



Pittsburg/Bay Point Community-Based Transportation Plan

Contra Costa Transportation Authority



CONTRA COSTA
transportation
authority



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Pittsburg/Bay Point Community-Based Transportation Plan

Contra Costa Transportation Authority

Prepared By:



1625 Shattuck Avenue
Suite 300
Berkeley, California 94709
510.848.3815



PLACEMAKERS

WHAT PLACEMAKERS AND PROJECTS ARE MOST IMPORTANT ON THE STUDY AREA?

- 1. CITY OF PITTSBURG
- 2. CITY OF ANTIOCH
- 3. CONTRA COSTA COUNTY
- 4. NEW TRANSPORT TECHNOLOGIES



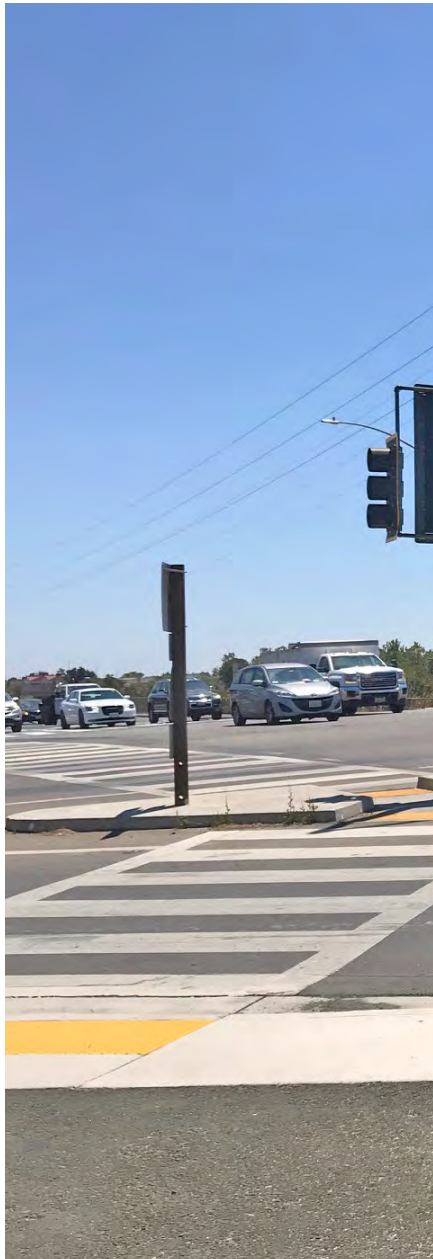
Table of Contents

List of Figures & Tables	ii
Executive Summary	3
1. Introduction	17
1.1 Metropolitan Transportation Commission Lifeline Transportation Program	17
1.2 CBTP Guidelines	18
1.3 2007 Bay Point CBTP	19
1.4 Current Pittsburg/Bay Point CBTP	19
1.5 Covid-19 and CBTP Development	21
2. Study Area Profile	22
2.1 Demographic Analysis	22
2.2 Transportation Patterns	30
2.3 Transportation Network	32
3. Previous Studies and Mobility Gaps	36
3.1 Local Studies	36
3.2 Countywide Studies	39
3.3 Ongoing Studies	40
3.4 Thematic Mobility Challenges	41
4. Outreach and Engagement Summary	42
4.1 CBTP Advisor Groups	42
4.2 Outreach Strategy	43
4.3 Outreach Awareness	44
4.4 Outreach Results	44
4.5 Outreach Summary	55
5. Methodology and Recommendations	56
5.1 COVID-19 and CBTP Development	56
5.2 Evaluation Criteria	56
5.3 Evaluation Process	59
5.4 Recommended Projects and Plans	60
Appendix A Existing Conditions Report	
Appendix B Outreach Materials and Results	
Appendix C Recommendations Scoring Results	



List of Figures & Tables

Figure ES-1 2007 and Current Community-Based Transportation Plan (CBTP) Study Areas	4
Table ES-1 Key Findings from Community Outreach Events	8
Table ES-2 High Need + High Potential Active Transportation Projects and Programs	11
Table ES-3 High Need + High Potential Transit Projects and Programs	12
Table ES-4 High Need + High Potential School Safety Projects and Programs	13
Table ES-5 High Need Active Transportation Projects and Programs	14
Table ES-6 High Need Transit Projects and Programs	15
Table ES-7 High Project Potential Active Transportation Projects and Programs	15
Table 1-1 Cycle 5 Lifeline Transportation Program Funding	17
Figure 1-1 Community Based Transportation Plan Study Area	20
Table 2-1 Race and Ethnicity in the Study Area and Contra Costa County	23
Figure 2-1 Age Distribution, Study Area (2017 ACS 5-Year Estimates)	23
Figure 2-2 Age Distribution, Contra Costa County (2017 ACS 5-Year Estimates)	23
Figure 2-3 Population Under 18 Years of Age	24
Figure 2-4 Population Age 65 and Over	25
Figure 2-5 Limited English Proficiency, Study Area and Contra Costa County (2017 ACS 5-Year Estimates)	26
Figure 2-6 Median Household Income, Study Area and Contra Costa County (2017 ACS 5-Year Estimates)	26
Figure 2-7 Population in Poverty (200% of Federal Poverty Level)	27
Figure 2-8 Percentage of People with Sensory Disabilities	28
Figure 2-9 Percentage of People with Physical Disabilities	29
Table 2-2 Mode of Travel to Work in the Study area and Contra Costa County	30
Figure 2-10 Vehicle Availability, Study Area (2017 ACS 5-Year Estimates)	30
Figure 2-11 Vehicle Availability, Contra Costa County (2017 ACS 5-Year Estimates)	30
Figure 2-12 Household Vehicle Availability	31
Figure 2-13 Long Distance Commute	32
Figure 2-14 Existing Transit Facilities	33
Figure 2-15 Existing and Proposed Bicycle Facilities	35
Figure 4-1 CBTP Outreach Flyer	45
Figure 4-2 CBTP Outreach Flyer (Spanish Verison)	45
Figure 4-3 Pittsburg/Bay Point Outreach Locations Map	46
Figure 4-4 County Planning Event Attendance	47
Figure 4-5 Contra Costa and Solano County Foodbank Responses	48
Figure 4-6 Contra Costa and Solano County Foodbank Results	49
Figure 4-7 Los Medanos Community College Mustang Day Responses	51
Figure 4-8 Los Medanos Community College Mustang Day Results	52
Figure 4-9 Los Medanos Community College Mustang Day Dot Survey Results	52
Figure 4-10 Total Outreach Counts	55
Figure 4-11 Total Responses Collected by Type	55
Figure 5-1 High Need + High Potential Active Transportation Recommendations	61
Figure 5-2 High Need + High Potential Transit Recommendations	62
Figure 5-3 High Need + High School Safety Recommendations	63
Table 5-1 High Need + High Potential Active Transportation Projects and Programs	64
Table 5-2 High Need + High Potential Transit Projects and Programs	65
Table 5-3 High Need + High Potential School Safety Projects and Programs	66
Table 5-4 High Need Active Transportation Projects and Programs	67
Table 5-5 High Need Transit Projects and Programs	68
Table 5-6 High Project Potential Active Transportation Projects and Programs	69



Executive Summary

This Community-Based Transportation Plan (CBTP) addresses transportation challenges in low-income “Communities of Concern” (CoC) across areas of Bay Point, Pittsburg, Antioch, and unincorporated Contra Costa County. The plan was developed by Contra Costa Transportation Authority (CCTA) with Metropolitan Transportation Commission (MTC) grant funding. In conformance with MTC guidelines, it represents a collaborative effort between CCTA, community members, local stakeholders, and transit operators to identify and fill local mobility gaps that impact low-income and challenged communities.

The CBTP recommends a series of projects and programs identified during community outreach and review of existing studies. These recommendations were prioritized using evaluation criteria developed with plan advisors.

COVID-19 Statement

The COVID-19 pandemic emerged following the outreach process of this CBTP. As a result, the community and stakeholder feedback in this plan does not reflect the changes in mobility context, habits, priorities, and challenges due to COVID-19 and formal shelter-in-place orders.

The scoring process was developed following shelter-in-place, and accounts for the impacts of those regulations. Shelter-in-place prompted significant shifts in the financial feasibility and implementation potential of transit projects, including those identified by Pittsburg, Bay Point and Antioch community members. As a result, some transit projects scored lower in the evaluation process used in this CBTP (see Section 5.2).

However, as explained further in Sections 5.2 and 5.4.1, counts at BART stations and for various transit systems show that transit ridership declines are significantly less pronounced in disadvantaged communities as compared to others. In the Pittsburg/Bay Point area, pre-COVID community input collected in the Plan is consistent with post-COVID ridership statistics: both reaffirm that there are major transit needs in the area that require fulfillment both before and during the pandemic. It can be assumed that the community will continue to rely on transit in the post-COVID future.

The Contra Costa Transportation Authority decided to adopt this plan in the current context, rather than re-initiate the existing conditions, community outreach, and recommendations processes. While COVID conditions affected the outcome of the evaluation process, this document has been developed to be flexible and amenable to revision based on return to normal conditions or solidification of “new normal” conditions. This Plan contains numerous transit projects categorized as “High Need”, which under current conditions would be challenging to implement. However, it is assumed that over the 10-year planning horizon of this CBTP, the mobility environment will change. Public transit is an ongoing lifeline for communities of concern, and recommendations deemed to have lower implementation potential in the age of COVID should be considered future opportunities regardless.

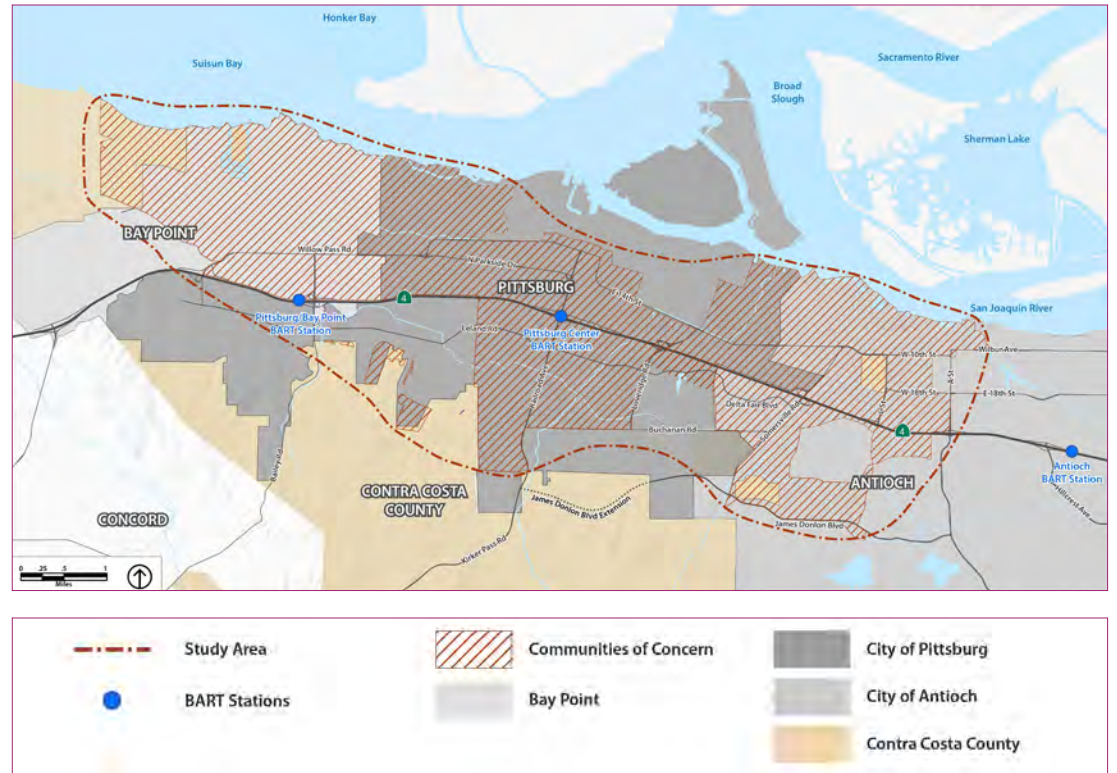
Study Area Profile

Demographic Profile

The most recent CBTP in this area was completed in 2007. The study area was limited to a portion of the Bay Point community, then home to about 22,000 people. The 2007 CBTP recommended 10 mobility improvement programs ranging from transit shelter enhancements to parking and lighting improvements at Bay Area Rapid Transit (BART) stations. Of these recommendations, three have been fully implemented and two partially implemented.

Figure ES-1 2007 and Current Community-Based Transportation Plan (CBTP) Study Areas

Figure 1: Bay Point Geographic Area



The current CBTP study area represents a significant expansion from 2007, as shown in Figure ES-1. It includes the majority of Bay Point north of State Route (SR-) 4; all of central Pittsburg surrounding SR-4 and Railroad Avenue, from Suisun Bay to the southern city limit; pockets of unincorporated Contra Costa County; and the City of Antioch west of A Street. The current population exceeds 93,000. In 2017, the median household income in the study area was \$54,000, with approximately 44 percent of residents living in poverty (defined here as below 200 percent of the federal poverty threshold).

The study area is more diverse than Contra Costa County as a whole. It contains higher percentages of Hispanic or Latino and Black or African-American residents than the County, half of the percentage of Asian residents and a much lower percentage of white residents. Less than 18 percent of CBTP area residents are white, non-Hispanic or Latino, compared to about 45 percent countywide. Approximately 4,100 households in the study area (13 percent of total households) are designated as “Limited English-Speaking Households,” as compared to 7 percent of households countywide.

Transportation and Transit Profile

Of the approximately 41,000 commuters 16 years and over in the study area, 87 percent travel to work by personal vehicle. Two-thirds of those workers drive alone. Nearly all residents in the study area experience commutes of 37 minutes or longer.

The study area includes the Pittsburg/Bay Point and Pittsburg Center BART stations, served by the SFO-Antioch BART line. The Antioch BART station is located about one mile east of the study area boundary. Amtrak service is available at the far-east end of the study area, providing direct connections to Berkeley, Oakland, San Jose, Stockton, Fresno and points beyond.

Local and intercity bus transit is primarily provided by Tri Delta Transit, which serves the entire study area through 11 bus routes. These routes connect BART stations and provide connectivity through eastern Contra Costa County. Bus operator County Connection also runs local and express bus routes, including Line 93X, which provides service from the Antioch BART station to Walnut Creek BART station.

Finally, the study area is served by an active transportation network that is a blend of bicycle and pedestrian facilities. Bike facilities consist mostly of Class I and Class II bikeways on major, east to west roadways.

Past and Current Studies

The recommendations in this CBTP respond to and build on previous and ongoing transportation studies. Due to the size and multijurisdictional make-up of the study area, understanding common mobility themes and adopted policies was significant to the development of relevant recommendations. For example, community feedback related to bicycle and pedestrian infrastructure was coordinated with projects proposed in 2020 *Pittsburg Moves*, the city's Active Transportation Plan, which was released in draft form in August 2020.

As detailed in Chapter 3, 11 local and countywide studies, spanning 2002 to the present, were reviewed.

Outreach and Engagement

All CBTP recommendations are based on a community coordination campaign consistent with MTC Guidelines.

Outreach and engagement in this plan included the following components:

1. Advisory group oversight
2. Project web page
3. Awareness campaign
4. County planning events
5. "Pop-Up" sessions at events in the study area
6. In-depth interviews with community members
7. Meet-and-greet feedback sessions with community resource leaders



Steering Committee Oversight

A CBTP Steering Committee (SC) was convened twice to ensure an inclusive outreach process, provide direction on reaching specific communities, and prioritize outreach opportunities. Members of the SC included:

- Vincent Manuel, Deputy Chief of Staff, Representing Supervisor Federal Glover
- Joy Motts, Mayor Pro Tem, City of Antioch
- Debra Mason, Chair, Bay Point Municipal Advisory Council
- Tim Leong, Director of Communication, Los Medanos College
- Alejandra Plascencia, East County Community Liaison, First 5 Contra Costa

Project Working Group Oversight

A Project Working Group (PWG) of local jurisdiction and transit agency staff convened five times throughout the outreach process to review the Outreach Strategy, help identify stakeholders in various CoCs, and provide practical guidance on coordinating outreach events and stakeholders. Members of the PWG for the Pittsburg/Bay Point CBTP included:

- Martin Engelmann, Deputy Executive Director, Planning, CCTA
- Matt Kelly, Senior Transportation Planner, CCTA
- Jaclyn Reyes, Administrative Assistant, CCTA
- James Hinkamp, Associate Transportation Planner, CCTA
- Mary Halle, Senior Civil Engineer, Contra Costa County (CCC) Public Works
- Bruce “Ole” Ohlsen, Pittsburg Citizen
- Vincent Manuel, Deputy Chief of Staff, CCC Supervisor District V
- Colin Piethe, Planner, CCC Dept. of Conservation and Development
- Denise Milosevich, Senior Health Education Specialist, CCC Health Services
- Kamal Parks, Senior Planner, BART
- Steve Ponte, Chief Operating Officer, East Contra Costa Transit Authority (ECCTA)
- Arlene Roberts, Administrative Analyst III, City of Antioch
- Tamany Brooks, Chief of Police, City of Antioch
- Agustin Diaz, Manager of Planning and Grants, ECCTA
- Paul Reinders, City Traffic Engineer, City of Pittsburg
- Clayton Johnson, Senior Health Education Specialist, CC Health Services

Project Web Page

The CBTP team developed a project web page on the CCTA website. The web page included background information on the CBTP process, links to project submittals such as Existing Conditions Reports and Outreach Strategies, and notification of events using customized fliers.

Awareness Campaign

The CBTP team developed a graphics-rich Outreach Awareness Notice in English (see Figure 4-1) and Spanish (see Figure 4-2) to notice the public of outreach events in various CoCs. The flier was adapted to each event and posted digitally on websites of agencies and stakeholders involved in the project.

County Planning Events

Contra Costa County is currently updating its General Plan, a process titled *Envision Contra Costa 2040*. The CBTP team attended the following outreach events associated with this process to gauge community mobility priorities in Bay Point:

- Contra Costa County General Plan Update Community Meeting 2 for Bay Point. This meeting was held on August 12, 2019, at the Ambrose Recreation and Park District office.
- Contra Costa County General Plan Update Community Meeting 3 for Bay Point. This meeting was held on January 30, 2020, at the at the Ambrose Recreation and Park District office.

Approximately 45 attendees contributed feedback concerning transportation challenges, most related to the need for an improved walking and cycling environment, increased frequency of east to west Tri Delta Routes and improved BART access.

Pop-Up Sessions

CBTP team members worked with community-based organizations (CBOs), non-profits, and various local agencies to schedule “pop-up” outreach sessions at pre-scheduled events targeting low-income and other potentially transportation-challenged communities. The goals of these events were to collect detailed feedback about transportation challenges directly from CoC residents and record personal narratives describing how these challenges impact daily life. English- and Spanish-speaking CBTP project staff facilitated “map-and-dot” study board exercises, on-site surveys, and “infrastructure gap” sticker exercises to allow participants to visually identify existing mobility gaps.

The CBTP team also conducted detailed interviews with volunteers to develop personal vignettes about daily mobility challenges in the study area.

Pop-up sessions were conducted at the following events with the following participation rates:

1. **The Food Bank of Contra Costa and Solano** weekly food service at Buchanan Park in the City of Pittsburg, on November 19, 2019. Approximately 15 attendees participated in interactive exercises, and nine in-depth interviews were conducted.
2. **Los Medanos Community College “Mustang Day”** on January 29, 2020. This event is hosted by the college each semester to welcome new students. At this event, 51 individuals participated in sticker voting, 55 people participated in mapping exercises, and 6 detailed interviews were conducted.

Meet-and-Greet Sessions

1. **Antioch Senior Center.** On January 3, 2020, CBTP team members visited the center to discuss paratransit, disability challenges, and access. Interviews were conducted with the Director of Programming, the Center’s Certified Transit Trainer, and visitors to the center. These discussions focused on access to both the Antioch and Pittsburg senior centers as well as paratransit service across the study area.
2. **Pittsburg Senior Center.** On January 4, 2020, CBTP team members collected feedback concerning the same topics from the Recreation Supervisor of Pittsburg Senior Center, including phone conversations and follow-up emails.

Key Findings

Table ES-1 summarizes the key findings and feedback from each outreach component.



Table ES-1 Key Findings from Community Outreach Events

Contra Costa County General Plan Update Community Meeting #2 and #3 in Bay Point

- Desire for better walking access to amenities like stores;
- Need for increased frequency of Tri Delta Route 381 and others well-travelled routes;
- Community-wide need for safer, more comfortable bus shelters;
- Need for improved transit options for disabled community members;
- Desire for direct BART shuttles and easier BART access;
- Lack of adequate safety and security concerns on public transit in bay point;
- Need for improved bike facilities, sidewalks, lighting and other corridor improvements on Willow Pass Road and Bailey Road

Food Bank of Contra Costa and Solano

Bicycle Challenges:

- Lack of adequate bike lanes on routes accessing support facilities and resource centers
- Dangers to cyclists on Willow Pass Road from Loftus Road westward
- Poor lighting; high auto-speeds on corridors

Pedestrian Challenges:

- Dangerous surrounding intersections, including Loveridge Road and California Avenue Intersection and others
- Sidewalk conditions on Buchanan Road: Sidewalk gaps, inadequate lighting, lack of wheelchair accessibility
- Dangerous and reckless driving on Harbor Street surrounding Pittsburg High School

Food Bank of Contra Costa and Solano *(Continued)*

Transit Challenges:

- Need for a shuttle route connecting support services such as food bank
- Lack of adequate bus routes on key corridors from study area to central Concord
- Need for a Tri Delta or County Connection shuttle connecting key neighborhoods to Pittsburg Center BART due to limited parking and bus service
- Unreliability of Tri Delta routes
- Unreliable connections on trip from central Pittsburg to Antioch; wait times are too long
- Inadequate evening service from CBTP study area to major medical facilities in Martinez such as VA Hospital

Paratransit Challenges:

- Difficult planning to due to reservation requirements
- General unreliability of paratransit busses

Los Medanos Community College "Mustang Day"

Bicycle Challenges:

- There are dangerous bicycle conditions on small segment of Willow Pass between Port Chicago Highway and Evora Road in Bay Point.
- Common use of Port Chicago for bike commuting on the north side of the City, but without marked bike lanes.
- Dangers of Harbor Street south of California Avenue: SR-4 crossing; bad lanes and safety
- Poor road conditions of East 14th Street east of Solari Street

**Table ES-1 Key Findings from Community Outreach Events
(Continued)**

**Los Medanos
Community College
“Mustang Day”
(Continued)**

Pedestrian Challenges:

- Bad pedestrian crossing at Highway 4 on-ramp (towards Hillcrest); timing of the light is bad and cars making right turns do not see pedestrians.
- Scary intersection of Somerville Road and State Route 4 due to number of lanes and conflicting signal times during pedestrian crossing.
- Lack of complete sidewalks and crosswalks along Railroad Avenue south of BART Station.
- Walking becomes more difficult during Los Medanos Community College school hours.
- Need for a comfortable pedestrian connection between the Costco center and Century Plaza Shopping Center.

Transit Challenges:

- Difficulty of getting in and out of the El Pueblo Neighborhood: Carpino and School Streets are the only ways in and out. Route extension is needed.
- Lack of adequate evening bus service for night students and staff throughout Pittsburg.
- Tri Delta Route 387 stops running after the last bus leaves campus at 9:15 PM.
- Need for a nighttime shuttle for student safety and BART access
- Inadequate service and infrastructure on routes servicing Los Medanos Community College
- Unreliability/lateness of Route 380
- Poorly timed connections between Routes 380 and 388
- Shelters at stops along 380 and 388 lack seating and signage

**Los Medanos
Community College
“Mustang Day”
(Continued)**

- Drivers often “demoralize” those without correct fare
- Difficulty of getting to Los Medanos Community College from some areas due to lack of north-south running bus routes.

**Antioch and Pittsburg
Senior Centers**

Paratransit Challenges:

- Service does not run late enough to facilitate evening activities at senior centers.
- Senior Paratransit hours, which stop at 5:30 PM, should match fixed-route service hours for evening service.
- Senior paratransit service between Bay Point BART to Antioch BART needs to run later.
- Route 200 (BART to VA hospital, Kaiser, Regional Medical Clinics) is vital to seniors and the one-hour headway needs to be reduced. Service should run later into the evening to allow for an associated extension of paratransit service.
- Another option: Expand paratransit service for all of Tri Delta’s service area from Martinez/Concord to far East County regardless of the time fixed routes end until last fixed route bus runs.
- Formalize a non-paratransit ‘driver request program’ so that senior centers and other facilities can coordinate with Tri Delta to ask for volunteer drivers for improved access to special events.
- Paratransit access is restricted due to gap between age-related paratransit and ADA-eligible paratransit. Tri Delta should at least simplify the ADA eligibility process.
- Simplify the On-Demand service with Lyft/Uber, which is currently a five-step, multi-day registration process requiring a smart phone and bank account, as well as Lyft/Uber accounts.

Recommendations Methodology

Evaluation Criteria

The CBTP project team worked with the PWG to establish four evaluation criteria to rank projects and programs by their ability to improve mobility for challenged communities:

1. **Reflects Community Priorities**
2. **Increases Access**
3. **Financial Feasibility**
4. **Ease of Implementation**

Scoring Methodology

Recommendations were scored one through five for each evaluation criteria. A score of one reflects the lowest potential for fulfillment of that category; five the highest. For all project and plans, the following score averages were calculated:

- **Area Need Score:** The average score of Criterion 1 (Reflects Community Priorities) and Criterion 2 (Increases Access)
- **Project Potential Score:** The average score of Criterion 3 (Financial Feasibility) and Criterion 4 (Ease of Implementation)

Drawing upon analysis of previous Community Based Transportation Plans, the team decided to consolidate criteria into the two scores listed above to improve the implementability of the CBTP as a whole. A focus on recommendations with the highest and/or most immediate potential to get funded and built will support the grant selection, timing and planning processes. It will facilitate more informed decision-making and awareness of potential challenges for future projects.

Projects and plans were categorized into the following groups based on the results of this scoring system.

High Need + High Potential Recommendations

These recommendations received an Area Need Score of 3.5 or above and a Project Potential Score of 3.5 or above. These are projects and programs consistent with community priorities, have the highest potential to reduce access gaps, and are unlikely to face implementation challenges.

High Need Recommendations

High Need Recommendations received an Area Need Score of 3.5 or above and a Project Potential Score of below 3.5. These projects will fulfill community priorities and increase community access but may be difficult to complete due to fun Project ding and costs, cross-jurisdictional management, engineering, and other implementation challenges.

High Project Potential Recommendations

These recommendations received an Area Need Score between 2.5 and 3.5, and a Project Potential Score of 3.5 or above. High Project Potential Recommendations would not fill priority and access gaps to the degree that higher-priority recommendations would. Yet they are financially feasible and unlikely to encounter major implementation challenges.

Project Types

Recommendations fall within the following groups of projects and plans:

Active Transportation. These are generally capital improvements that increase safe, healthy, active transportation choices, namely walking and biking, for everyday trips.

Transit. Transit projects may include new routes, expanding operating hours of certain lines, increasing transit line frequency, or improving transit stops with lighting, shelter, and seating.

School Safety. School safety projects provide safe, non-motorized routes between where people live and local schools.

Recommendations

The following tables summarize recommendations across project type. Each table includes recommendations, Area Need score, Project Potential score, and estimated cost.

High Need + High Potential Recommendations

Active Transportation Projects and Programs

Active Transportation Projects comprise most High Need + High Potential Recommendations. Not only were such projects identified by the community, in current studies and during CBTP advisor coordination, but funding for active transportation and multi-modal safety remains available in the wake of COVID-19.

Table ES-2 High Need + High Potential Active Transportation Projects and Programs

Recommendation	Area Need Score (3.5+)	Project Potential Score (3.5 +)	Estimated Cost
Develop a protected Class IV separated bicycle facility along Railroad Avenue in Pittsburg, from California Avenue to Buchanan Road.	4	3.75	\$480,000
Implement an ADA-compliant intersection improvement program at 3-4 major intersections along Railroad Avenue in Pittsburg.	4.5	4.5	\$600,000 to \$1 million
Complete community- and City-identified intersection improvements at various points across Harbor Street in Pittsburg, between Central Avenue and Solari Street.	3.75	4.5	\$175,000 to \$250,00 per intersection
Implement near-term improvements at Somersville Road/SR 4 intersection, including striping, signal modifications.	4	3.5	\$900,000
Fill sidewalks gaps on Buchanan Road: 1. at Railroad Avenue 2. from Kirker Pass Road to Heights Avenue	4	3.75	\$1.3 million
Improve pedestrian and bicycle experience and safety along Willow Pass Road in Bay Point by installing/upgrading infrastructure.	4.25	3.25	\$3 million to \$5 million
Implement a pedestrian and bicycle safety program on West 10th Street in Antioch that includes traffic calming improvements between G and A Streets and safety upgrades at the intersection of West 10th Street and D Street.	4	3.5	\$1 million to \$ 1.5 million
Improve pedestrian and bicycle experience and safety along Port Chicago Highway in Bay Point to McAvoy Road by installing/upgrading pedestrian and Bicycle infrastructure.	4.25	3.5	\$1 million to \$1.5 million
Install bicycle lanes on the McAvoy Road railroad crossing north of Port Chicago Highway.	3.5	3.5	\$30,000 to \$40,000
Improve pedestrian and bicycle experience and safety along Bailey Road in Pittsburg and Bay Point by installing/upgrading pedestrian and bicycle infrastructure.	4.5	3.5	\$1.5 million to \$2 million

Transit Projects and Programs

The overall implementation and financial potential of transit projects decreased with declines in systemwide revenues from COVID. This is reflected in the low number of High Need + High Potential Transit Projects shown in Table ES-3, and higher number of transit projects scored High Need (ES-6)

It is important to note that disadvantaged communities remain disproportionately reliant on transit service, as compared to other communities, during the pandemic. Ridership at Orinda BART Station, where approximately 72 percent of the population is white, saw a 94 percent drop in ridership. In comparison, Pittsburg Center BART Station, located where 65 percent of the population is Black or Latinx, saw a 74 percent drop in year over year ridership.¹

¹ Bay Area Council Economic Institute, September 2020, *Economic Profile 2020: Housing and Transportation in a Post-Pandemic Bay Area*, <http://www.bayareaeconomy.org/report/housing-and-transportation-in-a-post-pandemic-bay-area/>, accessed November 9, 2020.

Accessible public transit remains a mobility backbone for disadvantaged communities in the Bay Area and beyond. This was borne out in the Pittsburg/Bay Point area outreach process, during which low-income, youth and elderly residents identified area-wide and route-specific gaps, transit-isolated destinations, BART access issues and bus stop upgrades as needed community improvements.

Current challenges notwithstanding, all transit recommendations in this plan are considered viable community priorities.

Table ES-3 High Need + High Potential Transit Projects and Programs			
Recommendation	Area Need Score (3.5+)	Project Potential Score (3.5 +)	Estimated Cost
Upgrade up to 10 additional bus stops along high-use Tri Delta and County Connection routes with “half-barrel” bus shelters and shelter improvements consistent with 2019 NACTO and ADA standards.	4	3.5	\$20,000 to \$30,000 per stop
Upgrade or install five “half-barrel” bus shelters and improvement consistent with 2019 NACTO and ADA standards on routes serving the Antioch Senior Center., as well as.	4	3.5	\$20,000 to \$30,000 per stop
Develop a public information program to introduce and educate special needs transit riders about Tri Delta’s Tri Myride service. Develop in-person presentations about program eligibility, technology and service areas for senior centers and disability and other support facilities.	3.75	4	\$15,000 to \$20,000

School Safety Projects and Programs

As of this draft CBTP, public schools and facilities in Contra Costa County school district are closed to classroom learning for the 2020 through 2021 school year and planning various reopening strategies. As noted in Section 5.1, these conditions make it difficult to predict implementation of school safety projects. However, funding for previously identified Safe Routes to School programs increases the potential for these projects

Recommendation	Area Need Score (3.5+)	Project Potential Score (3.5 +)	Estimated Cost
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Pittsburg High School.	4.25	3.75	\$400,000 to \$700,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Bel Air Elementary in Bay Point.	3.5	3.75	\$300,000 to \$600,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Highlands Elementary School in Pittsburg.	3.75	3.5	\$300,000 to \$600,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Parkside Elementary School in Pittsburg.	3.5	3.5	\$300,000 to \$600,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Belshaw Elementary School in Antioch.	3.5	4	\$300,000 to \$600,000

High Need Recommendations

Active Transportation Projects and Programs

Table ES-5 High Need Active Transportation Projects and Programs			
Recommendation	Area Need Score (3.5+)	Project Potential Score (below 3.5)	Estimated Cost
Install Class II Buffered Bike Lanes along Harbor Street from Buchanan to Stoneman Avenue.	4.25	3.25	\$60,000
Install Class IV Separated Bikeway along Harbor Street, from Stoneman Avenue to 3rd Street:	4.25	3.25	\$680,000
Increase bicycle safety at Harbor Street under-crossing of Mococo railroad line in Pittsburg with separation and surface improvements.	3.5	2	\$30,000
Increase bicycle safety at Harbor Street under-crossing of BNSF railroad line in Pittsburg with separation and surface improvements.	3.5	2	\$30,000
Increase bicycle safety at the Willow Pass Road under-crossing of both the BNSF and the Mococo lines in Pittsburg with separation and surface improvements.	4	1.25	\$10,000,000 per crossing
Add Class I Bike Path on west side of San Marco Boulevard from Evora Road to Rio Verde Circle.	4.5	2.5	\$4.8 million
Work with local or transit agencies to install secure public bike repair equipment at BART stations and transit stops near public schools.	3.5	3	\$5,000 to \$8,000 per "station"
Improve the personal security and comfort along portion of Delta de Anza Regional Trail in study area, via new lighting, selective vegetation removal, installation of cameras, and improved sight lines.	4.5	2.5	\$800,000
Add pedestrian lighting and infrastructure improvements at intersections along the transition from Willow Pass Road to North Parkside Drive.	3.5	3	\$175,000 to \$250,00 per intersection
Implement a program of bicycle facility maintenance that includes quarterly lane sweeping by all study area agencies, as-needed lane restriping and graffiti abatement along the portion of the Delta de Anza Regional Trail in the study area.	3.5	3	\$500,000 annually

Transit Projects and Programs

Table ES-6 High Need Transit Projects and Programs			
Recommendation	Area Need Score (3.5+)	Project Potential Score (below 3.5)	Estimated Cost
Upgrade evening service and increase headways on 2 high-use routes connecting Los Medanos Community College and Pittsburg Adult Education Center to BART Stations and the City of Antioch, including Routes 387, 380, 381 and 388.	3.75	2	\$500,000 to \$1.5 million yearly
Reduce the 1-hour headway on Tri Delta Route 200 (BART to VA hospital, Kaiser, Regional Medical Clinics) and extend service to 9:00 PM.	3.5	3	\$500,000 to \$1 million yearly
Expand Tri Delta Senior (Age 65+) Paratransit Transportation evening service from 5:30 PM to 9:30 PM, with limited weekend service.	4	2	\$350,000 to \$500,000 yearly

High Project Potential Recommendations

Active Transportation Projects and Programs

Table ES-7 High Project Potential Active Transportation Projects and Programs			
Recommendation	Area Need Score (3.5+)	Project Potential Score (below 3.5)	Estimated Cost
Work with the City of Pittsburg to complete planned lighting improvements along segments of Railroad Avenue.	3.25	5	\$350,000 to 600,000
Mark green conflict zone striping on all approaches and through bus stops along Harbor Street in Pittsburg, between Buchanan Road and Solari Street.	2.75	4.5	\$7,000 per stop/ intersection
Close sidewalk gaps along Madison Avenue from Delta de Anza Regional Trail to Canal Road.	3	4	\$75,000
Install safety improvements and updates at the Bailey Road and Delta de Anza Regional Trail crossing.	3	4.5	\$125,000
Construct a 10-foot sidewalk segment or trail along the south side of Willow Pass Road between Port Chicago Highway and Evora Road in Bay Point.	2.5	3.5	\$300,000



1. Introduction

1.1 Metropolitan Transportation Commission Lifeline Transportation Program

In 2001, the Metropolitan Transportation Commission (MTC) published two reports identifying gaps in the provision of transportation services in low-income San Francisco Bay Area neighborhoods and initiated two programs to allocate funding for transportation improvement projects based on outreach to low-income communities. The Lifeline Transportation Program (LTP) allocates state and federal funds to provide grants for projects that meet mobility and accessibility needs in low-income communities. The Community-Based Transportation Plan (CBTP) program is an outreach-based program to improve travel needs in specific low-income Communities of Concern (CoC) throughout the Bay Area. Each CBTP is a collaborative effort between community members, transit operators, and congestion-management agencies to identify local mobility challenges and community-oriented solutions.

The projects identified in CBTPs then become eligible for funding through the LTP. Per its 2018 guidelines, the goal of the LTP is to fund projects that result in improved mobility for low-income residents of the San Francisco Bay Area. Eligible projects must:

- Be developed through an inclusive planning process that engages a broad range of stakeholders,
- Improve a range of transportation choices by adding new or expanded services, and
- Address transportation gaps and/or barriers identified in CBTPs.

Both operating projects and capital projects are eligible for funding under the LTP.

LTP Cycle Five, which covers Fiscal Year 2016 through 2017 and Fiscal Year 2017 through 2018 was funded by two sources: State Transit Assistance (STA) and Federal Transit Administration (FTA) Section 5307 Urbanized Area Formula funds. Table 1 details allocations to Contra Costa County.

County and Share of Regional % Low Income Population	FY 2016-2017 (\$ Millions)		FY 2017-2018 (\$ Millions)		Total (\$ Millions) Estimate
	STA Actual	FTA Actual	STA Actual	FTA Estimate	
Contra Costa 14.7%	\$1.08 M	\$0.50 M	\$1.07 M	\$0.50 M	\$3.10 M
Rest of Bay Area 86.3%	\$6.22 M	\$2.87 M	\$7.19 M	\$2.93 M	\$19.36 M
Total	\$7.30 M	\$3.37 M	\$8.26 M	\$3.43 M	\$22.36 M

Source: Metropolitan Transportation Commission, Lifeline Transportation Program Cycle 5 Guidelines.



1.2 CBTP Guidelines

MTC has established guidelines to ensure that CBTP mobility recommendations are the result of community input. Per the 2018 MTC guidelines:

- All CBTP recommendations must be based on a Community Engagement Plan that includes at least three best practices for outreach to low-income residents.
- Community outreach must be coordinated with community stakeholders, such as community-based organizations (CBOs) and non-profits working with the underserved.
- Each CBTP must convene a Steering Committee (SC) of social service, CBO, agency, and/or non-profit leadership to review outreach strategies, recommendation selection criteria, and milestones.
- Each CBTP must identify funding sources for “high-priority” projects.

1.2.1 Communities of Concern

As noted in Section 1.1, CBTP study areas are composed of MTC-identified CoCs. These are census tract-based geographies that exhibit either:

1. A low-income population (less than 200 percent of the federal poverty level) that exceeds 30 percent and a minority population that exceeds 70 percent; or
2. A low-income population that exceeds 30 percent and a population that surpasses MTC thresholds for at least three of the following:
 - Level of English Proficiency
 - Elderly
 - Zero-Vehicle Households
 - Single-Parent Households
 - Disabled
 - Rent-Burdened Households

1.3 2007 Bay Point CBTP

The Bay Point community was first identified as a CoC in MTC's 2001 Regional Transportation Plan (RTP). The resulting CBTP planning grant program funded four CBTPs in Contra Costa County, including one in Bay Point. The first Bay Point CBTP was completed in 2007. The study area included the Bay Point community only. The plan included 10 recommendations for improvements, including: Transit shelter enhancements, additional bus and shuttle services, marketing programs to highlight transit services, parking and lighting improvements at Bay Area Rapid Transit (BART) stations, establishment of an emergency ride home program and crossing-guard programs at local schools, and bicycle/pedestrian improvements along Bailey Road. Of the 10 recommendations in the 2007 Bay Point CBTP, 3 have been fully implemented, and 2 have been partially implemented.

1.4 Current Pittsburg/Bay Point CBTP

1.4.1 Study Area

The Pittsburg/Bay Point CBTP study area was determined primarily by the location of CoCs determined by the most-recent MTC assessment. The current study area boundary does not entirely conform to CoC boundaries because the community focus, reliance on outreach, and potential transit solutions, programs, and projects that result from the CBTP are not limited to the census tract level.

As shown in Figure 1-1, the current CBTP study area includes CoCs north of State Route (SR) 4 in a large area of Bay Point; surrounding SR-4 and Railroad Avenue in central Pittsburg; and bounded by the Pittsburg border, A Street, Suisun Bay, and James Donlon Boulevard in western Antioch. SR-4 bisects the study area, and the northern portion of the study area extends to Suisun Bay and the San Joaquin River. The study area includes the Pittsburg/Bay Point and Pittsburg Center BART Stations.



The study area has significantly increased in size, diversity, and population since the last CBTP. As noted, the 2007 Community-Based Transportation Plan for Bay Point study area included the Bay Point community only, with a population of under 22,000¹ at that time. The current study area extends east from Bay Point, through Pittsburg, and beyond A Street in Antioch. It includes portions of unincorporated Contra Costa County as well. The population is currently over 93,000.

¹ Metropolitan Transportation Commission, February 2007, Community-Based Transportation Plan for Bay Point, page 14.

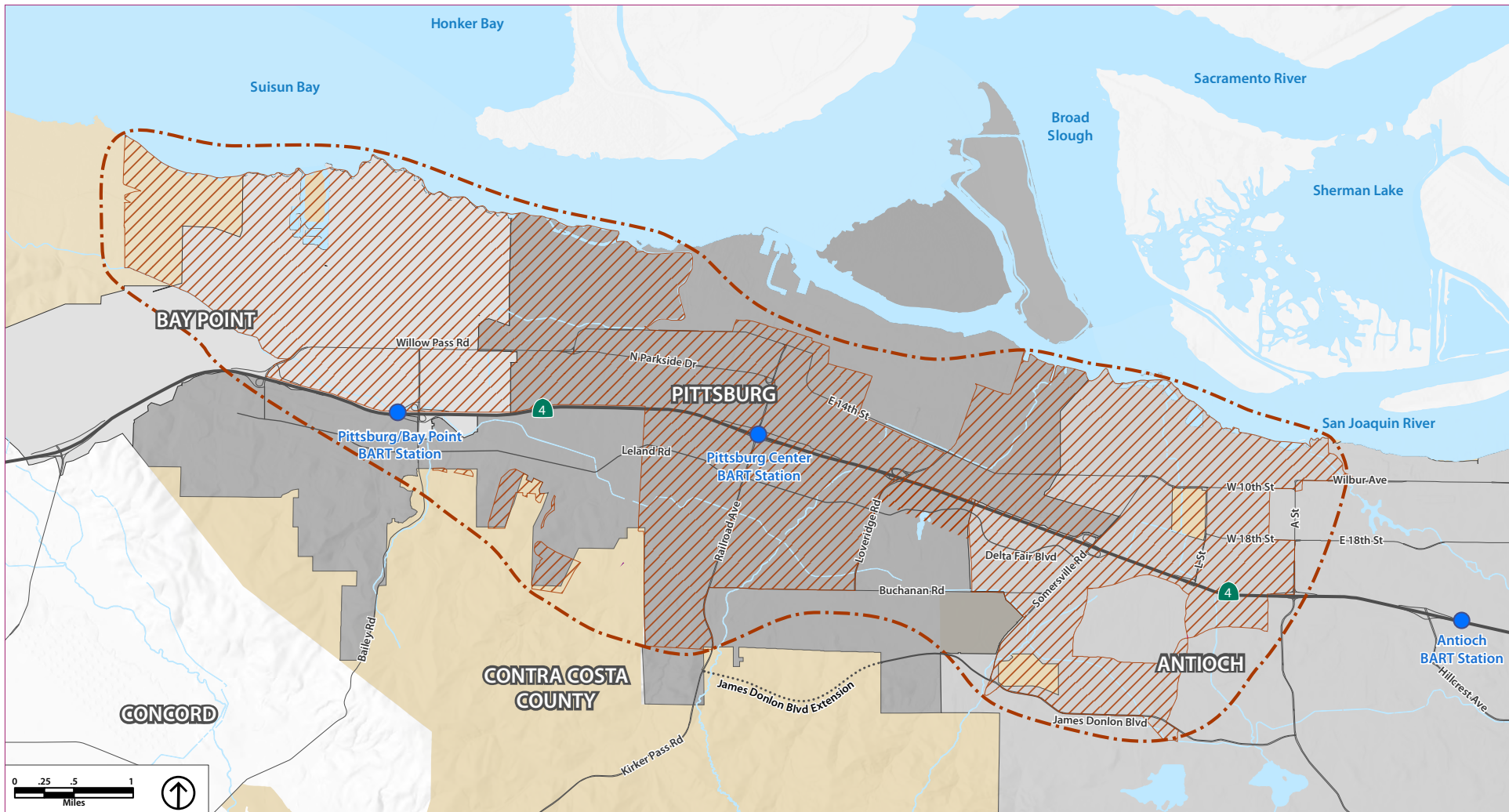
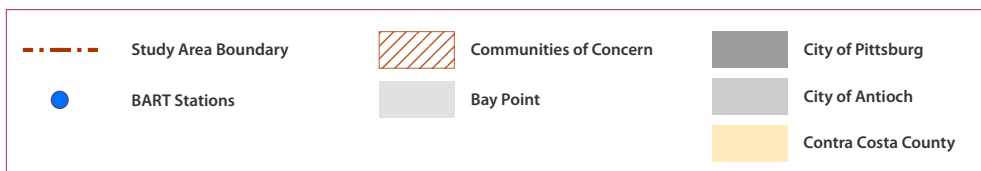
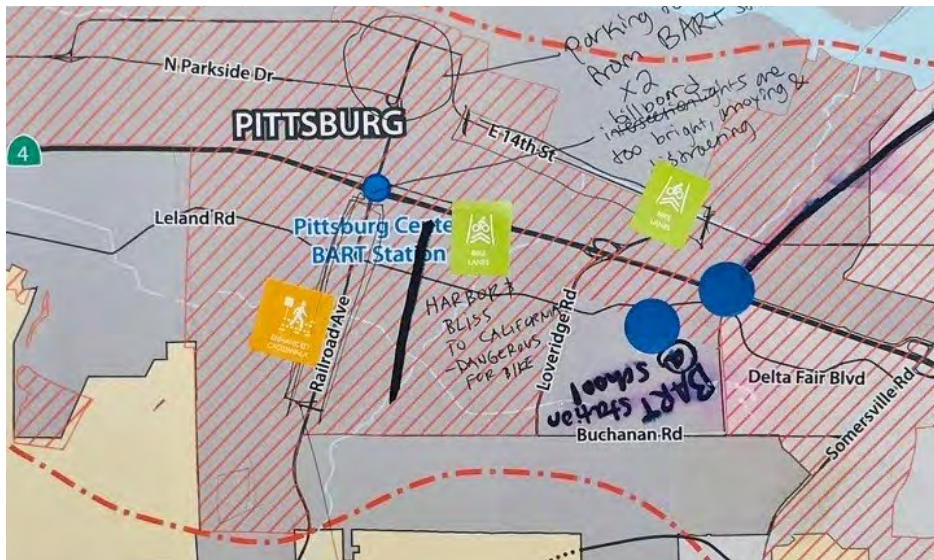


Figure 1-1 Community Based Transportation Plan Study Area





1.4.2 CBTP Advisors

1.4.2.1 Steering Committee

Per MTC’s 2018 CBTP Guidelines, the Pittsburgh/Bay Point CBTP project team convened an SC of representatives from CBOs, non-profits, and agencies with an interest in the CBTP outcome. Individual members are identified in Chapter 4. The role of the SC was to ensure transparency and inclusivity throughout the process, review milestones, and assist in program evaluation. The SC provided input on reaching specific groups in the community, prioritized outreach opportunities, and evaluated the list of policy and project recommendations for the study area. The SC was convened during the community outreach strategy process and during the prioritization of projects and plans to be included in the Final CBTP.

1.4.2.2 Project Working Group

The project team also convened a Project Working Group (PWG), which included the project team and partners from local jurisdictions, transit agencies, and MTC. The PWG met five times throughout the outreach process to provide practical guidance on local input, review deliverables, and provide input on project review criteria and CBTP draft recommendations. See Chapter 4 for a complete list of all PWG members.

1.5 Covid-19 and CBTP Development

The COVID-19 pandemic emerged following the community outreach process of this CBTP (see Chapter 4). As a result, the community feedback that influences recommendations in this CBTP does not reflect the changes in mobility context, habits, priorities, and challenges due to COVID-19 and formal shelter-in-place orders.

However, scoring of the recommendations, which includes financial feasibility and ease of implementation (see Chapter 5) occurred about four months into shelter-in-place regulations. COVID-19 and the resulting mobility habits have shifted the funding and implementation potential of key project types. The projects and programs in this plan reflect pre-COVID community feedback and post-COVID feasibility.

The Contra Costa Transportation Authority determined that it is in the interest of communities in the CBTP study area to adopt this plan in the current context, rather than re-initiate the existing conditions, community outreach, and recommendations processes.

2. Study Area Profile

The current Community-Based Transportation Plan (CBTP) study area is large and diverse, composed of a variety of existing land uses dominated by typical suburban communities. The most common land use is residential, single-family homes, with low- to medium-density housing of about 7 to 21 dwelling units per acre distributed throughout the CBTP study area. Heavy-industrial uses are concentrated along the Pittsburg waterfront, west and east of residential areas surrounding Railroad Avenue. Commercial areas are concentrated along Railroad Avenue in Pittsburg and surrounding State Route (SR-) 4 from Loveridge Road to Somersville Road corridors in east Pittsburg.

A full CBTP *Study Area Existing Conditions* Report is provided in Appendix A to this plan.

2.1 Demographic Analysis

The demographic profile presented in this report is based on census tract data from the 2010 U.S. Census. Data from the American Community Survey (ACS) five-year estimates (2006 through 2010 and 2013 through 2017) are compared to show trends since the last CBTP. In addition, future projections are provided on key demographic variables from the 2017 Regional Transportation Plan (RTP), which the Metropolitan Transportation Commission (MTC) published in July 2017. Also known as Plan Bay Area (PBA) 2040, this RTP contains forecasts for population, housing, and employment for the horizon year of 2040.

2.1.1 Population and Housing

The population of the study area in 2017 was approximately 93,667, an increase of 4.6 percent from the 2010 Census, when the population was 89,513. The study area has seen approximately half the countywide population growth over the past seven years, the latter of which grew 9.4 percent from 1,049,030 residents in 2010 to 1,147,439 in 2017. This trend is forecasted to stabilize in the future, with an expected growth rate of 21 percent from 2017 to 2040 to 113,223 residents within the CBTP study area. This growth rate will be slightly higher than the rate of the county's

long-term growth rate, which is expected to grow by only 17 percent (less than 1 percent per year) from 2017 to 2040 to a population of 1,338,240.

Household size in the study area is about 12 percent larger than household size in Contra Costa County and is expected to increase. Households in the study area increased from 3.2 people in 2010 to 3.21 people in 2017 (0.3 percent), while households countywide have increased 3.2 percent from 2.77 people to 2.86 people. By 2040, household size in the study area is expected to increase to 3.33 people and be 14 percent higher than the rest of the county, which is projected to increase to 2.89 people per household.

2.1.2 Race and Ethnicity

The study area contains higher percentages of Hispanic or Latino and Black or African-American residents versus Contra Costa County, while having approximately half of the percentage of Asian residents and a much lower percentage of white residents versus the County (Table 2-1).

Less than 18 percent of CBTP residents were white, non-Hispanic or Latino, compared to about 45 percent countywide. The Black or African-American population is approximately 16 percent in the study area compared to 8 percent countywide. Since 2010, the Hispanic or Latino population has increased in both the study area and countywide, increasing at a higher rate in the study area; making up over 50 percent of the population of the study area compared to approximately 25 percent countywide. The white population is decreasing, with a drop from 25 percent in 2010 to 18 percent in 2017 in the study area.

2.1.3 Age Distribution

Age distribution in the study area is similar to Contra Costa County, although the senior population is smaller in the study area (see Figures 2-1 and 2-2). Approximately 28 percent, or around 27,000 people, of the study area's total population is under 18 years of age. This youth rate is higher than that of Contra Costa County, which is 23 percent. Figure 2-3 shows the percentage of persons under the age of 18 in the

Table 2-1 Race and Ethnicity in the Study Area and Contra Costa County

Race Category	2017 ACS % of Population		2010 Census % of Population	
	Study Area	Contra Costa County	Study Area	Contra Costa County
White	18%	45%	25%	49%
Black or African American	16%	8%	15%	9%
American Indian or Alaska Native	<1%	<1%	<1%	<1%
Asian	9%	16%	9%	14%
Native Hawaiian or Other Pacific Islander	1%	<1%	1%	<1%
Other	<1%	<1%	<1%	<1%
Two or More Races	5%	5%	3%	3%
Hispanic or Latino	51%	25%	47%	23%
Total	100%	100%	100%	100%

Source: 2006-2010 and 2013-2017 American Community Survey (ACS) 5-year estimates,. Note: Totals may not add up to 100% due to rounding.

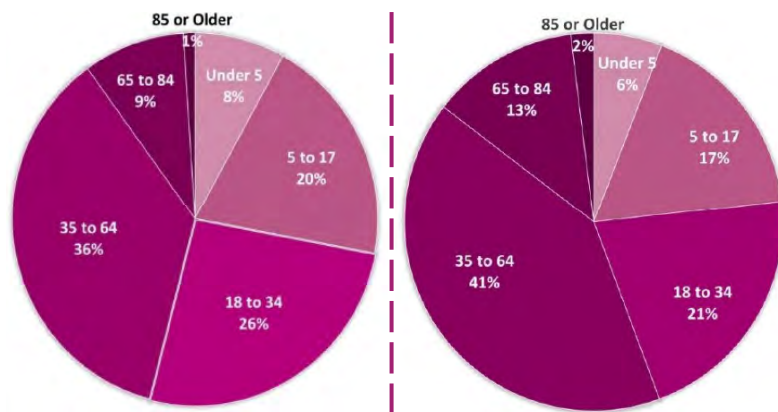


Figure 2-1 Age Distribution, Study Area (2017 ACS 5-Year Estimates)

Source: 2017 ACS 5-Year Estimates (2013-2017).

Figure 2-2 Age Distribution, Contra Costa County (2017 ACS 5-Year Estimates)

Source: 2017 ACS 5-Year Estimates (2013-2017).

study area by census tract. It reveals a greater concentration of young people in areas with access to regional transportation options, such as around Pittsburg/Bay Point and Pittsburg Center Bay Area Rapid Transit (BART) stations, and SR-4.

The senior population (65 years of age and older) in the study area constitutes approximately 10 percent of the total population, compared to 15 percent countywide. Figure 2-4 shows the percentage of seniors in the study area by census tract. By 2040, it is expected that the percentage of senior citizens (65 years and older) will increase to 19 percent of area’s population, while the youth population will decrease slightly.

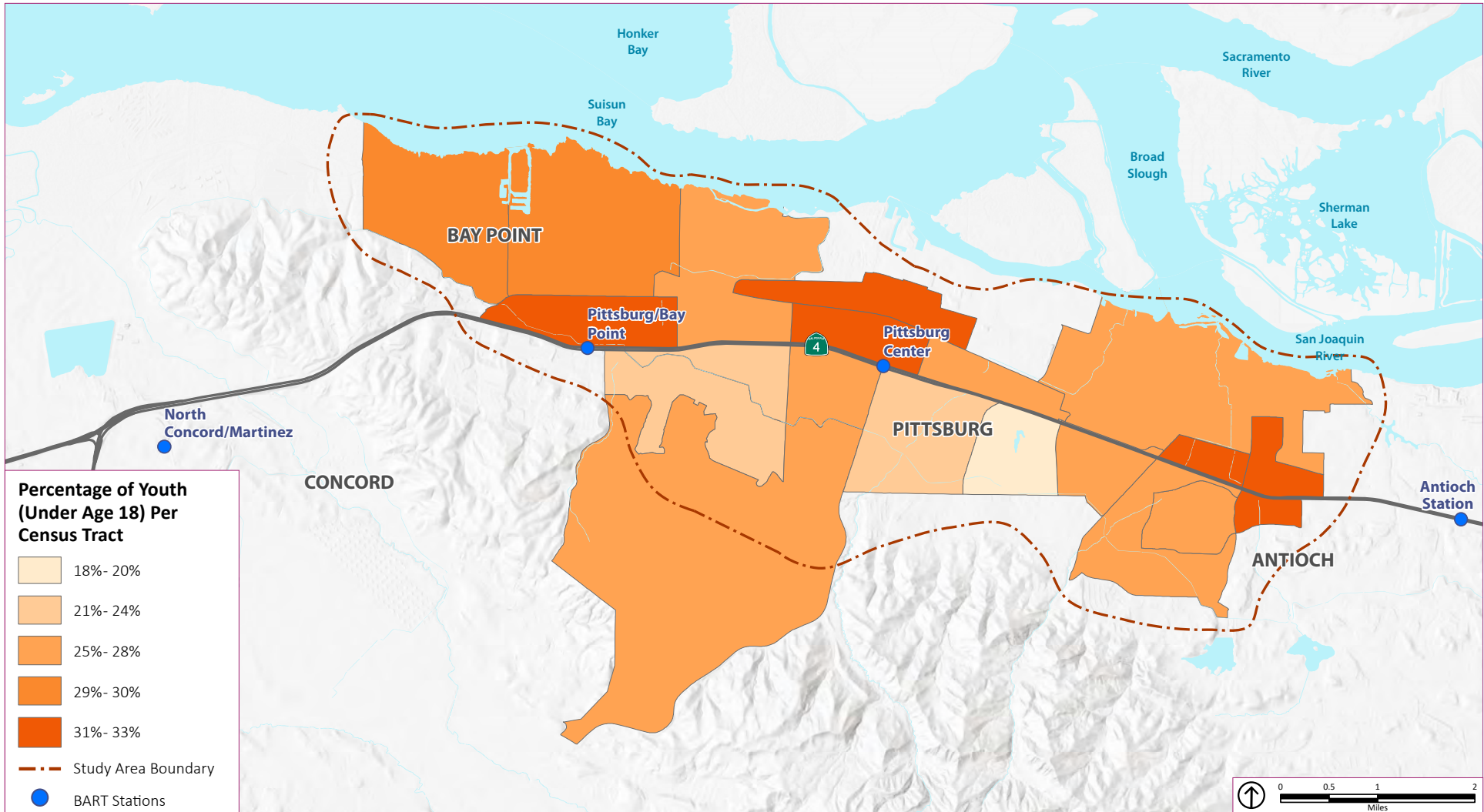


Figure 2-3 Population Under 18 Years of Age

Source: American Community Survey 5-Year Estimates, 2010 and 2017; Contra Costa County, 2018; PlaceWorks, 2019.

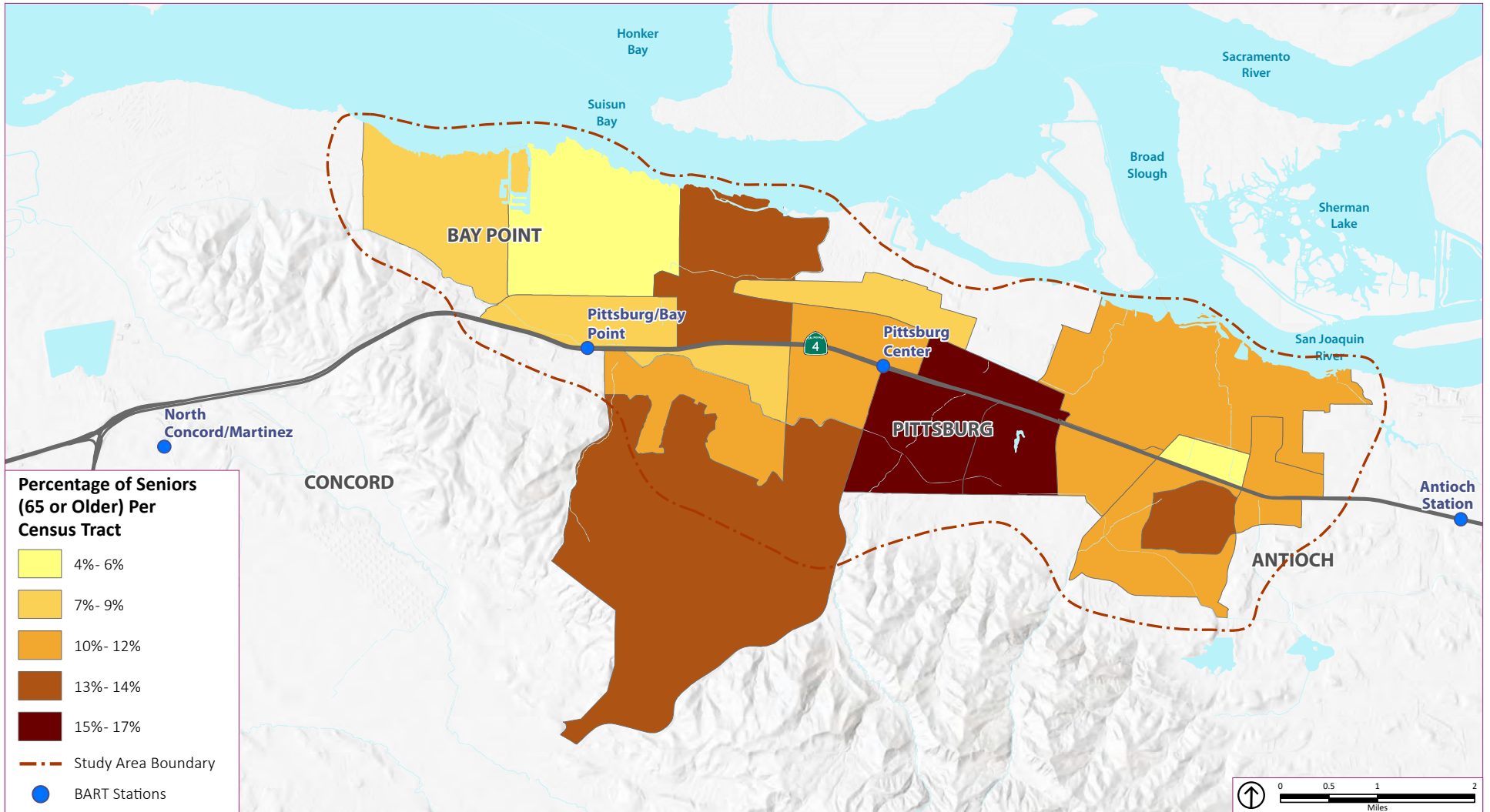
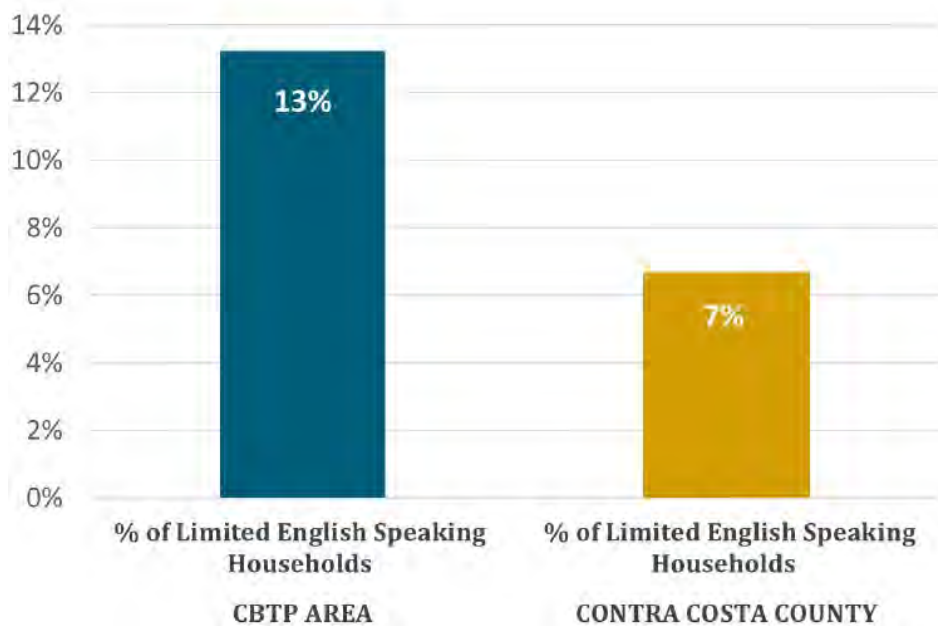


Figure 2-4 Population Age 65 and Over

Source: American Community Survey 5-Year Estimates, 2010 and 2017; Contra Costa County, 2018; PlaceWorks, 2019.

Figure 2-5 Limited English Proficiency, Study Area and Contra Costa County (2017 ACS 5-Year Estimates)

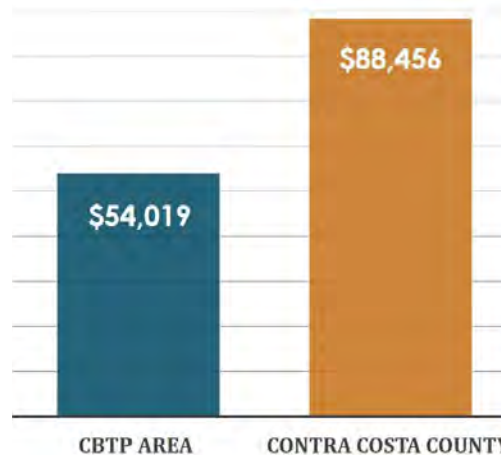


Source: 2017 ACS 5-Year Estimates (2013-2017).

2.1.4 Language and English Proficiency

In the Pittsburg/Bay Point Area CBTP, approximately 4,100 households (13 percent of total households) are designated as “Limited English-Speaking Households.” These are households in which all members 14 years and over speak a non-English language, with varying degrees of difficulty with English. This population segment is considerably larger in the study area relative to the countywide rate of 7 percent of total households (Figure 2-5).

Figure 2-6 Median Household Income, Study Area and Contra Costa County (2017 ACS 5-Year Estimates)



Source: 2017 ACS 5-Year Estimates (2013-2017).

2.1.5 Income and Poverty

According to 2017 ACS five-year estimates, the median household income in the study area is \$54,000, as compared \$88,500 for the entire county (Figure 2-6). The rate of increase of household income in the study area from 2010 to 2017 was also slower than the County. Census tracts in the study area with the lowest median household income (under \$50,000) are in western neighborhoods of Antioch and eastern neighborhoods of Pittsburg, as well as Bay Point, and are primarily located north of SR-4.

2.1.5.1 Poverty Status

The U.S. Census Bureau uses a set of income thresholds that vary by family size and composition to determine the population living in poverty. If a family’s total income is less than the poverty threshold, then that family and every individual in it is considered as living in poverty. To reflect high living costs and wages in the Bay Area, the poverty threshold used in the CBTP analysis is 200 percent of the federal poverty threshold. These 200-percent thresholds for the 2013 to 2017 ACS five-year estimates range from \$31,754 for a family of two to \$101,362 for the largest families (nine people or more). According to 2013 to 2017 ACS five-year estimates, approximately 44 percent of residents in the study area were living in poverty. This figure is significant when compared to 23 percent in Contra Costa County as a whole.

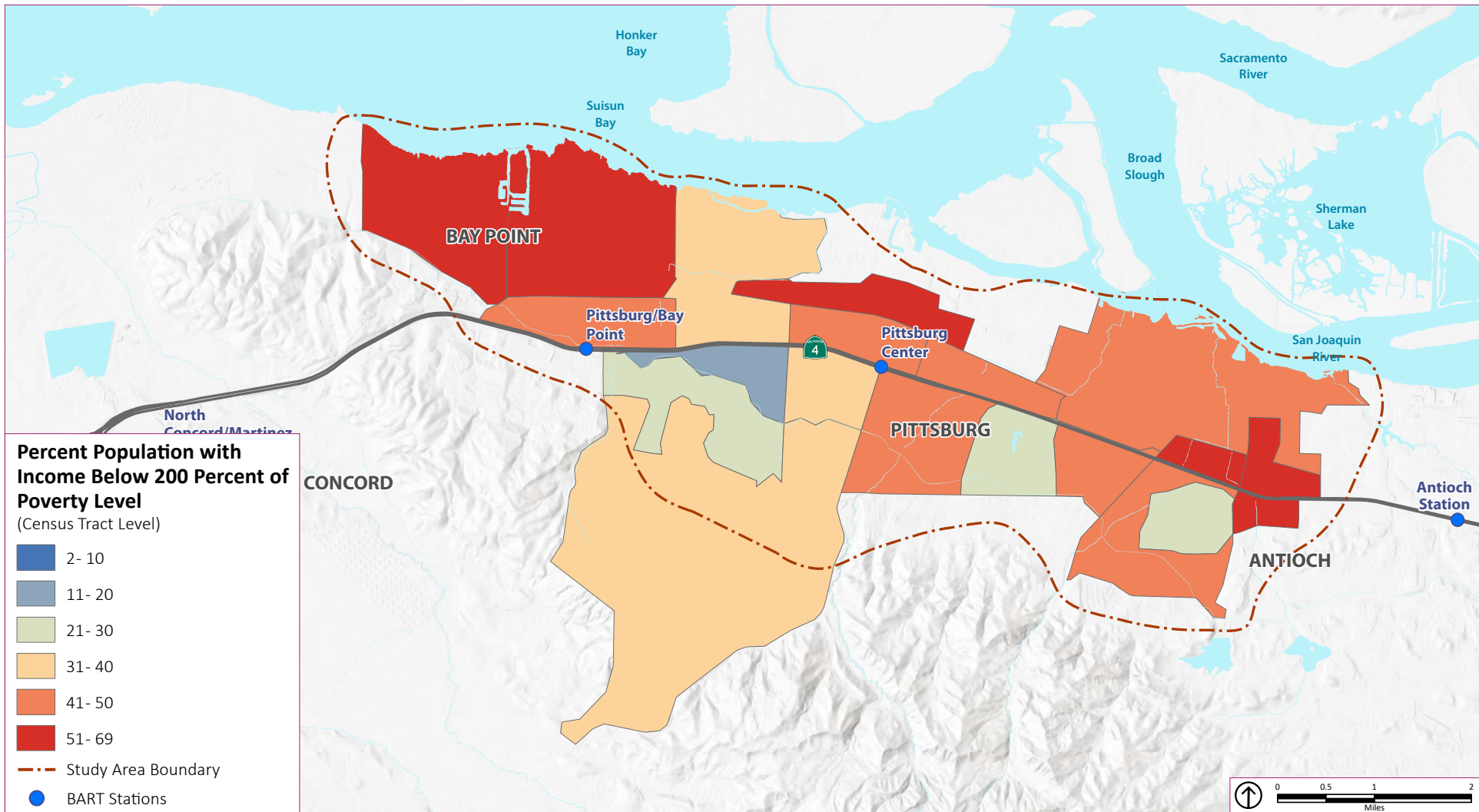


Figure 2-7 Population in Poverty (200% of Federal Poverty Level)

As shown in Figure 2-7, the study area has a relatively significant number of households with annual household income lower than the poverty threshold. Five census tracts in the study area exhibit over 50 percent of the population with income below 200 percent of the federal poverty level. These are primarily located in neighbor-

hoods in west Bay Point, such as Shore Acres and west neighborhoods in Pittsburg near Old Town, and west of Antioch in neighborhoods around Antioch High School. These neighborhoods all fall within the study area and are primarily located north of SR-4.

2.1.5.2 Unbanked Households

Unbanked households do not have an account at an insured institution or do not have an account but obtained non-bank alternative financial services in the past 12 months. According to Prosperity Now, 15 percent of households in the study area are unbanked.¹

2.1.6 Disability

The U.S. Census separates disability type into sensory (hearing- and sight-impaired) and physical disabilities. Both are considered significant barriers to mobility. As shown in Figure 2-8, populations with high rates of sensory disabilities are concentrated immediately southeast of the Pittsburg Center BART station and straddling both sides of the Pittsburg/Antioch boundary north of SR-4. Populations with high rates of physical disabilities (Figure 2-9) are also concentrated in the eastern portion of the study area, north of SR-4.

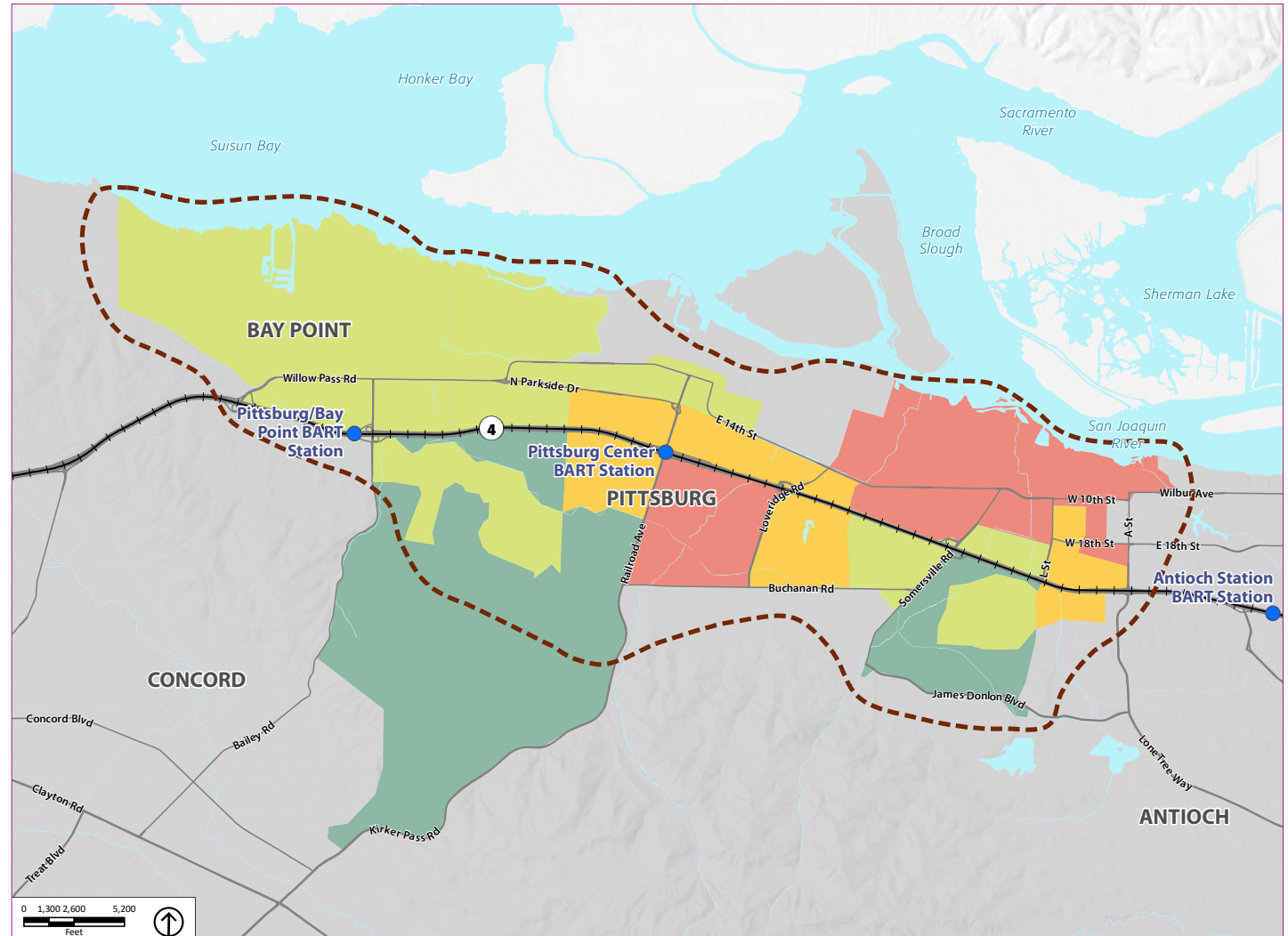
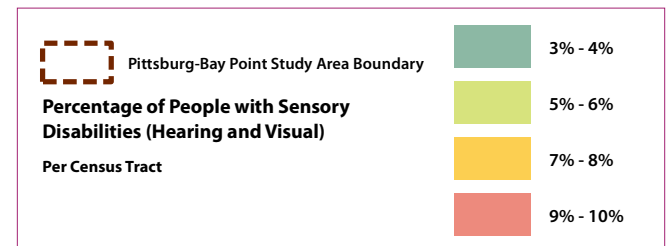


Figure 2-8 Percentage of People with Sensory Disabilities



Source: United States Census Bureau, S1810: Disability Characteristics, 2013-2017 ACS 5-Year Estimates.

1 Prosperity Now, formerly Corporation for Enterprise Development, 2014, Local Data Center Mapping Tool, <http://assetsandopportunity.org/localdata/>

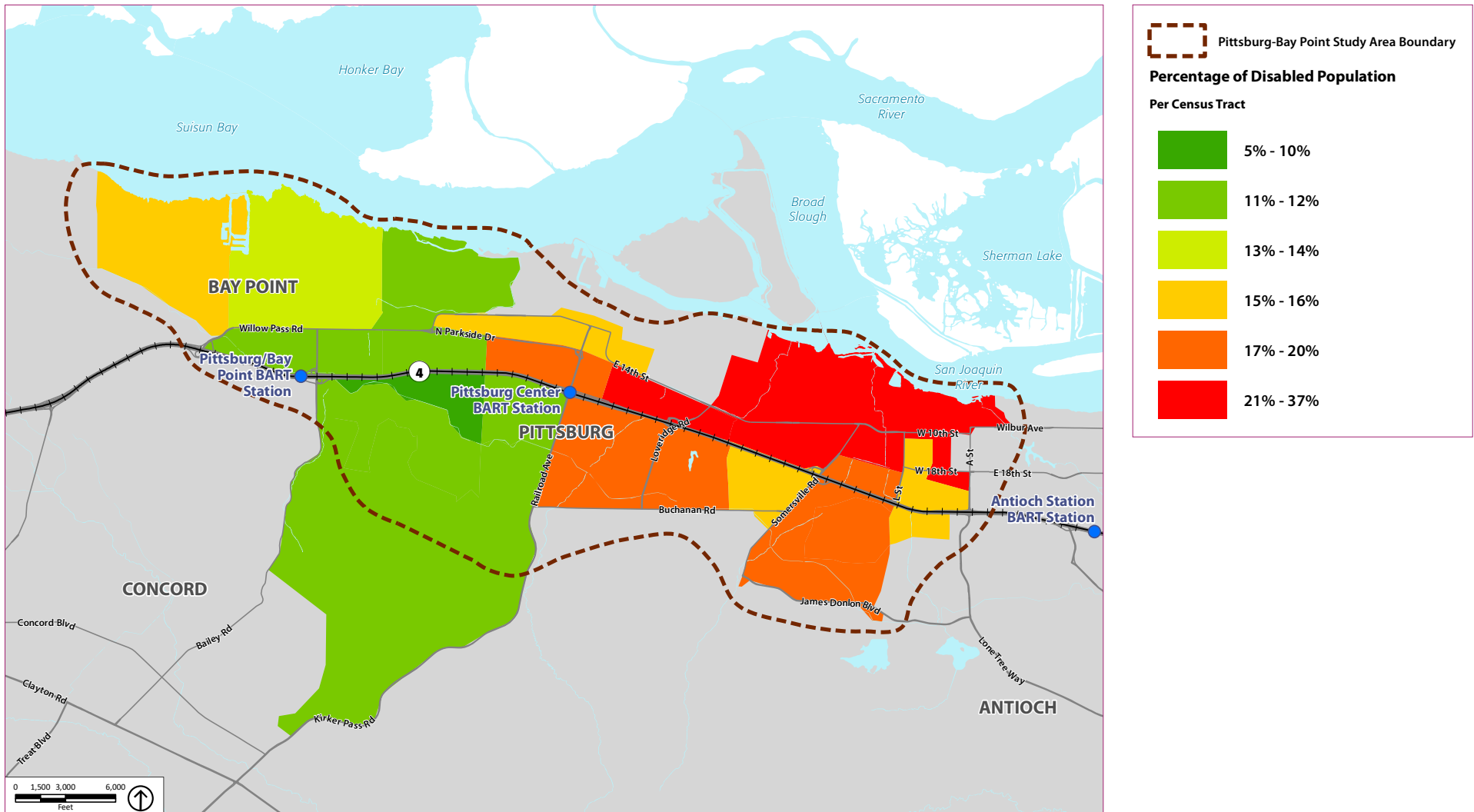


Figure 2-9 Percentage of People with Physical Disabilities

Source: United States Census Bureau, S1810: Disability Characteristics, 2013-2017 ACS 5-Year Estimates.

2.2 Transportation Patterns

The following sections describe current transportation and commute patterns in the CBTP study area and countywide.

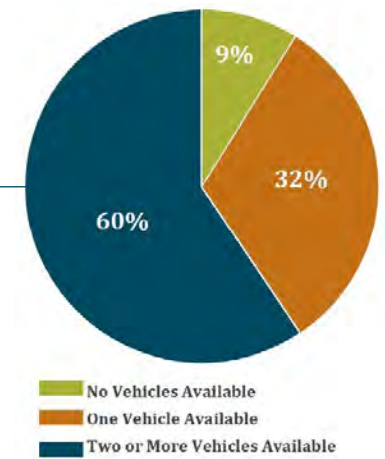
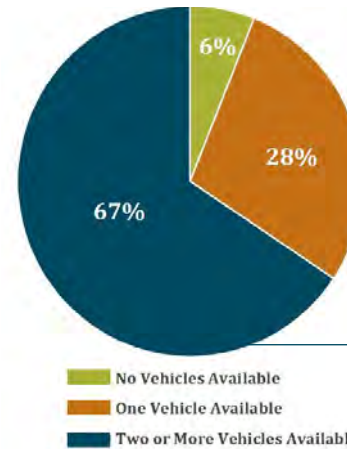
2.2.1 Vehicle Availability

The rate of household vehicle ownership is slightly less in the study area than Contra Costa County as a whole. As shown in Figures 2-10 and 2-11, the percentage of households without a private vehicle in the study area is 9 percent, as compared to 6 percent countywide. Similarly, 32 percent of households in the study area have one vehicle, compared to 28 percent countywide.

Figure 2-12 shows households with vehicle available by census tract for the study area. Areas with more households without vehicles generally correspond to areas with lower median household incomes. Communities of Concern (CoCs) in east Pittsburg and west Antioch have some of the highest concentrations of households without vehicles.

**Figure 2-10
Vehicle Availability, Study Area
(2017 ACS 5-Year Estimates)**

Source: 2017 ACS 5-Year Estimates (2013-2017).



**Figure 2-11
Vehicle Availability, Contra Costa
County (2017 ACS 5-Year Estimates)**

Source: 2017 ACS 5-Year Estimates (2013-2017).

Table 2-2 Mode of Travel to Work in the Study area and Contra Costa County

Means of Transportation to Work	2017 ACS (% of Total)		2010 Census (% of Total)	
	Study Area	Contra Costa County	Study Area	Contra Costa County
Car, Truck or Van	87%	80%	87%	82%
» Drove Alone	69%	68%	67%	70%
» Carpooled	18%	12%	20%	12%
Public Transportation	7%	10%	7%	9%
Bicycle	<1%	<1%	<1%	<1%
Walked	2%	2%	2%	2%
Other	2%	1%	2%	1%
Worked at Home	2%	6%	3%	6%
Total Workers 16 and Over	100%	100%	100%	100%

Source: 2006-2010 and 2013-2017 American Community Survey (ACS) 5-year estimates. Note: Totals may not add up to 100% due to rounding.

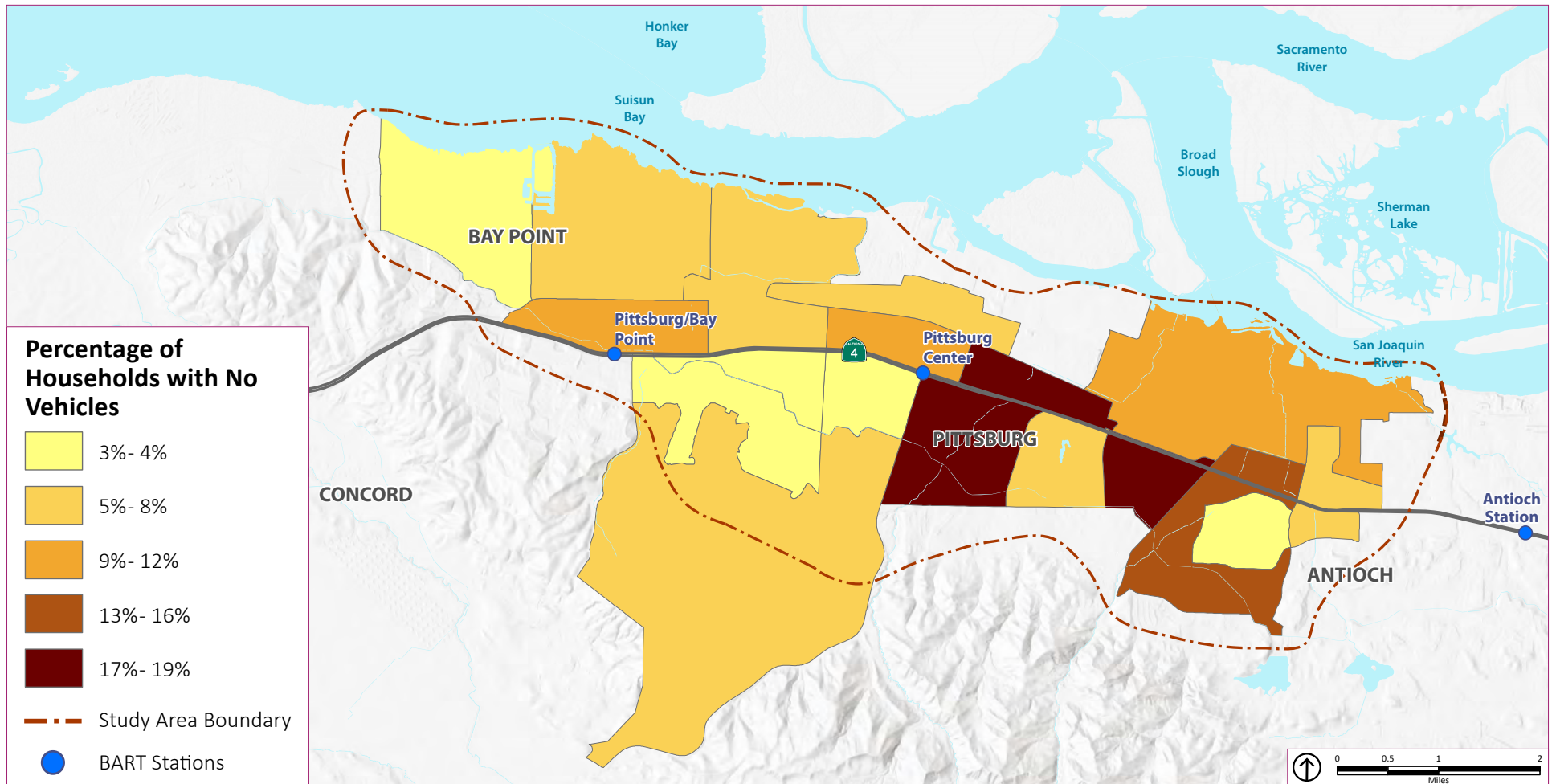


Figure 2-12 Household Vehicle Availability

2.2.2 Journey to Work

Out of about 41,000 workers aged 16 years and over in the study area, approximately 87 percent travel to work by car, truck, or van. Two-thirds of these workers drive alone (Table 2-2). Using a vehicle as the primary means of transportation to work is slightly less prevalent in the study area than countywide, the latter of which reported 69 percent of workers 16 and over primarily use a personal vehicle, while 18 percent carpool (share a vehicle).

The use of public transportation in the study area is less than countywide use. Rates of people commuting to work via public transportation remained steady in both the study area and the County from 2010 to 2017.

The rates of walking and bicycling as primary means of transportation to work are relatively low in the CBTP study area and countywide, at under 2 percent, respectively.

2.2.3 Long-Distance Commute

As evident in Figure 2-13, most residents in the study area generally experience long commutes—over 37 minutes, with the exception of one census block located directly south of the Pittsburg Center BART station, with a commute of less than 34 minutes. This is probably because neighborhoods in the study area are relatively lower income and do not have access to jobs near their homes.

2.3 Transportation Network

The following sections describe existing transit service and infrastructure in the study area and summarizes gaps in the transportation network in relevant countywide and local plans.

2.3.1 Transit Network

Existing transit facilities in the study area are shown on Figure 2-14.

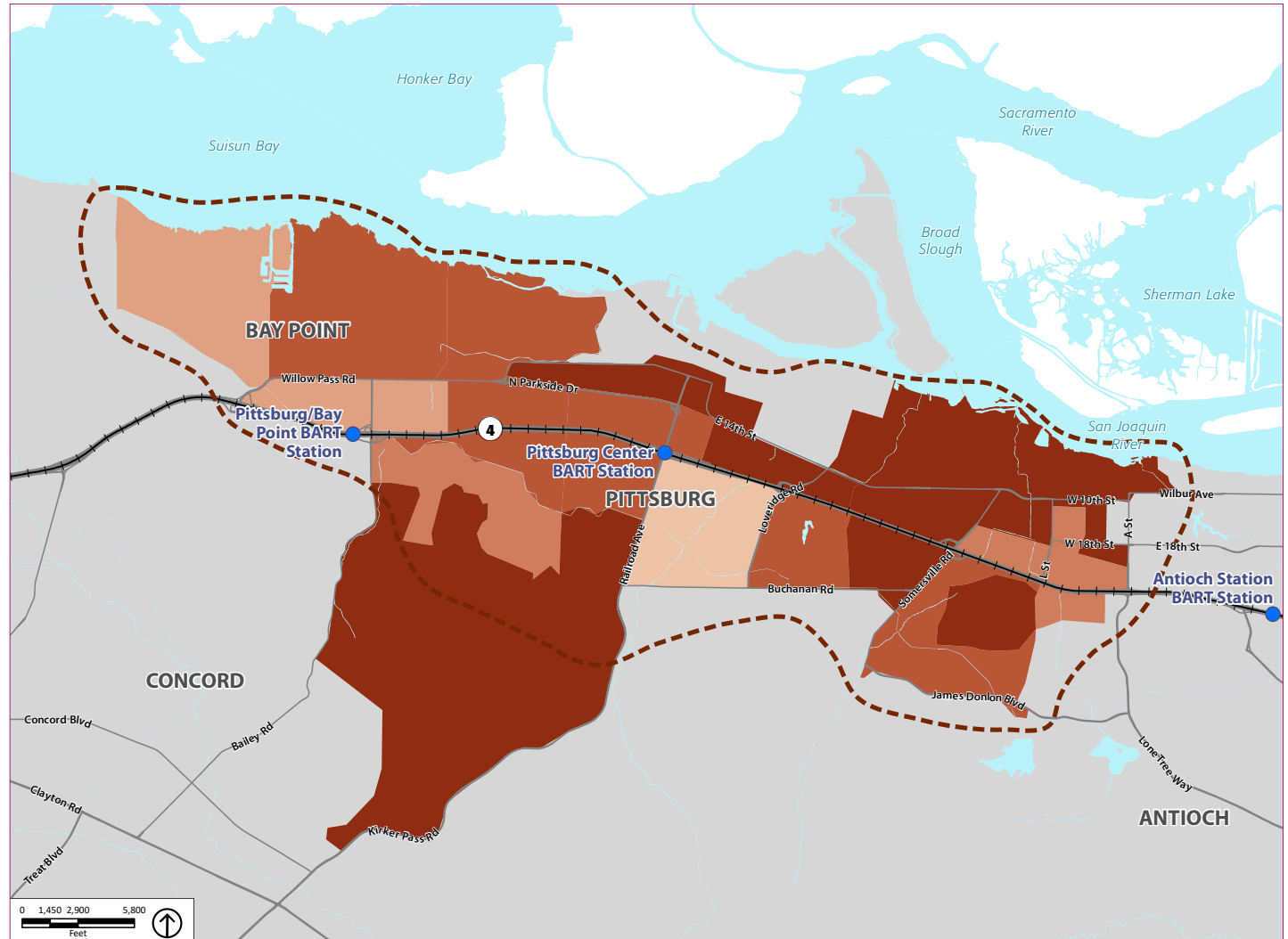
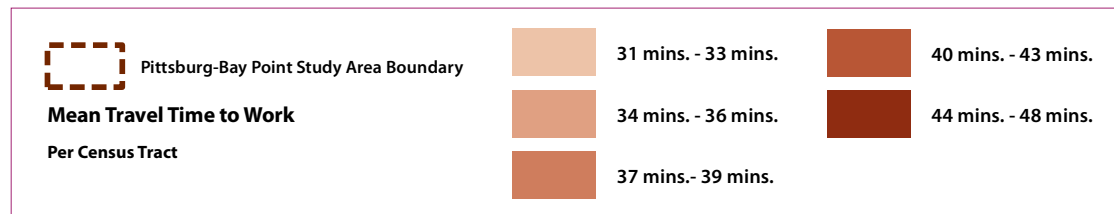


Figure 2-13 Long Distance Commute



Source: United States Census Bureau, S0801: Commuting Characteristics by Sex, 2013-2017 ACS 5-Year Estimates.

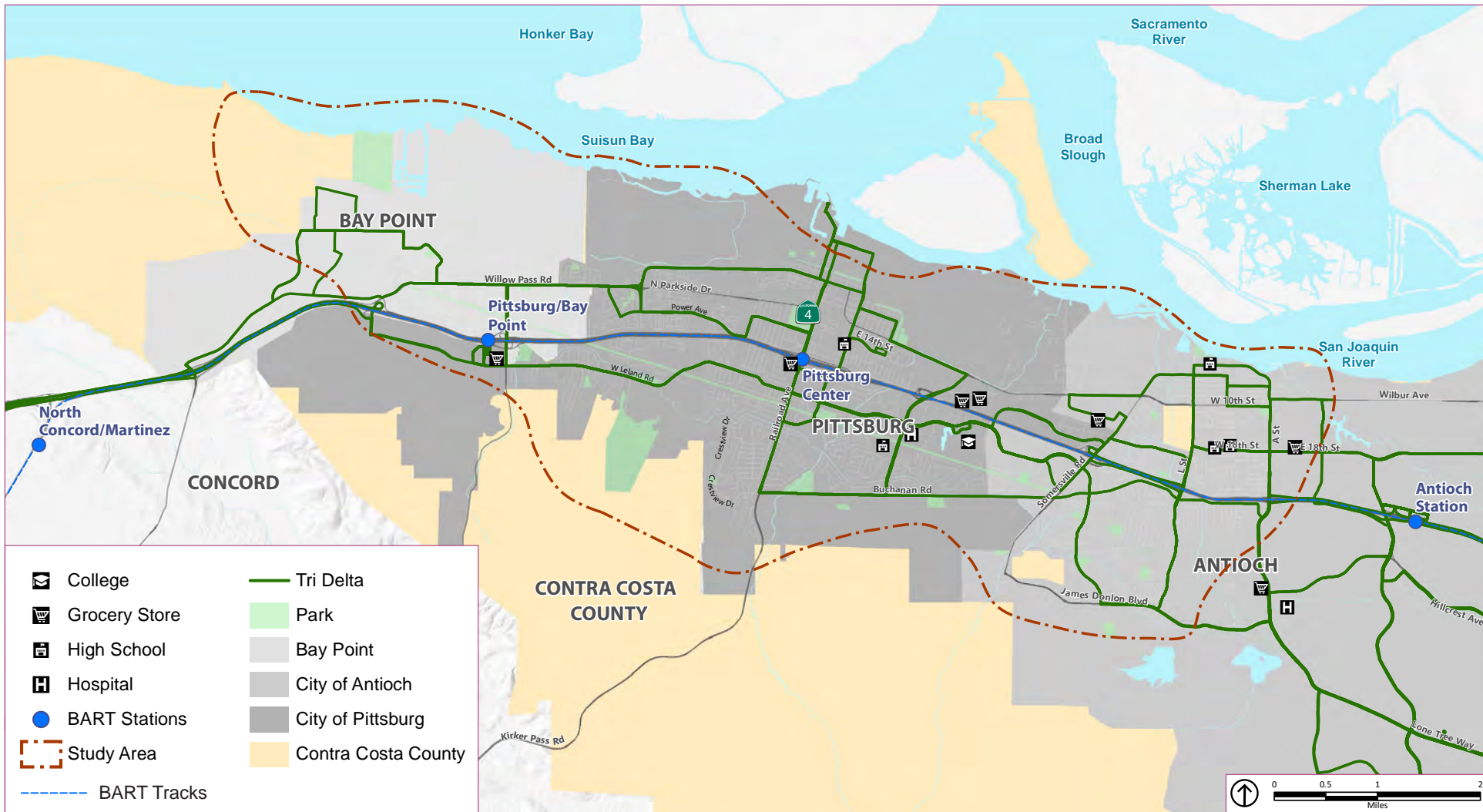


Figure 2-14 Existing Transit Facilities

Source: Contra Costa County, 2018; Fehr & Peers, 2019; PlaceWorks, 2019.

2.3.1.1 Rail

Rail services in the study area are provided by the Millbrae-Antioch BART line. Two BART stations (Pittsburg/Bay Point and Pittsburg Center) are in the western and central portion of the study area along SR-4. The Antioch BART station is located about one mile east of the study area boundary.

Amtrak service (Antioch-Pittsburg line) is available at the far-east end of the study area, adjacent to the San Joaquin River. These trains provide direct connections to Berkeley, Oakland, San Jose, Sacramento, and points beyond.

2.3.1.2 Bus

Local and intercity bus transit is provided primarily by Tri Delta Transit and County Connection. Tri Delta Transit serves the entire study area through 11 bus routes, which generally connect to BART stations and provide connectivity to the eastern area of Contra Costa County. County Connection operates local and express bus routes serving central Contra Costa County communities. County Connection Line 93X provides bus service from the Antioch BART station to Walnut Creek BART station via Kirker Pass Road and Buchanan Road. Finally, the City of Rio Vista's Delta Breeze Transit System operates a limited route from Rio Vista to the City of Antioch and Pittsburg / Bay Point BART Station.

2.3.1.3 Paratransit

Tri Delta Transit operates a paratransit transportation service that includes two public programs.

Americans with Disabilities Act (ADA) Paratransit transportation is a door-to-door service for individuals that meet the requirements and regulations of the ADA. It is limited to those who qualify based on the inability to use fixed-route transportation due to a disability or health constraint. Eligible riders may travel on paratransit systems throughout the nine counties of the Bay Area.

Through its second service, Senior Paratransit transportation, Tri Delta Transit provides local door-to-door public transportation to individuals who are 65 years of age or older. This transportation is limited to Tri Delta Transit's service area in eastern Contra Costa County and is subject to ride availability.



2.3.2 Bicycle Network

The existing and proposed bicycle network for the study area is shown on Figure 2-15. The existing network includes a mix of bicycle facility types and provides some connectivity with transit. The proposed bicycle projects in this figure are drawn from a review of the 2018 Contra Costa Countywide Bicycle and Pedestrian Plan and 2020 Pittsburg Moves, the City's Active Transportation Plan.

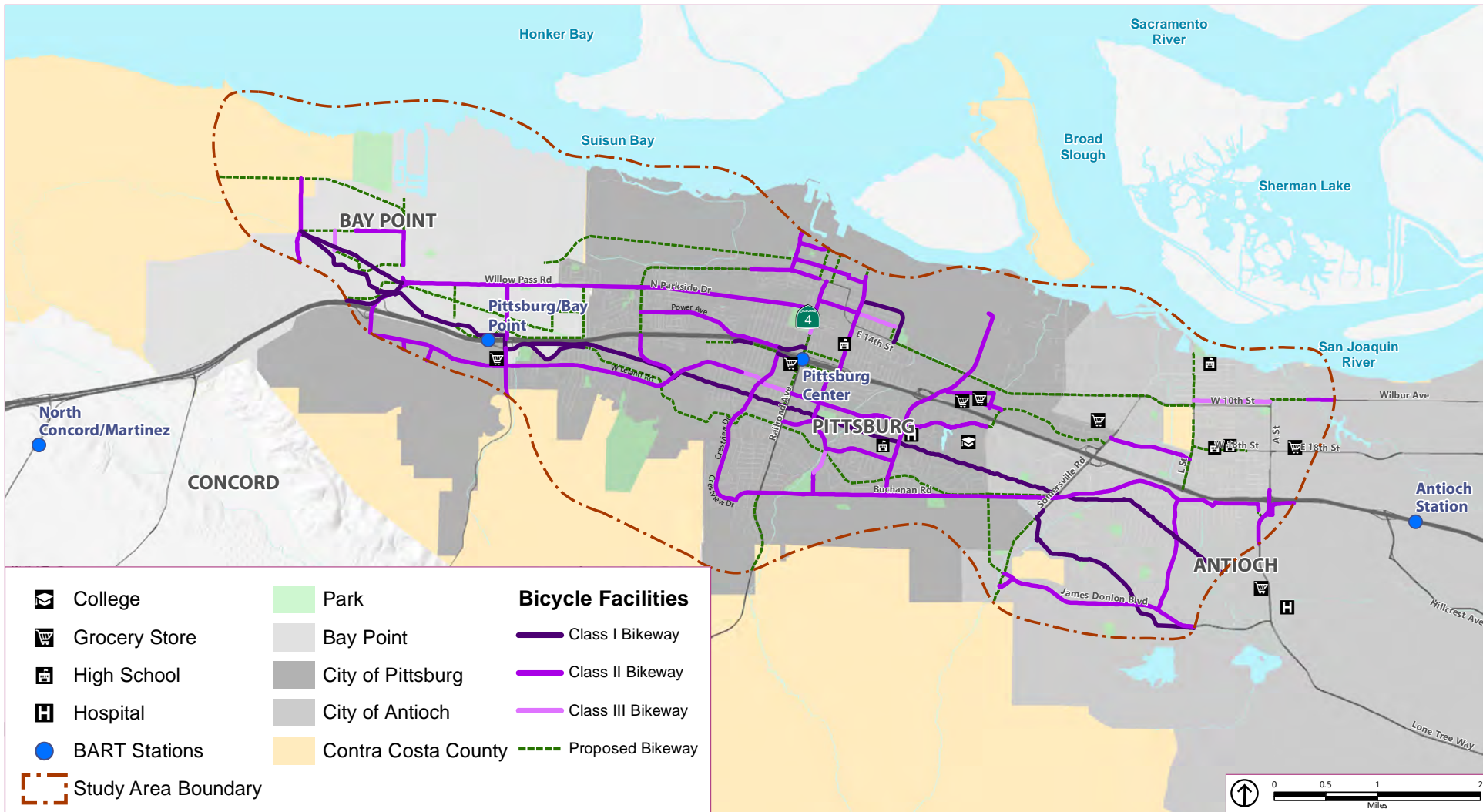


Figure 2-15 Existing and Proposed Bicycle Facilities

3. Previous Studies and Mobility Gaps

Agencies with jurisdiction in the Community-Based Transportation Plan (CBTP) study area have adopted studies that expose mobility gaps in the study area and establish projects, plans, and policies to fill those gaps. The following is a review of these previous studies and the transportation gaps they highlight.

The results of these studies are valuable to understanding and assessing the community input and recommendations outlined in Chapter 4 of this plan.

3.1 Local Studies

2002 Pittsburg/Bay Point BART Station Access Plan

The Pittsburg/Bay Point BART Station Access Plan was completed by the City of Pittsburg, Contra Costa County, and Bay Area Rapid Transit District (BART) in 2002. The purpose of the plan is to establish policies for orderly growth of the area, revitalization of activities in unincorporated Bay Point, and to capitalize on opportunities presented by the BART station.

Mobility Gaps Identified

- Access to the BART station by cyclists and pedestrians is impeded by car speeds on Willow Pass Road and lack of a Delta De Anza Trail linkage.
- Bailey Road, Willow Pass Road, and West Leland Road are too wide and facilitate high vehicle speeds.
- Lack of long-distance transit connections to East County from BART station.
- Lack of local transit connections to Pittsburg and Bay Point from BART station.
- Existing pedestrian network is discontinuous through station plan area.
- Delta De Anza Trail is underutilized as a bike and pedestrian facility, requiring use of Bailey Road to transition from the north to south side of State Route (SR-) 4.
- SR-4 is a barrier to pedestrian movement.

Antioch General Plan 2003 Circulation Element

The City of Antioch General Plan Circulation Element consists of goals and policies related to the circulation network and transportation options in Antioch. The Circulation Element “seeks to achieve and maintain a balanced, safe, problem-free transportation system.”¹ The element focuses on vehicle circulation, intersection congestion, and non-auto mobility.

Mobility Gaps Identified

- Lack of connectivity to neighboring cities by bike and pedestrian networks, particularly along Fitzuren Road, Contra Loma Boulevard to G Street.
- High levels of congestion and inadequate traffic-control devices.
- Through traffic in residential areas that creates hazardous pedestrian environments.
- Lack of actuated traffic signals that correspond with bicycle routes.

City of Pittsburg Railroad Avenue Specific Plan 2009

The Railroad Avenue Specific Plan is centered within the CBTP study area and is composed of Communities of Concern (CoCs). The Transportation and Circulation chapter outlines improvements for the area surrounding SR-4 and Railroad Avenue to create a network of transportation connections linking the Transit Village to the surrounding sub-areas and region.

Mobility Gaps Identified

- Sidewalk gaps (narrow sidewalks) along Railroad Avenue.
- Crosswalks inconsistent with Americans with Disabilities Act (ADA) standards.
- Lack of well-delineated wayfinding, signage, shelters, benches, lighting, and real-time LED signs displaying bus schedules, hinder the “easy-to-use” public transit system.

¹ City of Pittsburg, General Plan 2020, Transportation Element, page 7-25.



- Lack of connectivity between Tri Delta buses, shuttles, public parking areas, and eBART Station.
- Lack of local transportation connections between Specific Plan Area, Old Town Pittsburg, Los Medanos College, and other destinations.
- Underperforming Tri Delta and County Connection bus service during peak hours.
- Inadequate or no bike facilities on Railroad Avenue south of Frontage Road, Leland Road west of Railroad Avenue, Power Avenue west of Railroad Avenue, and Railroad Avenue north of California Avenue.



2011 Pittsburg/Bay Point BART Master Plan

The Pittsburg/Bay Point BART Master Plan is intended to guide the development of 50 acres of land adjacent to the BART station over 20 years. It describes allowed land uses and densities, transportation and circulation improvements, pedestrian pathways and improvements, urban design guidelines and standards, infrastructure development and financing, and phasing and implementation strategies and guidelines. The plan is a response to, among many other factors, a series of mobility challenges that commonly impact communities.

Mobility Gaps Identified

- Impacts to healthy lifestyles resulting from lack of active transportation options and automobile hazards.
- Lack of pedestrian-friendly streetscapes in the existing circulation network surrounding the BART station.
- Lack of non-auto access to the BART station.

Pittsburg General Plan 2020 Transportation Element

The Pittsburg General Plan 2020 Transportation Element is a policy framework of standards for increased capacity and development of an integrated multi-modal system. It sets forth broad policies and standards related to the City's street system, level of service, transit system, pedestrian routes, and bikeways.

Mobility Gaps Identified

- Lack of adequate and secure bicycle facilities at employment sites, public facilities, and multifamily residential complexes.
- Poor vehicle signage at Railroad Avenue/SR-4 interchange, to help notify vehicles of incoming bicyclists.
- Required bikeway improvements along multiple roadway segments within the CBTP study area, including, but not limited to:
 - California Avenue from Loveridge Road to Markstein Drive
 - Contra Costa Canal Trail from County/Bay Point to Antioch city limits
 - Central Avenue from Railroad Avenue to Harbor Street
 - Frontage Road from Los Medanos School to Crestview
 - Harbor Street from Buchanan Road to Contra Costa Canal
 - Leland Road from Railroad Avenue to Bailey Road
 - Railroad Avenue from SR-4 to East Eight Street
 - Railroad Avenue from Frontage Road to Delta De Anza Trail
 - Range Road from West Leland Road to Willow Pass Road
 - San Marco Boulevard from West Leland Road to Rio Verde Circle
 - San Marco Boulevard from Rio Verde Circle to Bailey Road
 - School Street from Railroad Avenue to Harbor Street
 - Seventeenth Street from Davi Avenue to Parkside Elementary School
 - SR-4 Frontage Road from Crestview Avenue to Railroad Avenue
 - SR-4 (north of) from Railroad Avenue to Range Road
 - Stoneman Avenue from Loveridge Road to Harbor Street
 - West Leland Road from Avila Road to Bailey Road
 - West Leland Road from Burton Avenue to Railroad Avenue
 - Willow Pass Road from West City Limits to Range Road.

Bailey Road/State Route 4 Interchange Pedestrian and Bicycle Project

This project will improve safety and circulation of pedestrians and bicyclists along Bailey Road through the SR-4 interchange. As designed, it will provide continuous sidewalks and bike lanes through the SR-4 interchange.

Mobility Gaps Identified

- Substandard and dangerous non-auto mobility infrastructure at a major SR-4 interchange.

3.2 Countywide Studies

To better understand gaps in the transportation network, the following policy documents were evaluated to identify proposed transportation projects and plans in the study area.

Contra Costa Safe Routes to School, Understanding Needs Moving Ahead 2016

The Safe Routes to School (SR2S) Needs Assessment is a comprehensive assessment of existing SR2S projects and programs occurring throughout Contra Costa County. The purpose was to understand SR2S activities throughout Contra Costa County, estimate funding needed to support future SR2S capital improvements and programs, provide resources to local communities as they plan, design, and implement improvements, and offer technical assistance to school sites.

The assessment estimated the unmet countywide need for future SR2S capital improvements at \$243 million, and the unmet countywide cost of all SR2S programs at \$58 million annually.

Mobility Gaps Identified

- Roadway conditions surrounding many county schools are unsafe for student cyclists and pedestrians.
- Funding for required SR2S improvements and programs are largely unmet.



Contra Costa Countywide Transportation Plan 2017

The Contra Costa Transportation Authority (CCTA) regularly updates the comprehensive Countywide Transportation Plan (CTP), a long-range policy document that identifies transportation goals and projects at all levels of geography, from regional coordination to local assistance. The CTP was most recently updated in 2017. It includes a 10-year project list of cost-adjusted projects identified in the Metropolitan Transportation Commission (MTC)/Association of Bay Area Governments' (ABAG's) regional planning blueprint, Plan Bay Area 2040. The CTP allows local municipalities to identify potential projects aimed to mitigate existing transportation gaps. The CTP outlines transportation challenges associated with countywide growth and establishes overall strategies and programs to overcome these challenges. The CTP includes potential projects in the CBTP study area.

Mobility Gaps Identified

- Inadequate pedestrian and bicycle infrastructure on Bailey Road adjacent to SR-4, including in Pittsburg.
- Unsafe turning lanes from Auto Center Drive to Loveridge road unsafe for pedestrians and cyclists.
- Lack of proper lighting, bike lanes, insufficient bus stops, and wider street segments along L Street.

Contra Costa Countywide Bicycle and Pedestrian Plan 2018

CCTA prepared the 2018 Countywide Bicycle and Pedestrian Plan (CBPP) to increase walking and cycling, improve bike and pedestrian safety, and develop a functional bike and pedestrian network throughout the County. The CBPP establishes projects to fill gaps in the pedestrian network within a series of Pedestrian Priority Areas, including those located within a quarter-mile from a school throughout the County, covering a substantial portion of the study area. These improvements include accessible walkways, functional curb ramps, safe crossings, traffic calming, direct connections, and streetscape improvements. Similarly, the CBPP includes a network of existing and proposed low-stress bikeways in the County that would benefit from bicycle infrastructure improvements.

Mobility Gaps Identified

Bikeways targeted for improvements include the following, as well as pedestrian facility design improvements:

- Port Chicago Highway through Bay Point and Pittsburg
- Willow Pass Road
- Harbor Street
- Bailey Road
- Wilbur Avenue connecting Pittsburg to Antioch
- L and A Streets in Antioch



3.3 Ongoing Studies

City of Pittsburg Active Transportation Plan

The City of Pittsburg published a draft Pittsburg Moves Active Transportation Plan in August 2020. According to the project website, the Plan will establish a “community-driven, equitable, and innovative vision for the future of walking and biking in Pittsburg.”²

The current draft plan includes a series of projects and plans that indicate mobility gaps in the City, some of which intersect the CBTP study area.

² City of Pittsburg, Pittsburg Moves website, <https://pittsburg-moves.com/>, accessed May 2, 2020.

Mobility Gaps Identified

As noted in the online Introduction to the Plan, the City’s “suburban roadway network and railroad and major infrastructure, present major barriers to connectivity.”³ Key barriers include:

- High stress bikeways on Railroad Avenue, 14th Street, California Avenue, and Willow Pass Road.
- Sidewalk gaps on large segments of North Parkside Drive, East 14th Street, Willow Pass Road, and Harbor Street.
- Pedestrian/bicycle high-injury corridors on West Leland Road, Railroad Avenue, and Harbor Street.

Contra Costa County General Plan Update

An update to all nine elements of the Contra Costa County General Plan is currently underway. Envision Contra Costa 2040 includes the Transportation and Circulation Element, which will describe existing and proposed roadways and other means of transportation, address reducing traffic congestion, and analyze traffic conditions so that existing and projected circulation needs may be met. A Transportation Baseline Report completed for the update identifies key barriers to mobility in the CBTP study area.

Mobility Gaps Identified

- High rate of bicycle collisions in Bay Point.
- High rate of pedestrian collisions in Bay Point.
- Railroad infrastructure running east to west through the CBTP study area.

³ City of Pittsburg, Pittsburg Moves website, <https://pittsburg-moves.com/>, accessed May 2, 2020.

3.4 Thematic Mobility Challenges

A series of thematic challenges emerges from the evaluation of the previous 11 studies, which span 18 years and cover the three-jurisdiction CBTP study area. Many of these challenges are reflected in the community input collected during the preparation of this plan and were identified by the Project Working Groups and Steering Committee during plan discussions. They include:

1. Fragmented, unsafe bicycle and pedestrian networks in Antioch, Pittsburg and Bay Point.
2. Dangerous, automobile-oriented design of most major corridors in Bay Point, Pittsburg, and Antioch, including:
 - Bailey Road
 - Willow Pass Road
 - West Leland Road
 - Port Chicago Highway
 - Harbor Street
3. Barriers and dangers to non-auto travel presented by SR-4 and associated interchanges.
4. Inadequate non-automobile access to, and associated facilities at, BART stations.
5. Inadequate transit infrastructure, including bus stops and shelters.
6. Lack of non-auto connectivity between BART stations.
7. Student pedestrians and cyclists negotiate unsafe conditions to and from many public schools.

4. Outreach and Engagement Summary

All Community-Based Transportation Plan (CBTP) recommendations are based on a community coordination campaign consistent with Metropolitan Transportation Commission (MTC) Guidelines. The Pittsburg/Bay Point CBTP study area encompasses Communities of Concern (CoCs) in unincorporated Bay Point, small unincorporated areas of Contra Costa County west of Bay Point and in pockets of Antioch, as well as in the cities of Pittsburg and Antioch. It is defined by multiple distinct neighborhoods and has a population of over 93,000. The project and plans recommended in this CBTP are the result of an outreach and engagement effort intended to reach challenged communities in geographic and demographic cross-sections of the study area.

Outreach and engagement included the following:

1. Oversight by two advisory groups
2. Development of a Contra Costa Transit Authority (CCTA)-approved Outreach Strategy
3. Creation and distribution of awareness materials
4. Feedback at County planning events
5. Interactive mobile “pop-up” workshops at various events in the study area
6. In-depth interviews with community members
7. Meet-and-greet feedback sessions with community resource leaders

All materials and raw results of the outreach and engagement process are included in Appendix B to this Plan. Not all non-quantitative community feedback collected during the outreach process, including interview responses, map-based inputs, and written responses translated directly into the lists of recommended project and plans in this CBTP.

4.1 CBTP Advisor Groups

4.1.1 Steering Committee

As noted in Chapter 1, a CBTP Steering Committee (SC) was convened to ensure an inclusive outreach process, provide direction on reaching specific groups in the com-

munity, and prioritize outreach opportunities. Members of the SC for the Pittsburg/Bay Point CBTP included:

- Vincent Manuel, Deputy Chief of Staff, Representing Supervisor Federal Glover
- Joy Motts, Mayor Pro Tem, City of Antioch
- Debra Mason, Chair, Bay Point Municipal Advisory Council
- Tim Leong, Director of Communication, Los Medanos College
- Alejandra Plascencia, East County Community Liaison, First 5 Contra Costa

4.1.2 Project Working Group

A Project Working Group (PWG) of local jurisdiction and transit agency staff convened numerous times throughout the outreach process to review the Outreach Strategy, help identify stakeholders in various CoCs, and provide practical guidance on coordinating outreach events and stakeholders. Members of the PWG for the Pittsburg/Bay Point CBTP included:

- Martin Engelmann, Deputy Executive Director, Planning, CCTA
- Matt Kelly, Senior Transportation Planner, CCTA
- Jaclyn Reyes, Administrative Assistant, CCTA
- James Hinkamp, Associate Transportation Planner, CCTA
- Mary Halle, Senior Civil Engineer, Contra Costa County (CCC) Public Works
- Bruce “Ole” Olsen, Pittsburg Citizen
- Vincent Manuel, Deputy Chief of Staff, CCC Supervisor District V
- Colin Piethe, Planner, CCC Department of Conservation and Development
- Denise Milosevich, Senior Health Education Specialist, CCC Health Services
- Kamal Parks, Senior Planner, BART
- Steve Ponte, Chief Operating Officer, East Contra Costa Transit Authority (ECCTA)
- Arlene Roberts, Administrative Analyst III, City of Antioch
- Tamany Brooks, Chief of Police, City of Antioch
- Agustin Diaz, Manager of Planning and Grants, ECCTA
- Paul Reinders, City Traffic Engineer, City of Pittsburg
- Clayton Johnson, Senior Health Education Specialist, CCC Health Services

4.2 Outreach Strategy

Per a CCTA- and SC-approved Outreach Strategy, public outreach was organized into three phases corresponding with key milestones in the CBTP process. These are summarized as follows.

Phase 1: Establish Area Overview and Preliminary Community Needs

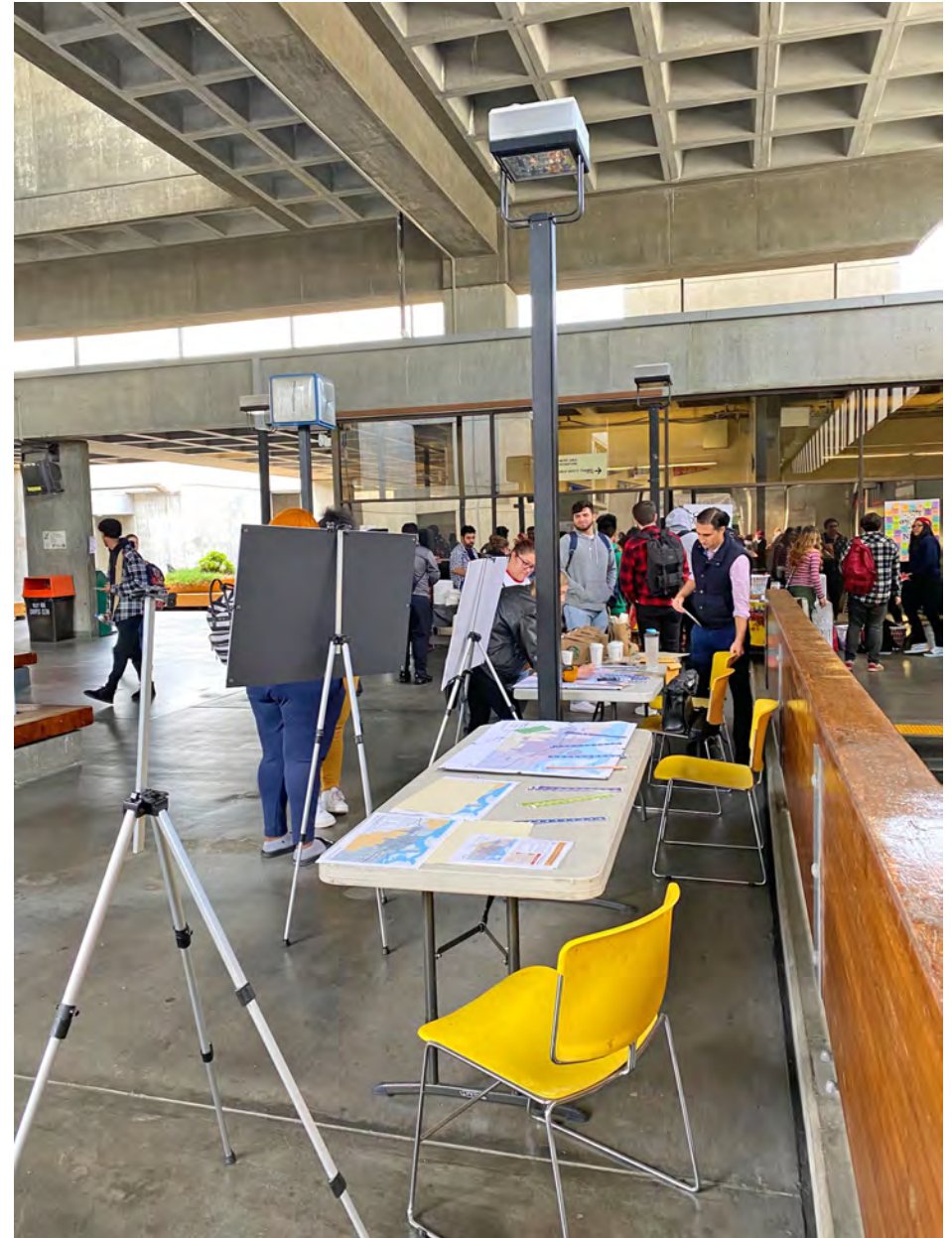
Phase 1 was designed to identify transportation-related challenges faced by those who live, work, and/or access services within various study area CoCs. Outreach during this phase consisted of establishing lists of community stakeholders and events for outreach opportunities and developing a flexible Outreach Awareness Notice template (see Section 4.3). The CBTP team met with the PWG three times to review the study area and existing demographics, discuss early outreach strategies and SC formation, and review the draft Outreach Strategy. The CBTP team also met with the SC to introduce and review the draft Outreach Strategy.

Phase 2: Solicit Community Recommendations

In Phase 2, the CBTP team approached stakeholders and potential community event hosts identified in Phase 1. On-the-ground outreach was performed in this phase. Members of CoCs in the study area were solicited for proposed projects, plans, and ideas to improve mobility. CBTP team members attended community events focused on challenged communities and organized “pop-Up” workshop and meet-and-greet feedback sessions. Interactive exercises and one-on-one interviews were used to gather detailed input from a diverse range of participants. Community feedback collected in Phase 2 is the main source of CBTP recommendations presented in Chapter 5 of this plan.

Phase 3: Analyze Potential Programs and Projects

During Phase 3, the CBTP team organized the community-identified mobility challenges and recommendations and worked with stakeholders, CCTA, and the PWG to develop criteria for evaluating and prioritizing the feedback. The CBTP team worked with PWG members to coordinate potential CBTP recommendations with existing planned mobility projects, “ground-truth” recommendations, and assess funding and implementation options for each. A draft CBTP was reviewed by both the PWG and SC, followed by PWG and SC meetings to discuss revisions. The final CBTP was developed based on these revisions and discussions.

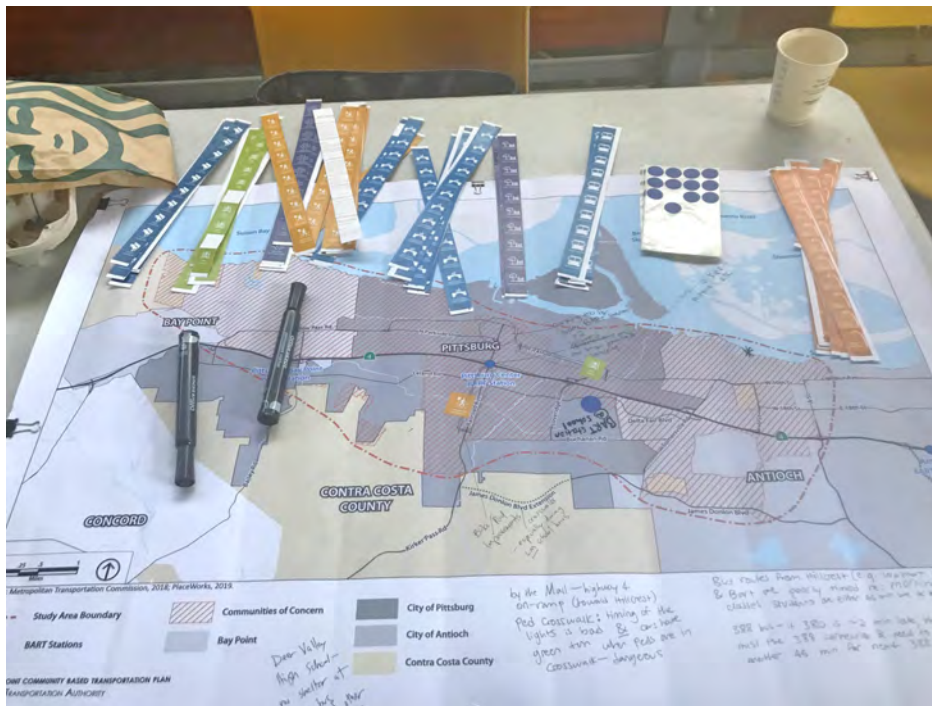


4.3 Outreach Awareness

4.3.1 Flier Noticing

Prior to engagement events, the CBTP team developed a graphics-rich Outreach Awareness Notice in English (see Figure 4-1) and Spanish (see Figure 4-2) to notice the public of outreach events in various CoCs. The flier was adapted to each event and posted digitally on websites of agencies and stakeholders involved in the project. The notice was continually updated throughout the outreach process to reflect the status of the project.

The Awareness Notice was also adapted for use as a hard-copy flier for posting at major transit locations and other organizations. Hard-copy fliers were posted on Tri Delta buses and bus stops, senior centers, community shuttles, and BART stations.



4.4 Outreach Results

The following sections summarize the methods, participation rates, and results of CBTP outreach events. The locations of all outreach and engagement events are shown on Figure 4-3.

4.4.1 County Planning Events

Contra Costa County is currently updating its General Plan, a process titled *Envision Contra Costa 2040*. The update will establish transportation goals, policies, and implementation plans for multiple unincorporated communities within the CBTP study area. The CBTP team attended the following outreach events associated with this process to gauge community mobility priorities:

- Contra Costa County General Plan Update Community Meeting 2 for Bay Point. This meeting was held on August 12, 2019, at the Ambrose Recreation and Park District office.
- Contra Costa County General Plan Update Community Meeting 3 for Bay Point. This meeting was held on January 30, 2020, at the Ambrose Recreation and Park District office.

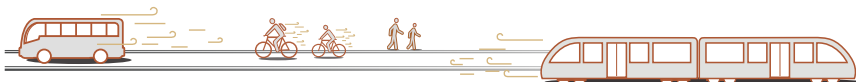
Unlike CBTP pop-up events (described herein), these events were not intended to reach specific mobility-challenged groups. As such, the CBTP team did not solicit feedback directly from participants but coordinated with the General Plan Update team for insight into individuals, events, and organizations to partner with, and participated in discussions and exercises about perceived County-wide mobility gaps. Awareness information and fliers about upcoming CBTP outreach events were also distributed.

4.4.1.1 Participation

Fifteen members of Bay Point attended Meeting 2, and 30 community members attended Meeting 3, as shown in Figure 4-4.

Figure 4-1 CBTP Outreach Flyer

HELP IMPROVE TRANSPORTATION OPTIONS IN PITTSBURG, BAY POINT AND ANTIOCH!



PARTICIPATE IN THE PITTSBURG-BAY POINT COMMUNITY-BASED TRANSPORTATION PLAN

The Pittsburg-Bay Point Community-Based Transportation Plan (CBTP) is an opportunity to improve transportation options and quality of life for neighborhoods in Pittsburg, Bay Point, and Antioch.

The Plan will bring residents, community organizations and transportation agencies together to identify transportation challenges and develop solutions.

The CBTP will:

- Evaluate transportation gaps and barriers identified by the community
- Develop solutions & projects to address these challenges
- Identify possible funding sources to pay for these solutions & projects

How To Participate

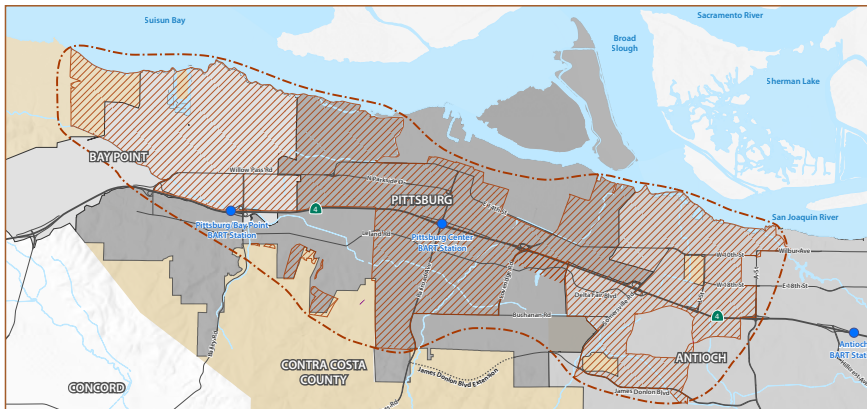
Text-based mobile survey:

Please take a few moments to answer our short mobile phone survey about your transportation habits and challenges. To get started, text "CBTP" to (925) 378-4338

Project webpage:

Go to www.ccta.net to learn more about the project, project partners and community events!

Plan Study Area



Study Area	Communities of Concern	City of Pittsburg
BART Stations	Bay Point	City of Antioch
		Contra Costa County


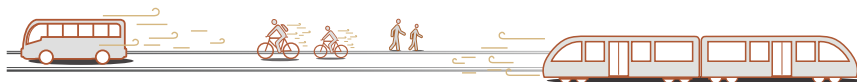


Figure 4-2 CBTP Outreach Flyer (Spanish Verison)

¡AYUDENOS A MEJORAR LAS OPCIONES DE TRANSPORTE EN PITTSBURG, BAY POINT Y ANTIOCH!



PARTICIPE EN EL PLAN DE PITTSBURG-BAY POINT DE TRANSPORTE BASADO EN LA COMUNIDAD

El plan de Pittsburg-Bay Point de transporte basada en la comunidad, o CBTP, es una oportunidad para mejorar las opciones de transporte y la calidad de vida de los vecindarios en Pittsburg, Bay Point y Antioch.

El plan reunirá residentes, organizaciones comunitarias y agencias de transporte para identificar los desafíos y desarrollar estrategias para superar los.

El CBTP va a:

- Evaluar las brechas y barreras de transporte identificadas por la comunidad
- Desarrollar soluciones y proyectos para resolver estos desafíos
- Identificar las posibles fuentes de financiamiento para pagar las soluciones y proyectos

Cómo Participar

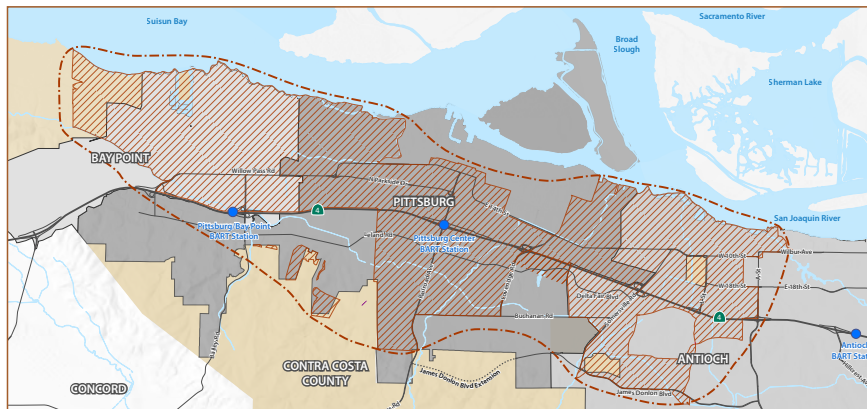
Encuesta móvil basada en texto:

Por favor, dedique un momento para responder a nuestra breve encuesta acerca de sus hábitos y desafíos de transporte por teléfono móvil. Acceda a la encuesta enviando un texto a (925) 378-4338

Página web del proyecto:

¡Visite www.ccta.net para aprender más del proyecto, socios del proyecto y eventos comunitarios!

Área de Estudio del Plan



Study Area	Communities of Concern	City of Pittsburg
BART Stations	Bay Point	City of Antioch
		Contra Costa County




Figure 4-3 Pittsburg/Bay Point Outreach Locations Map

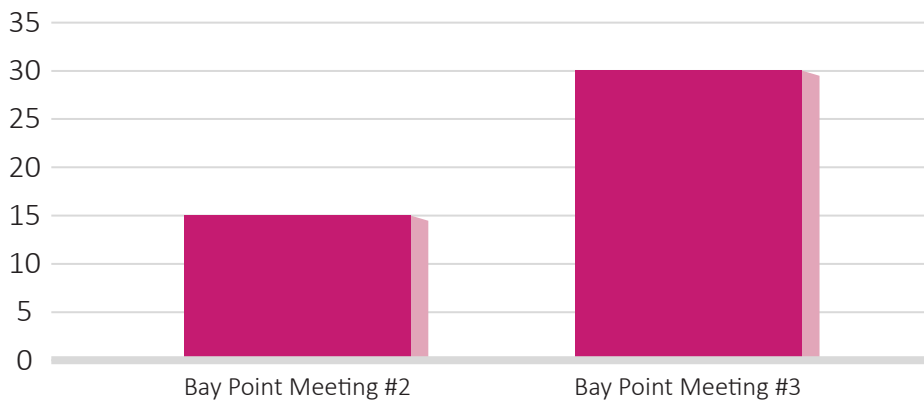


4.4.1.2 Major Themes

CBTP team members recorded participant feedback at both Bay Point Community Meetings. Over half of the entire unincorporated Bay Point area (a Census-Designated Place or CDP) is within the CBTP study area. The following mobility-related themes were expressed:

- Desire for better walking access to amenities like stores
- Need for increased frequency of Tri Delta Route 381 and other well-travelled routes
- Community-wide need for safer, more comfortable bus shelters
- Need for improved transit options for disabled community members
- Desire for direct BART shuttles and easier BART access
- Lack of adequate safety and security concerns on public transit in Bay Point
- Need for improved bike facilities, sidewalks, lighting, and other corridor improvements on Willow Pass Road and Bailey Road

Figure 4-4 County Planning Event Attendance



4.4.2 CBTP Pop-Up Events

CBTP team members worked with community-based organizations (CBOs), non-profits, and various local agencies to schedule “pop-up” outreach sessions at pre-scheduled events targeting low-income and other potentially transportation-challenged communities. The goals of these events were to collect detailed feedback about transportation challenges directly from CoC residents and record personal narratives describing how these challenges impact daily life. English- and Spanish-speaking CBTP project staff set up information and feedback tables at each event, with the following visual elements to prompt discussion:

- Project Information and Awareness Flier
- Poster-sized Study Area Map Boards
- Poster-sized Existing Transportation Network Boards
- Existing and Proposed Bicycle and Pedestrian Network Maps

PlaceWorks staff facilitated the following exercises with attendees to achieve the goals of the pop-up events. Raw results of these exercises are provided in Appendix B.

- Map and Dot Exercises. CBTP team members used study area boards to allow participants to illustrate transportation gaps and challenges. Participants highlighted mobility challenges and recommendations with color-coded dot stickers and used markers to illustrate travel routes, gaps, and potential solutions.



- Interview Vignettes. CBTP team members used CCTA-approved questions to interview volunteers about personal information, mobility gaps they encounter daily, and ideas for overcoming them. The goal of these interviews was to record true narratives of mobility gaps faced by challenged communities in the study area. Parts of these interviews are highlighted in sidebars of this chapter.

“Paratransit service from Railroad Avenue to the VA Hospital in Martinez...has had impacts on my health. Me and other riders are frustrated by 2-3 hour trips each way...and totally unreliable service. There is not service after 8PM and you must reserve a seat three days in advance. I’ve ended up missing or avoiding so many appointments that I stopped using the service and hired a caregiver. We need a shuttle to the VA [Hospital]”

– Guy, 66-year-old, Pittsburg resident.

The CBTP team categorized feedback from these sessions into the following four groups of mobility challenges:

- 1. Pedestrian Mobility Challenges:** These are challenges related to gaps in, and conditions of, pedestrian facilities and infrastructure. This category also includes physical barriers to pedestrian mobility, such as dangerous railroad and highway intersections.
- 2. Bicycle Mobility Challenges:** These are challenges related to gaps in, and conditions of, bikeways. This category also includes physical barriers to bicycling, such as dangerous railroad and highway intersections.
- 3. Transit Challenges:** Challenges related to transit access, bus stops and shelters, fixed-route planning and service, paratransit service, and transit cost.
- 4. Other Challenges:** These are challenges to disabled access, student access and safety, and security.

4.4.2.1 Pop-Up Event: Food Bank of Contra Costa and Solano

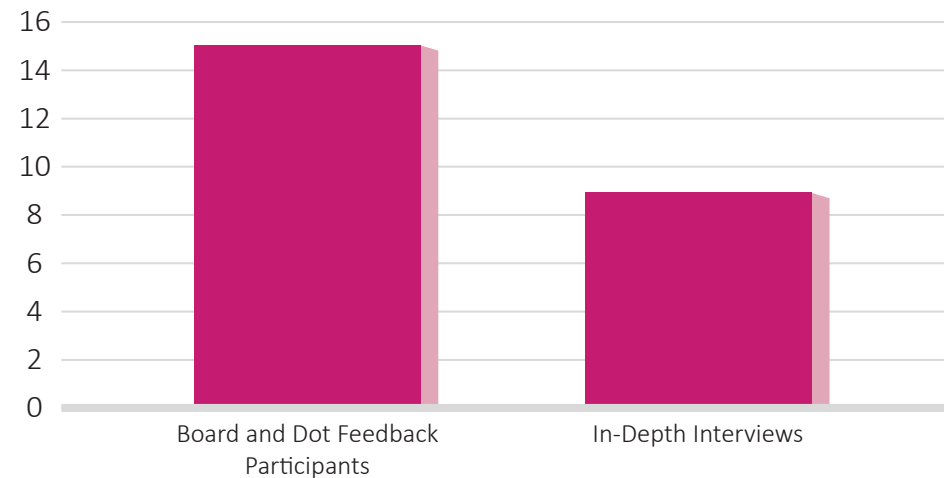
The Food Bank of Contra Costa and Solano is a tax-exempt charitable organization that distributes food to those in need through Food Bank programs accessed by local agencies and distributed via local trucks. CBTP team members, including a Spanish speaker, solicited feedback from participants at the weekly food service at Buchanan Park in the City of Pittsburg on November 19, 2019. Staff set up a pop-up facility adjacent to groups of waiting participants who had arrived on foot, bicycle, via transit, and in cars. The event was attended by multiple repeat attendees familiar with the immediate transportation environment and surrounding infrastructure.

Participation

PlaceWorks staff recorded nine in-depth interviews, including two in Spanish, and facilitated map exercises and/or discussions with approximately 15 individuals, as shown in Figure 4-5.



Figure 4-5 Contra Costa and Solano County Foodbank Responses

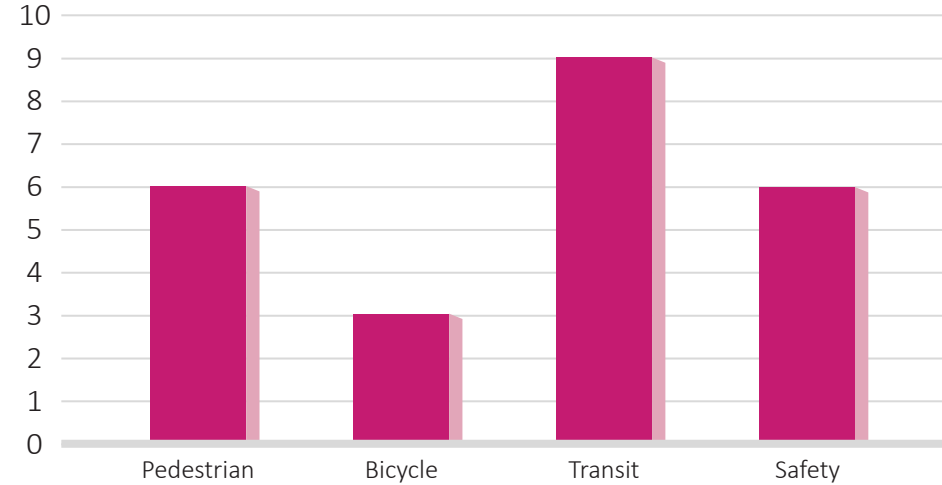


Feedback

Figure 4-6 shows that of the 24 total unique responses resulting from the board-and-dot exercises and in-depth interviews during the Food Bank’s weekly service, six were regarding pedestrian improvements, three were regarding bicycle improvements, nine were regarding transit improvements, and six responses were regarding other improvements. Multiple participants expressed the need for measures to make downtown Pittsburg feel safer at night, as well as the need for a dedicated Tri Delta or County Connection shuttle to Pittsburg Center BART.

Summary of Results

Figure 4-6 Contra Costa and Solano County Foodbank Results



Participant Input

The following are patterns of mobility concerns and barriers recorded during the event. They have been clarified for readability and/or transferred from markings on maps. However, they include original insight and ideas, and have not been ground-truthed against current conditions and/or ongoing plans and projects. The latter process occurred during the evaluation and prioritization of CBTP recommendations presented in Chapter 5 of this study.

“Bus connectivity is unreliable from Pittsburg to Antioch because of inconsistent scheduling. I regularly walk 1.5 hours from work in Pittsburg to my family home in Antioch instead of waiting up to 30 minutes for the bus. Doing this trip a few times a month is starting to cause me back and knee pain.”

– Paulina, 66-years-old, Antioch resident and babysitter.

I’ve seen groups of students on their cell phones and not paying attention almost get hit by cars [at Stone Harbor Drive and Harbor Street] numerous times.”

– Greg, 33-year-old Pittsburg resident

Bicycle Challenges

Participants identified:

- Lack of adequate bike lanes on routes accessing support facilities and resource centers
- Dangers to cyclists on Willow Pass Road from Loftus Road westward
 - Poor lighting
 - High auto speeds

Pedestrian Challenges

Participants identified:

- Dangers at Loveridge Road and California Avenue Intersection
 - Multiple turning variations associated with the roadway bend and Chevron/Storage access

- Sidewalk conditions on Buchanan Road
 - Sidewalk gaps
 - Inadequate lighting
 - Lack of wheelchair accessibility

Transit Challenges

Participants identified:

- Frustration with paratransit service
 - Length of trips and lack of adequate evening service to major medical facilities in Martinez, such as Veteran’s Administration (VA) Hospital
 - Difficult planning due to reservation requirements
 - General unreliability of paratransit buses
- Need for a shuttle route connecting support services, such as food bank
- Lack of adequate bus routes on key corridors from study area to central Concord, including:

- Bailey Road toward Concord
- From Railroad Avenue down Kirker Pass Road toward Concord
- Service to the area south of West Leland Road and west of Railroad Avenue
- Need for a Tri Delta or County Connection shuttle to Pittsburg Center BART due to limited parking and bus service
- Unreliability of Tri Delta routes
 - Unreliable connections on trip from central Pittsburg to Antioch
 - Wait times on those routes are too long; up to 40 minutes

Other Challenges

Participants identified:

- Sense of crime and unsafety in downtown Pittsburg at night
- Poor pedestrian conditions on Harbor Street that are especially dangerous
 - Reckless driving near Pittsburg High School endangers student pedestrians
 - Drivers speed from California to School Street through intersection at Stone Harbor Drive and Harbor Street

4.4.2.2 Pop-UP Event: Los Medanos Community College Mustang Day

Three PlaceWorks staff members, including a Spanish speaker, facilitated multi-strategy outreach at Los Medanos Community College, “Mustang Day,” on January 29, 2020. This is a well-attended event hosted by the college each semester to welcome new students. CBTP project staff interviewed participants of all ages and demographics about their transportation experiences in the study area generally and to and from the campus. CBTP team members used map boards, sticker surveys, and custom “Infrastructure Symbol” decals to facilitate feedback. Six detailed interviews were conducted, and 60 to 70 individuals participated in discussions and interactive exercises. All unfiltered feedback is recorded in Appendix B.

“I would like to see bike lanes installed specifically to lead to services providers and events like this one. I want everyone to be able to access the values of cycling instead of driving and busing. I think this would strengthen and empower low income communities.”

– **Veronica**, 42, Pittsburg resident with two children and husband in a wheelchair.

“Portions of Buchanan Road are unfriendly for people using wheelchairs. Poor, unlit sidewalks force me and my husband in a wheelchair into the roadway when we walk to parks and other destinations along Buchanan, including this weekly foodbank.”

– **Veronica**, Caregiver, 42 years old.

Participation

CBTP staff conducted a sticker-voting exercise that allowed participants to mark which of the four categories of mobility improvements they felt are needed most in the study area:

1. **Better bus service**
2. **Improved lighting/safety**
3. **Bicycle and pedestrian infrastructure**
4. **New transit technologies**

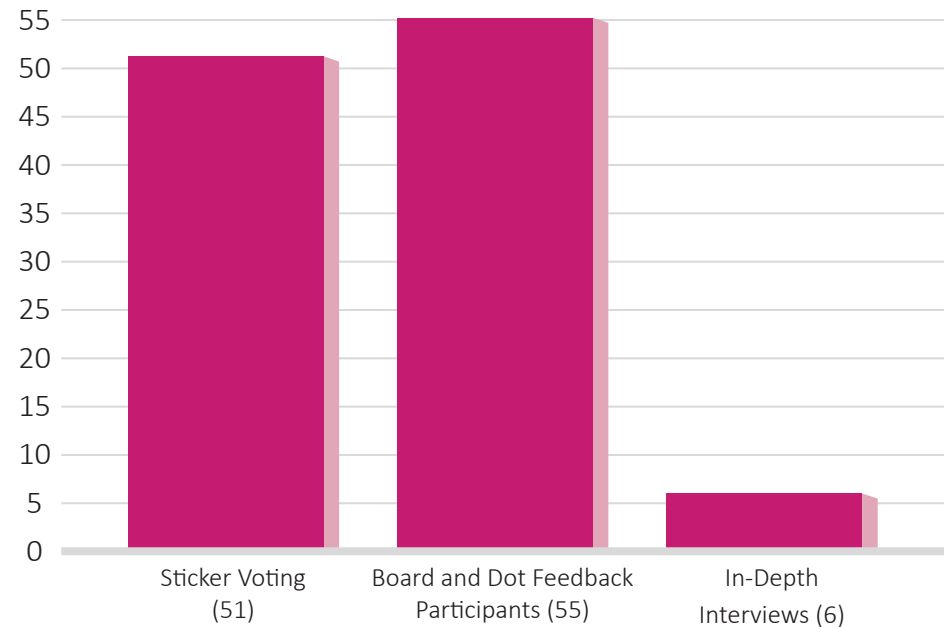
Fifty-one individuals participated in this voting exercise.

An additional 55 comments were recorded in the form of poster board-based dot-and-map feedback. At this event, the CBTP team provided participants with decals depicting various types of mobility improvements (shown in Appendix B) for placement on CBTP maps, including:

- Improved intersections
- More lighting
- Wider sidewalks
- Bike lanes
- Enhanced crosswalks
- Pedestrian overcrossings
- New bus stop
- New bus route

Participants recorded additional comments next to their stickers. Finally, in-depth interviews were completed. Figure 4-7 summarizes the number of responses.

Figure 4-7 Los Medanos Community College Mustang Day Responses



Feedback

Most of the recommendations collected from Los Medanos Mustang Day targeted transit and active transportation on arterials surrounding the campus area, and connecting students, staff, and faculty between campus, their homes, and jobs. Multiple participants expressed a desire for better nighttime service or a shuttle serving the campus for evening and night classes. Multiple participants also expressed a desire for improved regional connections to the campus to and from Concord and Antioch.

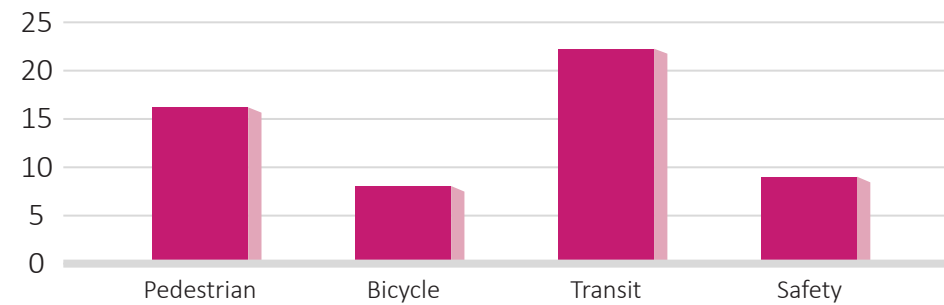
I've seen groups of students on their cell phones and not paying attention almost get hit by cars [at Stone Harbor Drive and Harbor Street] numerous times."

-Greg, 33-year-old Pittsburg resident

Summary of Interactive Board Results

Figure 4-8 shows that of the 55 total responses resulting from the board-and-dot exercises and in-depth interviews, 16 focused on pedestrian gaps, 8 on bicycle gaps, and 22 focused on transit challenges. Nine comments targeted other mobility gaps and challenges.

Figure 4-8 Los Medanos Community College Mustang Day Results

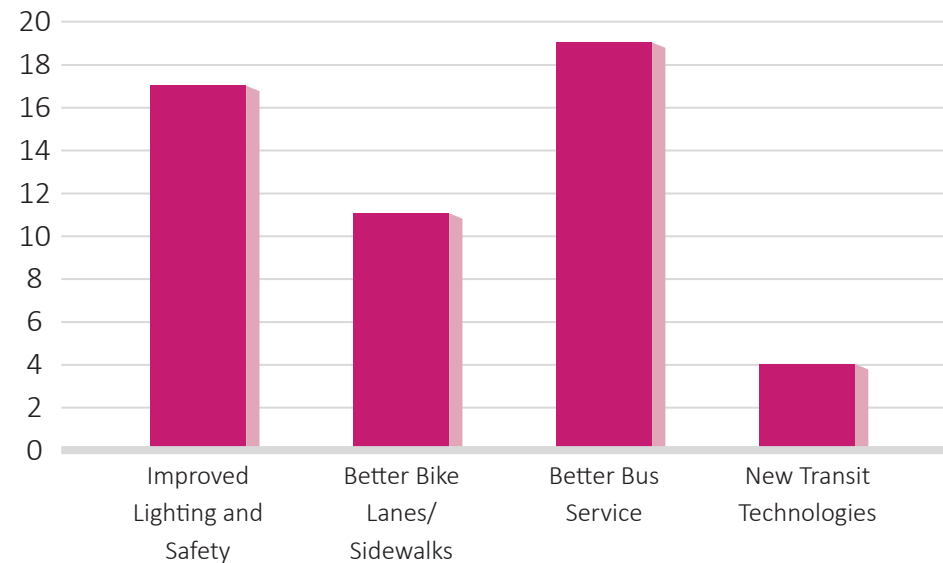


Summary of Sticker Voting Results

Figure 4-9 summarizes the results of the sticker voting exercise. Nineteen participants, or 37 percent, voted for better bus service as the most-needed improvement. Seventeen participants (33 percent) voted for improved lighting and safety. Eleven participants, or about 22 percent, voted for better bike lanes/sidewalks. Four participants voted for new transit technologies and the most-needed mobility improvement.

The results from the dot survey are consistent with the comments arising from the board-and-dot feedback as well as the in-depth interviews, in that better transit service was the primary concern for most participants of this pop-up event.

Figure 4-9 Los Medanos Community College Mustang Day Dot Survey Results



Participant Input

Bicycle Challenges

Participants identified:

- The need to close the bike gap in the Delta de Anza Regional Trail between Willow Pass Road and Port Chicago Highway via a bike path along the north side of SR-4, separate from but between the highway and the planned connector road between Evora Road and Arnold Industrial Way.
 - The need for better bike infrastructure along SR-4 west of Willow Pass.
- Common use of Port Chicago for bike commuting on the north side of the City, but without marked bike lanes.
- Dangers of Harbor Street south of California Avenue.
 - SR-4 crossing is dangerous.
 - This area needs better lanes and safety.

- Poor conditions of East 14th Street east of Railroad Avenue.
 - Too many potholes.
 - Poor maintenance.

Pedestrian Challenges

Participants identified:

- Pedestrian conditions at major intersections.
 - Pedestrian crossing at SR-4 on-ramp (towards Hillcrest); timing of the light is bad and cars making right turns don't see pedestrians.
 - Intersection of Somerville Road and SR-4 is dangerous due to number of lanes and conflicting signal times during pedestrian crossing.
- Lack of complete sidewalks and crosswalks along Railroad Avenue south of BART station.
 - Walking becomes more difficult during Los Medanos Community College school hours.
 - Need for a comfortable pedestrian bridge connecting the CostCo center and Century Plaza Shopping Center.

Transit Challenges

Participants identified:

- Difficulty of getting in and out of the El Pueblo Neighborhood
 - Carpino and School Streets are the only ways in and out.
 - No bus current service through the neighborhood means that a route extension is needed here.
- Lack of adequate evening bus service for night students and staff throughout Pittsburg
 - Tri Delta Route 387 stops running after the last bus leaves campus at 9:15 p.m.
 - Need for a nighttime shuttle for student safety and BART access

- Inadequate service and infrastructure on routes servicing Los Medanos Community College
 - Unreliability/lateness of Route 380
 - Poorly timed connections between Routes 380 and 388
 - Shelters at stops along 380 and 388 lack seating and signage
 - Drivers often "demoralize" those without correct fare
- Difficulty of getting to Los Medanos Community College from some areas due to lack of north to south bus routes.
- Inadequate service for evening/night classes and late use of campus.
 - Route 387 stops running after the last bus leaves campus at 9:15 p.m.
- Need more stops in Costa Loma community of Antioch
 - Currently there is only one bus that stops by Tailgaters Restaurant, CVS, and an AutoZone. There should be a bus line with access to [Contra Loma Regional Park] for people with no car.

"I work at the Adult Education Center [1151 Stoneman Avenue, Pittsburg], and County Connector buses don't run late enough for working students to attend necessary night classes. Many buses stop at 7:30, which is too late for night school."

-Anonymous, Adult Education Center faculty

Other Challenges

- Intersections and conditions near [Pittsburg] High School are unsafe for students and drivers, especially Harbor Street intersections leading to the campus.
- SR-4 overpass should have a spur going straight to campus so people can avoid using Loveridge Road, which is congested and dangerous.
- Billboard lights on Railroad Avenue and SR-4 billboard lights are so bright they can be distracting to drivers.
- There is a need for pavement repairs and improved maintenance across the study and in Bay Point especially.



4.4.2.3 Antioch Senior Center and Pittsburg Senior Center Meet-and-Greets

PlaceWorks staff conducted in-depth discussions with the Antioch Senior Center’s Director of Programming, the Center’s Certified Transit Trainer, as well as visitors to the center, on January 3, 2020. These discussions focused on access to both the Antioch and Pittsburg senior centers as well as paratransit service across the study area. Additional feedback from the Recreation Supervisor of Pittsburg Senior Center was provided via email. All unfiltered feedback is recorded in Appendix B.

Participation

PlaceWorks staff recorded detailed interviews with both the Director of Programming and the center’s in-house Transit Trainer.

Feedback

Summary of Results

Most of the mobility challenges identified during the senior center outreach process concerned access to paratransit, including overall programming and improved access to senior centers specifically. For example:

- Between 60 and 90 people a day use Tri Delta to access Antioch Senior Center. Senior Center programs are restricted to daytime hours due to Tri Delta service hours. Programming must be shaped around transit schedules.
- Improving evening paratransit with the following options:
 - Senior Paratransit hours, which stop at 5:30 p.m., should match fixed-route service hours for evening service.
 - Senior paratransit service between Bay Point BART to Antioch BART needs to run later.
 - Route 200 (BART to VA hospital, Kaiser, Regional Medical Clinics) is vital to seniors and the one-hour headway needs to be reduced. Service should run later into the evening to allow for an associated extension of paratransit service.
 - Another option would be to expand paratransit service for all of Tri Delta’s service area from Martinez/Concord to far East County regardless of the time fixed routes end until last fixed route bus runs.

I have a lot of seniors who would like to socialize in the evening. This is when many get lonely or anxious. I would like evening fixed-route service hours extended, as well as faster and more direct service to senior centers and other senior resources.

-Savoy Fraine, Recreation Programs Coordinator at Antioch Senior Center

- Formalize a non-paratransit ‘driver request program’ so that senior centers and other facilities can coordinate with Tri Delta to ask for volunteer drivers for improved access to special events.
- Paratransit access is restricted due to gap between age-related paratransit and ADA-eligible paratransit. Tri Delta should at least simplify the ADA eligibility process.
- Simplify the on-demand service with Lyft/Uber, which is currently a five-step, multi-day registration process requiring a smart phone and bank account, as well as Lyft/Uber accounts.

4.5 Outreach Summary

4.5.1 Total Participation

As shown in Figure 4-10, over 180 community members provided input during the CBTP outreach process. The CBTP team performed 18 in-depth interviews with volunteer interviewees, including food bank visitors, night school students, senior citizens, non-English speaking commuters, and others. About 70 people provided feedback by participating in visual and mapping techniques, 51 people participated in surveys, and more than 40 individuals attended County meetings.

4.5.2 Feedback Summary

As shown in Figure 4-11, members of CoCs in the Pittsburg/Bay Point area confront transit-related mobility barriers at the highest rate, followed closely by pedestrian barriers, and then bicycle and safety-related barriers at about half that rate. However, safety and security are integral to active mobility, and as such, many concerns about walking, cycling, and transit relate to issues such as improper lighting, dangerous intersections, and sense of isolation and poor network conditions. Safety concerns outside the context of a specific travel mode were largely about fear of travel due to perceived risks in certain neighborhoods and overall lack of safety around community destinations such as parks or schools.

Figure 4-10 Total Outreach Counts

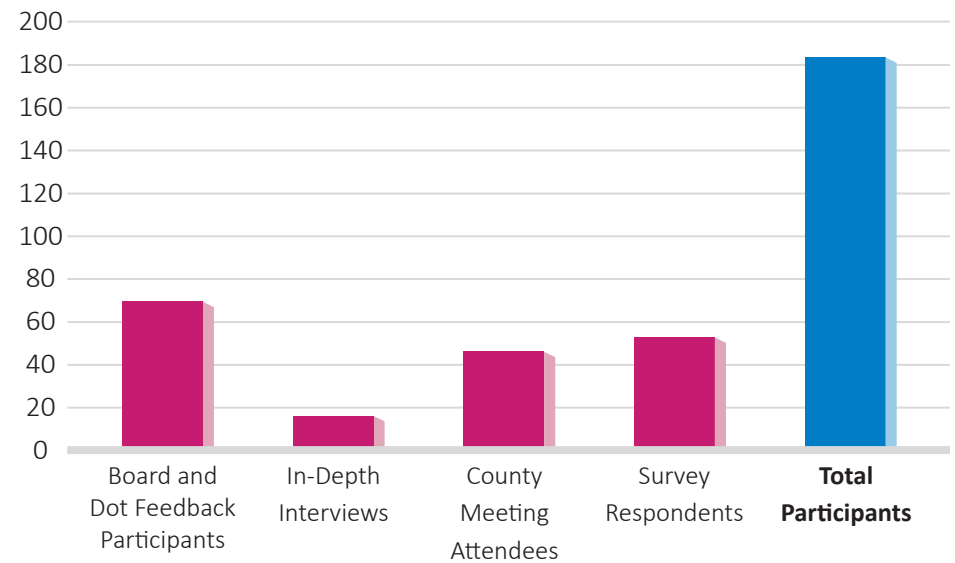
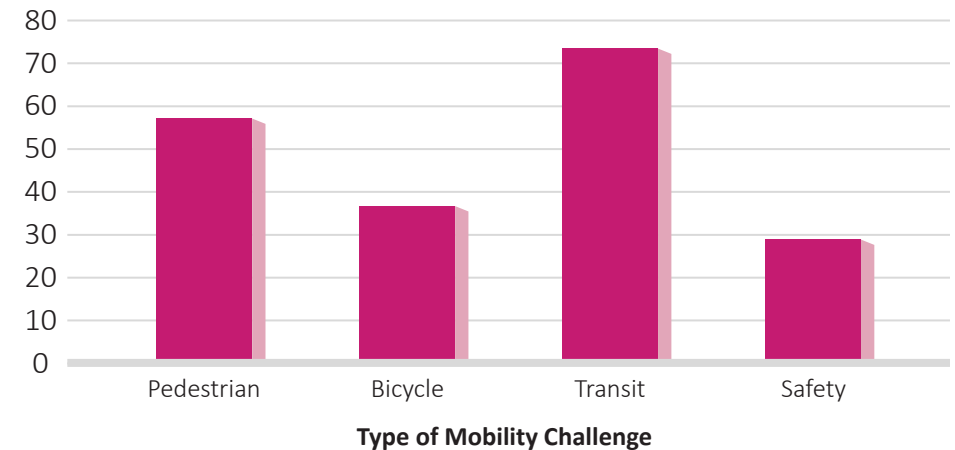


Figure 4-11 Total Responses Collected by Type



5. Methodology and Recommendations

This chapter identifies all recommended projects and plans. It outlines the evaluation criteria, evaluation methodology, and scoring approach used to identify and rank those recommendations. Potential funding sources, a key consideration in the evaluation process, are summarized.

5.1 COVID-19 and CBTP Development

As explained in Section 1.5, the COVID-19 pandemic emerged following the community outreach process of this CBTP. As a result, the community and stakeholder feedback in this plan does not reflect the changes in mobility context, habits, priorities, and challenges due to COVID-19 and formal shelter-in-place orders. The scoring process was developed following shelter-in-place, and accounts for the impacts of those regulations. Shelter-in-place prompted significant shifts in the financial feasibility and implementation potential of transit projects, including those identified by Pittsburg/Bay Point community members. As a result, some transit projects scored lower in the evaluation process used in this CBTP (see Section 5.2).

However, as explained further in Sections 5.2 and 5.4.1, transit ridership declines are significantly less pronounced in disadvantaged communities as compared to others. In the Pittsburg/Bay Point, pre-COVID community input is consistent with post-COVID ridership statistics: both reaffirm that there are major transit needs in the area that require fulfillment both during and post-COVID.

The Contra Costa Transportation Authority decided to adopt this plan in the current context, rather than re-initiate the existing conditions, community outreach, and recommendations processes. While COVID conditions affected the outcome of the evaluation process, this document has been developed to be flexible and amenable to revision based on return to normal conditions or solidification of “new normal” conditions. This Plan contains numerous transit projects categorized as “High Need”, which under current conditions would be challenging to implement. However, it assumed that over the 10-year planning horizon of this CBTP, the mobility environment will change. Public transit is an ongoing lifeline for communities of concern, and

recommendations deemed to have lower implementation potential in the age of COVID should be considered future opportunities regardless.

5.2 Evaluation Criteria

The CBTP project team worked with the Project Working Group (PWG) on February 3, 2020, to establish four evaluation criteria deemed appropriate to rank projects by their ability to improve mobility for challenged communities. Criterion such as diverse community benefit, degree of transportation improvement, current relevance, future technological challenges, usability and access, available funding, potential for cross-jurisdictional challenges, and ability to resolve mobility barriers were discussed.

Ultimately, the following four criteria were selected to score projects and plans:

- 1. Reflects Community Priorities**
- 2. Increases Access**
- 3. Financial Feasibility**
- 4. Ease of Implementation**

5.2.1 Reflects Community priorities

This criterion is the degree to which a project or plan is consistent with the priorities and needs of residents, community stakeholders, and leaders in Communities of Concern (CoC). Projects were ranked highly under this criterion if they:

- Reflect a theme in the community feedback collected during the CBTP outreach process described in Chapter 4;
- Are consistent with community mobility challenges identified in past plans and studies and the existing conditions analysis prepared for this CBTP;
- Support transportation goals established in current plans and studies;
- Are consistent with projects prioritized in the previous Bay Point CBTP, but not yet implemented.



5.2.2 Increases Access

This criterion is the potential of a project to improve access to key facilities and locations across the study area. As noted in Chapter 1, the current CBTP study area extends east from Bay Point, through Pittsburg, and beyond A Street in Antioch. It includes portions of unincorporated Contra Costa County and has a population of over 93,000. Given the geographic scale and diversity of mobility gaps across the study area, projects with one of two benefits score highly under this criterion:

- Those that would improve connectivity between systems;
- Those that would facilitate mobility for groups challenged by limited options.

5.2.3 is Financially Feasible

Cost and feasibility are important considerations for evaluating projects. This criteria considers more than the anticipated budget of a project, as one project may be more expensive than another but it may be eligible for a range of different funding sources, while the other project may be less expensive but does not fit into readily available funding categories.

MTC's CBTP guidelines are developed to ensure that mobility recommendations are the result of community input. Assessing the financial feasibility of projects is a tool to identify projects that are likely to find further support and move quickly to implementation. Projects were ranked under this criterion by estimated hard costs, analyzing the potential for funding based on project type, and reviewing historical financial challenges.

As stressed In Section 5.1, one of the most significant considerations in this criterion was revenue loss to transit providers resulting from COVID-19, which have impacted the current flexibility of providers to fund new projects. Many transit recommendations in this plan are outside committed funding sources, while project outreach and research indicate high transit needs within the community. However, future conditions will reposition the financial feasibility of transit projects and funding strategies for transit should continue to be developed.

Ranking projects under this criterion included reviewing potential funding sources for local and countywide mobility projects. These include:

- **Senate Bill (SB) 375**- California SB 375, passed in 2008, directs the California Air Resources Board (CARB) to set up regional targets for reducing greenhouse gas (GHG) emissions with regional metropolitan planning organizations (MPOs). The GHG targets are implemented through the MPO's regional Sustainable Communities Strategies (SCS). Below are a list of funding and grants offered by MTC as part of their SCS in fulfillment of SB 375.
 - **Lifeline Transportation Program** - Funds offered by MTC for projects that are identified through a collaborative, inclusive, community-driven process, and that address transportation gaps and barriers identified in CBTPs or other local planning efforts in low-income neighborhoods.
 - **One Bay Area Grant Program (OBAG)**- These grants are rewarded to transit-oriented development projects located in Priority Development Areas— Areas targeted for compact growth identified in Plan Bay Area (MTC's SCS). Priority is given to cities and counties that have been proactive in creating more housing and who have accepted a proportionally higher allocation of housing units through the Regional Housing Needs Assessment (RHNA) process.

- **Caltrans Active Transportation, Complete Streets, and Safe Routes to School Programs**- Active transportation grants fund transportation improvements that foster healthy activity, namely walking and biking. Complete Streets grants improve sidewalks and curbs that connect to important destinations. Safe Routes to School grants fund projects that provide safe walking and biking routes between neighborhoods and local schools.
- **Bay Area Air Quality Management District (BAAQMD) Grants** - BAAQMD offers a variety of funding sources for projects that reduce air pollution in the Bay Area, like their Carl Moyer Program, which provides grants to replace or upgrade heavy-duty diesel vehicles.
- **Measure J, Countywide Transportation Sales Tax** - Measure J provides half-cent sales tax revenue for transportation projects through 2034. The expenditure plan that guides the Measure includes \$360 million for local street and roads, as well as \$123 million for transit projects supporting seniors and the disabled.
- **Transportation n for Livable Communities (TLC)**- These funds are intended to support local efforts to achieve more compact, mixed-use development, and development that is pedestrian-friendly or linked into the overall transit system.
- **CARB Sustainable Transportation Equity Project (STEP)**- This is a pilot program launched in 2020 that funds transportation and planning projects that reduce GHG emissions in California.
- **Federal Transit Administration (FTA) Section 5310: Enhanced Mobility of Seniors and People with Disabilities Program** - As the title suggests, this program funds projects that improve mobility for seniors and people with disabilities by identifying and removing barriers and improving transportation services like paratransit. This project is part of the FAST Act of 2015.
- **Transportation Partnership and Cooperation (TRANSPAC) Subregional Transportation Mitigation Program (STMP)**- TRANSPAC is a Regional Transportation Planning Committee for Central Contra Costa County. The STMP collects mitigation fees from new developments and allocates it to the most appropriate and effective regional transportation projects that increase the capacity of transportation systems to accommodate new development.



- **Highway Safety Improvement Program (HSIP) Grants**- These grants, administered by the Federal Highway Administration, fund projects that are meant to significantly reduce traffic fatalities on public roads. The HSIP program is a part of the 2015 FAST Act.
- **Regional Surface Transportation Block Grant** - These are grants provided by the FTA to states and localities for different transportation projects, including highway improvements, bridge or tunnel projects on public roads, pedestrian and bicycle infrastructure, and transit capital projects.
- **Land and Water Conservation Fund (LWCF)**- Created by congress in 1964, Land and Water Conservation Funds are used to purchase land for all types of parks, from national parks to community trails and neighborhood ball parks.
- **Recreational Trails and Greenways Grant Program**- Funded by Proposition 68, this program will fund projects that provide nonmotorized infrastructure development and enhancements that promote new or alternate access to parks, waterways, and outdoor recreational pursuits to encourage health-related active transportation.

5.2.4 Ease of implementation

Numerous factors influence the ease or difficulty of initiating, completing, and putting a project into action. While a recommended project or program may align with community priorities, likely benefit many and appear a candidate for funding, assessing the challenges of implementation remains critical. Determining that the challenges of implementation of a single project are significant, facilitates the identification of other, more implementable projects that achieve the same benefits.

Factors used to assess the ease of implementation of recommendations include:

- Required cross-agency coordination.
- Cross-jurisdictional physical footprint.
- Engineering complexity.
- Lack of technological “future proofing;” i.e., the potential that a project will become obsolete due to new technologies.

5.3 Evaluation Process

As noted, the evaluation criteria outlined in Section 5.2 were developed in consultation with the PWG and then applied to candidate projects. This was part of a larger evaluation process that included:

1. Developing lists of potential projects and plans directly from community members during the outreach process, for review by the PWG. The PWG weighed in as a group and individually to identify high-potential recommendations.
2. Working with the PWG to develop the evaluation criteria outlines in the previous section.
3. Applying the four criteria to potential projects and plans, including:
 - Assessing candidate projects against existing mobility plans to identify those supportive of relevant mobility goals or redundant with implemented projects.
 - Assessing the feasibility of candidate projects in terms of required agency coordination, funding potential, and historic implementation challenges.



4. Presenting the draft CBTP to the project Steering Committee for document review and evaluation of prioritized recommendations.
5. Revision and finalization of priority projects and plans based on comments of the Steering Committee.

5.3.1 Criteria Scoring Categories

Recommendations were scored one through five for each evaluation criteria. A score of one reflects the lowest potential for fulfillment of that category; five the highest. For all project and plans, the following score averages were calculated:

- **Area Need Score:** The average score of Criterion 1 (Community Priorities) and Criterion 2 (Increases Access).
- **Project Potential Score:** The average score of Criterion 3 (Financial Feasibility) and Criterion 4 (Ease of Implementation).

The four criteria were organized into the above two scores to improve the implementability of the CBTP as a whole. Identifying those recommendations with the highest and/or most immediate potential to get funded and built will support the

grant selection, timing and planning processes. It will facilitate improved, more informed decision-making, and/or awareness of potential challenges in the future.

Projects and plans have been categorized into three groups based on the results of this scoring system.

High Need + High Potential Recommendations

These recommendations received an Area Need Score of 3.5 or above and a Project Potential Score of 3.5 or above. These projects and programs are consistent with community priorities, as reflected in mobility gaps identified in the CBTP outreach process, ongoing studies, and recommendations of the previous CBTP. These projects have the highest potential to reduce broad or specific access gaps that currently challenge community members.

In addition, these recommendations also are unlikely to face significant implementation challenges, as shown in high average scores for financial feasibility and ease of implementation.

High Need + High Potential Recommendations should be considered for near-term planning and implementation.

High Need Recommendations

High Need Recommendations received an Area Need Score of 3.5 or above and a Project Potential Score of below 3.5. These projects will fulfill community priorities and increase community access but may be difficult to complete due to funding and costs, cross-jurisdictional management, engineering, and other implementation challenges.

These projects should be considered for the future. They reflect the community's needs and past study results. The jurisdictions, agencies, and stakeholders that would likely need to coordinate on implementation should remain open to future management structures. Creative funding sources should be researched.

High Project Potential Recommendations

These recommendations received an Area Need Score between 2.5 and 3.5, and a Project Potential Score of 3.5 or above. High Project Potential Recommendations

would not fill priority and access gaps to the degree that higher-priority recommendations would. Yet they are financially feasible and unlikely to encounter major implementation challenges. Implementation of these projects would demonstrate progress within the community. These projects could be packaged into larger programs or implemented alongside higher-priority recommendations.

5.3.2 Project Types

Recommendations fall within the following three types of projects and plans:

Active Transportation. These are generally capital improvements that increase safe, healthy, active transportation choices, namely walking and biking, for everyday trips. Examples include improvements to trails and greenways, separated bike paths and cycle tracks connecting to jobs, grocery stores and transit, intersection improvements, and providing bike lockers and storage at important destinations like job centers and transit hubs.

Transit. Transit projects may include new routes, expanding operating hours of certain lines, increasing transit line frequency, improving program information or awareness, or improving transit stops with lighting, shelter, and seating.

School Safety. School safety projects provide safe, non-motorized routes between where people live and local schools. Projects include enhancing school-adjacent crosswalks with signals and flashing beacons, providing neighborhood bike path access directly to schools, and improving lighting along these and other routes commonly traveled by students.

5.4 Recommended Projects and Plans

The following section includes all recommended projects and plans across the three categories for the Pittsburg/Bay Point CBTP study area, as identified by the previously described scoring system.

High Need + High Potential Active Transportation Recommendations are shown on Figure 5-1; High Need + High Potential Transit Recommendations are shown on Figure 5-2; High Need + High Potential School Safety Recommendations are shown on Figure 5-3.

High Need and High Potential Recommendations are not shown on these maps.

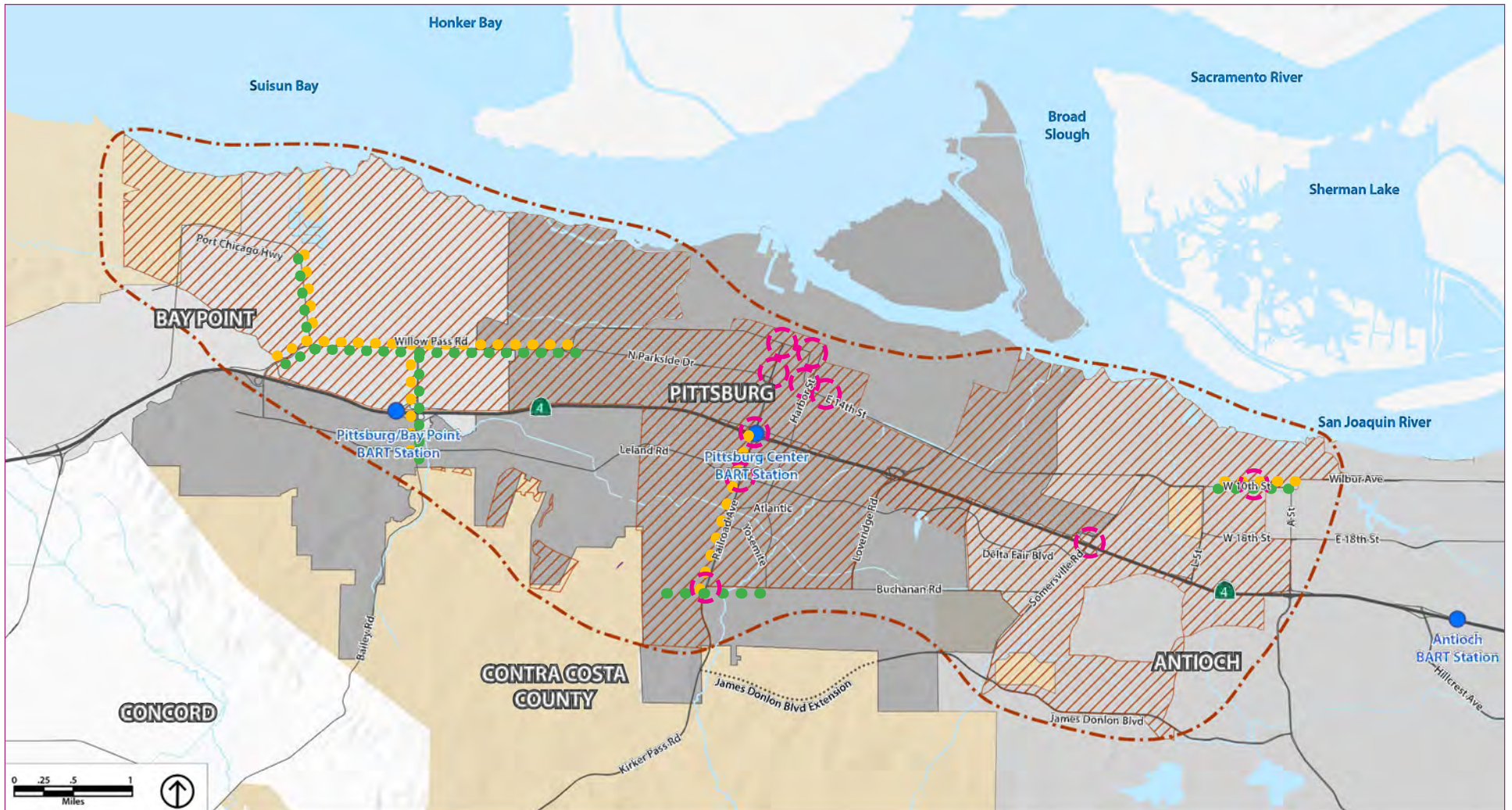
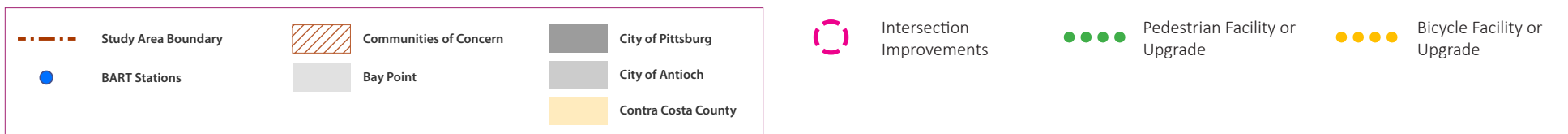


Figure 5-1 High Need + High Potential Active Transportation Recommendations



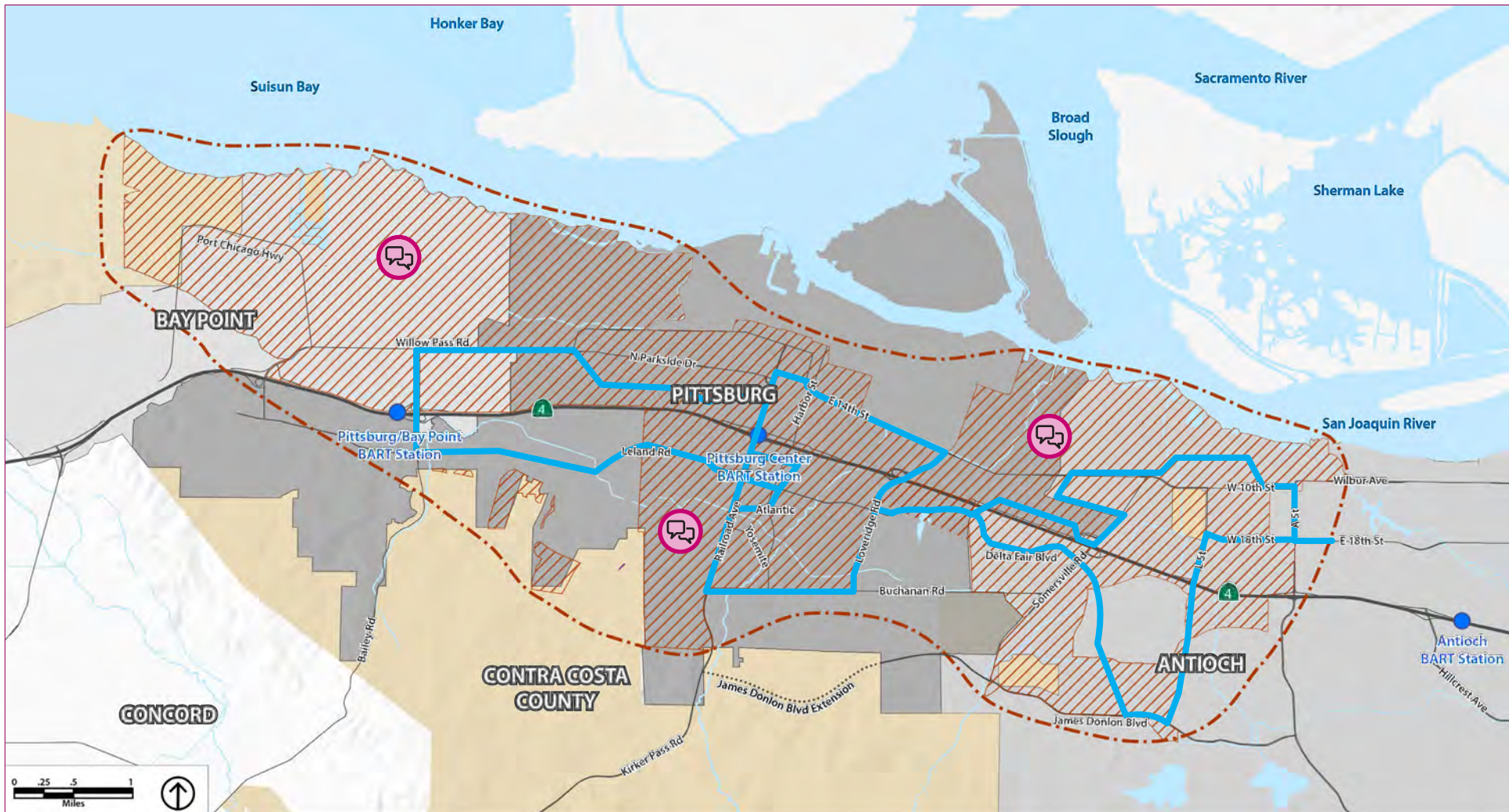
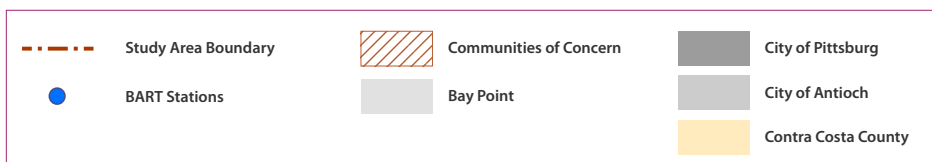



Figure 5-2 High Need + High Potential Transit Recommendations



 High Use Bus Routes for Potential Shelter Upgrades

 Tri Delta Tri Myride Campaign

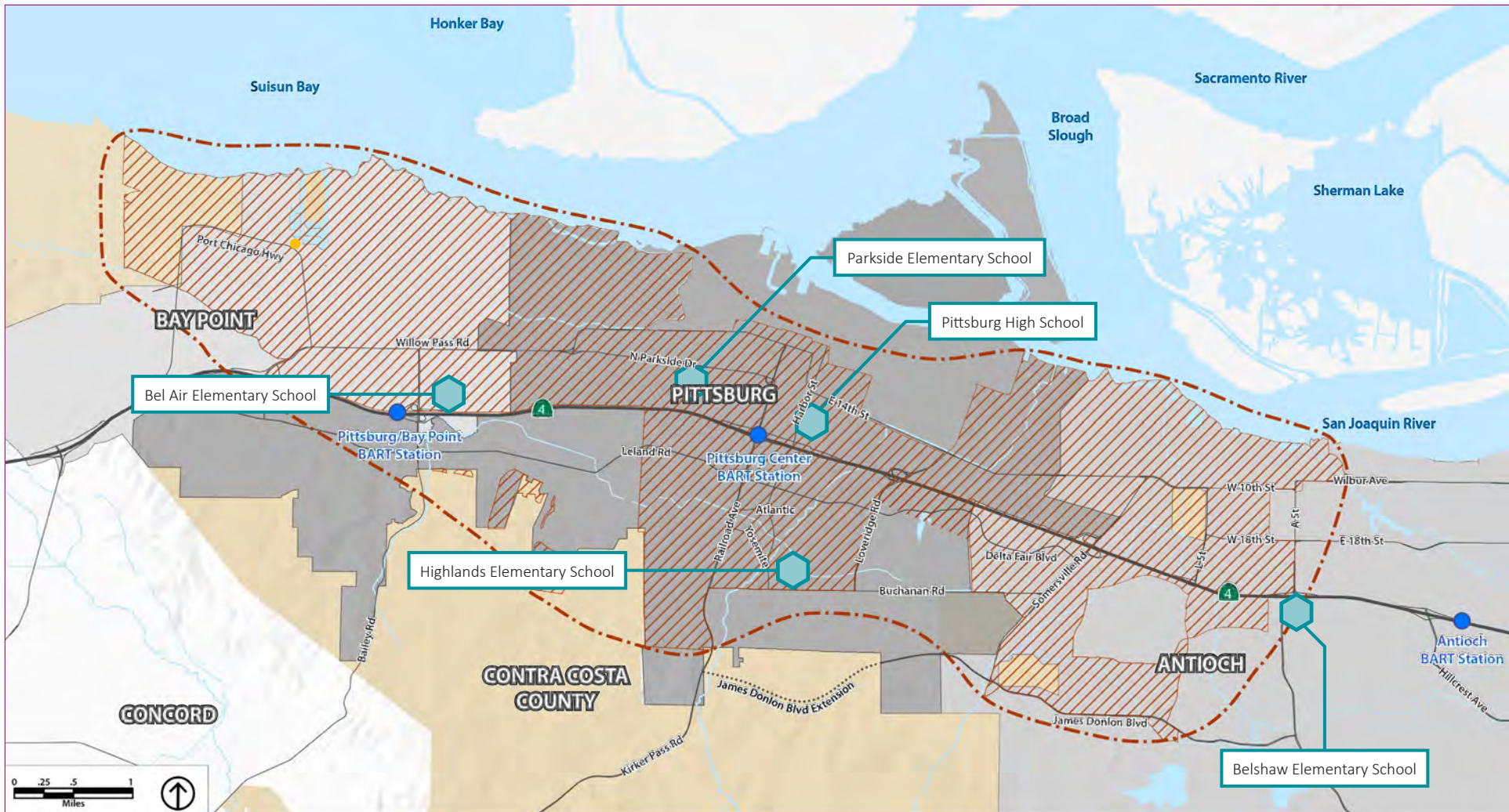
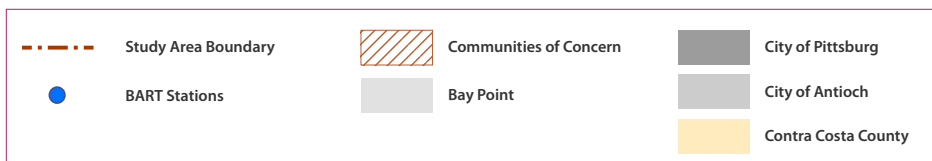


Figure 5-3 High Need + High School Safety Recommendations



 School Safety Project or Program

5.4.1 High Need + High Potential Recommendations

As noted in Section 5.3, High Need + High Potential Recommendations are those projects and programs most consistent with community priorities. They have the highest potential to reduce access gaps that currently challenge community members. In addition, they are financially feasible and would face minimal implementation challenges. They received score of 3.5 or above for both *Area Need* and *Project Potential*.

The following tables summarize recommendations across project type. Each table includes recommendations, *Area Need* score, *Project Potential* score, and estimated cost.

5.4.1.1 Active Transportation Projects and Programs

Active transportation projects, including bicycle and pedestrian programs and related capital improvements, comprise the majority of the High Need + High Potential Recommendations (see Table 5-1). Not only were such projects identified by the community, in current studies and during CBTP advisor coordination, but funding for active transportation and multi-modal safety remains available in the wake of COVID-19 mobility changes.

Recommendation	Area Need Score (3.5+)	Project Potential Score (3.5 +)	Estimated Cost
Develop a protected Class IV separated bicycle facility along Railroad Avenue in Pittsburg, from California Avenue to Buchanan Road.	4	3.75	\$480,000
Implement an ADA-compliant intersection improvement program at 3-4 major intersections along Railroad Avenue in Pittsburg.	4.5	4.5	\$600,000 to \$1 million
Complete community- and City-identified intersection improvements at various points across Harbor Street in Pittsburg, between Central Avenue and Solari Street.	3.75	4.5	\$175,000 to \$250,00 per intersection
Implement near-term improvements at Somersville Road/SR 4 intersection, including striping, signal modifications.	4	3.5	\$900,000
Fill sidewalks gaps on Buchanan Road: 1. at Railroad Avenue 2. from Kirker Pass Road to Heights Avenue	4	3.75	\$1.3 million
Improve pedestrian and bicycle experience and safety along Willow Pass Road in Bay Point by installing/upgrading infrastructure.	4.25	3.25	\$3 million to \$5 million
Implement a pedestrian and bicycle safety program on West 10th Street in Antioch that includes traffic calming improvements between G and A Streets and safety upgrades at the intersection of West 10th Street and D Street.	4	3.5	\$1 million to \$ 1.5 million
Improve pedestrian and bicycle experience and safety along Port Chicago Highway in Bay Point to McAvoy Road by installing/upgrading pedestrian and Bicycle infrastructure.	4.25	3.5	\$1 million to \$1.5 million
Install bicycle lanes on the McAvoy Road railroad crossing north of Port Chicago Highway.	3.5	3.5	\$30,000 to \$40,000
Improve pedestrian and bicycle experience and safety along Bailey Road in Pittsburg and Bay Point by installing/upgrading pedestrian and bicycle infrastructure.	4.5	3.5	\$1.5 million to \$2 million

5.4.1.2 Transit Projects and Programs

The overall implementation and financial potential of transit projects decreased with declines in systemwide revenues from COVID. This is reflected in the low number of High Priority + High Potential Transit Projects shown in Table 5-2, and higher number of transit projects scored High Need (Table 5-5)

It is important to note that disadvantaged communities remain disproportionately reliant on transit service, as compared to other communities, during the pandemic. For example, while station entries across the BART system dropped 87 percent from September 2019 to September 2020, drops were uneven from station to station. Ridership at Orinda Station, where 72 percent of the population is white, saw a 94 percent drop in ridership. In comparison, Pittsburg Center BART Station, located where 65 percent of the population is Black or Latinx, saw a 74 percent drop in year over year ridership.¹

¹ Bay Area Council Economic Institute, September 2020, *Economic Profile 2020: Housing and Transportation in a Post-Pandemic Bay Area*, <http://www.bayareaeconomy.org/report/housing-and-transportation-in-a-post-pandemic-bay-area/>, accessed November 9, 2020.

Accessible public transit remains a mobility backbone for disadvantaged communities in the Bay Area and beyond. This was borne out in the Pittsburg/Bay Point outreach process, during which low-income, youth and elderly residents identified area-wide and route-specific gaps, transit-isolated destinations, BART access issues and bus stop upgrades as needed community improvements.

Most transit recommendations received a lower Project Potential score and fall under the High Need Recommendations category. Those challenges notwithstanding, all transit recommendations in this plan are considered viable community priorities.

Table 5-2 High Need + High Potential Transit Projects and Programs			
Recommendation	Area Need Score (3.5+)	Project Potential Score (3.5 +)	Estimated Cost
Upgrade up to 10 additional bus stops along high-use Tri Delta and County Connection routes with “half-barrel” bus shelters and shelter improvements consistent with 2019 NACTO and ADA standards.	4	3.5	\$20,000 to \$30,000 per stop
Upgrade or install five “half-barrel” bus shelters and improvement consistent with 2019 NACTO and ADA standards on routes serving the Antioch Senior Center., as well as.	4	3.5	\$20,000 to \$30,000 per stop
Develop a public information program to introduce and educate special needs transit riders about Tri Delta’s Tri Myride service. Develop in-person presentations about program eligibility, technology and service areas for senior centers and disability and other support facilities.	3.75	4	\$15,000 to \$20,000

5.4.1.3 School Safety Projects and Programs

Recommendation	Area Need Score (3.5+)	Project Potential Score (3.5 +)	Estimated Cost
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Pittsburg High School.	4.25	3.75	\$400,000 to \$700,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Bel Air Elementary in Bay Point.	3.5	3.75	\$300,000 to \$600,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Highlands Elementary School in Pittsburg.	3.75	3.5	\$300,000 to \$600,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Parkside Elementary School in Pittsburg.	3.5	3.5	\$300,000 to \$600,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Belshaw Elementary School in Antioch.	3.5	4	\$300,000 to \$600,000

High Need + High Potential school safety projects and programs are summarized in Table 5-3. As of this Draft CBTP, public schools and facilities within east Contra Costa County are closed to classroom learning for the 2020 to 2021 school year. These conditions make it difficult to predict implementation of school safety projects. However, funding for previously identified Safe Routes to School programs increases the potential for these projects.

5.4.2 High Need Recommendations

As noted in Section 5.3, High Need Recommendations are consistent with community priorities and have high potential to reduce access gaps. However, they may be more difficult to complete than High Need + High Potential Recommendations due to funding, management, engineering, and other implementation challenges. They received an Area Need Score of 3.5 or above, and a Project Potential Score below 3.5.

5.4.2.1 Active Transportation Projects and Programs

High Need Active Transportation Projects and Programs are summarized in Table 5-4.

Table 5-4 High Need Active Transportation Projects and Programs

Recommendation	Area Need Score (3.5+)	Project Potential Score (below 3.5)	Estimated Cost
Install Class II Buffered Bike Lanes along Harbor Street from Buchanan to Stoneman Avenue.	4.25	3.25	\$60,000
Install Class IV Separated Bikeway along Harbor Street, from Stoneman Avenue to 3rd Street:	4.25	3.25	\$680,000
Increase bicycle safety at Harbor Street under-crossing of Mococo railroad line in Pittsburg with separation and surface improvements.	3.5	2	\$30,000
Increase bicycle safety at Harbor Street under-crossing of BNSF railroad line in Pittsburg with separation and surface improvements.	3.5	2	\$30,000
Increase bicycle safety at the Willow Pass Road under-crossing of both the BNSF and the Mococo lines in Pittsburg with separation and surface improvements.	4	1.25	\$10,000,000 per crossing
Add Class I Bike Path on west side of San Marco Boulevard from Evora Road to Rio Verde Circle.	4.5	2.5	\$4.8 million
Work with local or transit agencies to install secure public bike repair equipment at BART stations and transit stops near public schools.	3.5	3	\$5,000 to \$8,000 per "station"
Improve the personal security and comfort along portion of Delta de Anza Regional Trail in study area, via new lighting, selective vegetation removal, installation of cameras, and improved sight lines.	4.5	2.5	\$800,000
Add pedestrian lighting and infrastructure improvements at intersections along the transition from Willow Pass Road to North Parkside Drive.	3.5	3	\$175,000 to \$250,00 per intersection
Implement a program of bicycle facility maintenance that includes quarterly lane sweeping by all study area agencies, as-needed lane restriping and graffiti abatement along the portion of the Delta de Anza Regional Trail in the study area.	3.5	3	\$500,000 annually

Transit Projects and Programs

High Need Transit Projects and Programs are summarized in Table 5-5.

Table 5-5 High Need Transit Projects and Programs			
Recommendation	Area Need Score (3.5+)	Project Potential Score (below 3.5)	Estimated Cost
Upgrade evening service and increase headways on 2 high-use routes connecting Los Medanos Community College and Pittsburg Adult Education Center to BART Stations and the City of Antioch, including Routes 387, 380, 381 and 388.	3.75	2	\$500,000 to \$1.5 million yearly
Reduce the 1-hour headway on Tri Delta Route 200 (BART to VA hospital, Kaiser, Regional Medical Clinics) and extend service to 9:00 PM.	3.5	3	\$500,000 to \$1 million yearly
Expand Tri Delta Senior (Age 65+) Paratransit Transportation hours of operation to include service from 5:30 PM to 9:30 PM and limited weekend hours.	4	2	\$350,000 to \$500,000 yearly

5.4.3 High Project Potential Recommendations

High Project Potential Recommendations are less likely to fill mobility gaps than higher-priority projects. Regardless, they are the result of community input and past study findings. Moreover, they are financially feasible and unlikely to encounter major implementation challenges. These recommendations received an Area Need Score between 2.5 and 3.5, and a Project Potential Score of 3.5 or above (see Table 5-6).

Active Transportation Projects and Programs

High Project Potential Active Transportation Projects and Programs are summarized in Table 5-6.

Table 5-6 High Project Potential Active Transportation Projects and Programs

Recommendation	Area Need Score (3.5+)	Project Potential Score (below 3.5)	Estimated Cost
Work with the City of Pittsburg to complete planned lighting improvements along segments of Railroad Avenue.	3.25	5	\$350,000 to 600,000
Mark green conflict zone striping on all approaches and through bus stops along Harbor Street in Pittsburg, between Buchanan Road and Solari Street.	2.75	4.5	\$7,000 per stop/ intersection
Close sidewalk gaps along Madison Avenue from Delta de Anza Regional Trail to Canal Road.	3	4	\$75,000
Install safety improvements and updates at the Bailey Road and Delta de Anza Regional Trail crossing.	3	4.5	\$125,000
Construct a 10-foot sidewalk segment or trail along the south side of Willow Pass Road between Port Chicago Highway and Evora Road in Bay Point.	2.5	3.5	\$300,000



CONTRA COSTA
transportation
authority





Pittsburg/Bay Point Community-Based Transportation Plan

Contra Costa Transportation Authority



CONTRA COSTA
transportation
authority



↑ ↑ ↑ EXIT Transit Center P
↑ ↑ ↑ Transit Connections

No Smoking

PLEASE USE SIDEWALK LEVEL



Pittsburg/Bay Point Community-Based Transportation Plan

Contra Costa Transportation Authority

Prepared By:



1625 Shattuck Avenue
Suite 300
Berkeley, California 94709
510.848.3815



PLACEMAKERS

WHAT PLACEMAKERS AND PROJECTS ARE MOST IMPORTANT ON THE STUDY AREA?

- 1. CITY CENTER
- 2. WATERFRONT DEVELOPMENT
- 3. NEW TRANSPORT TECHNOLOGIES



Table of Contents

List of Figures & Tables	ii
Executive Summary	3
1. Introduction	17
1.1 Metropolitan Transportation Commission Lifeline Transportation Program	17
1.2 CBTP Guidelines	18
1.3 2007 Bay Point CBTP	19
1.4 Current Pittsburg/Bay Point CBTP	19
1.5 Covid-19 and CBTP Development	21
2. Study Area Profile	22
2.1 Demographic Analysis	22
2.2 Transportation Patterns	30
2.3 Transportation Network	32
3. Previous Studies and Mobility Gaps	36
3.1 Local Studies	36
3.2 Countywide Studies	39
3.3 Ongoing Studies	40
3.4 Thematic Mobility Challenges	41
4. Outreach and Engagement Summary	42
4.1 CBTP Advisor Groups	42
4.2 Outreach Strategy	43
4.3 Outreach Awareness	44
4.4 Outreach Results	44
4.5 Outreach Summary	55
5. Methodology and Recommendations	56
5.1 COVID-19 and CBTP Development	56
5.2 Evaluation Criteria	56
5.3 Evaluation Process	59
5.4 Recommended Projects and Plans	60
Appendix A Existing Conditions Report	
Appendix B Outreach Materials and Results	
Appendix C Recommendations Scoring Results	



List of Figures & Tables

Figure ES-1 2007 and Current Community-Based Transportation Plan (CBTP) Study Areas	4
Table ES-1 Key Findings from Community Outreach Events	8
Table ES-2 High Need + High Potential Active Transportation Projects and Programs	11
Table ES-3 High Need + High Potential Transit Projects and Programs	12
Table ES-4 High Need + High Potential School Safety Projects and Programs	13
Table ES-5 High Need Active Transportation Projects and Programs	14
Table ES-6 High Need Transit Projects and Programs	15
Table ES-7 High Project Potential Active Transportation Projects and Programs	15
Table 1-1 Cycle 5 Lifeline Transportation Program Funding	17
Figure 1-1 Community Based Transportation Plan Study Area	20
Table 2-1 Race and Ethnicity in the Study Area and Contra Costa County	23
Figure 2-1 Age Distribution, Study Area (2017 ACS 5-Year Estimates)	23
Figure 2-2 Age Distribution, Contra Costa County (2017 ACS 5-Year Estimates)	23
Figure 2-3 Population Under 18 Years of Age	24
Figure 2-4 Population Age 65 and Over	25
Figure 2-5 Limited English Proficiency, Study Area and Contra Costa County (2017 ACS 5-Year Estimates)	26
Figure 2-6 Median Household Income, Study Area and Contra Costa County (2017 ACS 5-Year Estimates)	26
Figure 2-7 Population in Poverty (200% of Federal Poverty Level)	27
Figure 2-8 Percentage of People with Sensory Disabilities	28
Figure 2-9 Percentage of People with Physical Disabilities	29
Table 2-2 Mode of Travel to Work in the Study area and Contra Costa County	30
Figure 2-10 Vehicle Availability, Study Area (2017 ACS 5-Year Estimates)	30
Figure 2-11 Vehicle Availability, Contra Costa County (2017 ACS 5-Year Estimates)	30
Figure 2-12 Household Vehicle Availability	31
Figure 2-13 Long Distance Commute	32
Figure 2-14 Existing Transit Facilities	33
Figure 2-15 Existing and Proposed Bicycle Facilities	35
Figure 4-1 CBTP Outreach Flyer	45
Figure 4-2 CBTP Outreach Flyer (Spanish Verison)	45
Figure 4-3 Pittsburg/Bay Point Outreach Locations Map	46
Figure 4-4 County Planning Event Attendance	47
Figure 4-5 Contra Costa and Solano County Foodbank Responses	48
Figure 4-6 Contra Costa and Solano County Foodbank Results	49
Figure 4-7 Los Medanos Community College Mustang Day Responses	51
Figure 4-8 Los Medanos Community College Mustang Day Results	52
Figure 4-9 Los Medanos Community College Mustang Day Dot Survey Results	52
Figure 4-10 Total Outreach Counts	55
Figure 4-11 Total Responses Collected by Type	55
Figure 5-1 High Need + High Potential Active Transportation Recommendations	61
Figure 5-2 High Need + High Potential Transit Recommendations	62
Figure 5-3 High Need + High School Safety Recommendations	63
Table 5-1 High Need + High Potential Active Transportation Projects and Programs	64
Table 5-2 High Need + High Potential Transit Projects and Programs	65
Table 5-3 High Need + High Potential School Safety Projects and Programs	66
Table 5-4 High Need Active Transportation Projects and Programs	67
Table 5-5 High Need Transit Projects and Programs	68
Table 5-6 High Project Potential Active Transportation Projects and Programs	69



Executive Summary

This Community-Based Transportation Plan (CBTP) addresses transportation challenges in low-income “Communities of Concern” (CoC) across areas of Bay Point, Pittsburg, Antioch, and unincorporated Contra Costa County. The plan was developed by Contra Costa Transportation Authority (CCTA) with Metropolitan Transportation Commission (MTC) grant funding. In conformance with MTC guidelines, it represents a collaborative effort between CCTA, community members, local stakeholders, and transit operators to identify and fill local mobility gaps that impact low-income and challenged communities.

The CBTP recommends a series of projects and programs identified during community outreach and review of existing studies. These recommendations were prioritized using evaluation criteria developed with plan advisors.

COVID-19 Statement

The COVID-19 pandemic emerged following the outreach process of this CBTP. As a result, the community and stakeholder feedback in this plan does not reflect the changes in mobility context, habits, priorities, and challenges due to COVID-19 and formal shelter-in-place orders.

The scoring process was developed following shelter-in-place, and accounts for the impacts of those regulations. Shelter-in-place prompted significant shifts in the financial feasibility and implementation potential of transit projects, including those identified by Pittsburg, Bay Point and Antioch community members. As a result, some transit projects scored lower in the evaluation process used in this CBTP (see Section 5.2).

However, as explained further in Sections 5.2 and 5.4.1, counts at BART stations and for various transit systems show that transit ridership declines are significantly less pronounced in disadvantaged communities as compared to others. In the Pittsburg/Bay Point area, pre-COVID community input collected in the Plan is consistent with post-COVID ridership statistics: both reaffirm that there are major transit needs in the area that require fulfillment both before and during the pandemic. It can be assumed that the community will continue to rely on transit in the post-COVID future.

The Contra Costa Transportation Authority decided to adopt this plan in the current context, rather than re-initiate the existing conditions, community outreach, and recommendations processes. While COVID conditions affected the outcome of the evaluation process, this document has been developed to be flexible and amenable to revision based on return to normal conditions or solidification of “new normal” conditions. This Plan contains numerous transit projects categorized as “High Need”, which under current conditions would be challenging to implement. However, it is assumed that over the 10-year planning horizon of this CBTP, the mobility environment will change. Public transit is an ongoing lifeline for communities of concern, and recommendations deemed to have lower implementation potential in the age of COVID should be considered future opportunities regardless.

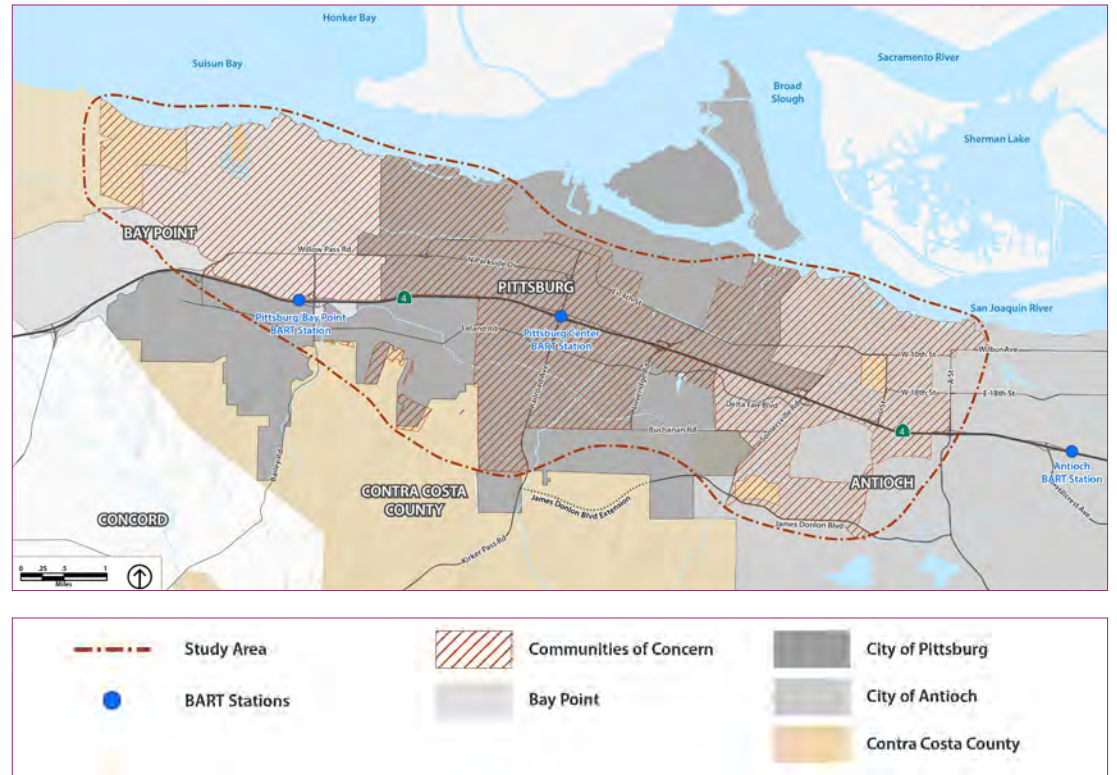
Study Area Profile

Demographic Profile

The most recent CBTP in this area was completed in 2007. The study area was limited to a portion of the Bay Point community, then home to about 22,000 people. The 2007 CBTP recommended 10 mobility improvement programs ranging from transit shelter enhancements to parking and lighting improvements at Bay Area Rapid Transit (BART) stations. Of these recommendations, three have been fully implemented and two partially implemented.

Figure ES-1 2007 and Current Community-Based Transportation Plan (CBTP) Study Areas

Figure 1: Bay Point Geographic Area



The current CBTP study area represents a significant expansion from 2007, as shown in Figure ES-1. It includes the majority of Bay Point north of State Route (SR-) 4; all of central Pittsburg surrounding SR-4 and Railroad Avenue, from Suisun Bay to the southern city limit; pockets of unincorporated Contra Costa County; and the City of Antioch west of A Street. The current population exceeds 93,000. In 2017, the median household income in the study area was \$54,000, with approximately 44 percent of residents living in poverty (defined here as below 200 percent of the federal poverty threshold).

The study area is more diverse than Contra Costa County as a whole. It contains higher percentages of Hispanic or Latino and Black or African-American residents than the County, half of the percentage of Asian residents and a much lower percentage of white residents. Less than 18 percent of CBTP area residents are white, non-Hispanic or Latino, compared to about 45 percent countywide. Approximately 4,100 households in the study area (13 percent of total households) are designated as “Limited English-Speaking Households,” as compared to 7 percent of households countywide.

Transportation and Transit Profile

Of the approximately 41,000 commuters 16 years and over in the study area, 87 percent travel to work by personal vehicle. Two-thirds of those workers drive alone. Nearly all residents in the study area experience commutes of 37 minutes or longer.

The study area includes the Pittsburg/Bay Point and Pittsburg Center BART stations, served by the SFO-Antioch BART line. The Antioch BART station is located about one mile east of the study area boundary. Amtrak service is available at the far-east end of the study area, providing direct connections to Berkeley, Oakland, San Jose, Stockton, Fresno and points beyond.

Local and intercity bus transit is primarily provided by Tri Delta Transit, which serves the entire study area through 11 bus routes. These routes connect BART stations and provide connectivity through eastern Contra Costa County. Bus operator County Connection also runs local and express bus routes, including Line 93X, which provides service from the Antioch BART station to Walnut Creek BART station.

Finally, the study area is served by an active transportation network that is a blend of bicycle and pedestrian facilities. Bike facilities consist mostly of Class I and Class II bikeways on major, east to west roadways.

Past and Current Studies

The recommendations in this CBTP respond to and build on previous and ongoing transportation studies. Due to the size and multijurisdictional make-up of the study area, understanding common mobility themes and adopted policies was significant to the development of relevant recommendations. For example, community feedback related to bicycle and pedestrian infrastructure was coordinated with projects proposed in 2020 *Pittsburg Moves*, the city's Active Transportation Plan, which was released in draft form in August 2020.

As detailed in Chapter 3, 11 local and countywide studies, spanning 2002 to the present, were reviewed.

Outreach and Engagement

All CBTP recommendations are based on a community coordination campaign consistent with MTC Guidelines.

Outreach and engagement in this plan included the following components:

1. Advisory group oversight
2. Project web page
3. Awareness campaign
4. County planning events
5. "Pop-Up" sessions at events in the study area
6. In-depth interviews with community members
7. Meet-and-greet feedback sessions with community resource leaders



Steering Committee Oversight

A CBTP Steering Committee (SC) was convened twice to ensure an inclusive outreach process, provide direction on reaching specific communities, and prioritize outreach opportunities. Members of the SC included:

- Vincent Manuel, Deputy Chief of Staff, Representing Supervisor Federal Glover
- Joy Motts, Mayor Pro Tem, City of Antioch
- Debra Mason, Chair, Bay Point Municipal Advisory Council
- Tim Leong, Director of Communication, Los Medanos College
- Alejandra Plascencia, East County Community Liaison, First 5 Contra Costa

Project Working Group Oversight

A Project Working Group (PWG) of local jurisdiction and transit agency staff convened five times throughout the outreach process to review the Outreach Strategy, help identify stakeholders in various CoCs, and provide practical guidance on coordinating outreach events and stakeholders. Members of the PWG for the Pittsburg/Bay Point CBTP included:

- Martin Engelmann, Deputy Executive Director, Planning, CCTA
- Matt Kelly, Senior Transportation Planner, CCTA
- Jaclyn Reyes, Administrative Assistant, CCTA
- James Hinkamp, Associate Transportation Planner, CCTA
- Mary Halle, Senior Civil Engineer, Contra Costa County (CCC) Public Works
- Bruce “Ole” Ohlsen, Pittsburg Citizen
- Vincent Manuel, Deputy Chief of Staff, CCC Supervisor District V
- Colin Piethe, Planner, CCC Dept. of Conservation and Development
- Denise Milosevich, Senior Health Education Specialist, CCC Health Services
- Kamal Parks, Senior Planner, BART
- Steve Ponte, Chief Operating Officer, East Contra Costa Transit Authority (ECCTA)
- Arlene Roberts, Administrative Analyst III, City of Antioch
- Tamany Brooks, Chief of Police, City of Antioch
- Agustin Diaz, Manager of Planning and Grants, ECCTA
- Paul Reinders, City Traffic Engineer, City of Pittsburg
- Clayton Johnson, Senior Health Education Specialist, CC Health Services

Project Web Page

The CBTP team developed a project web page on the CCTA website. The web page included background information on the CBTP process, links to project submittals such as Existing Conditions Reports and Outreach Strategies, and notification of events using customized fliers.

Awareness Campaign

The CBTP team developed a graphics-rich Outreach Awareness Notice in English (see Figure 4-1) and Spanish (see Figure 4-2) to notice the public of outreach events in various CoCs. The flier was adapted to each event and posted digitally on websites of agencies and stakeholders involved in the project.

County Planning Events

Contra Costa County is currently updating its General Plan, a process titled *Envision Contra Costa 2040*. The CBTP team attended the following outreach events associated with this process to gauge community mobility priorities in Bay Point:

- Contra Costa County General Plan Update Community Meeting 2 for Bay Point. This meeting was held on August 12, 2019, at the Ambrose Recreation and Park District office.
- Contra Costa County General Plan Update Community Meeting 3 for Bay Point. This meeting was held on January 30, 2020, at the at the Ambrose Recreation and Park District office.

Approximately 45 attendees contributed feedback concerning transportation challenges, most related to the need for an improved walking and cycling environment, increased frequency of east to west Tri Delta Routes and improved BART access.

Pop-Up Sessions

CBTP team members worked with community-based organizations (CBOs), non-profits, and various local agencies to schedule “pop-up” outreach sessions at pre-scheduled events targeting low-income and other potentially transportation-challenged communities. The goals of these events were to collect detailed feedback about transportation challenges directly from CoC residents and record personal narratives describing how these challenges impact daily life. English- and Spanish-speaking CBTP project staff facilitated “map-and-dot” study board exercises, on-site surveys, and “infrastructure gap” sticker exercises to allow participants to visually identify existing mobility gaps.

The CBTP team also conducted detailed interviews with volunteers to develop personal vignettes about daily mobility challenges in the study area.

Pop-up sessions were conducted at the following events with the following participation rates:

- 1. The Food Bank of Contra Costa and Solano** weekly food service at Buchanan Park in the City of Pittsburg, on November 19, 2019. Approximately 15 attendees participated in interactive exercises, and nine in-depth interviews were conducted.
- 2. Los Medanos Community College “Mustang Day”** on January 29, 2020. This event is hosted by the college each semester to welcome new students. At this event, 51 individuals participated in sticker voting, 55 people participated in mapping exercises, and 6 detailed interviews were conducted.

Meet-and-Greet Sessions

- 1. Antioch Senior Center.** On January 3, 2020, CBTP team members visited the center to discuss paratransit, disability challenges, and access. Interviews were conducted with the Director of Programming, the Center’s Certified Transit Trainer, and visitors to the center. These discussions focused on access to both the Antioch and Pittsburg senior centers as well as paratransit service across the study area.
- 2. Pittsburg Senior Center.** On January 4, 2020, CBTP team members collected feedback concerning the same topics from the Recreation Supervisor of Pittsburg Senior Center, including phone conversations and follow-up emails.

Key Findings

Table ES-1 summarizes the key findings and feedback from each outreach component.



Table ES-1 Key Findings from Community Outreach Events

Contra Costa County General Plan Update Community Meeting #2 and #3 in Bay Point

- Desire for better walking access to amenities like stores;
- Need for increased frequency of Tri Delta Route 381 and others well-travelled routes;
- Community-wide need for safer, more comfortable bus shelters;
- Need for improved transit options for disabled community members;
- Desire for direct BART shuttles and easier BART access;
- Lack of adequate safety and security concerns on public transit in bay point;
- Need for improved bike facilities, sidewalks, lighting and other corridor improvements on Willow Pass Road and Bailey Road

Food Bank of Contra Costa and Solano

Bicycle Challenges:

- Lack of adequate bike lanes on routes accessing support facilities and resource centers
- Dangers to cyclists on Willow Pass Road from Loftus Road westward
- Poor lighting; high auto-speeds on corridors

Pedestrian Challenges:

- Dangerous surrounding intersections, including Loveridge Road and California Avenue Intersection and others
- Sidewalk conditions on Buchanan Road: Sidewalk gaps, inadequate lighting, lack of wheelchair accessibility
- Dangerous and reckless driving on Harbor Street surrounding Pittsburg High School

Food Bank of Contra Costa and Solano *(Continued)*

Transit Challenges:

- Need for a shuttle route connecting support services such as food bank
- Lack of adequate bus routes on key corridors from study area to central Concord
- Need for a Tri Delta or County Connection shuttle connecting key neighborhoods to Pittsburg Center BART due to limited parking and bus service
- Unreliability of Tri Delta routes
- Unreliable connections on trip from central Pittsburg to Antioch; wait times are too long
- Inadequate evening service from CBTP study area to major medical facilities in Martinez such as VA Hospital

Paratransit Challenges:

- Difficult planning to due to reservation requirements
- General unreliability of paratransit busses

Los Medanos Community College "Mustang Day"

Bicycle Challenges:

- There are dangerous bicycle conditions on small segment of Willow Pass between Port Chicago Highway and Evora Road in Bay Point.
- Common use of Port Chicago for bike commuting on the north side of the City, but without marked bike lanes.
- Dangers of Harbor Street south of California Avenue: SR-4 crossing; bad lanes and safety
- Poor road conditions of East 14th Street east of Solari Street

**Table ES-1 Key Findings from Community Outreach Events
(Continued)**

**Los Medanos
Community College
“Mustang Day”
(Continued)**

Pedestrian Challenges:

- Bad pedestrian crossing at Highway 4 on-ramp (towards Hillcrest); timing of the light is bad and cars making right turns do not see pedestrians.
- Scary intersection of Somerville Road and State Route 4 due to number of lanes and conflicting signal times during pedestrian crossing.
- Lack of complete sidewalks and crosswalks along Railroad Avenue south of BART Station.
- Walking becomes more difficult during Los Medanos Community College school hours.
- Need for a comfortable pedestrian connection between the Costco center and Century Plaza Shopping Center.

Transit Challenges:

- Difficulty of getting in and out of the El Pueblo Neighborhood: Carpino and School Streets are the only ways in and out. Route extension is needed.
- Lack of adequate evening bus service for night students and staff throughout Pittsburg.
- Tri Delta Route 387 stops running after the last bus leaves campus at 9:15 PM.
- Need for a nighttime shuttle for student safety and BART access
- Inadequate service and infrastructure on routes servicing Los Medanos Community College
- Unreliability/lateness of Route 380
- Poorly timed connections between Routes 380 and 388
- Shelters at stops along 380 and 388 lack seating and signage

**Los Medanos
Community College
“Mustang Day”
(Continued)**

- Drivers often “demoralize” those without correct fare
- Difficulty of getting to Los Medanos Community College from some areas due to lack of north-south running bus routes.

**Antioch and Pittsburg
Senior Centers**

Paratransit Challenges:

- Service does not run late enough to facilitate evening activities at senior centers.
- Senior Paratransit hours, which stop at 5:30 PM, should match fixed-route service hours for evening service.
- Senior paratransit service between Bay Point BART to Antioch BART needs to run later.
- Route 200 (BART to VA hospital, Kaiser, Regional Medical Clinics) is vital to seniors and the one-hour headway needs to be reduced. Service should run later into the evening to allow for an associated extension of paratransit service.
- Another option: Expand paratransit service for all of Tri Delta’s service area from Martinez/Concord to far East County regardless of the time fixed routes end until last fixed route bus runs.
- Formalize a non-paratransit ‘driver request program’ so that senior centers and other facilities can coordinate with Tri Delta to ask for volunteer drivers for improved access to special events.
- Paratransit access is restricted due to gap between age-related paratransit and ADA-eligible paratransit. Tri Delta should at least simplify the ADA eligibility process.
- Simplify the On-Demand service with Lyft/Uber, which is currently a five-step, multi-day registration process requiring a smart phone and bank account, as well as Lyft/Uber accounts.

Recommendations Methodology

Evaluation Criteria

The CBTP project team worked with the PWG to establish four evaluation criteria to rank projects and programs by their ability to improve mobility for challenged communities:

1. **Reflects Community Priorities**
2. **Increases Access**
3. **Financial Feasibility**
4. **Ease of Implementation**

Scoring Methodology

Recommendations were scored one through five for each evaluation criteria. A score of one reflects the lowest potential for fulfillment of that category; five the highest. For all project and plans, the following score averages were calculated:

- **Area Need Score:** The average score of Criterion 1 (Reflects Community Priorities) and Criterion 2 (Increases Access)
- **Project Potential Score:** The average score of Criterion 3 (Financial Feasibility) and Criterion 4 (Ease of Implementation)

Drawing upon analysis of previous Community Based Transportation Plans, the team decided to consolidate criteria into the two scores listed above to improve the implementability of the CBTP as a whole. A focus on recommendations with the highest and/or most immediate potential to get funded and built will support the grant selection, timing and planning processes. It will facilitate more informed decision-making and awareness of potential challenges for future projects.

Projects and plans were categorized into the following groups based on the results of this scoring system.

High Need + High Potential Recommendations

These recommendations received an Area Need Score of 3.5 or above and a Project Potential Score of 3.5 or above. These are projects and programs consistent with community priorities, have the highest potential to reduce access gaps, and are unlikely to face implementation challenges.

High Need Recommendations

High Need Recommendations received an Area Need Score of 3.5 or above and a Project Potential Score of below 3.5. These projects will fulfill community priorities and increase community access but may be difficult to complete due to fun Project ding and costs, cross-jurisdictional management, engineering, and other implementation challenges.

High Project Potential Recommendations

These recommendations received an Area Need Score between 2.5 and 3.5, and a Project Potential Score of 3.5 or above. High Project Potential Recommendations would not fill priority and access gaps to the degree that higher-priority recommendations would. Yet they are financially feasible and unlikely to encounter major implementation challenges.

Project Types

Recommendations fall within the following groups of projects and plans:

Active Transportation. These are generally capital improvements that increase safe, healthy, active transportation choices, namely walking and biking, for everyday trips.

Transit. Transit projects may include new routes, expanding operating hours of certain lines, increasing transit line frequency, or improving transit stops with lighting, shelter, and seating.

School Safety. School safety projects provide safe, non-motorized routes between where people live and local schools.

Recommendations

The following tables summarize recommendations across project type. Each table includes recommendations, Area Need score, Project Potential score, and estimated cost.

High Need + High Potential Recommendations

Active Transportation Projects and Programs

Active Transportation Projects comprise most High Need + High Potential Recommendations. Not only were such projects identified by the community, in current studies and during CBTP advisor coordination, but funding for active transportation and multi-modal safety remains available in the wake of COVID-19.

Table ES-2 High Need + High Potential Active Transportation Projects and Programs

Recommendation	Area Need Score (3.5+)	Project Potential Score (3.5 +)	Estimated Cost
Develop a protected Class IV separated bicycle facility along Railroad Avenue in Pittsburg, from California Avenue to Buchanan Road.	4	3.75	\$480,000
Implement an ADA-compliant intersection improvement program at 3-4 major intersections along Railroad Avenue in Pittsburg.	4.5	4.5	\$600,000 to \$1 million
Complete community- and City-identified intersection improvements at various points across Harbor Street in Pittsburg, between Central Avenue and Solari Street.	3.75	4.5	\$175,000 to \$250,00 per intersection
Implement near-term improvements at Somersville Road/SR 4 intersection, including striping, signal modifications.	4	3.5	\$900,000
Fill sidewalks gaps on Buchanan Road: 1. at Railroad Avenue 2. from Kirker Pass Road to Heights Avenue	4	3.75	\$1.3 million
Improve pedestrian and bicycle experience and safety along Willow Pass Road in Bay Point by installing/upgrading infrastructure.	4.25	3.25	\$3 million to \$5 million
Implement a pedestrian and bicycle safety program on West 10th Street in Antioch that includes traffic calming improvements between G and A Streets and safety upgrades at the intersection of West 10th Street and D Street.	4	3.5	\$1 million to \$ 1.5 million
Improve pedestrian and bicycle experience and safety along Port Chicago Highway in Bay Point to McAvoy Road by installing/upgrading pedestrian and Bicycle infrastructure.	4.25	3.5	\$1 million to \$1.5 million
Install bicycle lanes on the McAvoy Road railroad crossing north of Port Chicago Highway.	3.5	3.5	\$30,000 to \$40,000
Improve pedestrian and bicycle experience and safety along Bailey Road in Pittsburg and Bay Point by installing/upgrading pedestrian and bicycle infrastructure.	4.5	3.5	\$1.5 million to \$2 million

Transit Projects and Programs

The overall implementation and financial potential of transit projects decreased with declines in systemwide revenues from COVID. This is reflected in the low number of High Need + High Potential Transit Projects shown in Table ES-3, and higher number of transit projects scored High Need (ES-6)

It is important to note that disadvantaged communities remain disproportionately reliant on transit service, as compared to other communities, during the pandemic. Ridership at Orinda BART Station, where approximately 72 percent of the population is white, saw a 94 percent drop in ridership. In comparison, Pittsburg Center BART Station, located where 65 percent of the population is Black or Latinx, saw a 74 percent drop in year over year ridership.¹

¹ Bay Area Council Economic Institute, September 2020, *Economic Profile 2020: Housing and Transportation in a Post-Pandemic Bay Area*, <http://www.bayareaeconomy.org/report/housing-and-transportation-in-a-post-pandemic-bay-area/>, accessed November 9, 2020.

Accessible public transit remains a mobility backbone for disadvantaged communities in the Bay Area and beyond. This was borne out in the Pittsburg/Bay Point area outreach process, during which low-income, youth and elderly residents identified area-wide and route-specific gaps, transit-isolated destinations, BART access issues and bus stop upgrades as needed community improvements.

Current challenges notwithstanding, all transit recommendations in this plan are considered viable community priorities.

Table ES-3 High Need + High Potential Transit Projects and Programs			
Recommendation	Area Need Score (3.5+)	Project Potential Score (3.5 +)	Estimated Cost
Upgrade up to 10 additional bus stops along high-use Tri Delta and County Connection routes with “half-barrel” bus shelters and shelter improvements consistent with 2019 NACTO and ADA standards.	4	3.5	\$20,000 to \$30,000 per stop
Upgrade or install five “half-barrel” bus shelters and improvement consistent with 2019 NACTO and ADA standards on routes serving the Antioch Senior Center., as well as.	4	3.5	\$20,000 to \$30,000 per stop
Develop a public information program to introduce and educate special needs transit riders about Tri Delta’s Tri Myride service. Develop in-person presentations about program eligibility, technology and service areas for senior centers and disability and other support facilities.	3.75	4	\$15,000 to \$20,000

School Safety Projects and Programs

As of this draft CBTP, public schools and facilities in Contra Costa County school district are closed to classroom learning for the 2020 through 2021 school year and planning various reopening strategies. As noted in Section 5.1, these conditions make it difficult to predict implementation of school safety projects. However, funding for previously identified Safe Routes to School programs increases the potential for these projects

Table ES-4 High Need + High Potential School Safety Projects and Programs			
Recommendation	Area Need Score (3.5+)	Project Potential Score (3.5 +)	Estimated Cost
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Pittsburg High School.	4.25	3.75	\$400,000 to \$700,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Bel Air Elementary in Bay Point.	3.5	3.75	\$300,000 to \$600,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Highlands Elementary School in Pittsburg.	3.75	3.5	\$300,000 to \$600,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Parkside Elementary School in Pittsburg.	3.5	3.5	\$300,000 to \$600,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Belshaw Elementary School in Antioch.	3.5	4	\$300,000 to \$600,000

High Need Recommendations

Active Transportation Projects and Programs

Table ES-5 High Need Active Transportation Projects and Programs			
Recommendation	Area Need Score (3.5+)	Project Potential Score (below 3.5)	Estimated Cost
Install Class II Buffered Bike Lanes along Harbor Street from Buchanan to Stoneman Avenue.	4.25	3.25	\$60,000
Install Class IV Separated Bikeway along Harbor Street, from Stoneman Avenue to 3rd Street:	4.25	3.25	\$680,000
Increase bicycle safety at Harbor Street under-crossing of Mococo railroad line in Pittsburg with separation and surface improvements.	3.5	2	\$30,000
Increase bicycle safety at Harbor Street under-crossing of BNSF railroad line in Pittsburg with separation and surface improvements.	3.5	2	\$30,000
Increase bicycle safety at the Willow Pass Road under-crossing of both the BNSF and the Mococo lines in Pittsburg with separation and surface improvements.	4	1.25	\$10,000,000 per crossing
Add Class I Bike Path on west side of San Marco Boulevard from Evora Road to Rio Verde Circle.	4.5	2.5	\$4.8 million
Work with local or transit agencies to install secure public bike repair equipment at BART stations and transit stops near public schools.	3.5	3	\$5,000 to \$8,000 per "station"
Improve the personal security and comfort along portion of Delta de Anza Regional Trail in study area, via new lighting, selective vegetation removal, installation of cameras, and improved sight lines.	4.5	2.5	\$800,000
Add pedestrian lighting and infrastructure improvements at intersections along the transition from Willow Pass Road to North Parkside Drive.	3.5	3	\$175,000 to \$250,00 per intersection
Implement a program of bicycle facility maintenance that includes quarterly lane sweeping by all study area agencies, as-needed lane restriping and graffiti abatement along the portion of the Delta de Anza Regional Trail in the study area.	3.5	3	\$500,000 annually

Transit Projects and Programs

Table ES-6 High Need Transit Projects and Programs			
Recommendation	Area Need Score (3.5+)	Project Potential Score (below 3.5)	Estimated Cost
Upgrade evening service and increase headways on 2 high-use routes connecting Los Medanos Community College and Pittsburg Adult Education Center to BART Stations and the City of Antioch, including Routes 387, 380, 381 and 388.	3.75	2	\$500,000 to \$1.5 million yearly
Reduce the 1-hour headway on Tri Delta Route 200 (BART to VA hospital, Kaiser, Regional Medical Clinics) and extend service to 9:00 PM.	3.5	3	\$500,000 to \$1 million yearly
Expand Tri Delta Senior (Age 65+) Paratransit Transportation evening service from 5:30 PM to 9:30 PM, with limited weekend service.	4	2	\$350,000 to \$500,000 yearly

High Project Potential Recommendations

Active Transportation Projects and Programs

Table ES-7 High Project Potential Active Transportation Projects and Programs			
Recommendation	Area Need Score (3.5+)	Project Potential Score (below 3.5)	Estimated Cost
Work with the City of Pittsburg to complete planned lighting improvements along segments of Railroad Avenue.	3.25	5	\$350,000 to 600,000
Mark green conflict zone striping on all approaches and through bus stops along Harbor Street in Pittsburg, between Buchanan Road and Solari Street.	2.75	4.5	\$7,000 per stop/ intersection
Close sidewalk gaps along Madison Avenue from Delta de Anza Regional Trail to Canal Road.	3	4	\$75,000
Install safety improvements and updates at the Bailey Road and Delta de Anza Regional Trail crossing.	3	4.5	\$125,000
Construct a 10-foot sidewalk segment or trail along the south side of Willow Pass Road between Port Chicago Highway and Evora Road in Bay Point.	2.5	3.5	\$300,000



1. Introduction

1.1 Metropolitan Transportation Commission Lifeline Transportation Program

In 2001, the Metropolitan Transportation Commission (MTC) published two reports identifying gaps in the provision of transportation services in low-income San Francisco Bay Area neighborhoods and initiated two programs to allocate funding for transportation improvement projects based on outreach to low-income communities. The Lifeline Transportation Program (LTP) allocates state and federal funds to provide grants for projects that meet mobility and accessibility needs in low-income communities. The Community-Based Transportation Plan (CBTP) program is an outreach-based program to improve travel needs in specific low-income Communities of Concern (CoC) throughout the Bay Area. Each CBTP is a collaborative effort between community members, transit operators, and congestion-management agencies to identify local mobility challenges and community-oriented solutions.

The projects identified in CBTPs then become eligible for funding through the LTP. Per its 2018 guidelines, the goal of the LTP is to fund projects that result in improved mobility for low-income residents of the San Francisco Bay Area. Eligible projects must:

- Be developed through an inclusive planning process that engages a broad range of stakeholders,
- Improve a range of transportation choices by adding new or expanded services, and
- Address transportation gaps and/or barriers identified in CBTPs.

Both operating projects and capital projects are eligible for funding under the LTP.

LTP Cycle Five, which covers Fiscal Year 2016 through 2017 and Fiscal Year 2017 through 2018 was funded by two sources: State Transit Assistance (STA) and Federal Transit Administration (FTA) Section 5307 Urbanized Area Formula funds. Table 1 details allocations to Contra Costa County.

County and Share of Regional % Low Income Population	FY 2016-2017 (\$ Millions)		FY 2017-2018 (\$ Millions)		Total (\$ Millions) Estimate
	STA Actual	FTA Actual	STA Actual	FTA Estimate	
Contra Costa 14.7%	\$1.08 M	\$0.50 M	\$1.07 M	\$0.50 M	\$3.10 M
Rest of Bay Area 86.3%	\$6.22 M	\$2.87 M	\$7.19 M	\$2.93 M	\$19.36 M
Total	\$7.30 M	\$3.37 M	\$8.26 M	\$3.43 M	\$22.36 M

Source: Metropolitan Transportation Commission, Lifeline Transportation Program Cycle 5 Guidelines.



1.2 CBTP Guidelines

MTC has established guidelines to ensure that CBTP mobility recommendations are the result of community input. Per the 2018 MTC guidelines:

- All CBTP recommendations must be based on a Community Engagement Plan that includes at least three best practices for outreach to low-income residents.
- Community outreach must be coordinated with community stakeholders, such as community-based organizations (CBOs) and non-profits working with the underserved.
- Each CBTP must convene a Steering Committee (SC) of social service, CBO, agency, and/or non-profit leadership to review outreach strategies, recommendation selection criteria, and milestones.
- Each CBTP must identify funding sources for “high-priority” projects.

1.2.1 Communities of Concern

As noted in Section 1.1, CBTP study areas are composed of MTC-identified CoCs. These are census tract-based geographies that exhibit either:

1. A low-income population (less than 200 percent of the federal poverty level) that exceeds 30 percent and a minority population that exceeds 70 percent; or
2. A low-income population that exceeds 30 percent and a population that surpasses MTC thresholds for at least three of the following:
 - Level of English Proficiency
 - Elderly
 - Zero-Vehicle Households
 - Single-Parent Households
 - Disabled
 - Rent-Burdened Households

1.3 2007 Bay Point CBTP

The Bay Point community was first identified as a CoC in MTC's 2001 Regional Transportation Plan (RTP). The resulting CBTP planning grant program funded four CBTPs in Contra Costa County, including one in Bay Point. The first Bay Point CBTP was completed in 2007. The study area included the Bay Point community only. The plan included 10 recommendations for improvements, including: Transit shelter enhancements, additional bus and shuttle services, marketing programs to highlight transit services, parking and lighting improvements at Bay Area Rapid Transit (BART) stations, establishment of an emergency ride home program and crossing-guard programs at local schools, and bicycle/pedestrian improvements along Bailey Road. Of the 10 recommendations in the 2007 Bay Point CBTP, 3 have been fully implemented, and 2 have been partially implemented.

1.4 Current Pittsburg/Bay Point CBTP

1.4.1 Study Area

The Pittsburg/Bay Point CBTP study area was determined primarily by the location of CoCs determined by the most-recent MTC assessment. The current study area boundary does not entirely conform to CoC boundaries because the community focus, reliance on outreach, and potential transit solutions, programs, and projects that result from the CBTP are not limited to the census tract level.

As shown in Figure 1-1, the current CBTP study area includes CoCs north of State Route (SR) 4 in a large area of Bay Point; surrounding SR-4 and Railroad Avenue in central Pittsburg; and bounded by the Pittsburg border, A Street, Suisun Bay, and James Donlon Boulevard in western Antioch. SR-4 bisects the study area, and the northern portion of the study area extends to Suisun Bay and the San Joaquin River. The study area includes the Pittsburg/Bay Point and Pittsburg Center BART Stations.



The study area has significantly increased in size, diversity, and population since the last CBTP. As noted, the 2007 Community-Based Transportation Plan for Bay Point study area included the Bay Point community only, with a population of under 22,000¹ at that time. The current study area extends east from Bay Point, through Pittsburg, and beyond A Street in Antioch. It includes portions of unincorporated Contra Costa County as well. The population is currently over 93,000.

¹ Metropolitan Transportation Commission, February 2007, Community-Based Transportation Plan for Bay Point, page 14.

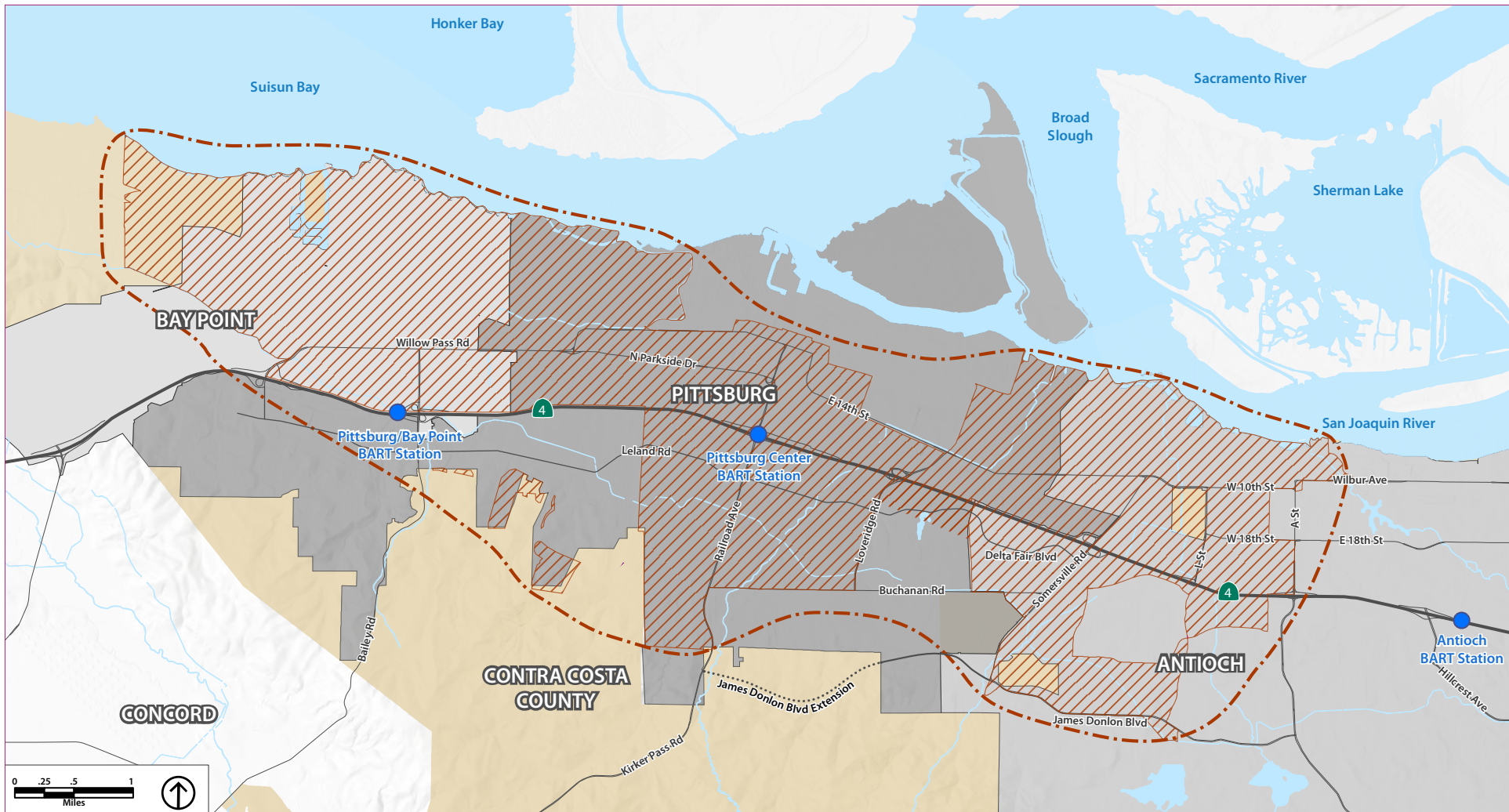
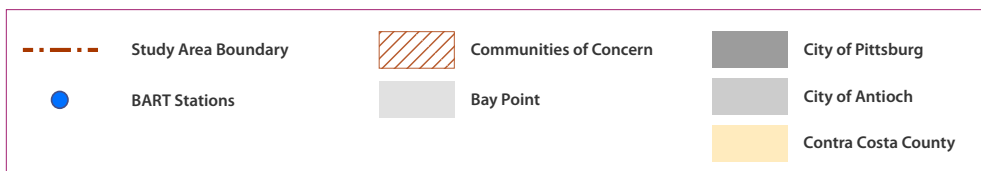
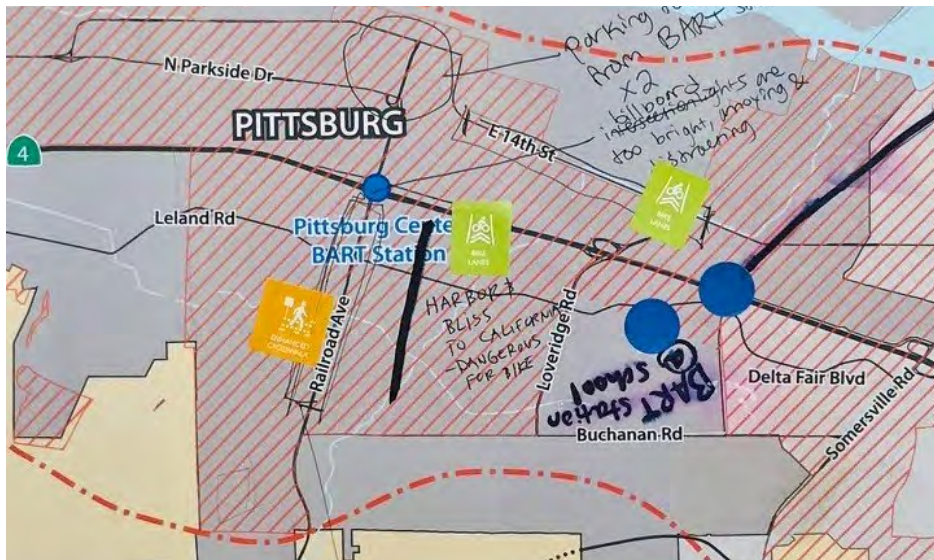


Figure 1-1 Community Based Transportation Plan Study Area





1.4.2 CBTP Advisors

1.4.2.1 Steering Committee

Per MTC’s 2018 CBTP Guidelines, the Pittsburgh/Bay Point CBTP project team convened an SC of representatives from CBOs, non-profits, and agencies with an interest in the CBTP outcome. Individual members are identified in Chapter 4. The role of the SC was to ensure transparency and inclusivity throughout the process, review milestones, and assist in program evaluation. The SC provided input on reaching specific groups in the community, prioritized outreach opportunities, and evaluated the list of policy and project recommendations for the study area. The SC was convened during the community outreach strategy process and during the prioritization of projects and plans to be included in the Final CBTP.

1.4.2.2 Project Working Group

The project team also convened a Project Working Group (PWG), which included the project team and partners from local jurisdictions, transit agencies, and MTC. The PWG met five times throughout the outreach process to provide practical guidance on local input, review deliverables, and provide input on project review criteria and CBTP draft recommendations. See Chapter 4 for a complete list of all PWG members.

1.5 Covid-19 and CBTP Development

The COVID-19 pandemic emerged following the community outreach process of this CBTP (see Chapter 4). As a result, the community feedback that influences recommendations in this CBTP does not reflect the changes in mobility context, habits, priorities, and challenges due to COVID-19 and formal shelter-in-place orders.

However, scoring of the recommendations, which includes financial feasibility and ease of implementation (see Chapter 5) occurred about four months into shelter-in-place regulations. COVID-19 and the resulting mobility habits have shifted the funding and implementation potential of key project types. The projects and programs in this plan reflect pre-COVID community feedback and post-COVID feasibility.

The Contra Costa Transportation Authority determined that it is in the interest of communities in the CBTP study area to adopt this plan in the current context, rather than re-initiate the existing conditions, community outreach, and recommendations processes.

2. Study Area Profile

The current Community-Based Transportation Plan (CBTP) study area is large and diverse, composed of a variety of existing land uses dominated by typical suburban communities. The most common land use is residential, single-family homes, with low- to medium-density housing of about 7 to 21 dwelling units per acre distributed throughout the CBTP study area. Heavy-industrial uses are concentrated along the Pittsburg waterfront, west and east of residential areas surrounding Railroad Avenue. Commercial areas are concentrated along Railroad Avenue in Pittsburg and surrounding State Route (SR-) 4 from Loveridge Road to Somersville Road corridors in east Pittsburg.

A full CBTP *Study Area Existing Conditions* Report is provided in Appendix A to this plan.

2.1 Demographic Analysis

The demographic profile presented in this report is based on census tract data from the 2010 U.S. Census. Data from the American Community Survey (ACS) five-year estimates (2006 through 2010 and 2013 through 2017) are compared to show trends since the last CBTP. In addition, future projections are provided on key demographic variables from the 2017 Regional Transportation Plan (RTP), which the Metropolitan Transportation Commission (MTC) published in July 2017. Also known as Plan Bay Area (PBA) 2040, this RTP contains forecasts for population, housing, and employment for the horizon year of 2040.

2.1.1 Population and Housing

The population of the study area in 2017 was approximately 93,667, an increase of 4.6 percent from the 2010 Census, when the population was 89,513. The study area has seen approximately half the countywide population growth over the past seven years, the latter of which grew 9.4 percent from 1,049,030 residents in 2010 to 1,147,439 in 2017. This trend is forecasted to stabilize in the future, with an expected growth rate of 21 percent from 2017 to 2040 to 113,223 residents within the CBTP study area. This growth rate will be slightly higher than the rate of the county's

long-term growth rate, which is expected to grow by only 17 percent (less than 1 percent per year) from 2017 to 2040 to a population of 1,338,240.

Household size in the study area is about 12 percent larger than household size in Contra Costa County and is expected to increase. Households in the study area increased from 3.2 people in 2010 to 3.21 people in 2017 (0.3 percent), while households countywide have increased 3.2 percent from 2.77 people to 2.86 people. By 2040, household size in the study area is expected to increase to 3.33 people and be 14 percent higher than the rest of the county, which is projected to increase to 2.89 people per household.

2.1.2 Race and Ethnicity

The study area contains higher percentages of Hispanic or Latino and Black or African-American residents versus Contra Costa County, while having approximately half of the percentage of Asian residents and a much lower percentage of white residents versus the County (Table 2-1).

Less than 18 percent of CBTP residents were white, non-Hispanic or Latino, compared to about 45 percent countywide. The Black or African-American population is approximately 16 percent in the study area compared to 8 percent countywide. Since 2010, the Hispanic or Latino population has increased in both the study area and countywide, increasing at a higher rate in the study area; making up over 50 percent of the population of the study area compared to approximately 25 percent countywide. The white population is decreasing, with a drop from 25 percent in 2010 to 18 percent in 2017 in the study area.

2.1.3 Age Distribution

Age distribution in the study area is similar to Contra Costa County, although the senior population is smaller in the study area (see Figures 2-1 and 2-2). Approximately 28 percent, or around 27,000 people, of the study area's total population is under 18 years of age. This youth rate is higher than that of Contra Costa County, which is 23 percent. Figure 2-3 shows the percentage of persons under the age of 18 in the

Table 2-1 Race and Ethnicity in the Study Area and Contra Costa County

Race Category	2017 ACS % of Population		2010 Census % of Population	
	Study Area	Contra Costa County	Study Area	Contra Costa County
White	18%	45%	25%	49%
Black or African American	16%	8%	15%	9%
American Indian or Alaska Native	<1%	<1%	<1%	<1%
Asian	9%	16%	9%	14%
Native Hawaiian or Other Pacific Islander	1%	<1%	1%	<1%
Other	<1%	<1%	<1%	<1%
Two or More Races	5%	5%	3%	3%
Hispanic or Latino	51%	25%	47%	23%
Total	100%	100%	100%	100%

Source: 2006-2010 and 2013-2017 American Community Survey (ACS) 5-year estimates,. Note: Totals may not add up to 100% due to rounding.

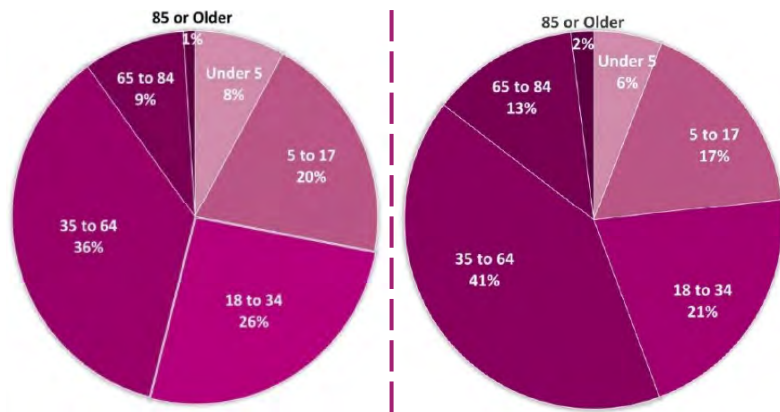


Figure 2-1 Age Distribution, Study Area (2017 ACS 5-Year Estimates)

Source: 2017 ACS 5-Year Estimates (2013-2017).

Figure 2-2 Age Distribution, Contra Costa County (2017 ACS 5-Year Estimates)

Source: 2017 ACS 5-Year Estimates (2013-2017).

study area by census tract. It reveals a greater concentration of young people in areas with access to regional transportation options, such as around Pittsburg/Bay Point and Pittsburg Center Bay Area Rapid Transit (BART) stations, and SR-4.

The senior population (65 years of age and older) in the study area constitutes approximately 10 percent of the total population, compared to 15 percent countywide. Figure 2-4 shows the percentage of seniors in the study area by census tract. By 2040, it is expected that the percentage of senior citizens (65 years and older) will increase to 19 percent of area’s population, while the youth population will decrease slightly.

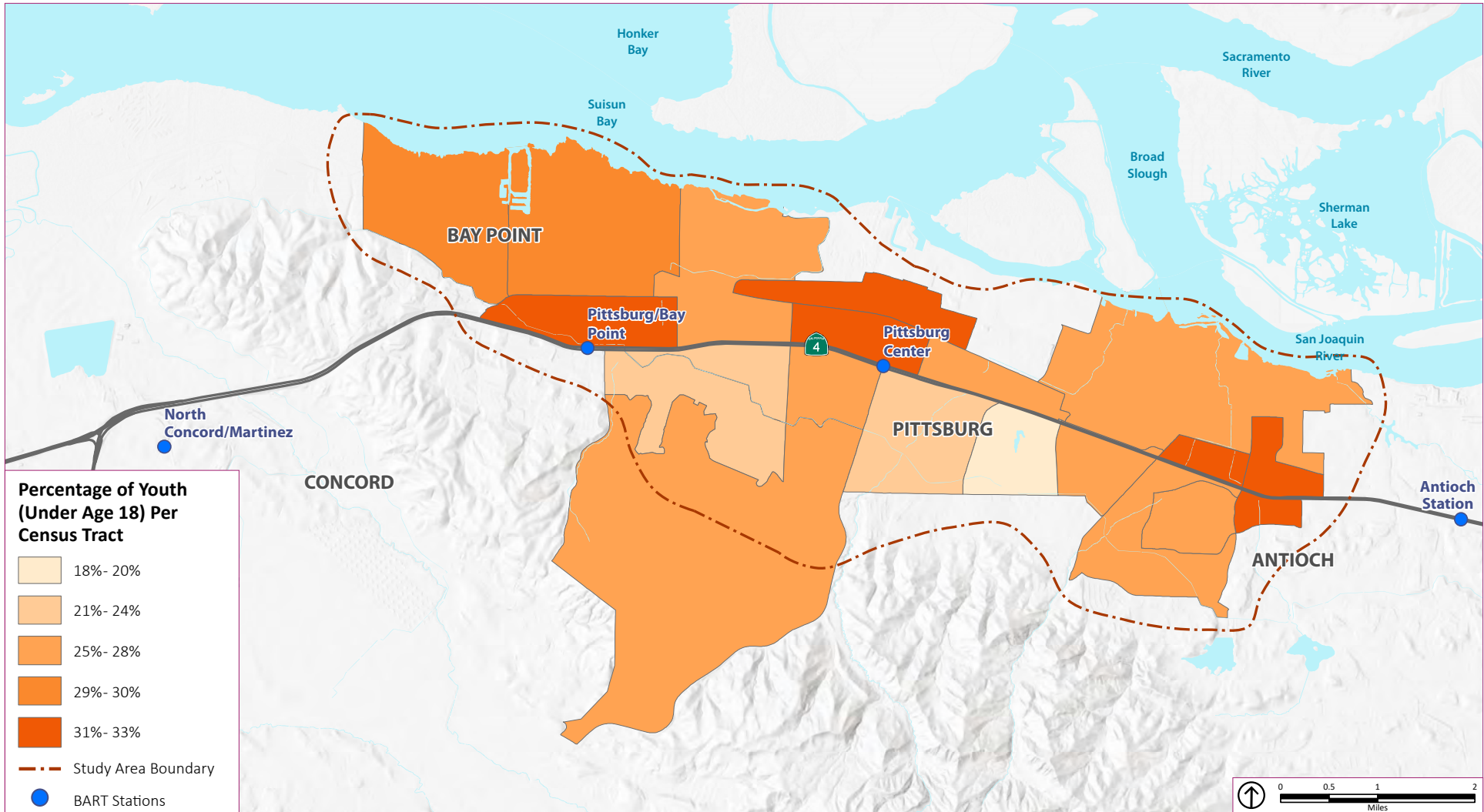


Figure 2-3 Population Under 18 Years of Age

Source: American Community Survey 5-Year Estimates, 2010 and 2017; Contra Costa County, 2018; PlaceWorks, 2019.

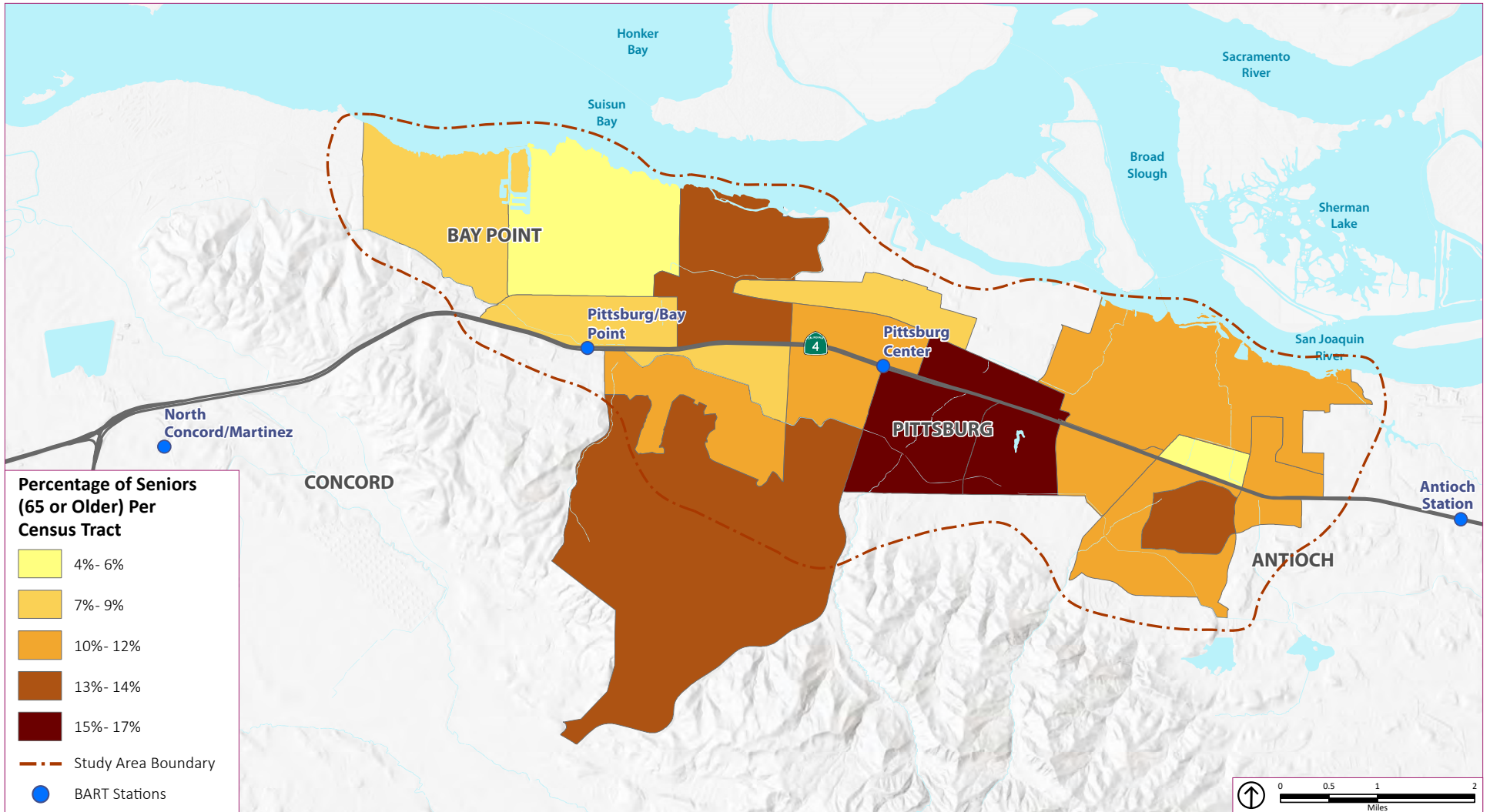
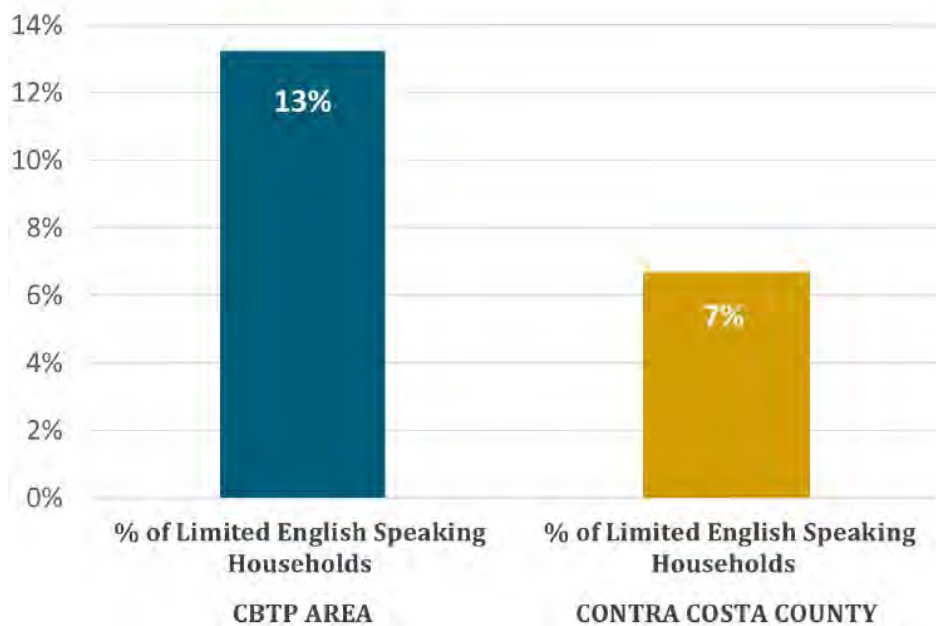


Figure 2-4 Population Age 65 and Over

Source: American Community Survey 5-Year Estimates, 2010 and 2017; Contra Costa County, 2018; PlaceWorks, 2019.

Figure 2-5 Limited English Proficiency, Study Area and Contra Costa County (2017 ACS 5-Year Estimates)

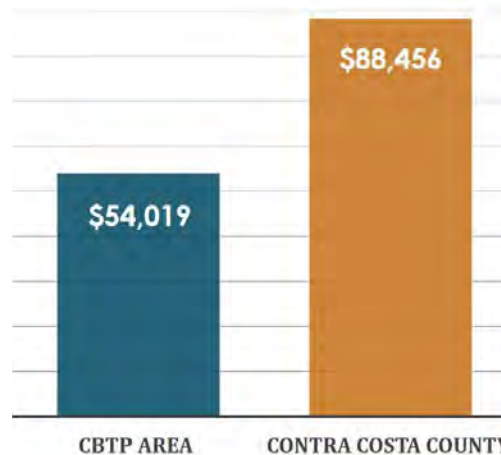


Source: 2017 ACS 5-Year Estimates (2013-2017).

2.1.4 Language and English Proficiency

In the Pittsburg/Bay Point Area CBTP, approximately 4,100 households (13 percent of total households) are designated as “Limited English-Speaking Households.” These are households in which all members 14 years and over speak a non-English language, with varying degrees of difficulty with English. This population segment is considerably larger in the study area relative to the countywide rate of 7 percent of total households (Figure 2-5).

Figure 2-6 Median Household Income, Study Area and Contra Costa County (2017 ACS 5-Year Estimates)



Source: 2017 ACS 5-Year Estimates (2013-2017).

2.1.5 Income and Poverty

According to 2017 ACS five-year estimates, the median household income in the study area is \$54,000, as compared \$88,500 for the entire county (Figure 2-6). The rate of increase of household income in the study area from 2010 to 2017 was also slower than the County. Census tracts in the study area with the lowest median household income (under \$50,000) are in western neighborhoods of Antioch and eastern neighborhoods of Pittsburg, as well as Bay Point, and are primarily located north of SR-4.

2.1.5.1 Poverty Status

The U.S. Census Bureau uses a set of income thresholds that vary by family size and composition to determine the population living in poverty. If a family’s total income is less than the poverty threshold, then that family and every individual in it is considered as living in poverty. To reflect high living costs and wages in the Bay Area, the poverty threshold used in the CBTP analysis is 200 percent of the federal poverty threshold. These 200-percent thresholds for the 2013 to 2017 ACS five-year estimates range from \$31,754 for a family of two to \$101,362 for the largest families (nine people or more). According to 2013 to 2017 ACS five-year estimates, approximately 44 percent of residents in the study area were living in poverty. This figure is significant when compared to 23 percent in Contra Costa County as a whole.

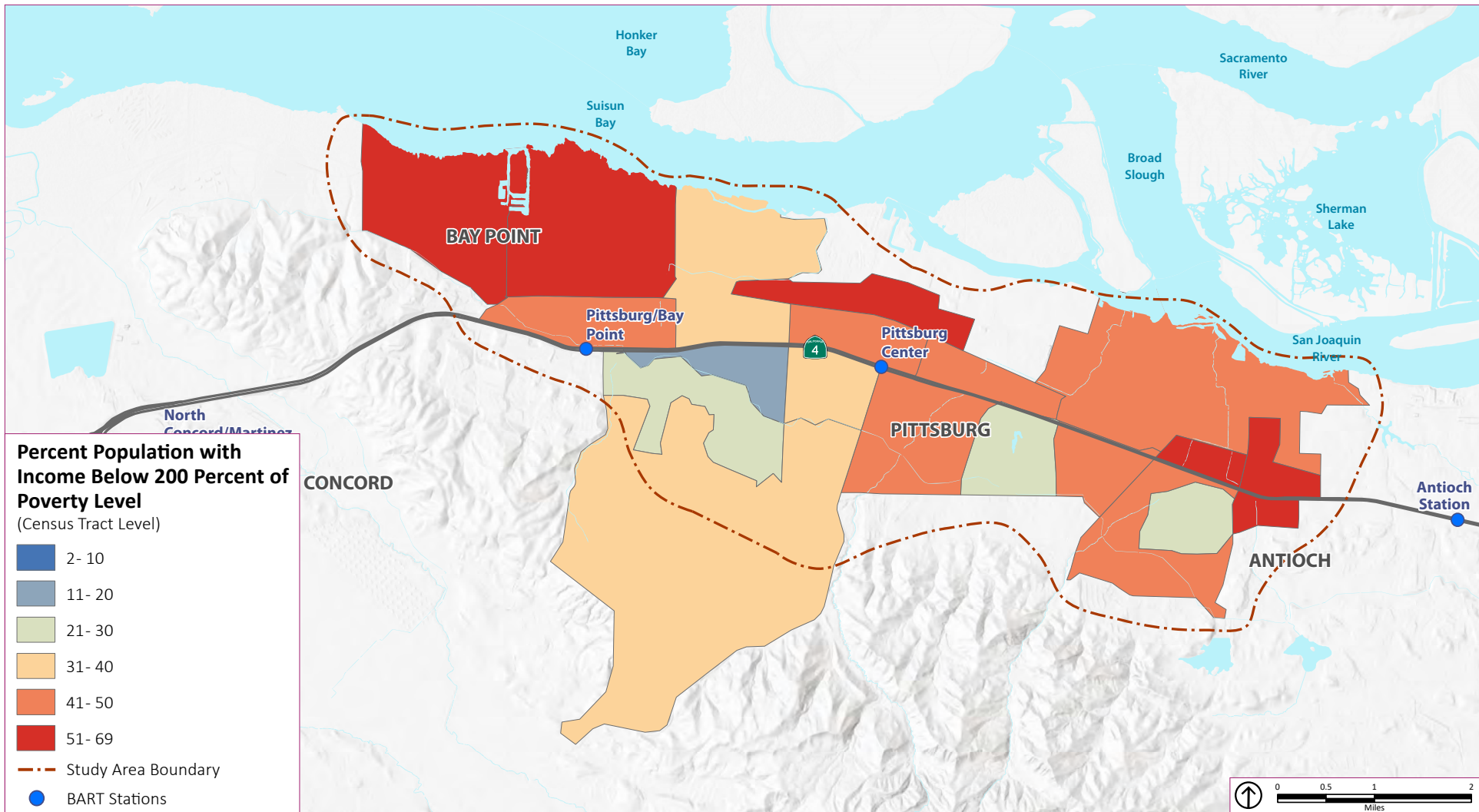


Figure 2-7 Population in Poverty (200% of Federal Poverty Level)

As shown in Figure 2-7, the study area has a relatively significant number of households with annual household income lower than the poverty threshold. Five census tracts in the study area exhibit over 50 percent of the population with income below 200 percent of the federal poverty level. These are primarily located in neighbor-

hoods in west Bay Point, such as Shore Acres and west neighborhoods in Pittsburg near Old Town, and west of Antioch in neighborhoods around Antioch High School. These neighborhoods all fall within the study area and are primarily located north of SR-4.

2.1.5.2 Unbanked Households

Unbanked households do not have an account at an insured institution or do not have an account but obtained non-bank alternative financial services in the past 12 months. According to Prosperity Now, 15 percent of households in the study area are unbanked.¹

2.1.6 Disability

The U.S. Census separates disability type into sensory (hearing- and sight-impaired) and physical disabilities. Both are considered significant barriers to mobility. As shown in Figure 2-8, populations with high rates of sensory disabilities are concentrated immediately southeast of the Pittsburg Center BART station and straddling both sides of the Pittsburg/Antioch boundary north of SR-4. Populations with high rates of physical disabilities (Figure 2-9) are also concentrated in the eastern portion of the study area, north of SR-4.

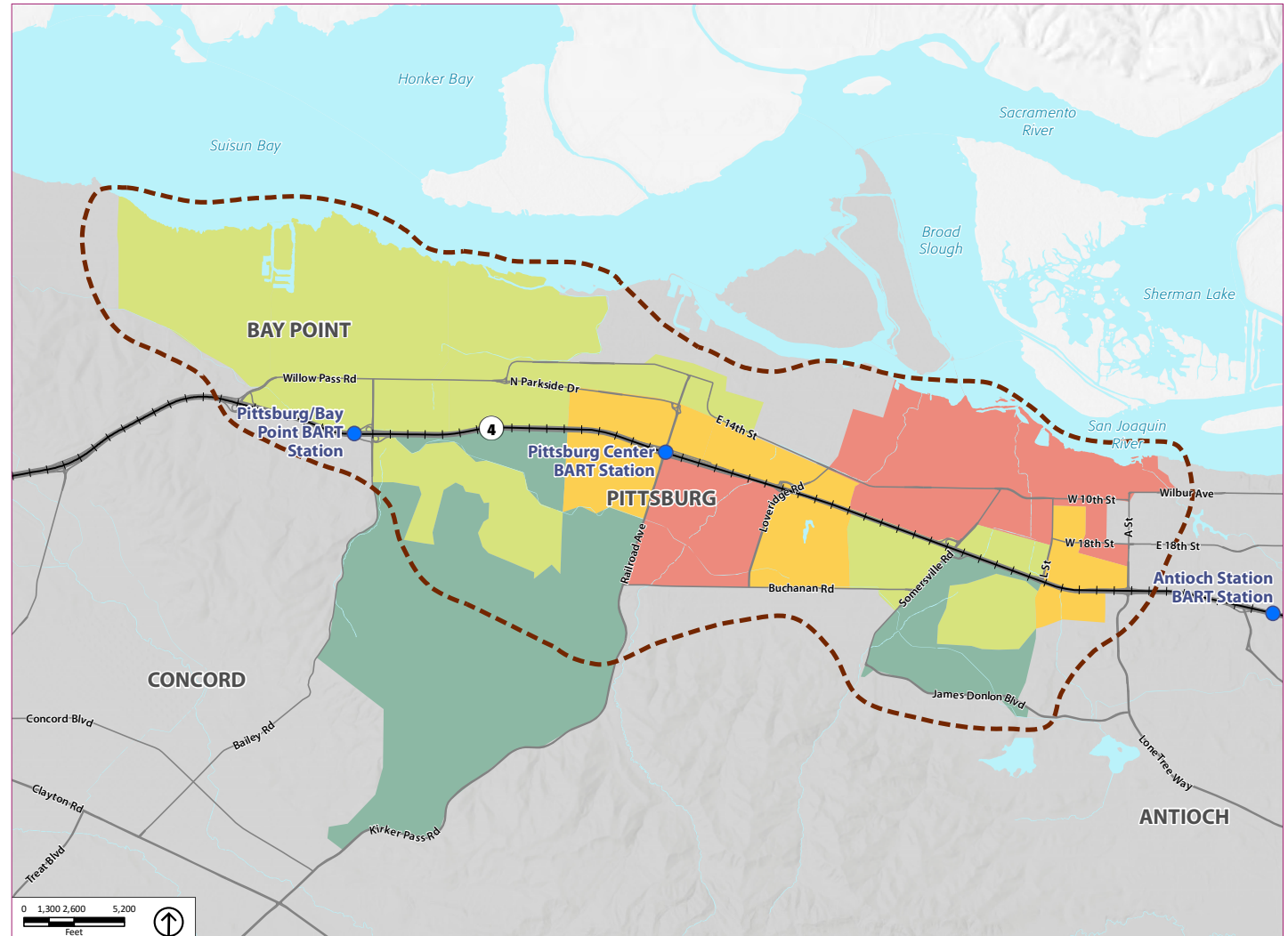
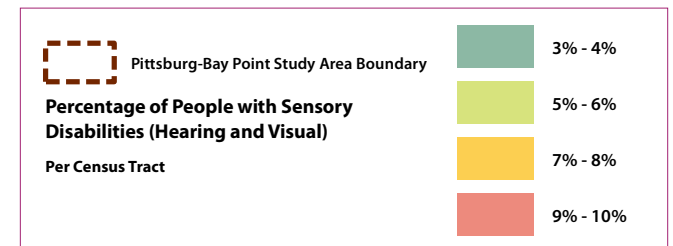


Figure 2-8 Percentage of People with Sensory Disabilities

1 Prosperity Now, formerly Corporation for Enterprise Development, 2014, Local Data Center Mapping Tool, <http://assetsandopportunity.org/localdata/>

Source: United States Census Bureau, S1810: Disability Characteristics, 2013-2017 ACS 5-Year Estimates.



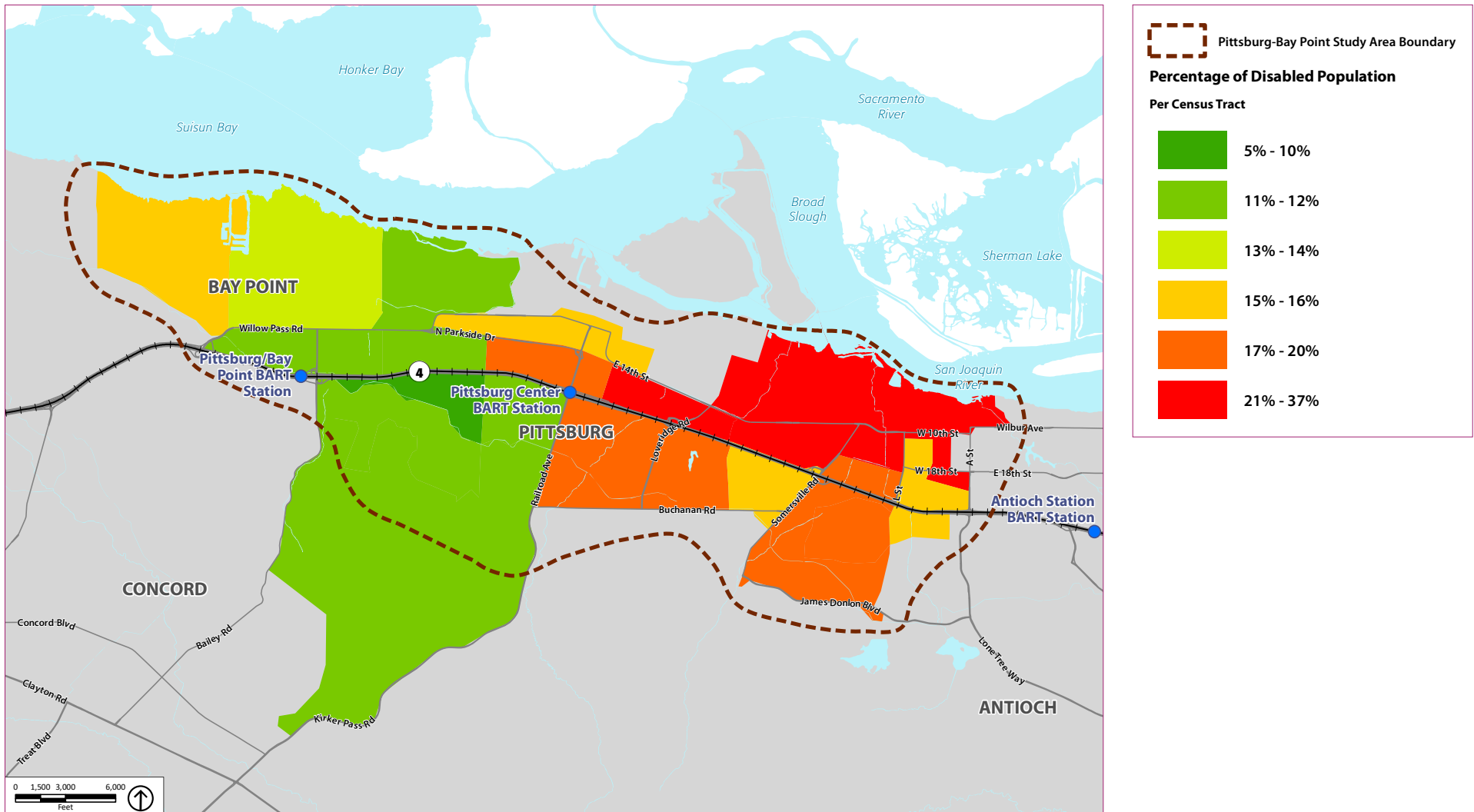


Figure 2-9 Percentage of People with Physical Disabilities

Source: United States Census Bureau, S1810: Disability Characteristics, 2013-2017 ACS 5-Year Estimates.

2.2 Transportation Patterns

The following sections describe current transportation and commute patterns in the CBTP study area and countywide.

2.2.1 Vehicle Availability

The rate of household vehicle ownership is slightly less in the study area than Contra Costa County as a whole. As shown in Figures 2-10 and 2-11, the percentage of households without a private vehicle in the study area is 9 percent, as compared to 6 percent countywide. Similarly, 32 percent of households in the study area have one vehicle, compared to 28 percent countywide.

Figure 2-12 shows households with vehicle available by census tract for the study area. Areas with more households without vehicles generally correspond to areas with lower median household incomes. Communities of Concern (CoCs) in east Pittsburg and west Antioch have some of the highest concentrations of households without vehicles.

Figure 2-10
Vehicle Availability, Study Area
(2017 ACS 5-Year Estimates)

Source: 2017 ACS 5-Year Estimates (2013-2017).

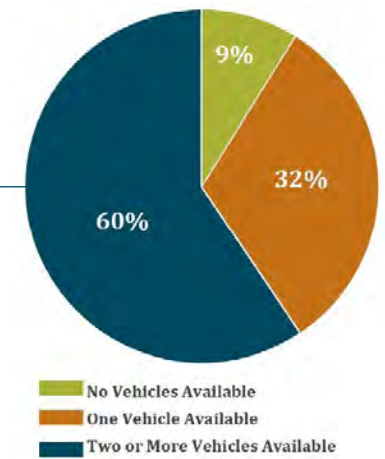
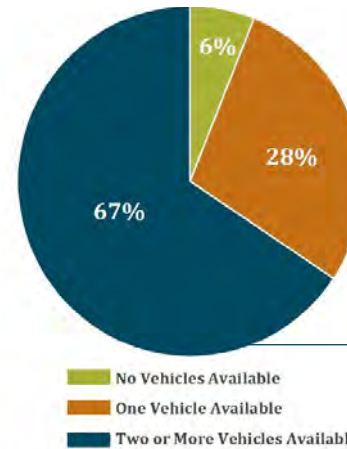


Figure 2-11
Vehicle Availability, Contra Costa
County (2017 ACS 5-Year Estimates)

Source: 2017 ACS 5-Year Estimates (2013-2017).

Table 2-2 Mode of Travel to Work in the Study area and Contra Costa County

Means of Transportation to Work	2017 ACS (% of Total)		2010 Census (% of Total)	
	Study Area	Contra Costa County	Study Area	Contra Costa County
Car, Truck or Van	87%	80%	87%	82%
» Drove Alone	69%	68%	67%	70%
» Carpooled	18%	12%	20%	12%
Public Transportation	7%	10%	7%	9%
Bicycle	<1%	<1%	<1%	<1%
Walked	2%	2%	2%	2%
Other	2%	1%	2%	1%
Worked at Home	2%	6%	3%	6%
Total Workers 16 and Over	100%	100%	100%	100%

Source: 2006-2010 and 2013-2017 American Community Survey (ACS) 5-year estimates. Note: Totals may not add up to 100% due to rounding.

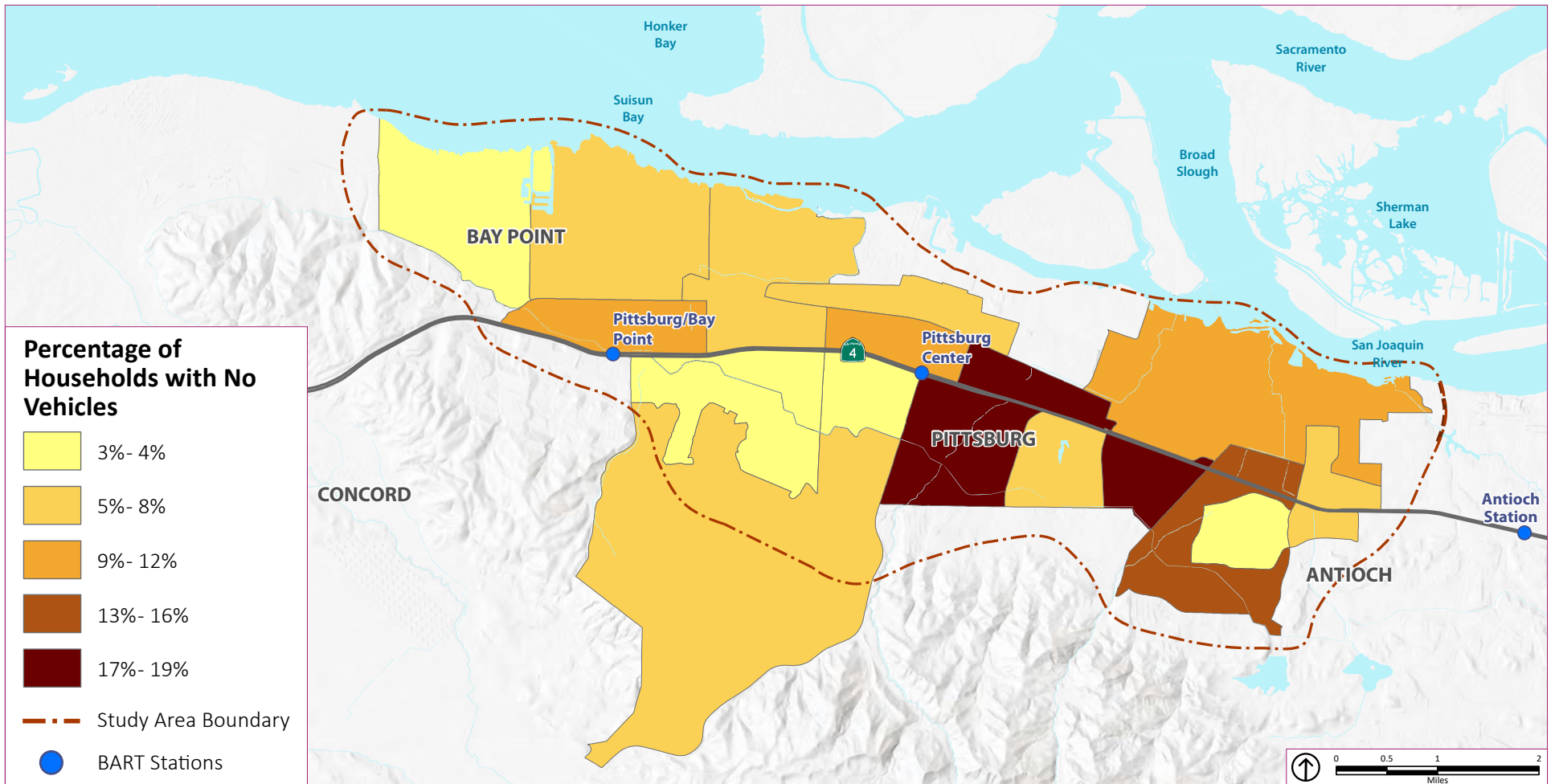


Figure 2-12 Household Vehicle Availability

2.2.2 Journey to Work

Out of about 41,000 workers aged 16 years and over in the study area, approximately 87 percent travel to work by car, truck, or van. Two-thirds of these workers drive alone (Table 2-2). Using a vehicle as the primary means of transportation to work is slightly less prevalent in the study area than countywide, the latter of which reported 69 percent of workers 16 and over primarily use a personal vehicle, while 18 percent carpool (share a vehicle).

The use of public transportation in the study area is less than countywide use. Rates of people commuting to work via public transportation remained steady in both the study area and the County from 2010 to 2017.

The rates of walking and bicycling as primary means of transportation to work are relatively low in the CBTP study area and countywide, at under 2 percent, respectively.

2.2.3 Long-Distance Commute

As evident in Figure 2-13, most residents in the study area generally experience long commutes—over 37 minutes, with the exception of one census block located directly south of the Pittsburg Center BART station, with a commute of less than 34 minutes. This is probably because neighborhoods in the study area are relatively lower income and do not have access to jobs near their homes.

2.3 Transportation Network

The following sections describe existing transit service and infrastructure in the study area and summarizes gaps in the transportation network in relevant countywide and local plans.

2.3.1 Transit Network

Existing transit facilities in the study area are shown on Figure 2-14.

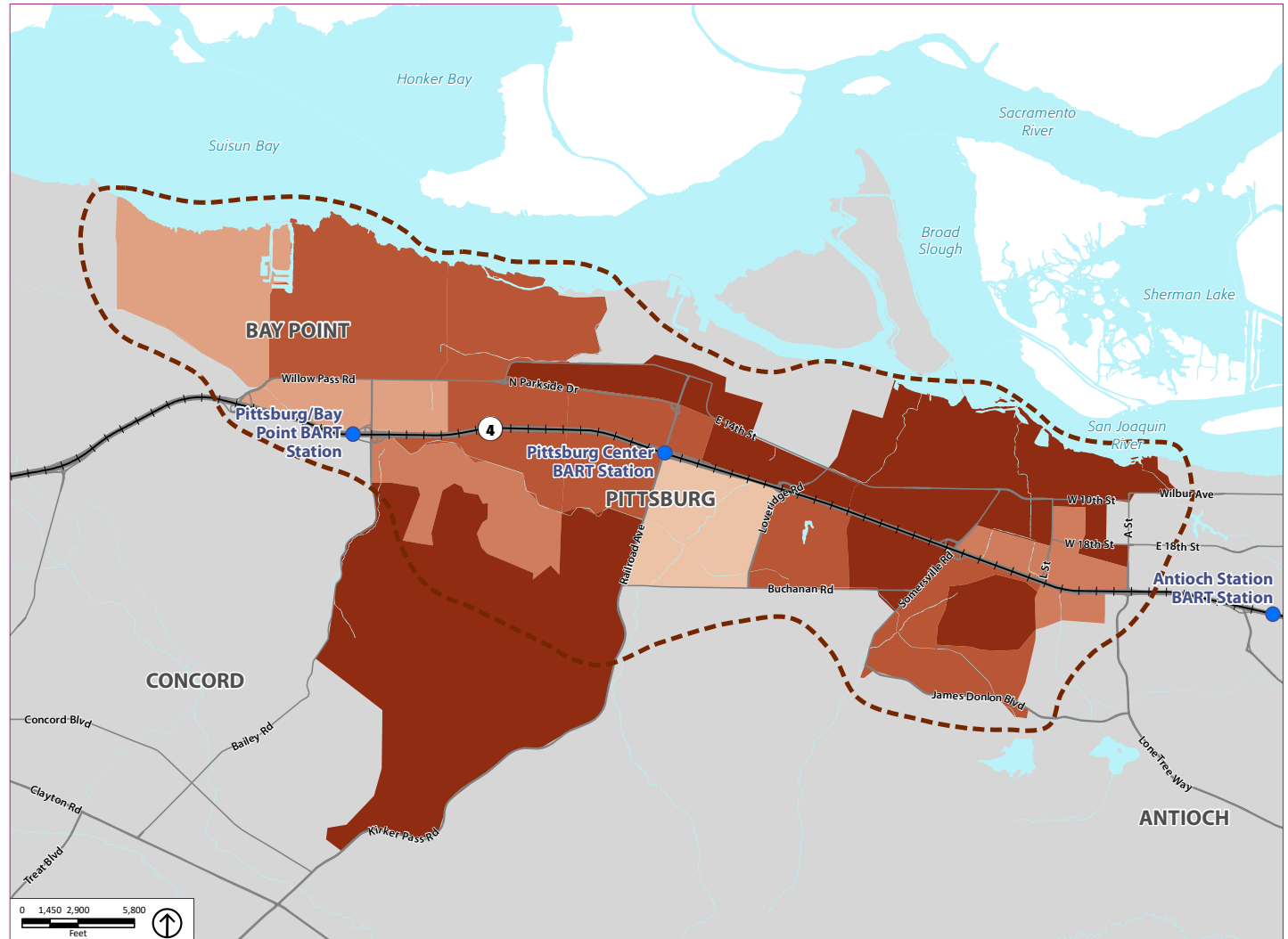
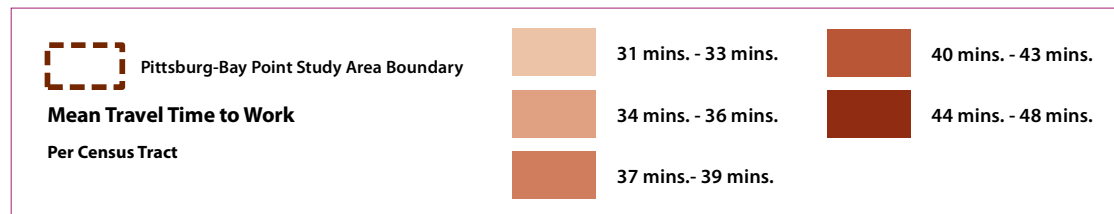


Figure 2-13 Long Distance Commute



Source: United States Census Bureau, S0801: Commuting Characteristics by Sex, 2013-2017 ACS 5-Year Estimates.

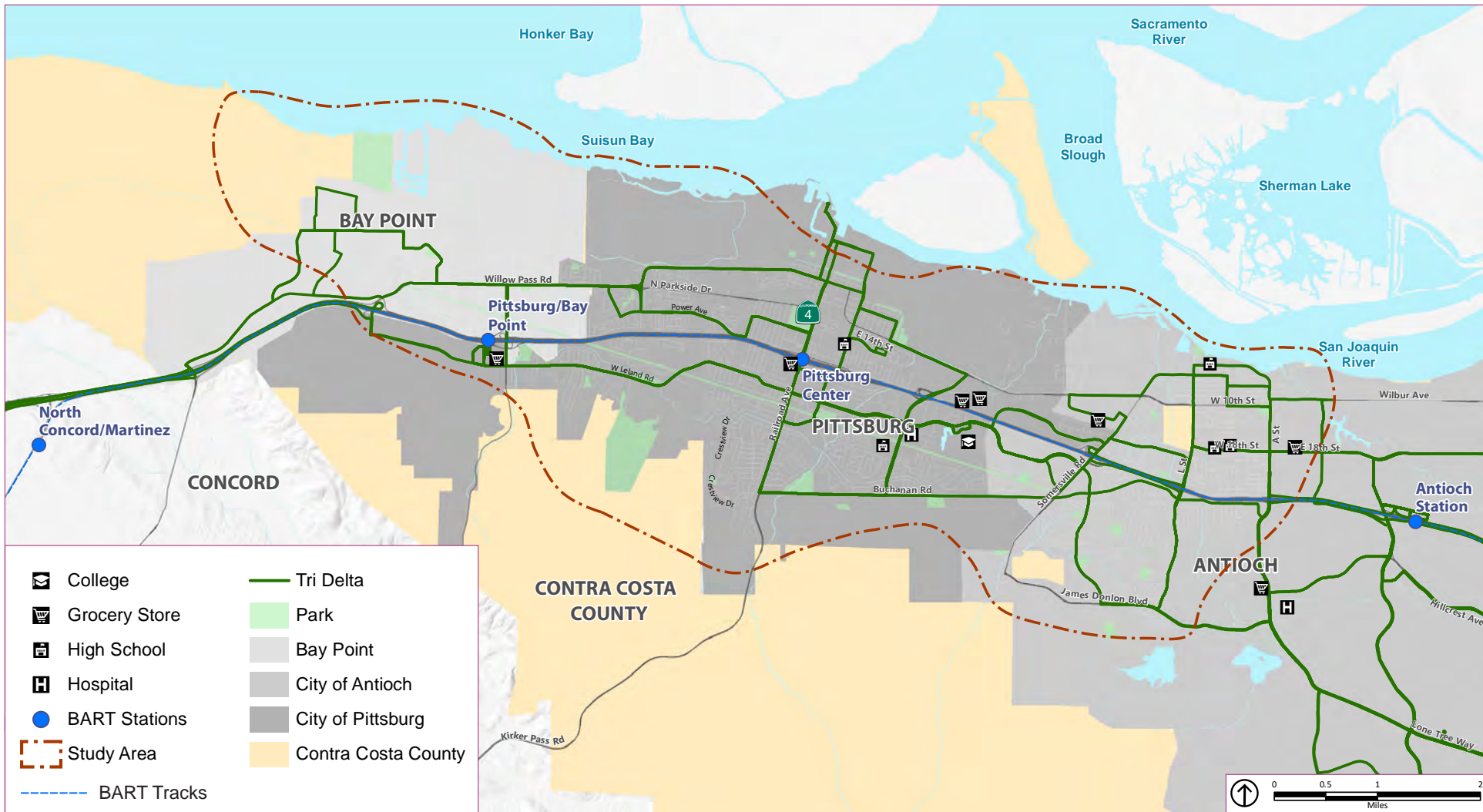


Figure 2-14 Existing Transit Facilities

Source: Contra Costa County, 2018; Fehr & Peers, 2019; PlaceWorks, 2019.

2.3.1.1 Rail

Rail services in the study area are provided by the Millbrae-Antioch BART line. Two BART stations (Pittsburg/Bay Point and Pittsburg Center) are in the western and central portion of the study area along SR-4. The Antioch BART station is located about one mile east of the study area boundary.

Amtrak service (Antioch-Pittsburg line) is available at the far-east end of the study area, adjacent to the San Joaquin River. These trains provide direct connections to Berkeley, Oakland, San Jose, Sacramento, and points beyond.

2.3.1.2 Bus

Local and intercity bus transit is provided primarily by Tri Delta Transit and County Connection. Tri Delta Transit serves the entire study area through 11 bus routes, which generally connect to BART stations and provide connectivity to the eastern area of Contra Costa County. County Connection operates local and express bus routes serving central Contra Costa County communities. County Connection Line 93X provides bus service from the Antioch BART station to Walnut Creek BART station via Kirker Pass Road and Buchanan Road. Finally, the City of Rio Vista's Delta Breeze Transit System operates a limited route from Rio Vista to the City of Antioch and Pittsburg / Bay Point BART Station.

2.3.1.3 Paratransit

Tri Delta Transit operates a paratransit transportation service that includes two public programs.

Americans with Disabilities Act (ADA) Paratransit transportation is a door-to-door service for individuals that meet the requirements and regulations of the ADA. It is limited to those who qualify based on the inability to use fixed-route transportation due to a disability or health constraint. Eligible riders may travel on paratransit systems throughout the nine counties of the Bay Area.

Through its second service, Senior Paratransit transportation, Tri Delta Transit provides local door-to-door public transportation to individuals who are 65 years of age or older. This transportation is limited to Tri Delta Transit's service area in eastern Contra Costa County and is subject to ride availability.



2.3.2 Bicycle Network

The existing and proposed bicycle network for the study area is shown on Figure 2-15. The existing network includes a mix of bicycle facility types and provides some connectivity with transit. The proposed bicycle projects in this figure are drawn from a review of the 2018 Contra Costa Countywide Bicycle and Pedestrian Plan and 2020 Pittsburg Moves, the City's Active Transportation Plan.

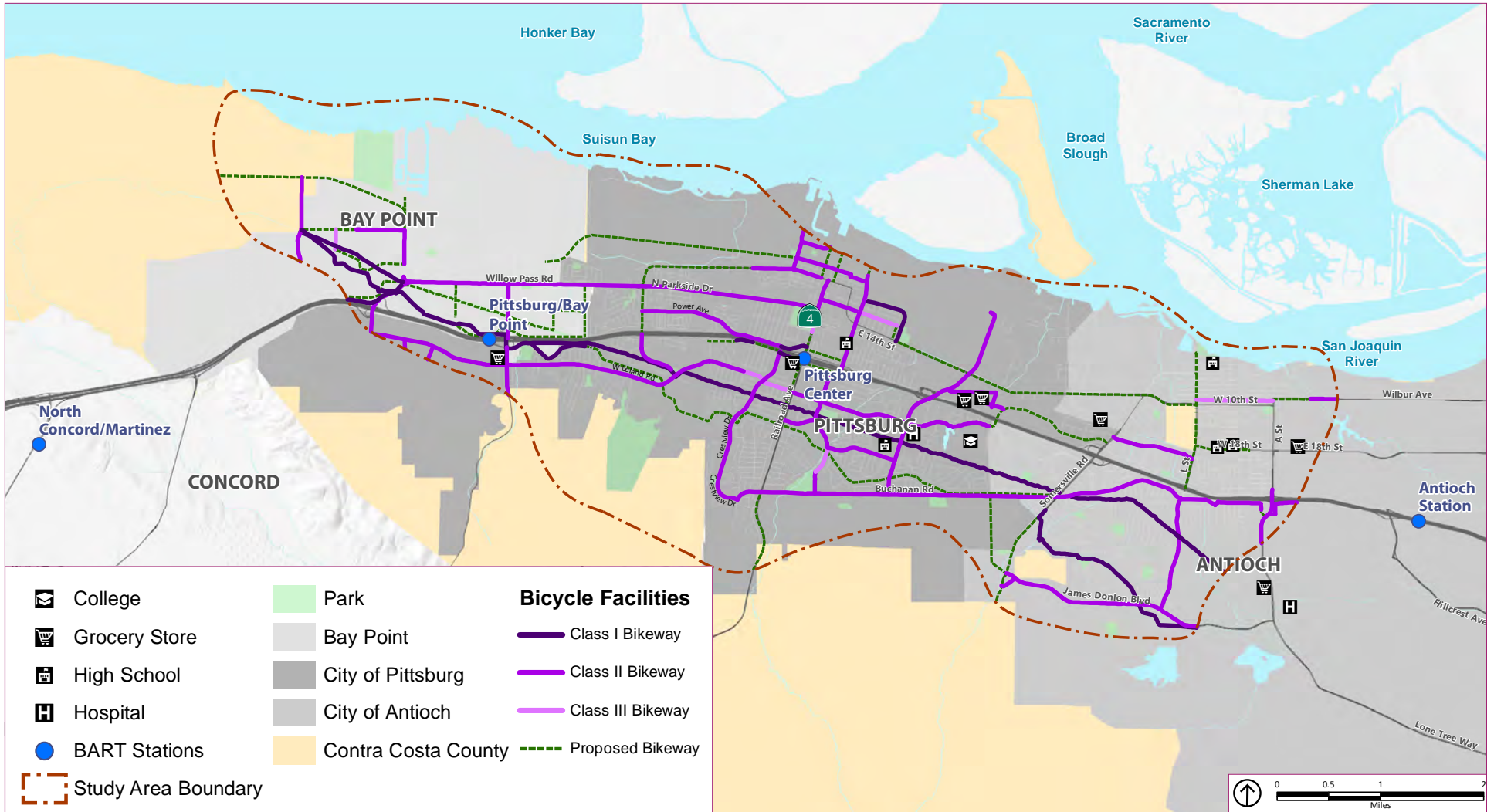


Figure 2-15 Existing and Proposed Bicycle Facilities

3. Previous Studies and Mobility Gaps

Agencies with jurisdiction in the Community-Based Transportation Plan (CBTP) study area have adopted studies that expose mobility gaps in the study area and establish projects, plans, and policies to fill those gaps. The following is a review of these previous studies and the transportation gaps they highlight.

The results of these studies are valuable to understanding and assessing the community input and recommendations outlined in Chapter 4 of this plan.

3.1 Local Studies

2002 Pittsburg/Bay Point BART Station Access Plan

The Pittsburg/Bay Point BART Station Access Plan was completed by the City of Pittsburg, Contra Costa County, and Bay Area Rapid Transit District (BART) in 2002. The purpose of the plan is to establish policies for orderly growth of the area, revitalization of activities in unincorporated Bay Point, and to capitalize on opportunities presented by the BART station.

Mobility Gaps Identified

- Access to the BART station by cyclists and pedestrians is impeded by car speeds on Willow Pass Road and lack of a Delta De Anza Trail linkage.
- Bailey Road, Willow Pass Road, and West Leland Road are too wide and facilitate high vehicle speeds.
- Lack of long-distance transit connections to East County from BART station.
- Lack of local transit connections to Pittsburg and Bay Point from BART station.
- Existing pedestrian network is discontinuous through station plan area.
- Delta De Anza Trail is underutilized as a bike and pedestrian facility, requiring use of Bailey Road to transition from the north to south side of State Route (SR-) 4.
- SR-4 is a barrier to pedestrian movement.

Antioch General Plan 2003 Circulation Element

The City of Antioch General Plan Circulation Element consists of goals and policies related to the circulation network and transportation options in Antioch. The Circulation Element “seeks to achieve and maintain a balanced, safe, problem-free transportation system.”¹ The element focuses on vehicle circulation, intersection congestion, and non-auto mobility.

Mobility Gaps Identified

- Lack of connectivity to neighboring cities by bike and pedestrian networks, particularly along Fitzuren Road, Contra Loma Boulevard to G Street.
- High levels of congestion and inadequate traffic-control devices.
- Through traffic in residential areas that creates hazardous pedestrian environments.
- Lack of actuated traffic signals that correspond with bicycle routes.

City of Pittsburg Railroad Avenue Specific Plan 2009

The Railroad Avenue Specific Plan is centered within the CBTP study area and is composed of Communities of Concern (CoCs). The Transportation and Circulation chapter outlines improvements for the area surrounding SR-4 and Railroad Avenue to create a network of transportation connections linking the Transit Village to the surrounding sub-areas and region.

Mobility Gaps Identified

- Sidewalk gaps (narrow sidewalks) along Railroad Avenue.
- Crosswalks inconsistent with Americans with Disabilities Act (ADA) standards.
- Lack of well-delineated wayfinding, signage, shelters, benches, lighting, and real-time LED signs displaying bus schedules, hinder the “easy-to-use” public transit system.

¹ City of Pittsburg, General Plan 2020, Transportation Element, page 7-25.



- Lack of connectivity between Tri Delta buses, shuttles, public parking areas, and eBART Station.
- Lack of local transportation connections between Specific Plan Area, Old Town Pittsburg, Los Medanos College, and other destinations.
- Underperforming Tri Delta and County Connection bus service during peak hours.
- Inadequate or no bike facilities on Railroad Avenue south of Frontage Road, Leland Road west of Railroad Avenue, Power Avenue west of Railroad Avenue, and Railroad Avenue north of California Avenue.



2011 Pittsburg/Bay Point BART Master Plan

The Pittsburg/Bay Point BART Master Plan is intended to guide the development of 50 acres of land adjacent to the BART station over 20 years. It describes allowed land uses and densities, transportation and circulation improvements, pedestrian pathways and improvements, urban design guidelines and standards, infrastructure development and financing, and phasing and implementation strategies and guidelines. The plan is a response to, among many other factors, a series of mobility challenges that commonly impact communities.

Mobility Gaps Identified

- Impacts to healthy lifestyles resulting from lack of active transportation options and automobile hazards.
- Lack of pedestrian-friendly streetscapes in the existing circulation network surrounding the BART station.
- Lack of non-auto access to the BART station.

Pittsburg General Plan 2020 Transportation Element

The Pittsburg General Plan 2020 Transportation Element is a policy framework of standards for increased capacity and development of an integrated multi-modal system. It sets forth broad policies and standards related to the City's street system, level of service, transit system, pedestrian routes, and bikeways.

Mobility Gaps Identified

- Lack of adequate and secure bicycle facilities at employment sites, public facilities, and multifamily residential complexes.
- Poor vehicle signage at Railroad Avenue/SR-4 interchange, to help notify vehicles of incoming bicyclists.
- Required bikeway improvements along multiple roadway segments within the CBTP study area, including, but not limited to:
 - California Avenue from Loveridge Road to Markstein Drive
 - Contra Costa Canal Trail from County/Bay Point to Antioch city limits
 - Central Avenue from Railroad Avenue to Harbor Street
 - Frontage Road from Los Medanos School to Crestview
 - Harbor Street from Buchanan Road to Contra Costa Canal
 - Leland Road from Railroad Avenue to Bailey Road
 - Railroad Avenue from SR-4 to East Eight Street
 - Railroad Avenue from Frontage Road to Delta De Anza Trail
 - Range Road from West Leland Road to Willow Pass Road
 - San Marco Boulevard from West Leland Road to Rio Verde Circle
 - San Marco Boulevard from Rio Verde Circle to Bailey Road
 - School Street from Railroad Avenue to Harbor Street
 - Seventeenth Street from Davi Avenue to Parkside Elementary School
 - SR-4 Frontage Road from Crestview Avenue to Railroad Avenue
 - SR-4 (north of) from Railroad Avenue to Range Road
 - Stoneman Avenue from Loveridge Road to Harbor Street
 - West Leland Road from Avila Road to Bailey Road
 - West Leland Road from Burton Avenue to Railroad Avenue
 - Willow Pass Road from West City Limits to Range Road.

Bailey Road/State Route 4 Interchange Pedestrian and Bicycle Project

This project will improve safety and circulation of pedestrians and bicyclists along Bailey Road through the SR-4 interchange. As designed, it will provide continuous sidewalks and bike lanes through the SR-4 interchange.

Mobility Gaps Identified

- Substandard and dangerous non-auto mobility infrastructure at a major SR-4 interchange.

3.2 Countywide Studies

To better understand gaps in the transportation network, the following policy documents were evaluated to identify proposed transportation projects and plans in the study area.

Contra Costa Safe Routes to School, Understanding Needs Moving Ahead 2016

The Safe Routes to School (SR2S) Needs Assessment is a comprehensive assessment of existing SR2S projects and programs occurring throughout Contra Costa County. The purpose was to understand SR2S activities throughout Contra Costa County, estimate funding needed to support future SR2S capital improvements and programs, provide resources to local communities as they plan, design, and implement improvements, and offer technical assistance to school sites.

The assessment estimated the unmet countywide need for future SR2S capital improvements at \$243 million, and the unmet countywide cost of all SR2S programs at \$58 million annually.

Mobility Gaps Identified

- Roadway conditions surrounding many county schools are unsafe for student cyclists and pedestrians.
- Funding for required SR2S improvements and programs are largely unmet.



Contra Costa Countywide Transportation Plan 2017

The Contra Costa Transportation Authority (CCTA) regularly updates the comprehensive Countywide Transportation Plan (CTP), a long-range policy document that identifies transportation goals and projects at all levels of geography, from regional coordination to local assistance. The CTP was most recently updated in 2017. It includes a 10-year project list of cost-adjusted projects identified in the Metropolitan Transportation Commission (MTC)/Association of Bay Area Governments' (ABAG's) regional planning blueprint, Plan Bay Area 2040. The CTP allows local municipalities to identify potential projects aimed to mitigate existing transportation gaps. The CTP outlines transportation challenges associated with countywide growth and establishes overall strategies and programs to overcome these challenges. The CTP includes potential projects in the CBTP study area.

Mobility Gaps Identified

- Inadequate pedestrian and bicycle infrastructure on Bailey Road adjacent to SR-4, including in Pittsburg.
- Unsafe turning lanes from Auto Center Drive to Loveridge road unsafe for pedestrians and cyclists.
- Lack of proper lighting, bike lanes, insufficient bus stops, and wider street segments along L Street.

Contra Costa Countywide Bicycle and Pedestrian Plan 2018

CCTA prepared the 2018 Countywide Bicycle and Pedestrian Plan (CBPP) to increase walking and cycling, improve bike and pedestrian safety, and develop a functional bike and pedestrian network throughout the County. The CBPP establishes projects to fill gaps in the pedestrian network within a series of Pedestrian Priority Areas, including those located within a quarter-mile from a school throughout the County, covering a substantial portion of the study area. These improvements include accessible walkways, functional curb ramps, safe crossings, traffic calming, direct connections, and streetscape improvements. Similarly, the CBPP includes a network of existing and proposed low-stress bikeways in the County that would benefit from bicycle infrastructure improvements.

Mobility Gaps Identified

Bikeways targeted for improvements include the following, as well as pedestrian facility design improvements:

- Port Chicago Highway through Bay Point and Pittsburg
- Willow Pass Road
- Harbor Street
- Bailey Road
- Wilbur Avenue connecting Pittsburg to Antioch
- L and A Streets in Antioch



3.3 Ongoing Studies

City of Pittsburg Active Transportation Plan

The City of Pittsburg published a draft Pittsburg Moves Active Transportation Plan in August 2020. According to the project website, the Plan will establish a “community-driven, equitable, and innovative vision for the future of walking and biking in Pittsburg.”²

The current draft plan includes a series of projects and plans that indicate mobility gaps in the City, some of which intersect the CBTP study area.

² City of Pittsburg, Pittsburg Moves website, <https://pittsburg-moves.com/>, accessed May 2, 2020.

Mobility Gaps Identified

As noted in the online Introduction to the Plan, the City’s “suburban roadway network and railroad and major infrastructure, present major barriers to connectivity.”³ Key barriers include:

- High stress bikeways on Railroad Avenue, 14th Street, California Avenue, and Willow Pass Road.
- Sidewalk gaps on large segments of North Parkside Drive, East 14th Street, Willow Pass Road, and Harbor Street.
- Pedestrian/bicycle high-injury corridors on West Leland Road, Railroad Avenue, and Harbor Street.

Contra Costa County General Plan Update

An update to all nine elements of the Contra Costa County General Plan is currently underway. Envision Contra Costa 2040 includes the Transportation and Circulation Element, which will describe existing and proposed roadways and other means of transportation, address reducing traffic congestion, and analyze traffic conditions so that existing and projected circulation needs may be met. A Transportation Baseline Report completed for the update identifies key barriers to mobility in the CBTP study area.

Mobility Gaps Identified

- High rate of bicycle collisions in Bay Point.
- High rate of pedestrian collisions in Bay Point.
- Railroad infrastructure running east to west through the CBTP study area.

³ City of Pittsburg, Pittsburg Moves website, <https://pittsburg-moves.com/>, accessed May 2, 2020.

3.4 Thematic Mobility Challenges

A series of thematic challenges emerges from the evaluation of the previous 11 studies, which span 18 years and cover the three-jurisdiction CBTP study area. Many of these challenges are reflected in the community input collected during the preparation of this plan and were identified by the Project Working Groups and Steering Committee during plan discussions. They include:

1. Fragmented, unsafe bicycle and pedestrian networks in Antioch, Pittsburg and Bay Point.
2. Dangerous, automobile-oriented design of most major corridors in Bay Point, Pittsburg, and Antioch, including:
 - Bailey Road
 - Willow Pass Road
 - West Leland Road
 - Port Chicago Highway
 - Harbor Street
3. Barriers and dangers to non-auto travel presented by SR-4 and associated interchanges.
4. Inadequate non-automobile access to, and associated facilities at, BART stations.
5. Inadequate transit infrastructure, including bus stops and shelters.
6. Lack of non-auto connectivity between BART stations.
7. Student pedestrians and cyclists negotiate unsafe conditions to and from many public schools.

4. Outreach and Engagement Summary

All Community-Based Transportation Plan (CBTP) recommendations are based on a community coordination campaign consistent with Metropolitan Transportation Commission (MTC) Guidelines. The Pittsburg/Bay Point CBTP study area encompasses Communities of Concern (CoCs) in unincorporated Bay Point, small unincorporated areas of Contra Costa County west of Bay Point and in pockets of Antioch, as well as in the cities of Pittsburg and Antioch. It is defined by multiple distinct neighborhoods and has a population of over 93,000. The project and plans recommended in this CBTP are the result of an outreach and engagement effort intended to reach challenged communities in geographic and demographic cross-sections of the study area.

Outreach and engagement included the following:

1. Oversight by two advisory groups
2. Development of a Contra Costa Transit Authority (CCTA)-approved Outreach Strategy
3. Creation and distribution of awareness materials
4. Feedback at County planning events
5. Interactive mobile “pop-up” workshops at various events in the study area
6. In-depth interviews with community members
7. Meet-and-greet feedback sessions with community resource leaders

All materials and raw results of the outreach and engagement process are included in Appendix B to this Plan. Not all non-quantitative community feedback collected during the outreach process, including interview responses, map-based inputs, and written responses translated directly into the lists of recommended project and plans in this CBTP.

4.1 CBTP Advisor Groups

4.1.1 Steering Committee

As noted in Chapter 1, a CBTP Steering Committee (SC) was convened to ensure an inclusive outreach process, provide direction on reaching specific groups in the com-

munity, and prioritize outreach opportunities. Members of the SC for the Pittsburg/Bay Point CBTP included:

- Vincent Manuel, Deputy Chief of Staff, Representing Supervisor Federal Glover
- Joy Motts, Mayor Pro Tem, City of Antioch
- Debra Mason, Chair, Bay Point Municipal Advisory Council
- Tim Leong, Director of Communication, Los Medanos College
- Alejandra Plascencia, East County Community Liaison, First 5 Contra Costa

4.1.2 Project Working Group

A Project Working Group (PWG) of local jurisdiction and transit agency staff convened numerous times throughout the outreach process to review the Outreach Strategy, help identify stakeholders in various CoCs, and provide practical guidance on coordinating outreach events and stakeholders. Members of the PWG for the Pittsburg/Bay Point CBTP included:

- Martin Engelmann, Deputy Executive Director, Planning, CCTA
- Matt Kelly, Senior Transportation Planner, CCTA
- Jaclyn Reyes, Administrative Assistant, CCTA
- James Hinkamp, Associate Transportation Planner, CCTA
- Mary Halle, Senior Civil Engineer, Contra Costa County (CCC) Public Works
- Bruce “Ole” Olsen, Pittsburg Citizen
- Vincent Manuel, Deputy Chief of Staff, CCC Supervisor District V
- Colin Piethe, Planner, CCC Department of Conservation and Development
- Denise Milosevich, Senior Health Education Specialist, CCC Health Services
- Kamal Parks, Senior Planner, BART
- Steve Ponte, Chief Operating Officer, East Contra Costa Transit Authority (ECCTA)
- Arlene Roberts, Administrative Analyst III, City of Antioch
- Tamany Brooks, Chief of Police, City of Antioch
- Agustin Diaz, Manager of Planning and Grants, ECCTA
- Paul Reinders, City Traffic Engineer, City of Pittsburg
- Clayton Johnson, Senior Health Education Specialist, CCC Health Services

4.2 Outreach Strategy

Per a CCTA- and SC-approved Outreach Strategy, public outreach was organized into three phases corresponding with key milestones in the CBTP process. These are summarized as follows.

Phase 1: Establish Area Overview and Preliminary Community Needs

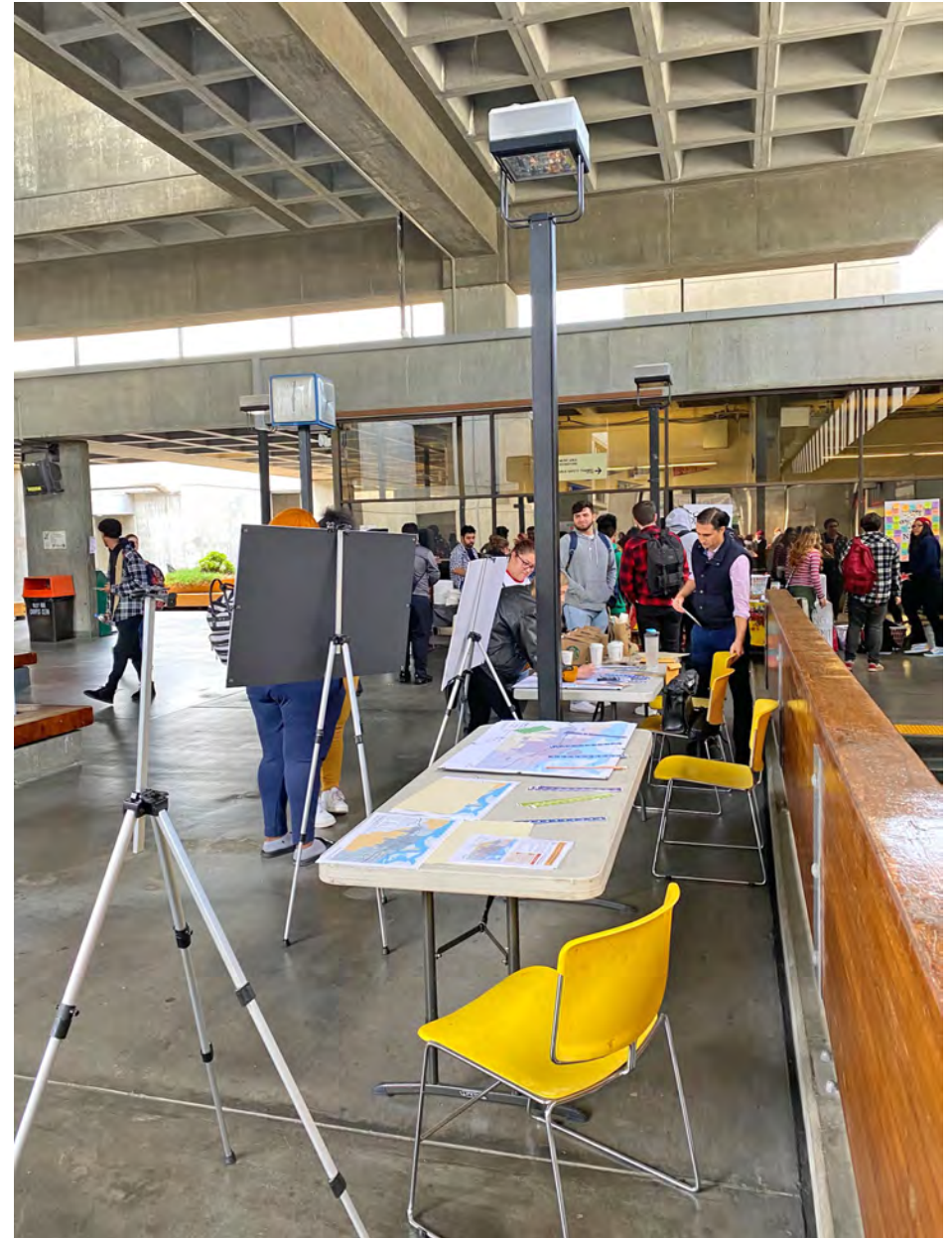
Phase 1 was designed to identify transportation-related challenges faced by those who live, work, and/or access services within various study area CoCs. Outreach during this phase consisted of establishing lists of community stakeholders and events for outreach opportunities and developing a flexible Outreach Awareness Notice template (see Section 4.3). The CBTP team met with the PWG three times to review the study area and existing demographics, discuss early outreach strategies and SC formation, and review the draft Outreach Strategy. The CBTP team also met with the SC to introduce and review the draft Outreach Strategy.

Phase 2: Solicit Community Recommendations

In Phase 2, the CBTP team approached stakeholders and potential community event hosts identified in Phase 1. On-the-ground outreach was performed in this phase. Members of CoCs in the study area were solicited for proposed projects, plans, and ideas to improve mobility. CBTP team members attended community events focused on challenged communities and organized “pop-Up” workshop and meet-and-greet feedback sessions. Interactive exercises and one-on-one interviews were used to gather detailed input from a diverse range of participants. Community feedback collected in Phase 2 is the main source of CBTP recommendations presented in Chapter 5 of this plan.

Phase 3: Analyze Potential Programs and Projects

During Phase 3, the CBTP team organized the community-identified mobility challenges and recommendations and worked with stakeholders, CCTA, and the PWG to develop criteria for evaluating and prioritizing the feedback. The CBTP team worked with PWG members to coordinate potential CBTP recommendations with existing planned mobility projects, “ground-truth” recommendations, and assess funding and implementation options for each. A draft CBTP was reviewed by both the PWG and SC, followed by PWG and SC meetings to discuss revisions. The final CBTP was developed based on these revisions and discussions.

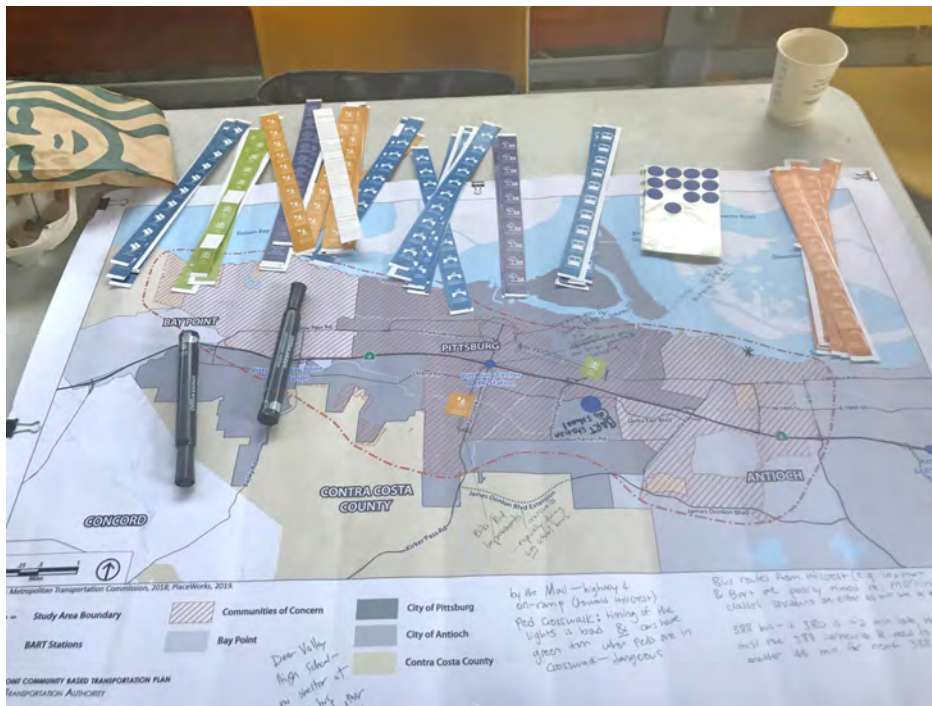


4.3 Outreach Awareness

4.3.1 Flier Noticing

Prior to engagement events, the CBTP team developed a graphics-rich Outreach Awareness Notice in English (see Figure 4-1) and Spanish (see Figure 4-2) to notice the public of outreach events in various CoCs. The flier was adapted to each event and posted digitally on websites of agencies and stakeholders involved in the project. The notice was continually updated throughout the outreach process to reflect the status of the project.

The Awareness Notice was also adapted for use as a hard-copy flier for posting at major transit locations and other organizations. Hard-copy fliers were posted on Tri Delta buses and bus stops, senior centers, community shuttles, and BART stations.



4.4 Outreach Results

The following sections summarize the methods, participation rates, and results of CBTP outreach events. The locations of all outreach and engagement events are shown on Figure 4-3.

4.4.1 County Planning Events

Contra Costa County is currently updating its General Plan, a process titled *Envision Contra Costa 2040*. The update will establish transportation goals, policies, and implementation plans for multiple unincorporated communities within the CBTP study area. The CBTP team attended the following outreach events associated with this process to gauge community mobility priorities:

- Contra Costa County General Plan Update Community Meeting 2 for Bay Point. This meeting was held on August 12, 2019, at the Ambrose Recreation and Park District office.
- Contra Costa County General Plan Update Community Meeting 3 for Bay Point. This meeting was held on January 30, 2020, at the Ambrose Recreation and Park District office.

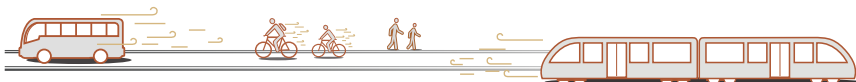
Unlike CBTP pop-up events (described herein), these events were not intended to reach specific mobility-challenged groups. As such, the CBTP team did not solicit feedback directly from participants but coordinated with the General Plan Update team for insight into individuals, events, and organizations to partner with, and participated in discussions and exercises about perceived County-wide mobility gaps. Awareness information and fliers about upcoming CBTP outreach events were also distributed.

4.4.1.1 Participation

Fifteen members of Bay Point attended Meeting 2, and 30 community members attended Meeting 3, as shown in Figure 4-4.

Figure 4-1 CBTP Outreach Flyer

HELP IMPROVE TRANSPORTATION OPTIONS IN PITTSBURG, BAY POINT AND ANTIOCH!



PARTICIPATE IN THE PITTSBURG-BAY POINT COMMUNITY-BASED TRANSPORTATION PLAN

The Pittsburg-Bay Point Community-Based Transportation Plan (CBTP) is an opportunity to improve transportation options and quality of life for neighborhoods in Pittsburg, Bay Point, and Antioch.

The Plan will bring residents, community organizations and transportation agencies together to identify transportation challenges and develop solutions.

The CBTP will:

- Evaluate transportation gaps and barriers identified by the community
- Develop solutions & projects to address these challenges
- Identify possible funding sources to pay for these solutions & projects

How To Participate

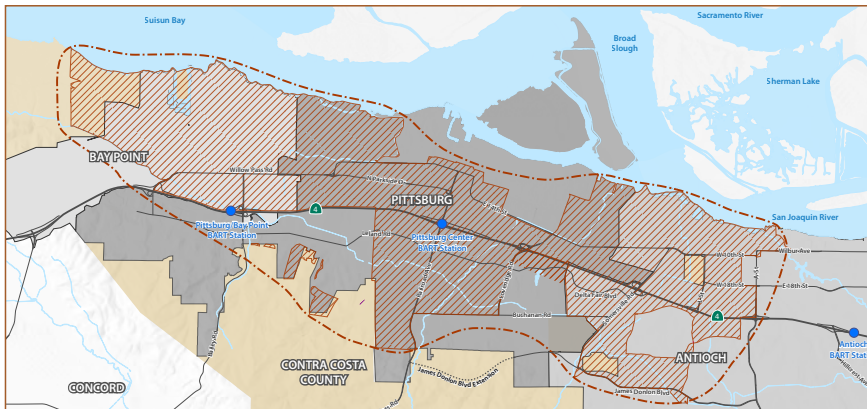
Text-based mobile survey:

Please take a few moments to answer our short mobile phone survey about your transportation habits and challenges. To get started, text "CBTP" to (925) 378-4338

Project webpage:

Go to www.ccta.net to learn more about the project, project partners and community events!

Plan Study Area



Study Area	Communities of Concern	City of Pittsburg
BART Stations	Bay Point	City of Antioch
		Contra Costa County


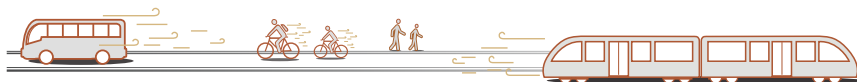


Figure 4-2 CBTP Outreach Flyer (Spanish Verison)

¡AYUDENOS A MEJORAR LAS OPCIONES DE TRANSPORTE EN PITTSBURG, BAY POINT Y ANTIOCH!



PARTICIPE EN EL PLAN DE PITTSBURG-BAY POINT DE TRANSPORTE BASADO EN LA COMUNIDAD

El plan de Pittsburg-Bay Point de transporte basada en la comunidad, o CBTP, es una oportunidad para mejorar las opciones de transporte y la calidad de vida de los vecindarios en Pittsburg, Bay Point y Antioch.

El plan reunirá residentes, organizaciones comunitarias y agencias de transporte para identificar los desafíos y desarrollar estrategias para superar los.

El CBTP va a:

- Evaluar las brechas y barreras de transporte identificadas por la comunidad
- Desarrollar soluciones y proyectos para resolver estos desafíos
- Identificar las posibles fuentes de financiamiento para pagar las soluciones y proyectos

Cómo Participar

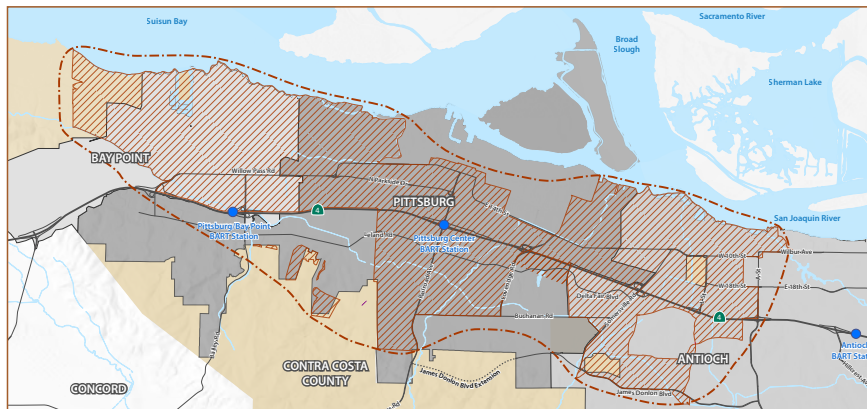
Encuesta móvil basada en texto:

Por favor, dedique un momento para responder a nuestra breve encuesta acerca de sus hábitos y desafíos de transporte por teléfono móvil. Acceda a la encuesta enviando un texto a (925) 378-4338

Página web del proyecto:

¡Visite www.ccta.net para aprender más del proyecto, socios del proyecto y eventos comunitarios!

Área de Estudio del Plan



Study Area	Communities of Concern	City of Pittsburg
BART Stations	Bay Point	City of Antioch
		Contra Costa County




Figure 4-3 Pittsburg/Bay Point Outreach Locations Map

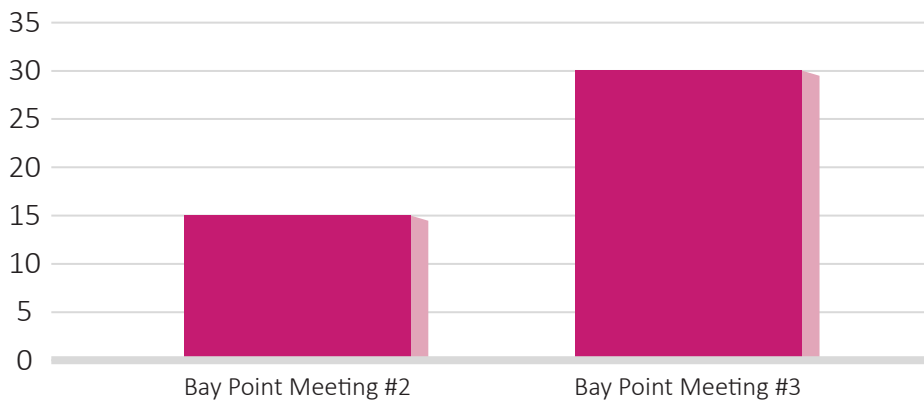


4.4.1.2 Major Themes

CBTP team members recorded participant feedback at both Bay Point Community Meetings. Over half of the entire unincorporated Bay Point area (a Census-Designated Place or CDP) is within the CBTP study area. The following mobility-related themes were expressed:

- Desire for better walking access to amenities like stores
- Need for increased frequency of Tri Delta Route 381 and other well-travelled routes
- Community-wide need for safer, more comfortable bus shelters
- Need for improved transit options for disabled community members
- Desire for direct BART shuttles and easier BART access
- Lack of adequate safety and security concerns on public transit in Bay Point
- Need for improved bike facilities, sidewalks, lighting, and other corridor improvements on Willow Pass Road and Bailey Road

Figure 4-4 County Planning Event Attendance



4.4.2 CBTP Pop-Up Events

CBTP team members worked with community-based organizations (CBOs), non-profits, and various local agencies to schedule “pop-up” outreach sessions at pre-scheduled events targeting low-income and other potentially transportation-challenged communities. The goals of these events were to collect detailed feedback about transportation challenges directly from CoC residents and record personal narratives describing how these challenges impact daily life. English- and Spanish-speaking CBTP project staff set up information and feedback tables at each event, with the following visual elements to prompt discussion:

- Project Information and Awareness Flier
- Poster-sized Study Area Map Boards
- Poster-sized Existing Transportation Network Boards
- Existing and Proposed Bicycle and Pedestrian Network Maps

PlaceWorks staff facilitated the following exercises with attendees to achieve the goals of the pop-up events. Raw results of these exercises are provided in Appendix B.

- Map and Dot Exercises. CBTP team members used study area boards to allow participants to illustrate transportation gaps and challenges. Participants highlighted mobility challenges and recommendations with color-coded dot stickers and used markers to illustrate travel routes, gaps, and potential solutions.



- Interview Vignettes. CBTP team members used CCTA-approved questions to interview volunteers about personal information, mobility gaps they encounter daily, and ideas for overcoming them. The goal of these interviews was to record true narratives of mobility gaps faced by challenged communities in the study area. Parts of these interviews are highlighted in sidebars of this chapter.

“Paratransit service from Railroad Avenue to the VA Hospital in Martinez...has had impacts on my health. Me and other riders are frustrated by 2-3 hour trips each way...and totally unreliable service. There is not service after 8PM and you must reserve a seat three days in advance. I’ve ended up missing or avoiding so many appointments that I stopped using the service and hired a caregiver. We need a shuttle to the VA [Hospital]”

– Guy, 66-year-old, Pittsburg resident.

The CBTP team categorized feedback from these sessions into the following four groups of mobility challenges:

- 1. Pedestrian Mobility Challenges:** These are challenges related to gaps in, and conditions of, pedestrian facilities and infrastructure. This category also includes physical barriers to pedestrian mobility, such as dangerous railroad and highway intersections.
- 2. Bicycle Mobility Challenges:** These are challenges related to gaps in, and conditions of, bikeways. This category also includes physical barriers to bicycling, such as dangerous railroad and highway intersections.
- 3. Transit Challenges:** Challenges related to transit access, bus stops and shelters, fixed-route planning and service, paratransit service, and transit cost.
- 4. Other Challenges:** These are challenges to disabled access, student access and safety, and security.

4.4.2.1 Pop-Up Event: Food Bank of Contra Costa and Solano

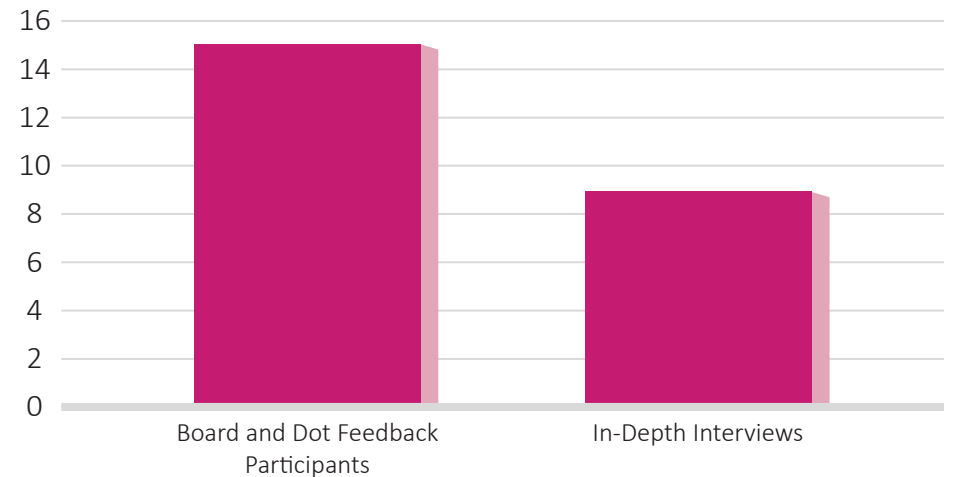
The Food Bank of Contra Costa and Solano is a tax-exempt charitable organization that distributes food to those in need through Food Bank programs accessed by local agencies and distributed via local trucks. CBTP team members, including a Spanish speaker, solicited feedback from participants at the weekly food service at Buchanan Park in the City of Pittsburg on November 19, 2019. Staff set up a pop-up facility adjacent to groups of waiting participants who had arrived on foot, bicycle, via transit, and in cars. The event was attended by multiple repeat attendees familiar with the immediate transportation environment and surrounding infrastructure.

Participation

PlaceWorks staff recorded nine in-depth interviews, including two in Spanish, and facilitated map exercises and/or discussions with approximately 15 individuals, as shown in Figure 4-5.



Figure 4-5 Contra Costa and Solano County Foodbank Responses

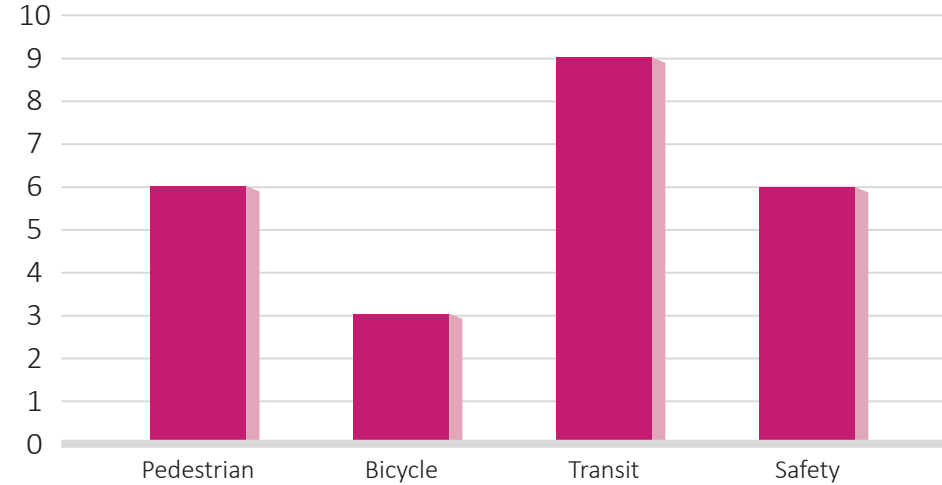


Feedback

Figure 4-6 shows that of the 24 total unique responses resulting from the board-and-dot exercises and in-depth interviews during the Food Bank’s weekly service, six were regarding pedestrian improvements, three were regarding bicycle improvements, nine were regarding transit improvements, and six responses were regarding other improvements. Multiple participants expressed the need for measures to make downtown Pittsburg feel safer at night, as well as the need for a dedicated Tri Delta or County Connection shuttle to Pittsburg Center BART.

Summary of Results

Figure 4-6 Contra Costa and Solano County Foodbank Results



Participant Input

The following are patterns of mobility concerns and barriers recorded during the event. They have been clarified for readability and/or transferred from markings on maps. However, they include original insight and ideas, and have not been ground-truthed against current conditions and/or ongoing plans and projects. The latter process occurred during the evaluation and prioritization of CBTP recommendations presented in Chapter 5 of this study.

“Bus connectivity is unreliable from Pittsburg to Antioch because of inconsistent scheduling. I regularly walk 1.5 hours from work in Pittsburg to my family home in Antioch instead of waiting up to 30 minutes for the bus. Doing this trip a few times a month is starting to cause me back and knee pain.”

– Paulina, 66-years-old, Antioch resident and babysitter.

I’ve seen groups of students on their cell phones and not paying attention almost get hit by cars [at Stone Harbor Drive and Harbor Street] numerous times.”

– Greg, 33-year-old Pittsburg resident

Bicycle Challenges

Participants identified:

- Lack of adequate bike lanes on routes accessing support facilities and resource centers
- Dangers to cyclists on Willow Pass Road from Loftus Road westward
 - Poor lighting
 - High auto speeds

Pedestrian Challenges

Participants identified:

- Dangers at Loveridge Road and California Avenue Intersection
 - Multiple turning variations associated with the roadway bend and Chevron/Storage access

- Sidewalk conditions on Buchanan Road
 - Sidewalk gaps
 - Inadequate lighting
 - Lack of wheelchair accessibility

Transit Challenges

Participants identified:

- Frustration with paratransit service
 - Length of trips and lack of adequate evening service to major medical facilities in Martinez, such as Veteran’s Administration (VA) Hospital
 - Difficult planning due to reservation requirements
 - General unreliability of paratransit buses
- Need for a shuttle route connecting support services, such as food bank
- Lack of adequate bus routes on key corridors from study area to central Concord, including:

- Bailey Road toward Concord
- From Railroad Avenue down Kirker Pass Road toward Concord
- Service to the area south of West Leland Road and west of Railroad Avenue
- Need for a Tri Delta or County Connection shuttle to Pittsburg Center BART due to limited parking and bus service
- Unreliability of Tri Delta routes
 - Unreliable connections on trip from central Pittsburg to Antioch
 - Wait times on those routes are too long; up to 40 minutes

Other Challenges

Participants identified:

- Sense of crime and unsafety in downtown Pittsburg at night
- Poor pedestrian conditions on Harbor Street that are especially dangerous
 - Reckless driving near Pittsburg High School endangers student pedestrians
 - Drivers speed from California to School Street through intersection at Stone Harbor Drive and Harbor Street

4.4.2.2 Pop-UP Event: Los Medanos Community College Mustang Day

Three PlaceWorks staff members, including a Spanish speaker, facilitated multi-strategy outreach at Los Medanos Community College, “Mustang Day,” on January 29, 2020. This is a well-attended event hosted by the college each semester to welcome new students. CBTP project staff interviewed participants of all ages and demographics about their transportation experiences in the study area generally and to and from the campus. CBTP team members used map boards, sticker surveys, and custom “Infrastructure Symbol” decals to facilitate feedback. Six detailed interviews were conducted, and 60 to 70 individuals participated in discussions and interactive exercises. All unfiltered feedback is recorded in Appendix B.

“I would like to see bike lanes installed specifically to lead to services providers and events like this one. I want everyone to be able to access the values of cycling instead of driving and busing. I think this would strengthen and empower low income communities.”

– **Veronica**, 42, Pittsburg resident with two children and husband in a wheelchair.

“Portions of Buchanan Road are unfriendly for people using wheelchairs. Poor, unlit sidewalks force me and my husband in a wheelchair into the roadway when we walk to parks and other destinations along Buchanan, including this weekly foodbank.”

– **Veronica**, Caregiver, 42 years old.

Participation

CBTP staff conducted a sticker-voting exercise that allowed participants to mark which of the four categories of mobility improvements they felt are needed most in the study area:

1. **Better bus service**
2. **Improved lighting/safety**
3. **Bicycle and pedestrian infrastructure**
4. **New transit technologies**

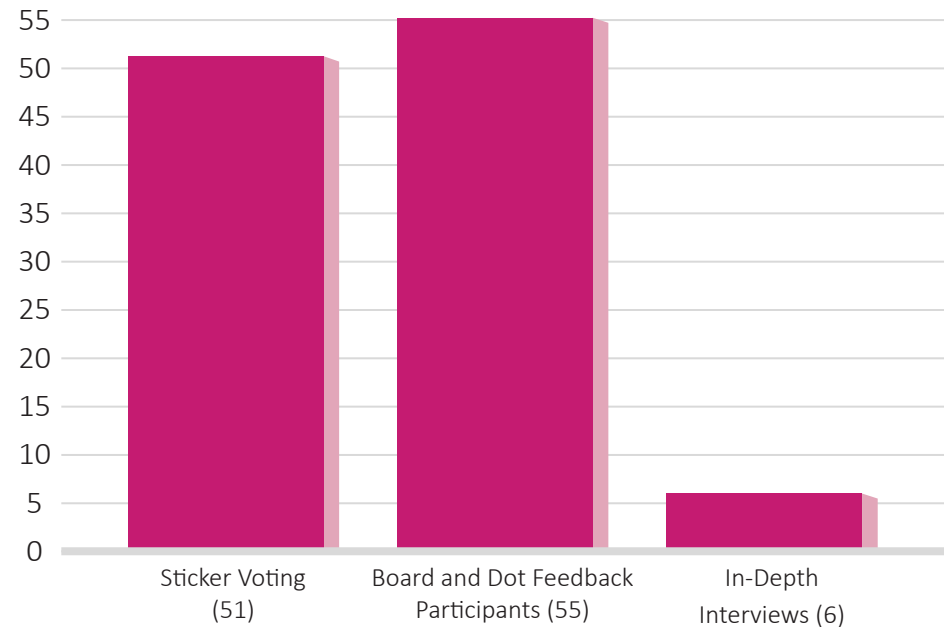
Fifty-one individuals participated in this voting exercise.

An additional 55 comments were recorded in the form of poster board-based dot-and-map feedback. At this event, the CBTP team provided participants with decals depicting various types of mobility improvements (shown in Appendix B) for placement on CBTP maps, including:

- Improved intersections
- More lighting
- Wider sidewalks
- Bike lanes
- Enhanced crosswalks
- Pedestrian overcrossings
- New bus stop
- New bus route

Participants recorded additional comments next to their stickers. Finally, in-depth interviews were completed. Figure 4-7 summarizes the number of responses.

Figure 4-7 Los Medanos Community College Mustang Day Responses



Feedback

Most of the recommendations collected from Los Medanos Mustang Day targeted transit and active transportation on arterials surrounding the campus area, and connecting students, staff, and faculty between campus, their homes, and jobs. Multiple participants expressed a desire for better nighttime service or a shuttle serving the campus for evening and night classes. Multiple participants also expressed a desire for improved regional connections to the campus to and from Concord and Antioch.

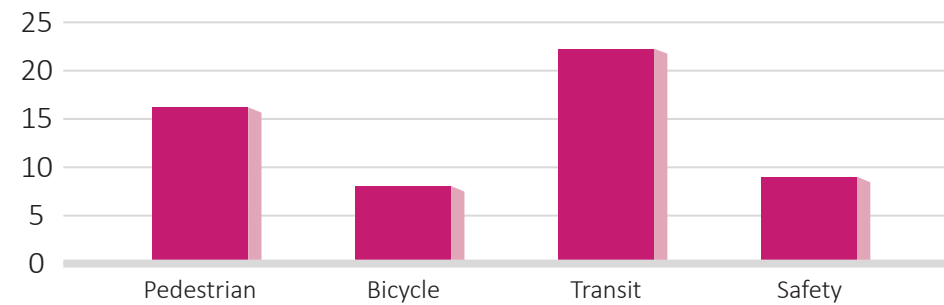
I've seen groups of students on their cell phones and not paying attention almost get hit by cars [at Stone Harbor Drive and Harbor Street] numerous times."

-Greg, 33-year-old Pittsburg resident

Summary of Interactive Board Results

Figure 4-8 shows that of the 55 total responses resulting from the board-and-dot exercises and in-depth interviews, 16 focused on pedestrian gaps, 8 on bicycle gaps, and 22 focused on transit challenges. Nine comments targeted other mobility gaps and challenges.

Figure 4-8 Los Medanos Community College Mustang Day Results

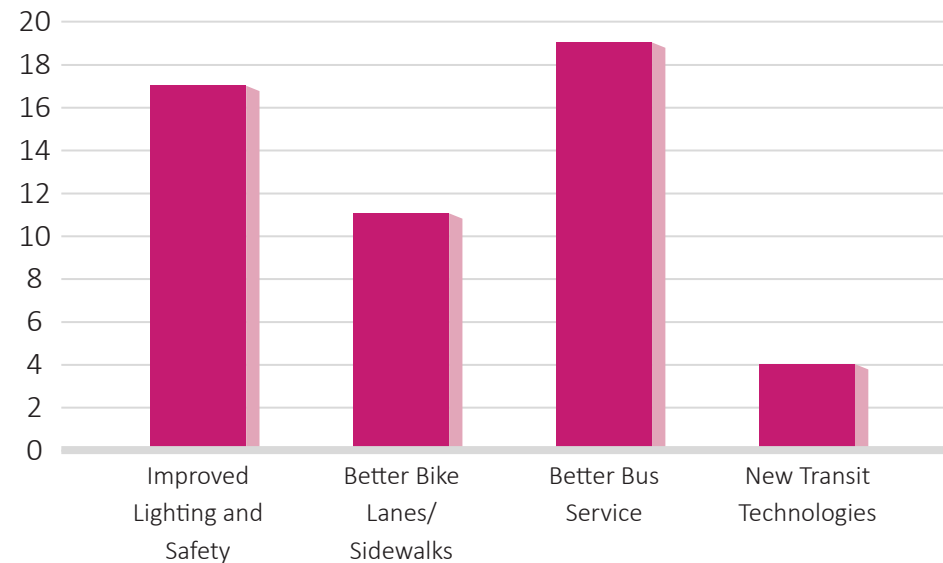


Summary of Sticker Voting Results

Figure 4-9 summarizes the results of the sticker voting exercise. Nineteen participants, or 37 percent, voted for better bus service as the most-needed improvement. Seventeen participants (33 percent) voted for improved lighting and safety. Eleven participants, or about 22 percent, voted for better bike lanes/sidewalks. Four participants voted for new transit technologies and the most-needed mobility improvement.

The results from the dot survey are consistent with the comments arising from the board-and-dot feedback as well as the in-depth interviews, in that better transit service was the primary concern for most participants of this pop-up event.

Figure 4-9 Los Medanos Community College Mustang Day Dot Survey Results



Participant Input

Bicycle Challenges

Participants identified:

- The need to close the bike gap in the Delta de Anza Regional Trail between Willow Pass Road and Port Chicago Highway via a bike path along the north side of SR-4, separate from but between the highway and the planned connector road between Evora Road and Arnold Industrial Way.
 - The need for better bike infrastructure along SR-4 west of Willow Pass.
- Common use of Port Chicago for bike commuting on the north side of the City, but without marked bike lanes.
- Dangers of Harbor Street south of California Avenue.
 - SR-4 crossing is dangerous.
 - This area needs better lanes and safety.

- Poor conditions of East 14th Street east of Railroad Avenue.
 - Too many potholes.
 - Poor maintenance.

Pedestrian Challenges

Participants identified:

- Pedestrian conditions at major intersections.
 - Pedestrian crossing at SR-4 on-ramp (towards Hillcrest); timing of the light is bad and cars making right turns don't see pedestrians.
 - Intersection of Somerville Road and SR-4 is dangerous due to number of lanes and conflicting signal times during pedestrian crossing.
- Lack of complete sidewalks and crosswalks along Railroad Avenue south of BART station.
 - Walking becomes more difficult during Los Medanos Community College school hours.
 - Need for a comfortable pedestrian bridge connecting the CostCo center and Century Plaza Shopping Center.

Transit Challenges

Participants identified:

- Difficulty of getting in and out of the El Pueblo Neighborhood
 - Carpino and School Streets are the only ways in and out.
 - No bus current service through the neighborhood means that a route extension is needed here.
- Lack of adequate evening bus service for night students and staff throughout Pittsburg
 - Tri Delta Route 387 stops running after the last bus leaves campus at 9:15 p.m.
 - Need for a nighttime shuttle for student safety and BART access

- Inadequate service and infrastructure on routes servicing Los Medanos Community College
 - Unreliability/lateness of Route 380
 - Poorly timed connections between Routes 380 and 388
 - Shelters at stops along 380 and 388 lack seating and signage
 - Drivers often "demoralize" those without correct fare
- Difficulty of getting to Los Medanos Community College from some areas due to lack of north to south bus routes.
- Inadequate service for evening/night classes and late use of campus.
 - Route 387 stops running after the last bus leaves campus at 9:15 p.m.
- Need more stops in Costa Loma community of Antioch
 - Currently there is only one bus that stops by Tailgaters Restaurant, CVS, and an AutoZone. There should be a bus line with access to [Contra Loma Regional Park] for people with no car.

Other Challenges

- Intersections and conditions near [Pittsburg] High School are unsafe for students and drivers, especially Harbor Street intersections leading to the campus.
- SR-4 overpass should have a spur going straight to campus so people can avoid using Loveridge Road, which is congested and dangerous.
- Billboard lights on Railroad Avenue and SR-4 billboard lights are so bright they can be distracting to drivers.
- There is a need for pavement repairs and improved maintenance across the study and in Bay Point especially.

"I work at the Adult Education Center [1151 Stoneman Avenue, Pittsburg], and County Connector buses don't run late enough for working students to attend necessary night classes. Many buses stop at 7:30, which is too late for night school."

-Anonymous, Adult Education Center faculty



4.4.2.3 Antioch Senior Center and Pittsburg Senior Center Meet-and-Greets

PlaceWorks staff conducted in-depth discussions with the Antioch Senior Center’s Director of Programming, the Center’s Certified Transit Trainer, as well as visitors to the center, on January 3, 2020. These discussions focused on access to both the Antioch and Pittsburg senior centers as well as paratransit service across the study area. Additional feedback from the Recreation Supervisor of Pittsburg Senior Center was provided via email. All unfiltered feedback is recorded in Appendix B.

Participation

PlaceWorks staff recorded detailed interviews with both the Director of Programming and the center’s in-house Transit Trainer.

Feedback

Summary of Results

Most of the mobility challenges identified during the senior center outreach process concerned access to paratransit, including overall programming and improved access to senior centers specifically. For example:

- Between 60 and 90 people a day use Tri Delta to access Antioch Senior Center. Senior Center programs are restricted to daytime hours due to Tri Delta service hours. Programming must be shaped around transit schedules.
- Improving evening paratransit with the following options:
 - Senior Paratransit hours, which stop at 5:30 p.m., should match fixed-route service hours for evening service.
 - Senior paratransit service between Bay Point BART to Antioch BART needs to run later.
 - Route 200 (BART to VA hospital, Kaiser, Regional Medical Clinics) is vital to seniors and the one-hour headway needs to be reduced. Service should run later into the evening to allow for an associated extension of paratransit service.
 - Another option would be to expand paratransit service for all of Tri Delta’s service area from Martinez/Concord to far East County regardless of the time fixed routes end until last fixed route bus runs.

I have a lot of seniors who would like to socialize in the evening. This is when many get lonely or anxious. I would like evening fixed-route service hours extended, as well as faster and more direct service to senior centers and other senior resources.

-Savoy Fraine, Recreation Programs Coordinator at Antioch Senior Center

- Formalize a non-paratransit ‘driver request program’ so that senior centers and other facilities can coordinate with Tri Delta to ask for volunteer drivers for improved access to special events.
- Paratransit access is restricted due to gap between age-related paratransit and ADA-eligible paratransit. Tri Delta should at least simplify the ADA eligibility process.
- Simplify the on-demand service with Lyft/Uber, which is currently a five-step, multi-day registration process requiring a smart phone and bank account, as well as Lyft/Uber accounts.

4.5 Outreach Summary

4.5.1 Total Participation

As shown in Figure 4-10, over 180 community members provided input during the CBTP outreach process. The CBTP team performed 18 in-depth interviews with volunteer interviewees, including food bank visitors, night school students, senior citizens, non-English speaking commuters, and others. About 70 people provided feedback by participating in visual and mapping techniques, 51 people participated in surveys, and more than 40 individuals attended County meetings.

4.5.2 Feedback Summary

As shown in Figure 4-11, members of CoCs in the Pittsburg/Bay Point area confront transit-related mobility barriers at the highest rate, followed closely by pedestrian barriers, and then bicycle and safety-related barriers at about half that rate. However, safety and security are integral to active mobility, and as such, many concerns about walking, cycling, and transit relate to issues such as improper lighting, dangerous intersections, and sense of isolation and poor network conditions. Safety concerns outside the context of a specific travel mode were largely about fear of travel due to perceived risks in certain neighborhoods and overall lack of safety around community destinations such as parks or schools.

Figure 4-10 Total Outreach Counts

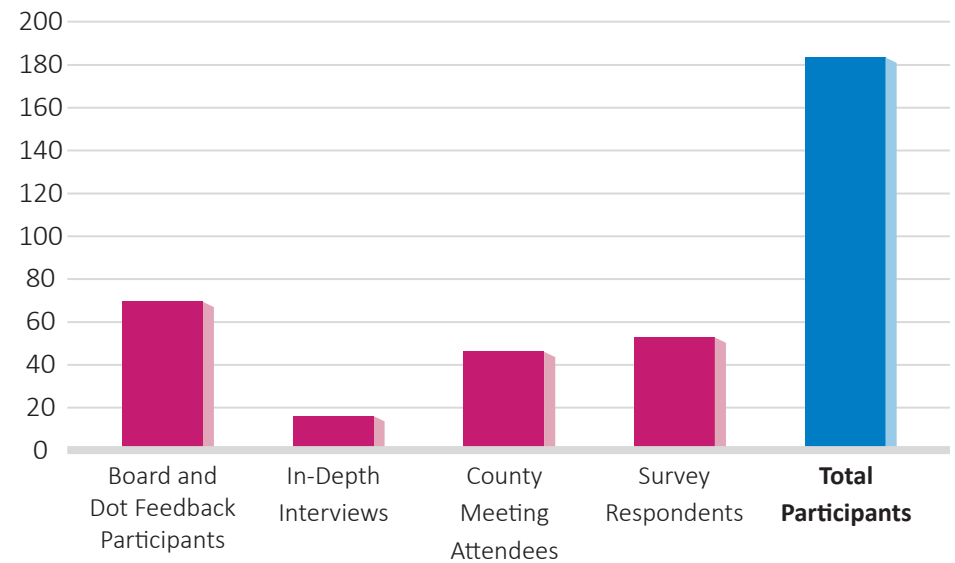
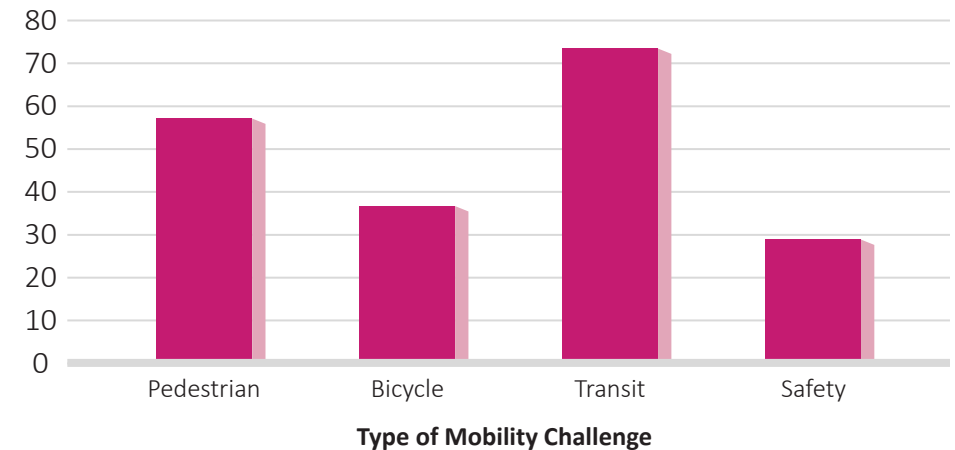


Figure 4-11 Total Responses Collected by Type



5. Methodology and Recommendations

This chapter identifies all recommended projects and plans. It outlines the evaluation criteria, evaluation methodology, and scoring approach used to identify and rank those recommendations. Potential funding sources, a key consideration in the evaluation process, are summarized.

5.1 COVID-19 and CBTP Development

As explained in Section 1.5, the COVID-19 pandemic emerged following the community outreach process of this CBTP. As a result, the community and stakeholder feedback in this plan does not reflect the changes in mobility context, habits, priorities, and challenges due to COVID-19 and formal shelter-in-place orders. The scoring process was developed following shelter-in-place, and accounts for the impacts of those regulations. Shelter-in-place prompted significant shifts in the financial feasibility and implementation potential of transit projects, including those identified by Pittsburg/Bay Point community members. As a result, some transit projects scored lower in the evaluation process used in this CBTP (see Section 5.2).

However, as explained further in Sections 5.2 and 5.4.1, transit ridership declines are significantly less pronounced in disadvantaged communities as compared to others. In the Pittsburg/Bay Point, pre-COVID community input is consistent with post-COVID ridership statistics: both reaffirm that there are major transit needs in the area that require fulfillment both during and post-COVID.

The Contra Costa Transportation Authority decided to adopt this plan in the current context, rather than re-initiate the existing conditions, community outreach, and recommendations processes. While COVID conditions affected the outcome of the evaluation process, this document has been developed to be flexible and amenable to revision based on return to normal conditions or solidification of “new normal” conditions. This Plan contains numerous transit projects categorized as “High Need”, which under current conditions would be challenging to implement. However, it assumed that over the 10-year planning horizon of this CBTP, the mobility environment will change. Public transit is an ongoing lifeline for communities of concern, and

recommendations deemed to have lower implementation potential in the age of COVID should be considered future opportunities regardless.

5.2 Evaluation Criteria

The CBTP project team worked with the Project Working Group (PWG) on February 3, 2020, to establish four evaluation criteria deemed appropriate to rank projects by their ability to improve mobility for challenged communities. Criterion such as diverse community benefit, degree of transportation improvement, current relevance, future technological challenges, usability and access, available funding, potential for cross-jurisdictional challenges, and ability to resolve mobility barriers were discussed.

Ultimately, the following four criteria were selected to score projects and plans:

- 1. Reflects Community Priorities**
- 2. Increases Access**
- 3. Financial Feasibility**
- 4. Ease of Implementation**

5.2.1 Reflects Community priorities

This criterion is the degree to which a project or plan is consistent with the priorities and needs of residents, community stakeholders, and leaders in Communities of Concern (CoC). Projects were ranked highly under this criterion if they:

- Reflect a theme in the community feedback collected during the CBTP outreach process described in Chapter 4;
- Are consistent with community mobility challenges identified in past plans and studies and the existing conditions analysis prepared for this CBTP;
- Support transportation goals established in current plans and studies;
- Are consistent with projects prioritized in the previous Bay Point CBTP, but not yet implemented.



5.2.2 Increases Access

This criterion is the potential of a project to improve access to key facilities and locations across the study area. As noted in Chapter 1, the current CBTP study area extends east from Bay Point, through Pittsburg, and beyond A Street in Antioch. It includes portions of unincorporated Contra Costa County and has a population of over 93,000. Given the geographic scale and diversity of mobility gaps across the study area, projects with one of two benefits score highly under this criterion:

- Those that would improve connectivity between systems;
- Those that would facilitate mobility for groups challenged by limited options.

5.2.3 is Financially Feasible

Cost and feasibility are important considerations for evaluating projects. This criteria considers more than the anticipated budget of a project, as one project may be more expensive than another but it may be eligible for a range of different funding sources, while the other project may be less expensive but does not fit into readily available funding categories.

MTC's CBTP guidelines are developed to ensure that mobility recommendations are the result of community input. Assessing the financial feasibility of projects is a tool to identify projects that are likely to find further support and move quickly to implementation. Projects were ranked under this criterion by estimated hard costs, analyzing the potential for funding based on project type, and reviewing historical financial challenges.

As stressed In Section 5.1, one of the most significant considerations in this criterion was revenue loss to transit providers resulting from COVID-19, which have impacted the current flexibility of providers to fund new projects. Many transit recommendations in this plan are outside committed funding sources, while project outreach and research indicate high transit needs within the community. However, future conditions will reposition the financial feasibility of transit projects and funding strategies for transit should continue to be developed.

Ranking projects under this criterion included reviewing potential funding sources for local and countywide mobility projects. These include:

- **Senate Bill (SB) 375**- California SB 375, passed in 2008, directs the California Air Resources Board (CARB) to set up regional targets for reducing greenhouse gas (GHG) emissions with regional metropolitan planning organizations (MPOs). The GHG targets are implemented through the MPO's regional Sustainable Communities Strategies (SCS). Below are a list of funding and grants offered by MTC as part of their SCS in fulfillment of SB 375.
 - **Lifeline Transportation Program** - Funds offered by MTC for projects that are identified through a collaborative, inclusive, community-driven process, and that address transportation gaps and barriers identified in CBTPs or other local planning efforts in low-income neighborhoods.
 - **One Bay Area Grant Program (OBAG)**- These grants are rewarded to transit-oriented development projects located in Priority Development Areas— Areas targeted for compact growth identified in Plan Bay Area (MTC's SCS). Priority is given to cities and counties that have been proactive in creating more housing and who have accepted a proportionally higher allocation of housing units through the Regional Housing Needs Assessment (RHNA) process.

- **Caltrans Active Transportation, Complete Streets, and Safe Routes to School Programs**- Active transportation grants fund transportation improvements that foster healthy activity, namely walking and biking. Complete Streets grants improve sidewalks and curbs that connect to important destinations. Safe Routes to School grants fund projects that provide safe walking and biking routes between neighborhoods and local schools.
- **Bay Area Air Quality Management District (BAAQMD) Grants** - BAAQMD offers a variety of funding sources for projects that reduce air pollution in the Bay Area, like their Carl Moyer Program, which provides grants to replace or upgrade heavy-duty diesel vehicles.
- **Measure J, Countywide Transportation Sales Tax** - Measure J provides half-cent sales tax revenue for transportation projects through 2034. The expenditure plan that guides the Measure includes \$360 million for local street and roads, as well as \$123 million for transit projects supporting seniors and the disabled.
- **Transportation n for Livable Communities (TLC)**- These funds are intended to support local efforts to achieve more compact, mixed-use development, and development that is pedestrian-friendly or linked into the overall transit system.
- **CARB Sustainable Transportation Equity Project (STEP)**- This is a pilot program launched in 2020 that funds transportation and planning projects that reduce GHG emissions in California.
- **Federal Transit Administration (FTA) Section 5310: Enhanced Mobility of Seniors and People with Disabilities Program** - As the title suggests, this program funds projects that improve mobility for seniors and people with disabilities by identifying and removing barriers and improving transportation services like paratransit. This project is part of the FAST Act of 2015.
- **Transportation Partnership and Cooperation (TRANSPAC) Subregional Transportation Mitigation Program (STMP)**- TRANSPAC is a Regional Transportation Planning Committee for Central Contra Costa County. The STMP collects mitigation fees from new developments and allocates it to the most appropriate and effective regional transportation projects that increase the capacity of transportation systems to accommodate new development.



- **Highway Safety Improvement Program (HSIP) Grants**- These grants, administered by the Federal Highway Administration, fund projects that are meant to significantly reduce traffic fatalities on public roads. The HSIP program is a part of the 2015 FAST Act.
- **Regional Surface Transportation Block Grant** - These are grants provided by the FTA to states and localities for different transportation projects, including highway improvements, bridge or tunnel projects on public roads, pedestrian and bicycle infrastructure, and transit capital projects.
- **Land and Water Conservation Fund (LWCF)**- Created by congress in 1964, Land and Water Conservation Funds are used to purchase land for all types of parks, from national parks to community trails and neighborhood ball parks.
- **Recreational Trails and Greenways Grant Program**- Funded by Proposition 68, this program will fund projects that provide nonmotorized infrastructure development and enhancements that promote new or alternate access to parks, waterways, and outdoor recreational pursuits to encourage health-related active transportation.

5.2.4 Ease of implementation

Numerous factors influence the ease or difficulty of initiating, completing, and putting a project into action. While a recommended project or program may align with community priorities, likely benefit many and appear a candidate for funding, assessing the challenges of implementation remains critical. Determining that the challenges of implementation of a single project are significant, facilitates the identification of other, more implementable projects that achieve the same benefits.

Factors used to assess the ease of implementation of recommendations include:

- Required cross-agency coordination.
- Cross-jurisdictional physical footprint.
- Engineering complexity.
- Lack of technological “future proofing;” i.e., the potential that a project will become obsolete due to new technologies.

5.3 Evaluation Process

As noted, the evaluation criteria outlined in Section 5.2 were developed in consultation with the PWG and then applied to candidate projects. This was part of a larger evaluation process that included:

1. Developing lists of potential projects and plans directly from community members during the outreach process, for review by the PWG. The PWG weighed in as a group and individually to identify high-potential recommendations.
2. Working with the PWG to develop the evaluation criteria outlines in the previous section.
3. Applying the four criteria to potential projects and plans, including:
 - Assessing candidate projects against existing mobility plans to identify those supportive of relevant mobility goals or redundant with implemented projects.
 - Assessing the feasibility of candidate projects in terms of required agency coordination, funding potential, and historic implementation challenges.



4. Presenting the draft CBTP to the project Steering Committee for document review and evaluation of prioritized recommendations.
5. Revision and finalization of priority projects and plans based on comments of the Steering Committee.

5.3.1 Criteria Scoring Categories

Recommendations were scored one through five for each evaluation criteria. A score of one reflects the lowest potential for fulfillment of that category; five the highest. For all project and plans, the following score averages were calculated:

- **Area Need Score:** The average score of Criterion 1 (Community Priorities) and Criterion 2 (Increases Access).
- **Project Potential Score:** The average score of Criterion 3 (Financial Feasibility) and Criterion 4 (Ease of Implementation).

The four criteria were organized into the above two scores to improve the implementability of the CBTP as a whole. Identifying those recommendations with the highest and/or most immediate potential to get funded and built will support the

grant selection, timing and planning processes. It will facilitate improved, more informed decision-making, and/or awareness of potential challenges in the future.

Projects and plans have been categorized into three groups based on the results of this scoring system.

High Need + High Potential Recommendations

These recommendations received an Area Need Score of 3.5 or above and a Project Potential Score of 3.5 or above. These projects and programs are consistent with community priorities, as reflected in mobility gaps identified in the CBTP outreach process, ongoing studies, and recommendations of the previous CBTP. These projects have the highest potential to reduce broad or specific access gaps that currently challenge community members.

In addition, these recommendations also are unlikely to face significant implementation challenges, as shown in high average scores for financial feasibility and ease of implementation.

High Need + High Potential Recommendations should be considered for near-term planning and implementation.

High Need Recommendations

High Need Recommendations received an Area Need Score of 3.5 or above and a Project Potential Score of below 3.5. These projects will fulfill community priorities and increase community access but may be difficult to complete due to funding and costs, cross-jurisdictional management, engineering, and other implementation challenges.

These projects should be considered for the future. They reflect the community's needs and past study results. The jurisdictions, agencies, and stakeholders that would likely need to coordinate on implementation should remain open to future management structures. Creative funding sources should be researched.

High Project Potential Recommendations

These recommendations received an Area Need Score between 2.5 and 3.5, and a Project Potential Score of 3.5 or above. High Project Potential Recommendations

would not fill priority and access gaps to the degree that higher-priority recommendations would. Yet they are financially feasible and unlikely to encounter major implementation challenges. Implementation of these projects would demonstrate progress within the community. These projects could be packaged into larger programs or implemented alongside higher-priority recommendations.

5.3.2 Project Types

Recommendations fall within the following three types of projects and plans:

Active Transportation. These are generally capital improvements that increase safe, healthy, active transportation choices, namely walking and biking, for everyday trips. Examples include improvements to trails and greenways, separated bike paths and cycle tracks connecting to jobs, grocery stores and transit, intersection improvements, and providing bike lockers and storage at important destinations like job centers and transit hubs.

Transit. Transit projects may include new routes, expanding operating hours of certain lines, increasing transit line frequency, improving program information or awareness, or improving transit stops with lighting, shelter, and seating.

School Safety. School safety projects provide safe, non-motorized routes between where people live and local schools. Projects include enhancing school-adjacent crosswalks with signals and flashing beacons, providing neighborhood bike path access directly to schools, and improving lighting along these and other routes commonly traveled by students.

5.4 Recommended Projects and Plans

The following section includes all recommended projects and plans across the three categories for the Pittsburg/Bay Point CBTP study area, as identified by the previously described scoring system.

High Need + High Potential Active Transportation Recommendations are shown on Figure 5-1; High Need + High Potential Transit Recommendations are shown on Figure 5-2; High Need + High Potential School Safety Recommendations are shown on Figure 5-3.

High Need and High Potential Recommendations are not shown on these maps.

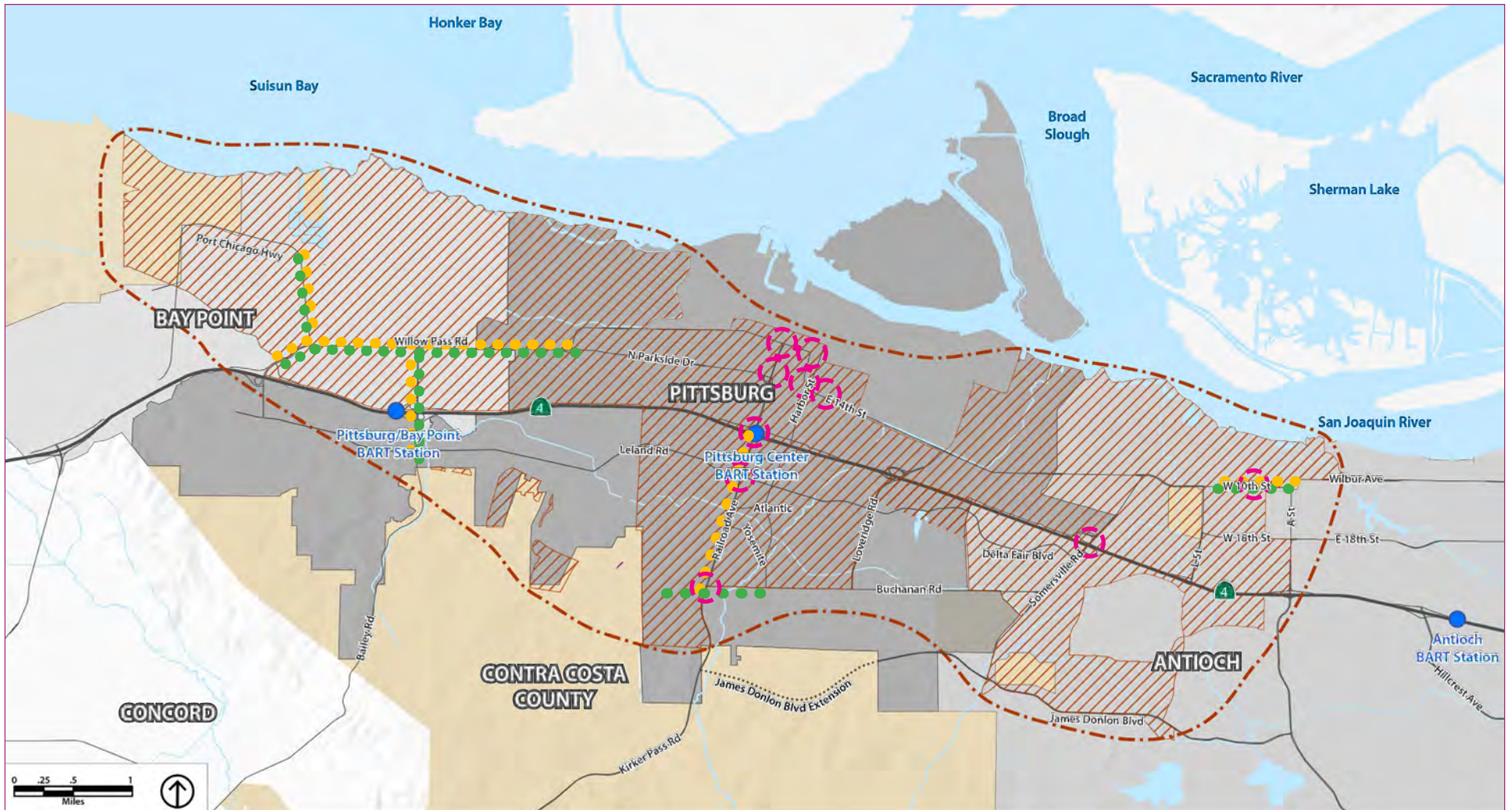
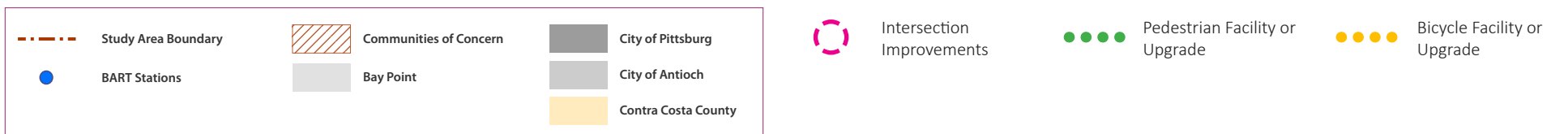


Figure 5-1 High Need + High Potential Active Transportation Recommendations



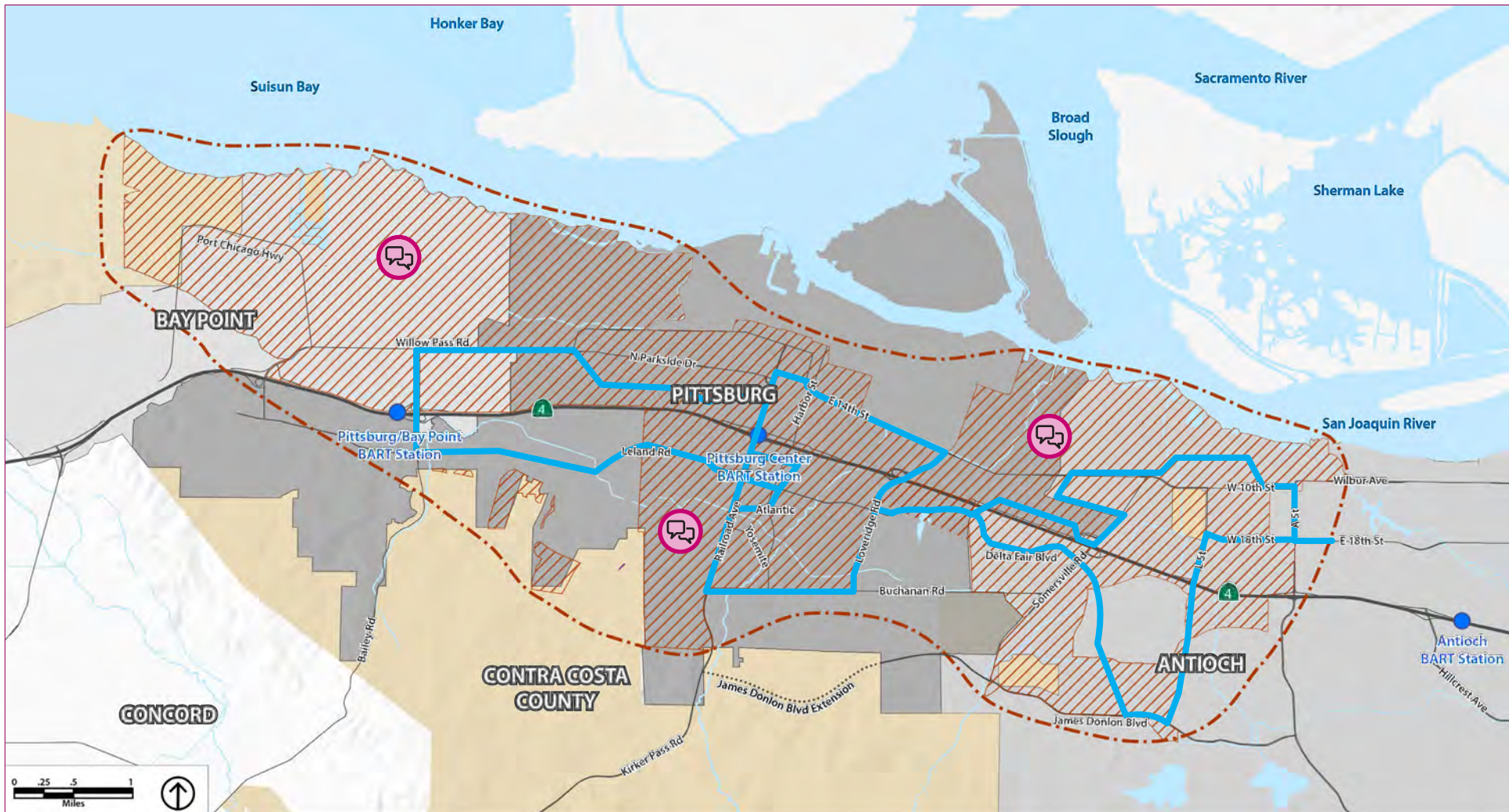
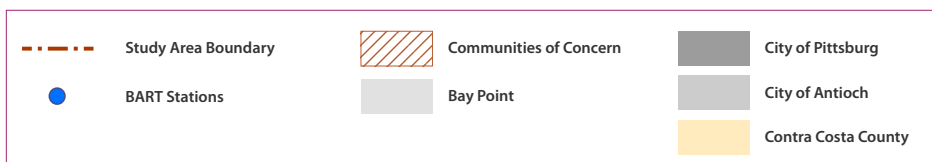


Figure 5-2 High Need + High Potential Transit Recommendations



High Use Bus Routes for Potential Shelter Upgrades

Tri Delta Tri Myride Campaign

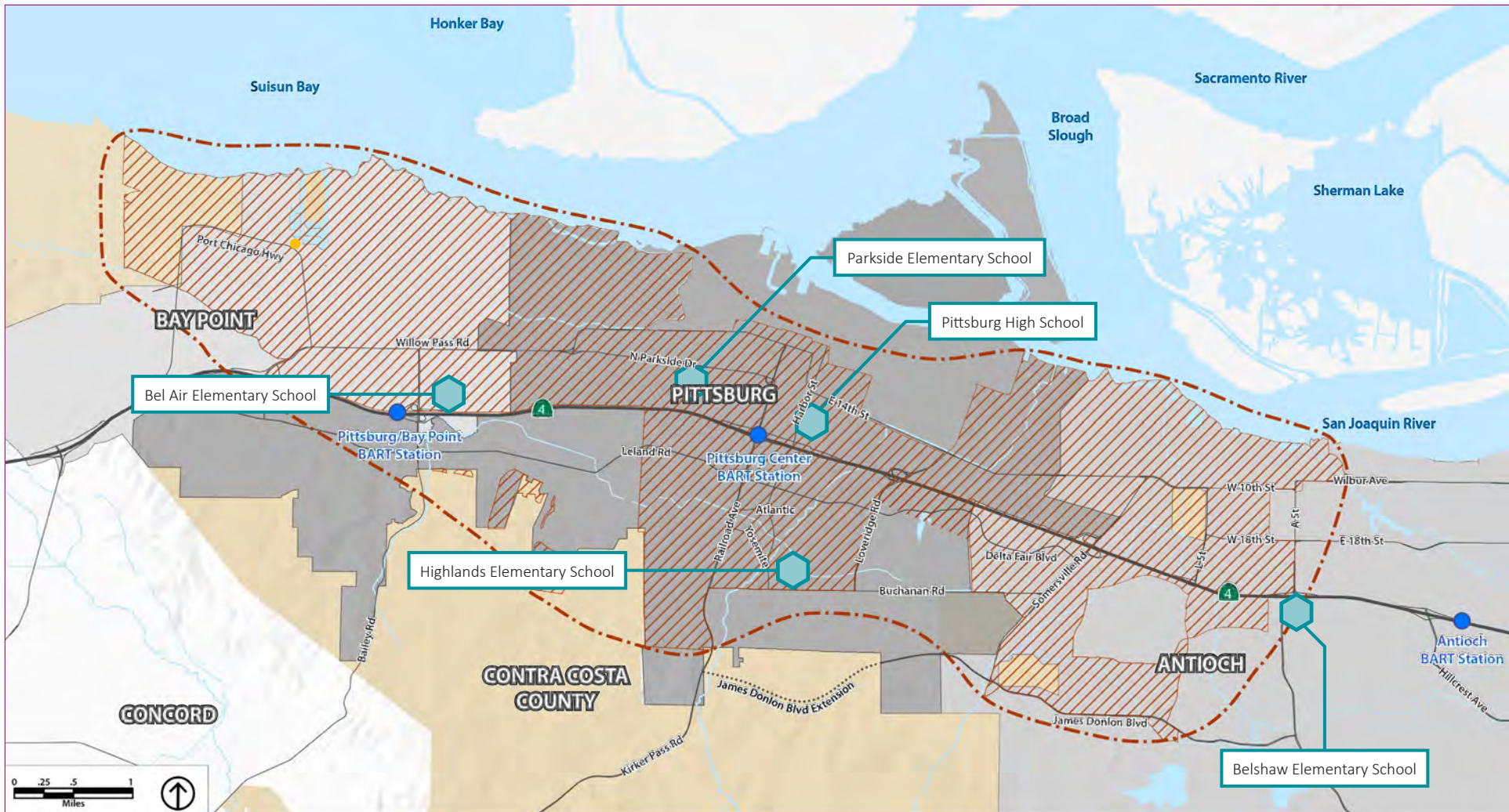
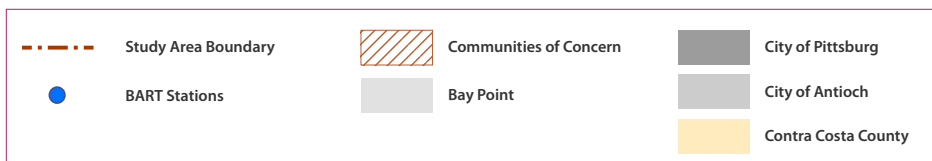


Figure 5-3 High Need + High School Safety Recommendations



 School Safety Project or Program

5.4.1 High Need + High Potential Recommendations

As noted in Section 5.3, High Need + High Potential Recommendations are those projects and programs most consistent with community priorities. They have the highest potential to reduce access gaps that currently challenge community members. In addition, they are financially feasible and would face minimal implementation challenges. They received score of 3.5 or above for both *Area Need* and *Project Potential*.

The following tables summarize recommendations across project type. Each table includes recommendations, *Area Need* score, *Project Potential* score, and estimated cost.

5.4.1.1 Active Transportation Projects and Programs

Active transportation projects, including bicycle and pedestrian programs and related capital improvements, comprise the majority of the High Need + High Potential Recommendations (see Table 5-1). Not only were such projects identified by the community, in current studies and during CBTP advisor coordination, but funding for active transportation and multi-modal safety remains available in the wake of COVID-19 mobility changes.

Recommendation	Area Need Score (3.5+)	Project Potential Score (3.5 +)	Estimated Cost
Develop a protected Class IV separated bicycle facility along Railroad Avenue in Pittsburg, from California Avenue to Buchanan Road.	4	3.75	\$480,000
Implement an ADA-compliant intersection improvement program at 3-4 major intersections along Railroad Avenue in Pittsburg.	4.5	4.5	\$600,000 to \$1 million
Complete community- and City-identified intersection improvements at various points across Harbor Street in Pittsburg, between Central Avenue and Solari Street.	3.75	4.5	\$175,000 to \$250,00 per intersection
Implement near-term improvements at Somersville Road/SR 4 intersection, including striping, signal modifications.	4	3.5	\$900,000
Fill sidewalks gaps on Buchanan Road: 1. at Railroad Avenue 2. from Kirker Pass Road to Heights Avenue	4	3.75	\$1.3 million
Improve pedestrian and bicycle experience and safety along Willow Pass Road in Bay Point by installing/upgrading infrastructure.	4.25	3.25	\$3 million to \$5 million
Implement a pedestrian and bicycle safety program on West 10th Street in Antioch that includes traffic calming improvements between G and A Streets and safety upgrades at the intersection of West 10th Street and D Street.	4	3.5	\$1 million to \$ 1.5 million
Improve pedestrian and bicycle experience and safety along Port Chicago Highway in Bay Point to McAvoy Road by installing/upgrading pedestrian and Bicycle infrastructure.	4.25	3.5	\$1 million to \$1.5 million
Install bicycle lanes on the McAvoy Road railroad crossing north of Port Chicago Highway.	3.5	3.5	\$30,000 to \$40,000
Improve pedestrian and bicycle experience and safety along Bailey Road in Pittsburg and Bay Point by installing/upgrading pedestrian and bicycle infrastructure.	4.5	3.5	\$1.5 million to \$2 million

5.4.1.2 Transit Projects and Programs

The overall implementation and financial potential of transit projects decreased with declines in systemwide revenues from COVID. This is reflected in the low number of High Priority + High Potential Transit Projects shown in Table 5-2, and higher number of transit projects scored High Need (Table 5-5)

It is important to note that disadvantaged communities remain disproportionately reliant on transit service, as compared to other communities, during the pandemic. For example, while station entries across the BART system dropped 87 percent from September 2019 to September 2020, drops were uneven from station to station. Ridership at Orinda Station, where 72 percent of the population is white, saw a 94 percent drop in ridership. In comparison, Pittsburg Center BART Station, located where 65 percent of the population is Black or Latinx, saw a 74 percent drop in year over year ridership.¹

¹ Bay Area Council Economic Institute, September 2020, *Economic Profile 2020: Housing and Transportation in a Post-Pandemic Bay Area*, <http://www.bayareaeconomy.org/report/housing-and-transportation-in-a-post-pandemic-bay-area/>, accessed November 9, 2020.

Accessible public transit remains a mobility backbone for disadvantaged communities in the Bay Area and beyond. This was borne out in the Pittsburg/Bay Point outreach process, during which low-income, youth and elderly residents identified area-wide and route-specific gaps, transit-isolated destinations, BART access issues and bus stop upgrades as needed community improvements.

Most transit recommendations received a lower Project Potential score and fall under the High Need Recommendations category. Those challenges notwithstanding, all transit recommendations in this plan are considered viable community priorities.

Recommendation	Area Need Score (3.5+)	Project Potential Score (3.5 +)	Estimated Cost
Upgrade up to 10 additional bus stops along high-use Tri Delta and County Connection routes with “half-barrel” bus shelters and shelter improvements consistent with 2019 NACTO and ADA standards.	4	3.5	\$20,000 to \$30,000 per stop
Upgrade or install five “half-barrel” bus shelters and improvement consistent with 2019 NACTO and ADA standards on routes serving the Antioch Senior Center., as well as.	4	3.5	\$20,000 to \$30,000 per stop
Develop a public information program to introduce and educate special needs transit riders about Tri Delta’s Tri Myride service. Develop in-person presentations about program eligibility, technology and service areas for senior centers and disability and other support facilities.	3.75	4	\$15,000 to \$20,000

5.4.1.3 School Safety Projects and Programs

Recommendation	Area Need Score (3.5+)	Project Potential Score (3.5 +)	Estimated Cost
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Pittsburg High School.	4.25	3.75	\$400,000 to \$700,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Bel Air Elementary in Bay Point.	3.5	3.75	\$300,000 to \$600,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Highlands Elementary School in Pittsburg.	3.75	3.5	\$300,000 to \$600,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Parkside Elementary School in Pittsburg.	3.5	3.5	\$300,000 to \$600,000
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bicycle-friendly bulb-outs, and rapid flashing beacons at Belshaw Elementary School in Antioch.	3.5	4	\$300,000 to \$600,000

High Need + High Potential school safety projects and programs are summarized in Table 5-3. As of this Draft CBTP, public schools and facilities within east Contra Costa County are closed to classroom learning for the 2020 to 2021 school year. These conditions make it difficult to predict implementation of school safety projects. However, funding for previously identified Safe Routes to School programs increases the potential for these projects.

5.4.2 High Need Recommendations

As noted in Section 5.3, High Need Recommendations are consistent with community priorities and have high potential to reduce access gaps. However, they may be more difficult to complete than High Need + High Potential Recommendations due to funding, management, engineering, and other implementation challenges. They received an Area Need Score of 3.5 or above, and a Project Potential Score below 3.5.

5.4.2.1 Active Transportation Projects and Programs

High Need Active Transportation Projects and Programs are summarized in Table 5-4.

Table 5-4 High Need Active Transportation Projects and Programs

Recommendation	Area Need Score (3.5+)	Project Potential Score (below 3.5)	Estimated Cost
Install Class II Buffered Bike Lanes along Harbor Street from Buchanan to Stoneman Avenue.	4.25	3.25	\$60,000
Install Class IV Separated Bikeway along Harbor Street, from Stoneman Avenue to 3rd Street:	4.25	3.25	\$680,000
Increase bicycle safety at Harbor Street under-crossing of Mococo railroad line in Pittsburg with separation and surface improvements.	3.5	2	\$30,000
Increase bicycle safety at Harbor Street under-crossing of BNSF railroad line in Pittsburg with separation and surface improvements.	3.5	2	\$30,000
Increase bicycle safety at the Willow Pass Road under-crossing of both the BNSF and the Mococo lines in Pittsburg with separation and surface improvements.	4	1.25	\$10,000,000 per crossing
Add Class I Bike Path on west side of San Marco Boulevard from Evora Road to Rio Verde Circle.	4.5	2.5	\$4.8 million
Work with local or transit agencies to install secure public bike repair equipment at BART stations and transit stops near public schools.	3.5	3	\$5,000 to \$8,000 per "station"
Improve the personal security and comfort along portion of Delta de Anza Regional Trail in study area, via new lighting, selective vegetation removal, installation of cameras, and improved sight lines.	4.5	2.5	\$800,000
Add pedestrian lighting and infrastructure improvements at intersections along the transition from Willow Pass Road to North Parkside Drive.	3.5	3	\$175,000 to \$250,00 per intersection
Implement a program of bicycle facility maintenance that includes quarterly lane sweeping by all study area agencies, as-needed lane restriping and graffiti abatement along the portion of the Delta de Anza Regional Trail in the study area.	3.5	3	\$500,000 annually

Transit Projects and Programs

High Need Transit Projects and Programs are summarized in Table 5-5.

Table 5-5 High Need Transit Projects and Programs			
Recommendation	Area Need Score (3.5+)	Project Potential Score (below 3.5)	Estimated Cost
Upgrade evening service and increase headways on 2 high-use routes connecting Los Medanos Community College and Pittsburg Adult Education Center to BART Stations and the City of Antioch, including Routes 387, 380, 381 and 388.	3.75	2	\$500,000 to \$1.5 million yearly
Reduce the 1-hour headway on Tri Delta Route 200 (BART to VA hospital, Kaiser, Regional Medical Clinics) and extend service to 9:00 PM.	3.5	3	\$500,000 to \$1 million yearly
Expand Tri Delta Senior (Age 65+) Paratransit Transportation hours of operation to include service from 5:30 PM to 9:30 PM and limited weekend hours.	4	2	\$350,000 to \$500,000 yearly

5.4.3 High Project Potential Recommendations

High Project Potential Recommendations are less likely to fill mobility gaps than higher-priority projects. Regardless, they are the result of community input and past study findings. Moreover, they are financially feasible and unlikely to encounter major implementation challenges. These recommendations received an Area Need Score between 2.5 and 3.5, and a Project Potential Score of 3.5 or above (see Table 5-6).

Active Transportation Projects and Programs

High Project Potential Active Transportation Projects and Programs are summarized in Table 5-6.

Table 5-6 High Project Potential Active Transportation Projects and Programs

Recommendation	Area Need Score (3.5+)	Project Potential Score (below 3.5)	Estimated Cost
Work with the City of Pittsburg to complete planned lighting improvements along segments of Railroad Avenue.	3.25	5	\$350,000 to 600,000
Mark green conflict zone striping on all approaches and through bus stops along Harbor Street in Pittsburg, between Buchanan Road and Solari Street.	2.75	4.5	\$7,000 per stop/ intersection
Close sidewalk gaps along Madison Avenue from Delta de Anza Regional Trail to Canal Road.	3	4	\$75,000
Install safety improvements and updates at the Bailey Road and Delta de Anza Regional Trail crossing.	3	4.5	\$125,000
Construct a 10-foot sidewalk segment or trail along the south side of Willow Pass Road between Port Chicago Highway and Evora Road in Bay Point.	2.5	3.5	\$300,000



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Appendix A Existing Conditions Report

EXISTING CONDITIONS

INTRODUCTION

The Metropolitan Transportation Commission (MTC) published two reports in 2001 that identified gaps in the provision of transportation services in low-income Bay Area neighborhoods. The *Lifeline Transportation Network Report* and *Environmental Justice Report* recommended community-based planning as a way for these neighborhoods to improve their residents' travel needs. In response, MTC initiated the Community-Based Transportation Planning (CBTP) Program. The program was developed to improve travel needs for Communities of Concern (CoC) throughout the Bay Area, which consist of neighborhoods defined by a series of census tract-level factors identified by MTC as influencing susceptibility to transportation gaps and mobility challenges. These include high rates of minorities, low-income residents, seniors, and lack of car ownership, among others. The CBTP program is a collaborative effort between CoCs, transit operators and congestion management agencies to identify local mobility challenges as well as community-oriented solutions. These projects then became eligible for funding under MTC's 2006 Lifeline Transportation Program.

Communities in the Pittsburg-Bay Point area were first identified as CoCs in MTC's 2001 Regional Transportation Plan (RTP). To address the transportation gaps experienced by residents in the CoCs, MTC initiated the CBTP planning grant program. The program funded four CBTPs in Contra Costa County, including one in the Pittsburg-Bay Point area. The first CBTP in the area was completed in 2007. It recommended a number of programs and projects to address transportation gaps, including transit shelter enhancements, additional bus and shuttle services, marketing programs to highlight transit services, parking and lighting improvements at BART stations, establishment of an emergency ride home program as well as crossing guard programs at local schools, and bicycle/pedestrian improvements along Bailey Road. Significant changes in demographics, land use and transit options have occurred in the last 12 years, prompting the development of this revised CBTP.

This document discusses existing conditions in the Pittsburg-Bay Point area, consistent with MTC's CoC designation. This report defines the CBTP study area and summarizes the land use, demographics, transit service and transit gaps that characterize the area. The document primarily utilizes data from the 2010 Census, 2013-2017 Five-Year American Community Survey (ACS), and demographic projections from MTC's Plan Bay Area 2040 Forecast. The topics covered by this document include a summary of MTC's Lifeline Transportation Program, land use, race and ethnicity, age distribution, language and limited English proficiency, income and poverty status, vehicle availability, journey to work, transportation gaps, and implementation status of recommended policies from the prior CBTP Plan.

EXISTING CONDITIONS

2018 LIFELINE TRANSPORTATION PROGRAM

Per its 2018 guidelines, the goal of the Lifeline Transportation Program is to fund projects that result in improved mobility for low-income residents of the San Francisco Bay Area. Eligible projects must:

- Be developed through an inclusive planning process that engages a broad range of stakeholders.
- Improve a range of transportation choices by adding new or expanded services.
- Address transportation gaps and/or barriers identified in Community-Based Transportation Plans (CBTP) or other substantive local planning efforts involving focused outreach to low-income populations.

Both operating projects and capital projects are eligible for funding under the Lifeline Transportation Program. Examples of operating projects include enhanced fixed-route transit, shuttles and auto loan programs. Capital projects include, but are not limited to, bus stop enhancements, vehicle purchase and modernization improvements.

Lifeline Transportation Program Cycle 5, which covers Fiscal Year 2016-17 through Fiscal Year 2017-18 was funded by two sources, State Transit Assistance (STA) and Federal Transit Administration (FTA) Section 5307 Urbanized Area Formula funds. Table 1 details the amounts of these funds allocated to the entire program and to Contra Costa County.

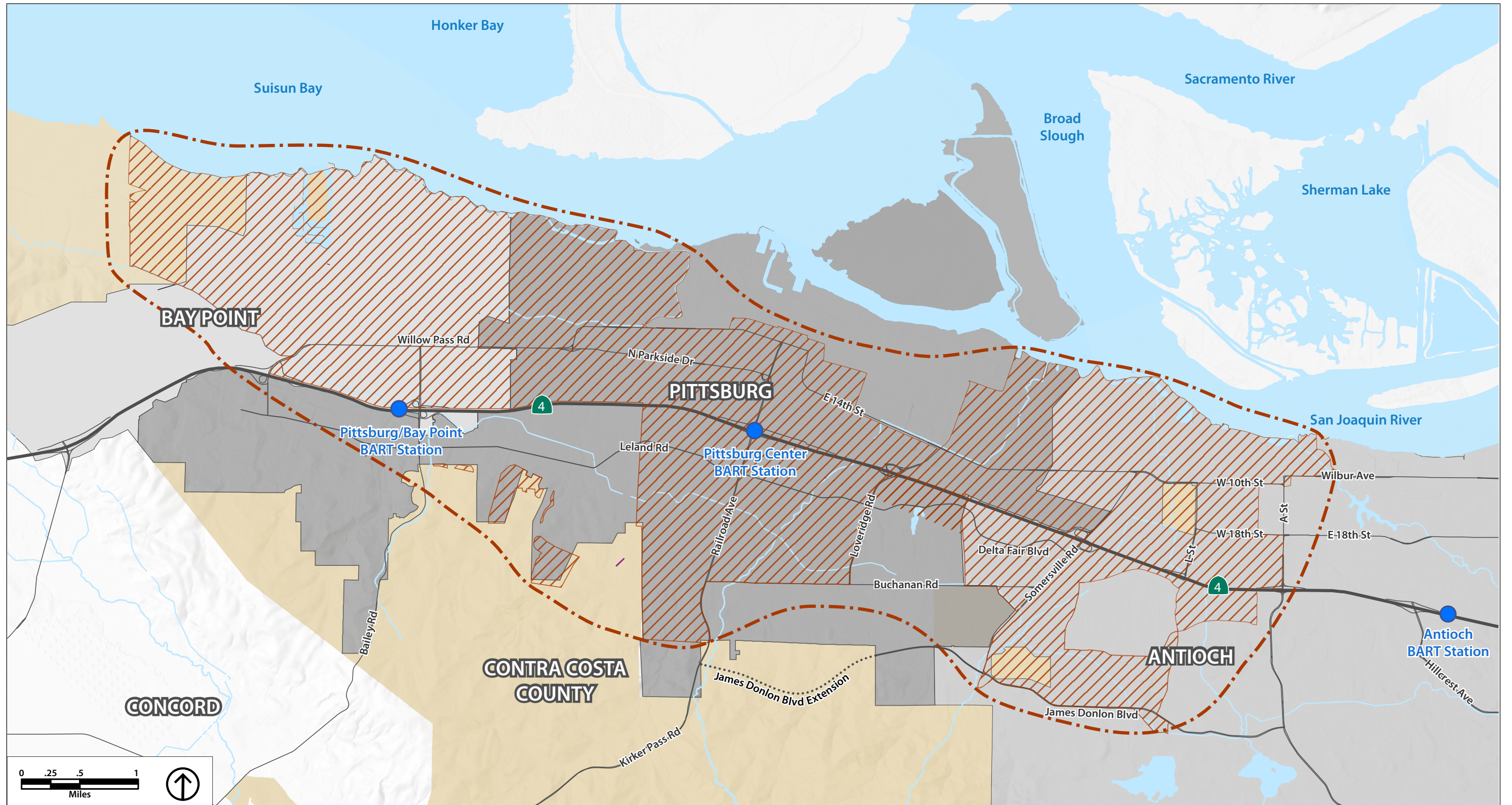
TABLE 1 CYCLE 5 LIFELINE FUNDING

County and Share of Regional % Low Income Population	FY 2016 -2017 (\$ Millions)		FY 2017-2018 (\$ Millions)		Total (\$ Millions) Estimate
	STA Actual	FTA Actual	STA Actual	FTA Estimate	
Contra Costa 14.7%	\$1.08 M	\$0.50 M	\$1.07 M	\$0.50 M	\$3.10 M
Rest of Bay Area 86.3%	\$6.22 M	\$2.87 M	\$7.19 M	\$2.93 M	\$19.36 M
Total	\$7.30 M	\$3.37 M	\$8.26 M	\$3.43 M	\$22.36 M

Source: Metropolitan Transportation Commission, Lifeline Transportation Program Cycle 5 Guidelines.

CBTP STUDY AREA

The Pittsburg-Bay Point CBTP study area (herein referred to as “study area”) is determined primarily by the location of local Communities of Concern (CoC). As shown in Figure 1, the east-west running study area includes CoCs north of State Route (SR) 4 in a large area of Bay Point;



Source: Metropolitan Transportation Commission, 2018; PlaceWorks, 2019.

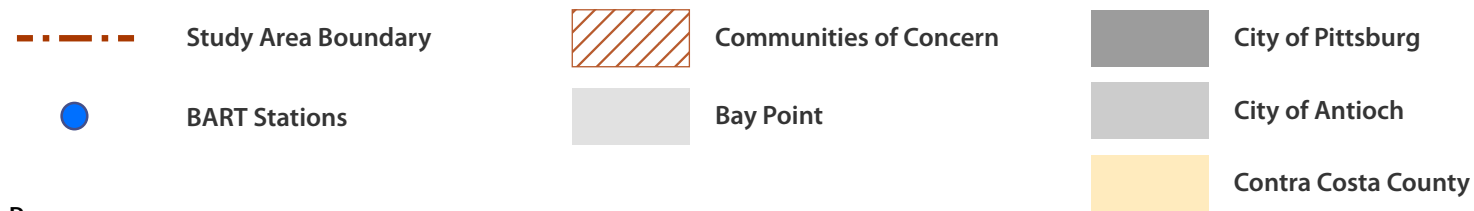


Figure 1
CBTP Area

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EXISTING CONDITIONS

surrounding SR 4 and Railroad Avenue in central Pittsburg; and bounded by the Pittsburg border, A Street, Suisun Bay and James Donlon Boulevard in western Antioch. State Route 4 bisects the study area, and the northern portion of the study area extends to Suisun Bay and the San Joaquin River. The study area includes the Pittsburg-Bay Point and Pittsburg Center BART Stations. Figure 1 also illustrates that the study area boundary does not entirely conform to CoC boundaries. This is because the community focus, reliance on outreach, and potential transit solutions, programs and projects that result from the CBTP cannot be limited to the census tract-level.

LAND USE CHARACTERISTICS

The study area includes land uses with patterns that are typical of suburban communities. There are a large variety of land uses in the study area, as shown in the composite general plan land use map (Figure 2 on page 7). Single-family land uses (about 5 to 7 units per acre) are prevalent in the study area, interspersed with multi-family land uses (about 7 to 21 units per acre).

Another common land use in the study area is heavy industrial, which is located along the Pittsburg waterfront, as well as to the northeast and northwest of Pittsburg Center. As noted in the City's General Plan, this reflects Pittsburg's history as a key industrial center within Contra Costa County. Uses such as the Dow Chemical Company plant are located here. The study area also contains a large areas of waterfront open space along Suisun Bay in Bay Point.

Finally, the study area contains smaller areas of residential-supporting land uses common to large communities, including public and semi-public uses such as schools and parks, as well as centralized commercial land uses along Railroad Avenue in Pittsburg and surrounding SR 4 from Loveridge Road to Somersville Road in east Pittsburg.

DEMOGRAPHIC CHARACTERISTICS

This demographic profile compares census tract data from the 2010 U.S. Census and American Community Survey 5-year estimates (2006-2010 and 2013-2017) to show trends since the last CBTP. In addition, future projections are provided from the 2017 Regional Transportation Plan (RTP), which MTC published in July 2017. Also known as Plan Bay Area (PBA) 2040, this RTP contains forecasts for population, housing, and employment for the horizon year of 2040. Detailed tables on projections are provided in the appendix to this document.

POPULATION PROJECTIONS

According to 2013-2017 ACS 5-year estimates, the population of the study area in 2017 was approximately 93,667, growing 4.6 percent from the 2010 Census, when the population of the study area was 89,513. The rate of population increase in the study area is about half of the growth

EXISTING CONDITIONS

experienced over the past seven years countywide in Contra Costa County, which grew from 1,049,030 residents in 2010 to 1,147,439 in 2017 (9.4 percent growth). Growth trends in the study area are predicted to be stable through 2040, where the study area is projected to grow by 21 percent (less than 1 percent growth per year) to 113,223 residents. This growth will be slightly higher than the rate of population growth countywide, which is expected to grow by 17 percent from 2017 to 2040 to a population of 1,338,240.

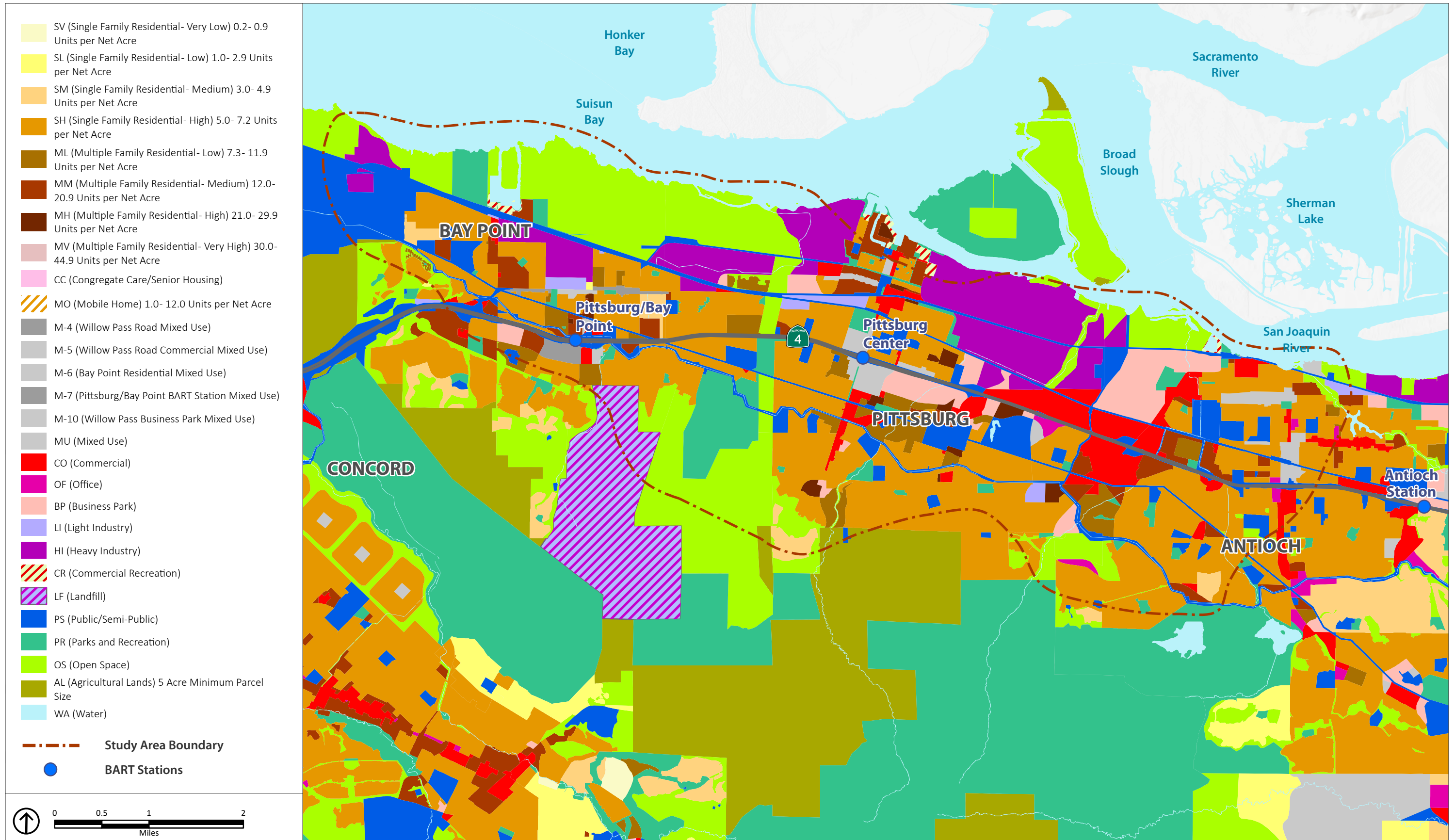
Household sizes in the study area are 12 percent larger than Contra Costa County overall and are expected to increase further. Household sizes since 2010 have increased slightly from 3.2 people in 2010 to 3.21 people in the study area (0.3 percent), while household sizes have increased more substantially countywide from 2.77 people per household in 2010 to 2.86 people in 2017 (3.2 percent). By 2040, household size in the study area is expected to 3.29 people per household, and will be 14 percent higher than the rest of the county, which is projected to increase to 2.89 people per household.

RACE AND ETHNICITY

The study area contains higher percentages of Hispanic or Latino and Black or African American residents compared to Contra Costa County, while having approximately half of the percentage of Asian residents and white residents compared to the County (Table 2). According to 2013–2017 ACS 5-year estimates, less than 18 percent of study area residents were white non-Hispanic or Latino compared to about 45 percent countywide. The Black or African American population is approximately 16 percent in the study area compared to 8 percent countywide. Over 50 percent of the study area population is Hispanic or Latino compared to approximately 25 percent in the County. Since 2010, the Hispanic or Latino population has increased in both the study area and countywide, while the percentage of White residents dropped in the study area from 25 percent of the population in 2010 to approximately 18 percent in 2017.

AGE DISTRIBUTION

According to 2013–2017 American Community Survey (ACS) 5-year estimates, approximately 28 percent of the population in the study area – or around 27,000 people – are under 18 years of age (Figure 3). This is higher than the countywide youth segment consisting of 23 percent of the County population (Figure 4). Since 2010, it appears that the youth population in both the County and the study area is decreasing as a percentage of total population. As evident in Figure 5, the youth population in the study area is focused in areas with access to regional transportation options such as around Pittsburg-Bay Point and Pittsburg Center BART stations, and SR 4.



Source: Contra Costa County, 2018; PlaceWorks, 2019.

Figure 2
General Plan Land Use Designations

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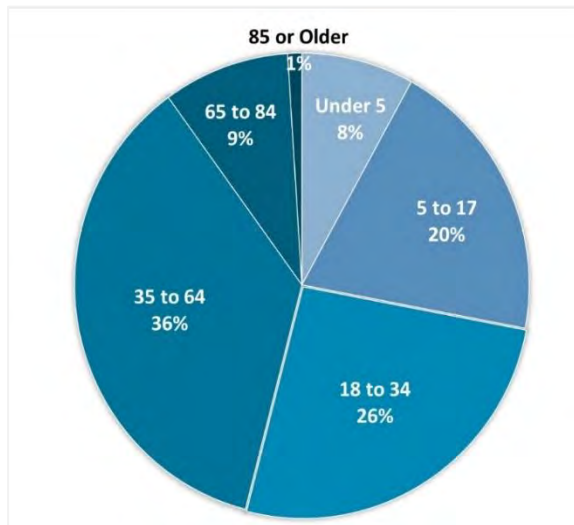
EXISTING CONDITIONS

TABLE 2 RACE AND ETHNICITY OF RESIDENTS IN THE STUDY AREA AND CONTRA COSTA COUNTY

Race Category	2017 ACS % of Population		2010 ACS % of Population	
	Study Area	Contra Costa County	Study Area	Contra Costa County
White	18%	45%	25%	49%
Black or African American	16%	8%	15%	9%
American Indian or Alaska Native	<1%	<1%	<1%	<1%
Asian	9%	16%	9%	14%
Native Hawaiian or Other Pacific Islander	1%	<1%	1%	<1%
Other	<1%	<1%	<1%	<1%
Two or More Races	5%	5%	3%	3%
Hispanic or Latino	51%	25%	47%	23%
Total	100%	100%	100%	100%

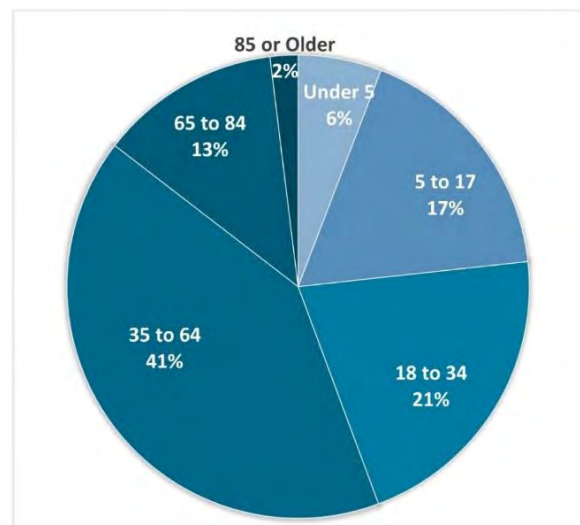
Source: 2006-2010 and 2013-2017 American Community Survey (ACS) 5-year estimates,. Note: Totals may not add up to 100% due to rounding.

**Figure 3 Age Distribution, Study Area
(2017 ACS 5-Year Estimates)**



Source: 2017 ACS 5-Year Estimates (2013-2017).

**Figure 4 Age Distribution, Contra Costa
County (2017 ACS 5-Year Estimates)**



Source: 2017 ACS 5-Year Estimates (2013-2017).

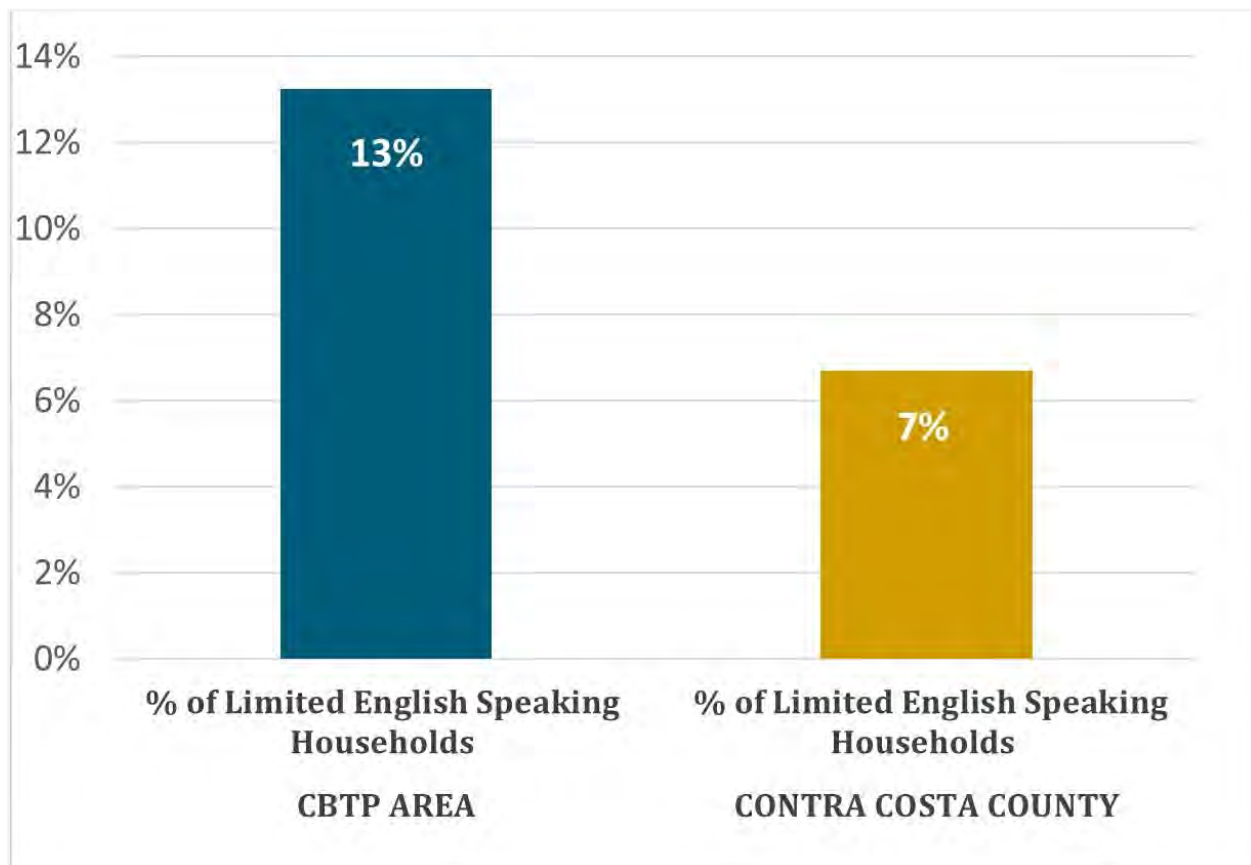
EXISTING CONDITIONS

As shown in Figures 3 and 4, the senior population (65 years of age and older) in the study area constitutes approximately 10 percent of the area’s total population, compared to 15 percent in Contra Costa County. Figure 6 on page 12 shows the percentage of seniors in the study area by census tract. According to ACS data, there appear to be no significant trends related to the senior population from 2010 to 2017. However, by 2040, it is projected that the study area will see a significant increase of senior citizens (65 years and older) to 19 percent of area’s population, while the youth population will decrease slightly. Projections to 2040 by age group in the study area and countywide are described in greater detail in Table 1 (Page 1) of the Appendix.

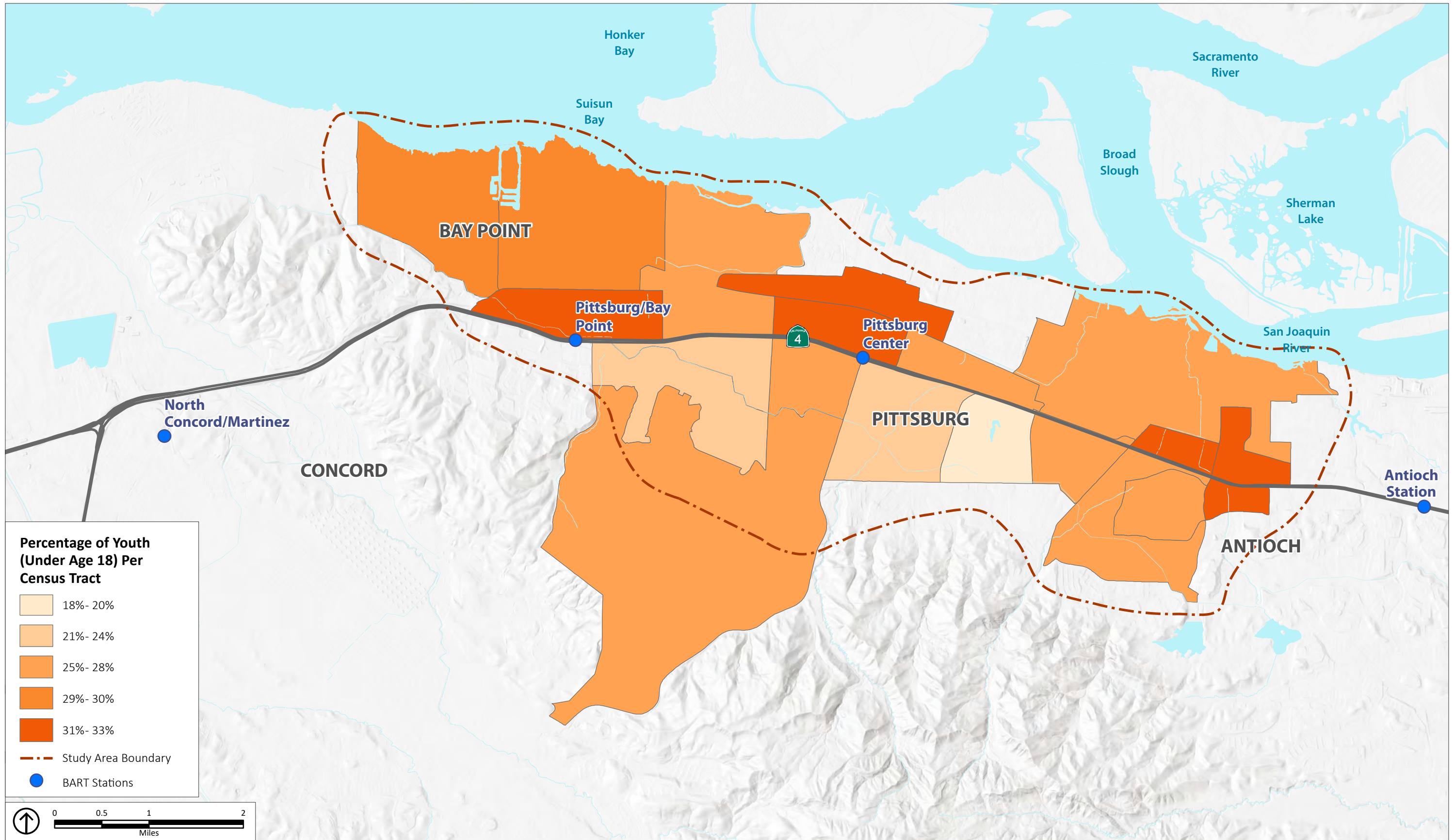
LANGUAGE AND LIMITED ENGLISH PROFICIENCY

As shown in Figure 7, approximately 4,100 households (13 percent of total households) in the study area are designated as “Limited English-Speaking Households”. These are households in which all members 14 years and over speak a non-English language, with varying degrees of difficulty with English. This population segment is considerably larger in the study area relative to the countywide rate of 7 percent of total households.

Figure 7 Limited English Proficiency, Study Area and Contra Costa County (2017 ACS 5-Year Estimates)

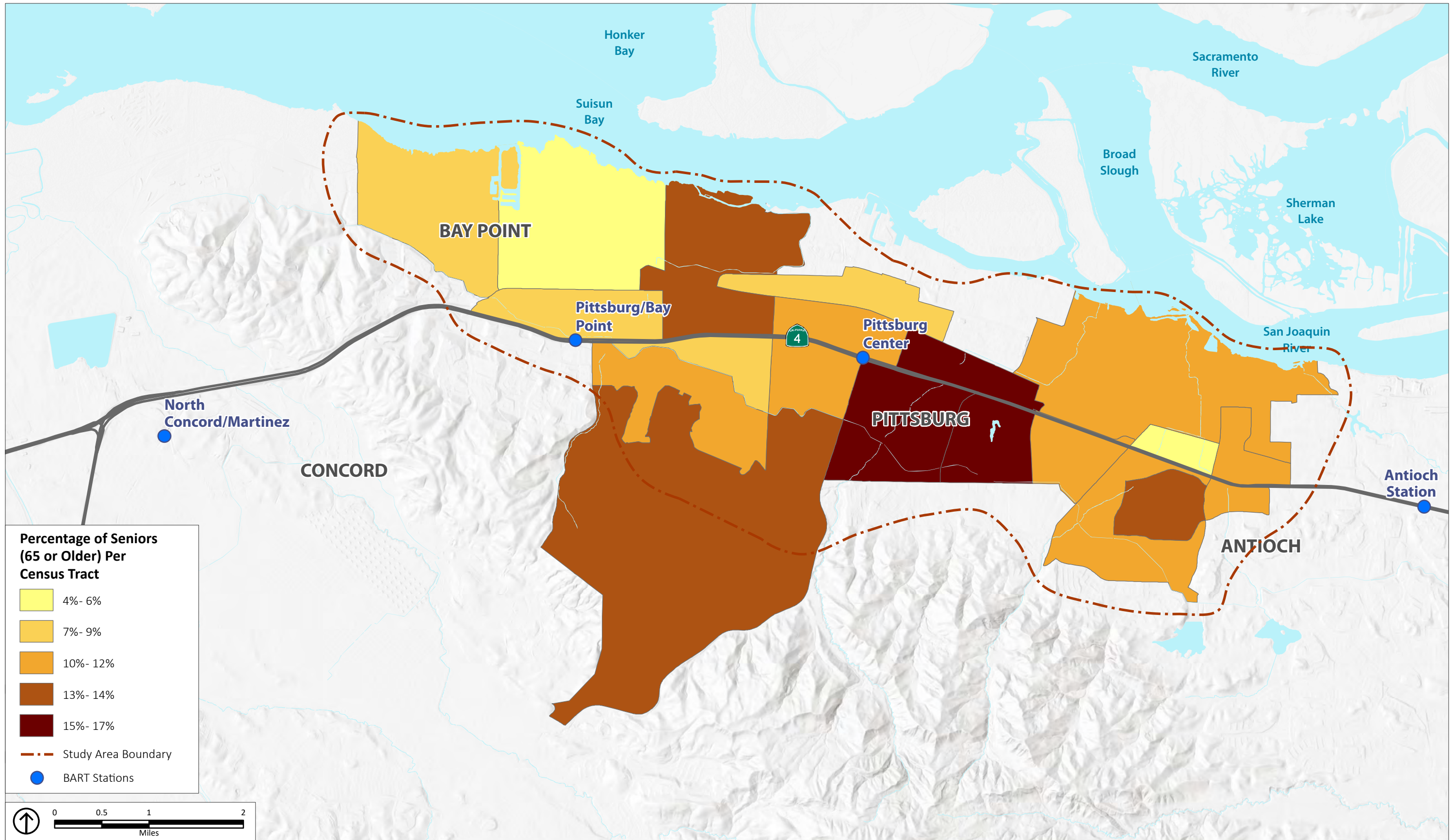


Source: 2017 ACS 5-Year Estimates (2013-2017).



Source: American Community Survey 5-Year Estimates, 2010 and 2017; Contra Costa County, 2018; PlaceWorks, 2019.

Figure 5
Population Under 18 Years of Age



Source: American Community Survey 5-Year Estimates, 2010 and 2017; Contra Costa County, 2018; PlaceWorks, 2019.

Figure 6
Population Age 65 Years and Over

SOCIOECONOMIC CHARACTERISTICS

CalEnviroScreen 3.0 Designations

CalEnviroScreen is a mapping tool and formula that helps identify California communities that are disproportionately burdened by, and vulnerable to, multiple sources of pollution. The tool produces results for each census tract in the state on a 100-point scale, with 100 points being the most disadvantaged. The tool was developed by the Office of Environmental Health Hazard Assessment (OEHHA) and the California Environmental Protection Agency (CalEPA). CalEnviroScreen uses environmental, health, and socioeconomic information to rank census tracts, with higher scores suggesting higher pollution burden and vulnerability. A full description of the mapping tool and formula is provided on Page 1 of the Appendix.

As shown in Figure 8 on page 15, according to CalEnviroScreen 3.0, the majority of census tracts have scores of 71 and above out of 100 points, indicating relatively high pollution burdens.

Educational Level

Table 3 shows educational attainment of residents in the study area and Contra Costa County using ACS data from 2010 and 2017. Educational attainment is lower in the study area than countywide. According to 2013-2017 ACS 5-year estimates, approximately 75 percent of residents age 25 years and over completed high school (or equivalent) compared to 88 percent in the County. Rates of post-high school education is significantly lower in the study area than in the County, with 12 percent of the population 25 years or older in the study area obtaining a bachelor’s degree or graduate/professional degree versus 41 percent of the population countywide in 2017. However, this is an increase from 2010, when just 9 percent of the population 25 years or older in the study area obtained a bachelor’s degree or graduate/professional degree.

TABLE 3 EDUCATIONAL ATTAINMENT OF RESIDENTS IN STUDY AREA AND CONTRA COSTA COUNTY

Education Level	2017 ACS (% of Population Over the Age of 25)		2010 ACS (% of Population Over the Age of 25)	
	Study Area	Contra Costa County	Study Area	Contra Costa County
Less than 9th Grade	13%	6%	14%	6%
9th to 12th Grade, No Diploma	12%	5%	13%	6%
High School Graduate (Includes Equivalency)	30%	18%	31%	20%
Some College, No Degree	26%	22%	24%	22%
Associate Degree	7%	8%	7%	8%
Bachelor's Degree	9%	26%	9%	25%
Graduate or Professional Degree	3%	15%	0%	14%

Source: 2006-2010 and 2013-2017 American Community Survey (ACS) 5-year estimates. Note: Totals may not add up to 100% due to rounding.

EXISTING CONDITIONS

Employment Industry

Table 4 shows employment by industry for both the study area and Contra Costa County for both 2010 and 2017. In general, there are only slight differences between the study area and the County, such as a higher percentage of study area residents employed in the construction industry. Based on future employment projections to 2040, it is expected that manufacturing and wholesaling jobs will decline slightly, while retail and service jobs will increase slightly in the study area, as described on Table 2 (page 2) of the Appendix. Job growth in the study area, however, is projected to be less than half of what is expected in the County (16 percent growth between 2010 through 2040 versus 38 percent for the County), as described in Table 3 (page 2) of the Appendix.

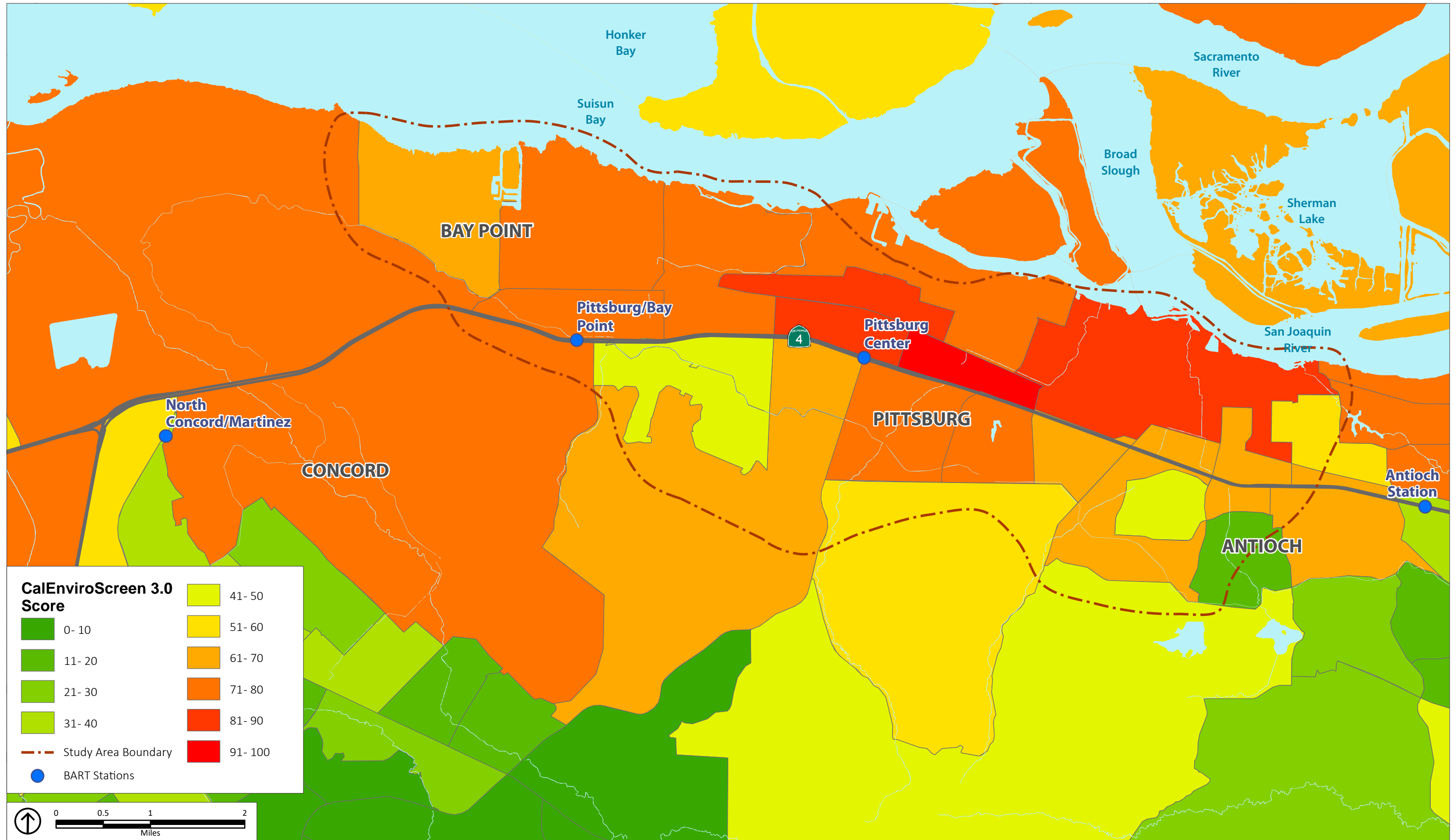
TABLE 4 EMPLOYMENT BY INDUSTRY IN STUDY AREA AND CONTRA COSTA COUNTY

Employment by Industry	2017 ACS (% of Population Over the Age of 16 Years)		2010 ACS (% of Population Over the Age of 16 Years)	
	Study area	Contra Costa County	Study area	Contra Costa County
Agriculture, forestry, fishing and hunting, and mining	1%	1%	1%	1%
Construction	10%	7%	12%	8%
Manufacturing	6%	7%	6%	7%
Wholesale trade	2%	2%	2%	3%
Retail trade	11%	11%	15%	11%
Transportation and warehousing, and utilities	5%	5%	5%	5%
Information	2%	3%	2%	3%
Finance and insurance, and real estate and rental and leasing	5%	9%	8%	10%
Professional, scientific, and management, and administrative and waste management services	14%	16%	13%	14%
Educational services, and health care and social assistance	17%	22%	18%	21%
Arts, entertainment, and recreation, and accommodation and food services	9%	9%	8%	8%
Other services, except public administration	5%	5%	6%	5%
Public administration	2%	4%	3%	4%

Source: 2006-2010 and 2013-2017 American Community Survey (ACS) 5-year estimates. Note: Totals may not add up to 100% due to rounding.

Unemployment Rate

Utilizing current data provided by the State of California Employment Department (EDD), the local area unemployment rate as of January 2019 was 3.6 percent for Contra Costa County. However, the communities in the study area, including the cities Antioch and Pittsburg, as well as the unincorporated community of Bay Point, had higher rates of unemployment in January 2019, with rates of 4.6 percent, 4.3 percent and 7.4 percent, respectively.



Source: CalEnviroScreen 3.0, Office of Environmental Health Hazard Assessment (OEHHA), 2018; Contra Costa County, 2018; Placeworks, 2018.

Figure 8
CalEnviroScreen Scores by Census Tract

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INCOME AND POVERTY STATUS

Median Household Income

According to 2017 ACS 5-year estimates, household income in the study area is significantly lower than that of the total population of Contra Costa County, with a median household income of approximately \$54,000 in the study area compared to \$88,500 countywide (Figure 9). In addition, comparing 2010 U.S. Census data with 2017 data shows household income in the study area appears to be increasing at a much lower rate compared to the County, as shown in Figure 10. Census tracts with the lowest median household income (under \$50,000) are located in western neighborhoods of Antioch and eastern neighborhoods of Pittsburg, as well as Bay Point, and are primarily located north of Highway 4.

Figure 9 Median Household Income, Study Area and Contra Costa County (2017 ACS 5-Year Estimates)



Source: 2017 ACS 5-Year Estimates (2013-2017).

Figure 10 Median Household Income, Study Area and Contra Costa County (2010 ACS 5-Year Estimates)



Source: 2010 ACS 5-Year Estimates (2006-2010).

EXISTING CONDITIONS

Poverty Status

The U.S. Census Bureau uses a set of income thresholds that vary by family size and composition to determine the population living in poverty. If a family’s total income is less than the poverty threshold, then that family and every individual in it is considered to be living in poverty. To reflect high living costs and wages in the Bay Area, the poverty threshold used in the CBTP analysis is 200 percent of the federal poverty threshold. These 200 percent thresholds for the 2013-2017 ACS 5-year estimates range from \$31,754 for a family of two to \$101,362 for the largest families (nine people or more). According to 2013-2017 ACS 5-year estimates, 44 percent of residents in the study area were living in poverty (Table 5). This figure is significant when compared to 23 percent in Contra Costa County as a whole.

Figure 11 shows the percent of population in poverty for each census tract area in the study area, based on the 200 percent of federal poverty threshold. Areas with high percentages include Bay Point, portions of central Pittsburg, and portions of central Antioch.

TABLE 5 POPULATION POVERTY (200% OF FEDERAL POVERTY) IN STUDY AREA AND CONTRA COSTA COUNTY

2017 ACS (% of Total Population)	
Study Area	Contra Costa County
44%	23%

Source: 2013-2017 American Community Survey (ACS) 5-year estimates.

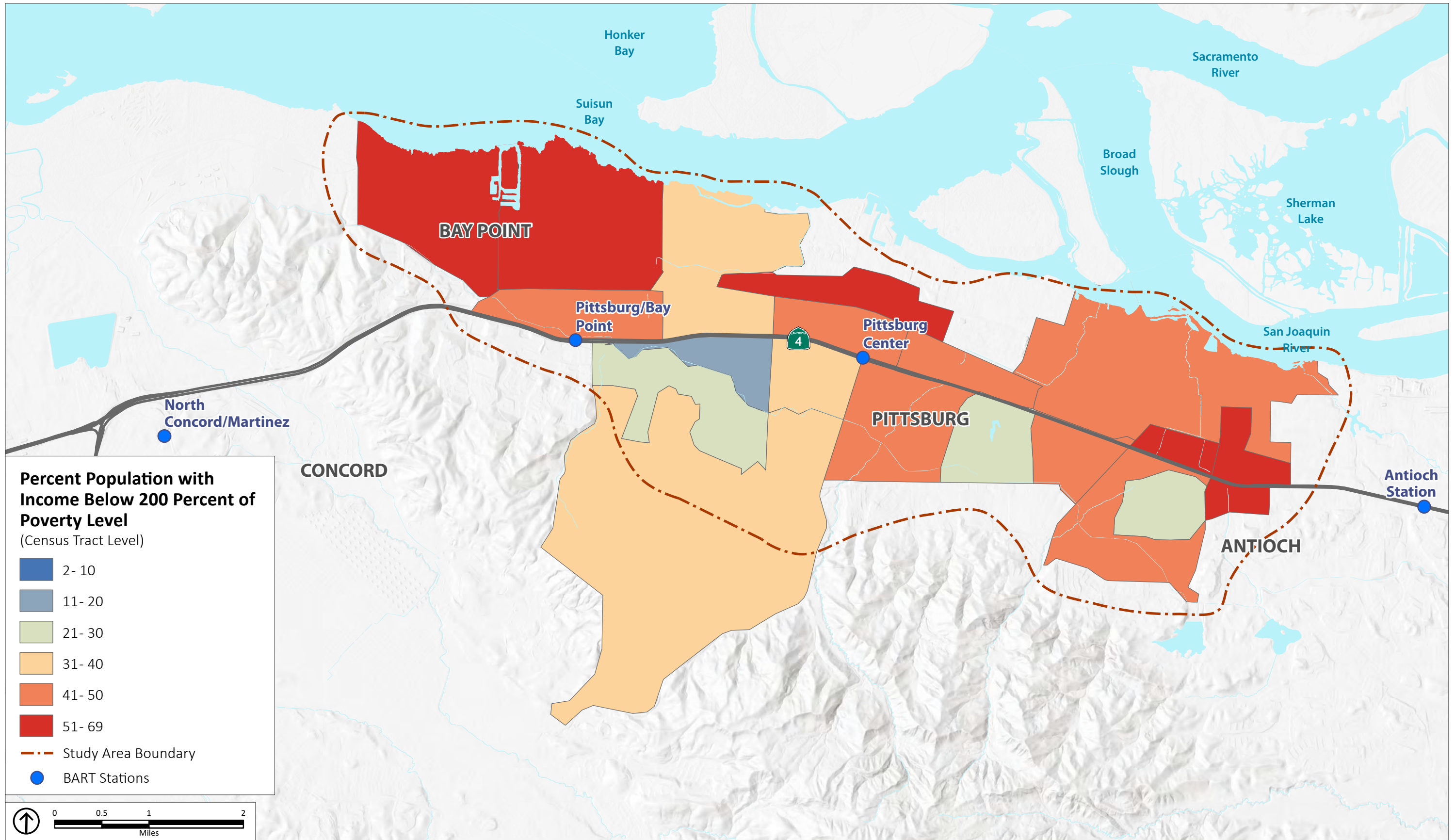
VEHICLE AVAILABILITY

Vehicle availability in the study area is slightly less than in Contra Costa County as a whole. A higher number of households in the study area are without a private vehicle (9 percent compared to 6 percent) or have one vehicle (32 percent compared to 28 percent), while the percentage of households with two vehicles is 60 percent compared to 67 percent in the County (see Figures 12 and 13). Figure 14 on page 23 shows households with no vehicle available by census tract for the study area. Communities of Concern in east Pittsburg and west Antioch have some of the highest concentrations of households without vehicles.

JOURNEY TO WORK

Out of the approximately 41,000 workers aged 16 years and over in the study area, approximately 87 percent primarily travel to work by car, truck, or van (see Table 7). Approximately 69 percent of these individuals drive alone, while 18 percent carpool. Vehicle use as the primary means of transportation to work is higher in the study area than countywide (87 percent versus 80 percent).

The rate of public transportation use in the study area is less than countywide. Rates of people commuting to work via public transportation remained steady in both the study area and the County from 2010 to 2017.



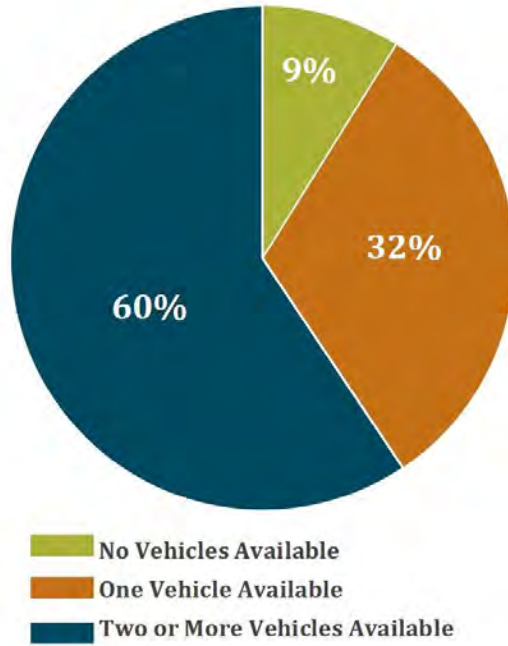
Source: American Community Survey 5-Year Estimates, 2010 and 2017; Contra Costa County, 2018; PlaceWorks, 2019.

Figure 11
Population in Poverty (200% of Federal Poverty Level)

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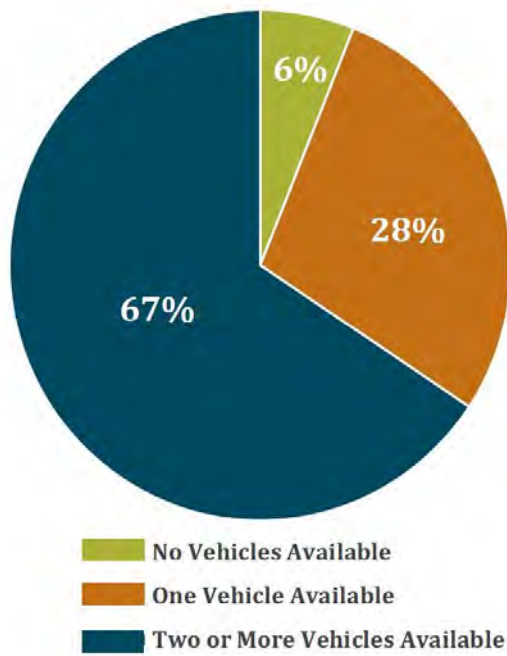
EXISTING CONDITIONS

Figure 12 Vehicle Availability, Study Area, (2017 ACS 5-Year Estimates)



Source: 2017 ACS 5-Year Estimates (2013-2017).

Figure 13 Vehicle Availability, Contra Costa County (2017 ACS 5-Year Estimates)



Source: 2017 ACS 5-Year Estimates (2013-2017).

EXISTING CONDITIONS

As shown in Table 6, rates of walking and bicycling as primary means of transportation to work are relatively low (under 2 percent). Rates of walking and bicycling in both the study area and the County also remained steady from 2010 to 2017.

TABLE 6 MODE OF TRAVEL TO WORK FOR STUDY AREA AND CONTRA COSTA COUNTY

Means of Transportation to Work	2017 ACS (% of Total)		2010 ACS (% of Total)	
	Study Area	Contra Costa County	Study Area	Contra Costa County
Car, Truck or Van	87%	80%	87%	82%
Drove Alone	69%	68%	67%	70%
Carpooled	18%	12%	20%	12%
Public Transportation	7%	10%	7%	9%
Bicycle	<1%	<1%	<1%	<1%
Walk	2%	2%	2%	2%
Other	2%	1%	2%	1%
Worked at Home	2%	6%	3%	6%
Total Workers 16 and Over	100%	100%	100%	100%

Source: 2006-2010 and 2013-2017 American Community Survey (ACS) 5-year estimates. Note: Totals may not add up to 100% due to rounding.

EXISTING TRANSPORTATION NETWORK

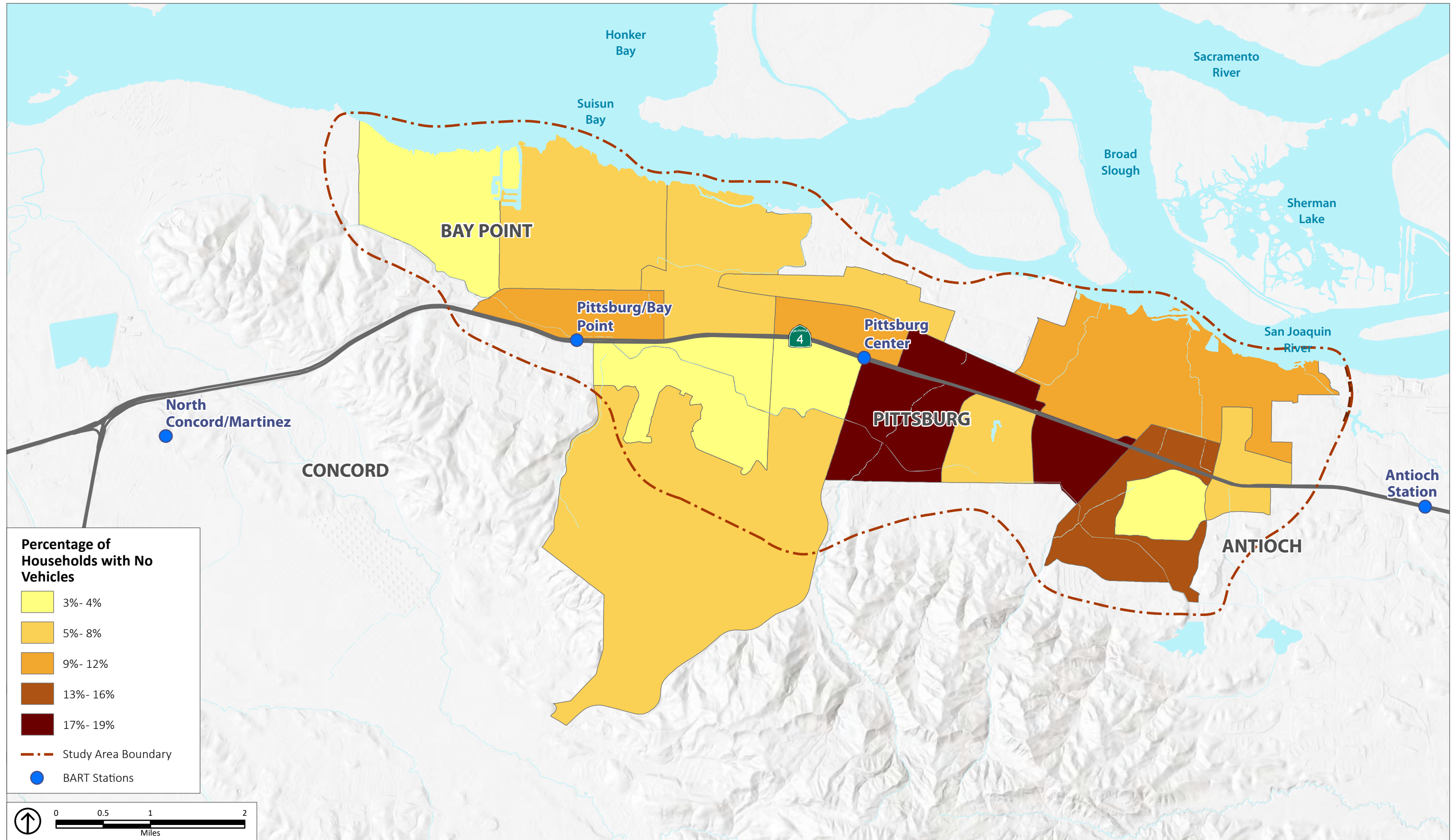
The following sections describe existing transit service and infrastructure in the study area and summarizes gaps in the transportation network, as identified in relevant countywide and local plans.

EXISTING TRANSIT NETWORK

There are multiple transit options in the Pittsburg-Bay Point study area. Existing transit routes in the Pittsburg and Bay Point communities are shown in Figure 15.

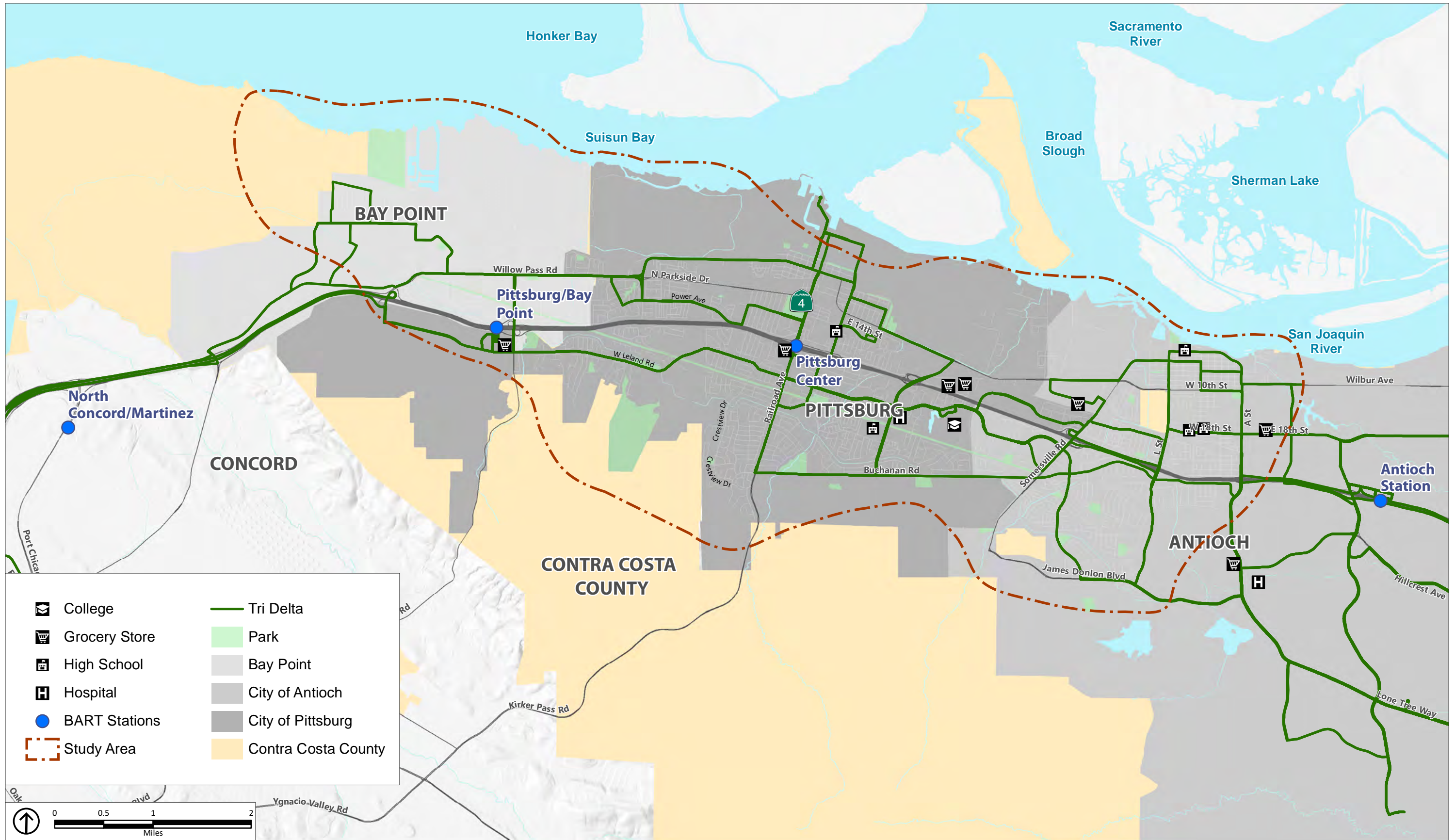
Bay Area Rapid Transit (BART)

BART operates seven routes connecting four counties: Contra Costa, Alameda, San Francisco, and San Mateo, with service extending to Antioch, Richmond, Dublin/Pleasanton, Warm Springs/South Fremont, and Millbrae. The Millbrae-Antioch BART line bisects the study area. Two BART stations, Pittsburg-Bay Point and the newly opened Pittsburg Center BART, are in the study area. CCTA collaborated with BART to extend regional service from the line's previous terminus at the Pittsburg-Bay Point BART station east 10 miles to Antioch, with service opening



Source: American Community Survey 5-Year Estimates, 2010 and 2017; Contra Costa County, 2018; PlaceWorks, 2019.

Figure 14
Household Vehicle Availability



Source: Contra Costa County, 2018; Fehr & Peers, 2019; PlaceWorks, 2019.

Figure 15
Existing Transit Facilities

EXISTING CONDITIONS

on May 26, 2018. The new service provides congestion relief for the heavily-traveled State Route (SR) 4 corridor and offers opportunities for residents and workers in the study area to take BART to and from jobs and activity centers located elsewhere in the region.

County Connection

County Connection operates local and express bus routes serving several central Costa County communities, with most routes operating within Concord, Martinez, Pleasant Hill and Walnut Creek. Line 93X provides bus service from Antioch BART station to Walnut Creek BART station via Kirker Pass Road and Buchanan Road.

Tri-Delta Transit

The area is also served by many Tri-Delta Transit routes, which generally connect to BART stations and provide connectivity to the eastern area of Contra Costa County. A summary of routes that service the area is included in Table 7 below:

TABLE 7 FIXED-ROUTE TRANSIT ROUTES SERVING CBTP STUDY AREA

Tri-Delta Transit Route	Route Description
200	Martinez/Pittsburg-Bay Point BART Station via SR 4 (Weekdays Only)
201	Concord BART Station/Pittsburg-Bay Point BART Station
380	Pittsburg Bay Point BART Station/Antioch BART Station (Weekdays Only)
387	Pittsburg Bay Point BART Station/Antioch BART Station via Willow Pass Road (Weekdays Only)
388	Pittsburg Bay Point BART Station/Antioch BART Station via West Leland Road (Weekdays Only)
389	Pittsburg Bay Point BART/Bay Point via Evora Road (Weekdays Only)
390	Pittsburg Center BART/Antioch BART via East Leland Road (Weekdays Only/Commute Hours)
391	Pittsburg Center BART/Brentwood Park & Ride via East Leland Road (Weekdays Only)
392	Pittsburg Bay Point BART/Antioch BART via East Leland Road (Sat. Sun. & Holidays Only)
394	Pittsburg Bay Point BART / Antioch BART via East Leland Road to Century Boulevard (Sat. Sun. & Holidays Only)
396	Somersville Towne Center / Bay Point (Sat. Sun. & Holidays Only)

EXISTING CONDITIONS

EXISTING BICYCLE NETWORK

Bicycle Infrastructure

Bikeways are described as falling into one of four classes that are regulated by Caltrans: Class I, Class II, Class III and Class IV.

- Class I multi-use paths allow bicycle and pedestrian travel in both directions on paved rights of way, completely separated from a road or highway.
- Class II facilities are on-street bicycle lanes that are shared-use and allow for one-way travel in the same direction as vehicle traffic. Class II bicycle lanes are separated from vehicle lanes with striping.
- Class III bicycle facilities are shared-use bicycle routes that allow for vehicles and bicycles to share the right of way. Class III bicycle routes typically provide connections between other bikeways or designate preferred bicycle routes along low-stress neighborhood streets.
- Class IV bicycle facilities are within or adjacent to a roadway and separated from traffic by a physical barrier such as bollards, on-street parking, or planters. This design allows an exclusive right-of-way for bicycle travel.

The existing and proposed bicycle network for the study area is shown in Figure 16. The existing network includes a mix of bicycle facility types and provides some connectivity with transit. The proposed bicycle projects in this figure are drawn from a review of the 2018 Contra Costa Countywide Bicycle and Pedestrian Plan.

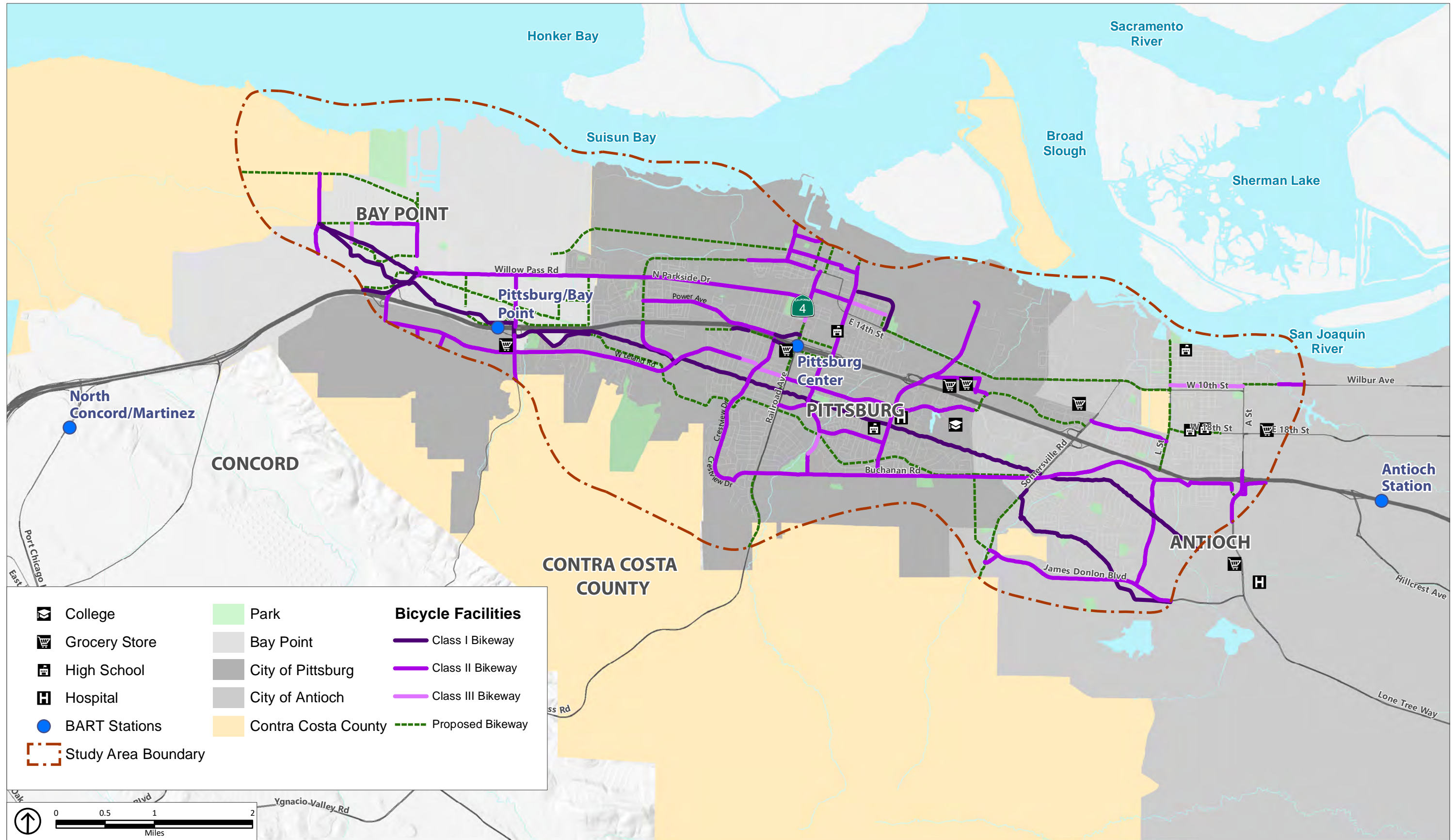
Conflicts Involving Pedestrians and Bicyclists

Figures 17 and 18 illustrate the occurrences of bicycle and pedestrian collisions from 2011-2015. These collision “heatmaps” include information from a variety of sources. The maps may demonstrate a variety of conditions and contexts that increase risks for cyclists and walkers, including non-existent or poorly-maintained facilities, lack of traffic control, and heavy auto traffic.

As shown in Figure 17, bicycle collisions are concentrated in three neighborhoods in the study area:

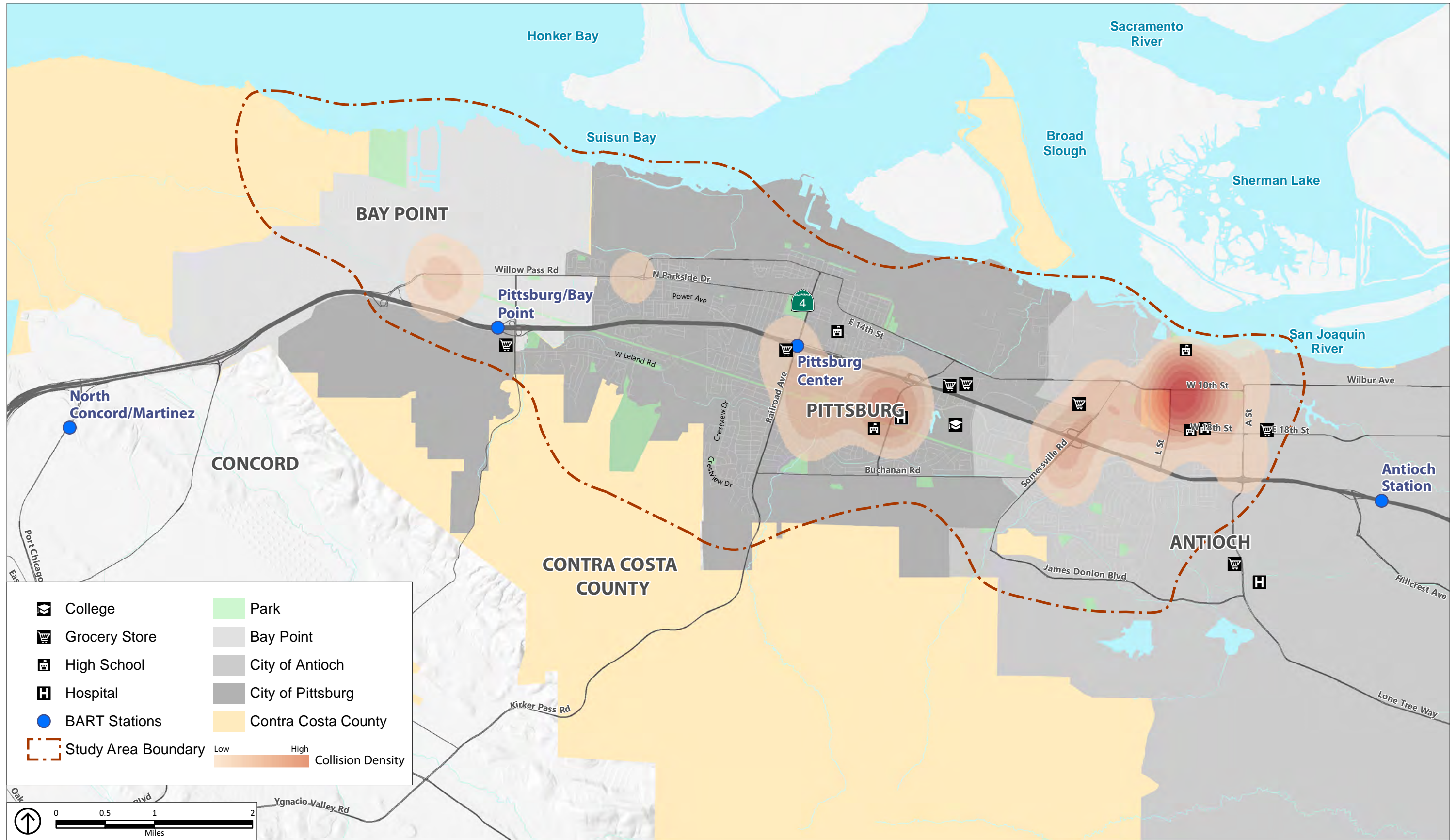
- In Bay Point, along Willow Pass Road west of Bailey Road
- In central Pittsburg along Loveridge Road toward Railroad Avenue
- In Antioch, in the area surrounding West 10th Street and L Street

As shown in Figure 18, pedestrian conflicts in the study area appear largely correlated to transit facilities, including both BART stations. However, the heatmap also shows high collision rates surrounding major roadway intersections, including Somersville Road and SR 4; L Street and SR 4; and A Street and SR 4.



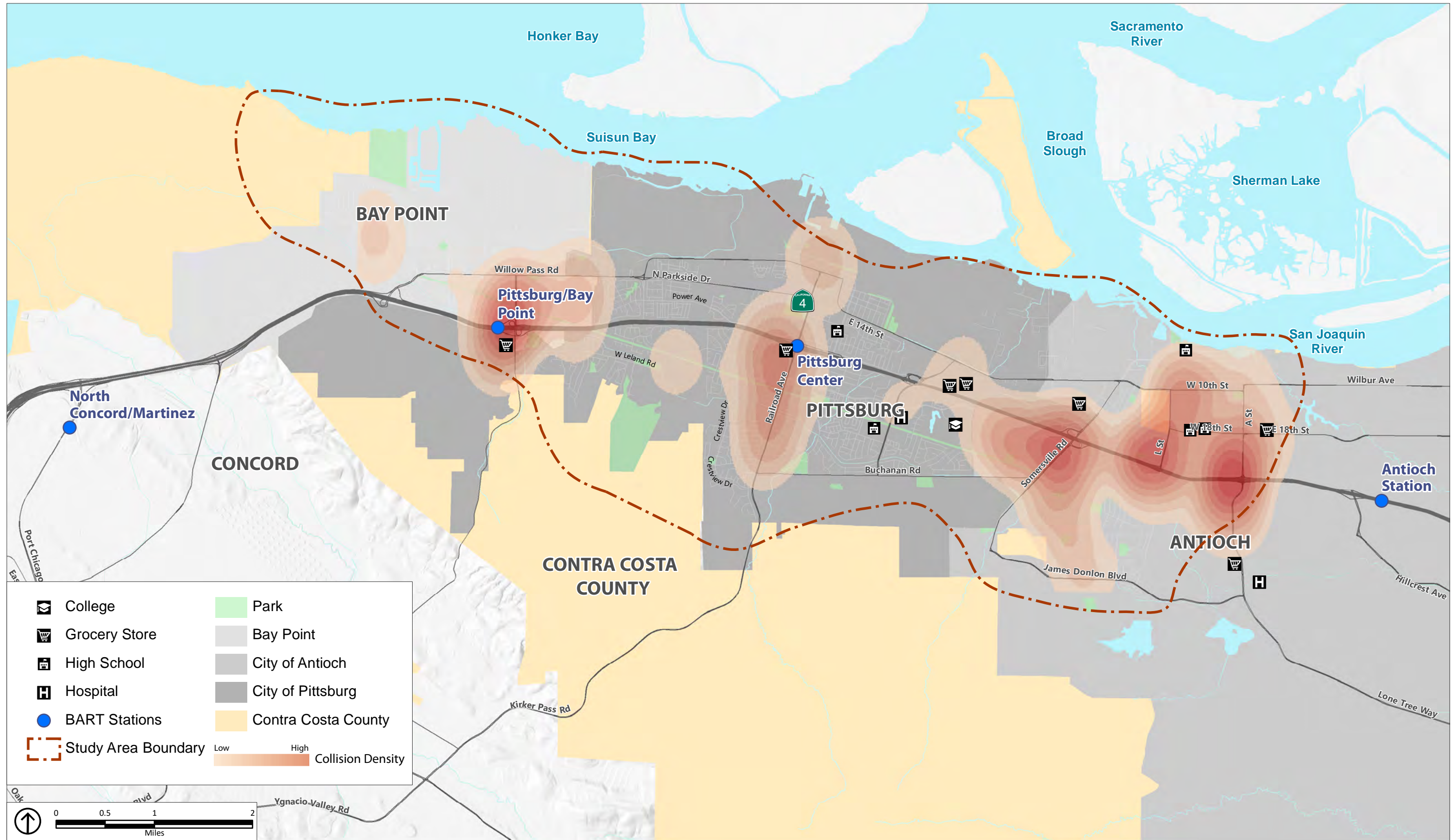
Source: Contra Costa County, 2018; PlaceWorks, 2019.

Figure 16
Existing and Proposed Bicycle Facilities



Source: Contra Costa County, 2018; SWITRS, 2018; Fehr & Peers, 2019; PlaceWorks, 2019.

Figure 17
Bicycle Collision Density, 2011-2015



Source: Contra Costa County, 2018; SWITRS, 2018; Fehr & Peers, 2019; PlaceWorks, 2019.

Figure 18
Pedestrian Collision Density, 2011-2015

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PREVIOUSLY IDENTIFIED TRANSPORTATION NEEDS

COUNTYWIDE AND LOCAL PLANS

To better understand gaps in the transportation network, the following policy documents were evaluated to identify proposed transportation projects and plans in the study area:

- 2017 Contra Costa Countywide Transportation Plan
 - <http://2017ctpupdate.net/>
- 2018 Contra Costa Countywide Bicycle and Pedestrian Plan
 - <https://www.ccta.net/2018/10/18/countywide-bicycle-and-pedestrian-plan/>
- City of Pittsburg 2020 General Plan
 - <http://www.ci.pittsburg.ca.us/index.aspx?page=228>
- City of Pittsburg Railroad Avenue Specific Plan (2009)
 - <http://www.ci.pittsburg.ca.us/index.aspx?page=209>
- City of Pittsburg Active Transportation and Safe Routes Plan (ongoing)
 - <http://www.ci.pittsburg.ca.us/index.aspx?page=972>
- City of Antioch General Plan
 - https://www.antiochca.gov/fc/community-development/planning/Antioch_Adopted_General_Plan.pdf

Some of these policy documents contain only general transportation policies and highlight countywide or generalized mobility gaps. Others contained specific transportation gaps that are, or may be, relevant to Communities of Concern in the study area. A brief summary of each report follows. When applicable, relevant transportation gaps or recommended projects identified in the report are summarized.

2017 Contra Costa Countywide Transportation Plan

Under Measure C, approved by the voters in 1986, the Contra Costa Transportation Authority (CCTA) was established. Measure C requires that CCTA prepare and regularly update a Comprehensive Countywide Transportation Plan (CTP). The most recent update, the 2017 CTP, is a long-range policy document that establishes a future vision for mobility in Contra Costa County. It identifies transportation goals and projects at all levels of political geography, from regional coordination to local assistance. The CTP outlines transportation challenges associated with countywide growth and establishes overall strategies and programs to overcome the challenges.

In addition to outlining a broad strategic approach, the 2017 CTP includes a 10-Year Project List comprised of cost-adjusted projects identified in MTC/ABAG's regional planning blueprint, 2013 Plan Bay Area. Some of these projects are located, or indicate potential transportation gaps, in the current study area. These include:

EXISTING CONDITIONS

- Bailey Road Pedestrian & Bicycle Improvements adjacent to SR-4.
- Widen and extend major streets and improve interchanges in east Contra Costa County.
- Construct a 2.2-mile roadway connecting James Donlon Boulevard west of Somersville Road in Antioch to Kirker Pass Road in unincorporated Contra Costa County.
- Widen Pittsburg-Antioch Highway from 2 lanes to 4 lanes with turning lanes from Auto Center Drive to Loveridge Road.
- Extend and widen West Leland Road as a 4-lane arterial, including a raised median, bicycle lanes and sidewalks, from San Marco Boulevard to Willow Pass Road.
- Widen California Avenue between Loveridge Road and Harbor Street from 2 lanes to 4 lanes.
- Widen L Street to 4 lanes with bike lanes, sidewalks, security lighting and bus stops.
- Develop Antioch Ferry landside improvements, including a parking garage, terminal building and wharf improvements.
- Purchase ferry vessels (3) for ferry service from Antioch.

2018 Contra Costa Countywide Bicycle and Pedestrian Plan (CBPP)

CCTA also prepares a Countywide Bicycle and Pedestrian Plan (CBPP). The 2018 CBPP builds on the 2017 CTP with the goal of increasing walking and cycling, improving bike and pedestrian safety, and developing a functional bike and pedestrian network across all County communities. The CBPP was updated in 2009, and again in 2018. The 2018 CBPP identifies a series of Pedestrian Priority Areas, including those located within a ¼-mile from a school throughout the County, covering a substantial portion of the study area. Per the CBPP, improvements to the pedestrian network in these areas are most likely to create a safe pedestrian environment.

The CBPP outlines key components of pedestrian facility design that could be applied to Pedestrian Priority Areas, including those in the study area. These include:

- Accessible walkways
- Functional curb ramps
- Safe crossings
- Traffic calming
- Direct connections
- Streetscape improvements

Similarly, the 2018 CBPP illustrates a network of existing and proposed low stress bikeways in the study area that would benefit from bicycle infrastructure improvements. These include:

- Port Chicago Highway through Bay Point and Pittsburg
- Willow Pass Road through Pittsburg
- Harbor Street in Pittsburg
- Bailey Road in Pittsburg
- Wilbur Avenue from Pittsburg to Antioch
- L and A Streets in Antioch

EXISTING CONDITIONS

City of Pittsburg 2020 General Plan

The City of Pittsburg 2020 General Plan is a comprehensive policy document adopted by the City Council to guide the City’s future development. It contains development policies that provide a framework for future growth and conservation. As noted in the Transportation Element of the Plan, it contains “policies and standards to enhance capacity and provide new linkages to further an integrated multi-modal transportation system.” The Transportation Element establishes a list of capital transportation projects for implementation by 2020, including road construction and widening. It also develops broad policies and standards related to the City’s street system, level of service, transit system, pedestrian routes, and bikeways. The General Plan also includes proposed bicycle facilities that are outlined in detail in the City’s Railroad Avenue Specific Plan (2009) (see below).

Policies that indicate gaps in transportation infrastructure and service that may impact local CoCs include:

- 7-P-45: During review of development projects, encourage secure bicycle facilities and other alternative transportation facilities at employment sites, public facilities, and multi-family residential complexes.
- 7-P-50: Improve signage, notifying vehicles of bicyclists at dangerous intersections and underpasses, such as the Railroad Avenue/State Route 4 interchange.

City of Pittsburg Railroad Avenue Specific Plan (2009)

Pittsburg’s Railroad Avenue Specific Plan (Plan) establishes a comprehensive vision and policy framework for the area surrounding SR 4 and Railroad Avenue. The entire Plan Area is within the study area, and nearly the entire Plan Area is composed of CoCs. The Plan’s Transportation and Circulation chapter outlines improvements that “will create a network of safe and accessible transportation connections, linking the Transit Village to the surrounding sub-areas and greater region.” It identifies a series of programs, policies and actions that indicate local transportation gaps that may impact CoCs in the study area, such as:

- 6-P-2: Create a program of wayfinding signage for common destinations.
- 6-P-3: Provide wide (minimum 6-feet) sidewalks.
- 6-P-7: Design the public realm and rights-of-way for universal design and Americans with Disabilities Act (ADA) compliance.
- 6-P-16: Create an “easy-to-use” public transit system that is well-delineated with identifying and orienting signage, high quality shelters, benches, lighting and real-time LED signs showing bus arrival times.
- 6-P-17: Include efficient links between Tri-Delta buses, shuttles, public parking areas and eBART Station. Work with transit providers to ensure matching service spans between buses, shuttles and eBART trains.

EXISTING CONDITIONS

- 6-P-18: Use shuttles and local bus transit to strengthen connections between the Specific Plan Area, Old Town Pittsburg, Los Medanos College and other key destinations in the City.
- 6-P-19: Achieve a minimum of 10- to 15-minute headways between BART and bus connections during peak hours.
- 6-P-23: Convert the Harbor Street/Garcia Avenue intersection from a two-way controlled stop to a signalized intersection.

The Plan identifies standards for arterials, collectors and local streets that improve pedestrian safety and experience, as well intersections slated for new crosswalks. Roadway sections requiring primary sidewalk improvements include Railroad Avenue, Leland Road and Power Avenue.

Finally, proposed bikeways in the Plan show gaps in the existing network. These include, among others:

- Railroad Avenue south of Frontage Road (Class II)
- Leland Road west of Railroad Avenue (Class I)
- Power Avenue west of Railroad Avenue (Class I)
- Railroad Avenue north of California Avenue (Class III)

City of Pittsburg Active Transportation and Safe Routes Plan

Pittsburg Moves is a recently initiated Active Transportation and Safe Routes Plan intended to develop a community-driven, equitable, and innovative vision for the future of walking and bicycling in Pittsburg. Although existing conditions, policies and actions remain to be established, the City has identified barriers to safe and comfortable walking in the City, including connectivity barriers such as Pittsburg's suburban roadway network, railroad lines, and freeways. The study area falls within the Pittsburg Active Transportation and Safe Routes Plan area, and the latter includes disadvantaged communities as defined by CalEnviroScreen.

City of Antioch General Plan (2003)

The Antioch General Plan, completed in 2003, is a comprehensive policy document to guide the City's future growth. Like the Pittsburg General Plan, it is composed mostly of generalized transportation goals and policies rather than specific gaps in transportation service or infrastructure, or challenges specific to disadvantaged communities. Additionally, only a portion of the City is within the study area.

The General Plan mostly focuses on vehicle circulation and intersection congestion, and general policy encouraging non-auto mobility.

The General Plan includes proposed bikeways. While most are outside of the study area, the following may represent gaps that impact Pittsburg-Bay Point CBTP CoCs:

EXISTING CONDITIONS

- Fitzuren Road, Contra Loma Boulevard to G Street.
- Bicycle Lanes connecting Rivertown to Southeast Antioch.

2007 CBTP IMPLEMENTATION STATUS

During the development of the 2007 Pittsburg-Bay Point Community Based Transportation Plan, existing transportation gaps were identified, and numerous outreach efforts were conducted to solicit input from the community about their transportation needs. Recommendations for transportation projects and programs emerged from the feedback received, and these were evaluated based on criteria such as level of support, community benefits, overall costs and funding availability. A series of 10 high-priority recommendations emerged from this evaluation. These are summarized in Table 8, which includes their implementation status and organizations involved in the implementation process.

TABLE 8 STATUS OF HIGH PRIORITY RECOMMENDATIONS FROM 2007 CBTP

Name of Recommendation	Was the Recommendation Implemented?	Relevant Organization(s)	Notes
Corridor Improvement Projects—includes Bailey Road	Partially: Bailey Road Ped and Bicycle Improvement Plan in June 2010	CCC Dept of Conservation & Development	Bailey Road located in current study area
Emergency ride home program	Per 511 website, East County service area now includes Bay Point	511 Contra Costa	Can't be directly tied to 2007 CBTP
Expanded marketing program to publicize trans. services	No	BART, Tri-Delta, others	Difficult to tie to CBTP
Crossing guard program at schools	No	DVUSD	Lack of crossing guards an increasing countywide issue
Bicycle Parking: Electric lockers at BART and more lockers at parks/schools	Not BART portion	BART	Current BART Website. 12 On-Demand bike lockers and 20 keyed lockers
BART lighting and info kiosk at Pittsburg/Bay Point	No	BART	Current BART Website. No kiosk
BART Parking: New spaces and daily parking fee program	Daily parking fee program implemented at P/BP Station in 2010	BART	
Improved bus shelters	New bus shelter program in 2011	Tri-Delta	
Concord Bus Route	No	Tri-Delta	Concord route does not serve key locations: Sun Valley Mall, Mt. Diablo Hospital, etc.
Increased frequency of Route 300	No	Tri-Delta	Per Tri-Delta website, Route 300 not matched to BART frequency

Appendix B Outreach Materials and Results

MEMORANDUM

DATE February 12, 2020
TO Matt Kelly, Acting Director of Planning
Contra Costa Transportation Authority
FROM Bruce Brubaker and Greg Goodfellow, PlaceWorks
SUBJECT Pittsburg-Bay Point CBTP Outreach Summary

Matt,

The following memorandum summarizes PlaceWorks' strategy for community outreach, resulting feedback and potential recommendations for the Pittsburg-Bay Point Community-Based Transportation Plan (CBTP). The memo introduces each of the outreach strategies and concludes with mobility gaps and challenges identified by outreach participants in the study area. These strategies, and mobility gaps and challenges are categorized by the following topics:

1. Bicycle Facilities
2. Pedestrian facilities
3. Transit Facilities
4. Other (may include desired improvements such as vehicular improvements, lighting, etc.)

Each of these topics also includes a set of potential recommended programs and projects based on community feedback, existing conditions and mobility gaps referenced in previously adopted policy documents relevant to the study area. These potential CBTP recommendations are for the purpose of discussion among the CBTP Project Working Group and Steering Committee.

Outreach Process

Per Metropolitan Transportation Commission (MTC) Guidelines, CBTP recommendations must be based on feedback solicited as part of a diverse outreach campaign. The Pittsburg-Bay Point study area includes Communities of Concern (COCs) in unincorporated Bay Point and other unincorporated areas of Contra Costa County as well as the cities of Pittsburg and Antioch. Multiple distinct neighborhoods define the study area. PlaceWorks coordinated with CCTA and the CBTP advisory bodies to develop an Outreach Strategy intended to reach geographic and demographic cross sections of the study area. The outreach strategy included the following components.

1. EVENT AWARENESS

Prior to the active outreach process, PlaceWorks developed a flexible, bilingual CBTP awareness flier to notice upcoming events and opportunities. Digital and printed versions of the flier were updated with

outreach information posted to local agency and stakeholder websites. Hard copies were distributed at participating public facilities and community resource centers.

English and Spanish-language versions of this flier are included in Appendix A to this Memo.

2. COUNTY PLANNING

PlaceWorks attended the following two Bay Point General Plan Workshops organized by the Contra Costa County General Plan Update team. The General Plan establishes transportation goals, policies and implementation plans for unincorporated areas of the County. Unlike the Pop-Up events that comprise the bulk of face-to-face CBTP outreach (see below), the Bay Point General Plan Workshop was not intended to reach specific COCs or mobility-challenged groups. As such, the CBTP team did not solicit feedback about personal mobility challenges directly from participants. Instead we coordinated with County staff for insight into individuals and organizations to partner with and recorded potential transportation projects indicating existing transportation gaps in the County. We also distributed awareness information and fliers about upcoming CBTP outreach events.

- **Contra Costa County General Plan Update Community Meeting for Bay Point #2** at the Community Ambrose Recreation and Park District, August 12, 2019, 6:30 PM-8:30 PM
- **Contra Costa County General Plan Update Community Meeting for Bay Point #3** at the Community Ambrose Recreation and Park District, January 30, 2020, 6:30 PM-8:30 PM

PlaceWorks distributed outreach fliers and project information at the meetings. County staff introduced the Pittsburg-Bay Point CBTP during its introductory presentation about the County General Plan Update process. PlaceWorks joined small-group exercises during which participants discussed mobility issues and ideas such as:

- Need for more walkability among grocery stores and local amenities
- Increased frequency of Route 381 and other Tri-Delta routes
- Community-wide need for improved, safer bus shelters
- Improved transit for disabled community members
- Desire for direct BART shuttles
- Safety and security on public transit routes
- Need for improved bike facilities on Willow Pass and other major roads
- Improved sidewalk, lighting on Willow Pass and Bailey Road

Approximately 25 community members attended each workshop.

3. POP-UP EVENTS

PlaceWorks worked with Community-Based Organizations (CBOs), non-profit and various local agencies to schedule “Pop-Up” outreach sessions at pre-scheduled events supporting low-income, elderly, youth and other potentially transportation-challenged communities. The goals of these events were to collect detailed feedback about transportation challenges directly from COC residents and to record personal narratives indicative of these challenges. English and Spanish speaking PlaceWorks staff set up information and feedback tables with printed versions of the following for distribution and discussion:

- Project Information and Awareness Flier
- Study Area Map
- Existing Transportation Network Map
- Existing and Proposed Bicycle and Pedestrian Network Map

PlaceWorks staff facilitated the following exercises with attendees to achieve the goals of the pop-up events.

- **Map and Dot Exercises.** PlaceWorks used poster-sized maps of the study area to allow participants to better express and illustrate transportation gaps and challenges. Participants highlighted liabilities and benefits with color coded dot stickers, expressed the location of various transportation needs with “Infrastructure Symbol” decals and used marker pens to illustrate travel routes, gaps and potential solutions (Appendix B).
- **Sticker Survey Boards.** At our Pop-Up Event at Los Medanos Community College (see below) we surveyed students’ perceptions of needed local transportation improvements using a simple “walk by” sticker boards (Appendix B).
- **Interview Vignettes.** PlaceWorks used a CCTA-approved set of questions (Appendix C) to interview volunteers in detail about personal challenges and transportation gaps they encounter daily, as well as their ideas for improving both sets of conditions. These narratives will be used to emphasize the mobility issues faced by various communities in the study area and how these issues impact overall quality of life on a regular basis. Interview participants voluntarily provided personal information as well about feedback about personal mobility challenges, daily transit gaps, difficult to access facilities and ideal solutions. Completed interviews are provided in Appendix D.

PlaceWorks facilitated Pop-Ups at the following events:

- **Food Bank of Contra Costa and Solano, November 19, 2019.**
Two PlaceWorks staff, including a Spanish speaker, solicited feedback from participants at Food Bank of Contra Costa and Solano's weekly food service at Buchanan Park in the City of Pittsburg. We set up tables adjacent to groups waiting participants, including those who had arrived on foot and bicycles, by transit and in cars. The event was attended by multiple repeat attendees familiar with the immediate transportation environment and surrounding infrastructure. We performed 9 in-depth interviews, including 2 in Spanish and received input from about 15 others. All unfiltered feedback is recorded in Appendix D.
- **Mustang Day at Los Medanos Community College, January 29, 2020**
Three PlaceWorks staff members, including a Spanish speaker, facilitated an event Los Medanos Community College "Mustang Day," a well-attended event hosted each semester on the first day of lectures to welcome new students to campus. Project staff interviewed participants of multiple race/ethnicities, age groups and backgrounds about their transportation experiences in the study area and to and from the campus, specifically. PlaceWorks used map boards, sticker surveys, and custom "Infrastructure Symbol" decals to facilitate feedback. PlaceWorks staff completed six detailed interviews and facilitated map exercises and/or discussions with about 60-70 individuals. All unfiltered feedback is recorded in Appendix D.
- **Staff and Member "Meet and Greet" at Antioch Senior Center and Pittsburg Senior Center**
PlaceWorks staff visited Senior Centers for in-depth discussions with the Center's Director of Programming, in-house "Transit Trainer" and Center visitors. The discussions focused on access to the senior center, similar issues at the Pittsburg Senior Center, and Paratransit service in the study area. All unfiltered feedback is recorded in Appendix D.

The results of process are synthesized below. Raw feedback and responses are included in Appendix D.

Outreach Results

The following section includes feedback received directly from the community, as well as responses to that feedback in the form of potential recommendations and solutions. The study area is extensive and has increased in size, diversity and population since the last CBTP. The 2007 *Community-Based Transportation Plan for Bay Point* study area included the Bay Point community only, an area with a population of under 22,000¹ at that time. The current study area extends east from Bay Point, through Pittsburg, and beyond A Street in Antioch. It includes portions of unincorporated Contra Costa County as well. As documented in the *Existing Conditions* report prepared for this CBTP, the population is currently over 93,000.

Given the breadth of the current study area, the benefits and limits of community feedback and the changing transportation and technological landscapes, we believe the following issues should be considered during the development of CBTP recommendations:

Scale. The outreach process revealed that in this large study area, mobility gaps highlighted by community members span from small individual sidewalk segments surrounding Pittsburg’s Buchanan park to large multi-jurisdictional connectivity challenges such as access from Antioch Senior Center to Veterans Hospital in Martinez. CCTA and CBTP advisory groups should discuss how to balance large- and small-scale recommendations in a manner that maximizes community benefit.

Projects vs. Studies. In reviewing patterns of community feedback, PlaceWorks has identified large transportation issues that would require extensive funding, planning and multi-jurisdictional coordination to fix. In an area this large, CCTA and CBTP advisory groups may consider the value of well-defined follow-up studies that would provide a foundation for project funding and/or policy adoption.

Role of technology. Many recommendations in past CBTPs were not implemented due to emerging technologies such as Transportation Network Companies (TNCs – also called rideshares), mobile information and online access. PlaceWorks found that nearly all mobility-challenged communities we spoke to had access to mobile phones. CCTA and CBTP advisory groups should consider the dynamic nature of transportation technologies when developing future recommendations.

Support Facility Access. PlaceWorks heard from community members and organization leaders that access to support organizations spread throughout the study area is desired. CCTA and advisory groups should consider the potential of recommendations for a “connected” network of those services. An example is a subsidized daily shuttle route that serves food banks, job centers, social security organizations, health facilities and senior centers.

¹ Metropolitan Transportation Commission, February 2007, *Community-Based Transportation Plan for Bay Point*, page 14.

Community Issues—Bicycle Facilities

1. East 14th Street from Harbor Street to West 10th Street was deemed unsafe and uncomfortable by multiple community members due to lack of adequate infrastructure, potholes and poor maintenance.
2. Geometry and wheelbase spacing of the bike loading racks on Tri-Delta busses does not easily accommodate newer, more popular bike styles such as mountain and commuter bikes. Loading can be difficult and a barrier to bike/bus mobility.
3. Twenty-two percent of Los Medanos students surveyed selected “Better Bike Lanes/Sidewalks” as the most needed transportation improvement type in the study area. Specific campus access issues include:
 - o Lack of bicycle adequate infrastructure on California Avenue and State Route 4, particularly the parallel segments east of the Pittsburg BART Station, is an impediment to access to Los Medanos Campus and reduces options for BART travel.
 - o Railroad Avenue has no bike infrastructure and feels unsafe when biking to and from Los Medanos and other destinations.
4. Harbor Street from Bliss Avenue to California Avenue is unsafe for cyclists due to the lack of protected bikeway infrastructure. Existing Class II lane is inadequate given traffic and proximity to Pittsburg High School.
5. Drivers are commonly anxious about bicyclist safety due to the lack of bike infrastructure in Pittsburg, which results in riders crossing traffic in an unsafe manner and outside designated bike lanes. Sharing the road with motorists is difficult in many spots.
6. Railroad crossings throughout the study area are too narrow and, if at-grade, often too rough to be safe for cyclists. These include:
 - o Railroad Avenue/Mococo line overcrossing
 - o Railroad Avenue/BNSF undercrossing
 - o L Street/Mococo Line undercrossing
 - o Somersville Road/Mococo line at-grade crossing.
7. Bike access to many community support facilities and events is poor. Many of these facilities are in locations hard to reach on bikes. This decreases bike use among low-income individuals and erodes support for bicycle community overall.

8. Willow Pass Road from Tower Mart (Loftus Road) to Bailey Road is dangerous to pedestrians and bikers because lighting is “horrible.” The Willow Pass approach to Highway 4 is so poorly lit that “I have to hit my brights.”

Potential Recommendations—Bicycle Facilities

1. Review the adequacy of the City of Pittsburg’s proposed bikeway on East 14th Street and expedite the implementation of that bikeway.
2. Tri-Delta shall conduct a short on-bus survey of bus riding cyclists to gauge satisfaction with loading hardware and assess the benefits of replacing existing bike racks with newer, and potentially more flexible racks.
3. Implement a bikeway east from the Pittsburg BART station toward Los Medanos College to make up inadequate infrastructure on California Avenue and Railroad Avenue. One option is to install Class II bike lanes on both sides of California Avenue from Pittsburg Center BART Station to the Class II lanes on Loveridge Road. A second option raised by cyclists is a formalized Class I “Bike Route” from the BART station to the Los Medanos Campus, including a student informational campaign and signage at endpoints.
4. Install Class I bike lanes on both sides of Harbor Street from East 14th Street to East Leland Road.
5. Identify high-conflict intersections in the study area—including those identified in the Existing Conditions Report for this CBTP—and assess infrastructure/safety gaps common to those intersections. Improve three intersections with high rates of conflicts by filling those infrastructure/safety gaps. Potential intersections include:
 - a. Railroad Avenue & Harbor Street
 - b. Stone Harbor Drive and Harbor Street
 - c. State Route 4 and Bailey Road and/or Somersville Road
6. Implement low-cost improvements to all existing railroad crossings, such as better striping, new signage, improved lighting, and resurfacing techniques. Prioritize full crossing reconfiguration based on use.
7. Distribute an informational flier highlighting bicycle support organizations, bicycle safety tips safety and bikeways surrounding support nodes such as community centers, food bank locations, youth facilities and adult education/job training events.
8. Install new street lighting along the Class II bikeway on Willow Pass Road from Port Chicago Highway to North Parkside Drive.

Community Issues—Pedestrian Facilities

1. Pedestrians generally feel unsafe crossing State Route 4 on Bailey Road, Somersville Road, and Willow Pass Road.
 - Intersection of Somersville Road and State Route 4 has signals but is still dangerous for pedestrians due to many lanes of traffic and conflicting signal times during pedestrian crossing. This is cited as a needed pedestrian link to the Century and Costco shopping centers.
 - Off-ramps Eastbound of Highway 4 to southbound Bailey Road the intersection corner is severely dangerous vehicles roll through the crosswalk to see oncoming traffic, cutting into the crosswalk. The motorists don't stop for the crosswalk, they roll through the crosswalk until they can see oncoming traffic that is southbound on Bailey Road to their left.
2. Railroad Avenue corridor is too auto-oriented and dangerous on foot. It lacks crosswalks and connections to and between designated shopping centers. Sidewalks are lacking and/or in poor conditions. Pedestrian must use road rights-of-way.
3. Students at Los Medanos stated that there is no pedestrian crossing over the railroad right-of-way splitting neighboring Century Plaza Shopping Center and the Costco property. Students visit these facilities often and this is frustrating.
4. Walking on Buchanan Road and Willow Pass Road is unsafe in the dark, due to a lack of lighting along these roads. Residents expressed the need for more lighting on all major and minor roads in the study area.
5. Numerous segments of sidewalk in the study area were deemed incomplete or poorly-maintained such that they are unsafe for pedestrians and the disabled. These include:
 - Segments of Willow Pass Road with unfinished sidewalks that result in pedestrian on the road on the road.
 - Buchanan Road adjacent and near Buchanan Park, where sidewalks are unlit and in such poor conditions that wheelchair users must use the street
 - Sidewalk on the southbound side of Bailey Road in front of the church just to the north of Canal Road, which too narrow.
 - Railroad Avenue south from the Pittsburg BART Station.
 - California Avenue and Loveridge Road

Potential Recommendations—Pedestrian Facilities

1. Implement a uniform safety plan for pedestrian safety through State Route 4. Improve infrastructure via elements such as bulb-outs, pork-chops, new flashing “No turn on red” signals and other driver messaging techniques on median islands and re-striping, and/or optimization of timing of existing signals.
2. Improve pedestrian connectivity through signalized and pedestrian safe crosswalks (pedestrian warning light systems) along Railroad Avenue. Work with shopping mall management to develop direct pedestrian connections between plazas.
3. Install an above-grade pedestrian overcrossing over railroad tracks to connecting shopping centers.
4. Install new streetlights and/or improved LED fixtures on the segment of Buchanan Road east of Railroad Avenue and the segment of Willow Pass Road north of the Pittsburg/Bay Point BART Station. Identify future targets for new lighting based on a study of streetlighting “dark spots” and levels of pedestrian activity.
5. Alert the City of Pittsburg Public Works Department to these sidewalk segments so that they are prioritized by the City’s Sidewalk Repair Section. In the mid-term, replace the current sidewalk repair phone system with an interactive, map-based sidewalk repair web page that allows users to easily input problem segments and describe the type of problem encountered.

Community Issues—Transit Facilities

1. Inadequate Tr-Delta evening service was cited by numerous individuals across outreach groups:
 - o There is a lack of bus services for residents who have irregular or “night shift” work schedules.
 - o Students at the Pittsburg Adult Education Center, primarily working students who must take night classes, are left without public transportation options. Many busses stop at 7:30, which is too late for night school course loads.
 - o Evening transit service to/from Los Medanos College is inadequate. There are many evening/nighttime classes and activities on campus and students who attend them are not well-served. For example, the last 387 bus leaves campus at 9:15 PM.
 - o Senior centers in Pittsburg and Antioch would like to extend evening programs but are restricted by Tri-Delta schedules. As a result, lunch and other daytime programs are at

capacity. Program staff would like to see more frequent and extended fixed-route service into the evening.

2. Lack of reliable bus service was cited as barrier to mobility by numerous individuals across the outreach groups:
 - o Thirty-seven percent of Los Medanos survey responders chose “Better Bus Service” as the most need transportation improvement, the highest-ranking response.
 - o Residents expressed frustration with the unreliability of Tri-Delta bus services in Bay Point and Pittsburg specifically. One resident regularly walks for over an hour rather than risk waiting for busses.
 - o Unreliability of busses can impact job status.
 - o Both late buses and early buses leave you alone in the dark for longer.
 - o Those served by the Pittsburg Senior Center are nearly fully reliant on Tri-Delta busses; unreliability and waits impact seniors especially hard.
3. Paratransit service hours do not match fixed route service hours. As such paratransit does not run late enough.
4. Access from the study area to medical centers in Martinez is inadequate and difficult for seniors.
5. Many bus stops in Pittsburg are entirely unmarked or inadequately marked. Drivers bypass these stops even with riders waiting at them in the dark.
6. Many bus drivers are either unfamiliar with their routes or simply careless. They often bypass stops with no signage and stops with clusters of homeless people, even when riders are waiting at those stops. Drivers will skip such stops even when “Stop Request” has been pulled.
7. Residents (e.g. elderly and disabled riders) feel paratransit is not adequately responsive. Paratransit does not communicate with its passengers when it is going to be late, leaving riders waiting outside for more than 30 minutes at any given time.
8. Tri-Delta Routes 380 and 381 were highlighted by young people as significant barriers to successful mobility for the following reasons:
 - o Lack of adequate shelters with seating along routes (Deer Valley High School stop cited as example)
 - o Late run times and resulting missed connections with Route 388
9. Shelters lack technology and real-time information displays.

10. El Pueblo Neighborhood of Pittsburg is a transit black hole. Access to the neighborhood is restricted to Carpino Avenue and School Street. There is no bus service into or through the neighborhood and it is a long walk to California and Harbor stations.

Potential Recommendations —Transit Facilities

1. Coordinate with Tr-Delta Transit and County Connection to prioritize Routes for extended evening service. Limit extended evening service to routes that connect BART Stations and public/medical facilities that offer needed evening programming and services. These include Tri-Delta Routes 200, 380, 381, 387 and 388.
2. An outside consultant shall prepare a Tri-Delta Bus Transit Service Reliability and Improvement Strategies report to identify problematic routes and improvement strategies. Implement a dedicated paratransit shuttle to senior centers in Pittsburg and Antioch.
3. Expand paratransit service such that it runs until the time the last fixed bus route ends.
4. Reducing the 1-hour headway Tri-Delta Route 200 (BART to VA hospital, Kaiser, Regional Medical Clinics) and extend service to 9:00 PM to ensure return trips.
5. Identify all Tri-Delta and County Connection bus stops in the study area that are unmarked or with inadequate signage. In the short-term, install temporary night-visible signage at each stop.
6. Establish a daily program of alerting drivers to the current conditions of each route, including lack of signage, construction and homeless/loitering issues. Ensure that drivers commit to serving these stops for paying riders regardless of conditions.
7. Implement a program like Richmond's R-Transit Lyft partnership, in which Lyft technology is used to provide on demand paratransit transportation.
8. Tri-Delta should implement a campus access improvement plan, with programmatic and physical upgrades to Routes 380 and 381. The Plan should target safety for younger riders with new shelters, lighting, seating and improved performance.
9. Provide real-time arrival displays at bus stops with many boardings and bus stops located near senior service centers, so that riders who do not use mobile apps can still see real-time arrival information.
10. Extend Tri Delta Route 388 School Street loop into El Pueblo neighborhood center.

Community Issues—Other

1. Downtown Pittsburg is feels extremely unsafe at night for transit users, pedestrians and cyclists. Community members cited high crime rates and lack of lighting.
2. Thirty-three percent of Los Medanos survey responders chose “Improved Lighting and Safety” as the most need transportation improvement.
3. Safety around Pittsburg High School on Harbor Street is inadequate, and access is dangerous. Drivers often speed through an area with thousands of student pedestrians. There is no Intersection at Stone Harbor Drive and Harbor, so drivers speed from California to School Street. “I’ve seen groups of students on cell phones and not paying attention almost get hit by cars numerous times.”
4. Billboards at Railroad Avenue and State Route SR 4 are too bright and flashy; lights are distracting/annoying/dangerous.

Potential Recommendations—Other

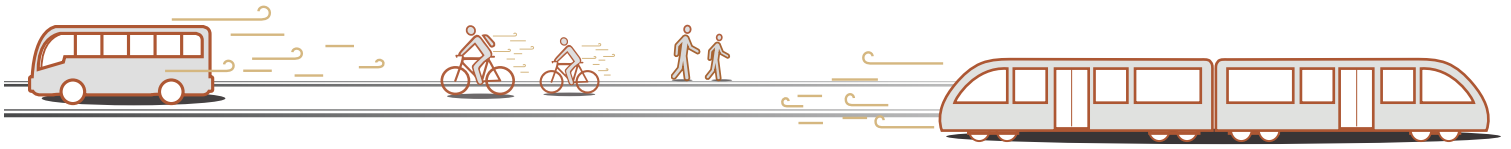
1. Coordinate with the Downtown Advisory Board to identify safety improvement measures that benefit non-auto travelers and the business community. Elements of the plan would include more street lighting, lighting in public spaces and bus shelter lighting, policies to activate storefronts and storefront lighting, and support for increased police presence until the last fixed-route service ends.
2. Improve street and bus shelter lighting along major rights-of-way surrounding the Los Medanos Campus, including
 - o East Leland Road
 - o Loveridge Road
 - o Buchanan Road
 - o Railroad Avenue
3. Implement an aggressive Safe Routes to School Program for Pittsburg High School. Integrate multiple components including increased crossing guards, signal installation, optimization of existing signals and improved student drop-off/pick-up.
4. Contra Costa County, the City of Pittsburg and the City of Antioch shall update municipal signage codes to restrict light and glare impacts to drivers and bicyclists at interchanges and major intersections.

A P P E N D I X A

O U T R E A C H A W A R E N E S S F L I E R S



HELP IMPROVE TRANSPORTATION OPTIONS IN PITTSBURG, BAY POINT AND ANTIOCH!



PARTICIPATE IN THE PITTSBURG-BAY POINT COMMUNITY-BASED TRANSPORTATION PLAN

The Pittsburg-Bay Point Community-Based Transportation Plan (CBTP) is an opportunity to improve transportation options and quality of life for neighborhoods in Pittsburg, Bay Point, and Antioch.

The Plan will bring residents, community organizations and transportation agencies together to identify transportation challenges and develop solutions.

The CBTP will:

- Evaluate transportation gaps and barriers identified by the community
- Develop solutions & projects to address these challenges
- Identify possible funding sources to pay for these solutions & projects

How To Participate



Text-based mobile survey:

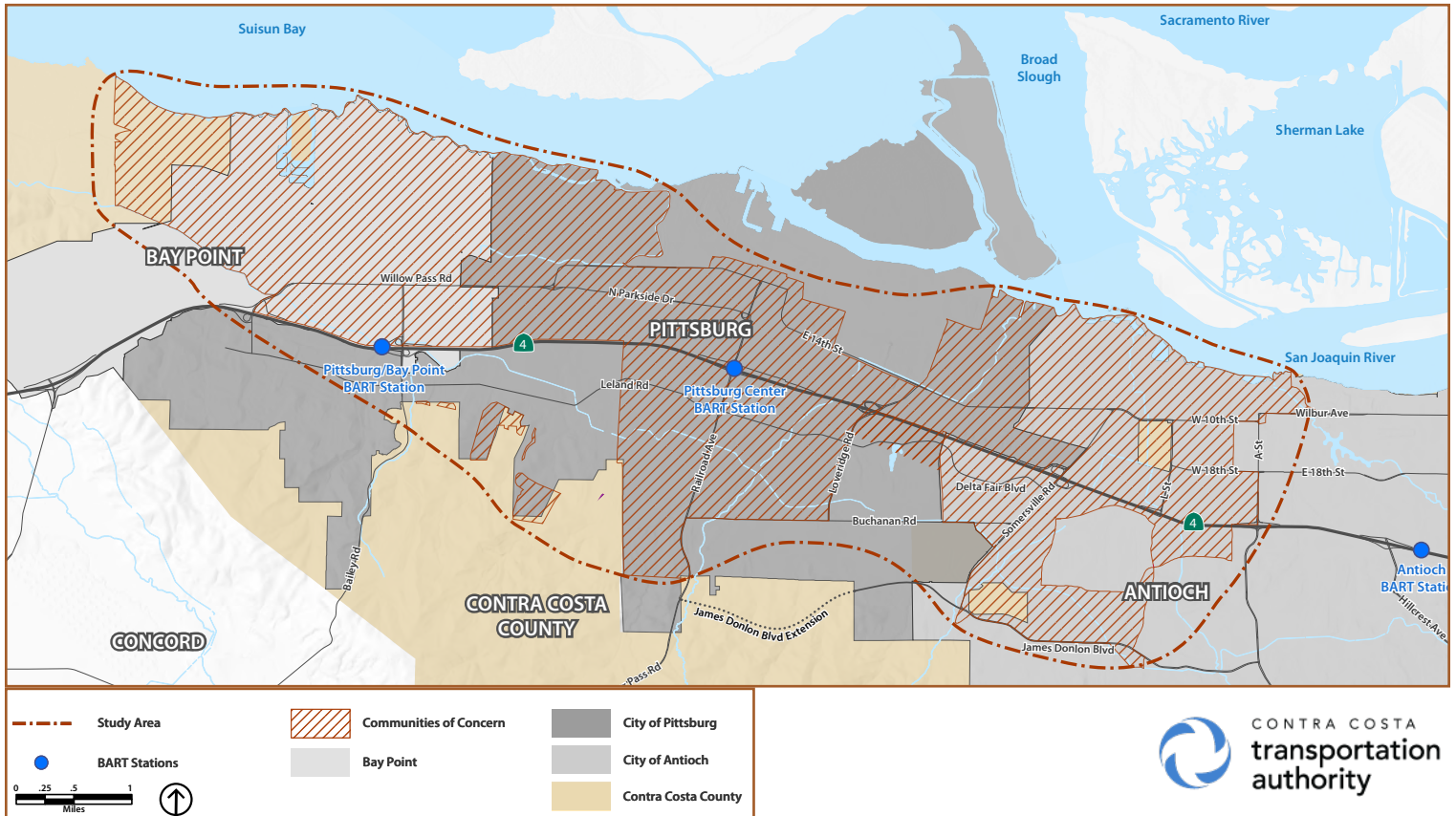
Please take a few moments to answer our short mobile phone survey about your transportation habits and challenges. To get started, text "CBTP" to (925) 378-4338



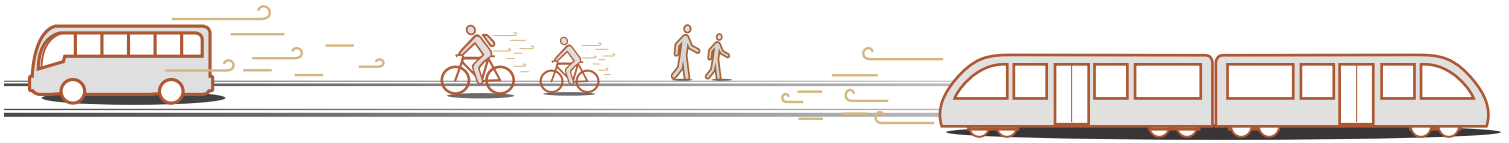
Project webpage:

A project webpage is currently under development. Go to www.ccta.net to learn more about the project, project partners and community events!

Plan Study Area



¡AYUDENOS A MEJORAR LAS OPCIONES DE TRANSPORTE EN PITTSBURG, BAY POINT Y ANTIOCH!



PARTICIPE EN EL PLAN DE PITTSBURG-BAY POINT DE TRANSPORTE BASADO EN LA COMUNIDAD

El plan de Pittsburg-Bay Point de transporte basada en la comunidad, o CBTP, es una oportunidad para mejorar las opciones de transporte y la calidad de vida de los vecindarios en Pittsburg, Bay Point y Antioch.

El plan reunirá residentes, organizaciones comunitarias y agencias de transporte para identificar los desafíos y desarrollar estrategias para superar los.

El CBTP va a:

- Evaluar las brechas y barreras de transporte identificadas por la comunidad
- Desarrollar soluciones y proyectos para resolver estos desafíos
- Identificar las posibles fuentes de financiamiento para pagar las soluciones y proyectos

Cómo Participar



Encuesta móvil basada en texto:

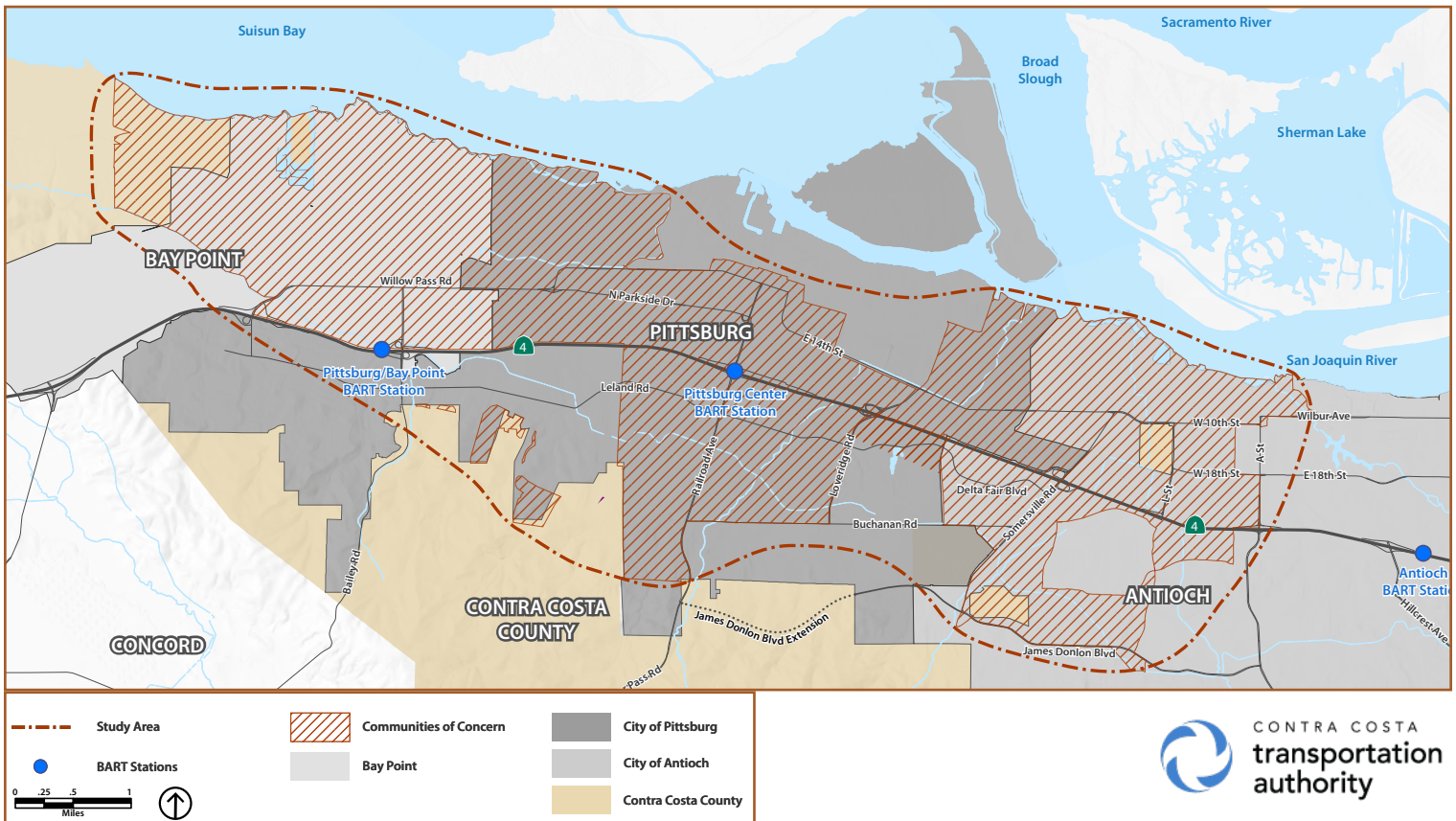
Por favor, dedique un momento para responder a nuestra breve encuesta acerca de sus hábitos y desafíos de transporte por teléfono móvil. Acceda a la encuesta enviando un texto a **(925) 378-4338**



Página web del proyecto:

La página web del proyecto está en construcción. ¡Visite www.ccta.net para aprender más del proyecto, socios del proyecto y eventos comunitarios!

Área de Estudio del Plan



A P P E N D I X B

P O P - U P M A P E X E R C I S E S



Food Bank of Contra Costa and Solano Food Drive, Pop-Up Outreach, Map 1

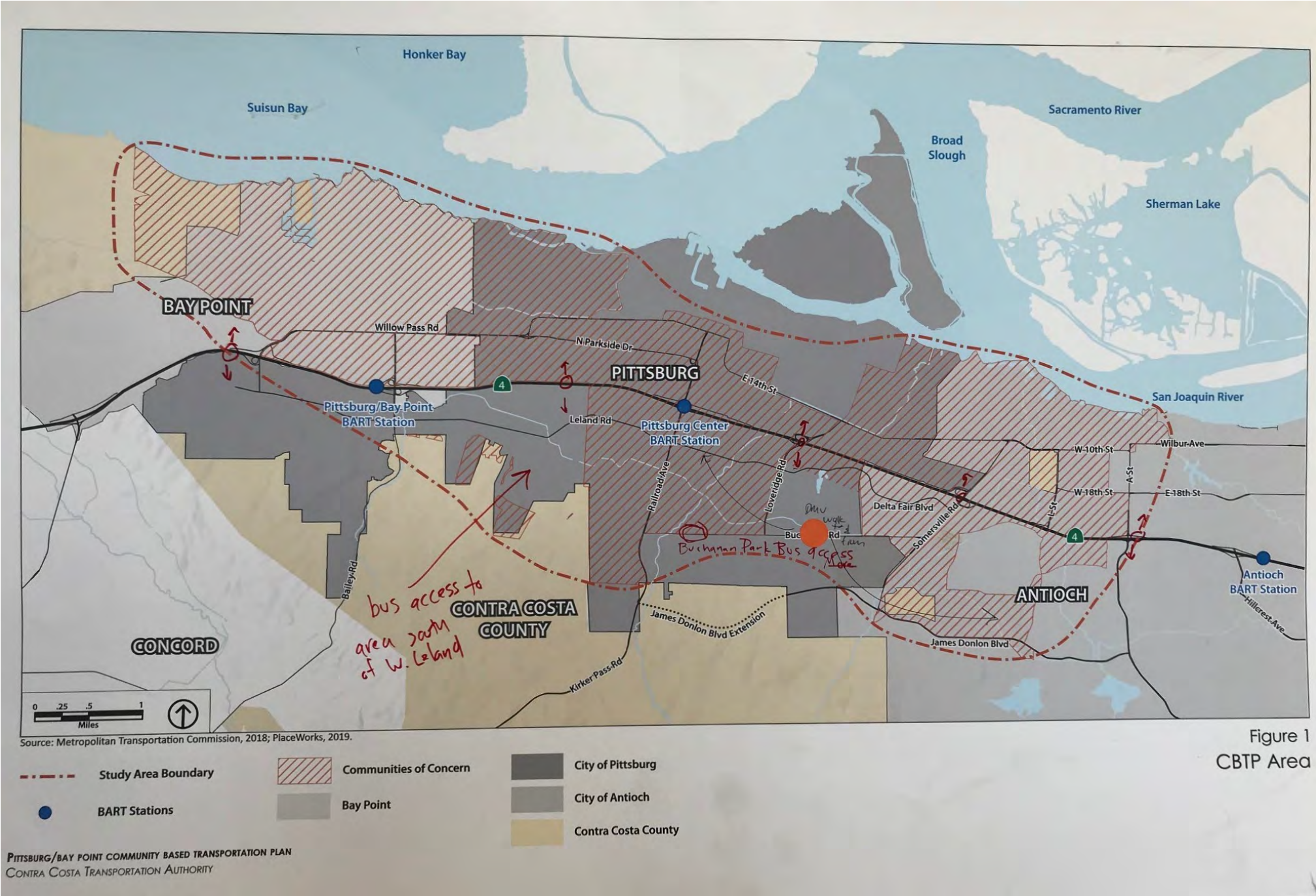
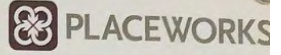


Figure 1
CBTP Area

Los Medanos Community College Mustang Day, Pop-Up Outreach, Dot Survey



WHAT TRANSPORTATION IMPROVEMENTS ARE NEEDED MOST IN THE STUDY AREA?

more frequency esp. buses going to BART station

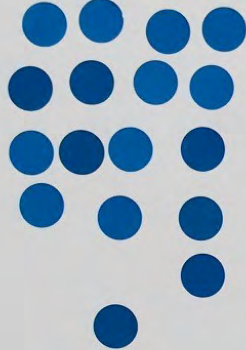
electric charging stations



BETTER BUS SERVICE



IMPROVED LIGHTING AND SAFETY



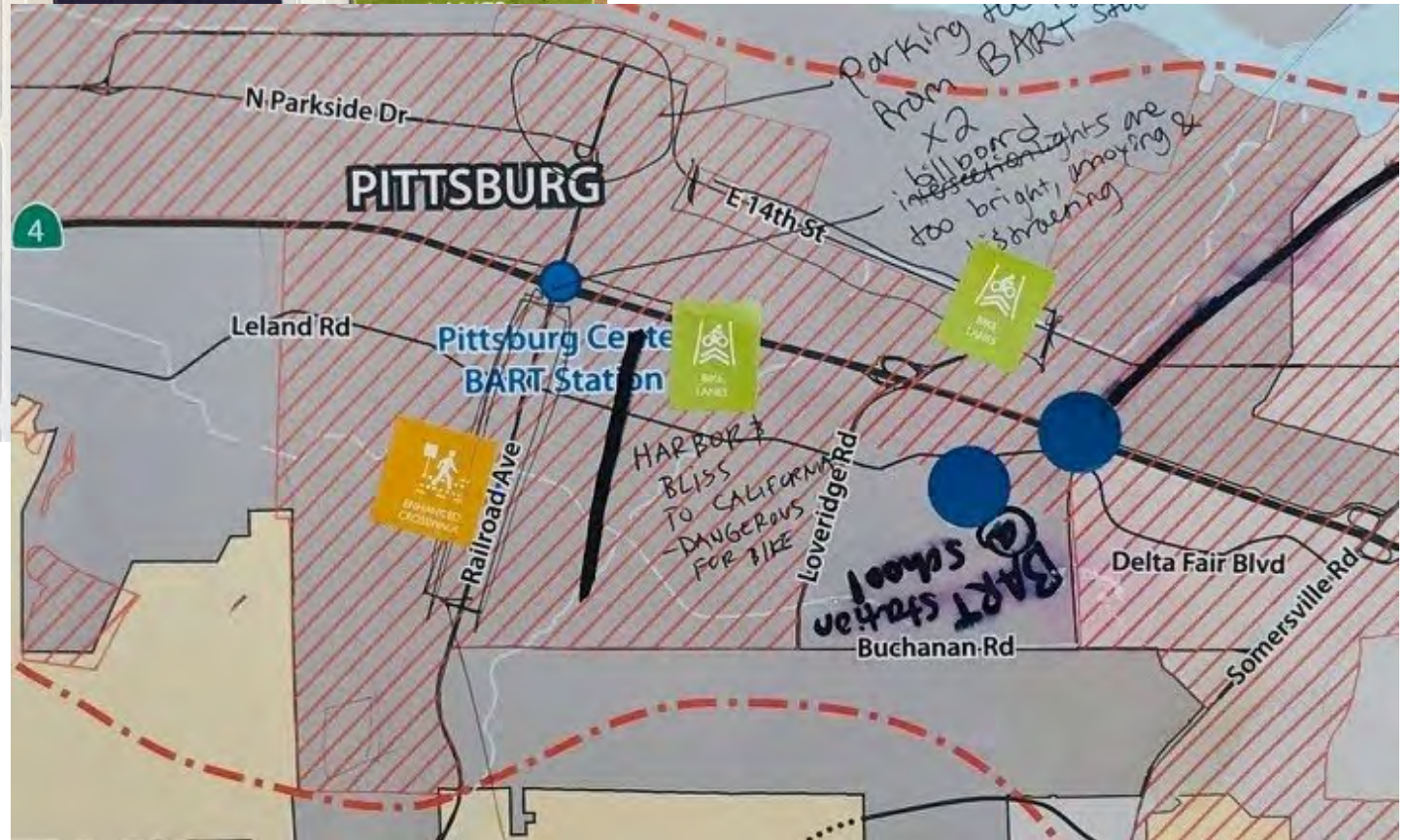
BETTER BIKE LANES/ SIDEWALKS



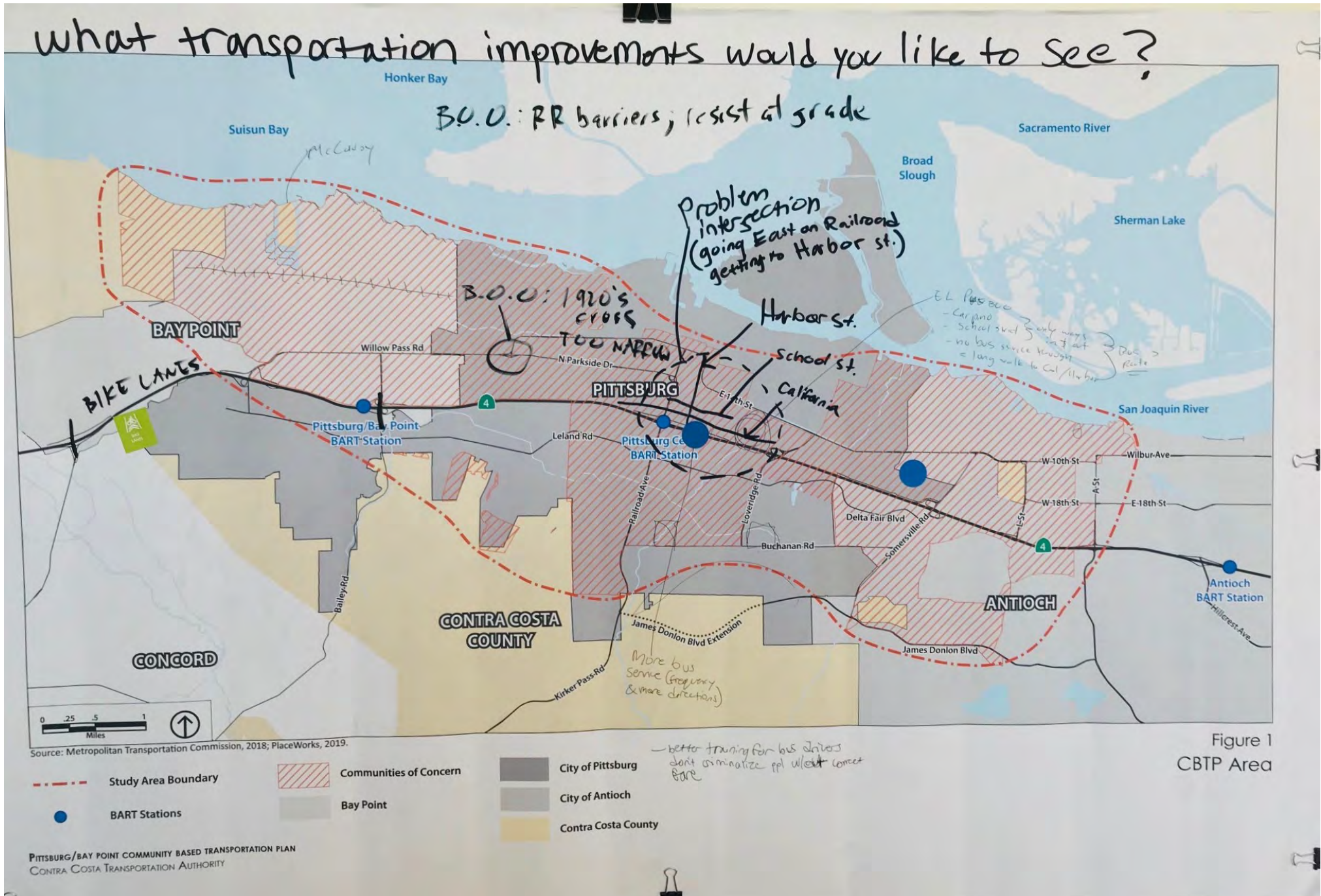
NEW TRANSIT TECHNOLOGIES



Transportation Improvement "Symbol Stickers" and Map Placement



Los Medanos Community College Mustang Day, Pop-Up Outreach, Map 1



Los Medanos Community College Mustang Day, Pop-Up Outreach, Map 1



Los Medanos Community College Mustang Day, Pop-Up Outreach, Map 1

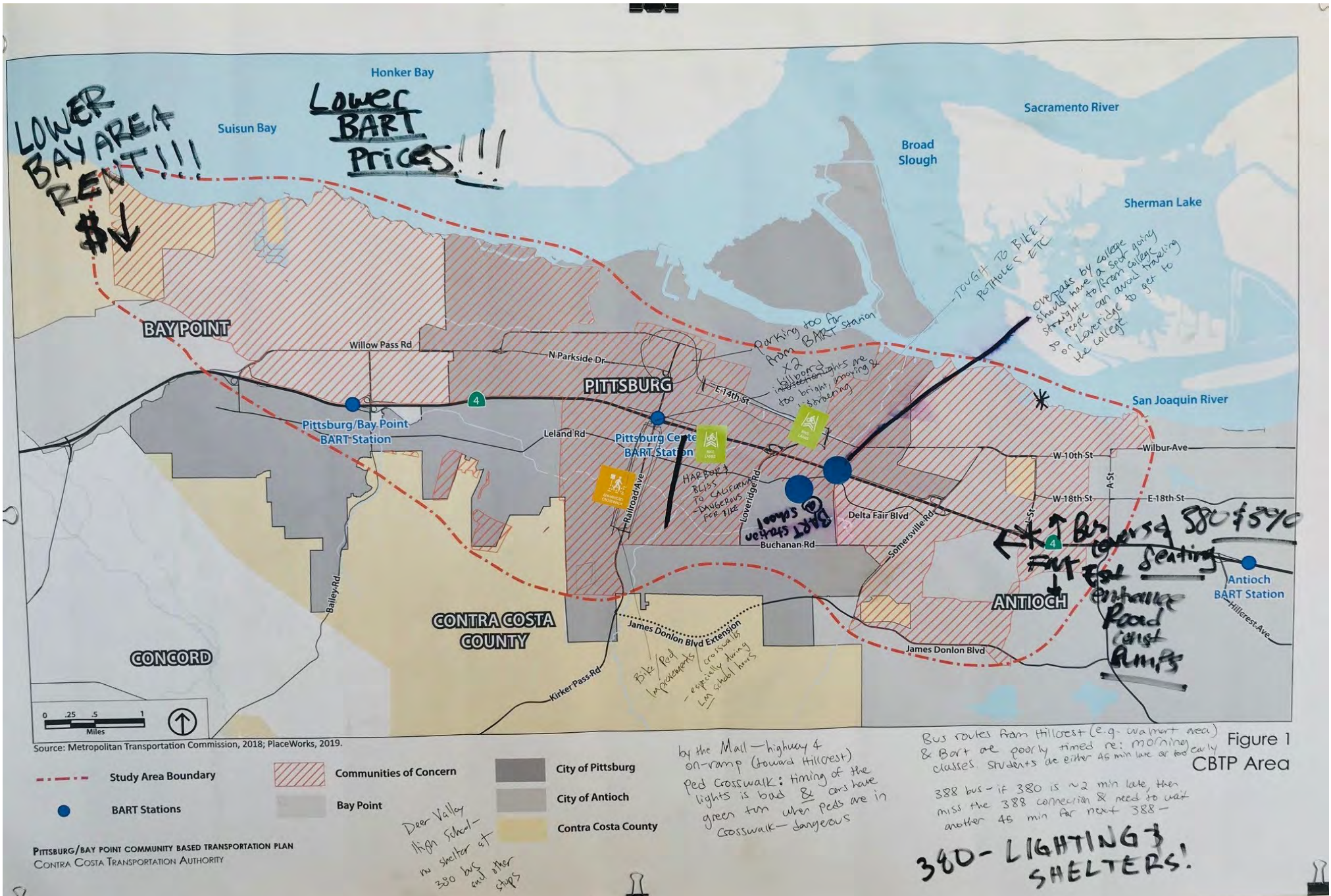


Figure 1
CBTP Area

Bus routes from Hillcrest (e.g. Walmart area) & BART are poorly timed re: morning classes. Students are either 45 min late or too early.

388 bus - if 380 is ~2 min late, then miss the 388 connection & need to wait another 45 min for next 388 -

380 - LIGHTING & SHELTERS!

A P P E N D I X C

I N T E R V I E W Q U E S T I O N S



MEMORANDUM

SUBJECT Draft CBTP Vignette Interview Template

Task 2.1 Interview Preparation

PlaceWorks will develop an interview template for Pop-Up events that includes questions related to personal situation, daily travel requirements, unmet travel needs, major mobility challenges due to both personal restrictions and infrastructure limits, desired support mechanisms, and others.

Draft Interview Questions:

Name _____

Age _____

Occupation _____

Marital Status _____

Children _____

City of Residency _____

1. What personal, physical, or economic limitations make it difficult to “get around” each day (for example, you don’t own a car, work is far from any bus route, your children attend different schools, etc.)?
2. Describe an incident in which a transportation obstacle significantly impacted your routine or well-being.
3. Describe a specific, especially difficult route that you regularly travel, and how you would fix it.
4. What local places or facilities do you or your family need to visit regularly, but that are hard to get to?
5. How do local bicycle and pedestrian facilities affect your biking and walking habits?

6. What areas do you avoid traveling in, and how do you reach nearby destinations?
7. How would you change the local transportation system to lessen your current transportation limitations?
8. Describe your dream transit or transportation project in your community.
9. What other major obstacles to getting around are common in your community?

A P P E N D I X D

R A W C O M M U N I T Y F E E D B A C K



EVENT: FOOD BANK OF CONTRA COSTA AND SOLANO

Date: 11/19/19

Location: Buchanan Park, City of Pittsburg

Time: 11:00 am -12:30 pm

Interview Participants (9 total)

Participant 1

Name: Paulina

Personal: 66 years of age, lives with her daughter and works from home babysitting children. Paulina is an elderly Latino woman, Spanish-speaking.

Transportation Issue/Challenge/Gap: Bus connectivity from Pittsburg to Antioch is unreliable due to inconsistent scheduling. As a result, she regularly walks 1.5 hours from work in Pittsburg to family home in Antioch instead of waiting up to 30 minutes for bus. Doing this trip a few times a month is starting to cause back and knee pain.

Suggestions/Solutions: Paulina wishes for the City of Pittsburg (Tri Delta) to better study its unreliable public transportation system. She suggested the city should add more buses to their fleet in order to improve bus schedules.

Participant 2

Name: Pasqual

Personal: Age 46, does not ride public transit himself, but has several friends and family that do.

Transportation Issue/Challenge/Gap: Many friends and family have issues when using public transportation, due to the unreliability of bus schedules. His main concern are the effects this can have on employment. Pasqual stated he has a few friends who have been fired as a result from being late to work due to the unreliable bus system in Pittsburg.

Suggestions/Solutions: Pasqual suggested the city should implement a commuter program for workers in Pittsburg.

Transportation Issue/Challenge/Gap: Lack of visibility of street signs throughout study area poses great danger for everyone.

Suggestions/Solutions: Street sign safety study for better understanding of “dark” areas, such as on Buchanan and Willow Pass.

Participant 3

Name: William

Personal: Age 50, retired school bus driver with “years of experience in terms of roadway and child safety.”

Transportation Issue/Challenge/Gap: Believes the City of Pittsburg has an overall lack of adequate bus lines, as well as reliable services for disabled and elderly people using paratransit. Specifically, buses do not extend to the North or South side of Pittsburg. Leading to a high usage of single occupant vehicles in the area.

Suggestions/Solutions: Implement BRT’s going from through Pittsburg, with separate route extensions that connect the North and South sides. Missing link is a north-south bus route in between the 2 BART stations--P/BP and Pittsburg Center BART Stations.

Participant 4

Name: George

Personal: Age 37, uses BART to commute to from home in south Pittsburg to Concord

Transportation Issue/Challenge/Gap: George lives relatively close to BART, but there are no buses that connect directly to Railroad Avenue from his house; forcing him to Uber from his house to BART. Existing buses to BART can take up to 40 minutes including the wait time, versus 10 minutes on Uber. Frustrated with lack of bus lines and the inconsistency of the bus schedules.

Suggestions/Solutions: New Tri-Delta route or re-routing of existing line that serves the “dead area” south of West Leland Road.

Participant 5

Name: Shane

Personal: Born & raised in Pittsburg study area. Single outdoorsman, age 50, no children.

Transportation Issue/Challenge/Gap: Downtown Pittsburg is a nighttime transportation gap for everyone due to crime and “sketchy characters”. There are transit options to and through the area, but he and others he knows choose drive to avoid “being on the streets.” He is certain this is an issue for the entire community.

Suggestions/Solutions: “Not any new transit or busses, but something that makes the streets safer, maybe foot patrols.”

Participant 6

Name: Veronica

Personal: 42 years old, married, 2 children, study area resident and caregiver. Husband is wheelchair-bound, she is an active bike rider. Came to this event on a bike.

Transportation Issue/Challenge/Gap: Portions of Buchanan Road are wheelchair unfriendly. Poor, unlit sidewalks force Veronica and her husband, who is in a wheelchair, onto the dangerous roadway during walks to parks and facilities (including weekly food bank) along Buchanan. "Busses are adequate for the disabled—it is between the busses that is our problem."

Suggestions/Solutions: Need to improve sidewalks and street safety on roads that lead to important resources for the needy, such as this event, parks and community centers.

Transportation Issue/Challenge/Gap: Bike access to facilities/events such the Food Bank is poor.

Suggestions/Solutions: She would like to see bike lanes installed specifically to "lead to" events/resources for the needy. She wants users to discover the value of cycling instead of driving and busing. Believes this would increase community and support among low-income.

Transportation Issue/Challenge/Gap: Non-auto danger at Loveridge and California Avenue. Multiple left-turn and U-turn variations associated with roadway bend and Chevron/storage access points is deadly.

Suggestions/Solutions: Better bike lanes on California, improve sidewalks, "make California feel less like on-ramp."

Participant 7

Name: Guy

Personal: 66 years old, Pittsburg resident, uses cane.

Transportation Issue/Challenge/Gap: Paratransit service from Railroad Ave to VA Hospital in Martinez is impacting his health. He and other riders are frustrated by 2-3 hour trip each way, resulting from what seems a circuitous route and lack of service. In addition, there is no service after 8:00 PM and you must reserve a seat 3-days ahead. "I've ended up missing or avoiding so many appointments that I stopped using the service and hired a caregiver." There is no alternative to the VA for many care plans.

Suggestions/Solutions: Dedicated, possibly subsidized, shuttle route to VA Center; more frequent paratransit service, study of overall paratransit rider and driver needs.

Participant 8

Name: Mark

Transportation Issue/Challenge/Gap: Dangers of Willow Pass Road to pedestrian and bikers. From Tower Mart (Loftus Road) to Bailey Road, lighting is horrible. Also, as Willow Pass approaches Highway 4/Evora/Delta de Anza Regional Trail, lighting is so bad that “I have to hit my brights at that turn” to make sure he sees anyone not driving.

Participant 9

Name: Greg

Personal: 33 years old, single, Pittsburg resident.

Transportation Issue/Challenge/Gap: Safety around Pittsburg High School on Harbor Street is inadequate, and access is dangerous. Drivers speed through. There is no Intersection at Stone Harbor Drive and Harbor, so drivers speed from California to School Street. “I’ve seen groups of students on cell phones and not paying attention almost get hit by cars numerous times.”

Suggestions/Solutions: Lengthen light at Harbor Street and signalize Stone Harbor Drive and Harbor Street. Improve school entryway signage with flashing crossers.

Board and Dot Feedback (14-16 participants)

- This spot (Buchanan park) has become a “go-to” because of the Mobile Food Bank. But right access is difficult. What about a bus route that comes to the park? Same idea for other spots the Mobile Food Bank serves. (x3)
- There is no bus service on Kirker, need to extend bus route from Railroad Ave down Kirker Pass
- We need another bus line into Concord, why not to extend bus route on Bailey Road to Concord
- Downtown Pittsburg is dangerous at night (x3)
- California Avenue is “strange” and inaccessible
- Roadway condition of California Avenue is poor
- Dedicated Tri-Delta or County Connection shuttle to Pittsburg Center BART is needed because parking is so bad
- Dedicated Tri-Delta or County Connection shuttle to Pittsburg Center BART is needed because existing bus service so limited (x2)

EVENT: LOS MEDANOS COMMUNITY COLLEGE MUSTANG DAY

Date: 1/29/2020

Location: Los Medanos Community College, City of Pittsburg

Time: 10:00 am -1:00 pm

INTERVIEW PARTICIPANTS (6 TOTAL)

Participant 1

Name: Ziara

Personal: 18 years old, single, no children, Pittsburg resident and part-time employee

Transportation Issue/Challenge/Gap: Ziara runs into morning challenge of late buses (particularly 380) nearly every morning. This morning, the bus was supposed to be on its way in 20 minutes according to schedule; however, it arrived in one hour. I have to get to work via the bus and I've been late numerous times.

Suggestions/Solutions: Increase reliability of most used bus routes.

Participant 2

Name: Tamera

Personal: 32 years old, married with 1 child, student, Antioch & Bay Point resident.

Due to home in Antioch and family home in Bay Point, I have to travel the corridor a lot with a child. Common problems are rush hour traffic and construction on the 4, which gets do bad you use transit. Pavement in all these communities requires maintenance and repair, especially in Bay Point. I avoid travelling "up" near the water edge and it is hard to get to school here at Los Medanos. We need more transit routes from north to south, not just east-west.

Suggestions/Solutions: Pedrina improvements in travelled corridors, new north-south running Tri-Delta Routes.

Participant 3

Name: Marcanthong Ponce

Personal: 19 years old, single no kids, student and Antioch resident.

Transportation Issue/Challenge/Gap: I have no car; daily bus rider. One problem I have is off-schedule busses—sometimes busses come early, and I miss them, and have to wait for the next round. It takes me a full hour to get from Antioch to school, and when I miss a bus it can take up to another hour. I also know that more and more students are riding bikes due to this, and the route here feels unsafe.

Suggestions/Solutions: More and more frequent bus routes, better bike lanes leading to Los Medanos campus.

Participant 4

Name: Pedro Pantoja

Personal: 19 years old, single no kids, student and Oakley resident.

Transportation Issue/Challenge/Gap: I drive through the study area to get to school. Traffic is the worst daily obstacle, but no so bad that I will take transit, which is worse.

Suggestions/Solutions: Fix traffic and construction.

Participant 5

Name: Kate

Personal: 21 years old, single, no children, student and Antioch resident.

Transportation Issue/Challenge/Gap: I get frustrated by the attitude and abilities of Tri-Delta bus drivers on my way from home in Antioch to LMC. Many bus stops aren't marked, and some don't even have temporary poles or signs. Drivers often wiz right be the stops and I've been almost hit a bunch of times as I wait. I've almost experienced drivers who skip stops that are near homeless encampments or that have homeless people nearby, even though I'm waiting for the bus. It seems like drivers get lost or aren't not trained properly.

The Lonetree and Davidson stop, in front of Railey's is an example. I've been on busses that don't stop there sometimes, even if someone pulled the Stop Request cord.

Suggestions/Solutions: Drivers need better route training and people skills; signage on all routes needs to be updated.

Participant 6

Name: Bruce “Ole” Ohlson

Personal: 60+ years old, retired, East Contra Costa County resident, lifelong cycle and community advocate, no car.

Transportation Issue/Challenge/Gap:

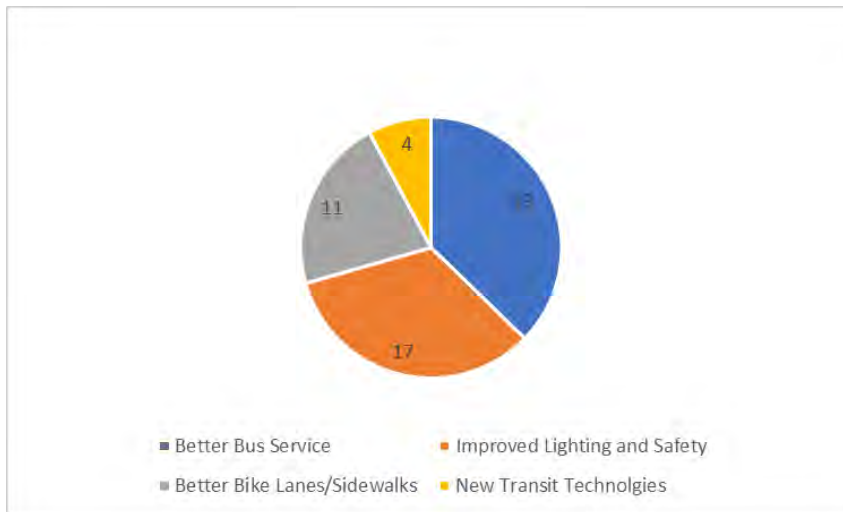
- Existing bus and auto challenges to Los Medanos you’re hearing about from young students mean that a major bike infrastructure plan from BART to the campus is required. This will require robust info campaign and student/staff/agency outreach.
- Railroad Crossing are barriers to myself and other bicyclists throughout:
 - EBRPD plans trail at 8th Street to Pittsburg, Concerned about at-grade bike-crossing at McCavoy. Railroad at McCavoy.
 - Railroad Ave: McCoCo line overcrossing and BNSF undercrossing are too narrow/dangerous.
 - L Street undercrossing at McCoCo RR in Antioch is too narrow
 - At-grade Somersville crossing with McCoCo RR is too rough for cyclists
- Route 4/Loveridge at-grade crossing needs improvements
- Tri-Delta bus bike racks are single design that have wrong wheelbase for most bikes used by young people—commute bikes and newer mountain bikes. Difficult to load.
- SR 4: This is a route of regional significance—and “a route of regional significance should cater to bicycles just as it does cars”

Dot Survey Feedback (51 participants)

Of the 51 students who participated:

- 37% selected bus service as the most need transportation improvements, specifically frequency and service to BART stations
- 33% selected improved lighting/safety in their mobility patterns
- 22% selected improved bike/ped infrastructure

- 8% selected new transit technologies, specifically electric vehicle parking station at LMC campus.



Board and Dot Feedback (about 32 participants)

- Lower rent in Bay Area overall so we can afford transit!
- Lower BART prices (x3)
- 380 bus shelters are bad or missing—especially at Deer Valley High School. Dangerous.
- Highway 4 on-ramp (towards Hillcrest)—ped crosswalk: timing of the light is bad and cars making right turn on green are dangerous to peds.
- Bus routes from Hillcrest (Walmart area) are poorly timed for morning classes—often students 45 minutes early or 45 minutes late!
- If 380 is just 2 minutes late, then you miss the 388 connection and you have to wait another 45 minutes for next 388.
- Need shelters with SEATING along 380 and 390 routes (x3)
- 380 is always late, no seating at stops, no shelters, just not sufficient. (x2)

- Transit service around Los Medanos College should be better at nighttime. There are lots of evening/nighttime classes on campus and students who attend them are not well-served. For example, the 387 stops running after the last bus leaves campus at 9:15PM. A nighttime shuttle for students administered by Los Medanos College could be good too—either to supplement better nighttime transit service or to replace it.
- I live in Costa Loma, there should be more bus stops there. Currently there is only one bus which stops by Tailgaters Restaurant, CVS and an Autozone. There should be a bus line with access to the park for people with no car or who can't drive but want to access nature nearby.
- Railroad Ave south of BART is sketchy for peds, especially during LMC school hours. Need better sidewalk and crosswalks.
- Intersection of Somersville Road and State Route 4 has signals but is still dangerous for pedestrians due to many lanes of traffic and conflicting signal times during pedestrian crossing
- residents often use Port Chicago to commute on the north side of the city, but feel unsafe having to ride without marked bike lanes.
- Harbor and Bliss Street to California: dangerous for bikes, Need better lanes and safety.
- Pittsburg BART parking: Parking is too far from the station itself. (x2)
- Railroad Ave and SR 4: billboard lights are too bright and distracting/annoying. (x2)
- East 14th Street east of railroad: This stretch is tough to ride bikes on due to potholes and poor maintenance
- Lone Tree/Canada Valley transit stop (near Lowes) should have better lighting.
- How about a new BART station at the campus?!
- BART should go all the way to Brentwood, Livermore, Patterson, Modesto (or high-speed rail). Knowing this is at least decades away, it would be helpful in the interim to have timed shuttles connecting Amtrak stations to important destinations like Los Medanos campus. One student for example travels on Amtrak from Modesto to Los Medanos campus. Many more students are coming from Stockton, Modesto, Brentwood.
- SR 4 overpass near campus should have a spur going straight to campus so people can avoid using Loveridge. This would also relieve traffic on Railroad.
- Community College District needs a transit support program for students who work and need to get to/from jobs. California Street—students must walk to work from Pittsburg BART or from campus

- There is no comfortable pedestrian connection into and out of the Costco/Century Plaza Shopping Center—need an overcrossing.
- Need better bike infrastructure along SR 4 west of Willow Pass.
- Better training for bus drivers—don't demoralize people without correct fare.
- Harbor Street intersection are bad: Eastbound Railroad & Harbor Street is all around problem intersection for everyone; School Street and Harbor, California Street and Harbor. At one point, an intersection on Harbor Street by the high school, near California Street was closed with no forewarning and no signage far enough away from the closure to give travelers the opportunity to re-route.
- El Pueblo Neighborhood residents have ingress/egress restriction—Carpino and School Street are the only ways in/out; no bus service through the neighborhood—need bus route extension! Long walk to California and harbor stations.
- I work at the Adult Education Center, and County Connector busses don't run late enough for working students to attend necessary night classes. Many busses stop at 7:30, which is too late for night school.

FOLLOW-UP EMAIL CORRESPONDENCE FROM BRUCE OHLSON

- Difficulties regarding the signage on the segment of Highway 4 between Willow Pass Road and Port Chicago Highway. These difficulties appear to be related to the installation of lighting along this segment of roadway.
 - Willow Pass Road interchange has two phone number signs useless to a bicyclist entering the on-ramp to westbound Highway 4. neither is visible to a bicyclist coming from the east on the Delta de Anza Trail as it (and they) approach the interchange and enter the on-ramp. Please move one of these signs to the westbound on-ramp.
 - Both existing phone number signs on northbound Willow Pass Road are unneeded because very few if any bicyclists cross the death-trap bridge on Willow Pass Road located to the south of the Highway 4 Willow Pass Road interchange just to head west on Highway 4.
 - someone or some entity has removed the Manual of Uniform Traffic Control Devices (MUTCD) "R5-10am" sign that indicates bicyclists are permitted to use this segment of freeway from the westbound on-ramp to Highway 4 from Willow Pass Road and replaced it with a nonstandard sign indicating that bicycles are prohibited. Please replace the incorrect sign with the proper sign. Caltrans has warrants for

Other Feedback:

- Needed project: On the southbound side of Bailey Road in front of the church just to the north of Canal Road, the sidewalk needs to be widened to the same width as in front of the McDonald's restaurant that is located just up the street. There is a wide, marked shoulder on the street here that was originally installed to be a dedicated right turn lane. Even with the installation of this sidewalk, there is plenty of space for a dedicated bicycle lane on this segment of street. This segment of sidewalk is used by the Delta de Anza Regional Trail as it transitions from one side of Highway 4 to the other on the sidewalks of Bailey Road.
- Needed project: The eastbound Highway 4 off-ramp to southbound Bailey Road intersection corner is extremely dangerous. The motorists don't stop for the crosswalk, they roll through the crosswalk until they can see oncoming traffic that is southbound on Bailey Road to their left. Then, without glancing to their right (where pedestrians and bicyclists are waiting to cross and who might even have a green "walk" signal), the motorist accelerates into southbound Bailey Road. This intersection is a GREAT candidate for a separate traffic-signal phase for pedestrians and bicyclists across both the off-ramp and Bailey Road. A "NO TURN ON RED" lighted sign could be installed on the median island of Bailey Road and lighted up at the appropriate time (whenever the pedestrian "beg" button has been pressed to call for passage). This intersection is used by the Delta de Anza Regional Trail.
- Needed project: Construct a bridge that connects the Pittsburg/Bay Point BART parking lot (just to the west of the station) over Highway 4 to Canal Road and/or the paved canal maintenance road. This bridge must be open 24 hours. Crossing this bridge must not require entering the BART station.
- GOAL: Have bicycle lanes included on both sides of every inch of every arterial street in Bay Point, Pittsburg, and Antioch. The good news in Bay Point is, we're almost there. See the project below:
- Needed Project: Install shoulders and mark them as bike lanes on both sides of Port Chicago highway between McAvoy Road and Skipper Road.
- Needed project: Install a pedestrian and bicycle path on the south side of Willow Pass Road between Port Chicago Highway and the westbound Highway 4 off-ramp to Evora Road and San Marco Boulevard. This will complete the Delta de Anza Regional Trail in Bay Point.
- Needed project: Connect the Delta de Anza Regional Trail to the back of the Ambrose Community Center in Bay Point. While we're at it, repair the fence. It has been broken down for years.
- Provide bike racks for temporary bicycle parking in front of every store in the study area. These parking facilities must be no farther from the main entrance to the store than the closest

nonhandicapped automobile parking place. These racks should be the modern "inverted 'U'" or "figure '4'" racks, not the historic (antiquated) "front wheel eaters."

EVENT: ANTIOCH SENIOR CENTER MEET-AND-GREET POP-UP

Date: 1/3/2020

Location: Antioch Senior Center, City of Antioch

Time: 10:00 am -11:30 pm

Savoy Fraine, Recreation Programs Coordinator

Tri Delta is the only mobility option for Antioch seniors, and needs improvements for senior mobility. I have 60-90 people a day that use it, and they must make arrangements 24 hours in advance. I want to hold evening events and can't.

- Routes are circuitous
- Often late.

Most importantly:

- Senior Center programs are currently restricted to daytime due to service hours of Tri-Delta. We have to shape our programming around this. I have a lot of seniors who would like to socialize in the evening. This is when many get lonely or anxious.
- We need to extend fixed-route service into the evening
- Provide more direct, faster routes to senior centers and other senior resources
- There is a "driver request program" whereby I can call Tri-Delta to ask for volunteer drivers at off-times if I have an event that needs getting seniors there. We should expand the Tri Delta "extra driver request" process to support senior center events. Make it a serious program.
- Reduce 1 hour headway of Route 200 (BART to VA hospital, Kaiser, Regional Medical Clinics)

Michael J. D'Augelli, Travel Trainer, Beyond Antioch

- I would like to see later fixed route service between Bay Point BART to Antioch BART so that paratransit service will be available later in the evening.
- Return of dedicated shuttle that ran out of money.
- Extend route 200 service later into the evening to allow for paratransit service later, or expand paratransit service for all of Tri Delta's service area from Martinez/Concord to far East County regardless of the time fixed routes end until last fixed route bus runs.
- Improve Tri Delta Paratransit by:

- Matching paratransit hours to fixed-route hours
- Closing the service gap between age-related paratransit and ADA-eligible paratransit
- Simplifying the paratransit ADA eligibility process
- Simplifying Tri Delta's new On-Demand Service with Lyft/Uber (now a 5-step/5-day registration process that requires smartphone, credit account, lyft/uber apps and lyft/uber accounts)
- Expand service areas for Try My Ride program
- Improve inadequate bus shelters on Routes to Pittsburg and Antioch senior centers.

A P P E N D I X E

C O M M U N I T Y C O N T A C T S



COMMUNITY CONTACTS

Organization	Name	Position or Role	Contact
Food Bank of Contra Costa and Solano	Neil Zarchin	Food Drive Administrator	FoodDrive@foodbankccs.org
A More Excellent Way Health Organization	Monique Sims-Harper	Executive Director	mnqsims@gmail.com
Los Medanos Community Healthcare District	Barbara Kee	Executive Assistant	bkee@lmchd.org
Los Medanos College	Timothy Leong	Director of Communications and Community Relations	tleong@4cd.edu
Los Medanos College	Bob Kratochvil, Ed.D	President	bkratochvil@losmedanos.edu
Los Medanos College	Teresea Archaga	Director of Student Life	TArchaga@losmedanos.edu
Antioch Senior Center	Savoy Fraine	Recreation Programs Coordinator	sfraine@ci.antioch.ca.us
Beyond Antioch	Michael J. D'Augelli	Certified Travel Trainer	beyondantioch@aol.com
Pittsburg Senior Center	Joy Walker	Recreation Supervisor	jwalker@ci.pittsburg.ca.us
Food Bank of Contra Costa and Solano	Neil Zarchin	Food Drive Administrator	FoodDrive@foodbankccs.org
Bike East Bay	Bruce "Ole" Ohlson	Program Staff	bruceolehlson@hotmail.com>
Contra Costa Countywide Bicycle Advisory Committee	Bruce "Ole" Ohlson	Member	bruceolehlson@hotmail.com>

Appendix C Recommendations Scoring Results

Recommendation	Reflects Community Priorities	Access	Financial Feasibility	Ease of Implementation	Average Score	Benefit	Near Term Potential
Active Transportation Improvements and Safety							
Work with the City of Pittsburg to complete planned community- and City-identified safety and multi-modal improvements along Railroad Avenue	3.75	3.625	4.5	3.75	3.91	3.6875	4.125
Improved ADA crossings	4	5	5	4	4.5	4.5	4.5
Protected (Class I/IV) bicycle facilities, California Avenue to Buchanan Road.	4	4	5	2.5	3.875	4	3.75
Landscape buffers	4	2	3	3.5	3.125	3	3.25
Lighting improvements	3	3.5	5	5	4.125	3.25	5
Develop a pedestrian/bicycle crossing over the BNSF rail corridor between Century Plaza in Pittsburg and the Costco center in Antioch	4	3	1	1	2	3.25	1
Complete community- and City-identified safety and multi-modal improvements along Harbor Street between Buchanan Road and Solari Street in Pittsburg	3.875	3.625	4	3.75	3.81	3.75	3.875
Harbor Street from Buchanan to Stoneman Avenue: Class II Buffered Bike Lanes	4.5	4	4	2.5	3.75	4.25	3.25
Harbor Street from Stoneman Avenue to 3rd Street: Class IV Separated Bikeway	4.5	4	4	2.5	3.75	4.25	3.25
Improved Intersections at various points across the segment	4	3.5	4	5	4.13	3.75	4.5
Mark green conflict zone striping on all approaches and through bus stops	2.5	3	4	5	3.625	2.75	4.5
Improve crossings at key Southern Pacific (Mococo Line) and BNSF railroad crossings in the CBTP study area.	3.17	2.67	1.00	1.25	1.35	2.9166667	1.125
Harbor Street under-crossing of Mococo railroad line in Pittsburg	3	4	1.5	2.5	2.75	3.5	2
Harbor Street under-crossing of BNSF railroad line in Pittsburg	3	4	1.5	2	2.625	3.5	1.75
Willow Pass Road under-crossing of both the BNSF and the Mococo lines in Pittsburg	4	4	1.5	1	2.625	4	1.25
McAvoy Road at grade crossing of BNSF and Mococo railroad lines in Bay Point	3	4	1.5	2	2.625	3.5	1.75
A Street crossing of the Mococo railroad line in Antioch	3	4	1.5	3	2.875	3.5	2.25
Cavalla Road crossing of the Mococo railroad line in Antioch	3	4	1.5	3	2.875	3.5	2.25
Implement bicycle and pedestrian safety improvements at State Route 4 intersections.	5	3.5	2	4	3.63	4.25	3
Add Class I Bike Path on west side of San Marcis Blvd from Evora Rd to Rio Verde Circle	5	4	2	3	3.5	4.5	2.5
Implement near-term improvements at Somersville Road/SR 4 intersection, including striping, signal modifications	5	3	2	5	3.75	4	3.5
Improve pedestrian and bicycle experience and safety along major corridors in study area.	4.5	4	3	4.00	3.88	4.25	3.5
Install pedestrian safety infrastructure along Willow Pass Road	4.5	4	3	4	3.875	4.25	3.5
Install pedestrian safety infrastructure along Port Chicago Highway	4.5	4	3	4	3.875	4.25	3.5
Install pedestrian safety infrastructure along Bailey Road	4.5	4	3	4	3.875	4.25	3.5
Add pedestrian lighting and infrastructure improvements at intersections along the transition from Willow Pass Road to North Parkside Drive	4	3	2	4	3.25	3.5	3
Program and install staffed, "Pop-Up" Bike Repair Workshops for rider support at Pittsburg/Bay Point and Pittsburg Center BART stations	4	3	1	3	2.75	3.5	2
Close bicycle, pedestrian, and safety gaps along the De Anza Trail in Bay Point, Pittsburg and Antioch.	3.5	3	3.5	4.25	3.5625	3.25	3.875
Close the bicycle facilities gap between Willow Pass Road and Port Chicago Highway with bike path along the north side of Highway 4	3	2	4	3	3	2.5	3.5
Install safety improvements and updates at the Bailey Road and De Anza Trail crossing	3	3	4	5	3.75	3	4.5
Close sidewalk gaps along Madison Avenue from the trail to Canal Road	3	3	4	4	3.5	3	4
Improve the personal security and comfort along portion of the trail in study area via new lighting, selective vegetation removal, installation of cameras, and improved sight lines	5	4	2	5	4	4.5	3.5
Transit							
Upgrade up to 10 bus stops along high-use Tri Delta and County Connection routes with new lighting, signage, and shelter improvements consistent with 2019 NACTO and ADA standards	4	4	3	4	3.75	4	3.5
Upgrade or install bus shelters on routes serving the Pittsburg and Antioch Senior Centers consistent with 2019 NACTO and ADA standards	4	4	3	4	3.75	4	3.5
Upgrade evening service and increase headways on high-use routes connecting Los Medanos Community College and Pittsburg Adult Education Center to BART Stations and the City of Antioch, including Routes 387, 380, 381 and 388	3.5	4	1	3	2.875	3.75	2
Reduce the 1-hour headway on Tri Delta Route 200 (BART to VA hospital, Kaiser, Regional Medical Clinics) and extend service to 9:00 PM	3	4	2.5	3.5	3.25	3.5	3
Expand bus service between Pittsburg/Bay Point BART and Pittsburg Center BART stations and Bay Point community. Decrease headways of Routes 389, 201, 206.	5	5	1	3	3.5	5	2

Upgrade paratransit service for improved access to key transit and support resources.	4.00	4.33	1.33	3.67	3.333333		4.166667	2.5
<i>Expand evening service of Tri Delta Paratransit by amending policy that restricts paratransit hours to fixed route hours, or extending hours of fixed routes between Pittsburg/Bay Point BART Station and Antioch BART Station</i>	4	4	1	3	3		4	2
<i>Investigate set-asides for a dedicated senior center paratransit program.</i>	4	4	1	4	3.25		4	2.5
<i>Extend Route 200 service later into the evening to allow for later paratransit service.</i>	4	5	2	4	3.75		4.5	3
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Simplify the eligibility and reservation processes for Tri Delta Paratransit.	4	2	4	5	3.75		3	4.5
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Develop a public information program to introduce and educate special needs transit riders about Tri Delta's Tri Myride service. Develop in-person presentations about program eligibility, technology and service areas for senior centers and disability and other support facilities	4	3.5	4	4	3.875		3.75	4
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School Access and Safety								
Implement Safe Routes to School infrastructure, including traffic calming techniques such as lane narrowing, speed humps, bulb-outs, and rapid flashing beacons at:	3.6	3.8	3.5	3.9	3.7		3.7	3.7
<i>Bel Air Elementary in Bay Point</i>	4	3	3.5	4	3.625		3.5	3.75
<i>Pittsburg High School in Pittsburg</i>	4.5	4	4	3.5	4		4.25	3.75
<i>Highland Elementary School in Pittsburg</i>	3.5	4	3	4	3.625		3.75	3.5
<i>Parkside Elementary School in Pittsburg</i>	3	4	3	4	3.5		3.5	3.5
<i>Belshaw Elementary School in Antioch</i>	3	4	4	4	3.75		3.5	4