinner".

Nancy Skinner  
State Senator, District 9

STATE CAPITOL  
P.O. BOX 942849  
SACRAMENTO, CA 94249-0020  
(916) 319-2020

DISTRICT OFFICE  
22320 FOOTHILL BLVD., SUITE 540  
HAYWARD, CA 94541  
(510) 583-8818



COMMITTEES  
HIGHER EDUCATION  
INSURANCE  
LABOR AND EMPLOYMENT  
PUBLIC SAFETY  
RULES

February 14, 2023

The Honorable Pete Buttigieg  
Secretary of the United States Department of Transportation (USDOT)  
1200 New Jersey Avenue, SE  
Washington, DC 20590

**RE: Support for Rebuilding America’s Infrastructure with Sustainability and Equity (RAISE)  
Grant Application for East Bay Greenway Multimodal Project**

Dear Secretary Buttigieg,

I am writing to express support for the Alameda County Transportation Commission’s (Alameda CTC) RAISE grant application for the East Bay Greenway Multimodal – North Segment project. The project will construct a regional trail bikeway facility and complete street improvements along streets parallel and connecting to the Bay Area Rapid Transit (BART) line through the Cities of Oakland and San Leandro, spanning 10.6 miles. The project will provide significant benefits to the communities that it traverses between the Lake Merritt BART station and the Bay Fair BART station while helping to meet local, state, and national goals to improve transportation safety.

The East Bay Greenway will provide a bikeway “spine” for all ages and abilities that connects neighborhoods to destinations of need including transit, commercial districts, affordable housing, community colleges, regional open spaces, schools, social services, parks, hospitals, and job centers. The project will provide significant safety benefits for vulnerable bicyclists and pedestrians along streets that have been identified as part of the countywide high injury network. The project will also provide healthy and affordable mobility options in communities that are identified as regional equity priority communities and have low levels of access to automobiles and high asthma rates. Alameda CTC is requesting \$25 million in RAISE funds, which will be matched with state and local transportation funds to fully fund the \$121 million project.

Thank you for your consideration of this request. For any questions, please call my office at (916) 319-2020.

Sincerely,

A handwritten signature in black ink that reads "Liz Ortega". The signature is written in a cursive, slightly slanted style.

LIZ ORTEGA  
Assemblymember, 20th District



**METROPOLITAN  
TRANSPORTATION  
COMMISSION**

Bay Area Metro Center  
375 Beale Street, Suite 800  
San Francisco, CA 94105  
415.778.6700  
www.mtc.ca.gov

February 20, 2023

*Alfredo Pedroza, Chair*  
Napa County and Cities

*Nick Josefowitz, Vice Chair*  
San Francisco Mayor's Appointee

*Margaret Abe-Koga*  
Cities of Santa Clara County

*Eddie Abu*  
San Francisco Bay Conservation  
and Development Commission

*David Canepa*  
San Mateo County

*Cindy Chavez*  
Santa Clara County

*Carol Dutra-Vernaci*  
Cities of Alameda County

*Dina El-Tawansy*  
California State  
Transportation Agency

*Victoria Fleming*  
Sonoma County and Cities

*Dorene M. Giacopini*  
U.S. Department of Transportation

*Federal D. Glover*  
Contra Costa County

*Matt Maban*  
San Jose Mayor's Appointee

*Nate Miley*  
Alameda County

*Stephanie Moulton-Peters*  
Marin County and Cities

*Gina Papan*  
Cities of San Mateo County

*David Rabbitt*  
Association of Bay Area Governments

*Hillary Ronen*  
City and County of San Francisco

*James P. Spering*  
Solano County and Cities

*Sheng Thao*  
Oakland Mayor's Appointee

*Vacant*  
Cities of Contra Costa County

*Vacant*  
U.S. Department of Housing  
and Urban Development

*Alix Bockelman*  
Acting Executive Director

*Alix Bockelman*  
Deputy Executive Director, Policy

*Andrew B. Fremier*  
Deputy Executive Director, Operations

*Brad Paul*  
Deputy Executive Director,  
Local Government Services

The Honorable Peter Buttigieg  
Secretary, United States Department of Transportation  
Office of the Secretary of Transportation  
1200 New Jersey Ave. SE  
Washington, D.C. 20590

RE: Support for Alameda County Transportation Commission Application to RAISE Program

Dear Secretary Buttigieg:

The Metropolitan Transportation Commission (MTC) is the Metropolitan Planning Organization (MPO) for the nine-county Bay Area. Our current long-range Regional Transportation Plan (RTP) and regional Sustainable Communities Strategy, Plan Bay Area 2050, was adopted in October 2021.

MTC submits this letter of support for the application for FY 2023 RAISE Transportation Discretionary Grant funding submitted by the Alameda County Transportation Commission for the *East Bay Greenway Multimodal Project – North Segment*. The project will construct approximately 10 miles of complete street improvements including Class I shared use paths, Class IV protected bikeways, neighborhood Class III routes, protected intersection treatments, pedestrian crossing safety and accessibility improvements, bus stop enhancements to improve speed and passenger comfort, and placemaking features such as benches, pedestrian scale lighting, and landscaping. This project supports the implementation of Plan Bay Area 2050 by creating healthy and safe streets, part of the Plan's strategy to meet transportation needs by building a Complete Streets network.

If you have any questions regarding our support for this project, please contact me at 415-778-6772 or Mark Dedrick, MTC's Washington Representative, at 202-494-3618.

Sincerely,

Theresa Romell  
Section Director, Funding Policy and Programs

TR:KA

J:\PROJECT\Funding\ARRA\Federal Discretionary Programs\RAISE 2023\ACTC\_EBG\_RAISE Support Letter.docx



# City of Oakland | Department of Transportation

DALZIEL BUILDING • 250 FRANK H. OGAWA PLAZA • SUITE 4344 • OAKLAND, CALIFORNIA 94612-2033

The Honorable Pete Buttigieg  
Secretary of the United States Department of Transportation (USDOT)  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Subject: Support for Rebuilding America's Infrastructure with Sustainability and Equity (RAISE) Grant Application for East Bay Greenway Multimodal Project

Dear Secretary Buttigieg,

On behalf of the City of Oakland, I am writing to express support for the Alameda County Transportation Commission's (Alameda CTC) RAISE grant application for the East Bay Greenway Multimodal – North Segment project. The project will construct a regional trail bikeway facility and complete street improvements along streets parallel and connecting to the Bay Area Rapid Transit (BART) line through the Cities of Oakland and San Leandro, spanning 10.6 miles. The project will provide significant benefits to the communities that it traverses between the Lake Merritt BART station and the Bay Fair BART station while helping to meet local, state, and national goals to improve transportation safety, economic competitiveness, climate resilience, and community connectivity.

The East Bay Greenway will provide an all ages and abilities bikeway “spine” that connects neighborhoods to destinations of need including transit, commercial districts, affordable housing, community colleges, regional open spaces, schools, social services, parks, hospitals, and job centers. The project will improve safety for vulnerable bicyclists and pedestrians along streets that have been identified as part of the countywide high injury network. The project will also provide healthy and affordable mobility options in communities that are identified as regional equity priority communities and have low levels of access to automobiles and high asthma rates. Alameda CTC is requesting \$25 million in RAISE funds which will be matched with state and local transportation funds to fully fund the \$121 million project.

The City of Oakland requests that the USDOT approve Alameda CTC's RAISE grant application request.

Sincerely,

1/11/23

Craig Raphael  
Funding Program Manager, City of Oakland Department of Transportation

# City of San Leandro

Civic Center, 835 E. 14th Street  
San Leandro, California 94577  
[www.sanleandro.org](http://www.sanleandro.org)



January 27, 2023

The Honorable Pete Buttigieg  
Secretary of the United States Department of Transportation (USDOT)  
1200 New Jersey Avenue, SE  
Washington, DC 20590

**Subject:** Support for Rebuilding America’s Infrastructure with Sustainability and Equity (RAISE) Grant Application for East Bay Greenway Multimodal Project

Dear Secretary Buttigieg,


As Mayor of San Leandro, I write to express the City of San Leandro’s support for the Alameda County Transportation Commission’s (Alameda CTC) RAISE grant application for the East Bay Greenway Multimodal – North Segment project.

If awarded funding, the project will provide safer roads and transportation corridors through creation of a dedicated regional trail bikeway facility and complete street improvements along streets parallel and connecting to the Bay Area Rapid Transit (BART) line through the Cities of Oakland and San Leandro, spanning 10.6 miles. The project will provide significant benefits to the communities that it traverses between the Lake Merritt BART station and the Bay Fair BART station while helping to meet local, state, and national goals to improve transportation safety, economic competitiveness, climate resilience, and community connectivity.

The East Bay Greenway will provide an all ages and abilities bikeway “spine” that connects neighborhoods to destinations of need including transit, commercial districts, affordable housing, community colleges, regional open spaces, schools, social services, parks, hospitals, and job centers. The project will improve safety for vulnerable bicyclists and pedestrians along streets that have been identified as part of the countywide high injury network. The project will also provide healthy and affordable mobility options in communities that are identified as regional equity priority communities and have low levels of access to automobiles and high asthma rates. Alameda CTC is requesting \$25 million in RAISE funds which will be matched with state and local transportation funds to fully fund the \$121 million project.

For these reasons, I respectfully request that the USDOT approve Alameda CTC’s RAISE grant application.

Sincerely,



Juan González III  
Mayor, City of San Leandro

Juan González III, Mayor

City Council:

Victor Aguilar, Jr.

Bryan Azevedo

Peter Ballew

Xouhoa Bowen

Celina Reynes

Fred Simon







**SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT**

2150 Webster Street, P.O. Box 12688  
Oakland, CA 94604-2688  
(510) 464-6000

2023

February 6, 2023

Janice Li  
PRESIDENT

Mark Foley  
VICE PRESIDENT

Robert Powers  
GENERAL MANAGER

The Honorable Pete Buttigieg  
Secretary of the United States Department of Transportation  
1200 New Jersey Avenue SE  
Washington, DC 20590

RE: BART Support for RAISE Application for East Bay Greenway Multimodal Project

DIRECTORS

Debora Allen  
1ST DISTRICT

Mark Foley  
2ND DISTRICT

Rebecca Saltzman  
3RD DISTRICT

Robert Raburn, Ph.D.  
4TH DISTRICT

John McPartland  
5TH DISTRICT

Elizabeth Ames  
6TH DISTRICT

Lateefah Simon  
7TH DISTRICT

Janice Li  
8TH DISTRICT

Bevan Duffy  
9TH DISTRICT

Dear Secretary Buttigieg,

On behalf of the San Francisco Bay Area Rapid Transit District (BART), I am writing to express support for the Alameda County Transportation Commission's (Alameda CTC) Rebuilding America's Infrastructure with Sustainability and Equity (RAISE) grant application for the East Bay Greenway Multimodal – North Segment project. The project will construct a regional trail bikeway facility and complete street improvements along streets parallel and connecting to the BART line through the Cities of Oakland and San Leandro, spanning 10.6 miles. The project will provide significant access benefits to the communities that it traverses between the Lake Merritt and Bay Fair BART stations, while helping to meet local, state, and national goals to improve transportation safety, economic competitiveness, climate resilience, and community connectivity.

The East Bay Greenway will provide an all ages and abilities bikeway “spine” that connects neighborhoods to destinations of need including transit, commercial districts, affordable housing, community colleges, regional open spaces, schools, social services, parks, hospitals, and job centers. The project will improve safety for vulnerable bicyclists and pedestrians along streets that have been identified as part of the countywide high injury network. The project will also provide healthy and affordable mobility options in communities that are identified as regional equity priority communities and have low levels of access to automobiles and high asthma rates. Alameda CTC is requesting \$25 million in RAISE funds which will be matched with state and local transportation funds to fully fund the \$121 million project.

BART appreciates the USDOT's consideration of Alameda CTC's RAISE grant application.

Sincerely,

Rob Jaques  
Manager, Grants & Funding Advocacy

cc: Carolyn Clevenger, ACTC  
Matthew Bomberg, ACTC  
Tim Chan, BART



Service Development Department  
1600 Franklin Street, Oakland CA 94612

February 6, 2023

The Honorable Pete Buttigieg  
Secretary of the United States Department of Transportation (USDOT)  
1200 New Jersey Avenue, SE  
Washington, DC 20590

**Re: Support for Rebuilding America's Infrastructure with Sustainability and Equity (RAISE)  
Grant Application for East Bay Greenway Multimodal Project**

Dear Secretary Buttigieg,

On behalf of AC Transit, I am writing to express support for the Alameda County Transportation Commission's (Alameda CTC) RAISE grant application for the East Bay Greenway Multimodal – North Segment project. The project will construct a regional trail bikeway facility and complete street improvements along streets parallel and connecting to the Bay Area Rapid Transit (BART) line through the Cities of Oakland and San Leandro, spanning 10.6 miles. The project will provide significant benefits to the communities that it traverses between the Lake Merritt BART station and the Bay Fair BART station while helping to meet local, state, and national goals to improve transportation safety, economic competitiveness, climate resilience, and community connectivity.

The East Bay Greenway will provide an all ages and abilities bikeway “spine” that connects neighborhoods to destinations of need including transit, commercial districts, affordable housing, community colleges, regional open spaces, schools, social services, parks, hospitals, and job centers. The project will improve safety for vulnerable bicyclists and pedestrians along streets that have been identified as part of the countywide high injury network, including those accessing AC Transit bus stops. The project will also implement transit elements including boarding islands and bus stop amenities along East 14<sup>th</sup> Street, which features some of AC Transit's highest ridership lines, that will provide transit speed and reliability mitigations while maintaining the potential for future Bus Rapid Transit. The project will also provide healthy and affordable mobility options in communities that are identified as regional equity priority communities and have low levels of access to automobiles and high asthma rates. Alameda CTC is requesting \$25 million in RAISE funds which will be matched with state and local transportation funds to fully fund the \$121 million project.

AC Transit requests that the USDOT approve Alameda CTC's RAISE grant application request.

Sincerely,

A handwritten signature in black ink that reads "Robert del Rosario".

Robert del Rosario  
Director of Service Development & Planning



2/9/2023

The Honorable Pete Buttigieg  
Secretary of the United States Department of Transportation (USDOT)  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Subject: Support for Rebuilding America's Infrastructure with Sustainability and Equity (RAISE) Grant Application for East Bay Greenway Multimodal Project

Dear Secretary Buttigieg,

On behalf of TransForm, I am writing to express support for the Alameda County Transportation Commission's (Alameda CTC) RAISE grant application for the East Bay Greenway Multimodal – North Segment project. The project will construct a regional trail bikeway facility and complete street improvements along streets parallel and connecting to the Bay Area Rapid Transit (BART) line through the Cities of Oakland and San Leandro, spanning 10.6 miles. The project will provide significant benefits to the communities that it traverses between the Lake Merritt BART station and the Bay Fair BART station while helping to meet local, state, and national goals to improve transportation safety, economic competitiveness, climate resilience, and community connectivity.

TransForm promotes walkable communities with excellent transportation choices to connect people of all incomes to opportunity, make California affordable, and help solve our climate crisis. With diverse partners we engage communities in planning, run innovative programs, and win policy change at the local, regional, and state levels. We often facilitate community engagement with East Oakland residents and we know firsthand that biking near East Oakland BART stations is simply dangerous. This new bikeway will promote equitably and low-emission travel options for some of the Bay Area's most marginalized residents.

The East Bay Greenway will provide an all ages and abilities bikeway "spine" that connects neighborhoods to destinations of need including transit, commercial districts, affordable housing, community colleges, regional open spaces, schools, social services, parks, hospitals, and job centers. The project will improve safety for vulnerable bicyclists and pedestrians along streets that have been identified as part of the countywide high injury network. The project will also provide healthy and affordable mobility options in communities that are identified as regional equity priority communities and have low levels of access to automobiles and high asthma rates.

Alameda CTC is requesting \$25 million in RAISE funds which will be matched with state and local transportation funds to fully fund the \$121 million project.

TransForm requests that the USDOT approve Alameda CTC's RAISE grant application request.

Sincerely,

A handwritten signature in black ink that reads "Amy Thomson". The signature is written in a cursive style with a large initial "A".

Amy Thomson

Transportation Policy and Programs Manager



January 11, 2023

The Honorable Pete Buttigieg  
Secretary of the United States Department of Transportation (USDOT)  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Subject: Support for Rebuilding America's Infrastructure with Sustainability and Equity (RAISE) Grant Application for East Bay Greenway Multimodal Project

Dear Secretary Buttigieg,

On behalf of Bike East Bay, I am writing to express support for the Alameda County Transportation Commission's (Alameda CTC) RAISE grant application for the East Bay Greenway Multimodal – North Segment project. The project will construct a regional trail bikeway facility and complete street improvements along streets parallel and connecting to the Bay Area Rapid Transit (BART) line through the Cities of Oakland and San Leandro, spanning 10.6 miles. The project will provide significant benefits to the communities that it traverses between the Lake Merritt BART station and the Bay Fair BART station while helping to meet local, state, and national goals to improve transportation safety, economic competitiveness, climate resilience, and community connectivity.

The East Bay Greenway will provide an all ages and abilities bikeway "spine" that connects neighborhoods to destinations of need including transit, commercial districts, affordable housing, community colleges, regional open spaces, schools, social services, parks, hospitals, and job centers. The project will improve safety for vulnerable bicyclists and pedestrians along streets that have been identified as part of the countywide high injury network. The project will also provide healthy and affordable mobility options in communities that are identified as regional equity priority communities and have low levels of access to automobiles and high asthma rates. Alameda CTC is requesting \$25 million in RAISE funds which will be matched with state and local transportation funds to fully fund the \$121 million project.

Bike East Bay requests that the USDOT approve Alameda CTC's RAISE grant application request.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Prinz'.

Robert Prinz  
Advocacy Director  
Bike East Bay

## Attachment 2: Project Location File

Submitted as a separate file [here](#).

## Attachment 3: Grant Application Full-size Figures

Figure 1-1. Project Vicinity Map

Figure 1-2. Areas of Persistent Poverty and Historically Disadvantaged Community Census Tracts

Figure 1-4. Transportation Network within the Project Vicinity

Figure 1-6. New Routes Location Map

Figure 3-1. Bicycle/Pedestrian Safety Map

Figure 3-3. Improved Intersection Safety Features

Figure 3-4. Air Quality Map – Asthma Percentile

Figure 3-6. Access to Community Destinations Map

Figure 3-7. Planned Mixed-Use Projects in the Corridor







Figure 3-8. Urban Tree Coverage in the Corridor

Figure 3-10. Access to Multimodal Choices Map

Figure 3-11. Pedestrian and Bicycle Gap Closure Map

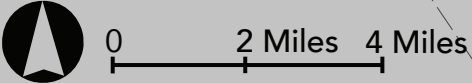
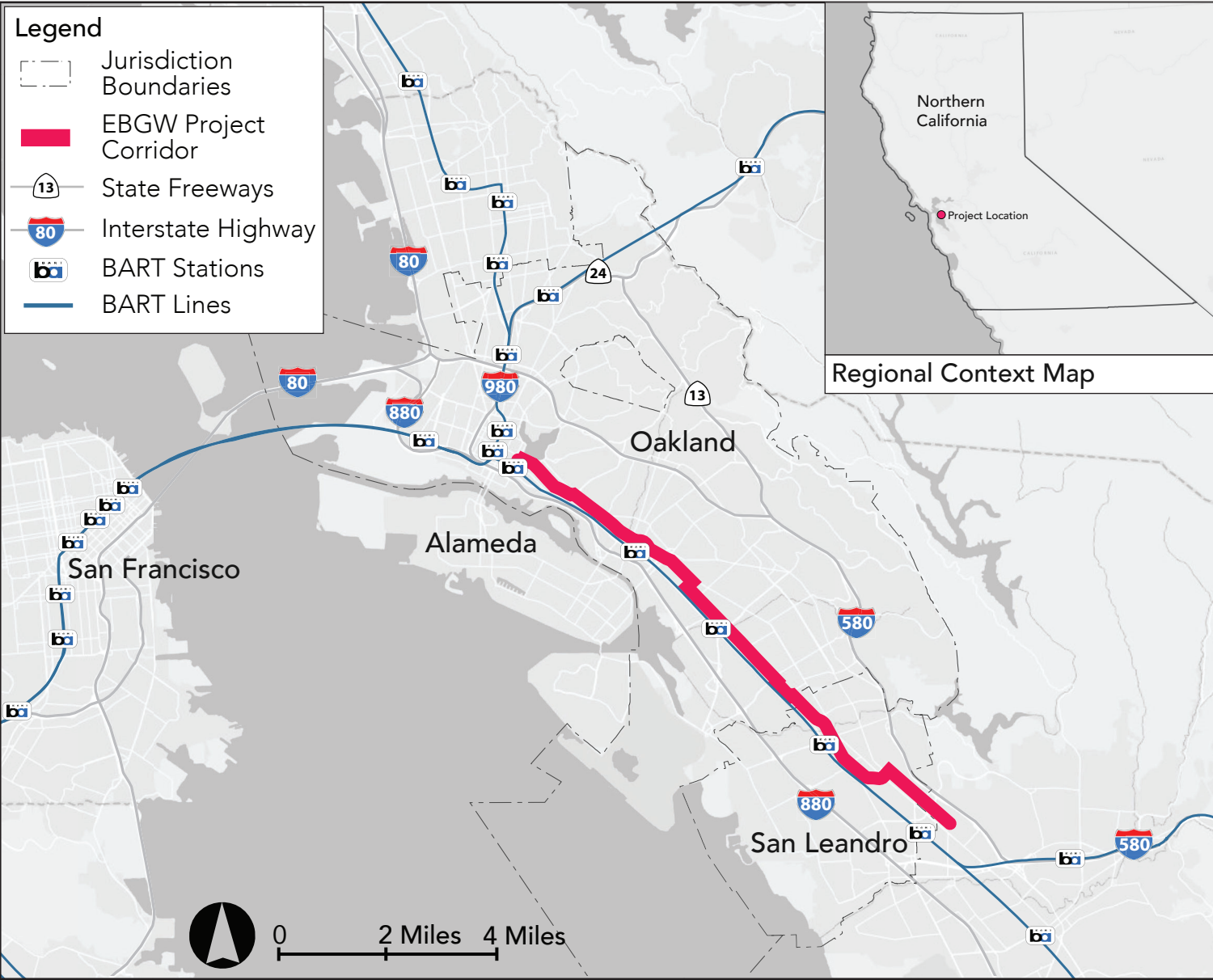
Figure 3 12. Major Employers within the Corridor

**Legend**

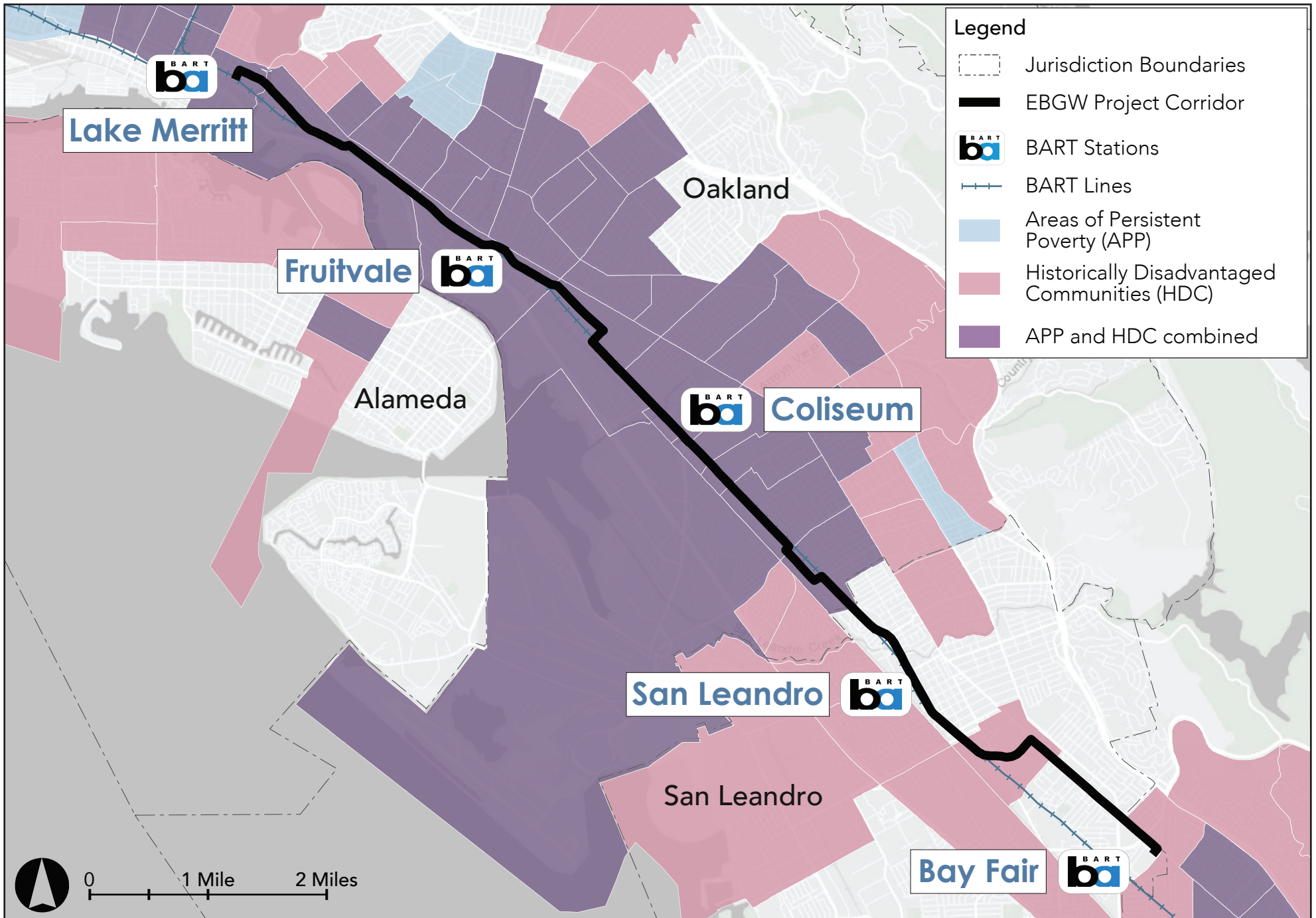
-  Jurisdiction Boundaries
-  EBGW Project Corridor
-  State Freeways
-  Interstate Highway
-  BART Stations
-  BART Lines



Regional Context Map

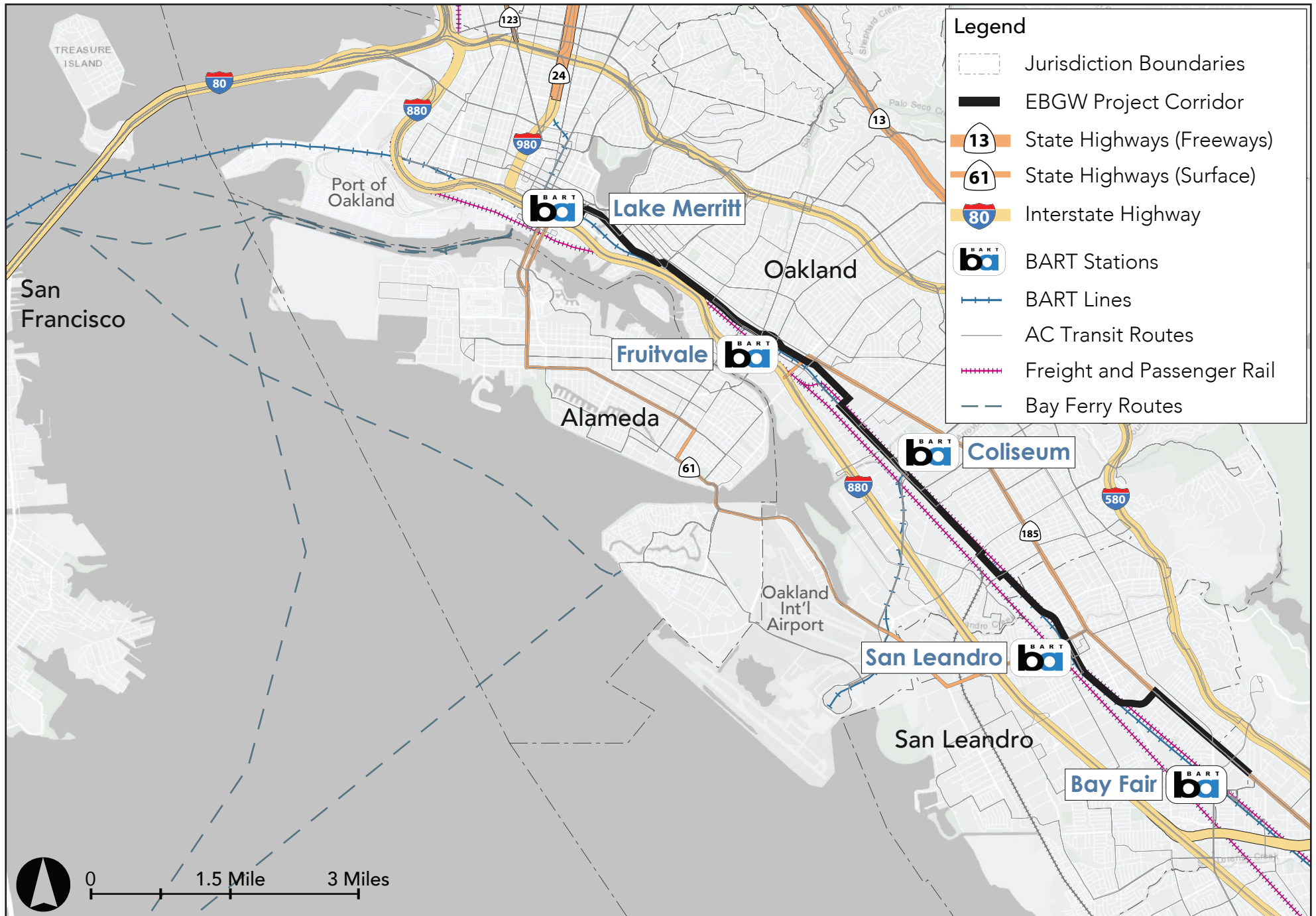






Source: US Department of Transportation

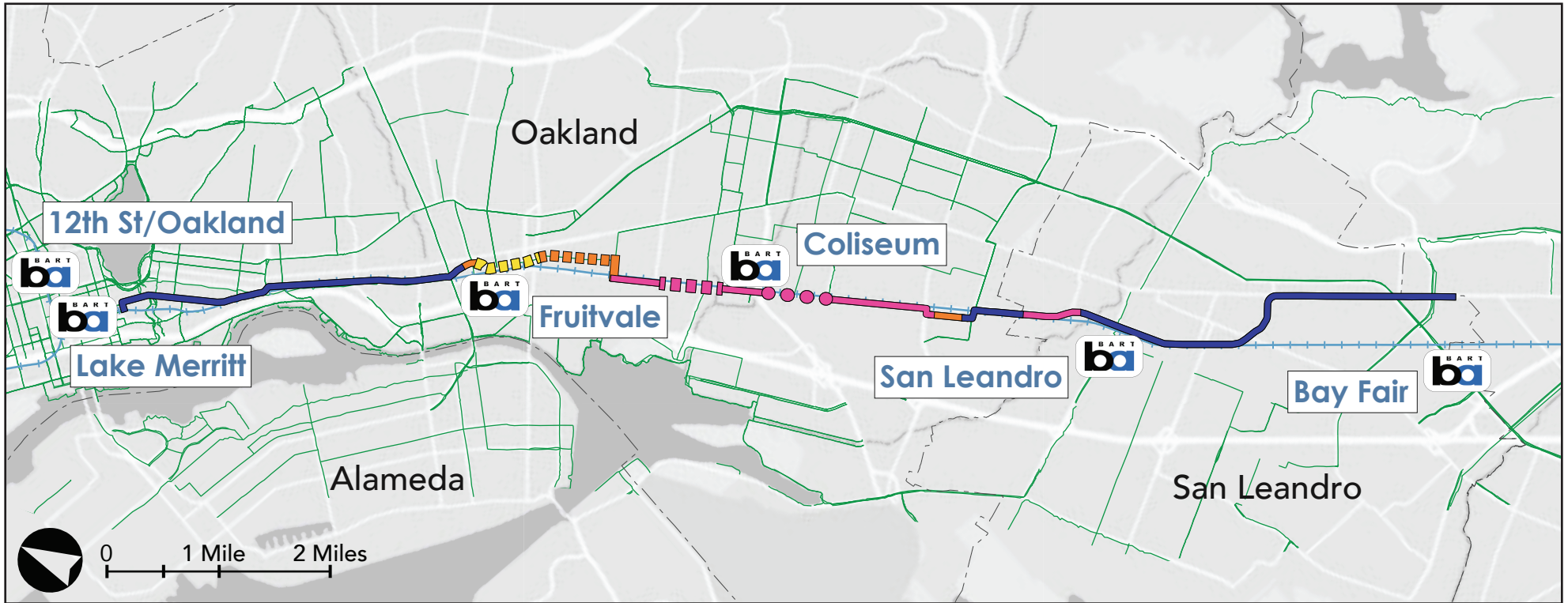




**Legend**

- Jurisdiction Boundaries
- EBGW Project Corridor
- State Highways (Freeways)
- State Highways (Surface)
- Interstate Highway
- BART Stations
- BART Lines
- AC Transit Routes
- Freight and Passenger Rail
- Bay Ferry Routes





**Legend**

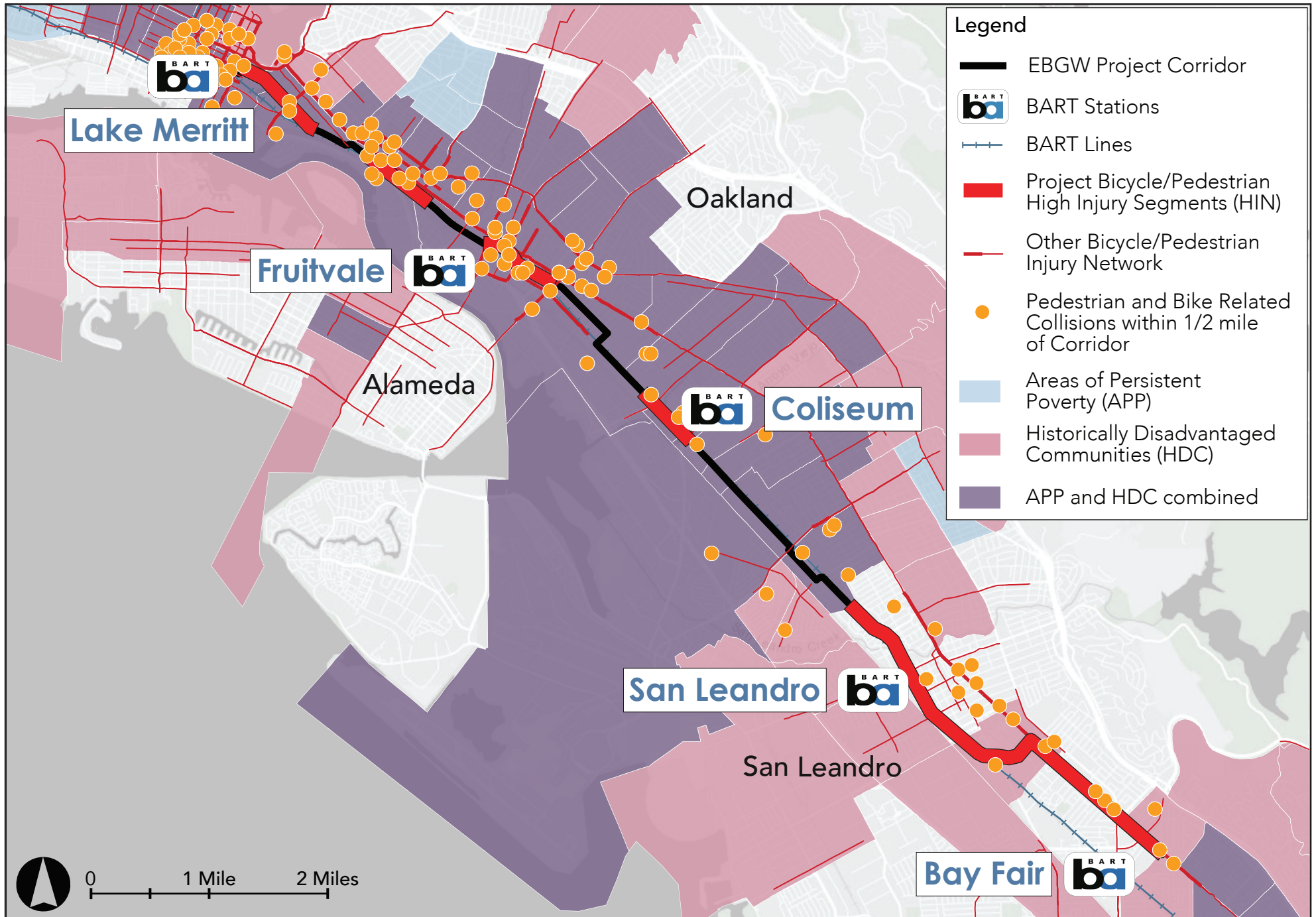
- Jurisdiction Boundaries
- BART Stations
- BART Lines
- Existing and Planned Bicycle Facilities

**Bicycle Facility Types**

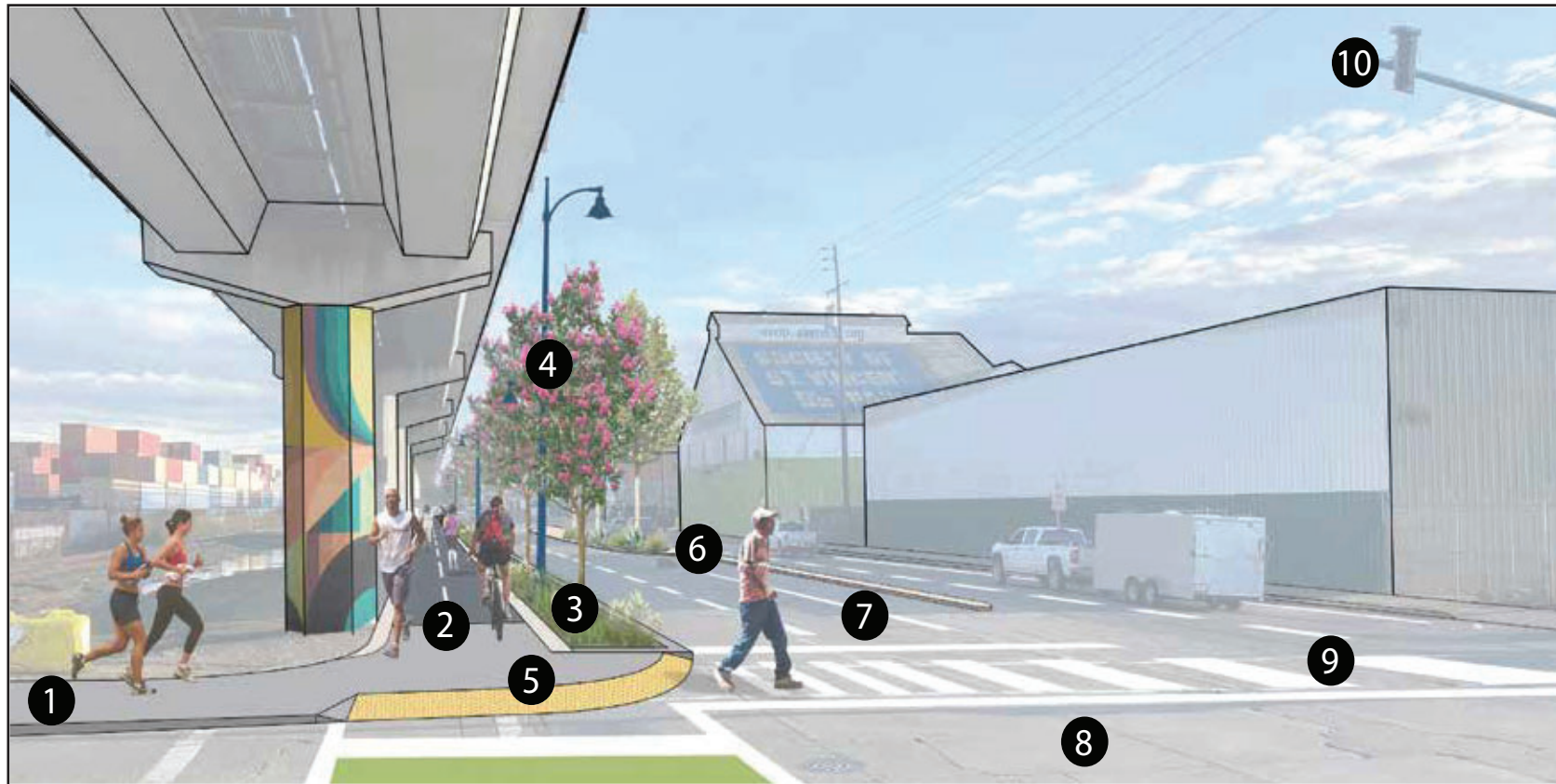
- |                                |                                      |                                   |
|--------------------------------|--------------------------------------|-----------------------------------|
| <i>Multiuse Path (Class I)</i> | <i>Buffered Bike Lane (Class II)</i> | <i>Bike Boulevard (Class III)</i> |
| New by Project                 | New by Others                        | New by Project                    |
| New by Others                  | <i>Protected Bikeway (Class IV)</i>  | New by Others                     |
| Existing                       | New by Project                       |                                   |

Source: Alameda CTC; Alameda County



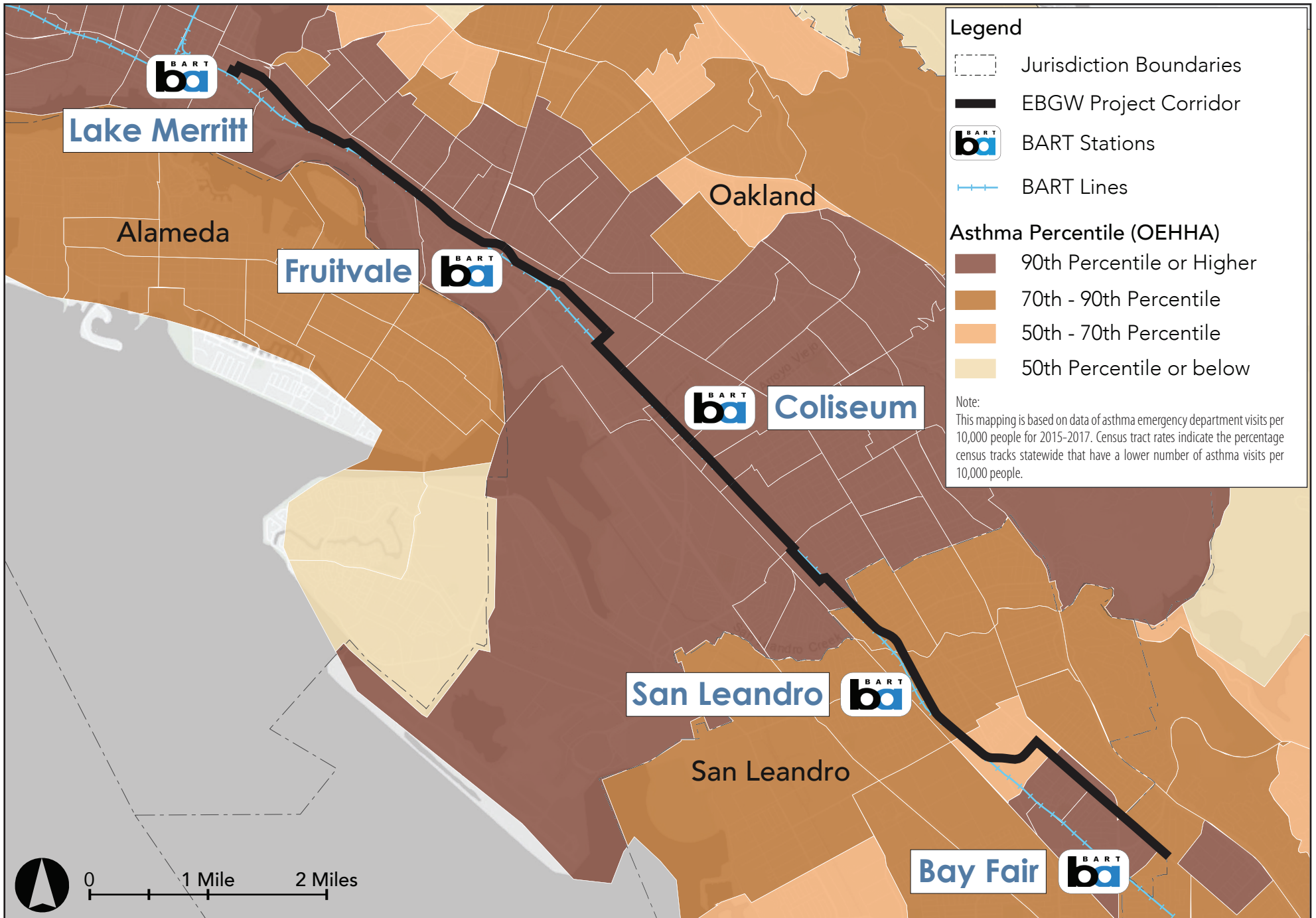


Source: Alameda CTC



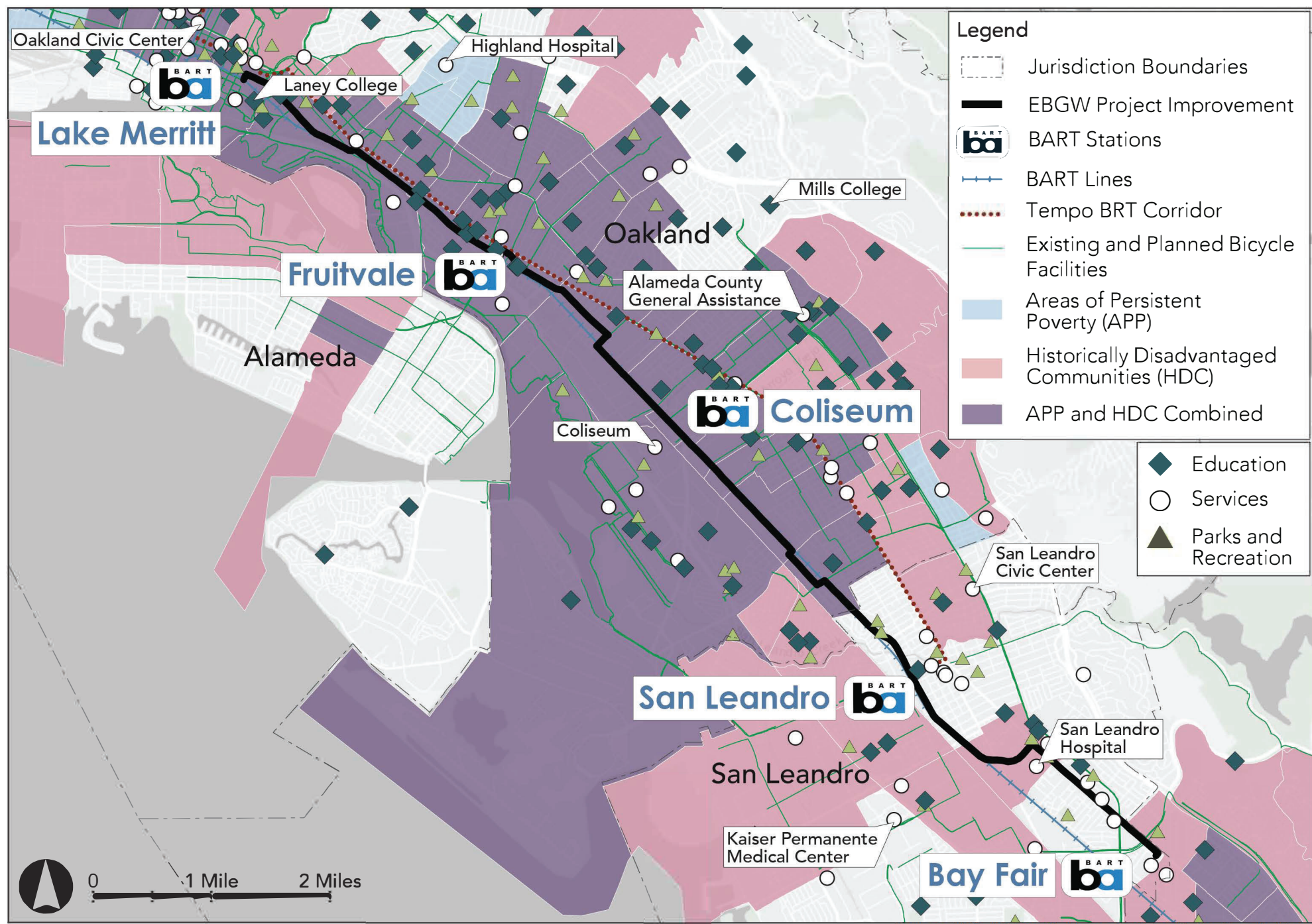
- 1 Close sidewalk gaps
  - 2 Separated pathways
  - 3 Landscaping and greening elements
  - 4 Pedestrian-scale lighting
  - 5 ADA-compliant ramps
  - 6 Raised medians and median refuges
  - 7 Narrower traffic lanes
  - 8 Pavement overlay/rehabilitation
  - 9 Enhanced crosswalks and crossing opportunities
  - 10 New and upgraded signals with pedestrian countdown, leading pedestrian interval and protected bike phases
- Additional features**
- Protected intersections
  - Bike-protected parking
  - Transit boarding islands

Source: CD+A

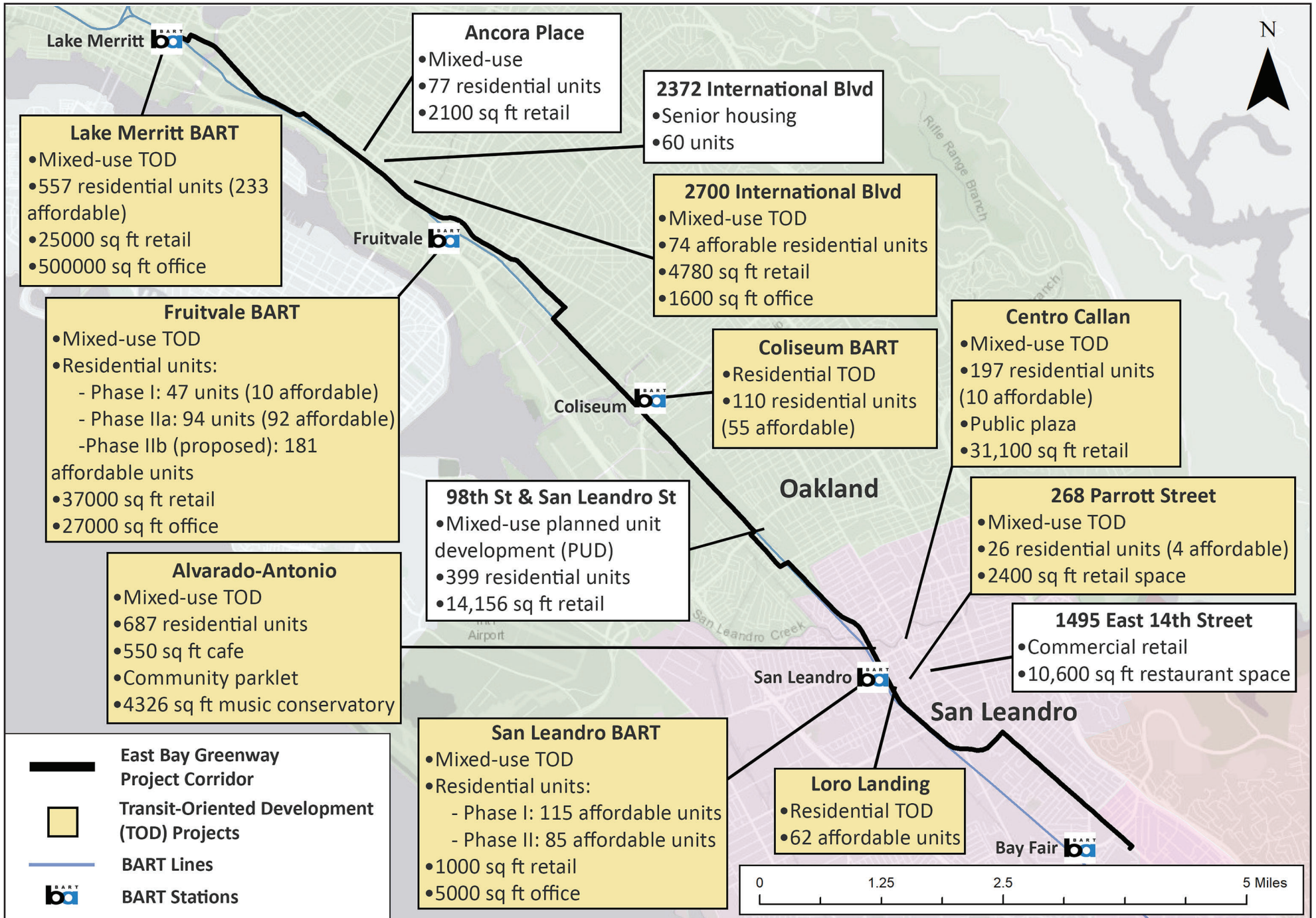


Source: CalEnviroScreen 4.0





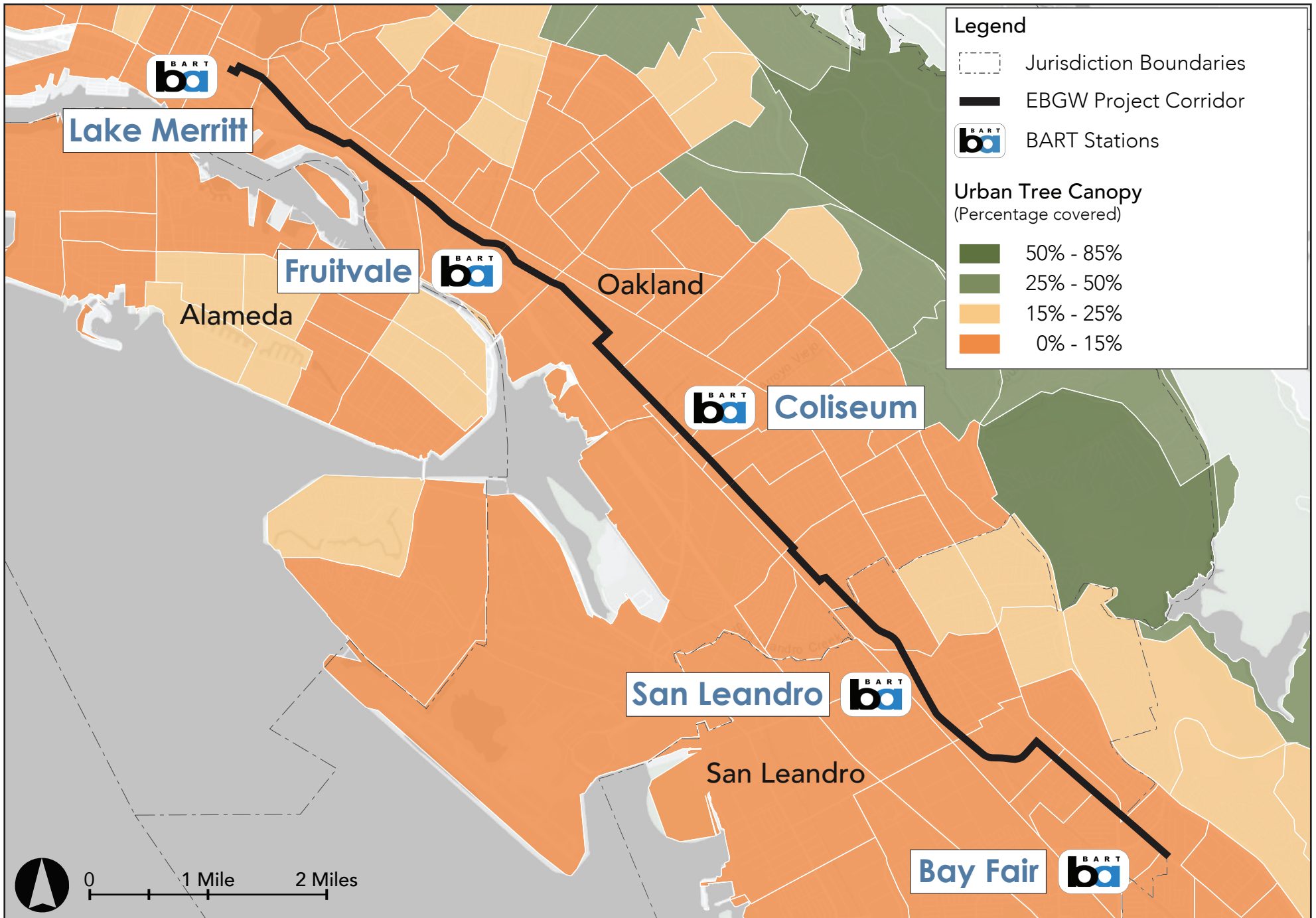
Source: MTC, AC Transit, Alameda Open Data, Google Maps



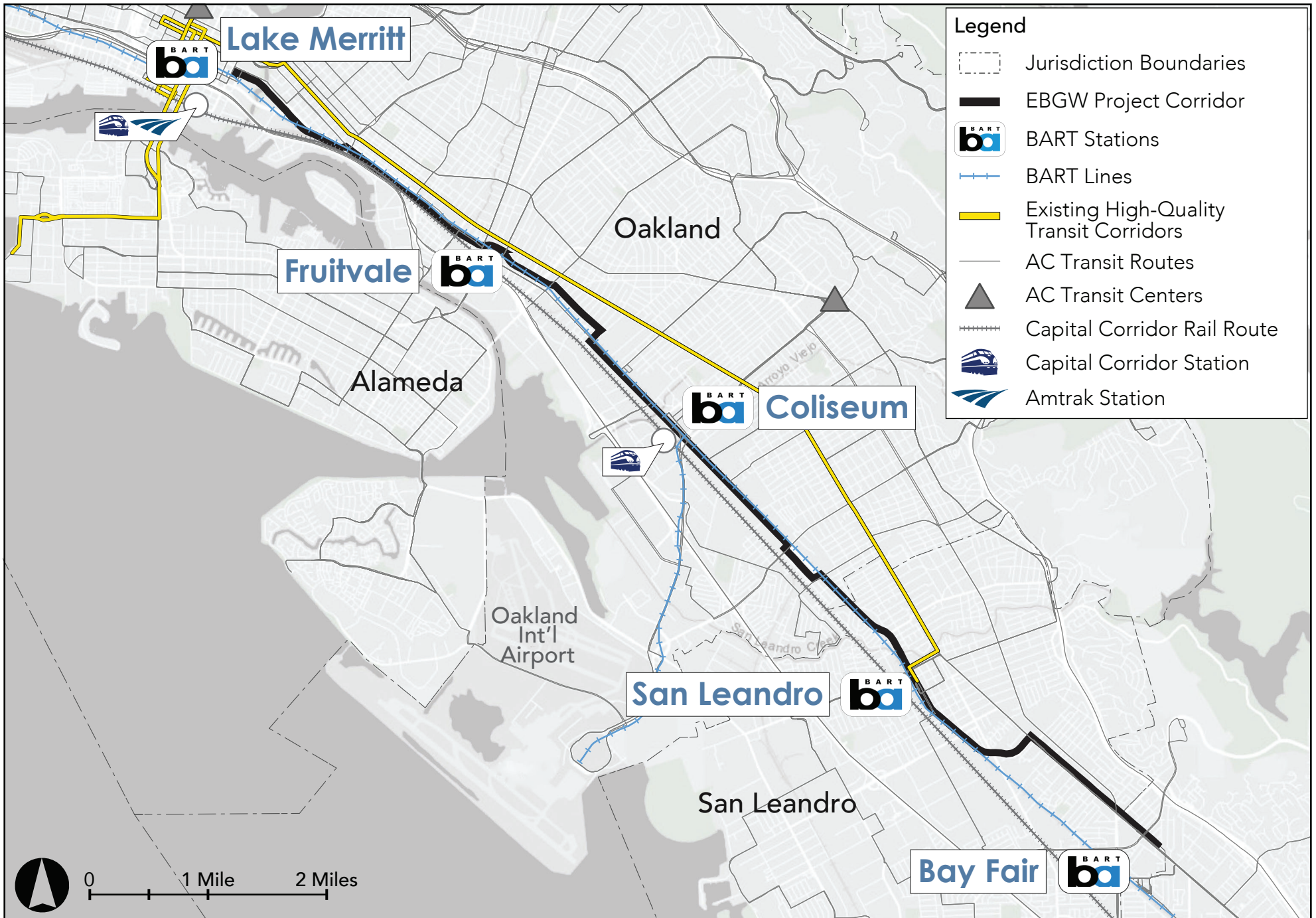
Source: CD+A and ESRI





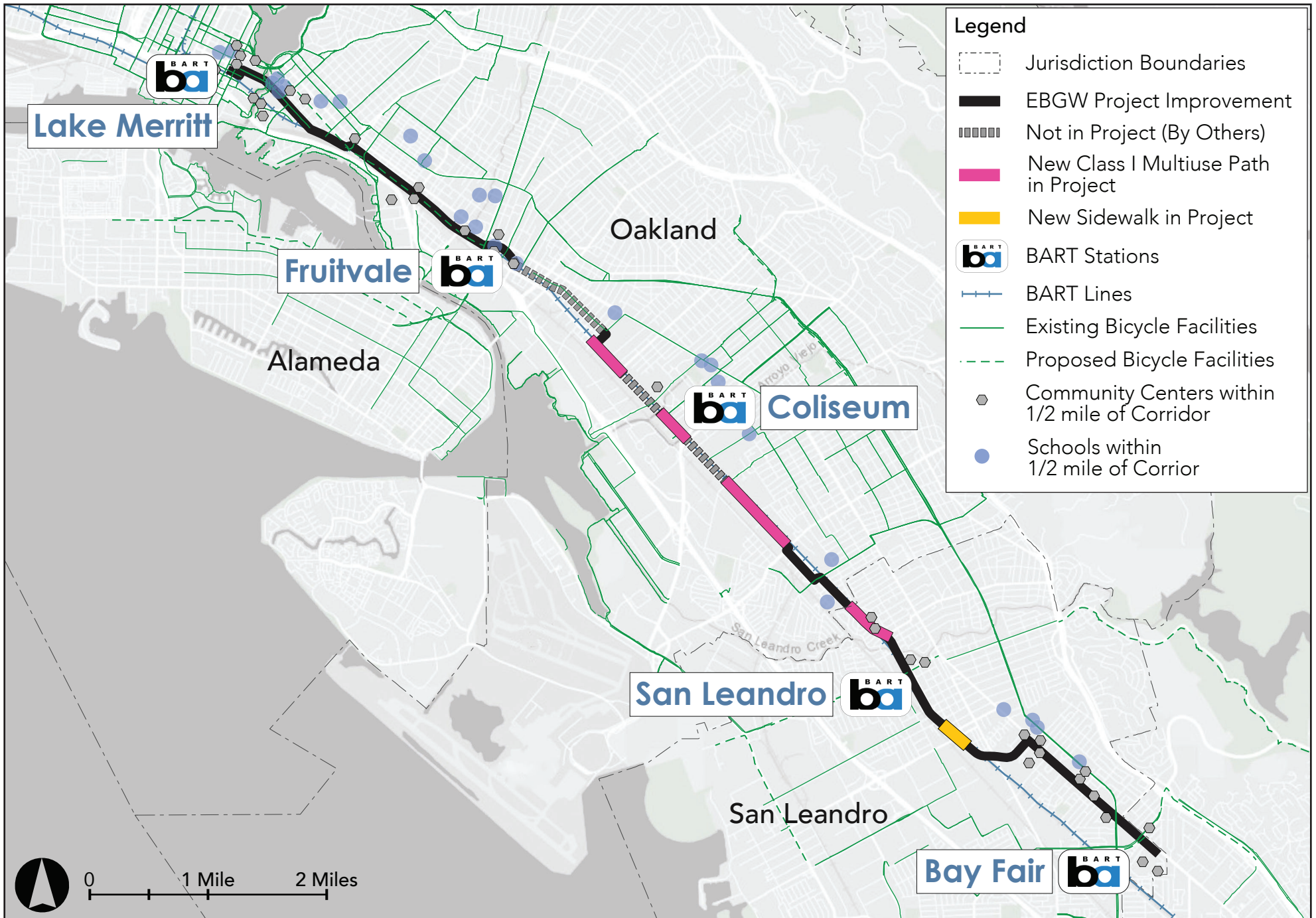


Source: US Forest Service



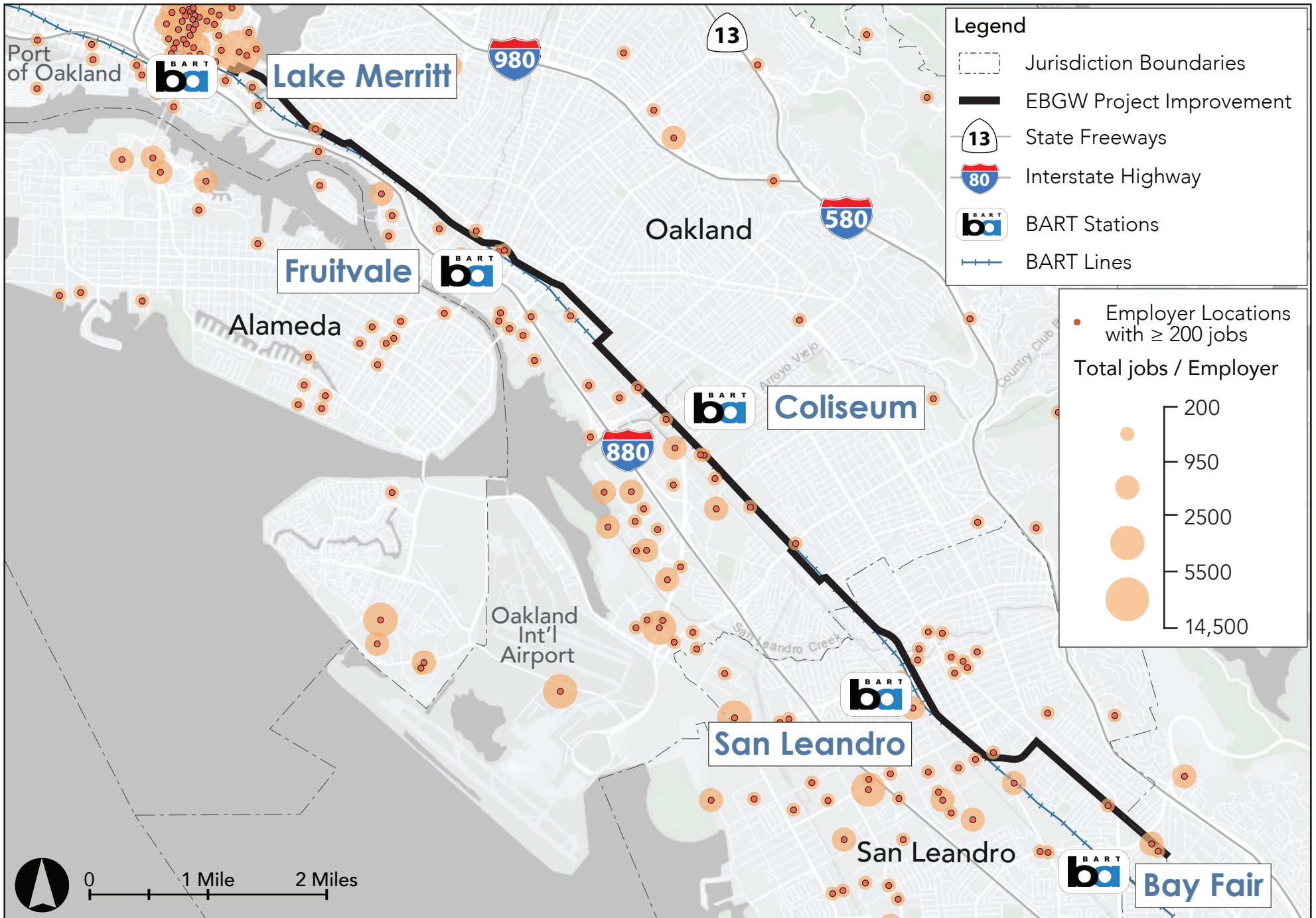
Source: MTC & AC Transit





Source: Alameda CTC





Source: U.S. Census Bureau, LODES data (2019)



# Attachment 4: Existing Conditions Photos

**Existing Conditions Photos**



**H-1 | 9<sup>th</sup> and Fallon Streets in Oakland:** There is a general lack of low-stress facilities within the EBGW corridor. By Lake Merritt BART and Laney College, cyclists must share the road with vehicular traffic



**H-2 | E10<sup>th</sup> Street and 6<sup>th</sup> Avenue in Oakland:** Many sections of the corridor lack marked cross walks for several consecutive blocks

**Existing Conditions Photos**



**H-3 | E10<sup>th</sup> Street at 8<sup>th</sup> Avenue in Oakland:** Several blocks on E10<sup>th</sup> Street have no curb ramps or are otherwise not ADA compliant



**H-4 | E8<sup>th</sup> Street at 10<sup>th</sup> Avenue in Oakland:** Cyclists traveling northbound have to weave across lanes to avoid getting trapped at the right-only lane

**Existing Conditions Photos**



**H-4 | E8<sup>th</sup> Street at 11<sup>th</sup> Avenue in Oakland:** Cyclists must contend high speeds and volumes on E8<sup>th</sup> Street (13,700 vpd/48 mph)



**H-5 | E8<sup>th</sup> Street at 12<sup>th</sup> Avenue in Oakland:** Unprotected left turns where turning vehicles must attempt to scan for a gap in opposing traffic and identify any crossing bicyclists and pedestrians



**Existing Conditions Photos**



**H-6 | E12<sup>th</sup> Street at 19<sup>th</sup> Avenue in Oakland: Lack of marked pedestrian crossings for long stretches of E12<sup>th</sup> Street leads to jaywalking and unsafe conditions**



**H-7 | E12<sup>th</sup> Street at 22nd Avenue in Oakland: Bike lanes are discontinuous & require cyclists to weave across multiple lanes to make left turns**

**Existing Conditions Photos**



**H-8 |** E12<sup>th</sup> Street at 25<sup>th</sup> Avenue in Oakland: Unprotected left turns on E12<sup>th</sup> Street are aggravated by poor sight distance due to the presence of the BART aerial structure columns



**H-9 |** San Leandro Street at Seminary Avenue in Oakland: There is a lack of pedestrian and bicycle facilities for long stretches of San Leandro Street, and no protected bicycle facilities within the corridor, except the constructed Segment 7A multi-use path from 75<sup>th</sup> to 85<sup>th</sup> Avenues

**Existing Conditions Photos**



**H-10** | San Leandro Street at 54<sup>th</sup> Avenue in Oakland: There are no marked crosswalks for long distances on San Leandro Street – pedestrians and cyclists must cross four lanes of traffic with no



**H-11** | San Leandro Street at 85<sup>th</sup> Avenue in Oakland: Paths of travel along and across San Leandro Street are discontinuous

**Existing Conditions Photos**



**H-12** | San Leandro Street south of 69<sup>th</sup> Avenue in Oakland: There is no separation of bikes from traffic north of Coliseum BART



**H-13** | San Leandro Street at 98<sup>th</sup> Avenue in Oakland: There are long crossings with no pedestrian refuge or curb bulbs

**Existing Conditions Photos**

**H-14**



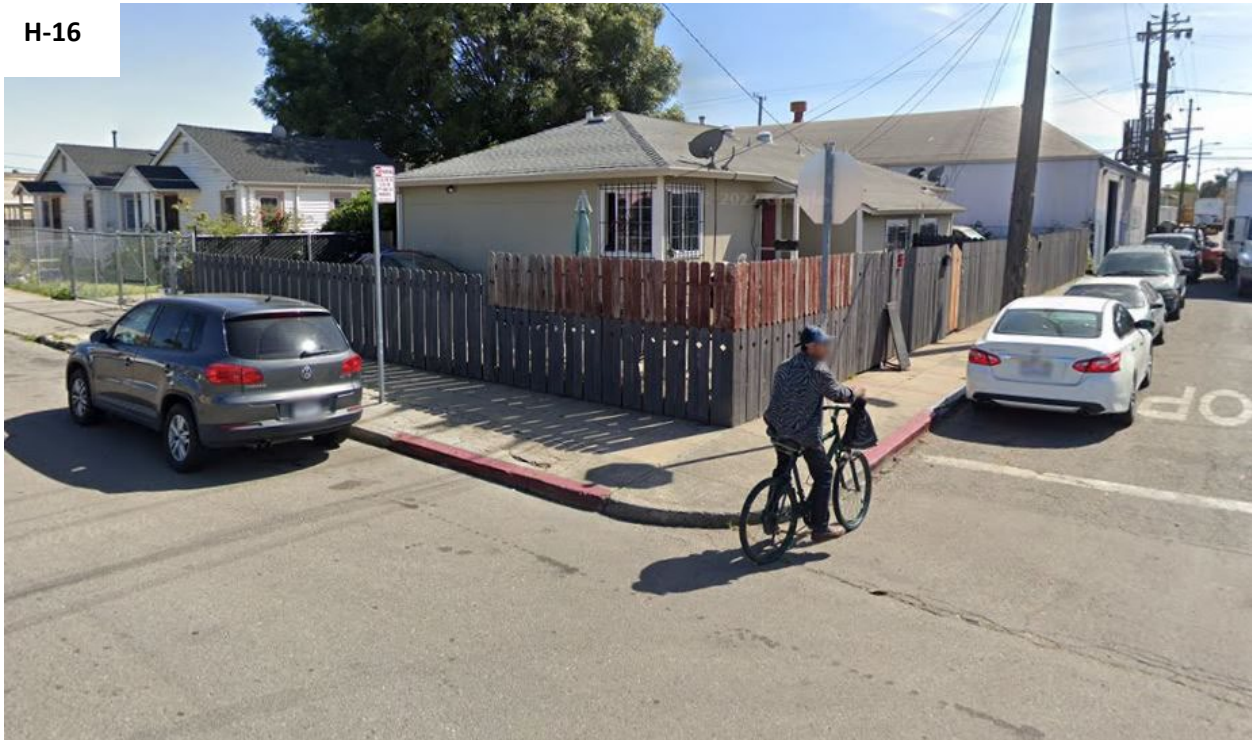
**H-15**



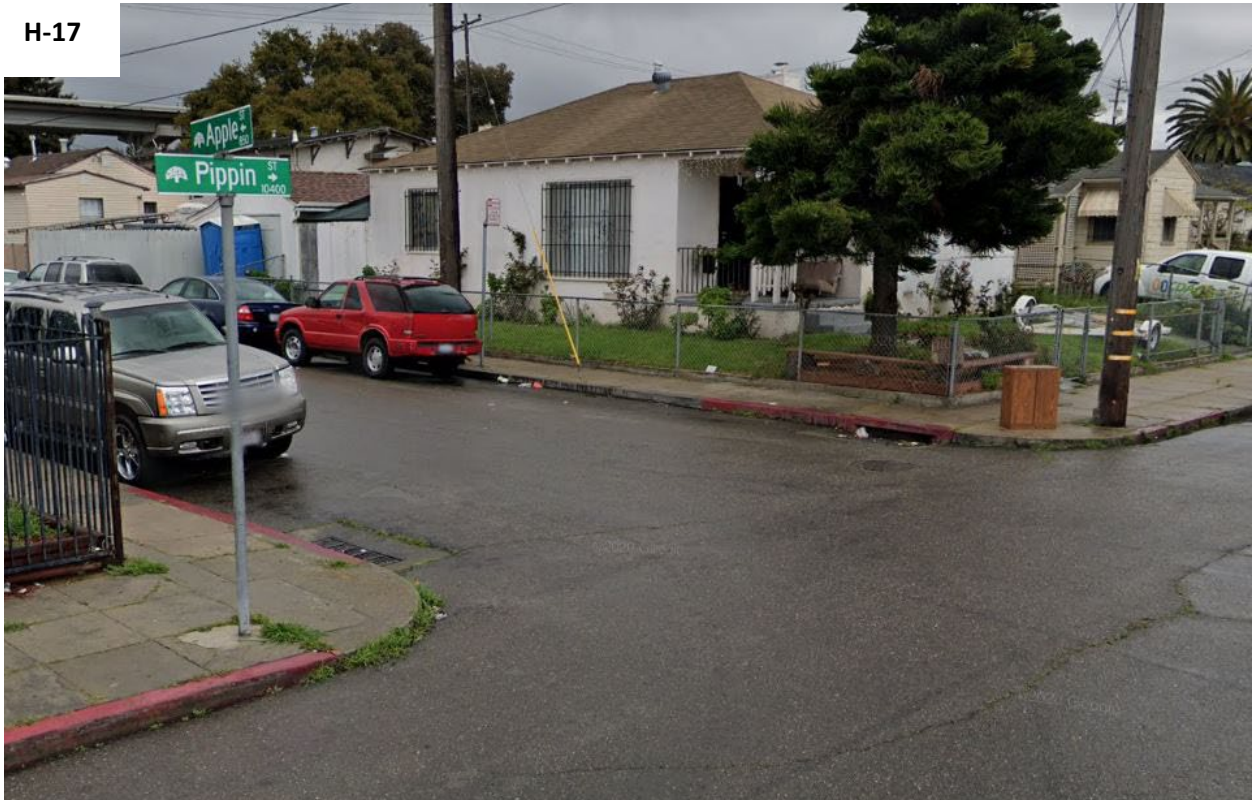
**H-14-15** | San Leandro Street Underpass at 105<sup>th</sup> Avenue in Oakland: There is a lack of signage to warn pedestrians and cyclists of unsafe road conditions, and no direct route southbound on San Leandro Street

Existing Conditions Photos

H-16



H-17



H-16-17 | Pippin Street in Oakland: Several intersections have not curb ramps

**Existing Conditions Photos**



**H-18** | San Leandro Street at Blenheim Street in Oakland: Narrow pavement widths do not allow for safe passing of bicyclists



**H-19** | San Leandro Street at Blenheim Street in Oakland: Pedestrians and cyclists must contend with narrow sidewalks and poor pavement conditions

**Existing Conditions Photos**



**H-20** | San Leandro Boulevard at Washington Street in San Leandro: Free right turns cause conflicts with cyclists



**H-21** | E 14<sup>th</sup> Street at 141<sup>st</sup> Avenue in San Leandro: Offset intersections add complexity to crossing maneuvers



**Existing Conditions Photos**

H-22



H-23



**H-22-23** | E14<sup>th</sup> Street in San Leandro: A lack of protected bike facilities within the corridor means cyclists must contend with car door openings and parking maneuvers

**Existing Conditions Photos**



**H-24 | E14<sup>th</sup> Street in San Leandro:** There is a lack of crossing opportunities along East 14th, which is in the heart of a commercial district: there are locations where pedestrians must walk up to a quarter mile out of their way to get to a marked crosswalk



**H-25 | E14<sup>th</sup> Street at Fairmont Street in San Leandro:** There are no bike protected intersections within the corridor. Safety would be improved at busy intersections like E14<sup>th</sup> and Fairmont Drive

## **Attachment 5: East Bay Greenway Funding Commitments**

- MTC Programming and Allocations Plan Bay Area 2050
- Regional Cycle 6 ATP Recommendations
- 2014 Alameda County Transportation Expenditure Plan

Blueprint Strategy	RTPID	Title	Scope	County	Open Period <sup>1</sup>	Cost/ Funding <sup>2</sup> (millions, YOY)
T07	21-T07-055	Minor Freight Improvements   Regional	This program includes funding to implement freight improvements throughout the Bay Area. This program generally implements programs that improve freight operations and support the Port of Oakland. Improvements include new weigh stations and rest areas and improvements to existing freight terminals and freight rail. Example projects include grade separation improvements at 7th Street at the Port of Oakland and improvements at the I-80 Westbound Truck Scales in Cordelia.	Regional	Various	\$2,500
T07	21-T07-056	Minor Roadway Improvements   Regional	This program includes funding to implement minor roadway improvements. This program generally implements projects exempt from regional air quality conformity, but it does include non-exempt local roadway widenings or extensions. Improvements include local road extensions or new lanes, and intersection improvements such as channelization and signalization. Example projects include improvements to Oakland Army Base, Quarry Lakes Pkwy (East-West Connector), Decoto Rd, Dublin Blvd, El Charro Rd, and Auto Mall Pkwy (ALA); Newell Dr and Airport Junction (NAP); implementation of Envision Expressway program, Calaveras Blvd, and Mary Ave (SCL); Hunters Point Shipyard and Candlestick Point local roads, Alemany Rd, and Treasure Island (SF); and Farmers Ln (SON).	Regional	Various	\$5,700
T07	21-T07-057	Technology Improvements   Regional	This program includes funding to implement technology improvements on the Bay Area's transportation systems. This program generally implements county, transit agency and other local management systems' travel demand management and emissions reduction technologies programs and initiatives. Improvements include incident management; signal coordination; Intelligent Transportation Systems; Traffic Operations Systems/Congestion Management Systems; ramp metering; Computer-Aided Dispatch/Automatic Vehicle Location; fare media; construction or renovation of power, signal and communications systems; toll management systems; toll media; car and bike share; alternative fuel vehicles and facilities; parking programs; carpool/vanpool; ridesharing activities; information, marketing and outreach; and traveler information.	Regional	Various	\$1,300
T07	21-T07-058	Planning/Program   Regional	This program includes funding to support regional and local planning programs and initiatives to support implementation of Plan Bay Area 2050. Investments include planning, research, technical assistance and program implementation. Example regional projects include support for Priority Development Area (PDA) planning and implementation; the Bay Area Preservation Pilot revolving loan fund; and the Housing Incentive Pool pilot program to incentivize the production of affordable housing.	Regional	Various	\$3,300
T07	21-T07-059	Financing/Reserve for Major Capital Projects   Regional	This program includes funding for financing costs of major capital projects (e.g., Caltrain Downtown Extension) and a funding reserve for projects with cost overruns.	Regional	Various	\$1,400
T08	21-T08-060	Complete Streets Network   Regional	This program includes funding to implement a regional Complete Streets network with an emphasis on improvements near transit and in Equity Priority Communities. It also includes funding to implement county and local initiatives to support active transportation systems. Investments include new and extended bike and pedestrian facilities; minor bicycle and/or pedestrian facility gap closures; minor road diets (less than 1/4-mile); ADA compliance; landscaping; lighting; streetscape improvements; secure bike parking at transit stations; and support to local jurisdictions to maintain and expand car-free slow streets. Example projects include the Bay Trail (MUL), Bay Skyway (SF), Better Market Street (SF), East Bay Greenway (ALA), and Urban Greenways and Trails (ALA).	Regional	Various	\$12,700
T09	21-T09-061	Regional Vision Zero Policy through Street Design and Reduced Speeds   Regional	This program includes funding to implement and advance a regional Vision Zero policy, which includes implementation of slower highways and streets through street design and automated enforcement, and other programmatic investments to advance Vision Zero policies. This program generally implements regional, county and local programs to support Vision Zero initiatives; Safe Routes to Schools programs; and the Highway Safety Improvement Program. Improvements include railroad/highway crossing improvements; warning devices; shoulder improvements; traffic control devices other than signalization; guardrails, median barriers and crash cushions; pavement marking; fencing; skid treatments; lighting improvements; widening narrow pavements with no added capacity; changes in vertical and horizontal alignment; transit safety, communications and surveillance systems; truck climbing lanes outside urban areas; and emergency truck pullovers.	Regional	Various	\$3,781

**Attachment 2**

**Recommended Cycle 6 Regional ATP Program of Projects (Alphabetical Order)**

(\$1,000s)

County	Sponsor	Project Title	Recommended Funding	Project Description
ALA	ACPW	Mission Boulevard Safe and Complete Streets for Active Transportation	\$ 25,000	On Mission Boulevard between East Lewelling Boulevard/1-238 and Rose St, in the unincorporated Alameda County communities of Ashland and Cherryland. Install Class IV separated bikeways, protected intersections, pedestrian hybrid beacons, curb extensions, median refuges, high-visibility crosswalks, signal timing, streetscaping.
ALA	ACPW	Oakland Making Moves: Active Oakland Neighborhoods	\$ 999	Oakland Making Moves: Active Oakland Neighborhood will serve 13 affordable housing sites located in disadvantaged/equity priority communities in Oakland. Oakland Making Moves will engage residents in mapping and using safe walking/biking routes from 13 affordable housing sites in Oakland to healthy places.
ALA	ACPW	San Lorenzo Creekway: Building Equitable Active Transportation in Alameda County	\$ 17,200	The San Lorenzo Creekway project will include a pedestrian and bicycle facility that runs along the San Lorenzo Creek for 7.7 miles. The SLC will be the only east-west connector through four disadvantaged communities in the unincorporated area of Central Alameda County - including San Lorenzo, Cherryland, Ashland, and Castro Valley. The project will also include a 1-mile on-street connection to Bayfair BART Station in San Leandro and a 1.5 mile on-street connection to Downtown Hayward.
ALA	ACTC	East Bay Greenway Multimodal, Phase 1	\$ 19,500	Within Alameda County, the project will construct a regional trail facility parallel and connecting to the Bay Area Rapid Transit (BART) line through the Cities of Oakland and San Leandro. The project will consist of Class I shared use paths, Class IV protected bikeways, and protected intersection treatments. The project scope also includes pedestrian crossing safety and accessibility improvements, bus stop enhancements to improve speed and passenger comfort, and placemaking features.
ALA	ACTC	San Pablo Avenue Safety Enhancements and Transit Bulbs Project	\$ 9,000	In Alameda County, on San Pablo Avenue between Heinz Street in South Berkeley and Clay Street in North Albany, construct bicycle/pedestrian safety and transit speed/reliability improvements including flashing beacons, pedestrian hybrid beacons, ADA compliant curb ramps, bulb outs at Rapid bus stops, median refuge islands, high visibility crosswalk upgrades, minor traffic signal modifications, bus stop relocations, lighting improvements, and warning signage.
ALA	Berkeley	Washington Elementary and Berkeley High Safe Routes to School project	\$ 1,511	Students at Washington Elementary and Berkeley High schools will have safer opportunities to walk and bike to school. Reconfiguring loading zones will reduce conflict and stress. Bulb-outs and pedestrian leading intervals will make pedestrians more visible to drivers. Thirteen intersections in Downtown Berkeley around Washington Elementary and Berkeley High Schools, and school frontages on Milvia Street and McKinley Avenue.
ALA	Oakland	Bancroft Avenue Greenway	\$ 29,311	The project is located in Oakland, CA on Bancroft Avenue from 73rd Avenue to 103rd Avenue. The project involves constructing two miles of separated multi-use path, 112 ADA ramps, 60 wayfinding signs, 30 regulatory signs, 22 benches, 24 trash receptacles, pedestrian scale lighting throughout the corridor, 179 new trees, landscaping, and irrigation.
CC	Concord	Willow Pass Road Bikeway Project	\$ 2,835	The project provides vital bicycle and pedestrian connections to multiple schools, a regional trail (Contra Costa Canal Trail), a regional train station (BART), and Downtown Concord. There are several healthcare centers, offices, churches, and multi-family housing units located along the corridor. Willow Pass Road is a regional connector that connects Downtown Concord to State Highway 4.
CC	San Pablo	Broadway-El Portal Safe Routes (BESR) Project	\$ 7,248	SR2S Infrastructure: Final design and construction of SR2S Master Plan recommended infrastructure improvements between Broadway Avenue and the nearby Bayview and Lake Elementary Schools, as well as 4 curb extensions, 3 new crosswalks, 2 speed feedback signs, 4 rectangular rapid flashing beacons, 4 bicycle racks, and enhanced high-visibility striping at 2 school-zone intersections on Broadway Avenue
MRN	Corte Madera	Central Marin Regional Pathways Gap Closure Project	\$ 1,500	The Gap Closure Project will address these issues through construction of a standard Class I pathway, a bi-directional Class IV bikeway, and upgraded intersection crossings and highway ramp for pedestrians and bicyclists.
MRN	San Rafael	Canal Neighborhood Active Transportation Enhancements Project	\$ 4,123	In San Rafael, in the Canal neighborhood, construct 10 ADA-compliant curb ramps, upgrade 6 curb ramps to meet ADA requirements, complete sidewalk infill on 10 streets, improve 6 transit stops, implement bicycle boulevard treatments on 3 streets, improve lighting on 10 streets and 3 pathways, enhance 4 uncontrolled crosswalks, and add secure parking for 10 bicycles. See Additional Information section for detailed locations.
MRN	San Rafael	San Rafael Canal Crossing Project	\$ 3,925	In San Rafael between Canal Street and Third Street. The project would result in the construction of a new non-motorized crossing of the San Rafael Creek between Canal Street and Third Street in San Rafael, CA.
SM	San Mateo County	Santa Cruz Avenue/Alameda de las Pulgas Complete Street Project	\$ 5,435	The Santa Cruz Avenue/Alameda de las Pulgas (SC/ADLP) corridor is part of a larger road network spanning two counties that runs over 15 miles, connecting numerous communities on the San Francisco Peninsula. The project is located in unincorporated West Menlo Park and is a gateway to Stanford University. The project will implement a road diet to provide enough space for sidewalks and bike lanes, new raised medians, and safety islands.
SCL	San Jose	Story-Keyes Complete Streets Project*	\$ 3,656	Along Keyes Street and Story Road, between 3rd Street and King Road, in Central and East San Jose including capital investments in bike/ped safety, such as separated bikeways, high visibility crossings, protected intersections, and bus boarding islands.
SON	Healdsburg	Healdsburg Avenue Complete Streets Project	\$ 11,819	Healdsburg Avenue between Powell Avenue and the Foss Creek bridge 1/4 mile south of Passalacqua Road, having a total project length of 1-1/2 mile. Construction to implement a road diet with the addition of bicycle, pedestrian and transit improvements.
<b>Total</b>			<b>\$ 143,062</b>	

\*San Jose requested \$36,386 however \$3,656 is available for funding.

# 2014 ALAMEDA COUNTY TRANSPORTATION EXPENDITURE PLAN



January 2014





Key investments in bicycle and pedestrian paths and safety include completion of the major trails in the County. Funding will allow for the completion of three key trails: the

County's East Bay Greenway, which provides a viable commute and community access route for many cyclists and pedestrians from Oakland to Fremont, and the Bay Trail and Iron Horse Trail in Alameda County which provide important off street routes for both commute and recreational trips. Funding for priority projects in local and countywide Bicycle and Pedestrian plans will also allow for investments that support the use of these modes.

A total of 8% of the funds available in this plan are devoted to improving bicycle and pedestrian infrastructure as well as providing programs to encourage people to bike and walk when possible and to support accessibility for seniors and people with disabilities. It is important to note that in addition to these dedicated funds, local bicycle and pedestrian projects will also be funded through the Local Streets Maintenance and Safety and Community Development Investments funding categories.

## **COMPLETION OF MAJOR TRAILS – IRON HORSE TRAIL, BAY TRAIL AND EAST BAY GREENWAY (\$264 M)**

This project provides for increased pedestrian and bicycle transportation options, more open space, and improved public safety in neighborhoods on these three major trails pictured on page 32. These projects have the potential to generate extensive and varied community benefits beyond creating infrastructure for bicycle and pedestrian travel including improving neighborhood connectivity, improving access to transit, reducing traffic, improving safe access to schools, supporting community health and reducing

greenhouse gas emissions. Funds may be applied to the construction and maintenance of the three major trails, as well as local connectors and access routes.

## **LOCAL BICYCLE AND PEDESTRIAN PATHS AND SAFETY (5% OF NET REVENUE, \$387 M)**

This program is designed to fund projects and provide operating funds that expand and enhance bicycle and pedestrian safety and facilities in Alameda County, focusing on projects that complete the County's bicycle and pedestrian infrastructure system. The program consists of two components:

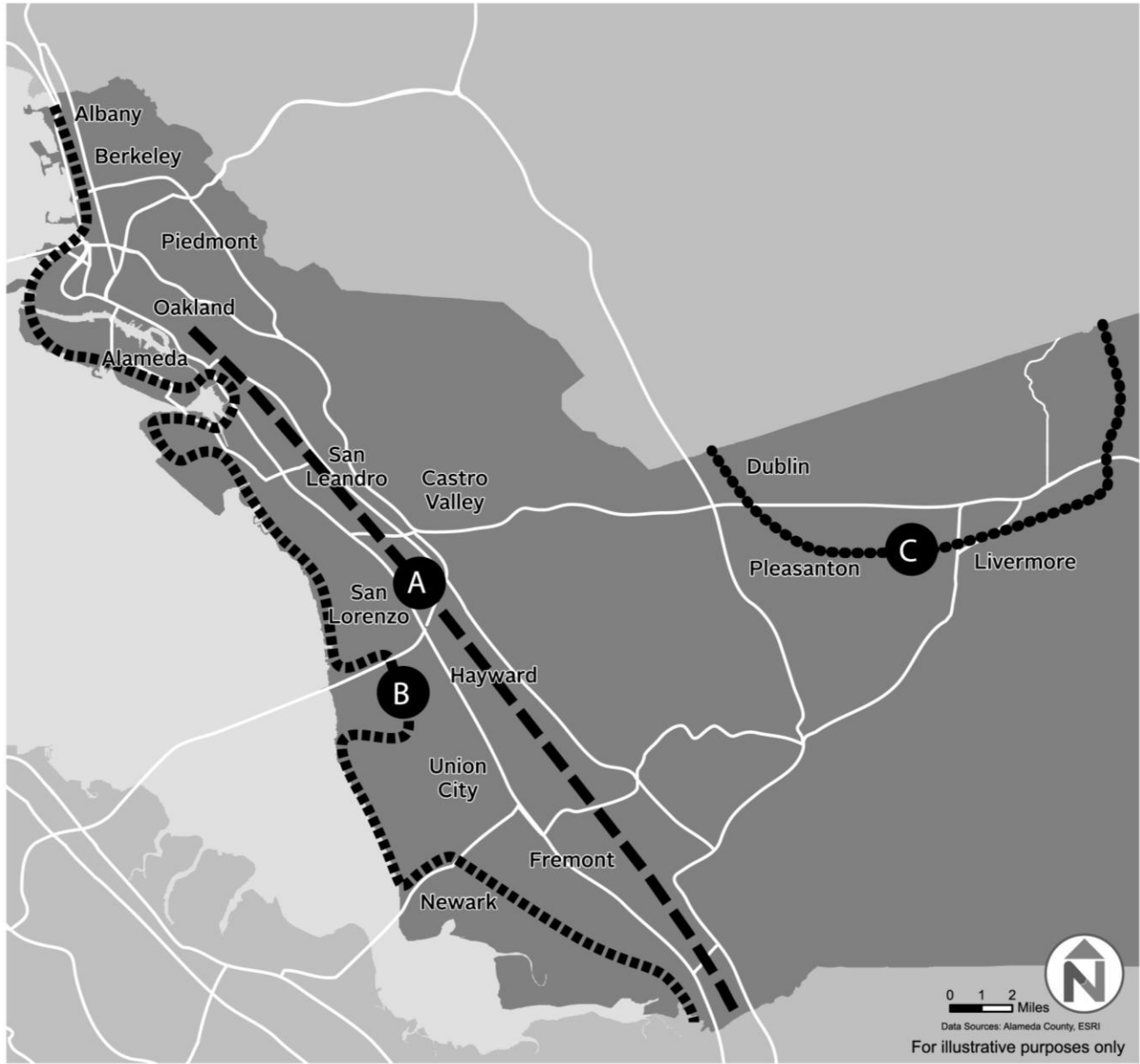
### **Bicycle and Pedestrian Direct Allocations to Cities and Alameda County (3% of net revenue, estimated at \$232 M)**

Funding will be provided on a monthly basis to the cities and to Alameda County for planning, construction and maintenance of bicycle and pedestrian projects and programs, focusing on completing the high-priority projects described in their Bicycle and Pedestrian Master Plans. Funds will be provided to each city within the county and to Alameda County based on their share of the population. Jurisdictions will be expected to implement, operate and maintain projects from the County's bicycle and pedestrian plans and to commit to a complete streets philosophy in their project design and implementation.



### **Bike and Pedestrian Grant Program (2% of net revenue, estimated at \$154 M)**

These funds, administered by Alameda CTC, will be available for the purposes of implementing and maintaining regional bicycle and pedestrian facilities



East Bay Greenway  
from Oakland to Fremont



Bay Trail Gap Closure  
and Access projects



Iron Horse Trail Gap Closure  
and Access projects

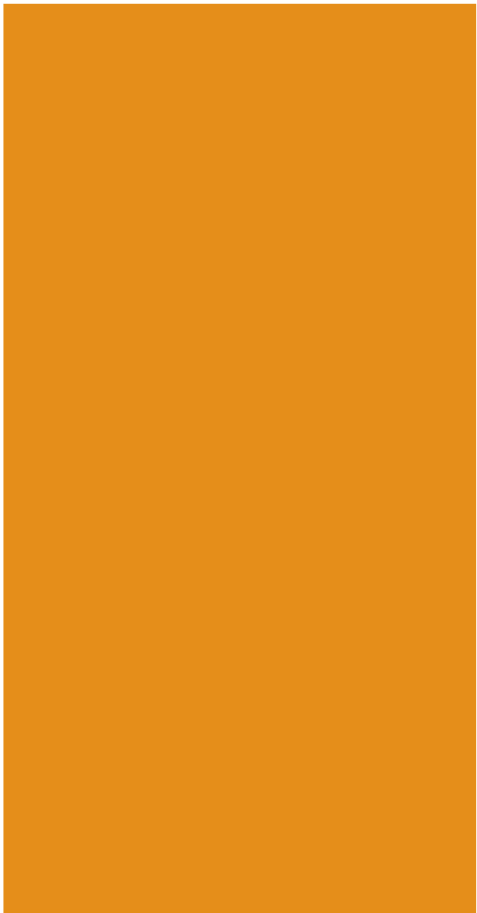
Not Shown:

- Completion of other priority projects in local and countywide bicycle and pedestrian plans
- Funding to cities and County
- Grant program for regional projects and trail maintenance.



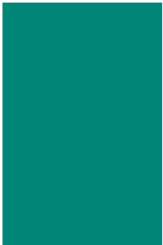
## **Attachment 6: Outreach Summary Reports**

- City of Oakland
- City of San Leandro



# Outreach Summary Report for Oakland

EAST BAY GREENWAY MULTIMODAL PROJECT:  
NORTH SEGMENT - LAKE MERRITT BART TO BAY FAIR BART



Alameda County Transportation Commission  
1111 Broadway, Suite 800  
Oakland, CA 94607  
[www.AlamedaCTC.org](http://www.AlamedaCTC.org)

01.03.2023

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## EXECUTIVE SUMMARY

This document reports on outreach efforts and community input collected for the Oakland portion of the East Bay Greenway (EBGW) Multimodal Project between September 15 and November 30, 2022.

The goal of this phase of outreach was to inform the public and stakeholders about the East Bay Greenway Multimodal Project and learn about community needs and concerns for multimodal transportation infrastructure. Project goals and alignment/design concepts were presented for public input, and community members were informed of how the latest concepts fit into the overall project schedule and environmental analysis. Additional outreach will be conducted as part of the project's final design.

Common themes heard during this round of outreach, across all input methods include:

### **Project Opportunities:**

- Overall sentiment toward the East Bay Greenway project was highly supportive.
- Several comments expressed enthusiasm for improved access to BART stations and community destinations.
- Bike lanes should be low maintenance, clean, and well-lit.
- High demand for public art and greening along the corridor.
- Requests to provide additional information to the public through door-to-door outreach and social media
- Some community members expressed excitement about the project as meeting a need in the different neighborhoods for a family-friendly active recreation facility

### **Specific Project Concerns:**

- Concerns about traffic safety along the corridor and sense that a high level of protection/separation will be needed for bikeways and pedestrian paths to be safe
- Concerns about cleanliness and maintenance.
- Uncertainty about possible delays to the project and concerns that the project timeline is too long.
- Concerns about unhoused populations along corridor including construction impacts and potential for new encampments.
- Concerns related to more traffic and congestion caused by the project.
- Concerns about cars parking in bike lanes.

This document may be appended as the project proceeds. Outreach for the San Leandro portion of the East Bay Greenway Multimodal Project is documented separately.



# 1. COMMUNITY & STAKEHOLDER OUTREACH

## 1.1 STAKEHOLDER LIST

A project stakeholder database (**Appendix A01**) was assembled using existing contacts from previous EBGW project outreach activities and updating and/or incorporating additional contacts such as elected officials and local community-based organizations (CBOs). The outreach team also identified businesses located along the project alignment for inclusion in the stakeholder list. As of this report, the stakeholder list includes 407 contacts.

## 1.2 STAKEHOLDER PRESENTATIONS

Stakeholder meetings were held on September 15 and October 19, 2022, to conduct outreach and collect input on the project.

A PowerPoint presentation was prepared (**Appendix A02**) and presented by Alameda CTC staff. Spanish and Chinese versions of the video were hosted on the project website. Email invitations were also drafted for Alameda CTC and City of Oakland staff (**Appendix A03**).

Attendees were also invited to visit the online survey (described in Section 2.2, below) to submit feedback on the project.

**Table 1. Summary of Presentations**

Date	Event	Attendees
09/15/22	City of Oakland Bicyclist & Pedestrian Advisory Commission (BPAC) virtual meeting	32 ( <b>Appendix A04</b> )
10/19/22	Virtual focus group with East Oakland Community-Based Organizations (CBOs) and cycling/multimodal transportation advocacy groups. Hosted over Zoom.	<b>(Appendix A05)</b> <ul style="list-style-type: none"> <li>• City of Oakland</li> <li>• Bike East Bay</li> <li>• TransForm</li> <li>• Higher Ground Neighborhood Development Corp</li> <li>• Rails-to-Trails Conservancy</li> <li>• Greenbelt Alliance</li> <li>• East Oakland Collective</li> <li>• Walk Oakland Bike Oakland</li> </ul>

Alameda CTC also held several briefings with staff from Oakland Department of Transportation, AC Transit, and BART, some of which included a PowerPoint presentation.

### 1.3 POP-UP EVENTS

A series of popups were held at community events and BART stations around Oakland near the EBGW alignment. The BART station popups were held on weekdays during peak commuting hours. An Alameda CTC representative, along with consultant support, staffed each event and recorded notes of comments and conversations from visitors. The majority of pop-up visitors were local transit riders or other Oakland residents who visited the project area often.

The EBGW fact sheets (Appendix A06) and project postcards were distributed at the popups. Community members were also encouraged to take the survey forms, either online or through paper copies provided at each event.

Popups were supported by a posterboard (**Appendix A07**) outlining the East Bay Greenway Multimodal Project and how the project will improve safety and connection along the BART corridor in Oakland for pedestrians and bicyclists. A Spanish-language posterboard was also included. Plotted maps of the alignment and graphical cross-sections and plotted maps of the alignment were provided by HNTB.

**Table 2. Summary of Pop-Up Events**

Date	Event / Location
09/17/22	Oakland Roots Soccer Game (outside of stadium entrance)
10/25/22	Lake Merritt BART Station
10/26/22	Coliseum BART Station
10/27/22	Fruitvale BART Station
10/30/22	Día de Los Muertos Festival

*Total estimated visitors to the pop-ups: 75+*



*Alameda CTC booth at Día de Los Muertos festival*

## 1.4 POSTCARD MAILER

A postcard describing the East Bay Greenway Multimodal project and its benefits was created and mailed to 14,987 residents and businesses along the project alignment in Oakland on October 3, 2022.

The postcard (**Appendix A08**) included a map of the proposed alignment in Oakland, details on the upcoming pop-up event at the Día de los Muertos festival, and an email address for submitting comments or questions. A QR code linking to the project survey was also featured. The information on the postcard was provided in English, Spanish, and Chinese.

## 1.5 E-BLAST AND CBO MATERIALS

Emails were drafted for distribution by Alameda CTC and the City of Oakland to their respective mailing lists. The emails (**Appendix A09**) publicized the date and location of upcoming pop-up events and promoted the project survey.

Outreach content, including a draft email and social media posts, was also provided to select CBOs, including the groups that attended the 10/19 focus group, for distribution to their respective constituents. (**Appendix A10**).

## 2. ONLINE OUTREACH

### 2.1 WEBSITE CONTENT

Updated web content and a video flyover of the project area (Appendix A11) was developed and deployed to the East Bay Greenway Oakland Phase 1 project page on [Alameda CTC's website](#).

### 2.2 SURVEY

An online survey (provided in English, Spanish, and Chinese) was created to solicit feedback about the project. The survey ran from October 1 to November 30, 2022 and was promoted by Alameda CTC on its Twitter and Facebook channels. Attendees of the 10/19 CBO focus group were asked to share a link to the survey to their constituents. Paper copies of the survey were also distributed at the pop-up events. (**Appendix A12**)

**Alameda CTC** @AlamedaCTC · Oct 21  
East Bay Greenway is a proposed 16-mile regional bike & pedestrian East Bay trail from Lake Merritt BART to South Hayward BART thru @CityofOaklandCA, @CitySanLeandro, @cityofhayward & @AlamedaCounty. Go to [alamedactc.org/programs-proje...](https://alamedactc.org/programs-proje...) and share your thoughts on the project!



### 2.3 MEDIA COVERAGE

An article covering the project and highlighting in-person outreach opportunities (including the Dia de Los Muertos pop-up) was published by The Oaklandside on September 22, 2022. [Link to article](#).



## 3. SUMMARY OF INPUT RECEIVED

The following section summarizes input received on the East Bay Greenway Multimodal project in Oakland. Feedback is summarized from comments received from the popup events, stakeholder briefings, and the survey.

The full datasets collected through each input method are provided in **Appendix B: Public Input**.

### 3.1 OVERALL IMPRESSION OF PROJECT

Common themes heard during this round of outreach, across all input methods include:

#### **Project Opportunities:**

- Overall sentiment toward the East Bay Greenway project was highly supportive.
- Several comments expressed enthusiasm for improved access to BART stations and community destinations.
- Bike lanes should be low maintenance, clean, and well-lit.
- High demand for public art and greening along the corridor.
- Requests to provide additional information to the public through door-to-door outreach and social media
- Some community members expressed excitement about the project as meeting a need in the different neighborhoods for a family-friendly active recreation facility

#### **Specific Project Concerns:**

- Concerns about traffic safety along the corridor and sense that a high level of protection/separation will be needed for bikeways and pedestrian paths to be safe
- Concerns about cleanliness and maintenance.
- Uncertainty about possible delays to the project and concerns that the project timeline is too long.
- Concerns about unhoused populations along corridor including construction impacts and potential for new encampments.

- Concerns related to more traffic and congestion caused by the project.
- Concerns about cars parking in bike lanes.

### 3.2 SUMMARY OF STAKEHOLDER MEETING INPUT

Questions and comments were recorded at the Bicycle and Pedestrian Advisory Committee (**Appendix B01**) and Oakland CBO Focus Group (**Appendix B02**) briefings.

Participant questions and comments were primarily centered around safety for pedestrians and bicyclists, maintaining the bike paths, and the possibility of adding more greening and amenities along the project corridor. Participants had several suggestions for project features that would serve the public, including creating wider, family-friendly paths, adding art and design elements, and incorporating a two-way cycle track design.

Two emails with comments were received after the focus group briefing (**Appendix B03**), one concerned with adding play structures for children and fitness structures to the greenway, and the other suggesting outreach to community organizations for planning through an environmental justice lens.

### 3.3 SUMMARY OF POP-UP EVENT INPUT

Across all pop-up events, most of the questions and comments were positive. The most frequently asked questions from pop-up event visitors were:

- When will the project be complete?
- How will the project be funded?
- Will the East Bay Greenway connect to the Bay Trail?

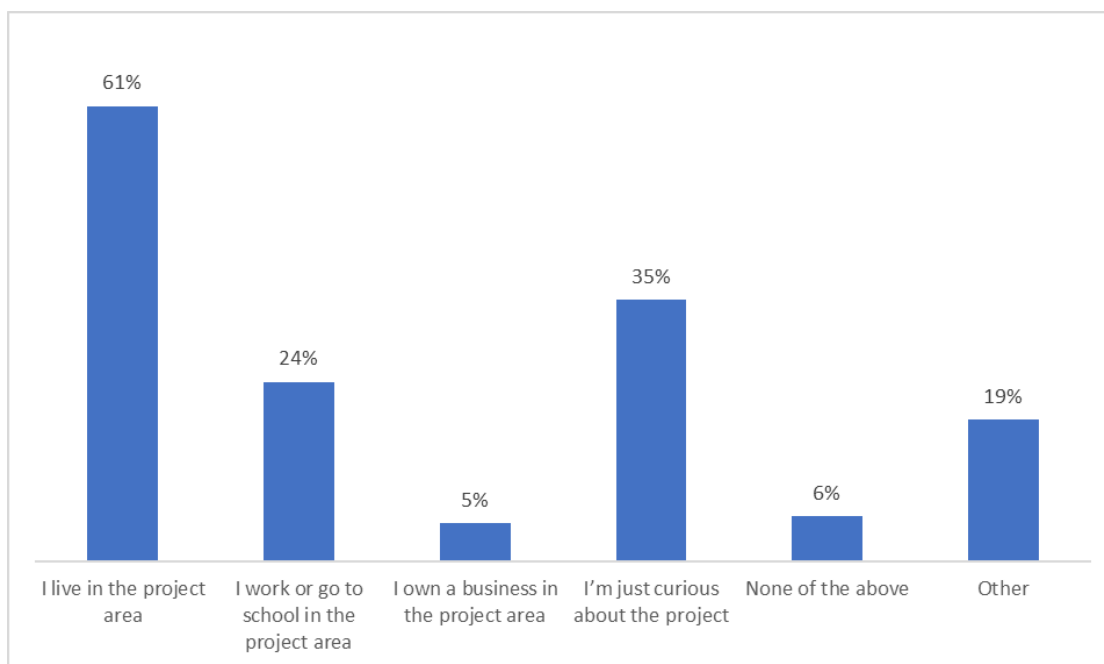
### 3.4 SUMMARY OF SURVEY RESPONSES AND COMMENTS

The following figures and tables summarize responses received from the EBGW Multimodal Project Oakland Survey via Google forms as well as paper surveys that were filled out at the

pop-up events. A total of 144 responses were received for the survey with the majority taking the survey online. Three individuals took the survey in Spanish and the rest in English.

The full dataset is available in **Appendix B04**.

**Q1: What is your interest in the East Bay Greenway project? Select all that apply.**



Respondents who selected “Other” were able to leave a write-in comment with more information about their interest in the project. The majority of these write-in responses cited an interest in biking in the area. For example, one respondent said, *“I’m a bike commuter and I would ride this if it were built”*.

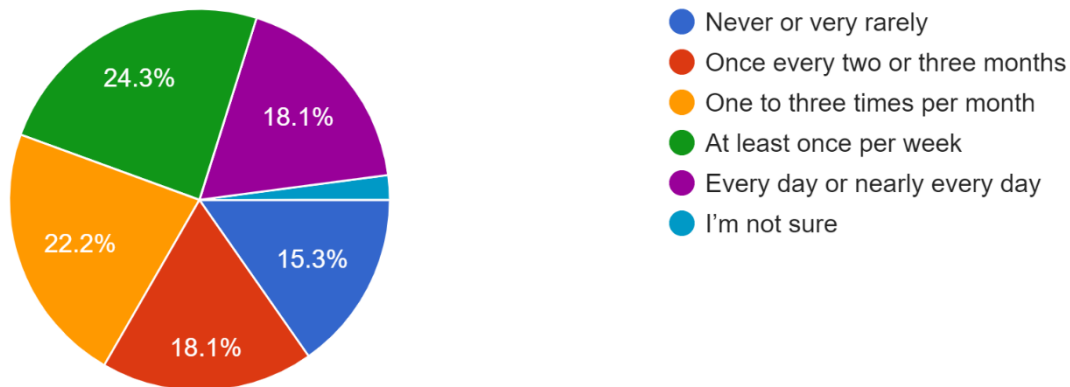
Another theme was safety as seen in the following response: *“I support trail/greenway projects, I design trail/greenway projects, and I want to be able to bike through the East Bay more safely.”*

**Q2: What forms of transportation do you use on a regular basis (at least 2-3 times per week)? Select all that apply.**

#	Response	%
1	Walk	69%
2	Bike/Scooter	66%

#	Response	%
3	BART	59%
4	Drive	55%
5	Bus	24%
6	Rideshare	6%
7	Other	4%

**Q3: How often do you travel along East 10th, East 8th, East 12th, or San Leandro Streets in Oakland (between Lake Merritt BART and San Leandro)?**



Over two-thirds of participants (67%) travel through the project area at least monthly, with a further 42% traveling through the area on a weekly or daily basis.

**Q4: Which of the following features do you want to see most along this section of roadway? Select all that apply.**

#	Response	%
1	Separated bike paths or lanes	92%
2	Better pedestrian crossings	68%



#	Response	%
3	Upgraded lighting	61%
4	Landscaping and/or amenities (benches, art, etc)	60%
5	Bike routes with lower speeds and less traffic	55%
6	Other	11%

Bike and pedestrian safety emerged as clear priorities for respondents. Of the 11% of respondents that selected “Other,” the write-in field was mostly used to emphasize the need for one or more of the already featured priorities, including cleaner streets, paved roads, and crossings that priorities bicyclists and pedestrians

**Q5: How might you and your family use the East Bay Greenway? Select all that apply.**

#	Response	%
1	For fun/recreation	87%
2	To get to shopping, errands, or appointments	65%
3	To commute to work or school	44%

**Q6: What are your concerns about the project, if any? For example, concerns related to construction, traffic, parking, etc. Please be specific.**

Respondents were invited to submit open-ended responses expressing any concerns they had about the project. The most common themes and the number of survey respondents expressing the theme are summarized below.



#	Theme	Respondents expressing comment theme
1	Traffic safety	18
2	Project timeline and construction	17
3	Maintenance/cleanliness	9
4	Homelessness	9
5	Traffic congestion	7
6	Personal security	4
7	Others	1-4

The table below provides representative quotes from each of the most common comment theme areas.

Concerns	Relevant Quotes
Traffic Safety	<ul style="list-style-type: none"> <li>“[I] want clear paths for pedestrians and wheelchairs and bicycles and for it to be safe for kids to ride with special crossing lights for any car-traffic [pathways].”</li> <li>Drivers in this area are very dangerous and frequently speed and ignore traffic laws. The route needs to be protected by crash-proof barriers to prevent bikers and pedestrians from being killed.</li> </ul>
Project Timeline and Construction	<ul style="list-style-type: none"> <li>“Project construction timeline -- too long”</li> <li>“I’m all for the project! My only concerns are delays in getting it completed.”</li> </ul>
Maintenance/cleanliness	<ul style="list-style-type: none"> <li>Keeping the paths safe and clean - housing support and resources will be needed for the unhoused in the community to really maintain the path</li> </ul>



Concerns	Relevant Quotes
Homelessness	<ul style="list-style-type: none"> <li>Ensure homeless encampments and trash dumping do not overtake the beautified space.</li> </ul>
Traffic and congestion	<ul style="list-style-type: none"> <li>"I am concerned about traffic. If lanes need to be reduced to make room for the separated bike paths, it may cause congestion."</li> <li>"My main concern is that you will create something that is still stressful to ride. I presently use Bancroft and Foothill but Foothill is stressful, especially thru Fruitvale. I love this idea of better connection between Castro Valley and Oakland."</li> </ul>
Personal Security	<ul style="list-style-type: none"> <li>"The San Leandro Street corridor will have major challenges as it is a very rough neighborhood with lots of homelessness, crime, and rampant scofflaw drivers. Crossing any street, even if you have the green light, is dangerous because so many drivers run red lights."</li> </ul>

### Q7: What is your ZIP code?

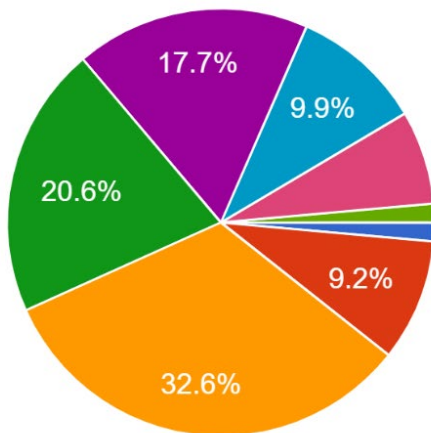
The survey included several optional demographic questions to guide equity outreach efforts. The five most reported corresponding cities are provided below:

#	City	%
1	Oakland	64%
2	Alameda	6.6%
3	Hayward	6.6%
4	Emeryville	3.3%
5	Berkeley	3.3%

The most common zip codes for responses in Oakland were 94606 (18 responses); 94601 (16); 94607 (9); 94611 (8); 94610 (6); 94612 (6); 94609 (6); 94621 (5); 95619 (4); 94605 (3); 94618 (2); and 94602 (2).

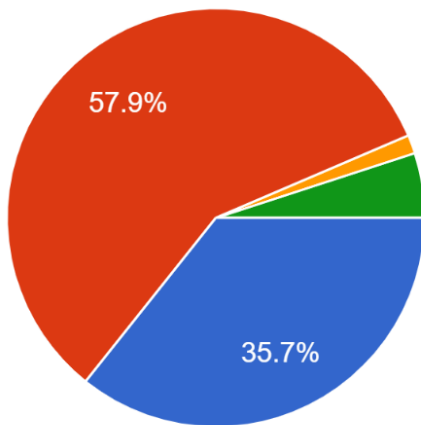


**Q8: How old are you?**



- Under 20
- 20 to 29
- 30 to 39
- 40 to 49
- 50 to 59
- 60 to 69
- 70 or older
- Prefer not to say

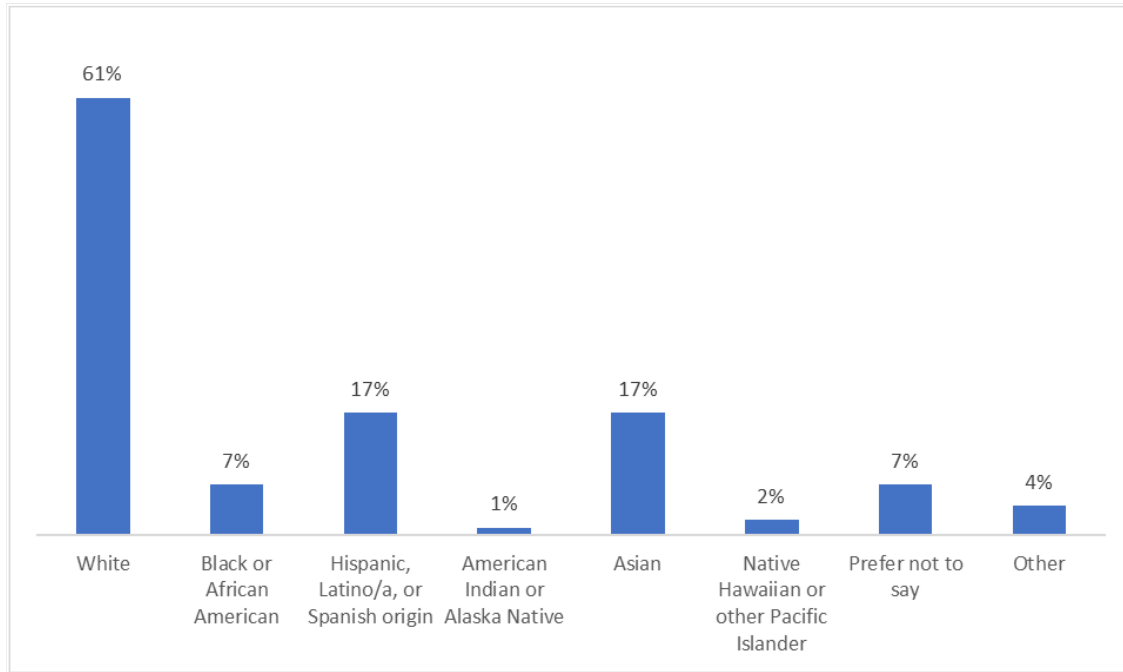
**Q9: How do you describe yourself?**



- Woman
- Man
- Describe myself another way
- Prefer not to say



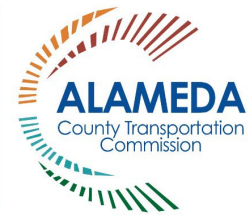
**Q10: What do you consider your race or origin? *Select all that apply.***



**Q11: Do you have any additional questions or comments for the project team?**

Additional feedback and questions about the project largely fell into several key comment theme areas, as summarized below.

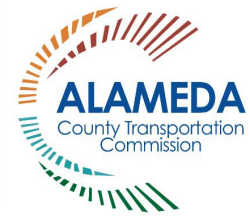
#	Theme	Respondents expressing comment theme
1	General support for project	21
2	Specific design suggestions	7
3	Support for separated/protected facilities	5
4	Questions regarding project scope and schedule	3



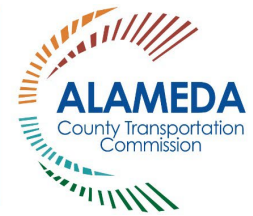
#	Theme	Respondents expressing comment theme
5	Suggestions for additional outreach	3
6	Neighborhood needs	3
7	References to model facility	3
8	Other feedback, including: <ul style="list-style-type: none"> <li>homelessness</li> <li>volunteer engagement</li> <li>accommodations for seniors, children, and people with disabilities</li> <li>project maintenance</li> <li>general skepticism about the project</li> </ul>	1-2

Excerpts from responses highlighting the most common themes are provided below:

Category	Relevant Quotes
General Support for Project	<ul style="list-style-type: none"> <li><i>"This is an awesome project and I can't wait to see it completed."</i></li> <li><i>"I live in San Antonio neighborhood and work in Hayward near the Hayward BART station. This project would drastically improve these areas and help reduce car dependency and promote pedestrian safety."</i></li> <li><i>"I presently use Bancroft and Foothill but Foothill is stressful, especially thru Fruitvale. I love this idea of better connection between Castro Valley and Oakland. [...]. Cycle commuting is very practical but only if people feel safe. Thanks for this great project!"</i></li> </ul>



Category	Relevant Quotes
Specific Design Suggestions	<ul style="list-style-type: none"> <li>• <i>“The transition between Section 2 (E 8th St – E 10th St to 14th Ave) and Section 3 ( E 12th St – 20th Ave to Fruitvale Ave) should provide an adequately protected/marked crossing between the cycle track section and protected bike lane section. A cycle track in each direction along Section 3 should be considered [...]The intersection at 12th St. and 23rd Ave. should include design elements to protect eastbound bicycle and pedestrian users from automobiles turning onto 23rd Ave.</i></li> </ul>
Support for separated/protected facilities	<ul style="list-style-type: none"> <li>• <i>“I would like to feel comfortable biking with my children here [...] This means traffic calming and separated bike facilities”</i></li> <li>• <i>“Protected bike lanes are preferable to sharing the street with any vehicle traffic”</i></li> </ul>
Project Scope/Schedule	<ul style="list-style-type: none"> <li>• <i>“Are they also going to pave and fix the current paths, sidewalks, etc.”</i></li> <li>• <i>“Will this create jobs?”</i></li> </ul>
Outreach and Updates	<ul style="list-style-type: none"> <li>• <i>“Will there be more public outreach concerning this project?”</i></li> <li>• <i>“On foot/ In person outreach should be included on this survey as well”</i></li> </ul>
Neighborhood Needs	<ul style="list-style-type: none"> <li>• <i>“this project with help with better connectivity to transit. which is hard for most people living in disinvested or industrial parts of East Oakland.”</i></li> </ul>



Category	Relevant Quotes
Model Facilities	<ul style="list-style-type: none"><li data-bbox="506 447 1396 632">• <i>“The concept of this greenway seems ideal: it could open up the neighborhoods along the way to increased opportunities and inexpensive ways to access other neighborhoods and opportunities. The Ohlone Greenway seems like a successful model.”</i></li><li data-bbox="506 674 1396 821">• <i>“It would be really awesome if this happened. Would it be like the Doyle Street Greenway in Emeryville? I love that one - it's so pleasant and makes going between Oakland and Berkeley so much easier!”</i></li></ul>

## APPENDIX A: OUTREACH COLLATERAL

### A01: STAKEHOLDER LIST

Excel spreadsheet containing the project stakeholder list. [Link to spreadsheet](#)

### A02: POWERPOINT PRESENTATION VIDEOS

Presentation given to Focus Group with narrations provided for web distribution.

- [Link to English Presentation](#)
- [Link to Spanish Presentation](#)
- [Link to Chinese Presentation](#)

### A03: FOCUS GROUP EMAILS

Invitations emails drafted for Alameda CTC and City of Oakland for attendees. [Link to PDF](#)

### A04: BPAC PRESENTATION & MINUTES

Document with list of BPAC attendees and PowerPoint presentation. [Link to PDF](#)

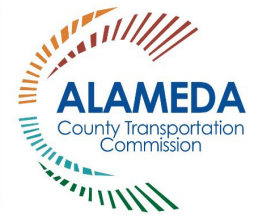
### A05: FOCUS GROUP ATTENDEES

List of focus group attendees. [Link to PDF](#)

### A06: POP-UP EVENT FACT SHEET

Project fact sheet distributed at popups.

# OUTREACH SUMMARY REPORT FOR OAKLAND EAST BAY GREENWAY MULTIMODAL PROJECT: NORTH SEGMENT - LAKE MERRITT BART TO BAY FAIR BART



## ALAMEDA County Transportation Commission East Bay Greenway Multimodal, (Phase 1) SEPTEMBER 2022

### PROJECT OVERVIEW

The Alameda County Transportation Commission (Alameda CTC) is the implementing agency for the East Bay Greenway (EBGW) project that proposes to construct a 16-mile long active transportation facility along major arterials that connects seven BART stations from the Lake Merritt BART station in Oakland to the South Hayward BART station. The project will construct Class I and Class IV bike facilities, evaluate transit enhancements, such as transit islands and traffic signal priority safety enhancements, such as traffic calming measures through narrow lanes and placemarking signal upgrades for bicyclists, protected intersections, and pedestrian crossing enhancements with high-visibility crosswalks and bulb-outs that meet Americans with Disabilities Act requirements. EBGW Phase 1 focuses on getting "quick-term" improvements in construction in a three-to-five-year horizon. EBGW Phase 2 will continue to work with the Union Pacific Railroad to implement a Rail-to-Trail or Rail-with-Trail facility in a 10+ year horizon.



### PROJECT NEED

- The existing county bike-way network does not provide a continuous and comfortable route connecting Downtown Oakland and South Hayward.
- Existing interjurisdictional routes in the East Bay Greenway corridor are generally arterial roadways that carry significant traffic volumes, are designed transit and truck routes, and have established histories of collisions involving bicyclists and pedestrians.
- The East Bay Greenway jurisdictions and BART have adopted specific plans, station area plans and other land use plans, calling for thousands of additional residents and jobs in the East Bay Greenway corridor. Improved last-mile transit access to regional transit and destinations is essential to accommodating planned growth along the East Bay Greenway corridor.

### PROJECT BENEFITS

- Improves bicycle and pedestrian network connectivity in communities along the BART line
- Improves access to regional transit, schools, downtown area, and other destinations
- Creates a facility that is accessible and comfortable to bicyclists and pedestrians of all ages and abilities
- Improves safety for bicyclists and pedestrians
- Supports promotion of a multimodal transportation system and reduction of greenhouse gas emissions to protect our climate and create sustainable communities

CAPITAL PROJECT FACT SHEET

PN: 158700

### EAST BAY GREENWAY MULTIMODAL (PHASE 1)

#### STATUS

Implementing Agency: Alameda CTC

Current Phase: Preliminary Engineering/Environmental



Initial East Bay Greenway segment from Coliseum BART to 85th Avenue (funded by Measure WW, TICB and SAAQAG).



Rendering of East Bay Greenway.

#### PROJECT DOCUMENTS

For more information on the project, please visit: [www.alamedactc.org/eastbaygreenway](http://www.alamedactc.org/eastbaygreenway).

#### PARTNERS AND STAKEHOLDERS

Cities of Oakland, San Leandro and Hayward, Alameda County, AC Transit, Bay Area Rapid Transit and the California Department of Transportation

Note: Information on this fact sheet is subject to periodic updates.

Alameda County Transportation Commission • 1111 Broadway, Suite 800 • Oakland, CA 94607 • 510.208.7400 • [www.AlamedaCTC.org](http://www.AlamedaCTC.org)

#### COST ESTIMATE BY PHASE (\$ x 1,000)

PE/Environmental	\$2,350
Final Design	\$12,400
Construction	\$159,500
<b>Total Phase 1 Expenditures</b>	<b>\$174,250</b>

#### FUNDING SOURCES (\$ x 1,000)

Local	\$14,750
TBD	\$159,500
<b>Total Phase 1 Revenues</b>	<b>\$174,250</b>

#### SCHEDULE BY PHASE

	Begin	End
Environmental	Fall 2021	Summer 2023
Final Design (PS&E)	Fall 2022	Early 2024
Construction	Summer 2024	Fall 2026



Rendering of East Bay Greenway.

## A07: POP-UP EVENT POSTERS

Informational posters brought to pop-up events.

East Bay Greenway Multimodal Project: Oakland

### PROJECT OVERVIEW

The Alameda County Transportation Commission (Alameda CTC) in cooperation with the city of Oakland, is proposing a 16-mile-long regional trail linking the Lake Merritt BART Station in Oakland and the South Hayward BART Station with new bike lanes and multi-use paths.

### Project Benefits

- Increases transit connectivity along the BART line
- Improves safety for bicyclists and pedestrians
- Increases local city's ability to connect
- Facilitates a faster BART (and other) connection
- Creates a safe and comfortable transportation corridor

### Project Features

- Shared-use paths
- Protected bike lanes
- Now bike lanes on streets that have slower speeds and more traffic
- Intersective safety improvements
- Improved lighting & greenway amenities
- Increased pedestrian coverage

### East Bay Greenway Project: Two Phases

**Phase 1:** The Alameda CTC is currently engineering the multimodal project which will provide superior safety features and be the region's first.

**Phase 2:** The Alameda CTC project is the long term plan and will provide an off-street multi-use path with amenities. It requires significant support from transit agencies, local business, and residents.

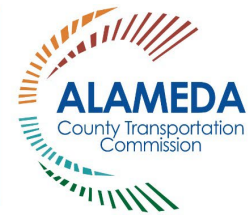
#### Phase 1 Progress

- Conceptual Design
- Environmental Clearance
- Secure Funding
- Final Design
- Construction

## A08: POSTCARD

Postcard mailed to neighbors/businesses in project area and distributed at popups.

# OUTREACH SUMMARY REPORT FOR OAKLAND EAST BAY GREENWAY MULTIMODAL PROJECT: NORTH SEGMENT - LAKE MERRITT BART TO BAY FAIR BART



**PHASE 1 Proyecto Multimodal East Bay Greenway**

La Comisión de Transporte del Condado de Alameda, en colaboración con la Ciudad de Oakland, está desarrollando el Proyecto Multimodal East Bay Greenway, un sendero regional propuesto que unirá las líneas de las estaciones de BART en Oakland y el Condado de Alameda.

El East Bay Greenway mejorará el acceso al transporte público y a otros destinos importantes de la comunidad y mejorará la seguridad de todos los usuarios del camino, a la vez que promoverá las opciones de transporte sostenibles, ecológicas y equitativas de andar en bicicleta y caminar. El proyecto incluirá senderos de uso compartido, carriles para bicicletas protegidos, mejoras en el alumbrado y mejoras en los cruces peatonales, entre otros.

**PHASE 1 East Bay Greenway Multimodal Project**

The Alameda County Transportation Commission, in cooperation with the City of Oakland, is developing the East Bay Greenway Multimodal Project, a proposed regional trail that will link BART station areas in Oakland and Alameda County.

The East Bay Greenway will improve access to transit and other key community destinations and improve safety for all roadway users while promoting the healthy, eco-friendly, and equitable transportation options of biking and walking. The project will include shared-use paths, protected bike lanes, lighting upgrades, enhanced pedestrian crossings, and other improvements.

**PHASE 1 East Bay Greenway 多式聯運項目**

阿拉米達縣交通委員會 (Alameda County Transportation Commission) 正與奧克蘭市合作，開發東灣綠道 (East Bay Greenway) 多式聯運項目，計劃將第一區區區鐵路、維爾奧克蘭和利文沃德BART車站區域。

East Bay Greenway 將改善交通運輸和其他重要社區目的地的可及性，並提高所有道路使用者的安全，同時促進健康、環保和公平的交通選擇——步行和步行。北段將包括共享路徑、保護自行車道、照明升級、增強的行人過街設施，以及其他改進。

**敬邀參加!**

阿拉米達縣交通委員會和奧克蘭市歡迎您參加我們即將舉行的快閃活動：

**您被邀請!**

The Alameda CTC and the City of Oakland welcome you to our upcoming pop-up event.

**Usted está cordialmente invitado!**

La Alameda CTC y la Ciudad de Oakland lo invita a nuestro próximo evento pop-up.

**Festival del Día de los Muertos**

Lo Alameda CTC y la Ciudad de Oakland lo invita a nuestro próximo evento pop-up.

**Para obtener más información acerca de este proyecto, visite AlamedaCTC.org/eastbaygreenway.**

**Escanee el código QR** para responder una breve encuesta sobre el proyecto o envíe sus comentarios por email a [EBGWinfo@alamedactc.org](mailto:EBGWinfo@alamedactc.org)

**You're Invited!**

The Alameda CTC and the City of Oakland welcome you to our upcoming pop-up event.

**Día de los Muertos Festival**

International Ave. & Fruitvale Ave. October 30, 2022 10 AM - 5 PM

**Scan the QR code** to complete a brief survey about the project or email us your comments at [EBGWinfo@alamedactc.org](mailto:EBGWinfo@alamedactc.org)

[AlamedaCTC.org/eastbaygreenway](https://www.alamedactc.org/eastbaygreenway)

## A09: POP-UP EVENT OUTREACH CONTENT

Content created for Alameda CTC to promote pop-up events & survey. [Link to PDF](#)

## A10: PARTNER OUTREACH CONTENT

Content created for partners organizations to promote pop-up events & survey via e-blast and social media.

Twitter Post #1:

A regional trail linking Lake Merritt & South Hayward BART stations is in the works! The East Bay Greenway will provide 16 miles of separated bike lanes & other safety features. Head to @AlamedaCTC popups in @Oakland or visit [alamedactc.org/eastbaygreenway](http://alamedactc.org/eastbaygreenway)

Twitter Post #2:

Your feedback is needed! @AlamedaCTC is conducting a survey on the Oakland span of its proposed East Bay Greenway project. The multi-use path & bike lanes will link Lake Merritt and South Hayward BART. Chime in if you live or work near the span in Oakland! [bit.ly/EBGWOaklandSurvey](http://bit.ly/EBGWOaklandSurvey)

Twitter graphic:



Instagram post:

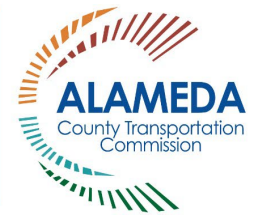
A regional trail linking Lake Merritt & South Hayward BART stations is in the works! The proposed East Bay Greenway will provide separated bike lanes, enhance pedestrian crossings, and offer other safety improvements along the route from @Oakland to Hayward. Alameda CTC wants to hear from you! Head to their upcoming popups in Oakland or visit [alamedactc.org/eastbaygreenway](http://alamedactc.org/eastbaygreenway) to learn more.

Instagram graphic:





# OUTREACH SUMMARY REPORT FOR OAKLAND EAST BAY GREENWAY MULTIMODAL PROJECT: NORTH SEGMENT - LAKE MERRITT BART TO BAY FAIR BART




## A11: EBGW OAKLAND FLYOVER VIDEO

Video providing bird's eye view of EBGW corridor in Oakland. [Link to video.](#)

## A12: PROJECT SURVEY


Text of survey on website and distribution materials.



### East Bay Greenway Project Survey

The **East Bay Greenway Multimodal project** is a proposed bicycle and pedestrian path that will run along the BART corridor from Oakland to Hayward, linking the Lake Merritt and South Hayward BART stations.

Within Oakland, the project will extend approximately 8 miles, generally along East 10<sup>th</sup>, East 8<sup>th</sup>, East 12<sup>th</sup>, and San Leandro Streets. In some places bike paths will be separated and, in others, the bike routes will be on streets with lower speed limits or fewer cars. Pedestrian crossings and lighting will be improved, and new landscaping or amenities will be added.



We want to hear from people who live or work nearby or who use the project area in other ways, to learn how the East Bay Greenway will be most beneficial.

**1. What is your interest in the East Bay Greenway project?** *Select all that apply.*

- I live in the project area
- I work or go to school in the project area
- I own a business in the project area
- I'm just curious about the project
- Other \_\_\_\_\_
- None of the above

**2. What forms of transportation do you use on a regular basis (at least 2-3 times per week)?** *Select all that apply.*

- Drive
- BART
- Bus
- Bike/scooter
- Walk
- Rideshare
- Other \_\_\_\_\_

**3. How often do you travel along East 10<sup>th</sup>, East 8<sup>th</sup>, East 12<sup>th</sup>, or San Leandro Streets in Oakland (between Lake Merritt BART and San Leandro)?**

- Never or very rarely
- Once every two or three months
- One to three times per month
- At least once per week
- Every day or nearly every day
- I'm not sure

**4. Which of the following features do you want to see most along this section of roadway?** *Select all that apply.*

- Separated bike paths or lanes
- Bike routes with lower speeds and less traffic
- Better pedestrian crossings
- Upgraded lighting
- Landscaping and/or amenities (benches, art, etc.)
- Other \_\_\_\_\_
- None of the above

**5. How might you and your family use the East Bay Greenway?** *Select all that apply.*

- To commute to work or school
- To get to shopping, errands, or appointments
- For fun/recreation
- Other \_\_\_\_\_

**6. What are your concerns about the project, if any?** *For example, concerns related to construction, traffic, parking, etc. Please be specific.*

**OPTIONAL:** Your answers to the next few questions will help us understand which communities we have heard from and who we still need to reach.

**7. What is your ZIP code?** \_\_\_\_\_

**8. How old are you?**

- Under 20
- 20 to 29
- 30 to 39
- 40 to 49
- 50 to 59
- 60 to 69
- 70 or older
- Prefer not to say

**9. How do you describe yourself?**

- Woman
- Man
- Describe myself another way
- Prefer not to say

**11. Do you have any additional questions or comments for the project team?**

**10. What do you consider your race or origin?** *Select all that apply.*

- White
- Black or African American
- Hispanic, Latino/a, or Spanish origin
- American Indian or Alaska Native
- Asian
- Native Hawaiian or other Pacific Islander
- Not listed here \_\_\_\_\_
- Prefer not to say

**12. If you would like to receive updates about the project, please provide your email address.** *NOTE: This information will be used only to keep you updated on the project and not for anything else.*

\_\_\_\_\_

Thank you for your input! To learn more about the project, please visit [www.alamedactc.org/eastbaygreenway](http://www.alamedactc.org/eastbaygreenway) and click on the Oakland tab.

AlamedaCTC.org • EBGW North Segment Outreach Summary Report • 22

## APPENDIX B: PUBLIC INPUT RECEIVED

### B01: BPAC BRIEFING Q&A COMMENTS

Notes of questions & comments received during stakeholder presentations. [Link to PDF](#)

### B02: FOCUS GROUP BRIEFING Q&A

Notes of questions & comments received during focus group. [Link to PDF](#)

### B03: FOCUS GROUP BRIEFING EMAIL COMMENTS.

Emails received from stakeholders following presentations. [Link to PDF](#)

### B04: PROJECT SURVEY DATA

Excel spreadsheet with full survey responses. [Link to spreadsheet](#)



# East Bay Greenway Phase 1 E. 14th St./Mission Blvd. Segment Outreach Summary Report in San Leandro May 2022

## Outreach Purpose

The purpose of stakeholder engagement for the EBGW Phase 1: E. 14th St./Mission Segment was to collect input and feedback from individuals and businesses that regularly utilize or rely on the corridor to help shape technical decision-making around recommended multimodal and economic development improvements. Alameda CTC partnered with local jurisdictions and other implementing agencies to learn about existing concerns and interests along E. 14th St. During this process, the project team heard from a variety of stakeholders including pedestrians, business owners and employees, people on bikes, and other audiences along the corridor. This input will help to define future improvements that are intended to support the long-term viability of the corridor by supporting existing and future growth opportunities.

Stakeholder outreach was conducted in four forms:

- Pop-Up Events
- Business Outreach
- Focus Groups
- Online Survey

The following content in this report summarizes the first three types of engagement and their respective key takeaways. Results of the online survey are not ready at the time of this writing, but they will be added later.



## Popup Events

The project team participated in a total of 5 pop-ups hosted between February 26th and April 16th that were scheduled at a variety of locations within the City of San Leandro. These destinations included the Bayfair Farmers Market, San Leandro BART Station, John Muir Middle School, San Leandro Downtown Farmers Market, and San Leandro High School.

### Key Input from Pop-Up Events

Key Issue: Safety, Pedestrian Improvements

- People at the five popup events showed overwhelming support for the project as residents stated that E. 14th Street needed improvements to make it pedestrian and bike-friendly, such as new trees, lighting, and expanded sidewalks
- Residents advised the project team to pay attention to the width of the bike lane to ensure it is not so wide that it allows vehicles or too narrow that does not allow people on bikes to pass
- Support for placemaking and areas to attract more families to the street; parents are concerned about letting their middle school-aged children bike on E. 14th St. as they perceive it to be unsafe in its existing condition

## Business Outreach

The project team conducted door-to-door interviews to engage with business owners along the E. 14th St. corridor from Bayfair Drive to 136th Avenue. Over a three-day period, 125 businesses were contacted via in-person conversations and follow-up phone calls resulting in 45 completed surveys designed specifically to address business interests and needs.

### Key Input from Business Outreach

*Key Issues: Speeding and Reckless Driving, Spillover Parkin, Lack of Safe Crossings,*

- Most business respondents along the corridor did not believe that removing parking from one side of the street would have an unresolvable effect on their ability to operate because they have parking on their properties.
- Some businesses that rely on short-term parking are more impacted by the removal of parking.
- Parking has higher demand during the afternoon and nighttime in the blocks between 148<sup>th</sup> and 146<sup>th</sup> Ave.
- Many business respondents stated they use on-street parking for their deliveries. Field observations showed that delivery trucks sometimes park in the center two-way turn lane when parking lanes are occupied (or even when not in use).
- The project team received consistent feedback from both business owners and community members that speeding, reckless driving, and lack of parking enforcement are the primary safety issues for the corridor.

Delivery parking needs and short-term parking for pick up should be analyzed as part of the project design.

## Focus Groups

The project team hosted two virtual focus groups, one for Bike-Ped and Transit riders and the other for Business owners. The focus groups included a detailed presentation informed by feedback from the pop-up events and door-to-door business outreach.

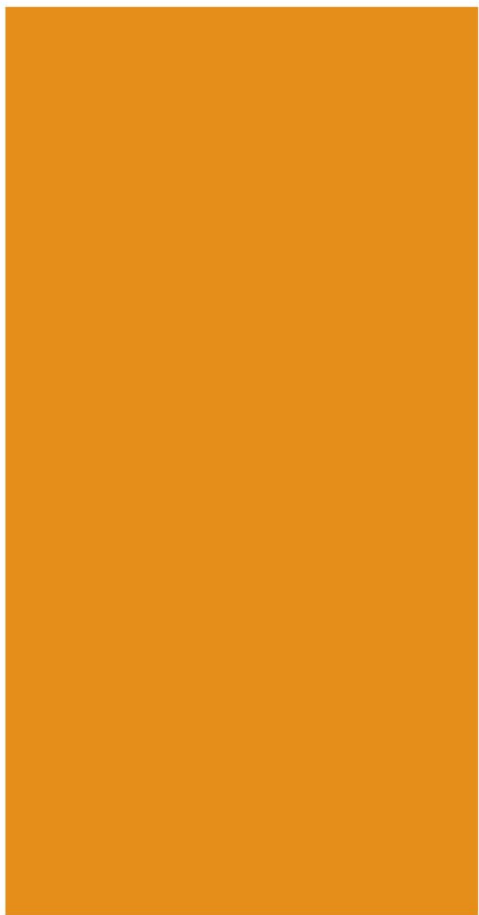
### Key Input from Focus Groups

*Key Issues: Landscaping and physical improvements, pedestrian-friendly areas, separated cycling infrastructure*



- Desire for transit improvements, paired with aesthetic enhancements to liven the corridor and support local businesses.
- Support for tree plantings, public artwork, new benches, and signage to assist with wayfinding.
- Both community members and business owners asked for more trees but requested that the project team select plants that could be effectively maintained by the City of San Leandro.
- better pedestrian lighting followed by larger sidewalks and more pedestrian space.
- Concerns for fast vehicular speeds, and lack of safe crossing opportunities throughout the corridor.
- This feedback demonstrated the need for enhanced crosswalks and signals that prioritize pedestrians instead of vehicles.
- Both cyclists and drivers advocated for bike infrastructure that effectively separates vehicles from bikes. Some respondents asked for permeable barriers between the bike facility and the vehicular travel lane, such as armadillos. Other participants preferred planters that provided a vertical element to divide cars from bikes and discouraged the use of plastic bollards as they are hit by cars and do not offer much protection to people on bikes.

# Attachment 7: Benefit-Cost Analysis Narrative



**East Bay Greenway Multimodal Project:  
Implementing a Community Vision**  
2023 RAISE Grant Benefit Cost Analysis Memo



**Alameda County Transportation Commission**  
1111 Broadway, Suite 800  
Oakland, CA 94607  
[www.AlamedaCTC.org](http://www.AlamedaCTC.org)  
February 2023



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## 1 Cost-Effectiveness Analysis

A Benefit-Cost Analysis (BCA) was conducted in conformance with United States Department of Transportation (USDOT) guidance to assess the impacts of the East Bay Greenway Multimodal Project (EBGW). The project will construct approximately 10.6 miles of a major north-south bicycle and multimodal corridor on local streets and a state conventional highway adding Class I, buffered Class II, neighborhood Class III, and Class IV facilities connecting five Bay Area Rapid Transit (BART) stations, beginning at the Lake Merritt Station in Oakland to the Bay Fair Station in San Leandro. The EBGW project also includes signalized and unsignalized intersection upgrades, pedestrian and transit boarding islands, and transit signal priority to increase transit reliability. The project comprises a major segment of a larger 16-mile project planned from Lake Merritt to South Hayward, and it has independent utility. Placemaking improvements, such as parklets, public art, and streetscape enhancements, will support anticipated growth in transit and active transportation along the corridor and reflect local community heritages. The BCA conducted for the EBGW project indicated a favorable benefit/cost (B/C) ratio with the monetized benefits of the project exceeding the estimated project-related costs. In the summary discussion to follow, individual analysis inputs and results are presented.

The analysis was performed using the California Department of Transportation (Caltrans) 2022 Cal-B/C Active Transit Model (Cal-B/C Model), version 8.1. This model incorporates project costs by category and benefits related to travel options and conditions for bicyclists and pedestrians, and it is considered the most appropriate model to address the project description and needs. The model incorporated the Real Discount Rate update to reflect USDOT guidance. All other data inputs remained specific to the State of California because the data provided is more conservative than the USDOT BCA guidance.

The Cal-B/C Model Inputs section discusses Cal-B/C inputs used in the analysis of the EBGW project, and the CAL-B/C Model Results section provides details regarding the BCA results. All monetary values presented in this appendix are expressed in 2021 dollars. A 7% discount rate was used to compute the net present value of benefits and costs.

## 2 Benefit-Cost Analysis Summary

The Cal B/C model calculates the B/C ratio based on inputs (i.e., type of project, improvement characteristics, existing and future trip data, and crash rates). The B/C analysis includes benefits in the following categories:

- Journey Quality
- Additional Delay Savings
- Additional Safety Benefits
- Health Benefits
- Emission Reductions

Table 1 provides a summary of the Cal B/C results for the EBGW project.

**Table 1. EBGW CAL-B/C Results**

Life-Cycle Costs (mil. \$)	\$103.6
Life-Cycle Benefits (mil. \$)	\$295.3
Net Present Value (mil. \$)	\$191.7
Benefit / Cost Ratio:	2.8
Rate of Return on Investment:	134.3%
Payback Period:	6 years

## 3 Cal-B/C Model Inputs

The Cal-B/C model includes several default parameters, such as travel time, vehicle operating cost, crash cost, active transportation, and highway operations. Sources for these default values include the Office of Management and Budget (OMB), Bureau of Labor Statistics (BLS), USDOT Department Guidance, ITS<sup>1</sup> Deployment Analysis System (IDAS) model, American Transportation Research Institute, AAA, Caltrans, and California Board of Equalization. The default values were used in this BCA unless otherwise stated.

The model was fitted to the EBGW project using project-specific crash, traffic, and bicyclist and pedestrian usage data. These inputs are discussed in the following subsections. The model identifies the required project specific data inputs with green cells.

<sup>1</sup> intelligent transportation systems

### 3.1 Project and Site Characteristics

The 2022 Cal-B/C model, version 8.1 requires users to select the project type from a given list. The EBGW project was identified as an “Existing facility upgrade and new facility extension” project, which is categorized as a Type 3 project. Users must also input the project length for the existing and the new facility. Other characteristics required for the model included project location, if the project was included in a Safe Routes to School (SRTS) program, if the project had programmatic initiatives, and the expected length of the construction period. Table 2 provides the project inputs that were entered into the model.

**Table 2. Project and Site Characteristics**

<b>Type of Project</b>		
Existing facility upgrade only = 1	3	
New facility only, no existing facility work = 2		
Existing facility upgrade and new facility extension = 3		
<b>Total Project Length</b>		<b>Project Type Data Check</b>
Total Existing Facility Length (miles)	4.97	OK
Total New Facility Length (miles)	4.13	OK
<b>Characteristics</b>		
<b>Project Location</b> (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)	2	
<b>Safe Route to School?</b> (enter 1 for Yes, 0 for No)	0	
<b>Programmatic Initiatives?</b> (enter 1 for Yes, 0 for No)	0	
<b>Construction</b>		<b>Constr. Years Data Check</b>
Length of Construction Period (years)	2	OK

### 3.2 Existing Segment Improvements and Trip Volume

The Cal-B/C model requires project specific data for improvement characteristics based on cycling and pedestrian usage, along with existing trip data in the base year and future year scenarios. Data inputs were based on the geometric configurations from the project concept drawings, dated September 28, 2022; historic bicycle and pedestrian counts; and future year model data (traffic volumes and bicycle/pedestrian usage forecasts) obtained from the Alameda County Transportation Commission (CTC) Transportation Demand Model by Kittelson and Associates; and crash data<sup>2</sup> from the draft *Transportation Impact Study* prepared for the EBGW project by CHS Consulting. Projected annual growth rates were calculated based on bicycle and pedestrian data. The Cal-B/C model calculated the daily trips in the base year and in Year 20 (20 years

<sup>2</sup> Crash data was collected for the most recent pre-pandemic, full five-year period between January 1, 2015, and December 31, 2019, using the UC Berkeley Transportation Injury Mapping System (TIMS). The data includes collisions between pedestrians, bicyclists, and automobiles. The data set focused on collisions that occurred within a 500-foot radius of the proposed East Bay Greenway Project corridor.

post-construction) based off the current daily trip data. This was done for both the bicycle and pedestrian trips, as shown in Table 3.

**Table 3. Existing Segment Improvements and Trip Volume**

<b>Improvement Characteristics</b>		Class	No Build	Build	Project Length Data Check
<b>Existing Facility Length, if Applicable</b>					
Bike Paths (miles)	I	0.5	0.92		OK
Bike Lanes (miles)	II	4.27	0		
Bike Route (miles)	III	0.2	0.12		
Separated Bikeways, Cycle Tracks (miles)	IV	0	3.93		
Total		4.97	4.97		
<b>Pedestrian Improvements</b>			Yes = 1 or No=0	Yes = 1 or No=0	
Street Lighting			1	1	
Curb Level			0	1	
Crowding			0	1	
Pavement Evenness			0	1	
Information Panels			0	0	
Benches			0	1	
Directional Signage			0	1	
<b>Trip Data - Adults</b>					
<b>Cycling</b>			No Build	Build	
Daily Trips - Current			493		
Projected Annual Growth Rates from Year 1 (%)			2.3%	11.1%	
Daily Trips - Year 1 (post-construction)			516	609	
Daily Trips - Year 20 (post-construction)			805	4,961	
<b>Pedestrian</b>					
Daily Trips - Current			1,123		
Projected Annual Growth Rates from Year 1 (%)			2.3%	2.3%	
Daily Trips - Year 1 (post-construction)			1,174	1,174	
Daily Trips - Year 20 (post-construction)			1,832	1,832	

### 3.3 New Facility Improvements and Trip Volume

The Cal-B/C model also required project-specific data for improvement characteristics based on bicycle and pedestrian usage along with new facility trip data in the base year and future year scenarios. The No Build (base year) was assumed to have identical ridership to the existing scenario. The Cal-B/C model calculated the daily trips in the base year and in Year 20 (20 years post-construction). This was done for the bicycle and pedestrian trips using identical growth rates. To be conservative, no initial bump in demand is assumed when the new facility opens. New facility data is included in Table 4.

**Table 4. New Facility Improvements and Trip Volume**

<b>Improvement Characteristics</b>				
<b>New Facility Length</b>				
	Class	No Build	Build	Project Length Data Check
No Facility	0	4.13		OK
Bike Paths (miles)	I		1.16	
Bike Lanes (miles)	II		0	
Bike Route (miles)	III		0.13	
Separated Bikeways, Cycle Tracks (miles)	IV		2.84	
<b>Total</b>		<b>4.13</b>	<b>4.13</b>	
<b>Pedestrian Improvements</b>				
			<b>Yes = 1</b>	
Street Lighting			1	
Curb Level			1	
Crowding			1	
Pavement Evenness			1	
Information Panels			0	
Benches			1	
Directional Signage			1	
<b>Trip Data - Adults</b>				
<b>Cycling</b>				
		No Build	Build	
Daily Trips - Current		493		
Projected Annual Growth Rates from Year 1 (%)		2.3%	11.1%	
Daily Trips - Year 1 (post-construction)		516	609	
Daily Trips - Year 20 (post-construction)		805	4,961	
<b>Pedestrian</b>				
Daily Trips - Current		1,123		
Projected Annual Growth Rates from Year 1 (%)		2.3%	2.3%	
Daily Trips - Year 1 (post-construction)		1,174	1,174	
Daily Trips - Year 20 (post-construction)		1,832	1,832	

### 3.4 Intersection Improvements – Time Savings and Crash Data

The EBGW project plans to improve 13 intersections along the corridor. The Cal-B/C model considers intersection improvements and the associated travel time and crash data. The number of improved intersections is based on new or major signal modifications and new Pedestrian Hybrid Beacon or Rapid Rectangular Flashing Beacon controls. To be conservative, no time savings were assumed at the improved intersections in the corridor. Bicyclist and pedestrian crash rates were provided from the draft *Transportation Impact Study* by CHS Consulting. To be conservative, the BCA assumed the existing trend of declining bicycling crashes (about 1.5% fewer each year) continues after the project is implemented. Values were calculated using the least squares method for bicycle crashes per year as provided by the Alameda CTC. Specific benefits or costs related to SRTS initiatives or any non-infrastructure initiatives, such as education and outreach programs, were not quantified. The breakdown of intersection and accident data is in Table 5.

**Table 5. Intersection Improvements**

<b>Reduced Delay Due to Intersection Improvements</b>		
<b>Time Savings Parameters</b>		
Number of Improved Intersections		13
Time Savings per Improved Intersection (min.)		
Intersection improvements on SRTS? (enter 1 for Yes, 0 for No)		
<b>Accident Rate - Current Conditions</b>		
<b>Cyclists</b>		
	<b>Count (No.)</b>	<b>Rate per Year</b>
Number of Years of Data	5.00	
<b>Existing Conditions</b>		
Total Number of Accidents (Tot)	200	40.0
Number of Fatal Accidents (Fat)	1	0.2
Number of Injury Accidents (Inj)	99	19.8
Number of \Property Damage Only (PDO) Accidents	100	20.0
Annual Growth Rate in Accidents (%/year)	-1.5%	-0.003
<b>Pedestrians</b>		
	<b>Count (No.)</b>	<b>Rate per Year</b>
Number of Years of Data	5.00	
<b>Existing Conditions</b>		
Total Number of Accidents (Tot)	312	62.4
Number of Fatal Accidents (Fat)	5	1.0
Number of Injury Accidents (Inj)	157	31.4
Number of \Property Damage Only (PDO) Accidents	150	30.0
Annual Growth Rate in Accidents (%/year)	2.7%	0.0054

## 4 Project Costs

Project costs and the length of the construction period were entered into the Cal B/C model. Project costs were included in the following categories, as appropriate: Project Support, Right-of-Way (ROW) Acquisition, Construction, and Maintenance/Operations.

The initial design and construction costs for the EBGW project are approximately \$120.9 million. The construction period is assumed to be two years, beginning in 2024. Annual construction expenditures were assumed to be allocated proportionally over the 14 months of construction. The total project cost is \$103.6 million in present value terms, including maintenance/operations. The breakdown of project costs, as reflected in the Cal B/C analysis, is indicated in Table 6.



Table 6. Project Costs

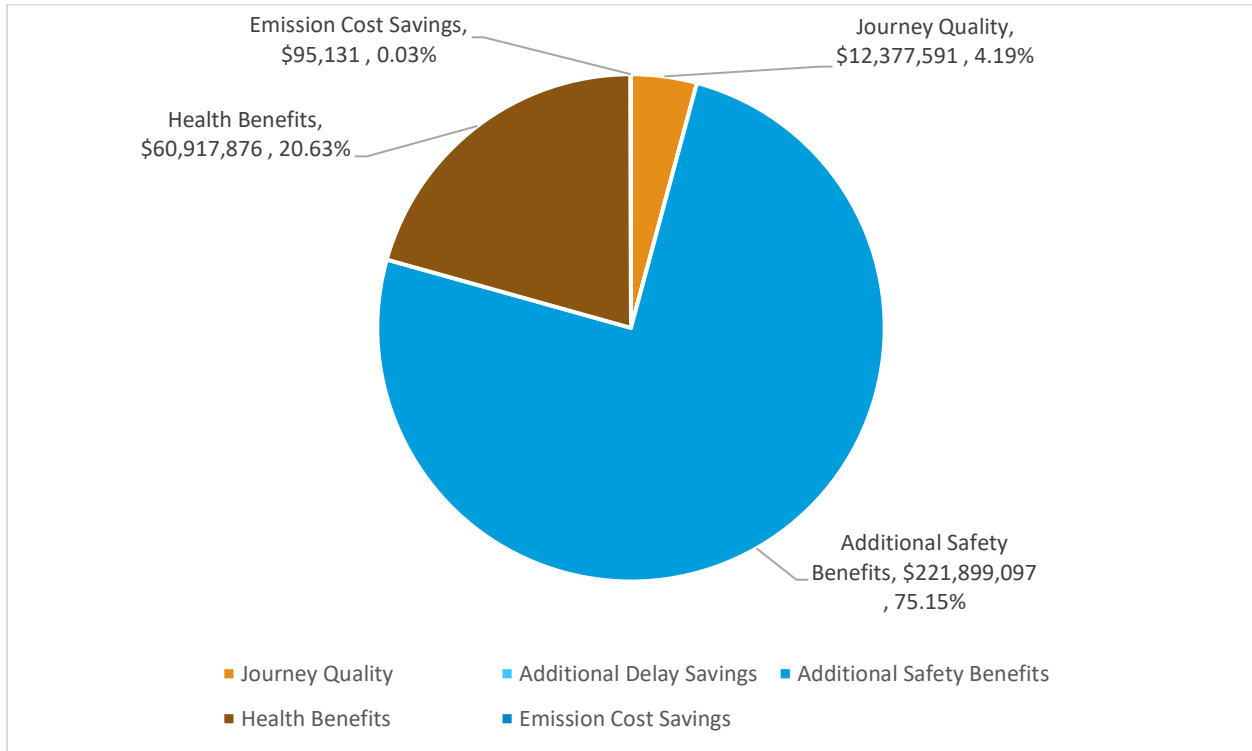
Year	Construction Years	DIRECT PROJECT COSTS					TOTAL COSTS (in dollars)	
		Project Support	INITIAL COSTS		SUBSEQUENT COSTS		Constant Dollars	Present Value
			R / W	Construction	Maint./ Op.	Rehab.		
<b>Infrastructure Program Costs</b>								
1	0	\$4,719.0	\$403.0				\$5,122,000	\$5,122,000
2	0	\$3,875.0				<-- Must enter a cost	3,875,000	3,621,495
3	1			\$55,975.0			55,975,000	48,890,733
4	1			\$55,975.0			55,975,000	45,692,274
5	0						0	0
6	0						0	0
7	0						0	0
8	0						0	0
<b>Annual Infrastructure O&amp;M Costs</b>								
1							\$0	\$0
2							0	0
3							0	0
4					\$39		39,350	28,056
5					\$40		40,190	26,780
6					\$39		39,350	24,505
7					\$40		40,190	23,391
8					\$39		39,350	21,404
9					\$40		40,190	20,431
10					\$39		39,350	18,695
11					\$40		40,190	17,845
12					\$39		39,350	16,329
13					\$40		40,190	15,586
14					\$39		39,350	14,262
15					\$40		40,190	13,614
16					\$39		39,350	12,457
17					\$40		40,190	11,891
18					\$39		39,350	10,881
19					\$40		40,190	10,386
20					\$39		39,350	9,504
<b>Total</b>		\$8,594	\$403	\$111,950	\$676	\$0	\$121,622,670	\$103,622,518

Note: Initial and subsequent costs are entered in thousands of dollars.

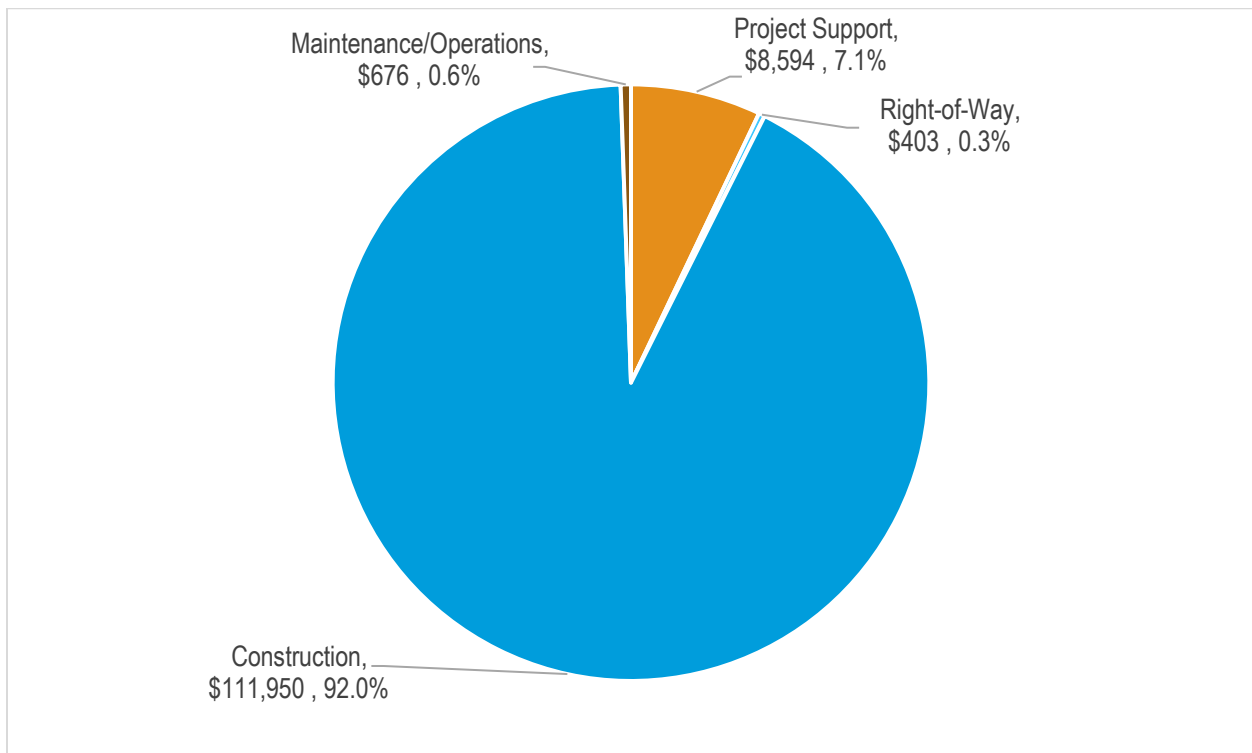
## 5 CAL-B/C Model Results

The Cal-B/C model evaluated benefits related to journey quality, intersection safety, auto crash costs, health for absenteeism and reduced mortality, and emissions reduction. **Figures 1 and 2** graphically depict the share by category of total project life cycle benefits and total project life cycle costs associated with the EBGW project, as discussed in more detail in the following subsections. Additional safety benefits are the combination of intersection safety and reduced auto crash costs. Health benefits are the combination of absenteeism and reduced mortality benefits.

**Figure 1. EBGW Itemized Benefits, Present Value**



**Figure 2. EBGW Project Costs, Present Value**



### 5.1 Journey Quality Savings

The Cal-B/C model calculated journey quality benefits for bicyclists and pedestrians who travel to a destination. The journey quality benefit looks at improvements in the quality of the trip for pedestrians and cyclists that arise from a greater feeling of safety, comfort, aesthetics, and other types of improvements. Improvements to existing and new facilities can generate benefits for current trips and induced trips. Recreational users are not included. The model interpolated the year-to-year data between Year 1 and Year 20 benefits. Refer to the formulas for more information about each calculation.

$$\text{Average Annual Trips} = \text{Average Daily Trips} \times \text{Annual Days in Year, by purpose}$$

$$\text{Time-Value of Improved Facility} = (1 - \text{Facility Preference Factor}) \times \text{Distance per Trip (miles)} / \text{Travel Speed (mph)}$$

$$\text{Value of Journey Quality} = \text{Time-Value of Improvement} \times \text{Average Value of Time}$$

Tables 7 and 8 provide total journey quality benefits by year for the existing and new facility, respectively. Both tables are the combined calculations of bicyclist and pedestrian benefits. Note that Value of Journey Quality for Induced Trips applies the rule of half<sup>3</sup>.

**Table 7. Journey Quality Savings – Existing Facility**

Year	AVERAGE ANNUAL VOLUME (trips/yr.)				JOURNEY QUALITY VALUE (\$)			Constant Dollars	Present Value
	Total Trips, Existing Facility (Baseline)	Total Trips, Improved Facility	Existing Trips, Improved Facility	Induced Trips, Improved Facility	Existing Trip-Miles, Existing Facility	Existing Trip-Miles, Improved Facility	Induced Trip-Miles, Improved Facility		
1	616,835	650,685	616,835	33,849	421,229	477,597	12	\$56,380	\$49,244
20	962,577	2,479,340	962,577	1,516,763	657,331	745,295	521	\$88,483	\$21,370
1	616,835	650,685	616,835	33,849	421,229	477,597	12	\$56,380	\$49,244
2	635,033	746,930	635,033	111,897	433,656	491,687	38	\$58,069	\$47,402
3	653,229	843,175	653,229	189,945	446,081	505,775	65	\$59,759	\$45,590
4	671,427	939,420	671,427	267,993	458,508	519,865	92	\$61,449	\$43,812
5	689,624	1,035,666	689,624	346,042	470,935	533,955	119	\$63,138	\$42,071
6	707,821	1,131,910	707,821	424,090	483,361	548,043	146	\$64,828	\$40,372
7	726,018	1,228,156	726,018	502,138	495,788	562,133	172	\$66,517	\$38,714
8	744,214	1,324,400	744,214	580,186	508,214	576,223	199	\$68,207	\$37,100
9	762,412	1,420,646	762,412	658,234	520,641	590,311	226	\$69,897	\$35,532
10	780,608	1,516,890	780,608	736,282	533,068	604,401	253	\$71,587	\$34,011
11	798,806	1,613,136	798,806	814,330	545,493	618,491	279	\$73,277	\$32,535
12	817,002	1,709,380	817,002	892,378	557,920	632,579	306	\$74,966	\$31,108
13	835,199	1,805,626	835,199	970,426	570,346	646,669	333	\$76,656	\$29,728
14	853,396	1,901,870	853,396	1,048,474	582,773	660,759	360	\$78,346	\$28,396
15	871,593	1,998,116	871,593	1,126,522	595,199	674,848	387	\$80,035	\$27,111
16	889,790	2,094,360	889,790	1,204,570	607,626	688,937	413	\$81,725	\$25,872
17	907,987	2,190,606	907,987	1,282,618	620,053	703,027	440	\$83,414	\$24,680
18	926,184	2,286,850	926,184	1,360,666	632,478	717,116	467	\$85,104	\$23,532
19	944,381	2,383,096	944,381	1,438,715	644,905	731,205	494	\$86,794	\$22,429
20	962,577	2,479,340	962,577	1,516,763	657,331	745,295	521	\$88,483	\$21,370
<b>Total</b>									<b>\$680,609</b>

<sup>3</sup> The Rule of Half assumes the value of benefit accrued for new users is one half that of existing users.

Table 8. Journey Quality Savings - New Facility

Year	ANNUAL PERSON-TRIPS (trips/yr.)				JOURNEY QUALITY VALUE (\$)			Constant Dollars	Present Value
	Total Trips, No Facility (Baseline)	Total Trips, New Facility	Existing Trips, New Facility	Induced Trips, New Facility	Existing Trips, New Facility	Induced Trips, New Facility			
1	616,835	650,685	616,835	33,849	0	468,913	34,208	\$503,121	\$439,446
20	962,577	2,479,340	962,577	1,516,763	0	731,744	1,532,826	\$2,264,570	\$546,923
1	616,835	650,685	616,835	33,849	0	468,913	34,208	\$503,121	\$439,446
2	635,033	746,930	635,033	111,897	0	482,747	113,082	\$595,829	\$486,374
3	653,229	843,175	653,229	189,945	0	496,580	191,957	\$688,536	\$525,282
4	671,427	939,420	671,427	267,993	0	510,413	270,832	\$781,245	\$557,016
5	689,624	1,035,666	689,624	346,042	0	524,247	349,706	\$873,953	\$582,351
6	707,821	1,131,910	707,821	424,090	0	538,079	428,581	\$966,660	\$601,987
7	726,018	1,228,156	726,018	502,138	0	551,913	507,455	\$1,059,368	\$616,561
8	744,214	1,324,400	744,214	580,186	0	565,746	586,330	\$1,152,076	\$626,653
9	762,412	1,420,646	762,412	658,234	0	579,579	665,205	\$1,244,783	\$632,785
10	780,608	1,516,890	780,608	736,282	0	593,412	744,079	\$1,337,492	\$635,433
11	798,806	1,613,136	798,806	814,330	0	607,246	822,954	\$1,430,200	\$635,026
12	817,002	1,709,380	817,002	892,378	0	621,078	901,829	\$1,522,907	\$631,952
13	835,199	1,805,626	835,199	970,426	0	634,912	980,703	\$1,615,615	\$626,564
14	853,396	1,901,870	853,396	1,048,474	0	648,745	1,059,578	\$1,708,323	\$619,175
15	871,593	1,998,116	871,593	1,126,522	0	662,578	1,138,453	\$1,801,030	\$610,072
16	889,790	2,094,360	889,790	1,204,570	0	676,411	1,217,327	\$1,893,738	\$599,510
17	907,987	2,190,606	907,987	1,282,618	0	690,245	1,296,202	\$1,986,447	\$587,717
18	926,184	2,286,850	926,184	1,360,666	0	704,077	1,375,076	\$2,079,154	\$574,903
19	944,381	2,383,096	944,381	1,438,715	0	717,911	1,453,951	\$2,171,862	\$561,250
20	962,577	2,479,340	962,577	1,516,763	0	731,744	1,532,826	\$2,264,570	\$546,923
<b>Total</b>								<b>\$11,696,980</b>	

## 5.2 Intersection Safety Savings

The Cal-B/C model evaluated safety savings by calculating the safety benefits associated with intersection improvements along a bicycle/pedestrian facility. Improvements to existing intersections (e.g., lights, bridges, etc.) can lead to reduced accidents at intersections. Benefits can arise for existing and induced pedestrians and cyclists at each intersection crossed. The number of intersections crossed per trip is determined by the total length of the existing facility, the average distance traveled per user type, and the number of intersections with improvements. The magnitude of impacts is determined by the percent reduction in existing accidents due to specific safety measures. The model interpolated the year-to-year data between Year 1 and Year 20 benefits. Refer to the formulas for more information about each calculation.

$$\text{Baseline Average Annual Crashes by Type} = \text{Sum of Total Crashes by Type} / \text{Years of Crash Data}$$

$$\text{Reduction in Crashes by Type} = \text{Crash Modification Factor(s)} \times \text{Baseline Average Annual Crash by Type}$$

$$\text{Value of Crash Reduction by Type} = \text{Reduced Number of Crashes by Type} \times \text{Value of Crash by Type}$$

$$\text{Value of Crash Reduction All Types} = \text{Sum of Value of Crash by Type}$$

Table 9 provides total intersection safety benefits by year for the EBGW project for bicyclists and pedestrians.

**Table 9. Intersection Safety Savings**

Year	EXISTING ACCIDENT RATE AT AFFECTED INTERSECTIONS (events/yr.)				NEW ACCIDENT RATE AT AFFECTED INTERSECTIONS (events/yr.)				ACCIDENT REDUCTION AT AFFECTED INTERSECTIONS (events/yr.)				SAFETY VALUE (\$)	Constant Dollars	Present Value
	Fatalities	Injuries	Property Damage Only	Total	Fatalities	Injuries	Property Damage Only	Total	Fatalities	Injuries	Property Damage Only	Total	Total		
1	1.2	51.2	50	102.4	0.2	11.2	11	22.5	1	40	39	79.9	\$19,498,139	\$19,498,139	\$17,030,429
20	1.9	67	64.8	133.5	0.4	14.7	14.2	29.3	1.4	52.3	50.6	104.2	\$27,925,730	\$27,925,730	\$6,744,430
1	1.2	51.2	50	102.4	0.24	11.24	10.99	22.48	0.96	39.96	39.01	79.93	\$19,498,139	\$19,498,139	\$17,030,429
2	1.2	51.7	50.5	103.5	0.24	11.38	11.12	22.74	0.95	40.42	39.48	80.76	\$19,820,219	\$19,820,219	\$16,179,203
3	1.29	52.31	51	104.61	0.24	11.51	11.16	22.91	0.95	40.9	39.85	81.7	\$20,154,060	\$20,154,060	\$15,375,436
4	1.29	52.92	51.61	105.83	0.24	11.65	11.29	23.19	0.95	41.37	40.32	82.64	\$20,499,935	\$20,499,935	\$14,616,171
5	1.29	53.54	52.23	107.05	0.24	11.79	11.43	23.46	1.05	41.85	40.8	83.59	\$20,858,124	\$20,858,124	\$13,898,648
6	1.29	54.26	52.84	108.39	0.34	11.93	11.57	23.74	1.04	42.33	41.28	84.65	\$21,228,912	\$21,228,912	\$13,220,299
7	1.38	54.88	53.47	109.73	0.34	12.07	11.71	24.11	1.04	42.92	41.76	85.72	\$21,612,597	\$21,612,597	\$12,578,729
8	1.38	55.61	54.19	111.18	0.34	12.21	11.85	24.39	1.04	43.4	42.25	86.79	\$22,009,485	\$22,009,485	\$11,971,701
9	1.38	56.45	54.82	112.64	0.34	12.35	11.99	24.68	1.14	44	42.83	87.97	\$22,419,888	\$22,419,888	\$11,397,134
10	1.47	57.18	55.56	114.21	0.34	12.59	12.23	25.06	1.14	44.69	43.43	89.15	\$22,844,130	\$22,844,130	\$10,853,081
11	1.47	58.02	56.39	115.79	0.34	12.73	12.37	25.44	1.13	45.29	44.02	90.45	\$23,282,544	\$23,282,544	\$10,337,727
12	1.47	58.87	57.14	117.47	0.34	12.88	12.52	25.83	1.13	45.99	44.62	91.74	\$23,735,468	\$23,735,468	\$9,849,375
13	1.57	59.72	57.98	119.27	0.34	13.12	12.76	26.12	1.23	46.59	45.22	93.15	\$24,203,259	\$24,203,259	\$9,386,441
14	1.56	60.67	58.83	121.06	0.34	13.27	12.9	26.61	1.23	47.4	45.93	94.56	\$24,686,276	\$24,686,276	\$8,947,443
15	1.66	61.62	59.79	122.97	0.34	13.52	13.15	27	1.23	48.11	46.64	95.97	\$25,184,891	\$25,184,891	\$8,530,994
16	1.66	62.58	60.64	124.99	0.33	13.76	13.3	27.4	1.32	48.92	47.35	97.49	\$25,699,487	\$25,699,487	\$8,135,800
17	1.66	63.65	61.6	127.01	0.33	13.91	13.55	27.89	1.32	49.64	48.16	99.12	\$26,230,459	\$26,230,459	\$7,760,646
18	1.75	64.71	62.67	129.04	0.33	14.16	13.79	28.29	1.32	50.55	48.88	100.75	\$26,778,210	\$26,778,210	\$7,404,399
19	1.75	65.78	63.74	131.27	0.43	14.41	13.94	28.78	1.42	51.37	49.69	102.49	\$27,343,158	\$27,343,158	\$7,065,992
20	1.85	66.96	64.81	133.52	0.43	14.66	14.19	29.28	1.42	52.3	50.62	104.23	\$27,925,730	\$27,925,730	\$6,744,430
<b>Total</b>															<b>\$221,284,079</b>

### 5.3 Crash Reduction

The Cal-B/C model evaluated the accident-cost benefits by calculating the benefits of avoided crashes on. Some of the induced pedestrian and cycling trips entail diversions from auto use. Benefits from reduced auto use include reduced frequency of accidents and level of auto emissions. Crash costs were calculated by crash type. The model interpolated the year-to-year data between Year 1 and Year 20 benefits. Refer to the formulas for more information about each calculation.

$$\text{Vehicle-Miles Traveled} = \text{Affected Length} \times \text{Average Volume} / \text{Vehicle Occupancy}$$

$$\text{Highway Accident Cost} = (\text{VMT}^4 \times \text{Rate} \times \text{Cost/Mile}) \text{ by Crash Type}$$

$$\text{Transit Crash Cost} = \text{Vehicle-Miles} \times \text{Crash Cost/Mile}$$

$$\text{Transit Crash Cost/Mile from Parameters}$$

Table 10 provides the total crash cost savings benefit and crash cost savings benefit by year for the EBGW project.

<sup>4</sup> vehicle miles traveled

Table 10. Crash Reduction Benefits

Year	AVERAGE ANNUAL VOLUME (trip-miles/yr.)		REDUCED VMT (veh-miles/yr.)	ACCIDENT BENEFITS (\$/yr.)	Constant Dollars	Present Value
	Induced Trips, Cycling	Induced Trips, Pedestrians	Induced Trips, Cyclists, Pedestrians	Induced Trips		
1	83,561	0	27,669	\$3,476	\$3,476	\$3,036
20	3,744,311	0	1,239,838	\$155,763	\$155,763	\$37,619
1	83,561	0	27,669	\$3,476	\$3,476	\$3,036
2	276,232	0	91,468	\$11,491	\$11,491	\$9,380
3	468,903	0	155,266	\$19,506	\$19,506	\$14,881
4	661,574	0	219,064	\$27,521	\$27,521	\$19,622
5	854,245	0	282,863	\$35,537	\$35,537	\$23,680
6	1,046,916	0	346,661	\$43,552	\$43,552	\$27,122
7	1,239,587	0	410,459	\$51,567	\$51,567	\$30,012
8	1,432,258	0	474,258	\$59,582	\$59,582	\$32,409
9	1,624,929	0	538,056	\$67,597	\$67,597	\$34,363
10	1,817,600	0	601,854	\$75,612	\$75,612	\$35,923
11	2,010,271	0	665,653	\$83,627	\$83,627	\$37,132
12	2,202,942	0	729,451	\$91,642	\$91,642	\$38,028
13	2,395,613	0	793,249	\$99,658	\$99,658	\$38,649
14	2,588,284	0	857,048	\$107,673	\$107,673	\$39,026
15	2,780,955	0	920,846	\$115,688	\$115,688	\$39,187
16	2,973,626	0	984,645	\$123,703	\$123,703	\$39,161
17	3,166,297	0	1,048,443	\$131,718	\$131,718	\$38,971
18	3,358,969	0	1,112,241	\$139,733	\$139,733	\$38,637
19	3,551,640	0	1,176,040	\$147,748	\$147,748	\$38,181
20	3,744,311	0	1,239,838	\$155,763	\$155,763	\$37,619
<b>Total</b>					<b>\$615,019</b>	

### 5.4 Health – Absenteeism

The Cal-B/C model calculated the benefits to employers of improved health of employees who use active transportation modes. Benefits were based on the value of reduced work absences. The model interpolated the year-to-year data between Year 1 and Year 20 benefits. Refer to the formulas for more information about each calculation. The average value of time per day is based on the state average wage rate for an 8-hour day.

$$\text{Average Annual Commuters} = \text{Average Daily Trips} / \text{Roundtrip Factor} \times \text{Commuting Purpose (\%)} \times \text{Annual Days}$$

$$\text{Reduced Days of Work Absences} = \text{Average Annual Commuters} \times \text{Short-term Sick Leave Coverage} \times \text{Reduction in Sick Days}$$

$$\text{Value of Short-term Health} = \text{Reduced Days of Work Absences} \times \text{Average Value of Time per Day}$$

Table 11 provides total absenteeism health benefits by year for the EBGW project. This health benefit was only calculated for induced (i.e., new to the system) bicycle users.

**Table 11. Health Benefits - Absenteeism**

Year	COMMUTER TRIPS (trips/yr.)			REDUCTION IN ABSENTEEISM (days)	VALUE OF REDUCED ABSENTEEISM (\$/day)	Constant Dollars	Present Value
	Total Commuters, Existing + New Facility (Baseline)	Total Commuters, Improved + New Facility	Induced Commuters, Existing Facility	Induced Commuters	Induced Commuters		
1	86	102	15	2	\$259.54	\$556	\$486
20	134	828	693	96	\$259.54	\$24,936	\$6,022
1	86	102	15	2	\$259.54	\$556	\$486
2	89	140	51	7	\$259.54	\$1,840	\$1,502
3	91	178	87	12	\$259.54	\$3,123	\$2,382
4	94	216	122	17	\$259.54	\$4,406	\$3,141
5	96	254	158	22	\$259.54	\$5,689	\$3,791
6	99	293	194	27	\$259.54	\$6,972	\$4,342
7	101	331	229	32	\$259.54	\$8,255	\$4,805
8	104	369	265	37	\$259.54	\$9,538	\$5,188
9	106	407	301	42	\$259.54	\$10,822	\$5,501
10	109	445	337	47	\$259.54	\$12,105	\$5,751
11	111	484	372	52	\$259.54	\$13,388	\$5,944
12	114	522	408	57	\$259.54	\$14,671	\$6,088
13	117	560	444	61	\$259.54	\$15,954	\$6,187
14	119	598	479	66	\$259.54	\$17,237	\$6,248
15	122	636	515	71	\$259.54	\$18,520	\$6,274
16	124	675	551	76	\$259.54	\$19,804	\$6,269
17	127	713	586	81	\$259.54	\$21,087	\$6,239
18	129	751	622	86	\$259.54	\$22,370	\$6,185
19	132	789	658	91	\$259.54	\$23,653	\$6,112
20	134	828	693	96	\$259.54	\$24,936	\$6,022
<b>Total</b>							<b>\$98,458</b>

### 5.5 Health – Reduced Mortality

The Cal-B/C model calculated the benefits to bicyclists and pedestrians for improved long-term health based on a reduced risk of mortality. Reduced mortality costs were calculated by user type. The model interpolated the year-to-year data between Year 1 and Year 20 benefits. Refer to the formulas for more information about each calculation.

$$\text{Number of Induced Users} = \text{Users with Project (Improved or New Facility)} - \text{Baseline Users (Existing and/or no Facility)}$$

$$\text{Number of Users in Risk-reducing Age Group} = \text{Number of Induced Users} \times \text{Percent of Users (by Mode) in Risk-reducing Age Group}$$

$$\text{Number of Expected Deaths in Age Group (Baseline)} = \text{Number of Users in Risk-reducing Age Group} \times \text{Death Rate (Group)}$$

$$\text{Reduced Mortality Risk} = \text{Expected Deaths in Age Group} \times \text{Mortality Risk Reduction (\%), as function of annual trip miles}$$

$$\text{Value of Reduced Mortality} = \text{Reduced Number of Annual Deaths} \times \text{Value of Life}$$

Table 12 provides total reduced mortality health benefits by year for the EBGW project. This health benefit was only calculated for induced cycle users.

Table 12. Health Benefits – Reduced Mortality

Year	AVERAGE ANNUAL USERS (Users/yr.)			REDUCED MORTALITY RISK (# of persons)			VALUE OF REDUCED MORTALITY (\$)	Constant Dollars	Present Value
	Total Users, Existing Facility (Baseline)	Total Users, Improved Facility	Induced Users, Improved Facility	Users in Risk-Reducing Age Group (Ages 20-64)	Expected # of Deaths Among Users	Reduced Mortality Risk (Induced User Trips)	Induced Users		
1	231	273	42	22.8	0.1	0.0	\$171,878	\$171,878	\$150,125
20	361	2,225	1,863	1,023.0	2.6	0.6	\$7,701,742	\$7,701,742	\$1,860,072
1	231	273	42	22.8	0.1	0.0	\$171,878	\$171,878	\$150,125
2	238	376	137	75.5	0.2	0.0	\$568,187	\$568,187	\$463,809
3	245	478	233	128.1	0.3	0.1	\$964,495	\$964,495	\$735,809
4	252	581	329	180.8	0.5	0.1	\$1,360,804	\$1,360,804	\$970,234
5	259	684	425	233.4	0.6	0.1	\$1,757,113	\$1,757,113	\$1,170,838
6	265	787	521	286.0	0.7	0.2	\$2,153,421	\$2,153,421	\$1,341,042
7	272	889	617	338.7	0.9	0.2	\$2,549,730	\$2,549,730	\$1,493,966
8	279	992	713	391.3	1.0	0.2	\$2,946,039	\$2,946,039	\$1,602,450
9	286	1,095	809	444.0	1.1	0.3	\$3,342,347	\$3,342,347	\$1,689,080
10	293	1,197	905	496.6	1.3	0.3	\$3,738,656	\$3,738,656	\$1,776,208
11	300	1,300	1,000	549.3	1.4	0.3	\$4,134,965	\$4,134,965	\$1,836,974
12	306	1,403	1,096	601.9	1.5	0.3	\$4,531,273	\$4,531,273	\$1,880,317
13	313	1,506	1,192	654.5	1.6	0.4	\$4,927,582	\$4,927,582	\$1,911,001
14	320	1,608	1,288	707.2	1.8	0.4	\$5,323,890	\$5,323,890	\$1,929,623
15	327	1,711	1,384	759.8	1.9	0.4	\$5,720,199	\$5,720,199	\$1,937,629
16	334	1,814	1,480	812.5	2.0	0.5	\$6,116,508	\$6,116,508	\$1,936,330
17	341	1,916	1,576	865.1	2.2	0.5	\$6,512,816	\$6,512,816	\$1,926,907
18	347	2,019	1,672	917.8	2.3	0.5	\$6,909,125	\$6,909,125	\$1,910,431
19	354	2,122	1,768	970.4	2.4	0.6	\$7,305,434	\$7,305,434	\$1,887,863
20	361	2,225	1,863	1,023.0	2.6	0.6	\$7,701,742	\$7,701,742	\$1,860,072
<b>Total</b>									<b>\$30,409,709</b>

### 5.6 Emissions Reduction

The Cal-B/C model determined an emissions reduction benefit by calculating VMT and highway emissions costs. Emissions costs were calculated by emissions type. The model interpolated the year-to-year data between Year 1 and Year 20 benefits. Refer to the formulas for more information about each calculation.

$$\text{Vehicle-Miles Traveled} = \text{Affected Length} \times \text{Avg. Annual Volume}$$

$$\text{Highway Emissions Cost} = (\text{VMT} \times \text{Rate} \times \text{Cost/Mile}) \text{ by Emissions Type}$$

$$\text{Vehicle Emissions Cost} = (\text{Vehicle-Miles} \times \text{Rate} \times \text{Cost/Mile}) \text{ by Emissions Type}$$

Table 13 provides the total emissions benefit and the emissions benefit by year for the EBGW project.

Table 13. Emissions Reduction

Year	AVERAGE ANNUAL VOLUME (trip-miles/yr.)		REDUCED VMT (veh-miles/yr.)	AVERAGE SPEED (mph)	RUNNING EMISSIONS (\$/yr.)	Constant Dollars	Present Value
	Induced Trips, Cycling	Induced Trips, Pedestrians	Induced Trips	Induced Trips	Induced Trips		
1	83,561	0	27,669	25	\$573	\$573	\$500
20	3,744,311	0	1,239,838	25	\$25,842	\$25,842	\$6,241
1	83,561	0	27,669	25	\$573	\$573	\$500
2	276,232	0	91,468	25	\$1,926	\$1,926	\$1,572
3	468,903	0	155,266	25	\$3,327	\$3,327	\$2,538
4	661,574	0	219,064	25	\$4,778	\$4,778	\$3,406
5	854,245	0	282,863	25	\$6,279	\$6,279	\$4,184
6	1,046,916	0	346,661	25	\$7,832	\$7,832	\$4,877
7	1,239,587	0	410,459	25	\$9,439	\$9,439	\$5,494
8	1,432,258	0	474,258	25	\$7,886	\$7,886	\$4,289
9	1,624,929	0	538,056	25	\$9,116	\$9,116	\$4,634
10	1,817,600	0	601,854	25	\$10,389	\$10,389	\$4,936
11	2,010,271	0	665,653	25	\$11,708	\$11,708	\$5,199
12	2,202,942	0	729,451	25	\$13,074	\$13,074	\$5,425
13	2,395,613	0	793,249	25	\$14,487	\$14,487	\$5,618
14	2,588,284	0	857,048	25	\$15,950	\$15,950	\$5,781
15	2,780,955	0	920,846	25	\$17,463	\$17,463	\$5,915
16	2,973,626	0	984,645	25	\$19,028	\$19,028	\$6,024
17	3,166,297	0	1,048,443	25	\$20,647	\$20,647	\$6,109
18	3,358,969	0	1,112,241	25	\$22,321	\$22,321	\$6,172
19	3,551,640	0	1,176,040	25	\$24,052	\$24,052	\$6,216
20	3,744,311	0	1,239,838	25	\$25,842	\$25,842	\$6,241
<b>Total</b>							<b>\$95,131</b>



## 6 Other Benefits

The Cal-B/C model quantifies the key benefits from implementation of the active transportation project. The model reflects a conservative representation of the benefits the project will provide: non-quantifiable benefits are considered outside of the BCA analysis, but should be recognized when considering the overall beneficial impact of the project. Other benefits to acknowledge from the EBGW project include, but are not limited to, the following:

- **State of Good Repair:** The EBGW project includes roadway pavement rehabilitation and resurfacing which will prolong the useful life of the roadway and reduce wear and tear on vehicles –which result in reduced maintenance costs for both the owner and users.
- **Multimodal Access:** The new facility will encourage a mode shift from motorized to non-motorized trips for first- and last-mile trips; therefore, reducing vehicle usage harmful emissions in the community.
- **Improved Connectivity:** The facility will allow improved connectivity within the community. Individuals will have better access to jobs, resources, services, and various community centers.
- **Addition of Green Infrastructure:** The project will provide opportunities to incorporate green and sustainable infrastructure such as stormwater infrastructure to capture run-off from the street into planters or pervious areas to improve the water quality and provide irrigation for plants; water-efficient or drought-resistant plantings to conserve water and reduce maintenance; addition of street trees to enhance the urban fores, reduce the heat-island effect and provide natural shading along the EBGW; new and enhanced urban open space; and energy-efficient lighting to reduce energy use and contribution to light pollution.

These benefits, in addition to those analyzed in the Cal-B/C model, work to improve the quality of life and the accessibility for the surrounding community. Please see the RAISE narrative for additional discussion on the beneficial aspects of the project.

## **Attachment 8: Benefit-Cost Analysis Calculation File**

Submitted as a separate file [here](#).