



**PUBLIC ADVISORY:
THE CITY COUNCIL CHAMBER WILL NOT BE OPEN TO THE PUBLIC**

Pursuant to Section 3 of Executive Order N-29-20, issued by Governor Newsom on March 17, 2020, the meeting of the Planning Commission will be conducted electronically through Zoom and broadcast live through Granicus on the City's website which can be located on the [Streaming Media](#) page. If you do not have internet access, the meeting will also be available to the public in a listening-only mode via telephone call-in line. To listen to the meeting, dial 1 (669) 900-6833. When prompted, dial in the Webinar ID, 845 1763 3482 and Password, 086252.

Please be advised that pursuant to the Executive Order, and to ensure the health and safety of the public by limiting human contact that could spread the COVID-19 virus, the Council Chamber will not be open for the meeting. Planning Commissioners will be participating electronically and will not be physically present in the Council Chamber.

Beginning with the January 26, 2021 Planning Commission Meeting, live comments will be allowed by members of the public via teleconferencing during Zoom meetings and emailed comments will no longer be read aloud by staff. To be placed in a queue to comment, please adhere to the following instructions.

To Participate in Public Comment During the Meeting:

- Notify the City Clerk's Office via email by 3:00 p.m. on the meeting date that you would like to be placed in the queue for general Public Comments, or comments on a specific agenda item. Requests received after 3:00 p.m. on the date of the meeting will not be able to comment.
- Email your name and telephone number to meetingcomments@ci.pittsburg.ca.us. We need both identifications to pair you with the item you wish to speak on. You must also be sure that you call in using the number you have provided, or we may not be able to identify you as a speaker.
- Your email must include the words **"FOR PUBLIC COMMENT"** in the subject line and specify the **Agenda Item number or Non-Agenda** as appropriate.
- You will receive an email confirmation with instructions to log in.
- Once the meeting starts (check the Streaming Media link on our website – www.ci.pittsburg.ca.us) you can phone in to Zoom. If you log in before the event has started, you may be disconnected.
- You will be added to the meeting as an attendee and will be called upon by staff for phone-in comments.
- Speakers will be muted until their opportunity to provide public comment.
- All comments will be subject to the three-minute time limitation (approximately 350 words).
- Begin your comment by providing your name and city of residence for the record – although providing this is not required for participation.
- Just as in a live meeting inside the Council Chamber, only one comment per agenda item per person is allowed.

The City of Pittsburg thanks you in advance for taking all precautions to prevent the spread of the COVID 19 virus.



City of Pittsburg Planning Commission Agenda

January 26, 2021

**City Hall Council Chamber
65 Civic Avenue, Pittsburg, CA 94565**

**Regular Meeting
7:00 P.M.**

Planning Commission Members

**Sarah Foster, Chair
Christopher Moreno, Vice-Chair
Dr. Trinh Nguyen, Commissioner
Wolfgang Croskey, Commissioner
James Coniglio, Commissioner
Elissa Robinson, Commissioner
Vacant, Commissioner**

A decision by the Planning Commission is not final until the appeal period expires 10 calendar days after the date the decision occurred. The applicant, City Council member(s), City Manager, or any affected person may appeal the denial, approval, recommendation, or any condition of approval of an item within the 10-day appeal period. A completed appeal form and the applicable filing fee must be filed with the City Planner, 65 Civic Avenue, Pittsburg. The appeal form must include the name and address of the appellant and state the reasons for the appeal. The appeal will be set for City Council consideration and appropriate public notification given.

The Commission requests that you refrain from disruptive conduct during the meeting and that you observe the order and decorum of the Council Chamber. Please refrain from making personal, impertinent, or slanderous remarks. Boisterous or disruptive behavior while the Commission is in session, is considered counterproductive and will not be tolerated.

CALL TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

DELETIONS, WITHDRAWALS OR CONTINUANCES

COMMENTS FROM THE AUDIENCE

PRESENTATIONS

1. Pittsburgh Moves Active Transportation Plan

This is a presentation of the final draft of the proposed Pittsburgh Moves Active Transportation Plan.

CONSENT

2. Minutes

Minutes of December 8, 2020

PUBLIC HEARINGS

3. Frontage Road General Plan Amendment and Rezone Project, AP-20-1544 (GP, RZ)

This is a request for recommendation of City Council approval of a general plan amendment and rezoning of a city-owned undeveloped parcel and an unmapped portion of an abandoned right-of-way, to 'Community Commercial' and CC (Community Commercial) District, respectively. The site totals less than three acres in size and is located along the northern side of Frontage Road, between Dover Way and Chelsea Way. Assessor's Parcel No. (APN) 087-227-001. Development of the site is not proposed at this time.

ZONING ADMINISTRATOR REPORTS

4. Notice of Intent to Exercise Delegated Design Review Authority, Submittal of Adopted Zoning Administrator Resolutions.

The Zoning Administrator submits two notices of intent to exercise delegated design review authority for: 1) a remodel of the existing Ace Hardware store located at 125 E. Leland; and 2) a new 60-foot monopole for microwave communications at 570 W. 10th Street. The Zoning Administrator also submits one resolution previously approved under the delegated authority (Planning Commission Resolution No. 9918).

STAFF COMMUNICATIONS

COMMITTEE REPORTS / COMMISSIONER COMMENTS

ADJOURNMENT OF PLANNING COMMISSION MEETING

NOTICE TO PUBLIC

NOTICE TO THE DISABLED AND VISUALLY OR HEARING IMPAIRED

In compliance with the Americans with Disabilities Act, the city of Pittsburg will provide special assistance for disabled citizens. Upon request, an agenda for any meeting shall be made available in appropriate alternative formats. The Council Chamber is equipped with sound amplifier units for use by the hearing impaired. The units operate in conjunction with the Chamber's sound system. You may request the sound amplifier from the City Clerk for personal use during Commission meetings. If you need special assistance to participate in this meeting, or are requesting a specially formatted agenda, please contact the City Clerk at 925-252-4850. Notification 48 hours prior to the meeting will enable the city to make reasonable arrangements to ensure accessibility to this meeting or provide the requested agenda format. (28 CFR 35.102-35.104 ADA Title II)

GENERAL INFORMATION

Copies of the open session agenda packets that are distributed to the Planning Commission are on file in the office of the Planning Department, 65 Civic Avenue, Pittsburg, California, and are available for public inspection, beginning no fewer than 72 hours in advance of the meeting, by appointment. Additionally, if any reports or documents that are public records are distributed to the Planning Commission fewer than 72 hours before the meeting, those reports, and documents will also be available for public inspection in the city's Planning Department prior to the meeting. As a courtesy, the agenda is also located on the city's website at www.ci.pittsburg.ca.us.

**CITY OF PITTSBURG
PLANNING COMMISSION
STAFF REPORT
January 26, 2021**

ITEM: Pittsburg Moves Active Transportation Plan

ORIGINATED BY: City of Pittsburg, 65 Civic Avenue, Pittsburg, CA 94565

SUBJECT: This is a presentation of the final draft of the proposed Pittsburg Moves Active Transportation Plan.

RECOMMENDATION:

Staff recommends the Commission receive a presentation on the final draft of the proposed Pittsburg Moves Active Transportation Plan.

BACKGROUND:

The Pittsburg Moves Active Transportation Plan (ATP) was developed by the City of Pittsburg to promote better active transportation in the community. Active transportation is any self-propelled, human-powered form of transportation, such as walking or bicycling.

The initial push for Pittsburg Moves came from the Healthy & Livable Pittsburg Collaborative (HLPC). The HLPC was formed in 2015, bringing together several community partners to launch a plan of action for improving the health outcomes of Pittsburg residents. The group's steering committee included representatives from Contra Costa Health Services (CCHS), the City of Pittsburg, Pittsburg Unified School District (PUSD), Kaiser Permanente, Los Medanos Community Healthcare District, and other organizations such as First 5 Contra Costa and La Clinica de La Raza.

Throughout 2015, HLPC, with the support of Kaiser and John Muir Health, engaged and gathered input from Pittsburg seniors, youth, and adults on recommendations for strategies that could promote healthy eating and active living in the community. With this input, HLPC developed a [Community Action Plan](#) that included five long-term goals focused on nutrition and health education, physical activity, community engagement, the built-environment, and policy. One of HLPC's objectives was developing an active transportation plan and a better built environment to get more people walking and biking around town. According to the California Household Travel Survey (2010-2012), 10 percent of people in Pittsburg walk for all trip types, and less than one percent use bikes.

In response to HLPC's work, the City applied for grant funding from the California Transportation Commission to prepare the City's first active transportation plan, which became known as "Pittsburg Moves." The City received funding for the Pittsburg Moves ATP in April 2018. A bicycle and pedestrian advisory group met throughout the plan development process to help guide the work. The group included staff from the

City, PUSD, CCHS, BART, Bike East Bay, East Bay Regional Parks, and Contra Costa County Fire Protection District.

The City used a variety of strategies such as traditional workshops, “pop-ups”, and other activities to engage residents during the preparation of the Pittsburg Moves ATP. These strategies are described in detail on pages 6 through 11 of the Pittsburg Moves ATP (see Attachment 1 of this report). There were several key issue areas that emerged from the public engagement:

- **Speeding and Distracted Driving:** Most participants felt that people in Pittsburg drive too fast. Others mentioned drivers are often distracted with their phones. Participants voiced a need for innovative traffic calming solutions and additional traffic enforcement. The Pittsburg Center BART Station was one of the areas participants said the City should focus on.

The data gathered for the Pittsburg Moves ATP indicates there is a need for more bicyclist and pedestrian safety improvements. According to the Statewide Integrated Record System, there were a total of 41 bicycle injury collisions and 88 pedestrian injury collisions in Pittsburg between 2013 and 2017. Fifteen of those collisions were fatal.

- **Complete Neighborhoods:** Several participants indicated they have no choice but to use their cars because they live too far from the places they work, shop, dine, or recreate. They said the City should emphasize local jobs and a full range of commercial services in each neighborhood if it wants a greater number of people walking or biking to their destinations.
- **Complete Streets:** Many shared that Pittsburg’s streets seem designed to prioritize the movement of cars. However, everyone strongly agreed that Pittsburg’s streets should be designed for the safety and mobility of everyone, including bicyclists and pedestrians. Participants said the City should provide wider sidewalks; more shade trees and better lighting; protected bike lanes; frequent and safe crossing opportunities; median islands; accessible pedestrian signals; curb extensions; and narrower travel lanes whenever possible.
- **Street Maintenance:** Almost everyone indicated that Pittsburg’s streets need more frequent repair and maintenance. Participants asked the City to allocate more funding to replace faded bike lane and crosswalk striping, repair tripping hazards along sidewalks, and remove potholes and debris from roadways.
- **Personal Security:** Pittsburg’s parks were among the top destinations mentioned when participants were asked about their favorite places to walk or bike in the community. Unfortunately, many people said they now avoid going because of the appearance of homeless encampments. Participants said their sense of safety could improve if there was more police involvement. Parents also

mentioned that personal security is an important factor when it comes to letting their children walk or bike to school.

- **Education & Encouragement:** Participants called for the City to provide more educational programs and initiatives that encourage safe, responsible behavior by all road users. They said programs should go beyond safety and include bike mechanic training, learn-to-ride lessons, and other types of programming. Parents shared they would feel more confident about their kids walking or biking to school if they received proper safety training.

PITTSBURG MOVES ATP OVERVIEW:

The Pittsburg Moves ATP envisions Pittsburg becoming the most bicycle and pedestrian friendly community in East Contra Costa County. It also aims to eliminate bicycle and pedestrian deaths by the year 2040. To realize this vision, the Pittsburg Moves ATP includes the following active transportation goals:

- **Goal 1: Emphasize land use patterns and development projects that promote active transportation.**
- **Goal 2: Create a comprehensive active transportation network that enhances safety, access, comfort, and convenience for everyone.**
- **Goal 3: Maintain an active transportation network that it is attractive, comfortable, and free of hazards.**
- **Goal 4: Implement a range of education, encouragement, enforcement, and evaluation programs that support walking and bicycling.**

Each goal is accompanied by several policies that would help guide any future decisions affecting active transportation in the community. The recommended policies are included on pages 56 through 61 of the Pittsburg Moves ATP.

The Pittsburg Moves ATP recommends over 250 improvement projects intended to create a comprehensive active transportation network that enhances safety, access, comfort, and convenience for bicyclists and pedestrians of all ages and abilities. The full list of recommended projects is contained in Appendix A of the document (see Attachment 2 of this report). The City would prioritize improvements located along the following corridors:

1. Delta de Anza Trail
2. Harbor Street
3. Railroad Avenue
4. Kirker Pass Road
5. Willow Pass Road/North Parkside Drive

6. E. 14th Street/Pittsburg Antioch Highway
7. Schooner Way/Polaris Drive/Power Avenue/California Avenue
8. Loveridge Road
9. Willow Pass Road/West 10th Street/East 10th Street
10. West Leland Road/East Leland Road

Implementation of the project list would more than double the city's existing bikeway mileage, from about 43 miles in 2018 to approximately 90 miles by 2040. The list includes almost 26 additional miles of shared-use paths; just over seven miles of new buffered bike lanes; eight-and-a-half miles of new bike boulevards; and just over 17 miles of new separated bikeways. The new bicycle infrastructure is meant to eliminate existing gaps; improve north-south and east-west connectivity; and reduce the high level of traffic stress along Pittsburg's arterial streets.

There are also over 11 miles of new sidewalk proposed in order to bridge existing gaps in the city's pedestrian network. A variety of pedestrian safety improvements are also proposed for different crosswalk locations. These include high-visibility crosswalk markings, parking restrictions at crosswalk approaches, adequate night-time lighting, raised crosswalks, advanced yield markings, in-street pedestrian crossing signs, curb extensions, median refuge islands, rectangular flashing beacons, and pedestrian hybrid beacons. The pedestrian safety improvements are intended to address conflicts at crossing locations, reduce vehicle speeds, enhance pedestrian visibility, increase the number of drivers who yield to pedestrians, and provide sufficient separation between pedestrians and traffic. Appendix C of the Pittsburg ATP (see Attachment 3 of this report) establishes a brand-new crosswalk policy that the City would use when considering whether to mark, enhance, or remove crosswalks throughout the community.

GENERAL PLAN/CODE COMPLIANCE:

General Plan: The Pittsburg Moves ATP is consistent with General Plan Transportation Element Policies 7-P-33 through 7-P-54 which seek to improve bikeways and pedestrian movement throughout the community. It is also consistent priorities identified during the visioning workshops for the Envision Pittsburg General Plan Update. Residents participating in those workshops expressed that as the city continues to grow, additional emphasis needs be placed on alternative ways of getting around, including walking and bicycling.

Environmental Review: The Pittsburg Moves ATP is subject to the California Environmental Quality Act (CEQA) and the State CEQA guidelines. Pursuant to the provisions of the State CEQA Guidelines, an Initial Study was prepared for the Pittsburg Moves ATP. Based on the analysis in the study, the staff determined that potentially significant effects of the project could be lessened through specified mitigations, and subsequently, a draft Mitigated Negative Declaration (MND) was prepared. A copy of the Initial Study and MND is provided in Attachment 5 of this report.

On August 26, 2020, a Notice of Intent to Adopt a Mitigated Negative Declaration was distributed to the public for a 30-day review, in accordance with CEQA Guidelines. Prior to the close of the comment period, the City received a comment letter from East Bay Regional Parks (EBRP). The EBRP letter requested that the Pittsburg Moves ATP be revised to include the alignment identified for Pittsburg's portion of the Great California Delta Trail. The alignment is shown in Attachment 6 of this report and it has been incorporated into the final draft of the Pittsburg Moves ATP.

ANALYSIS:

Implementation of the Pittsburg Moves ATP would ensure that future land use decisions and capital improvement projects address the City's active transportation needs. It would also help improve the community's future health, mobility, livability, and economic outcomes. The subsections below describe how active transportation impacts each these outcome areas.

Health: Active transportation allows people to build physical activity into everyday life by enabling them to walk or bike to their destinations. Even a moderate amount of daily exercise has a range of benefits to both physical and mental health. These benefits range from lower risk of heart disease, adult-onset diabetes, high-blood pressure and stress to more energy, flexibility, and muscle strength. Physical activity can also help combat obesity and lower asthma rates. According to CCHS data for 2018-2019, 51 percent of 5th graders, 55% of 7th graders, and 54% of 9th graders in the Pittsburg Unified School District were considered overweight or obese. [CalEnviroscreen 3.0](#) data for 2018 also indicates that Pittsburg is in the top 90 to 99th percentile statewide for asthma and cardiovascular disease.

Mobility: Active transportation gives people who cannot drive more and affordable options for getting around independently to meet their daily needs. Those who benefit most from improvements to walking and biking include children (particularly for going to school); many seniors and people with disabilities; and low-income families, for whom the cost of owning and operating a car can be more prohibitive. Transportation options are also important for drivers who would like to spend less time behind the wheel. Drivers also benefit from less congestion and demand for parking, as even a small number of people shifting to walking and biking can have an impact on traffic.

Livability: To the extent that promoting active transportation leads people to walk and bike more and to drive less, it can improve the quality of life in important ways. When residents are out on foot or by bike, they interact more with neighbors. Residential streets become calmer and quieter, which, again, encourages interaction. Streets become safer, not only in terms of traffic but also in terms of crime since pedestrians and bicyclists put "more eyes on the street." According to the American Planning Association, 81 percent of millennials say affordable and convenient transportation alternatives are at least somewhat important when deciding where to live and work.

Economy: Active transportation can also benefit the bottom line of households, businesses, and cities. The economic benefits of walking and biking include lower transportation costs for individuals and families; increased property values in traffic-calmed neighborhoods; savings from less wear and tear on streets and less demand for roadway improvements and parking lots; and a greater ability for communities to attract new residents and employers. According to the Active Transportation Alliance, homes in neighborhoods with a high "[WalkScore](#)" sell for \$4,000 to \$34,000 more than the average home.

Environment: The most critical environmental benefits of active transportation are reduced air pollution and emissions of greenhouse gases. According to the 2019 [California Green Innovation Index](#), on-road passenger vehicles account for 28 percent of the state's total GHG emissions in 2017. The [State Department of Public Health](#) recently estimated that California could reduce emissions by approximately 14 percent if half of its population met the U.S. Surgeon General's physical activity guidelines (which for adults is 150 weekly minutes of moderate physical activity) through active transportation.

ACTION REQUIRED:

No action required.

ATTACHMENTS:

1. Pittsburg Moves Active Transportation Plan (December 2020 Final Draft)
2. Appendix A – Project List
3. Appendix B – Crosswalk Policy
4. Appendix C – Plan Conformance with ATP Guidelines
5. Initial Study/Mitigated Negative Declaration for the Pittsburg Moves Active Transportation
6. Great California Delta Trail Alignment

Prepared by: Hector J. Rojas, AICP, Senior Planner



PITTSBURG MOVES

Active Transportation Plan

Prepared by



FEHR & PEERS

December 2020



Acknowledgments

Pittsburg City Council

- Jelani Killings, Mayor
- Merl Craft, Vice Mayor
- Holland Barret White
- Shanelle Scales-Preston
- Juan Antonio Banales

Pittsburg Planning Commission

- James Coniglio
- Elissa Robinson
- Christopher Moreno
- Dr. Trinh Nguyen
- Wolfgang Croskey
- Punita Bhasin

City of Pittsburg & Consultant Team

- Hector Rojas, City of Pittsburg
- Paul Reinders, City of Pittsburg
- Nhat Phan, City of Pittsburg

- Carrie Modi, Fehr & Peers
- Meghan Mitman, Fehr & Peers
- Sarah Saviskas, Fehr & Peers
- Jonathan Berlin, Rincon Consultants, Inc.
- Paul Zykofsky, Local Government Commission
- Josh Meyer, Local Government Commission
- Susie Hufstader, Advocacy Manager

Pittsburg Moves Bicycle & Pedestrian Technical Advisory Group

- Jill Hecht, City of Pittsburg
- Richard Abono, City of Pittsburg
- Kristin Pollot, City of Pittsburg
- Bobby Joaquin, City of Pittsburg
- Bryan Ballardo, City of Pittsburg
- Laura Wright, City of Pittsburg
- Robert Semas, Pittsburg Police

- Matt Belasco, Pittsburg Unified School District
- Kamala Parks, Bay Area Rapid Transit District
- Clayton Johnson, Contra Costa Health Services
- Chris Barton, East Bay Regional Parks
- Tracie Dutter, Contra Costa Fire Protection District

Special Thanks

- Bruce Ohlson
- Ana Villalobos, Contra Costa Health Services



Pittsburg Moves was funded through an Active Transportation Program Planning Grant awarded by the California Active Transportation Commission.

Table of Contents

1. Introduction.....1

2. Existing Conditions.....15

3. Vision & Goals.....55

4. Improvement Projects.....63

5. Support Programs.....99

Appendix A - Project List.....A-1

Appendix B - Crosswalk Policy.....B-1

Appendix C - Plan Conformance with ATP Guidelines.....C-1



1

Introduction

Purpose of this Plan

Pittsburg Moves is a plan that was developed by the City of Pittsburg to promote better active transportation in the community. Active transportation is any self-propelled, human-powered form of transportation, such as walking or bicycling. By prioritizing active transportation, the City of Pittsburg hopes to improve its health, mobility, livability, economy, and environment.

Pittsburg has a disproportionate share of poor public health outcomes. The rate of deaths caused by diabetes is 37% in Pittsburg compared to 19% in Contra Costa County. The share of overweight or obese children is 55% of Pittsburg Unified School District students compared to 36% countywide.¹

¹ California Physical Fitness Test (PFT) (2018)



Health

Active transportation allows people to build physical activity into everyday life by enabling them to walk or bike to their destinations. Even a moderate amount of daily exercise has an impressive range of benefits to both physical and mental health. These benefits range from lower risk of heart disease, adult-onset diabetes, high-blood pressure and stress to more energy, flexibility and muscle strength. Of course, physical activity can also help combat obesity and lower asthma rates.

Did You Know?

- 55% of American adults do not meet minimum recommended levels of physical activity.²
- In 2016 – 2018, 54 residents died of diabetes. This accounts for 4.1% of the 1,323 deaths of Pittsburg residents in those years.¹
- In 2018-2019, 51% of 5th graders, 55% of 7th graders, and 54% of 9th graders in the Pittsburg Unified School District were considered overweight or obese. Of those students considered overweight or obese, about 2/3 are considered at a health risk.¹
- Pittsburg is in the top 90 to 99th percentile statewide for asthma and cardiovascular disease.³

² Active Transportation Alliance
³ CalEnviroscreen 3.0 data

Mobility

Active transportation gives people who cannot drive more and affordable options for getting around independently to meet their daily needs. Those who benefit most from improvements to walking and biking include children (particularly for going to school); many seniors and people with disabilities; and low-income families, for whom the cost of owning and operating a car can be more prohibitive.

Transportation options are also important for drivers who would like to spend less time behind the wheel shuttling themselves or others around. Drivers also benefit from less congestion and demand for parking, as even a small number of people shifting to walking and biking can have an impact on traffic.

Did You Know?

- In a typical community, 20-40% of residents cannot drive due to age, disability or poverty, and so depend on non-automobile modes, or are forced to rely on motorists for rides.²
- 28% of all trips are one mile or less yet two-thirds of these trips are made by car.²

Livability

To the extent that promoting active transportation leads people to walk and bike more and to drive less, it can improve the quality of life in important ways. When residents are out on foot or by bike, they interact more with neighbors. Residential streets become calmer and quieter, which, again, encourages interaction. Streets become safer, not only in terms of traffic but also in terms of crime, since pedestrians and cyclists put “more eyes on the street.”

Did You Know?

- Per capita crime rates tend to be lower in more walkable communities. Better conditions for walking (and for cycling) increases the number of active participants, who act as deterrents to illegal or anti-social behavior and are readier to report threats.²
- 81% of millennials (generally people born in the 1980s and 1990s) say affordable and convenient transportation alternatives are at least somewhat important when deciding where to live and work.⁴

⁴ American Planning Association

Economy

Active transportation can benefit the bottom line of households, businesses, and cities. The economic benefits of walking and biking include lower transportation costs for individuals and families; increased property values in traffic-calmed neighborhoods; savings to the cities from less wear and tear on streets and less demand for roadway improvements and parking lots; and a greater ability for communities to attract new residents and employers.

Did You Know?

- Car-dependent households devote 20% more income to transportation than households in communities with more pedestrian- and bicycle-friendly streets.²
- Homes in neighborhoods with a high “WalkScore” sell for \$4,000 to \$34,000 more than the average home.²

Environment

The most critical environmental benefits of active transportation are reduced air pollution and emissions of greenhouse gases. Other benefits include energy savings; less noise pollution; less water pollution; and even reduced pressure to develop agricultural and open space.

Did You Know?

- 30-40% of Americans live in areas impacted by traffic-related air pollution.²
- Short car trips pollute more per mile because engines are less efficient during the first few minutes of operation. Because walking and biking tend to substitute for short trips, they provide relatively large energy savings: a 1% shift from driving to walking or biking reduces fuel consumption 2-4%.²
- Driving can lead to water pollution from car fluids washing off streets and highways in the form of run-off; and from air pollution depositing into water bodies.⁵
- Driving requires 15 times as much space – in the form of roads and parking – than biking, and about 100 times as much as walking.²

⁵ U.S. Environmental Protection Agency

Plan Development

The initial push for Pittsburg Moves came from the Healthy & Livable Pittsburg Collaborative (HLPC). The HLPC was formed in 2015, bringing together several community partners to launch a plan of action for improving the health outcomes of Pittsburg residents. The group's steering committee included representatives from Contra Costa Health Services (CCHS), the City of Pittsburg, Pittsburg Unified School District (PUSD), Kaiser Permanente, Los Medanos Community Healthcare District, and other organizations such as First 5 Contra Costa and La Clinica de La Raza.

Throughout 2015, HLPC, with the support of Kaiser and John Muir Health, engaged and gathered input from Pittsburg seniors, youth, and adults on recommendations for strategies that could promote healthy eating and active living in the community. With this input, HLPC developed a Community Action Plan that included five long-term goals focused on nutrition and health education, physical activity, community engagement, the built-environment, and policy. One of HLPC's objectives was developing an active transportation plan and a better built environment to get more people walking and biking around town.

In response to HLPC's work, the City of Pittsburg applied for grant funding from the California Transportation Commission to prepare the City's first active transportation plan, which became known as "Pittsburg Moves." The City received funding for Pittsburg Moves in April 2018. A bicycle and pedestrian advisory group met throughout the plan development process to help guide the work. The group included staff from the City of Pittsburg, PUSD, CCHS, BART, Bike East Bay, East Bay Regional Parks, and Contra Costa County Fire Protection District. Pittsburg Moves was adopted by the Pittsburg City Council on _____, 2020 through Resolution No. 20-_____.

FIGURE I-1
PITTSBURG MOVES PLANNING PROCESS



Plan Elements

Pittsburg Moves is organized into the following chapters:

- **Chapter 1:** Introduction
- **Chapter 2:** Existing Conditions
- **Chapter 3:** Vision & Goals
- **Chapter 4:** Improvement Projects
- **Chapter 5:** Support Programs

Public Engagement

The City of Pittsburg used a variety of strategies to engage residents during the preparation of Pittsburg Moves. The following sections provide a brief description of each strategy. The City advertised for Pittsburg Moves events using its Facebook and Nextdoor accounts, online events calendar, email subscription lists, and digital reader board located at the Pittsburg Center Bay Area Rapid Transit (BART) Station. For the workshops, the City also sent out bilingual, electronic fliers using Peachjar, which is a platform used by PUSD to communicate with its parents through email.

Public Workshops

The City hosted two traditional public workshops at Pittsburg City Hall that were held in the evenings between 6:30 PM and 8:30 PM. The first workshop was held on July 12, 2018 and it was designed to have the community identify locations where it is challenging to walk or ride a bicycle. The second workshop was held on October 30, 2018. At this workshop, the City unveiled the active transportation infrastructure projects that were developed based community input.

Pop-ups

The City set up “pop-up” booths at larger community events to raise awareness about Pittsburg Moves and get additional feedback about the community’s active transportation needs from people that normally cannot attend traditional evening workshops. Participants used maps to point out issue and opportunity areas. They also identified the types of facilities that should be installed throughout the city to increase access and safety. The participants received a flashing, reflective armband and other giveaways in exchange for providing their comments. Pittsburg Moves pop-ups were held at the following community events between 2018 and 2019:

- 3/27/18 – Bike-to-Work Day (Pittsburg/Bay Point BART Station), 6:30 AM
- 8/7/18 – National Night Out (Small World Park), 6:00 PM
- 8/14/18 – Jazz/Blues at the Marina (51 Marina Boulevard), 6:00 PM
- 8/17/18 – Movies in the Park (John Buckley Square), 6:00 PM
- 8/18/18 – Pittsburg Farmer’s Market (John Buckley Square), 9:00 AM
- 8/24/18 – Movies in the Park (John Buckley Square), 6:00 PM



- 8/25/18 – Pittsburg Farmer’s Market (John Buckley Square), 9:00 AM
- 8/30/18 – Classic Car Show (Downtown Pittsburg), 6:00 PM
- 8/31/18 – Movies in the Park (John Buckley Square), 6:00 PM
- 9/6/18 – Classic Car Show (Downtown Pittsburg), 6:00 PM
- 9/7/18 – First Fridays (51 Marina Boulevard), 5:30 PM
- 10/26/18 – P.E. Night (Marina Vista Elementary School), 6:00 PM
- 4/18/19 –Walk & Roll (MLK Jr. Junior High School), 7:30 AM
- 4/24/19 – Earth Day Event (Los Medanos College), 10:00 AM
- 5/9/19 – Bike-to-Work Day (Pittsburg Center BART Station), 6:30 AM

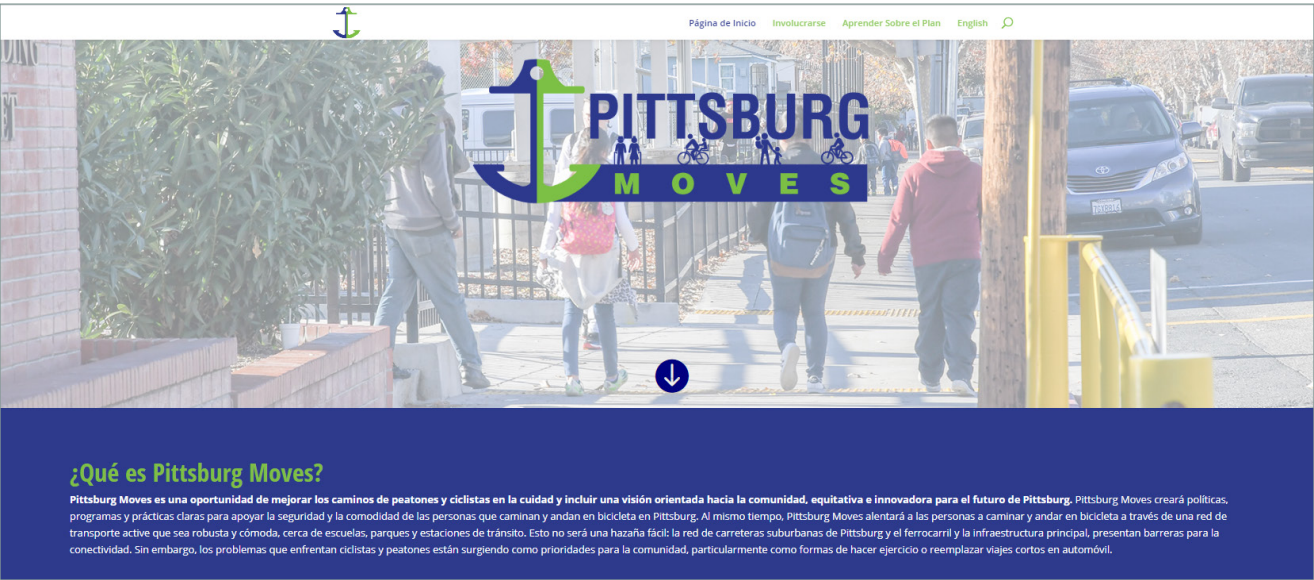
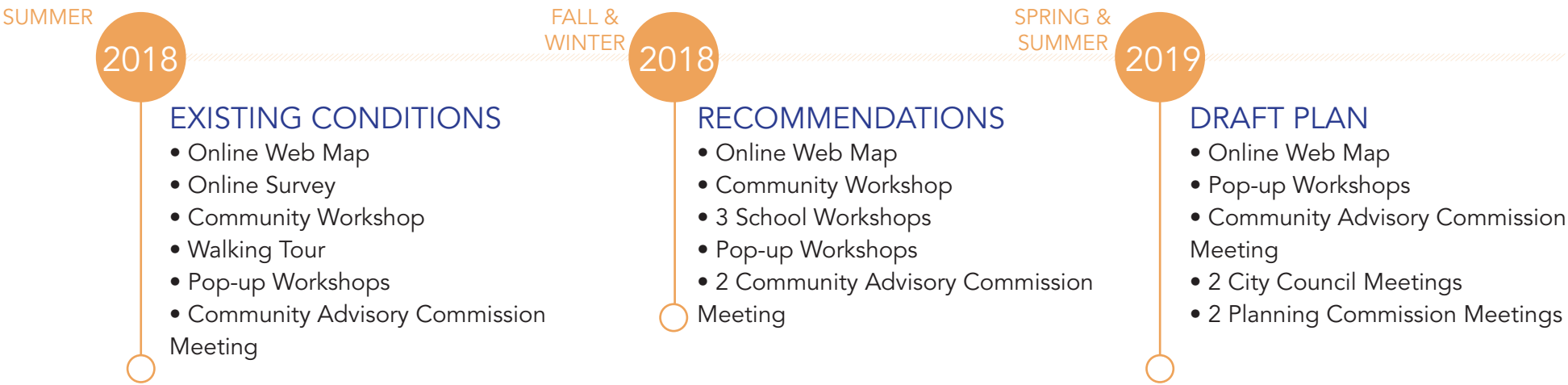


FIGURE I-2
THE PITTSBURG MOVES WEBSITE
DISTRIBUTED INFORMATION
ABOUT UPCOMING EVENTS
AND HOSTED SURVEYS AND
ONLINE WEBMAPPING INPUT

What was the Pittsburg Moves community process?



25
IN-PERSON
EVENTS

pop-ups, workshops,
school meetings, and
living preview

9
OUTREACH
FORMATS

online web map, online survey,
community workshops, walking tour,
pop-up workshops, evening
workshops, living preview, school
workshops, Community Advisory
committee meetings

14
SCHOOL
COMMUNITIES

2
LANGUAGES
English, Spanish

FIGURE I-3
PITTSBURG MOVES COMMUNITY PROCESS SURVEY 17

Living Preview

The City hosted its first ever “living preview” on June 6, 2019. The preview was given between 7:30 AM and 10:00 AM at the intersection of Railroad Avenue and California Avenue. It was designed to give commuters at the Pittsburg Center BART Station an opportunity to try out curb extensions, leading pedestrian intervals, and a protected bikeway. Overall, commuters expressed great enthusiasm and support for these and other safety improvements. They also gave additional feedback on how to improve the intersection and create safe access to the BART station.

Other Activities

Walking & Biking Audit

On December 6, 2017, Pittsburg High School students participated in a walking and biking audit led by staff from the CCHS Community Wellness & Prevention Program, 511 Contra Costa, and the City of Pittsburg. The audit focused on evaluating existing conditions on School Street (between Railroad Avenue and Harbor Street) and Harbor Street (between School Street and California Avenue). Prior to the audit, students learned about a range of active transportation improvements that could be considered to promote better access and safety.

Downtown Walking Tour

Bike East Bay and the City of Pittsburg led a walking tour of the Downtown on June 30, 2018. The tour spanned one mile along portions of Railroad Avenue, E. 10th Street, East Street, E. 8th Street, Cumberland Street, and E. 6th Street. Tour leaders discussed the safety benefits of several recent pedestrian improvements, such as pedestrian-scale lighting, outdoor furniture, rapid flashing beacons, curb extensions, directional curb ramps, and raised intersections. Participants strongly supported installation of similar improvements around other activity centers including BART stations, schools, parks, and shopping centers.

Group Bike Ride

On October 13, 2018, residents participated in a group bike ride led by Bike East Bay and the City of Pittsburg. The four-mile ride began at City Hall with stops at Pittsburg Center BART Station, the Delta de Anza Regional Trail, the intersection of Harbor Street/California Avenue, and Downtown Pittsburg. At the end of the ride, leaders facilitated a discussion about the existing conditions observed by participants. The proposed bikeway network shown in **Figure 4-1** of Chapter 4 was also unveiled after the ride. Participants voiced strong support for the proposed network improvements, especially the new separated bikeways (Class IV) envisioned along many of the City’s arterial roads.



Safe Routes to School Workshops

The Local Government Commission and City of Pittsburg hosted several workshops for parents to identify their children's needs for safer routes to school. The workshops occurred on October 18, 2018 at Marina Vista Elementary School; on October 23, 2018 at Hillview Junior High School; on November 15, 2018 at Pittsburg High School; and on March 20, 2019 at Highlands Elementary School.

The Hillview and Highlands workshops were particularly well-attended by Latinx parents who emphasized the need for additional crosswalk safety around their schools. They were very vocal about how difficult it can be to drop off their children with limited parking available at each school. Many acknowledged this issue could be addressed in part if their neighborhoods had safer routes for walking and biking to school.

Bike Rodeos

On May 31, 2019, Los Medanos Elementary School third graders walked to John Henry Johnson Park where they learned about bike safety and participated in a bike rodeo offered by Bike East Bay and the CCHS Injury Prevention and Physical Activity Promotion Project. A couple of students learned how to ride for the very first time and others were able to take home a brand-new kick scooter or refurbished bike courtesy of CCHS or



Website

The City of Pittsburgh also established an interactive, bilingual website (www.pittsburg-moves.com) for Pittsburgh Moves. Through the website, residents were able to learn about active transportation, look at the city's existing bike and pedestrian infrastructure, and review collision trends in the community. An interactive map was provided to allow residents to map issues, constraints, and opportunities.

Survey

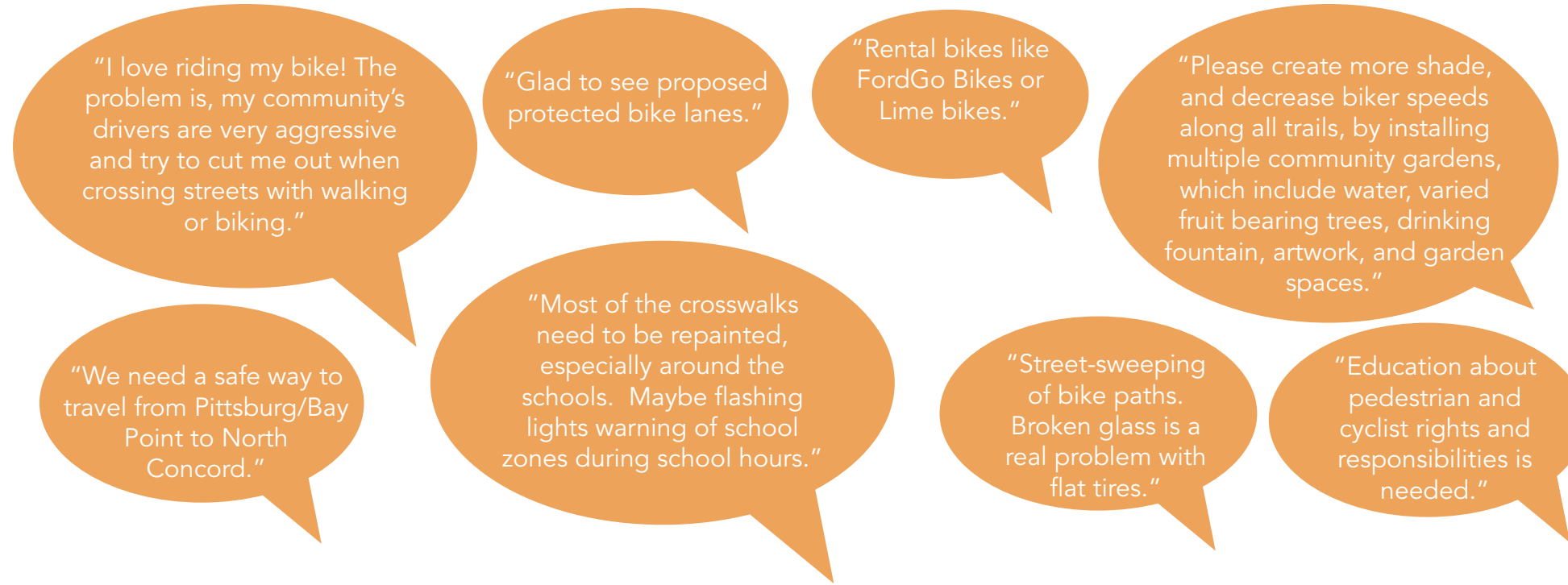
Residents also shared their views about Pittsburgh's active transportation environment through an online and printed survey. One of the survey questions asked residents to provide three words they felt best described the conditions for walking and biking in Pittsburgh. The most frequently used words were "unsafe," "dangerous," and "fearful." A word cloud of other words used by residents to describe Pittsburgh's walking and biking conditions is provided as **Figure 1-4**.



FIGURE I-4
A WORD CLOUD SHOWING HOW RESIDENTS DESCRIBE PITTSBURG'S WALKING AND BIKING CONDITIONS

What did we hear?

FIGURE I-5
COMMUNITY FEEDBACK SURVEY



What were the big topics?


SPEEDING AND
DISTRACTED DRIVING


COMPLETE
NEIGHBORHOODS


COMPLETE
STREETS


STREET
MAINTENANCE


PERSONAL
SECURITY


EDUCATION AND
ENCOURAGEMENT

What We Heard

Over 450 residents and other stakeholders provided input during the public engagement process for Pittsburg Moves. There were several key issue areas that emerged from conversations at workshops, pop-ups, and other activities:

- **Speeding and Distracted Driving:** Most participants felt that people in Pittsburg drive too fast. Others mentioned drivers are often distracted with their phones. These were among the top reasons that participants said they avoid walking or biking in Pittsburg, especially along busy streets like Railroad Avenue. Participants voiced a need for innovative traffic calming solutions and additional traffic enforcement. The Pittsburg Center BART Station was one of the areas participants said the City should focus on.
- **Complete Neighborhoods:** Several participants indicated they have no choice but to use their cars because they live too far from the places they work, shop, dine, or recreate. They said the City should emphasize local jobs and a full range of commercial services in each neighborhood if it wants a greater number of people walking or biking to their destinations.
- **Complete Streets:** Many shared that Pittsburg's streets seem designed to prioritize the movement of cars. However, everyone strongly agreed that Pittsburg's streets should be designed for the safety and mobility of everyone, including bicyclists and pedestrians. Participants said the City should provide wider sidewalks; more shade trees and better lighting; protected bike lanes; frequent and safe crossing opportunities; median islands; accessible pedestrian signals; curb extensions; and narrower travel lanes whenever possible.
- **Street Maintenance:** Almost everyone indicated that Pittsburg's streets need more frequent repair and maintenance. Participants asked the City to allocate more funding to replace faded bike lane and crosswalk striping, repair tripping hazards along sidewalks, and remove potholes and debris from roadways.
- **Personal Security:** Pittsburg's parks were among the top destinations mentioned when participants were asked about their favorite places to walk or bike in the community. Unfortunately, many people said they now avoid going because of the appearance of homeless encampments.

Participants said their sense of safety could improve if there was more police involvement. Parents also mentioned that personal security is an important factor when it comes to letting their children walk or bike to school.

- **Education & Encouragement:** Participants called for the City to provide more educational programs and initiatives that encourage safe, responsible behavior by all road users. They said programs should go beyond safety and include bike mechanic training, learn-to-ride lessons, and other types of programming. Parents shared they would feel more confident about their kids walking or biking to school if they received proper safety training.

The City also received many requests for specific active transportation improvements at different locations throughout the community. Where appropriate, these improvements were incorporated into the recommended projects list developed for Pittsburg Moves (see Appendix A).



2

Existing Conditions About Pittsburg

Pittsburg is a largely suburban community located along the Sacramento River in east Contra Costa County. Over 72,000 people live in the City.⁶ A demographic assessment completed for the Pittsburg Moves Plan reveals that:

- **Pittsburg Is Young:** The median age of the population in Pittsburg is 34. This is younger than the county average (39). Children under the age of 18 comprise a quarter of Pittsburg's

population (26%). Only 10% of the population is above 65 years of age.

- **Pittsburg Is Linguistically Diverse:** About half of the population speak English at home and half speak a language other than English. Almost a quarter of the population (23%) do not speak English fluently.
- **Pittsburg Is Racially Diverse:** About 42% of the population identifies as Hispanic or Latinx, 17% as black, and 16% as Asian.

⁶ Statistics in this section come from the American Community Survey 5-year estimates (ACS, 2020).



The Metropolitan Transportation Commission (MTC) uses the term Communities of Concern to refer to a diverse cross-section of populations and communities that could be considered disadvantaged or vulnerable now and in the future. Communities of Concern typically have many households with people that: identify as minority, report low-incomes, are rent-burdened, are 75 years and older, have limited English proficiency, have a disability, do not have access to an automobile, and/or are single-parents.

- **Pittsburg Has Many People Living at or Below the Poverty Line:** The city has a median household income of \$70,770. This is much lower than the median for Contra Costa County (\$93,721). Approximately 13% of Pittsburg residents live below the federal poverty line, which varies by household size. In 2019, the poverty level for an individual was an annual income of \$12,490 and for a household of four was an annual income of \$25,750.⁷
- **Pittsburg Gets Around by Car:** Despite the number of people living at or below the poverty line, many still own cars. Only 7% of households have no access to cars. Within MTC Communities of Concern, this number is higher, typically 14%. A map of the MTC-designated Communities of Concern in Pittsburg is provided in **Figure 2-1**. According to the California Household Travel Survey (2010-2012), 10% of people walk for all trip types, and less than 1% use bikes. Most walking trips are made for utilitarian or recreation trips instead of commute purposes.
- **Pittsburg Is Disproportionately Affected by Public Health Concerns:** Pittsburg is in the top 90 to 99th percentile statewide for asthma and cardiovascular disease.⁸ Pittsburg also has significantly higher diabetes death rates (37.0 per 100,000) than the county overall (18.9 per 100,000) and state overall (23.4 per 100,000).⁹

⁷ <https://aspe.hhs.gov/poverty-guidelines>
⁸ CalEnviroScreen 3.0 data
⁹ Community Health Indicators for Contra Costa County report, December 2010. https://cchealth.org/health-data/hospital-council/2010/pdf/2010_community_health_indicators_report_complete.pdf

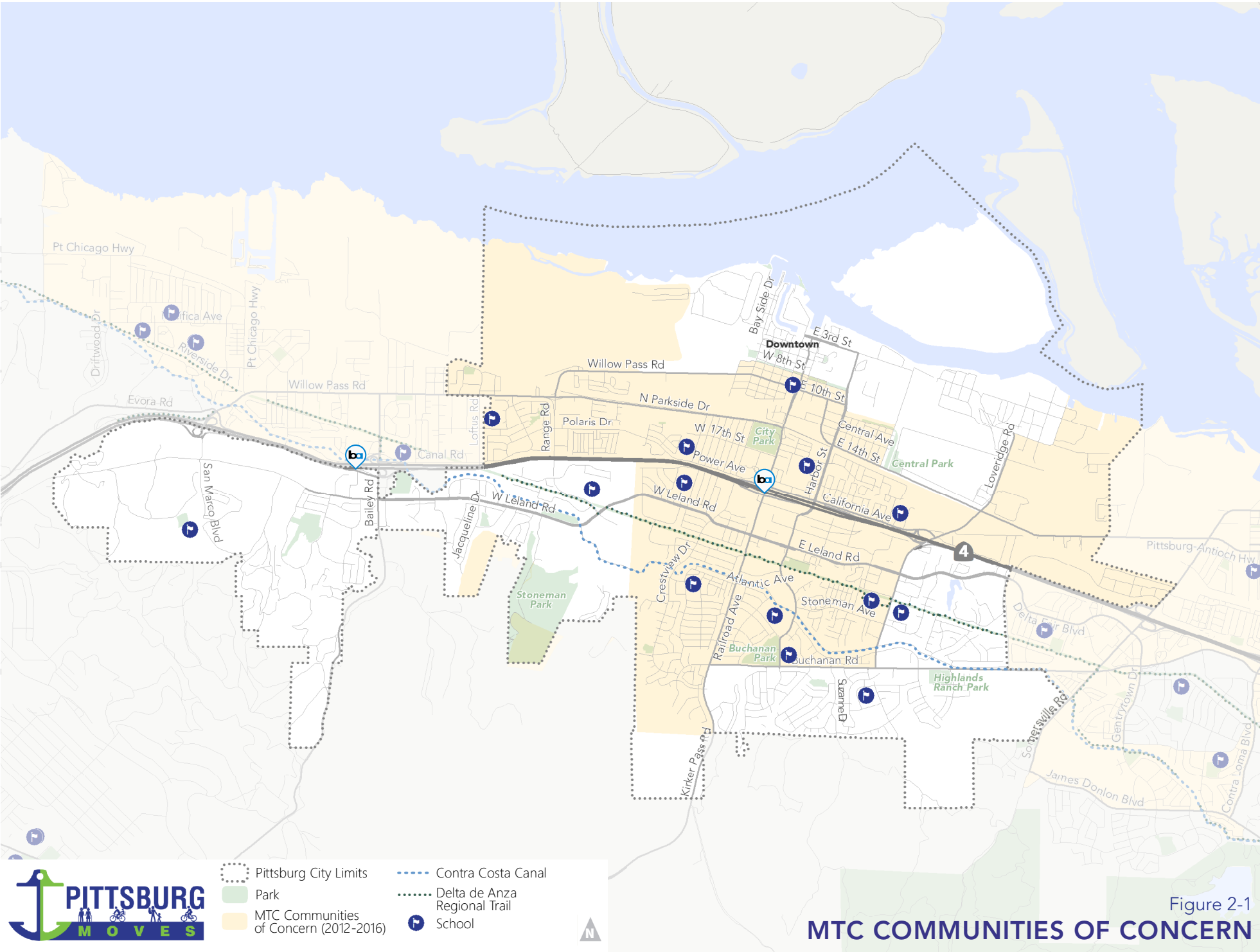


Figure 2-1

MTC COMMUNITIES OF CONCERN





Land Use Patterns

State Route 4 (SR-4) splits Pittsburg down the middle. The area north of SR-4 has a higher residential density and a greater mix of land uses. Neighborhoods in this area are mostly built on a gridded street network; however, the grid is interrupted by large industrial parcels and railroad tracks that limit connectivity. As a result, only a few roadways provide continuous connections.

South of SR-4, Pittsburg is primarily residential with commercial areas clustered along major arterials such as Railroad Avenue. This area also includes many roads that are low speed and volume. Newer residential neighborhoods in this area tend to have recently built bicycle and pedestrian amenities including standard bike lanes and wide sidewalks.

Figure 2-2 shows the existing land use designations in Pittsburg.

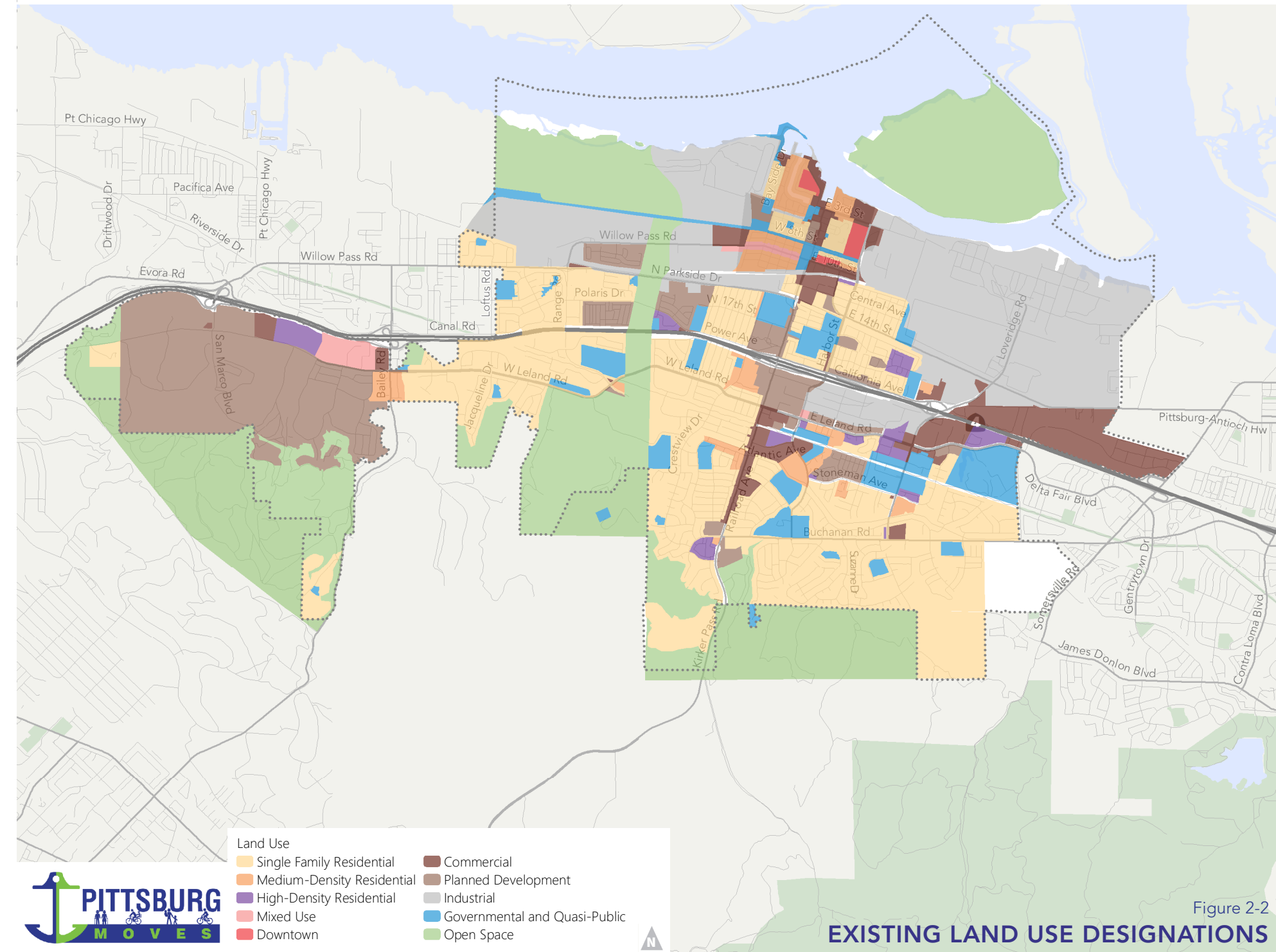


Figure 2-2

Future Growth

By 2040, Pittsburg's population is expected to surpass 90,000. The city is also expected to add 5,300 households and 2,800 jobs by then. Most of this growth will be focused in the city's Priority Development Areas (PDAs). These are existing transit-rich neighborhoods that are ideal for compact development and active transportation.

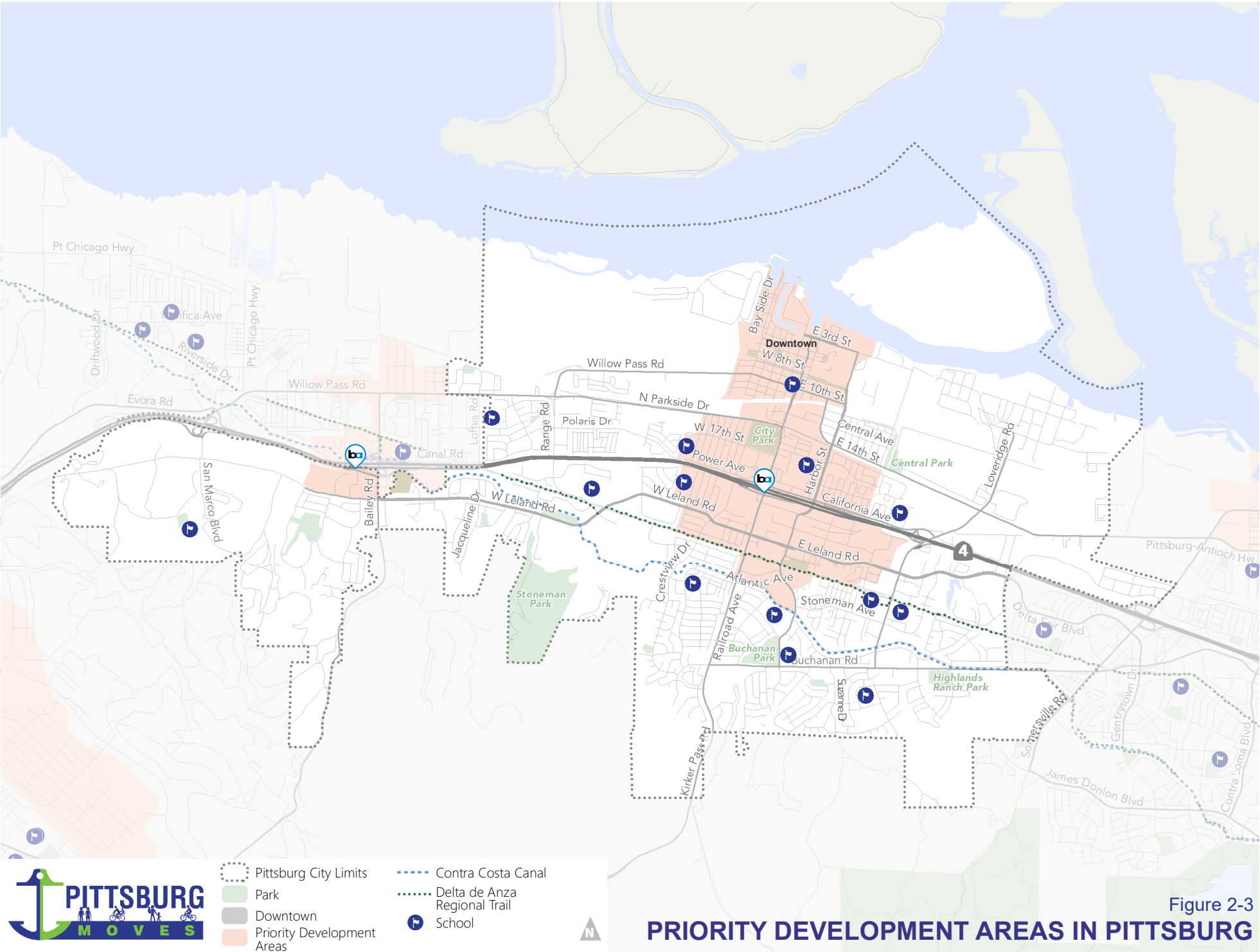
There are three PDAs in Pittsburg:

- Downtown;
- Pittsburg Center BART Station; and
- Pittsburg/Bay Point BART Station.

The geographic location of the PDAs is shown in **Figure 2-3**.



Illustrative examples of what future growth along Railroad Avenue would look like.
Source: Railroad Avenue Specific Plan.



Source: City of Pittsburg (2018)

Key Destinations

The city's key destinations include the Downtown, Civic Center, major employers, shopping centers, schools, parks, and community centers. The general location of these are shown in **Figure 2-4**.

- **Downtown:** The Downtown extends from the BNSF railroad tracks in the south to the Sacramento River Delta waterfront in the north. Its eastern and western boundaries are generally defined by Harbor and Beacon streets. Pittsburg's downtown is one of the oldest in the county, and one of the few with shoreline access. It has several physical assets that make the area very walkable. These include its waterfront location; a mix of commercial, office, and residential uses; pedestrian-scale buildings, wide sidewalks, and small plazas; and a traditional urban street pattern, with parking behind buildings.
- **Civic Center:** This area is located northwest of the Pittsburg Center BART Station. It is bounded by City Park to the north, Railroad Avenue to the east, Davi Avenue to the west, and SR-4 to the south. The public uses anchoring this area include Pittsburg City Hall, the Pittsburg Library, and Pittsburg Superior Court. Walking and biking has increased significantly in this area since the opening of the Pittsburg Center BART Station

in 2018. However, there are several freeway ramps around the station that make walking and biking difficult.

- **Major Employers:** **Table 2-1** lists the major employers in Pittsburg. Many of the employers included in the list are driven largely by providing retail goods and services (such as government, education, and health-related services) to the city's residents. Some of the city's more industrial employers such as Corteva and USS POSCO Industries are located on larger parcels in areas designed primarily for truck access.
- **Shopping Centers:** There are approximately 12 shopping centers throughout Pittsburg. Several of them are concentrated along Railroad Avenue between SR-4 and the Contra Costa Canal. The centers are characterized by large parking lots primarily accessed by car. Some of the centers contain supermarkets or grocery stores. At the time of this writing, there were four supermarkets and 13 smaller grocery stores throughout the city. Most residents in the community do not live within a quarter-mile walking distance of a supermarket or grocery store.
- **Schools:** There are 14 K-12 schools in Pittsburg. They have neighborhood-

based enrollment, which means there is potential for higher rates of walking and biking to school if the proper facilities and amenities were to be provided. Other public educational facilities in Pittsburg include the Pittsburg Adult Education School and Los Medanos College. The Delta de Anza Regional Trail runs along the college's southern border, but there are currently no connections to facilitate access from the trail.

- **Parks and Trails:** The city manages approximately 340 acres of park space. The largest parks are Stoneman Trailhead Park (190 acres), City Park (28 acres), Buchanan Park (22.9 acres), and Highlands Ranch Park (10 acres). It is estimated that over half of residents live within a quarter-mile walking distance of a park. The city also has approximately 13 miles of shared-use trails, including the 4.52-mile Delta de Anza Regional Trail that connects with Bay Point and Antioch. Although it is located outside city boundaries, residents also enjoy convenient access to the Black Diamond Mines Regional Preserve which spans over 4,627 acres near the city's southeastern border. The Preserve is managed by the East Bay Regional Parks District and it offers tours of abandoned coal mining tunnels and many miles of hiking trails.

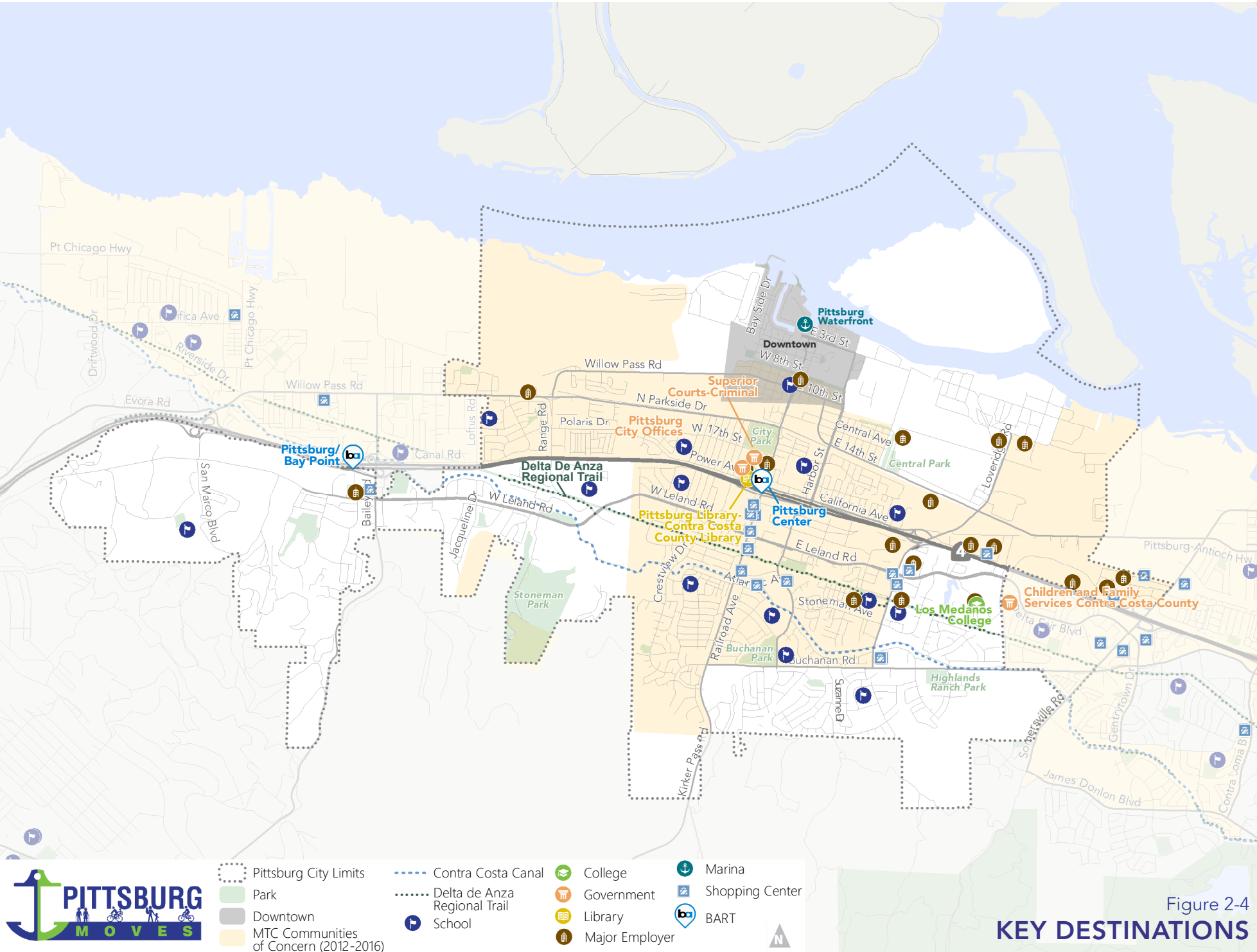


Figure 2-4

KEY DESTINATIONS

Table 2-1: Major Employers in Pittsburgh (2019)

Employer with 100+ Employees	Industry	Employee Count
Los Medanos College	Community College	500-999
City of Pittsburgh	City Offices	250-499
Contra Costa County Health Center	Public Health Programs	250-499
Corteva	Other Chemical and Allied Products Merchant Wholesalers	250-499
Walmart	General Merchandise	250-499
USS POSCO Industries	Iron, Steel Mills, and Ferroalloy Manufacturing	100-249
Durham School Service	School and Employee Bus Transportation	100-249
Winco Foods	Grocery Stores and Supermarkets	100-249
Safeway	Grocery Stores and Supermarkets	100-249
Diamond Ridge Healthcare Center	Senior Homes	100-249
Pittsburg Health Center	Public Health Programs	100-249
McCampbell Analytical, Inc.	Environmental Consulting	100-249
Winter Honda	New Car Dealerships	100-249
Cemcom Inc.	Brick, Stone, and Related Construction Materials Merchant Wholesalers	100-249
Bay Area Casino Express	Gambling Facilities	100-249
Cintas	Specialty Clothing Stores	100-249
Olive Garden Italian Kitchen	Full-Service Restaurants	100-249
Pittsburg Adult Education	Elementary, Middle, and High Schools	100-249
Pittsburg Unified School District	Elementary, Middle, and High Schools	100-249
Target	General Merchandise	100-249
Island Pacific Pittsburg	Grocery Stores and Supermarkets	100-249

Source: www.thinkpittsburg.com, 2019

Public Transit

Pittsburg is well connected to the Bay Area through the regional and local public transit services provided by Tri-Delta Transit, County Connection, and Bay Area Rapid Transit (BART). **Figure 2-5** shows the public transit routes currently serving the Pittsburg community.

Tri-Delta Transit

Tri-Delta Transit is operated by the Eastern Contra Costa County Transit Authority (ECCTA). Tri-Delta serves Pittsburg, Antioch, Oakley, Brentwood, and the unincorporated areas of east Contra Costa County, including Bay Point. Within Pittsburg, Tri-Delta operates 12 bus routes. At the time of this writing, it operated 15 local “weekday” and five “weekends and holiday” buses. Tri-Delta’s bus fare was increased from \$1.25 in 2008

to \$2.00 in 2019. In 2018, ECCTA began operating their first battery electric transit bus. All buses have bicycle racks and are wheel chair accessible. Different bus routes operate at different hours from 3:30 AM to 10:30 PM, and different headways from 15 minutes to 60 minutes.

Tri-Delta Transit also offers Tri MyRide On-Demand Transit that operates from 5:00 AM to 9:00 PM on weekdays, with \$2.00 per ride.

County Connection

County Connection buses are operated by the Central Contra Costa Transit Authority (CCCTA). The 93x Kirker Pass Express is the only bus line that operates in Pittsburg, and it provides service on Kirker Pass Road and Buchanan Road between Walnut Creek and Antioch. Service hours are from 5:00 AM to 8:00 AM and from 4:00 PM to 8:00 PM on weekdays only. The 93x Kirker Pass

Express provides service every 30 minutes to 60 minutes during peak commute periods. County Connection's fares are \$2.00 for youth and adult and \$1.00 for senior and people with disabilities when using Clipper card. Fares increase to \$2.50 for youth and adult and \$1.25 for senior and people with disabilities when using cash.

Paratransit

All Tri-Delta Transit and County Connection buses are accessible; however, disabled individuals can request paratransit service (also referred to as door-to-door transit) if they are unable to use fixed-route service. Tri-Delta’s paratransit service is also extended to persons 65 and older. County Connection’s LINK Paratransit service accommodates interagency travel by coordinating with other paratransit service providers in the region. Paratransit operators are required by law to service areas within three-quarters of a mile of their respective, public fixed-route service. ADA paratransit operates from 3:00 AM to midnight on weekdays, 6:00 AM to 1:00 AM on Saturdays, and 7:00 AM to 1:00 AM on Sundays. Senior paratransit operates from 6:30 AM to 5:30 PM on weekdays, 10:00 AM to 5:30 PM on Saturdays, and no service on Sundays. Paratransit’s fare is \$2.75 for one-way trip starting and ending in Tri-Delta Transit ADA’s service area and \$5.50 outside of Tri-Delta Transit ADA’s service area.



BART

BART provides regional transit service to major job centers in the Bay Area. There are two BART stations in Pittsburg – the Pittsburg/Bay Point Station and the Pittsburg Center Station. BART operates seven days a week, from 5:00 AM to midnight on weekdays, from 6:00 AM to midnight on Saturdays, and from 8:00 AM to midnight on Sundays. Headways are 15 minutes on weekdays and Saturday mornings until 8:00 PM, then every 20 minutes after 8:00 PM and on Sundays. A BART fare calculator is available at www.bart.gov.

Pittsburg/Bay Point Station

The Pittsburg/Bay Point BART Station is located northwest of Bailey Road and SR-4. On average, it serves approximately 8,000 weekday riders (4,000 entries and 4,000 exits). The station includes a surface parking lot with 2,000 parking spaces and a five-acre area set aside for bus, passenger loading/unloading, and short-term parking. Twenty-four short-term bicycle racks are provided just outside the station's fare gates. The station also has 12 "BikeLink" lockers, which provide safe and secure long-term bicycle parking for only a few cents an hour. There are also 20 long-term bicycle parking lockers available that require registration and issuance of a key.

According to BART's Station Access Policy, the access typologies of Pittsburg/Bay Point BART

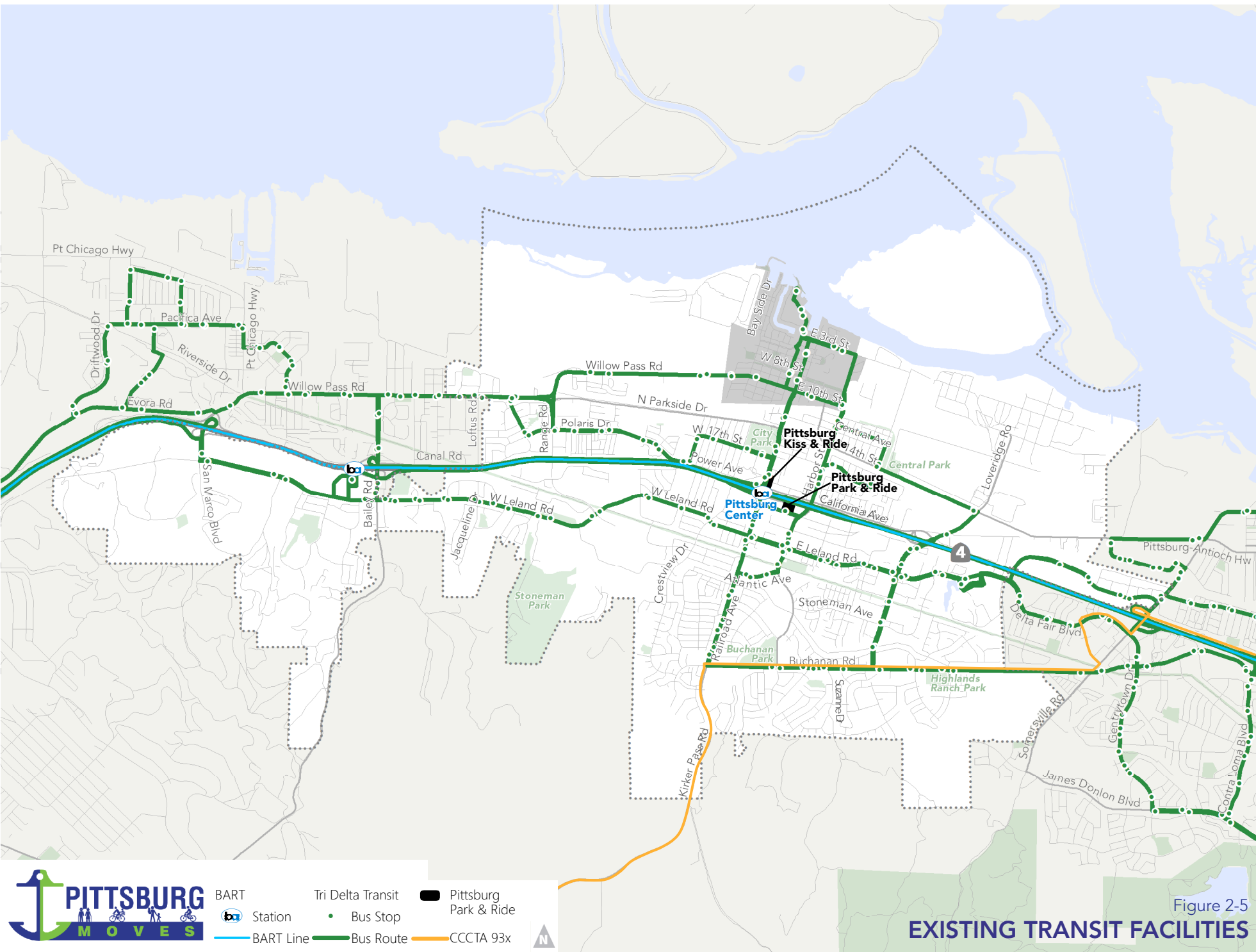
Station are "intermodal - auto reliant" and "auto-dependent". Per BART's Multimodal Access Design Guidelines (2017), these station types mean improving walking environment should be prioritized. The station is difficult to access for people walking and biking. In many cases, the sidewalk around the station has no buffer from traffic, which creates an uncomfortable walking environment. Intersections are large. People coming from the north have to navigate through the busy interchange at SR-4 and Bailey Road. Although there are residential and other uses just south of the station, access is limited and the developments generally face away from the station. Crossing opportunities into the BART station are also limited. There is only one marked crosswalk leg at each of the two BART access roads intersecting W. Leland Road.

Pittsburg Center Station

Pittsburg Center BART Station is located at the Railroad Avenue overcrossing of SR-4. It currently serves an average of 2,400 weekday riders (1,200 entries and 1,200 exits). High-density, transit-oriented development is envisioned for the area under the Railroad Avenue Specific Plan, so there are limited parking and drop-off facilities present. BART

riders can be dropped off at the City's multi-modal transfer facility located east of Railroad Avenue and California Avenue; or they can park their car at one of 262 available off-street spaces located west of Bliss Avenue and Harbor Street. Twenty-two short-term bicycle racks are provided at the multi-modal transfer facility. The facility also provides six BikeLink lockers.

The access typology is "balanced intermodal" for this station per BART's Station Access Policy. This means improving both walking and biking environment should be prioritized for this station. The Pittsburg Center BART station is difficult to access for people walking and biking. Bicyclists can use a combination of shared-use paths and standard bike lanes when coming from the west towards the station along Power Avenue. Bicyclists coming from the east, however, only have the option of sharing the road with motorists. Accessing the station by foot involves crossing one of the city's busiest intersections at California Avenue and Railroad Avenue. To access the station from the west, pedestrians must first cross a channelized right turn slip onto SR-4, then cross five additional lanes of traffic. Coming north to the station, they must cross three lanes of traffic on California Avenue.



Bicycling Environment

Bikeway Network

Pittsburg’s existing bikeway network is shown in **Figure 2-6**. The network has several gaps in continuity that limit bike access between neighborhoods. The most notable gaps occur along Railroad Avenue, Willow Pass Road, San Marco Boulevard, E. 14th Street/P-A Highway, and California Avenue.

Bikeway Types

The city's existing bikeway network consists of three different bikeway types: shared-use paths (Class I); standard bike lanes (Class II); and bike routes (Class III). Together, these bikeways cover about 43 linear miles (see **Table 2-2**). Most of the city's bikeways are standard bike lanes like those along Willow Pass Road and Buchanan Road. Shared-use paths, like the Delta de Anza Regional Trail, make up 30% of Pittsburg’s bikeways. Only 4% of the bikeway network consists of bike routes. The following pages include descriptions for each type of bikeway (Class I through Class IV).



Table 2-2: Existing Bikeway Network

Bikeway Type	Length	Percentage
Shared-Use Paths (Class I)	12.9 miles	30%
Standard Bike Lanes (Class II)	28.3 miles	66%
Buffered Bike Lanes (Class II)	0 miles	0%
Bike Routes (Class III)	1.5 miles	4%
Bike Boulevards (Class III)	0 miles	0%
Separated Bikeways (Class IV)	0 miles	0%
Total	42.7 miles	

Source: City of Pittsburg GIS, July 2018

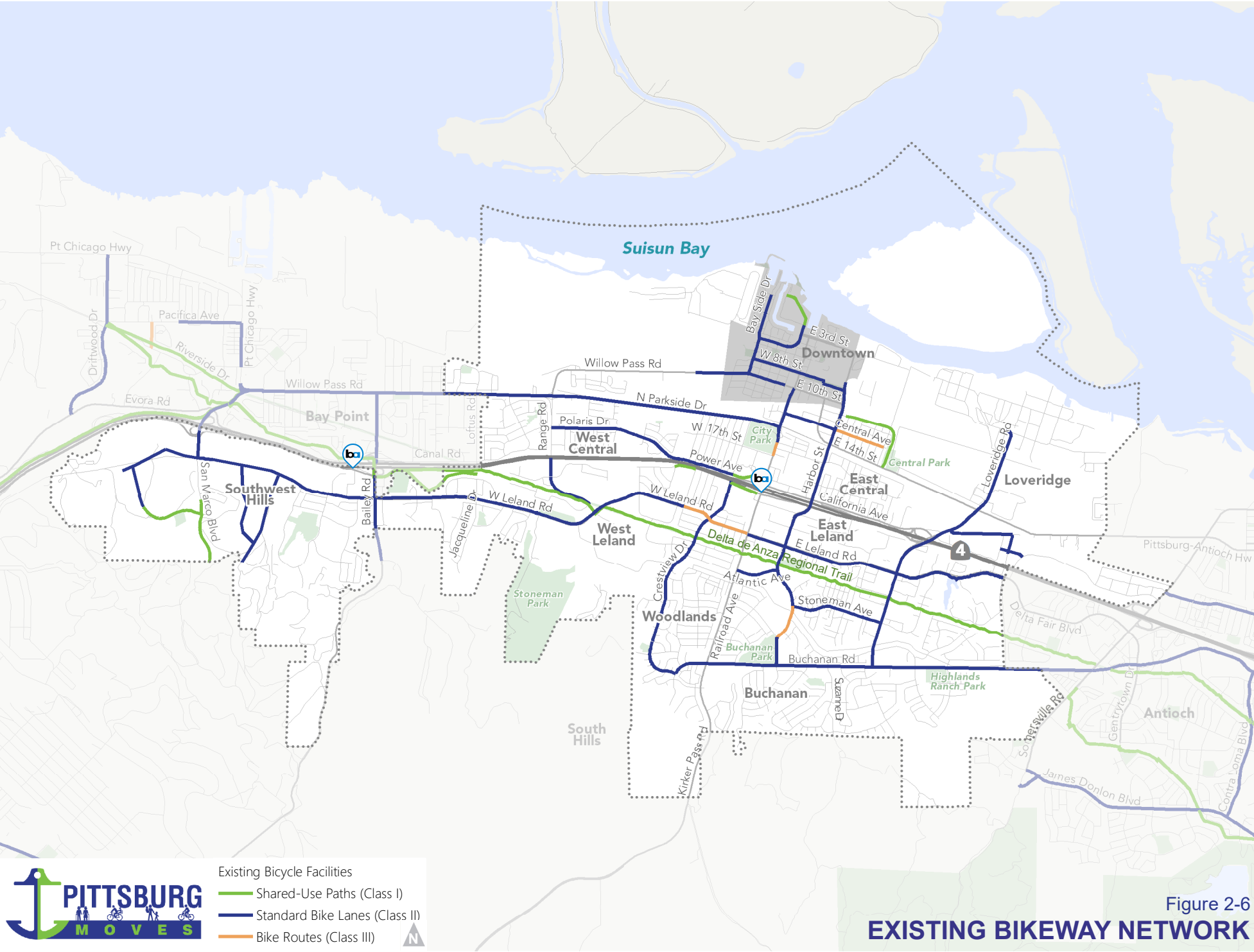


Figure 2-6

EXISTING BIKEWAY NETWORK

Existing Bicycle Facilities

- Shared-Use Paths (Class I)
- Standard Bike Lanes (Class II)
- Bike Routes (Class III)

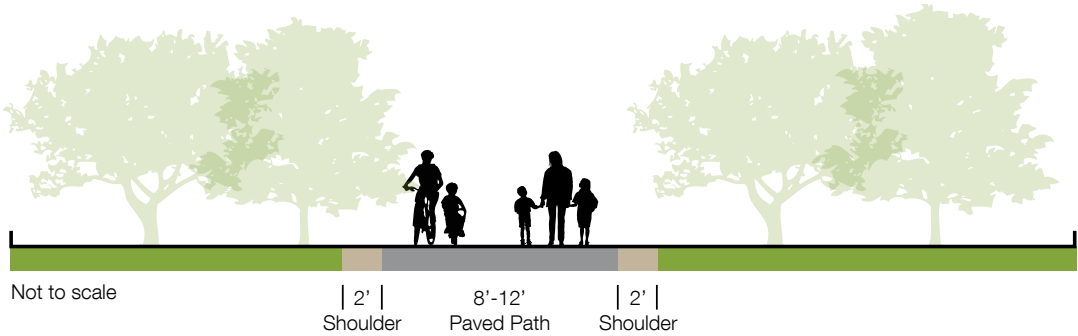
Source: City of Pittsburg and Fehr & Peers (2020)

Shared-Use Paths (Class I)

Shared-use paths provide a separate right-of-way for the exclusive use of bicyclists and pedestrians. They tend to have minimal intersecting traffic and are often located along creeks, canals, and former rail lines. Shared-use paths are considered the lowest-stress facilities for bicyclists and pedestrians.

The Delta de Anza Regional Trail is Pittsburg’s longest shared-use path (4.52 miles) and its most important low-stress biking facility. The trail connects east-west from Oakley to Concord. There are several opportunities to enhance security, provide amenities, and improve access along Pittsburg’s portion of the trail.

The city's other shared-use paths are typically shorter segments. In some cases, they are short because they provide a bicycle and pedestrian-only connection for streets that otherwise do not connect, such as the Power Avenue Trail between Davi Avenue and Railroad Avenue.

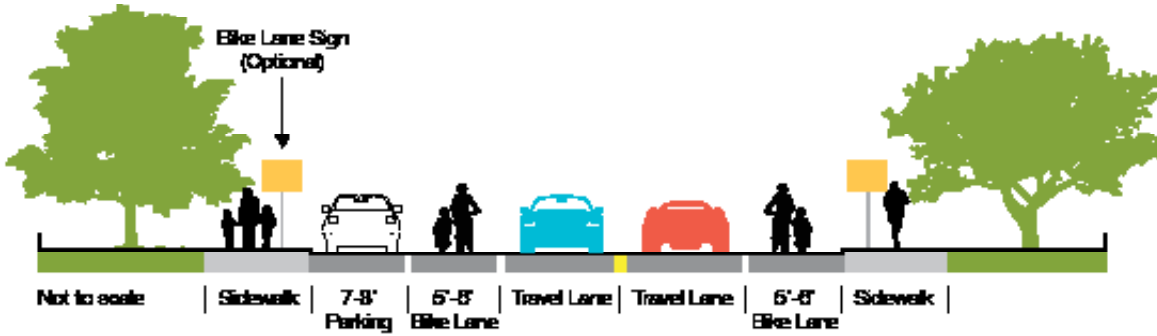


Standard Bike Lanes (Class II)

Standard bike lanes designate an exclusive space for bicyclists through the use of pavement markings and signage. The bike lane is located adjacent to motor vehicle travel lanes and flows in the same direction as motor vehicle traffic. Bike lanes are typically on the right side of the street, between the adjacent travel lane and curb, road edge, or parking lane.

Bike lanes enable bicyclists to ride at their preferred speed without interference from prevailing traffic conditions. Bike lanes also facilitate predictable behavior and movements between bicyclists and motorists.

In Pittsburg, most arterials provide a standard bike lane. In some cases, these bike lanes are also located on secondary streets with lower vehicle volume, such as Crestview Drive, and provide a more comfortable biking connection.

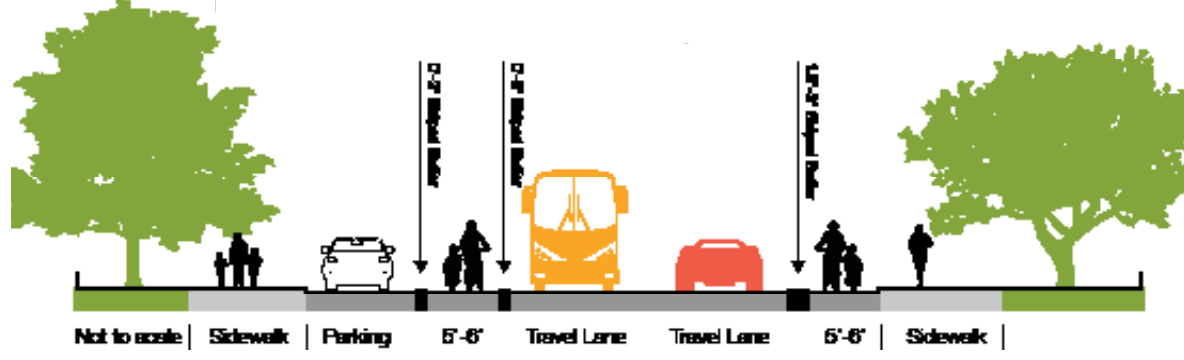


Buffered Bike Lanes (Class II)

Buffered bike lanes are standard bike lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane. This type of bikeway:

- Provides greater distance between motor vehicles and bicyclists;
- Provides space for bicyclists to pass another bicyclist without riding into the adjacent motor vehicle travel lane;
- Encourages bicyclists to ride outside of the door zone when buffer is between parked cars and bike lane;
- Provides a greater space for bicycling without making the bike lane appear so wide that it might be mistaken for a travel lane or a parking lane;
- Appeals to a wider cross-section of bicycle users; and
- Encourages bicycling by contributing to the perception of safety.

Pittsburg's first buffered bike lanes were recently installed along Railroad Avenue between Civic Avenue and W. 10th Street. The lanes are not reflected in **Table 2-2** because they were not installed by the time the bikeway network inventory was completed for Pittsburg Moves.



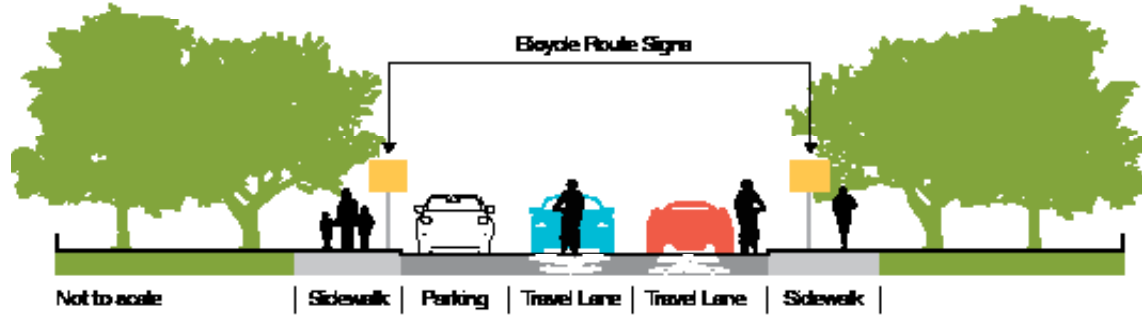
Bike Routes and Boulevards (Class III)

Bike routes are designated streets where bicyclists and automobile drivers are encouraged to share the road. The routes are typically designated with signage, but some streets also use sharrows to indicate where bicyclists should position themselves on the road.

Bike routes are typically used where there is not enough right-of-way to provide a standard bike lane, or along low-volume, low-speed streets where it is more comfortable for bicyclists to share the road with automobile drivers.

A bike route can be upgraded to a bike boulevard by adding traffic calming measures (such as speed humps or traffic diverters) to discourage drivers from using the boulevard as a through route.

In Pittsburg, there are bike routes along Central Avenue between Harbor Street and P-A Highway; W. Leland Road between Railroad Avenue and Burton Avenue; and Harbor Street between Yosemite Drive and Stoneman Avenue.



Separated Bikeway (Class IV)

Separated bikeways are often referred to as "cycle tracks" and they are a relatively newer class of bicycle facility. They have different forms but all share common elements—they provide space that is intended to be exclusively or primarily used for bicycles, and are separated from motor vehicle travel lanes, parking lanes, and sidewalks.

Separated bikeways may be one-way or two-way, and may be at street level or at sidewalk level. If at sidewalk level, a curb or median separates it from motor traffic, while different pavement color/texture separates it from the sidewalk. If at street level, it can be separated from motor traffic by raised medians, on-street parking, or bollards.

Separated bikeways provide dedicated and protected space for bicycling making them an attractive facility for riders of all ages and abilities. Pittsburgh Moves envisions a bikeway network with over 17 miles of separated bikeways.





Bicycle Comfort

Cities are using a “level of traffic stress” (LTS) analysis to help determine the comfort of bicycling in their communities. An LTS analysis takes different travel corridor characteristics into consideration, including the number of travel lanes; speed of traffic; number of vehicles; presence of bike lanes; width of bike lanes; and presence of physical barriers providing protection from traffic. Based on these variables, a bicycle facility can be rated with an LTS ranging from 1 to 4.

The least stressful (most comfortable) facilities are given an LTS 1 rating. Facilities with this rating are typically shared-use paths; separated bikeways; low-volume and low-speed bike routes; and bike lanes on calmer and narrower streets. The most stressful (least comfortable) facilities are given an LTS 4 rating. Facilities with this rating are typically major arterials with multiple lanes of traffic (with or without bicycle lanes in some cases, depending on speeds) or narrower streets with higher speed limits.

An LTS analysis was performed for Pittsburg Moves. **Figure 2-7** shows the LTS ratings for all of the city's streets and pathways as of 2018. Most streets and pathways (82%) are low-stress (LTS 1) residential streets that provide comfortable access but only at a neighborhood scale. The remaining 18% of streets are high-stress (LTS 3 and 4) arterials that, in many cases, provide the only way of getting from one neighborhood to the other.

Pittsburg’s highest-stress (LTS 4) arterials consist of Railroad Avenue, California Avenue, Willow Pass Road, N. Parkside Drive, E. 3rd Street, E. 10th Street, E. 14th Street/P-A Highway, Century Boulevard, and San Marco Boulevard. Other high-stress (LTS 3) arterials include Bailey Road, W. Leland Road, E. Leland Road, Harbor Street, and Loveridge Road. Buchanan Road is one of the few examples of an arterial providing a comfortable, low-stress bicycling experience.

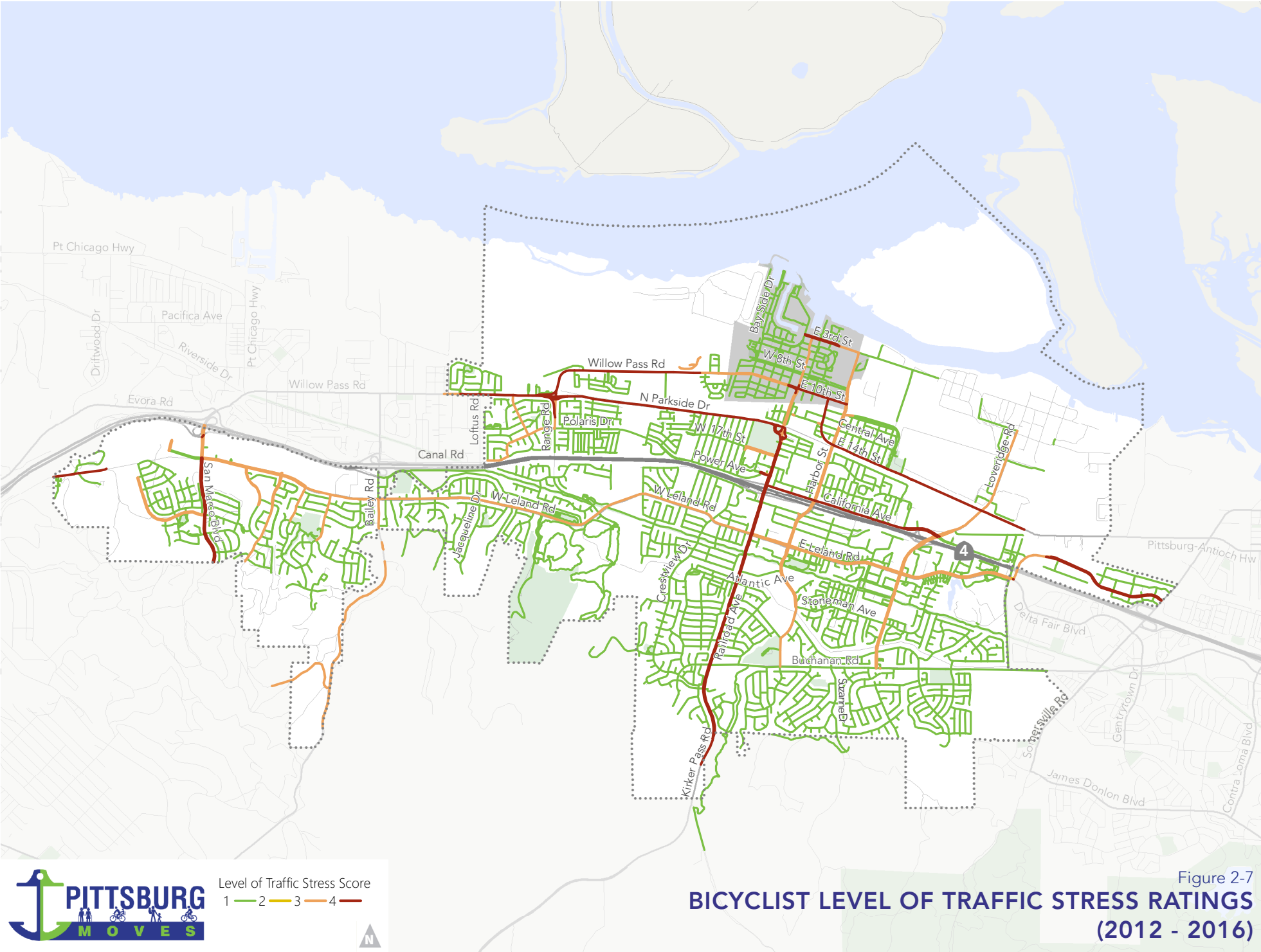


Figure 2-7

Note: An LTS rating of 1 or 2 corresponds to low stress, and ratings of 3 or 4 correspond to high stress.
Source: City of Pittsburg and Fehr & Peers (2012-2016)

Attitudes toward Bicycling

People typically fall into one of the following categories when it comes to riding a bicycle:

- **Strong and Fearless:** People in this group are highly skilled and have the most riding experience. They will use their bicycles on arterials even when there are no bikeways present. It is estimated “strong and fearless” riders represent less than one percent of people in a community. This group of riders will feel comfortable using facilities with any LTS rating.
- **Enthused and Confident:** This group consists of skilled riders who are also comfortable sharing the road, but prefer using bikeways when they are available. “Enthused and confident” riders make up about 7% of people in a community. They typically feel comfortable using facilities with an LTS rating of 1, 2, or 3.
- **Interested but Concerned:** This group of people is curious about bicycling and like to ride, but are concerned about safety and therefore do not ride regularly. They typically avoid riding their bicycles on major arterials unless there are facilities that provide a high degree of protection. “Interested but concerned” riders represent the majority in a community (around 60%). Riders in this group may only feel comfortable using facilities with an LTS rating of 1 or 2.

- **No Way No How:** People in this group are simply not interested in riding a bicycle. Riding a bicycle may not appeal to them for several reasons. It may be inconvenient, or they may not be physically able to ride. This group represents approximately 33% of people in a community.

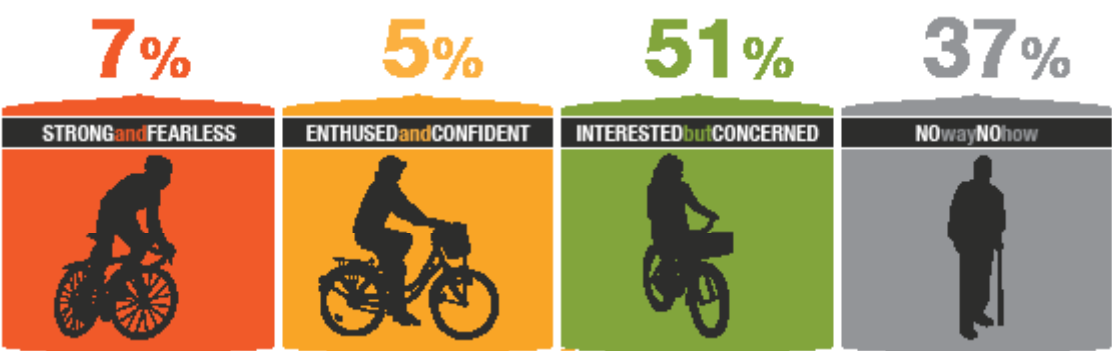
Since most of Pittsburgh’s arterials exhibit a high level of traffic stress (LTS 3 and 4), it would appear bicycling between neighborhoods is currently an unattractive option for everyone in the community except those with a “strong and fearless” attitude toward bicycling.

Addressing comfort is one of the most important things that any community can do to create a more bicycle-friendly environment. Several studies have shown that a community’s interest in biking can be increased by providing comfortable streets with lower-stress environments.¹⁰

¹⁰Jennifer Dill and Nathan McNeil, “Revisiting the Four Types of Cyclists: Findings from a National Survey,” Transportation Research Record: Journal of the Transportation Research Board, 2587: 90-99, 2016.



THE FOUR TYPES OF BICYCLISTS



LEVEL OF TRAFFIC STRESS

Level of traffic stress (LTS) is a way to evaluate the stress a bike rider will experience while riding on the road. It is used to categorize roads by the types of riders above who will be willing to use them based on:



- LTS 1** Most children can feel safe riding on these streets.
- LTS 2** The mainstream “interested but concerned” adult population will feel safe riding on these streets.
- LTS 3** Streets that are acceptable to “enthused and confident” riders who still prefer having their own dedicated space.
- LTS 4** High-stress streets with high speed limits, multiple travel lanes, limited or non-existent bikeways, and long intersection crossing distances.

Bicyclist Safety

According to the Statewide Integrated Record System (SWITRS), there were a total of 41 bicycle injury collisions in Pittsburg between 2013 and 2017.¹¹ The general location of each bicycle collision is shown in **Figure 2-8. Table 2-3** groups the collisions by violation type and **Table 2-4** groups them by injury severity. An analysis of the bicycle collision data indicates the following:

- Leland Road and Railroad Avenue saw the highest number of bicycle collisions.
- Seventy-one percent of bicycle collisions occurred during the day, 20% occurred during dusk-dawn, and 10% occurred at night.
- Sixty-one percent of bicycle collisions occurred at an intersection or within 100 feet of an intersection. Thirty-nine percent of bicycle collisions occurred in the middle of the block.
- The most common violation type for all bicycle collisions was riding on the wrong side of road, followed by other hazardous violations (e.g. driver or bicyclist is talking on a cell phone), and auto right-of-way violations (e.g. bicyclist failing to yield to an automobile who has the right-of-way).

¹¹ This figure does not include near-miss collisions or collisions that may not have been reported, as SWITRS is based on police reports.

- Most drivers who struck a bicyclist were proceeding straight (49%) when the collision occurred.
- Thirty-seven percent of drivers were making a right-turn when they struck a bicyclist (while the bicyclist proceeded straight).
- Left-turn collisions, where a bicyclist proceeding straight is struck by an oncoming auto making a left-turn, accounted for 7% of bicycle collisions.
- Most bicycle collisions resulted in lower order injuries such as complaints of pain and other visible injuries; however, there were three bicycle collisions that resulted in severe injuries and one that was fatal.
- Most victims were 40-49 years old; though they ranged from children to 59 years old. There were eight victims under the age of 19, which accounts for about 20% of all victims. Males accounted for 78% of all bicycle collision victims.

Table 2-3: Bicycle Collision Types (2013-2017)

Violation Type	Collisions
Wrong Side of Road	19
Other Hazardous Violation	5
Automobile Right of Way	4
Improper Turning	3
Traffic Signals and Signs	3
Unsafe Speed	1
Unsafe Starting or Backing	1
Pedestrian Right of Way	1
Unknown	1
Not Stated	3
Total:	41

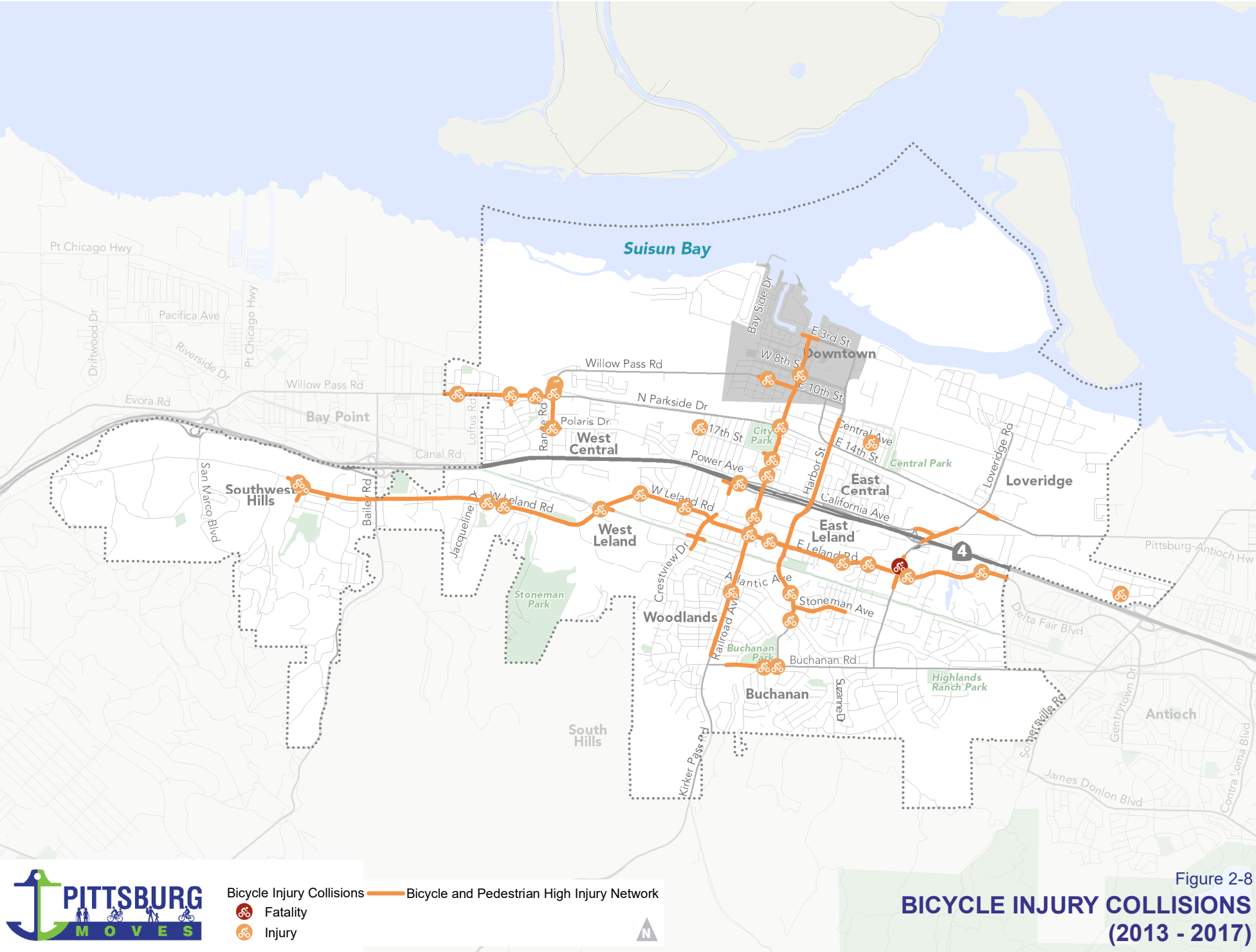
Source: SWITRS via TIMS, 2013-2017

Table 2-4: Bicycle Collision Injury Severity (2013-2017)

Injury Severity	No.
Complaint of Pain	22
Other Visible Injury	15
Severe Injury	3
Fatal	1
Total:	41

Source: SWITRS via TIMS, 2013-2017

Note: Property Damage Only collisions are not included in total.



Source: SWITRS TIMS (2013-2017)

How Does Pittsburg’s Bicyclist Safety Record Compare?

The California Office of Traffic Safety (OTS) develops rankings so that cities can compare their traffic safety statistics to those of other cities with similar-sized populations. **Table 2-5** lists the 2017 OTS rankings for cities in Contra Costa County with a population between 50,001 and 100,000 based on the number of victims killed and injured that year.

The figures in the ranking column show as two numbers divided by a slash. The first number is that city’s ranking in the category listed. The second number is the total number of cities in the state with a population between 50,001 and 100,000. For instance, “52/106” means that city ranks 52nd out of 106 cities of similar size.

It should be noted that a ranking of 1/106 is the highest or worst ranking in the group of cities with this population range. A ranking of 52/106 is average and 106/106 is the lowest or best ranking.

Composite rankings are also shown to provide an indication of overall traffic safety. They are based on an aggregate of several of the other rankings not listed here (such as Had Been Drinking 21-34; Had Been Drinking Under 21; Alcohol Involved; Hit & Run; and Nighttime and Speed collisions).

Table 2-5: 2017 OTS Rankings for Contra Costa Cities with Population 50,001-100,000

Type of Collision	Victims Killed & Injured	Ranking	Ranking Compared to Pittsburg
San Ramon (83,179 pop.)			
Total Fatal and Injury	236	82/106	Better
All Bicyclist Involved	18	66/106	Worse
Bicyclist Involved (under age 15)	6	19/106	Worse
Composite		97/106	Better
Pittsburg (72,006 pop.)			
Total Fatal and Injury	202	52/106	
All Bicyclist Involved	8	75/106	
Bicyclist Involved (under age 15)	1	76/106	
Composite		25/106	
Walnut Creek (69,498 pop.)			
Total Fatal and Injury	268	81/106	Better
All Bicyclist Involved	14	78/106	Better
Bicyclist Involved (under age 15)	2	53/106	Worse
Composite		92/106	Better
Brentwood (62,140 pop.)			
Total Fatal and Injury	215	41/106	Worse
All Bicyclist Involved	4	93/106	Better
Bicyclist Involved (under age 15)	0	94/106	Better
Composite		17/106	Worse

Source: California Office of Traffic Safety



Walking Environment

Pedestrian Network

Pittsburg's pedestrian network consists of sidewalks, paths, and crosswalks. The quality of the network often varies by activity center. The Downtown and other areas (including Pittsburg's parks) tend to have high-quality walking environments that are comfortable, safe, and attractive. Most of Pittsburg's industrial areas along the eastern waterfront were designed to prioritize truck traffic and therefore have minimal or no walking facilities.

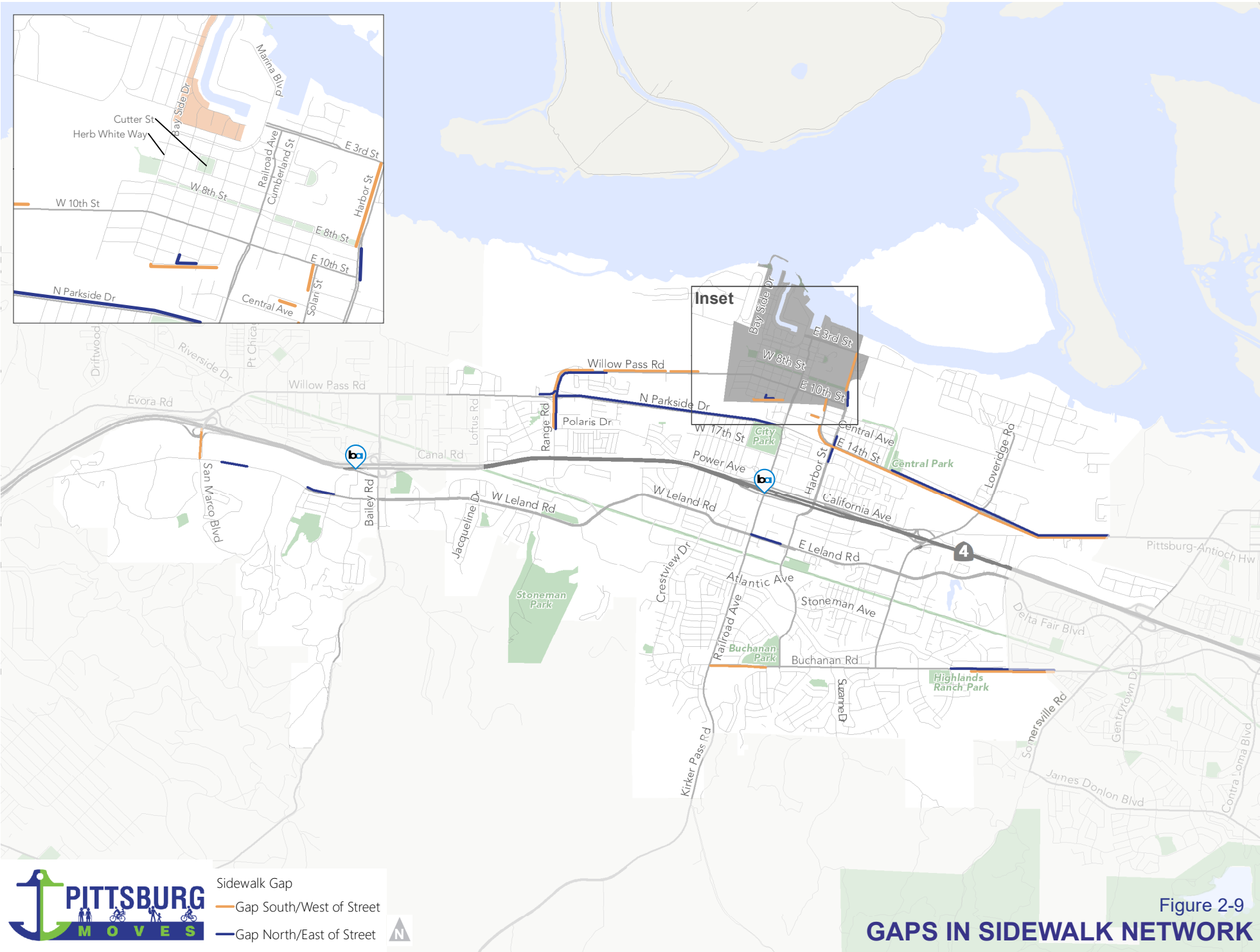
Sidewalks and Shared-Use Paths

Sidewalks are provided along most of Pittsburg's streets, but there are a considerable number of gaps in the system that affect connectivity (see **Figure 2-9**).

The largest gaps are along Willow Pass Road, N. Parkside Drive, and P-A Highway. Smaller gaps exist along portions of W. Leland Road, E. Leland Road, Buchanan Road, San Marco Boulevard, and Harbor Street.

Pittsburg also has over 12 miles of shared-use paths that provide comfortable walking environments. The best example is the Delta Regional Trail, which covers over 15 miles between the cities of Concord, Bay Point, Pittsburg, Antioch, and Oakley.

Other notable examples of shared-use paths in city include the greenway along E. 8th Street between Herb White Way and Harbor Street; another greenway on the southside of P-A Highway between Harbor Street and E. 14th Street; and the recently completed trail along San Marco Boulevard, north of Santa Teresa Drive.



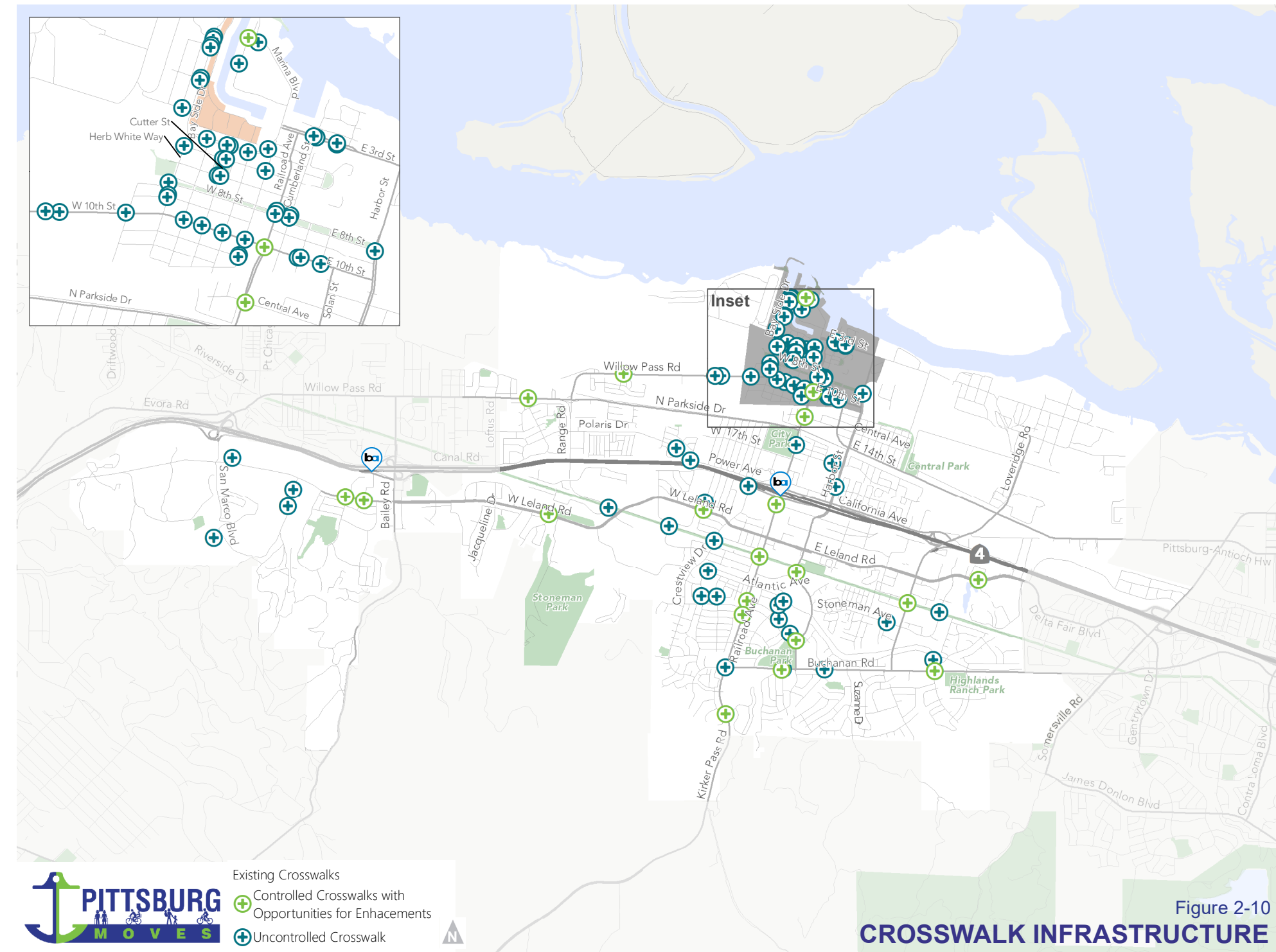
Crosswalks

Crosswalks identify the preferred areas for pedestrians to cross the street. There are two kinds of crosswalks:

- **Controlled:** This type of crosswalk is located at stop-signs and traffic signals. They provide the most protection for pedestrians, since they require drivers to come to a complete stop and yield to people in the crosswalk.
- **Uncontrolled:** This is a type of crosswalk that is not located at stop-signs or traffic signals. In some cases, uncontrolled crosswalks are also found in the middle of a larger block to provide quicker access between streets.

There are several controlled crosswalk locations throughout Pittsburg with opportunities for enhancement (see **Figure 2-10**). Opportunities for enhancement at may include adding pedestrian countdowns during the “Flash Don’t Walk” signal phase; providing the walk phase during each signal cycle without having to press the push button (also referred to as “pedestrian recall”); prohibiting right turn on red; and automatically giving pedestrians a walk phase on side streets.

Refer to the Pittsburgh Moves Crosswalk Policy in Appendix B for a full discussion of potential enhancements.



Pedestrian Safety

According to SWITRS, there were a total of 88 pedestrian injury collisions in Pittsburg between 2013 and 2017.¹² The general location of the reported pedestrian collisions is shown in **Figure 2-11**. **Table 2-6** groups the collisions by violation type and **Table 2-7** groups them by injury severity. An analysis of Pittsburg’s pedestrian collision data indicates the following:

- Leland Road, Railroad Avenue, Harbor Street, and Loveridge Road saw the highest number of pedestrian collisions.
- Thirty-three percent of pedestrian collisions occurred during the day; 43% occurred during dusk-dawn; and 24% occurred at night. Only three of the pedestrian collisions that happened at night (3% of all pedestrian collisions) took place at a location with no street lighting.
- Sixty-three percent of pedestrian collisions occurred at an intersection or within 100 feet of an intersection. Thirty-eight percent occurred in the middle of the block, away from the intersection.
- “Pedestrian Right-of-Way” was the most common violation type for all pedestrian collisions. This occurs when the pedestrian has the right-of-way and a vehicle violates (e.g. a vehicle failing to yield to a pedestrian walking

12 This figure does not include near-miss collisions or collisions that may not have been reported.

the crosswalk). The next most common types were “Pedestrian Violation”, which refers to pedestrians violating the right-of-way of a vehicle (e.g. crossing in front of traffic that has a green light), and “Improper Turning” (e.g. a vehicle turning when it does not have a green light).

- Most pedestrian collisions (60%) occurred when vehicles were proceeding straight. Sixteen percent of pedestrian collisions occurred as vehicles were making left-turn turns with pedestrians crossing the street, and 13% occurred when drivers were making right-turns and struck a pedestrian.
- Most pedestrian collisions (64%) resulted in lower order injuries such as complaints of pain and other visible injuries.
- Thirty-six percent of the pedestrian injuries were severe or fatal. Fourteen pedestrians lost their lives as a result of the collision. The majority of fatal or severe pedestrian collisions (69%) occurred in or within 100 feet of the intersection.
- Most victims were adults. There were 33 victims (35% of pedestrian victims) under the age of 19 and 20 victims (21% of pedestrian victims) over the age of 60. Seniors and underage pedestrians accounted for 40% of all victims. Sixty percent of victims were male, and 40% were female.

Table 2-6: Pedestrian Collision Types (2013-2017)

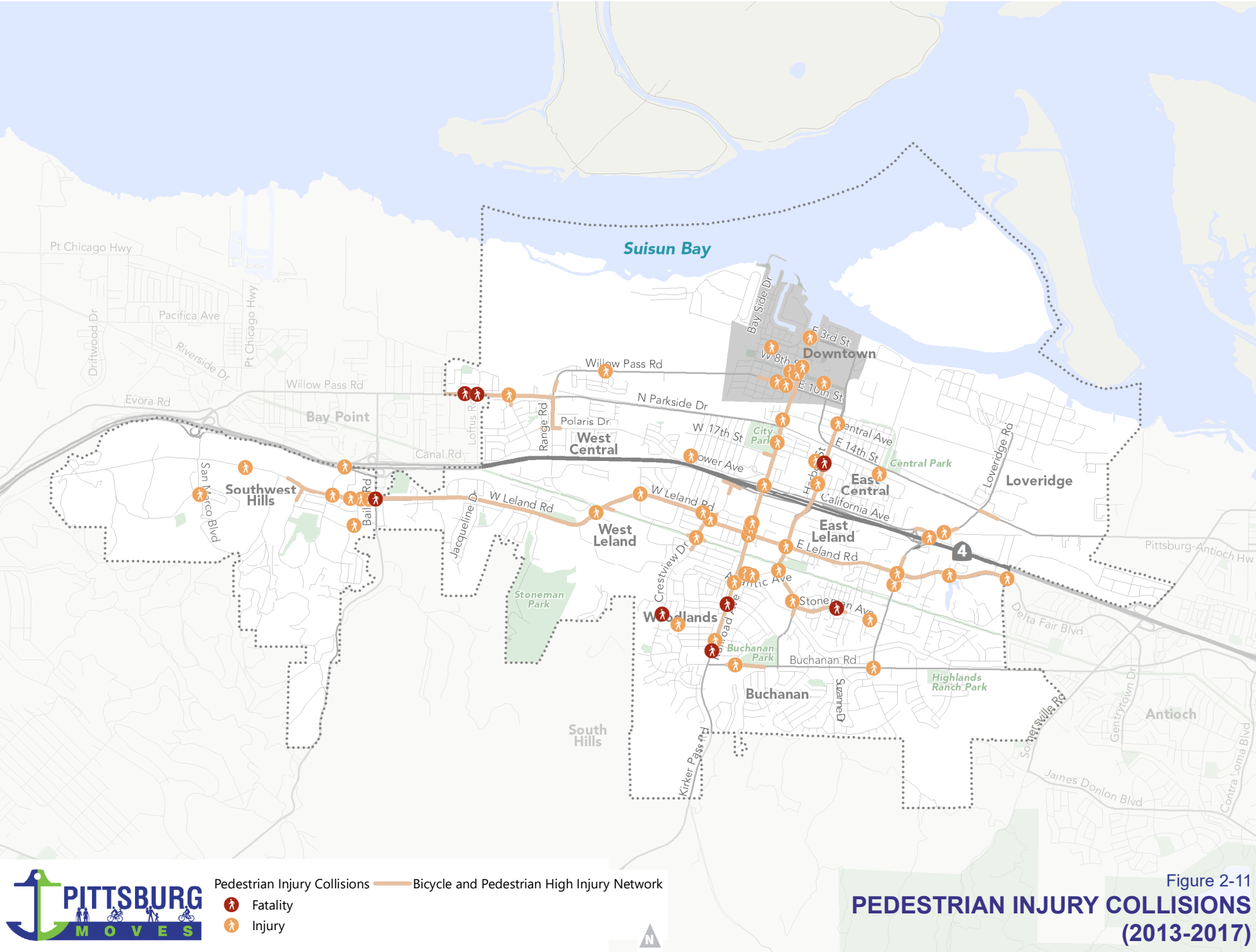
Violation Type	Collisions
Pedestrian Right of Way	28
Pedestrian Violation	27
Improper Turning	9
Unsafe Speed	6
Driving or Bicycling Under the Influence of Alcohol or Drug	2
Automobile Right of Way	1
Impeding Traffic	1
Improper Passing	1
Unsafe Lane Change	1
Traffic Signals and Signs	1
Other/Unknown/Not Stated	11
Total:	88

Source: SWITRS via TIMS, 2013-2017

Table 2-7: Pedestrian Collision Injury Severity (2013-2017)

Injury Severity	No.	Percentage
Complaints of Pain	35	40%
Other Visible Injury	21	24%
Severe Injury	18	20%
Fatal	14	16%
Total:	88	

Source: SWITRS via TIMS, 2013-2017
Note: Property Damage Only collisions are not included in total.



Source: SWITRS TIMS (2013-2017)

How Does Pittsburg’s Pedestrian Safety Record Compare?

The California Office of Traffic Safety (OTS) develops rankings so that cities can compare their traffic safety statistics to those of other cities with similar-sized populations. **Table 2-8** lists the 2017 OTS rankings for cities in Contra Costa County with a population between 50,001 and 100,000 based on the number of victims killed and injured that year.

The figures in the ranking column show as two numbers divided by a slash. The first number is that city’s ranking in the category listed. The second number is the total number of cities in the state with a population between 50,001 and 100,000. For instance, “52/106” means that city ranks 52nd out of 106 cities of similar size.

It should be noted that a ranking of 1/106 is the highest or worst ranking in the group of cities with this population range. A ranking of 52/106 is considered average and 106/106 is the lowest or best ranking.

Composite rankings are also shown to provide an indication of overall traffic safety. They are based on an aggregate of several of the other rankings not listed here (such as Had Been Drinking 21-34; Had Been Drinking Under 21; Alcohol Involved; Hit & Run; and Nighttime and Speed collisions).

Table 2-8: 2017 OTS Rankings for Contra Costa Cities with Population 50,001-100,000

Type of Collision	Victims Killed & Injured	Ranking	Ranking Compared to Pittsburg
San Ramon (83,179 pop.)			
Total Fatal and Injury	236	82/106	Better
All Pedestrian Involved	14	86/106	Better
Pedestrian Involved (under age 15)	5	19/106	Worse
Pedestrian Involved (65 and over)	1	86/106	Better
Composite		97/106	Better
Pittsburg (72,006 pop.)			
Total Fatal and Injury	202	52/106	
All Pedestrian Involved	21	43/106	
Pedestrian Involved (under age 15)	2	65/106	
Pedestrian Involved (65 and over)	4	31/106	
Composite		25/106	
Walnut Creek (69,498 pop.)			
Total Fatal and Injury	268	81/106	Better
All Pedestrian Involved	33	35/106	Worse
Pedestrian Involved (under age 15)	2	58/106	Worse
Pedestrian Involved (65 and over)	5	24/106	Worse
Composite		92/106	Better
Brentwood (62,140 pop.)			
Total Fatal and Injury	215	41/106	Worse
All Pedestrian Involved	12	62/106	Better
Pedestrian Involved (under age 15)	3	38/106	Worse
Pedestrian Involved (65 and over)	0	98/106	Better
Composite		17/106	Worse

Source: California Office of Traffic Safety



Pittsburg's High Injury Network

A map of Pittsburg's High Injury Network¹³ (HIN) is shown in **Figure 2-12**. The HIN is a collection of streets in Pittsburg with a high concentration of bicycle and/or pedestrian injury collisions. Pittsburg's HIN represents only 7% of the overall street network, but it accounts for 78% of all walking and biking related injury collisions.

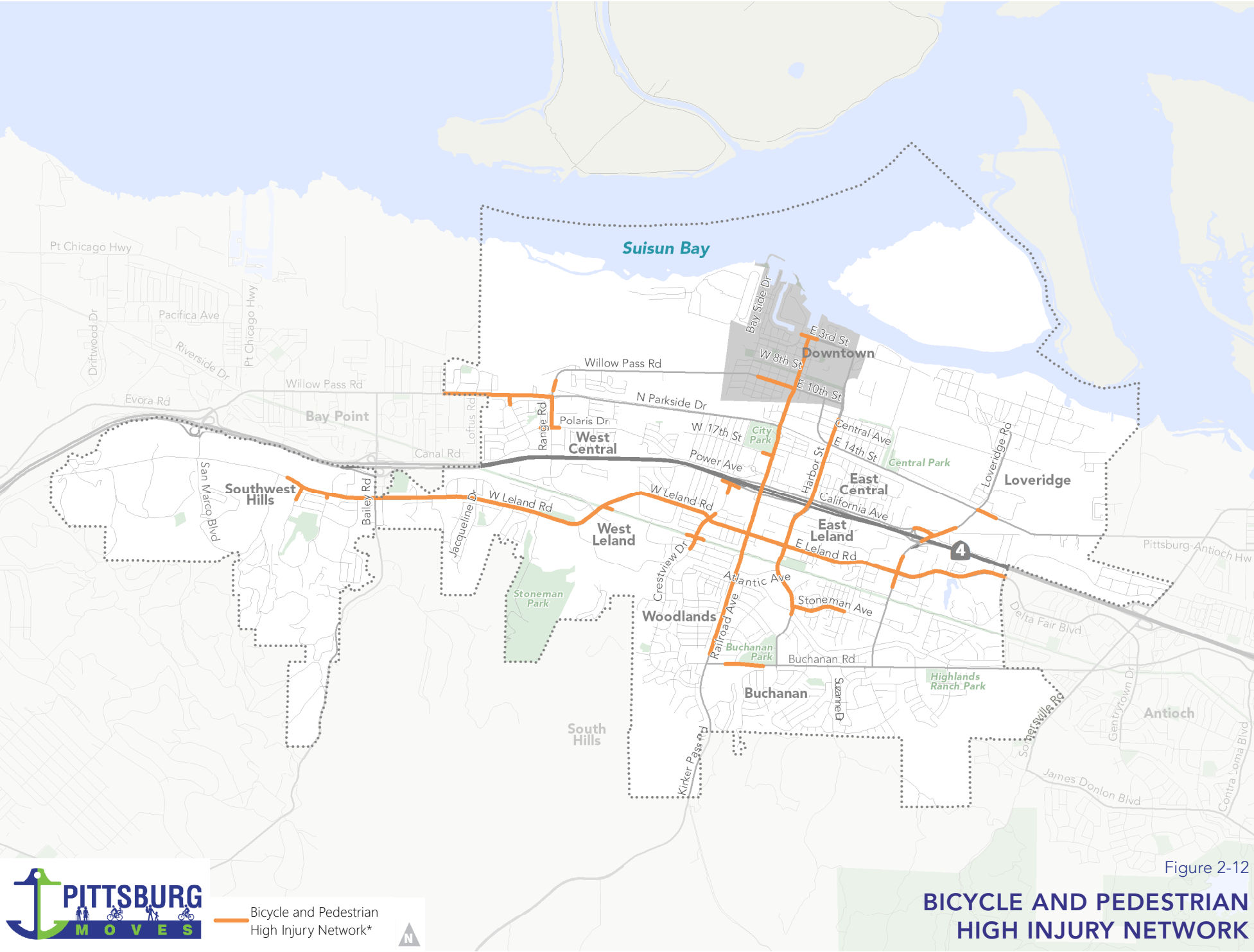
Table 2-9 lists the streets on Pittsburg's HIN that had one or more reported bicycle and/or pedestrian injury collisions between 2012 and 2016. Most of the collisions occurred on major arterials, where traffic volumes and speeds are higher, and pedestrian and bicycle facilities are more limited. Sixty-three percent of injury collisions on the HIN involved pedestrians and 37% involved bicyclists. Twenty-nine percent of collisions on the HIN resulted in fatal or severe injuries, with seven fatalities and 15 severe injury collisions reported. Eighty-two percent of fatal and severe injures along the HIN involved bicyclists.

¹³ The HIN was developed using a collision density metric attached to the road network that assigned a higher weight to collisions involving a fatality or severe injury. For example, a fatal collision weighted three times that of a minor injury collision, and a severe injury collision is weighted three times as much. The final index used to create the HIN network was based on the average of the percentile ranks of the weighted collision density metrics for pedestrian, and bicycle collisions. Based on SWITRS data from 2012-2016.

Table 2-9: Bicycle and Pedestrian Injuries on Pittsburg's HIN (2012-2016)

Street	Bicycle Injury Collisions	Pedestrian Injury Collisions	Total
W. Leland Road	5	9	14
Railroad Avenue	4	10	14
Harbor Street	1	9	10
E. Leland Road	4	4	8
Loveridge Road	1	5	6
Willow Pass Road	2	2	4
Range Road	3	0	3
West 10th Street	1	1	2
8th Street	1	0	1
Atlantic Avenue	1	0	1
Balclutha Way	1	0	1
Burton Ave	1	0	1
California Ave	1	0	1
Height Avenue	1	0	1
Winter Way	1	0	1
Woodhill Drive	1	0	1
10th Street	0	1	1
Buchanan Road	0	1	1
Crestview Drive	0	1	1
Frontage Road	0	1	1
Gladstone Drive	0	1	1
Marsh Avenue	0	1	1
Pittsburg-Antioch Highway	0	1	1
Stoneman Avenue	0	1	1
Total	29	48	77

Source: SWITRS via TIMS, 2012-2016



Source: SWITRS (2012-2016), Fehr & Peers (2019)



3

Vision & Goals

The following vision, goals, and policies reflect the priorities expressed by the community throughout the public outreach for Pittsburg Moves. The City of Pittsburg will use the framework established in this chapter as it makes decisions that affect active transportation to improve the community's health, mobility, livability, economy, and environment.

Community Vision:

In 2040, Pittsburg will be the most bicycle and pedestrian friendly community in East Contra Costa County. There will be zero bicyclist or pedestrian deaths on its streets.



Goal 1



Emphasize land use patterns and development projects that promote active transportation.

Policies:

1. Focus mixed-use, higher-density development in the Downtown, Pittsburg Center BART Station, and Pittsburg/Bay Point BART Station Priority Development Areas (PDAs).
2. Utilize CCTA's Vehicle Miles Traveled (VMT) Analysis Methodology for Land Use Projects in Contra Costa for evaluating VMT impacts.
3. Discourage urban sprawl and other development projects that increase VMT. Support businesses and development projects that provide goods and services to residents within walking and biking distance of their homes.
4. Require development projects to provide a high degree of street connectivity. Discourage the development of “gated” communities and avoid street vacations that result in decreased connectivity between neighborhoods.
5. As part of design review, require bicycle amenities such as short- and long-term bicycle parking, bicycle repair stations, showers, and changing rooms with personal effects lockers when appropriate.
6. Ensure that parking areas are designed to facilitate safe bicycle and pedestrian access between parking spaces, sidewalks, and building entrances.

Goal 2



Create a comprehensive active transportation network that enhances safety, access, comfort, and convenience for everyone.

Policies:

1. Design major arterials to function as complete streets that balance the needs of automobiles with those of pedestrians, bicyclists, transit users, and others.
2. Incorporate the Pittsburg Moves Project List (Appendix A) into the City's Capital Improvement Program; strive to complete all projects by 2040; emphasize delivery of the top ten priority projects in Chapter 4; coordinate with PUSD through the City's Traffic Safety Committee to implement projects near schools; and coordinate with outside agencies to improve regional connections.
3. Support and partner with other agencies to deliver multi-jurisdictional trail projects. This includes working with the East Bay Regional Park District and State Protection Commissions to establish the Great California Delta Trail as well as working with the Contra Costa Water District and East Bay Regional Park District to allow trail access along the Contra Costa Canal.
4. When possible, install best practice intersection treatments, such as bike boxes, fully protected intersections, and two-stage left turn lanes to reduce conflicts between bicycles and automobiles.
5. Integrate green infrastructure into all capital improvement projects, such as pavers, rain gardens, and bioretention areas.
6. Utilize most recent State and Federal design standards as well as guidance from NACTO and AASHTO when developing new active transportation facilities.
7. Utilize the Pittsburg Moves Crosswalk Policy (Appendix B) when marking, enhancing, and/or removing crosswalks throughout the city.
8. Continue looking for opportunities to eliminate sidewalk gaps that limit connectivity between neighborhoods.

9. Minimize active transportation barriers such as highways, freeway ramps, and at-grade rail crossings.
10. Continue providing pedestrian facilities, such as pedestrian-scale lighting, street trees, benches, waste receptacles, and landscaping along streets and pathways.
11. Work with transit agencies to improve bus frequency and reliability; and provide pedestrian amenities such as benches and covered waiting areas at bus stops with real-time transit information.
12. Install bicycle loop or video detection devices and bicycle detection markings at all intersections.
13. Reconfigure roadways with excessive vehicular capacity to accommodate new or enhanced bicycle facilities.
14. Remove underutilized street parking to provide enhanced bicycle facilities where feasible.
15. Limit the number of curb cuts and other access points along major arterial streets to improve bicycle and pedestrian safety.
16. Implement leading pedestrian interval (LPI) phases in high pedestrian demand areas to facilitate safe and efficient pedestrian movement.
17. Provide directional and destination signage for bicyclists, pedestrians, and transit users.

Goal 3

Maintain an active transportation network that is attractive, comfortable, and free of hazards.

Policies:

1. Maintain streets so that they are clean and free of debris and litter.
2. Require micromobility service operators to obtain permits prior to commencing operations. Consult CCTA's White Paper on Contra Costa Shared Micromobility to establish permitting requirements for equipment collection, use of right-of-way, data collection and sharing.
3. Require property owners to repair sidewalk tripping hazards along their frontage.
4. Provide smooth pavement surfaces that are free of potholes, cracks, steps, sunken or raised utility trenches or covers, hazardous drainage grates, and overhanging vegetation.¹⁴
5. Seek additional funding to raise the city's average pavement condition index (PCI) score to 70 or above.
6. Integrate elements from the Pittsburg Moves Project List (Appendix A) into restriping, repaving, overlay, and other routine maintenance projects whenever possible.
7. Repair or replace crosswalk and bike lane markings that have been faded or damaged.
8. Ensure that maintenance and construction projects provide temporary traffic controls to accommodate the flow of bicyclists and pedestrians.
9. Continue providing an online platform for residents to report street maintenance issues.

¹⁴ For more information about bicycle-friendly drainage grates, see: <https://www.fhwa.dot.gov/publications/research/safety/pedbike/05085/chapt14.cfm>





Goal 4

Implement a range of education, encouragement, enforcement, and evaluation programs that support active transportation.

Policies:

1. Partner with others to expand programs that: educate pedestrians, bicyclists, and motorists about roadway safety; and encourage people to walk or bike to their destinations.
2. Seek additional funding to expand traffic enforcement programs especially around schools.
3. Advocate for automated speed enforcement (ASE) in California. ASE slows speeds by using fixed or mobile cameras and other equipment to detect and capture images of vehicles traveling at dangerous speeds.
4. Continue to support and participate in Bike to Work Day and other bike promotion events.
5. Encourage event organizers to provide and advertise valet bicycle parking at local events.
6. Utilize MTC's Regional Pedestrian and Bicycle Count Guidelines to conduct bicycle and pedestrian counts before and after implementation of any significant active transportation project, including those listed in the Pittsburgh Moves Project List (Appendix A).
7. Prepare an annual report on the City's progress toward implementation of Pittsburgh Moves. Provide the following information to the City Council as part of the report:
 - A list of significant active transportation projects completed during the previous year.
 - A table summarizing the changes in Pittsburgh's bikeway mileage over the most recent five-year period.
 - Tables summarizing Pittsburgh's bicycle

and pedestrian-related collisions over the most recent five-year period.

- A table summarizing Pittsburgh's most recent OTS Rankings for bicycle and pedestrian-related collisions.
 - A summary of education, encouragement, and enforcement programs that were implemented during the previous year.
8. Apply for and achieve a League of American Bicyclists Bicycle Friendly Community status upon adoption of Pittsburgh Moves. Reapply on an annual basis and strive to achieve "gold" status by 2030.
 9. Encourage businesses to apply for Bicycle Friendly Business status with the League of American Bicyclists and provide recognition for those that achieve the designation.
 10. Work with online mapping companies to ensure that recommended bicycle and pedestrian routes within Pittsburgh are accurate.

Refer to Chapter 5 for a menu of potential education, encouragement, and enforcement programs that can be implemented to support active transportation in Pittsburgh.



4

Improvement Projects

The Pittsburgh Moves Project List in Appendix A contains over 290 improvement projects to create a comprehensive active transportation network that enhances safety, access, comfort, and convenience for bicyclists and pedestrians of all ages and abilities. This chapter provides an overview of the proposed bicycle and pedestrian improvements and identifies the city's priority corridors. It also includes cost estimates and suggested sources of funding.

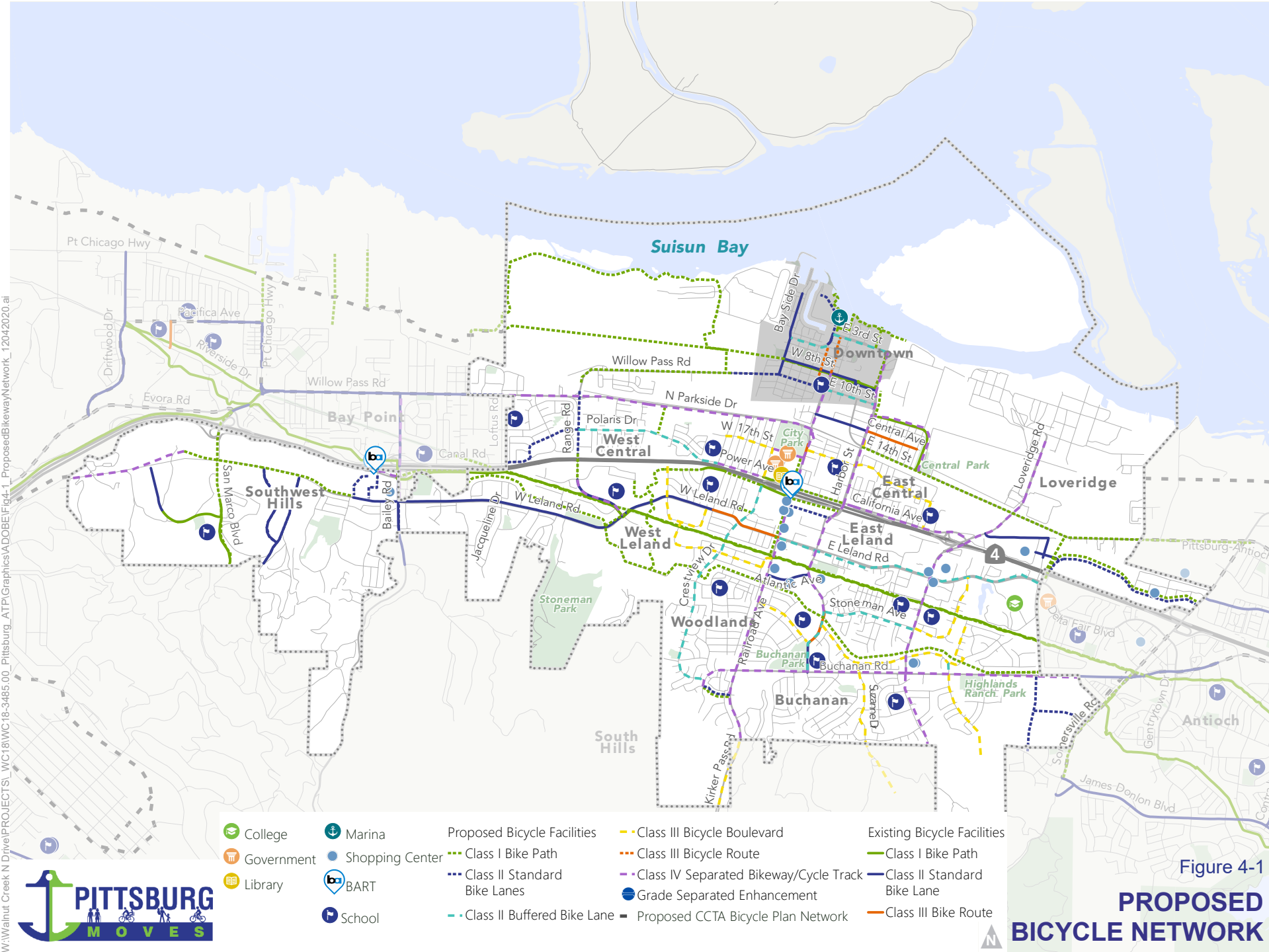
Bicycle Improvements

Figure 4-1 illustrates the city’s bikeway network after implementation of the Pittsburg Moves Project List. The proposed bikeway network more than doubles the city’s existing bikeway mileage, from about 43 miles in 2018 to approximately 90 miles by 2040. It includes almost 26 additional miles of shared-use paths; just over seven miles of new buffered bike lanes; eight-and-a-half miles of new bike boulevards; and just over 17 miles of new separated bikeways. The proposed network will eliminate existing gaps; improve north-south and east-west connectivity; and reduce the high level of traffic stress along Pittsburg’s arterials.

Table 4-1: Existing and Future Bikeway Network Mileage

Bikeway Type	Existing Length	Existing Percentage	Proposed Length	Proposed Percentage
Shared-Use Paths (Class I)	12.9 miles	30%	38.6 miles	43%
Standard Bike Lanes (Class II)	28.3 miles	66%	16.4 miles	18%
Buffered Bike Lanes (Class II)	0 miles	0%	7.1 miles	8%
Bike Routes (Class III)	1.5 miles	4%	1.8 miles	2%
Bike Boulevards (Class III)	0 miles	0%	8.5 miles	9%
Separated Bikeways (Class IV)	0 miles	0%	17.2 miles	19%
Total	42.7 miles		89.6 miles	

Source: City of Pittsburg GIS, July 2018



Pedestrian Improvements

Figure 4-2 shows the general location of crosswalk and sidewalk improvements proposed in the Pittsburgh Moves Project List. There are over 11 miles of new sidewalk proposed to bridge all the existing gaps in the city's pedestrian network. A variety of safety countermeasures are also proposed at different crosswalk locations. These include high-visibility crosswalk markings, parking restrictions at crosswalk approaches, adequate night-time lighting, raised crosswalks, advanced yield markings, in-street pedestrian crossing signs, curb extensions, median refuge islands, rectangular flashing beacons (RRFBs), and pedestrian hybrid beacons (PHBs).

The proposed countermeasures are intended to address conflicts at crossing locations, reduce vehicle speeds, enhance pedestrian visibility, increase the number of drivers who yield to pedestrians, and provide sufficient separation between pedestrians and traffic. Descriptions for each of the countermeasures are found in the Pittsburgh Moves Crosswalk Policy (Appendix B).

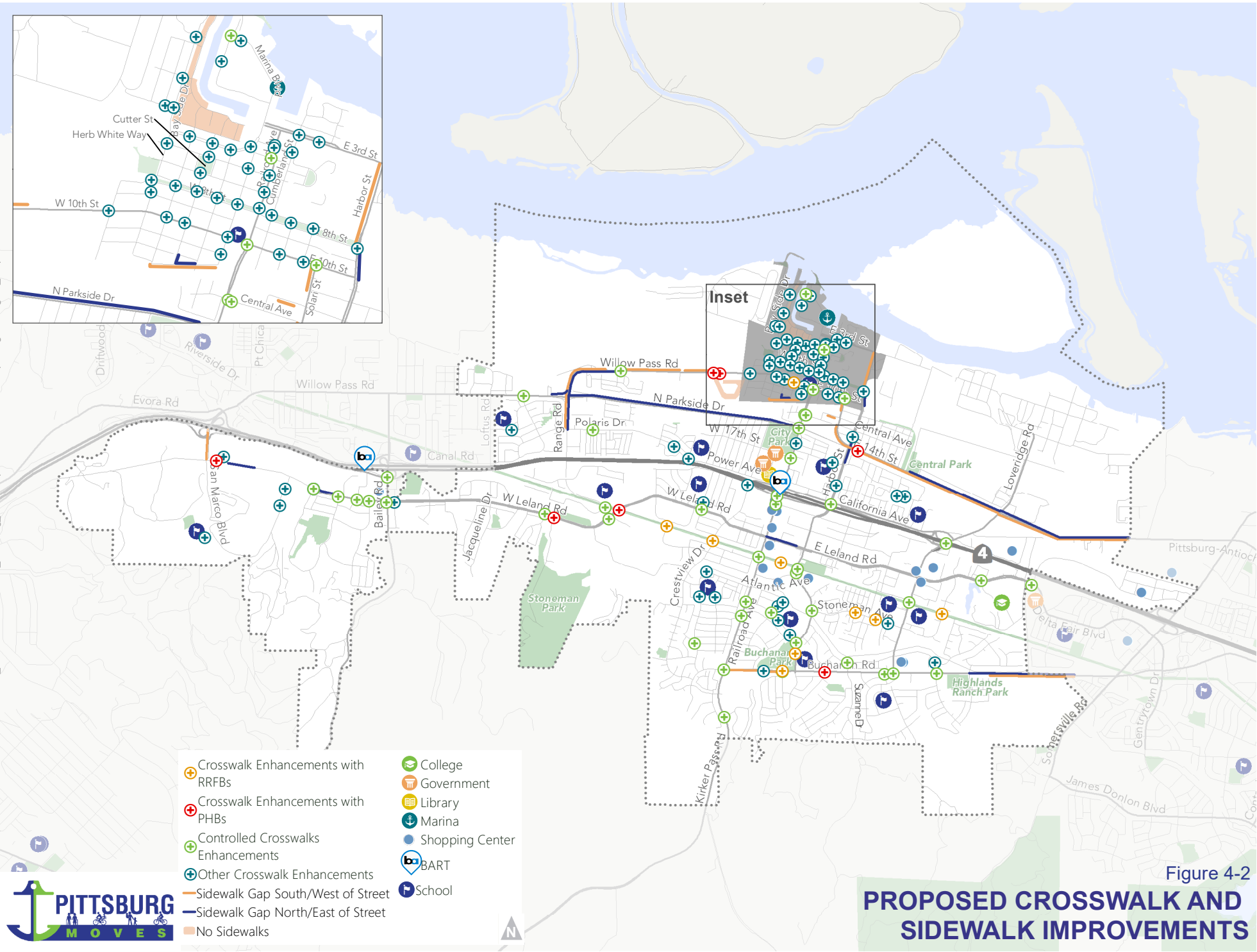


Figure 4-2
PROPOSED CROSSWALK AND SIDEWALK IMPROVEMENTS

Priority Corridors

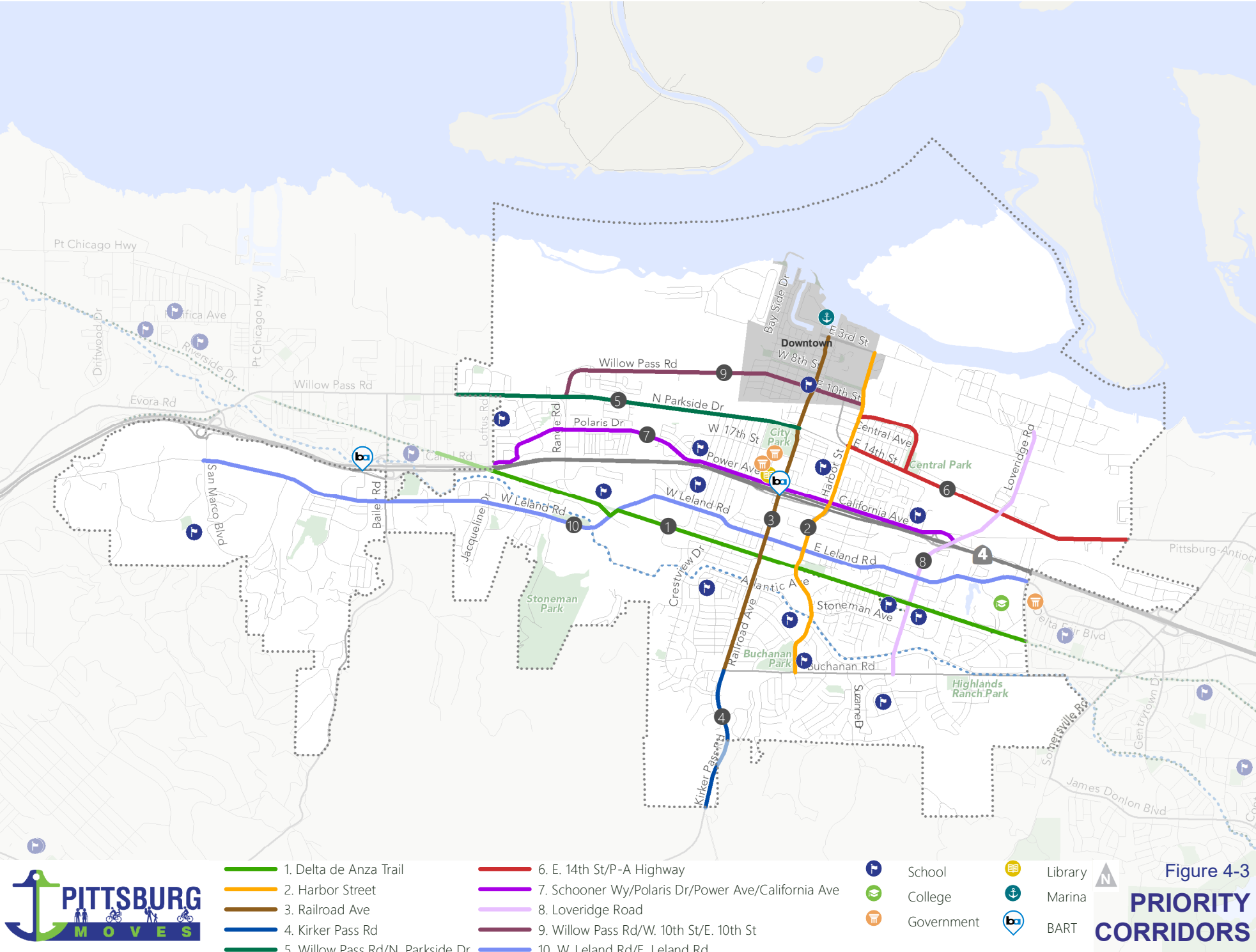
The Pittsburg Moves Project List organizes proposed improvement projects into ten corridor groups. As the City implements the project list, it will prioritize improvements along these corridors:

- Delta de Anza Trail
- Harbor Street
- Railroad Avenue
- Kirker Pass Road
- Willow Pass Road/N. Parkside Drive
- E. 14th Street/P-A Highway
- Schooner Way/Polaris Drive/Power Avenue/California Avenue
- Loveridge Road
- Willow Pass Road/W. 10th Street/E. 10th Street
- W. Leland Road/E. Leland Road

The priority corridors are depicted in **Figure 4-3**. To determine their priority level, each corridor group was given a score based on its ability to: reduce fatal and severe injuries; provide safe, continuous, and convenient access; increase the share of active transportation trips; and provide facilities in or near a disadvantaged community as defined by MTC.

Great California Delta Trail

The Great California Delta Trail is also a priority for Pittsburg. The Great California Delta Trail is a proposed trail network connecting Pittsburg and the rest of Contra Costa County with Sacramento, San Joaquin, Solano, and Yolo counties. In Pittsburg, the trail would connect the East Bay Regional Park District's Bay Point Wetlands and Pittsburg's Marina Park and provide access to the Delta shoreline. Pittsburg will support EBRPD in the development of the Trail. Many Pittsburg residents emphasized the connection to the water and the desire to have improved access to this community resource.



Priority Corridor #1

Delta de Anza Regional Trail

Length:	4.5 miles
Corridor Type:	East-west shared-use path
Speed Limit:	N/A
Truck Route?	No
Current LTS Score:	1
Segments in HIN?	No
Schools:	12
Parks:	9
Bus Stops:	87
Ped Collisions:	0*
Bike Collisions:	0*

*Ped and Bike Collisions between 2012-2016

Key Improvements

- Add pedestrian-scale lighting and verify lighting levels at trail crossings.
- Identify security strategies, which could include blue light emergency phones, cameras, and/or increased trail enforcement.
- Add trail amenities, such as water stations and trash bins.
- Provide shade trees and landscaping to increase comfort and appearance.
- Work with East Bay Regional Park District (EBRPD) and community-based organizations to develop placemaking projects, including public art installations and community gardens.
- Add staging areas with parking and wayfinding signs to provide greater access.
- Work with East Bay Municipal Utility District (EBMUD) and Contra Costa County to pave the existing gravel trail between Franklin Avenue and Canal Avenue in Bay Point.
- Widen the curb ramps at Loveridge Road and provide high-visibility crosswalk markings.
- Upgrade the trail crossings at Atherton Avenue, Crestview Drive, Presidio Lane, and Gladstone Drive to include RRFBs; wayfinding signs; high-visibility crosswalk markings; parking restrictions at crosswalk approaches; adequate nighttime lighting; curb extensions; upgraded curb ramps; and advanced yield markings with "yield here to pedestrian" signs.
- Install a raised crosswalk at Atherton Avenue and Gladstone Drive.
- Install a median refuge at Crestview Drive.
- Work with property owners to close the trail gap between Ackerman Drive and W. Leland Road.
- Consider installing a protected intersection at Railroad Avenue.
- Install a PHB or traffic signal at Harbor Street with a median refuge, high-visibility crosswalk markings, and wayfinding signage.

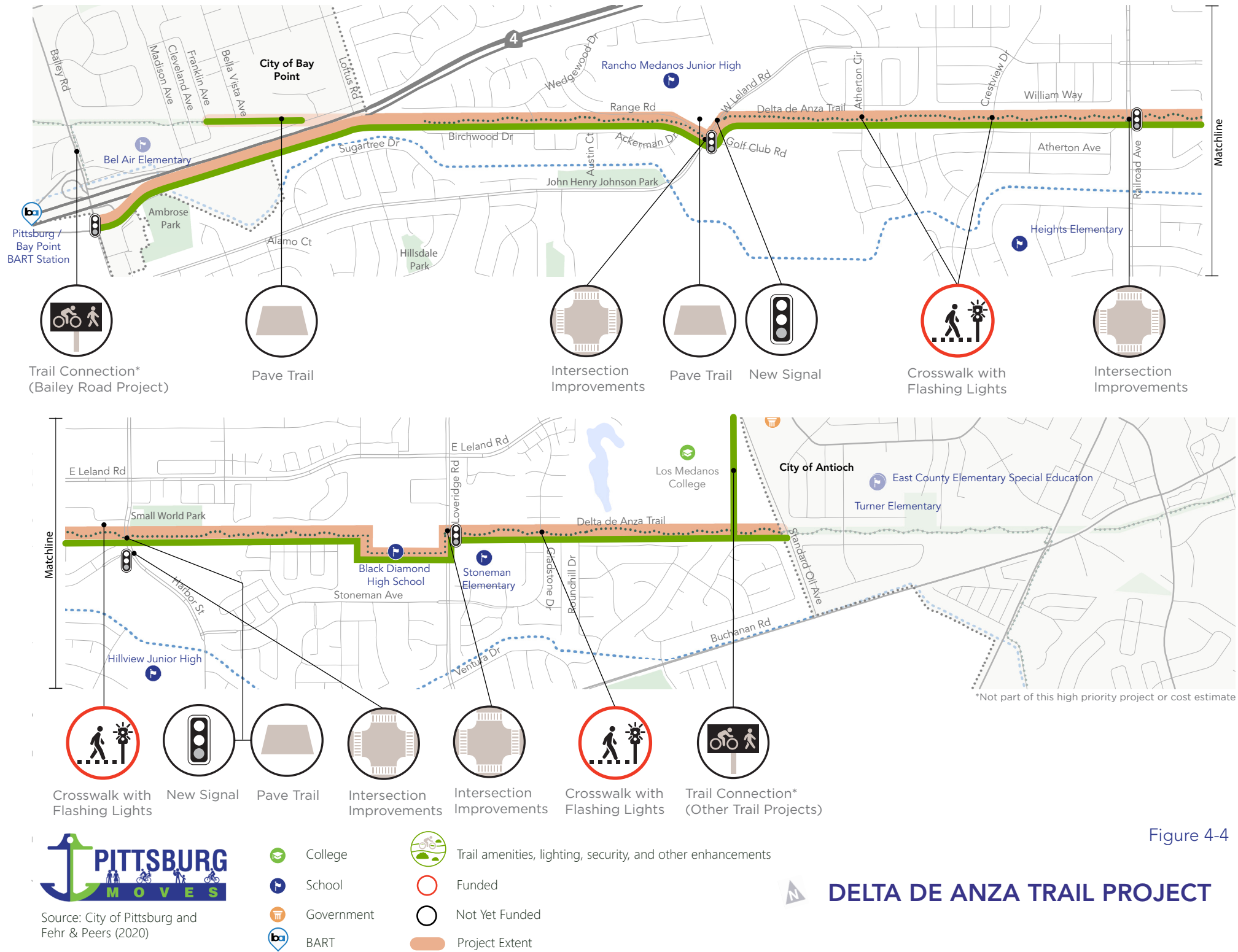


Figure 4-4

Priority Corridor #2

Harbor Street

Length:

2.5 miles

Corridor Type:

North-south minor arterial

Speed Limit:

35 mph

Truck Route?

Yes (north of E. Leland Road)

Current LTS Score:

3

Segments in HIN?

Yes

Schools:

4

Parks:

7

Bus Stops:

73

Ped Collisions:

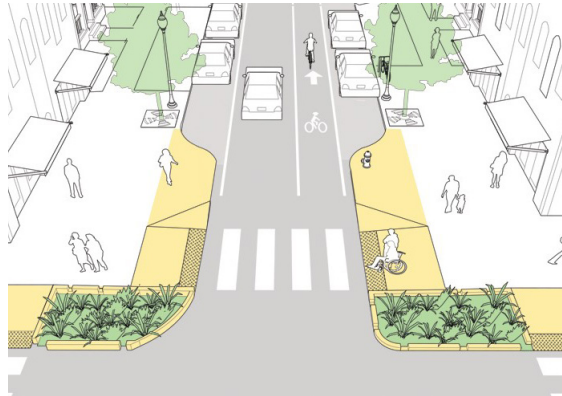
11*

Bike Collisions:

3*

*Ped and Bike Collisions between 2012-2016

- Key Improvements
- Install buffered bike lanes from Buchanan Road to Stoneman Avenue.
 - Install separated bikeways from Stoneman Avenue to E. 3rd Street.
 - Install a single-lane roundabout at Stoneman Avenue or narrow the intersection by providing a median refuge and curb extensions. Mark the southern crosswalk.
 - At Yosemite Drive: align the intersection as close to 90 degrees as possible; install curb extensions on the southwest and northwest corners and east side of the street; and add a leading pedestrian interval (LPI) on northern and southern crosswalks.
 - Between the Highlands Elementary and Buchanan Park driveways, install a RRFB with a high-visibility crosswalk, median refuge, and curb extensions.
 - At E. 8th Street, provide adequate nighttime lighting and install a high-visibility crosswalk with advanced yield markings and “yield here to pedestrian” signs.



Curb extensions increase the overall visibility of pedestrians by aligning them with the parking lane. They also reduce the crossing distance for pedestrians.



Median refuge islands are protected spaces placed in the center of the street to facilitate bicycle and pedestrian crossings.

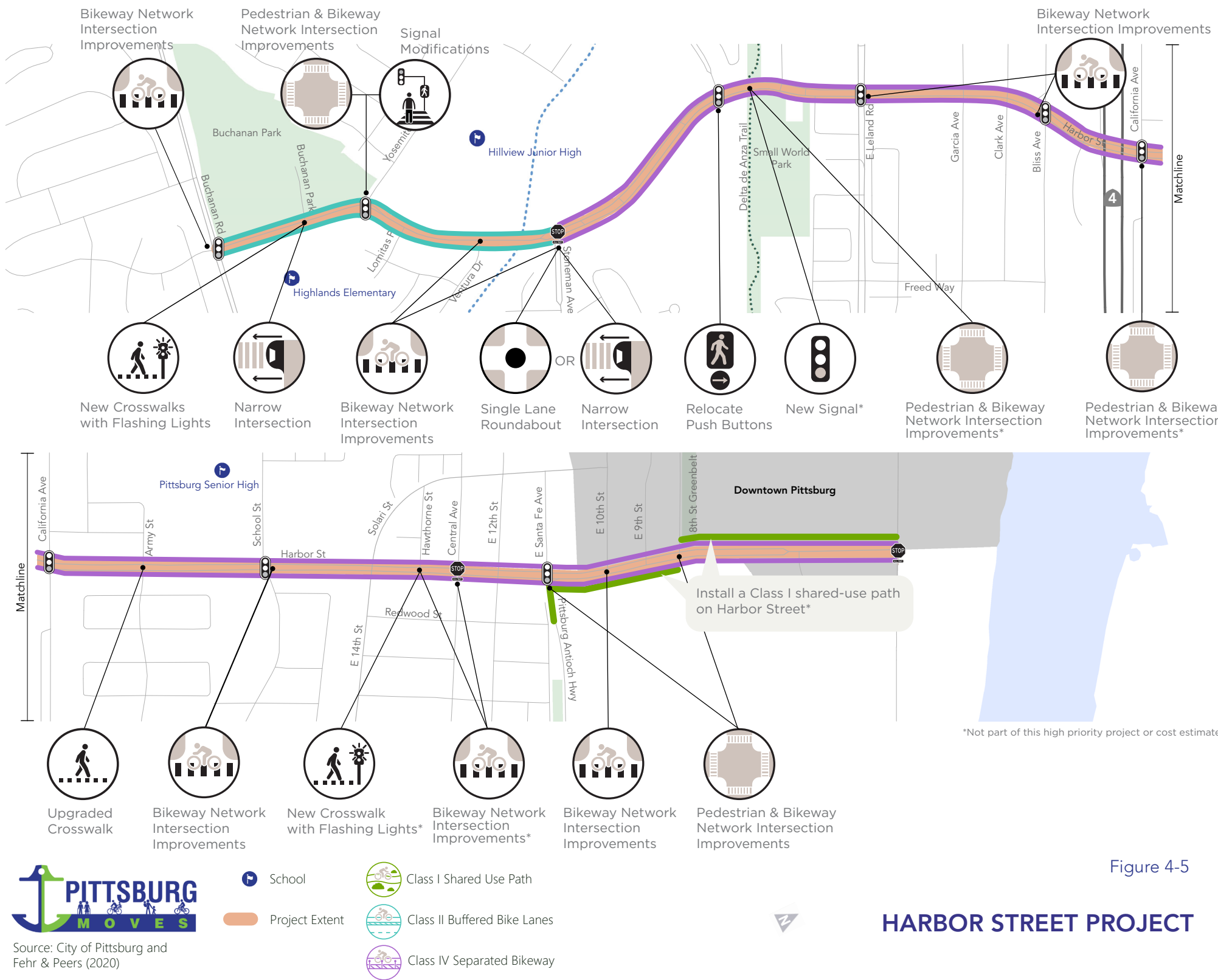


Figure 4-5

HARBOR STREET PROJECT

Priority Corridor #3

Railroad Avenue

Length:

2.6 miles

Corridor Type:

North-south major arterial

Speed Limit:

20 mph north of W. 10th Street/35 mph south of W. 10th Street

Truck Route?

Yes (south of W. 10th Street)

Current LTS Score:

3 and 4

Segments in HIN?

Yes

Schools:

4

Parks:

8

Bus Stops:

70

Ped Collisions:

13*

Bike Collisions:

5*

*Ped and Bike Collisions between 2012-2016

Key Improvements

- Between E. 3rd Street and E. 8th Street, add signage to designate the segment as a bike route.
- Provide a mobility hub with bike parking at the southwest corner of Railroad Avenue and E. 8th Street.
- Install separated bikeways from E. 8th Street to Buchanan Road.
- Widen the sidewalk between California Avenue and City Park to provide a shared-use path with a minimum five-foot landscape buffer from the street.
- Install a shared-use path on the west side of Railroad Avenue between California Avenue and the Delta de Anza Regional Trail. Provide pedestrian scale lighting, a landscape buffer from the street, and high-visibility crosswalks at intersections.
- At Parkside Drive, remove the pork chop island and tighten corner radii to reduce vehicle speeds and the crossing distance for pedestrians. Provide high-visibility crosswalks with advance stop bars and upgrade the curb ramps.
- At Civic Avenue, mark the southern crosswalk and add LPIs on the northern and southern crosswalks. Provide high-visibility crosswalks, parking restrictions at crosswalk approaches, and adequate nighttime lighting.
- Mark the northern crosswalk at Bliss Avenue. Upgrade the curb ramps and provide a pedestrian refuge at the northern and southern crosswalks.
- At the southeast corner of California Avenue, install a curb extension to increase pedestrian visibility and slow northbound right-turning vehicles.
- At the northwest corner of California Avenue, consider increasing pedestrian visibility by signaling the southbound right turn lane to SR-4.
- At California Avenue, mark the southern crosswalk and install an LPI for the eastern crosswalk. Provide a two-step trail crossing with green paint along the northern and eastern crosswalks.
- At the SR-4 eastbound ramps, mark the northern crosswalk and upgrade the curb ramps. Install a two-step trail crossing with green paint along the southern and eastern crosswalks. Widen the pedestrian refuge at the southern crosswalk.

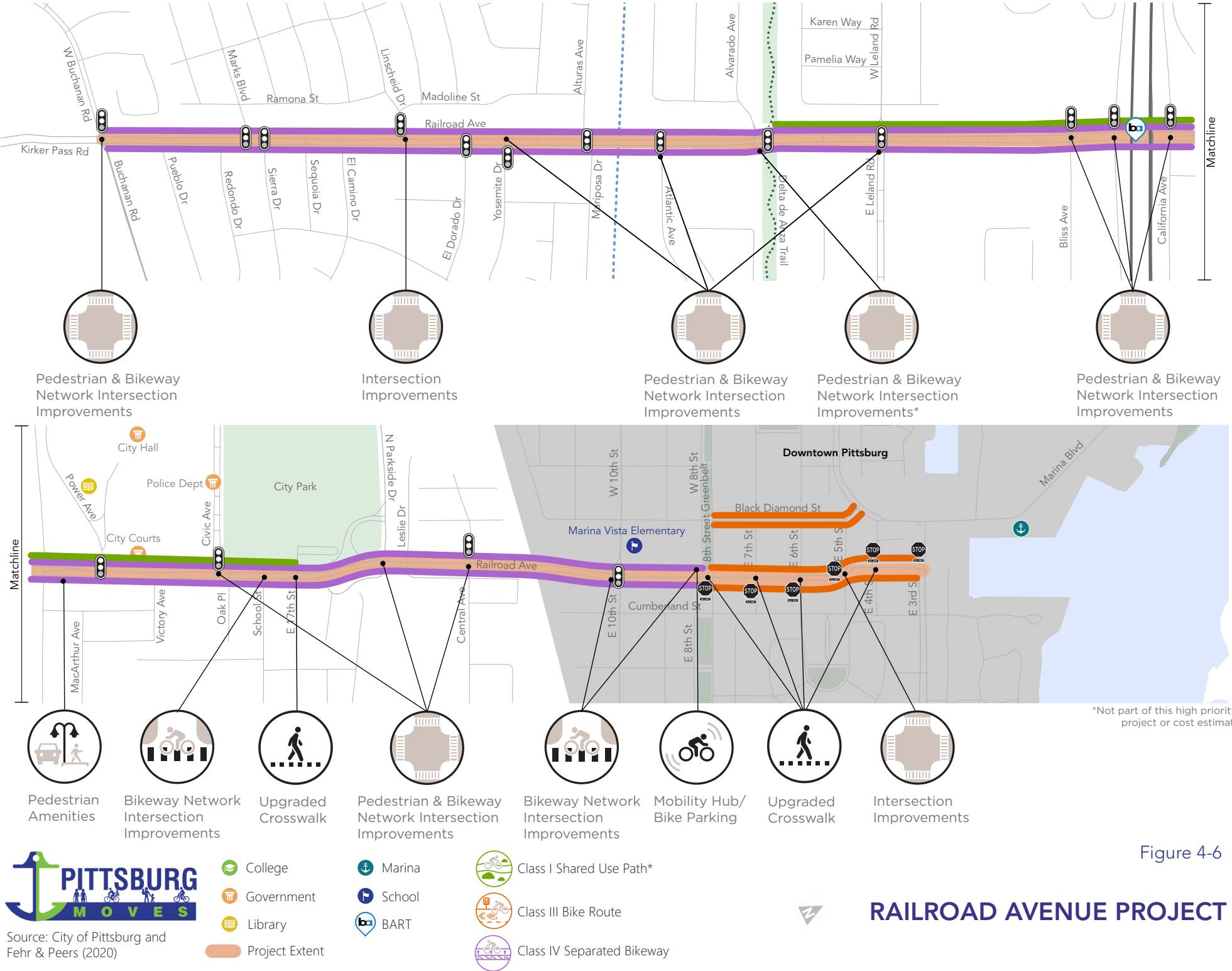


Figure 4-6

RAILROAD AVENUE PROJECT

Priority Corridor #4

Kirker Pass Road

Length:

1 mile

Corridor Type:

North-south major arterial

Speed Limit:

40 mph

Truck Route?

Yes

Current LTS Score:

4

Segments in HIN?

No

Schools:

0

Parks:

2

Bus Stops:

5

Ped Collisions:

0*

Bike Collisions:

0*

*Ped and Bike Collisions between 2012-2016



Rectangular rapid flashing beacons (RRFBs) are pedestrian-activated flashing LED lights, typically mounted on existing crosswalk signage, that signal to drivers that a pedestrian is about to enter a crosswalk. RRFBs have proven to be highly effective at increasing yield rates. RRFBs are most effective at multilane crosswalks with speed limits less than 40 mph.

Key Improvements

- Install separated bikeways from Buchanan Road to Pheasant Drive.
- At Pheasant Drive, remove the northeast and southeast slip lanes, straighten the eastern crosswalk, add a pedestrian refuge, and upgrade the curb ramps.



For roadways with speed limits higher than 40 mph, the FHWA recommends considering pedestrian hybrid beacons (PHBs). Like RRFBs, PHBs are pedestrian-activated lights that flash yellow to alert drivers of incoming pedestrians. Unlike RRFBs, PHBs are mounted on mast arms above the mid-block crosswalk, much like a traffic light at an intersection.

- Between Buchanan Road and the southern city limit, install rumble strips, flashing beacons, and speed feedback signs to help slow vehicles entering the city.

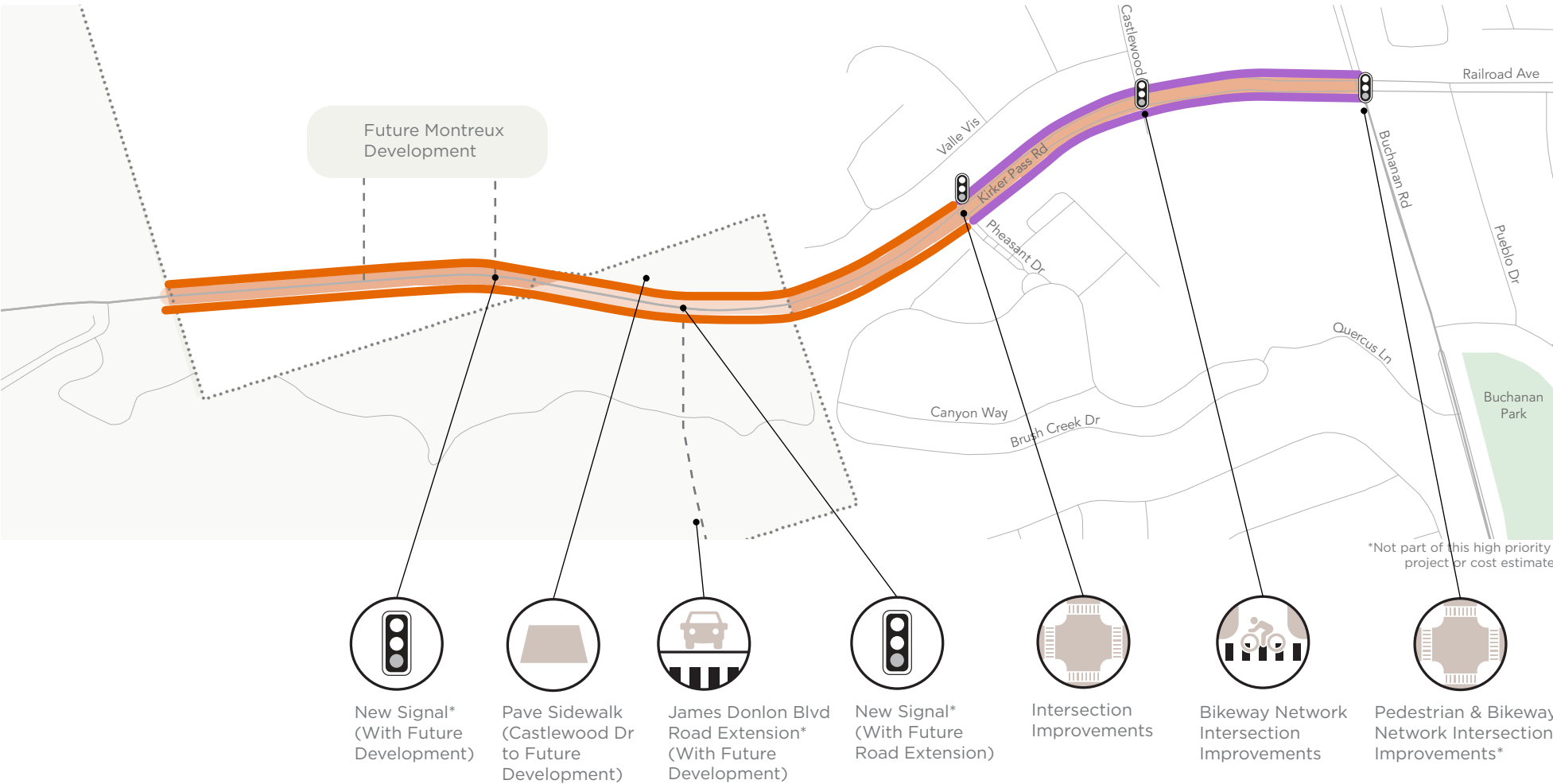


Figure 4-7

KIRKER PASS ROAD PROJECT

Priority Corridor #5

Willow Pass Road/N. Parkside Drive

Length:	2.5 miles
Corridor Type:	East-west major arterial/minor arterial
Speed Limit:	40 mph
Truck Route?	Yes
Current LTS Score:	4
Segments in HIN?	Yes
Schools:	4
Parks:	7
Bus Stops:	64
Ped Collisions:	2*
Bike Collisions:	3*

*Ped and Bike Collisions between 2012-2016

Key Improvements

- Coordinate with the County to install separated bikeways between Railroad Avenue and Loftus Road.
- Coordinate with the County to install standard bike lanes from Loftus Road to the western city limit.
- At Balclutha Way, mark the western crosswalk and provide high-visibility markings.

Top Right: Separated bikeways can use a variety of methods for physical protection from passing traffic. They may be combined with a parking lane or other barrier between the bikeway and the motor vehicle travel lane.

Bottom Right: Separated bikeways can also be elevated above street level. They can be placed next to the sidewalk or at an intermediate level between the roadway and sidewalk to separate the bikeway from the pedestrian area.

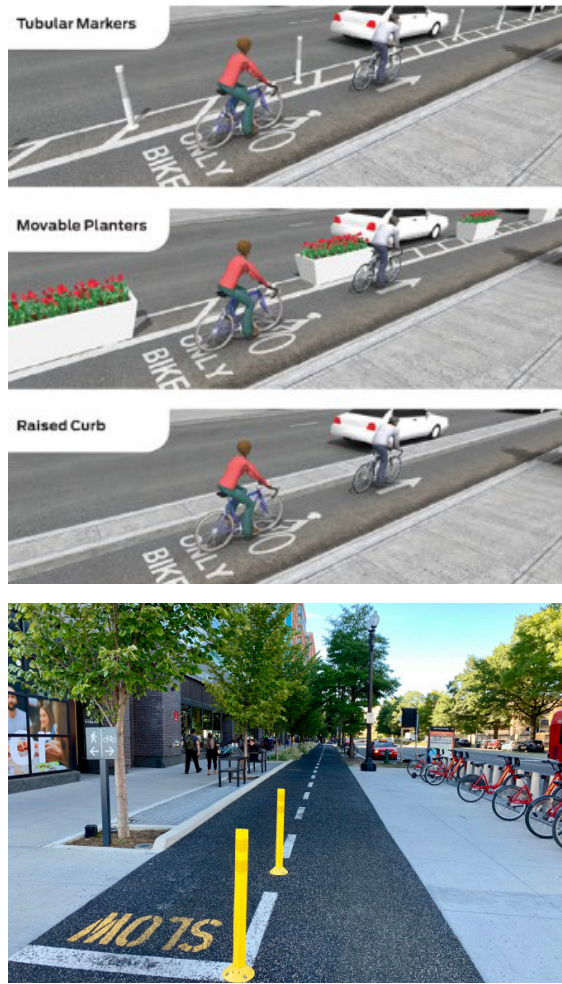


Figure 4-8
WILLOW PASS ROAD/
N. PARKSIDE DRIVE PROJECT

Priority Corridor #6

E. 14th Street/ P-A Highway

Length:	2.9 miles
Corridor Type:	East-west major arterial
Speed Limit:	45 mph
Truck Route?	Yes
Current LTS Score:	4
Segments in HIN?	Yes
Schools:	3
Parks:	4
Bus Stops:	50
Ped Collisions:	1*
Bike Collisions:	0*

*Ped and Bike Collisions between 2012-2016

Key Improvements

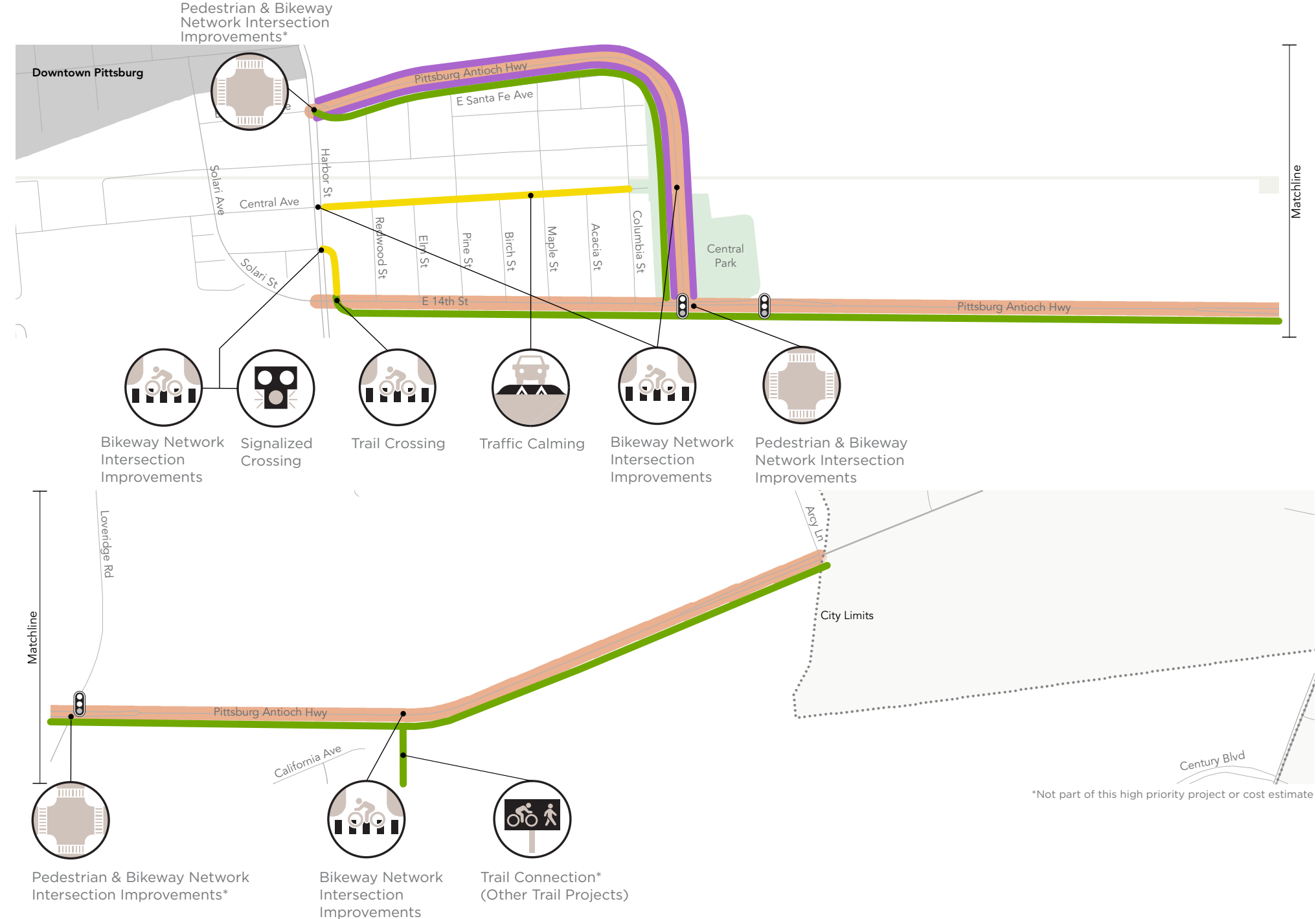
- Install a shared-use path from Harbor Street to the eastern city limit.
- Designate the unnamed roadway east of Harbor Street, between Hawthorne Street and E. 14th Street as a bike boulevard.
- Add a PHB at the Harbor Street/Hawthorne Street intersection and a trail crossing on E. 14th Street, just east of the bridge.
- Install separated bikeways along P-A Highway, between Harbor Street and Central Park.
- Enhance the existing bike route along Central Avenue east of Harbor Street by providing additional traffic calming improvements such as speed tables and/or speed humps.



Speed tables are midblock traffic calming devices that raise the entire wheelbase of a vehicle to reduce its traffic speed.



Speed humps are parabolic vertical traffic calming devices intended to slow traffic speeds on low volume, low speed roads.



Source: City of Pittsburgh and Fehr & Peers (2020)

Project Extent



Class I Shared Use Path (additional study needed to determine which side of the street)



Class III Bicycle Boulevard



Class IV Separated Bikeway

Figure 4-9
**E. 14TH STREET/PITTSBURG-ANTIOCH
HIGHWAY PROJECT**

Priority Corridor #7

Schooner Way/ Polaris Drive/ Power Avenue/ California Avenue

Length: 3.6 miles
Corridor Type: East-west collector/minor arterial
Speed Limit: 35 mph/40mph
Truck Route? Yes (along California Avenue)

Current LTS Score: 1 (along Power Avenue) and 4 (along California Avenue)
Segments in HIN? No (along Power Avenue) and Yes (along California Avenue)

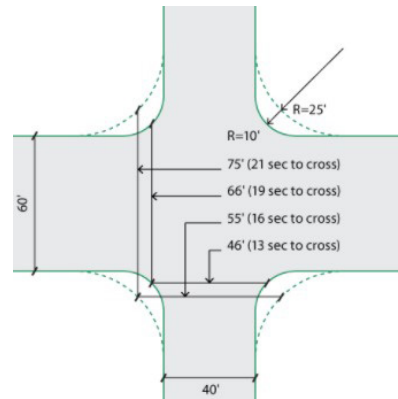
Schools: 6
Parks: 8
Bus Stops: 87

Ped Collisions: 1*
Bike Collisions: 2*

*Ped and Bike Collisions between 2012-2016

Key Improvements

- Install standard bike lanes along Schooner Way from the western city limit to Range Road.
- Install buffered bike lanes along Polaris Drive from Range Road to Andrew Avenue.
- Install a two-way separated bikeway on the south side of Power Avenue between Andrew Boulevard and Davi Avenue.
- At Balclutha Way: mark the southern crosswalk; tighten the northeast and northwest turning radii; install pedestrian refuges on the eastern and western crosswalks; and upgrade the curb ramps.
- At Jorgensen Drive, add a pedestrian refuge, high-visibility crosswalk markings, parking restrictions at crosswalk approaches, adequate nighttime lighting, upgraded curb ramps, and advanced yield markings with “yield here to pedestrian” signs. Consider installing RRFBs if there is low driver compliance.
- At the mid-block location west of the shopping center at 1000 Power Avenue, provide a raised crosswalk with high-visibility markings, a pedestrian refuge, and adequate nighttime lighting.



Corner radii directly impact vehicle turning speeds and pedestrian crossing distances. Minimizing the size of a corner radius is critical to creating compact intersections with safe turning speeds. While standard curb radii are 10–15 feet, many cities use corner radii as small as 2 feet.

- Install a shared-use path with minimum five-foot landscape buffers along the south side of California Avenue between Railroad Avenue and Loveridge Road.
- At Harbor Street, mark the southern crosswalk and tighten the turning radii where feasible to reduce crossing distances.

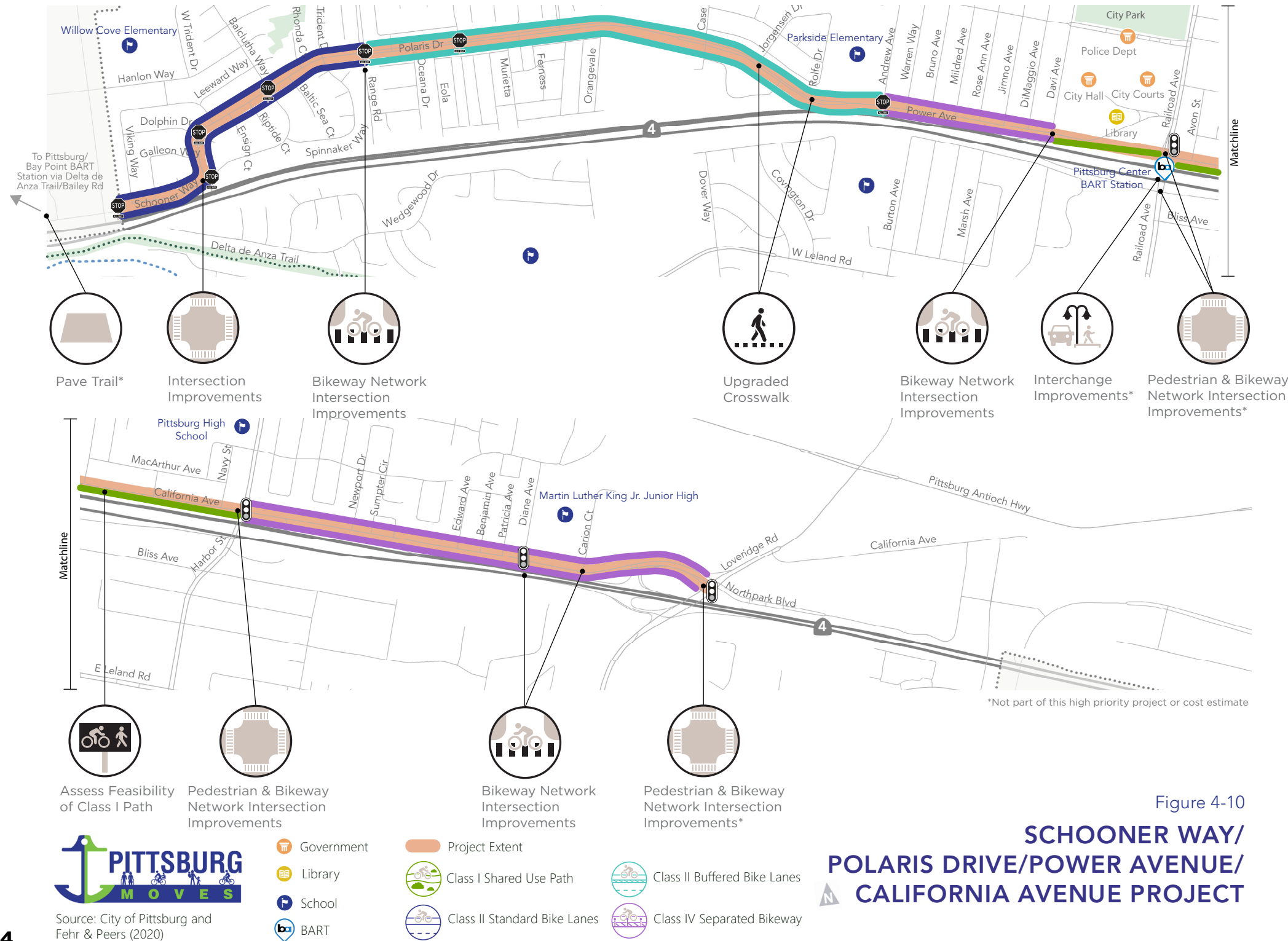


Figure 4-10
**SCHOONER WAY/
POLARIS DRIVE/POWER AVENUE/
CALIFORNIA AVENUE PROJECT**

Priority Corridor #8
Loveridge Road

Length: 2.2 miles

Corridor Type: North-south major arterial

Speed Limit: 35 mph

Truck Route? Yes (north of E. Leland Road)

Current LTS Score: 3

Segments in HIN? Yes

Schools: 5

Parks: 2

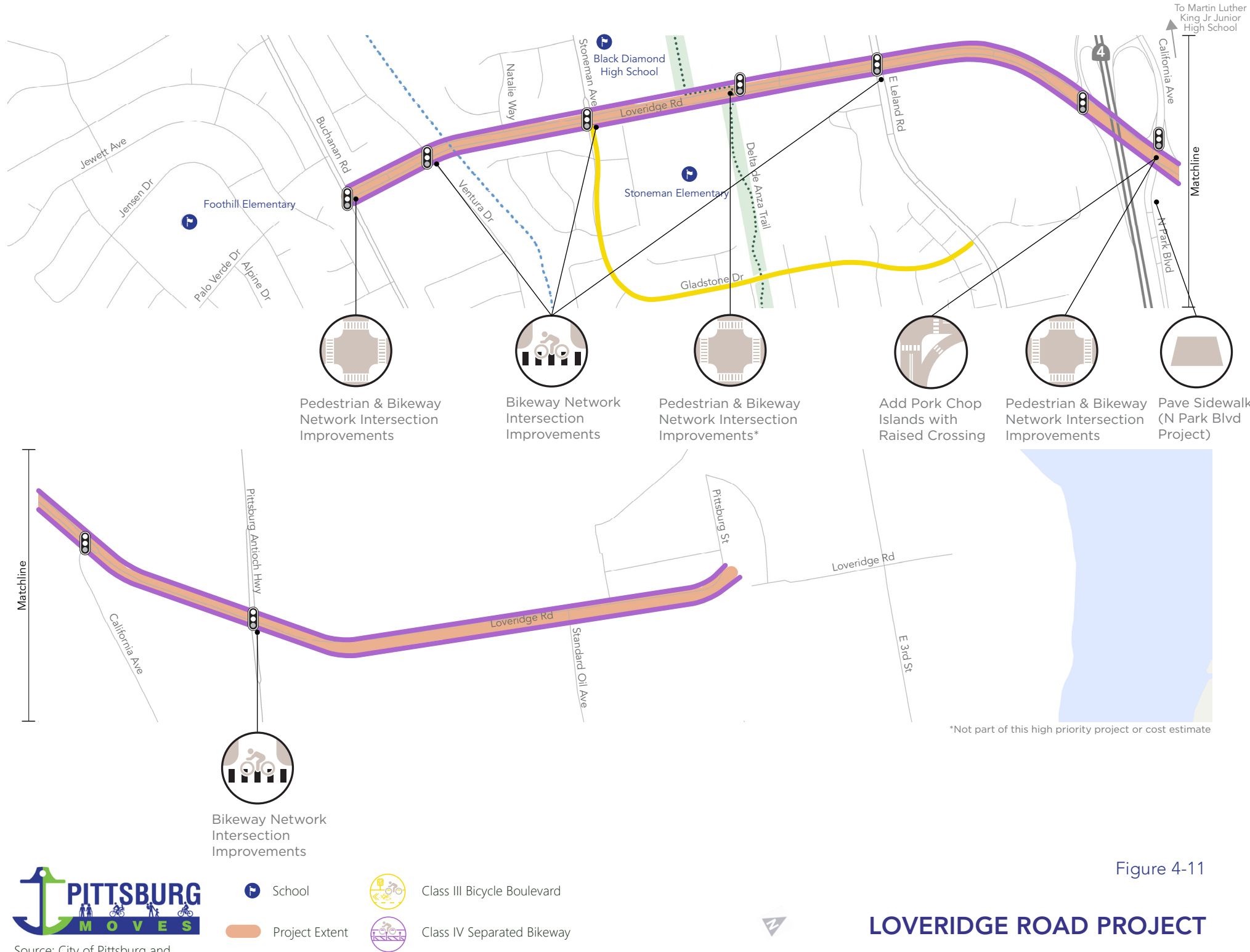
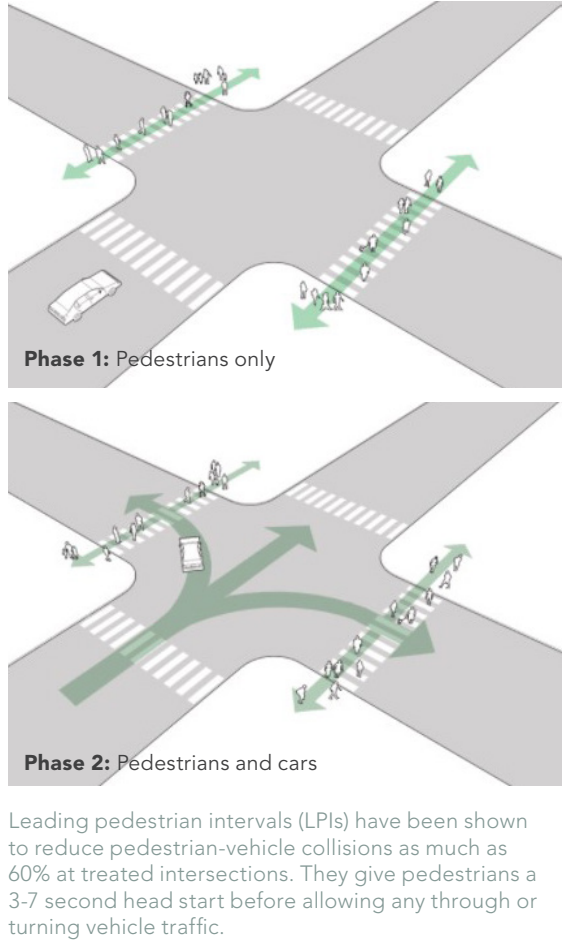
Bus Stops: 30

Ped Collisions: 9*

Bike Collisions: 4*

*Ped and Bike Collisions between 2012-2016

- Key Improvements**
 - Install separated bikeways from Buchanan Road to Pittsburg Street.
 - At Buchanan Road: install a “turning vehicles yield to pedestrians” sign for southbound vehicles turning right; install a median refuge with a pedestrian push button at the northern crosswalk; tighten the curb radii on the northwest and northeast corners to slow turning vehicles; install “25 mph school zone” signage; add an LPI for southbound vehicles turning right; and consider prohibiting right turns on red and adding an LPI on the eastern and western crosswalks.
 - At California Avenue, install pork chop islands with raised crosswalks at all corners of the intersection to shorten crossing distances for pedestrians.
 - Designate a bike boulevard along Stoneman Avenue and Gladstone Drive, between Loveridge Road and E. Leland Road. Explore traffic calming improvements such as speed tables and/or speed humps.



Priority Corridor #9

Willow Pass Road/W. 10th Street/E. 10th Street

Length:	2.3 miles
Corridor Type:	East-west major arterial
Speed Limit:	40 mph/30-35 mph
Truck Route?	Yes
Current LTS Score:	3 and 4
Segments in HIN?	Yes
Schools:	2
Parks:	7
Bus Stops:	52
Ped Collisions:	2*
Bike Collisions:	3*

*Ped and Bike Collisions between 2012-2016

Key Improvements

- Install a shared-use path from Parkside Drive to Enterprise Circle and standard bike lanes from Enterprise Circle to Railroad Avenue.
- At Enterprise Circle: install a PHB with a high-visibility crosswalk; add parking restrictions at the crosswalk approaches; provide adequate nighttime lighting; add curb extensions and a pedestrian refuge; and upgrade the curb ramps.
- At Beacon Street: move the EB bus stop to far side; install a PHB; add parking restrictions at the crosswalk approaches; install advanced stop bars; and add curb extensions.
- At West and Cutter streets: add parking restrictions at the crosswalk approaches; provide adequate nighttime lighting; and install advanced yield markings with "yield here to pedestrian" signs.
- At York Street: install a RRFB; add parking restrictions at the crosswalk approaches; provide adequate nighttime lighting; install advanced yield markings with yield signs; and add curb extensions.
- At Black Diamond Street: add a new high-visibility crosswalk; add parking restrictions at the crosswalk approaches; provide adequate nighttime lighting; and install advanced yield markings with yield signs.
- At East Street: install high-visibility crosswalks; add parking restrictions at the crosswalk approaches; provide adequate nighttime lighting; install advanced yield markings with yield signs; add curb extensions and a pedestrian refuge; upgrade the curb ramps; and install missing curb ramps.
- At Los Medanos Street: install high-visibility crosswalks; add parking restrictions at the crosswalk approaches; provide adequate nighttime lighting; install advanced yield markings with yield signs; add curb extensions and a pedestrian refuge; upgrade the curb ramps; and install missing curb ramps.
- At Solari Drive: relocate the eastern crosswalk to the west side of the street; add high-visibility markings to crosswalks; add parking restrictions at the crosswalk approaches; provide adequate nighttime lighting; install advanced yield markings with yield signs; and add curb extension on the southwest corner.
- Install buffered bike lanes from Railroad Avenue to Harbor Street. At Railroad Avenue: remove the slip lane on the southeast corner; add high-visibility crosswalk markings; add a pedestrian refuge on the southern crosswalk; and add an LPI on the eastern and western crosswalks.



Figure 4-12
WILLOW PASS ROAD/
W. 10TH STREET/
E. 10TH STREET PROJECT

Priority Corridor #10

W. Leland Road/E. Leland Road

Length:	6.3 miles
Corridor Type:	East-west major arterial
Speed Limit:	35-40 mph
Truck Route?	Yes
Current LTS Score:	3
Segments in HIN?	Yes
Schools:	11
Parks:	7
Bus Stops:	88
Ped Collisions:	22*
Bike Collisions:	15*

*Ped and Bike Collisions between 2012-2016

Key Improvements

- When West Leland Road is extended via development from Avila Road, add a Class IV separated bikeway.
- At the S. Broadway Avenue intersection, add a marked crosswalk and install curb ramps across Broadway Avenue.
- Install a shared-use path on the south side of W. Leland Road from Villa Drive to the BART station access road northeast of Southwood Drive.
- At Woodhill Drive, upgrade the southeast curb ramp and mark the eastern and western crosswalks.
- Close the sidewalk gap on the northern side of W. Leland between Woodhill Drive and the BART station access road northeast of Southwood Drive.
- At Southwood Drive, upgrade the curb ramps and mark the eastern and western crosswalks.
- At the BART station access road: mark the western crosswalk; add high-visibility crosswalk markings; and install an LPI on the eastern and western crosswalks.
- Mark the western crosswalk at Oak Hills Drive.
- At Montevideo Drive, mark the western crosswalk and upgrade the curb ramp on the southwest corner.
- Install a PHB with a high-visibility crosswalk and pedestrian refuge at the John Henry Johnson Parkway. Locate the PHB on the westside of the parkway and relocate the bus stop from the nearside to the farside.
- If warranted by the projected pedestrian demand from the redevelopment of the former golf course, install a PHB with a high-visibility crosswalk and pedestrian refuge at the driveway entrance to John Henry Johnson Park.
- Require a right-of-way dedication along the southern side of W. Leland Road from Range Road to Dover Way so the sidewalk can be expanded for students at Rancho Medanos Junior High.
- At Burton Avenue, mark the eastern crosswalk, install countdown signals, and add an LPI on the eastern and western crosswalks.
- Close the sidewalk gap approximately 200 feet east of Railroad Avenue on the northside of E. Leland Road. Provide a temporary asphalt pathway until a standard concrete sidewalk can be constructed.
- Install separated bikeways from Railroad Avenue to the eastern city limit.

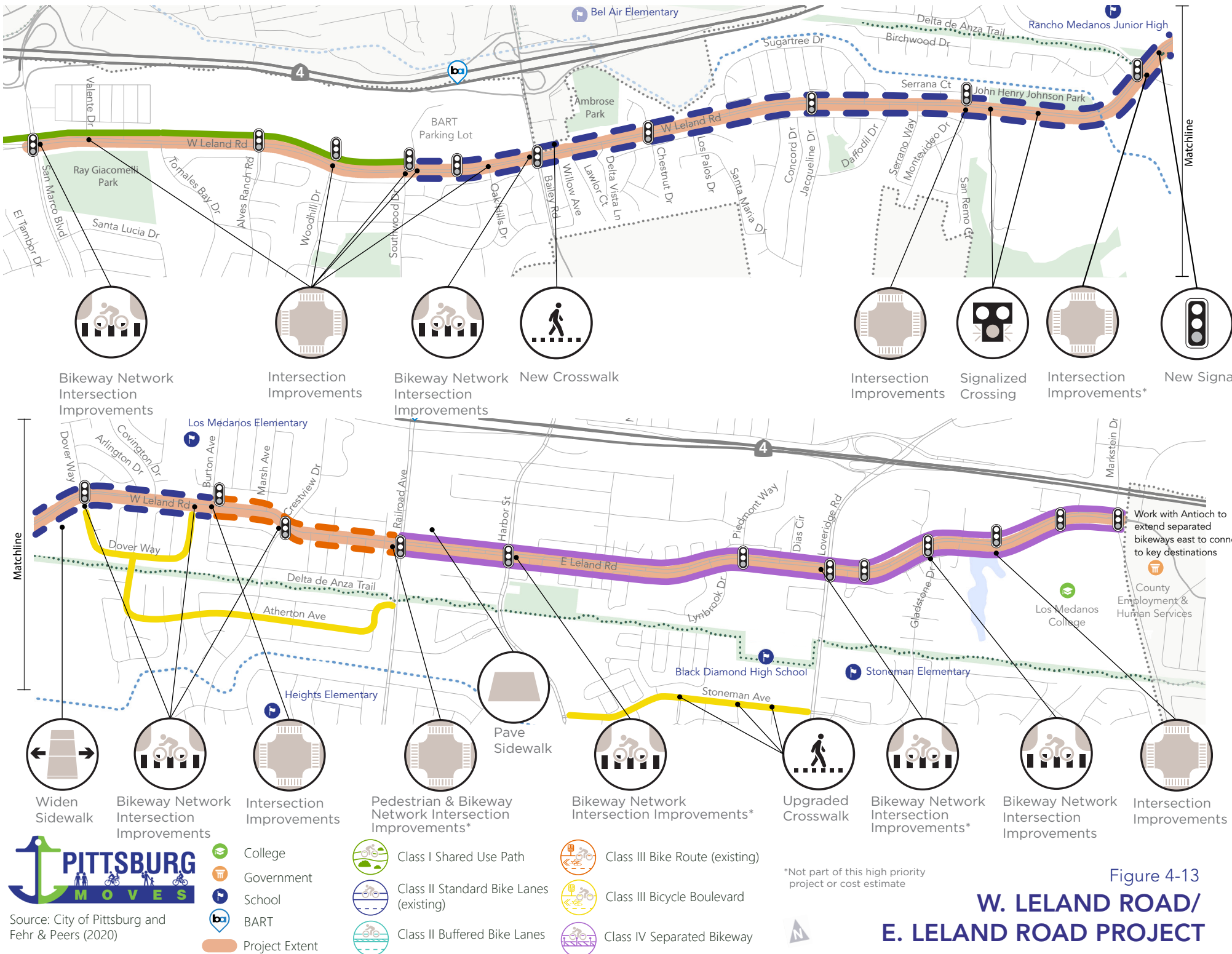


Figure 4-13
W. LELAND ROAD/
E. LELAND ROAD PROJECT

Cost Estimates

Table 4-2 summarizes the estimated costs for implementation of the Pittsburg Moves Project List. The table reflects planning-level estimates which include soft costs and contingencies. The City will develop detailed estimates during the preliminary design of each improvement or group of improvements as they advance toward implementation. Actual costs will vary as design decisions and assumptions about materials change.

Cost estimates were developed with the following assumptions:

- Shared-use paths would be constructed on generally flat right-of-way with minimal grading needed.
- Bikeways would require minimal or no roadway improvements, such as roadway widening, unless otherwise noted in the project list.
- Bike boulevards would require sharrows, striping, and medium traffic calming measures.
- Separated bikeways would utilize striped buffers and plastic pylons. It should be noted that the cost of a separated bikeway varies, depending on the type of vertical element used.

Table 4-2: Estimated Cost of Pittsburg Moves Project List

Improvement Type	Total Cost
Bicycle	\$44,937,600
Pedestrian	\$84,894,000
Total:	\$129,931,600

Note: Estimated costs are in 2019 dollars. Costs exclude any right of way acquisitions that may be required as well as any additional feasibility studies.

Refer to the Pittsburg Moves Project List in Appendix A for the estimated cost of each individual improvement or priority corridor.



Funding Sources

Federal, state, and local government agencies invest billions of dollars every year in the nation’s transportation system. Only a fraction of that funding is used to develop policies, plans, and projects to improve conditions for bicyclists and pedestrians. Even though appropriate funds are available, they are limited and often hard to find. Desirable projects sometimes go unfunded because communities may be unaware of a fund’s existence or may apply for the wrong type of grant. In addition, there is competition between municipalities for the limited available funds.

Table 6-1 identifies federal, State, and local funding sources that the City of Pittsburg may use to fund implementation of the Pittsburg Moves Project List.



Table 4-2: Funding Sources and Uses

Source	Origin	Funding Uses							
		CIP Development	Maintenance and Operations	Implementation	First and Last Mile	Urban Forestry	Access to Nature	Stormwater Treatment	Culture and History
Federal Funding Sources									
Land and Water Conservation Fund	U.S. National Park Service/ California Department of Parks and Recreation	✓					✓	✓	
Urban Community Forestry Program	U.S. National Park Service	✓				✓			
Surface Transportation Program (STP)	Federal Highway Administration (FHWA)/ Caltrans	✓		✓	✓			✓	
Highway Safety Improvement Program (HSIP)	FHWA	✓		✓	✓			✓	
Transportation Alternative Program (TAP)	FHWA	✓		✓	✓			✓	
Recreational Trails Program	FHWA	✓		✓	✓		✓	✓	
EPA Brownfields Clean Up and Assessments	U.S. Environmental Protection Agency	✓		✓	✓			✓	
Sustainable Communities Planning Grant and Incentive Program	U.S. Department of Housing and Urban Development (HUD)				✓				
Urban Revitalization and Livable Communities Act	HUD			✓	✓				
Community Development Block Grants	HUD	✓			✓		✓		✓

Source	Origin	Funding Uses							
		CIP Develop-ment	Mainte-nance and Operations	Implemen-tation	First and Last Mile	Urban Forestry	Access to Nature	Stormwa-ter Treat-ment	Culture and His-tory
ACHIEVE, Communities Putting Prevention to Work, Pioneering Communities	Center for Disease Control and Prevention				✓		✓		
Urban and Community Forest Program	Department of Agriculture, Forest Service	✓		✓		✓	✓	✓	
Community Forest and Open Space Conservation	Department of Agriculture, Forest Service	✓		✓		✓	✓	✓	
Choice Neighborhoods Implementation Grants	HUD, Office of Public and Indian Housing	✓		✓	✓		✓	✓	
Safe Routes to School, Mini-grants	National Center for Safe Routes to School, Caltrans	✓		✓	✓				
Metropolitan and Statewide and Nonmetropolitan Transportation Planning	Federal Transit Administration (FTA)	✓		✓	✓			✓	
Urbanized Area Formula Grants	FTA	✓	✓		✓			✓	
Bus and Bus Facilities Formula Grants	FTA	✓			✓				
Enhanced Mobility of Seniors and Individuals with Disabilities	FTA	✓	✓		✓				
Formula Grants for Rural Areas	FTA	✓	✓		✓				
TOD Planning Pilot Grants	FTA	✓	✓		✓			✓	

Source	Origin	Funding Uses							
		CIP Development	Maintenance and Operations	Implementation	First and Last Mile	Urban Forestry	Access to Nature	Stormwater Treatment	Culture and History
State Funding Sources									
Land and Water Conservation Fund (LCWF)	California Department of Parks and Recreation (DPR)	✓			✓		✓	✓	
Statewide Park Program Prop 84 Round 2	DPR	✓		✓	✓				
Recreational Trails Program	DPR	✓	✓	✓	✓		✓	✓	
Proposition 117 – Habitat Conservation	DPR	✓		✓		✓	✓	✓	
Nature Education Facilities	DPR	✓	✓				✓		✓
Watershed Program	DPR	✓		✓			✓	✓	
Stormwater Flood Management Prop. 1E	DPR	✓		✓	✓	✓	✓	✓	
Roberti-Z’Berg-Harris (RZH) Grant Program – Prop. 40	DPR	✓	✓		✓	✓	✓	✓	
Aquatic Center Grants	Department of Boating and Waterways	✓							
Community Based Transportation Planning, Environmental Justice and Transit Planning	Caltrans	✓			✓			✓	
Active Transportation Planning Grants (ATP)	Caltrans	✓		✓	✓			✓	
Regional Improvement Program	Caltrans	✓			✓			✓	

Source	Origin	Funding Uses							
		CIP Develop-ment	Mainte-nance and Operations	Implemen-tation	First and Last Mile	Urban Forestry	Access to Nature	Stormwa-ter Treat-ment	Culture and His-tory
Safe Routes to School Programs (SR2S)	Caltrans	✓			✓			✓	
Traffic Safety Grants	California Office of Traffic Safety	✓		✓	✓				
Local Partnership Program – Competitive and Formulaic	California Transportation Commission (SB 1)		✓	✓				✓	
Coastal Conservancy Grants	California Coastal Conservancy	✓			✓	✓	✓	✓	✓
Non-point Source Pollution, Watershed Plans, Water Conservation (Props. 13, 40, 50, and 84)	State Water Resources Control Board	✓	✓			✓		✓	
Sustainable Communities Planning, Regional SB 375	Strategic Growth Council/Department of Conservation	✓			✓	✓	✓	✓	✓
Environmental Enhancement and Mitigation (EEMP)	California Natural Resources Agency, Caltrans	✓					✓	✓	
California River Parkway and Urban Streams Restoration Grant	California Natural Resources Agency/ Department of Water Resources	✓	✓		✓		✓	✓	
Strategic Growth Council Urban Greening Program	California Natural Resources Agency	✓		✓		✓	✓	✓	
California Cap and Trade Program	Cal EPA, Air Resources Board	✓		✓	✓	✓	✓		
Urban Forestry Program (Leafing Out, Leading Edge and Green Trees Grants)	California Department of Forestry and Fire Protection (CAL FIRE)	✓		✓		✓			

Source	Origin	Funding Uses							
		CIP Development	Maintenance and Operations	Implementation	First and Last Mile	Urban Forestry	Access to Nature	Stormwater Treatment	Culture and History
Local Funding Sources									
General Fund	City of Pittsburgh	✓	✓	✓	✓	✓	✓	✓	✓
General Obligation Bonds	City of Pittsburgh	✓	✓	✓	✓	✓	✓	✓	✓
Landscape Maintenance District (LMD)	City of Pittsburgh			✓					
Community Facilities District (CFD)	City of Pittsburgh			✓					
Enhanced Infrastructure Financing District (EIFD)	City of Pittsburgh	✓	✓	✓	✓	✓	✓	✓	✓
Benefit Assessment District	City of Pittsburgh			✓					
Local Traffic Mitigation Fee (LTMF)	City of Pittsburgh	✓	✓	✓	✓	✓	✓	✓	✓
Regional Transportation-Development Impact Mitigation Fee (RTDIM)	City of Pittsburgh	✓	✓	✓	✓	✓	✓	✓	✓
Park Impact Fees	City of Pittsburgh	✓		✓	✓	✓	✓	✓	✓
Development Agreements	City of Pittsburgh	✓	✓	✓	✓	✓	✓	✓	✓
Transit Occupancy Tax (TOT) Revenues	City of Pittsburgh	✓	✓	✓	✓	✓	✓	✓	✓
Sales Tax Revenues	City of Pittsburgh	✓	✓	✓	✓	✓	✓	✓	✓
Food and Beverage Tax	City of Pittsburgh	✓	✓		✓		✓		✓



5

Support Programs

This chapter provides a menu of education, encouragement, enforcement, and evaluation programs that can help support increased active transportation in Pittsburgh.

Adult Bicycling Skills Classes

Most adults who bike have not received training on safe bicycling practices, the rules of the road, and bicycle handling skills. Bicycling skills classes can help close this education gap. Given the large increase in bicycle infrastructure planned as part of Pittsburgh Moves, the City should sponsor or partner with other organizations to provide adult bicycle skills classes as a way of encouraging people to try out new facilities as they are built. Bike East Bay offers several classes taught by certified instructors. Their classes cover many topics ranging from bike theft prevention, bike commuting, and bike mechanics. The League of American Bicyclists also offers classes. Information can be found at www.bikeleague.org. **Potential sponsors:** City of Pittsburgh, Bike East Bay, The League of American Bicyclists



Bait Bike Program

Bike theft is a concern in many communities including Pittsburgh. Bait bike programs involve a bicycle outfitted with a tracking device monitored by police. The bicycle should be nondescript and consistent with the character of bicycles ridden in the community. Periodically, the police department can lock the bait bike at a location where thefts have been reported and monitor the tracking device. When the bicycle is stolen, police can use the location data to recover the bicycle and cite the thief. This program can be particularly effective in prosecuting organized bicycle theft operations that remove bicycles from the community to be sold in bulk at another location. **Potential sponsors:** Pittsburgh Police Department

Bicycle Rodeos

A bike rodeo is an event that provides elementary and middle school children with the opportunity to learn, practice, and demonstrate bike handling skills in a fun, safe, and encouraging atmosphere. Numerous obstacle courses are set up with chalk, traffic cones, and other materials. Volunteers run each activity station or obstacle course, with the objective of teaching the children how to better control their bikes. Bike East Bay and Contra Costa Health Services (CCHS) offer bike rodeos throughout the county and are looking to expand their programs in Pittsburgh. CCHS' bike rodeo kit can be borrowed by community organizations interested in hosting their own events. **Potential sponsors:** Bike East Bay, Contra Costa Health Services, Contra Consta Transportation Authority

BikeMobile

The Bay Area BikeMobile hosts bicycle repair clinics at schools, libraries, recreation centers, and community events across the Bay Area. At these events, participants are engaged in a hands-on repair process so that they may be more confident in making future repairs on their own. Additionally, BikeMobile promotes safe riding, teaches beginners how to ride without training wheels, and gives away refurbished bicycles. BikeMobile is offered through the Metropolitan Transportation Commission's Spare the Air Youth Program and it is a free resource that focuses on low-income communities. **Potential sponsors:** Metropolitan Transportation Commission's Spare the Air Youth Program, Bike East Bay

Bay Area Bike to Work Day (BTWD)

Bay Area BTWD is a celebration of bicycles as fun and healthy way to get to work. The City of Pittsburgh participates in BTWD by hosting energizer stations on the Delta de Anza Regional Trail and the Pittsburgh Center BART Station. The energizer stations provide participants with refreshments, giveaways, and bicycle information during the morning and evening commutes. BTWD is part of National Bike Month in May. **Potential sponsors:** City of Pittsburgh, Bike East Bay, 511 Contra Costa, Contra Costa Transportation Authority, Bay Area Air Quality Management District



Book-A-Bike

San Mateo County has a book-a-bike pilot program that makes bicycles available for same-day check-out at one of its libraries. The bikes are available for adults with a library card and signed waiver. The library's fleet includes four low-maintenance bicycles equipped with a cargo basket, bike light, carbon gears, and flat-free tires. A helmet, bike lock, and first aid kit are also provided as part of the rental. The City of Pittsburgh can seek grant funding for a similar program at the Pittsburgh Library. **Potential sponsors:** City of Pittsburgh, Lyft, Lime, Bike East Bay, 511 Contra Costa, Encina Bicycle Center



Source: <https://smcl.org/blogs/post/book-a-bike-at-belmont-library/>

Green Sneaker Challenge

This is an elementary school challenge that rewards the class or grade level with the greatest number of students who walk or bike to school. The winning class or grade level wins a green sneaker trophy and other incentives such as early dismissal, extra recess time, and pizza parties. The Marin County Safe Routes to School program has a Green Sneaker Guidebook with instructions and tips for schools interested in creating their own challenge (www.saferoutestoschools.org/contests.html). **Potential sponsors:** City of Pittsburgh, Bike East Bay

Light and Helmet Giveaways

The California Office of Traffic Safety (OTS) grant program can fund bicycle helmets or lights for giveaways to children at schools or children observed bicycling without wearing helmets or residents riding without lights. Bicycle lights are required for nighttime riding in California and can help increase the safety of a person riding a bicycle. Typically, this type of program is conducted in partnership with police departments. The City of Pittsburgh should consider seeking an OTS grant to conduct helmet and light giveaways. **Potential sponsors:** City of Pittsburgh, Bike East Bay, Contra Costa Transportation Authority

Open Streets

Open Streets are events that temporarily close streets to automobile traffic so people can use them for walking, biking, playing, and getting to know their neighbors. These events create a safe and fun space to practice active transportation, explore neighborhoods, and build healthy communities. Originating from Ciclovía in Bogotá, Columbia and Seattle Bicycle Sundays in Washington, open streets initiatives have spread to over 100 US cities including Oakland, San Francisco, and San Jose. Open streets events are most successful when planned with the support of many different community stakeholders from neighborhoods, local government, schools, advocacy groups, and businesses. **Potential sponsors:** City of Pittsburgh, local businesses

Park and Walk Program

Park and walk programs encourage families to park several blocks from school and walk the rest of the way to school. Parking lots that are typically vacant or unused during school drop-off and pick-up times, such as parks, places of worship, or malls with large parking lots, may be willing to share their space and can serve as a meeting place for families for the walk to school. This program can reduce traffic congestion around the school's pick-up and drop-off areas while still accommodating parents who drop their children off at school on their way to work. **Potential sponsors:** Bike East Bay, Contra Costa Health Services, Contra Costa Transportation Authority



School Travel Tallies

The City of Pittsburgh can coordinate with its school districts to have teachers conduct annual travel tallies at each school. As part of this program, teachers in each classroom can get a head count of how many students walk, bicycle, carpool, or drive to school. The City can use the tallies to track improvements in the rates of children walking and biking to school. A sample tally sheet can be downloaded from the National Center for Safe Routes to School website (www.saferoutesdata.org). **Potential sponsors:** Pittsburgh Unified School District, Bike East Bay, Contra Costa Health Services

Social Walks/Rides

Social walks and bicycle rides can provide many benefits to a community. People who are uncomfortable bicycling or walking alone, or who are unfamiliar with the best routes to use, will benefit from having a group to show them the way. Rides can also be used as informal education opportunities to remind participants about safe walking and bicycling behavior and sharing the road. **Potential sponsors:** Pittsburgh Unified School District, Bike East Bay, Contra Costa Health Services

Spare the Air Youth Program

The Metropolitan Transportation Commission and Bay Area Air Quality Management District organize a technical advisory committee which consists of safe routes to school and other youth-oriented program implementers who target transportation and climate change through a variety of funding sources. The committee meets quarterly in San Francisco with an option to attend remotely. The City of Pittsburgh can participate on the committee to network, learn about other Safe Routes to School programs, and connect with funding opportunities. **Potential sponsors:** City of Pittsburgh, Metropolitan Transportation Commission, Bay Area Air Quality Management District, Contra Costa Health Services

Street Smarts Diablo Campaign

The City of Pittsburgh currently partners with 511 Contra Costa on the Street Smarts Diablo campaign to deliver free bicycle and pedestrian safety programs to schools. Programs offered through Street Smarts include “Mr. Beeps” assemblies for K-2 students and Bicycle Blender Walk & Rolls for middle school and high school students. Street Smarts also provides safe routes to school curriculum that can be incorporated by teachers into their classes. Street Smarts Diablo is funded through the Contra Costa Transportation Authority and the Bay Area Air Quality Management District’s Transportation Fund for Clean Air. **Potential sponsors:** City of Pittsburgh, Metropolitan Transportation Commission, Bay Area Air Quality Management District, 511 Contra Costa



Traffic Safety Enforcement

The Pittsburgh Police Department conducts enforcement periodically based on their observations and request from the community. Any traffic safety enforcement that occurs in Pittsburgh should be done with a commitment to not disproportionately burdening low-income communities, communities of color, and/or immigrant communities. Additionally, traffic safety enforcement that occurs should focus on the driver behaviors known to cause the most severe pedestrian and bicycle crashes.

Potential enhancements to enforcement may include: exploring opportunities for automated speed enforcement (pending state legislation) and red-light cameras; and focusing enforcement to address unsafe driving behavior in school zones, such as double-parking and weaving around cars, and near the BART stations. **Potential sponsors:** Pittsburgh Police Department.



Walk & Roll to School Days

A walk & roll to school day is a special event that encourages students and their parents to try walking, bicycling, or other non-motorized ways to get to school. There are two annual events that are celebrated internationally. International Walk to School Day is celebrated on the first Wednesday in October and Bike to School Day is the first Wednesday in May. **Potential sponsors:** City of Pittsburgh, Bay Area Air Quality Management District, 511 Contra Costa, School Districts, Bike East Bay, Contra Costa Health Services

Walking and Bicycling Audits

Walking and bicycling audits identify barriers for travel between home and school. They generally include a tour of the school area where participants identify issues related to walking and biking, followed by a debriefing and brainstorming session to rank concerns and identify potential solutions. Audits are typically completed by planners, engineers, and other staff with experience in pedestrian and bicycle issues. They often include input from stakeholders like school faculty and/or administrators, district staff, parents, and students. The stakeholders systematically document conditions that impact students walking or bicycling to and from school and note specific locations on a map. The Spare the Air Youth Program provides a guidebook with suggestions for preparing and conducting an audit (www.sparetheairyouth.org/program-resources/safety-activities/school-site-audits). **Potential sponsors:** City of Pittsburgh, Bike East Bay

Walking School Buses and Bike Trains

Walking school buses and bike trains are formed when a group of children accompanied by one or more adults walk or bike together to school. Routes can originate from a particular neighborhood or, in order to include children who live too far to bicycle, begin from a park, parking lot, or other meeting place. As the walking school bus continues the route to school, the group can pick up students at designated meeting locations. Walking school buses and bike trains can be informal arrangements between neighbors with children attending the same school or official school-wide endeavors with trained volunteers and structured meeting points with a pick-up timetable. **Potential sponsors:** City of Pittsburgh, Bike East Bay, 511 Contra Costa, Contra Costa Health Services



Appendix A

Project List

Table A-1: Pittsburgh Moves Project List

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
A	Trail Projects					
A.1	Delta de Anza Trail					
1	Delta de Anza Trail	Western City limit to Eastern City Limit	Trail	- Coordinate with EBRPD to improve the personal security and comfort for users of the Delta de Anza Trail. Note that site constraints associated with underground utilities and pipe may limit provision of some improvements. Additional feasibility study is required. - Proposed improvement include: - Add pedestrian-scale lighting and verify lighting levels at crossings - Identify a security strategy for the trail, which might include blue light phones, cameras, and/or increased trail enforcement - Add trail amenities, such as trash cans and water stations - Provide shade trees and landscaping to increase comfort and aesthetics of the trail - Work with local groups and East Bay Regional Park District (EBRPD) to develop placemaking strategies and installations, such as community gardens and artwork - Explore opportunities to convert the Delta de Anza Trail into a linear park, like the Richmond Greenway Trail, to provide park access to park-poor areas - Add staging areas with parking and wayfinding signs to provide greater access to the trail. Potential locations to explore include the parcel on the east side of Railroad Avenue just north of the Delta de Anza Trail and at Small World Park.	4.9	\$18,272,000
2	Delta de Anza Trail Extension	On-street trail alignment between Delta de Anza Canal Road Extension and Delta de Anza Trail south of SR 4	Trail	See Bailey Road improvements	n/a	-

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
3	Delta de Anza Canal Road Extension (in Bay Point)	Franklin Avenue to Canal Avenue	Trail	- Work with East Bay Municipal Utility District (EBMUD) and County to pave existing unpaved trail - Work with EBMUD and County to mark enhanced trail crossings at Emerald Cove Drive to connect the EBMUD Utility Trail and Canal Road per Pittsburgh Moves Crosswalk Policy	0.6	\$2,237,000
4	Delta de Anza Trail	Delta de Anza Trail at Uncontrolled Intersections with Atherton Avenue, Crestview Drive, Presidio Lane, and Gladstone Drive	Crosswalk	- Per City’s Crosswalk Policy, upgrade Delta de Anza Trail crossings at Atherton Avenue, Crestview Drive, Presidio Lane, and Gladstone Drive to include: -Rectangular Rapid Flashing Beacons (RRFBs) -Wayfinding Signs -High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels -Curb extensions -Upgraded curb ramps -Trail crossing striping -Advanced yield markings with Yield Here to Pedestrian signs - Install a raised crosswalk at Atherton Avenue and Gladstone Drive . - Install a median refuge at Crestview Drive.	n/a	\$831,000
5	Delta de Anza Trail	Delta de Anza Trail at West Leland Road and at Range Road Intersections	Trail	- In the long-term, work with the adjacent property owner to install a trail diagonally between the Ackerman Drive/Range Road intersection and West Leland road/Delta De Anza Trail intersection. Install a Pedestrian Hybrid Beacon (PHB) as part of the project. - In the near-term, follow an on-street alignment on Range Road and West Leland Road that goes through the Range Road/West Leland R Road intersection. Repurpose Class II bike lanes, sidewalk, and excess roadway width into a Class I path on the west side of Range Road and south side of West Leland Road, and install wayfinding, curb ramps, and crosswalk striping at the intersection of West Leland Road and Golf Club Road. See Range Road projects for additional information.	0.1	\$1,135,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
6	Harbor Street	Harbor Street and Atlantic Avenue Intersection	Crosswalk	• In near-term, stripe north crosswalk as a trail crossing. • Install trail wayfinding • Install “turning vehicle yield to bikes/pedestrian” signs • Install median refuge with existing median • Investigate if accessibility upgrades needed to push buttons and countdown signals • Upgrade curb ramps • As funding is available, install trail crossing with a PHB or signal 180’ north of the intersection.	n/a	\$673,000
7	Delta de Anza Trail	Delta de Anza Trail at Railroad Avenue Intersection	Crosswalk	• Study feasibility of protected intersection • Protect eastbound left-turn movement to separate from trail crossing • Remove slip lane on NW corner and southbound right-turn pocket and install curb extensions to shorten trail crossing • Straighten west crosswalk and push back ~10’ to align with new Curb extensions; install direction ramps • Straighten south crosswalk and install directional ramp on west side • Work with East Bay Regional Park District to set back existing fence and signal pole to widen out sidewalk space at intersection and allow for two-stage turn from northbound separated bikeway to westbound Delta De Anza Trail • Install bike ramp from southbound separated bikeway to new Curb extensions to provide access to Delta De Anza Trail • Install bike box at southbound approach to provide connection from Trail to Railroad Avenue Class IV facility • Investigate need for countdown signals	n/a	\$673,000
8	Delta de Anza Trail	Delta de Anza Trail at Harbor Street Intersection	Crosswalk	Install new trail crossing signal. Signal will coordinate with adjacent signal at Atlantic Avenue. Install median refuge, trail crossing striping, and trail wayfinding signage.	n/a	\$682,000
9	Delta de Anza Trail	Delta de Anza Trail at Harbor Street	Trail	Pave the remaining 5’ section between the trail and the sidewalk (East side of Harbor Street).	0.05	\$186,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
10	Delta de Anza Trail	Delta de Anza Trail and Loveridge Road Intersection	Crosswalk	Restripe current crosswalk to trail crossing striping per Pittsburgh Moves Design Guidelines. Install trail wayfinding signs and widen curb ramps.	n/a	\$56,000
A.2 California Delta Trail						
11	California Delta Trail	Western City limit to 8th Street Greenbelt	Trail	Work with East Bay Regional Park District (EBRPD) and PG&E to install a Class I path through the Pittsburgh Wetlands as part of the Great California Delta Trail that connects to the County’s alignment.	3	\$11,187,000
12	California Delta Trail spur	Willow Pass Road to California Delta Trail	Trail	Explore the feasibility of adding a Class I facility spur connection between Willow Pass Road and the California Delta Trail to provide another access point. This requires coordination with property owners.	0.2	\$746,000
13	8th Street Greenbelt	West Street to Harbor Street	Crosswalk	Mark crosswalks at each intersection with trail crossing striping and enhancements per Pittsburgh Moves Design Guidelines and Crosswalk Policy.	n/a	\$306,000
14	Harbor Street	East 3rd Street to East 8th Street	Trail	Add a Class I facility on the west side of the street consistent with the Making Waves Academy development proposal. This facility would run parallel to the Class IV facility proposed in the right-of-way.	0.3	\$1,119,000
15	Harbor Street	East 8th Street to Pittsburgh-Antioch Highway	Trail	• Install a new Class I facility on the east side of Harbor Street from just north of Pittsburgh-Antioch Highway to East 8th Street. This is in addition to the Class IV facilities proposed on Harbor Street, shown on the Harbor Street project list. • New path requires widening the existing sidewalk and new retaining wall underneath the railroad tracks. • Install a connection between bike path north of East Santa Fe Ave to Harbor Street and Pittsburgh-Antioch Highway bike path. • Install trail crossing at 8th Street per the Uncontrolled Crosswalk Upgrades list. • Connect to a new Class I path along the west side of Harbor Street through the sports field and the existing 8th Street Greenway	0.2	\$939,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
16	Harbor Street	Harbor Street and Pittsburg-Antioch Highway Intersection	Crosswalk	- Stripe the east crosswalk as a trail crossing. - Install a speed table across the slip lane or remove if necessary truck access can be maintained	n/a	\$354,000
17	East 14th Street	On-street trail alignment between Harbor Street and East City Limits	Trail	See Pittsburg-Antioch Highway improvements.	n/a	-
18	Central Park Path	n/a	Programmatic	Add lighting in Central Park paths	0.3	\$499,000
A.3	Los Medanos to Pittsburg Center BART Trail					
19	Frontage Road	Crestview Lane to Burton Avenue	Trail	Add a Class I facility using abandoned land south of freeway to connect existing Class I facilities. May require widening into Frontage Road to provide usable path space around overhead utility lines.	0.4	\$1,492,000
20	Frontage Road	Chelsea Way to Dover Way	Trail	Add a Class I facility using abandoned land south of freeway.	0.3	\$1,119,000
A.4	PG&E Corridor					
21	PG&E Corridor	Dover Way to West Leland Road	Trail	Work with PG&E to conduct a feasibility study for a Class I path to determine a preferred alignment within in the PG&E Corridor, which is designated open space in the General Plan.	0.2	\$746,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
22	PG&E Corridor	West Leland Road to Delta de Anza Trail to proposed Contra Costa Canal Trail Extension	Trail	Work with PG&E to conduct a feasibility study adding a Class I path to determine a preferred alignment within the PG&E Corridor, which is designated open space in the General Plan.	0.5	\$1,864,000
23	PG&E Corridor	North Parkside Drive to Power Avenue	Trail	Work with PG&E to conduct a feasibility study for a Class I facility between N Parkside Drive and Power Avenue. Topography may be a constraint.	0.5	\$1,864,000
24	Rancho Medanos Junior High School	Bodega Drive at Rancho Medanos Junior High School	Trail	Create a trail that connects Bodega Drive to Rancho Medanos Junior High School and the planned utility corridor trail. This would provide the neighborhood walking access to the school, West Leland Road, the planned utility corridor trail, and the Delta de Anza Trail. Work with Rancho Medanos, the community, and other stakeholders to develop a joint use agreement for the gated area adjacent to the school.	0.2	\$746,000
25	SR 4	n/a	Grade Separated Crossing	Study feasibility of providing a trail connection across SR 4 in the context of all citywide needs to improvement connectivity over SR 4. See SR 4 grade separation feasibility study for more information	n/a	
A.5	Delta Waterfront Access Trail					
26	Delta Waterfront Access Trail	East 3rd Street to Delta Access Trail	Trail	Install Class I path that connects East 3rd Street to the waterfront Delta Access Trail as part of school redevelopment, connecting to 8th Street.	0.6	\$2,237,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
27	Delta Waterfront Access Trail	Western subdivision to Koch Carbon Inc (near to eastern end point of East 3rd Street)	Trail	Add a bicycle/pedestrian path along the shoreline that connects the western subdivision to the industrial property east of downtown.	0.5	\$1,864,000
A.6 Railroad Avenue Greenway						
28	Railroad Avenue	California Avenue to Delta de Anza Trail	Trail	Install a Class I shared-use path on the west side of Railroad Avenue with pedestrian-scale lighting amenities, landscape buffer from the street, and a minimum 10’ usable width. Use trail crossing striping instead of typical crosswalk markings at intersections.	0.5	\$1,864,000
29	Railroad Avenue	California Avenue to City Park	Trail	Widen existing sidewalk to provide Class I shared-use path with minimum 5’ landscape buffer from Railroad Avenue. Provide trail crossing intersection improvements, including trail crossing striping.	0.3	\$1,290,000
30	Railroad Avenue	All Greenway Intersections	Crossings	- Mark all Greenway crossings with trail crossing striping Pittsburgh Moves Design Guidelines - Enhance crosswalks consistent with per Pittsburgh Moves Crosswalk Policy - Consider LPI/LBI for trail crossing - Make push buttons accessible for people on bike - See Railroad Avenue section for trail crossing improvements at the intersection of Railroad Avenue and California Avenue (SR 4 westbound on-ramp) and at Railroad Avenue and the SR 4 eastbound on-ramps	n/a	-
A.7 Other Trail Projects						
31	Contra Costa Canal Trail Extension	Citywide	Trail	Work with Contra Costa County Water District to conduct feasibility study of Class I path to extend the Contra Costa Canal Trail into Pittsburgh.	4.9	\$100,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
32	Bay to Black Diamond Trail	Citywide	Trail	Work with EBRPD and City of Antioch to conduct a feasibility study for a new “Bay to Black Diamond Trail” to connect the waterfront with the Black Diamond Mines Regional Preserve.	n/a	\$100,000
33	Utility Easement East of Los Medanos College	Buchanan Road to Pittsburgh Antioch Highway	Trail	Work with property owners and Antioch to secure easement for Class I shared-use path with lighting, amenities, and connection points to the Delta de Anza trail and East Leland Road. Requires consideration of SR 4 and railroad grade separations, as well as trail crossings per the design guidelines. Consider connections to future waterfront trails if properties redevelop.	1.1	\$9,000
34	Delta View Golf Course	n/a	Trail	Conduct a feasibility study for a Class I perimeter loop path around the Delta View Golf Course	3.0	\$100,000
A.8 BART Projects						
35	Pittsburg Bay Point BART access road	BART Station to Bailey Road	Bike treatment	Add Class IV facilities on the access road on the north edge of the Pittsburg Bay Point BART site, consistent with the North Concord to Antioch BART Access Study.	0.2	\$88,000
36	Pittsburg Bay Point BART Station	n/a	Pedestrian treatment	Add pedestrian improvements on the BART site per the North Concord to Antioch BART Access Study, such as ADA ramps, pedestrian access stairway/ramp from West Leland Road, and marked crosswalks.	n/a	\$276,000
37	Pittsburg Bay Point BART Station	n/a	Bike treatment	In near-term, stripe Class II bike lanes through narrowing travel lanes to 10-11’. With future development, add Class IV separated bikeways.	0.6	\$263,000
38	Pittsburg Center BART Station	TBD	Bike parking	Coordinate with BART to provide additional bike parking at the Pittsburg Center BART station. This should include bike racks on the Railroad Avenue overpass for short-term parking as well as bike lockers in the Park & Ride and south of the station.	n/a	\$17,000
39	BART Station		Pedestrian treatment	Add additional lighting on streets adjacent to BART stations and pedestrian scale lighting from the public right of way to BART stations.	0.2	\$332,600

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
B	North-South Corridors					
B.1	San Marcos Boulevard					
40	San Marcos Boulevard	Evora Road to Rio Verde Circle	Trail	Add a Class I facility on the west side of the roadway that ties into the West Leland Road intersection. Explore extending the facility through the SR 4 interchange into Contra Costa County to connect with the Delta de Anza Trail (A Class I facility is proposed in Pittsburg 2020 from West Leland Road to Rio Verde Circle).	1.2	\$4,798,000
B.2	Tomales Bay Drive/Alves Ranch Road					
41	Tomales Bay Drive	West Leland Road to Alves Ranch Road	Bike treatment	Restripe bike lanes with two white stripes, with 10’ travel lanes (no center line per existing condition), 6’ bike lanes, and 8’ parking, and add traffic calming treatments to make the existing class II bike lane lower stress.	0.6	\$89,000
42	Alves Ranch Road	West Leland Road to end of the road	Bike treatment	Restripe bike lanes with two white stripes, with 10’ travel lanes (no center line per existing condition), 6’ bike lanes, and 8’ parking, and add traffic calming treatments to make the bike lanes lower stress.	0.7	\$103,000
43	Alves Ranch Road	Kapalua Bay Circle Intersection	Crosswalk	Install crosswalk enhancements per the Pittsburg Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines • Pedestrian refuge island on north crosswalk • Curb extensions • Consider RRFBs if there is low driver compliance	n/a	\$301,000
44	Alves Ranch Road	Maho Bay Circle/Botany Bay Drive Intersection	Crosswalk	Install crosswalk enhancements per the Pittsburg Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield line • Pedestrian refuge through narrowing travel lanes to 10-11’ • Reduce curb radius on Northeast corner	n/a	\$189,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
B.3	Bailey Road					
45	Bailey Road (outside City limits)	Willow Pass Road to Canal Road	Bike treatment	Narrow lanes to 11’ and 10’ to provide a Class IV separated bikeways with 7’ bikeway and 4’ buffer. Add bicycle and pedestrian oriented wayfinding and signage on Bailey Road to connecting routes and destinations, such as the BART station.	0.3	\$131,000
46	Bailey Road	Canal Road to BART Access Road	Bike treatment, Trail	• -In the long-term, work with County, CCTA, Caltrans, EBRPD, and BART to widen the existing sidewalk to provide a minimum 10’ Class I path with 5’ landscape buffer on the west side of the street. This could incorporate the width of the SB bike lane. Note that is this is the Delta De Anza Trail. • In the near-term, upgrade the bike lanes to Class IV separated bikeway through narrowing travel lanes to 11’ and creating a 5’ bike lane with 2’ buffer and posts. • Add bicycle and pedestrian oriented wayfinding signage on Bailey Road to connecting routes and destinations, such as the BART station.	0.1	\$430,000
47	Bailey Road	Bailey Road and SR 4 eastbound Off-Ramps/BART Access Road Intersection	Bike/ pedestrian treatment	• Stripe trail crossing markings on the west and south crosswalks to highlight the trail and allow for two-stage crossing through the intersection and intersection enhancements consistent with the Pittsburg Moves Design Guidelines • Stripe east crosswalk as high-visibility • Stripe advanced stop bars at all approaches • Provide leading pedestrian intervals and consider protecting right-turns to remove pedestrian-auto conflicts per the Pittsburg Moves Crosswalk Policy	n/a	\$323,000
48	Bailey Road	BART Access Road to West Leland Road	Bike treatment	Narrow travel lanes to 11’ outside and 10’ inside to created Class IV separated bikeway (5-6’ bike lane with 2-4’ buffer). Add bicycle and pedestrian oriented wayfinding and signage on Bailey Road to connecting routes and destinations, such as the BART station.	0.2	\$88,000
49	Bailey Road	West Leland Road Intersection	Bike/ pedestrian treatment	• Stripe high-visibility crosswalk markings with advanced stop bars • Install missing crosswalk on south leg • Formalize median refuge with nose and pedestrian push button on north crosswalk • Install LPI on north crosswalk	n/a	\$323,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
50	Bailey Road	West Leland Road to 500’ south of Leland Road	Bike treatment	Add 6-7’ Class II bike lanes through narrowing travel lanes to 10-11’ and maintaining parking.	0.1	\$15,000
51	Bailey Road	West Leland Road to 250’ south of Leland Road	Pedestrian treatment	Work with homeowners to close sidewalk gap on east side of street	0.05	\$129,000
52	Bailey Road	500’ south of Leland Road to Southern City Limits	Bike treatment	• Add Class II bike lane southbound to support bicyclists climbing the grade • Explore feasibility of widening roadway to provide bike lanes in both directions based on available ROW • Stripe green-backed sharrows and sign as Class III bicycle route in northbound direction	0.1	\$15,000
53	Bailey Road	n/a	Trail	See related projects in the Delta de Anza Trail list	n/a	-
B.4	Range Road					
54	Range Road/ Willow Pass Road	Railroad bridge over Willow Pass Road to SR 4	Bike treatment	Add Class II bike lanes (5’) by narrowing travel lanes and removing or narrowing center median. Relocate lighting in center median. Will require some tree removal. This should connect to the grade separated treatment that is proposed at the Railroad Bridge, listed under Willow Pass Road projects.	0.5	\$74,000
55	Range Road Extension/ SR 4 Grade Separation	Existing terminus of Range Road north of SR 4 to Wedgewood Drive	Trail	Study the feasibility of extending Range Road with grade separation at SR 4, either as a roadway or pedestrian/bicycle only access	0.2	\$100,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
56	Range Road	Wedgewood Drive to West Leland Road	Bike treatment	• Upgrade existing Class II bike lanes to Class IV separated bikeways with a lane reduction between Ackerman Drive and West Leland Road. • If PG&E right-of-way alignment for Delta de Anza Trail is not feasible, implement a lane reduction from 1200’ north of Ackerman Drive to West Leland Road and use excess width to widen the west side to 10’ Class I shared use path with 5’ landscape buffer • Stripe trail crossings on west and south crosswalks at Leland Road and provide space for bikes and people to queue on each corner • Consider a LPI to support crossings at Leland Road per the Pittsburgh Moves Crosswalk Policy	0.4	\$175,000
57	Range Road	Ackerman Drive to West Leland Road	Bike treatment	As an interim, near-term bike treatment, complete a lane reduction between Ackerman Drive and West Leland Road to provide Class IV separated bikeways	0.1	\$44,000
58	Range Road	Delta de Anza Trail at Range Road and at West Leland Road Intersections	Crosswalk	See Delta de Anza Trail projects for trail crossing enhancement at Range Road and at West Leland Road.	n/a	-
59	Range Road	Ackerman Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • Mark high-visibility trail crossings to highlight Delta De Anza Trail, parking restrictions on crosswalk approach, and maintainadequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines -Pedestrian refuge	n/a	\$77,000
B.5	Crestview Drive					
60	Crestview Drive	Frontage Road to Castlewood Drive	Bike treatment	Upgrade the existing Class II bike lanes to Class II buffered bike lanes.	1.7	\$215,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
61	Crestview Drive	Crestview Drive to Crowley Avenue	Trail	Formalize the trail connection adjacent to Mt Zion Baptist Church that connects Crestview Drive to Crowley Avenue. This will require coordination with and permission from Mt Zion Baptist Church.	0.04	\$149,000
62	Crestview Drive	Crestview Drive at Buchanan Road	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Trail crossing striping on east and west crosswalks	n/a	\$68,000
63	Crestview Drive	West Buchanan Road to Kirker Pass Road	Bike treatment	Install Class II bike lanes in WB direction through parking prohibition (consider allowing overnight parking) and install Class III bicycle route EB. Consider allowing daytime parking prohibition on south side of the street to provide Class II bike lanes in the EB direction.	0.2	\$18,000
B.6 Marina Boulevard						
64	Marina Boulevard	Cutter Avenue to East 5th Street	Bike treatment	Add Class II bike lanes through a 4 to 3 lane reduction with 11’ travel lanes, 6’ bike lanes, and 8’ parking.	0.4	\$59,000
65	Marina Boulevard	East 5th Street to Herb White Way	Bike treatment	Restripe the roadway to accommodate 11’ travel lanes, 6’ bike lanes with a 3’ buffer, and 8’ parking lanes.	0.3	\$38,000
66	Marina Boulevard	Cutter Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Pedestrian refuge - Upgraded curb ramps - Consider RRFBs if there is low driver compliance	n/a	\$316,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
67	Marina Boulevard	East 5th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Widened median to create pedestrian refuge - Upgraded curb ramps - Consider RRFBs if there is low driver compliance	n/a	\$173,000
68	Marina Boulevard	West Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Pedestrian refuge - Consider RRFBs if low driver compliance at crosswalk - Upgraded curb ramps	n/a	\$173,000
69	Marina Boulevard	York Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Upgraded curb ramps - Consider RRFBs if there is low driver compliance	n/a	\$173,000
B.7 Railroad Avenue/Kirker Pass Road						
70	Railroad Avenue	East 3rd Street to East 8th Street	Bike treatment	Add signage designating this segment of Railroad Avenue as a Class III Bicycle Route. City may want to consider back-in angle parking in the future to allow for Class II lanes, which would minimize pedestrian and bicyclist conflicts with vehicles.	0.3	\$10,000
71	Railroad Avenue	Railroad Avenue at East 8th Street	Bike parking	Establish the corner of Railroad Avenue and 8th Street outside Marina Vista Elementary School as a mobility hub, which includes bike parking.	n/a	\$20,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
72	Black Diamond Street	Marina Boulevard to East 8th Street	Bike treatment	Install a Class III Bicycle Route to provide an alternate north-south route through Downtown that avoids the angled parking present on Railroad Avenue and Cumberland Street.	0.3	\$10,000
73	Railroad Avenue	East 8th to East 10th Streets	Bike treatment	Add directional Class IV separated bikeways through removal of parking on one side of the street.	0.1	\$44,000
74	Railroad Avenue	Railroad Avenue at 5th Street	Pedestrian treatment	- Install new north leg marked crosswalk - Install curb extensions at NE and SE corners - Relocate bus stop to far side of intersection or south of 5th Street	n/a	\$258,000
75	Railroad Avenue	Railroad Avenue and Central Avenue Intersection	Crosswalk	- Conduct study to reassess access and circulation at Cornwall Street and Railroad Lane to narrow intersection and remove additional legs to enhance safety. - Consider moving the angled parking from the east to west sides of Railroad Lane and bulbing out to provide space for vehicles to queue at the WB approach\ - Prohibit NB left-turn at Railroad Lane, and direct truck east on Central Avenue/Solari Street to SR 4. - Tighten curb radii where feasible while maintaining truck access - Consider adding LPIs per the Pittsburgh Moves Crosswalk Policy - Restripe crosswalks and add advanced stop bars - Upgrade curb ramps - Add protected left turns - Investigate if accessibility upgrades are needed to push buttons and countdown signals	n/a	\$2,019,000
76	Railroad Avenue	Railroad Avenue and Parkside Drive Intersection	Crosswalk	- Remove pork chop island on east crosswalk and tighten corner radii to reduce auto speeds and crossing distance - Stripe crosswalks as high-visibility with advanced stop bars and upgrade curb ramps - If feasible with topography and sight distance, bring the SB on-ramp in at closer to 90 degree alignment with Railroad Avenue	n/a	\$876,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
77	Railroad Avenue	Railroad and Civic Avenue Intersection	Crosswalk	- Mark south crosswalk at Civic Avenue - Add LPI on north and south crosswalks - Consider making Oak Place right-in/right-out only to simplify intersection and allow U-turns at School Street to provide full access for residents - Add high-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels	n/a	\$673,000
78	Railroad Avenue	10th Street to California Avenue	Bike treatment	Add directional Class IV separated bikeways (8' bike lane, 4' buffer) by reducing travel lane widths to 12'.	0.2	\$88,000
79	Railroad Avenue	California Avenue to Central Avenue	Bike treatment	As a near-term, interim improvement: - Mark Class II bicycles lanes continuous in both directions to address existing gaps. - Mark bikeways up to intersections. - Stripe bike lanes with solid stripe for last 50' before the intersection. - At intersections, stripe bike lane between the right turn and through lane with green conflict zone markings - Mark green conflict zone striping at Parkside Drive ramps, bus stops, and slip lane at SB California Avenue.	0.6	\$89,000
80	Railroad Avenue	Center Drive to Bliss Avenue	Pedestrian treatment	Improve Railroad Avenue sidewalk with lighting, attractive traffic barrier, and pedestrian amenities per the North Concord to Antioch BART Access Study.	0.2	\$138,000
81	Railroad Avenue	Railroad Avenue and Bliss Avenue Intersection	Pedestrian treatment	- Close the sidewalk gap at the west intersection approach (see Bliss Avenue for more information) - Mark the north crosswalk - Add pedestrian refuge on north and south crosswalks - Upgrade curb ramps - Investigate if accessibility upgrades needed to push buttons and countdown signals	n/a	\$323,000
82	Railroad Avenue	California Avenue to SR 4 ramps	Bike treatment	On the Railroad Avenue overpass, add directional Class IV separated bikeways with buffers and delineators. This will require coordination with Caltrans.	0.1	\$44,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
83	Railroad Avenue	SR 4 WB On-Ramp/ California Avenue Intersection	Bike/ pedestrian treatment	- At the southeast corner of Railroad Ave & California Ave, add a bulb out to provide increased pedestrian visibility and slow northbound-right turning vehicles at intersection. Route the bike lane into bulb out for a semi-protected corner. - At the northwest corner of Railroad Ave & California Ave, explore signalizing the southbound right turn lane from Railroad Avenue to the SR-4 westbound onramp in order to increase pedestrian visibility. - Install green paint for a 2-step trail crossing across Railroad Avenue at California Avenue (north and east legs). - Add new south crosswalk - Install leading pedestrian interval (LPI) for east crosswalk - Install BART wayfinding	n/a	\$673,000
84	Railroad Avenue	SR 4 EB Ramps Intersection	Bike/ pedestrian treatment	- Install green paint for a 2-step trail crossing across Railroad Avenue at the SR 4 eastbound off ramp (south and east legs) to connect trail users from the 2-way Class IV facility on the overpass to the bike facilities south of the overpass (Class I facility on the west side and directional Class IV facilities on Railroad Avenue). - Trail crossing striping on south crosswalk. - Add north crosswalk - Widen pedestrian refuge on south crosswalk to 10’ and add truncated domes and pedestrian push button - Upgrade curb ramps, including relocating truncated domes on SE corner ramps - Investigate if accessibility upgrades needed to push buttons and countdown signals - Install wayfinding to BART	n/a	\$673,000
85	Railroad Avenue	SR 4 ramps to Delta de Anza Trail	Bike treatment	Add a Class IV bicycle facility (7’ bike lane, 4’ buffer) by reducing travel lane widths to 10’ and 11’ in each direction.	0.5	\$219,000
86	Railroad Avenue	Railroad Avenue and Yosemite Drive Intersection	Crosswalk	- Install south leg marked crosswalk with protected left turns - Add new directional curb ramps (clear of driveway on west side) - Install “Bikes Use Ped Signal” sign and two-stage turn box to support southbound left movements onto Yosemite Drive - Investigate need for countdown signals	n/a	\$323,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
87	Railroad Avenue	Railroad Avenue and Linscheid Drive Intersection	Crosswalk	Install north leg marked crosswalk, and investigate need for countdown signals.	n/a	\$81,000
88	Railroad Avenue/Kirker Pass Road	Delta de Anza Trail to Pheasant Drive	Bike treatment	- Install Class IV separated bikeways by narrowing the travel lanes to 10’ inside and 11’ outside lanes. - With the James Donlan Road extension, reduce the long right turn pocket on the northbound approach of Buchanan Road and mark the Class IV separated bikeways up to the intersection.	1.3	\$569,000
89	Railroad Avenue	Railroad Avenue and Buchanan Road Intersection	Crosswalk	- Add high-visibility crosswalk markings, adequate nighttime lighting levels - Add advanced stop lines - Add new south leg marked crosswalk - Consider adding a pedestrian refuge with widened north, south median - Close sidewalk gap on NE corner (see Buchanan projects for more information) - Close bike lane gaps (see Buchanan projects for more information)	n/a	\$673,000
90	Railroad Avenue	4th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised intersection (or crosswalks) - Upgraded curb ramps - Curb extensions	n/a	\$464,000
91	Railroad Avenue	6th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels	n/a	\$34,000
92	Railroad Avenue	7th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, adequate nighttime lighting levels	n/a	\$34,000
93	Railroad Avenue	8th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, adequate nighttime lighting levels - Consider relocate decorative flagpoles or RRFB to make the RRFB more visible to NB drivers	n/a	\$35,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
94	Railroad Avenue	17th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: Advance Yield Here to Pedestrians sign and yield line	n/a	\$34,000
95	Kirker Pass Road	Pheasant Drive to Southern City Limit	Bike treatment	Convert shoulder to Class IV separated bikeways	0.3	\$131,000
96	Kirker Pass Road	Kirker Pass Road and Pheasant Drive Intersection	Crosswalk	- Remove the NE and SE slip lanes and straighten east crosswalk - Add pedestrian refuge on east crosswalk - Upgrade curb ramps	n/a	\$323,000
97	Kirker Pass Road	Kirker Pass Road at City boundary to Buchanan Road	Traffic calming	Install rumble strips, flashing beacons, and speed feedback signs to reduce speeds entering Pittsburgh. Time signals to slow speeds. This will require coordination with County outside City limits.	0.5	\$208,000
B.8	Harbor Street					
98	Harbor Street	East 8th Street to Pittsburgh-Antioch Highway	Bike treatment	As a near term, interim improvement on Harbor Street: - Refresh bike lane markings and add more frequent bike lane markings. - Stripe bike lanes with solid stripe starting 50’ before the intersection. - Add green conflict zone markings at intersection with East Santa Fe Avenue/Pittsburgh-Antioch Highway	0.2	\$30,000
99	Harbor Street	East 3rd Street to Army Street	Bike treatment	Add a Class IV bicycle facility through either (1) a 4-3 lane reduction (7’ bike lane, 3-4’ buffer) or (2) between Pittsburgh-Antioch Highway and Hawthorne Street, remove parking on one side of the street.	1.1	\$482,000
100	Harbor Street	Army Street to California Avenue	Bike treatment	In the near term, interim improvement on Harbor Street: - Close bike lane gap in southbound direction - Stripe green conflict zone markings at California Avenue intersection - Prohibit parking on west side during daytime when bicyclists would use the street	0.1	\$15,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
101	Harbor Street	Army Street to California Avenue	Bike treatment	Install Class IV separated bikeways: - Northbound: narrow travel lanes to 10’ and 11’ respectively to make room for a 6’ bike lane with 3’ protected buffer - Southbound: widen the roadway on the west side of Harbor Street into the oversized landscape strip to provide parking and a buffered bike lane for southbound travel OR prohibit parking on the west side of Harbor Street.	0.1	\$44,000
102	Harbor Street	Harbor St at Atlantic Avenue Intersection	Trail	Place the pedestrian push buttons at convenient locations for people biking, as the Delta De Anza Trail jogs through this intersection.	n/a	\$81,000
103	Harbor Street	California Avenue to Bliss Avenue	Bike treatment	Install Class IV separated bikeways through narrowing travel lanes to 10’ inside and 11’ outside (2’ buffer, 5’ bicycle lane)	0.1	\$44,000
104	Harbor Street	Bliss Avenue to Stoneman Avenue	Bike treatment	Upgrade the existing Class II bike lanes to a Class IV bicycle facility (7’ bike lane, 4’ buffer) by narrowing the travel lanes to 10’ and 11’ respectively.	0.8	\$350,000
105	Harbor Street	East Leland Road Intersection	Bike treatment	As a near term, interim improvement on Harbor Street: - Mark the northbound bike lane up to the intersection - Mark green conflict zone striping on all approaches and through bus stops	0.1	\$15,000
106	Harbor Street	Stoneman Avenue to Yosemite Drive	Bike treatment	Install Class II Buffered Bike Lanes (5’ bike lane with 3’ buffer) through a 4-3 lane reduction.	0.3	\$38,000
107	Harbor Street	Harbor Street at Stoneman Drive	Bike/ped treatment	- Install single-lane roundabout OR narrow intersection through median refuge and bulbouts - Mark south crosswalk	n/a	\$448,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
108	Harbor Street	Harbor Street and Yosemite Drive Intersection	Crosswalk	- Align the intersection so that Yosemite Drive intersects Harbor Street close to 90 degrees - Install curb extensions on the SW and NW corners and east side of street - Add LPI on north and south crosswalks - Investigate if accessibility upgrades are needed to push buttons and countdown signals	n/a	\$547,000
109	Harbor Street	Yosemite Drive to Buchanan Road	Bike treatment	Add Class II Buffered Bike Lanes (6’ bike lane with 2’ buffer) by narrowing travel lanes to 11’.	0.2	\$25,000
110	Harbor Street	Harbor Street at Highlands Elementary/ Buchanan Park Driveway	Crosswalk	- Mark new high-visibility crosswalk and install an RRFB across Harbor Street at the Highlands Elementary School driveway (on the north side, with both a median refuge and curb extension) per the Pittsburg Moves Crosswalk Policy - Install a crosswalk ahead warning sign on the southbound approach (with the curve). - Install curb extensions	n/a	\$88,000
111	Harbor Street	East 8th Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Pedestrian refuge island - Consider RRFBs if there is low driver compliance	n/a	\$43,000
112	Harbor Street	Stone Harbor Drive/Army Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Pedestrian refuge island	n/a	\$43,000
113	Harbor Street	East 3rd Street to Pittsburg-Antioch Highway	Trail	See trail connections identified in the California Delta Trail to Antioch project list.	n/a	-

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
B.9 Loveridge Road						
114	Loveridge Road	California Avenue/N Park Boulevard to Pittsburg-Antioch Highway	Bike treatment	As an interim solution, close gaps in the existing bike lanes, including missing segments of southbound bike lane, consistent bike lane width and markings, and striping bikeway up to and through the intersection	0.4	\$59,000
115	Loveridge Road	North terminus of roadway to California Avenue	Bike treatment	Reduce travel lanes to 11’ and install 7’ separated bikeways (5’ bike lanes, 2’ buffer)	0.9	\$394,000
116	Loveridge Road	California Avenue to SR 4 EB Ramps	Bike treatment	Upgrade the existing Class II bike lanes to a Class IV bicycle facility.	0.1	\$44,000
117	Loveridge Road	SR 4 EB Ramps to Buchanan Road	Bike treatment	Upgrade the existing Class II bike lanes to a Class IV bicycle facility (7’ bike lane, 2’ buffer) by narrowing travel lanes to 10’ and 11’ respectively.	1.1	\$482,000
118	Loveridge Road	Loveridge Road and Buchanan Street Intersection	Crosswalk	To address southbound motorists not yielding to pedestrians when turning right: - Install “Turning Vehicles Yield to Pedestrians” sign for southbound right traffic - Install a median refuge with pedestrian push button on Buchanan Street at the northern crosswalk - Tighten curb radii on the NW and NE corners to slow the speed of turning traffic - Install school zone 25 MPH signage - Modify the signal timing to add a leading pedestrian interval for southbound vehicles turning right - Consider prohibiting right turns on red and adding LPI on east and west crosswalks per the Pittsburg Moves Crosswalk Policy	n/a	\$323,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
119	Loveridge Road	Loveridge Road and California Avenue Intersection	Crosswalk	- Install pork chop islands with raised crosswalks at all corners of the intersection, which will shorten crossing distances for pedestrians. - Restripe the crosswalks and install median refuges with push buttons if they still enable left turns.	n/a	\$673,000
120	Stoneman Avenue/ Gladstone Drive	Loveridge Road to East Leland Road	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding and sharrows. Explore additional traffic calming. (Some traffic calming already exists in some segments.)	0.7	\$294,000
121	Roundhill Drive/Norine Drive	Ventura Drive to Roundhill Drive to Delta de Anza Trail	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding and sharrows. Explore additional traffic calming. This would tie into the bicycle boulevard proposed on Ventura Drive.	0.4	\$168,000
B.10	North Park Boulevard					
122	North Park Boulevard	Pace Boulevard to Century Boulevard	Bike treatment	Refresh bike lane markings; relocate bike lane to be between the EBL and EBR lanes and add green conflict zone markings.	0.2	\$30,000
123	North Park Boulevard	Loveridge Road to Pace Boulevard	Pedestrian treatment	Close the sidewalk gap on the north side of N Park Boulevard. This may require coordination with private property owner.	0.6	\$1,549,000
B.11	Century Boulevard					
124	Century Boulevard	East Leland Road to City limits	Bike treatment	Add 5’ Class II bike lanes given limited right-of-way - requires widening the paved width of the roadway between East Leland Road and Century Way. Where roadway is improved, reduce travel lane width to 10-11’ to provide bike lanes. As the area redevelops, add a Class I facility off-street in addition.	1.2	\$177,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
125	Century Boulevard Greenway	East Leland Road to City limits	Trail	Add a Class I facility as the area redevelops to provide a connection to the shopping center. This will require coordination with the City of Antioch.		-
B.12	Somersville Road (coordinate with Antioch)					
126	Somersville Road	Delta de Anza Trail to James Donlon Boulevard	Trail	Add a Class I facility by widening the existing sidewalk.	0.9	\$3,356,000
127	Tuscany Meadows Drive	James Donlon Boulevard to Buchanan Road	Bike treatment	Install Class II buffered bike lanes per the Tuscany Meadows EIR.	0.5	\$63,000
128	Sequoia Drive	Tuscany Meadows Drive to Somersville Road	Bike treatment	Install Class II buffered bike lanes per the Tuscany Meadows EIR.	0.5	\$63,000
C	East-West Corridors					
C.1	E 3rd Street					
129	East 3rd Street	Marina Boulevard to East of Riverway Driveway	Bike treatment	Install Class II buffered bike lanes with a lane reduction. Assume 11’ travel lane and 8’ parking, leaving 13’ remaining for bike lane and buffer	0.3	\$38,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
130	East 3rd Street	East of Riverway Driveway to Harbor Street	Bike treatment	Install Class II buffered bike lanes when the road is widened through redevelopment.	0.2	\$25,000
131	East 3rd Street	Cardinale Court Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach • Advance Yield Here to Pedestrians signs and yield lines • Pedestrian refuge island • Curb extensions • Upgraded curb ramps • Consider RRFBs if there is low driver compliance • Assumes 4 to 3 lane road diet	n/a	\$358,000
132	East 3rd Street	Cumberland Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines • Pedestrian refuge island • Curb extensions • Upgraded curb ramps • Consider RRFBs if there is low driver compliance • Assumes 4 to 3 lane road diet	n/a	\$358,000
C.2 Willow Pass Road/West 10th Street/East 10th Street						
133	Willow Pass Road	Parkside Drive to Enterprise Circle	Trail	• Install a Class I facility (10’ shared-use path with 5’ landscape buffer) through redevelopment. Conduct a right-of-way assessment to determine if path or shoulder widening opportunities are possible in the interim. • Study additional options for providing bicycle/pedestrian access at pinch points underneath railroad bridges (not included in cost)	1.2	\$4,475,000
134	Willow Pass Road	Willow Pass Road and Nantucket Drive	Crosswalk	• Mark east leg crosswalk • Upgrade curb ramps • Investigate if accessibility upgrades are needed to push buttons and countdown signals	n/a	\$323,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
135	West 10th Street	Enterprise Circle to Montezuma Street	Bike treatment	Restripe existing Class II bike lanes to define parking lanes and bike lanes. Narrow travel lanes to 11’ and restripe parking at 8’ and bike lane at 6’.	0.3	\$44,000
136	West 10th Street/East 10th Street	Montezuma Avenue to Railroad Avenue	Bike treatment	Widen existing Class II bike lanes by removing median and restriping street with 11’ travel lanes, 10’ left-turn pocket, 6’ bike lanes, and 8’ parking lane.	0.4	\$59,000
137	Willow Pass Road	10th Street Intersection (Commerce Center Driveway)	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • PHB • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance stop bar • Pedestrian refuge island • Curb extensions • Upgraded curb ramps • Assumes lane reduction to remove EB right-turn lane and extend bikeway	n/a	\$326,000
138	West 10th Street	Enterprise Circle Intersection	Crosswalk	Relocate crosswalk to west side of the street, clear of driveways and relocate bus stop to far side of intersection. Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • PHB • Parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance stop bar • Curb extensions • Upgraded curb ramps	n/a	\$326,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
139	West 10th Street	Beacon Street	Crosswalk	Relocate crosswalk to west side of the street, clear of driveways and relocate bus stop to far side of intersection. Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • PHB • Parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance stop bar • Curb extensions • Upgraded curb ramp • Move the EB bus stop to the far side	n/a	\$326,000
140	West 10th Street	Black Diamond Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • Parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines • Consider installing RRFBs if driver compliance is low and/or observed speed are higher than the posted speed limit.	n/a	\$34,000
141	West 10th Street	Cutter Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • Parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines	n/a	\$34,000
142	West 10th Street	East Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians sign and yield line • Pedestrian refuge island • Upgraded curb ramps and install missing curb ramps at crosswalk • Curb extension shadowing parking • Consider installing RRFBs if driver compliance is low and/or observed speed are higher than the posted speed limit.	n/a	\$167,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
143	West 10th Street	Los Medanos Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians sign and yield line • Pedestrian refuge island • Upgraded curb ramps and install missing curb ramps at crosswalk • Curb extension shadowing parking • Consider installing RRFBs if driver compliance is low and/or observed speed are higher than the posted speed limit.	n/a	\$167,000
144	West 10th Street	York Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • Parking restriction on crosswalk approach, adequate nighttime lighting level • Advance Yield Here to Pedestrians signs and yield lines • Curb extensions • RRFBs	n/a	\$212,000
145	West 10th Street	West Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • Parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines	n/a	\$34,000
146	East 10th Street	East Street Intersection	Pedestrian treatment	Install missing curb ramps at crosswalk	n/a	\$12,000
147	East 10th Street	50’ west of Solari Street	Pedestrian treatment	Install missing curb ramps at driveway	n/a	\$12,000
148	East 10th Street	East 10th Street at Solari Drive	Pedestrian treatment	• Relocate crosswalk to west side of intersection to make crosswalk accessible • Install curb extension on SW corner • Stripe high-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Stripe Advance Yield Here to Pedestrians signs and yield lines		\$180,000
149	East 10th Street	Railroad Avenue and East 10th Street	Crosswalk	• Remove slip lane on SE corner • Add pedestrian refuge on south crosswalk • Add leading pedestrian interval (LPI) on east and west crosswalks • Add high visibility crosswalk marking	n/a	\$673,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
150	East 10th Street	Railroad Avenue to Harbor Street	Bike treatment	Add Class II buffered bike lanes (8') through a 4-3 lane reduction and parking removal on one side.	0.4	\$51,000
C.3 E 14th Street/Pittsburg-Antioch Highway						
151	Central Avenue	Harbor Street to Pittsburg-Antioch Highway	Traffic calming	Provide traffic calming improvements along Central Avenue, such as speed tables at major intersections and/or speed humps to enhance the existing Class III Bicycle Route	0.5	\$208,000
152	East 14th Street	Harbor Street to Pittsburg-Antioch Highway	Trail	Add Class I Multi Use Path on East 14th Street. This will require using the unpaved shoulder on the south side of the roadway and/or removing parking.	0.4	\$1,492,000
153	East 14th to Harbor Bike Boulevard Connector	Harbor Street and Hawthorne Street/ Driveway Intersection	Crosswalk	Add Pedestrian Hybrid Beacon (PHB) to connect the bike facility on the west side of Harbor Street to the driveway/bike connection on the east side of the street.	n/a	\$193,000
154	East 14th to Harbor Bike Boulevard Connector	East 14th Street at City-owned driveway (just east of Harbor Street overcrossing)	Crosswalk	Add trail crossing on East 14th Street just east of the bridge, providing a connection between the Class I facility on East 14th Street and the driveway that connects to Harbor Street.	n/a	\$34,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
155	East 14th to Harbor Bike Boulevard Connector	East 14th Street to Harbor Street	Bike treatment	To provide a connection between East 14th Street and Harbor Street, make the City-owned driveway a designated bicycle boulevard by adding wayfinding and sharrows. Explore additional traffic calming.	0.1	\$42,000
156	Pittsburg-Antioch Highway	Harbor Street to East 14th Street	Bike treatment	Add a Class IV bicycle facility (7' bike lane, 3' buffer) by utilizing existing shoulders and narrowing travel lanes to 11'.	1.7	\$744,000
157	Pittsburg-Antioch Highway	East 14th Street to Arcy Lane	Trail	Add Class I Multi Use Path on Pittsburg-Antioch Highway by narrowing the travel lanes to 11' and turn lanes to 10' and utilizing the unpaved shoulders.	1.7	\$6,339,000
C.4 North Parkside Drive/Willow Pass Road						
158	Willow Pass Road	Riverview Mobile Home Park to Dory Road	Bike treatment	As a near-term, interim solution: • Close westbound bike lane gap • Mark green conflict zone striping through merge areas at Range Road ramps and bus stops • Align off ramps close to 90 degrees with Range Road and add stop control • Stripe additional bike lane legends in existing bike lanes	0.3	\$51,000
159	North Parkside Drive	Railroad Avenue to Amberhill Court	Bike treatment	Add a Class IV bicycle facility by repurposing space for existing 5-6' Class II facility, narrowing travel and turn lanes to 11', and eliminating parking. This assumes road widening as redevelopment occurs.	1	\$438,000
160	North Parkside Drive	Amberhill Court to Parkview Drive	Bike treatment	Add a Class IV bicycle facility by narrowing travel lanes to 10'.	0.3	\$131,000
161	North Parkside Drive	Parkview Drive to Range Road	Bike treatment	Add a Class IV bicycle facility (7' bike lane plus minimum 2' buffer) by narrowing travel lanes to 11' and turn lanes to 10'.	0.5	\$219,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
162	North Parkside Drive/Willow Pass Road	Range Road to Commodore Court	Bike treatment	Add a Class IV bicycle facility (7' bike lane plus buffer) by narrowing travel lanes and using space from existing 6' Class II facility. Over the bridge at Range Rd, add Class II bike lanes (5') with 11' travel lanes.	0.4	\$175,000
163	Willow Pass Road	Commodore Court to Loftus Road	Bike treatment	Convert existing 13' Class II facility into Class IV bicycle facility (7' bike lane plus buffer).	0.2	\$88,000
164	Willow Pass Road	Willow Pass Road and Balclutha Way Intersection	Crosswalk	-Mark west crosswalk -Investigate if accessibility upgrades needed to push buttons and countdown signals	n/a	\$323,000
165	Willow Pass Road	Loftus Road to City Limits	Bike treatment	Restripe 6' Class II bike lanes to refresh markings and clearly defined parking and biking lanes.	0.2	\$30,000
C.5	School Street/Civic Avenue/W 17th Street					
166	West 17th Street	Cassia Street to Davi Avenue	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming, per the Railroad Avenue Specific Plan.	0.4	\$168,000
167	Civic Avenue	Davi Avenue to Railroad Avenue	Bike treatment	Add Class II bike lanes per the Railroad Avenue Specific Plan.	0.3	\$44,000
168	Davi Avenue	Power Avenue to Civic Avenue	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming, per the Railroad Avenue Specific Plan.	0.2	\$84,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
169	School Street	Railroad Avenue to Harbor Street	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Work with school district to provide bike cut through where gates currently block auto traffic on School Street.	0.4	\$168,000
170	School Street	Mid-Block location	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: -Parking restriction on crosswalk approach, adequate nighttime lighting levels -Consider raised crosswalk	n/a	\$65,000
171	School Street/ Treatro Street/ El Pueblo Avenue/Diane Avenue	Harbor Street to Treatro Street to El Pueblo Avenue to Diane Avenue to California Avenue	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming.	0.8	\$336,000
C.6	Polaris Drive/Power Avenue/California Avenue					
172	Polaris Drive/ Schooner Way	Schooner Way (City Limits to Polaris Drive) and Polaris Drive (Schooner Way to Range Road)	Bike treatment	Add Class II bike lanes. Where houses front the street, allow overnight parking/time of day bike lanes. Where houses do not front the street, prohibit parking in the bike lane.	0.68	\$101,000
173	Polaris Drive/ Power Avenue	Range Road to Andrew Boulevard	Bike treatment	Add Class II buffered bike lanes (at minimum, 6' bike lane, 2 'buffer) by narrowing travel lanes to 11'. On Power Avenue, remove parking on the south side.	1.07	\$136,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
174	Power Avenue	Andrew Boulevard to Davi Avenue	Bike treatment	Install a 16’ 2-way Class IV separated bikeway (12’ bike lanes, 4 ‘buffer) on the south side of the street.	0.34	\$149,000
175	Polaris Drive	Polaris Drive at Schooner Way	Pedestrian treatment	• Install new south crosswalk • Tighten NE and NW curb radii • Install pedestrian refuges on east and west leg crosswalks • Upgrade curb ramps		\$164,000
176	Power Avenue	Jorgensen Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines • Pedestrian refuge • Upgraded curb ramps • Consider RRFBs if there is low driver compliance	n/a	\$55,000
177	Power Avenue	Mid-Block location (at 1000 Power Avenue shopping center)	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • High-visibility crosswalk markings, adequate nighttime lighting levels • Pedestrian refuge • Raised crosswalk	n/a	\$86,000
178	California Avenue	Railroad Avenue to Harbor Street	Trail	Assess the feasibility of installing a Class I path on the south side of California Avenue (widen the proposed 8’ path to 14’) and add a minimum 5’ landscape buffer between the parking area and the path, narrowing the 15’ proposed travel lanes and proposed pull out lanes. Coordinate with PG&E.	0.4	\$1,492,000
179	California Avenue	Harbor Street to Loveridge Road	Bike treatment	If the path option is infeasible, install a two-way Class IV bike facility on the north side of California Avenue from Harbor Street to Loveridge Road. Implement a lane reduction to gain the necessary right of way.	0.9	\$394,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
180	California Avenue	California Avenue and Harbor Street Intersection	Bike/Ped treatment	• Tighten curb radii at corners where feasible to reduce crossing distances • Add south leg marked crosswalk • With bikeway installation, stripe two-stage turn boxes to support bicyclists traveling from Harbor to BART via California Avenue	n/a	\$323,000
C.7 Bliss Avenue						
181	Bliss Avenue	Railroad Avenue to Harbor Street	Bike treatment	In the near-term, repave Bliss to provide a smoother riding surface to the BART station. Stripe green-back sharrows in the center of travel lane. Add a two-stage turn box on Harbor Street at Bliss Avenue to facilitate lefts onto Bliss Avenue.	0.3	\$10,000
182	ROW north of Bliss Avenue	Railroad Avenue to Harbor Street	Trail	Install a bicycle trail south of and parallel to SR 4.	0.3	\$1,119,000
183	Bliss Avenue	Railroad Avenue to Harbor Street	Bike treatment	With redevelopment, improve the street frontage to provide a consistent minimum 50’ curb-to-curb cross-section (Two 11’ travel lanes, 6’ bike lanes, and 8’ parking on both sides of the street). Make a Class IV separated bikeway if there is ROW available. Work with property owners to prohibit perpendicular parking in future.	0.3	\$44,000
184	Bliss Avenue	Railroad Avenue to Harbor Street	Pedestrian treatment	Close all sidewalk gaps with minimum 8’ sidewalk with street trees. Work with property owners to prohibit perpendicular parking in future.	0.3	\$775,000
C.8 Leland Road						
185	West Leland Road Extension	Avila Road to West Leland Road	Bike treatment	When West Leland Road is extended via development, add Class IV separated bikeway	0.5	-
186	West Leland Road	S Broadway Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • Add marked crosswalk and install curb ramps across Broadway Avenue	n/a	\$46,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
187	West Leland Road	Villa Drive to Tomales Bay Drive	Trail	Add Class I Multi Use Path on the south side of West Leland Road.	0.6	\$2,237,000
188	West Leland Road	Valente Drive intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Add a Pedestrian Hybrid Beacon (PHB) on West Leland Road at Valente Drive to provide access to Ray Giacomelli Park, the playground, and dog park. - Mark on east leg with median refuge.	n/a	\$211,000
189	West Leland Road	Tomales Bay Drive to BART Access Road	Trail	Add Class I Multi Use Path on the north side of West Leland Road.	0.8	\$2,983,000
190	West Leland Road	West Leland Road and Woodhill Drive Intersection	Crosswalk	- Mark east and west leg crosswalks - Close sidewalk gap - Upgrade SE curb ramp - Investigate if accessibility upgrades are needed to push buttons and countdown signals	n/a	\$673,000
191	West Leland Road	Woodhill Drive to BART Access Road	Pedestrian treatment	Close sidewalk gap on the north side of West Leland Road	0.2	\$516,000
192	West Leland Road	West Leland Road and Southwood Drive	Crosswalk	- Mark east and west leg crosswalks - Upgrade curb ramps - Investigate if accessibility upgrades needed to push buttons and countdown signals This project should be coordinated with the crosswalk improvements proposed at the BART driveway.	n/a	\$673,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
193	West Leland Road	West Leland Road and BART Driveway Intersection	Crosswalk	- Add west leg marked crosswalk - Add high visibility crosswalk marking - Add BART wayfinding - Install leading pedestrian interval (LPI) on east and west crosswalks - Investigate if accessibility upgrades needed to push buttons and countdown signals This project should be coordinated with the crosswalk improvements proposed at the intersection of West Leland Road and Southwood Drive.	n/a	\$673,000
194	West Leland Road	West Leland Road and Oak Hills Drive Intersection	Crosswalk	Add west leg marked crosswalk	n/a	\$323,000
195	West Leland Road	West Leland Road and Montevideo Drive Intersection	Crosswalk	- Add west leg marked crosswalk - Upgrade curb ramp on the SW corner - Investigate if accessibility upgrades needed to push buttons and countdown signals	n/a	\$323,000
196	West Leland Road	West Leland Road at John Henry Johnson Parkway	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Add new high visibility crosswalk with PHB to connect residential neighborhood to John Henry Johnson Park. - Locate on west leg and move bus stops from nearside to far side. - Install median refuge that maintains fire access.	n/a	\$207,000
197	West Leland Road	West Leland Road at John Henry Johnson Park parking lot driveway	Crosswalk	With future redevelopment of the former golf course, consider if pedestrian demand would warrant marking new high visibility crosswalk with Pedestrian Hybrid Beacon (PHB) and median refuge if pedestrian demand exists per Pittsburgh Moves Crosswalk Policy. Locate crosswalk on east leg with median refuge.	n/a	\$205,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
198	West Leland Road	Range Road to Dover Way	Pedestrian treatment	Work with adjacent landowners to widen sidewalk on south side of the street to 10’ to support children walking to Rancho Medanos Junior High School	0.4	\$1,033,000
199	Atherton Avenue/ Sherman Street/ Alvarado Street	Dover Way to Railroad Avenue	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Remove parking on Alvarado Street and potentially Dover Way.	1	\$420,000
200	West Leland Road	100’ east of Railroad Avenue	Pedestrian treatment	Close sidewalk gap between Pittsburgh Funeral Chapel and Pittsburgh Ace Hardware. Install temporary treatment such as an asphalt path.	0.1	\$258,000
201	Dover Way	Frontage Road to Atherton Avenue to West Leland Road	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Explore removing parking.	0.8	\$336,000
202	West Leland Road	West Leland Road and Burton Avenue	Crosswalk	• Add east leg marked crosswalk • Install countdown signals • Add LPI on east and west crosswalks	n/a	\$323,000
203	East Leland Road	East Leland Road at Harbor Street	Bike treatment	As a near-term, interim improvement: • Mark eastbound and westbound bike lanes up to intersection • Mark green conflict zone striping on all approaches and through bus stops	0.1	\$15,000
204	East Leland Road	Railroad Ave to City Limits	Bike treatment	Upgrade the existing Class II bike lanes to Class IV separated bikeways by narrowing the 12’ travel lanes to 10’ and 11’ respectively and turn lanes to 10’.	2	\$876,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
205	East Leland Road	East Leland Road and Los Medanos College	Crosswalk	• -Create gateway to Los Medanos College through squaring-up intersection relative to Diamond Hills Apartment Complex driveway and install curb extensions • Consider wide median with refuge on the south crosswalk to create a grand campus entrance • Add marked crosswalks at each approach and mark crosswalks consistently • Upgrade curb ramps at each approach • Add bike boxes on NB and SB approaches to support turning movements into/out of the College	n/a	\$897,000
206	Delta Fair Boulevard	Century Boulevard/East Leland Road to Somersville Road	Bike/Ped treatment	Work with Antioch to extend Class IV separated bikeways into Antioch to provide access to the County Employment & Human Services offices and beyond. Mark crosswalks at Century Boulevard intersection.	1.1	\$482,000
207	Stoneman Avenue	Harbor Street to Loveridge Road	Bike treatment	Convert existing bike lanes to Class II buffered bike lanes (6’ bike lanes with 2’ buffers) by narrowing travel lanes to 11’ (with 10’ left turn lane) and marking parking at 8’.	0.7	\$89,000
208	Stoneman Avenue	Briarcliff Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Upgrade curb ramp on SW corner • Advance Yield Here to Pedestrians signs and yield lines • Pedestrian refuge island with removed WB left-turn pocket	n/a	\$49,000
209	Stoneman Avenue	Meadowbrook Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • Relocate crosswalk to west side of the street to provide pedestrian refuge island assuming stopping sight distance met • Use yellow school zone markings • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines • Curb extensions • Replace in-pavement flashers with PHB or RRFB	n/a	\$221,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
210	Stoneman Avenue	Meadowbrook Circle Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Replace in-pavement flashers with PHB or RRFB	n/a	\$221,000
C.9 Buchanan Road						
211	Buchanan Road	100' west of Railroad Avenue to Heights Avenue	Pedestrian treatment	Close sidewalk gap on the south side of the street. Requires a significant retaining wall between Quercus Lane and Heights Avenue (not included in cost, require further feasibility study).	0.4	\$1,033,000
212	Buchanan Road	Buchanan Road at Railroad Avenue	Bike treatment	- In the long-term, create consistent roadway edge on SE side of intersection. See Railroad Avenue for more information. - As a near-term, interim improvement: - Mark EB and WB bike lanes up to intersection - Mark green conflict zone striping	0.1	\$15,000
213	Buchanan Road	Castlewood Drive to Loveridge Road	Bike treatment	Add a Class IV bicycle facility (6' bike lane, 3' buffer) using existing right-of-way. This assumes 11' travel lanes and a 10' two-way left turn lane. This may require removing on-street parking between Railroad Avenue and Brookside Drive..	1.5	\$657,000
214	Buchanan Road	Buchanan Road at Castlewood Drive Intersection	Bike/Ped treatment	- Mark west and north leg high-visibility crosswalks. Install advanced yield markings and signage on north crosswalk. - Install median refuge on north crosswalk - Install bicycle wayfinding	n/a	\$113,000
215	Buchanan Road	Buchanan Road at Heights Ave	Crosswalk	- Enhance existing crosswalk with RRFBs and advanced yield markings to access the park - Reduce curb radius on SW corner and straighten crosswalk across side street - Close sidewalk gap on SW corner (see Buchanan Road sidewalk gap closure project, cost not included here)	n/a	\$288,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
216	Buchanan Road	Buchanan Road at Loveridge Road	Bike treatment	As a near-term, interim improvement: - Mark westbound bike lanes up to intersection - Mark green conflict zone striping and at bus stops	0.1	\$15,000
217	Buchanan Road	Buchanan Road at Mcfaul Drive	Crosswalk	Convert existing median to median refuge and check lighting levels		\$9,000
218	Buchanan Road	Loveridge Road to City Limits	Bike treatment	Upgrade existing Class II bike lanes to Class IV separated bikeways by narrowing travel lanes to 11' (6' bike lanes with 4' buffer).	1.6	\$700,000
219	Buchanan Road	Buchanan Road and Ventura Drive Intersection	Crosswalk	Install east crosswalk and protect conflicting northbound and southbound left-turns - Add advanced stop bars on each approach - Add bike boxes on northbound and southbound approaches to support turning movement on to/off of Buchanan Road	n/a	\$1,813,000
220	Buchanan Road	Santa Ana Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Restriped yellow high-visibility crosswalks for school zone - PHB with advanced stop bars - Parking restriction on crosswalk approach, adequate nighttime lighting levels - School crosswalk signage - Pedestrian refuges at crosswalks on side-streets	n/a	\$211,000
221	Yosemite Drive	Railroad Avenue to Harbor Street	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Provides an interim east-west option to the future Contra Costa Canal Trail.	0.5	\$210,000
222	Yosemite Drive	Brookside Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Raised crosswalk - Curb extensions - Upgraded curb ramps	n/a	\$189,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
223	Yosemite Drive	Mid-block at Hillview Junior High	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised crosswalk	n/a	\$65,000
224	Yosemite Drive	Yosemite Drive at San Juan Drive	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Stripe consistent high-visibility crosswalk markings, add parking restriction on crosswalk approach, and adequate nighttime lighting levels - Install curb extensions with directional curb ramps		\$146,000
225	Ventura Drive	Harbor Street to Norine Drive	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding and sharrows. Speed calming treatments are already installed. Provides an interim option for the future Contra Costa Canal Trail.	1.1	\$462,000
226	Ventura Drive	Norine Drive to Buchanan Road	Bike treatment	Add Class II buffered bike lanes (5’ bike lanes with 2’ buffer) by reducing travel lanes to 11’ (10’ left-turn pocket). Mark parking at 8’.	0.1	\$13,000
227	Ventura Drive	Buchanan Road to James Donlon Boulevard	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. City may want to consider upgraded facilities in the future as this area redevelops.	0.1	\$42,000
228	Ventura Drive	Ventura Drive at Norine Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Raised crosswalk - Curb extensions on NE and SE corners to narrow large intersection and reduce speeds - Pedestrian refuge island - Upgraded curb ramps	n/a	\$301,000
229	Ventura Drive	Ventura Drive at Suzanne Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Install high-visibility crosswalk markings, parking restrictions on crosswalk approaches, and appropriate nighttime lighting levels - Provide new east leg marked crosswalk with directional curb ramps		\$80,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
230	Suzanne Drive	Ventura Drive to James Donlon Boulevard	Bike treatment	Connect Buchanan Road and Ventura Drive bikeways through making this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming.	0.1	\$42,000
C.10 State Route 4 Crossing Study						
231	SR 4 Crossing	n/a	Bike/ pedestrian treatment	Study feasibility of grade-separated crossings for bicyclists and pedestrians across SR 4, including at: - Between Parkside and Los Medanos Elementary Schools. - Near the Pittsburgh Center BART Station - At Range Road - Pittsburg Bay Point BART Station (in County)	n/a	\$100,000
C.11 Other Uncontrolled Crosswalk Enhancements						
232	West 4th Street	Bay Side Drive Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Pedestrian refuges on north and south crosswalks through narrowing the travel lanes to 10-11’		\$43,000
233	East 4th Street	Cumberland Avenue Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach - Advance Yield Here to Pedestrians signs and yield lines - Upgraded curb ramps		\$46,000
234	West 4th Street	Odessa Avenue Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised crosswalk - Reduce curb radii		\$146,000
235	6th Street	Black Diamond Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels		\$34,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
236	6th Street	Cutter Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings across Cutter Street, parking restriction on crosswalk approach, adequate nighttime lighting levels - Raised intersection (near Marina Walk Park) - Upgraded curb ramps		\$227,000
237	6th Street	Herb White Way Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels		\$34,000
238	7th Street	Cutter Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Raised intersection - Crosswalk signage - Upgraded curb ramps on all corners		\$251,000
239	8th Street	Cumberland Avenue Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Upgraded curb ramps		\$46,000
240	8th Street	Herb White Way Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Truncated domes in median refuges (north, west and south crosswalks) and curb extensions (SE and SW corners) - Advance Yield Here to Pedestrians sign and yield line		\$227,000
241	9th Street	Herb White Way Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, adequate nighttime lighting levels - Crosswalk signage - Advance Yield Here to Pedestrians signs and yield lines		\$34,000
242	11th Street	Black Diamond Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels		\$34,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
243	Bay Side Drive	River Park Drive Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider curb extensions on NE and SE corners - Upgraded curb ramps		\$158,000
244	Bay Side Drive	2nd Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider curb extensions on NE and SE corners - Upgraded curb ramps		\$158,000
245	Cutter Avenue	Pelican Court Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Straighten north crosswalk - Upgraded curb ramps - Remove pork chop		\$76,000
246	Pelican Court	Pelican Loop Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Curb extensions on NE corner to narrow intersection while still allow for truck/boat trailers to make all movements and remove striped pork chop - Straighten north crosswalk - High-visibility crosswalks on all approaches with advanced yield markings and signage - Upgraded curb ramps		\$210,000
247	Pelican Loop	Mid-block location		- Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach - Raised crosswalk - Upgraded curb ramps		\$77,000
248	Burton Avenue	Crowley Avenue Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Reduce curb radii on SE corner and straighten west crosswalk		\$146,000
249	El Pueblo Avenue	Hermosa Avenue Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: Parking restriction on crosswalk approach, adequate nighttime lighting levels		\$1,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
250	El Pueblo Avenue	Treatro Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: Parking restriction on crosswalk approach, adequate nighttime lighting levels		\$1,000
251	Hanlon Way	Cove Way Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels		\$34,000
252	Pacini Avenue	Riverview Drive/Marks Boulevard Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Square-up intersection by T-ing Riverview Drive and Marks Boulevard into Pacini Avenue - Remove stop control on Pacini Avenue to make two distinct side-street stop-controlled intersections - High-visibility ladder-striped crosswalks on all approaches - Upgraded curb ramps		\$482,000
253	Pilar Ridge Drive	Rio Verde Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels		\$34,000
254	Portofino Drive	Valente Drive Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels		\$34,000
255	Riverview Drive	Alturas Avenue Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised crosswalk		\$65,000
256	Riverview Drive	Mori Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Raised crosswalk		\$65,000
257	San Juan Drive	Calistoga Drive Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised crosswalk (Hillview Junior High School)		\$65,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
258	San Juan Drive	Mariposa Drive Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised crosswalk (Hillview Junior High School)		\$65,000
259	Seeno Avenue	Tiffany Drive Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Refresh high-visibility crosswalk striping, parking restriction on crosswalk approach, ensure adequate nighttime lighting levels - Raised crosswalk (near Heights Elementary School) - Consider curb extensions		\$227,000



Appendix B

Crosswalk Policy

A. Crosswalk Fundamentals

The main functions of crosswalks are to improve safety by directing pedestrians to the safe crossing location and reinforce the legitimacy of pedestrian crossings.

Although vehicles are required to yield the right-of-way to pedestrians at all intersections where crossing is not prohibited (regardless of whether the crosswalk is marked), well-marked pedestrian crossings prepare drivers for the likelihood of encountering a pedestrian in the roadway. Well-marked crosswalks also improve walkability and pedestrian accessibility, as well as direct pedestrians toward the safest crossing locations.

While pedestrians and drivers have a shared responsibility to behave in accordance with the California Vehicle Code (CVC), planners and engineers also have a shared responsibility to design and implement a safe environment for pedestrians. This section outlines the types of crosswalks and where crossing the street is legal per the CVC.

A.1 Legal Crosswalks

The CVC defines where and how crossing the street is legal in California. A legal crosswalk exists where a sidewalk meets a street at an intersection, regardless of whether the crosswalk is marked with striping indicating its existence. Motorists must yield the right-of-way to pedestrians at these locations, as well as at marked mid-block crossings. Except for locations between immediately adjacent signalized crossings (where midblock crossing is prohibited), pedestrians may legally cross the street mid-block wherever a crossing is not expressly prohibited. However, pedestrians must yield the right-of-way to motorists at these unmarked mid-block crossings.

These legal statutes related to crosswalks are contained in the CVC, as follows:

Section 275 defines a legal crosswalk as:

- That portion of a roadway included within the prolongation or connection of the boundary lines of sidewalks at intersections where the intersecting roadways meet at approximately right angles, except the prolongation of such lines from an alley across a street.
- Any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface (such as a marked mid-block crossing).

Section 21950 describes right-of-way at a crosswalk:

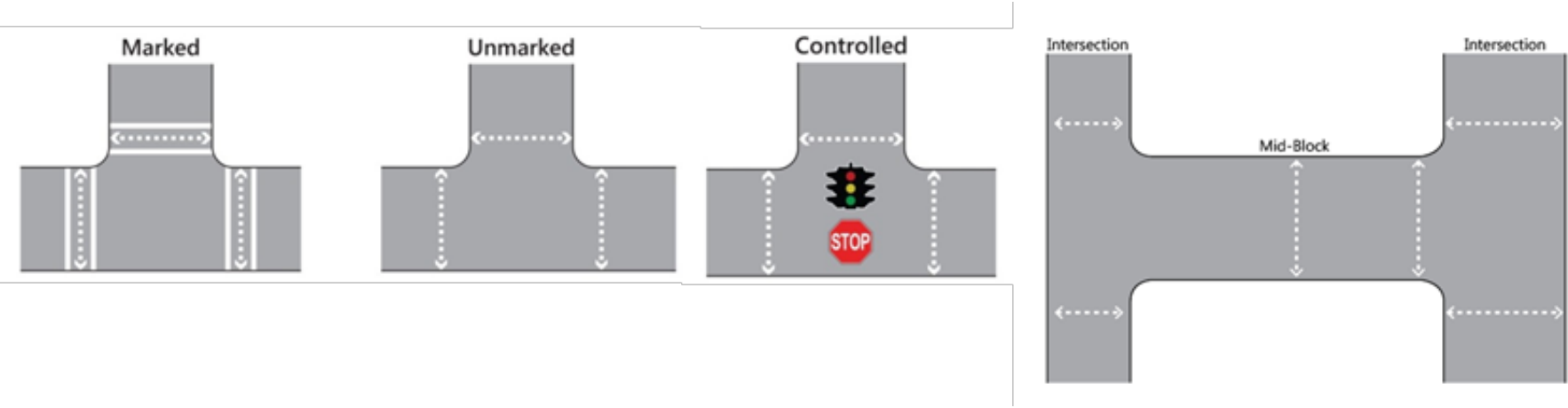
- The driver of a vehicle shall yield the right-of-way to a pedestrian crossing the roadway within any marked crosswalk or within any unmarked crosswalk at an intersection.

Section 21955 describes where pedestrians may not cross a street:

- Between adjacent intersections controlled by traffic control signal devices or by police officers, pedestrians shall not cross the roadway at any place except in a crosswalk.

A.2 Types of Crosswalks

Legal crosswalks are organized by three characteristics, as shown in the figures below:



1. **Presence of Striping (Marked vs. Unmarked):** The first characteristic is whether the legal crossing location is marked with striping on the street, or unmarked. Marked crosswalks reinforce the location and legitimacy of a pedestrian crossing. While marked crosswalks generally improve pedestrian safety, crosswalk marking should be guided by roadway characteristics and other safety considerations.
2. **Traffic Control Type (Controlled or Uncontrolled):** The second characteristic is whether the crosswalk is controlled (by a traffic signal or stop sign) or uncontrolled. Controlled crosswalks typically provide maximum safety benefit by requiring vehicles to stop for pedestrians. However, these treatments are not appropriate on all roadways. On some roadways, uncontrolled crosswalks can be safe and appropriate, though they typically require additional safety treatments, as drivers may not expect pedestrians crossing the roadway.
3. **Location (Intersection or Mid-block):** The third characteristic is whether the crosswalk is located at an intersection or mid-block between intersections. Mid-block crosswalks typically require additional safety treatments, as drivers may not expect pedestrians crossing the roadway, particularly outside of an intersection.

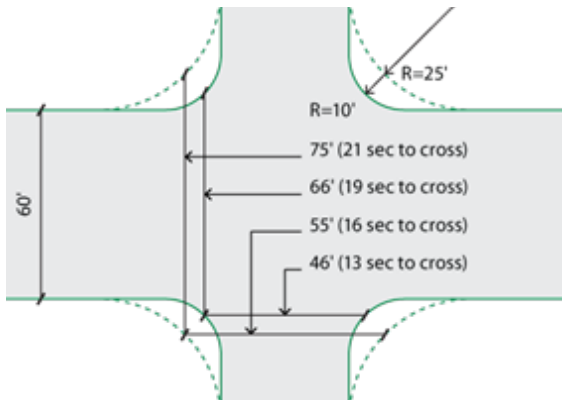
A.3 Common Geometric Considerations

Roadway geometry significantly affects pedestrian safety, and all crosswalk evaluations should begin with an assessment of potential geometric enhancements. Common geometric considerations include:

- Curb radii;
- Curb ramps;
- Curb extensions;
- Median refuges; and
- Lane reductions

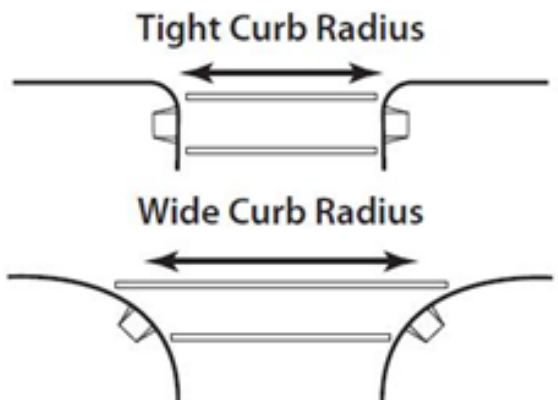
A.3.1 Curb Radii

Corner curb radii at intersections affect vehicle turning speeds and pedestrian crossing distances. A tighter curb radius creates a more compact intersection that forces vehicles to turn at slower speeds through the crosswalk. Tighter curb radii also shorten the crosswalk, reducing pedestrian crossing times and exposure to vehicles. For urban and suburban streets in Pittsburgh, curb radii should generally be 10 to 15 feet, resulting in vehicles turning at 15 MPH or less, which are more appropriate speeds for pedestrian safety.



Larger curb radii may be considered on truck routes or school bus routes, though the smallest appropriate design vehicle shall be used to determine the curb radius. Generally, 30-foot trucks should be able to stay within their lane when making a turn while larger trucks should be allowed to encroach into the adjacent lanes when making a turn.

For sidewalk or intersection reconstruction projects and new roads, concrete should be used to provide tighter curb radii. However, striping and posts are acceptable for repaving or other similar retrofit projects. Repaving and other retrofit projects should construct intersection bulb-outs with striping and posts to reduce curb radii.



A.3.2 Curb Ramps

Tighter curb radii support better pedestrian ramp alignment. For sidewalk or intersection reconstruction and new roadway projects, two curb ramps should be provided per intersection corner at every intersection, with each curb ramp directing pedestrians into the marked crosswalk.

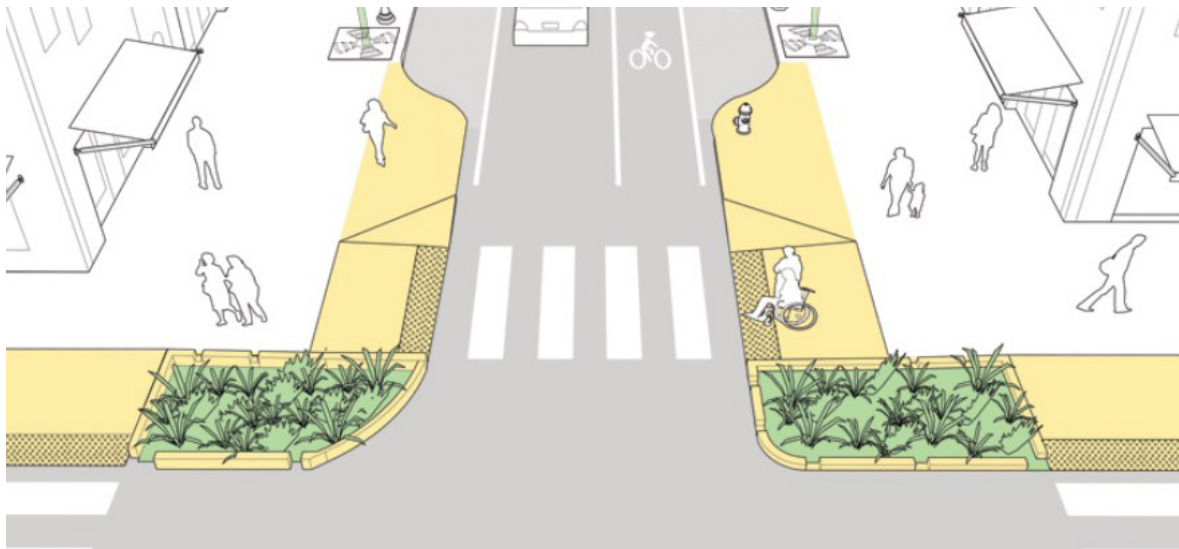
Directional curb ramps are critical to support those with mobility and visual impairments. These kind of ramps guide pedestrians directly into the crosswalk instead of into the middle of the intersection, as is common with diagonal ramps. This guidance is useful for all pedestrians but is particularly important for pedestrians in a wheelchair or similar assistive device who have more difficulty adjusting their direction of travel. Directional curb

ramps aid pedestrians with visual impairments navigating the street environment with a cane and provide them with a physical cue directing them straight through the crosswalk.

Existing single diagonal curb ramps should be retained for repaving or other similar retrofit projects, but painted bulbs with landings should be provided to reduce speeds, provide shorter crossing distances, and direct pedestrians with disabilities into the crosswalk.

A.3.3 Curb Extensions

Curb extensions or “bulb-outs” expand the sidewalk and intersection to reduce crossing distances and increase the visibility of pedestrians waiting to cross the street. They can be constructed where there is excess street width at the intersection or to shadow on-street parking. Curb extensions also address motorists using shoulder space or excessively wide travel lanes to create de-facto right-turn pockets at intersections. Although these “squeeze-by” maneuvers may sometimes improve automobile traffic operations, they are not desirable from a pedestrian safety perspective and increase the risk of multiple-threat pedestrian collisions. A yielding vehicle in one lane may prevent a driver in the adjacent lane from seeing a crossing pedestrian.



B. Identification of Candidate Locations for New Marked Crosswalks

Both proactive and reactive approaches are needed to develop a comprehensive pedestrian crosswalk safety strategy. Proactive approaches include holistic assessments, walk audits, and systemic safety analyses to address potential safety issues that may not be evident in reported collision records or specific requests from the community. Proactive approaches will be particularly beneficial in Pittsburgh where the sample size of collisions are relatively low. Reactive assessments, on the other hand, use collision data and community requests to identify potential needs for marked crosswalks and additional safety countermeasures.

B.1 Proactive Approaches

Chart B-1 describes how the City will assess whether to mark a crosswalk in situations where there are no recorded complaints or there is a lack of collision data. According to the FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing

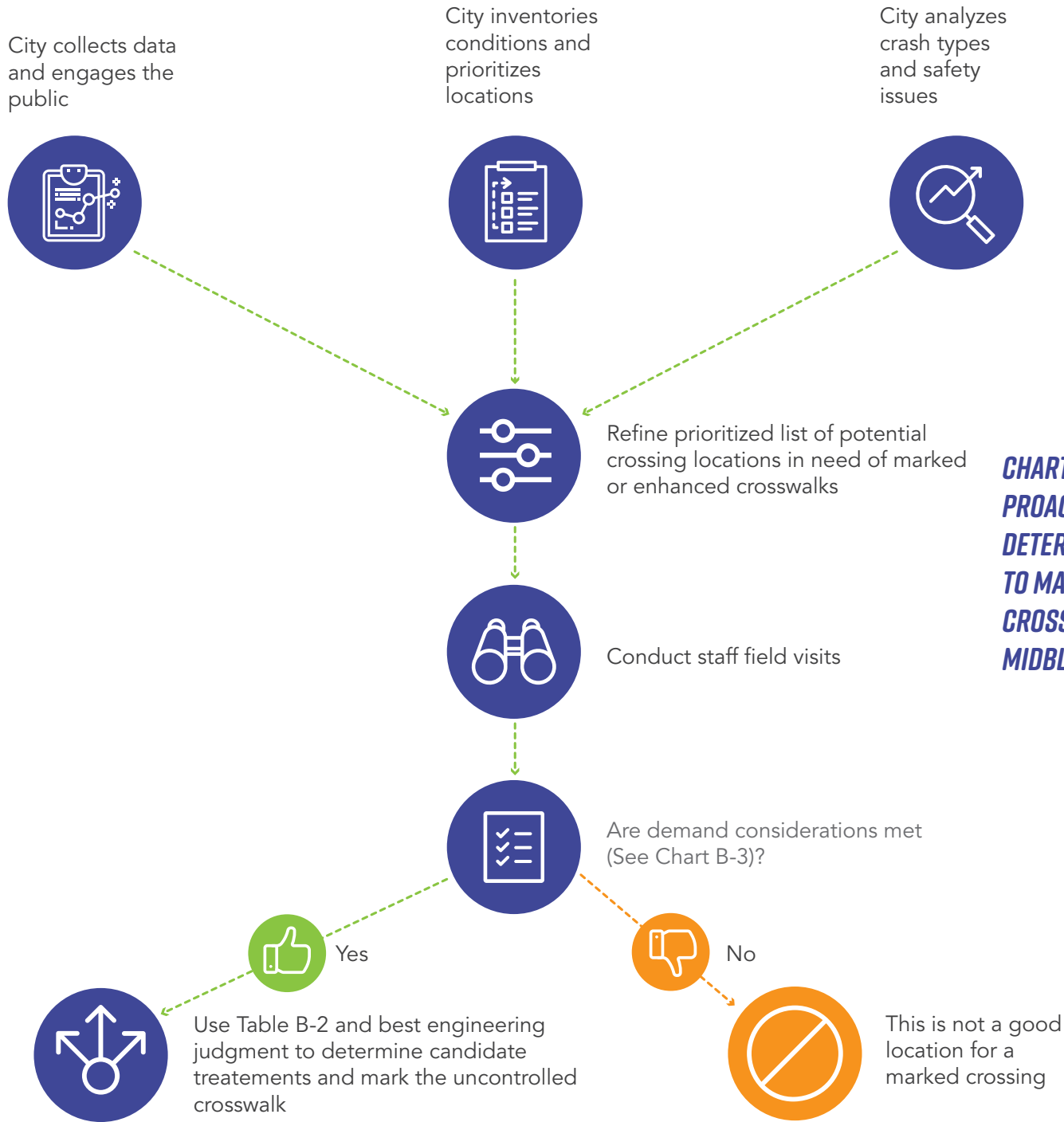


Locations, proactive safety assessments typically include the following steps:

1. Collecting pedestrian crash data;
2. Reviewing transportation studies and documents for proposed projects;
3. Completing a pedestrian safety action plan with an analytical process to identify potential locations for safety improvements;
4. Documenting informal public comments, as the public has local knowledge of where additional crossing support is needed and where high-priority enhancement areas may be beneficial;
5. Conducting walk audits to identify deficiencies and opportunities; and
6. Prioritizing the resulting project list.

The state-funded Systemic Safety Analysis Report (SSAR) program has bolstered the development of proactive safety assessments in California. This program provides funding for local agencies to perform collision analyses, identify safety issues on their roadway networks, and develop a list of systemic countermeasures that can be used to secure future Highway Safety Improvement Program (HSIP) funds.

Proactive approaches do not have to be limited to citywide assessments, as studies with smaller focus areas can also utilize a proactive approach. Complete streets corridor studies, for example, can provide a systemic safety assessment across the corridor and match issues with feasible countermeasures. Roadway repaving or slurry seal projects can also identify existing issues and replace old striping with new safety countermeasure striping.



B.2 Reactive Approaches

The City will also use reactive approaches to improve safety at unmarked crosswalks. By analyzing collision data and addressing community requests, the City can ensure that crossings with demonstrated safety issues are addressed appropriately.

If the criteria in **Chart B-2** are met, and the decision is made to mark a crosswalk, the City will refer to **Table B-2** through **Table B-4** to determine if additional safety countermeasures are needed to mark the crosswalk based on existing or proposed roadway characteristics.

Chart B-2 describes how the City will process a request to mark a crosswalk from the moment staff receives the request from a resident or other stakeholder. This process should always include a staff field visit to understand the site and its engineering constraints. The ultimate determination of the need for a marked crosswalk should follow the process set out in subsequent sections of this Crosswalk Policy.

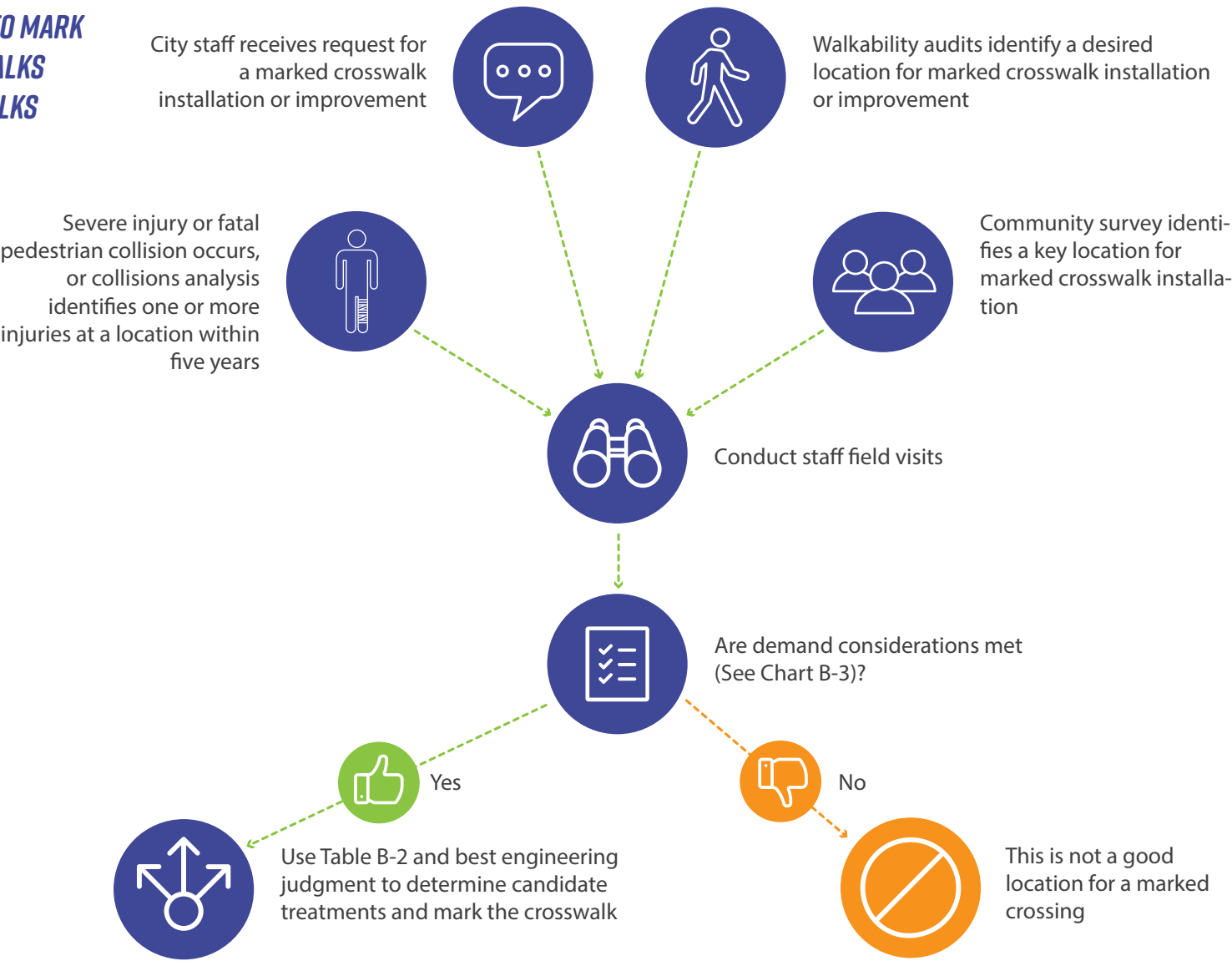
After the decision is made to mark a crosswalk, roadway characteristics should be run through several tables in **Section C** including:

- **Table B-2** – Recommended Countermeasure Enhancements at Uncontrolled Crosswalks;
- **Table B-3** – Potential Additional Countermeasure Enhancements at Uncontrolled Crosswalks; and
- **Table B-4** – Safety Issues Addressed by Each Countermeasure

These tables identify additional safety countermeasures that may be needed to mark the crosswalk safely. This is a critical step as, at higher speed and volume locations, marked crosswalks alone may not be considered safe. **Tables B-2** through **B-4** will assist the City in identifying additional countermeasures needed to safely mark the crosswalk.



CHART B- 2:
REACTIVE PROCESS FOR
DETERMINING WHETHER TO MARK
UNCONTROLLED CROSSWALKS
AND MIDBLOCK CROSSWALKS



C. Marking and Enhancing Uncontrolled Crosswalks

This section provides the City with guidance on when to mark and enhance crosswalks at uncontrolled intersections and mid-block locations. Uncontrolled crosswalks require additional consideration during planning and design because drivers are not consistently required to stop. Instead, drivers must recognize the presence of a pedestrian and yield accordingly. For this reason, improving the visibility and safety of pedestrians at uncontrolled locations is critical.

C.1 Benefits of Marked Crosswalks

Sidewalks and crosswalks are essential links within a pedestrian network. Whether commuting, running errands, exercising, or simply wandering, pedestrians need safe and convenient roadway crossings to reach their destinations. A marked crosswalk has three primary functions:

- 1.To create reasonable expectations for where pedestrians may cross a roadway;
- 2.To improve predictability of pedestrian actions and movement; and
- 3.To channel pedestrians to designated crossing locations, which are often selected for their optimal sight distance.

Marked crosswalks offer the following benefits:

- They help pedestrians find their way across complex intersections;
- They reassure pedestrians of their legal right to cross a roadway at an intersection or mid-block crossing; and
- They can designate the shortest path across a roadway.

As discussed earlier, the CVC gives the right-of-way to pedestrians at all marked or unmarked legal crosswalks. However, both drivers and pedestrians sometimes fail to obey the law or are simply unaware of who possesses the right-of-way, particularly at unmarked crossing locations. Drivers often fail to yield the right-of-way without the visual cue of a marked crosswalk, while pedestrians frequently wait for a large gap in traffic to attempt to cross.

C.2 When to Mark a Crosswalk

Identifying candidate locations for marked crosswalks involves two steps:

1. Identify where people would like to cross the street - these locations are called "pedestrian desire lines" as they represent the most desirable, and typically most direct, locations where people want to cross a street. Pedestrian desire lines are influenced by elements of the roadway network like transit stops, as well as nearby land uses. Information about nearby land uses and the roadway network help identify areas where pedestrian crossings may need to be improved. Specific crossings needing enhancement can then be identified through engineering studies, walk audits, City staff observations, or public feedback.
2. Identify where people can cross safely. The primary consideration in this step is providing adequate stopping sight distance. Pedestrians are at highest risk of injury in a collision because they are the least protected. The crosswalk safety treatment toolboxes in this Policy provide numerous options for enhancing pedestrian safety at uncontrolled and controlled crossings,

with treatment selection based on the overall context of the crosswalk, including surrounding land uses, roadway characteristics, and user characteristics.

Once candidate locations are identified, an engineering evaluation should be conducted to determine if a marked crosswalk should be installed, and if so, what visibility enhancements should be included in the design.

Crosswalks should be marked where all the following conditions occur:

- Sufficient demand exists to justify the installation of a marked crosswalk (see **Chart B-3**);
- The location has sufficient sight distance, and/or sight distance will be improved prior to marking the crosswalk; and
- Other safety considerations do not preclude marking the crosswalk.

Existing pedestrian volumes, the number of pedestrian-vehicle collisions, community surveys, resident requests, and walking audits should be used to assess whether sufficient demand exists to justify a marked crosswalk.

At uncontrolled intersections (i.e. side-street stops) where there are desire lines on both crosswalk legs, run each location through **Chart B-3**.

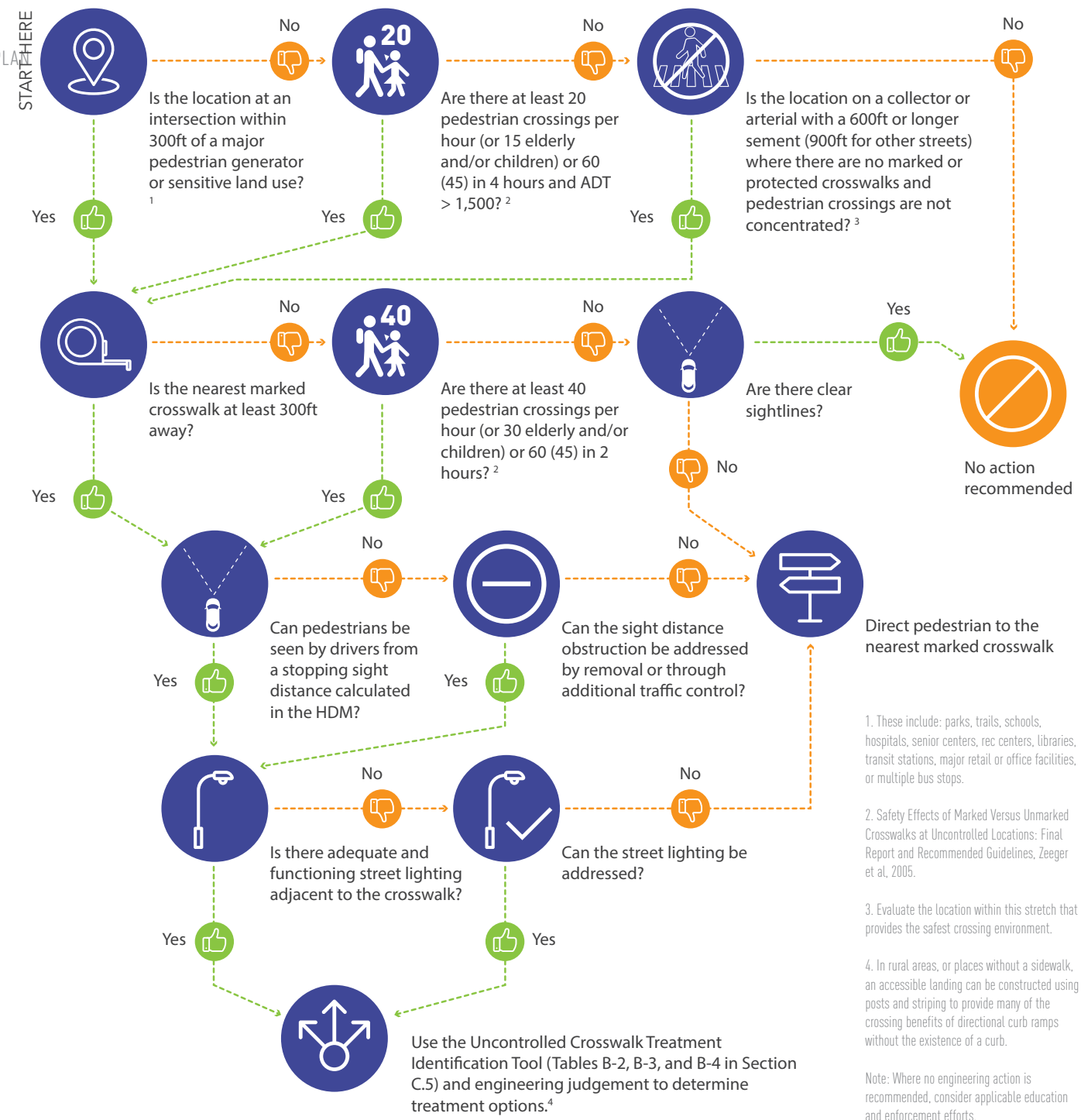
Safety considerations that might preclude a marked crosswalk include high travel speeds, heavy traffic volumes, wide, multi-lane roads, and sight distance issues caused by topography or building lines. Sight distance issues caused by parked vehicles should be addressed by providing red curb parking-restricted areas on either side of the crosswalk, and issues caused by vegetation may be addressed by trimming or modifying landscaping.

After a decision is made to mark a crosswalk, **Table B-2** should be used to identify necessary safety countermeasures. Removing crosswalks or otherwise failing to provide adequately enhanced crosswalks are not acceptable outcomes under this Crosswalk Policy.

Chart B-3 describes the process that should be used to determine the need for marking a new uncontrolled crosswalk, using pedestrian demand, crosswalk frequency, and pedestrian visibility as a basis. It should be noted that the thresholds in **Chart B-3** are appropriate for urban and suburban communities. As a suburban community, Pittsburg may consider reducing pedestrian volume or collision requirements. When marking crosswalks at intersections, each approach should be assessed using this **Chart B-3** to determine whether one or two crosswalks should be marked.



CHART B-3:
FEASIBILITY ANALYSIS
FOR TREATMENTS AT
UNCONTROLLED LOCATIONS



C.3 Safety Countermeasures for Uncontrolled Crosswalks

Once a decision to mark a crosswalk has been made based on **Chart B-3**, City staff must assess whether additional countermeasures are necessary or recommended to safely mark the crosswalk. Countermeasure identification should first be based on roadway characteristics, with ultimate suitability determined by site context and the City's best engineering judgment. If there are reported collisions at a location, installing safety countermeasures that address or correct the safety issue is essential.

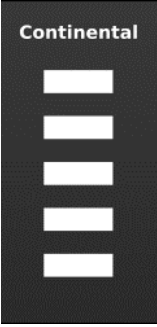
C.3.1 Potential Safety Countermeasures for Uncontrolled Crosswalks

Table B-1 lists 12 effective countermeasures⁴ that are appropriate in specific roadway contexts. Three of these tools—high-visibility crosswalk markings, parking restrictions at crosswalk approach, and adequate nighttime lighting levels—should be used at all uncontrolled crosswalks.

⁴ Based on the FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations. Four of the elements are combined into a "baseline" for uncontrolled crosswalks: high-visibility markings, parking restrictions, and nighttime lighting into one countermeasure.



Table B-1: Safety Countermeasures for Uncontrolled Crosswalk Enhancement

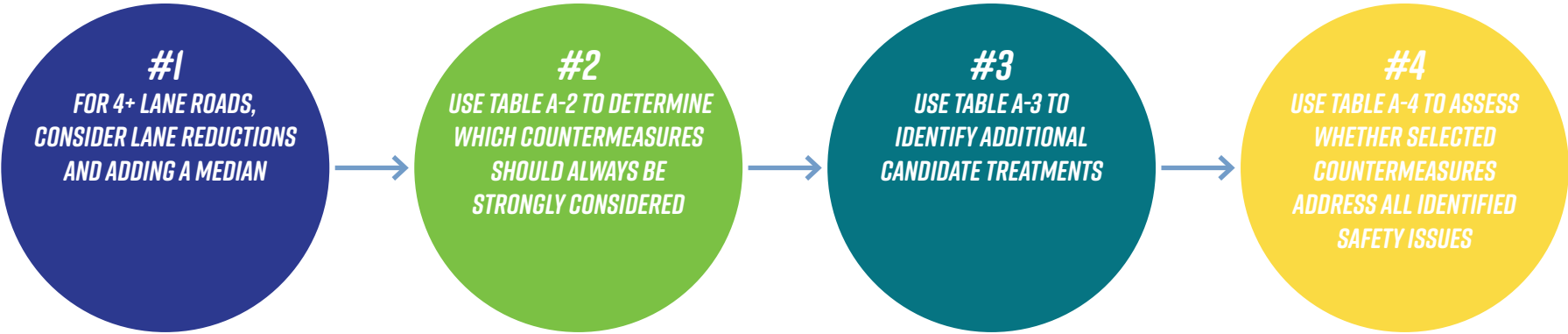
Counter-measure No.	Safety Countermeasure	Use	Example Image
Countermeasures to Be Used at All Uncontrolled Crosswalks			
1A	High-Visibility Crosswalk Markings	This is a standard countermeasure to consider at all existing uncontrolled crosswalks. Crosswalks should be marked as close to 90 degrees and designed as short as possible.	 Source: SF Better Streets
1B	Parking Restrictions at Crosswalk Approaches and Removal of Other Sight Distance Obstructions	This is a standard countermeasure to consider at all existing uncontrolled crosswalks. A minimum 10-foot red curb should be marked ahead of the crosswalk.	 Source: Google
1C	Adequate Nighttime Lighting	This is a standard countermeasure to consider at all existing uncontrolled crosswalks. All marked crosswalks should be provided with lighting and the average illumination level in the crosswalk area should be at least equal to that provided at the intersection of two major streets (around 34 lux). The uniformity ratio should be no more than 3:1.	 Source: FHWA

Counter-measure No.	Safety Countermeasure	Use	Example Image
Additional Countermeasures – Determine Use Based on Tables B-2 and B-3			
2	Raised Crosswalk	This is a countermeasure that may be considered where the roadway speed is 30 mph or less and there are three or fewer travel lanes.	 Source: Google
3	Advanced Yield to Pedestrians Markings and Signage	This is a countermeasure that is strongly recommended on all roadways with four or more lanes and speeds over 35 mph.	 Source: SRTS Guide
4	In-Street Pedestrian Crossing Signage	This is a countermeasure that should be considered on roadways with three or fewer travel lanes and speeds under 30 mph.	 Source: User Guide for R1-6 Gateway Treatment for Pedestrian Crossings report

Counter-measure No.	Safety Countermeasure	Use	Example Image
5	Curb Extensions	This is a countermeasure that may be implemented at any location where space is available, such as streets with parking lanes.	 Source: FHWA
6	Median Refuge Island	This is a countermeasure that is strongly recommended on all roadways with three or more lanes and no raised medians. Median refuges should be a minimum of six feet in width with truncated domes. The refuge island should be designed so that the pedestrian is encouraged to make eye contact with oncoming traffic.	 Source: PedBike Images/Lyubov Zuyeva

Counter-measure No.	Safety Countermeasure	Use	Example Image
7	Rectangular Rapid-Flashing Beacon (RRFB)	This is a countermeasure that is recommended at locations with higher speeds, higher ADT, and higher number of traffic lanes.	 Source: FHWA
8	Pedestrian Hybrid Beacon (PHB)	This is a countermeasure that should be considered for roadways with the highest speeds, highest ADT, and highest number of travel lanes when MUTCD warrants are met. PHBs should be designed to include Advanced Yield to Pedestrian Markings.	 Source: FHWA

Source: Table adapted from FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations (draft July 2019).



C.3.2 When to Enhance with Safety Countermeasures

Determining which safety countermeasures to install at uncontrolled crosswalks should be conducted in four steps as shown above. First, lane reductions and median installations should be considered on roadways with four or more lanes. Next, roadway characteristics should be referenced with **Table B-2** to identify countermeasures that should be considered at uncontrolled crossings of that roadway type. **Table B-3** should then be used to identify additional candidate treatments that may also be appropriate, depending on the specific context of the intersection. Finally, once treatments have been selected using those two tables, **Table B-4** should be used to assess whether they

address all identified safety issues. If they do not, additional candidate treatments that do address those issues should also be included.

Table B-2 identifies whether additional countermeasures may be needed to provide a safe uncontrolled crosswalk based on average daily traffic (ADT), posted or observed speeds, the number of travel lanes, and the presence of a median. Per the FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations, the enhancements listed in **Table B-2** represent safety countermeasures that should be strongly considered at uncontrolled crosswalks across roadways with the given roadway characteristics.

Recommendations are organized into four levels of enhancement:

- **Level A:** This level consists of the most basic improvements that should be implemented at all uncontrolled crosswalks, regardless of roadway characteristics. They include High-Visibility Crosswalk Markings, Parking Restrictions at Crosswalk Approaches, Adequate Nighttime Lighting, and the Removal of Sight Distance Obstructions. Directional curb ramps and tight curb radii should also be implemented if the crosswalk is at an intersection.
- **Level B:** This level includes all Level A countermeasures, plus Advanced Yield to Pedestrians Markings and Signage.
- **Level C:** This level includes all Level A and B countermeasures, plus Rectangular Rapid Flashing Beacons (RRFBs) or

Pedestrian Hybrid Beacon (PHBs). The City will decide between RRFBs and PHBs based on: (1) MUTCD PHB guidelines; and (2) rates of drivers yielding to pedestrians. The MUTCD PHB guidelines should be consulted to determine if a PHB is appropriate. If not, the rate of drivers yielding to pedestrians should be reviewed. If it is low, the City should use PHBs, as the higher safety efficacy device; otherwise, it should use RRFBs. The City should use either device in conjunction with Level A and B enhancements. At Level C, crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

- **Level D:** This level includes all Level A and B countermeasures, plus PHBs. PHBs are stronger traffic control devices that are needed on wider roadways with higher speeds and greater ADT. Pedestrian signals should be considered as an alternative to PHBs where warrants are met. At this level, crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Table B-3 identifies additional countermeasures that may be appropriate, based on roadway characteristics. Each numbered countermeasure in **Table B-2** and **Table B-3**

corresponds to a countermeasure in **Table B-4**. The reported and near-miss collisions documented at the crosswalk should also be compared against **Table B-4** to determine if the proposed countermeasures would address those collision trends. If they do not, **Table B-3** and **Table B-4** should be used to identify potential additional treatments to address the documented safety record. **Figure B-1** and **Figure B-2** illustrate the warrant criteria for installing Pedestrian Hybrid Beacons (PHBs) in low-speed and high-speed roadways, respectively.

C.4 Documenting Process

Brief technical documentation should be created for all crosswalks that have been identified as candidates for markings or other countermeasures. The documentation should outline the process used by the City to identify the countermeasures considered to improve pedestrian safety at the crosswalk. It should also document the existing roadway characteristics and provide a brief site analysis justifying the inclusion or exclusion of countermeasures based on this Crosswalk Policy and outside factors like funding constraints.

C.5 Requests for Additional Enhancements

Community members might request additional enhancements even after the City has installed new countermeasure improvements. In general, requests should not be used to supplant the recommendations set forth in this Crosswalk Policy. When a community request is made to further enhance a crosswalk that has already been improved in accordance with this Crosswalk Policy, the technical documentation should be consulted to ensure that any issues raised in the request were considered during the assessment process. If no new information is provided that significantly alters the conditions used to select the appropriate countermeasure, then no further action is needed. However, if additional information is provided that might substantially affect the recommendations from this Crosswalk Policy, then it is strongly recommended that a reassessment be performed.

Table B-2: Recommended Countermeasure Enhancements at Uncontrolled Crosswalks

Roadway Type	Vehicle ADT ≤ 9,000			9,000 < Vehicle ADT ≤ 15,000			Vehicle ADT ≥ 15,000		
	≤30 mph	31-39 mph	≥40 mph	≤30 mph	31-39 mph	≥40 mph	≤30 mph	31-39 mph	≥40 mph
	Recommended Level:			Recommended Level:			Recommended Level:		
2 Lanes without Raised Median	A	A	C	A	A	C	A	A ¹	D
3 Lanes with Raised Median	A	B	C	A ¹	C	C	B ¹	C	D
3 Lanes without Raised Median	A	B	D	A ¹	C	D	B ¹	D	D
4+ Lanes with Raised Median	B	B	D	B ¹	C	D	C	D	D
4+ Lanes without Raised Median	B	B ¹	D ¹	B ¹	C ¹	D ¹	C ¹	D ¹	D ¹

Notes:

Level A: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels, and removal of sight-distance obstructions (Countermeasure No. 1).

Level B: All Level A countermeasures, plus advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line (Countermeasure No. 3).

Level C: All Level A and Level B countermeasures, plus RRFB (Countermeasure No. 7) or PHB (Countermeasure No. 8). First, consider MUTCD PHB installation guidelines and assume 10% background growth and/or future demand. Second, if guidelines are not met and driver yielding is high, install RRFBs. Otherwise, install a PHB. If vehicle speeds are a primary issue, consider using PHBs instead of RRFBs. See NCHRP 562: Improving Pedestrian Safety at Unsignalized Crossings worksheets for more information.

Level D: All Level A and Level B countermeasures, plus PHB (Countermeasure No. 8). Assume 10% background growth and/or future demand in assessing MUTCD PHB installation guidelines. If thresholds are not met, consider directing pedestrians to the nearest enhanced or controlled crosswalk.

1. Always consider pedestrian refuge island (Countermeasure No. 6) as baseline countermeasure recommendation.

Source: Table adapted from FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations (July 2018).

Table B-3: Potential Additional Countermeasure Enhancements at Uncontrolled Crosswalks

Roadway Type	Vehicle ADT ≤ 9,000			9,000 < Vehicle ADT ≤ 15,000			Vehicle ADT ≥ 15,000		
	≤30 mph	31-39 mph	≥40 mph	≤30 mph	31-39 mph	≥40 mph	≤30 mph	31-39 mph	≥40 mph
	Recommended Countermeasure Nos.			Recommended Countermeasure Nos.			Recommended Countermeasure Nos.		
2 Lanes ¹	2, 3, 4, 5, 6	3, 5, 6, 7, 8	3, 5, 6	3, 4, 5, 6	3, 5, 6, 7, 8	3, 5, 6	3, 4, 5, 6, 7, 8	3, 5, 6, 7, 8	3, 5, 6
3 Lanes with Raised Median	2, 3, 4, 5	5, 7, 8	5	3, 4, 5, 7, 8	5	5	4, 5, 7, 8	5	5
3 Lanes without Raised Median	2, 3, 4, 5, 6, 7, 8	5, 6, 7, 8	5, 6	3, 4, 5, 6, 7, 8	5, 6	5, 6	4, 5, 6, 7, 8	5, 6	5, 6
4+ Lanes with Raised Median	5, 7, 8	5, 7, 8	5	5, 7, 8	5	5	5	5	5
4+ Lanes without Raised Median	5, 6, 7, 8	5, 7, 8	5	5, 7, 8	5	5	5	5	5

Notes:

- PHBs (Countermeasure No. 8) and RRFBs (Countermeasure No. 7) should be strongly considered where driver compliance and yielding rates to pedestrians are low.
- Median refuge islands (Countermeasure No. 6) are part of the baseline recommendation on streets with multilane approaches without raised median AND with speeds over 35MPH and/or ADT over 9,000.

1. Advanced yield markings (Countermeasure No. 3) can be considered on two-lane roadways where there are driver encroachment issues, or other issues with motorist compliance.

Source: Table adapted from FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations (July 2018).

Table B-4: Safety Issues Addressed by Each Countermeasure

Counter-Measure ID	Countermeasure	Reported, Near-Miss, or Observed Collision Trends				
		Conflicts at crossing locations	Excessive vehicle speed	Inadequate conspicuity/visibility	Drivers not yielding to pedestrians in crosswalks	Insufficient separation from traffic
1A	High-Visibility Crosswalk Markings	✓		✓	✓	
1B	Parking Restrictions at Crosswalk Approaches and Removal of Other Sight Distance Obstructions	✓		✓	✓	
1C	Adequate Nighttime Lighting	✓		✓		
2	Raised Crosswalk	✓	✓	✓	✓	
3	Advanced Yield to Pedestrians Markings and Signage	✓		✓	✓	✓
4	In-Street Pedestrian Crossing Signage	✓	✓	✓	✓	
5	Curb Extensions	✓	✓	✓		✓
6	Median Refuge Island	✓	✓	✓		✓
7	Rectangular Rapid-Flashing Beacon (RRFB)	✓			✓	
8	Pedestrian Hybrid Beacon (PHB)	✓			✓	

Source: Table adapted from FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations (July 2018).

C.6 MUTCD Guidelines for PHB Installation

Enhancement Levels C and D both recommend PHB installations. The California MUTCD provides some PHB guidance based on pedestrian volumes, vehicle volumes, crosswalk lengths, and vehicle speeds. See the **Figures B-1** and **B-2** at right for the PHB curves for slow speed and high-speed roads, respectively.

PHBs should be considered in places where the roadway characteristics meet the guidelines. Assume pedestrian and/or auto volume growth of 10% if close to threshold. If driver compliance is low, consider installation even if the guideline is not met.

FIGURE B-1
MUTCD (FIGURE 4F-1). GUIDELINES FOR INSTALLATION OF PEDESTRIAN HYBRID BEACONS ON LOW-SPEED ROADWAYS

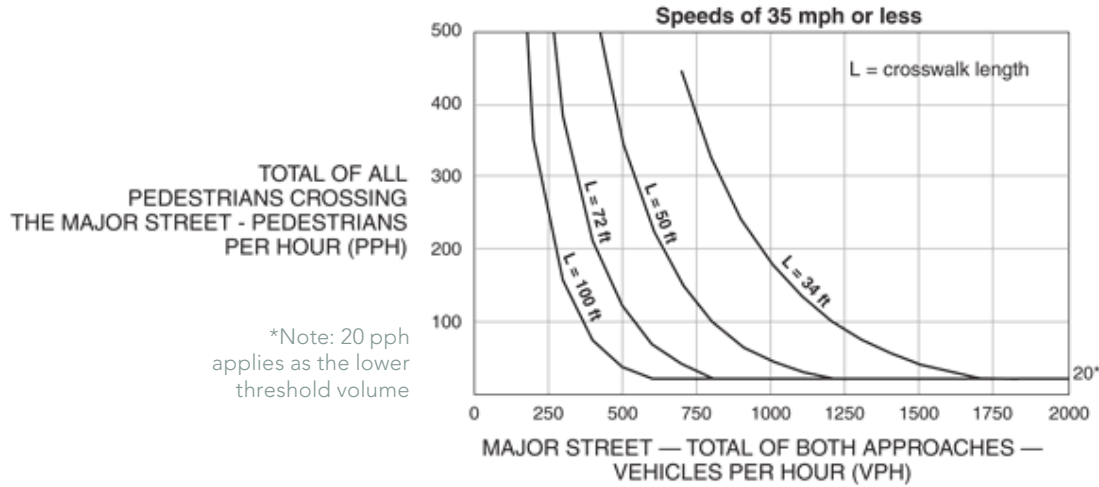
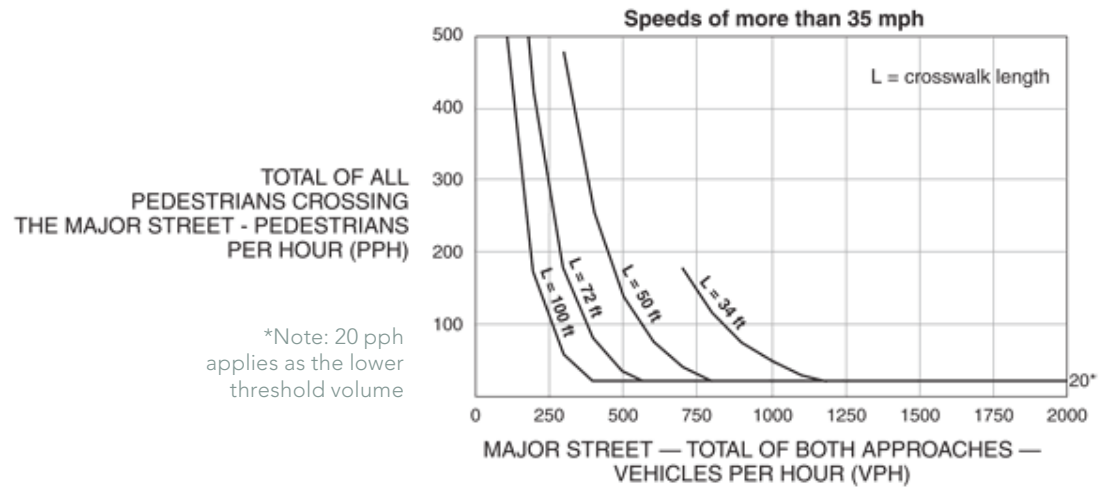


FIGURE B-2
MUTCD (FIGURE 4F-2). GUIDELINES FOR INSTALLATION OF PEDESTRIAN HYBRID BEACONS ON HIGH-SPEED ROADWAYS



D. Countermeasures for Controlled Crosswalks

Controlled crosswalks are those where vehicles are typically required to come to a complete stop due to a stop sign, traffic signal, or other yield control. These crossings may not need enhancement beyond standard crosswalk markings because stop signs and traffic signals explicitly allocate right-of-way to users and typically have a high rate of motorist compliance. However, even with these control devices in place, consideration should be given to implementation of certain countermeasures at intersections with frequent pedestrian-auto conflicts, pedestrian collisions, or low rates of compliance, as well as near schools or at skewed intersections.

This section discusses the potential countermeasures that the City will consider to further enhance safety at controlled crosswalks. The countermeasures are intended to improve visibility, clarify who has the right-of-way, and reduce vehicular speeds.

The section is organized into four parts:

- Baseline Controlled Crosswalk Countermeasures

- Stop-Controlled Crosswalk Countermeasures;
- Yield-Controlled Crosswalk Countermeasures; and
- Signal-Controlled Crosswalk Countermeasures.

It should be noted that all the countermeasures discussed in this section are required or allowed by the standards and specifications in the California MUTCD.

D.1 Baseline Controlled Crosswalk Countermeasures

Certain controlled crosswalk countermeasures are considered to be “baseline” as they are needed at all stop-controlled and signalized intersections.⁵ These baseline measures should be integrated into the design of all new controlled intersections. Existing controlled crosswalks may require retrofits, which can be phased in over time. Baseline controlled crosswalk countermeasures consist of crosswalk striping, geometric improvements, sight-line improvements,

and accessibility improvements. These countermeasures are listed below with additional guidance for each measure.

Crosswalk Striping

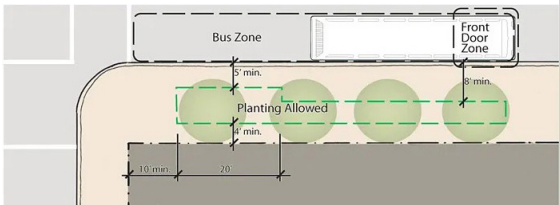
- Mark crosswalks as close to 90 degrees as possible to minimize crossing distances, provide opportunities to reduce curb radii and create curb extensions, and make the street environment more predictable for those with visual impairments.⁶
- Provide high-visibility continental crosswalk striping where driver compliance with the existing stop or signal controls is low.
- Install advanced stop bars to avoid driver encroachment to indicate where drivers should stop and wait for pedestrians in the crosswalk.⁷ These function similarly to advance yield markings (also known as "shark teeth") but are only used at stop-controlled crosswalks.

Geometric Improvements

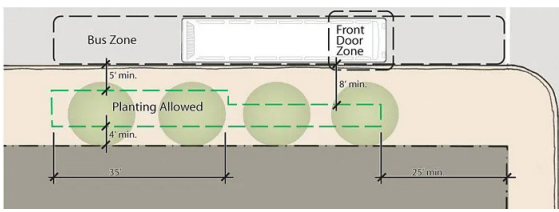
- Where street width and turning movements allow for a six-foot median, provide a median refuge island with thumbnails. The “thumbnail” is a median island that protects the pedestrian crossing space and creates a full refuge in the street.
- Remove slip lanes unless pedestrians benefit from the existing channelization; otherwise, provide raised crosswalks or protected right turns to increase visibility and reduce speeds.
- Tighten curb radii to reduce turning vehicle speeds.
- Install curb extensions to improve sight lines between autos and pedestrians and reduce overall pedestrian crossing distances.
- Consider lane reductions and/or narrowed lane widths to reduce speeds and collision risk.

Sight Line Improvements

- Restrict parking at intersection approaches to improve sight lines.
- Provide adequate nighttime lighting to ensure crosswalk safety.



Far-Side Bus Stop

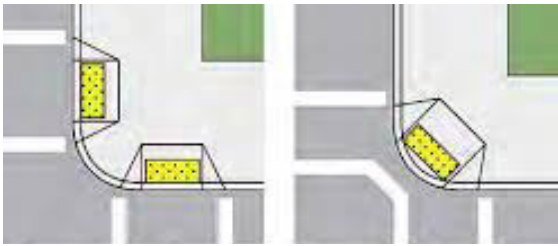


Near-Side Bus Stop

- Install curb extensions to improve sight lines between autos and pedestrians and reduce the overall crossing distance.
- Remove sign clutter, vegetation, and/or other obstructions that may limit visibility.
- Favor far side bus stop designs which encourage pedestrians to walk behind stopped buses and promote better visibility between pedestrians and drivers.

Accessibility Improvements

- For new construction or major reconstruction projects, provide tighter curb radii and two directional curb ramps per corner. For repaving or other retrofit projects, retain the



Directional Curb Ramps Best practice

Diagonal Curb Ramp Not best practice

single diagonal curb ramp, but install painted bulbs with landings.

D.1.1 Stop-Controlled Crosswalk Countermeasures

Stop-controlled crosswalks are located at intersections controlled by stop signs. Stop-controlled crosswalks in low-volume, low-speed areas do not need to be marked. On busier roadways, however, crosswalks at stop-controlled intersections should be marked if any of the following conditions apply:

- The crosswalk is within 1/8 mile of a school;
- Elderly or disabled pedestrian volumes of 15 or more are expected during the peak hour of pedestrian demand;
- Overall pedestrian volumes of 20 or more are expected during the peak hour of pedestrian demand, with

ADT volumes of 6,000 or higher;

- Pedestrians should be directed to a particular leg of the intersection for safety or efficiency reasons; or
- The crosswalk serves an intersection of one or more collector/arterial streets.

D.1.2 Yield-Controlled Crosswalk Countermeasures

Signal-controlled crosswalks are located at intersections controlled by yield signs. Yield-controlled crosswalks are less effective at controlling vehicle movements and protecting crossing pedestrians, as drivers may reduce speed but expect to travel fast through the crosswalk location. For this reason, yield control is most appropriate in contexts with low vehicle speeds and long sight distances, which allow drivers ample time to identify crossing pedestrians and come to a stop. The baseline countermeasures described in **Section D.1** are therefore particularly important to keep speeds low and establish good visibility between drivers and pedestrians. Yield-controlled crosswalks should be marked similarly to stop-controlled crosswalks, as described in **Section D.2**, and should have high-visibility continental crosswalk striping.

D.1.3 Signal-Controlled Crosswalk Countermeasures

Signal-controlled crosswalks are located at intersections controlled by a traffic signal. Traffic signals are either “actuated”, meaning that pedestrians must be detected or activate the pedestrian phase by pressing a push button, or are “pre-timed”, meaning that the pedestrians are served in each signal cycle and do not need to request to cross the street. While traffic signals generally are the strongest traffic control device for a crosswalk, conflicts between turning vehicles and pedestrians in the crosswalk can still cause pedestrian safety issues. For this reason, signal-controlled intersections may require geometric improvements to reduce speeds and traffic signal phasing solutions to address pedestrian-auto conflicts.

Marked crosswalks should generally be provided on all legs of signalized intersections. However, intersections with double left or double right turns must protect those turns to safely mark the conflicting crosswalk. Intersections with double right turns must have a “No Right Turn on Red” restriction or black out sign that is actuated when the conflicting pedestrian crossing phase is actuated.

The process outlined below should be used to identify potential countermeasures for use at signal-controlled crosswalks. It first outlines general safety improvements that should be considered at all signalized intersections. The process also provides guidance for additional signal phasing enhancements to remove or mitigate potential conflicts between pedestrians and turning vehicles, consisting of four flow charts that use inputs available from a typical field survey to identify potential countermeasures appropriate for the given context. These flow charts should be supplemented with the City’s best engineering judgment.

D.1.4 Universal Safety Countermeasures

The safety countermeasures in this section represent improvements that should be considered whenever new or modified signals are studied and include operational, pedestrian access, and geometric enhancements.

Universal traffic signal improvements include shortening cycle lengths, prioritizing multimodal travel, minimizing the number of signal phases, setting slow progression speeds, adjusting timing for off-peak hours, and considering fixed signal timing,

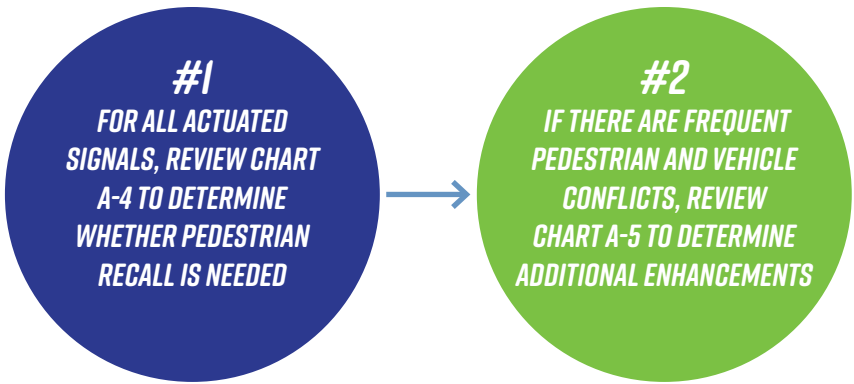
among others. These universal operational improvements are detailed in **Table B-5**.

D.2 Additional Signal Enhancements

Not all pedestrian/vehicle conflicts are addressed by the universal considerations for signal-controlled crosswalks, and additional safety needs at signalized intersections depend on intersection operations and design, roadway characteristics, and pedestrian volumes. After assessing the suitability of each of the universal considerations, additional signal enhancements should be considered for projects involving major signal modifications, corridor studies, traffic studies, or safety studies and where reported, near-miss, or observed conflicts between pedestrians and autos occur. First, review **Chart B-4** to determine if pedestrian recall is needed, and then review **Chart B-5** to identify which signal enhancements should be considered.

Intersections with frequent pedestrian and vehicle conflicts will return more substantive recommendations. Intersections with few pedestrian and vehicle conflicts will return treatments that require less-intensive signal modifications or even no changes.

Where LPIs are recommended, pedestrians



should be given a minimum of three-to-seven seconds head start, depending on pedestrian volumes, turning vehicle volumes, and roadway characteristics. At intersections with particularly high potential for conflicts or long crossing distances, LPIs of up to ten seconds May be appropriate. Longer LPIs give pedestrians more time to cross before the start of a green signal in the same travel direction, increasing visibility to turning vehicles and reinforcing pedestrian right-of-way, though they also increase intersection delay.⁸

Table B-5 summarizes the pedestrian access modifications that should be universally considered at signal-controlled crosswalks. Accessible pedestrian signals should be installed at all intersections to improve

pedestrian accessibility. These signals provide audible and vibrotactile information to improve accessibility for disabled pedestrians. Push buttons should also be mounted in medians six-feet or wider. When retrofitting existing medians less than six feet wide, the median should be widened with concrete or with striping and plastic posts to retain pedestrian push buttons and upgrade for ADA accessibility. If the median cannot be widened, any existing push buttons should be removed.

For all thresholds included in **Charts B-4** through **B-8**, if volumes are within 10% of a threshold, roundup to account for future demand and background growth in pedestrian and/or vehicle volumes.

⁸ FHWA Signalized Intersections: Informational Guide. Publication Number FHWA-HRT-04-091. August 2004.

Table B-5: Universal Safety Countermeasures for Signal-Controlled Crosswalks

Counter-measure	Description	Applicable to Which Projects?				
		New Signals/ Major Signal Modifications	Minor Signal Modifications	Signal Retiming	All Other Projects	Studies, Safety Issues
Accessible Pedestrian Signals	Accessible pedestrian signals (APS) communicate audible and vibrotactile information about the crossing to people who are blind or have low vision. They are typically activated with a push button with a large raised arrow.	✓			✓	✓
Pedestrian Countdown Signals	During the “Flash Don’t Walk” (i.e. flashing red hand) phase, a countdown timer should appear next to the flashing red hand. The timer shows how many seconds are remaining for pedestrians to cross the street before opposing traffic receives a green light. This is a safety countermeasure and is California requirement.	✓				✓
Adequate Minimum Walk Time	California has standards how long to give the pedestrian phase. The “Flash Don’t Walk” should provide enough time to cross the street based on a maximum walking speed of 3.5 feet per second. Slower speeds should be considered near sensitive uses, such as senior centers and schools.	✓	✓	✓		✓
Pedestrian Signals that “Rest in Walk”	On streets with coordinated traffic signals, the pedestrian crossing of the side street should always give pedestrians the walk phase (i.e. it should “Rest in Walk”), so that they do not have to push a button to get the walk phase.	✓	✓	✓		✓
Pedestrian Phase Actuation Extension	When pedestrians arrive at a crosswalk close to the signal changing to green or as the signal changes green for cars traveling in the same direction and press the push button, they typically do not receive a walk phase. The signal is programmed (“the actuation window”) to think the pedestrian is too late, and they have to wait a full signal cycle to get the walk phase. Instead, the actuation window can get extra time, so that pedestrians who arrive near the beginning of the vehicle green phase can still get the walk phase, without waiting a full signal cycle.	✓	✓			✓

Counter-measure	Description	Applicable to Which Projects?				
		New Signals/ Major Signal Modifications	Minor Signal Modifications	Signal Retiming	All Other Projects	Studies, Safety Issues
Pedestrian Recall	At many signals, pedestrians push a button to receive the walk phase. When a signal is on “pedestrian recall”, the walk phase is displayed each signal cycle, without pedestrians needing to push the button. This makes walking more convenient and reduces the amount of time pedestrians must wait (“pedestrian delay”).	✓	✓	✓		✓
Cycle Length Minimization	“Cycle length” is the amount of time it takes for every movement (e.g. northbound left turn, west crosswalk, etc) to receive a green light. This can range from 60-90 seconds or even several minutes, depending on how a signal is timed and the amount of traffic that is expected to move through it. Keeping cycle lengths short (i.e. closer to 60 seconds) means that pedestrians do not have to wait as long to receive a green light. When pedestrian delay is high, people may be more likely to cross against the light.	✓	✓	✓		✓
No Right Turn on Red	In California, drivers can turn right after stopping at a red light. This means they must look for a gap in traffic and for pedestrians who have the walk phase before proceeding. Red turn on red can be prohibited either all the time or at specific times (e.g. when the pedestrian walk phase is on or near bell times at a school) to enhance crosswalk safety. Right turn on red should always be prohibited for the inside turn lane when there is more than one right turn lane.	✓	✓	✓	✓	✓
Additional Signal Enhancements	Charts B-4 through B-7 assess the suitability of additional signal enhancements like leading pedestrian intervals, protected turn signals, and pedestrian scrambles. They should always be used to identify additional potential safety enhancements.	✓				✓

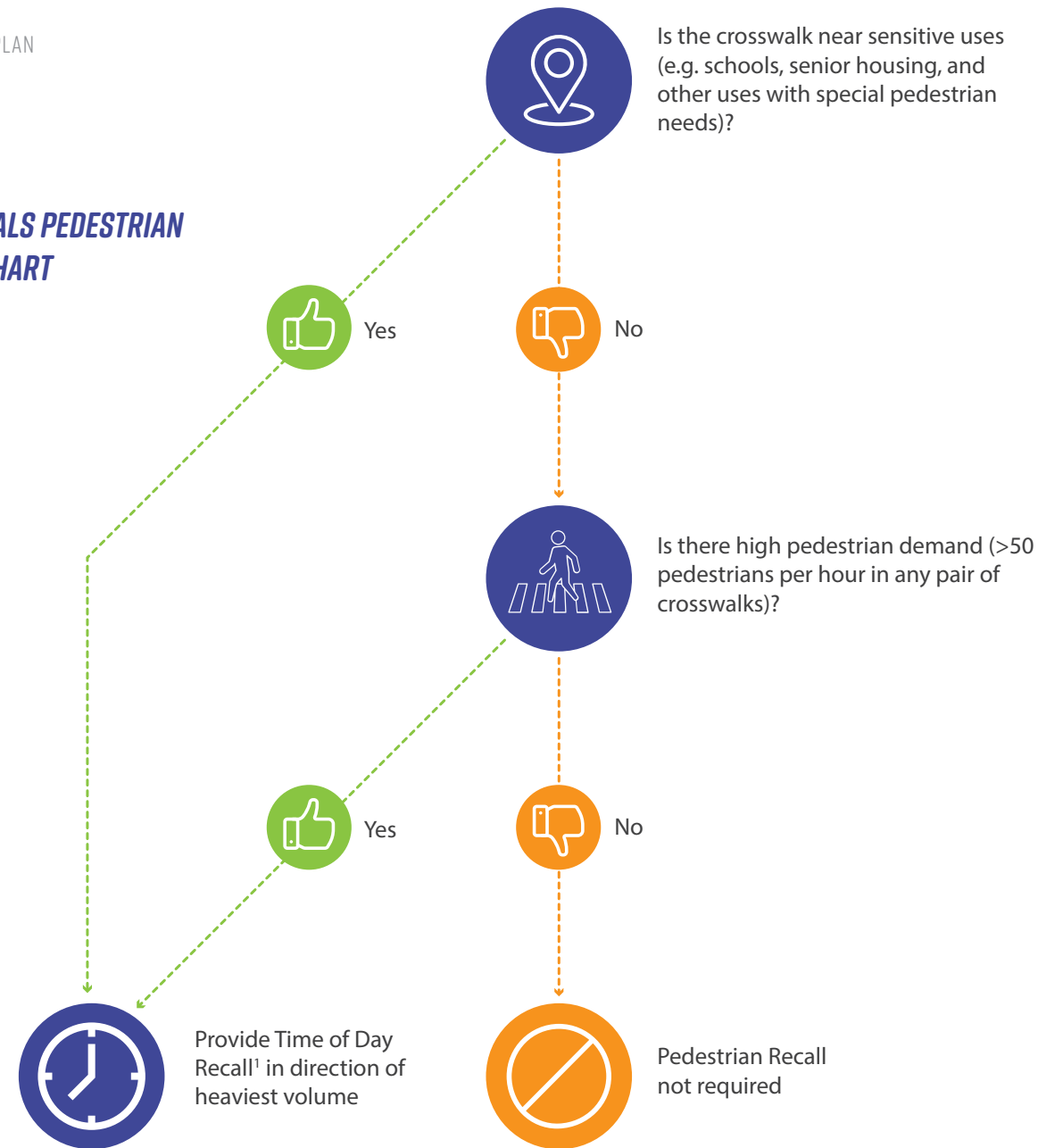
Source: Adapted from City of Oakland Great Streets Design Guidelines.

Table B-6: Guide to Using Flow Charts for Additional Signal Enhancements

Tool	Description	Step 1: Review Charts B-4 and B-5		Step 2: If identified by Chart B-5, determine additional signal enhancements based on Charts B-6, B-7, and B-8		
		Chart B-4: Actuated Signals	Chart B-5: Pedestrian and Vehicle Conflicts	Chart B-6: Left Turns on Two-Way Streets	Chart B-7: Right Turns on Two-Way Streets or Left Turns on One-Way Streets	Chart B-8: Pedestrian Scrambles
Time of Day Recall in Direction of Heavy Volume	City creates signal timings for different times in the day. Near bell times, peak periods, or relevant times of days, pedestrian always receive the walk phase and do not need to press the push button.	✓	Chart B-5 determines the use of Charts B-6, B-7, and B-8			
Pedestrian Scramble	Pedestrian Scramble: Provide a dedicated pedestrian phase, during which pedestrians can cross in any direction, including diagonally.			✓		✓
All-Pedestrian Phase	All Pedestrian Phase: Pedestrian have a dedicated pedestrian phase where they can cross in any crosswalk. Diagonally crossing is not allowed.			✓		✓
Protected Turn	If a turn is currently allowed (i.e. typical green ball signal, no green arrow), add a protected left-turn (i.e. green arrow) to separate the pedestrian phase from the conflicting vehicle turning movement.			✓	✓	
Leading Pedestrian Interval (LPI)	LPIs give pedestrians a 3-7 second “head start” before cars traveling in the same direction get the green signal. By the time the cars get the green light, sight lines between drivers and pedestrian are better or the pedestrian have finished crossing that part of the street.				✓	

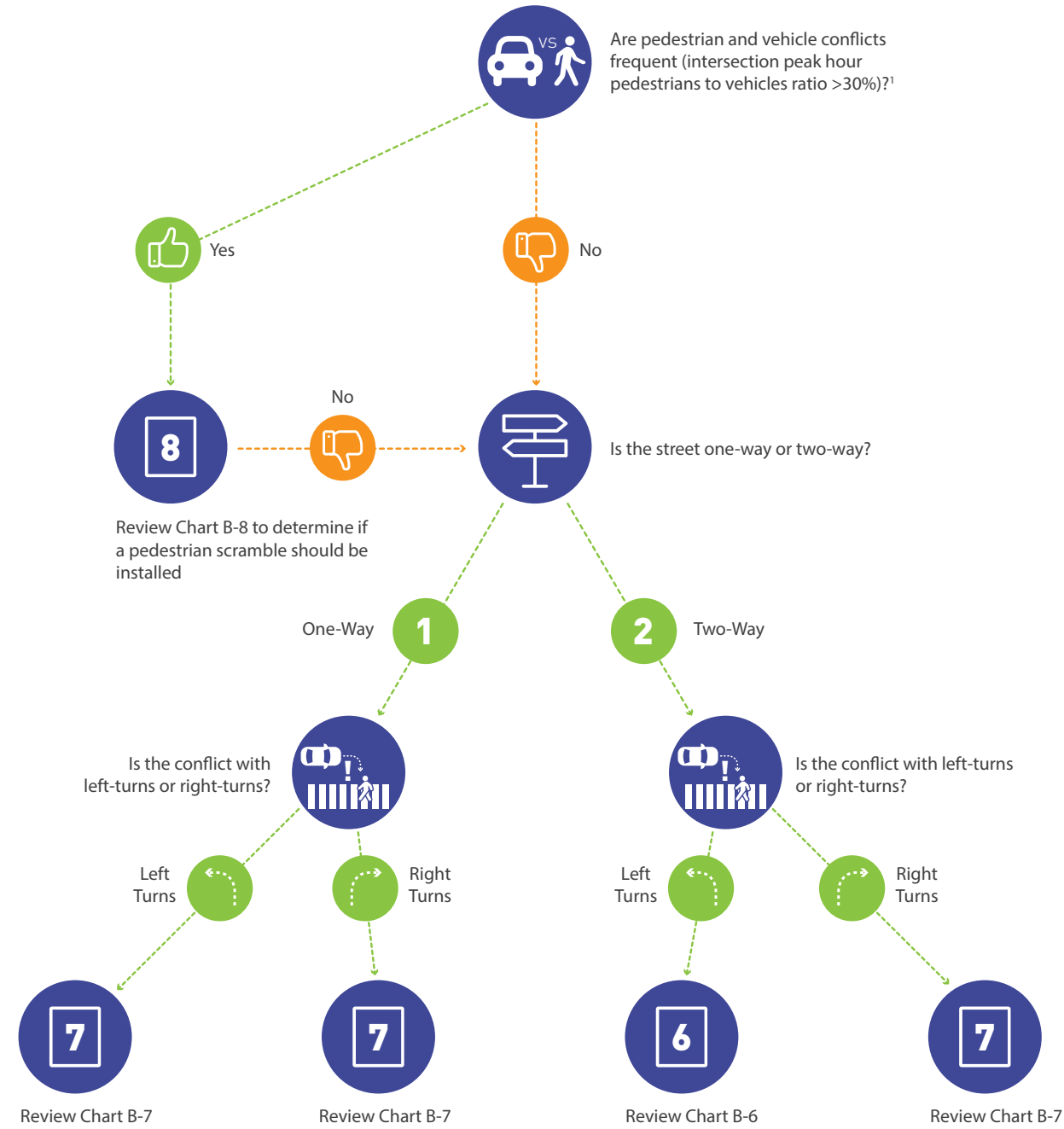
Tool	Description	Step 1: Review Charts B-4 and B-5		Step 2: If identified by Chart B-5, determine additional signal enhancements based on Charts B-6, B-7, and B-8		
		Chart B-4: Actuated Signals	Chart B-5: Pedestrian and Vehicle Conflicts	Chart B-6: Left Turns on Two-Way Streets	Chart B-7: Right Turns on Two-Way Streets or Left Turns on One-Way Streets	Chart B-8: Pedestrian Scrambles
LPI with No Right Turn on Red	These are the same as above with either a static (i.e. metal sign) or dynamic (i.e. a digital sign with a changing message) right-turn on red (RTOR) restriction. Prohibiting RTOR means that that a car can’t make a right turn when the LPI is on.		Chart B-5 determines the use of Charts B-6, B-7, and B-8		✓	
“Turning Vehicles Yield to Pedestrians” Sign	This is a static sign that can be posted at an intersection to try to increase driver awareness of pedestrian conflicts, but the potential for conflict still occurs.			✓	✓	
Split Phase	Typically, two directions of traffic get the green light at the same time (e.g. northbound and southbound through cars and east and west crosswalks). With a split phase, only one direction of traffic gets a green light, which can remove the conflicts between turning drivers and the adjacent crosswalks, for example. It also increases the cycle length and increases the amount everyone must wait at the intersections.			✓		
No Action Required	Conflicts are generally managed or limited, the set of tools are not appropriate, and/or further action may not be needed.	✓	✓	✓	✓	✓

**CHART B-4:
ACTUATED SIGNALS PEDESTRIAN
OPTION FLOW CHART**



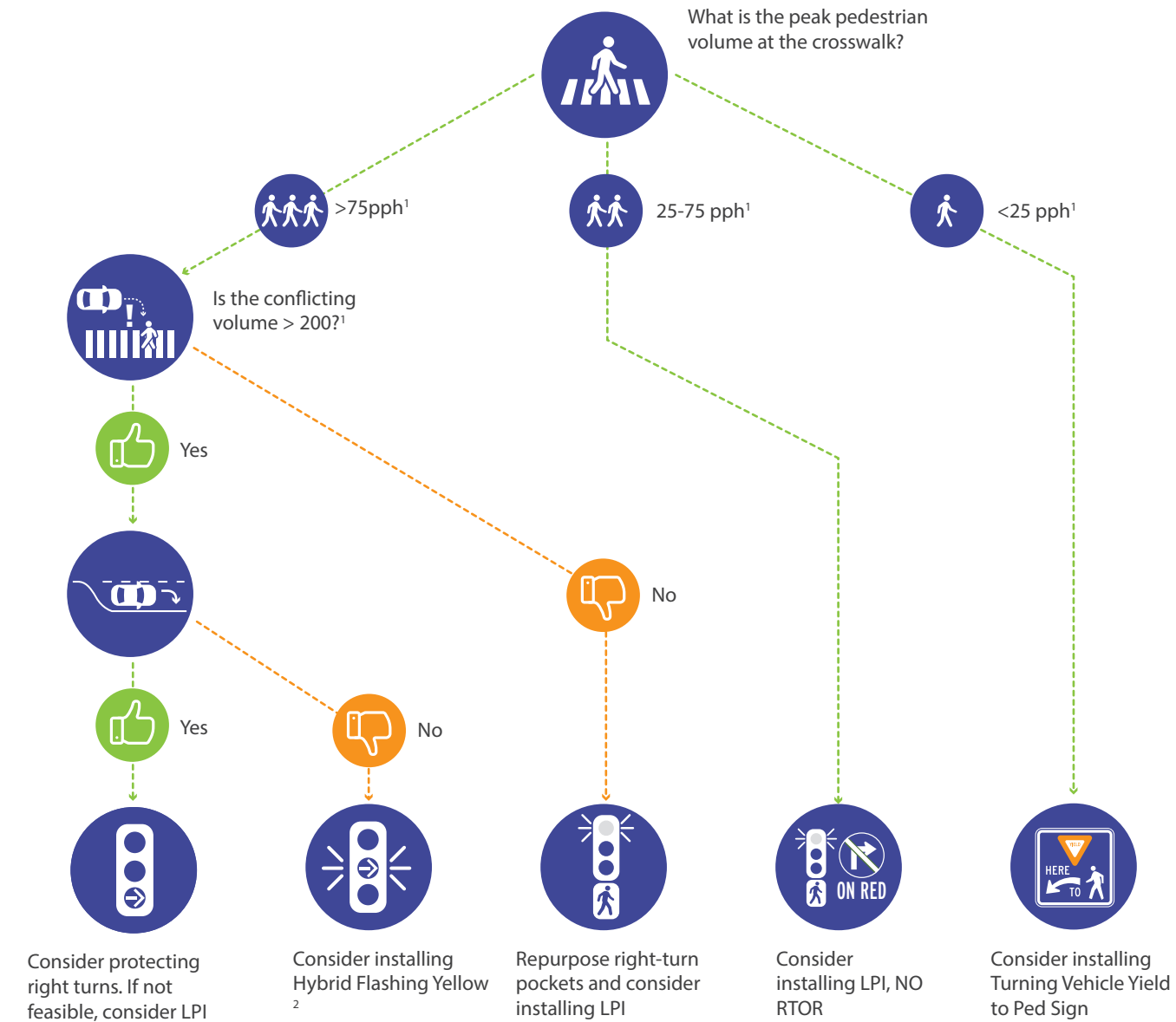
1. Recall should be provided any time there is high demand and/or during peak hours of use from sensitive uses.

**CHART B-5:
PEDESTRIAN AND
VEHICLE CONFLICTS**



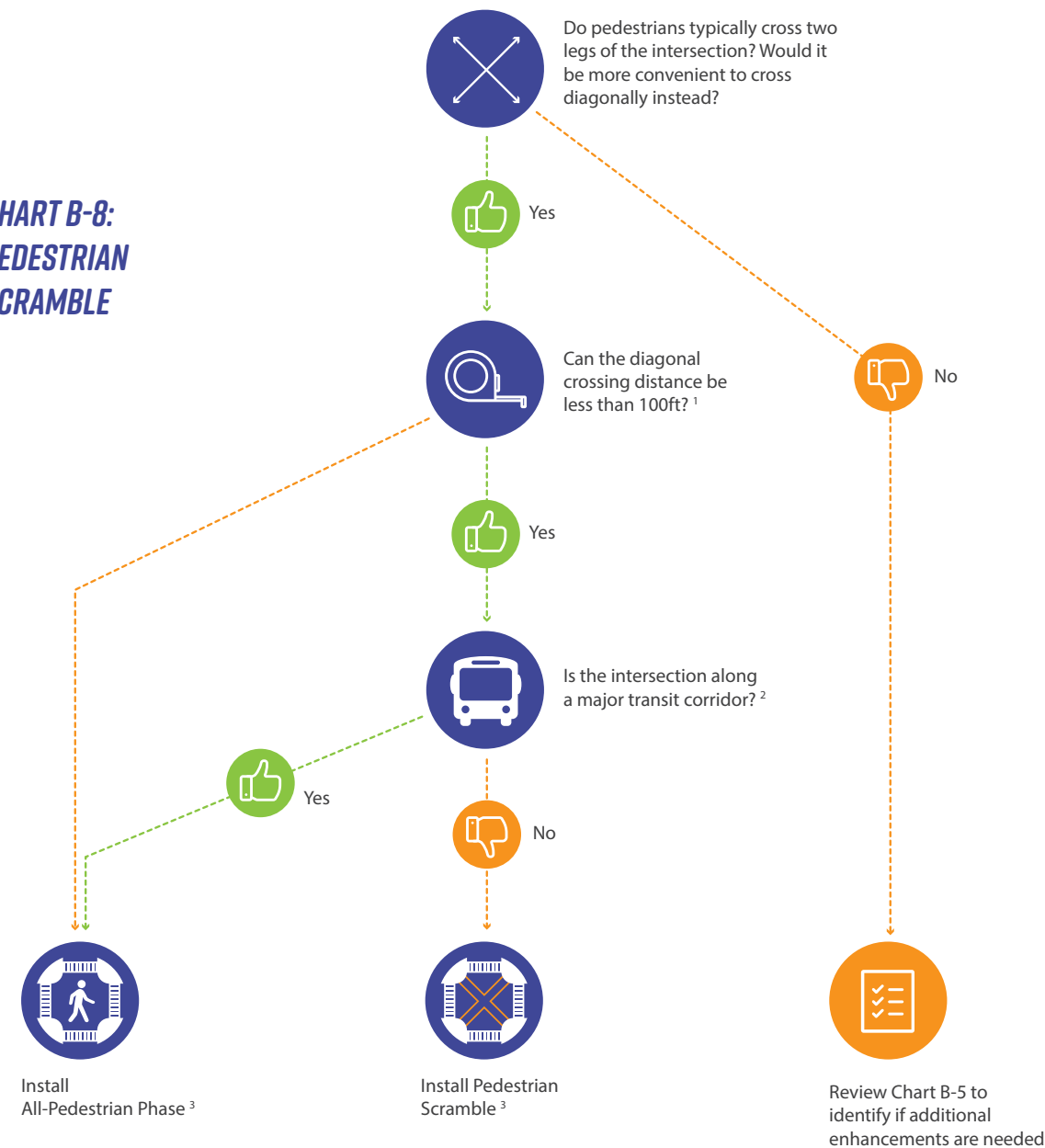
1. If volume(s) are within 10% of the threshold, roundup to account for background growth and future demand.

**CHART B-7:
RIGHT TURNS ON TWO-WAY
STREETS AND LEFT TURNS
ON ONE-WAY STREETS**



1. If volume(s) are within 10% of the threshold, roundup to account for background growth and future demand.
2. Protected turn when pedestrian phase is called. Otherwise, green ball with yellow flashing arrow.

CHART B-8:
PEDESTRIAN
SCRAMBLE



1. Less than 100 feet after bulb-outs and other enhancements to shorten crossing distances have been implemented
2. If additional transit operations enhancements present (e.g. transit signal priority), still consider installing the scramble if it benefits access to transit.
3. For more information on these tools see Appendix C Safety Countermeasure Toolbox

Crosswalk Worksheet

This worksheet may be completed to outline the process used by staff to identify the countermeasures considered to improve pedestrian safety at any given crosswalk.

Major Road:

Minor Road or Location:

Date of Review:

Reviewer:

Peak Hour Observed:

CRITICAL ROADWAY CHARACTERISTICS

Site Distance Issues (circle driver or pedestrian as applicable):

- 1. Parked cars (driver/ped)
- 2. Moving traffic obscures vision during crossing (driver/ped)
- 3. Roadway curvature (driver/ped)
- 4. Terrain (driver/ped)
- 5. Vegetation (driver/ped)
- 6. Significant sun glare (driver/ped)
- 7. Insufficient building setback (driver/ped)
- 8. Moveable roadside items, e.g., street furniture (driver/ped)
- 9. Fixed roadside items, e.g., signal control boxes, signs (driver/ped)
- 10. Inadequate roadway lighting (driver/ped)
- 11. Poor signal visibility (driver/ped)

Sight distance is generally acceptable if the pedestrian can easily be seen from a distance of 10x the speed limit or 250 feet. See Caltrans Highway Design Manual Chapter 400 for more information on calculating sight distance.

Sight Distance Mitigations

If any of the above issues are circled for the driver or pedestrian, can these issues be mitigated? If no, direct pedestrians to the nearest marked crosswalk (stop field view here) or consider installing a pedestrian signal or grade separation (continue below to collect data for warrant analysis). If yes, make note of mitigation options and continue below.

FIELD VISIT AND BACKGROUND INFORMATION

GENERAL PEDESTRIAN CHARACTERISTICS

- 1. Is the crossing along a direct route to a major pedestrian attractor/ generator? Circle: yes/no
- 2. Peak Hour Pedestrian Volume (total crossing major road): _____ pedestrians/hour
- 3. Pedestrian Crossing Distance, curb to curb: _____ feet
- 4. Distance to nearest marked crosswalk: _____ feet.
Is the crossing signalized? Circle: yes/no
- 5. Pedestrian Walking Speed (average): _____ ft/sec
- 6. Pedestrian Start-up and End Clearance Time: _____ sec
- 7. Existing Pedestrian Signal Timing (crossing major road): _____ sec
- 8. Existing Pedestrian Signal Provisions (count down/ push button/ scramble/ other/ none – circle all that apply)

- 9. Other Existing Pedestrian Accommodations (e.g., signage, crosswalk striping) – list here and include on diagram:

- a. _____
- b. _____

GENERAL VEHICLE/ ROADWAY CHARACTERISTICS

- 1. Major Road Traffic Speed (posted/ statutory/ 85th Percentile – circle one):
a. _____ MPH
- 2. Major Road Traffic Volume (total of both approaches during peak hour):
a. _____ vehicles/hour
- 3. Average Daily Traffic Volume
a. _____ vehicles/day
- 4. Number of Lanes on Major Road: _____ and on Minor Road: _____
- 5. Is a median present? Circle: Yes/no.
- 6. Typical Motorist Compliance at Pedestrian Crossings in Region: low/ medium/ high (circle one)

BEHAVIORAL INDICATORS

Check all that apply:

- 1. Inadequate pedestrian search (pedestrians enter roadway without searching): _____
- 2. Inadequate driver search (drivers proceed without searching): _____
- 3. Aborted crossing (return to curb after both feet in roadway): _____
- 4. Crossing against light (entry and exit from roadway against signal): _____
- 5. Small gaps (accepting gaps which require rapid crossings): _____
- 6. Leaving crosswalk (crossing starts or ends outside of an available crosswalk): _____
- 7. Crossing in front of a bus: _____
- 8. Vehicle overtaking (ped crosses in front of stopped traffic – Multiple Threat): _____
- 9. Running (entry or crossing while running or moving fast): _____
- 10. Short time exposure (e.g., appearance from behind parked car): _____
- 11. Retreat (momentary reversal in pedestrian direction of travel): _____

ADDITIONAL INFORMATION

Community Characteristics:

- 1. Population: _____ people
- 2. Distance to major transit hub: _____ feet or miles (circle one)
- 3. Average age in Census Block: _____ years versus citywide average of: _____ years

Potential Risk Factors:

- 1. Have pedestrian collisions occurred at this location in the past 5 years? Circle: yes/no
 - a. Number of injuries: _____ people
 - b. Number of fatalities: _____ people
- 2. Potential or Observed Conflicts (circle observed or potential as applicable):
 - a. Pedestrian walks too close to a vehicle – NEAR SIDE OF CROSSING (observed/ potential)
 - b. Pedestrian walks too close to a vehicle – FAR SIDE (observed/ potential)
 - c. Right turn vehicle (on green) too close to pedestrian (observed/ potential)
 - d. Left turn vehicle too close to pedestrian (observed/ potential)

- e. Right turn on red vehicle too close to pedestrian (observed/ potential)
- 3. Other Risk Factors (check all that apply):
 - a. Poor crossing surface: _____
 - b. Faded roadway striping (e.g. crosswalk striping): _____
 - c. High crime area/ personal safety concerns: _____
 - d. Businesses selling alcohol near study location: _____
 - e. School near study location: _____
 - f. Senior facility near study location: _____

Observations or suggestions for appropriate education or enforcement measures based on this field view:

FINDINGS MARKING UNCONTROLLED CROSSWALKS

Does **Chart B-3** recommend considering a marked crosswalk? Circle: yes/no.

If no, what were the limiting factors (list all that apply)?

ENHANCING UNCONTROLLED CROSSWALK

1a. Can a road diet be completed? Circle: yes/no

If no, what were the limiting factors (list all that apply, include consideration of ADT and prevailing speeds)?

1b. Can a median or median refuge be installed? Circle: yes/no

If no, what were the limiting factors (list all that apply, include discussion of roadway width, narrowed travel lanes, and road diet)?

2. What Level of Enhancement Does Recommend? Circle: A, B, C, or D.

Are there any barriers or contextual issues with installing that recommendation?

3. What Additional Candidate Treatments Does **Table B-3** Suggest? Circle all that apply: 1, 2, 3, 4, 5, 6, 7, 8, 9.

Which countermeasures are contextually appropriate for the site and will be included in the project? Include all countermeasures circled above and note why they were or were not included in the project.

4. Review reported collisions and reported community safety concerns and then review **Table B-4**: Do the proposed countermeasures in Step #2 and #3 address all the reported issues? Circle: yes/no.

If no, which safety issues are not addressed? Which additional countermeasures or enhancements can be incorporated to address the safety issues?

CONTROLLED CROSSWALKS

1. What is the intersection control type: Circle: signalized, stop-controlled, or yield-controlled (if at roundabout, refer to Uncontrolled Crosswalk section).

2. Review **Section D.1** and identify all baseline improvements to be incorporated into the project. Identify which elements are and are not incorporated into the project. Identify the engineering constraints for baseline conditions not incorporated into the project.

3a. For signals, review **Section D.1.3** and identify which elements are and are not incorporated into the project. Identify the engineering constraints for universal conditions not incorporated into the project.

3b. If an actuated signal, review **Chart B-4**. Is pedestrian recall needed? Circle: yes/no

3c. Review **Chart B-5** and, if appropriate, review **Charts B-6** through **B-8**. Record the results and identify if engineering constraints apply:

Chart B-5:

Chart B-6:

Chart B-7:

Chart B-8:

4. For stop-control review **Section D.1.1** and for yield-control review **Section D.1.2**, should crosswalks be marked? Circle: yes/no.



Appendix C

Plan Conformance with ATP Guidelines

This plan meets all requirements for active transportation plans as identified by the California Transportation Commission's 2017 Active Transportation Program Guidelines. The Guidelines list 17 key elements for transportation plans.

Table C-1: Plan Conformance with ATP Guidelines

Item	ATP Requirements	See Chapter No.
1	The estimated number of existing bicycle trips and pedestrian trips in the plan area, both in absolute numbers and as a percentage of all trips, and the estimated increase in the number of bicycle trips and pedestrian trips resulting from implementation of the plan.	Chapter 2
2	The number and location of collisions, serious injuries, and fatalities suffered by bicyclists and pedestrians in the plan area, both in absolute numbers and as a percentage of all collisions and injuries, and a goal for collision, serious injury, and fatality reduction after implementation of the plan.	Chapter 2
3	A map and description of existing and proposed land use and settlement patterns which must include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, major employment centers, and other destinations.	Chapter 2
4	A map and description of existing and proposed bicycle transportation facilities, including a description of bicycle facilities that serve public and private schools and, if appropriate, a description of how the five Es (Education, Encouragement, Enforcement, Engineering, and Evaluation) will be used to increase rates of bicycling to school	Chapter 2 and Chapter 4
5	A map and description of existing and proposed end-of-trip bicycle parking facilities.	Chapter 4
6	A description of existing and proposed policies related to bicycle parking in public locations, private parking garages and parking lots and in new commercial and residential developments.	Chapter 3
7	A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These must include, but not be limited to, bicycle parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.	Chapter 4
8	A map and description of existing and proposed pedestrian facilities, including those at major transit hubs and those that serve public and private schools and, if appropriate, a description of how the five Es (Education, Encouragement, Enforcement, Engineering, and Evaluation) will be used to increase rates of walking to school. Major transit hubs must include, but are not limited to, rail and transit terminals, and ferry docks and landings.	Chapter 2 and Chapter 4
9	A description of proposed signage providing wayfinding along bicycle and pedestrian networks to designated destinations.	Chapter 4

Item	ATP Requirements	See Chapter No.
10	A description of the policies and procedures for maintaining existing and proposed bicycle and pedestrian facilities, including, but not limited to, the maintenance of smooth pavement, ADA level surfaces, freedom from encroaching vegetation, maintenance of traffic control devices including striping and other pavement markings, and lighting.	Chapter 3
11	A description of bicycle and pedestrian safety, education, and encouragement programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the law impacting bicycle and pedestrian safety, and the resulting effect on collisions involving bicyclists and pedestrians.	Chapter 3 and Chapter 5
12	A description of the extent of community involvement in development of the plan, including disadvantaged and underserved communities.	Chapter 1
13	A description of how the active transportation plan has been coordinated with neighboring jurisdictions, including school districts within the plan area, and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, general plans and a Sustainable Community Strategy in a Regional Transportation Plan.	Chapter 1
14	A description of the projects and programs proposed in the plan and a listing of their priorities for implementation, including the methodology for project prioritization and a proposed timeline for implementation.	Chapter 4 and Appendix A
15	A description of past expenditures for bicycle and pedestrian facilities and programs, and future financial needs for projects and programs that improve safety and convenience for bicyclists and pedestrians in the plan area. Include anticipated revenue sources and potential grant funding for bicycle and pedestrian uses.	Chapter 4 and Chapter 5
16	A description of steps necessary to implement the plan and the reporting process that will be used to keep the adopting agency and community informed of the progress being made in implementing the plan.	Chapter 4 and Chapter 5
17	A resolution showing adoption of the plan by the city, county or district. If the active transportation plan was prepared by a county transportation commission, regional transportation planning agency, MPO, school district or transit district, the plan should indicate the support via resolution of the city(s) or county(s) in which the proposed facilities would be located.	Chapter 3



Appendix A

.....

Project List

Table A-1: Pittsburgh Moves Project List

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
A	Trail Projects					
A.1	Delta de Anza Trail					
1	Delta de Anza Trail	Western City limit to Eastern City Limit	Trail	- Coordinate with EBRPD to improve the personal security and comfort for users of the Delta de Anza Trail. Note that site constraints associated with underground utilities and pipe may limit provision of some improvements. Additional feasibility study is required. - Proposed improvement include: - Add pedestrian-scale lighting and verify lighting levels at crossings - Identify a security strategy for the trail, which might include blue light phones, cameras, and/or increased trail enforcement - Add trail amenities, such as trash cans and water stations - Provide shade trees and landscaping to increase comfort and aesthetics of the trail - Work with local groups and East Bay Regional Park District (EBRPD) to develop placemaking strategies and installations, such as community gardens and artwork - Explore opportunities to convert the Delta de Anza Trail into a linear park, like the Richmond Greenway Trail, to provide park access to park-poor areas - Add staging areas with parking and wayfinding signs to provide greater access to the trail. Potential locations to explore include the parcel on the east side of Railroad Avenue just north of the Delta de Anza Trail and at Small World Park.	4.9	\$18,272,000
2	Delta de Anza Trail Extension	On-street trail alignment between Delta de Anza Canal Road Extension and Delta de Anza Trail south of SR 4	Trail	See Bailey Road improvements	n/a	-

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
3	Delta de Anza Canal Road Extension (in Bay Point)	Franklin Avenue to Canal Avenue	Trail	- Work with East Bay Municipal Utility District (EBMUD) and County to pave existing unpaved trail - Work with EBMUD and County to mark enhanced trail crossings at Emerald Cove Drive to connect the EBMUD Utility Trail and Canal Road per Pittsburgh Moves Crosswalk Policy	0.6	\$2,237,000
4	Delta de Anza Trail	Delta de Anza Trail at Uncontrolled Intersections with Atherton Avenue, Crestview Drive, Presidio Lane, and Gladstone Drive	Crosswalk	- Per City’s Crosswalk Policy, upgrade Delta de Anza Trail crossings at Atherton Avenue, Crestview Drive, Presidio Lane, and Gladstone Drive to include: -Rectangular Rapid Flashing Beacons (RRFBs) -Wayfinding Signs -High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels -Curb extensions -Upgraded curb ramps -Trail crossing striping -Advanced yield markings with Yield Here to Pedestrian signs - Install a raised crosswalk at Atherton Avenue and Gladstone Drive . - Install a median refuge at Crestview Drive.	n/a	\$831,000
5	Delta de Anza Trail	Delta de Anza Trail at West Leland Road and at Range Road Intersections	Trail	- In the long-term, work with the adjacent property owner to install a trail diagonally between the Ackerman Drive/Range Road intersection and West Leland road/Delta De Anza Trail intersection. Install a Pedestrian Hybrid Beacon (PHB) as part of the project. - In the near-term, follow an on-street alignment on Range Road and West Leland Road that goes through the Range Road/West Leland R Road intersection. Repurpose Class II bike lanes, sidewalk, and excess roadway width into a Class I path on the west side of Range Road and south side of West Leland Road, and install wayfinding, curb ramps, and crosswalk striping at the intersection of West Leland Road and Golf Club Road. See Range Road projects for additional information.	0.1	\$1,135,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
6	Harbor Street	Harbor Street and Atlantic Avenue Intersection	Crosswalk	• In near-term, stripe north crosswalk as a trail crossing. • Install trail wayfinding • Install “turning vehicle yield to bikes/pedestrian” signs • Install median refuge with existing median • Investigate if accessibility upgrades needed to push buttons and countdown signals • Upgrade curb ramps • As funding is available, install trail crossing with a PHB or signal 180’ north of the intersection.	n/a	\$673,000
7	Delta de Anza Trail	Delta de Anza Trail at Railroad Avenue Intersection	Crosswalk	• Study feasibility of protected intersection • Protect eastbound left-turn movement to separate from trail crossing • Remove slip lane on NW corner and southbound right-turn pocket and install curb extensions to shorten trail crossing • Straighten west crosswalk and push back ~10’ to align with new Curb extensions; install direction ramps • Straighten south crosswalk and install directional ramp on west side • Work with East Bay Regional Park District to set back existing fence and signal pole to widen out sidewalk space at intersection and allow for two-stage turn from northbound separated bikeway to westbound Delta De Anza Trail • Install bike ramp from southbound separated bikeway to new Curb extensions to provide access to Delta De Anza Trail • Install bike box at southbound approach to provide connection from Trail to Railroad Avenue Class IV facility • Investigate need for countdown signals	n/a	\$673,000
8	Delta de Anza Trail	Delta de Anza Trail at Harbor Street Intersection	Crosswalk	Install new trail crossing signal. Signal will coordinate with adjacent signal at Atlantic Avenue. Install median refuge, trail crossing striping, and trail wayfinding signage.	n/a	\$682,000
9	Delta de Anza Trail	Delta de Anza Trail at Harbor Street	Trail	Pave the remaining 5’ section between the trail and the sidewalk (East side of Harbor Street).	0.05	\$186,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
10	Delta de Anza Trail	Delta de Anza Trail and Loveridge Road Intersection	Crosswalk	Restripe current crosswalk to trail crossing striping per Pittsburgh Moves Design Guidelines. Install trail wayfinding signs and widen curb ramps.	n/a	\$56,000
A.2 California Delta Trail						
11	California Delta Trail	Western City limit to 8th Street Greenbelt	Trail	Work with East Bay Regional Park District (EBRPD) and PG&E to install a Class I path through the Pittsburgh Wetlands as part of the Great California Delta Trail that connects to the County’s alignment.	3	\$11,187,000
12	California Delta Trail spur	Willow Pass Road to California Delta Trail	Trail	Explore the feasibility of adding a Class I facility spur connection between Willow Pass Road and the California Delta Trail to provide another access point. This requires coordination with property owners.	0.2	\$746,000
13	8th Street Greenbelt	West Street to Harbor Street	Crosswalk	Mark crosswalks at each intersection with trail crossing striping and enhancements per Pittsburgh Moves Design Guidelines and Crosswalk Policy.	n/a	\$306,000
14	Harbor Street	East 3rd Street to East 8th Street	Trail	Add a Class I facility on the west side of the street consistent with the Making Waves Academy development proposal. This facility would run parallel to the Class IV facility proposed in the right-of-way.	0.3	\$1,119,000
15	Harbor Street	East 8th Street to Pittsburgh-Antioch Highway	Trail	• Install a new Class I facility on the east side of Harbor Street from just north of Pittsburgh-Antioch Highway to East 8th Street. This is in addition to the Class IV facilities proposed on Harbor Street, shown on the Harbor Street project list. • New path requires widening the existing sidewalk and new retaining wall underneath the railroad tracks. • Install a connection between bike path north of East Santa Fe Ave to Harbor Street and Pittsburgh-Antioch Highway bike path. • Install trail crossing at 8th Street per the Uncontrolled Crosswalk Upgrades list. • Connect to a new Class I path along the west side of Harbor Street through the sports field and the existing 8th Street Greenway	0.2	\$939,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
16	Harbor Street	Harbor Street and Pittsburg-Antioch Highway Intersection	Crosswalk	- Stripe the east crosswalk as a trail crossing. - Install a speed table across the slip lane or remove if necessary truck access can be maintained	n/a	\$354,000
17	East 14th Street	On-street trail alignment between Harbor Street and East City Limits	Trail	See Pittsburg-Antioch Highway improvements.	n/a	-
18	Central Park Path	n/a	Programmatic	Add lighting in Central Park paths	0.3	\$499,000
A.3	Los Medanos to Pittsburg Center BART Trail					
19	Frontage Road	Crestview Lane to Burton Avenue	Trail	Add a Class I facility using abandoned land south of freeway to connect existing Class I facilities. May require widening into Frontage Road to provide usable path space around overhead utility lines.	0.4	\$1,492,000
20	Frontage Road	Chelsea Way to Dover Way	Trail	Add a Class I facility using abandoned land south of freeway.	0.3	\$1,119,000
A.4	PG&E Corridor					
21	PG&E Corridor	Dover Way to West Leland Road	Trail	Work with PG&E to conduct a feasibility study for a Class I path to determine a preferred alignment within in the PG&E Corridor, which is designated open space in the General Plan.	0.2	\$746,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
22	PG&E Corridor	West Leland Road to Delta de Anza Trail to proposed Contra Costa Canal Trail Extension	Trail	Work with PG&E to conduct a feasibility study adding a Class I path to determine a preferred alignment within the PG&E Corridor, which is designated open space in the General Plan.	0.5	\$1,864,000
23	PG&E Corridor	North Parkside Drive to Power Avenue	Trail	Work with PG&E to conduct a feasibility study for a Class I facility between N Parkside Drive and Power Avenue. Topography may be a constraint.	0.5	\$1,864,000
24	Rancho Medanos Junior High School	Bodega Drive at Rancho Medanos Junior High School	Trail	Create a trail that connects Bodega Drive to Rancho Medanos Junior High School and the planned utility corridor trail. This would provide the neighborhood walking access to the school, West Leland Road, the planned utility corridor trail, and the Delta de Anza Trail. Work with Rancho Medanos, the community, and other stakeholders to develop a joint use agreement for the gated area adjacent to the school.	0.2	\$746,000
25	SR 4	n/a	Grade Separated Crossing	Study feasibility of providing a trail connection across SR 4 in the context of all citywide needs to improvement connectivity over SR 4. See SR 4 grade separation feasibility study for more information	n/a	
A.5	Delta Waterfront Access Trail					
26	Delta Waterfront Access Trail	East 3rd Street to Delta Access Trail	Trail	Install Class I path that connects East 3rd Street to the waterfront Delta Access Trail as part of school redevelopment, connecting to 8th Street.	0.6	\$2,237,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
27	Delta Waterfront Access Trail	Western subdivision to Koch Carbon Inc (near to eastern end point of East 3rd Street)	Trail	Add a bicycle/pedestrian path along the shoreline that connects the western subdivision to the industrial property east of downtown.	0.5	\$1,864,000
A.6 Railroad Avenue Greenway						
28	Railroad Avenue	California Avenue to Delta de Anza Trail	Trail	Install a Class I shared-use path on the west side of Railroad Avenue with pedestrian-scale lighting amenities, landscape buffer from the street, and a minimum 10’ usable width. Use trail crossing striping instead of typical crosswalk markings at intersections.	0.5	\$1,864,000
29	Railroad Avenue	California Avenue to City Park	Trail	Widen existing sidewalk to provide Class I shared-use path with minimum 5’ landscape buffer from Railroad Avenue. Provide trail crossing intersection improvements, including trail crossing striping.	0.3	\$1,290,000
30	Railroad Avenue	All Greenway Intersections	Crossings	- Mark all Greenway crossings with trail crossing striping Pittsburgh Moves Design Guidelines - Enhance crosswalks consistent with per Pittsburgh Moves Crosswalk Policy - Consider LPI/LBI for trail crossing - Make push buttons accessible for people on bike - See Railroad Avenue section for trail crossing improvements at the intersection of Railroad Avenue and California Avenue (SR 4 westbound on-ramp) and at Railroad Avenue and the SR 4 eastbound on-ramps	n/a	-
A.7 Other Trail Projects						
31	Contra Costa Canal Trail Extension	Citywide	Trail	Work with Contra Costa County Water District to conduct feasibility study of Class I path to extend the Contra Costa Canal Trail into Pittsburgh.	4.9	\$100,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
32	Bay to Black Diamond Trail	Citywide	Trail	Work with EBRPD and City of Antioch to conduct a feasibility study for a new “Bay to Black Diamond Trail” to connect the waterfront with the Black Diamond Mines Regional Preserve.	n/a	\$100,000
33	Utility Easement East of Los Medanos College	Buchanan Road to Pittsburgh Antioch Highway	Trail	Work with property owners and Antioch to secure easement for Class I shared-use path with lighting, amenities, and connection points to the Delta de Anza trail and East Leland Road. Requires consideration of SR 4 and railroad grade separations, as well as trail crossings per the design guidelines. Consider connections to future waterfront trails if properties redevelop.	1.1	\$9,000
34	Delta View Golf Course	n/a	Trail	Conduct a feasibility study for a Class I perimeter loop path around the Delta View Golf Course	3.0	\$100,000
A.8 BART Projects						
35	Pittsburg Bay Point BART access road	BART Station to Bailey Road	Bike treatment	Add Class IV facilities on the access road on the north edge of the Pittsburg Bay Point BART site, consistent with the North Concord to Antioch BART Access Study.	0.2	\$88,000
36	Pittsburg Bay Point BART Station	n/a	Pedestrian treatment	Add pedestrian improvements on the BART site per the North Concord to Antioch BART Access Study, such as ADA ramps, pedestrian access stairway/ramp from West Leland Road, and marked crosswalks.	n/a	\$276,000
37	Pittsburg Bay Point BART Station	n/a	Bike treatment	In near-term, stripe Class II bike lanes through narrowing travel lanes to 10-11’. With future development, add Class IV separated bikeways.	0.6	\$263,000
38	Pittsburg Center BART Station	TBD	Bike parking	Coordinate with BART to provide additional bike parking at the Pittsburg Center BART station. This should include bike racks on the Railroad Avenue overpass for short-term parking as well as bike lockers in the Park & Ride and south of the station.	n/a	\$17,000
39	BART Station		Pedestrian treatment	Add additional lighting on streets adjacent to BART stations and pedestrian scale lighting from the public right of way to BART stations.	0.2	\$332,600

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
B	North-South Corridors					
B.1	San Marcos Boulevard					
40	San Marcos Boulevard	Evora Road to Rio Verde Circle	Trail	Add a Class I facility on the west side of the roadway that ties into the West Leland Road intersection. Explore extending the facility through the SR 4 interchange into Contra Costa County to connect with the Delta de Anza Trail (A Class I facility is proposed in Pittsburg 2020 from West Leland Road to Rio Verde Circle).	1.2	\$4,798,000
B.2	Tomales Bay Drive/Alves Ranch Road					
41	Tomales Bay Drive	West Leland Road to Alves Ranch Road	Bike treatment	Restripe bike lanes with two white stripes, with 10’ travel lanes (no center line per existing condition), 6’ bike lanes, and 8’ parking, and add traffic calming treatments to make the existing class II bike lane lower stress.	0.6	\$89,000
42	Alves Ranch Road	West Leland Road to end of the road	Bike treatment	Restripe bike lanes with two white stripes, with 10’ travel lanes (no center line per existing condition), 6’ bike lanes, and 8’ parking, and add traffic calming treatments to make the bike lanes lower stress.	0.7	\$103,000
43	Alves Ranch Road	Kapalua Bay Circle Intersection	Crosswalk	Install crosswalk enhancements per the Pittsburg Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines • Pedestrian refuge island on north crosswalk • Curb extensions • Consider RRFBs if there is low driver compliance	n/a	\$301,000
44	Alves Ranch Road	Maho Bay Circle/Botany Bay Drive Intersection	Crosswalk	Install crosswalk enhancements per the Pittsburg Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield line • Pedestrian refuge through narrowing travel lanes to 10-11’ • Reduce curb radius on Northeast corner	n/a	\$189,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
B.3	Bailey Road					
45	Bailey Road (outside City limits)	Willow Pass Road to Canal Road	Bike treatment	Narrow lanes to 11’ and 10’ to provide a Class IV separated bikeways with 7’ bikeway and 4’ buffer. Add bicycle and pedestrian oriented wayfinding and signage on Bailey Road to connecting routes and destinations, such as the BART station.	0.3	\$131,000
46	Bailey Road	Canal Road to BART Access Road	Bike treatment, Trail	• -In the long-term, work with County, CCTA, Caltrans, EBRPD, and BART to widen the existing sidewalk to provide a minimum 10’ Class I path with 5’ landscape buffer on the west side of the street. This could incorporate the width of the SB bike lane. Note that is this is the Delta De Anza Trail. • In the near-term, upgrade the bike lanes to Class IV separated bikeway through narrowing travel lanes to 11’ and creating a 5’ bike lane with 2’ buffer and posts. • Add bicycle and pedestrian oriented wayfinding signage on Bailey Road to connecting routes and destinations, such as the BART station.	0.1	\$430,000
47	Bailey Road	Bailey Road and SR 4 eastbound Off-Ramps/BART Access Road Intersection	Bike/ pedestrian treatment	• Stripe trail crossing markings on the west and south crosswalks to highlight the trail and allow for two-stage crossing through the intersection and intersection enhancements consistent with the Pittsburg Moves Design Guidelines • Stripe east crosswalk as high-visibility • Stripe advanced stop bars at all approaches • Provide leading pedestrian intervals and consider protecting right-turns to remove pedestrian-auto conflicts per the Pittsburg Moves Crosswalk Policy	n/a	\$323,000
48	Bailey Road	BART Access Road to West Leland Road	Bike treatment	Narrow travel lanes to 11’ outside and 10’ inside to created Class IV separated bikeway (5-6’ bike lane with 2-4’ buffer). Add bicycle and pedestrian oriented wayfinding and signage on Bailey Road to connecting routes and destinations, such as the BART station.	0.2	\$88,000
49	Bailey Road	West Leland Road Intersection	Bike/ pedestrian treatment	• Stripe high-visibility crosswalk markings with advanced stop bars • Install missing crosswalk on south leg • Formalize median refuge with nose and pedestrian push button on north crosswalk • Install LPI on north crosswalk	n/a	\$323,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
50	Bailey Road	West Leland Road to 500’ south of Leland Road	Bike treatment	Add 6-7’ Class II bike lanes through narrowing travel lanes to 10-11’ and maintaining parking.	0.1	\$15,000
51	Bailey Road	West Leland Road to 250’ south of Leland Road	Pedestrian treatment	Work with homeowners to close sidewalk gap on east side of street	0.05	\$129,000
52	Bailey Road	500’ south of Leland Road to Southern City Limits	Bike treatment	• Add Class II bike lane southbound to support bicyclists climbing the grade • Explore feasibility of widening roadway to provide bike lanes in both directions based on available ROW • Stripe green-backed sharrows and sign as Class III bicycle route in northbound direction	0.1	\$15,000
53	Bailey Road	n/a	Trail	See related projects in the Delta de Anza Trail list	n/a	-
B.4	Range Road					
54	Range Road/ Willow Pass Road	Railroad bridge over Willow Pass Road to SR 4	Bike treatment	Add Class II bike lanes (5’) by narrowing travel lanes and removing or narrowing center median. Relocate lighting in center median. Will require some tree removal. This should connect to the grade separated treatment that is proposed at the Railroad Bridge, listed under Willow Pass Road projects.	0.5	\$74,000
55	Range Road Extension/ SR 4 Grade Separation	Existing terminus of Range Road north of SR 4 to Wedgewood Drive	Trail	Study the feasibility of extending Range Road with grade separation at SR 4, either as a roadway or pedestrian/bicycle only access	0.2	\$100,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
56	Range Road	Wedgewood Drive to West Leland Road	Bike treatment	• Upgrade existing Class II bike lanes to Class IV separated bikeways with a lane reduction between Ackerman Drive and West Leland Road. • If PG&E right-of-way alignment for Delta de Anza Trail is not feasible, implement a lane reduction from 1200’ north of Ackerman Drive to West Leland Road and use excess width to widen the west side to 10’ Class I shared use path with 5’ landscape buffer • Stripe trail crossings on west and south crosswalks at Leland Road and provide space for bikes and people to queue on each corner • Consider a LPI to support crossings at Leland Road per the Pittsburgh Moves Crosswalk Policy	0.4	\$175,000
57	Range Road	Ackerman Drive to West Leland Road	Bike treatment	As an interim, near-term bike treatment, complete a lane reduction between Ackerman Drive and West Leland Road to provide Class IV separated bikeways	0.1	\$44,000
58	Range Road	Delta de Anza Trail at Range Road and at West Leland Road Intersections	Crosswalk	See Delta de Anza Trail projects for trail crossing enhancement at Range Road and at West Leland Road.	n/a	-
59	Range Road	Ackerman Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • Mark high-visibility trail crossings to highlight Delta De Anza Trail, parking restrictions on crosswalk approach, and maintainadequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines -Pedestrian refuge	n/a	\$77,000
B.5	Crestview Drive					
60	Crestview Drive	Frontage Road to Castlewood Drive	Bike treatment	Upgrade the existing Class II bike lanes to Class II buffered bike lanes.	1.7	\$215,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
61	Crestview Drive	Crestview Drive to Crowley Avenue	Trail	Formalize the trail connection adjacent to Mt Zion Baptist Church that connects Crestview Drive to Crowley Avenue. This will require coordination with and permission from Mt Zion Baptist Church.	0.04	\$149,000
62	Crestview Drive	Crestview Drive at Buchanan Road	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Trail crossing striping on east and west crosswalks	n/a	\$68,000
63	Crestview Drive	West Buchanan Road to Kirker Pass Road	Bike treatment	Install Class II bike lanes in WB direction through parking prohibition (consider allowing overnight parking) and install Class III bicycle route EB. Consider allowing daytime parking prohibition on south side of the street to provide Class II bike lanes in the EB direction.	0.2	\$18,000
B.6 Marina Boulevard						
64	Marina Boulevard	Cutter Avenue to East 5th Street	Bike treatment	Add Class II bike lanes through a 4 to 3 lane reduction with 11’ travel lanes, 6’ bike lanes, and 8’ parking.	0.4	\$59,000
65	Marina Boulevard	East 5th Street to Herb White Way	Bike treatment	Restripe the roadway to accommodate 11’ travel lanes, 6’ bike lanes with a 3’ buffer, and 8’ parking lanes.	0.3	\$38,000
66	Marina Boulevard	Cutter Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Pedestrian refuge - Upgraded curb ramps - Consider RRFBs if there is low driver compliance	n/a	\$316,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
67	Marina Boulevard	East 5th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Widened median to create pedestrian refuge - Upgraded curb ramps - Consider RRFBs if there is low driver compliance	n/a	\$173,000
68	Marina Boulevard	West Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Pedestrian refuge - Consider RRFBs if low driver compliance at crosswalk - Upgraded curb ramps	n/a	\$173,000
69	Marina Boulevard	York Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Upgraded curb ramps - Consider RRFBs if there is low driver compliance	n/a	\$173,000
B.7 Railroad Avenue/Kirker Pass Road						
70	Railroad Avenue	East 3rd Street to East 8th Street	Bike treatment	Add signage designating this segment of Railroad Avenue as a Class III Bicycle Route. City may want to consider back-in angle parking in the future to allow for Class II lanes, which would minimize pedestrian and bicyclist conflicts with vehicles.	0.3	\$10,000
71	Railroad Avenue	Railroad Avenue at East 8th Street	Bike parking	Establish the corner of Railroad Avenue and 8th Street outside Marina Vista Elementary School as a mobility hub, which includes bike parking.	n/a	\$20,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
72	Black Diamond Street	Marina Boulevard to East 8th Street	Bike treatment	Install a Class III Bicycle Route to provide an alternate north-south route through Downtown that avoids the angled parking present on Railroad Avenue and Cumberland Street.	0.3	\$10,000
73	Railroad Avenue	East 8th to East 10th Streets	Bike treatment	Add directional Class IV separated bikeways through removal of parking on one side of the street.	0.1	\$44,000
74	Railroad Avenue	Railroad Avenue at 5th Street	Pedestrian treatment	- Install new north leg marked crosswalk - Install curb extensions at NE and SE corners - Relocate bus stop to far side of intersection or south of 5th Street	n/a	\$258,000
75	Railroad Avenue	Railroad Avenue and Central Avenue Intersection	Crosswalk	- Conduct study to reassess access and circulation at Cornwall Street and Railroad Lane to narrow intersection and remove additional legs to enhance safety. - Consider moving the angled parking from the east to west sides of Railroad Lane and bulbing out to provide space for vehicles to queue at the WB approach\ - Prohibit NB left-turn at Railroad Lane, and direct truck east on Central Avenue/Solari Street to SR 4. - Tighten curb radii where feasible while maintaining truck access - Consider adding LPIs per the Pittsburgh Moves Crosswalk Policy - Restripe crosswalks and add advanced stop bars - Upgrade curb ramps - Add protected left turns - Investigate if accessibility upgrades are needed to push buttons and countdown signals	n/a	\$2,019,000
76	Railroad Avenue	Railroad Avenue and Parkside Drive Intersection	Crosswalk	- Remove pork chop island on east crosswalk and tighten corner radii to reduce auto speeds and crossing distance - Stripe crosswalks as high-visibility with advanced stop bars and upgrade curb ramps - If feasible with topography and sight distance, bring the SB on-ramp in at closer to 90 degree alignment with Railroad Avenue	n/a	\$876,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
77	Railroad Avenue	Railroad and Civic Avenue Intersection	Crosswalk	- Mark south crosswalk at Civic Avenue - Add LPI on north and south crosswalks - Consider making Oak Place right-in/right-out only to simplify intersection and allow U-turns at School Street to provide full access for residents - Add high-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels	n/a	\$673,000
78	Railroad Avenue	10th Street to California Avenue	Bike treatment	Add directional Class IV separated bikeways (8' bike lane, 4' buffer) by reducing travel lane widths to 12'.	0.2	\$88,000
79	Railroad Avenue	California Avenue to Central Avenue	Bike treatment	As a near-term, interim improvement: - Mark Class II bicycles lanes continuous in both directions to address existing gaps. - Mark bikeways up to intersections. - Stripe bike lanes with solid stripe for last 50' before the intersection. - At intersections, stripe bike lane between the right turn and through lane with green conflict zone markings - Mark green conflict zone striping at Parkside Drive ramps, bus stops, and slip lane at SB California Avenue.	0.6	\$89,000
80	Railroad Avenue	Center Drive to Bliss Avenue	Pedestrian treatment	Improve Railroad Avenue sidewalk with lighting, attractive traffic barrier, and pedestrian amenities per the North Concord to Antioch BART Access Study.	0.2	\$138,000
81	Railroad Avenue	Railroad Avenue and Bliss Avenue Intersection	Pedestrian treatment	- Close the sidewalk gap at the west intersection approach (see Bliss Avenue for more information) - Mark the north crosswalk - Add pedestrian refuge on north and south crosswalks - Upgrade curb ramps - Investigate if accessibility upgrades needed to push buttons and countdown signals	n/a	\$323,000
82	Railroad Avenue	California Avenue to SR 4 ramps	Bike treatment	On the Railroad Avenue overpass, add directional Class IV separated bikeways with buffers and delineators. This will require coordination with Caltrans.	0.1	\$44,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
83	Railroad Avenue	SR 4 WB On-Ramp/ California Avenue Intersection	Bike/ pedestrian treatment	- At the southeast corner of Railroad Ave & California Ave, add a bulb out to provide increased pedestrian visibility and slow northbound-right turning vehicles at intersection. Route the bike lane into bulb out for a semi-protected corner. - At the northwest corner of Railroad Ave & California Ave, explore signalizing the southbound right turn lane from Railroad Avenue to the SR-4 westbound onramp in order to increase pedestrian visibility. - Install green paint for a 2-step trail crossing across Railroad Avenue at California Avenue (north and east legs). - Add new south crosswalk - Install leading pedestrian interval (LPI) for east crosswalk - Install BART wayfinding	n/a	\$673,000
84	Railroad Avenue	SR 4 EB Ramps Intersection	Bike/ pedestrian treatment	- Install green paint for a 2-step trail crossing across Railroad Avenue at the SR 4 eastbound off ramp (south and east legs) to connect trail users from the 2-way Class IV facility on the overpass to the bike facilities south of the overpass (Class I facility on the west side and directional Class IV facilities on Railroad Avenue). - Trail crossing striping on south crosswalk. - Add north crosswalk - Widen pedestrian refuge on south crosswalk to 10’ and add truncated domes and pedestrian push button - Upgrade curb ramps, including relocating truncated domes on SE corner ramps - Investigate if accessibility upgrades needed to push buttons and countdown signals - Install wayfinding to BART	n/a	\$673,000
85	Railroad Avenue	SR 4 ramps to Delta de Anza Trail	Bike treatment	Add a Class IV bicycle facility (7’ bike lane, 4’ buffer) by reducing travel lane widths to 10’ and 11’ in each direction.	0.5	\$219,000
86	Railroad Avenue	Railroad Avenue and Yosemite Drive Intersection	Crosswalk	- Install south leg marked crosswalk with protected left turns - Add new directional curb ramps (clear of driveway on west side) - Install “Bikes Use Ped Signal” sign and two-stage turn box to support southbound left movements onto Yosemite Drive - Investigate need for countdown signals	n/a	\$323,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
87	Railroad Avenue	Railroad Avenue and Linscheid Drive Intersection	Crosswalk	Install north leg marked crosswalk, and investigate need for countdown signals.	n/a	\$81,000
88	Railroad Avenue/Kirker Pass Road	Delta de Anza Trail to Pheasant Drive	Bike treatment	- Install Class IV separated bikeways by narrowing the travel lanes to 10’ inside and 11’ outside lanes. - With the James Donlan Road extension, reduce the long right turn pocket on the northbound approach of Buchanan Road and mark the Class IV separated bikeways up to the intersection.	1.3	\$569,000
89	Railroad Avenue	Railroad Avenue and Buchanan Road Intersection	Crosswalk	- Add high-visibility crosswalk markings, adequate nighttime lighting levels - Add advanced stop lines - Add new south leg marked crosswalk - Consider adding a pedestrian refuge with widened north, south median - Close sidewalk gap on NE corner (see Buchanan projects for more information) - Close bike lane gaps (see Buchanan projects for more information)	n/a	\$673,000
90	Railroad Avenue	4th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised intersection (or crosswalks) - Upgraded curb ramps - Curb extensions	n/a	\$464,000
91	Railroad Avenue	6th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels	n/a	\$34,000
92	Railroad Avenue	7th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, adequate nighttime lighting levels	n/a	\$34,000
93	Railroad Avenue	8th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, adequate nighttime lighting levels - Consider relocate decorative flagpoles or RRFB to make the RRFB more visible to NB drivers	n/a	\$35,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
94	Railroad Avenue	17th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: Advance Yield Here to Pedestrians sign and yield line	n/a	\$34,000
95	Kirker Pass Road	Pheasant Drive to Southern City Limit	Bike treatment	Convert shoulder to Class IV separated bikeways	0.3	\$131,000
96	Kirker Pass Road	Kirker Pass Road and Pheasant Drive Intersection	Crosswalk	- Remove the NE and SE slip lanes and straighten east crosswalk - Add pedestrian refuge on east crosswalk - Upgrade curb ramps	n/a	\$323,000
97	Kirker Pass Road	Kirker Pass Road at City boundary to Buchanan Road	Traffic calming	Install rumble strips, flashing beacons, and speed feedback signs to reduce speeds entering Pittsburgh. Time signals to slow speeds. This will require coordination with County outside City limits.	0.5	\$208,000
B.8	Harbor Street					
98	Harbor Street	East 8th Street to Pittsburgh-Antioch Highway	Bike treatment	As a near term, interim improvement on Harbor Street: - Refresh bike lane markings and add more frequent bike lane markings. - Stripe bike lanes with solid stripe starting 50’ before the intersection. - Add green conflict zone markings at intersection with East Santa Fe Avenue/Pittsburgh-Antioch Highway	0.2	\$30,000
99	Harbor Street	East 3rd Street to Army Street	Bike treatment	Add a Class IV bicycle facility through either (1) a 4-3 lane reduction (7’ bike lane, 3-4’ buffer) or (2) between Pittsburgh-Antioch Highway and Hawthorne Street, remove parking on one side of the street.	1.1	\$482,000
100	Harbor Street	Army Street to California Avenue	Bike treatment	In the near term, interim improvement on Harbor Street: - Close bike lane gap in southbound direction - Stripe green conflict zone markings at California Avenue intersection - Prohibit parking on west side during daytime when bicyclists would use the street	0.1	\$15,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
101	Harbor Street	Army Street to California Avenue	Bike treatment	Install Class IV separated bikeways: - Northbound: narrow travel lanes to 10’ and 11’ respectively to make room for a 6’ bike lane with 3’ protected buffer - Southbound: widen the roadway on the west side of Harbor Street into the oversized landscape strip to provide parking and a buffered bike lane for southbound travel OR prohibit parking on the west side of Harbor Street.	0.1	\$44,000
102	Harbor Street	Harbor St at Atlantic Avenue Intersection	Trail	Place the pedestrian push buttons at convenient locations for people biking, as the Delta De Anza Trail jogs through this intersection.	n/a	\$81,000
103	Harbor Street	California Avenue to Bliss Avenue	Bike treatment	Install Class IV separated bikeways through narrowing travel lanes to 10’ inside and 11’ outside (2’ buffer, 5’ bicycle lane)	0.1	\$44,000
104	Harbor Street	Bliss Avenue to Stoneman Avenue	Bike treatment	Upgrade the existing Class II bike lanes to a Class IV bicycle facility (7’ bike lane, 4’ buffer) by narrowing the travel lanes to 10’ and 11’ respectively.	0.8	\$350,000
105	Harbor Street	East Leland Road Intersection	Bike treatment	As a near term, interim improvement on Harbor Street: - Mark the northbound bike lane up to the intersection - Mark green conflict zone striping on all approaches and through bus stops	0.1	\$15,000
106	Harbor Street	Stoneman Avenue to Yosemite Drive	Bike treatment	Install Class II Buffered Bike Lanes (5’ bike lane with 3’ buffer) through a 4-3 lane reduction.	0.3	\$38,000
107	Harbor Street	Harbor Street at Stoneman Drive	Bike/ped treatment	- Install single-lane roundabout OR narrow intersection through median refuge and bulbouts - Mark south crosswalk	n/a	\$448,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
108	Harbor Street	Harbor Street and Yosemite Drive Intersection	Crosswalk	- Align the intersection so that Yosemite Drive intersects Harbor Street close to 90 degrees - Install curb extensions on the SW and NW corners and east side of street - Add LPI on north and south crosswalks - Investigate if accessibility upgrades are needed to push buttons and countdown signals	n/a	\$547,000
109	Harbor Street	Yosemite Drive to Buchanan Road	Bike treatment	Add Class II Buffered Bike Lanes (6’ bike lane with 2’ buffer) by narrowing travel lanes to 11’.	0.2	\$25,000
110	Harbor Street	Harbor Street at Highlands Elementary/ Buchanan Park Driveway	Crosswalk	- Mark new high-visibility crosswalk and install an RRFB across Harbor Street at the Highlands Elementary School driveway (on the north side, with both a median refuge and curb extension) per the Pittsburg Moves Crosswalk Policy - Install a crosswalk ahead warning sign on the southbound approach (with the curve). - Install curb extensions	n/a	\$88,000
111	Harbor Street	East 8th Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Pedestrian refuge island - Consider RRFBs if there is low driver compliance	n/a	\$43,000
112	Harbor Street	Stone Harbor Drive/Army Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Pedestrian refuge island	n/a	\$43,000
113	Harbor Street	East 3rd Street to Pittsburg-Antioch Highway	Trail	See trail connections identified in the California Delta Trail to Antioch project list.	n/a	-

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
B.9 Loveridge Road						
114	Loveridge Road	California Avenue/N Park Boulevard to Pittsburg-Antioch Highway	Bike treatment	As an interim solution, close gaps in the existing bike lanes, including missing segments of southbound bike lane, consistent bike lane width and markings, and striping bikeway up to and through the intersection	0.4	\$59,000
115	Loveridge Road	North terminus of roadway to California Avenue	Bike treatment	Reduce travel lanes to 11’ and install 7’ separated bikeways (5’ bike lanes, 2’ buffer)	0.9	\$394,000
116	Loveridge Road	California Avenue to SR 4 EB Ramps	Bike treatment	Upgrade the existing Class II bike lanes to a Class IV bicycle facility.	0.1	\$44,000
117	Loveridge Road	SR 4 EB Ramps to Buchanan Road	Bike treatment	Upgrade the existing Class II bike lanes to a Class IV bicycle facility (7’ bike lane, 2’ buffer) by narrowing travel lanes to 10’ and 11’ respectively.	1.1	\$482,000
118	Loveridge Road	Loveridge Road and Buchanan Street Intersection	Crosswalk	To address southbound motorists not yielding to pedestrians when turning right: - Install “Turning Vehicles Yield to Pedestrians” sign for southbound right traffic - Install a median refuge with pedestrian push button on Buchanan Street at the northern crosswalk - Tighten curb radii on the NW and NE corners to slow the speed of turning traffic - Install school zone 25 MPH signage - Modify the signal timing to add a leading pedestrian interval for southbound vehicles turning right - Consider prohibiting right turns on red and adding LPI on east and west crosswalks per the Pittsburg Moves Crosswalk Policy	n/a	\$323,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
119	Loveridge Road	Loveridge Road and California Avenue Intersection	Crosswalk	- Install pork chop islands with raised crosswalks at all corners of the intersection, which will shorten crossing distances for pedestrians. - Restripe the crosswalks and install median refuges with push buttons if they still enable left turns.	n/a	\$673,000
120	Stoneman Avenue/ Gladstone Drive	Loveridge Road to East Leland Road	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding and sharrows. Explore additional traffic calming. (Some traffic calming already exists in some segments.)	0.7	\$294,000
121	Roundhill Drive/Norine Drive	Ventura Drive to Roundhill Drive to Delta de Anza Trail	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding and sharrows. Explore additional traffic calming. This would tie into the bicycle boulevard proposed on Ventura Drive.	0.4	\$168,000
B.10	North Park Boulevard					
122	North Park Boulevard	Pace Boulevard to Century Boulevard	Bike treatment	Refresh bike lane markings; relocate bike lane to be between the EBL and EBR lanes and add green conflict zone markings.	0.2	\$30,000
123	North Park Boulevard	Loveridge Road to Pace Boulevard	Pedestrian treatment	Close the sidewalk gap on the north side of N Park Boulevard. This may require coordination with private property owner.	0.6	\$1,549,000
B.11	Century Boulevard					
124	Century Boulevard	East Leland Road to City limits	Bike treatment	Add 5’ Class II bike lanes given limited right-of-way - requires widening the paved width of the roadway between East Leland Road and Century Way. Where roadway is improved, reduce travel lane width to 10-11’ to provide bike lanes. As the area redevelops, add a Class I facility off-street in addition.	1.2	\$177,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
125	Century Boulevard Greenway	East Leland Road to City limits	Trail	Add a Class I facility as the area redevelops to provide a connection to the shopping center. This will require coordination with the City of Antioch.		-
B.12	Somersville Road (coordinate with Antioch)					
126	Somersville Road	Delta de Anza Trail to James Donlon Boulevard	Trail	Add a Class I facility by widening the existing sidewalk.	0.9	\$3,356,000
127	Tuscany Meadows Drive	James Donlon Boulevard to Buchanan Road	Bike treatment	Install Class II buffered bike lanes per the Tuscany Meadows EIR.	0.5	\$63,000
128	Sequoia Drive	Tuscany Meadows Drive to Somersville Road	Bike treatment	Install Class II buffered bike lanes per the Tuscany Meadows EIR.	0.5	\$63,000
C	East-West Corridors					
C.1	E 3rd Street					
129	East 3rd Street	Marina Boulevard to East of Riverway Driveway	Bike treatment	Install Class II buffered bike lanes with a lane reduction. Assume 11’ travel lane and 8’ parking, leaving 13’ remaining for bike lane and buffer	0.3	\$38,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
130	East 3rd Street	East of Riverway Driveway to Harbor Street	Bike treatment	Install Class II buffered bike lanes when the road is widened through redevelopment.	0.2	\$25,000
131	East 3rd Street	Cardinale Court Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach • Advance Yield Here to Pedestrians signs and yield lines • Pedestrian refuge island • Curb extensions • Upgraded curb ramps • Consider RRFBs if there is low driver compliance • Assumes 4 to 3 lane road diet	n/a	\$358,000
132	East 3rd Street	Cumberland Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines • Pedestrian refuge island • Curb extensions • Upgraded curb ramps • Consider RRFBs if there is low driver compliance • Assumes 4 to 3 lane road diet	n/a	\$358,000
C.2 Willow Pass Road/West 10th Street/East 10th Street						
133	Willow Pass Road	Parkside Drive to Enterprise Circle	Trail	• Install a Class I facility (10’ shared-use path with 5’ landscape buffer) through redevelopment. Conduct a right-of-way assessment to determine if path or shoulder widening opportunities are possible in the interim. • Study additional options for providing bicycle/pedestrian access at pinch points underneath railroad bridges (not included in cost)	1.2	\$4,475,000
134	Willow Pass Road	Willow Pass Road and Nantucket Drive	Crosswalk	• Mark east leg crosswalk • Upgrade curb ramps • Investigate if accessibility upgrades are needed to push buttons and countdown signals	n/a	\$323,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
135	West 10th Street	Enterprise Circle to Montezuma Street	Bike treatment	Restripe existing Class II bike lanes to define parking lanes and bike lanes. Narrow travel lanes to 11’ and restripe parking at 8’ and bike lane at 6’.	0.3	\$44,000
136	West 10th Street/East 10th Street	Montezuma Avenue to Railroad Avenue	Bike treatment	Widen existing Class II bike lanes by removing median and restriping street with 11’ travel lanes, 10’ left-turn pocket, 6’ bike lanes, and 8’ parking lane.	0.4	\$59,000
137	Willow Pass Road	10th Street Intersection (Commerce Center Driveway)	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • PHB • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance stop bar • Pedestrian refuge island • Curb extensions • Upgraded curb ramps • Assumes lane reduction to remove EB right-turn lane and extend bikeway	n/a	\$326,000
138	West 10th Street	Enterprise Circle Intersection	Crosswalk	Relocate crosswalk to west side of the street, clear of driveways and relocate bus stop to far side of intersection. Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • PHB • Parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance stop bar • Curb extensions • Upgraded curb ramps	n/a	\$326,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
139	West 10th Street	Beacon Street	Crosswalk	Relocate crosswalk to west side of the street, clear of driveways and relocate bus stop to far side of intersection. Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • PHB • Parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance stop bar • Curb extensions • Upgraded curb ramp • Move the EB bus stop to the far side	n/a	\$326,000
140	West 10th Street	Black Diamond Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • Parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines • Consider installing RRFBs if driver compliance is low and/or observed speed are higher than the posted speed limit.	n/a	\$34,000
141	West 10th Street	Cutter Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • Parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines	n/a	\$34,000
142	West 10th Street	East Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians sign and yield line • Pedestrian refuge island • Upgraded curb ramps and install missing curb ramps at crosswalk • Curb extension shadowing parking • Consider installing RRFBs if driver compliance is low and/or observed speed are higher than the posted speed limit.	n/a	\$167,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
143	West 10th Street	Los Medanos Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians sign and yield line • Pedestrian refuge island • Upgraded curb ramps and install missing curb ramps at crosswalk • Curb extension shadowing parking • Consider installing RRFBs if driver compliance is low and/or observed speed are higher than the posted speed limit.	n/a	\$167,000
144	West 10th Street	York Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • Parking restriction on crosswalk approach, adequate nighttime lighting level • Advance Yield Here to Pedestrians signs and yield lines • Curb extensions • RRFBs	n/a	\$212,000
145	West 10th Street	West Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • Parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines	n/a	\$34,000
146	East 10th Street	East Street Intersection	Pedestrian treatment	Install missing curb ramps at crosswalk	n/a	\$12,000
147	East 10th Street	50’ west of Solari Street	Pedestrian treatment	Install missing curb ramps at driveway	n/a	\$12,000
148	East 10th Street	East 10th Street at Solari Drive	Pedestrian treatment	• Relocate crosswalk to west side of intersection to make crosswalk accessible • Install curb extension on SW corner • Stripe high-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Stripe Advance Yield Here to Pedestrians signs and yield lines		\$180,000
149	East 10th Street	Railroad Avenue and East 10th Street	Crosswalk	• Remove slip lane on SE corner • Add pedestrian refuge on south crosswalk • Add leading pedestrian interval (LPI) on east and west crosswalks • Add high visibility crosswalk marking	n/a	\$673,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
150	East 10th Street	Railroad Avenue to Harbor Street	Bike treatment	Add Class II buffered bike lanes (8') through a 4-3 lane reduction and parking removal on one side.	0.4	\$51,000
C.3 E 14th Street/Pittsburg-Antioch Highway						
151	Central Avenue	Harbor Street to Pittsburg-Antioch Highway	Traffic calming	Provide traffic calming improvements along Central Avenue, such as speed tables at major intersections and/or speed humps to enhance the existing Class III Bicycle Route	0.5	\$208,000
152	East 14th Street	Harbor Street to Pittsburg-Antioch Highway	Trail	Add Class I Multi Use Path on East 14th Street. This will require using the unpaved shoulder on the south side of the roadway and/or removing parking.	0.4	\$1,492,000
153	East 14th to Harbor Bike Boulevard Connector	Harbor Street and Hawthorne Street/ Driveway Intersection	Crosswalk	Add Pedestrian Hybrid Beacon (PHB) to connect the bike facility on the west side of Harbor Street to the driveway/bike connection on the east side of the street.	n/a	\$193,000
154	East 14th to Harbor Bike Boulevard Connector	East 14th Street at City-owned driveway (just east of Harbor Street overcrossing)	Crosswalk	Add trail crossing on East 14th Street just east of the bridge, providing a connection between the Class I facility on East 14th Street and the driveway that connects to Harbor Street.	n/a	\$34,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
155	East 14th to Harbor Bike Boulevard Connector	East 14th Street to Harbor Street	Bike treatment	To provide a connection between East 14th Street and Harbor Street, make the City-owned driveway a designated bicycle boulevard by adding wayfinding and sharrows. Explore additional traffic calming.	0.1	\$42,000
156	Pittsburg-Antioch Highway	Harbor Street to East 14th Street	Bike treatment	Add a Class IV bicycle facility (7' bike lane, 3' buffer) by utilizing existing shoulders and narrowing travel lanes to 11'.	1.7	\$744,000
157	Pittsburg-Antioch Highway	East 14th Street to Arcy Lane	Trail	Add Class I Multi Use Path on Pittsburg-Antioch Highway by narrowing the travel lanes to 11' and turn lanes to 10' and utilizing the unpaved shoulders.	1.7	\$6,339,000
C.4 North Parkside Drive/Willow Pass Road						
158	Willow Pass Road	Riverview Mobile Home Park to Dory Road	Bike treatment	As a near-term, interim solution: • Close westbound bike lane gap • Mark green conflict zone striping through merge areas at Range Road ramps and bus stops • Align off ramps close to 90 degrees with Range Road and add stop control • Stripe additional bike lane legends in existing bike lanes	0.3	\$51,000
159	North Parkside Drive	Railroad Avenue to Amberhill Court	Bike treatment	Add a Class IV bicycle facility by repurposing space for existing 5-6' Class II facility, narrowing travel and turn lanes to 11', and eliminating parking. This assumes road widening as redevelopment occurs.	1	\$438,000
160	North Parkside Drive	Amberhill Court to Parkview Drive	Bike treatment	Add a Class IV bicycle facility by narrowing travel lanes to 10'.	0.3	\$131,000
161	North Parkside Drive	Parkview Drive to Range Road	Bike treatment	Add a Class IV bicycle facility (7' bike lane plus minimum 2' buffer) by narrowing travel lanes to 11' and turn lanes to 10'.	0.5	\$219,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
162	North Parkside Drive/Willow Pass Road	Range Road to Commodore Court	Bike treatment	Add a Class IV bicycle facility (7' bike lane plus buffer) by narrowing travel lanes and using space from existing 6' Class II facility. Over the bridge at Range Rd, add Class II bike lanes (5') with 11' travel lanes.	0.4	\$175,000
163	Willow Pass Road	Commodore Court to Loftus Road	Bike treatment	Convert existing 13' Class II facility into Class IV bicycle facility (7' bike lane plus buffer).	0.2	\$88,000
164	Willow Pass Road	Willow Pass Road and Balclutha Way Intersection	Crosswalk	-Mark west crosswalk -Investigate if accessibility upgrades needed to push buttons and countdown signals	n/a	\$323,000
165	Willow Pass Road	Loftus Road to City Limits	Bike treatment	Restripe 6' Class II bike lanes to refresh markings and clearly defined parking and biking lanes.	0.2	\$30,000
C.5	School Street/Civic Avenue/W 17th Street					
166	West 17th Street	Cassia Street to Davi Avenue	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming, per the Railroad Avenue Specific Plan.	0.4	\$168,000
167	Civic Avenue	Davi Avenue to Railroad Avenue	Bike treatment	Add Class II bike lanes per the Railroad Avenue Specific Plan.	0.3	\$44,000
168	Davi Avenue	Power Avenue to Civic Avenue	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming, per the Railroad Avenue Specific Plan.	0.2	\$84,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
169	School Street	Railroad Avenue to Harbor Street	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Work with school district to provide bike cut through where gates currently block auto traffic on School Street.	0.4	\$168,000
170	School Street	Mid-Block location	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: -Parking restriction on crosswalk approach, adequate nighttime lighting levels -Consider raised crosswalk	n/a	\$65,000
171	School Street/ Treatro Street/ El Pueblo Avenue/Diane Avenue	Harbor Street to Treatro Street to El Pueblo Avenue to Diane Avenue to California Avenue	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming.	0.8	\$336,000
C.6	Polaris Drive/Power Avenue/California Avenue					
172	Polaris Drive/ Schooner Way	Schooner Way (City Limits to Polaris Drive) and Polaris Drive (Schooner Way to Range Road)	Bike treatment	Add Class II bike lanes. Where houses front the street, allow overnight parking/time of day bike lanes. Where houses do not front the street, prohibit parking in the bike lane.	0.68	\$101,000
173	Polaris Drive/ Power Avenue	Range Road to Andrew Boulevard	Bike treatment	Add Class II buffered bike lanes (at minimum, 6' bike lane, 2 'buffer) by narrowing travel lanes to 11'. On Power Avenue, remove parking on the south side.	1.07	\$136,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
174	Power Avenue	Andrew Boulevard to Davi Avenue	Bike treatment	Install a 16’ 2-way Class IV separated bikeway (12’ bike lanes, 4 ‘buffer) on the south side of the street.	0.34	\$149,000
175	Polaris Drive	Polaris Drive at Schooner Way	Pedestrian treatment	• Install new south crosswalk • Tighten NE and NW curb radii • Install pedestrian refuges on east and west leg crosswalks • Upgrade curb ramps		\$164,000
176	Power Avenue	Jorgensen Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines • Pedestrian refuge • Upgraded curb ramps • Consider RRFBs if there is low driver compliance	n/a	\$55,000
177	Power Avenue	Mid-Block location (at 1000 Power Avenue shopping center)	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • High-visibility crosswalk markings, adequate nighttime lighting levels • Pedestrian refuge • Raised crosswalk	n/a	\$86,000
178	California Avenue	Railroad Avenue to Harbor Street	Trail	Assess the feasibility of installing a Class I path on the south side of California Avenue (widen the proposed 8’ path to 14’) and add a minimum 5’ landscape buffer between the parking area and the path, narrowing the 15’ proposed travel lanes and proposed pull out lanes. Coordinate with PG&E.	0.4	\$1,492,000
179	California Avenue	Harbor Street to Loveridge Road	Bike treatment	If the path option is infeasible, install a two-way Class IV bike facility on the north side of California Avenue from Harbor Street to Loveridge Road. Implement a lane reduction to gain the necessary right of way.	0.9	\$394,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
180	California Avenue	California Avenue and Harbor Street Intersection	Bike/Ped treatment	• Tighten curb radii at corners where feasible to reduce crossing distances • Add south leg marked crosswalk • With bikeway installation, stripe two-stage turn boxes to support bicyclists traveling from Harbor to BART via California Avenue	n/a	\$323,000
C.7 Bliss Avenue						
181	Bliss Avenue	Railroad Avenue to Harbor Street	Bike treatment	In the near-term, repave Bliss to provide a smoother riding surface to the BART station. Stripe green-back sharrows in the center of travel lane. Add a two-stage turn box on Harbor Street at Bliss Avenue to facilitate lefts onto Bliss Avenue.	0.3	\$10,000
182	ROW north of Bliss Avenue	Railroad Avenue to Harbor Street	Trail	Install a bicycle trail south of and parallel to SR 4.	0.3	\$1,119,000
183	Bliss Avenue	Railroad Avenue to Harbor Street	Bike treatment	With redevelopment, improve the street frontage to provide a consistent minimum 50’ curb-to-curb cross-section (Two 11’ travel lanes, 6’ bike lanes, and 8’ parking on both sides of the street). Make a Class IV separated bikeway if there is ROW available. Work with property owners to prohibit perpendicular parking in future.	0.3	\$44,000
184	Bliss Avenue	Railroad Avenue to Harbor Street	Pedestrian treatment	Close all sidewalk gaps with minimum 8’ sidewalk with street trees. Work with property owners to prohibit perpendicular parking in future.	0.3	\$775,000
C.8 Leland Road						
185	West Leland Road Extension	Avila Road to West Leland Road	Bike treatment	When West Leland Road is extended via development, add Class IV separated bikeway	0.5	-
186	West Leland Road	S Broadway Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: • Add marked crosswalk and install curb ramps across Broadway Avenue	n/a	\$46,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
187	West Leland Road	Villa Drive to Tomales Bay Drive	Trail	Add Class I Multi Use Path on the south side of West Leland Road.	0.6	\$2,237,000
188	West Leland Road	Valente Drive intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Add a Pedestrian Hybrid Beacon (PHB) on West Leland Road at Valente Drive to provide access to Ray Giacomelli Park, the playground, and dog park. - Mark on east leg with median refuge.	n/a	\$211,000
189	West Leland Road	Tomales Bay Drive to BART Access Road	Trail	Add Class I Multi Use Path on the north side of West Leland Road.	0.8	\$2,983,000
190	West Leland Road	West Leland Road and Woodhill Drive Intersection	Crosswalk	- Mark east and west leg crosswalks - Close sidewalk gap - Upgrade SE curb ramp - Investigate if accessibility upgrades are needed to push buttons and countdown signals	n/a	\$673,000
191	West Leland Road	Woodhill Drive to BART Access Road	Pedestrian treatment	Close sidewalk gap on the north side of West Leland Road	0.2	\$516,000
192	West Leland Road	West Leland Road and Southwood Drive	Crosswalk	- Mark east and west leg crosswalks - Upgrade curb ramps - Investigate if accessibility upgrades needed to push buttons and countdown signals This project should be coordinated with the crosswalk improvements proposed at the BART driveway.	n/a	\$673,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
193	West Leland Road	West Leland Road and BART Driveway Intersection	Crosswalk	- Add west leg marked crosswalk - Add high visibility crosswalk marking - Add BART wayfinding - Install leading pedestrian interval (LPI) on east and west crosswalks - Investigate if accessibility upgrades needed to push buttons and countdown signals This project should be coordinated with the crosswalk improvements proposed at the intersection of West Leland Road and Southwood Drive.	n/a	\$673,000
194	West Leland Road	West Leland Road and Oak Hills Drive Intersection	Crosswalk	Add west leg marked crosswalk	n/a	\$323,000
195	West Leland Road	West Leland Road and Montevideo Drive Intersection	Crosswalk	- Add west leg marked crosswalk - Upgrade curb ramp on the SW corner - Investigate if accessibility upgrades needed to push buttons and countdown signals	n/a	\$323,000
196	West Leland Road	West Leland Road at John Henry Johnson Parkway	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Add new high visibility crosswalk with PHB to connect residential neighborhood to John Henry Johnson Park. - Locate on west leg and move bus stops from nearside to far side. - Install median refuge that maintains fire access.	n/a	\$207,000
197	West Leland Road	West Leland Road at John Henry Johnson Park parking lot driveway	Crosswalk	With future redevelopment of the former golf course, consider if pedestrian demand would warrant marking new high visibility crosswalk with Pedestrian Hybrid Beacon (PHB) and median refuge if pedestrian demand exists per Pittsburgh Moves Crosswalk Policy. Locate crosswalk on east leg with median refuge.	n/a	\$205,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
198	West Leland Road	Range Road to Dover Way	Pedestrian treatment	Work with adjacent landowners to widen sidewalk on south side of the street to 10’ to support children walking to Rancho Medanos Junior High School	0.4	\$1,033,000
199	Atherton Avenue/ Sherman Street/ Alvarado Street	Dover Way to Railroad Avenue	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Remove parking on Alvarado Street and potentially Dover Way.	1	\$420,000
200	West Leland Road	100’ east of Railroad Avenue	Pedestrian treatment	Close sidewalk gap between Pittsburg Funeral Chapel and Pittsburg Ace Hardware. Install temporary treatment such as an asphalt path.	0.1	\$258,000
201	Dover Way	Frontage Road to Atherton Avenue to West Leland Road	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Explore removing parking.	0.8	\$336,000
202	West Leland Road	West Leland Road and Burton Avenue	Crosswalk	• Add east leg marked crosswalk • Install countdown signals • Add LPI on east and west crosswalks	n/a	\$323,000
203	East Leland Road	East Leland Road at Harbor Street	Bike treatment	As a near-term, interim improvement: • Mark eastbound and westbound bike lanes up to intersection • Mark green conflict zone striping on all approaches and through bus stops	0.1	\$15,000
204	East Leland Road	Railroad Ave to City Limits	Bike treatment	Upgrade the existing Class II bike lanes to Class IV separated bikeways by narrowing the 12’ travel lanes to 10’ and 11’ respectively and turn lanes to 10’.	2	\$876,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
205	East Leland Road	East Leland Road and Los Medanos College	Crosswalk	• -Create gateway to Los Medanos College through squaring-up intersection relative to Diamond Hills Apartment Complex driveway and install curb extensions • Consider wide median with refuge on the south crosswalk to create a grand campus entrance • Add marked crosswalks at each approach and mark crosswalks consistently • Upgrade curb ramps at each approach • Add bike boxes on NB and SB approaches to support turning movements into/out of the College	n/a	\$897,000
206	Delta Fair Boulevard	Century Boulevard/East Leland Road to Somersville Road	Bike/Ped treatment	Work with Antioch to extend Class IV separated bikeways into Antioch to provide access to the County Employment & Human Services offices and beyond. Mark crosswalks at Century Boulevard intersection.	1.1	\$482,000
207	Stoneman Avenue	Harbor Street to Loveridge Road	Bike treatment	Convert existing bike lanes to Class II buffered bike lanes (6’ bike lanes with 2’ buffers) by narrowing travel lanes to 11’ (with 10’ left turn lane) and marking parking at 8’.	0.7	\$89,000
208	Stoneman Avenue	Briarcliff Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Upgrade curb ramp on SW corner • Advance Yield Here to Pedestrians signs and yield lines • Pedestrian refuge island with removed WB left-turn pocket	n/a	\$49,000
209	Stoneman Avenue	Meadowbrook Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: • Relocate crosswalk to west side of the street to provide pedestrian refuge island assuming stopping sight distance met • Use yellow school zone markings • High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels • Advance Yield Here to Pedestrians signs and yield lines • Curb extensions • Replace in-pavement flashers with PHB or RRFB	n/a	\$221,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
210	Stoneman Avenue	Meadowbrook Circle Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Replace in-pavement flashers with PHB or RRFB	n/a	\$221,000
C.9 Buchanan Road						
211	Buchanan Road	100' west of Railroad Avenue to Heights Avenue	Pedestrian treatment	Close sidewalk gap on the south side of the street. Requires a significant retaining wall between Quercus Lane and Heights Avenue (not included in cost, require further feasibility study).	0.4	\$1,033,000
212	Buchanan Road	Buchanan Road at Railroad Avenue	Bike treatment	- In the long-term, create consistent roadway edge on SE side of intersection. See Railroad Avenue for more information. - As a near-term, interim improvement: - Mark EB and WB bike lanes up to intersection - Mark green conflict zone striping	0.1	\$15,000
213	Buchanan Road	Castlewood Drive to Loveridge Road	Bike treatment	Add a Class IV bicycle facility (6' bike lane, 3' buffer) using existing right-of-way. This assumes 11' travel lanes and a 10' two-way left turn lane. This may require removing on-street parking between Railroad Avenue and Brookside Drive..	1.5	\$657,000
214	Buchanan Road	Buchanan Road at Castlewood Drive Intersection	Bike/Ped treatment	- Mark west and north leg high-visibility crosswalks. Install advanced yield markings and signage on north crosswalk. - Install median refuge on north crosswalk - Install bicycle wayfinding	n/a	\$113,000
215	Buchanan Road	Buchanan Road at Heights Ave	Crosswalk	- Enhance existing crosswalk with RRFBs and advanced yield markings to access the park - Reduce curb radius on SW corner and straighten crosswalk across side street - Close sidewalk gap on SW corner (see Buchanan Road sidewalk gap closure project, cost not included here)	n/a	\$288,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
216	Buchanan Road	Buchanan Road at Loveridge Road	Bike treatment	As a near-term, interim improvement: - Mark westbound bike lanes up to intersection - Mark green conflict zone striping and at bus stops	0.1	\$15,000
217	Buchanan Road	Buchanan Road at Mcfaul Drive	Crosswalk	Convert existing median to median refuge and check lighting levels		\$9,000
218	Buchanan Road	Loveridge Road to City Limits	Bike treatment	Upgrade existing Class II bike lanes to Class IV separated bikeways by narrowing travel lanes to 11' (6' bike lanes with 4' buffer).	1.6	\$700,000
219	Buchanan Road	Buchanan Road and Ventura Drive Intersection	Crosswalk	Install east crosswalk and protect conflicting northbound and southbound left-turns - Add advanced stop bars on each approach - Add bike boxes on northbound and southbound approaches to support turning movement on to/off of Buchanan Road	n/a	\$1,813,000
220	Buchanan Road	Santa Ana Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Restriped yellow high-visibility crosswalks for school zone - PHB with advanced stop bars - Parking restriction on crosswalk approach, adequate nighttime lighting levels - School crosswalk signage - Pedestrian refuges at crosswalks on side-streets	n/a	\$211,000
221	Yosemite Drive	Railroad Avenue to Harbor Street	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Provides an interim east-west option to the future Contra Costa Canal Trail.	0.5	\$210,000
222	Yosemite Drive	Brookside Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Raised crosswalk - Curb extensions - Upgraded curb ramps	n/a	\$189,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
223	Yosemite Drive	Mid-block at Hillview Junior High	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised crosswalk	n/a	\$65,000
224	Yosemite Drive	Yosemite Drive at San Juan Drive	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Stripe consistent high-visibility crosswalk markings, add parking restriction on crosswalk approach, and adequate nighttime lighting levels - Install curb extensions with directional curb ramps		\$146,000
225	Ventura Drive	Harbor Street to Norine Drive	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding and sharrows. Speed calming treatments are already installed. Provides an interim option for the future Contra Costa Canal Trail.	1.1	\$462,000
226	Ventura Drive	Norine Drive to Buchanan Road	Bike treatment	Add Class II buffered bike lanes (5’ bike lanes with 2’ buffer) by reducing travel lanes to 11’ (10’ left-turn pocket). Mark parking at 8’.	0.1	\$13,000
227	Ventura Drive	Buchanan Road to James Donlon Boulevard	Bike treatment	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. City may want to consider upgraded facilities in the future as this area redevelops.	0.1	\$42,000
228	Ventura Drive	Ventura Drive at Norine Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Raised crosswalk - Curb extensions on NE and SE corners to narrow large intersection and reduce speeds - Pedestrian refuge island - Upgraded curb ramps	n/a	\$301,000
229	Ventura Drive	Ventura Drive at Suzanne Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Install high-visibility crosswalk markings, parking restrictions on crosswalk approaches, and appropriate nighttime lighting levels - Provide new east leg marked crosswalk with directional curb ramps		\$80,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
230	Suzanne Drive	Ventura Drive to James Donlon Boulevard	Bike treatment	Connect Buchanan Road and Ventura Drive bikeways through making this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming.	0.1	\$42,000
C.10 State Route 4 Crossing Study						
231	SR 4 Crossing	n/a	Bike/ pedestrian treatment	Study feasibility of grade-separated crossings for bicyclists and pedestrians across SR 4, including at: - Between Parkside and Los Medanos Elementary Schools. - Near the Pittsburgh Center BART Station - At Range Road - Pittsburg Bay Point BART Station (in County)	n/a	\$100,000
C.11 Other Uncontrolled Crosswalk Enhancements						
232	West 4th Street	Bay Side Drive Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Pedestrian refuges on north and south crosswalks through narrowing the travel lanes to 10-11’		\$43,000
233	East 4th Street	Cumberland Avenue Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach - Advance Yield Here to Pedestrians signs and yield lines - Upgraded curb ramps		\$46,000
234	West 4th Street	Odessa Avenue Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised crosswalk - Reduce curb radii		\$146,000
235	6th Street	Black Diamond Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels		\$34,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
236	6th Street	Cutter Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings across Cutter Street, parking restriction on crosswalk approach, adequate nighttime lighting levels - Raised intersection (near Marina Walk Park) - Upgraded curb ramps		\$227,000
237	6th Street	Herb White Way Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels		\$34,000
238	7th Street	Cutter Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Raised intersection - Crosswalk signage - Upgraded curb ramps on all corners		\$251,000
239	8th Street	Cumberland Avenue Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Upgraded curb ramps		\$46,000
240	8th Street	Herb White Way Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Truncated domes in median refuges (north, west and south crosswalks) and curb extensions (SE and SW corners) - Advance Yield Here to Pedestrians sign and yield line		\$227,000
241	9th Street	Herb White Way Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, adequate nighttime lighting levels - Crosswalk signage - Advance Yield Here to Pedestrians signs and yield lines		\$34,000
242	11th Street	Black Diamond Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels		\$34,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
243	Bay Side Drive	River Park Drive Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider curb extensions on NE and SE corners - Upgraded curb ramps		\$158,000
244	Bay Side Drive	2nd Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider curb extensions on NE and SE corners - Upgraded curb ramps		\$158,000
245	Cutter Avenue	Pelican Court Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Straighten north crosswalk - Upgraded curb ramps - Remove pork chop		\$76,000
246	Pelican Court	Pelican Loop Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Curb extensions on NE corner to narrow intersection while still allow for truck/boat trailers to make all movements and remove striped pork chop - Straighten north crosswalk - High-visibility crosswalks on all approaches with advanced yield markings and signage - Upgraded curb ramps		\$210,000
247	Pelican Loop	Mid-block location		- Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach - Raised crosswalk - Upgraded curb ramps		\$77,000
248	Burton Avenue	Crowley Avenue Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Reduce curb radii on SE corner and straighten west crosswalk		\$146,000
249	El Pueblo Avenue	Hermosa Avenue Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: Parking restriction on crosswalk approach, adequate nighttime lighting levels		\$1,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
250	El Pueblo Avenue	Treatro Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: Parking restriction on crosswalk approach, adequate nighttime lighting levels		\$1,000
251	Hanlon Way	Cove Way Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels		\$34,000
252	Pacini Avenue	Riverview Drive/Marks Boulevard Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Square-up intersection by T-ing Riverview Drive and Marks Boulevard into Pacini Avenue - Remove stop control on Pacini Avenue to make two distinct side-street stop-controlled intersections - High-visibility ladder-striped crosswalks on all approaches - Upgraded curb ramps		\$482,000
253	Pilar Ridge Drive	Rio Verde Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels		\$34,000
254	Portofino Drive	Valente Drive Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels		\$34,000
255	Riverview Drive	Alturas Avenue Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised crosswalk		\$65,000
256	Riverview Drive	Mori Street Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Raised crosswalk		\$65,000
257	San Juan Drive	Calistoga Drive Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised crosswalk (Hillview Junior High School)		\$65,000

ID	Roadway Name	Limits (From/To)	Project Type	Project Description	Miles	Estimated Cost
258	San Juan Drive	Mariposa Drive Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised crosswalk (Hillview Junior High School)		\$65,000
259	Seeno Avenue	Tiffany Drive Intersection		Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Refresh high-visibility crosswalk striping, parking restriction on crosswalk approach, ensure adequate nighttime lighting levels - Raised crosswalk (near Heights Elementary School) - Consider curb extensions		\$227,000



Appendix B

.....

Crosswalk Policy

A. Crosswalk Fundamentals

The main functions of crosswalks are to improve safety by directing pedestrians to the safe crossing location and reinforce the legitimacy of pedestrian crossings.

Although vehicles are required to yield the right-of-way to pedestrians at all intersections where crossing is not prohibited (regardless of whether the crosswalk is marked), well-marked pedestrian crossings prepare drivers for the likelihood of encountering a pedestrian in the roadway. Well-marked crosswalks also improve walkability and pedestrian accessibility, as well as direct pedestrians toward the safest crossing locations.

While pedestrians and drivers have a shared responsibility to behave in accordance with the California Vehicle Code (CVC), planners and engineers also have a shared responsibility to design and implement a safe environment for pedestrians. This section outlines the types of crosswalks and where crossing the street is legal per the CVC.

A.1 Legal Crosswalks

The CVC defines where and how crossing the street is legal in California. A legal crosswalk exists where a sidewalk meets a street at an intersection, regardless of whether the crosswalk is marked with striping indicating its existence. Motorists must yield the right-of-way to pedestrians at these locations, as well as at marked mid-block crossings. Except for locations between immediately adjacent signalized crossings (where midblock crossing is prohibited), pedestrians may legally cross the street mid-block wherever a crossing is not expressly prohibited. However, pedestrians must yield the right-of-way to motorists at these unmarked mid-block crossings.

These legal statutes related to crosswalks are contained in the CVC, as follows:

Section 275 defines a legal crosswalk as:

- That portion of a roadway included within the prolongation or connection of the boundary lines of sidewalks at intersections where the intersecting roadways meet at approximately right angles, except the prolongation of such lines from an alley across a street.
- Any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface (such as a marked mid-block crossing).

Section 21950 describes right-of-way at a crosswalk:

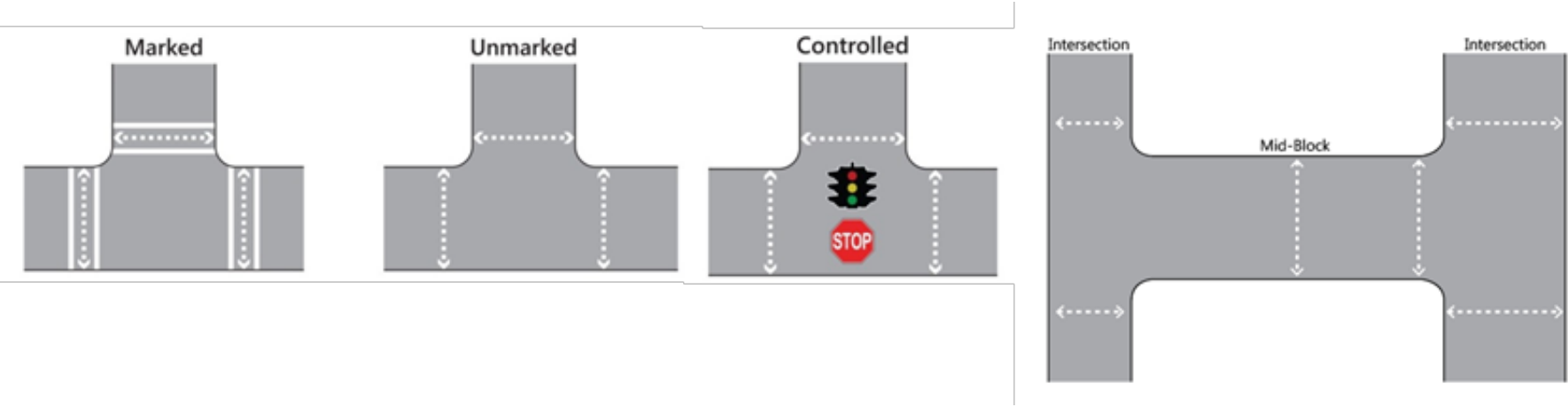
- The driver of a vehicle shall yield the right-of-way to a pedestrian crossing the roadway within any marked crosswalk or within any unmarked crosswalk at an intersection.

Section 21955 describes where pedestrians may not cross a street:

- Between adjacent intersections controlled by traffic control signal devices or by police officers, pedestrians shall not cross the roadway at any place except in a crosswalk.

A.2 Types of Crosswalks

Legal crosswalks are organized by three characteristics, as shown in the figures below:



1. **Presence of Striping (Marked vs. Unmarked):** The first characteristic is whether the legal crossing location is marked with striping on the street, or unmarked. Marked crosswalks reinforce the location and legitimacy of a pedestrian crossing. While marked crosswalks generally improve pedestrian safety, crosswalk marking should be guided by roadway characteristics and other safety considerations.
2. **Traffic Control Type (Controlled or Uncontrolled):** The second characteristic is whether the crosswalk is controlled (by a traffic signal or stop sign) or uncontrolled. Controlled crosswalks typically provide maximum safety benefit by requiring vehicles to stop for pedestrians. However, these treatments are not appropriate on all roadways. On some roadways, uncontrolled crosswalks can be safe and appropriate, though they typically require additional safety treatments, as drivers may not expect pedestrians crossing the roadway.
3. **Location (Intersection or Mid-block):** The third characteristic is whether the crosswalk is located at an intersection or mid-block between intersections. Mid-block crosswalks typically require additional safety treatments, as drivers may not expect pedestrians crossing the roadway, particularly outside of an intersection.

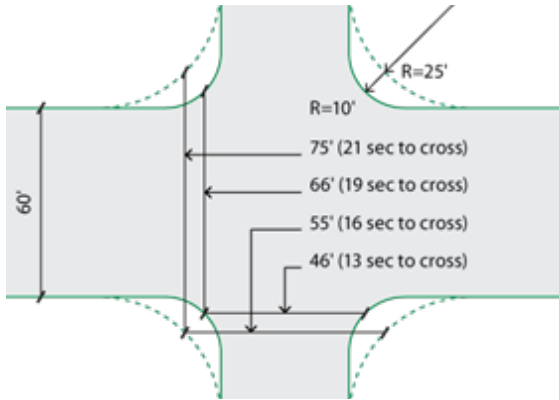
A.3 Common Geometric Considerations

Roadway geometry significantly affects pedestrian safety, and all crosswalk evaluations should begin with an assessment of potential geometric enhancements. Common geometric considerations include:

- Curb radii;
- Curb ramps;
- Curb extensions;
- Median refuges; and
- Lane reductions

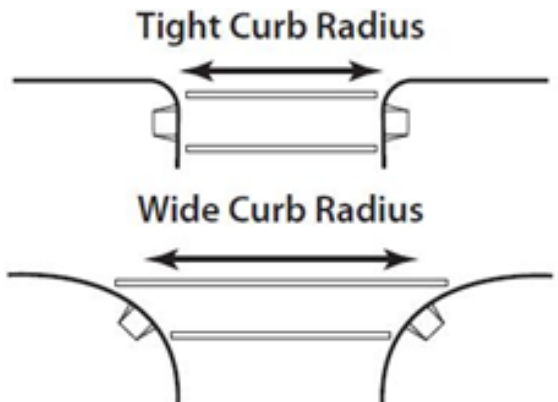
A.3.1 Curb Radii

Corner curb radii at intersections affect vehicle turning speeds and pedestrian crossing distances. A tighter curb radius creates a more compact intersection that forces vehicles to turn at slower speeds through the crosswalk. Tighter curb radii also shorten the crosswalk, reducing pedestrian crossing times and exposure to vehicles. For urban and suburban streets in Pittsburgh, curb radii should generally be 10 to 15 feet, resulting in vehicles turning at 15 MPH or less, which are more appropriate speeds for pedestrian safety.



Larger curb radii may be considered on truck routes or school bus routes, though the smallest appropriate design vehicle shall be used to determine the curb radius. Generally, 30-foot trucks should be able to stay within their lane when making a turn while larger trucks should be allowed to encroach into the adjacent lanes when making a turn.

For sidewalk or intersection reconstruction projects and new roads, concrete should be used to provide tighter curb radii. However, striping and posts are acceptable for repaving or other similar retrofit projects. Repaving and other retrofit projects should construct intersection bulb-outs with striping and posts to reduce curb radii.



A.3.2 Curb Ramps

Tighter curb radii support better pedestrian ramp alignment. For sidewalk or intersection reconstruction and new roadway projects, two curb ramps should be provided per intersection corner at every intersection, with each curb ramp directing pedestrians into the marked crosswalk.

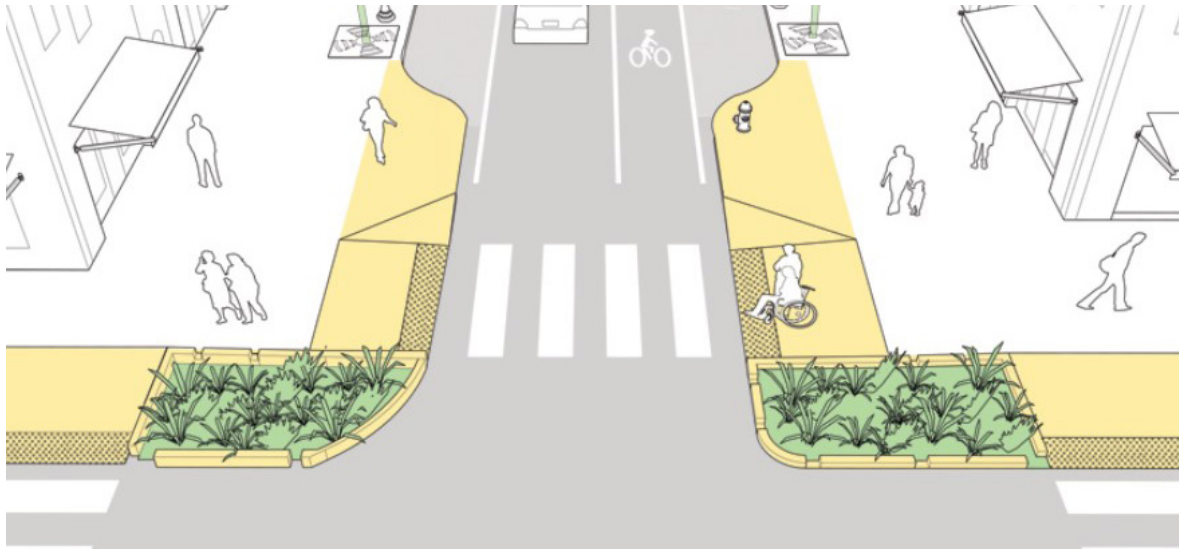
Directional curb ramps are critical to support those with mobility and visual impairments. These kind of ramps guide pedestrians directly into the crosswalk instead of into the middle of the intersection, as is common with diagonal ramps. This guidance is useful for all pedestrians but is particularly important for pedestrians in a wheelchair or similar assistive device who have more difficulty adjusting their direction of travel. Directional curb

ramps aid pedestrians with visual impairments navigating the street environment with a cane and provide them with a physical cue directing them straight through the crosswalk.

Existing single diagonal curb ramps should be retained for repaving or other similar retrofit projects, but painted bulbs with landings should be provided to reduce speeds, provide shorter crossing distances, and direct pedestrians with disabilities into the crosswalk.

A.3.3 Curb Extensions

Curb extensions or “bulb-outs” expand the sidewalk and intersection to reduce crossing distances and increase the visibility of pedestrians waiting to cross the street. They can be constructed where there is excess street width at the intersection or to shadow on-street parking. Curb extensions also address motorists using shoulder space or excessively wide travel lanes to create de-facto right-turn pockets at intersections. Although these “squeeze-by” maneuvers may sometimes improve automobile traffic operations, they are not desirable from a pedestrian safety perspective and increase the risk of multiple-threat pedestrian collisions. A yielding vehicle in one lane may prevent a driver in the adjacent lane from seeing a crossing pedestrian.



B. Identification of Candidate Locations for New Marked Crosswalks

Both proactive and reactive approaches are needed to develop a comprehensive pedestrian crosswalk safety strategy. Proactive approaches include holistic assessments, walk audits, and systemic safety analyses to address potential safety issues that may not be evident in reported collision records or specific requests from the community. Proactive approaches will be particularly beneficial in Pittsburgh where the sample size of collisions are relatively low. Reactive assessments, on the other hand, use collision data and community requests to identify potential needs for marked crosswalks and additional safety countermeasures.

B.1 Proactive Approaches

Chart B-1 describes how the City will assess whether to mark a crosswalk in situations where there are no recorded complaints or there is a lack of collision data. According to the FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing

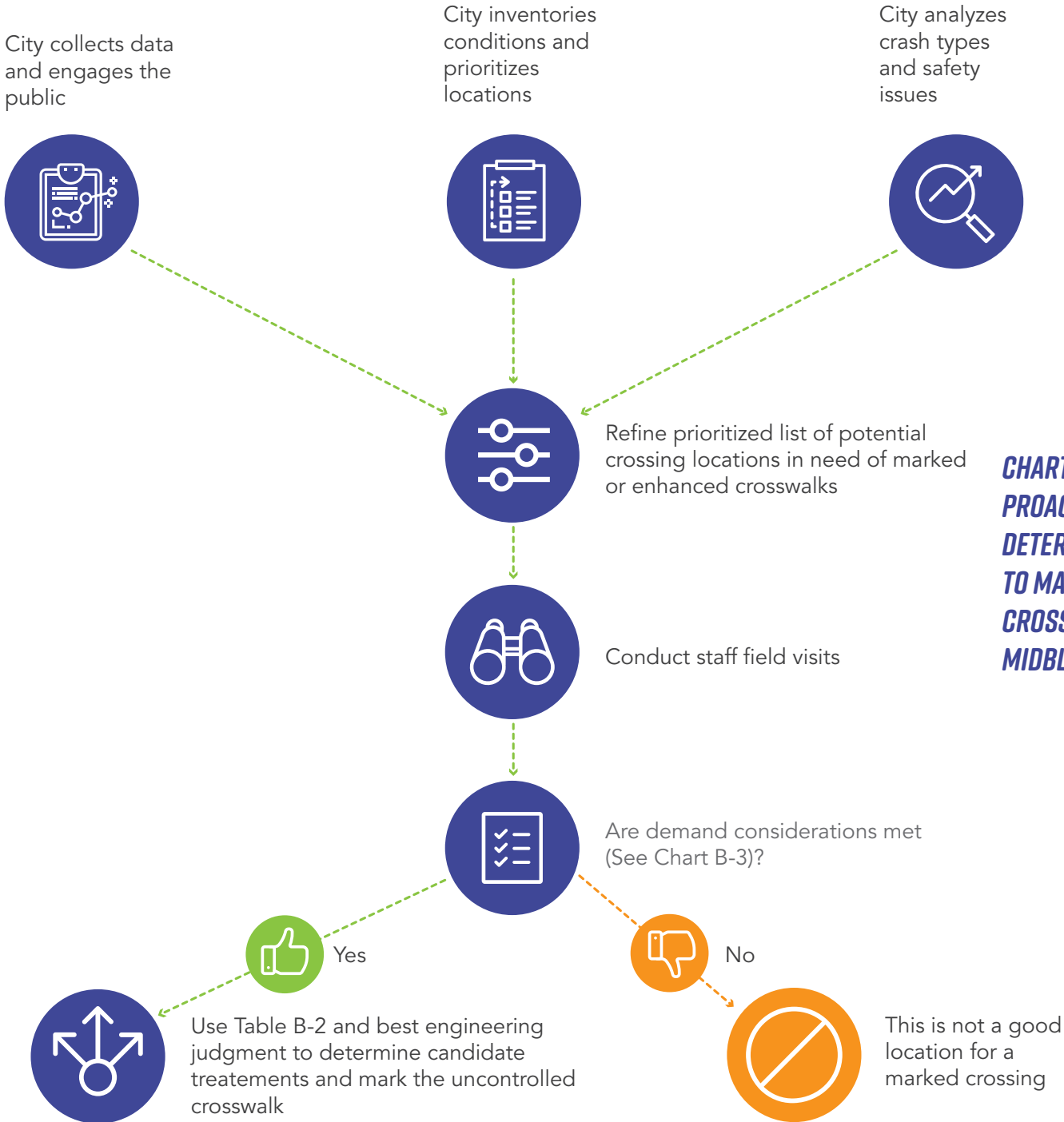


Locations, proactive safety assessments typically include the following steps:

1. Collecting pedestrian crash data;
2. Reviewing transportation studies and documents for proposed projects;
3. Completing a pedestrian safety action plan with an analytical process to identify potential locations for safety improvements;
4. Documenting informal public comments, as the public has local knowledge of where additional crossing support is needed and where high-priority enhancement areas may be beneficial;
5. Conducting walk audits to identify deficiencies and opportunities; and
6. Prioritizing the resulting project list.

The state-funded Systemic Safety Analysis Report (SSAR) program has bolstered the development of proactive safety assessments in California. This program provides funding for local agencies to perform collision analyses, identify safety issues on their roadway networks, and develop a list of systemic countermeasures that can be used to secure future Highway Safety Improvement Program (HSIP) funds.

Proactive approaches do not have to be limited to citywide assessments, as studies with smaller focus areas can also utilize a proactive approach. Complete streets corridor studies, for example, can provide a systemic safety assessment across the corridor and match issues with feasible countermeasures. Roadway repaving or slurry seal projects can also identify existing issues and replace old striping with new safety countermeasure striping.



B.2 Reactive Approaches

The City will also use reactive approaches to improve safety at unmarked crosswalks. By analyzing collision data and addressing community requests, the City can ensure that crossings with demonstrated safety issues are addressed appropriately.

If the criteria in **Chart B-2** are met, and the decision is made to mark a crosswalk, the City will refer to **Table B-2** through **Table B-4** to determine if additional safety countermeasures are needed to mark the crosswalk based on existing or proposed roadway characteristics.

Chart B-2 describes how the City will process a request to mark a crosswalk from the moment staff receives the request from a resident or other stakeholder. This process should always include a staff field visit to understand the site and its engineering constraints. The ultimate determination of the need for a marked crosswalk should follow the process set out in subsequent sections of this Crosswalk Policy.

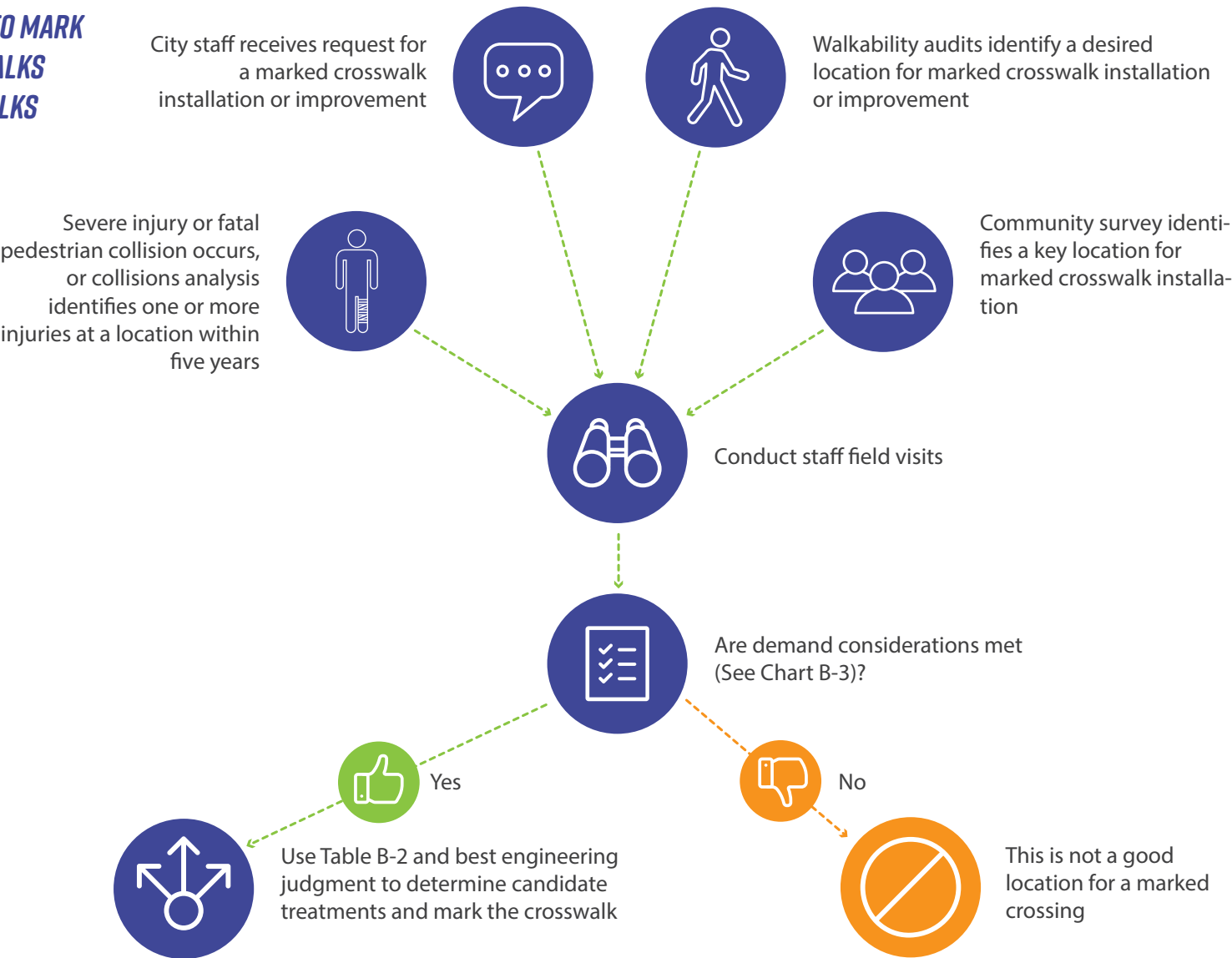
After the decision is made to mark a crosswalk, roadway characteristics should be run through several tables in **Section C** including:

- **Table B-2** – Recommended Countermeasure Enhancements at Uncontrolled Crosswalks;
- **Table B-3** – Potential Additional Countermeasure Enhancements at Uncontrolled Crosswalks; and
- **Table B-4** – Safety Issues Addressed by Each Countermeasure

These tables identify additional safety countermeasures that may be needed to mark the crosswalk safely. This is a critical step as, at higher speed and volume locations, marked crosswalks alone may not be considered safe. **Tables B-2** through **B-4** will assist the City in identifying additional countermeasures needed to safely mark the crosswalk.



CHART B- 2:
REACTIVE PROCESS FOR
DETERMINING WHETHER TO MARK
UNCONTROLLED CROSSWALKS
AND MIDBLOCK CROSSWALKS



C. Marking and Enhancing Uncontrolled Crosswalks

This section provides the City with guidance on when to mark and enhance crosswalks at uncontrolled intersections and mid-block locations. Uncontrolled crosswalks require additional consideration during planning and design because drivers are not consistently required to stop. Instead, drivers must recognize the presence of a pedestrian and yield accordingly. For this reason, improving the visibility and safety of pedestrians at uncontrolled locations is critical.

C.1 Benefits of Marked Crosswalks

Sidewalks and crosswalks are essential links within a pedestrian network. Whether commuting, running errands, exercising, or simply wandering, pedestrians need safe and convenient roadway crossings to reach their destinations. A marked crosswalk has three primary functions:

- 1.To create reasonable expectations for where pedestrians may cross a roadway;
- 2.To improve predictability of pedestrian actions and movement; and
- 3.To channel pedestrians to designated crossing locations, which are often selected for their optimal sight distance.

Marked crosswalks offer the following benefits:

- They help pedestrians find their way across complex intersections;
- They reassure pedestrians of their legal right to cross a roadway at an intersection or mid-block crossing; and
- They can designate the shortest path across a roadway.

As discussed earlier, the CVC gives the right-of-way to pedestrians at all marked or unmarked legal crosswalks. However, both drivers and pedestrians sometimes fail to obey the law or are simply unaware of who possesses the right-of-way, particularly at unmarked crossing locations. Drivers often fail to yield the right-of-way without the visual cue of a marked crosswalk, while pedestrians frequently wait for a large gap in traffic to attempt to cross.

C.2 When to Mark a Crosswalk

Identifying candidate locations for marked crosswalks involves two steps:

1. Identify where people would like to cross the street - these locations are called "pedestrian desire lines" as they represent the most desirable, and typically most direct, locations where people want to cross a street. Pedestrian desire lines are influenced by elements of the roadway network like transit stops, as well as nearby land uses. Information about nearby land uses and the roadway network help identify areas where pedestrian crossings may need to be improved. Specific crossings needing enhancement can then be identified through engineering studies, walk audits, City staff observations, or public feedback.
2. Identify where people can cross safely. The primary consideration in this step is providing adequate stopping sight distance. Pedestrians are at highest risk of injury in a collision because they are the least protected. The crosswalk safety treatment toolboxes in this Policy provide numerous options for enhancing pedestrian safety at uncontrolled and controlled crossings,

with treatment selection based on the overall context of the crosswalk, including surrounding land uses, roadway characteristics, and user characteristics.

Once candidate locations are identified, an engineering evaluation should be conducted to determine if a marked crosswalk should be installed, and if so, what visibility enhancements should be included in the design.

Crosswalks should be marked where all the following conditions occur:

- Sufficient demand exists to justify the installation of a marked crosswalk (see **Chart B-3**);
- The location has sufficient sight distance, and/or sight distance will be improved prior to marking the crosswalk; and
- Other safety considerations do not preclude marking the crosswalk.

Existing pedestrian volumes, the number of pedestrian-vehicle collisions, community surveys, resident requests, and walking audits should be used to assess whether sufficient demand exists to justify a marked crosswalk.

At uncontrolled intersections (i.e. side-street stops) where there are desire lines on both crosswalk legs, run each location through **Chart B-3**.

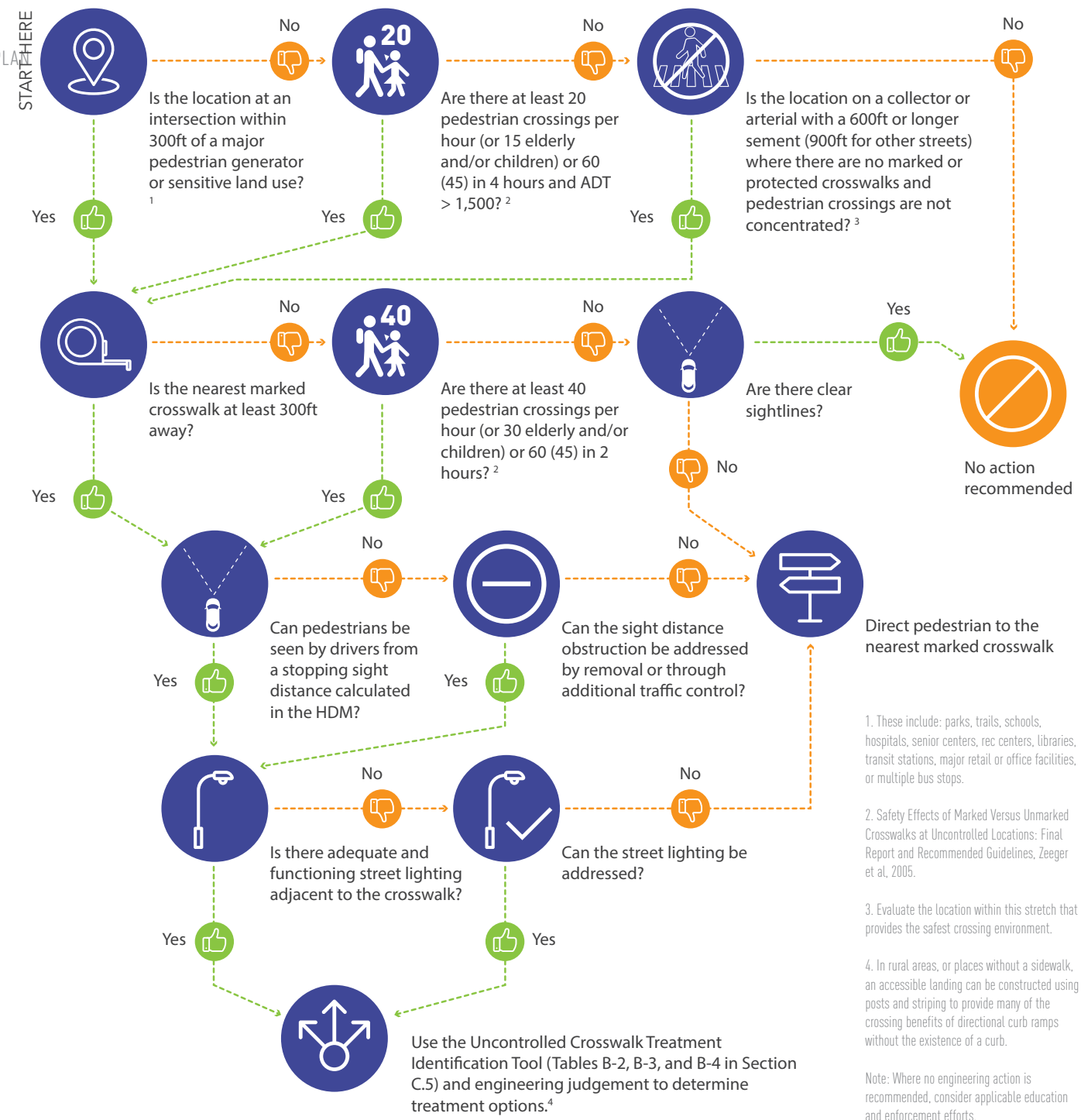
Safety considerations that might preclude a marked crosswalk include high travel speeds, heavy traffic volumes, wide, multi-lane roads, and sight distance issues caused by topography or building lines. Sight distance issues caused by parked vehicles should be addressed by providing red curb parking-restricted areas on either side of the crosswalk, and issues caused by vegetation may be addressed by trimming or modifying landscaping.

After a decision is made to mark a crosswalk, **Table B-2** should be used to identify necessary safety countermeasures. Removing crosswalks or otherwise failing to provide adequately enhanced crosswalks are not acceptable outcomes under this Crosswalk Policy.

Chart B-3 describes the process that should be used to determine the need for marking a new uncontrolled crosswalk, using pedestrian demand, crosswalk frequency, and pedestrian visibility as a basis. It should be noted that the thresholds in **Chart B-3** are appropriate for urban and suburban communities. As a suburban community, Pittsburg may consider reducing pedestrian volume or collision requirements. When marking crosswalks at intersections, each approach should be assessed using this **Chart B-3** to determine whether one or two crosswalks should be marked.



CHART B-3:
FEASIBILITY ANALYSIS
FOR TREATMENTS AT
UNCONTROLLED LOCATIONS



C.3 Safety Countermeasures for Uncontrolled Crosswalks

Once a decision to mark a crosswalk has been made based on **Chart B-3**, City staff must assess whether additional countermeasures are necessary or recommended to safely mark the crosswalk. Countermeasure identification should first be based on roadway characteristics, with ultimate suitability determined by site context and the City's best engineering judgment. If there are reported collisions at a location, installing safety countermeasures that address or correct the safety issue is essential.

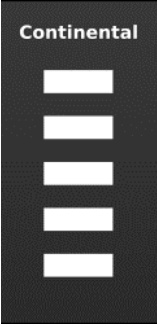
C.3.1 Potential Safety Countermeasures for Uncontrolled Crosswalks

Table B-1 lists 12 effective countermeasures⁴ that are appropriate in specific roadway contexts. Three of these tools—high-visibility crosswalk markings, parking restrictions at crosswalk approach, and adequate nighttime lighting levels—should be used at all uncontrolled crosswalks.

⁴ Based on the FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations. Four of the elements are combined into a "baseline" for uncontrolled crosswalks: high-visibility markings, parking restrictions, and nighttime lighting into one countermeasure.



Table B-1: Safety Countermeasures for Uncontrolled Crosswalk Enhancement

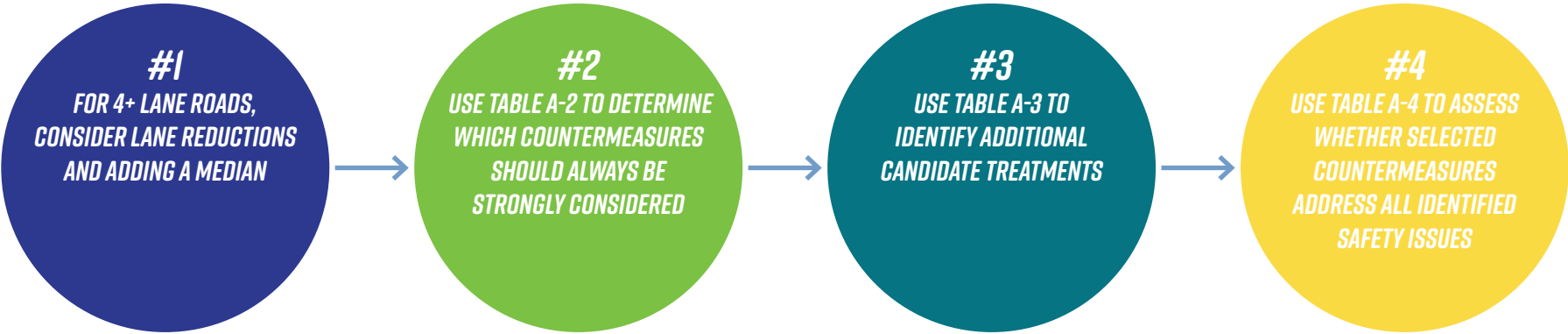
Counter-measure No.	Safety Countermeasure	Use	Example Image
Countermeasures to Be Used at All Uncontrolled Crosswalks			
1A	High-Visibility Crosswalk Markings	This is a standard countermeasure to consider at all existing uncontrolled crosswalks. Crosswalks should be marked as close to 90 degrees and designed as short as possible.	 Source: SF Better Streets
1B	Parking Restrictions at Crosswalk Approaches and Removal of Other Sight Distance Obstructions	This is a standard countermeasure to consider at all existing uncontrolled crosswalks. A minimum 10-foot red curb should be marked ahead of the crosswalk.	 Source: Google
1C	Adequate Nighttime Lighting	This is a standard countermeasure to consider at all existing uncontrolled crosswalks. All marked crosswalks should be provided with lighting and the average illumination level in the crosswalk area should be at least equal to that provided at the intersection of two major streets (around 34 lux). The uniformity ratio should be no more than 3:1.	 Source: FHWA

Counter-measure No.	Safety Countermeasure	Use	Example Image
Additional Countermeasures – Determine Use Based on Tables B-2 and B-3			
2	Raised Crosswalk	This is a countermeasure that may be considered where the roadway speed is 30 mph or less and there are three or fewer travel lanes.	 Source: Google
3	Advanced Yield to Pedestrians Markings and Signage	This is a countermeasure that is strongly recommended on all roadways with four or more lanes and speeds over 35 mph.	 Source: SRTS Guide
4	In-Street Pedestrian Crossing Signage	This is a countermeasure that should be considered on roadways with three or fewer travel lanes and speeds under 30 mph.	 Source: User Guide for R1-6 Gateway Treatment for Pedestrian Crossings report

Counter-measure No.	Safety Countermeasure	Use	Example Image
5	Curb Extensions	This is a countermeasure that may be implemented at any location where space is available, such as streets with parking lanes.	 Source: FHWA
6	Median Refuge Island	This is a countermeasure that is strongly recommended on all roadways with three or more lanes and no raised medians. Median refuges should be a minimum of six feet in width with truncated domes. The refuge island should be designed so that the pedestrian is encouraged to make eye contact with oncoming traffic.	 Source: PedBike Images/Lyubov Zuyeva

Counter-measure No.	Safety Countermeasure	Use	Example Image
7	Rectangular Rapid-Flashing Beacon (RRFB)	This is a countermeasure that is recommended at locations with higher speeds, higher ADT, and higher number of traffic lanes.	 Source: FHWA
8	Pedestrian Hybrid Beacon (PHB)	This is a countermeasure that should be considered for roadways with the highest speeds, highest ADT, and highest number of travel lanes when MUTCD warrants are met. PHBs should be designed to include Advanced Yield to Pedestrian Markings.	 Source: FHWA

Source: Table adapted from FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations (draft July 2019).



C.3.2 When to Enhance with Safety Countermeasures

Determining which safety countermeasures to install at uncontrolled crosswalks should be conducted in four steps as shown above. First, lane reductions and median installations should be considered on roadways with four or more lanes. Next, roadway characteristics should be referenced with **Table B-2** to identify countermeasures that should be considered at uncontrolled crossings of that roadway type. **Table B-3** should then be used to identify additional candidate treatments that may also be appropriate, depending on the specific context of the intersection. Finally, once treatments have been selected using those two tables, **Table B-4** should be used to assess whether they

address all identified safety issues. If they do not, additional candidate treatments that do address those issues should also be included.

Table B-2 identifies whether additional countermeasures may be needed to provide a safe uncontrolled crosswalk based on average daily traffic (ADT), posted or observed speeds, the number of travel lanes, and the presence of a median. Per the FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations, the enhancements listed in **Table B-2** represent safety countermeasures that should be strongly considered at uncontrolled crosswalks across roadways with the given roadway characteristics.

Recommendations are organized into four levels of enhancement:

- **Level A:** This level consists of the most basic improvements that should be implemented at all uncontrolled crosswalks, regardless of roadway characteristics. They include High-Visibility Crosswalk Markings, Parking Restrictions at Crosswalk Approaches, Adequate Nighttime Lighting, and the Removal of Sight Distance Obstructions. Directional curb ramps and tight curb radii should also be implemented if the crosswalk is at an intersection.
- **Level B:** This level includes all Level A countermeasures, plus Advanced Yield to Pedestrians Markings and Signage.
- **Level C:** This level includes all Level A and B countermeasures, plus Rectangular Rapid Flashing Beacons (RRFBs) or

Pedestrian Hybrid Beacon (PHBs). The City will decide between RRFBs and PHBs based on: (1) MUTCD PHB guidelines; and (2) rates of drivers yielding to pedestrians. The MUTCD PHB guidelines should be consulted to determine if a PHB is appropriate. If not, the rate of drivers yielding to pedestrians should be reviewed. If it is low, the City should use PHBs, as the higher safety efficacy device; otherwise, it should use RRFBs. The City should use either device in conjunction with Level A and B enhancements. At Level C, crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

- **Level D:** This level includes all Level A and B countermeasures, plus PHBs. PHBs are stronger traffic control devices that are needed on wider roadways with higher speeds and greater ADT. Pedestrian signals should be considered as an alternative to PHBs where warrants are met. At this level, crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

Table B-3 identifies additional countermeasures that may be appropriate, based on roadway characteristics. Each numbered countermeasure in **Table B-2** and **Table B-3**

corresponds to a countermeasure in **Table B-4**. The reported and near-miss collisions documented at the crosswalk should also be compared against **Table B-4** to determine if the proposed countermeasures would address those collision trends. If they do not, **Table B-3** and **Table B-4** should be used to identify potential additional treatments to address the documented safety record. **Figure B-1** and **Figure B-2** illustrate the warrant criteria for installing Pedestrian Hybrid Beacons (PHBs) in low-speed and high-speed roadways, respectively.

C.4 Documenting Process

Brief technical documentation should be created for all crosswalks that have been identified as candidates for markings or other countermeasures. The documentation should outline the process used by the City to identify the countermeasures considered to improve pedestrian safety at the crosswalk. It should also document the existing roadway characteristics and provide a brief site analysis justifying the inclusion or exclusion of countermeasures based on this Crosswalk Policy and outside factors like funding constraints.

C.5 Requests for Additional Enhancements

Community members might request additional enhancements even after the City has installed new countermeasure improvements. In general, requests should not be used to supplant the recommendations set forth in this Crosswalk Policy. When a community request is made to further enhance a crosswalk that has already been improved in accordance with this Crosswalk Policy, the technical documentation should be consulted to ensure that any issues raised in the request were considered during the assessment process. If no new information is provided that significantly alters the conditions used to select the appropriate countermeasure, then no further action is needed. However, if additional information is provided that might substantially affect the recommendations from this Crosswalk Policy, then it is strongly recommended that a reassessment be performed.

Table B-2: Recommended Countermeasure Enhancements at Uncontrolled Crosswalks

Roadway Type	Vehicle ADT ≤ 9,000			9,000 < Vehicle ADT ≤ 15,000			Vehicle ADT ≥ 15,000		
	≤30 mph	31-39 mph	≥40 mph	≤30 mph	31-39 mph	≥40 mph	≤30 mph	31-39 mph	≥40 mph
	Recommended Level:			Recommended Level:			Recommended Level:		
2 Lanes without Raised Median	A	A	C	A	A	C	A	A ¹	D
3 Lanes with Raised Median	A	B	C	A ¹	C	C	B ¹	C	D
3 Lanes without Raised Median	A	B	D	A ¹	C	D	B ¹	D	D
4+ Lanes with Raised Median	B	B	D	B ¹	C	D	C	D	D
4+ Lanes without Raised Median	B	B ¹	D ¹	B ¹	C ¹	D ¹	C ¹	D ¹	D ¹

Notes:

Level A: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels, and removal of sight-distance obstructions (Countermeasure No. 1).

Level B: All Level A countermeasures, plus advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line (Countermeasure No. 3).

Level C: All Level A and Level B countermeasures, plus RRFB (Countermeasure No. 7) or PHB (Countermeasure No. 8). First, consider MUTCD PHB installation guidelines and assume 10% background growth and/or future demand. Second, if guidelines are not met and driver yielding is high, install RRFBs. Otherwise, install a PHB. If vehicle speeds are a primary issue, consider using PHBs instead of RRFBs. See NCHRP 562: Improving Pedestrian Safety at Unsignalized Crossings worksheets for more information.

Level D: All Level A and Level B countermeasures, plus PHB (Countermeasure No. 8). Assume 10% background growth and/or future demand in assessing MUTCD PHB installation guidelines. If thresholds are not met, consider directing pedestrians to the nearest enhanced or controlled crosswalk.

1. Always consider pedestrian refuge island (Countermeasure No. 6) as baseline countermeasure recommendation.

Source: Table adapted from FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations (July 2018).

Table B-3: Potential Additional Countermeasure Enhancements at Uncontrolled Crosswalks

Roadway Type	Vehicle ADT ≤ 9,000			9,000 < Vehicle ADT ≤ 15,000			Vehicle ADT ≥ 15,000		
	≤30 mph	31-39 mph	≥40 mph	≤30 mph	31-39 mph	≥40 mph	≤30 mph	31-39 mph	≥40 mph
	Recommended Countermeasure Nos.			Recommended Countermeasure Nos.			Recommended Countermeasure Nos.		
2 Lanes ¹	2, 3, 4, 5, 6	3, 5, 6, 7, 8	3, 5, 6	3, 4, 5, 6	3, 5, 6, 7, 8	3, 5, 6	3, 4, 5, 6, 7, 8	3, 5, 6, 7, 8	3, 5, 6
3 Lanes with Raised Median	2, 3, 4, 5	5, 7, 8	5	3, 4, 5, 7, 8	5	5	4, 5, 7, 8	5	5
3 Lanes without Raised Median	2, 3, 4, 5, 6, 7, 8	5, 6, 7, 8	5, 6	3, 4, 5, 6, 7, 8	5, 6	5, 6	4, 5, 6, 7, 8	5, 6	5, 6
4+ Lanes with Raised Median	5, 7, 8	5, 7, 8	5	5, 7, 8	5	5	5	5	5
4+ Lanes without Raised Median	5, 6, 7, 8	5, 7, 8	5	5, 7, 8	5	5	5	5	5

Notes:

- PHBs (Countermeasure No. 8) and RRFBs (Countermeasure No. 7) should be strongly considered where driver compliance and yielding rates to pedestrians are low.
- Median refuge islands (Countermeasure No. 6) are part of the baseline recommendation on streets with multilane approaches without raised median AND with speeds over 35MPH and/or ADT over 9,000.

1. Advanced yield markings (Countermeasure No. 3) can be considered on two-lane roadways where there are driver encroachment issues, or other issues with motorist compliance.

Source: Table adapted from FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations (July 2018).

Table B-4: Safety Issues Addressed by Each Countermeasure

Counter-Measure ID	Countermeasure	Reported, Near-Miss, or Observed Collision Trends				
		Conflicts at crossing locations	Excessive vehicle speed	Inadequate conspicuity/visibility	Drivers not yielding to pedestrians in crosswalks	Insufficient separation from traffic
1A	High-Visibility Crosswalk Markings	✓		✓	✓	
1B	Parking Restrictions at Crosswalk Approaches and Removal of Other Sight Distance Obstructions	✓		✓	✓	
1C	Adequate Nighttime Lighting	✓		✓		
2	Raised Crosswalk	✓	✓	✓	✓	
3	Advanced Yield to Pedestrians Markings and Signage	✓		✓	✓	✓
4	In-Street Pedestrian Crossing Signage	✓	✓	✓	✓	
5	Curb Extensions	✓	✓	✓		✓
6	Median Refuge Island	✓	✓	✓		✓
7	Rectangular Rapid-Flashing Beacon (RRFB)	✓			✓	
8	Pedestrian Hybrid Beacon (PHB)	✓			✓	

Source: Table adapted from FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations (July 2018).

C.6 MUTCD Guidelines for PHB Installation

Enhancement Levels C and D both recommend PHB installations. The California MUTCD provides some PHB guidance based on pedestrian volumes, vehicle volumes, crosswalk lengths, and vehicle speeds. See the **Figures B-1** and **B-2** at right for the PHB curves for slow speed and high-speed roads, respectively.

PHBs should be considered in places where the roadway characteristics meet the guidelines. Assume pedestrian and/or auto volume growth of 10% if close to threshold. If driver compliance is low, consider installation even if the guideline is not met.

FIGURE B-1
MUTCD (FIGURE 4F-1). GUIDELINES FOR INSTALLATION OF PEDESTRIAN HYBRID BEACONS ON LOW-SPEED ROADWAYS

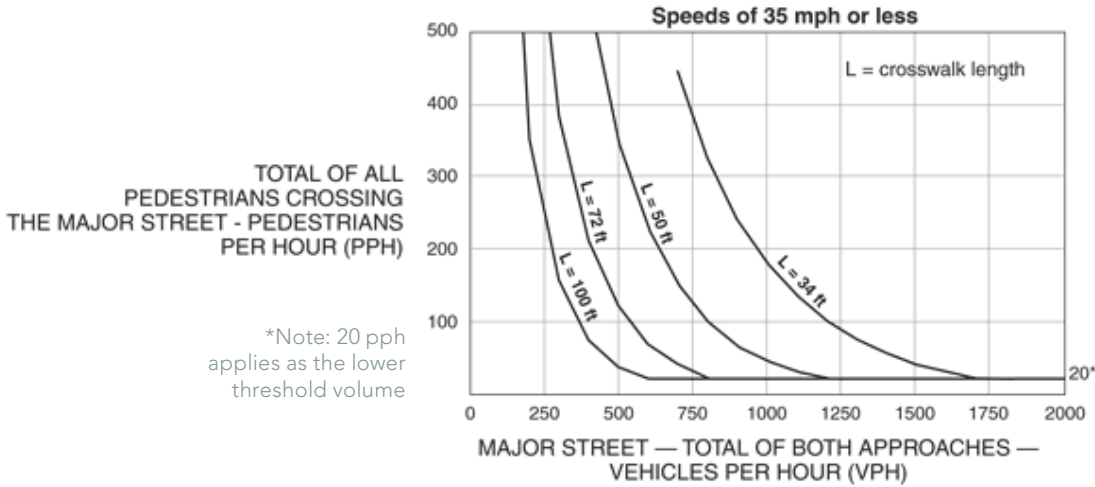
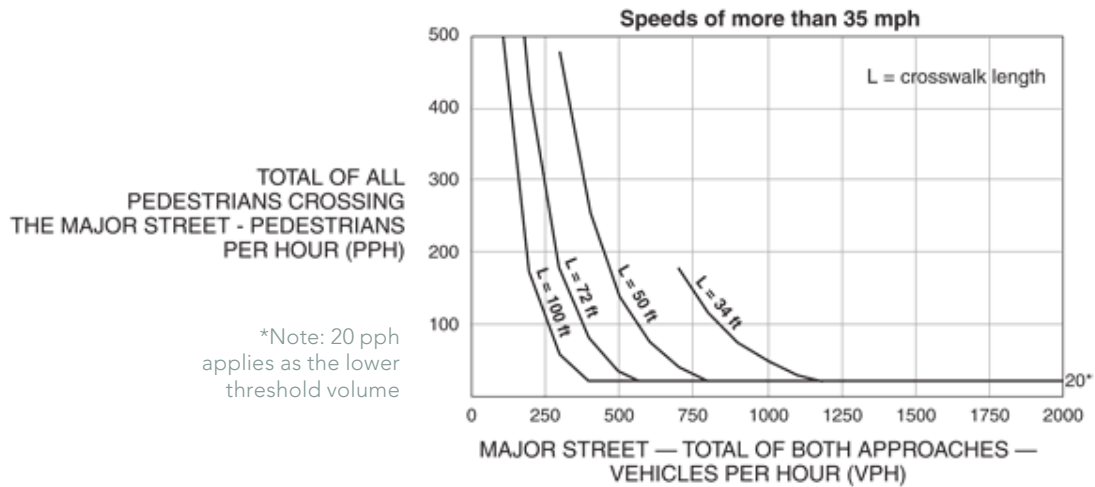


FIGURE B-2
MUTCD (FIGURE 4F-2). GUIDELINES FOR INSTALLATION OF PEDESTRIAN HYBRID BEACONS ON HIGH-SPEED ROADWAYS



D. Countermeasures for Controlled Crosswalks

Controlled crosswalks are those where vehicles are typically required to come to a complete stop due to a stop sign, traffic signal, or other yield control. These crossings may not need enhancement beyond standard crosswalk markings because stop signs and traffic signals explicitly allocate right-of-way to users and typically have a high rate of motorist compliance. However, even with these control devices in place, consideration should be given to implementation of certain countermeasures at intersections with frequent pedestrian-auto conflicts, pedestrian collisions, or low rates of compliance, as well as near schools or at skewed intersections.

This section discusses the potential countermeasures that the City will consider to further enhance safety at controlled crosswalks. The countermeasures are intended to improve visibility, clarify who has the right-of-way, and reduce vehicular speeds.

The section is organized into four parts:

- Baseline Controlled Crosswalk Countermeasures

- Stop-Controlled Crosswalk Countermeasures;
- Yield-Controlled Crosswalk Countermeasures; and
- Signal-Controlled Crosswalk Countermeasures.

It should be noted that all the countermeasures discussed in this section are required or allowed by the standards and specifications in the California MUTCD.

D.1 Baseline Controlled Crosswalk Countermeasures

Certain controlled crosswalk countermeasures are considered to be “baseline” as they are needed at all stop-controlled and signalized intersections.⁵ These baseline measures should be integrated into the design of all new controlled intersections. Existing controlled crosswalks may require retrofits, which can be phased in over time. Baseline controlled crosswalk countermeasures consist of crosswalk striping, geometric improvements, sight-line improvements,

and accessibility improvements. These countermeasures are listed below with additional guidance for each measure.

Crosswalk Striping

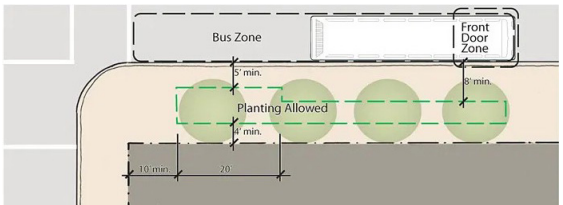
- Mark crosswalks as close to 90 degrees as possible to minimize crossing distances, provide opportunities to reduce curb radii and create curb extensions, and make the street environment more predictable for those with visual impairments.⁶
- Provide high-visibility continental crosswalk striping where driver compliance with the existing stop or signal controls is low.
- Install advanced stop bars to avoid driver encroachment to indicate where drivers should stop and wait for pedestrians in the crosswalk.⁷ These function similarly to advance yield markings (also known as "shark teeth") but are only used at stop-controlled crosswalks.

Geometric Improvements

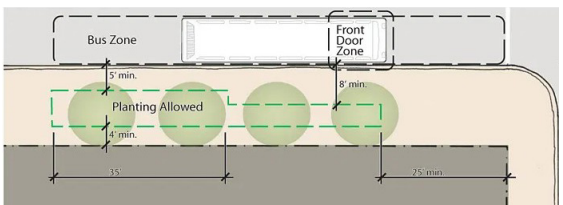
- Where street width and turning movements allow for a six-foot median, provide a median refuge island with thumbnails. The “thumbnail” is a median island that protects the pedestrian crossing space and creates a full refuge in the street.
- Remove slip lanes unless pedestrians benefit from the existing channelization; otherwise, provide raised crosswalks or protected right turns to increase visibility and reduce speeds.
- Tighten curb radii to reduce turning vehicle speeds.
- Install curb extensions to improve sight lines between autos and pedestrians and reduce overall pedestrian crossing distances.
- Consider lane reductions and/or narrowed lane widths to reduce speeds and collision risk.

Sight Line Improvements

- Restrict parking at intersection approaches to improve sight lines.
- Provide adequate nighttime lighting to ensure crosswalk safety.



Far-Side Bus Stop

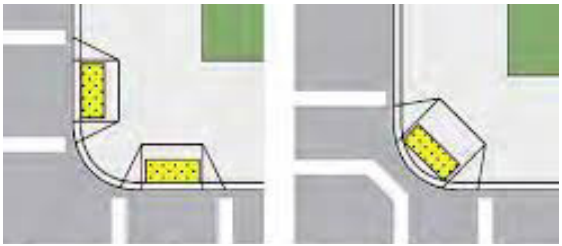


Near-Side Bus Stop

- Install curb extensions to improve sight lines between autos and pedestrians and reduce the overall crossing distance.
- Remove sign clutter, vegetation, and/or other obstructions that may limit visibility.
- Favor far side bus stop designs which encourage pedestrians to walk behind stopped buses and promote better visibility between pedestrians and drivers.

Accessibility Improvements

- For new construction or major reconstruction projects, provide tighter curb radii and two directional curb ramps per corner. For repaving or other retrofit projects, retain the



Directional Curb Ramps Best practice

Diagonal Curb Ramp Not best practice

single diagonal curb ramp, but install painted bulbs with landings.

D.1.1 Stop-Controlled Crosswalk Countermeasures

Stop-controlled crosswalks are located at intersections controlled by stop signs. Stop-controlled crosswalks in low-volume, low-speed areas do not need to be marked. On busier roadways, however, crosswalks at stop-controlled intersections should be marked if any of the following conditions apply:

- The crosswalk is within 1/8 mile of a school;
- Elderly or disabled pedestrian volumes of 15 or more are expected during the peak hour of pedestrian demand;
- Overall pedestrian volumes of 20 or more are expected during the peak hour of pedestrian demand, with

ADT volumes of 6,000 or higher;

- Pedestrians should be directed to a particular leg of the intersection for safety or efficiency reasons; or
- The crosswalk serves an intersection of one or more collector/arterial streets.

D.1.2 Yield-Controlled Crosswalk Countermeasures

Signal-controlled crosswalks are located at intersections controlled by yield signs. Yield-controlled crosswalks are less effective at controlling vehicle movements and protecting crossing pedestrians, as drivers may reduce speed but expect to travel fast through the crosswalk location. For this reason, yield control is most appropriate in contexts with low vehicle speeds and long sight distances, which allow drivers ample time to identify crossing pedestrians and come to a stop. The baseline countermeasures described in **Section D.1** are therefore particularly important to keep speeds low and establish good visibility between drivers and pedestrians. Yield-controlled crosswalks should be marked similarly to stop-controlled crosswalks, as described in **Section D.2**, and should have high-visibility continental crosswalk striping.

D.1.3 Signal-Controlled Crosswalk Countermeasures

Signal-controlled crosswalks are located at intersections controlled by a traffic signal. Traffic signals are either “actuated”, meaning that pedestrians must be detected or activate the pedestrian phase by pressing a push button, or are “pre-timed”, meaning that the pedestrians are served in each signal cycle and do not need to request to cross the street. While traffic signals generally are the strongest traffic control device for a crosswalk, conflicts between turning vehicles and pedestrians in the crosswalk can still cause pedestrian safety issues. For this reason, signal-controlled intersections may require geometric improvements to reduce speeds and traffic signal phasing solutions to address pedestrian-auto conflicts.

Marked crosswalks should generally be provided on all legs of signalized intersections. However, intersections with double left or double right turns must protect those turns to safely mark the conflicting crosswalk. Intersections with double right turns must have a “No Right Turn on Red” restriction or black out sign that is actuated when the conflicting pedestrian crossing phase is actuated.

The process outlined below should be used to identify potential countermeasures for use at signal-controlled crosswalks. It first outlines general safety improvements that should be considered at all signalized intersections. The process also provides guidance for additional signal phasing enhancements to remove or mitigate potential conflicts between pedestrians and turning vehicles, consisting of four flow charts that use inputs available from a typical field survey to identify potential countermeasures appropriate for the given context. These flow charts should be supplemented with the City’s best engineering judgment.

D.1.4 Universal Safety Countermeasures

The safety countermeasures in this section represent improvements that should be considered whenever new or modified signals are studied and include operational, pedestrian access, and geometric enhancements.

Universal traffic signal improvements include shortening cycle lengths, prioritizing multimodal travel, minimizing the number of signal phases, setting slow progression speeds, adjusting timing for off-peak hours, and considering fixed signal timing,

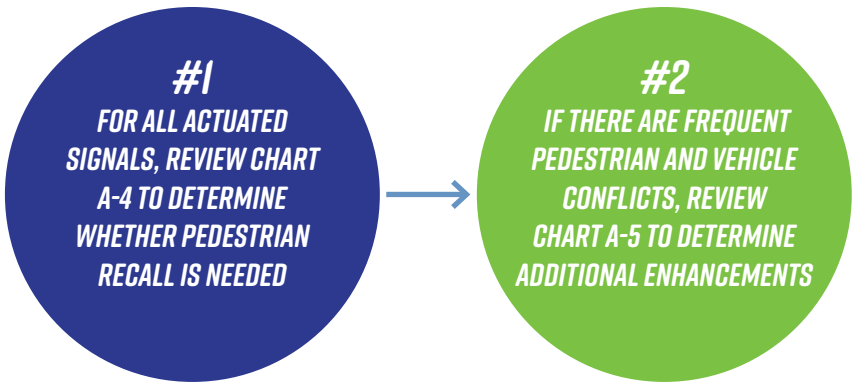
among others. These universal operational improvements are detailed in **Table B-5**.

D.2 Additional Signal Enhancements

Not all pedestrian/vehicle conflicts are addressed by the universal considerations for signal-controlled crosswalks, and additional safety needs at signalized intersections depend on intersection operations and design, roadway characteristics, and pedestrian volumes. After assessing the suitability of each of the universal considerations, additional signal enhancements should be considered for projects involving major signal modifications, corridor studies, traffic studies, or safety studies and where reported, near-miss, or observed conflicts between pedestrians and autos occur. First, review **Chart B-4** to determine if pedestrian recall is needed, and then review **Chart B-5** to identify which signal enhancements should be considered.

Intersections with frequent pedestrian and vehicle conflicts will return more substantive recommendations. Intersections with few pedestrian and vehicle conflicts will return treatments that require less-intensive signal modifications or even no changes.

Where LPIs are recommended, pedestrians



should be given a minimum of three-to-seven seconds head start, depending on pedestrian volumes, turning vehicle volumes, and roadway characteristics. At intersections with particularly high potential for conflicts or long crossing distances, LPIs of up to ten seconds May be appropriate. Longer LPIs give pedestrians more time to cross before the start of a green signal in the same travel direction, increasing visibility to turning vehicles and reinforcing pedestrian right-of-way, though they also increase intersection delay.⁸

Table B-5 summarizes the pedestrian access modifications that should be universally considered at signal-controlled crosswalks. Accessible pedestrian signals should be installed at all intersections to improve

pedestrian accessibility. These signals provide audible and vibrotactile information to improve accessibility for disabled pedestrians. Push buttons should also be mounted in medians six-feet or wider. When retrofitting existing medians less than six feet wide, the median should be widened with concrete or with striping and plastic posts to retain pedestrian push buttons and upgrade for ADA accessibility. If the median cannot be widened, any existing push buttons should be removed.

For all thresholds included in **Charts B-4** through **B-8**, if volumes are within 10% of a threshold, roundup to account for future demand and background growth in pedestrian and/or vehicle volumes.

⁸ FHWA Signalized Intersections: Informational Guide. Publication Number FHWA-HRT-04-091. August 2004.

Table B-5: Universal Safety Countermeasures for Signal-Controlled Crosswalks

Counter-measure	Description	Applicable to Which Projects?				
		New Signals/ Major Signal Modifications	Minor Signal Modifications	Signal Retiming	All Other Projects	Studies, Safety Issues
Accessible Pedestrian Signals	Accessible pedestrian signals (APS) communicate audible and vibrotactile information about the crossing to people who are blind or have low vision. They are typically activated with a push button with a large raised arrow.	✓			✓	✓
Pedestrian Countdown Signals	During the “Flash Don’t Walk” (i.e. flashing red hand) phase, a countdown timer should appear next to the flashing red hand. The timer shows how many seconds are remaining for pedestrians to cross the street before opposing traffic receives a green light. This is a safety countermeasure and is California requirement.	✓				✓
Adequate Minimum Walk Time	California has standards how long to give the pedestrian phase. The “Flash Don’t Walk” should provide enough time to cross the street based on a maximum walking speed of 3.5 feet per second. Slower speeds should be considered near sensitive uses, such as senior centers and schools.	✓	✓	✓		✓
Pedestrian Signals that “Rest in Walk”	On streets with coordinated traffic signals, the pedestrian crossing of the side street should always give pedestrians the walk phase (i.e. it should “Rest in Walk”), so that they do not have to push a button to get the walk phase.	✓	✓	✓		✓
Pedestrian Phase Actuation Extension	When pedestrians arrive at a crosswalk close to the signal changing to green or as the signal changes green for cars traveling in the same direction and press the push button, they typically do not receive a walk phase. The signal is programmed (“the actuation window”) to think the pedestrian is too late, and they have to wait a full signal cycle to get the walk phase. Instead, the actuation window can get extra time, so that pedestrians who arrive near the beginning of the vehicle green phase can still get the walk phase, without waiting a full signal cycle.	✓	✓			✓

Counter-measure	Description	Applicable to Which Projects?				
		New Signals/ Major Signal Modifications	Minor Signal Modifications	Signal Retiming	All Other Projects	Studies, Safety Issues
Pedestrian Recall	At many signals, pedestrians push a button to receive the walk phase. When a signal is on “pedestrian recall”, the walk phase is displayed each signal cycle, without pedestrians needing to push the button. This makes walking more convenient and reduces the amount of time pedestrians must wait (“pedestrian delay”).	✓	✓	✓		✓
Cycle Length Minimization	“Cycle length” is the amount of time it takes for every movement (e.g. northbound left turn, west crosswalk, etc) to receive a green light. This can range from 60-90 seconds or even several minutes, depending on how a signal is timed and the amount of traffic that is expected to move through it. Keeping cycle lengths short (i.e. closer to 60 seconds) means that pedestrians do not have to wait as long to receive a green light. When pedestrian delay is high, people may be more likely to cross against the light.	✓	✓	✓		✓
No Right Turn on Red	In California, drivers can turn right after stopping at a red light. This means they must look for a gap in traffic and for pedestrians who have the walk phase before proceeding. Red turn on red can be prohibited either all the time or at specific times (e.g. when the pedestrian walk phase is on or near bell times at a school) to enhance crosswalk safety. Right turn on red should always be prohibited for the inside turn lane when there is more than one right turn lane.	✓	✓	✓	✓	✓
Additional Signal Enhancements	Charts B-4 through B-7 assess the suitability of additional signal enhancements like leading pedestrian intervals, protected turn signals, and pedestrian scrambles. They should always be used to identify additional potential safety enhancements.	✓				✓

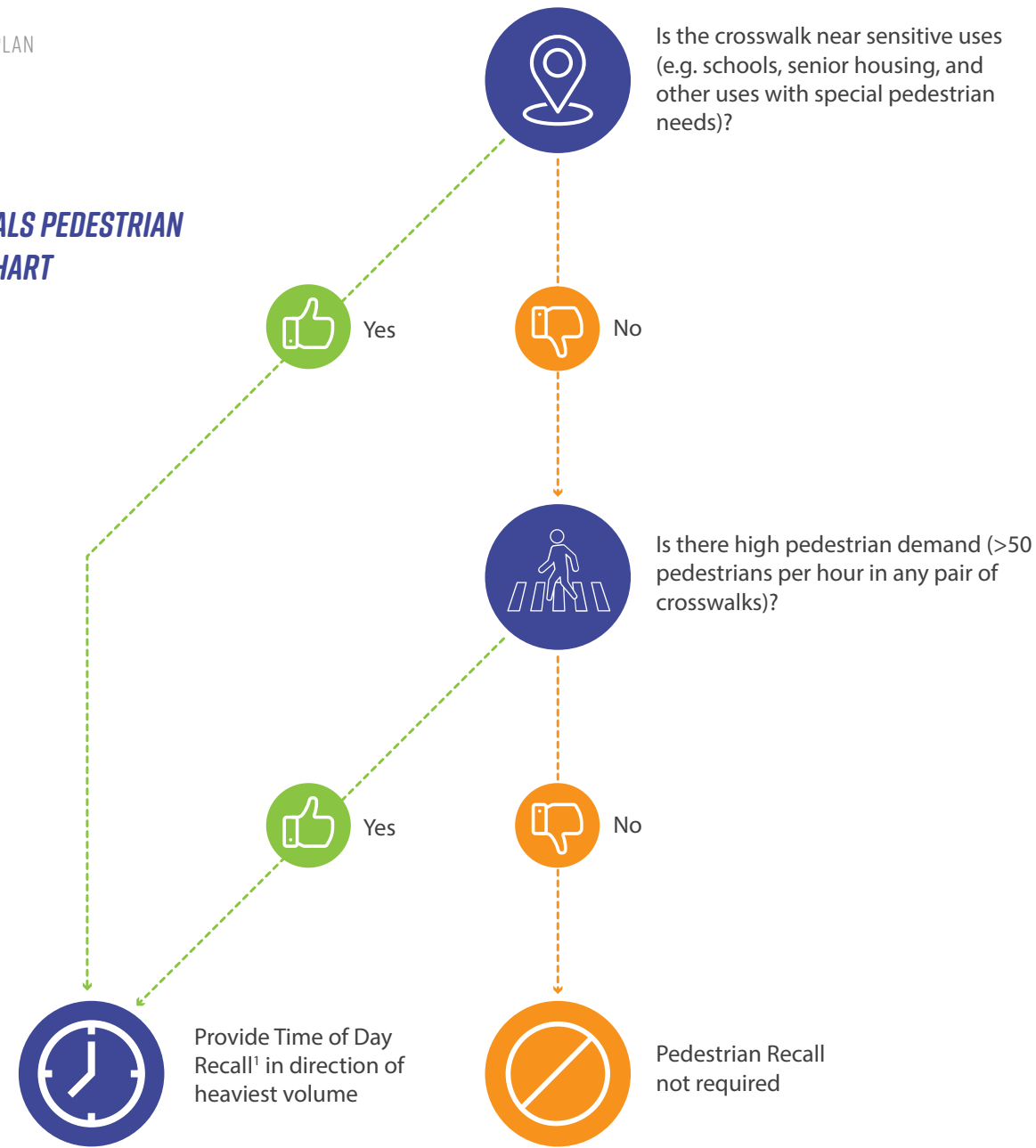
Source: Adapted from City of Oakland Great Streets Design Guidelines.

Table B-6: Guide to Using Flow Charts for Additional Signal Enhancements

Tool	Description	Step 1: Review Charts B-4 and B-5		Step 2: If identified by Chart B-5, determine additional signal enhancements based on Charts B-6, B-7, and B-8		
		Chart B-4: Actuated Signals	Chart B-5: Pedestrian and Vehicle Conflicts	Chart B-6: Left Turns on Two-Way Streets	Chart B-7: Right Turns on Two-Way Streets or Left Turns on One-Way Streets	Chart B-8: Pedestrian Scrambles
Time of Day Recall in Direction of Heavy Volume	City creates signal timings for different times in the day. Near bell times, peak periods, or relevant times of days, pedestrian always receive the walk phase and do not need to press the push button.	✓	Chart B-5 determines the use of Charts B-6, B-7, and B-8			
Pedestrian Scramble	Pedestrian Scramble: Provide a dedicated pedestrian phase, during which pedestrians can cross in any direction, including diagonally.			✓		✓
All-Pedestrian Phase	All Pedestrian Phase: Pedestrian have a dedicated pedestrian phase where they can cross in any crosswalk. Diagonally crossing is not allowed.			✓		✓
Protected Turn	If a turn is currently allowed (i.e. typical green ball signal, no green arrow), add a protected left-turn (i.e. green arrow) to separate the pedestrian phase from the conflicting vehicle turning movement.			✓	✓	
Leading Pedestrian Interval (LPI)	LPIs give pedestrians a 3-7 second “head start” before cars traveling in the same direction get the green signal. By the time the cars get the green light, sight lines between drivers and pedestrian are better or the pedestrian have finished crossing that part of the street.				✓	

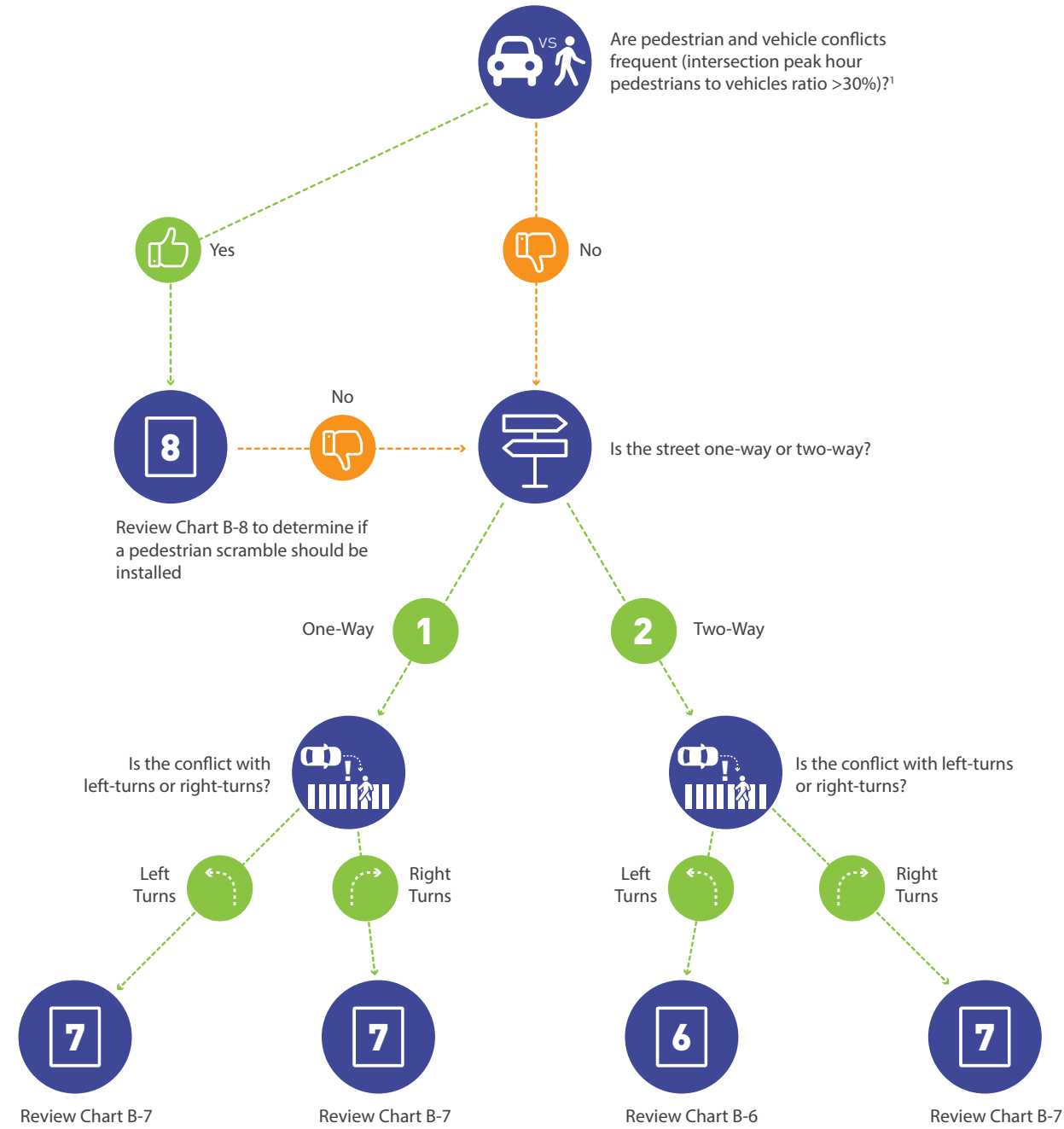
Tool	Description	Step 1: Review Charts B-4 and B-5		Step 2: If identified by Chart B-5, determine additional signal enhancements based on Charts B-6, B-7, and B-8		
		Chart B-4: Actuated Signals	Chart B-5: Pedestrian and Vehicle Conflicts	Chart B-6: Left Turns on Two-Way Streets	Chart B-7: Right Turns on Two-Way Streets or Left Turns on One-Way Streets	Chart B-8: Pedestrian Scrambles
LPI with No Right Turn on Red	These are the same as above with either a static (i.e. metal sign) or dynamic (i.e. a digital sign with a changing message) right-turn on red (RTOR) restriction. Prohibiting RTOR means that that a car can’t make a right turn when the LPI is on.		Chart B-5 determines the use of Charts B-6, B-7, and B-8		✓	
“Turning Vehicles Yield to Pedestrians” Sign	This is a static sign that can be posted at an intersection to try to increase driver awareness of pedestrian conflicts, but the potential for conflict still occurs.			✓	✓	
Split Phase	Typically, two directions of traffic get the green light at the same time (e.g. northbound and southbound through cars and east and west crosswalks). With a split phase, only one direction of traffic gets a green light, which can remove the conflicts between turning drivers and the adjacent crosswalks, for example. It also increases the cycle length and increases the amount everyone must wait at the intersections.			✓		
No Action Required	Conflicts are generally managed or limited, the set of tools are not appropriate, and/ or further action may not be needed.	✓	✓	✓	✓	✓

**CHART B-4:
ACTUATED SIGNALS PEDESTRIAN
OPTION FLOW CHART**



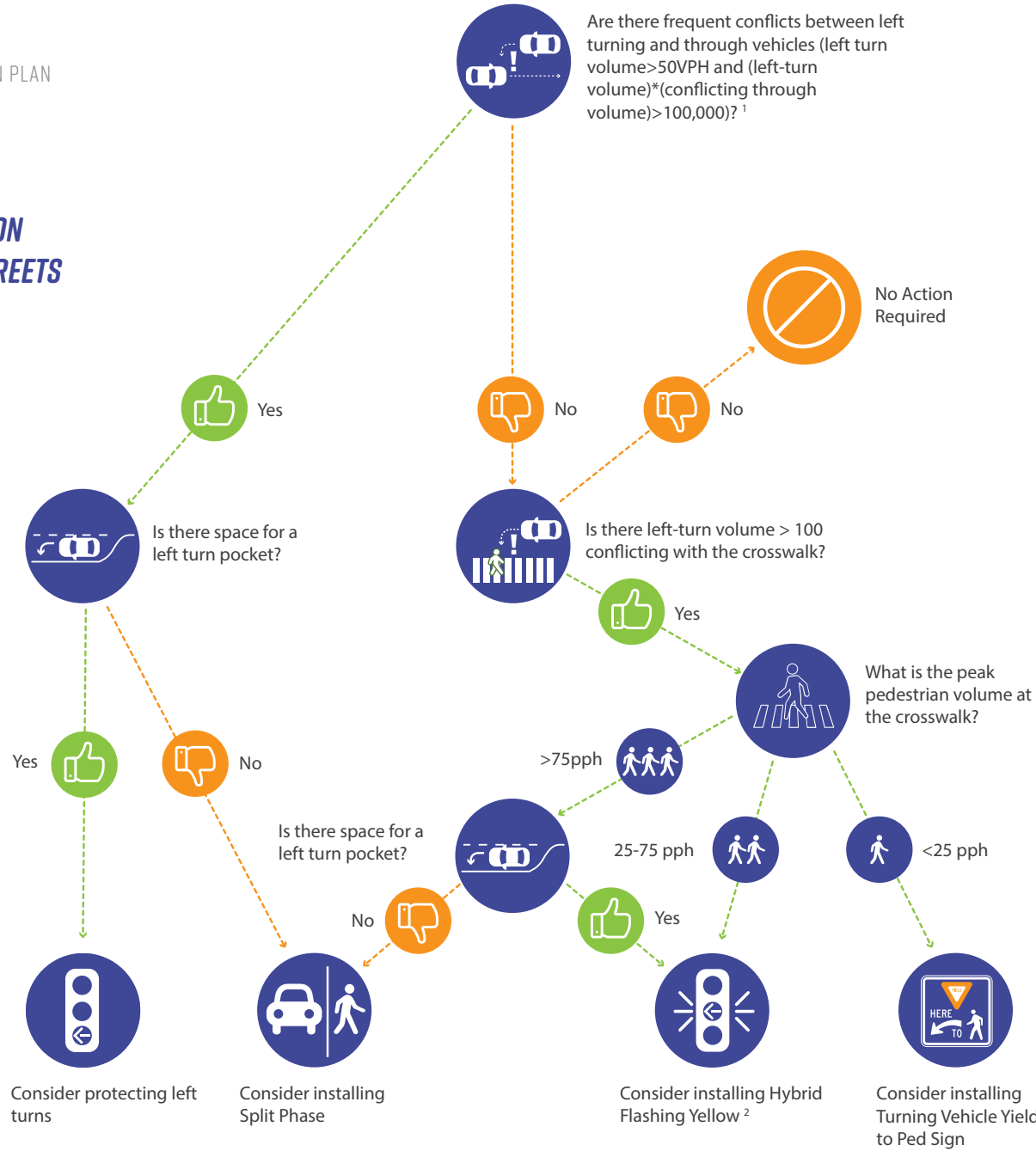
1. Recall should be provided any time there is high demand and/or during peak hours of use from sensitive uses.

**CHART B-5:
PEDESTRIAN AND
VEHICLE CONFLICTS**



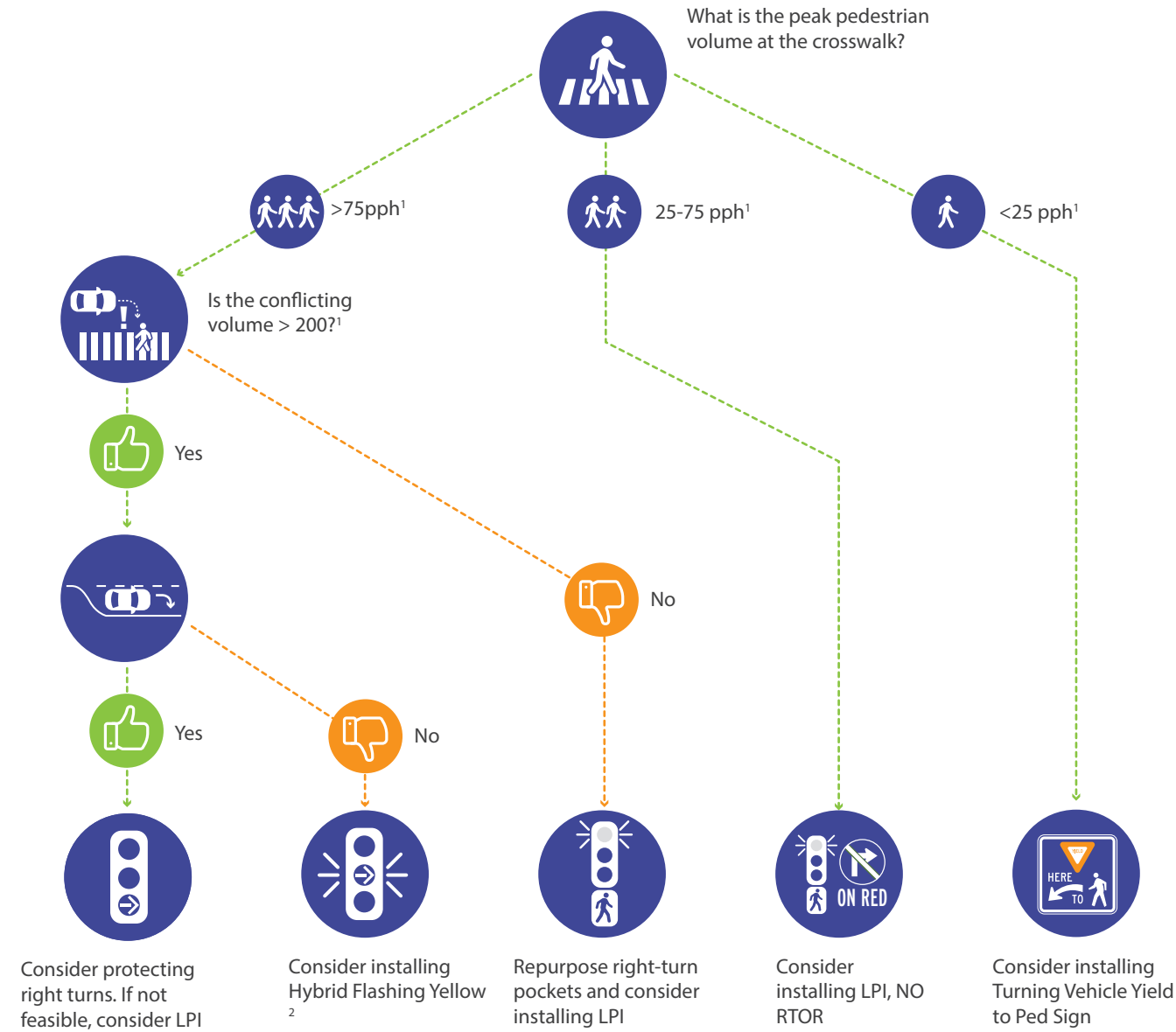
1. If volume(s) are within 10% of the threshold, roundup to account for background growth and future demand.

**CHART B-6:
LEFT-TURNS ON
TWO-WAY STREETS**



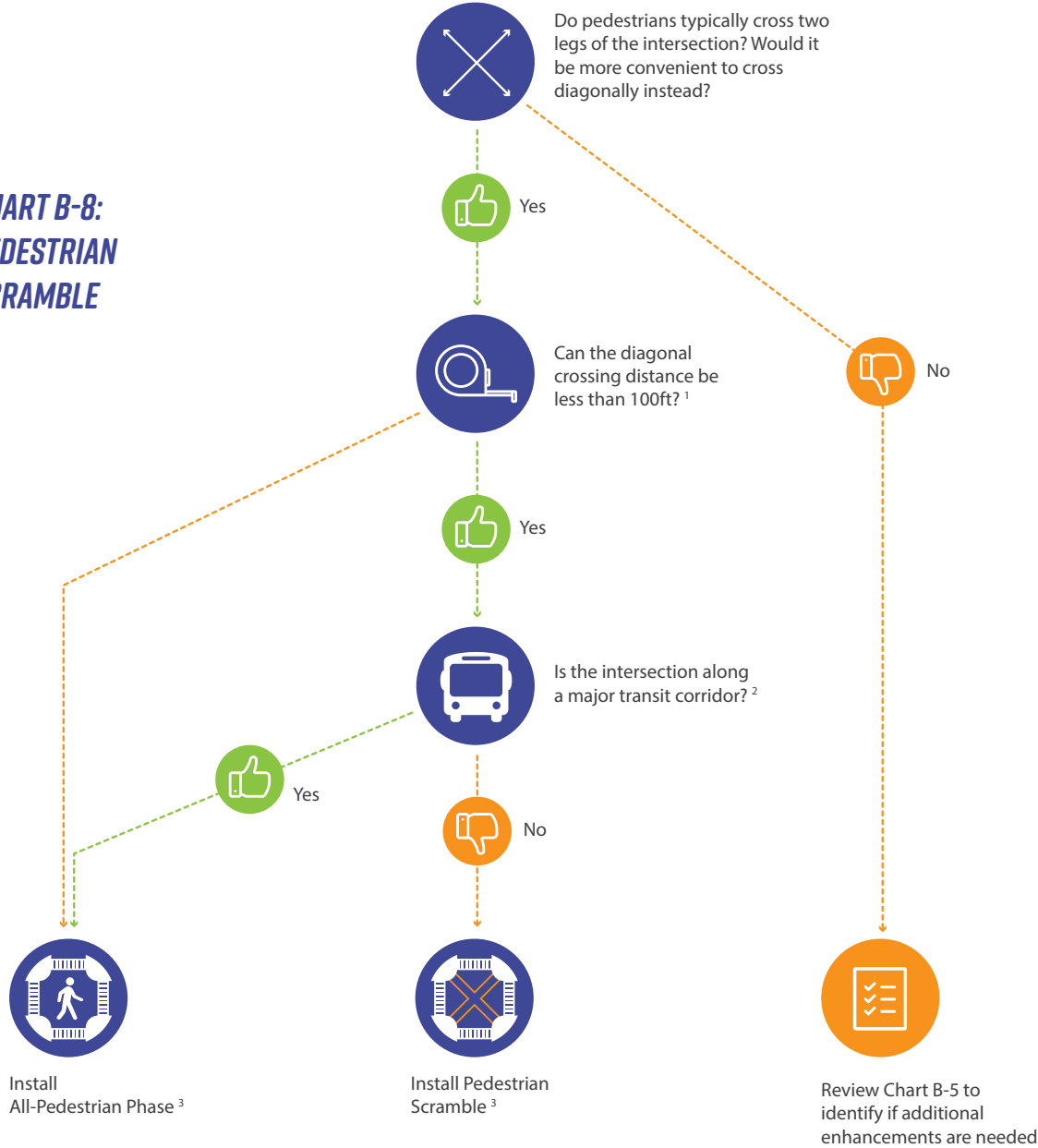
1. If volume(s) are within 10% of the threshold, roundup to account for background growth and future demand.
2. Protected turn when pedestrian phase is called. Otherwise, green ball with yellow flashing arrow.

**CHART B-7:
RIGHT TURNS ON TWO-WAY
STREETS AND LEFT TURNS
ON ONE-WAY STREETS**



1. If volume(s) are within 10% of the threshold, roundup to account for background growth and future demand.
2. Protected turn when pedestrian phase is called. Otherwise, green ball with yellow flashing arrow.

CHART B-8:
PEDESTRIAN
SCRAMBLE



1. Less than 100 feet after bulb-outs and other enhancements to shorten crossing distances have been implemented
2. If additional transit operations enhancements present (e.g. transit signal priority), still consider installing the scramble if it benefits access to transit.
3. For more information on these tools see Appendix C Safety Countermeasure Toolbox

Crosswalk Worksheet

This worksheet may be completed to outline the process used by staff to identify the countermeasures considered to improve pedestrian safety at any given crosswalk.

Major Road: _____

Minor Road or Location: _____

Date of Review: _____

Reviewer: _____

Peak Hour Observed: _____

FIELD VISIT AND
BACKGROUND
INFORMATION

CRITICAL ROADWAY
CHARACTERISTICS

Site Distance Issues (circle driver or pedestrian as applicable):

- 1. Parked cars (driver/ped)
- 2. Moving traffic obscures vision during crossing (driver/ped)
- 3. Roadway curvature (driver/ped)
- 4. Terrain (driver/ped)
- 5. Vegetation (driver/ped)
- 6. Significant sun glare (driver/ped)
- 7. Insufficient building setback (driver/ped)
- 8. Moveable roadside items, e.g., street furniture (driver/ped)
- 9. Fixed roadside items, e.g., signal control boxes, signs (driver/ped)
- 10. Inadequate roadway lighting (driver/ped)
- 11. Poor signal visibility (driver/ped)

Sight distance is generally acceptable if the pedestrian can easily be seen from a distance of 10x the speed limit or 250 feet. See Caltrans Highway Design Manual Chapter 400 for more information on calculating sight distance.

Sight Distance Mitigations

If any of the above issues are circled for the driver or pedestrian, can these issues be mitigated? If no, direct pedestrians to the nearest marked crosswalk (stop field view here) or consider installing a pedestrian signal or grade separation (continue below to collect data for warrant analysis). If yes, make note of mitigation options and continue below.

GENERAL PEDESTRIAN CHARACTERISTICS

- 1. Is the crossing along a direct route to a major pedestrian attractor/ generator? Circle: yes/no
- 2. Peak Hour Pedestrian Volume (total crossing major road): _____ pedestrians/hour
- 3. Pedestrian Crossing Distance, curb to curb: _____ feet
- 4. Distance to nearest marked crosswalk: _____ feet.
Is the crossing signalized? Circle: yes/no
- 5. Pedestrian Walking Speed (average): _____ ft/sec
- 6. Pedestrian Start-up and End Clearance Time: _____ sec
- 7. Existing Pedestrian Signal Timing (crossing major road): _____ sec
- 8. Existing Pedestrian Signal Provisions (count down/ push button/ scramble/ other/ none – circle all that apply)

- 9. Other Existing Pedestrian Accommodations (e.g., signage, crosswalk striping) – list here and include on diagram:

- a. _____
- b. _____

GENERAL VEHICLE/ ROADWAY CHARACTERISTICS

- 1. Major Road Traffic Speed (posted/ statutory/ 85th Percentile – circle one):
a. _____ MPH
- 2. Major Road Traffic Volume (total of both approaches during peak hour):
a. _____ vehicles/hour
- 3. Average Daily Traffic Volume
a. _____ vehicles/day
- 4. Number of Lanes on Major Road: _____ and on Minor Road: _____
- 5. Is a median present? Circle: Yes/no.
- 6. Typical Motorist Compliance at Pedestrian Crossings in Region: low/ medium/ high (circle one)

BEHAVIORAL INDICATORS

Check all that apply:

- 1. Inadequate pedestrian search (pedestrians enter roadway without searching): _____
- 2. Inadequate driver search (drivers proceed without searching): _____
- 3. Aborted crossing (return to curb after both feet in roadway): _____
- 4. Crossing against light (entry and exit from roadway against signal): _____
- 5. Small gaps (accepting gaps which require rapid crossings): _____
- 6. Leaving crosswalk (crossing starts or ends outside of an available crosswalk): _____
- 7. Crossing in front of a bus: _____
- 8. Vehicle overtaking (ped crosses in front of stopped traffic – Multiple Threat): _____
- 9. Running (entry or crossing while running or moving fast): _____
- 10. Short time exposure (e.g., appearance from behind parked car): _____
- 11. Retreat (momentary reversal in pedestrian direction of travel): _____

ADDITIONAL INFORMATION

Community Characteristics:

- 1. Population: _____ people
- 2. Distance to major transit hub: _____ feet or miles (circle one)
- 3. Average age in Census Block: _____ years versus citywide average of: _____ years

Potential Risk Factors:

- 1. Have pedestrian collisions occurred at this location in the past 5 years? Circle: yes/no
 - a. Number of injuries: _____ people
 - b. Number of fatalities: _____ people
- 2. Potential or Observed Conflicts (circle observed or potential as applicable):
 - a. Pedestrian walks too close to a vehicle – NEAR SIDE OF CROSSING (observed/ potential)
 - b. Pedestrian walks too close to a vehicle – FAR SIDE (observed/ potential)
 - c. Right turn vehicle (on green) too close to pedestrian (observed/ potential)
 - d. Left turn vehicle too close to pedestrian (observed/ potential)

- e. Right turn on red vehicle too close to pedestrian (observed/ potential)
- 3. Other Risk Factors (check all that apply):
 - a. Poor crossing surface: _____
 - b. Faded roadway striping (e.g. crosswalk striping): _____
 - c. High crime area/ personal safety concerns: _____
 - d. Businesses selling alcohol near study location: _____
 - e. School near study location: _____
 - f. Senior facility near study location: _____

Observations or suggestions for appropriate education or enforcement measures based on this field view:

FINDINGS MARKING UNCONTROLLED CROSSWALKS

Does **Chart B-3** recommend considering a marked crosswalk? Circle: yes/no.

If no, what were the limiting factors (list all that apply)?

ENHANCING UNCONTROLLED CROSSWALK

1a. Can a road diet be completed? Circle: yes/no

If no, what were the limiting factors (list all that apply, include consideration of ADT and prevailing speeds)?

1b. Can a median or median refuge be installed? Circle: yes/no

If no, what were the limiting factors (list all that apply, include discussion of roadway width, narrowed travel lanes, and road diet)?

2. What Level of Enhancement Does Recommend? Circle: A, B, C, or D.

Are there any barriers or contextual issues with installing that recommendation?

3. What Additional Candidate Treatments Does **Table B-3** Suggest? Circle all that apply: 1, 2, 3, 4, 5, 6, 7, 8, 9.

Which countermeasures are contextually appropriate for the site and will be included in the project? Include all countermeasures circled above and note why they were or were not included in the project.

4. Review reported collisions and reported community safety concerns and then review **Table B-4**: Do the proposed countermeasures in Step #2 and #3 address all the reported issues? Circle: yes/no.

If no, which safety issues are not addressed? Which additional countermeasures or enhancements can be incorporated to address the safety issues?

CONTROLLED CROSSWALKS

1. What is the intersection control type: Circle: signalized, stop-controlled, or yield-controlled (if at roundabout, refer to Uncontrolled Crosswalk section).

2. Review **Section D.1** and identify all baseline improvements to be incorporated into the project. Identify which elements are and are not incorporated into the project. Identify the engineering constraints for baseline conditions not incorporated into the project.

3a. For signals, review **Section D.1.3** and identify which elements are and are not incorporated into the project. Identify the engineering constraints for universal conditions not incorporated into the project.

3b. If an actuated signal, review **Chart B-4**. Is pedestrian recall needed? Circle: yes/no

3c. Review **Chart B-5** and, if appropriate, review **Charts B-6** through **B-8**. Record the results and identify if engineering constraints apply:

Chart B-5:

Chart B-6:

Chart B-7:

Chart B-8:

4. For stop-control review **Section D.1.1** and for yield-control review **Section D.1.2**, should crosswalks be marked? Circle: yes/no.



Appendix C

.....

Plan Conformance with ATP Guidelines

This plan meets all requirements for active transportation plans as identified by the California Transportation Commission's 2017 Active Transportation Program Guidelines. The Guidelines list 17 key elements for transportation plans.

Table C-1: Plan Conformance with ATP Guidelines

Item	ATP Requirements	See Chapter No.
1	The estimated number of existing bicycle trips and pedestrian trips in the plan area, both in absolute numbers and as a percentage of all trips, and the estimated increase in the number of bicycle trips and pedestrian trips resulting from implementation of the plan.	Chapter 2
2	The number and location of collisions, serious injuries, and fatalities suffered by bicyclists and pedestrians in the plan area, both in absolute numbers and as a percentage of all collisions and injuries, and a goal for collision, serious injury, and fatality reduction after implementation of the plan.	Chapter 2
3	A map and description of existing and proposed land use and settlement patterns which must include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, major employment centers, and other destinations.	Chapter 2
4	A map and description of existing and proposed bicycle transportation facilities, including a description of bicycle facilities that serve public and private schools and, if appropriate, a description of how the five Es (Education, Encouragement, Enforcement, Engineering, and Evaluation) will be used to increase rates of bicycling to school	Chapter 2 and Chapter 4
5	A map and description of existing and proposed end-of-trip bicycle parking facilities.	Chapter 4
6	A description of existing and proposed policies related to bicycle parking in public locations, private parking garages and parking lots and in new commercial and residential developments.	Chapter 3
7	A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These must include, but not be limited to, bicycle parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.	Chapter 4
8	A map and description of existing and proposed pedestrian facilities, including those at major transit hubs and those that serve public and private schools and, if appropriate, a description of how the five Es (Education, Encouragement, Enforcement, Engineering, and Evaluation) will be used to increase rates of walking to school. Major transit hubs must include, but are not limited to, rail and transit terminals, and ferry docks and landings.	Chapter 2 and Chapter 4
9	A description of proposed signage providing wayfinding along bicycle and pedestrian networks to designated destinations.	Chapter 4

Item	ATP Requirements	See Chapter No.
10	A description of the policies and procedures for maintaining existing and proposed bicycle and pedestrian facilities, including, but not limited to, the maintenance of smooth pavement, ADA level surfaces, freedom from encroaching vegetation, maintenance of traffic control devices including striping and other pavement markings, and lighting.	Chapter 3
11	A description of bicycle and pedestrian safety, education, and encouragement programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the law impacting bicycle and pedestrian safety, and the resulting effect on collisions involving bicyclists and pedestrians.	Chapter 3 and Chapter 5
12	A description of the extent of community involvement in development of the plan, including disadvantaged and underserved communities.	Chapter 1
13	A description of how the active transportation plan has been coordinated with neighboring jurisdictions, including school districts within the plan area, and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, general plans and a Sustainable Community Strategy in a Regional Transportation Plan.	Chapter 1
14	A description of the projects and programs proposed in the plan and a listing of their priorities for implementation, including the methodology for project prioritization and a proposed timeline for implementation.	Chapter 4 and Appendix A
15	A description of past expenditures for bicycle and pedestrian facilities and programs, and future financial needs for projects and programs that improve safety and convenience for bicyclists and pedestrians in the plan area. Include anticipated revenue sources and potential grant funding for bicycle and pedestrian uses.	Chapter 4 and Chapter 5
16	A description of steps necessary to implement the plan and the reporting process that will be used to keep the adopting agency and community informed of the progress being made in implementing the plan.	Chapter 4 and Chapter 5
17	A resolution showing adoption of the plan by the city, county or district. If the active transportation plan was prepared by a county transportation commission, regional transportation planning agency, MPO, school district or transit district, the plan should indicate the support via resolution of the city(s) or county(s) in which the proposed facilities would be located.	Chapter 3



Pittsburg Moves – Active Transportation Plan

Public Draft Initial Study – Mitigated Negative Declaration

prepared by

City of Pittsburg
Planning Division
65 Civic Avenue
Pittsburg, California 94565
Contact: Hector Rojas, AICP, Senior Planner

prepared with the assistance of

Rincon Consultants, Inc.
449 15th Street, Suite 303
Oakland, California 94612

August 2020



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

Pittsburg Moves – Active Transportation Plan

Public Draft Initial Study – Mitigated Negative Declaration

prepared by

City of Pittsburg
Planning Division
65 Civic Avenue
Pittsburg, California 94565
Contact: Hector Rojas, AICP, Senior Planner

prepared with the assistance of

Rincon Consultants, Inc.
449 15th Street, Suite 303
Oakland, California 94612

August 2020



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

This report prepared on 50% recycled paper with 50% post-consumer content.

Table of Contents

Initial Study	1
1. Project Title	1
2. Lead Agency Name and Address	1
3. Contact Person and Phone Number	1
4. Project Location	1
5. Project Sponsor's Name and Address	1
6. General Plan Designation	1
7. Zoning	1
8. Description of Project	1
9. Surrounding Land Uses and Setting	7
10. Other Public Agencies Whose Approval is Required	7
11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?	7
Environmental Factors Potentially Affected	9
Determination	9
Environmental Checklist	11
1 Aesthetics	11
2 Agriculture and Forestry Resources	17
3 Air Quality	19
4 Biological Resources	23
5 Cultural Resources	35
6 Energy	39
7 Geology and Soils	41
8 Greenhouse Gas Emissions	49
9 Hazards and Hazardous Materials	53
10 Hydrology and Water Quality	57
11 Land Use and Planning	63
12 Mineral Resources	65
13 Noise	67
14 Population and Housing	73
15 Public Services	75
16 Recreation	77
17 Transportation	79
18 Tribal Cultural Resources	83
19 Utilities and Service Systems	87
20 Wildfire	91
21 Mandatory Findings of Significance	93

References 95

 Bibliography 95

 List of Preparers 99

Tables

Table 1 Representative Active Transportation Projects with Potential Effects on Biological
Resources 25

Table 2 Caltrans Criteria for Vibration Annoyance 69

Table 3 Caltrans Criteria for Vibration Damage..... 69

Table 4 Typical Construction Noise Levels..... 70

Table 5 Vibration Levels for Construction Equipment..... 72

Figures

Figure 1 Regional Location2

Figure 2 Project Location3

Figure 3 Proposed Bicycle Network5

Figure 4 Proposed Pedestrian Projects6

Figure 5 Photographs of Representative Sites with Views Affected by Proposed Projects 14

Figure 6 Photographs of Representative Sites with Views Affected by Proposed Projects 15

Appendices

Appendix A Proposed Active Transportation Projects

Initial Study

1. Project Title

Pittsburg Moves – Active Transportation Plan

2. Lead Agency Name and Address

City of Pittsburg
Planning Division
65 Civic Avenue
Pittsburg, California 94565

3. Contact Person and Phone Number

Hector Rojas, AICP, Senior Planner, 925-252-4043

4. Project Location

Citywide, City of Pittsburg (see Figure 1 for regional location Figure 2 for project location)

5. Project Sponsor's Name and Address

Same as Lead Agency

6. General Plan Designation

N/A, Citywide

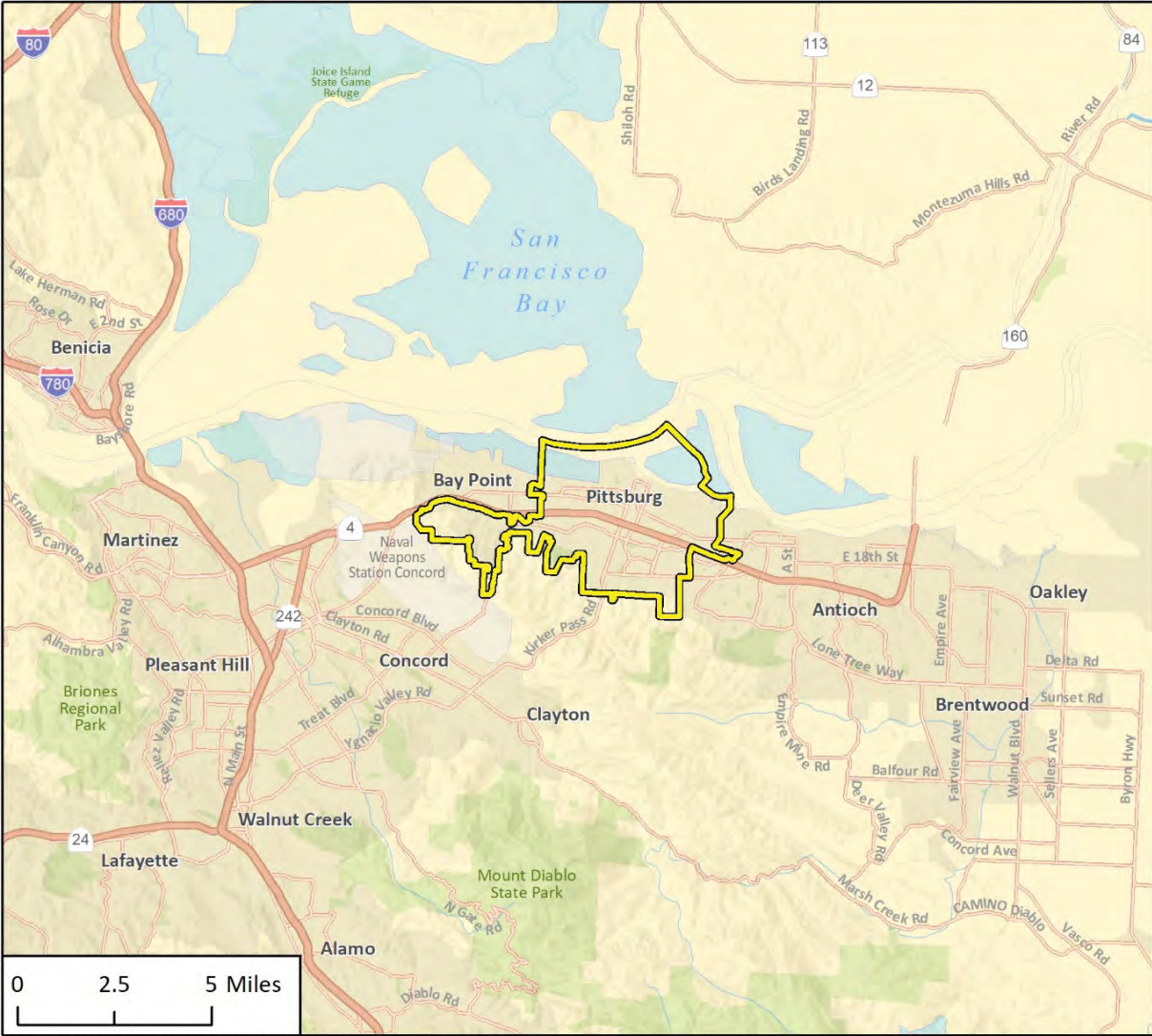
7. Zoning

N/A, Citywide

8. Description of Project

The proposed Pittsburg Moves – Active Transportation Plan (the “Plan”) is intended to increase walking and biking in the city of Pittsburg. The Plan has two basic elements: 1) a set of policies, programs, and practices to support a robust and comfortable active transportation network near schools, parks, and transit stations, and 2) a comprehensive list of proposed improvements to bicycle and pedestrian infrastructure.

Figure 1 Regional Location



Imagery provided by Esri and its licensors © 2020.

★ City of Pittsburg

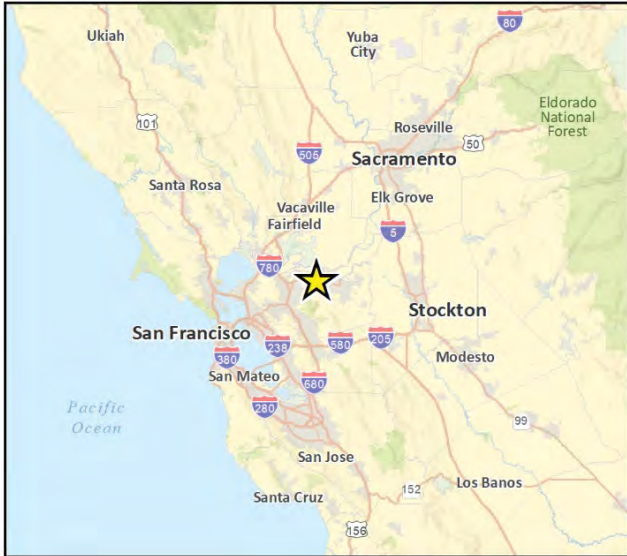


Figure 2 Project Location



The Plan's objectives include:

- Decreasing vehicle miles traveled by increasing the proportion of trips accomplished by biking and walking
- Increasing the safety and mobility of pedestrians and bicyclists of all ages and abilities
- Supporting the region's greenhouse gas reduction goals
- Improving public health outcomes, especially for residents living in areas identified as a disadvantaged community

Proposed sidewalk, crosswalk, and bicycle projects listed in the Plan were selected based on input gathered from several community engagement activities and other activities. The City held a Walking Workshop in Old Town, Community Workshops at City Hall, and pop-up events during National Night Out, Movies in the Park, and the Pittsburgh Farmer's Market.

Table A-1 in Appendix A presents the Plan's full list of individual projects, sorted by trails, east-west corridors, and north-south corridors. Figure 3 and Figure 4, respectively, show the location of each bicycle and pedestrian project listed in the Plan. Proposed bicycle projects include four classes of facilities:

- Class I bike paths (paved routes that are completely separate from roadways and are typically shared with pedestrians)
- Class II bike lanes and buffered bike lanes (on-street lanes designated for bicyclists using stripes and stencils)
- Class III bicycle boulevards and routes (streets suitable for sharing the same right-of-way with motor vehicles)
- Class IV bikeways (protected bike lanes where parked cars, curbs, bollards, or planter boxes provide physical separation between bicyclists and moving cars) (Oakland 2020)

Pedestrian facilities listed in the Plan include the following types of crosswalk enhancements:

- Crosswalk striping
- Wayfinding signs
- Rectangular Rapid Flashing Beacons (RRFBs)
- Pedestrian Hybrid Beacons (PHBs)
- Upgraded curb ramps
- Advanced yield markings and signs for drivers
- Raised crosswalks
- Median refuges
- Curb extensions to shorten crossings
- Trail crossing signals
- Accessible push buttons for bicyclists

In addition, projects listed in the Plan include supportive infrastructure for bicyclists and pedestrians, such as bike racks and lockers at the Pittsburgh Bay Point BART station and additional lighting on streets and paths.

Figure 3 Proposed Bicycle Network

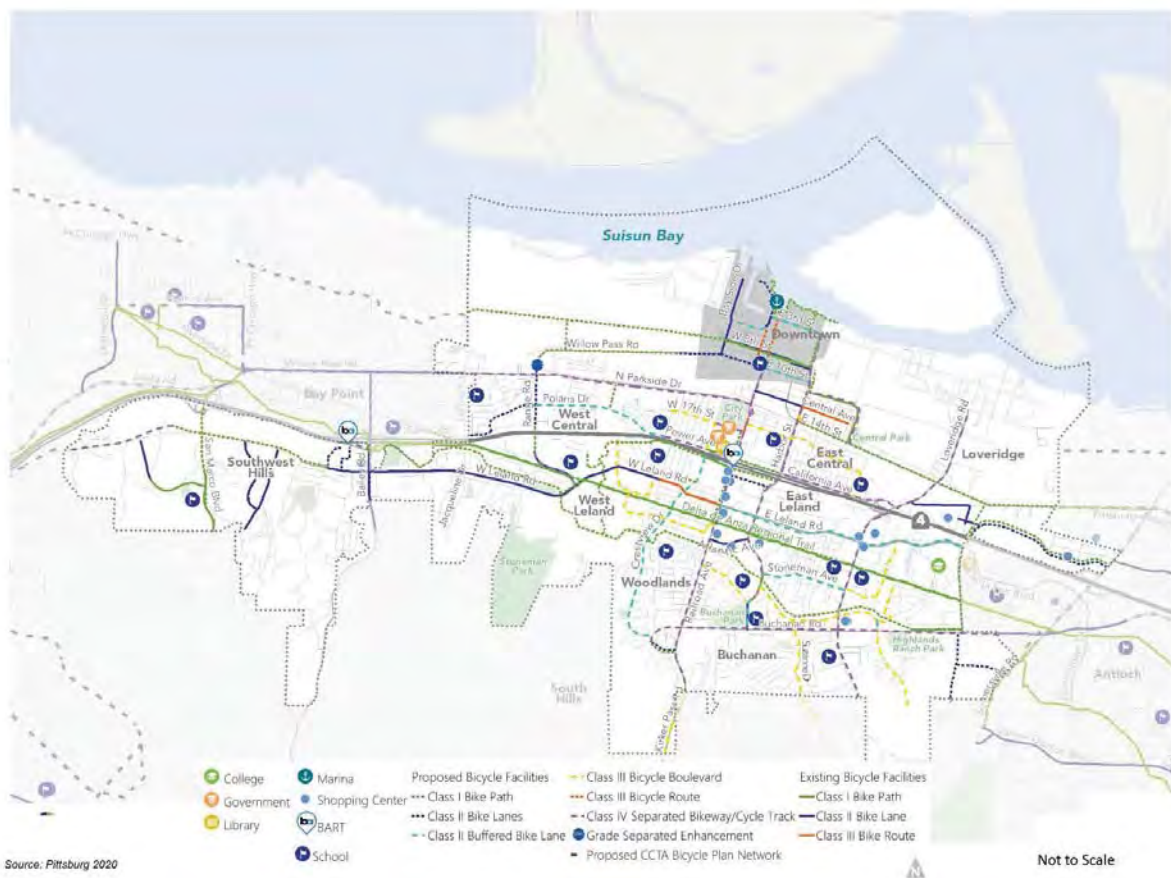
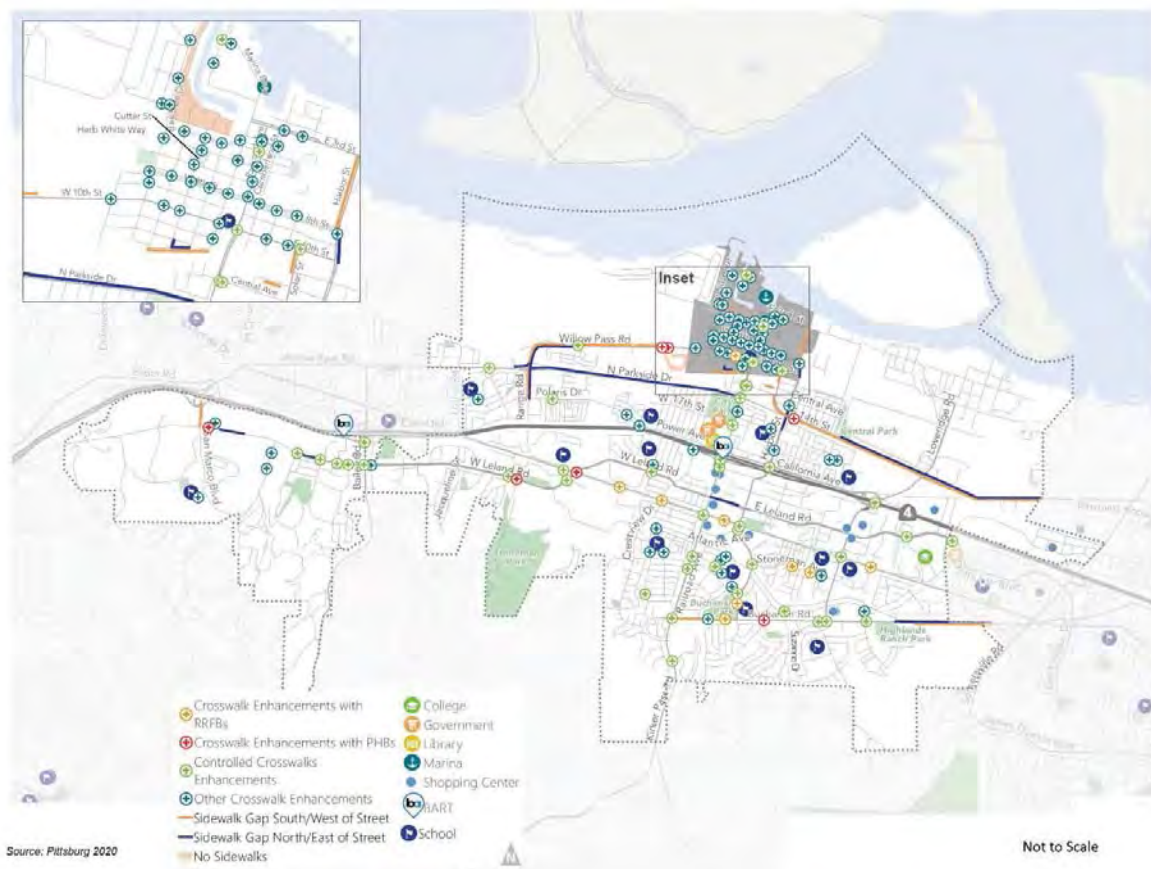


Figure 4 Proposed Pedestrian Projects



Adoption of the proposed Plan would set in place a long-term program for the future construction of the active transportation projects listed in Appendix A; however, adoption in itself would not directly involve the construction of such projects. Thus, this Initial Study evaluates the environmental impacts associated with the Plan at a programmatic level and provides programmatic-level mitigation measures. All future active transportation projects forwarded as implementing actions of the Plan, when proposed for construction, will be compared with the Plan program and programmatic mitigation measures, with the anticipated benefit of more detailed construction drawings and scheduling information.

9. Surrounding Land Uses and Setting

Pittsburg is surrounded by a mixture of rural landscapes, developed areas, and waterways. The city of Antioch is east of Pittsburg, with open space, business park, and single-family residential land uses next to city limits (Pittsburg 2019a). Honker Bay and the northern side of the Sacramento River, which are part of the greater Sacramento-San Joaquin River Delta, are north of the city in Solano County. Undeveloped, rolling terrain in the South Hills, Southwest Hills, and Black Diamond areas in unincorporated Contra Costa County is south of the Pittsburg city limits. This area mainly has rural and agricultural land uses. A narrow segment of the city of Concord, with undeveloped rolling hills, also touches the southwestern city limits. Urbanized areas in the unincorporated community of Bay Point and wetlands adjacent to Suisun Bay are to the west of Pittsburg.

10. Other Public Agencies Whose Approval is Required

None.

11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

No.

This page intentionally left blank.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources | ☐ Energy |
| ☒ Geology/Soils | ☐ Greenhouse Gas Emissions | ☒ Hazards & Hazardous Materials |
| ☐ Hydrology/Water Quality | ☐ Land Use/Planning | ☐ Mineral Resources |
| ☒ Noise | ☐ Population/Housing | ☐ Public Services |
| ☒ Recreation | ☐ Transportation | ☒ Tribal Cultural Resources |
| ☐ Utilities/Service Systems | ☐ Wildfire | ☒ Mandatory Findings of Significance |

Determination

Based on this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

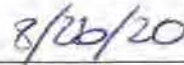
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

Hector Rojas

Printed Name



Date

Senior Planner

Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

A scenic highway is generally defined by Caltrans as a public highway that traverses an area of outstanding scenic quality, containing striking views, flora, geology, or other unique natural attributes. One highway section in Contra Costa County is a State-designated scenic highway: the segment of State Route 24 from the east portal of the Caldecott Tunnel to State Route 680 near Walnut Creek (Pittsburg 2019a). Pittsburg is not visible from this roadway segment.

A scenic corridor is the view from a road that may include a distant panorama and/or the immediate roadside area (Pittsburg 2019a). A scenic corridor encompasses the outstanding natural features and landscapes that are considered scenic. The City's existing General Plan does not designate any scenic corridors (the General Plan is currently being updated).

The City's General Plan identifies open space, viewshed areas, ridgelines, hillsides, and creeks as visual and aesthetic resources (Pittsburg 2019a). As shown in Figure 4-1 of the General Plan, multiple small ridgelines in the southern hills are visible from various parts of Pittsburg (Pittsburg 2010a). These southern hills lend Pittsburg residents a sense of identity. Drivers recognize the transition into Pittsburg as they crest the ridgeline on State Route 4 from Concord. Views of the hills to the south, and Suisun Bay to the north create an identifiable entryway for the City. Views from

the southern hills include vistas of cityscape and Suisun Bay beyond. Figure 9-1 in the General Plan designates major ridgelines which are the highest and most visually prominent ridgelines along the southern skyline. The General Plan notes that preserving these ridgelines from development will help preserve the aesthetic value of the viewshed (Pittsburg 2019a).

The City's General Plan also notes that the Delta shoreline is one of the City's most identifiable visual resources, although it is not designated as a scenic resource (Pittsburg 2019a). Views of the Delta shoreline from public spaces are limited. The General Plan notes that waterfront development standards should ensure that new development projects are designed to provide maximum views of the shoreline.

a. Would the project have a substantial adverse effect on a scenic vista?

The proposed Plan would facilitate the development of active transportation projects in Pittsburg, a city where scenic vistas of the southern hills are valued. The Delta shoreline at the northern edge of Pittsburg also has the potential to serve as a scenic resource although public views of the shoreline are currently limited. New Class I shared-use paths, Class II bike lanes, crosswalk enhancements, and other active transportation improvements listed in the Plan would not block or otherwise alter existing scenic vistas of the southern hills or Delta shoreline. No buildings or similar visual barriers that could affect existing scenic vistas are proposed in the Plan. Therefore, the Plan would not have an adverse effect on a scenic vista.

Several proposed bicycle and pedestrian projects in the Plan would in fact make scenic vistas more accessible to Pittsburg residents and visitors. For example, the proposed Delta Waterfront Access Trail would add 1.1 miles of a Class I path for bicyclists and pedestrians on the shoreline between the Pittsburg Public Boat Ramp and the Koch Carbon industrial property east of downtown. Similarly, a proposed 3-mile segment of the California Delta Trail from the western city limit to 8th Street would add a Class I path through the Pittsburg Wetlands with views of the Delta shoreline. A proposed Class III bicycle boulevard on Kirker Pass Road also would provide safer access for bicyclists to a route with views of the southern hills. Therefore, the Plan would have a beneficial overall effect on scenic vistas. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

As discussed above, Pittsburg is not visible from the nearest State-designated scenic highway, which is State Route 24 from the east portal of the Caldecott Tunnel to State Route 680 near Walnut Creek. The nearest State route that is eligible for designation as a scenic highway is State Route 4 from State Route 160 near Antioch to Route 84 near Brentwood (Caltrans 2019). Pittsburg is approximately 4.5 miles west of this highway segment and is marginally visible from it. Therefore, the construction of bicycle and pedestrian improvements in Pittsburg under the proposed Plan would not affect scenic resources within a State scenic highway. No impact would occur.

NO IMPACT

- c. *Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The proposed Plan would apply to the urbanized area within Pittsburg city limits. New bicycle and pedestrian projects listed in the Plan would not conflict with General Plan policies to protect public views of scenic ridgelines. Zoning regulations applicable to scenic quality in Pittsburg address antennas, fence and wall heights on residential properties, outdoor storage and displays, recycling collections facilities, wireless telecommunication facilities, grading, and hillside development, among other issues. New bicycle and pedestrian projects would not include features that could conflict with these regulations.

Figure 5 and Figure 6 show existing conditions at representative sites where proposed active transportation projects would alter views from public vantage points. As indicated by these figures, proposed Class I shared-use paths and Class II bike lanes in some locations would require the removal of trees in medians or the removal of streetside vegetation, for instance on Range Road, 10th Street, and San Marco Boulevard. However, as discussed above, the Plan would be located in an urbanized area where it would not conflict with applicable zoning and other regulations governing scenic quality. Therefore, the Plan would have a less than significant impact.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

Projects listed in the Plan would add the following types of lighting to improve visibility and enhance safety for pedestrians and bicyclists:

- Pedestrian-scale lighting on Class I shared-use paths and from the public right-of-way to BART stations
- Additional street lighting adjacent to BART stations
- Crosswalk lighting (Rectangular Rapid Flashing Beacons and Pedestrian Hybrid Beacons)

Many crosswalk projects listed in the Plan also call for ensuring adequate nighttime lighting levels. These projects would result in additional nighttime lighting near shared-use paths, streets, and crosswalks in Pittsburg. However, lighting for bicyclists and pedestrians is generally smaller in scale and provides less illumination than typical lighting on streetscapes. New lighting also would be in and next to urbanized areas of Pittsburg where some street and building lighting is already present. Lighting in these areas, at a scale appropriate for bicyclists and pedestrians, would not substantially affect views in less developed parts of the city (e.g., the southern hills) that are darker at night. Therefore, proposed lighting in specific locations under the Plan would not substantially increase nighttime lighting levels or glare in Pittsburg to the extent that would affect views.

LESS THAN SIGNIFICANT IMPACT

Figure 5 Photographs of Representative Sites with Views Affected by Proposed Projects



Photograph 1. San Marco Road, looking northward, where a 1.2-mile Class I shared-use path is proposed on the west side of the road leading to West Leland Road.



Photograph 2. Range Road, looking northward from Polaris Drive, where trees in the center median would be removed to add Class II bike lanes.

Figure 6 Photographs of Representative Sites with Views Affected by Proposed Projects



Photograph 3. 10th Street, looking eastward at York Street, where a median with trees would be removed to accommodate Class II bike lanes.



Photograph 4. PG&E utility corridor, looking westward, where a 3-mile Class I shared-use path would be added through the Pittsburg Wetlands.

This page intentionally left blank.

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

Proposed bicycle and pedestrian projects in the Plan are almost entirely located in urban or wetland areas of Pittsburg that the California Department of Conservation does not identify as suitable for farmland (California Department of Conservation 2017). The only exceptions are proposed Class I shared-use paths and Class II bike lanes located in a wide utility corridor that runs from the southern hills to the north through the West Leland and West Central areas. The California Department of Conservation has mapped this corridor as Farmland of Local Importance. However, this potentially arable land is occupied by utility and roadway infrastructure and is not practically suitable for farming. Furthermore, it is not designated as Prime Farmland, Unique Farmland, or Farmland of

Statewide Importance. Therefore, the Plan would not facilitate conversion of such land to non-agricultural use, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

Pittsburg does not have any land zoned for agricultural use (Pittsburg 2010b). Although approximately 259 acres in city limits are occupied by “dry farming, farming, grazing, [or] pasture” uses, the proposed bicycle and pedestrian projects listed in the Plan would not be located on agricultural land. Therefore, the Plan would not conflict with agricultural zoning or Williamson Act contracts for preservation of agricultural use. No impact would occur.

NO IMPACT

- c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

- d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

Pittsburg does not have any land zoned for forestry (Pittsburg 2010b). According to Figure 5.2-1 in the City’s Existing Conditions Report, no forested land cover is located within city limits (Pittsburg 2019a). Therefore, the Plan would not conflict with zoning for forest land or timberland, and it would not result in the loss of forest land. No impact would occur.

NO IMPACT

- e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

As discussed in Items a and d, the Plan would not result in the conversion of land used for agricultural or forestry purposes. Therefore, no impact would occur.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The applicable air quality management plan (AQMP) for Pittsburg is the 2017 Clean Air Plan adopted by the Bay Area Air Quality Management District (BAAQMD) in April 2017. To be consistent with an AQMP, a project must conform to the local General Plan and must not result in or contribute to an exceedance of the local jurisdiction's forecasted future population. A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP. Population growth would lead to increased vehicle use, energy consumption, and associated air pollutant emissions.

As discussed in Section 14, *Population and Housing*, implementation of the Plan would not involve the construction of infrastructure that could induce substantial population growth such as new or increased capacity sewer or water lines, or the construction of new streets and roads. While the proposed active transportation projects would make non-motorized transportation more efficient, this would not be a substantial growth-inducing effect in Pittsburg. Furthermore, planning for additional active transportation facilities, including safe routes to schools, would be consistent with strategies in the 2017 Clean Air Plan to reduce emissions of criteria air pollutants from transportation. Transportation Control Measure TR 7 in the Clean Air Plan encourages planning for safe routes to schools, and Measure TR9 encourages planning for bicycle access and pedestrian facilities in local plans, as a means of reducing mobile emissions. Therefore, the Plan would not result in or contribute to an exceedance of Pittsburg's forecasted population and would be consistent with the BAAQMD's 2017 Clean Air Plan.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

Pittsburg is within the jurisdiction of BAAQMD. The BAAQMD region is currently in non-attainment of state and national ambient air quality standards for ozone and fine particulate matter (PM_{2.5}) and of state standards for large particulate matter (PM₁₀) (CARB 2018). Emissions of ozone precursors and particulate matter during construction of the proposed active transportation projects listed in the Plan could incrementally contribute to an existing air quality violation. Because the proposed facilities would not contribute to urban growth or generate additional motor vehicle trips, they would not introduce new long-term sources of air pollutants into the BAAQMD region; in fact, improvements to bicycle and pedestrian facilities could encourage people to substitute bicycling and walking for driving, incrementally reducing emissions associated with motor vehicle use.

The construction of active transportation projects would generate temporary emissions from three primary sources: the operation of construction vehicles (e.g., scrapers, loaders, and dump trucks); ground disturbance during clearing and grading, creating fugitive dust; and the application of asphalt, paint, or other oil-based substances. The extent of daily emissions, particularly reactive organic gases (ROGs) and nitrogen oxide (NO_x) emissions, generated by construction equipment would depend on the quantity of equipment used and the hours of operation for each project. The extent of fugitive dust (PM_{2.5} and PM₁₀) emissions would depend upon the following factors: 1) the amount of disturbed soils; 2) the length of disturbance time; 3) whether existing structures are demolished; 4) whether excavation is involved; and 5) whether transporting excavated materials offsite is necessary. The amount of ROG emissions generated by paints and oil-based substances such as asphalt depends upon the type and amount of material utilized.

BAAQMD's May 2017 *CEQA Air Quality Guidelines* provide thresholds for plan-level impacts for criteria pollutants and precursors (BAAQMD 2017). There are no construction emissions thresholds for plans. However, impacts would be significant if the project is not consistent with the current air quality plan and if projected vehicles miles traveled or vehicle trip increase would be less than or equal to projected population increase.

Under BAAQMD's methodology, a determination of consistency with CEQA Guidelines thresholds should demonstrate that a project:

- Supports the primary goals of the 2017 Clean Air Plan;
- Includes applicable control measures from the 2017 Clean Air Plan; and
- Does not disrupt or hinder implementation of any 2017 Clean Plan control measures

The primary goals of the 2017 Clean Air Plan are to protect air quality and health at the regional and local scale and to protect the climate. The Plan would improve bicycle and pedestrian facilities throughout Pittsburg. By facilitating bicycling and walking as modes of transportation, it is expected that the Plan would reduce motor vehicle trips and vehicle miles traveled in Pittsburg and greater Contra Costa County, improving regional air quality. In addition, the Plan would promote health by increasing recreational opportunities in the city. As described above under Item a, the Plan would be consistent with 2017 Clean Air Plan Transportation Control Measures TR 7 and TR9 to encourage planning for safe routes to schools and for bicycle access and pedestrian facilities. Therefore, the Plan includes applicable control measures from the 2017 Clean Air Plan and would not disrupt or hinder implementation of the Clean Air Plan.

Because implementation of the Plan would decrease vehicle miles traveled and would not result in a population increase, it would not result in exceedance of the BAAQMD threshold for criteria pollutants and precursors. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Proposed bicycle and pedestrian projects adjacent to travel lanes for motor vehicles would temporarily expose users of these facilities to particulate matter, carbon monoxide, and other pollutants from motor vehicle exhaust; however, users would only be exposed to air pollutants for brief periods while using bicycle and pedestrian projects and are not considered sensitive receptors. In addition, according to a 2017 review of scientific literature published in the *Lancet Public Health* journal, “consensus exists that despite the harmful effects of air pollution exposure, physical activity from active commuting provides more gains in health outcomes than air pollution exposure provides losses” (Cepeda et. al 2017). Therefore, it is anticipated that the health benefits from increased bicycling and pedestrian activity under the Plan would outweigh the risks from exposure to air pollution.

The proposed active transportation projects would not generate operational pollutants that would expose adjacent sensitive receptors such as homes, hospitals, and schools to substantial pollutant concentrations. Furthermore, because the Plan is intended to facilitate additional bicycling and walking, it would reduce vehicle miles traveled in Pittsburgh, thereby incrementally reducing the exposure of sensitive receptors to pollutant concentrations from motor vehicles. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

During construction of the proposed active transportation projects, emissions from construction equipment could potentially result in minor odors. However, construction activities would be temporary and would not involve materials or activities that are a potential source of significant odors. They would not result in the creation of objectionable odors affecting a substantial number of people. Furthermore, bicyclists and pedestrians would not be exposed to any objectionable odors from construction because active transportation facilities would be closed to the public when under construction. Therefore, the impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

This page intentionally left blank.

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Historically, vegetation communities in Pittsburgh broadly included native grassland, oak woodlands, riparian communities, and coastal salt and brackish marsh, as described in the City’s Existing Conditions Report (Pittsburg 2019a). The southern portion of the city is largely undeveloped open space with large areas of rolling grassy hills, while the northern edge consists of salt and brackish marshlands at the New York Slough. Areas of notable biological sensitivity within the city include Browns Island Regional Shoreline and Black Diamond Mines Regional Preserve and its environs. These natural areas have potential to support several threatened and endangered plant and animal species. Seventy special-status plant species and 82 special status animal species have been observed within approximately 15 miles of the city (Pittsburg 2019a).

Agricultural and ruderal vegetation in and surrounding Pittsburgh provides habitat for both common and special-status wildlife populations. Commonly observed wildlife species in the region include: California ground squirrel (*Spermophilus beecheyi*), California vole (*Microtus californicus*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus cyaneus*), American kestrel (*Falco sparverius*), white-tailed kite (*Elanus leucurus*), American killdeer (*Charadrius vociferus*), gopher snake (*Pituophis melanoleucus*), garter snake (*Thamnophis species*), western fence lizard (*Sceloporus occidentalis*), and various regionally occurring species of bats.

Development has altered much of Pittsburgh’s landscape, restricting natural vegetation primarily to undeveloped hillside areas. Many species are locally rare or no longer occur in portions of Pittsburgh as a result of agricultural and urban development within the city limits. A review of records from the California Natural Diversity Database (CNDDDB) (queried in January 2020) identified 40 special-status animal species and 37 special-status plant species with occurrence records within a five-mile radius of city limits, including 29 federal and/or state listed species. The records search also showed that critical habitat for Delta smelt (*Hypomesus transpacificus*), Alameda whipsnake (*Masticophis lateralis euryxanthus*), Antioch Dunes evening-primrose (*Oenothera deltoides subsp. howellii*), and Contra Costa wallflower (*Erysimum capitatum var. angustatum*) is located within city limits or within that five-mile buffer.

Birds protected under the California Fish and Game Code (CFGF) nest in a wide range of habitats including previously disturbed and ruderal areas (e.g., medians and road shoulders) and within areas of maintained ornamental vegetation (i.e., lawns, gardens, parks and trails). Wetlands and associated riparian areas often function as habitat for special-status species and may act as important wildlife movement corridors.

Approach to Impacts Analysis

As a programmatic evaluation, this section considers the potential for direct and indirect impacts to sensitive biological resources that could occur at the project-level if active transportation projects listed in the Plan are constructed in specific vegetation communities or habitats. Many of the proposed bicycle and pedestrian facilities listed in the Plan would be located within the limits of existing roads, sidewalks, or other previously disturbed areas and would be unlikely to affect sensitive biological resources; however, the construction of proposed Class I shared-use paths and Class II bike lanes that require roadway widening or the loss of medians could result in the loss of vegetation. Some pedestrian projects such as new sidewalks also may require additional paving along existing roadways and installation of lighting on streets and paths, which could directly affect special-status or sensitive biological resources. Table 1 lists representative projects included in the Plan that have the potential to impact biological resources and includes a brief description of the proposed project activities.

Table 1 Representative Active Transportation Projects with Potential Effects on Biological Resources

Project Name	Limits (From/To)	Project Type	Description	Miles
Trail Projects				
California Delta Trail	Western City limit to 8th Street Greenbelt	Trail	Install a Class I path through the Pittsburg Wetlands as part of the Great California Delta Trail that connects to the County's alignment. This project would involve construction next to wetlands and could result in tree removal.	3.0
Harbor Street	East 8th Street to Pittsburg-Antioch Highway	Trail	Install a new Class I facility on the east side of Harbor Street from just north of Pittsburg-Antioch Highway to East 8th Street. The new path requires widening the existing sidewalk and new retaining wall underneath the railroad tracks. This project could require the removal of street trees.	0.2
Frontage Road	Chelsea Way to Dover Way	Trail	Add a Class I facility using abandoned land south of freeway. This project could require tree removal.	0.3
Railroad Avenue	California Avenue to Delta de Anza Trail	Trail	Install a Class I shared-use path on the west side of Railroad Avenue with pedestrian-scale lighting amenities, landscape buffer from the street, and a minimum 10' usable width. This project could involve the removal of street trees.	0.5
Railroad Avenue	California Avenue to City Park	Trail	Widen existing sidewalk to provide Class I shared-use path with minimum 5' landscape buffer from Railroad Avenue. This project could involve the removal of street trees.	0.3
San Marco Boulevard	Evora Road to Rio Verde Circle	Trail	Add a Class I facility on the west side of the roadway that ties into the West Leland Road intersection. This project could include the removal of street trees.	1.2
Century Boulevard Greenway	East Leland Road to City limits	Trail	Add a Class I facility as the area redevelops to provide a connection to the shopping center. This project would potentially remove trees next to the existing sidewalk.	1.2
Willow Pass Road	Parkside Drive to Enterprise Circle	Trail	Install a Class I facility (10' shared-use path with 5' landscape buffer) through redevelopment. This project could involve tree removal.	1.2
Range Road/Willow Pass Road	Railroad bridge over Willow Pass Road to SR 4	Class II Bicycle Lanes	Add Class II bike lanes (5') by narrowing travel lanes and removing or narrowing center median. Relocate lighting in center median. This project would require some tree removal in the center median.	0.5
West 10th Street/East 10th Street	Montezuma Avenue to Railroad Avenue	Class II Bicycle Lanes	Widen existing Class II bike lanes by removing median and restriping street. This project would involve tree removal in the medians.	0.4

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Based on the locations of proposed active transportation projects listed in the Plan, as shown in Figure 3 and Figure 4, these projects would be within existing paved, disturbed, or graded rights-of-way. Even the proposed Class I shared-use paths would be routed through existing utility corridors and other rights-of-way disturbed ground. If all construction work, staging, parking and associated

activity is fully contained within previously disturbed areas, the projects would not modify or otherwise impact suitable habitat for sensitive species. It is not expected that projects would directly disturb natural habitat, where soil compaction could cause direct mortality from the collapse of underground burrows, or the trimming or removal of obligate host plants could cause direct mortality or loss of suitable habitat for special-status species. Therefore, projects occurring entirely within existing disturbed areas would not result in significant impacts to non-avian federal or state listed species or other non-avian special-status species.

Some proposed Class I shared-use paths would be located adjacent to wetlands or shoreline habitat that could have special-status species. The proposed California Delta Trail segment from 8th Street to the western city limit would be located on a disturbed utility corridor next to the Pittsburgh Wetlands, while the Delta Waterfront Trail near Koch Carbon could be constructed in the vicinity of wetland vegetation at the shoreline of New York Slough. In the unlikely event of filling of seasonal or perennial wetlands, or removal of riparian vegetation next to wetlands, projects could result in direct mortality of special-status species. In addition, these activities could result in the loss of breeding, foraging, and refuge habitat.

These proposed Class I shared-use paths would have the potential to temporarily or permanently disturb or remove natural habitat, which could directly impact special-status species. In addition, higher usage of new sidewalks or widened roads, bike paths, and trails could cause increased mortality of species in nearby natural habitat. Construction and maintenance activities for individual active transportation projects could result in potentially significant impacts to federal and state listed species under all circumstances, while impacts to non-listed species may be considered significant under CEQA if they result in reduced viability of the survival of a local or regional population. Therefore, the proposed active transportation projects result in direct and indirect effects on sensitive biological resources including special-status species, resulting in a potentially significant impact.

Many projects also would require the removal of vegetation that could serve as habitat for migratory birds protected under the CFGC. Table 1 lists representative projects that could involve vegetation removal. For example, several projects would remove medians planted with street trees. Other projects would remove ruderal vegetation, ornamental roadside vegetation, or street trees along roadways. Protected migratory birds can be expected to nest within and adjacent to a wide range of disturbed areas, including existing trails, road medians, road and sidewalk shoulders, ornamental vegetation and ruderal areas. Construction noise and activity in previously disturbed areas could result in nest abandonment, injury or mortality of birds protected under the CFGC, violating State regulations to protect migratory birds. Potentially significant impacts on special-status migratory birds include:

- Direct mortality resulting from the movement of equipment and vehicles through an individual project area
- Direct mortality resulting from removal of trees with active bird nests
- Abandoned eggs or young and subsequent nest failure for special-status nesting birds, including raptors, and other non-special-status migratory birds resulting from construction-related noises
- Loss or disturbance of rookeries and other colonial nests

These adverse effects on listed or special status bird species would be a potentially significant impact under CEQA.

Maintaining the consistency of individual projects with adopted federal and state regulations that protect special-status species, including their habitat and movement corridors, would ensure that the City incorporate appropriate design measures, including avoidance, if appropriate. In addition, individual projects with the potential to result in significant impacts would be required to undergo project-specific CEQA review at the time they are proposed. Mitigation Measures BIO-1 and BIO-2 would further ensure potential impacts are avoided or reduced to less than significant. These measures would require assessment of biological resources at a project-specific level, mitigation of impacts to special-status species, and protection of such species during construction. The City shall implement the following mitigation measures for the applicable bicycle and pedestrian improvements identified in Table A-1 in Appendix A.

Mitigation Measures

BIO-1 Biological Resources Screening and Assessment

The following development standard shall be added to the proposed Plan:

“Prior to final design approval of individual active transportation projects listed in the Plan that involve ground disturbance in or directly adjacent to natural habitat, or the removal or trimming of trees, the City shall have a qualified biologist conduct an analysis of the project to identify biological constraints and potential impacts to sensitive biological resources, including potential impacts to special-status plants, animals, and their habitats, as well as protected natural communities including wetland and terrestrial communities and protected trees. For those projects where ground disturbance would not affect natural habitat (i.e., work is limited to paved, ruderal, or developed areas only), a desktop analysis to identify biological constraints for the project may be sufficient. This analysis shall include queries of agency databases such as the CNDDDB, the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Plants of California*, the U.S. Fish and Wildlife Service (USFWS) *Information for Planning and Consultation (IPaC)*, USFWS *Critical Habitat Portal*, and USFWS *National Wetlands Inventory (NWI)* as well as other relevant literature for baseline information on special-status species and other sensitive biological resources occurring at the individual project site and in the immediate surrounding area. The qualified biologist shall determine, based on the nature of construction activities, if a field reconnaissance is necessary for such projects to completely assess biological constraints.

If the biologist identifies protected biological resources within the limits of and/or potentially adversely affected by the project, the City shall first prepare alternative designs that seek to avoid and/or minimize impacts to the biological resources. If the project cannot be designed without complete avoidance, the City shall have the qualified biologist identify the specific impacts to special-status species, develop project-specific avoidance and mitigation procedures to be followed to reduce biological impacts to a less-than-significant level, identify any state or federal listed species that would necessitate coordination with the appropriate regulatory agency (i.e., USFWS, National Marine Fisheries Services [NMFS], California Department of Fish and Wildlife [CDFW], U.S. Army Corps of Engineers [USACE]) to obtain regulatory permits, and implement project-specific avoidance and mitigation measures prior to and during any construction activities.

Mitigation actions that may be required should impacts to special-status species be identified include:

- Pre-construction surveys to identify the presence of special-status species within and adjacent to work areas.

- Worker Environmental Awareness Program training for all construction personnel.
- Complete avoidance of special-status species where and if possible. Avoidance measures may include:
 - Delimiting and flagging of special-status species avoidance buffer areas (Environmentally Sensitive Areas or ESAs)
 - Monitoring of construction activity near ESAs
 - Installation of special-status species exclusion fencing.
- Relocation of special-status species out of work areas (with applicable permits and authorizations as necessary).
- Restoration of temporarily disturbed special-status species' habitat.
- Compensatory mitigation for impacts to special-status species habitat at a minimum ratio appropriate for extent and quality of permanently disturbed habitat. Mitigation ratios may vary from 1:1 to 5:1."

BIO-2 Construction Best Management Practices

The following development standard shall be added to the proposed Plan:

"Based on the results of the biological resources screening and assessment required by Mitigation Measure BIO-1 for certain active transportation projects, and the extent of potential impacts to special-status species, the City shall incorporate one or more of the following construction Best Management Practices (BMPs) as recommended by a qualified biologist into all grading and construction plans:

- A 20 mile-per-hour speed limit shall be designated in all construction areas to minimize dust emissions and noise.
- All vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas, and clearing of vegetation for vehicle access shall be avoided to the greatest extent feasible.
- The number of access routes, number, and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the goal of the project.
- Equipment washout and fueling areas shall be located within the limits of grading at a minimum of 100 feet from waters, wetlands, or other sensitive resources as identified by a qualified biologist. Washout areas shall be designed to fully contain polluted water and materials for subsequent removal from the site.
- Daily construction work schedules shall be limited to daylight hours only (consistent with the City's noise ordinance).
- Mufflers shall be used on all construction equipment and vehicles shall be in good operating condition.
- Drip pans shall be placed under all stationary vehicles and mechanical equipment.
- All trash shall be placed in sealed containers and shall be removed from the project site a minimum of once per week.
- No pets are permitted on project site during construction."

Implementation of Mitigation Measures BIO-1 and BIO-2 would protect special-status species that may be affected by construction of the proposed active transportation projects, reducing potential impacts to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Naturally occurring plant communities in California are primarily identified in the *List of Vegetation Alliances and Associations (Natural Communities List)* (CDFW 2019). This document provides comprehensive lists of officially recognized plant communities occurring in Contra Costa County and the State of California. In this document, each plant community is assigned a conservation status rank (also known as "Rare Rank"), which is used to determine the sensitivity of the plant community. Plant communities with global or state status ranks of G1 through G3, or S1 through S3, respectively, are considered sensitive, and are referred to as "natural communities of special concern." Plant communities are classified based on plant species composition and abundance, as well as the underlying abiotic conditions of the stand, such as slope, aspect, or soil type.

Pittsburg and its surroundings support a combination of native grassland, oak woodlands, riparian communities, and coastal salt and brackish marshes. The region within 15 miles of the city has the potential to support nine natural communities of special concern: Alkali Meadow, Alkali Seep, Cismontane Alkali Marsh, Coastal and Valley Freshwater Marsh, Coastal Brackish Marsh, Northern Claypan Vernal Pool, Serpentine Bunchgrass, Valley Needlegrass Grassland, and Valley Sink Scrub. Of these sensitive natural communities, one community, Coastal Brackish Marsh, occurs within city limits. Coastal Brackish Marsh is located along the waterfront area in the western portion of the city, as well as on Chipps Island, Browns Island, and Winter Island. Proposed active transportation projects that would require ground disturbance or widening of existing roads and rights-of-way are not planned in or near areas containing natural communities of special concern; therefore, implementation of the Plan would not result in significant impacts to any sensitive natural communities.

Riparian habitat occurs along several rivers and creeks in the region and may be affected by the development of individual bicycle and pedestrian projects, especially new Class I shared-use paths (USFWS 2020). Riparian habitat associated with Waters of the State falls under the jurisdiction of CDFW as discussed below under Item c. Individual active transportation projects could potentially result in construction work within jurisdictional limits including cut and fill below the top of delineated banks, removal or modification to wetlands, or trimming and clearing of riparian vegetation. Therefore, implementation of the Plan would have a potentially significant impact on riparian habitat. Mitigation Measures BIO-3 and BIO-4 would ensure avoidance of impacts or mitigate those impacts to less than significant through a project-level analysis to delineate sensitive aquatic environments, and design or modify the project to avoid direct and indirect impacts on these areas through compensatory mitigation.

Mitigation Measures

BIO-3 Riparian Communities

The following development standard shall be added to the proposed Plan:

“For trail projects located within or immediately adjacent to natural areas, if the initial screening of biological resources under Mitigation Measure BIO-1 identifies the presence of riparian communities within or adjacent to a project site, the City shall design or modify the project to avoid direct and indirect impacts on these habitats, if feasible. Additionally, the City shall minimize the loss of riparian vegetation by trimming rather than removal where feasible.

Prior to construction, the City shall install orange construction barrier fencing to identify environmentally sensitive areas around the riparian area (50 feet from edge) and other sensitive natural communities (50 feet from edge), or as defined by the agency with regulatory authority over the resource(s). The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The fencing shall be installed before construction activities are initiated and shall be maintained throughout the construction period. The following paragraph shall be included in the construction specifications:

The Contractor’s attention is directed to the areas designated as “environmentally sensitive areas.” These areas are protected, and no entry by the Contractor for any purpose will be allowed unless specifically authorized in writing by lead agency overseeing the bicycle improvement project. The Contractor will take measures to ensure that the Contractor’s forces do not enter or disturb these areas, including giving written notice to employees and subcontractors.

Temporary fences around the environmentally sensitive areas shall be installed as the first order of work. Temporary fences shall be furnished, constructed, maintained, and removed as shown on the plans, as specified in the special provisions, and as directed by the project engineer. The fencing shall be commercial-quality woven polypropylene, orange in color, and at least 4 feet high (Tensor Polygrid or equivalent). The fencing shall be tightly strung on posts with maximum 10-foot spacing.

Immediately upon completion of construction activities, the contractor shall stabilize exposed soil/slopes. On highly erodible soils/slopes, the contractor shall use a non-vegetative material that binds the soil initially and breaks down within a few years. If more aggressive erosion control treatments are needed, geotextile mats, excelsior blankets, or other soil stabilization products shall be used. All stabilization efforts should include habitat restoration efforts.”

BIO-4 Compensatory Mitigation

The following development standard shall be added to the proposed Plan:

“If individual trail projects located within or immediately adjacent to natural areas involve the disturbance of riparian communities during construction, the City shall compensate for the disturbance to ensure no net loss of habitat functions and values. Compensatory mitigation ratios shall be determined on a project-by-project basis during the project-level CEQA review, once project impacts have been determined. Compensatory mitigation shall be at a minimum ratio of two acres restored, created, and/or preserved for each acre disturbed. Compensation may comprise on-site restoration/creation, off-site restoration, preservation, or mitigation credits (or a combination of these elements). The City shall develop and implement a restoration and monitoring plan that describes how the habitat shall be created, the success criteria that will be used to quantify mitigation success, and the frequency and duration of monitoring.”

By delineating, avoiding, and/or compensating for the loss of sensitive habitats, implementation of Mitigation Measures BIO-3 and BIO-4 would reduce the impact on sensitive habitats to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Individual proposed active transportation projects may be located in or adjacent to wetlands and several creeks, canals, and drainages. Specifically, the Class I shared-use paths planned along and just north of Willow Pass Road would be constructed adjacent to or through freshwater emergent wetlands in the northern portion of the city. Implementation of the Plan has the potential to impact federal and state Jurisdictional Waters under Sections 401 and 404 of the Clean Water Act and Sections 1600-1616 of the CFGC. Cut and fill activity below the top of delineated banks, removal or modification to wetlands, or trimming and clearing of riparian vegetation could affect state or federally regulated aquatic resources in several ways including disturbances to the hydrologic structure, increased siltation, and modifications to bed and bank.

A formal Jurisdictional Delineation would be required to assess the extent of impacts to waters of the state and waters of the U.S., and to support Clean Water Act and Sections 1600-1616 permitting for projects that could directly impact USACE, CDFW, or Regional Water Quality Control Board (RWQCB) jurisdictional areas. If it is determined that a bicycle or pedestrian project would impact wetland resources, the appropriate permits under Sections 401 and 404 of the Clean Water Act and Sections 1600-1616 of the CFGC would be required. Mitigation Measure BIO-5 would ensure avoidance of impacts or mitigate those impacts to less than significant through a project-level analysis to delineate jurisdictional waters and wetlands and perform restoration if necessary.

Mitigation Measures

BIO-5 Jurisdictional Delineation and Restoration for Impacts to Waters and Wetlands

The following development standard shall be added to the proposed Plan:

“For individual trail projects listed in the Plan, if waters of the state or waters of the U.S. are present within or immediately adjacent to the area of construction, a qualified wetlands biologist shall perform a wetland delineation following the 1987 Army Corps of Engineers Wetlands Delineation Manual and any applicable regional supplements to the Delineation Manual. The jurisdictional delineation shall determine the extent of the jurisdiction for CDFW, USACE, and/or RWQCB, and shall be conducted in accordance with the requirement set forth by each agency. The result shall be a preliminary jurisdictional delineation report to be submitted to the implementing agency, USACE, RWQCB, and CDFW, as appropriate, for review and approval. Jurisdictional areas shall be avoided to the maximum extent possible.

Impacts to waters and wetlands shall be mitigated through one or more options to meet the required amount of mitigation based on direct impacts from project development under the mitigation ratios outlined below. Mitigation for impacts to waters and wetlands can be achieved through the acquisition and in-perpetuity management of similar habitat or through the in-lieu funding of such through an existing mitigation bank. Funding and management of internal

mitigation areas can be managed internally. Funding and management of off-site mitigation lands shall be provided through purchase of credits from an existing, approved mitigation bank or land purchased by implementing entity and placed into a conservation easement or other covenant restricting development (e.g., deed restriction). Internal mitigation lands, or in lieu funding sufficient to acquire lands shall provide habitat at a minimum 1:1 ratio for impacted lands, comparable to habitat to be impacted by individual project activity. Compensatory mitigation for wetlands communities can be combined with other compensatory mitigation (e.g., sensitive vegetation communities) as applicable.”

BIO-6 General Avoidance and Minimization

The following development standard shall be added to the proposed Plan:

“For individual trail projects located within or immediately adjacent to waters of the state, waters of the U.S., or wetlands, potential jurisdictional features identified in jurisdictional delineation reports shall be avoided. Identified jurisdictional features shall be documented in a report detailing how all identified jurisdictional features should be avoided.

- Material/spoils generated from project activities shall be located away from jurisdictional areas or special-status habitat and protected from storm water run-off using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls (non- monofilament), covers, sand/gravel bags, and straw bale barriers, as appropriate.
- Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and generally at least 50 feet from the top of bank.
- Spillage of material shall be stopped if it can be done safely. The contaminated area shall be cleaned, and any contaminated materials properly disposed. For all spills, the project foreman or designated environmental representative shall be notified.”

Implementation of these measures would reduce the level of impact on wetlands to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

Wildlife movement corridors can be both large and small scale. Regionally, the City is not located within an Essential Connectivity Area (ECA) as mapped in the report California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California (Spencer et al. 2010). ECAs represent principle connections between Natural Landscape Blocks. ECAs are regions in which land

conservation and management actions should be prioritized to maintain and enhance ecological connectivity. ECAs are mapped based on coarse ecological condition indicators, rather than the needs of particular species and thus serve the majority of species in each region. No mapped wildlife movement corridors are present in Pittsburgh.

Pittsburg supports a diversity of wildlife and has several creek channels which tend to serve as smaller scale movement corridors for both terrestrial and aquatic species throughout the city. The southern portion of the city is largely undeveloped open space with large areas of rolling grassy hills, while the northern edge consists of salt and brackish marshlands at the New York Slough. These areas, combined with the Browns Island Regional Shoreline and Black Diamond Mines Regional Preserve, provide discontinuous habitat blocks and patches. The proposed Plan is not anticipated to affect wildlife movement in areas of paved and disturbed rights-of-way. Although some active transportation projects such as Class I shared-use paths would be adjacent to riparian corridors and waterways, the location of these projects would not disrupt a critical wildlife movement corridor as described above. Wildlife can cross a pedestrian or bicycle path with relative ease, and the level and speed of path use is not a substantial overall deterrent to wildlife moving across the proposed path. Adverse effects on the movement of terrestrial species would be temporary and limited to specific activities including installation of temporary fencing, night lighting, construction noise, construction of multi-use paths, and the presence of construction personnel during working hours. Pedestrian and bicycle path development is not expected to result in significant changes to the genetic connectivity among local populations of wildlife, or within a broader regional context, and is not expected to prevent local wildlife movement. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The City has established a Tree Preservation and Protection Ordinance in Article XIX of the Pittsburgh Municipal Code. This ordinance has provisions regarding the protection of trees, removal of “protected” trees as part of development applications, and replacement of protected trees that are removed. The City requires a permit for the removal of protected trees, and specific bicycle and pedestrian projects proposed under the Plan would be subject to the City’s requirements. The City also has a Street Tree Ordinance as prescribed in Section 12.32.070 of the City’s Municipal Code. Pittsburgh Municipal Code Section 12.32.070(A) requires that a street tree permit be obtained before a person plants, cuts, trims, removes, prunes, shapes, injures, interferes with, or does maintenance work on a street tree.

Tree trimming and the removal of some streetscape trees may be required for some of the individual projects that involve street modifications. Any proposed active transportation projects involving tree trimming or removal of protected or street trees would require permits from the City, under these two ordinances. Additionally, the City would be required to draft and implement a tree replacement plan in accordance with City standards, at a replacement ratio of either 4:1 for 24-inch box trees or 12:1 for 15-gallon trees (trees planted to trees removed). With adherence to the City’s Tree Preservation and Protection Ordinance and Street Tree Protection Ordinance, proposed active transportation projects would not conflict with local policies and ordinances and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Pittsburg is inside the “inventory area” of the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP) (2006). The HCP/NCCP serves as a comprehensive, multi-jurisdictional habitat conservation plan, pursuant to Section (a)(1)(B) of the federal Endangered Species Act, as well as a natural communities conservation plan under the California Natural Community Conservation Planning Act of 2001. The City adopted the HCP/NCCP in 2007, under Pittsburg Municipal Code Section 15.108, *Habitat Conservation Plan/Natural Community Conservation Plan Implementation Ordinance*. The primary intent of the HCP/NCCP is to provide for the conservation of a range of plants and animals and in return, provide take coverage and mitigation for covered projects throughout eastern Contra Costa County to avoid the cost and delays of mitigating biological impacts on a project-by-project basis. It would allow the incidental take (for development purposes) of species and their habitat from development. The City is a permittee to the HCP/NCCP, and any new proposed project is required to comply with applicable provisions of the plan.

The proposed active transportation projects under the Plan would occur in the HCP/NCCP inventory area; therefore, each project would be subject to the requirements of Pittsburg Municipal Code Section 15.108. For development projects such as the proposed active transportation facilities, the HCP/NCCP requirements include the submittal of an HCP/NCCP application and payment of all applicable HCP/NCCP fees prior to the issuance of a grading or building permit.

The City of Pittsburg, as a signatory of the HCP, would implement all conditions and requirements of the plan on a project-by-project basis, consistent with the HCP/NCCP policies, conservation measures, and fees. As required by Pittsburg Municipal Code Section 15.108, project sites identified as containing ruderal land cover types and larger than one acre are required to submit an HCP/NCCP application and pay all applicable HCP fees prior to ground disturbing activities. As a result, impacts related to consistency with the HCP/NCCP would be less than significant.

LESS THAN SIGNIFICANT IMPACT

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

This cultural resources analysis draws from the City's 2019 Existing Conditions Report which was prepared in support of the General Plan update (City of Pittsburg 2019a). This document presents an inventory of previously recorded cultural resources within the City's Planning Area, which encompasses and exceeds city limits and the corresponding boundary of the proposed Plan. The inventory was compiled through a search of the California Historical Resources Information System completed at the Northwest Information Center (NWIC) in May 2019 and identified 137 previously recorded cultural resources within the City's Planning Area. It includes both prehistoric and historic resources, such as rock art panels, railroads, boat landings, schools, buildings, and residences. Although it does not identify potential historical resources eligibility, the inventory does list an NWIC Property Number, address, resource type, and name as available. The Existing Conditions Report also indicates there are properties in the larger Planning Area that are listed in the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and/or Contra Costa County Historic Property Data File.

Methodology and Significance Thresholds

The significance of a cultural resource and subsequently the significance of any impact is determined by among other things, consideration of whether that resource can increase our knowledge of the past. The determining factors are site content and degree of preservation. A finding of archaeological significance follows the criteria established in the *CEQA Guidelines*.

CEQA Guidelines Section 15064.5 (Determining the Significance of Impacts to Archaeological Resources) states:

(a)(3) [...] Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (Public Resources Code, Section 5024.1, Title 14 CCR, Section 4852).

(a)(4) The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to section 5020.1(k) of the

Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

(b) A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

A substantial adverse change in the significance of a historical resource means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. Generally, impacts to historical resources can be mitigated to below a level of significance by following the Secretary of the Interior's Guidelines for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Standards) [Guidelines § 15064.6(b)]. In some circumstances, documentation of an historical resource by way of historic narrative photographs or architectural drawings will not mitigate the impact of demolition below the level of significance [Guidelines Section 15126.4(b)(2)].

Preservation in place is the preferred form of mitigation for archaeological resources as it retains the relationship between artifact and context and may avoid conflicts with groups associated with the site [Guidelines Section 15126.4 (b)(3)(A)].

Project Impacts and Mitigation

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

As discussed above, there are numerous previously recorded cultural resources within city limits. In addition, other properties in Pittsburgh have the potential to be historical resources pending further evaluation. According to the California Office of Historic Preservation, any physical evidence of human activities over 45 years of age can be recorded and evaluated for consideration as historical resources (California Office of Historic Preservation 1995). This includes not only buildings, but also structures, objects, sites, and districts.

The Plan proposes a variety of active transportation projects, which would be constructed in existing public rights-of-way and (with minor exceptions) would not require the acquisition of private property that could contain historical structures or contributing features in their surrounding landscapes. One proposed project would be located along 4.9 miles of the Contra Costa Canal, an engineering structure that has been found eligible for listing in the CRHR, and is therefore considered a historical resource as defined by CEQA. However, this project would only be a feasibility study for a future Class I shared-use path. Studying the feasibility of adding a new trail would not involve physical construction that could adversely affect the historical resource. If this trail is proposed for construction in the future, a project-specific review of environmental impacts under CEQA may be required at that time. Therefore, implementation of the Plan itself would not result in the demolition or alteration of structures which are or would qualify as historical resources. Further, although active transportation projects would introduce new street features such as curbs, planter boxes, striping, and signs; the modest scale and nature of these project elements would be consistent with the function and character of existing roadways proposed for modification.

The Plan therefore would not substantially alter the general setting or indirectly impact any known or potential historical resources such that its significance would be materially impaired. As a result,

the Plan would not cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?*

Previous archaeological sites have been identified within the Plan area. Archaeological materials associated with Native American and early Euro-American occupation may exist throughout the city, including where proposed active transportation projects are located, and have the potential to provide important scientific information regarding history and prehistory. Therefore, the Plan could affect known and unknown cultural resources. Because the Plan is being analyzed on a program level, the majority of projects do not yet have complete design plans and known archaeological resources cannot be identified at this time. The proposed active transportation projects would occur in already disturbed corridors in an urban environment, where it is unlikely that ground disturbance would encounter intact archaeological resources. However, ground-disturbing activities associated with implementation of the Plan would still have the potential to damage or destroy archaeological resources, especially if they occur below the existing road base or in less disturbed sediments. Consequently, mitigation is necessary to ensure that potential impacts to cultural resources are reduced to a less-than-significant level.

Mitigation Measures

CUL-1 Archaeological Resources Assessment

The following development standard shall be added to the proposed Plan:

“If cultural resources are encountered during ground-disturbing activities for a proposed active transportation project listed in the Plan, work in the immediate area shall be halted and an archaeologist meeting the Secretary of the Interior’s Professional Qualification Standards for archaeology in either prehistoric or historic archaeology shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work such as excavating the cultural deposit to fully characterize its extent, and collecting and curating artifacts may be warranted to mitigate any significant impacts to cultural resources. In the event that archaeological resources of Native American origin are identified during project construction, a qualified archaeologist will consult with the City to begin Native American consultation procedures.”

By implementing Mitigation Measure CUL-1, the City would evaluate and protect significant archaeological resources if encountered during construction, resulting in a less than significant impact.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. Disturb any human remains, including those interred outside of formal cemeteries?*

Ground disturbing activities during implementation of the Plan could potentially encounter human remains. If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance occur until the county coroner has made the necessary findings as to the origin and disposition pursuant to the Public Resources Code Section 5097.98. If the remains are

determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site and make recommendations to the landowner within 48 hours of being granted access. With adherence to these existing regulations, impacts to human remains would be less than significant.

LESS THAN SIGNIFICANT IMPACT

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Construction of the proposed active transportation projects listed in the Plan would result in short-term consumption of energy from the use of construction equipment and processes. Energy use during construction would be primarily from fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. The scope of construction activity that requires energy use would be limited because many facilities would simply require restriping of or surface treatments on existing paved rights-of-way, while others would add narrow linear strips of pavement to widen existing roadways or construct new shared-use paths. Therefore, the project would not result in wasteful or inefficient use of energy during construction.

After construction, proposed active transportation projects would provide a safe and better connected non-motorized transportation system in Pittsburgh, facilitating an increase the number of bicyclists and pedestrians and a decrease in the number of motor vehicle trips. Decreasing the number of personal vehicles on roadways would reduce overall energy consumption in Pittsburgh, mainly from fuel consumption. Some proposed shared-use paths, pedestrian routes to BART stations, and crosswalk enhancements would include light fixtures that would require energy use at nighttime. However, energy for lighting would be minimal relative to existing lighting in Pittsburgh and offset by the reduced use of fossil fuels for vehicle transport. Therefore, the Plan would have a less than significant impact from wasteful, inefficient, or unnecessary consumption of energy resources.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The City of Pittsburgh has not adopted an energy efficiency plan. However, by improving the active transportation network in Pittsburgh, the Plan would result in an overall reduction in motor vehicle trips and an improvement in energy efficiency. In addition, as described in Section 3, *Air Quality*, and

Section 8, *Greenhouse Gas Emissions*, the project would be consistent with the 2017 Clean Air Plan. Therefore, the Plan would not conflict with any state or local plans for energy efficiency, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☒	☐
2. Strong seismic ground shaking?	☐	☐	☒	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
4. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

- a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

The proposed active transportation projects listed in the Plan would be located in the San Francisco Bay Area, a region of intense seismic activity. According to the U.S. Geological Survey (USGS), one late Quaternary fault (with evidence of movement in the last 130,000 years) is located in the city of Pittsburg: the Rio Vista Fault (USGS 2020, 2017). This potentially active fault has been mapped on a northwest-southeast axis from Central Avenue through Marina Park to Chipps Island (USGS 2020). Because the Rio Vista Fault has not caused surface displacements in the last 11,000 years, it is not defined as an “active fault” (Pittsburg 2010a). Figure 5.4-3 in the City’s Existing Conditions Report also maps three fault zones as located in Contra Costa County near Pittsburg: the Concord, Clayton, and Antioch faults (Pittsburg 2019a). However, these mapped fault zones are located outside city limits. Therefore, users of new active transportation facilities listed in the Plan would not be subject to a substantial risk of fault rupture. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

Major earthquakes have occurred in the vicinity of Pittsburg in the past and can be expected to occur again in the near future (Pittsburg 2010a). Strong ground shaking at any of the proposed active transportation projects could result from a rupture of faults near Pittsburg or of the major regional earthquake faults in the Bay Area. Such strong ground shaking could damage pavement at proposed bicycle and pedestrian facilities listed in the Plan. However, the City would resurface pavement that is substantially damaged by ground shaking to prevent a long-term risk of injury. The Plan also does not include proposed bridges or habitable structures that could be vulnerable to collapse during ground shaking. Therefore, the Plan would not expose people or structures to substantial adverse effects of seismic ground shaking. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

Liquefaction, which is primarily associated with unconsolidated, saturated materials, is most common in areas of sand and silt or on reclaimed lands. In these areas, ground failure and differential settlement could result from a severe earthquake, damaging paved surfaces and elevated structures. Liquefaction potential is highest in areas underlain by poorly engineered Bay fills, Bay mud, and unconsolidated alluvium. As mapped in Figure 5.4-4 in the City’s Existing Conditions Report, low-lying parts of Pittsburg near Suisun Bay and in valleys descending from the southern hills are susceptible to liquefaction (Pittsburg 2019a). Proposed bicycle and pedestrian projects listed in the Plan would not include habitable structures that could expose people to adverse effects from seismic-related ground failure, including liquefaction. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

As mapped in Figure 10-1 in the Pittsburg General Plan, moderately unstable and generally unstable slopes are located in the southern portion of the city (Pittsburg 2010a). Unstable slopes that may be susceptible to landslides within the city limits are primarily to the south of W. Leland Road and west of Railroad Avenue. Proposed bicycle facilities would not be located in areas mapped as having moderately or generally unstable slopes. Crosswalk enhancements listed in the Plan would not have the potential to cause loss, injury, or death from landslide events. Therefore, the impact from exposure to landslides would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

The active transportation projects listed in the Plan that would be constructed within existing paved rights-of-way are unlikely to cause substantial soil erosion or loss of topsoil. However, the construction of proposed shared-use paths and bicycle facilities that require roadway widening would involve ground disturbance of unpaved areas. This construction activity could cause erosion and sedimentation. However, any grading activity within city limits is subject to the erosion control requirements of Chapter 15.88 of the Pittsburg Municipal Code. Pursuant to Section 15.88.030.B of the Municipal Code, “all land-disturbing or land-filling activities or soil storage shall be undertaken in a manner designed to minimize surface runoff, erosion and sedimentation.” In addition to local erosion control regulations, if any proposed bicycle facility would involve disturbance of an area over one acre in size, it would be required to comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit Requirements, which would limit peak post-project runoff levels to pre-project levels. The City would also be required to prepare a Storm Water Pollution Prevention Plan (SWPPP), a sediment and erosion control plan that describes the activities to prevent stormwater contamination, control sedimentation and erosion, and comply with the requirements of the statewide permit. Therefore, the Plan would have a less than significant impact from soil erosion or the loss of topsoil.

LESS THAN SIGNIFICANT IMPACT

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

The proposed active transportation projects that would be constructed within existing paved rights-of-way would not result in landslides, lateral spreading, subsidence, liquefaction, or collapse because they would occur on already developed land. Proposed facilities that would occur on undeveloped parcels would adhere, as applicable, to Mitigation Measure G-1 (below) to minimize the risk of expansive soils. Therefore, the Plan would not result in unstable geologic units or soils and impacts would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

According to the Natural Resource Conservation Service’s Web Soil Survey, multiple soil types that occur in Pittsburg have a potential for shrinking and swelling behavior, including but not limited to

Brentwood clay loam, Capay clay, and Clear Lake clay (NRCS 2020). In areas underlain by expansive soils, the shrinking and swelling of soil can disrupt or damage paved surfaces. Proposed bicycle and pedestrian projects located within existing paved rights-of-way would be unlikely to experience substantial shrink-swell from soil movement. However, proposed Class I shared-use paths on previously unpaved ground could endanger trail users, if expansive soils are present and cause pavement to crack. For these projects, site-specific geotechnical investigations would be required. The impact of expansive soils would be potentially significant.

Mitigation Measures

Mitigation Measure G-1 would be required to reduce potential hazards from expansive soils.

G-1 Expansive Soils

The following development standard shall be added to the proposed Plan:

“If a Class I shared-use path project listed in the Plan is located in an area mapped as having expansive underlying soil, the City shall ensure that a site-specific geotechnical investigation is conducted by a qualified engineer. The investigation shall identify hazardous conditions and recommend appropriate design factors to minimize hazards. Such measures could include concrete slabs on grade with increased steel reinforcement, removal of highly expansive material and replacement with non-expansive import fill material, or chemical treatment with hydrated lime to reduce the expansion characteristics of the soils.”

With implementation of this mitigation measure, expansive soils would be remediated on a site-specific basis, and potential impacts would be reduced to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

None of the projects listed in the proposed Plan would involve the construction of septic tanks or alternative wastewater disposal systems. No impact would occur.

NO IMPACT

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Significant paleontological resources are fossils or assemblages of fossils that are unique, unusual, rare, uncommon, diagnostically important, or are common but have the potential to provide valuable scientific information for evaluating evolutionary patterns and processes, or which could improve our understanding of fossil chronologies, the ecology and geographic distribution of fossil organisms, or the history of geologic layers. Evaluating the potential for impacts to paleontological resources from implementing the Plan involves three distinct steps: 1) identify the geologic units that occur (i.e., are mapped at the surface or may be directly underlying mapped units) within the study area; 2) determine the paleontological sensitivity of mapped or underlying geologic units; and 3) determine if the active transportation projects proposed in the Plan have the potential to disturb paleontologically sensitive geologic units.

Paleontological Resource Potential

The Society of Vertebrate Paleontology (SVP) (2010) describes sedimentary rock units as having a high, low, undetermined, or no potential for containing significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. While these standards were written specifically to protect vertebrate paleontological resources, all fields of paleontology have adopted these guidelines, which are given here verbatim:

- I. **High Potential (sensitivity)** – Rock units from which significant vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations that contain significant nonrenewable paleontological resources anywhere in their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical; and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas that contain potentially datable organic remains older than Recent, including deposits associated with nests or middens, and areas which may contain new vertebrate deposits, traces, or trackways are also classified as significant.
- II. **Low Potential (sensitivity)** – Sedimentary rock units that are potentially fossiliferous, but have not yielded fossils in the past, or contain common and/or widespread invertebrate fossils of well documented and understood taphonomic, phylogenetic species and habitat ecology. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potential for yielding significant fossils prior to the start of construction. Generally, these units will be poorly represented by specimens in institutional collections and will not require protection or salvage operations. However, as excavation for construction proceeds, it is possible that significant and unanticipated paleontological resources might be encountered and require a change of classification from Low to High Potential and, thus, require monitoring and mitigation if the resources are found to be significant.
- III. **Undetermined Potential (sensitivity)** – Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.
- IV. **No Potential** – Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing significant paleontological resources.

Existing Conditions

Pittsburg is located in the Sacramento-San Joaquin River Delta area within the southern Coast Ranges, one of 11 major geomorphic provinces in California (California Geological Survey 2002). A geomorphic province is a region of unique topography and geology that is distinguished from other regions based on its landforms and geologic history. During the Cenozoic era, the area of the present-day Coast Ranges was covered by seawater and a thick deposit of marine to nonmarine

shale, sandstone, and conglomerate accumulated on the Franciscan basement rock (Bartow and Nilsen 1990). Later, during the late Miocene to Pliocene eras, a mountain-building episode occurred in the vicinity of the present-day Coast Ranges, resulting in their uplift above sea level. Subsequently, from the late Pliocene to Pleistocene eras, extensive deposits of terrestrial alluvial fan and fluvial sediments were deposited in the Coast Ranges (Norris and Webb 1990).

Paleontological Impact Analysis

According to the published mapping, the proposed active transportation projects are underlain by the following mapped geologic units:

- Holocene (i.e., Qa, Qal) to late Pleistocene (i.e., Qoa) alluvial sediments, consisting of various compositions of gravel, sand, and silt
- Holocene bay mud deposits (i.e., Qbm), composed of blueish-gray to black silty clay with interspersed layers of sand, gravel, peat, and shell fragments
- Pliocene to Pleistocene Oro Loma Formation (i.e., Tol) (Dibblee and Minch 2006; Sims et al. 1973), interbedded, terrestrial sandstone, claystone, and pebble conglomerate derived from Franciscan detritus (Dibblee and Minch 2006).

Based on a literature review and in accordance with SVP guidelines (2010), the geologic units underlying the proposed facilities were determined to have low to high paleontological sensitivity. Intact Holocene deposits (i.e., Qa, Qal, Qbm) underlying Pittsburg, particularly those younger than 5,000 years old, are considered too young to preserve paleontological resources and are assigned a low paleontological sensitivity (SVP 2010). However, Holocene sediments may grade downward into older deposits of late Pleistocene age (i.e., Qoa) that could preserve fossil remains at shallow or unknown depths. Pleistocene alluvial sediments have a well-documented record of abundant and diverse vertebrate fauna throughout California. Localities have produced fossil specimens of mammoth (*Mammuthus columbi*), horse (*Equus*), camel (*Camelops*), and bison (*Bison*), as well as various birds, rodents, and reptiles (Agenbroad 2003; Bell et al. 2004; Jefferson 1991; Merriam 1911; Savage et al. 1954; Springer et al. 2009; Wilkerson et al. 2011; Winters 1954).

Accurately assessing the boundaries between younger and older units is generally not possible without site-specific stratigraphic data, some form of radiometric dating or fossil analysis, so conservative estimates of the depth at which paleontologically sensitive units may occur ensures impact avoidance. Given the short distance between Pittsburg and the surrounding mountains and the prevalence of older Quaternary sediments mapped at the surface, Rincon estimates the transition to Quaternary sediments likely to occur at about five feet below ground surface. A search of the paleontological locality records maintained in the online Paleobiology Database indicates that the Pliocene to Pleistocene Oro Loma Formation (i.e., Tol) has produced significant fossil specimens of horse (*Hipparion tehonense*, *Neohipparion leptode*, *Dinohippus* sp.) and camel (*Alforias* sp.) throughout California (Paleobiology Database 2020). Therefore, Pleistocene alluvial deposits and the Pliocene to Pleistocene Oro Loma Formation are assigned a high paleontological sensitivity.

The active transportation projects listed in the Plan that would be constructed within developed areas (i.e., existing paved rights-of-way) are unlikely to impact paleontological resources of high sensitivity. Although proposed shared-use paths and bicycle facilities that require roadway widening would involve ground disturbance outside existing paved surfaces, all these projects would be located in corridors where the ground has already been disturbed and graded (e.g., utility corridors, landscaped or ruderal strips adjacent to streets). Based on previous trails constructed in Pittsburg, the City anticipates that the maximum depth of grading for new shared-use paths would not exceed

one foot below the ground surface. This depth of grading would be shallower than the estimated five-foot depth at which Quaternary sediments that may have intact fossil resources could begin to occur. Disturbed sediments at less than five feet below the ground surface would not likely yield paleontological resources, and any such resources if present would not be found in intact sedimentary formations that provide historical context. Therefore, the impact on paleontological resources would be less than significant.

LESS THAN SIGNIFICANT IMPACT

This page intentionally left blank.

8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Climate Change and Greenhouse Gas Emissions

Climate change is the observed increase in the average temperature of the earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The term "climate change" is often used interchangeably with the term "global warming," but "climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years. Per the United Nations Intergovernmental Panel on Climate Change (IPCC 2013), the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-20th century (IPCC 2013).

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Observations of CO₂ concentrations, globally-averaged temperature, and sea level rise are generally well within the range of the extent of the earlier IPCC projections. The recently

observed increases in CH₄ and N₂O concentrations are smaller than those assumed in the scenarios in the previous assessments. Each IPCC assessment has used new projections of future climate change that have become more detailed as the models have become more advanced.

Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆ (CalEPA 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as “carbon dioxide equivalent” (CO₂e), and is the amount of a GHG emitted multiplied by its GWP. CO₂ has a 100-year GWP of one. By contrast, CH₄ has a GWP of 25, meaning its global warming effect is 25 times greater than CO₂ on a molecule per molecule basis over a 100-year period (IPCC 2007).

The accumulation of GHGs in the atmosphere regulates the earth’s temperature. Without the natural heat trapping effect of GHGs, Earth’s surface would be about 34° C cooler (CalEPA 2006). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Based on the California Air Resources Board (CARB) California Greenhouse Gas Inventory for 2000-2017, California produced 424 million metric tons (MMT) CO₂e in 2017 (CARB 2019). The largest single source of GHG in California is transportation, contributing 40 percent of the State’s total GHG emissions. California emissions are due in part to its large size and large population compared to other states. However, the state’s mild climate reduces California’s per capita fuel use and GHG emissions as compared to other states.

Regulatory Setting

In response to an increase in man-made GHG concentrations over the past 150 years, California has implemented Assembly Bill (SB 32), which requires the State to reduce greenhouse gases (GHGs) to 40 percent below 1990 levels by 2030. On December 14, 2017, the California Air Resources Board (CARB) adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) CO₂e by 2030 and two MT CO₂e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.

On September 10, 2018, the governor issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 32 and other legislation. EO B-55-18 also tasks CARB with including a pathway toward the EO B-55-18 carbon neutrality goal in the next Scoping Plan update.

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

The vast majority of individual projects, in themselves, do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

Many proposed active transportation projects listed in the Plan would include minor surface treatments like restriping of lines and enhancing crosswalks, which would not involve construction activity that generates GHG emissions. Some projects, though, would require grading and paving activity, especially to widen paved areas or construct new shared-use paths. The use of trucks to haul soil and grading equipment for earth movement typically emits the greatest amount of GHG emissions during construction. Because the Plan provides a list of projects for future implementation, not for immediate construction, the precise timing of construction and the list of construction equipment for individual projects is not precisely known at this time. At this programmatic level of analysis, construction-related emissions are speculative; such emissions depend on the characteristics of individual active transportation projects. BAAQMD's *CEQA Air Quality Guidelines* (2017) have no thresholds for determining plan-level impacts from construction emissions. Therefore, construction emissions would not exceed an applicable plan-level threshold.

This section analyzes the Plan's long-term effect on GHG emissions by a qualitative discussion of its consistency with applicable plans and policies to reduce emissions. This approach is consistent with guidance from the BAAQMD's *CEQA Air Quality Guidelines* for plan-level analysis. The BAAQMD's 2017 Clean Air Plan sets goals to reduce vehicle emissions and contribute to protecting the climate. The Plan would be consistent with these goals because it would facilitate walking and biking as substitute modes of travel for driving motorized vehicles. Currently an estimated 67 percent of Pittsburgh residents drive alone to work, and another 17 percent carpool (Pittsburgh 2019a). Combined, approximately 84 percent of residents drive to work. By contrast, it is estimated that only 2 percent of residents walk or bike to work. By improving connectivity and safety for pedestrians and bicyclists, the Plan would make active transportation a more viable alternative to driving for people who work locally. The proposed improvements also would make it easier for people to reach local BART stations without driving and then commute to regional work sites in the greater Bay Area. This would address the so-called "first-mile/last-mile" problem where it is difficult for people to move between a transit stop and an origin or destination. Furthermore, a long-term increase in walking and bicycling behavior in Pittsburgh would offset any emissions from constructing new active transportation projects or from additional electricity use for light fixtures. Therefore, as discussed in Section 3, *Air Quality*, the Plan would be consistent with the primary goals of the 2017 Clean Air Plan.

The 2017 Clean Air Plan also contains 85 control strategies aimed at reducing air pollution and protecting the climate in the Bay Area. Applicable control measures to the Plan are measures TR2 (Trip Reduction Programs) and TR9 (Bicycle and Pedestrian Access Facilities). Control Measure TR2

encourages trip reduction policies and programs in local plans and Control Measure TR9 encourages planning for bicycle and pedestrian facilities in local plans.

TR2 Trip Reduction Programs

Implement the regional Commuter Benefits Program (Rule 14-1) that requires employers with 50 or more Bay Area employees to provide commuter benefits. Encourage trip reduction policies and programs in local plans (e.g., general and specific plans), while providing grants to support trip reduction efforts. Encourage local governments to require mitigation of vehicle travel as part of new development approval, to adopt transit benefits ordinances in order to reduce transit costs to employees, and to develop innovative ways to encourage rideshare, transit, cycling, and walking for work trips. Fund various employer-based trip reduction programs.

TR7 Safe Routes to Schools and Safe Routes to Transit

Provide funds for the regional Safe Routes to School and Safe Routes to Transit Programs.

TR9 Bicycle and Pedestrian Access and Facilities

Encourage planning for bicycle and pedestrian facilities in local plans (e.g., general and specific plans, fund bike lanes, routes, paths and bicycle parking facilities).

By improving connectivity and safety for bicyclists and pedestrians, the Plan would make it easier for people to commute by cycling and walking, consistent with Control Measure TR2 to reduce work trips by motor vehicle. Planning for bicycle and pedestrian facilities at a local level would be consistent with Control Measure TR9. Pedestrian projects listed in the Plan also focus on closing sidewalk gaps and enhancing safety near schools. By planning for safe routes to schools, the Plan would facilitate the City's efforts to get funding for individual pedestrian safety projects, consistent with Control Measure TR9. Implementation of the Plan also would not preclude any planned transit or bicycle pathways, and would not otherwise disrupt regional planning efforts to reduce vehicle miles traveled (VMT) and meet federal and State air quality standards. Therefore, the Plan would not hinder implementation of any 2017 Clean Air Plan's control measures.

The Plan also would be consistent with State targets for reducing GHG emissions. California's 2017 Climate Change Scoping Plan to achieve the target of cutting statewide emissions 40 percent from 1990 baseline levels encourages using streets for active transportation as one measure to reduce emissions from transportation (CARB 2017). As stated in the 2017 Scoping Plan, policies that increase active transportation "will need to play a greater role as California strives to achieve its 2030 and 2050 climate targets." The Plan would implement this approach at a local level, consistent with State policy to reduce GHG emissions in compliance with SB 32 and Executive Order B-55-18, eventually achieving statewide carbon neutrality by 2045.

Therefore, the Plan would have a less than significant impact on the environment from GHG emissions, and would not conflict with applicable plans to reduce GHG emissions.

LESS THAN SIGNIFICANT IMPACT

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☒	☐

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

None of the proposed active transportation projects listed in the Plan would involve the transport, use, or disposal of hazardous materials other than the routine use of chemicals during construction (e.g., fuel and engine fluids for equipment, paint, and asphalt) and would not create conditions which could lead to the release of hazardous substances. Users of new active transportation facilities would be subject to a very small risk of exposure to upset and accident conditions from the release of hazardous materials being transported on adjacent travel lanes for motor vehicles. However, this is not a reasonably foreseeable risk to pedestrians and bicyclists. These impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

As shown in Figures 3 and 4, many bicycle and crosswalk projects listed in the Plan would be located within one-quarter mile of schools. These are considered “safe route to school” projects, which improve connectivity and safety for students traveling to and from schools. Ground disturbance during construction of these projects could temporarily expose students and staff to emissions of fugitive dust. However, construction activity would be temporary, which would reduce the time of exposure to dust emissions. Bicycle projects near schools also would be constructed in linear pathways, which would reduce the amount of construction time near schools as construction proceeds along the proposed alignment. Therefore, construction within one-quarter mile of schools would be short-term and would result in minimal fugitive dust emissions. In addition, the projects would not involve hazardous emissions or handling of hazardous materials beyond the routine temporary use of fuel and engine fluids for construction equipment and the application of materials like asphalt and paints. The potential impact to schools would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

According to databases of hazardous material sites maintained by the California Department of Toxic Substances Control (EnviroStor) and the California State Water Resources Control Board (GeoTracker), Pittsburg has the following types of hazardous sites that are still active or need further investigation: leaking underground storage tanks (LUSTs), school investigation sites, voluntary cleanup sites, corrective action sites, evaluation sites, and state response sites (DTSC 2020, SWRCB 2020). These sites are dispersed across many parts of Pittsburg but clustered in the industrial area east of Harbor Street and north of Pittsburg-Antioch Highway and along Railroad Avenue and Willow Pass Road. Many of these sites are at gas stations or industrial facilities that would not be affected by the construction of active transportation projects on public rights-of-way. However, proposed projects that involve the disturbance of soil at or near listed hazardous materials sites could potentially expose people and the environment to hazardous substances. For example, a proposed

Class I shared-use path would be constructed along Willow Pass Road, and a Class IV separated bikeway would be installed on Railroad Avenue, areas which are currently near identified hazardous material sites. Therefore, the impact related to listed hazardous material sites would be potentially significant.

Mitigation Measures

Mitigation Measure HAZ-1 would be required to identify listed hazardous material sites on and near proposed bicycle and pedestrian improvements located near hazardous materials releases, to mitigate for hazardous contaminants where necessary.

HAZ-1 Hazardous Material Sites Investigation and Remediation

The following development standard shall be added to the proposed Plan:

“Prior to construction of any active transportation project listed in the Plan that requires ground disturbance, the City shall consult lists of hazardous material sites maintained by the California Department of Toxic Substances Control (DTSC), the State Water Resources Control Board (SWRCB), and the Contra Costa Hazardous Materials Programs. Where a proposed improvement is located on or adjacent to an identified site, follow up Phase I, and as appropriate, Phase II hazardous waste site investigations shall be completed, and any contaminants shall be remediated to concentrations below applicable screening-level thresholds for human health. No disturbance of contaminated soil shall be permitted unless an approved site cleanup and remediation plan has been implemented for the identified hazardous waste sites.”

By implementing Mitigation Measure HAZ-1, the City would investigate hazardous material sites and remediate contaminants, where applicable, so that people are not exposed to concentrations exceeding screening-level thresholds. This would reduce the impact to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The nearest publicly available airport to Pittsburg is Buchanan Field Airport, which is located approximately 4 miles southwest of city limits. Pittsburg is outside the Airport Influence Area for Buchanan Field Airport, as mapped in the Contra Costa County Airport Land Use Compatibility Plan (Contra Costa County Airport Land Use Commission 2000). Therefore, the Plan would be located outside the scope of an airport land use plan and more than two miles from the nearest airport, and it would not result in a safety hazard or excessive noise from airport activity. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- f. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed active transportation projects would augment Pittsburg’s existing circulation system, giving people better multi-modal options to escape from a hazard. Although construction could temporarily close travel lanes, no streets would be permanently closed or blocked under the Plan.

Therefore, the Plan would not impair the implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan.

NO IMPACT

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

As shown in Figure 4.4-1 in the City's Existing Conditions Report, the southern and western edges of Pittsburg are partly located in a high fire hazard severity zone in a state responsibility area (Pittsburg 2019a). However, Pittsburg and its surroundings are not located in or near a very high fire hazard severity zone. As discussed in Section 20, *Wildfire*, the Plan would not result in the exposure of people to significant risks associated with very high fire hazard severity zones. Furthermore, the proposed active transportation projects would almost entirely be located in urbanized or low-lying parts of Pittsburg that are not prone to high fire risk. Therefore, the Plan would not result in a significant risk of loss, injury, or death involving wildland fires.

LESS THAN SIGNIFICANT IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
(iv) Impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Proposed active transportation projects that would be constructed within an existing paved right-of-way, such as Class III bicycle routes and boulevards, most Class II bike lanes, and crosswalk enhancements, would not degrade ground water quality because they would not result in additional runoff or pollutants. However, ground disturbance outside existing paved rights-of-way, especially grading and vegetation removal for Class I shared-use paths and for Class II bike lanes that require roadway widening, may result in soil erosion. In addition, converting pervious surfaces into paved facilities could increase the amount of runoff from urban areas and thus decrease water quality.

The proposed active transportation projects may be subject to stormwater requirements under the Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (Order Number R2-2015-0049) for the San Francisco Bay Area. This permit is intended to reduce the discharge of pollutants in the City's municipal separate storm sewer system (MS4). The MS4 permit was issued jointly to the City and other local agencies in the regional Contra Costa Clean Water Program (California Regional Water Quality Control Board 2015). To achieve compliance with the regional program, and thus with the conditions of the most recently issued MS4 permit, the City has adopted local regulations. Specifically, Chapter 13.28 of the Pittsburgh Municipal Code establishes discharge requirements for all water entering the storm drain system generated on any developed and undeveloped lands lying within city limits (Pittsburg 2019b).

Under Section 13.28.090 of the Pittsburgh Municipal Code, the City requires best management practices (BMPs) to control the volume, rate, and potential pollutant load of stormwater runoff from new development and redevelopment projects as required by the City's MS4 permit (Pittsburg 2019b). Such BMPs include, where appropriate, Low Impact Development techniques to be implemented at New Development and Significant Redevelopment project sites. These techniques include infiltrating, storing, detaining, evapotranspiring (the release of water vapor from soil, other surfaces, and plants), and biotreating stormwater runoff close to its source (California Regional Water Quality Control Board 2015). If any proposed active transportation project would create 10,000 square feet or more of impervious surface, it would constitute "New Development" under the MS4 permit and would be required to implement BMPs.

In addition, if a proposed active transportation facility would involve disturbance of an area over one acre in size, it would be required to comply with NPDES Construction General Permit Requirements, which would limit peak post-project runoff levels to pre-project levels. Grading activity for some proposed Class I shared-use paths, among other bicycle facilities listed in the Plan, may disturb more than one acre. For such projects to comply with the Construction General Permit, the City would have to prepare a Storm Water Pollution Prevention Plan (SWPPP), which includes BMPs to control erosion and sediment. Construction BMPs could include silt fencing, fiber rolls, stabilized construction entrances, stockpile management, and solid waste management. Post-construction stormwater performance standards are also required.

Compliance with existing regulatory requirements would ensure that the proposed active transportation projects would not violate water quality standards or waste discharge requirements and would not create substantial runoff water or otherwise degrade water quality. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*
- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Some proposed active transportation projects would use water during operation. Water stations providing potable water would be added on the Delta de Anza Trail, and new landscaping and shade trees next to active transportation facilities would require watering. The proposed water stations could incrementally increase demand for groundwater in Pittsburg. In 2015, 13 percent of potable water was sourced from local groundwater wells (Pittsburg 2019a). Because of the small scale of additional water demand for users of the Delta de Anza Trail, and the minor share of potable water sourced from local groundwater, the additional use of potable water would not substantially decrease groundwater supplies. Pittsburg relies on recycled water for street-side landscaping and city parks (Pittsburg 2019a), so additional landscaping under the Plan would not draw from groundwater. Therefore, the Plan would not substantially decrease groundwater supplies.

Proposed active transportation projects that would be constructed within existing paved rights-of-way, such as Class III bicycle routes and boulevards, most Class II bike lanes, and crosswalk enhancements, would not result in new impermeable surfaces and thus would not interfere with groundwater recharge. However, new facilities constructed outside of existing paved rights-of-way, such as Class I shared-use paths and Class II bike lanes that require roadway widening, would increase the volume of impermeable surfaces in Pittsburg. As a result, the proposed facilities could marginally reduce groundwater recharge and increase the amount of surface runoff. However, projects that disturb at least one acre would comply with the NPDES Construction General Permit by implementing BMPs to maintain or replicate the pre-development hydrologic regime. Implementation of required BMPs would minimize impacts related to groundwater recharge. Therefore, the Plan would not substantially interfere with groundwater recharge.

Pittsburg is under the jurisdiction of the San Francisco Regional Water Quality Control Board (RWQCB), which is responsible for preparing the Water Quality Control Plan for the region (Basin Plan). The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality objectives. The State has developed total maximum daily loads (TMDLs), which are a calculation of the maximum amount of a pollutant that a water body can have and still meet water quality objectives established by the region. As discussed under checklist Item a, active transportation projects listed in the Plan that would disturb at least one acre would be required to comply with the State's Construction General Permit, which would minimize and avoid water quality impacts associated with soil erosion and stormwater runoff from project sites. Implementation of proposed active transportation projects would not violate water quality objectives for beneficial uses in the vicinity of the project site or exceed TMDLs. Therefore, the Plan would not conflict with a water quality control plan.

The city overlies the Pittsburg Plain Groundwater Basin (Pittsburg 2019a). In September 2014, the California Legislature enacted comprehensive legislation aimed at strengthening local control and management of groundwater basins throughout the state. Known as the Sustainable Groundwater Management Act (SGMA), the legislation provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for state intervention when necessary to protect the resource. In 2019 the California Department of Water Resources ranked the Pittsburg Plain Groundwater Basin as a "very low" priority under SGMA (California Department of Water Resources 2019). Because the basin is not identified as a high or medium priority, it is not required

to submit a Groundwater Sustainability Plan. Therefore, the Plan would not conflict with any sustainable groundwater management plan.

Impacts related to groundwater would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

Proposed active transportation projects that would be constructed within existing paved rights-of-way, such as Class III bicycle routes and boulevards and most Class II bike lanes, would not alter existing drainage patterns. New facilities located outside of existing paved rights-of-way, such as Class I shared-use paths and bike lanes that would require widening of roadways, could alter existing drainage patterns by introducing new impervious surfaces. However, proposed bicycle facilities would comply with erosion control systems and construction BMPs per the City's MS4 permit. BMPs may include directing runoff to permeable areas, maximizing stormwater storage for reuse, and incorporating porous materials into the project design. Compliance with these requirements would ensure that stormwater would be captured and retained on-site, and would minimize the risks of erosion, flooding, or excess stormwater in the local stormwater drainage system. No bridges or stream and river crossings are proposed in the Plan. Proposed active transportation projects would cross drainages using existing infrastructure. Therefore, the Plan would have a less than significant impact related to drainage patterns.

LESS THAN SIGNIFICANT IMPACT

- c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*
- d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

As discussed above, proposed bicycle facilities constructed outside of existing paved rights-of-way would result in the addition of new impervious surfaces. However, proposed bicycle facilities would not include any new structures such as bridge abutments that could impede or redirect flood flows. Therefore, implementation of the Plan would not impede or redirect flood flows.

In the City's Existing Conditions Report, Table 4.2-4 indicates that Pittsburgh is not at risk from tsunamis, while Figure 4.5-1 shows that low-lying part of the city near the Delta shoreline are

located in a 100-year flood zone designated by the Federal Emergency Management Agency (FEMA) (Pittsburg 2019a). Some proposed active transportation projects in the Plan would be located in the 100-year flood zone, but the operation of bikeways and pedestrian facilities would not involve the use of pollutants that could be released during inundation. Proposed facilities also are not located near a large standing body of water that may be subject to a seiche, or standing wave. Therefore, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

This page intentionally left blank.

11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

a. Would the project physically divide an established community?

The purpose of the proposed active transportation projects listed in the Plan is to increase connectivity in the community of Pittsburg by improving bicycle and pedestrian access. Although the Plan would redesign existing streets for improved multi-modal access, no new roads or other large or linear facilities that would physically divide existing neighborhoods would be constructed. Therefore, the Plan would not divide an established community, but rather would enhance its connectivity. No impact would occur.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The Plan was developed in coordination with the City's existing General Plan and its current General Plan update process. As discussed in Section 17, *Transportation*, the Plan would be consistent with multiple policies in the Transportation Element of the existing General Plan (adopted in 2001 and last amended in 2010) to improve pedestrian and bicyclist circulation. These policies are intended to reduce safety hazards in the circulation system and increase the share of active transportation users in Pittsburg. Increasing active transportation would reduce environmental impacts associated with vehicle miles traveled. All projects listed in the Plan would also comply with policies in the adopted General Plan that are explicitly designed to avoid or mitigation environmental effects.

The City's Vision and Opportunities report for the General Plan update, released in July 2019, identifies active transportation as a key priority of the community, based on feedback from public workshops and pop-up demonstrations (Pittsburg 2019c). As stated in this report, "Pittsburg's future should incorporate concepts of 'complete streets' that serve all modes of transportation, not just cars." The City also identifies "strategic opportunities to enhance public safety through improved bicycle and pedestrian routes and amenities." The Plan's policies to promote active transportation and list of proposed active transportation projects are consistent with themes in the visioning process for the General Plan update, which are intended to reduce environmental impacts from transportation.

In addition, the Plan would also be consistent with the resilience objectives in ABAG's Plan Bay Area (2040): to enhance climate protection and adaptation efforts, strengthen open space protections, create healthy and safe communities, and protect communities against natural hazards. As discussed in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, the Plan would facilitate a reduction in long-term air pollution and GHG emissions by encouraging people to substitute bicycling and walking for driving motor vehicles. The Plan would also further public health goals of increasing physical activity through bicycling and walking. Therefore, the Plan would support ABAG's objectives to enhance climate protection and create healthy and safe communities.

The Plan would be consistent with applicable local and regional plans and policies to reduce environmental impacts. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

There are no significant mineral deposits or active mining operations in the City's Planning Area (Pittsburg 2019a). Therefore, the Plan would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. No impact would occur.

NO IMPACT

This page intentionally left blank.

13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Noise Setting

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs (e.g., the human ear). Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013a).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (Hz) and less sensitive to frequencies around and below 100 Hz (Kinsler, et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as a doubling of traffic volume, would increase the noise level by 3 dB; similarly, dividing the energy in half would result in a decrease of 3 dB (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive an increase (or decrease) of up to 3 dBA in noise levels (i.e., twice [or half] the sound energy); that a change of 5

dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (or half) as loud (10.5 times the sound energy) (Crocker 2007).

The impact of noise is not a function of sound level alone. The time of day when noise occurs and the duration of the noise are also important. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. Typically, L_{eq} is summed over a one-hour period.

The City's General Plan and Municipal Code regulate noise in Pittsburgh. Policy 12-P-9 in the Noise Element of the General Plan limits the generation of loud noises on construction sites adjacent to existing development to normal business hours between 8 a.m. and 5 p.m. In the Pittsburgh Municipal Code, Section 9.44.010 prohibits the use of pile drivers, pneumatic hammers, and similar equipment between the hours of 10 p.m. and 7 a.m. (Pittsburg 2019b). The City's Building and Construction Ordinance (Section 15.88.060.A.5) also prohibits grading noise, including warming up equipment motors, within 1,000 feet of a residence between the hours of 5:30 p.m. and 7 a.m. on weekdays, unless otherwise approved by the City Engineer. However, the Pittsburgh Municipal Code does not establish numeric standards for construction noise.

Vibration Setting

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of hertz (Hz). The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body is from a low of less than 1 Hz up to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise may result in adverse effects, such as building damage, when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz). The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. Particle velocity is the velocity at which the ground moves. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the greatest magnitude of particle velocity associated with a vibration event. Although the City does not have standards for human annoyance or structural damage from vibration, Caltrans has published applicable guidelines for these vibration impacts. Table 2 and Table 3, respectively, show the recommended Caltrans criteria for vibration annoyance and structural damage.

Table 2 Caltrans Criteria for Vibration Annoyance

Human Response	Maximum PPV (in/sec)	
	Transient Sources ¹	Continuous/Frequent Intermittent Sources ¹
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

¹ Caltrans defines transient sources as those that create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources can include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2013b

Table 3 Caltrans Criteria for Vibration Damage

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans 2013b

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

This analysis covers temporary increases in ambient noise from construction activity and permanent increases from noise generated during the operation of active transportation projects.

Construction Noise

Construction of the active transportation projects listed in the Plan would generate elevated noise levels on a temporary basis in the immediate vicinity of project sites. As shown in Table 4, average noise levels associated with using heavy equipment at construction sites can range from approximately 76 to 88 dBA at 50 feet from the source, depending upon the types of equipment in operation at any given time and the phase of construction. The highest noise levels generally occur during excavation and grading, which involve using such equipment as backhoes, bulldozers, shovels, and front-end loaders. Although many active transportation projects would simply require restriping and signage, some projects would require heavy equipment for demolition and grading. For example, crosswalk enhancements could involve jackhammering of existing pavement and concrete to extend curbs, upgrade curb ramps, and install pedestrian beacons.

Table 4 Typical Construction Noise Levels

Equipment	25 feet from Source (dBA L _{eq})	50 feet from Source (dBA L _{eq})	100 feet from Source (dBA L _{eq})	200 feet from Source (dBA L _{eq})	500 feet from Source (dBA L _{eq})
Air Compressor	86	80	74	68	60
Backhoe	86	80	74	68	60
Concrete Mixer	91	85	79	73	65
Grader	91	85	79	73	65
Jack Hammer	94	88	82	76	68
Paver	91	85	79	73	65
Roller	91	85	79	73	65
Saw	82	76	70	64	56
Scraper	91	85	79	73	65
Truck	90	84	78	72	64

Note: pile drivers will not be used for active transportation projects.

Source: Noise level at 50 feet from Federal Transit Administration, 2018. Noise levels at 25 feet, 100 feet, 200 feet, and 500 feet were extrapolated using a 6 dBA attenuation rate per doubling of distance. Each noise level assumes the piece of equipment is operating at full power for the expected duration to complete the construction activity. The duration varies widely between each piece of equipment. Noise levels also depend on the model and year of the equipment used.

Noise levels from point sources such as equipment at construction sites typically attenuate at a rate of 6 dBA per doubling of distance. Therefore, only areas within several hundred feet of construction sites would typically be exposed to perceptible construction noise levels. As noted above, the Pittsburgh Municipal Code does not establish numeric standards for construction noise. However, construction noise that substantially exceeds existing ambient noise levels could disturb sensitive receptors, such as residences and schools.

Construction activity under the Plan would be required to comply with Policy 12-P-9 in the City’s Noise Element, which would “limit generation of loud noises on construction sites adjacent to existing development to normal business hours between 8:00 AM and 5:00 PM.” This policy would prevent loud construction activity during evening and nighttime hours when nearby residences are most sensitive to noise. However, as discussed above, daytime construction noise could still disturb sensitive receptors. Therefore, the construction of active transportation projects could have a potentially significant impact on sensitive receptors from temporary increases in ambient noise levels.

Mitigation Measures

In addition to requirements for construction noise in the City’s Noise Element and Municipal Code, the following mitigation measures are required to reduce the exposure of sensitive receptors to construction noise:

N-1 Noise Reduction Measures Near Sensitive Receptors

The following development standard shall be added to the proposed Plan:

“The City shall ensure that, where residences, schools, or other noise-sensitive uses are located within 500 feet of construction sites for active transportation projects listed in the Plan, appropriate measures shall be implemented to reduce noise exposure to the extent feasible. Specific techniques may include, but are not limited to:

- Locating stationary noise-generating construction equipment as far from sensitive receptors as feasible.
- Installing temporary noise barriers to block and deflect noise.”

N-2 Noise Control Equipment

The following development standard shall be added to the proposed Plan:

“The City shall ensure that equipment and trucks used for construction of active transportation projects listed in the Plan utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds).”

N-3 Impact Equipment

The following development standard shall be added to the proposed Plan:

“The City shall ensure that impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for construction of active transportation projects listed in the Plan be hydraulically or electrically powered wherever feasible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, use of an exhaust muffler on the compressed air exhaust can lower noise levels from the exhaust by up to about 10 dBA. When feasible, external jackets on the impact equipment can achieve a reduction of 5 dBA. Whenever feasible, use quieter procedures, such as drilling rather than impact equipment operation.”

With implementation of local noise control requirements and proposed mitigation, temporary construction noise would be reduced to the extent feasible. Therefore, this impact would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

Operational Noise

The operation of proposed active transportation projects could generate temporary, intermittent noise from human conversations and the use of bicycles near sensitive residential uses. However, these noise sources would not substantially increase ambient noise levels relative to existing roadway traffic. The substitution of bicyclist and pedestrian trips for motor vehicle trips on proposed facilities also would incrementally reduce traffic noise. Therefore, the impact from permanent increases in noise would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

The use of heavy construction equipment can generate substantial vibration near the source. It is expected that construction of some proposed active transportation projects would generate temporary vibration from jackhammering to break up existing pavement, bulldozers for earthmoving, trucks loaded with construction materials, and vibratory rollers to even out the surface of new asphalt.

Similar to construction noise, vibration levels would vary depending on the type of construction project and related equipment use. In general, the construction of bicycle facilities projects would be unlikely to generate substantial vibration. Table 5 estimates vibration levels from equipment that may be used during construction of the proposed facilities.

Table 5 Vibration Levels for Construction Equipment

Equipment	PPV (in/sec)		
	25 Feet	50 Feet	100 Feet
Vibratory Roller	0.210	0.098	0.046
Large Bulldozer	0.089	0.042	0.019
Loaded Trucks	0.076	0.035	0.017
Jackhammer	0.035	0.016	0.008

Source: Caltrans 2013b

As shown in Table 5, construction activity would generate vibration levels reaching an estimated 0.098 PPV at a distance of 50 feet, during paving of new bicycle facilities. Because this vibration level would not exceed 0.25 PPV, Caltrans' recommended criterion for distinctly perceptible vibration from transient sources, it would not result in substantial annoyance to people of normal sensitivity. Construction activity that generates loud noises (and therefore vibration) also would be limited to normal business hours, which would prevent the exposure of sensitive receptors to vibration during evening and nighttime hours. Furthermore, maximum vibration levels would not exceed the Caltrans criteria of 0.5 PPV for potential damage of historic and old buildings from transient vibration sources. Even if construction activity generated vibration as close as 25 feet from sensitive receptors, vibration levels reaching 0.21 PPV (as shown in Table 5) still would not exceed applicable Caltrans criteria for human annoyance and structural damage. Therefore, vibration would not be excessive, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

As discussed in Section 9, *Hazards and Hazardous Materials*, the nearest publicly available airport to Pittsburg is Buchanan Field Airport, which is located approximately four miles southwest of city limits. Pittsburg is outside the Airport Influence Area for Buchanan Field Airport, as mapped in the Contra Costa County Airport Land Use Compatibility Plan (Contra Costa County Airport Land Use Commission 2000). No private airstrips are located in the vicinity of Pittsburg. Therefore, the Plan would not expose active transportation users to excessive noise levels from aircraft. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------------	--	------------------------------------	-----------

Would the project:

- a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

☐ ☐ ☐ ☒

- b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

☐ ☐ ☐ ☒

- a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*
- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

Implementation of the Plan would not involve the construction of infrastructure that could induce substantial population growth, such as new or increased capacity sewer or water lines, or the construction of new streets and roads, but rather would serve existing populations. While these local improvements would make the area more attractive to tourists, this would not be a substantial growth-inducing effect in Pittsburg. Proposed on-street bicycle facilities and crosswalk enhancements also would be located within existing road corridors and would not require the extension of roads. In addition, because the proposed active transportation projects would be located in existing roadway corridors or open space areas, they would not require displacement of housing or people. No impact related to population and housing would occur.

NO IMPACT

This page intentionally left blank.

15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1 Fire protection?	☐	☐	■	☐
2 Police protection?	☐	☐	■	☐
3 Schools?	☐	☐	☐	■
4 Parks?	☐	☐	☐	■
5 Other public facilities?	☐	☐	☐	■

a.1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

a.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

Proposed Class I shared-use paths listed in the Plan that would be located outside existing rights-of-way would provide public access to areas that are not currently accessible and could require expanded police and fire protection service in these corridors. However, new shared-use paths could also increase access for police and fire providers into areas with poor existing access (e.g., the Pittsburg Wetlands). In addition, proposed active transportation projects would be located in the urbanized community of Pittsburg, which is already served by police and fire protection. The proposed projects would not involve residential, commercial, or other development that could

substantially increase demand for police or fire protection services in Pittsburgh. Therefore, the Plan would have a less than significant impact related to these public services.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

The Plan would facilitate active transportation improvements, not the construction of residences or places of employment that would increase the population of school-age children in Pittsburgh. Because the Plan would not increase demand for school facilities, no impact would occur.

NO IMPACT

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

The Plan would not facilitate the construction of residences or places of employment that would increase the service population for park facilities in Pittsburgh. However, it would improve public access to existing parks. Projects listed in the Plan would complete bicycle connections and improve pedestrian access to Buchanan Park, City Park, Ambrose Park, Highlands Ranch Park, Stoneman Park, and Central Park. Therefore, the Plan would not have an adverse environmental impact from the construction of parks.

NO IMPACT

a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

As discussed above, the Plan would not facilitate an increase in Pittsburgh's population. Therefore, it would not increase demand for libraries or other governmental facilities.

NO IMPACT

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☒	☐	☐

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

As discussed in Section 15, *Public Services*, projects listed in the Plan would complete bicycle connections and improve pedestrian access to Buchanan Park, City Park, Ambrose Park, Highlands Ranch Park, Stoneman Park, and Central Park. Therefore, the Plan would improve access to local parks in Pittsburg. The proposed construction of local segments of the regional Delta de Anza and California Delta trails would also improve access to parks beyond city limits, such as the Bay Point Regional Shoreline. Improved access to local and regional parks could incrementally increase the number of visitors at these recreational facilities. However, the proposed active transportation projects would mainly serve existing residents and employees in Pittsburg, and they would not increase the service population for local parks. Therefore, it is not anticipated that improved access to parks would increase public use to the extent that would significantly accelerate or cause the physical deterioration of parks, requiring repair or expansion. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Certain active transportation projects proposed in the Plan, particularly Class I shared-use paths, would serve as new recreational facilities. The construction of these recreational facilities could have adverse environmental impacts, as described elsewhere in this IS-MND, before the implementation of mitigation measures. As discussed in Section 4, *Biological Resources*, impacts to special-status species, nesting birds, and wetlands and riparian communities during construction would be potentially significant. Section 5, *Cultural Resources*, notes that impacts to archaeological resources from ground disturbance could be significant. As discussed in Section 7, *Geology and Soils*, new bicycle paths on undisturbed soil could be subject to unstable conditions from expansive soils. Section 9, *Hazards and Hazardous Materials*, also indicates that soil disturbance could expose

people to hazardous contaminants. Section 18, *Tribal Cultural Resources*, notes that impacts to Native American resources from ground disturbance could be significant. Mitigation measures in these respective sections would reduce potential environmental impacts to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☒	☐

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*
- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The Plan has been developed in coordination with the Transportation element of Pittsburg's existing General Plan and with the City's General Plan update process, taking into consideration multiple modes of circulation including transit, roadway, bicycle, and pedestrian facilities.

Transit Facilities

Proposed active transportation routes in the Plan, as well as proposed bike racks and lockers at the Pittsburg Bay Point BART station, would improve multi-modal access to transit facilities. In addition, proposed crosswalk enhancements would improve safety for pedestrians accessing bus stops. The Plan would not affect the capacity of transit facilities to accommodate public demand. Therefore, the Plan would not conflict with policies in the City's Transportation Element (2010) to improve transit access.

Roadway Facilities

The projects listed in the Plan, by their nature, would have little to no impact on roadway circulation for motor vehicles in Pittsburg. One of the Plan's core objectives is to reduce vehicle miles traveled by improving access for pedestrians and bicyclists, allowing people to substitute active transportation for driving. While increased bicycle activity on area roadways could incrementally increase travel times for motorized vehicles having to pass bicyclists or wait for them to cross

intersections, this increase would be negligible and potentially offset by the reduction of local vehicle trips. Therefore, the Plan would not conflict with policies related to roadway facilities in the City's Transportation Element (2010), and it would not conflict with statewide policy to reduce vehicle miles traveled under CEQA Guidelines section 15064.3, subdivision (b).

Bicycle Facilities

The City's Existing Conditions Report identifies gaps in Pittsburgh's bike lane network and higher stress for bicyclists even where bike lanes are provided adjacent to 35 mph motor vehicle speeds (Pittsburg 2019a). In addition, key constraints to bicycling in Pittsburgh include a relative lack of north-south connections while most designated bikeways have a high degree of traffic stress for bicyclists. The Plan proposes a comprehensive set of improvements to address these deficiencies in connectivity and safety. As shown in Figure 3, the Plan would provide for a citywide network of shared-use paths, bike lanes, and bike routes and boulevards. This would implement Policy 7-P-44 in the City's Transportation Element to develop a citywide Bicycle Master Plan (Pittsburg 2010). The California Delta Trail segment west of 8th Street also would implement Policy 7-P-47 to develop a multi-use bike path along the abandoned railroad tracks north of Willow Pass Road. Therefore, the Plan would not conflict with applicable policies for bicycle facilities.

Pedestrian Facilities

While the pedestrian network is generally well developed in Pittsburgh, there are some locations where gaps or barriers limit pedestrian circulation, including lengthy crossings of busy streets and discontinuous street patterns in newer developments (Pittsburg 2019a). Sidewalk gaps exist on an estimated 13 miles of the City's roadway network. Proposed pedestrian facilities in the Plan would comprehensively improve pedestrian access and safety in Pittsburgh, consistent with applicable policies. For example, the proposed projects to close gaps in the City's sidewalk network would implement Policy 7-P-38 to "develop a series of continuous pedestrian systems within Downtown and residential neighborhoods." Proposed crosswalk enhancements also would implement Policy 7-P-42 to improve pedestrian crossing safety at heavily used intersections. Therefore, the Plan would not conflict with policies related to pedestrian facilities.

NO IMPACT

- c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

According to the City's Existing Conditions Report, pedestrians and bicyclists are typically the most vulnerable users to roadway hazards (Pittsburg 2019a). When collisions do occur, the extent of their injuries is typically greater and increases exponentially with the speed of the roadway. The Plan would add geometric design features at existing intersections for the purpose of improving public safety for pedestrians and bicyclists. Crosswalk enhancements would include features such as curb extensions to shorten pedestrian crossings, raised crosswalks to indicate that drivers should slow down at intersections, and upgraded curb ramps to improve access for pedestrians with mobility restrictions. Instead of introducing hazards to the circulation system, proposed geometric features would decrease existing hazards identified in the Existing Conditions Report. Potentially incompatible uses such as farm equipment also are not proposed in the Plan. Therefore, no impact related to roadway hazards would occur.

NO IMPACT

d. Would the project result in inadequate emergency access?

Individual active transportation projects listed in the Plan would have to conform to local, State, and national standards and manuals, as applicable, regarding safety, proper design, emergency access, and construction. These standards would require proper emergency access as part of the design and through construction of projects. Adherence to these required design and construction standards would reduce potential impacts related to emergency access to a less-than-significant level.

LESS THAN SIGNIFICANT IMPACT

This page intentionally left blank.

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☒	☐	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

PRC Section 21074 (a)(1)(A) and (B) define tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe.” These resources are:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
2. Determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

Assembly Bill (AB) 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

The City of Pittsburg prepared and mailed letters to local Native Americans who have requested notification under AB 52 on February 18, 2020. Under AB 52, tribes have 30 days to respond and

request consultation. The 30-day window for requesting consultation on the Plan elapsed in late March. On April 22, 2020, the Governor signed Executive Order N-54-20, which suspended for 60 days the period in which a tribe must request consultation on a project during the CEQA process, due to the coronavirus pandemic (Newsom 2020). Because the entire consultation period for the Plan predated the Executive Order's statewide suspension of consultation periods, the Executive Order is not applicable in this case. No tribes responded during the 30-day period to request consultation.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1?*

Because no tribes have requested AB 52 consultation over the Plan, the City assumes that no known tribal cultural resources are present within Pittsburgh. However, it is possible that ground disturbance during construction of the proposed active transportation project would encounter unknown tribal cultural resources or known cultural resources that may be identified as tribal cultural resources. Therefore, the Plan has the potential to significantly impact tribal cultural resources through ground disturbance and looting or vandalism of encountered resources. Mitigation is required to ensure that any unanticipated discoveries of tribal cultural resources are avoided or, where avoidance is infeasible, mitigated to a less than significant level.

Mitigation Measures

TCR-1 Suspension of Work Around Tribal Cultural Resources

The following development standard shall be added to the proposed Plan:

"In the event that cultural resources of Native American origin are identified during construction of an active transportation project listed in the Plan, all earth-disturbing work in the vicinity of the find shall be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find as a cultural resource and an appropriate local Native American representative is consulted. If the City, in consultation with local Native Americans, determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with local Native American group(s). The plan shall include avoidance of the resource or, if avoidance of the resource is infeasible, the plan shall outline the appropriate treatment of the resource in coordination with the appropriate local Native American tribal representative and, if applicable, a qualified archaeologist. Examples of appropriate mitigation for tribal cultural resources include, but are not limited to, protecting the cultural character and integrity of the resource, protecting traditional use of the resource, protecting the confidentiality of the resource, or heritage recovery."

Implementation of Mitigation Measure TCR-1 would protect tribal cultural resources in the event of their discovery on construction sites, reducing the potential impact on such resources to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

This page intentionally left blank.

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

Proposed active transportation projects that would be constructed within existing paved rights-of-way, such as most bike lanes, routes, and boulevards, and crosswalk enhancements, would be located on existing roadways and would not impact stormwater drainage. However, as discussed in Section 10, *Hydrology and Water Quality*, proposed bicycle facilities that would be constructed outside existing paved rights-of-way, such as shared-use paths and bike lanes that may require roadway widening, would increase the volume of impermeable surfaces in Pittsburg. In compliance

with the NPDES Construction General Permit, such projects would be required to implement BMPs to maintain or replicate the pre-development hydrologic regime. Implementation of required BMPs would minimize impacts related to stormwater drainage.

Some active transportation projects would be located in utility corridors or in roadway rights-of-way that may overlay utility infrastructure. For example, a proposed trail within a PG&E corridor would connect Bodega Drive to Rancho Medanos Junior High School. Such facilities would not require trenching or excavation to the extent that relocation of existing utility infrastructure would be necessary. In addition, although some new facilities would include pedestrian-scale lighting that uses electricity, new bicycle and pedestrian projects would not exert substantial demand on utilities such as electric power and natural gas. Therefore, they would not result in the need to build new utility infrastructure. The Plan would have a less than significant impact related to the relocation or construction of utility infrastructure.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

The City obtains 85 to 95 percent of its water supply from the Contra Costa Water District (CCWD) pursuant to a contractual arrangement allowing the City to obtain water as is necessary to meet its needs, subject to rationing restrictions in the event of drought or other extraordinary circumstances (Pittsburg 2019a). CCWD's future supply projections indicate adequate availability of surface water delivered through its contract with the U.S. Bureau of Reclamation, along with other available sources and short-term purchases under normal conditions. In the event of multiple consecutive dry years, the City projects that its water supply would still exceed demand through the year 2030. However, projected demand would begin to exceed supply around 2035 if actions to manage demand are not pursued.

To ensure that Pittsburg's water supply remains sufficient in future years, the City has developed a four-stage rationing plan for implementation during declared water shortages (Pittsburg 2019a). The rationing plan includes voluntary and mandatory rationing, depending on the causes, severity, and anticipated duration of the water supply shortage. Implementation of this plan would reduce water consumption by up to 50 percent as needed during drought years.

During the construction of active transportation projects listed in the Plan, water may be required on a temporary basis to wet down disturbed areas and minimize emissions of fugitive dust. However, water use would be temporary occurring only during construction activities. As discussed in Section 10, *Hydrology and Water Quality*, some new facilities would use water after construction. These include water stations to provide potable water on the Delta de Anza Trail, and additional landscaping and shade trees. The increase in water demand by active transportation users and landscaping would be small in scale relative to existing citywide use and would not substantially decrease water supplies. Furthermore, Pittsburg relies on recycled water for street-side landscaping and city parks (Pittsburg 2019a), so additional landscaping under the Plan would not draw from groundwater. Any additional water demand would be offset by water rationing during drought years on an as-needed basis. Therefore, the Plan would have a less than significant impact on water supplies.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Construction of the proposed active transportation projects would not include new restrooms or septic systems that could generate additional wastewater. Although new restrooms could potentially be installed at staging areas for shared-use paths, they are not proposed as elements of the projects listed in the Plan. Therefore, implementation of the Plan itself would not affect the ability of wastewater treatment providers to accommodate wastewater generated in Pittsburgh. No impact would occur.

NO IMPACT

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The proposed active transportation projects would not lead to a permanent increase in solid waste generated in Pittsburgh. During construction, waste would be limited to debris from the removal of linear strips of existing pavement or subsurface material. Most individual facilities would involve surface treatments like the painting of stripes for bike lanes or sharrows for bike routes, and the installation of crosswalk enhancements, the construction of which would not generate a substantial amount of solid waste. Furthermore, the long-term use of new on-street facilities would not generate solid waste. Although trash cans may be installed on planned shared-use path segments, the disposal of waste by trail users would generate minimal additional solid waste for disposal at a landfill. The construction and operation of active transportation projects would not substantially increase solid waste generation. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

This page intentionally left blank.

20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

As shown in Figure 4.4-1 in the City's Existing Conditions Report, some of the southern and western edges of Pittsburg are located in a high fire hazard severity zone in a state responsibility area (Pittsburg 2019a). However, Pittsburg and its surroundings are not located in or near a very high fire hazard severity zone.

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

No proposed active transportation projects listed in the Plan would be located in a very high fire hazard severity zone. One facility, a Class III bicycle boulevard on Kirker Pass Road, would be located in a high fire hazard severity zone. This project would involve striping and signage for motor vehicles to share the road with bicyclists, and would not alter the roadway's capacity to accommodate emergency response vehicles or evacuations from Pittsburg. Therefore, the Plan would not impair

an adopted emergency response plan or emergency evacuation plan related to wildfire. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

As discussed above, the Plan would not be located in or near a very high fire hazard severity zone. Therefore, the proposed active transportation projects would not exacerbate wildfire risks related to slope, prevailing winds, or the addition of flammable material. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

The Plan would not be located in or near a very high fire hazard severity zone. Furthermore, proposed active transportation projects would not require the installation of new infrastructure such as roads, fuel breaks, emergency water sources, or power lines that may exacerbate fire risk or result in other environmental impacts. No impact would occur.

NO IMPACT

- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

Because the Plan would not be located in or near a very high fire hazard severity zone, it would not expose people to significant risks as a result of runoff, post-fire slope instability, or drainage changes. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

- a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

As discussed in Section 4, *Biological Resources*, certain proposed active transportation projects listed in the Plan could reduce the habitat of special-status species, disrupt nesting birds, and impair wetlands and riparian habitat. As discussed in Section 5, *Cultural Resources*, the construction of proposed projects would not impact historical resources; however, they may impact unanticipated archaeological resources. Potential impacts to biological resources would be reduced to a less-than-significant level with implementation of Mitigation Measures BIO-1 through BIO-6 to study, protect, and compensate for the loss of sensitive biological resources. Impacts to cultural resources would

be reduced to a less-than-significant level with implementation of Mitigation Measure CR-1 for the protection and recovery of cultural resources if discovered on construction sites. Therefore, impacts to biological and cultural resources would be reduced to less-than-significant levels with implementation of identified mitigation measures.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

As described in the discussion of environmental checklist Sections 1 through 20, the Plan would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated, with respect to all environmental issues. Cumulative impacts of several resource areas have been addressed in the individual resource sections above: Air Quality, Greenhouse Gases, Noise, and Transportation/Traffic (See CEQA Guidelines Section 15064(h)(3)). Proposed active transportation projects would reduce vehicle miles traveled and greenhouse gas emissions while improving overall air quality. Therefore, the Plan would not result in a cumulative traffic impact. Cumulative noise impacts would be less than significant because proposed facilities would not increase traffic on area roadways. Other resource areas (population/housing and mineral) were determined to have no impact. Therefore, the Plan would not contribute to cumulative impacts related to these issues. Several resource issues (e.g., geology, hazards and hazardous materials) are by their nature project-specific and impacts at one location do not add to impacts at other locations or create additive impacts. As such, cumulative impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in Section 3, *Air Quality*, proposed active transportation projects would not result in a direct or indirect air quality impact. As discussed in Section 13, *Noise*, construction of the proposed facilities may affect nearby sensitive receptors, but implementation of Mitigation Measures N-1 through N-3 would reduce construction noise impacts by requiring noise control measures to the extent feasible, such as locating stationary construction equipment as far from sensitive receptors as feasible and using the best available noise control techniques on equipment. Similarly, as discussed in Section 9, *Hazards and Hazardous Materials*, construction of active transportation projects could occur on or near listed hazardous material sites, but implementation of Mitigation Measure HAZ-1 would reduce impacts by requiring assessment and remediation for any such active sites. Impacts to human beings would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

References

Bibliography

- Agenbroad, L.D. 2003. New Localities, Chronology, and Comparisons for the Pygmy Mammoth (*Mammuthus exilis*), in J. Reumer (ed.): Advances in Mammoth Research, Proceedings of the 2nd International Mammoth Conference, Rotterdam, the Netherlands. DEINSEA 9:1-16.
- Bartow, J.A., and Nilsen, T.H. 1990. Review of the Great Valley Sequence, Eastern Diablo Range and Northern San Joaquin Valley, Central California. U.S. Geological Survey Open-File Report 90-226.
- Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May 2017. Available at:
http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en
- Bell, C.J., E.L. Lundelius, Jr., A.D. Barnosky, R.W. Graham, E.H. Lindsay, D.R. Ruez, Jr., H.A. Semken, Jr., S.D. Webb, and R.J. Zakrzewski. 2004. The Blancan, Irvingtonian, and Rancholabrean Mammal Ages, in Woodburne, M.O. (ed.) Late Cretaceous and Cenozoic Mammals of North America: Biostratigraphy and Geochronology. Columbia University Press, New York, pp. 232-314.
- California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. December 14, 2017. Available at:
https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.
- _____. 2018. Maps of State and Federal Area Designations. October 2018. Available at:
<https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>
- _____. 2019. California Greenhouse Gas Emissions for 2000 to 2017: Trends of Emissions and Other Indicators. Available at:
https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf
- California Department of Conservation. 2017. California Important Farmland Finder. Available at:
<https://maps.conservation.ca.gov/DLRP/CIFF/> (accessed February 2020).
- California Department of Fish and Wildlife (CDFW). 2019. California Natural Community List. Updated November 8, 2019. Available at: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities> (accessed January 2020).
- _____. 2020. California Natural Diversity Database (CNDDB) - Rarefind 5. Available at:
<https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data> (accessed January 2020).
- California Department of Toxic Substances Control (DTSC). 2020. EnviroStor database. Available at:
<https://www.envirostor.dtsc.ca.gov/public/> (accessed February 2020).
- California Department of Water Resources. 2019. Sustainable Groundwater Management Act 2019 Basin Prioritization: Process and Results. Available at:
https://www.emwd.org/sites/default/files/file-attachments/sgma_basin_prioritization_2019_results.pdf?1559164669

- California Environmental Protection Agency (CalEPA). 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature. Available at: <https://calisphere.org/item/ark:/86086/n26972h4/>
- California Geological Survey (CGS). 2002. California Geomorphic Provinces, Note 36. Available at: <https://www.contracosta.ca.gov/DocumentCenter/View/34134/CGS-2002-California-Geomorphic-ProvincesNote-36-PDF>
- California Office of Historic Preservation. 1995. Instructions for Recording Historical Resources. Published March 1995. Available at: <http://scic.org/docs/OHP/manual95.pdf>
- California Regional Water Quality Control Board, San Francisco Bay Region. 2015. Municipal Regional Stormwater NPDES Permit. Order No. R2-2015-0049. Available at: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/R2_2015_0049_amended.pdf
- Caltrans. 2013a. Technical Noise Supplement to the Traffic Noise Analysis Protocol. (CT-HWANP-RT-13-069.25.2) September. Available at: <https://evogov.s3.amazonaws.com/media/17/media/119602.pdf>
- _____. 2013b. Transportation and Construction Vibration Guidance Manual (CT-HWANP-RT-13-069.25.3). September. Available at: http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf
- _____. 2019. List of Eligible and Officially Designated State Scenic Highways. August 2019. Available at: https://dot.ca.gov/-/media/dot-media/programs/design/documents/design-and-eligible-aug2019_a11y.xlsx
- Cepeda et. al. 2017. “Levels of Ambient Air Pollution According to Mode of Transport: A Systematic Review.” *Lancet Public Health*, January 2017, Vol 2: e23-34. Available at: [https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667\(16\)30021-4.pdf](https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667(16)30021-4.pdf)
- Contra Costa County Airport Land Use Commission. 2000. Contra Costa County Airport Land Use Compatibility Plan. Available at: <https://www.contracosta.ca.gov/4307/Airport-Land-Use-Commission-ALUC>
- Crocker, Malcolm J. Crocker (Editor). 2007. *Handbook of Noise and Vibration Control Book*, ISBN: 978-0-471-39599-7, Wiley-VCH, October.
- Dibblee, T.W., and Minch, J.A., 2006. Geologic map of the Clayton quadrangle, Contra Costa County, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-192, scale 1:24,000.
- _____. 2006. Geologic map of the Vine Hill & Honker Bay quadrangles, Contra Costa & Solano Counties, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-191, scale 1:24,000.
- East Contra Costa County Habitat Conservation Plan Association. 2006. Final East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan. Available at: https://www.contracosta.ca.gov/depart/cd/water/HCP/archive/final-hcp/final_hcp_nccp.html (accessed January 2020).

- Federal Transit Administration (FTA). Transit Noise and Vibration Impact Assessment Manual. September 2018. Available at:
https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf
- Intergovernmental Panel on Climate Change (IPCC). 2007. *Summary for Policymakers*. In: *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Available at:
<https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-spm-1.pdf>
- _____. 2013: Summary for Policymakers. In: *Climate Change 2013: The Physical Science Basis*. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available at:
https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_SPM_FINAL.pdf
- Jefferson, G.T. 1991 A Catalogue of Late Quaternary Vertebrates from California, Part Two, Mammals. Natural History Museum of Los Angeles County Technical Report, 7:1-129.
- Kinsler, Lawrence E., et al. 1999. *Fundamentals of Acoustics*, 4th Edition. ISBN 0-471-84789-5. Wiley-VCH, December 1999.
- Merriam, J.C. 1911. The Fauna of Rancho La Brea; Part I: Occurrence. *Memoirs of the University of California*, 1(2):197-213.
- Newson, Gavin. 2020. Executive Order N-54-20. April 22, 2020. Available at:
<https://www.gov.ca.gov/wp-content/uploads/2020/04/N-54-20-COVID-19-text-4.22.20.pdf>
- Norris, R. M. and Webb, R. W. 1990. *Geology of California*. John Wiley and Sons, Inc. New York.
- Oakland, City of. 2020. Bikeway Project FAQs. Available at:
<https://www.oaklandca.gov/resources/bikeway-project-faqs> (accessed February 2020).
- Paleobiology Database. 2020. Fossilworks web-based portal, <http://fossilworks.org> and paleodb.org (accessed February 2020).
- Pittsburg, City of. 2010a. City of Pittsburg General Plan. Adopted 2001, last amended 2010. Available at:
https://static1.squarespace.com/static/5c741fe1b10f25b8de62226a/t/5c917a7724a6949d02f90591/1553037981743/Pittsburg_GeneralPlan2020_Consolidated_web.pdf
- _____. 2010b. Interactive Zoning Map. Available at:
<http://www.ci.pittsburg.ca.us/index.aspx?page=500> (accessed February 5, 2020).
- _____. 2019a. Existing Conditions Report: City of Pittsburg General Plan Update. Available at:
<https://pittsburg.generalplan.org/documents-and-maps>
- _____. 2019b. Pittsburg Municipal Code. Updated November 2019. Available at:
<https://www.codepublishing.com/CA/Pittsburg> (accessed February 7, 2020).
- _____. 2019c. Vision and Opportunities Report: City of Pittsburg General Plan Update. July 2019. Available at:
https://static1.squarespace.com/static/5c741fe1b10f25b8de62226a/t/5d40c1cd146675000198636c/1564525016590/VisioningReport_7-29-19-compressed.pdf

- Reynolds, R.E., R.L. Reynolds, and A.F. Pajak III. 1991. Blancan, Irvingtonian, and Rancholabrean(?) Land Mammal Age Faunas from Western Riverside County, California, in R.E. Reynolds, and D.P. Whistler (eds.) *Inland Southern California: the Last 70 million Years*. M.O. Woodburne, San Bernardino County Museum Association Quarterly, 38(3-4):37-40.
- Savage, D.E., T. Downs, and O.J. Poe. 1954. Cenozoic Land Life of Southern California, in R.H. Jahns ed., *Geology of Southern California*. California Division of Mines and Geology, 170, Ch III, pp. 43-58.
- Scott, E. and S.M. Cox. 2008. Late Pleistocene Distribution of Bison (Mammalia; Artiodactyla) from the Mojave Desert of Southern California and Nevada, in X. Wang and L.G. Barnes (eds.) *Geology and Vertebrate Paleontology of Western and Southern North America: Contributions in Honor of David P. Whistler*. Natural History Museum of Los Angeles County, Science Series, 41:359-82.
- Sims, J.D. Fox, K.F. Bartow, J.A., and Helley, E.J. 1973. Preliminary geologic map of Solano County and parts of Napa, Contra Costa, Marin, and Yolo Counties, California: U.S. Geological Survey, Miscellaneous Field Studies Map MF-484, scale 1:62,500.
- Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee. Bethesda, MD. Available at: http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx
- Springer, K., E. Scott, J.C. Sagebiel, and L.K. Murray. 2009. The Diamond Valley Lake Local Fauna: Late Pleistocene Vertebrates from Inland Southern California, in Albright, L.B. III (ed.), *Papers on Geology, Vertebrate Paleontology, and Biostratigraphy in Honor of Michael O. Woodburne*. Museum of Northern Arizona Bulletin, 65:217-36.
- State Water Resources Control Board (SWRCB). 2020. GeoTracker database. Available at: <https://geotracker.waterboards.ca.gov/> (accessed February 2020).
- United States Fish and Wildlife (USFWS). 2020. National Wetlands Inventory. Available at: <https://www.fws.gov/wetlands/data/Mapper.html> (accessed January 2020).
- United States Geological Survey (USGS). 2017. Quaternary Fault and Fold Database of the United States: Rio Vista Fault (Class A) No. 246. Available at: https://earthquake.usgs.gov/cfusion/qfault/show_report_AB_archive.cfm?fault_id=246§ion_id=
- _____. 2020. Quaternary Fault and Fold Database of the United States: Interactive Fault Map. Available at: <http://www.ci.pittsburg.ca.us/Modules/ShowDocument.aspx?documentid=1390>
- Wilkerson, G., T. Elam, and R. Turner. 2011. Lake Thompson Pleistocene Mammalian Fossil Assemblage, Rosamond, in Reynolds, R.E. (ed.) *The Incredible Shrinking Pliocene: The 2011 Desert Symposium Field Guide and Proceedings*. California State University Desert Studies Consortium, Pp. 88-90.
- Winters, H.H. 1954. The Pleistocene fauna of the Manix Beds in the Mojave Desert, California. Master's Thesis, California Institute of Technology. 71 pp.

List of Preparers

Rincon Consultants, Inc. prepared this IS-MND under contract to the City of Pittsburgh. Persons involved in data gathering analysis, project management, and quality control are listed below.

RINCON CONSULTANTS, INC.

Abe Leider, AICP CEP, Principal
 Jonathan Berlin, MESM, Senior Environmental Planner
 Kari Zajac, MESM, Project Manager
 Leslie Trejo, Planning Intern
 David Daitch, Ph.D., Program Manager
 Craig Lawrence, Senior Biologist/Regulatory Specialist
 Elizabeth Wilson, Associate Environmental Planner
 Hannah Haas, MA, RPA, Archaeologist
 Elaine Foster, Archaeologist
 Steven Treffers, Senior Architectural Historian
 Mathew Carson, MS, Paleontologist
 Jorge Mendieta, Associate Environmental Scientist/Paleontologist
 Audrey Brown, GIS Analyst
 Debra Jane Selzer, Lead Document Formatting and Production Specialist

This page intentionally left blank.

Appendix A

Proposed Active Transportation Projects

Table A-1 Proposed Pedestrian and Bicycle Improvement Projects

Project Name	Limits (From/To)	Project Type	Description	Miles
Trail Projects				
De Anza Trail				
Delta de Anza Trail	Western City limit to Eastern City Limit	Trail	▪ Add pedestrian-scale lighting and verify lighting levels at crossings ▪ Identify a security strategy for the trail, which might include blue light phones, cameras, and/or increased trail enforcement ▪ Add trail amenities, such as trash cans and water stations ▪ Provide shade trees and landscaping to increase comfort and aesthetics of the trail ▪ Work with local groups and East Bay Regional Park District (EBRPD) to develop placemaking strategies and installations, such as community gardens and artwork ▪ Explore opportunities to convert the Delta de Anza Trail into a linear park, like the Richmond Greenway Trail, to provide park access to park-poor areas ▪ Add staging areas with parking and wayfinding signs to provide greater access to the trail. Potential locations to explore include the parcel on the east side of Railroad Avenue just north of the Delta de Anza Trail and at Small World Park.	4.9
Delta de Anza Trail Extension	On-street trail alignment between Delta de Anza Canal Road Extension and Delta de Anza Trail south of SR 4	Trail	See Bailey Road improvements	n/a
Delta de Anza Canal Road Extension (in Bay Point)	Franklin Avenue to Canal Road	Trail	▪ Work with East Bay Municipal Utility District (EBMUD) and County to pave existing unpaved trail ▪ Work with EBMUD and County to mark enhanced trail crossings at Emerald Cove Drive to connect the EBMUD Utility Trail and Canal Road per Pittsburg Moves Crosswalk Policy	0.6

Project Name	Limits (From/To)	Project Type	Description	Miles
Delta de Anza Trail	Delta de Anza Trail at Uncontrolled Intersections with Atherton Avenue, Crestview Drive, Presidio Lane, and Gladstone Drive	Crosswalk	- Per City's Crosswalk Policy, upgrade Delta de Anza Trail crossings at Atherton Avenue, Crestview Drive, Presidio Lane, and Gladstone Drive to include: - Rectangular Rapid Flashing Beacons (RRFBs) - Wayfinding Signs - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Curb extensions - Upgraded curb ramps - Trail crossing striping - Advanced yield markings with Yield Here to Pedestrian sign - Install a raised crosswalk at Atherton Avenue and Gladstone Drive - Install a median refuge at Crestview Drive.	n/a
Delta de Anza Trail	Delta de Anza Trail at West Leland Road and at Range Road Intersections	Trail	- In the long-term, work with the adjacent property owner to install a trail diagonally between the Ackerman Drive/Range Road intersection and West Leland road/Delta De Anza Trail intersection. Install a Pedestrian Hybrid Beacon (PHB) as part of the project. - In the near-term, follow an on-street alignment on Range Road and West Leland Road that goes through the Range Road/West Leland Road intersection. Repurpose Class II bike lanes, sidewalk, and excess roadway width into a Class I path on the west side of Range Road and south side of West Leland Road, and install wayfinding, curb ramps, and crosswalk striping at the intersection of West Leland Road and Golf Club Road. See Range Road projects for additional information.	0.1

Project Name	Limits (From/To)	Project Type	Description	Miles
Harbor Street	Harbor Street and Atlantic Avenue Intersection	Crosswalk	▪ In near-term, stripe north crosswalk as a trail crossing. ▪ Install trail wayfinding ▪ Install "turning vehicle yield to bikes/pedestrian" signs ▪ Install median refuge with existing median ▪ Investigate if accessibility upgrades needed to push buttons and countdown signals ▪ Upgrade curb ramps As funding is available, install trail crossing with a PHB or signal 180' north of the intersection	n/a
Delta de Anza Trail	Delta de Anza Trail at Railroad Avenue Intersection	Crosswalk	▪ Study feasibility of protected intersection ▪ Protect eastbound left-turn movement to separate from trail crossing ▪ Remove slip lane on NW corner and southbound right-turn pocket and install curb extensions to shorten trail crossing ▪ Straighten west crosswalk and push back ~10' to align with new Curb extensions; install direction ramps ▪ Straighten south crosswalk and install directional ramp on west side ▪ Work with East Bay Regional Park District to set back existing fence and signal pole to widen out sidewalk space at intersection and allow for two-stage turn from northbound separated bikeway to westbound Delta De Anza Trail ▪ Install bike ramp from southbound separated bikeway to new Curb extensions to provide access to Delta De Anza Trail ▪ Install bike box at southbound approach to provide connection from Trail to Railroad Avenue Class IV facility ▪ Investigate need for countdown signals	n/a
Delta de Anza Trail	Delta de Anza Trail at Harbor Street Intersection	Crosswalk	Install new trail crossing signal. Signal will coordinate with adjacent signal at Atlantic Avenue. Install median refuge, trail crossing striping, and trail wayfinding signage.	n/a
Delta de Anza Trail	Delta de Anza Trail at Harbor Street	Trail	Pave the remaining 5' section between the trail and the sidewalk (East side of Harbor Street).	0.05

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
Delta de Anza Trail	Delta de Anza Trail and Loveridge Road Intersection	Crosswalk	Restripe current crosswalk to trail crossing striping per Pittsburg Moves Design Guidelines. Install trail wayfinding signs and widen curb ramps.	n/a
California Delta Trail				
California Delta Trail	Western City limit to 8th Street Greenbelt	Trail	Work with East Bay Regional Park District (EBRPD) and PG&E to install a Class I path through the Pittsburg Wetlands as part of the Great California Delta Trail that connects to the County's alignment.	3
California Delta Trail spur	Willow Pass Road to California Delta Trail	Trail	Explore the feasibility of adding a Class I facility spur connection between Willow Pass Road and the California Delta Trail to provide another access point. This requires coordination with property owners.	0.2
8th Street Greenbelt	West Street to Harbor Street	Crosswalk	Mark crosswalks at each intersection with trail crossing striping and enhancements per Pittsburg Moves Design Guidelines and Crosswalk Policy.	n/a
Harbor Street	East 3rd Street to East 8th Street	Trail	Add a Class I facility on the west side of the street consistent with the Making Waves Academy development proposal. This facility would run parallel to the Class IV facility proposed in the right-of-way.	0.3
Harbor Street	East 8th Street to Pittsburg-Antioch Highway	Trail	- Install a new Class I facility on the east side of Harbor Street from just north of Pittsburg-Antioch Highway to East 8th Street. This is in addition to the Class IV facilities proposed on Harbor Street, shown on the Harbor Street project list. - New path requires widening the existing sidewalk and new retaining wall underneath the railroad tracks. - Install a connection between bike path north of East Santa Fe Ave to Harbor Street and Pittsburg-Antioch Highway bike path. - Install trail crossing at 8th Street per the Uncontrolled Crosswalk Upgrades list. - Connect to a new Class I path along the west side of Harbor Street through the sports field and the existing 8th Street Greenway	0.2

Project Name	Limits (From/To)	Project Type	Description	Miles
Harbor Street	Harbor Street and Pittsburg-Antioch Highway Intersection	Minor Signalized Intersection Improvements	- Stripe the east crosswalk as a trail crossing. - Install a speed table across the slip lane or remove if necessary, truck access can be maintained	n/a
East 14th Street	On-street trail alignment between Harbor Street and East City Limits		See Pittsburg-Antioch Highway improvements.	n/a
Central Park Path	n/a	Lighting	Add lighting in Central Park paths	0.3
Los Medanos to Pittsburg Center BART Trail				
Frontage Road	Crestview Lane to Burton Avenue	Trail	Add a Class I facility using abandoned land south of freeway to connect existing Class I facilities. May require widening into Frontage Road to provide usable path space around overhead utility lines.	0.4
Frontage Road	Chelsea Way to Dover Way	Trail	Add a Class I facility using abandoned land south of freeway.	0.3
PG&E Corridor				
PG&E Corridor	Dover Way to West Leland Road	Trail	Work with PG&E to conduct a feasibility study for a Class I path to determine a preferred alignment within in the PG&E Corridor, which is designated open space in the General Plan.	0.2
PG&E Corridor	West Leland Road to Delta de Anza Trail to proposed Contra Costa Canal Trail Extension	Trail	Work with PG&E to conduct a feasibility study adding a Class I path to determine a preferred alignment within the PG&E Corridor, which is designated open space in the General Plan.	0.5
PG&E Corridor	North Parkside Drive to Power Avenue	Trail	Work with PG&E to conduct a feasibility study for a Class I facility between N Parkside Drive and Power Avenue. Topography may be a constraint.	0.5
Rancho Medanos Junior High School	Bodega Drive at Rancho Medanos Junior High School	Trail	Create a trail that connects Bodega Drive to Rancho Medanos Junior High School and the planned utility corridor trail. This would provide the neighborhood walking access to the school, West Leland Road, the planned utility corridor trail, and the Delta de Anza Trail. Work with Rancho Medanos, the community, and other stakeholders to develop a joint use agreement for the gated area adjacent to the school.	0.2

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
SR 4	n/a	Grade Separated Crossing	Study feasibility of providing a trail connection across SR 4 in the context of all citywide needs to improvement connectivity over SR 4. See SR 4 grade separation feasibility study for more information	n/a
Delta Waterfront Access Trail				
Delta Waterfront Access Trail	East 3rd Street to Delta Access Trail	Trail	Install Class I path that connects East 3rd Street to the waterfront Delta Access Trail as part of school redevelopment, connecting to 8th Street.	0.6
Delta Waterfront Access Trail	Western subdivision to Koch Carbon Inc (near to eastern end point of East 3rd Street)	Trail	Add a bicycle/pedestrian path along the shoreline that connects the western subdivision to the industrial property east of downtown.	0.5
Railroad Avenue Greenway				
Railroad Avenue	California Avenue to Delta de Anza Trail	Trail	Install a Class I shared-use path on the west side of Railroad Avenue with pedestrian-scale lighting amenities, landscape buffer from the street, and a minimum 10' usable width. Use trail crossing striping instead of typical crosswalk markings at intersections.	0.5
Railroad Avenue	California Avenue to City Park	Trail	Widen existing sidewalk to provide Class I shared-use path with minimum 5' landscape buffer from Railroad Avenue. Provide trail crossing intersection improvements, including trail crossing striping.	0.3
Railroad Avenue	All Greenway Intersections	Signal Improvements	▪ Mark all Greenway crossings with trail crossing striping Pittsburgh Moves Design Guidelines ▪ Enhance crosswalks consistent with per Pittsburgh Moves Crosswalk Policy ▪ Consider LPI/LBI for trail crossing ▪ Make push buttons accessible for people on bikes ▪ See Railroad Avenue section for trail crossing improvements at the intersection of Railroad Avenue and California Avenue (SR 4 westbound on-ramp) and at Railroad Avenue and the SR 4 eastbound on-ramps	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
Other Trail Projects				
Contra Costa Canal Trail Extension	Citywide	Trail	Work with Contra Costa County Water District to conduct feasibility study of Class I path to extend the Contra Costa Canal Trail into Pittsburg.	4.9
Bay to Black Diamond Trail	Citywide	Trail	Work with EBRPD and City of Antioch to conduct a feasibility study for a new "Bay to Black Diamond Trail" to connect the waterfront with the Black Diamond Mines Regional Preserve.	n/a
Utility Easement East of Los Medanos College	Buchanan Road to Pittsburg Antioch Highway	Trail	Work with property owners and Antioch to secure easement for Class I shared-use path with lighting, amenities, and connection points to the Delta de Anza trail and East Leland Road. Requires consideration of SR 4 and railroad grade separations, as well as trail crossings per the design guidelines. Consider connections to future waterfront trails if properties redevelop.	1.1
Delta View Golf Course	n/a	Trail	Conduct a feasibility study for a Class I perimeter loop path around the Delta View Golf Course	3.0
BART Projects				
Pittsburg Bay Point BART access road	BART Station to Bailey Road	Class IV Separated Bikeways	Add Class IV facilities on the access road on the north edge of the Pittsburg Bay Point BART site, consistent with the North Concord to Antioch BART Access Study.	0.2
Pittsburg Bay Point BART Station	n/a	Pedestrian treatment	Add pedestrian improvements on the BART site per the North Concord to Antioch BART Access Study, such as ADA ramps, pedestrian access stairway/ramp from West Leland Road, and marked crosswalks.	n/a
Pittsburg Bay Point BART Station	n/a	Class IV Separated Bikeways	In near-term, stripe Class II bike lanes through narrowing travel lanes to 10-11'. With future development, add Class IV separated bikeways.	0.6
Pittsburg Center BART Station	TBD	Bike parking	Coordinate with BART to provide additional bike parking at the Pittsburg Center BART station. This should include bike racks on the Railroad Avenue overpass for short-term parking as well as bike lockers in the Park & Ride and south of the station.	n/a
BART Station		Lighting	Add additional lighting on streets adjacent to BART stations and pedestrian scale lighting from the public right of way to BART stations.	0.2

City of Pittsburg
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
North-South Corridors				
San Marco Boulevard				
San Marco Boulevard	Evora Road to Rio Verde Circle	Trail	Add a Class I facility on the west side of the roadway that ties into the West Leland Road intersection. Explore extending the facility through the SR 4 interchange into Contra Costa County to connect with the Delta de Anza Trail (A Class I facility is proposed in Pittsburg 2020 from West Leland Road to Rio Verde Circle).	1.2
Tomales Bay Drive/Alves Ranch Road				
Tomales Bay Drive	West Leland Road to Alves Ranch Road	Class II Bicycle Lanes	Restripe bike lanes with two white stripes, with 10' travel lanes (no center line per existing condition), 6' bike lanes, and 8' parking, and add traffic calming treatments to make the existing class II bike lane lower stress.	0.6
Alves Ranch Road	West Leland Road to end of the road	Class II Bicycle Lanes	Restripe bike lanes with two white stripes, with 10' travel lanes (no center line per existing condition), 6' bike lanes, and 8' parking, and add traffic calming treatments to make the bike lanes lower stress.	0.7
Alves Ranch Road	Kapalua Bay Circle Intersection	Crosswalk	Install crosswalk enhancements per the Pittsburg Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines ▪ Pedestrian refuge island on north crosswalk ▪ Curb extensions ▪ Consider RRFBs if there is low driver compliance	n/a
Alves Ranch Road	Maho Bay Circle/Botany Bay Drive Intersection	Crosswalk	Install crosswalk enhancements per the Pittsburg Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines ▪ Pedestrian refuge through narrowing travel lanes to 10-11' ▪ Reduce curb radius on Northeast corner	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
Bailey Road				
Bailey Road (outside City limits)	Willow Pass Road to Canal Road	Class IV Separated Bikeways	Narrow lanes to 11' and 10' to provide a Class IV separated bikeways with 7' bikeway and 4' buffer. Add bicycle and pedestrian oriented wayfinding and signage on Bailey Road to connecting routes and destinations, such as the BART station.	0.3
Bailey Road	Canal Road to BART Access Road	Class IV Separated Bikeways, Trail	- In the long-term, work with County, CCTA, Caltrans, EBRPD, and BART to widen the existing sidewalk to provide a minimum 10' Class I path with 5' landscape buffer on the west side of the street. This could incorporate the width of the SB bike lane. Note that this is the Delta De Anza Trail. - In the near-term, upgrade the bike lanes to Class IV separated bikeway through narrowing travel lanes to 11' and creating a 5' bike lane with 2' buffer and posts. - Add bicycle and pedestrian oriented wayfinding signage on Bailey Road to connecting routes and destinations, such as the BART station.	0.1
Bailey Road	Bailey Road and SR 4 eastbound Off-Ramps/BART Access Road Intersection	Minor Signalized Intersection Improvements	- Stripe trail crossing markings on the west and south crosswalks to highlight the trail and allow for two-stage crossing through the intersection and intersection enhancements consistent with the Pittsburg Moves Design Guidelines - Stripe east crosswalk as high-visibility - Stripe advanced stop bars at all approaches - Provide leading pedestrian intervals and consider protecting right-turns to remove pedestrian-auto conflicts per the Pittsburg Moves Crosswalk Policy	n/a
Bailey Road	BART Access Road to West Leland Road	Class IV Separated Bikeways	Narrow travel lanes to 11' outside and 10' inside to created Class IV separated bikeway (5-6' bike lane with 2-4' buffer). Add bicycle and pedestrian oriented wayfinding and signage on Bailey Road to connecting routes and destinations, such as the BART station.	0.2

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
Bailey Road	West Leland Road Intersection	Minor Signalized Intersection Improvements	- Stripe high-visibility crosswalk markings with advanced stop bars - Install missing crosswalk on south leg - Formalize median refuge with nose and pedestrian push button on north crosswalk - Install LPI on north crosswalk	n/a
Bailey Road	West Leland Road to 500' south of Leland Road	Class II Bicycle Lanes	Add 6-7' Class II bike lanes through narrowing travel lanes to 10-11' and maintaining parking.	0.1
Bailey Road	West Leland Road to 250' south of Leland Road	Sidewalk	Work with homeowners to close sidewalk gap on east side of street	0.05
Bailey Road	500' south of Leland Road to Southern City Limits	Class II Bicycle Lanes	- Add Class II bike lane southbound to support bicyclists climbing the grade - Explore feasibility of widening roadway to provide bike lanes in both directions based on available ROW - Stripe green-backed sharrows and sign as Class III bicycle route in northbound direction	0.1
Bailey Road	n/a	Trail	See related projects in the Delta de Anza Trail list	n/a
Range Road				
Range Road/Willow Pass Road	Railroad bridge over Willow Pass Road to SR 4	Class II Bicycle Lanes	Add Class II bike lanes (5') by narrowing travel lanes and removing or narrowing center median. Relocate lighting in center median. Will require some tree removal. This should connect to the grade separated treatment that is proposed at the Railroad Bridge, listed under Willow Pass Road projects.	0.5
Range Road Extension/SR 4 Grade Separation	Existing terminus of Range Road north of SR 4 to Wedgewood Drive	Trail	Study the feasibility of extending Range Road with grade separation at SR 4, either as a roadway or pedestrian/bicycle only access	0.2

Project Name	Limits (From/To)	Project Type	Description	Miles
Range Road	Wedgewood Drive to West Leland Road	Class IV Separated Bikeways	- Upgrade existing Class II bike lanes to Class IV separated bikeways with a lane reduction between Ackerman Drive and West Leland Road. - If PG&E right-of-way alignment for Delta de Anza Trail is not feasible, implement a lane reduction from 1200' north of Ackerman Drive to West Leland Road and use excess width to widen the west side to 10' Class I shared use path with 5' landscape buffer. - Stripe trail crossings on west and south crosswalks at Leland Road and provide space for bikes and people to queue on each corner - Consider a LPI to support crossings at Leland Road per the Pittsburg Moves Crosswalk Policy	0.4
Range Road	Ackerman Drive to West Leland Road	Class IV Separated Bikeways	As an interim, near-term bike treatment, complete a lane reduction between Ackerman Drive and West Leland Road to provide Class IV separated bikeways	0.1
Range Road	Delta de Anza Trail at Range Road and at West Leland Road Intersections	Crosswalk	See Delta de Anza Trail projects for trail crossing enhancement at Range Road and at West Leland Road.	n/a
Range Road	Ackerman Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - Mark high-visibility trail crossings to highlight Delta De Anza Trail, parking restrictions on crosswalk approach, and maintain adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Pedestrian refuge	n/a
Crestview Drive				
Crestview Drive	Frontage Road to Castlewood Drive	Class II Buffered Bicycle Lanes	Upgrade the existing Class II bike lanes to Class II buffered bike lanes.	1.7
Crestview Drive	Crestview Drive to Crowley Avenue	Trail	Formalize the trail connection adjacent to Mt Zion Baptist Church that connects Crestview Drive to Crowley Avenue. This will require coordination with and permission from Mt Zion Baptist Church.	0.04

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
Crestview Drive	Crestview Drive at Buchanan Road	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Trail crossing striping on east and west crosswalks	n/a
Crestview Drive	West Buchanan Road to Kirker Pass Road	Class II Bicycle Lanes; Class III Bicycle Route	Install Class II bike lanes in WB direction through parking prohibition (consider allowing overnight parking) and install Class III bicycle route EB. Consider allowing daytime parking prohibition on south side of the street to provide Class II bike lanes in the EB direction.	0.2
Marina Boulevard				
Marina Boulevard	Cutter Avenue to East 5th Street	Class II Bicycle Lanes	Add Class II bike lanes through a 4 to 3 lane reduction with 11' travel lanes, 6' bike lanes, and 8' parking.	0.4
Marina Boulevard	East 5th Street to Herb White Way	Class II Buffered Bicycle Lanes	Restripe the roadway to accommodate 11' travel lanes, 6' bike lanes with a 3' buffer, and 8' parking lanes.	0.3
Marina Boulevard	Cutter Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Pedestrian refuge - Upgraded curb ramps - Consider RRFBs if there is low driver compliance	n/a
Marina Boulevard	East 5th Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Widened median to create pedestrian refuge - Upgraded curb ramps - Consider RRFBs if there is low driver compliance	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
Marina Boulevard	West Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Pedestrian refuge - Consider RRFBs if low driver compliance at crosswalk - Upgraded curb ramps	n/a
Marina Boulevard	York Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Upgraded curb ramps - Consider RRFBs if there is low driver compliance	n/a
Railroad Avenue/Kirker Pass Road				
Railroad Avenue	East 3rd Street to East 8th Street	Class III Bicycle Route	Add signage designating this segment of Railroad Avenue as a Class III Bicycle Route. City may want to consider back-in angle parking in the future to allow for Class II lanes, which would minimize pedestrian and bicyclist conflicts with vehicles.	0.3
Railroad Avenue	Railroad Avenue at East 8th Street	Bike parking	Establish the corner of Railroad Avenue and 8th Street outside Marina Vista Elementary School as a mobility hub, which includes bike parking.	n/a
Black Diamond Street	Marina Boulevard to East 8th Street	Class III Bicycle Route	Install a Class III Bicycle Route to provide an alternate north-south route through Downtown that avoids the angled parking present on Railroad Avenue and Cumberland Street.	0.3
Railroad Avenue	East 8th to East 10th Streets	Class IV Separated Bikeways	Add directional Class IV separated bikeways through removal of parking on one side of the street.	0.1
Railroad Avenue	Railroad Avenue at 5th Street	Intersection Improvement	- Install new north leg marked crosswalk - Install curb extensions at NE and SE corners - Relocate bus stop to far side of intersection or south of 5th Street	n/a

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
Railroad Avenue	Railroad Avenue and Central Avenue Intersection	Major Signalized Intersection Improvements	- Conduct study to reassess access and circulation at Cornwall Street and Railroad Lane to narrow intersection and remove additional legs to enhance safety. - Consider moving the angled parking from the east to west sides of Railroad Lane and bulbing out to provide space for vehicles to queue at the WB approach - Prohibit NB left-turn at Railroad Lane, and direct truck east on Central Avenue/Solari Street to SR 4. - Tighten curb radii where feasible while maintaining truck access - Consider adding LPIs per the Pittsburgh Moves Crosswalk Policy - Restripe crosswalks and add advanced stop bars - Upgrade curb ramps - Add protected left turns - Investigate if accessibility upgrades are needed to push buttons and countdown signals	n/a
Railroad Avenue	Railroad Avenue and Parkside Drive Intersection	Intersection Improvement	- Remove pork chop island on east crosswalk and tighten corner radii to reduce auto speeds and crossing distance - Stripe crosswalks as high-visibility with advanced stop bars and upgrade curb ramps - If feasible with topography and sight distance, bring the SB on-ramp in at closer to 90 degree alignment with Railroad Avenue	n/a
Railroad Avenue	Railroad and Civic Avenue Intersection	Major Signalized Intersection Improvements	- Mark south crosswalk at Civic Avenue - Add LPI on north and south crosswalks - Consider making Oak Place right-in/right-out only to simplify intersection and allow U-turns at School Street to provide full access for residents - Add high-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels	n/a
Railroad Avenue	10th Street to California Avenue	Class IV Separated Bikeways	Add directional Class IV separated bikeways (8' bike lane, 4' buffer) by reducing travel lane widths to 12'.	0.2

Project Name	Limits (From/To)	Project Type	Description	Miles
Railroad Avenue	California Avenue to Central Avenue	Class II Bicycle Lanes	As a near-term, interim improvement: ▪ Mark Class II bicycles lanes continuous in both directions to address existing gaps. ▪ Mark bikeways up to intersections. ▪ Stripe bike lanes with solid stripe for last 50' before the intersection. ▪ At intersections, stripe bike lane between the right turn and through lane with green conflict zone markings ▪ Mark green conflict zone striping at Parkside Drive ramps, bus stops, and slip lane at SB California Avenue.	0.6
Railroad Avenue	Center Drive to Bliss Avenue	Streetscape	Improve Railroad Avenue sidewalk with lighting, attractive traffic barrier, and pedestrian amenities per the North Concord to Antioch BART Access Study.	0.2
Railroad Avenue	Railroad Avenue and Bliss Avenue Intersection	Minor Signalized Intersection Improvements	▪ Close the sidewalk gap at the west intersection approach (see Bliss Avenue for more information) ▪ Mark the north crosswalk ▪ Add pedestrian refuge on north and south crosswalks ▪ Upgrade curb ramps ▪ Investigate if accessibility upgrades needed to push buttons and countdown signals	n/a
Railroad Avenue	California Avenue to SR 4 ramps	Class IV Separated Bikeways	On the Railroad Avenue overpass, add directional Class IV separated bikeways with buffers and delineators. This will require coordination with Caltrans.	0.1

Project Name	Limits (From/To)	Project Type	Description	Miles
Railroad Avenue	SR 4 WB On-Ramp/California Avenue Intersection	Major Signalized Intersection Improvements	- At the southeast corner of Railroad Ave & California Ave, add a bulb out to provide increased pedestrian visibility and slow northbound-right turning vehicles at intersection. Route the bike lane into bulb out for a semi-protected corner. - At the northwest corner of Railroad Ave & California Ave, explore signalizing the southbound right turn lane from Railroad Avenue to the SR-4 westbound onramp in order to increase pedestrian visibility. - Install green paint for a 2-step trail crossing across Railroad Avenue at California Avenue (north and east legs). - Add new south crosswalk - Install leading pedestrian interval (LPI) for east crosswalk - Install BART wayfinding	n/a
Railroad Avenue	SR 4 EB Ramps Intersection	Major Signalized Intersection Improvements	- Install green paint for a 2-step trail crossing across Railroad Avenue at the SR 4 eastbound off ramp (south and east legs) to connect trail users from the 2-way Class IV facility on the overpass to the bike facilities south of the overpass (Class I facility on the west side and directional Class IV facilities on Railroad Avenue). Trail crossing striping on south crosswalk. - Add north crosswalk - Widen pedestrian refuge on south crosswalk to 10' and add truncated domes and pedestrian push button - Upgrade curb ramps, including relocating truncated domes on SE corner ramps - Investigate if accessibility upgrades needed to push buttons and countdown signals - Install wayfinding to BART	n/a
Railroad Avenue	SR 4 ramps to Delta de Anza Trail	Class IV Separated Bikeways	Add a Class IV bicycle facility (7' bike lane, 4' buffer) by reducing travel lane widths to 10' and 11' in each direction.	0.5

Project Name	Limits (From/To)	Project Type	Description	Miles
Railroad Avenue	Railroad Avenue and Yosemite Drive Intersection	Minor Signalized Intersection Improvements	- Install south leg marked crosswalk with protected left turns - Add new directional curb ramps (clear of driveway on west side) - Install "Bikes Use Ped Signal" sign and two-stage turn box to support southbound left movements onto Yosemite Drive - Investigate need for countdown signals	n/a
Railroad Avenue	Railroad Avenue and Linscheid Drive Intersection	Minor Signalized Intersection Improvements	Install north leg marked crosswalk and investigate need for countdown signals.	n/a
Railroad Avenue/Kirker Pass Road	Delta de Anza Trail to Pheasant Drive	Class IV Separated Bikeways	Install Class IV separated bikeways by narrowing the travel lanes to 10' inside and 11' outside lanes. With the James Donlan Boulevard extension, reduce the long right turn pocket on the northbound approach of Buchanan Road and mark the Class IV separated bikeways up to the intersection.	1.3
Railroad Avenue	Railroad Avenue and Buchanan Road Intersection	Major Signalized Intersection Improvements	- Add high-visibility crosswalk markings, adequate nighttime lighting levels - Add advanced stop lines - Add new south leg marked crosswalk - Consider adding a pedestrian refuge with widened north, south median - Close sidewalk gap on NE corner (see Buchanan projects for more information) - Close bike lane gaps (see Buchanan projects for more information)	n/a
Railroad Avenue	4th Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised intersection (or crosswalks) - Upgraded curb ramps - Curb extensions	n/a
Railroad Avenue	6th Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels	n/a

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
Railroad Avenue	7th Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: High-visibility crosswalk markings, adequate nighttime lighting levels	n/a
Railroad Avenue	8th Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, adequate nighttime lighting levels - Consider relocate decorative flagpoles or RRFB to make the RRFB more visible to NB drivers	n/a
Railroad Avenue	17th Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: Advance Yield Here to Pedestrians sign and yield line	n/a
Kirker Pass Road	Pheasant Drive to Southern City Limit	Class IV Separated Bikeways	Convert shoulder to Class IV separated bikeways	0.3
Kirker Pass Road	Kirker Pass Road and Pheasant Drive Intersection	Minor Signalized Intersection Improvements	- Remove the NE and SE slip lanes and straighten east crosswalk - Add pedestrian refuge on east crosswalk - Upgrade curb ramps	n/a
Kirker Pass Road	Kirker Pass Road at City boundary to Buchanan Road	Traffic calming	Install rumble strips, flashing beacons, and speed feedback signs to reduce speeds entering Pittsburg. Time signals to slow speeds. This will require coordination with County outside City limits.	0.5
Harbor Street				
Harbor Street	East 8th Street to Pittsburg-Antioch Highway	Class II Bicycle Lanes	As a near term, interim improvement on Harbor Street: - Refresh bike lane markings and add more frequent bike lane markings. - Stripe bike lanes with solid stripe starting 50' before the intersection. - Add green conflict zone markings at intersection with East Santa Fe Avenue/Pittsburg-Antioch Highway	0.2
Harbor Street	East 3rd Street to Army Street	Class IV Separated Bikeways	Add a Class IV bicycle facility through either (1) a 4-3 lane reduction (7' bike lane, 3-4' buffer) or (2) between Pittsburg-Antioch Highway and Hawthorne Street, remove parking on one side of the street.	1.1

Project Name	Limits (From/To)	Project Type	Description	Miles
Harbor Street	Army Street to California Avenue	Class II Bicycle Lanes	In the near term, interim improvement on Harbor Street: - Close bike lane gap in southbound direction - Stripe green conflict zone markings at California Avenue intersection - Prohibit parking on west side during daytime when bicyclists would use the street	0.1
Harbor Street	Army Street to California Avenue	Class IV Separated Bikeways	Install Class IV separated bikeways: - Northbound: narrow travel lanes to 10' and 11' respectively to make room for a 6' bike lane with 3' protected buffer - Southbound: widen the roadway on the west side of Harbor Street into the oversized landscape strip to provide parking and a buffered bike lane for southbound travel OR prohibit parking on the west side of Harbor Street.	0.1
Harbor Street	Harbor St at Atlantic Avenue Intersection	Minor Signalized Intersection Improvements	Place the pedestrian push buttons at convenient locations for people biking, as the Delta De Anza Trail jogs through this intersection.	n/a
Harbor Street	California Avenue to Bliss Avenue	Class IV Separated Bikeways	Install Class IV separated bikeways through narrowing travel lanes to 10' inside and 11' outside (2' buffer, 5' bicycle lane)	0.1
Harbor Street	Bliss Avenue to Stoneman Avenue	Class IV Separated Bikeways	Upgrade the existing Class II bike lanes to a Class IV bicycle facility (7' bike lane, 4' buffer) by narrowing the travel lanes to 10' and 11' respectively.	0.8
Harbor Street	East Leland Road Intersection	Class II Bicycle Lanes	As a near term, interim improvement on Harbor Street: - Mark the northbound bike lane up to the intersection - Mark green conflict zone striping on all approaches and through bus stops	0.1
Harbor Street	Stoneman Avenue to Yosemite Drive	Class II Buffered Bicycle Lanes	Install Class II Buffered Bike Lanes (5' bike lane with 3' buffer) through a 4-3 lane reduction.	0.3
Harbor Street	Harbor Street at Stoneman Drive	Roundabout	- Install single-lane roundabout OR narrow intersection through median refuge and bulbouts - Mark south crosswalk	n/a

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
Harbor Street	Harbor Street and Yosemite Drive Intersection	Minor Signalized Intersection Improvements	- Align the intersection so that Yosemite Drive intersects Harbor Street close to 90 degrees - Install curb extensions on the SW and NW corners and east side of street - Add LPI on north and south crosswalks - Investigate if accessibility upgrades are needed to push buttons and countdown signals	n/a
Harbor Street	Yosemite Drive to Buchanan Road	Class II Buffered Bicycle Lanes	Add Class II Buffered Bike Lanes (6' bike lane with 2' buffer) by narrowing travel lanes to 11'.	0.2
Harbor Street	Harbor Street at Highlands Elementary/Buchanan Park Driveway	Crosswalk with RRFBs	- Mark new high-visibility crosswalk and install an RRFB across Harbor Street at the Highlands Elementary School driveway (on the north side, with both a median refuge and curb extension) per the Pittsburg Moves Crosswalk Policy - Install a crosswalk ahead warning sign on the southbound approach (with the curve). - Install curb extensions	n/a
Harbor Street	East 8th Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Pedestrian refuge island - Consider RRFBs if there is low driver compliance	n/a
Harbor Street	Stone Harbor Drive/Army Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Pedestrian refuge island	n/a
Harbor Street	East 3rd Street to Pittsburg-Antioch Highway	Trail	See trail connections identified in the California Delta Trail to Antioch project list.	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
Loveridge Road				
Loveridge Road	California Avenue/N Park Boulevard to Pittsburg-Antioch Highway	Class II Bicycle Lanes	As an interim solution, close gaps in the existing bike lanes, including missing segments of southbound bike lane, consistent bike lane width and markings, and striping bikeway up to and through the intersection	0.4
Loveridge Road	North terminus of roadway to California Avenue	Class IV Separated Bikeways	Reduce travel lanes to 11' and install 7' separated bikeways (5' bike lanes, 2' buffer)	0.9
Loveridge Road	California Avenue to SR 4 EB Ramps	Class IV Separated Bikeways	Upgrade the existing Class II bike lanes to a Class IV bicycle facility.	0.1
Loveridge Road	SR 4 EB Ramps to Buchanan Road	Class IV Separated Bikeways	Upgrade the existing Class II bike lanes to a Class IV bicycle facility (7' bike lane, 2' buffer) by narrowing travel lanes to 10' and 11' respectively.	1.1
Loveridge Road	Loveridge Road and Buchanan Street Intersection	Minor Signalized Intersection Improvements	▪ To address southbound motorists not yielding to pedestrians when turning right: Install "Turning Vehicles Yield to Pedestrians" sign for southbound right traffic ▪ Install a median refuge with pedestrian push button on Buchanan Street at the western crosswalk ▪ Tighten curb radii on the NW and NE corners to slow the speed of turning traffic ▪ Install school zone 25 MPH signage ▪ Modify the signal timing to add a leading pedestrian interval for southbound vehicles turning right ▪ Consider prohibiting right turns on red and adding LPI on east and west crosswalks per the Pittsburg Moves Crosswalk Policy	n/a
Loveridge Road	Loveridge Road and California Avenue Intersection	Major Signalized Intersection Improvements	▪ Install pork chop islands with raised crosswalks at all corners of the intersection, which will shorten crossing distances for pedestrians. ▪ Restripe the crosswalks and install median refuges with push buttons if they still enable left turns.	n/a
Stoneman Avenue/Gladstone Drive	Loveridge Road to East Leland Road	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding and sharrows. Explore additional traffic calming. (Some traffic calming already exists in some segments.)	0.7

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
Roundhill Drive/Norine Drive	Ventura Drive to Roundhill Drive to Delta de Anza Trail	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding and sharrows. Explore additional traffic calming. This would tie into the bicycle boulevard proposed on Ventura Drive.	0.4
North Park Boulevard				
North Park Boulevard	Pace Boulevard to Century Boulevard	Class II Bicycle Lanes	Refresh bike lane markings; relocate bike lane to be between the EBL and EBR lanes and add green conflict zone markings.	0.2
North Park Boulevard	Pace Boulevard to Century Boulevard	Sidewalk	Close the sidewalk gap on the north side of N Park Boulevard. This may require coordination with private property owner.	0.6
Century Boulevard				
Century Boulevard	East Leland Road to City limits	Class II Bicycle Lanes	Add 5' Class II bike lanes given limited right-of-way - requires widening the paved width of the roadway between East Leland Road and Century Way. Where roadway is improved, reduce travel lane width to 10-11' to provide bike lanes. As the area redevelops, add a Class I facility off-street in addition.	1.2
Century Boulevard Greenway	East Leland Road to City limits	Trail	Add a Class I facility as the area redevelops to provide a connection to the shopping center. This will require coordination with the City of Antioch.	1.2 ¹
Somersville Road (coordinate with Antioch)				
Somersville Road	Delta de Anza Trail to James Donlon Boulevard	Trail	Add a Class I facility by widening the existing sidewalk.	0.9
Tuscany Meadows Drive	James Donlon Boulevard to Buchanan Road	Class II Buffered Bicycle Lanes	Install Class II buffered bike lanes per the Tuscany Meadows EIR.	0.5
Sequoia Drive	Tuscany Meadows Drive to Somersville Road	Class II Buffered Bicycle Lanes	Install Class II buffered bike lanes per the Tuscany Meadows EIR.	0.5
East-West Corridors				
E 3rd Street				
East 3rd Street	Marina Boulevard to East of Riverway Driveway	Class II Buffered Bicycle Lanes	Install Class II buffered bike lanes with a lane reduction. Assume 11' travel lane and 8' parking, leaving 13' remaining for bike lane and buffer	0.3
East 3rd Street	East of Riverway Driveway to Harbor Street	Class II Buffered Bicycle Lanes	Install Class II buffered bike lanes when the road is widened through redevelopment.	0.2

¹ Most of the proposed 1.2-mile Century Boulevard Greenway would be located within Antioch city limits.

Project Name	Limits (From/To)	Project Type	Description	Miles
East 3rd Street	Cardinale Court Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach - Advance Yield Here to Pedestrians signs and yield lines - Pedestrian refuge island - Curb extensions - Upgraded curb ramps - Consider RRFBs if there is low driver compliance - Assumes 4 to 3 lane road diet	n/a
East 3rd Street	Cumberland Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Pedestrian refuge island - Curb extensions - Upgraded curb ramps - Consider RRFBs if there is low driver compliance - Assumes 4 to 3 lane road diet	n/a
Willow Pass Road/West 10th Street/East 10th Street				
Willow Pass Road	Parkside Drive to Enterprise Circle	Trail	- Install a Class I facility (10' shared-use path with 5' landscape buffer) through redevelopment. Conduct a right-of-way assessment to determine if path or shoulder widening opportunities are possible in the interim. - Study additional options for providing bicycle/pedestrian access at pinch points underneath railroad bridges (not included in cost)	1.2
Willow Pass Road	Willow Pass Road and Nantucket Drive	Minor Signalized Intersection Improvements	- Mark east leg crosswalk - Upgrade curb ramps - Investigate if accessibility upgrades are needed to push buttons and countdown signals	n/a
West 10th Street	Enterprise Circle to Montezuma Street	Class II Bicycle Lanes	Restripe existing Class II bike lanes to define parking lanes and bike lanes. Narrow travel lanes to 11' and restripe parking at 8' and bike lane at 6'.	0.3
West 10th Street/East 10th Street	Montezuma Avenue to Railroad Avenue	Class II Bicycle Lanes	Widen existing Class II bike lanes by removing median and restriping street with 11' travel lanes, 10' left-turn pocket, 6' bike lanes, and 8' parking lane.	0.4

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
Willow Pass Road	10th Street Intersection (Commerce Center Driveway)	Crosswalk with PHB	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: ▪ PHB ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines ▪ Pedestrian refuge island ▪ Curb extensions ▪ Upgraded curb ramps ▪ Assumes lane reduction to remove EB right-turn lane and extend bikeway	n/a
West 10th Street	Enterprise Circle Intersection	Crosswalk with PHB	▪ Relocate crosswalk to west side of the street, clear of driveways and relocate bus stop to far side of intersection. ▪ Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: ▪ PHB ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines ▪ Pedestrian refuge island ▪ Curb extensions ▪ Upgraded curb ramps	n/a
West 10th Street	Black Diamond Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines	n/a
West 10th Street	Cutter Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
West 10th Street	East Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians sign and yield line - Pedestrian refuge island - Upgraded curb ramps and install missing curb ramps at crosswalk - Curb extension shadowing parking - Consider RRFB if there is low driver compliance	n/a
West 10th Street	York Street Intersection	Crosswalk with RRFBs	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - RRFBs	n/a
West 10th Street	West Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Consider RRFBs if there is low driver yielding	n/a
East 10th Street	East Street Intersection	Curb Ramps	Install missing curb ramps at crosswalk	n/a
East 10th Street	50' west of Solari Street	Curb Ramps	Install missing curb ramps at driveway	n/a
East 10th Street	East 10th Street at Solari Drive	Intersection Improvement	- Relocate crosswalk to west side of intersection to make crosswalk accessible - Install curb extension on SW corner - Stripe high-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Stripe Advance Yield Here to Pedestrians signs and yield lines	
East 10th Street	Railroad Avenue and East 10th Street	Major Signalized Intersection Improvements	- Remove slip lane on SE corner - Add pedestrian refuge on south crosswalk - Add leading pedestrian interval (LPI) on east and west crosswalks - Add high visibility crosswalk marking	n/a

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
East 10th Street	Railroad Avenue to Harbor Street	Class II Buffered Bicycle Lanes	Add Class II buffered bike lanes (8') through a 4-3 lane reduction and parking removal on one side.	0.4
E 14th Street/Pittsburg-Antioch Highway				
Central Avenue	Harbor Street to Pittsburg-Antioch Highway	Crosswalk with PHB	Add Pedestrian Hybrid Beacon (PHB) to connect the bike facility on the west side of Harbor Street to the driveway/bike connection on the east side of the street.	n/a
East 14th Street	Harbor Street to Pittsburg-Antioch Highway	Crosswalk	Add trail crossing on East 14th Street just east of the bridge, providing a connection between the Class I facility on East 14th Street and the driveway that connects to Harbor Street.	n/a
East 14th to Harbor Bike Boulevard Connector	Harbor Street and Hawthorne Street/Driveway Intersection	Class III Bicycle Boulevard	To provide a connection between East 14th Street and Harbor Street, make the City-owned driveway a designated bicycle boulevard by adding wayfinding and sharrows. Explore additional traffic calming.	0.1
East 14th to Harbor Bike Boulevard Connector	East 14th Street at City-owned driveway (just east of Harbor Street overcrossing)	Class IV Separated Bikeways	Add a Class IV bicycle facility (7' bike lane, 3' buffer) by utilizing existing shoulders and narrowing travel lanes to 11'.	1.7
East 14th to Harbor Bike Boulevard Connector	East 14th Street to Harbor Street	Trail	Add Class I Multi Use Path on Pittsburg-Antioch Highway by narrowing the travel lanes to 11' and turn lanes to 10' and utilizing the unpaved shoulders.	1.7
Pittsburg-Antioch Highway	Harbor Street to East 14th Street	Crosswalk with PHB	Add Pedestrian Hybrid Beacon (PHB) to connect the bike facility on the west side of Harbor Street to the driveway/bike connection on the east side of the street.	n/a
Pittsburg-Antioch Highway	East 14th Street to Arcy Lane	Crosswalk	Add trail crossing on East 14th Street just east of the bridge, providing a connection between the Class I facility on East 14th Street and the driveway that connects to Harbor Street.	n/a
North Parkside Drive/Willow Pass Road				
Willow Pass Road	Riverview Mobile Home Park to Dory Road	Class IV Separated Bikeways	Add a Class IV bicycle facility by repurposing space for existing 5-6' Class II facility, narrowing travel and turn lanes to 11', and eliminating parking. This assumes road widening as redevelopment occurs.	1
North Parkside Drive	Railroad Avenue to Amberhill Court	Class IV Separated Bikeways	Add a Class IV bicycle facility by narrowing travel lanes to 10'.	0.3
North Parkside Drive	Amberhill Court to Parkview Drive	Class IV Separated Bikeways	Add a Class IV bicycle facility (7' bike lane plus minimum 2' buffer) by narrowing travel lanes to 11' and turn lanes to 10'.	0.5

Project Name	Limits (From/To)	Project Type	Description	Miles
North Parkside Drive	Parkview Drive to Range Road	Class IV Separated Bikeways	Add a Class IV bicycle facility (7' bike lane plus buffer) by narrowing travel lanes and using space from existing 6' Class II facility. Over the bridge at Range Rd, add Class II bike lanes (5') with 11' travel lanes.	0.4
North Parkside Drive/Willow Pass Road	Range Road to Commodore Court	Class IV Separated Bikeways	Convert existing 13' Class II facility into Class IV bicycle facility (7' bike lane plus buffer).	0.2
Willow Pass Road	Commodore Court to Loftus Road	Minor Signalized Intersection Improvements	- Mark west crosswalk - Investigate if accessibility upgrades needed to push buttons and countdown signals	n/a
Willow Pass Road	Willow Pass Road and Balclutha Way Intersection	Class II Bicycle Lanes	Restripe 6' Class II bike lanes to refresh markings and clearly defined parking and biking lanes.	0.2
Willow Pass Road	Loftus Road to City Limits	Class IV Separated Bikeways	Add a Class IV bicycle facility by repurposing space for existing 5-6' Class II facility, narrowing travel and turn lanes to 11', and eliminating parking. This assumes road widening as redevelopment occurs.	1
School Street/Civic Avenue/W 17th Street				
West 17th Street	Cassia Street to Davi Avenue	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming, per the Railroad Avenue Specific Plan.	0.4
Civic Avenue	Davi Avenue to Railroad Avenue	Class II Bicycle Lanes	Add Class II bike lanes per the Railroad Avenue Specific Plan.	0.3
Davi Avenue	Power Avenue to Civic Avenue	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming, per the Railroad Avenue Specific Plan.	0.2
School Street	Railroad Avenue to Harbor Street	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Work with school district to provide bike cut through where gates currently block auto traffic on School Street.	0.4
School Street	Mid-Block location	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised crosswalk	n/a

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
School Street/Treatro Street/El Pueblo Avenue/Diane Avenue	Harbor Street to Treatro Street to El Pueblo Avenue to Diane Avenue to California Avenue	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming.	0.8
Polaris Drive/Power Avenue/California Avenue				
Polaris Drive/Schooner Way	Schooner Way (City Limits to Polaris Drive) and Polaris Drive (Schooner Way to Range Road)	Class II Bicycle Lanes	Add Class II bike lanes. Where houses front the street, allow overnight parking/time of day bike lanes. Where houses do not front the street, prohibit parking in the bike lane.	0.68
Polaris Drive/Power Avenue	Range Road to Andrew Boulevard	Class II Buffered Bicycle Lanes	Add Class II buffered bike lanes (at minimum, 6' bike lane, 2' buffer) by narrowing travel lanes to 11'. On Power Avenue, remove parking on the south side.	1.07
Power Avenue	Andrew Boulevard to Davi Avenue	Class IV Separated Bikeway (Two-Way)	Install a 16' 2-way Class IV separated bikeway (12' bike lanes, 4' buffer) on the south side of the street.	0.34
Polaris Drive	Polaris Drive at Schooner Way	Intersection Improvement	- Install new south crosswalk - Tighten NE and NW curb radii - Install pedestrian refuges on east and west leg crosswalks - Upgrade curb ramps	
Power Avenue	Jorgensen Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Pedestrian refuge - Upgraded curb ramps - Consider RRFBs if there is low driver compliance	n/a
Power Avenue	Mid-Block location (at 1000 Power Avenue shopping center)	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, adequate nighttime lighting levels - Pedestrian refuge - Raised crosswalk	n/a
California Avenue	Railroad Avenue to Harbor Street	Trail	Assess the feasibility of installing a Class I path on the south side of California Avenue (widen the proposed 8' path to 14') and add a minimum 5' landscape buffer between the parking area and the path, narrowing the 15' proposed travel lanes and proposed pull out lanes. Coordinate with PG&E.	0.4

Project Name	Limits (From/To)	Project Type	Description	Miles
California Avenue	Harbor Street to Loveridge Road	Class IV Separated Bikeway (Two-Way)	If the path option is infeasible, install a two-way Class IV bike facility on the north side of California Avenue from Harbor Street to Loveridge Road. Implement a lane reduction to gain the necessary right of way.	0.9
California Avenue	California Avenue and Harbor Street Intersection	Minor Signalized Intersection Improvements	▪ Tighten curb radii at corners where feasible to reduce crossing distances ▪ Add south leg marked crosswalk ▪ With bikeway installation, stripe two-stage turn boxes to support bicyclists traveling from Harbor to BART via California Avenue	n/a
Bliss Avenue				
Bliss Avenue	Railroad Avenue to Harbor Street	Class III Bicycle Route	In the near-term, repave Bliss to provide a smoother riding surface to the BART station. Stripe green-back sharrows in the center of travel lane. Add a two-stage turn box on Harbor Street at Bliss Avenue to facilitate lefts onto Bliss Avenue.	0.3
ROW north of Bliss Avenue	Railroad Avenue to Harbor Street	Trail	Install a bicycle trail south of and parallel to SR 4.	0.3
Bliss Avenue	Railroad Avenue to Harbor Street	Class II Bicycle Lanes	With redevelopment, improve the street frontage to provide a consistent minimum 50' curb-to-curb cross-section (Two 11' travel lanes, 6' bike lanes, and 8' parking on both sides of the street). Make a Class IV separated bikeway if there is ROW available. Work with property owners to prohibit perpendicular parking in future.	0.3
Bliss Avenue	Railroad Avenue to Harbor Street	Sidewalk	Close all sidewalk gaps with minimum 8' sidewalk with street trees. Work with property owners to prohibit perpendicular parking in future.	0.3
Leland Road				
West Leland Road Extension	Avila Road to West Leland Road	Class IV Separated Bikeways	When West Leland Road is extended via development, add Class IV separated bikeway	0.5
West Leland Road	S Broadway Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ Add marked crosswalk and install curb ramps across Broadway Avenue	n/a
West Leland Road	Villa Drive to Tomales Bay Drive	Trail	Add Class I Multi Use Path on the south side of West Leland Road.	0.6

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
West Leland Road	Valente Drive intersection	Crosswalk with PHB	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Add a Pedestrian Hybrid Beacon (PHB) on West Leland Road at Valente Drive to provide access to Ray Giacomelli Park, the playground, and dog park. - Mark on east leg with median refuge.	n/a
West Leland Road	Tomales Bay Drive to BART Access Road	Trail	Add Class I Multi Use Path on the north side of West Leland Road.	0.8
West Leland Road	West Leland Road and Woodhill Drive Intersection	Major Signalized Intersection Improvements	- Mark east and west leg crosswalks - Close sidewalk gap - Upgrade SE curb ramp - Investigate if accessibility upgrades are needed to push buttons and countdown signals	n/a
West Leland Road	Woodhill Drive to BART Access Road	Sidewalk	Close sidewalk gap on the north side of West Leland Road	0.2
West Leland Road	West Leland Road and Southwood Drive	Major Signalized Intersection Improvements	- Mark east and west leg crosswalks - Upgrade curb ramps - Investigate if accessibility upgrades needed to push buttons and countdown signals - This project should be coordinated with the crosswalk improvements proposed at the BART driveway.	n/a
West Leland Road	West Leland Road and BART Driveway Intersection	Major Signalized Intersection Improvements	- Add west leg marked crosswalk - Add high visibility crosswalk marking - Add BART wayfinding - Install leading pedestrian interval (LPI) on east and west crosswalks - Investigate if accessibility upgrades needed to push buttons and countdown signals - This project should be coordinated with the crosswalk improvements proposed at the intersection of West Leland Road and Southwood Drive.	n/a
West Leland Road	West Leland Road and Oak Hills Drive Intersection	Minor Signalized Intersection Improvements	Add west leg marked crosswalk	n/a
West Leland Road	West Leland Road and Montevideo Drive Intersection	Minor Signalized Intersection Improvements	- Add west leg marked crosswalk - Upgrade curb ramp on the SW corner - Investigate if accessibility upgrades needed to push buttons and countdown signals	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
West Leland Road	West Leland Road at John Henry Johnson Parkway	Crosswalk with PHB	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Add new high visibility crosswalk with PHB to connect residential neighborhood to John Henry Johnson Park. - Locate on west leg and move bus stops from nearside to farside. - Install median refuge that maintains fire access.	n/a
West Leland Road	West Leland Road at John Henry Johnson Park parking lot driveway	Crosswalk with PHB	With future redevelopment of the former golf course, consider if pedestrian demand would warrant marking new high visibility crosswalk with Pedestrian Hybrid Beacon (PHB) and median refuge if pedestrian demand exists per Pittsburgh Moves Crosswalk Policy. Locate crosswalk on east leg with median refuge.	n/a
West Leland Road	Range Road to Dover Way	Sidewalk	Work with adjacent landowners to widen sidewalk on south side of the street to 10' to support children walking to Rancho Medanos Junior High School	0.4
Atherton Avenue/ Sherman Street/Alvarado Street	Dover Way to Railroad Avenue	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Remove parking on Alvarado Street and potentially Dover Way.	1
West Leland Road	100' east of Railroad Avenue	Sidewalk	Close sidewalk gap between Pittsburgh Funeral Chapel and Pittsburgh Ace Hardware. Install temporary treatment such as an asphalt path.	0.1
Dover Way	Frontage Road to Atherton Avenue to West Leland Road	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Explore removing parking.	0.8
West Leland Road	West Leland Road and Burton Avenue	Minor Signalized Intersection Improvements	- Add east leg marked crosswalk - Install countdown signals - Add LPI on east and west crosswalks	n/a
East Leland Road	East Leland Road at Harbor Street	Class II Bicycle Lanes	As a near-term, interim improvement: - Mark eastbound and westbound bike lanes up to intersection - Mark green conflict zone striping on all approaches and through bus stops	0.1
East Leland Road	Railroad Ave to City Limits	Class IV Separated Bikeways	Upgrade the existing Class II bike lanes to Class IV separated bikeways by narrowing the 12' travel lanes to 10' and 11' respectively and turn lanes to 10'.	2

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
East Leland Road	East Leland Road and Los Medanos College	Major Signalized Intersection Improvements	- Create gateway to Los Medanos College through squaring-up intersection relative to Diamond Hills Apartment Complex driveway and install curb extensions - Consider wide median with refuge on the south crosswalk to create a grand campus entrance - Add marked crosswalks at each approach and mark crosswalks consistently - Upgrade curb ramps at each approach - Add bike boxes on NB and SB approaches to support turning movements into/out of the College	n/a
Delta Fair Boulevard	Century Boulevard/East Leland Road to Somersville Road	Class IV Separated Bikeways	Work with Antioch to extend Class IV separated bikeways into Antioch to provide access to the County Employment & Human Services offices and beyond. Mark crosswalks at Century Boulevard intersection.	1.1
Stoneman Avenue	Harbor Street to Loveridge Road	Class II Buffered Bicycle Lanes	Convert existing bike lanes to Class II buffered bike lanes (6' bike lanes with 2' buffers) by narrowing travel lanes to 11' (with 10' left turn lane) and marking parking at 8'.	0.7
Stoneman Avenue	Briarcliff Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Upgrade curb ramp on SW corner - Advance Yield Here to Pedestrians signs and yield lines - Pedestrian refuge island with removed WB left-turn pocket	n/a
Stoneman Avenue	Meadowbrook Avenue Intersection	Crosswalk with RRFBs	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Relocate crosswalk to west side of the street to provide pedestrian refuge island assuming stopping sight distance met - Use yellow school zone markings - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Replace in-pavement flashers with PHB or RRFB	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
Stoneman Avenue	Meadowbrook Circle Intersection	Crosswalk with RRFBs	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Advance Yield Here to Pedestrians signs and yield lines - Curb extensions - Replace in-pavement flashers with PHB or RRFB	n/a
Buchanan Road				
Buchanan Road	100' west of Railroad Avenue to Heights Avenue	Sidewalk	Close sidewalk gap on the south side of the street. Requires a significant retaining wall between Quercus Lane and Heights Avenue (not included in cost, require further feasibility study).	0.4
Buchanan Road	Buchanan Road at Railroad Avenue	Class II Bicycle Lanes	- In the long-term, create consistent roadway edge on SE side of intersection. See Railroad Avenue for more information. - As a near-term, interim improvement: - Mark EB and WB bike lanes up to intersection - Mark green conflict zone striping	0.1
Buchanan Road	Castlewood Drive to Loveridge Road	Class IV Separated Bikeways	Add a Class IV bicycle facility (6' bike lane, 3' buffer) using existing right-of-way. This assumes 11' travel lanes and a 10' two-way left turn lane. This may require removing on-street parking between Railroad Avenue and Brookside Drive.	1.5
Buchanan Road	Buchanan Road at Castlewood Drive Intersection	Intersection Improvement	- Mark west and north leg high-visibility crosswalks. Install advanced yield markings and signage on north crosswalk. - Install median refuge on north crosswalk - Install bicycle wayfinding	n/a
Buchanan Road	Buchanan Road at Heights Ave	Intersection Improvement	- Enhance existing crosswalk with RRFBs and advanced yield markings to access the park - Reduce curb radius on SW corner and straighten crosswalk across side street - Close sidewalk gap on SW corner (see Buchanan Road sidewalk gap closure project, cost not included here)	n/a

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
Buchanan Road	Buchanan Road at Loveridge Road	Class II Bicycle Lanes	As a near-term, interim improvement: ▪ Mark westbound bike lanes up to intersection ▪ Mark green conflict zone striping and at bus stops	0.1
Buchanan Road	Buchanan Road at Mcfaul Drive	Intersection Improvement	Convert existing median to median refuge and check lighting levels	
Buchanan Road	Loveridge Road to City Limits	Class IV Separated Bikeways	Upgrade existing Class II bike lanes to Class IV separated bikeways by narrowing travel lanes to 11' (6' bike lanes with 4' buffer).	1.6
Buchanan Road	Buchanan Road and Ventura Drive Intersection	Major Signalized Intersection Improvements	▪ Install east crosswalk and protect conflicting northbound and southbound left-turns ▪ Add advanced stop bars on each approach ▪ Add bike boxes on northbound and southbound approaches to support turning movement on to/off of Buchanan Road	n/a
Buchanan Road	Santa Ana Drive Intersection	Crosswalk with PHB	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ Restriped yellow high-visibility crosswalks for school zone ▪ PHB with advanced stop bars ▪ Parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ School crosswalk signage ▪ Pedestrian refuges at crosswalks on side-streets	n/a
Yosemite Drive	Railroad Avenue to Harbor Street	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Provides an interim east-west option to the future Contra Costa Canal Trail.	0.5
Yosemite Drive	Brookside Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Raised crosswalk ▪ Curb extensions ▪ Upgraded curb ramps	n/a
Yosemite Drive	Mid-block at Hillview Junior High	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Consider raised crosswalk	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
Yosemite Drive	Yosemite Drive at San Juan Drive	Intersection Improvement	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - Stripe consistent high-visibility crosswalk markings, add parking restriction on crosswalk approach, and adequate nighttime lighting levels - Install curb extensions with directional curb ramps	
Ventura Drive	Harbor Street to Norine Drive	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding and sharrows. Speed calming treatments are already installed. Provides an interim option for the future Contra Costa Canal Trail.	1.1
Ventura Drive	Norine Drive to Buchanan Road	Class II Buffered Bicycle Lanes	Add Class II buffered bike lanes (5' bike lanes with 2' buffer) by reducing travel lanes to 11' (10' left-turn pocket). Mark parking at 8'.	0.1
Ventura Drive	Buchanan Road to James Donlon Boulevard	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. City may want to consider upgraded facilities in the future as this area redevelops.	0.1
Ventura Drive	Ventura Drive at Norine Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Raised crosswalk - Curb extensions on NE and SE corners to narrow large intersection and reduce speeds - Pedestrian refuge island - Upgraded curb ramps	n/a
Ventura Drive	Ventura Drive at Suzanne Drive Intersection	Intersection Improvement	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: - Install high-visibility crosswalk markings, parking restrictions on crosswalk approaches, and appropriate nighttime lighting levels - Provide new east leg marked crosswalk with directional curb ramps	
Suzanne Drive	Ventura Drive to James Donlon Boulevard	Class III Bicycle Boulevard	Connect Buchanan Road and Ventura Drive bikeways through making this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming.	0.1

Project Name	Limits (From/To)	Project Type	Description	Miles
State Route 4 Crossing Study				
SR 4 Crossing	n/a	Grade Separated Crossing	Study feasibility of grade-separated crossings for bicyclists and pedestrians across SR 4, including at: 1. Between Parkside and Los Medanos Elementary Schools. 2. Near the Pittsburgh Center BART Station 3. At Range Road 4. Pittsburgh Bay Point BART Station (in County)	n/a
Other Uncontrolled Crosswalk Enhancements				
West 4th Street	Bay Side Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Pedestrian refuges on north and south crosswalks through narrowing the travel lanes to 10-11'	
East 4th Street	Cumberland Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach ▪ Advance Yield Here to Pedestrians signs and yield lines ▪ Upgraded curb ramps	
West 4th Street	Odessa Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Consider raised crosswalk ▪ Reduce curb radii	
6th Street	Black Diamond Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels	
6th Street	Cutter Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Raised intersection (near Marina Walk Park) ▪ Upgraded curb ramps	

Project Name	Limits (From/To)	Project Type	Description	Miles
6th Street	Herb White Way Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels	
7th Street	Cutter Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Raised intersection - Crosswalk signage - Upgraded curb ramps on all corners	
8th Street	Cumberland Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Upgraded curb ramps	
8th Street	Herb White Way Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Truncated domes in median refuges (north, west and south crosswalks) and curb extensions (SE and SW corners) - Advance Yield Here to Pedestrians sign and yield line	
9th Street	Herb White Way Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, adequate nighttime lighting levels - Crosswalk signage - Advance Yield Here to Pedestrians signs and yield lines	
11th Street	Black Diamond Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels	
Bay Side Drive	River Park Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider curb extensions on NE and SE corners - Upgraded curb ramps	

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
Bay Side Drive	2nd Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Consider curb extensions on NE and SE corners ▪ Upgraded curb ramps	
Cutter Avenue	Pelican Court Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ Straighten north crosswalk ▪ Upgraded curb ramps ▪ Remove pork chop	
Pelican Court	Pelican Loop Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ Curb extensions on NE corner to narrow intersection while still allow for truck/boat trailers to make all movements and remove striped pork chop ▪ Straighten north crosswalk ▪ High-visibility crosswalks on all approaches with advanced yield markings and signage ▪ Upgraded curb ramps	
Pelican Loop	Mid-block location	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach ▪ Raised crosswalk ▪ Upgraded curb ramps	
Burton Avenue	Crowley Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Reduce curb radii on SE corner and straighten west crosswalk	
El Pueblo Avenue	Hermosa Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ Parking restriction on crosswalk approach, adequate nighttime lighting levels	
El Pueblo Avenue	Treatro Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ Parking restriction on crosswalk approach, adequate nighttime lighting levels	

Project Name	Limits (From/To)	Project Type	Description	Miles
Hanlon Way	Cove Way Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels	
Pacini Avenue	Riverview Drive/Marks Boulevard Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - Square-up intersection by T-ing Riverview Drive and Marks Boulevard into Pacini Avenue - Remove stop control on Pacini Avenue to make two distinct side-street stop-controlled intersections - High-visibility ladder-striped crosswalks on all approaches - Upgraded curb ramps	
Pilar Ridge Drive	Rio Verde Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels	
Portofino Drive	Valente Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels	
Riverview Drive	Alturas Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised crosswalk	
Riverview Drive	Mori Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Raised crosswalk	
San Juan Drive	Calistoga Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: - High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels - Consider raised crosswalk (Hillview Junior High School)	

City of Pittsburgh
Pittsburg Moves – Active Transportation Plan

Project Name	Limits (From/To)	Project Type	Description	Miles
San Juan Drive	Mariposa Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Consider raised crosswalk (Hillview Junior High School)	
Seeno Avenue	Tiffany Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ Refresh high-visibility crosswalk striping, parking restriction on crosswalk approach, ensure adequate nighttime lighting levels ▪ Raised crosswalk (near Heights Elementary School) ▪ Consider curb extensions	
Notes: Class I = multi-use path, Class II = bike lane, Class III = bike boulevard, Class IV = separated bike lane				

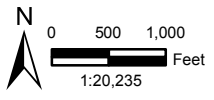


Trail Segments

- | | | |
|----------|----|----|
| Existing | 1C | 3 |
| Spur | 2A | 4 |
| 1A | 2B | 4A |
| 1B | 2C | 5 |

Features

- Observation Point
- +— Railroads
- ★ Trailhead



QUESTA
ENGINEERING CORP.
Civil
Environmental
& Water Resources
(510) 236-6114
FAX (510) 236-2423
questa@questaec.com
P.O. Box 70356 1220 Brickyard Cove Road Point Richmond, CA 94807



City of **Pittsburg**
CALIFORNIA



GREAT CALIFORNIA DELTA TRAIL

BAY POINT WETLANDS TO PITTSBURG MARINA PARK
PRELIMINARY ENGINEERING STUDY

FIGURE 12: TRAIL SEGMENTS

**MINUTES
OF A REGULAR MEETING
OF THE
PITTSBURG PLANNING COMMISSION**

December 8, 2020

Pursuant to Section 3 of Executive Order N-29-20, issued by Governor Newsom on March 17, 2020, the regular meeting of the Planning Commission for December 8, 2020 was conducted telephonically through Zoom with broadcasting live through Granicus on the City's website. Please be advised that pursuant to the Executive Order, and to ensure the health and safety of the public by limiting human contact that could spread the COVID-19 virus, the Council Chamber was not open for the meeting. Council Members participated telephonically or through Zoom and were not physically present in the Council Chamber.

Chair Foster called the meeting of the Pittsburg Planning Commission to order at 7:00 p.m. on Tuesday, December 8, 2020, in the Council Chamber at City Hall, 65 Civic Avenue, Pittsburg, California via Zoom teleconference.

ROLL CALL

Present: Chair Foster, Vice-Chair Moreno, Commissioners Croskey, Coniglio, Bhasin, Robinson

Absent: Commissioner Nguyen

Staff: City Attorney Donna Mooney, Community Development Director Jill Hecht, City Engineer Richard Abono, Planning Manager/ Secretary Kristin Pollot, Senior Civil Engineer Gina Haynes, Associate Planner Trishia Caguiat, Deputy City Clerk Amanda McVey, Administrative Coordinator Shelby Rose

PLEDGE OF ALLEGIANCE

Commissioner Coniglio led the Pledge of Allegiance.

DELETIONS / WITHDRAWALS / CONTINUANCES

There were none.

COMMENTS FROM THE AUDIENCE

There were no comments from the audience.

PRESENTATIONS

1. Addendum to the Five-Year Capital Improvement Program (CIP) for 2020/21 through 2024/25.

Gina Haynes, Senior Civil Engineer, gave presentation.

CONSENT

2. Minutes of November 10, 2020
3. General Plan Consistency Determination for an Addendum to the Five-Year Capital Improvement Program (CIP) for 2020/21 through 2024/25.

On motion by Commissioner Robinson and seconded by Commissioner Moreno to approve the Minutes of November 10, 2020 and carried by the following vote:

AYES: Bhasin, Coniglio, Croskey, Moreno, Robinson, Foster
NAYES: None
ABSTAIN: None
ABSENT: Nguyen

STUDY SESSION

4. West Leland Commerce Center, AP-20-1540 (PPR)

A study session of a preliminary plan review to receive Planning Commission feedback on a proposal to construct a new regional retail commercial center, consisting of two large anchor tenant pads (58,000 square-foot and 37,000 square-foot in size) and two smaller commercial tenant pads (3,500 square-foot and 2,800 square-foot), on an approximate 12-acre site located along the north side of Avila Road, just west of the existing San Marco development area. Assessor Parcel Number 091-020-018

Associate Planner Caguiat gave a presentation on the item.

Applicants Louis Parsons, Doug Messner, Kris Kamerzell, Massoud Naraghi, John Vizcay spoke on behalf of their application.

Public comment was received through email from the following and were read aloud:

Jonathon Mendoza, Pittsburg

The Commissioners discussed and provided feedback to staff related to parking, preserving the views from the site, retaining open space appearance, flexibility in allowable uses for the site, visibility from the freeway, and landscaping.

ZONING ADMINISTRATOR REPORTS

5. The Zoning Administrator submit one notice of intent to exercise delegated design review authority for six revised model homes for the San Marco Subdivision, Village "E". The Zoning Administrator also submit three resolutions previously approved under the delegated authority (Planning Commission Resolution No. 9918).

STAFF COMMUNICATIONS

Planning Manager / Secretary Pollot suggested the Commission convene to next regular meeting of December 22, 2020.

COMMITTEE REPORTS / COMMISSIONER COMMENTS

Chair Foster reported on the TransPlan reorganization.

Commissioner Croskey spoke on behalf of the Chamber of Commerce regarding the Reimagine and Thrive Workshop for small business owners.

ADJOURNMENT

The meeting was adjourned at 8:36 p.m. to December 22, 2020.

Respectfully Submitted,

Kristin Pollot, AICP, Secretary

MeetingComments

From: Jonathan Samuel Mendoza <jonathansmendoza@gmail.com>
Sent: Monday, December 7, 2020 11:47 PM
To: meetingcomments@ci.pittsburg.ca.us
Subject: FOR PUBLIC COMMENT - 4. West Leland Commerce Center, AP-20-1540 (PPR)

****External Sender: Use caution before opening links or attachments****

Dear Pittsburg Planning Commission:

Please include the following comments in your review/consideration of this proposed project (and any projects in the vicinity):

- Require Class I bikeways/paths along West Leland Road and Avila Road connecting Pittsburg and Concord (especially to the future NPS/EBRPD Concord Hills Regional Park);
- Protect the views of the hillside along highway 4 by 1) prohibiting grading of the hills visible from highway 4; and 2) prohibiting illuminated signage towers visible from the freeway (like those seen along highway 4 between Somersville and Loveridge exits);
- Work with the City of Concord to widen and install signals along West Leland Road / Avila Road for drivers to safely turn onto Willow Pass Road in Concord.

Thanks for your time.

Best,

Jonathan M.

**CITY OF PITTSBURG
PLANNING COMMISSION
STAFF REPORT
January 26, 2021**

ITEM: Frontage Road General Plan Amendment and Rezone Project, AP-20-1544 (GP, RZ).

ORIGINATED BY: City of Pittsburg Economic Development Department, 65 Civic Avenue, Pittsburg, CA 94565

SUBJECT: This is a request for recommendation of City Council approval of a general plan amendment and rezoning of a city-owned undeveloped parcel and an unmapped portion of an abandoned right-of-way, to 'Community Commercial' and CC (Community Commercial) District, respectively. The site totals less than three acres in size and is located along the northern side of Frontage Road, between Dover Way and Chelsea Way. Assessor's Parcel No. (APN) 087-227-001. Development of the site is not proposed at this time.

RECOMMENDATION: Staff recommends that the Commission: 1) review the initial study and proposed negative declaration for the project, and then: 2) adopt Resolution No. 10163, recommending that the City Council approve the requested General Plan and Zoning Map amendments.

BACKGROUND: The approximately three-acre area was previously excess right-of-way that was conveyed to the City by Caltrans. While the property maintains a General Plan Land Use designation of "Park," it currently does not have a zoning designation applied. The western portion of the property houses the Dover Well pump station, which was recently renovated.

The majority of the site (2.79 acres) is a mapped parcel (APN: 087-227-001) which stretches along the north side of and parallel to Frontage Road. An approximately 0.11-acre portion of the site adjacent to the northwest corner of APN: 087-227-001 is unmapped. This area is mainly comprised of utility infrastructure and an access roadway.

On February 18, 2020, the City Council, by minute order, moved unanimously to initiate a study of a potential amendment to the General Plan Land Use Designation, as well as the establishment of a zoning designation on the project site in order to allow for potential future development of a billboard adjacent to State Route 4.

PROJECT DESCRIPTION: The proposed project would re-designate a majority of the site's General Plan land use from Park to Community Commercial, and would also apply a new zoning designation (where none currently exists) of CC District to the site (see attached for a map of existing vs proposed general plan and zoning designations).

Existing Conditions: The project site is owned by the City of Pittsburg and is an undeveloped parcel that is long and narrow, with 15 utility poles and multiple utility easements running across the site. The site is generally flat with an approximate

elevation of 50 feet. The site is un-landscaped with ruderal vegetation and three existing trees are located toward the center of the site along the sound barrier.

Surrounding Land Uses: The surrounding neighborhood includes residential land uses, governmental and quasi-public land uses, and open space. State Route 4 is north of the project site and further north of the site and State Route 4, are the Belmont Apartment Homes, a small convenience store, and a PG&E substation. To the east of the site is the Los Medanos Elementary School and single-family residences. To the south of the site is Frontage Road and further south are single family residences. To the west of the site is a 1,000-foot-wide PG&E utility corridor and beyond that are single-family homes. The Contra Costa Canal is located approximately 0.6 mile southwest of the project site and the Pittsburg Center Bay Area Rapid Transit (BART) station is located approximately 0.7 mile east of the site.

Proposed Project: While no development project is proposed at this time, approval of the mapping changes would allow for the potential future construction of the site. As discussed under the “Existing Conditions” section above, utility easements and parcel size/shape constraints would limit development options and as such, it is assumed that no habitable structures could be constructed on the site. Uses that could work on the site might include minor utilities or telecommunication facilities, electronic billboards, or small structures such as an automated teller machines (ATM) or reverse vending machines. A large portion of the site is envisioned to be developed with a 12-foot wide Class I bicycle trail, running from Chelsea Way to Dover Way, providing a connection to the existing trail that extends to the Pittsburg Center BART Station. The construction of this bicycle trail would further limit future development on the project site.

CODE COMPLIANCE:

General Plan: The requested General Plan amendment would require modification to General Plan Figure 2-2 (Land Use Diagram) and Figure 2-4j (West Leland Subarea), and would remove the designation of Park from the subject property and replace it with the Community Commercial land use designation on the mapped portion of APN: 087-277-001. It should be noted that the remnant 0.11-acre portion near the northwest corner of the project site that is not a part of the mapped parcel does not currently have any General Plan designation, but would also be assigned the Community Commercial designation.

As mentioned, the proposed land use amendment would potentially facilitate the buildout of a Class I trail along Frontage Road, consistent with the General Plan’s Land Use Framework Guiding Principles, which call for increased connectivity between neighborhoods.

The modification to the land use designation for this property is consistent with General Plan Goal 2-G-6, which encourages the City to, “[m]aintain programs and provide incentives for use of vacant infill land and reuse and revitalization of underutilized sites.” The modification would also further the implementation of General Plan policy 6-P-14,

which calls for establishing an inventory of ready-to-go non-residential sites, complete with zoning, infrastructure, and environmental clearances, as well as policy 6-P-15, which calls for consideration of opportunities for enhancement in order to fund the various economic development initiatives outlined in the Economic Development Element of the General Plan.

Zoning: The subject site, including both the mapped and unmapped portions, do not currently maintain any zoning designation. The proposed rezone would, in effect, establish the initial zoning designation for the site.

The CC District zoning would be consistent with the Community Commercial General Plan land use designation. Pursuant to Pittsburg Municipal Code section 18.48.030, the Planning Commission shall include written findings to support any recommendation it makes to the City Council to amend the Zoning Ordinance.

Required Findings – General Plan Map Amendment: Under Government Code section 65358, the legislative body (City Council) of a local government agency may amend its general plan, in whole or in part, if it finds that the amendment would be in the public interest. No more than four general plan amendments to each required element may be adopted within one calendar year. For calendar year 2021, the City Council has not adopted any amendments to the General Plan Land Use Element.

California Government Code and Pittsburg Municipal Code (PMC) identify the Planning Commission as the advisory body to the City Council on amendments to the general plan. Government Code section 65353(a) requires that the Commission conduct at least one public hearing prior to making its recommendation on a proposed general plan amendment.

Required Findings – Zoning Map Amendment: PMC section 18.16.020 identifies the Planning Commission as the advisory body to the City Council on proposed changes to the zoning map, and PMC 18.48.030 requires that the Commission determine, prior to making its recommendation, whether or not:

- The change proposed is consistent with the objectives, policies, general land uses and programs specified in the General Plan and applicable specific plan;
- A community need is demonstrated for the change proposed; and
- Its adoption will be in conformity with public convenience, general welfare and good zoning practice.

Environmental: The proposed project is subject to the California Environmental Quality Act (CEQA), and the State CEQA Guidelines (Public Resources Code section 21080). Pursuant to the provisions of the State CEQA Guidelines, City staff prepared an Initial Study for this proposed project. Based on the analysis in that study, the Planning Manager determined the proposed project could not have a significant effect on the environment, and subsequently, a Notice of Intent to Adopt a Negative Declaration (ND) was prepared and distributed to the public on November 25, 2020, for a 30-day review,

in accordance with the CEQA requirements. The Planning Commission is being asked to consider the Initial Study and draft ND prior to making its recommendation to the City Council on the proposed project.

Public Notice: On or prior to January 15, 2021, in accordance with Government Code sections 65090 and 65091, and PMC section 18.14.020, a “Notice of Public Hearing,” for the January 26, 2021, public hearing on this item was published in the East County Times; was posted at City Hall; and was mailed via first class or electronic mail to the applicant, to the property owner, to owners of property located within 300 feet of the proposed project site, to local service agencies whose services might be affected by this project, and to individuals who had previously filed written request for such notice.

ANALYSIS: In order to recommend approval of a General Plan amendment, the Planning Commission must find that the amendment proposed would be in the public interest. Staff believes this finding can be made because the proposed land use change would facilitate the use of the vacant parcel and help the City achieve its economic development objectives, as described above. At the same time, due to the existing utility easements and underground infrastructure, development of a residential use or commercial building would be preempted, thereby eliminating the potential for significant traffic, noise, or other impacts, nor would it necessitate additional public services or strain existing services. Uses such as minor utilities, telecommunication facilities, or small structures could be constructed on the site and would have the smallest footprints on the site compared to other developments typically allowed under the Community Commercial designation.

In order to recommend approval of a zoning change, the Commission must find that the amendment proposed is consistent with the objectives, policies, general land uses and programs specified in the General Plan; there is a community need; and the amendment proposed would be in conformity with public convenience, general welfare and good zoning practice.

Staff believes the proposed amendment would be consistent with the objectives of the General Plan. The proposed project would be consistent with General Plan Land Use Element Goal 2-G-6, as well as Economic Development Element policies 6-P-14 and 6-P-15. Potential revenues generated by the leasing of this site for items such as communications and other infrastructure would go directly to economic development activities. Furthering economic development in the City directly addresses a major community need that has been vocalized for several years, and most recently during the City Council goal setting workshops and Envision Pittsburgh forums.

As it is assumed that no habitable structures could be constructed on the site, and that uses such as minor utilities, telecommunication facilities, or small structures would represent the maximum extent of what could be constructed on the site, staff believes that the proposed zoning amendment would be in conformity with public convenience, general welfare and good zoning practice. Facilitating development of a long-standing vacant site would help to eradicate existing problems that come with vacant sites, such

as illegal dumping. As more thoroughly described in the Initial Study, the project being considered does not propose development, and thus, would not create any significant impacts.

Staff does want to expressly convey that future development of site with non-habitable uses will be sought. However, at this time, the City has not received an application for any development, and the project before the Planning Commission at this time is limited to the General Plan amendment and rezoning request. As the site does not currently maintain any zoning designation, one should be applied; the Community Commercial General Plan designation and corresponding zoning district assignment would increase marketability and expand the range of uses beyond what the current Park designation allows. Any future development of the site would be subject to all applicable project specific approvals, standards, and environmental reviews, without exception.

ACTION REQUIRED: Move to adopt Resolution No. 10163, recommending City Council adoption of the General Plan and zoning map amendments proposed.

ATTACHMENTS:

1. Proposed Resolution No. 10163
 - a. Exhibit A – General Plan Map Amendment
 - b. Exhibit B – Zoning Map Amendment
2. Proposed Negative Declaration and Initial Study, dated November 2020
3. Comments Received on Proposed Negative Declaration and Initial Study
4. Map of Surrounding Land Uses
5. Notice of Public Hearing/Vicinity Map
6. Staff Presentation

Prepared by: Jordan Davis, Interim Director of Economic Development/Assistant to the City Manager

PROPOSED
BEFORE THE PLANNING COMMISSION OF THE CITY OF PITTSBURG

In the Matter of:

Resolution Recommending City Council	)	Resolution No. 10163
Approval of a General Plan and Zoning	)	
Map Amendment for the "Frontage Road	)	
General Plan Amendment and Rezone	)	
<u>Project, AP-20-1544 (GP, RZ)".</u>	)	

The Planning Commission of the City of Pittsburg DOES RESOLVE as follows:

Section 1. Background

- A. On February 18, 2020, the City of Pittsburg Economic Development Department filed Planning Application No. 20-1544, requesting approval of a General Plan and zoning map amendment (the "Project"). The Project would amend the General Plan and rezone a City-owned undeveloped parcel, as well as a small unmapped portion of abandoned right-of-way that combined total less than three (3) acres in size along the northern side of Frontage Road, between Dover Way and Chelsea Way. Assessor's Parcel No. 087-227-001 ("Project Site"). The application does not propose any development at this time.

- B. The project site is owned by the City of Pittsburg and is comprised of remnant areas acquired by the City from the California Department of Transportation (CalTrans) following various freeway widening projects. The site has historically remained vacant, with the exception of the Dover Well Pump Station located at the western end of the site, largely due to the presence of several overhead powerlines and the corresponding PG&E easement, as well the proximity to State Route 4.

- C. The majority of the site (2.79 acres) is a mapped parcel (APN: 087-227-001) which stretches along the north side of and parallel to Frontage Road. An approximately 0.11-acre portion of the site adjacent to the northwest corner of APN: 087-227-001 is unmapped. This area is mainly comprised of utility infrastructure and an access roadway.

- D. The requested amendments would: 1) change the Project Site's General Plan land use designation from 'Park' to 'Community Commercial'; and 2) establish a zoning designation of CC (Community Commercial) on the Project Site. The Project Site does not currently have an assigned zoning district.

- E. The project is subject to the California Environmental Quality Act ("CEQA") (Public Resources Code 21000-21189) and the State CEQA guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387).

- F. The City, as the lead agency under CEQA, prepared an Initial Study for this proposed project. Based on the analysis in the Initial Study, the Planning Manager determined the proposed project could not have a significant effect on the environment, and subsequently, a Notice of Intent to Adopt a Negative Declaration (ND) was prepared.
- G. The Notice of Intent to adopt a Negative Declaration and accompanying Initial Study were distributed to the public on November 25, 2020, for a 30-day review in accordance with the CEQA requirements.
- H. Government Code section 65358 provides that the legislative body of a local government agency may amend its general plan, in whole or in part, if it finds that the amendment would be in the public interest. No more than four general plan amendments to each required element may be adopted within one calendar year. For the 2021 calendar year, the City Council has not adopted any amendments to the General Plan to date.
- I. The California Government Code and the Pittsburg Municipal Code identify the Planning Commission as the advisory body to the City Council on amendments to the General Plan. Government Code section 65353(a) requires that the Planning Commission conduct at least one public hearing prior to making its recommendation on a proposed General Plan amendment.
- J. Pittsburg Municipal Code (“PMC”) section 18.16.020 identifies the Planning Commission as the advisory body to the City Council on proposed changes to the zoning map. Prior to making a recommendation, the Planning Commission must find, in accordance with PMC 18.48.030, that:
 - 1. The change proposed is consistent with the objectives, policies, general land uses, and programs specified in the General Plan and applicable specific plan;
 - 2. A community need is demonstrated for the change proposed; and
 - 3. Its adoption will be in conformity with public convenience, general welfare, and good zoning practice.
- K. On or prior to January 15, 2021, in accordance with Government Code sections 65090 and 65091, and PMC section 18.14.020, a “Notice of Public Hearing,” for the January 26, 2021, public hearing on this item was published in the East County Times; was posted at City Hall; and was mailed via first class or electronic mail to the applicant, to the property owner, to owners of property located within 300 feet of the proposed project site, to local service agencies whose services might be affected by this project, and to individuals who had previously filed written request for such notice.
- L. On January 26, 2021, the Planning Commission considered the Initial Study prepared for the project and held a public hearing on the General Plan map amendment and amendments to the zoning map, at which time oral and/or written testimony was considered.

Section 2. Findings

A. Based on the Planning Commission Staff Report entitled, “Frontage Road General Plan Amendment and Rezone Project, AP-20-1544 (GP, RZ),” dated January 26, 2021, and based on all the information contained in the Planning Division files on the project, incorporated herein by reference and available for review in the Planning Division located at 65 Civic Avenue in Pittsburg, and based on all written and oral testimony presented at the meeting, the Planning Commission finds that:

1. All recitals above are true and correct and are incorporated herein by reference.
2. The Initial Study and Negative Declaration have been independently reviewed and considered, prior to making a recommendation to the City Council.

General Plan Map Amendment

3. The requested General Plan map amendment is in the public interest, in that it will facilitate the use of the vacant parcel and help the City achieve its economic development objectives while reducing blight.

Zoning Map Amendment

4. The requested zoning map amendment is consistent with the objectives, policies, general land uses, and programs specified in the General Plan, in that:
 - a. It will facilitate development on an infill site, thereby helping the City maintain a compact urban form (Goal 2-G-1).
 - b. It will incentive the use of vacant infill land and revitalize an underutilized site (Goal 2-G-6).
 - c. It will add to the City’s inventory of ready-to-go non-residential sites, complete with zoning, infrastructure, and certain environmental clearances (Policy 6-P-14).
 - d. It represents an opportunity for enhancement in order to fund the various economic development initiatives outlined in the Economic Development Element of the General Plan (Policy 6-P-15).
 - e. It will allow development in an area where public facilities and infrastructure are already available (Policy 3-P-1).
5. Furthering economic development in the City directly addresses a major community need that has been vocalized for several years, and most recently during the City Council goal setting workshops and Envision Pittsburg forums. Future development of the site with non-habitable uses will be sought; however, at this time, the City has

not received any applications for development, and the project before the Planning Commission is limited to the General Plan amendment and rezoning request. The Community Commercial General Plan designation and corresponding CC zoning district assignment will increase marketability and expand the range of uses beyond what the current Park designation allows. Any future development of the site will be subject to all applicable project specific approvals, standards, and environmental reviews, without exception.

6. As it is assumed that no habitable structures could be constructed on the site, and that uses such as minor utilities, telecommunication facilities, or small structures will represent the maximum extent of what could be constructed on the site, the proposed zoning amendment is in conformity with public convenience, general welfare and good zoning practice.

- B. The staff report entitled “Frontage Road General Plan Amendment and Rezone Project, AP-20-1544 (GP, RZ),” dated January 26, 2021, is referenced hereto as additional support for the findings.

Section 3. Recommendation

Based on the findings set forth above, the Planning Commission hereby recommends that the City Council adopt a resolution and ordinance (as applicable) to:

- A. Amend General Plan Figure 2-2 (Land Use Diagram) and Figure 2-4j (West Leland Subarea) to change the land use designation of the Project Site described in section 1.A above, from ‘Park’ to ‘Community Commercial’ as substantially presented in “Exhibit A” of this resolution, as well as modify other General Plan tables and charts as necessary to reflect the change in land use acreages and maintain internal consistency; and
- B. Amend the zoning map to establish a zoning designation of CC (Community Commercial) to the project site described in section 1.A above and as substantially presented in “Exhibit B” of this resolution.

Section 4. Effective Date

This resolution shall take effect immediately upon its adoption.

On motion by Commissioner _____, seconded by Commissioner _____, the foregoing resolution was passed and adopted the 26th day of January 2021, by the Planning Commission of the City of Pittsburg, California by the following vote:

AYES:

NAYES:

ABSTAIN:

ABSENT:

I hereby certify that the above Resolution No. 10163 was adopted by the Planning Commission of the City of Pittsburg on January 26, 2021.

KRISTIN POLLOT, AICP, SECRETARY
PITTSBURG PLANNING COMMISSION

Exhibit A of Resolution No. 10163
General Plan Map Amendment

Fig. 1: Existing General Plan Designations



Exhibit A of Resolution No. 10163
General Plan Map Amendment

Fig. 2: Proposed General Plan Designations



Exhibit A of Resolution No. 10163
Zoning Map Amendment

Fig. 1: Existing Zoning Designations



Exhibit A of Resolution No. 10163
Zoning Map Amendment

Fig. 2: Proposed Zoning Designations





Frontage Road General Plan Amendment and Rezone Project

Initial Study – Negative Declaration

prepared by

City of Pittsburg

65 Civic Avenue

Pittsburg, California 94565

Contact: Kristin Pollot, AICP, Planning Manager

prepared with the assistance of

Rincon Consultants, Inc.

449 15th Street, Suite 303

Oakland, California 94612

November 2020



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

Frontage Road General Plan Amendment and Rezone Project

Initial Study – Negative Declaration

prepared by

City of Pittsburg

65 Civic Avenue

Pittsburg, California 94565

Contact: Kristin Pollot, AICP, Planning Manager

prepared with the assistance of

Rincon Consultants, Inc.

449 15th Street, Suite 303

Oakland, California 94612

November 2020



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

This report prepared on 50% recycled paper with 50% post-consumer content.

Table of Contents

Abbreviations and Acronyms.....	iii
Initial Study.....	1
1. Project Title	1
2. Contact Person and Phone Number	1
3. Project Location	1
4. Project Sponsor's Name and Address.....	1
5. General Plan Designation.....	1
6. Lead Agency Name and Address.....	1
7. Zoning.....	4
8. Project Description.....	4
9. Surrounding Land Uses and Setting	4
10. Other Public Agencies Whose Approval is Required	5
11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?	5
Environmental Factors Potentially Affected.....	7
Determination	7
Environmental Checklist.....	9
1 Aesthetics.....	9
2 Agriculture and Forestry Resources.....	13
3 Air Quality	17
4 Biological Resources.....	21
5 Cultural Resources	27
6 Energy	31
7 Geology and Soils.....	33
8 Greenhouse Gas Emissions.....	39
9 Hazards and Hazardous Materials	43
10 Hydrology and Water Quality	49
11 Land Use and Planning.....	55
12 Mineral Resources	57
13 Noise	59
14 Population and Housing.....	65
15 Public Services.....	67
16 Recreation.....	69
17 Transportation	71
18 Tribal Cultural Resources	75
19 Utilities and Service Systems	77
20 Wildfire.....	81

21	Mandatory Findings of Significance	83
References		85
	Bibliography	85
	List of Preparers	89

Tables

Table 1	Typical Construction Noise Levels.....	61
Table 2	Vibration Levels for Construction Equipment.....	62
Table 3	Estimated Landfill Capacities and Closure Dates	78

Figures

Figure 1	Regional Location	2
Figure 2	Project Location	3
Figure 3	Existing Project Site	10
Figure 4	Existing Project Site	10

Abbreviations and Acronyms

AB	Assembly Bill
ABAG	Association of Bay Area Governments
af	acre feet
afy	acre feet per year
ALUCP	Airport Land Use Compatibility Plan
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
BIOS	Biogeographic Information and Observation System
BMP	best management practices
CALFIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CalGreen	California Green Building Standards Code
CalOES	California Office of Emergency Services
CalOSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources, Recycling, and Recovery
CAPCOA	California Air Pollution Control Officers Association
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
SBPP	Countywide Bicycle and Pedestrian Plan
CCAP	Central County Action Plan
CCCFPD	Contra Costa County Fire Protection District
CCCSD	Central Contra Costa Sanitary District
CCR	California Code of Regulations
CCTA	Contra Costa Transportation Authority
CCWD	Contra Costa Water District
CCCWP	Contra Costa Clean Water Program
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code

CFP	California Fully Protected
CMP	Congestion Management Program
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂ e	carbon monoxide equivalent
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CTP	Countywide Transportation Plan
CWA	Clean Water Act
dB	decibels
dBA	A-weighted sound pressure level
DOC	Department of Conservation
DOF	Department of Finance
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
ECCC HCP	East Contra Costa County Habitat Conservation Plan
EMFAC	Emissions Factor Model
FEMA	Federal Emergency Management Agency
FHC	fuel hydrocarbon
FTA	Federal Transit Administration
GHG	greenhouse gases
Hz	hertz
HMBP	Hazardous Materials Business Plan
IPaC	Information for Planning and Consultation
ITE	Institute of Transportation Engineers
kBtu	thousand British thermal units
kWh	kilowatt-hours
Ldn	Day-Night Average (noise) level
Leq	single steady A-weighted (noise) level
Lmax	highest root mean squared sound pressure level

Lmin	lowest root mean squared sound pressure level
LUST	Leaking Underground Storage Tank
MCE	Marin Clean Energy
MDUSD	Mount Diablo Unified School District
mph	miles per hour
MT	metric tons
MWH	megawatt hours
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NMFS	National Marine Fisheries Service
N ₂ O	nitrous oxides
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resources Conservation Service
NWI	National Wetlands Inventory
O ₃	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
Pb	Lead
PG&E	Pacific Gas and Electric
PMC	Pittsburg Municipal Code
PPD	Pittsburg Police Department
PPRD	Pittsburg Parks and Recreation District
PM _{2.5}	particulate matter with a diameter of up to 2.5 microns
PM ₁₀	particulate matter with a diameter of up to 10 microns
PPD	Precise Plan District
PPV	Peak Particle Velocity
PRC	Public Resources Code
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board

City of Pittsburgh
Frontage Road General Plan Amendment and Rezone Project

SB	Senate Bill
SFBAAB	San Francisco Bay Area Air Basin
SLF	Sacred Lands File
SO ₂	sulfur dioxide
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board (California)
TAC	toxic air contaminant
TCR	Tribal Cultural Resources
USACE	U.S. Army Corps of Engineers
USEPA	Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
VdB	vibration decibels
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compounds

Initial Study

The City of Pittsburg, as the Lead Agency, prepared this Initial Study for the Frontage Road Project (“project”) in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations [CCR] Section 15000 et. seq.), and the regulations and policies of the City of Pittsburg, California.

1. Project Title

Frontage Road General Plan Amendment and Rezone

2. Contact Person and Phone Number

Kristin Pollot, AICP, Planning Manager
925-252-4015
KPollot@ci.pittsburg.ca.us

3. Project Location

The project site is located along Frontage Road roughly between Dover Way and Chelsea Way in the City of Pittsburg, Contra Costa County. To the north of the site is an approximately 13-foot tall sound barrier to attenuate noise from State Route 4, and beyond that are residences, a small convenience store, and a Pacific Gas and Electric (PG&E) substation to the north. To the south is a frontage road and further south are single-family residences. To the west of the project site is an approximately 1,000-foot-wide PG&E powerline corridor, with single-family residences and a public park further west. To the east are Los Medanos Elementary School and further single-family residences east of the site. Figure 1 shows the regional location of the project site, and Figure 2 provides an aerial image of the project site in its neighborhood context.

4. Project Sponsor’s Name and Address

City of Pittsburg
65 Civic Avenue
Pittsburg, California 94565

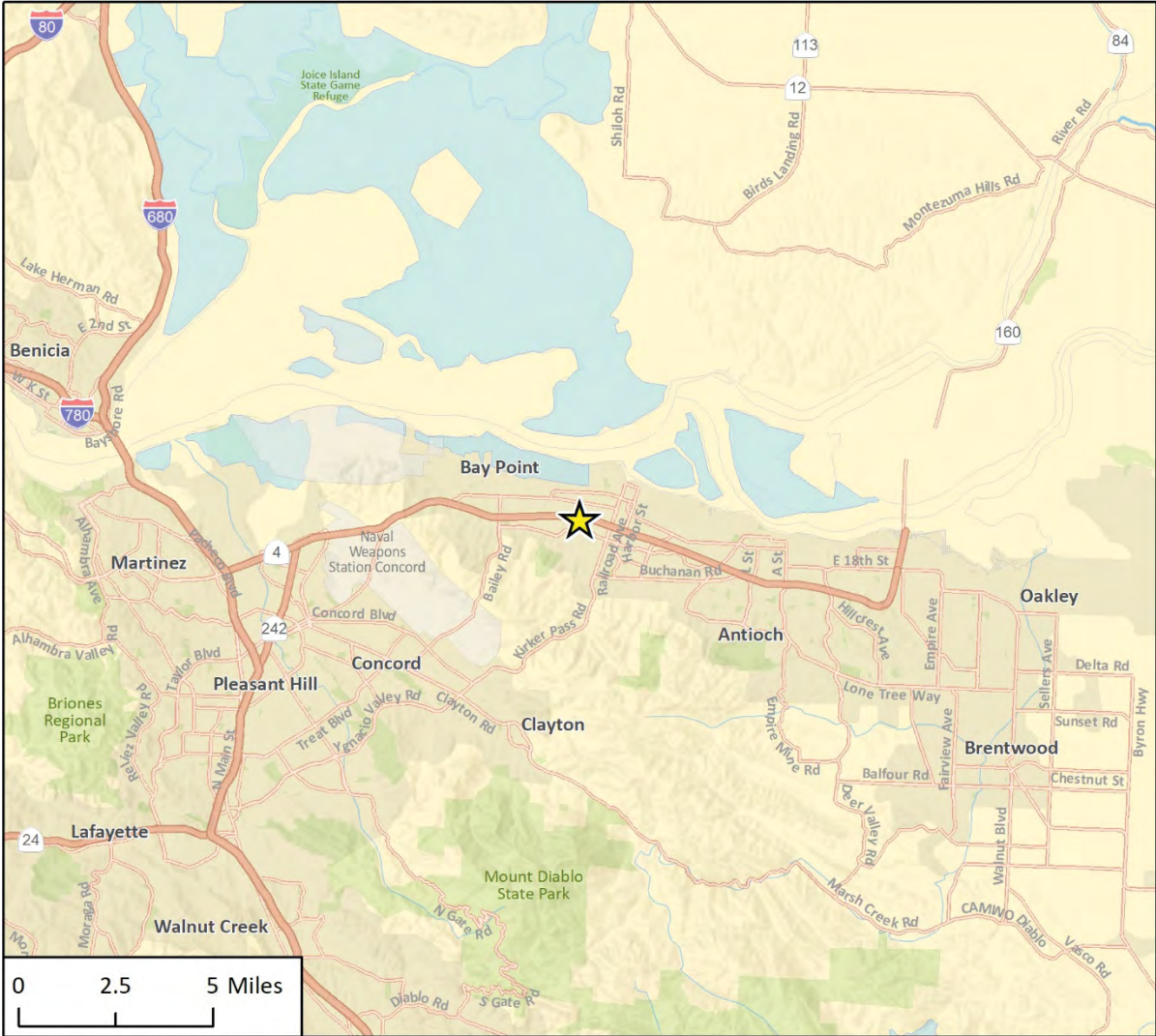
5. General Plan Designation

Park

6. Lead Agency Name and Address

City of Pittsburg
65 Civic Avenue
Pittsburg, California 94565

Figure 1 Regional Location



Imagery provided by Esri and its licensors © 2020.

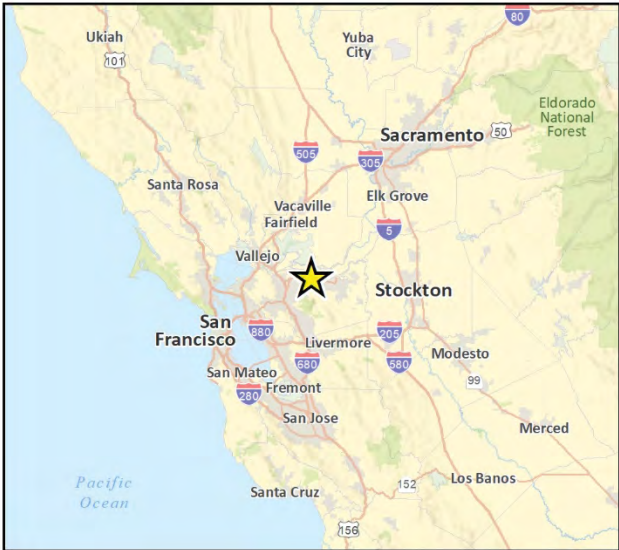
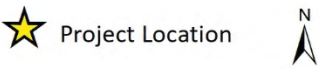


Fig. 1 Regional Location

Figure 2 Project Location



Fig. 2 Project Location

7. Zoning

None. This former right-of-way parcel has not had a zoning designation applied.

8. Project Description

The proposed Frontage Road General Plan Amendment and Rezone project (“project”) would amend the General Plan and rezone a City-owned undeveloped parcel, as well as a small unmapped portion of abandoned right-of-way (APN: 087-277-001), that in total are less than three (3) acres in size. The site would amend the City of Pittsburg’s General Plan and would be rezoned to Community Commercial (AP-20-1544 [GP,RZ]). Approval of the project would allow for the future construction of the project site. However, development constraints such as physical setting and utility easements would limit development on the site to only allowable uses under the Community Commercial designation such as additional utilities or telecommunication facilities.

Due to these constraints, a portion of the project site would potentially be developed with a 12-foot wide Class I bicycle trail along the southern perimeter of the site. The construction of a bicycle trail would further limit development on the project site. As such, it is assumed that no habitable structures could be constructed on the site but uses such as minor utilities or telecommunication facilities, for example electronic billboards, or small structures such as an automated teller machine (ATM) or reverse vending machine¹ could be constructed on the site and would have the smallest footprints on the site compared to other developments typically allowed under the Community Commercial designation.

The proposed project would not result in any direct physical impacts as the proposed General Plan amendment and rezone would not propose any construction or specific development. . Furthermore, future development of the project site may require additional environmental review and/or separate project specific mitigation if the proposed use would result in more severe impacts than what was analyzed in this Initial Study.

9. Surrounding Land Uses and Setting

The surrounding neighborhood includes residential land uses, governmental and quasi-public land uses, and open space. State Route 4 is north of the project site and further north of the site and State Route 4, are the Belmont Apartment Homes, a small convenience store, and a PG&E substation. To the east of the site is the Los Medanos Elementary School and single-family residences. To the south of the site is Frontage Road and further south are single family residences. To the west of the site is a 1,000-foot-wide PG&E utility corridor and single-family homes are beyond that. The Contra Costa Canal is located approximately 0.6 mile southwest of the project site and the Pittsburg Center Bay Area Rapid Transit (BART) station is located approximately 0.7 mile east of the site.

The project site is owned by the City of Pittsburg and is an undeveloped parcel with 15 utility poles and multiple utility easements. The site is generally flat with an approximate elevation of 50 feet.

¹ A reverse vending machine is a machine where people can return empty beverage containers like bottles and cans for recycling.

The site is landscaped with ruderal vegetation and three trees toward the center of the site along the sound barrier.

10. Other Public Agencies Whose Approval is Required

The City of Pittsburgh is the only public agency with discretionary authority to approve this project. The following permits and approvals are required from the City prior to project construction:

- General Plan Amendment
- Community Commercial Rezone

11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

The City has not received any requests from California Native American tribes to be notified of proposed projects in the City, pursuant to Public Resources Code (PRC) Section 21080.3.1.

This page intentionally left blank.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☐ Biological Resources | ☐ Cultural Resources | ☐ Energy |
| ☐ Geology/Soils | ☐ Greenhouse Gas Emissions | ☐ Hazards and Hazardous Materials |
| ☐ Hydrology/Water Quality | ☐ Land Use/Planning | ☐ Mineral Resources |
| ☐ Noise | ☐ Population/Housing | ☐ Public Services |
| ☐ Recreation | ☐ Transportation | ☐ Tribal Cultural Resources |
| ☐ Utilities/Service Systems | ☐ Wildfire | ☐ Mandatory Findings of Significance |

Determination

Based on this initial evaluation:

- ☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- ☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

Kristin Pollot

Printed Name

11/24/20

Date

Planning Manager

Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

Setting

The project site is an undeveloped parcel with 45-foot utility poles on the site. The site's landscape includes three landscaping trees and ruderal vegetation. Figure 3 and Figure 4 provide views of the existing project site. The project site is approximately 12 miles northeast from a designated State Scenic Highway, State Route 24 (California Department of Transportation [Caltrans] 2019). A large PG&E corridor is located directly west of the site.

A scenic corridor is the view from a road that may include a distant panorama and/or the immediate roadside area (City of Pittsburg 2019a). The City's adopted General Plan (November 16, 2001) does not designate any scenic corridors. The City's General Plan also notes that the Delta shoreline is one of the City's most identifiable visual resources, although it is not designated as a scenic resource (City of Pittsburg 2019a). Views of the Delta shoreline from public spaces are limited and unavailable through or from the project site. The ridgelines in the southern portion of the City are also identified within the General Plan as identifiable visual resources, although are not designated as scenic resources.

Figure 3 Existing Project Site



Project site looking east

Figure 4 Existing Project Site



Utility Poles on the project site

Regulatory Setting

City of Pittsburg General Plan

Urban Design Goal 4-G-2: Preserve minor ridgelines south of State Route 4 as open space to provide screening for hillside development.

City of Pittsburg Municipal Code

Section 18.82.030. From Outdoor Lighting. Security lighting may be indirect or diffused, or be shielded or directed away from an R district within 100 feet.

Impact Analysis

a. *Would the project have a substantial adverse effect on a scenic vista?*

A scenic vista is usually defined as a panoramic view from an elevated position or a long-range view from a public vantage point. This can include views of natural features or of the built environment, when architecture and landscaped boulevards offer high-value views of an area considered important to the sense of place. The City of Pittsburg General Plan identifies the ridgelines and Delta shoreline in Pittsburg as identifiable visual resources within the City but are not designated scenic resources. There are no scenic vistas within or near the project site, or that would be impacted by development of the project site. The project would have no impact.

NO IMPACT

b. *Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The nearest State-designated scenic highway is State Route 24 from the east portal of the Caldecott Tunnel to Interstate 680 near Walnut Creek. The City of Pittsburg is not visible from this route. The nearest State route eligible for designation as a scenic highway is State Route 4 from State Route 160 near Antioch to Route 84 near Brentwood (Caltrans 2019). The project site is not located within this eligible portion of State Route 4. Project implementation would have no effect on scenic resources in view of a state scenic highway. There would be no impact.

NO IMPACT

c. *Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project site is an undeveloped property in an urbanized area characterized by single family residential to the south, east, and west and an approximately 13-foot tall sound wall and State Route 4 to the north. The project would amend the General Plan and rezone the parcel to Community Commercial which would allow for development of the project site. Development on the site would be limited and constrained by the utility easements on the site. The project would not remove existing vegetation or trees on site.

The project would allow for development of the site but due to the site's physical constraints, habitable structures could not be developed. Visual barriers would be similar to utility poles or

electronic billboards. Any development on the project site would be required to undergo Design Review or similar review processes before either City Council or Planning Commission and would be required to comply with the Pittsburgh Municipal Code, such as, for example, Sections 18.36.200, which outlines the design review procedure for all land use districts other than single-family residential and Section 19.12.025, which outlines the review procedure for electronic billboards. Future development that would include the construction of wireless telecommunication facilities would also be required to comply with Pittsburgh Municipal Code Section 18.84.930, which outlines standards of review for design review application of wireless telecommunication facilities. Development standards outlined in the Pittsburgh Municipal Code, Chapter 18.52, for Commercial Districts include setbacks, a maximum FAR of 0.5, a maximum height of 60-feet, and a minimum of 10 percent of a site set aside for landscaping. Future development with a small structure would only be partially visible from State Route 4 as the 13-foot noise barrier currently obstructs views through the project site. However, a structure greater than 13 feet in height would be visible and could significantly affect views of the ridgelines for vehicles travelling along State Route 4. Development with an electronic billboard, for instance, would introduce structures as tall as the utility poles on site and would not exceed the development standard of a 55-foot height limit, as set forth by Pittsburgh Municipal Code Section 19.12.025. Development of the site with electronic billboards would introduce structures that would affect views of the ridgelines to the south for vehicles traveling along State Route 4. However, those viewers would be travelling up to 65 miles per hour and would experience a minimal disruption of those views. Therefore, development of the project site under the Community Commercial zoning designation would not conflict with applicable zoning requirements and regulations governing scenic quality.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The project would not create a new source of light or glare that would affect daytime or nighttime views in the area. Development of the site in the future with, for instance, an electronic billboard, would introduce a new source of light to the area. However, per Pittsburgh Municipal Code Section 19.12.025, any electronic billboard would be required to face away, in a perpendicular direction, from the residences to the south, east, and west of the site, and comply with the applicable Federal, State, and local laws and regulations regarding light and glare. Therefore, the project would not substantially increase nighttime lighting levels of light and glare to the extent that it would affect views.

LESS THAN SIGNIFICANT IMPACT

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Setting

The project site is in an urban area and is currently undeveloped. The City of Pittsburg does not have any land zoned for agricultural use (City of Pittsburg 2010).

The California Department of Conservation (DOC) manages the Farmland Mapping and Monitoring Program to assess and record suitability of land for agricultural purposes. In each county, the land is analyzed for soil and irrigation quality and the highest quality land is designated as Prime Farmland. The project site and vicinity are designated as Urban and Built-Up Land and the site does not have any identified agricultural or forest land (DOC 2016a).

Regulatory Setting

PRC Section 12220(g) defines forest land as:

“land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.”

PRC Section 4526 defines timberland as:

“land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.”

Government Code Section 51104(g) defines a timberland production zone as:

“an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h).”

Impact Analysis

- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

The project site and surrounding area is located entirely in the Urban and Built Up Land area (DOC 2016a). Project implementation would only modify the project site; therefore, no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be affected by project implementation and no impact would occur.

NO IMPACT

- b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

The project site and surrounding areas are not subject to Williamson Act contracts (DOC 2016a). The project would only involve a General Plan amendment and the rezone of the site to Community Commercial from vacant land. Therefore, no Williamson Act contracts would be affected by project implementation and no impact would occur.

NO IMPACT

- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*
- e. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

The City of Pittsburg does not have any land zoned for forestry (City of Pittsburg 2010). While some vegetation is present on the project site, the site itself is not considered forest or timberland. The project site does not provide forest and timber resources. As such, the project would not convert forest or timberland uses, and no impact would occur.

NO IMPACT

This page intentionally left blank.

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Air Quality Standards and Attainment

The City of Pittsburg is in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). Air quality in the SFBAAB is affected by the region's emission sources and by natural factors. Topography, speed, and direction of wind, and air temperature gradient all influence air quality. The SFBAAB is affected by a Mediterranean climate, with warm, dry summers and cool, damp winters.

Air pollutant emissions in the SFBAAB are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include sources such as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

The U.S. Environmental Protection Agency (USEPA) has set primary national ambient air quality standards for ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter with a diameter of up to ten microns (PM₁₀) and up to 2.5 microns (PM_{2.5}), and lead (Pb). Primary standards are those levels of air quality deemed necessary, with an adequate margin of safety, to protect public health. California has established health-based ambient air

quality standards for these and other pollutants, some of which are more stringent than the federal standards.

As the local air quality management agency, the BAAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet them. Depending on whether standards are met or exceeded, a local air basin is classified as in “attainment” or “non-attainment.” The BAAQMD is in non-attainment for the federal standards for O₃ and PM_{2.5} and in non-attainment for the state standard for O₃, PM_{2.5}, and PM₁₀.

Air Quality Management

The BAAQMD is primarily responsible for assuring national and state ambient air quality standards are attained and maintained in the Bay Area. The BAAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities. The BAAQMD has jurisdiction over much of the nine-county Bay Area, including Contra Costa County.

The BAAQMD adopted the 2017 Clean Air Plan (2017 Plan) as an update to the 2010 Clean Air Plan. The 2017 Plan provides a regional strategy to protect public health and protect the climate. To fulfill state ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors—volatile organic compounds (VOC)/reactive organic gases (ROG)² and nitrogen oxides (NO_x)—and reduce transport of ozone and its precursors to neighboring air basins. The 2017 Plan builds upon and enhances the BAAQMD’s efforts to reduce emissions of fine particulate matter and toxic air contaminants (BAAQMD 2017a).

Impact Analysis

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

To be consistent with an AQMP, a project must conform to the local General Plan and must not result in or contribute to an exceedance of the local jurisdiction’s forecasted future population. A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP. Population growth would lead to increased vehicle use, energy consumption, and associated air pollutant emissions.

Construction

As discussed in Section 14, *Population and Housing*, the project would not involve the construction of infrastructure that could induce substantial population growth such as new or increased capacity sewer or water lines, or the construction of new streets and roads. The project would not involve construction or operation of various uses on the site and thus, would not have associated construction emissions or operational vehicle trips. Secondary impacts associated with potential future development on the site and impacts associated with that development may include

² The ARB defines VOC and ROG similarly as, “any compound of carbon excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions (California 2004). For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions and the term ROG is used in this report.

construction of the site that would contribute to construction emissions. Development construction would be temporary and allowable uses on the site, such as electronic billboards, telecommunication facilities or other small uninhabited structures, are not expected to require construction that would exceed two weeks (Lamphier-Gregory 2019). Construction on the project site would be below screening level sizes listed in the 2017 BAAQMD *California Environmental Quality Act (CEQA) Guidelines* and would not include construction activities such as demolition, simultaneous construction phases, extensive site preparation, or extensive material transport. Furthermore, as discussed under criterion *b*, the project would not result in an increase of any criteria air pollutant. Therefore, the project would comply with the 2017 Clean Air Plan.

Operation

The project would not require operation of the project site. No habitable structures could be constructed on the project site that would result in substantial population growth. Therefore, development on the project site would not conflict or obstruct implementation of the applicable air quality control plan.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

The BAAQMD region is currently in non-attainment of State and national ambient air quality standards for ozone and fine particulate matter (PM_{2.5}) and of State standards for large particulate matter (PM₁₀) (CARB 2018). As described in Section 8, *Project Description*, the proposed project would not result in any direct impacts as the proposed General Plan amendment and rezone does not propose any construction activities and therefore, would not contribute to an existing air quality violation.

However, secondary impacts associated with potential future development on the project site may occur and impacts associated with that development could include a minimal contribution to an existing air quality violation through an increase in criteria air pollutants. Construction activities of future development on the project site could include site preparation, rough grading, and paving, all of which have the potential to generate criteria air pollutant emissions. In particular, site preparation and grading may cause windblown dust that could contribute particulate matter into the local atmosphere. The BAAQMD has not established quantitative thresholds for fugitive dust emissions but rather states that projects that incorporate best management practices (BMP) for fugitive dust control during construction, such as watering exposed surfaces, would have a less than significant impact related to fugitive dust emissions. Fugitive dust emissions could be significant and future development may require a subsequent CEQA analysis in which mitigation measures may be required to reduce impacts related to fugitive dust.

Future development of the site would not construct any habitable structures therefore, secondary impacts of the project would not contribute to urban growth or generate additional motor vehicle trips. Contributions to an existing air quality violation, as a result of secondary impacts associated with future development, would be subject to BAAQMD best management practices and regulations. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

A TAC is defined by California law as an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. Certain population groups, such as children, older adults, and people with health problems, are particularly sensitive to air pollution. Sensitive receptors are defined as population groups that are more susceptible to exposure to pollutants and examples include health care facilities, retirement homes, school and playground facilities, and residential areas. The nearest sensitive receptors are the residential uses to the east, south, and west of the site. The project would not directly expose sensitive receptors to substantial pollutant concentrations because it would not involve the construction or operation of the site. Secondary impacts, as a result of a potential future project at the site, may include construction activities. However, potential construction activities are expected to be limited in scope and not require any long term construction that would expose sensitive receptors to substantial pollutant concentrations. Furthermore, the proposed Community Commercial general plan and zoning designation would not allow for uses on the site that would introduce sensitive receptors to the site.

In the Bay Area, a number of urban or industrialized communities exist where the exposure to long-term TACs is relatively high compared to other communities. Sources of TACs may include, but are not limited to, land uses such as freeways and high-volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities. However, according to the BAAQMD CEQA Guidelines, the project site is not in an impacted community (BAAQMD 2017b). The project would not allow for the above uses on the project site. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Table 3-3 in the BAAQMD's 2017 *CEQA Guidelines* provides odor screening distances for land uses with the potential to generate substantial odor complaints. The uses in the table include wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, and chemical plants (BAAQMD 2017b). None of the uses identified in the table would occur on the project site. The project would not generate objectionable odors affecting a substantial number of people.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Existing Setting

Two soil types occur on the site: Rincon clay loam, 2-9 percent slopes, and Capay clay, 1-15 percent slopes (USDA 2019). The project site currently contains ruderal grasslands and sparse trees and shrubs surrounded by paved areas. Vegetation on the site appears to be periodically mowed, and piles of gravel and woodchips are also present within the site. According to the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI; USFWS 2020c) and the U.S. Geological Survey (USGS) National Hydrography Dataset (NHD, USGS 2020), an ephemeral stream occurs in the undeveloped area to the west, approximately 475 feet from the project site.

Regulatory Setting

Federal and State

Regulatory authority over biological resources is shared by federal, State, and local agencies under a variety of laws, ordinances, regulations, and statutes. Primary authority for biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the City of Pittsburg).

The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the State and has direct jurisdiction under the California Fish and Game Code (CFGF). Under the California Endangered Species Act (CESA) and the federal Endangered Species Act (FESA), the CDFW and the USFWS, respectively, have direct regulatory authority over species formally listed as threatened or endangered (and listed as rare for CDFW). Native and/or migratory bird species are protected under the CFGF Sections 3503, 3503.5, and 3511.

Statutes within the Clean Water Act (CWA), CFGF, and California Code of Regulations (CCR) protect wetlands and riparian habitat. The U.S. Army Corps of Engineers (USACE) has regulatory authority over wetlands and waters of the United States under Section 404 of the CWA. The State Water Resources Control Board and the nine Regional Water Quality Control Boards (RWQCBs) ensure water quality protection in California pursuant to Section 401 of the CWA and Section 13263 of the Porter-Cologne Water Quality Control Act. The CDFW regulates waters of the State under the CFGF Section 1600 et seq.

Special status species are those plants and animals: 1) listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS and the National Marine Fisheries Service (NMFS) under the FESA; 2) listed or proposed for listing as Rare, Threatened, or Endangered by the CDFW under the CESA; 3) recognized as California Species of Special Concern (CSSC) by the CDFW; 4) afforded protection under CFGF; and 5) occurring on Lists 1 and 2 of the CDFW California Rare Plant Rank (CRPR) system.

Local

The City of Pittsburg Municipal Code (18.84.825-18.84.865) has tree protection guidelines that may apply to the project. The project site also falls under the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCC HCP/NCCP).

Methods

Literature Review

Rincon Consultants, Inc. (Rincon) biologists reviewed agency databases and relevant literature for baseline information on special status species and other sensitive biological resources occurring or potentially occurring at the project site and in the immediate surrounding area. The following sources were reviewed for background information:

- CDFW California Natural Diversity Database (CNDDDB) (CDFW 2020a) and Biogeographic Information and Observation System (BIOS) (CDFW 2020b)
- CDFW Special Animals List (CDFW 2019) and Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2020c)
- California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California (CNPS 2020)
- USFWS Information for Planning and Consultation (IPaC; USFWS 2019a)
- USFWS Critical Habitat Portal (USFWS 2020b)
- USFWS NWI (USFWS 2020c)
- NHD (USGS 2020)
- United States Department of Agriculture (USDA) Natural Resources Conservation Services (NRCS) Web Soil Survey (NRCS 2019)

Rincon biologists conducted a review of the CNDDDB (CDFW 2020a) for recorded occurrences of special status plant and wildlife taxa in the region. For this review, the search included all occurrences within USGS 7.5-minute topographic quadrangle encompassing the project site (*Honker Bay*), and the eight surrounding quadrangles (*Fairfield South, Denverton, Birds Landing, Vine Hill, Antioch North, Walnut Creek, Clayton, and Antioch South*).

Rincon compiled the results of the background literature review into a list of regionally occurring special status plants and animals and evaluated each species for potential to occur based on habitat conditions and proximity to known occurrences. Rincon also reviewed the NWI (USFWS 20120c) and the NHD (USGS 2020) for potential aquatic resources, including jurisdictional waters of the United States or waters of the State.

Impact Analysis

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Special Status Plants

A review of agency databases for known special status plant occurrences within the nine USGS quadrangles containing and surrounding the project site identified 63 special status plant species (CDFW 2020a; CNPS 2020; USFWS 2020a). All the reported species have specific habitat requirements including such factors as soil type, elevation and aspect among others. The highly disturbed existing conditions and the lack of appropriate soils and native vegetation communities on the site preclude the potential for most rare plants to occur on the site. Rincon biologists

determined that of these 63 special status species, only one, big tarplant (*Blepharizonia plumosa*), has the potential to occur within or adjacent to the project site.

Big tarplant has a low potential to occur on site. It has a state rank of S1S2 (imperiled to critically imperiled in California) and a CNPS CRPR of 1B.1 (seriously threatened throughout its range in California). There are five recorded occurrences within 5 miles of the project site, with the most recent in 2000, 5 miles southeast of the project site (CDFW 2020a). A historic occurrence from 1937 occurs in the project vicinity. This plant occurs in annual grassland on clay or clay loam soils. Annual non-native grasslands are present on site and both of these soil types occur within the project site; however, due to the highly disturbed nature of the project site and its location in a developed area, impacts to this species associated with potential future development are not expected.

Special Status Wildlife

Seventy-one (71) special status animal species were identified with known occurrence records within the nine USGS quadrangles containing and surrounding the project site (CDFW 2020a; USFWS 2020a). This list was reviewed and refined according to the potential for species to occur on the project site based on the presence and quality of habitats within the project site. Of these, two species have the potential to occur within the site: Western bumble bee (*Bombus occidentalis*) and western burrowing owl (*Athene cunicularia*).

The western bumble bee (state candidate for listing) has a low potential to occur on site. This bee was once widespread in the northwestern United States but is in decline from Central California to southern British Columbia. In California, it has been lost from 53 percent of its historic range and has an 84 percent decline in relative abundance (Xerces Society et al. 2018). Habitat loss and alteration, pathogens, urban development and fragmentation, and other factors have contributed to their decline. The most recent of the two occurrence records within five miles of the project site is from 1974 (CDFW 2020a). One unconfirmed sighting was reported 2.5 miles south of the project site in 2018 (Xerces Society et al. 2020), however confirmed populations are thought to be restricted to higher elevations in the Sierra Nevada since 2012 (Xerces Society et al. 2018). A generalist forager, the western bumble bee nests underground in cavities or rodent burrows. It requires limited ground disturbance and an abundance of floral resources, as well as suitable overwintering sites for queens. Given the precipitous decline in bumblebees over the last two decades, absence of recent confirmed sightings in the project vicinity, and the disturbed nature of vegetation communities on-site, there is a very low likelihood that the project provides suitable habitat for this species. Impacts to western bumble bee associated with potential future development, are not expected.

The burrowing owl (a state species of special concern) has a low potential to occur on site. There are four CNDDDB occurrence records within five miles of the project site (CDFW 2020a). The closest recorded occurrence is from 2005, approximately one mile to the west of the project site. Suitable habitat (open, dry, annual grassland) is present on site; however, due to the site's small area, proximity to a busy freeway, and disturbed nature of the site, it is unlikely that the burrowing owl would occur on site. Undeveloped land surrounding the project site may provide suitable habitat for burrowing owl. The ECCC HCP/NCCP considers ruderal land cover to be potential burrowing owl habitat and requires preconstruction take avoidance surveys in suitable habitat within 500 feet of the project site. Future development may require subsequent CEQA analysis and mitigation measures to reduce impacts to burrowing owls.

Despite the lack of robust native vegetation communities, the site could be used by species of migratory birds that utilize trees, shrubs, or sparse ground cover as nesting habitat. Native bird nests are protected by CFGC Section 3503. The nesting season generally extends from February 1

through August 31 in California but can vary based upon annual climatic conditions. Future potential construction activities could result in the mortality of, or injury to birds from construction activity, or disturbance-related nest abandonment as a result of construction activity and noise. Impacts to most non-listed bird species through nest destruction or abandonment would not be considered a significant impact; however, loss of active nests or mortality would be a violation of CFGC code. Impacts to special status birds would be significant if those impacts would jeopardize the viability of a local or regional population. Future development may require subsequent CEQA analysis and mitigation measures to reduce impacts to nesting birds.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The review of the resource agency databases for sensitive natural communities within the nine USGS quadrangles containing and surrounding the project site identified five sensitive natural communities: coastal brackish marsh, northern claypan vernal pool, serpentine bunchgrass, stabilized interior dunes, and valley needlegrass grassland. None of these sensitive natural communities are present within the project site, nor are any other sensitive natural communities. No substantial adverse effect on sensitive natural communities would occur as a result of the project.

NO IMPACT

- c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Based on a review of information on biological resources within the project region and data collected during a site visit, no vegetated wetlands or potentially jurisdictional features occur within the project site. No impacts to jurisdictional wetlands or waters would occur.

NO IMPACT

- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The project area is surrounded by developed and disturbed areas with primarily ornamental and ruderal vegetation. Land use in the vicinity is primarily residential and the project site does not provide connectivity between natural habitats and is therefore not expected to support wildlife movement. No impacts to wildlife movement corridors would occur as a result of the project.

NO IMPACT

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The City has established a Tree Preservation and Protection Ordinance in Article XIX of the Pittsburgh Municipal Code. This ordinance has provisions regarding the protection of trees, removal of “protected” trees as part of development applications, and replacement of protected trees that are removed. The City would require a permit for the removal of protected trees.

The project would comply with all local ordinances, and if tree trimming or the removal of trees is required for future development of the project site, the applicant would be required to obtain the necessary permits. With adherence to the City’s Tree Preservation and Protection Ordinance, future potential development of the project site would not conflict with local policies and ordinance.

NO IMPACT

- f. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The City of Pittsburgh is inside the “inventory area” of the ECCC HCP/NCCP (2006). The ECCC HCP/NCCP serves as a comprehensive, multi-jurisdictional habitat conservation plan, pursuant to Section (a)(1)(B) of the federal ESA, as well as a natural communities conservation plan under the California Natural Community Conservation Planning Act of 2001. The City adopted the ECCC HCP/NCCP in 2007, under Pittsburgh Municipal Code Section 15.108, *Habitat Conservation Plan/Natural Community Conservation Plan Implementation Ordinance*. The primary intent of the ECCC HCP/NCCP is to provide for the conservation of a range of plants and animals and in return, provide take coverage and mitigation for covered projects throughout eastern Contra Costa County to avoid the cost and delays of mitigating biological impacts on a project-by-project basis. It would allow the incidental take (for development purposes) of species and their habitat from development. The City is a permittee to the ECCC HCP/NCCP, and any proposed development project is required to comply with applicable provisions of the plan.

Potential future development of the project site would occur in the ECCC HCP/NCCP inventory area; therefore, any development facilitated by the project would be subject to the requirements of Pittsburgh Municipal Code Section 15.108.

However, most of the project site is within an area mapped as urban in the HCP/NCCP; pursuant to PMC section 15.108.030(2), areas mapped as “urban” are exempted from the requirements of the HCP/NCCP. Additionally, an area of approximately 5,700 square feet is mapped as “ruderal”; pursuant to PMC section 15.108.030(1), development projects that will permanently disturb less than once acre are also exempt from the requirements of the HCP/NCCP. As such, the entire project area is exempt and impacts related to consistency with the ECCC HCP/NCCP would be less than significant.

LESS THAN SIGNIFICANT IMPACT

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

This section provides an analysis of the project's impacts on cultural resources, including historical and archaeological resources, as well as human remains. CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1) and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b]).

PRC, Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;

- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Rincon received search results of the California Historical Resources Information System (CHRIS) at the Northwest Information Center (NWIC) located at Sonoma State University on August 28, 2020. The search was performed to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a 0.25-mile radius surrounding it. The CHRIS search included a review of available records at the NWIC, as well as the National Register of Historic Places (NRHP), the CRHR, the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, the Archaeological Determinations of Eligibility list, and historic maps.

The NWIC records search identified 24 cultural resources studies conducted within a 0.25-mile radius of the project site, four of which include the project site. None of the studies within the project site identified cultural resources within the project site. The records search identified seven cultural resources recorded within a 0.25-mile radius of the project site, none of which have recorded boundaries that extend into the project site.

Impact Analysis

- a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

The results of the NWIC records search indicate the presence of seven previously recorded historic-era built environment resources within a 0.25-mile radius, two of which are less than 500 feet from the project site. The nearest resource, P-07-004702, is recorded across SR 4, approximately 305 feet northeast of the eastern most portion of the project site. The resource is recorded as Parkside Elementary, a 10-acre school property consisting of eight buildings constructed in the Mid-Century Modern style built in 1952. The resource was recommended not eligible for inclusion on the NRHP or CRHR under all criteria. No built-environment features that may be considered historical resources are present within the project site. Therefore, there would be no impact to historical resources.

NO IMPACT

- b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The site has been disturbed by previous development and no archaeological resources have been recorded within the project site. Rincon reviewed historical aerials and topographic maps from HistoricAerials.com. These images were reviewed to identify potential cultural resource concerns on the project site. Aerial imagery from 1959 to 1968 depicts the project site as undeveloped land south of SR 4 (NETR Online 2020). Imagery from 1979 to 2002 shows development of housing south of the project site. Aerial imagery from 2005 depicts the project site in its current condition (NETR Online 2020). Historic topographic maps from 1908 to 1969 confirm the sites history of undeveloped land with housing development south of the project site by 1974 (NETR Online 2020). The project site has been disturbed by the placement of fill, construction of overhead and underground utilities, and the construction of a sound barrier.

Although no archaeological resources are known to exist within the project site, unanticipated discoveries are a possibility during ground disturbance. Future development may require subsequent CEQA analysis and mitigation measures to reduce impacts to unknown archaeological resources.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

No cemeteries are known to exist within the project site; however, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner would be notified immediately. If the human remains are determined to be prehistoric, the coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a most likely descendant (MLD). The MLD would complete the inspection of the site within 48 hours of being granted access to the site. With adherence to existing regulations, potential future impacts to human remains would be less than significant.

LESS THAN SIGNIFICANT IMPACT

This page intentionally left blank.

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Energy Supply Setting

Energy use relates directly to environmental quality, since it can adversely affect air quality and can generate GHG emissions that contribute to climate change. Fossil fuels are burned to create electricity that powers residences and commercial/industrial buildings, heats and cools buildings, and powers vehicles. Transportation energy use is related to the fuel efficiency of cars, trucks, and public transportation; choice of different travel modes such as auto, carpool, and public transit; and miles traveled by these modes. Construction and routine operation and maintenance of transportation infrastructure also consume energy.

Electricity & Natural Gas

In 2018, California used 285,488 gigawatt hours of electricity, of which approximately 31 percent of electricity generated was from renewable resources (California Energy Commission [CEC] 2018a, 2018b). Contra Costa County used 9,310 gigawatt hours of electricity in 2018 (CEC 2018c). Contra Costa County used 1,124 million U.S. therms of natural gas in 2018. Marin Clean Energy (MCE), a community choice energy program that serves Marin, Napa, Solano and Contra Costa Counties, provides electricity to the project site. MCE provides electricity generated from a greater percentage of renewable energy sources in comparison to the standard statewide energy mix. MCE's services are divided into three tiers, including Light Green, Deep Green and Local Sol. The default tier that electricity customers are automatically enrolled is Light Green, which is composed of a minimum of 60 percent electricity generated from eligible renewable sources, as defined by the state Renewable Portfolio Standard³. MCE's retail sales of electricity totaled 4,436,963 MWh in 2018 (MCE 2019). The project site would be provided electricity by PG&E or MCE and natural gas by PG&E.

³ The Renewable Portfolio Standard (RPS) is a state program that requires power entities to supply retail sales with minimum quantities of renewable energy. RPS eligible renewable sources of power include solar, wind, biomass and biowaste, geothermal, and certain hydroelectric facilities (MCE 2019).

Impact Analysis

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

The project would not require construction or development of the project site. There would be no consumption of energy associated with the General Plan amendment and rezone of the project site. However, future development of the project site would likely require the use of energy. Construction on the project site would result in short term consumption of energy from the use of construction equipment and processes. Energy use during construction would be primarily from fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. If future development of the project site would include the construction of a structure, then construction energy consumption would be greater.

Assuming no habitable structure can be built on the project site due to physical constraints, operation of the project site under the General Plan amendment and rezone would consist of energy use similar to utilities on site or telecommunication facilities in the area. Construction on the project site for additional utilities or telecommunication facilities would not be expected to exceed two weeks and therefore, energy usage related to construction would be minimal. Operation of the project site with uses such as electronic billboards would require the use of electrical energy. The energy consumption of a 14-foot by 48-foot electronic billboard (as an example) would be approximately 48,000 kWh per year or approximately 48 MWh (Louis Berger Group, Inc. 2011). However, any utility or telecommunication facility on the project site would be constructed to current electrical codes and would be subject to energy efficiency regulations for the specific type of development and Title 24 energy efficiency regulations. Therefore, potential operation of an electronic billboard would not result in the inefficient, wasteful, or unnecessary consumption of energy. The project would not result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Future development on the project site would be subject to local, regional, and state energy requirements and thus, would not conflict or obstruct a state or local plan for renewable energy or energy efficiency. The City of Pittsburgh has not adopted an energy efficiency plan and has not outlined energy goals or policies within its General Plan. Future development of the site would be required to comply with all state and local plans for renewable energy and energy efficiency. Therefore, the project would not conflict with any state or local plans for energy efficiency, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☒	☐
2. Strong seismic ground shaking?	☐	☐	☒	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
4. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Setting

Active faults are defined by the State of California to be a fault that has surface displacement within the Holocene time (approximately the last 10,000 years). Potentially active faults as defined by the State of California to be a fault that has shown evidence of surface displacement during the Quaternary (last 1.6 million years). Any fault that is sufficiently active describes a fault that has some evidence of Holocene displacement on one or more of its segments or branches. Associated issues with earthquakes include liquefaction, which is the rapid transformation of sediment to a fluid-like state. It occurs when water-saturated, loose to medium dense, relatively clay-free sands and silts are subjected to earthquake ground motion.

The Bay Area contains both active and potentially active faults. Major active faults in or near Pittsburgh include the Clayton fault located approximately 4 miles southwest of the site, the Rio Vista fault located approximately 1.3 miles northeast of the site, the Antioch fault located approximately 7 miles to the east of the site, and the Concord fault located approximately 8 miles southwest of the site (USGS 2019).

Expansive soils are soils that swell in density and volume as they absorb water and contract as they lose water. Associated problems include cracking and deterioration of roadway surface, as they expand and contract during seasonal wet and dry cycles. The project site is topographically flat and soils in the region are classified as Antioch loam, Capay Clay, and Rincon clay loam (NRCS 2019). Capay Clay is identified as an expansive soil found on the project site.

Regulatory Setting

Federal and State

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONING ACT

Following the 1989 Loma Prieta earthquake, the Seismic Hazards Mapping Act (SHMA) was passed by the California legislature in 1990. The SHMA (PRC Chapter 7.8, Section 2690-2699.6) directs the Department of Conservation, California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides and amplified ground shaking. It also requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the identified hazard is present and the inclusion of appropriate mitigation to reduce earthquake-related hazards.

SEISMIC HAZARDS MAPPING ACT

The Seismic Hazards Mapping Act of 1990 was enacted, in part, to address seismic hazards not included in the Alquist-Priolo Act, including strong ground shaking, landslides, and liquefaction. Under the Alquist-Priolo Act, the State Geologist is responsible for identifying and mapping seismic hazards. CGS Special Publication 117, adopted in 1997 by the State Mining and Geology Board, constitutes guidelines for evaluating seismic hazards other than surface faulting and for recommending mitigation measures as required by PRC Section 2695(a). In accordance with the mapping criteria, the CGS seismic hazard zone maps identifies areas with the potential for a ground shaking event that corresponds to 10 percent probability of exceedance in 50 years.

The purpose of the Seismic Hazards Mapping Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and state agencies are directed to use seismic hazard zone maps developed by CGS in their

land-use planning and permitting processes. The Seismic Hazards Mapping Act requires site-specific geotechnical investigations prior to permitting most urban development projects in seismic hazard zones.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Construction projects which disturb one or more acres of soil or are part of a larger common plan of development that disturbs one or more acres of soil must obtain coverage under the statewide National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). In order to obtain coverage under the Construction General Permit, a project-specific Stormwater Pollution Prevention Plan (SWPPP) must be prepared. The SWPPP outlines Best Management Practices (BMPs) to reduce stormwater and non-stormwater pollutant discharges, including erosion control, minimizing contact between construction materials and precipitation, and strategies to prevent equipment leakage or spills.

Impact Analysis

- a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

The project site is not in an Earthquake Fault Zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known active or potentially active faults exist on the site. The nearest Alquist-Priolo Earthquake Fault Zone to the project site is associated with the Rio Vista Fault, and is located approximately 1.3 miles northeast of the site (USGS 2020). This potentially active fault has been mapped on a northwest-southeast axis from Central Avenue through Marina Park to Chipps Island (USGS 2020). Because the Rio Vista Fault has not caused surface displacements in the last 11,000 years, it is not defined as an “active fault” (Pittsburg 2010b). Furthermore, the project site would not be developed with any habitable structures that would introduce a population to the project site. Therefore, the risk of loss, injury, or death involving rupture of a known earthquake fault would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

Major earthquakes have occurred in the vicinity of Pittsburg in the past and can be expected to occur again in the near future (Pittsburg 2010b). Strong ground shaking at the project site could result from a rupture of faults near the City or of the major regional earthquake faults in the Bay Area. Such strong ground shaking could damage structures on the project site. However, no habitable structures would be constructed on the site that could be vulnerable to collapse during ground shaking. Therefore, the project would not expose people or structures to substantial adverse effects of seismic ground shaking. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

Liquefaction, which is primarily associated with unconsolidated, saturated materials, is most common in areas of sand and silt or on reclaimed lands. In these areas, ground failure and differential settlement could result from a severe earthquake, damaging paved surfaces and elevated structures. Liquefaction potential is highest in areas underlain by poorly engineered Bay fills, Bay mud, and unconsolidated alluvium. The western portion of the project site is identified as being in a liquefaction zone (USGS 2016). However, no habitable structures would be constructed on the site that could expose people to adverse effects from seismic-related ground failure, including liquefaction. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

Earthquakes can trigger landslides that may cause injuries and damage many types of structures. Landslides are typically a hazard on or near slopes or hillside areas, rather than on generally level areas, like the project site and vicinity. The project site is a flat, undeveloped, approximately 3-acre parcel in an urbanized area of the City. As there are no significant slopes in the project vicinity, no substantial landslide risks would be associated with the site. Per the California Geological Survey Landslide Inventory, the project site is not within a landslide hazard zone (USGS 2019). Impacts related to landslides would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project result in substantial soil erosion or the loss of topsoil?*

The project does not include any demolition, grading, site preparation, or other ground disturbing activity. However, if the project site were to be developed, construction of any structures would be subject to the erosion control requirements of Chapter 15.88 of the Pittsburgh Municipal Code. Pursuant to Section 15.88.030(B), "all land-disturbing or land-filling activities or soil storage shall be undertaken in a manner designed to minimize surface runoff, erosion and sedimentation." In addition to local erosion control regulations, if any proposed structure would involve disturbance of an area over one acre in size, it would be required to comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit Requirements, which would limit peak post-project runoff levels to pre-project levels. The potential future project applicant would also be required to prepare a SWPPP, a sediment and erosion control plan that describes the activities to prevent stormwater contamination, control sedimentation and erosion, and comply with the requirements of the statewide permit. Therefore, the project would have a less than significant impact from soil erosion or the loss of topsoil.

LESS THAN SIGNIFICANT IMPACT

- c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

A landslide is a movement of surface material down a slope. Lateral spread and liquefaction are processes in which material flows in a fluid-like movement; lateral spread refers to this movement over a gentle slope during a landslide, and liquefaction refers to water-saturated sediment losing

strength due to ground-shaking. Subsidence and collapse refer to the caving in or sinking of land. The project site is not within an area mapped as having landslides (USGS 2019). Therefore, the project has a low potential for slope instability occurring at the site and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

Expansive soils are those that have a potential to undergo significant changes in volume, either shrinking or swelling, due to their composition and moisture content. Periodic shrinking and swelling of expansive soils can cause extensive damage to other structures and roads. According to the Natural Resource Conservation Service's Web Soil Survey, multiple soil types that occur in Pittsburg have a potential for shrinking and swelling behavior, including but not limited to Brentwood Clay loam, Capay clay, and Clear Lake clay (NRCS 2020). In areas underlain by expansive soils, the shrinking and swelling of soil can disrupt or damage paved surfaces. A portion of the project site is underlain by Capay clay. The project would not have any direct impacts associated with the General Plan amendment and rezone of the project site. However, secondary impacts as a result of potential future development on the project site could have impacts regarding expansive soils. There would be no habitable structures or structures with paved surfaces that could be developed on the site as a result of the project. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The project would not involve the construction of septic tanks or alternative wastewater disposal systems. No impact would occur.

NO IMPACT

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Pittsburg has some sensitivity for paleontological resources, but no paleontological resources have been found on the project site according to database queries (University of California Museum of Paleontology 2019).

The project falls within a highly urbanized area but has not been developed previously. However, portions of the project site have been previously disturbed for the installation of utilities. Ground disturbance of a similar footprint on the project site would not have an impact on paleontological resources or a unique geologic feature. Therefore, the project has a low potential to destroy unique paleontological resources or a unique geologic feature directly or indirectly. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

This page intentionally left blank.

8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. Climate change is the result of numerous, cumulative sources of GHGs. GHGs contribute to the "greenhouse effect," which is a natural occurrence that helps regulate the temperature of the planet. Most radiation from the sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it warms the planet by approximately 60 degrees Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature.

Individual projects do not generate enough GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

Regulatory Setting

BAAQMD Significance Thresholds

In the 2017 BAAQMD CEQA Air Quality Guidelines, the BAAQMD outlines an approach to determine the significance of projects. The BAAQMD recommends that lead agencies determine appropriate GHG emissions thresholds of significance based on substantial evidence in the record. The following significance thresholds established in the 2017 BAAQMD CEQA Guidelines for operational GHG

emissions from land use development projects within the SFBAAB are the most appropriate thresholds for use in determining the significance of project impacts (BAAQMD 2017b):

- Compliance with a qualified GHG reduction strategy
- Annual emissions less than 1,100 MT of CO₂e per year
- Annual emissions less than 4.6 MT of CO₂e per service population (residents and employees) per year

The BAAQMD has not established a quantitative significance threshold for evaluating construction-related emissions, but it does recommend quantifying and disclosing construction-generated GHG emissions. Therefore, to assess the construction emissions, the total emissions generated during construction were amortized based on the life of the development (30 years) and added to the operational emissions. Therefore, for the purposes of this analysis, the proposed project's year 2030 GHG emissions would be significant if they would exceed 660 MT of CO₂e per year.

Impact Analysis

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

The project does not include any development activity that could generate GHG emissions to directly influence climate change. However, physical changes caused by a potential future development of the site, could contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. The project would not directly involve construction that could generate GHG emissions. However, secondary impacts of the project could allow for development that would grade and pave the site. The use of trucks to haul soil and grading equipment for earth movement typically emits the greatest amount of GHG emissions during construction. BAAQMD's *CEQA Air Quality Guidelines* do not provide a threshold for assessing construction GHG Emissions impacts or provide a screening level for project comparison. Therefore, secondary impacts from potential future development on the site would be below screening thresholds and would have minimal construction GHG emissions.

This section analyzes the project's long-term effect on GHG Emissions by a qualitative discussion of its consistency with applicable plans and policies to reduce emissions based on significance thresholds for projects as outlined above in the *BAAQMD Significance Thresholds*. The BAAQMD's 2017 Clean Air Plan sets goals to reduce vehicle emissions and contribute to protecting the climate. The project would be consistent with these goals because it would not directly generate any vehicle trips to the project site. Secondary impacts of the project could include future development on the project site that would have no potential to generate new vehicle trips and increase GHG emissions during operation because no habitable structures could be constructed on the site. Construction of a minor utility or a telecommunication facility, such as an electronic billboard could be constructed on the site. Secondary impacts of construction on the project site would include additional vehicle trips associated with construction. Additional vehicle trips associated with construction would be minimal and would not significantly impact GHG emissions. No vehicle trips would be associated with operation of a utility or electronic billboard. Secondary impacts of the project including future

development of the site would be required to be consistent with State targets for reducing GHG emissions. Furthermore, future development on the site would be subject to Title 24 energy efficiency standards which would reduce energy emissions that contribute to GHG emissions. Therefore, the project would have a less than significant impact on the environment from GHG emissions and would not conflict with applicable plans to reduce GHG emissions.

LESS THAN SIGNIFICANT IMPACT

This page intentionally left blank.

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

Setting

There are 55 listings on the EnviroStor database with a Pittsburgh address. Of the 55 listings, eight are listed as corrective action, 13 as evaluation, one as military evaluation, eight as non-operating, one as operating, one as post-closure, one as school cleanup, eight as school investigation, four as state response, three as tiered permit, and seven as voluntary cleanup (City of Pittsburgh 2019a). The project site is not identified as any of these sites on the EnviroStor databases.

According to the City's Existing Conditions Report, in May 2019 a GeoTracker search was performed to identify any known or suspected sources of environmental hazards within the City of Pittsburgh (City of Pittsburgh 2019a). There were 56 locations with a Pittsburgh address listed in the GeoTracker database for Leaking Underground Storage Tanks (LUST). Fifty-one of the locations have undergone LUST cleanup and the State has closed the case. There are five locations in Pittsburgh with an open case (City of Pittsburgh 2019a). The project site was not identified as a listed location containing a LUST.

Regulatory Setting

Federal and State

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

As a department of the California Environmental Protection Agency, the Department of Toxic Substances Control (DTSC) is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of Resource Conservation and Recovery Act and the California Health and Safety Code.

DTSC also administers the California Hazardous Waste Control Law to regulate hazardous wastes. While the California Hazardous Waste Control Law is generally more stringent than Resource Conservation and Recovery Act, until the USEPA approves the California program, both state and federal laws apply in California. The California Hazardous Waste Control Law lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

Government Code Section 65962.5 requires the DTSC, the State Department of Health Services, the SWRCB, and the California Department of Resources, Recycling, and Recovery (CalRecycle) to compile and annually update lists of hazardous waste sites and land designated as hazardous waste sites throughout the state. The Secretary for Environmental Protection consolidates the information submitted by these agencies and distributes it to each city and county where sites on the lists are located. Before the lead agency accepts an application for any development project as complete, the applicant must consult these lists to determine if the site at issue is included.

If any soil is excavated from a site containing hazardous materials, it is considered a hazardous waste if it exceeds specific criteria in Title 22 of the CCR. Remediation of hazardous wastes found at a site may be required if excavation of these materials is performed, or if certain other soil disturbing activities would occur. Even if soil or groundwater at a contaminated site does not have the characteristics required to be defined as hazardous waste, remediation of the site may be

required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking jurisdiction.

GOVERNMENT CODE SECTION 65962.5 (CORTESE LIST)

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by the State, local agencies, and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by DTSC, SWRCB, and CalRecycle.

Impact Analysis

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

The project would not involve the transport, use, or disposal of hazardous materials. Future development on the site could involve the transport, use, or disposal of hazardous materials during construction (e.g., fuel and engine fluids for equipment, paint, and asphalt) but would not be expected to create conditions which could lead to the release of hazardous substances. However, due to the site's physical setting, development of the site would be limited. Future development that would involve the transport, use, or disposal of hazardous materials would be required to adhere to the Resources Conservation and Recovery Act (RCRA). The California Department of Toxic Substances Control (DTSC) is responsible for implementing the RCRA program, as well as California's own hazardous waste laws. DTSC regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California. It does this primarily under the authority of RCRA and in accordance with the California Hazardous Waste Control Law (California Health and Safety Code Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (Title 22, CCR, Divisions 4 and 4.5). DTSC also oversees permitting, inspection, compliance, and corrective action programs to ensure that hazardous waste managers follow federal and State requirements and other laws that affect hazardous waste, particularly its handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. Finally, storage of any hazardous materials at or above State-defined thresholds makes a facility subject to a Hazardous Materials Business Plan (HMBP). The Contra Costa Health Services – Hazardous Materials Programs is responsible for the HMBP program for the City of Pittsburg (Contra Costa Health Services 2020). A HMBP must be submitted if these thresholds for hazardous materials are met. Compliance with these regulations for potential future projects would reduce potential impacts associated with the routine transport, use, storage, or disposal of hazardous materials to less than significant levels.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The project site is located directly west of the Los Medanos Elementary School. The project would not involve the use or storage of hazardous materials. Future development of the site has the potential to involve the use or storage of hazardous materials. Any future development would be

required to handle all hazardous substances in accordance with all applicable State and federal laws such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the CCR, Title 22. The project would have a less than significant impact on hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The following databases were checked, pursuant to Government Code Section 65962.5, on July 27, 2020 to provide hazardous material release information at the project site:

- **USEPA**
 - Comprehensive Environmental Response, Compensation, and Liability Information System/Superfund Enterprise Management System/Envirofacts database search (USEPA 2020a, 2020b)
- **SWRCB**
 - GeoTracker search for leaking underground storage tanks and other cleanup sites (SWRCB 2020)
- **DTSC**
 - EnviroStor search for hazardous facilities or known contamination sites (DTSC 2020b)
 - Cortese List of Hazardous Waste and Substances Sites (DTSC 2020a)
 - Cleanup Site and Hazardous Waste Facilities Database

Based on a review of these databases, it was confirmed that the project site is not included on existing lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, due to the site's proximity to State Route 4, it is possible that the site is contaminated with hazardous substances. Secondary impacts associated with potential development of the project site could include significant impacts from contaminated soils. Future development may require subsequent CEQA analysis and may require mitigation measures to reduce impacts associated with contaminated soils.

LESS THAN SIGNIFICANT IMPACT

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The nearest airport to the project site is Buchanan Field Airport, which is located approximately 8 miles southwest of the project site. The City of Pittsburg is outside the Airport Influence Area for Buchanan Field Airport, as mapped in the Contra Costa County Airport Land Use Compatibility Plan (Contra Costa County Airport Land Use Commission 2000). Therefore, the project would be located outside the scope of an airport land use plan and more than two miles from the nearest airport, and it would not result in a safety hazard or excessive noise from airport activity. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed project would not obstruct existing roadways or require the construction of new roadways or access points. Therefore, the proposed project would not block emergency response or evacuation routes or interfere with adopted emergency response and emergency evacuation plans. No impact would occur.

NO IMPACT

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

The project site is in a developed, urbanized area surrounded by residential development, governmental and quasi-public uses, and open space. No adjacent wildlands or densely vegetated areas are located nearby that would represent a significant fire hazard. Additionally, the project does not fall within a Fire Hazard Severity Zone or Very High Fire Hazard Severity Zone for wildland fires (CAL FIRE 2020). Therefore, the project would not expose people or structures to significant hazards related to wildland fires and there would be no impacts.

NO IMPACT

This page intentionally left blank.

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
(iv) Impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Setting

The project site is approximately 3 acres and generally flat and has an approximate elevation of 50 feet (USGS 2018). Water drains from the north of the project site to the southern boundary of the site. There is an existing storm drain system on Frontage Road. The Contra Costa Canal trail is located approximately 0.6 mile southwest of the project site. The City of Pittsburg receives approximately 16 inches of rain annually, with rainfall concentrated in the winter months (Cal-Adapt 2020).

Regulatory Setting

National Pollutant Discharge Elimination System

The federal government administers the National Pollutant Discharge Elimination System (NPDES) permit program, which regulates discharges into surface waters under the Clean Water Act (CWA). The primary regulatory control relevant to the protection of water quality is the NPDES permit administered by the State Water Resources Control Board, which establishes requirements prescribing the quality of point sources of discharge and water quality objectives. These objectives are established based on the designated beneficial uses (e.g., water supply, recreation, and habitat) for a particular surface waterbody. The NPDES permits are issued to point source dischargers of pollutants to surface waters pursuant to Water Code Chapter 5.5, which implements the federal CWA. Examples include, but are not limited to, public wastewater treatment facilities, industries, power plants, and groundwater cleanup programs discharging to surface waters (State Water Resources Control, Title 23, Chapter 9, Section 2200). The Regional Water Quality Control Board (RWQCB) establishes and regulates discharge limits under the NPDES permits.

Clean Water Act

Congress enacted the CWA, formerly the Federal Water Pollution Control Act of 1972, with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the U.S. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and non-point source discharges to surface water. The NPDES permit process regulates those discharges (CWA Section 402). NPDES permitting authority is administered by the SWRCB and its nine RWQCBs. The project site is in a watershed administered by the San Francisco Bay RWQCB (San Francisco Bay RWQCB 2017).

California Porter Cologne Water Quality Control Act

The Porter Cologne Water Quality Control Act of 1967 requires the SWRCB and the nine RWQCBs to adopt water quality criteria to protect State waters. These criteria include the identification of beneficial uses, narrative and numerical water quality standards, and implementation procedures. The criteria for state waters in the region are contained in the *Water Quality Objectives* Chapter of the Basin Plan for the San Francisco Bay RWQCB (San Francisco Bay RWQCB 2017). The Water Quality Control Plan, or Basin Plan, protects designated beneficial uses of State waters through the issuance of Waste Discharge Requirements and through the development of TMDL. Anyone proposing to discharge waste that could affect the quality of the waters of the State must make a report of the waste discharge to the RWQCB or SWRCB, as appropriate, in compliance with Porter-Cologne.

Contra Costa Clean Water Program

The City of Pittsburg is a contributing city to the Contra Costa Clean Water Program (CCCWP), which was established in 1991 in response to federal stormwater NPDES regulations. Per the CCCWP Stormwater C.3 Guidebook (CCCWP 2017), projects an acre or larger are required to submit a Stormwater Control Plan and incorporate Low Impact Designs based on the Low Development Site Design Guide for hydromodification (flow control). The plan must implement a combination of two or more of the following strategies: (1) preserve natural drainage features of the site; (2) implement pervious surfaces; (3) disperse runoff from some amount of roof or paved area to a vegetated area; (4) drain impervious surfaces to engineered integrated management practices.

San Francisco Bay Regional Water Quality Control Board

The City of Pittsburg is under the jurisdiction of RWQCB Region 2, the San Francisco Bay RWQCB. The San Francisco Bay RWQCB provides permits for projects that may affect surface waters and groundwater locally and is responsible for preparing the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality objectives. The Basin Plan serves as the basis for the San Francisco Bay RWQCB's regulatory programs and incorporates an implementation plan to ensure water quality objectives are met.

Impact Analysis

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The proposed project would not result in any direct impacts as the proposed General Plan Amendment and rezone would not propose any construction on the site; therefore, it would not have the potential to impact water quality through erosion or through debris carried in runoff. However, secondary impacts associated with potential future development of the site, may include impacts to water quality through erosion or through debris carried in runoff and thus, would be subject to stormwater requirements under the Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (Order Number R2-2015-0049) for the San Francisco Bay Area. This permit is intended to reduce the discharge of pollutants in the City's municipal separate storm sewer system (MS4). The MS4 permit was issued jointly to the City and other local agencies in the regional Contra Costa Clean Water Program (California Regional Water Quality Control Board 2015). To achieve compliance with the regional program, and thus with the conditions of the most recently issued MS4 permit, the City has adopted local regulations. Specifically, Chapter 13.28 of the Pittsburg Municipal Code establishes discharge requirements for all water entering the storm drain system generated on any developed and undeveloped lands lying within City limits (City of Pittsburg 2019b).

Under Pittsburg Municipal Code Section 13.28.090, the City requires best management practices (BMPs) to control the volume, rate, and potential pollutant load of stormwater runoff from new development and redevelopment projects as required by the City's MS4 permit (Pittsburg 2019b). Such BMPs include, where appropriate, Low Impact Development techniques to be implemented at New Development and Significant Redevelopment project sites. These techniques include infiltrating, storing, detaining, evapotranspiring (the release of water vapor from soil, other surfaces, and plants), and biotreating stormwater runoff close to its source (California Regional Water Quality Control Board 2015). If future development on the site would create 10,000 square feet or more of

impervious surface, it would constitute “New Development” under the MS4 permit and would be required to implement BMPs.

In addition, if proposed development would involve disturbance of an area over one acre in size, it would be required to comply with NPDES Construction General Permit Requirements, which would limit peak post-project runoff levels to pre-project levels. For such projects to comply with the Construction General Permit, the project applicant would have to prepare a SWPPP, which includes BMPs to control erosion and sediment. Construction BMPs could include silt fencing, fiber rolls, stabilized construction entrances, stockpile management, and solid waste management. Post-construction stormwater performance standards would also be required.

Compliance with existing regulatory requirements would ensure that future development on the site would not violate water quality standards or waste discharge requirements and would not create substantial runoff water or otherwise degrade water quality. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*
- e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The project would not require the use of groundwater nor obstruct the implementation of a water quality control plan or sustainable groundwater management plan. In 2015, 13 percent of potable water was sourced from local groundwater wells (City of Pittsburgh 2019a). No habitable structures could be constructed on site; therefore, no groundwater supplies would be used that would substantially decrease groundwater supplies.

There are no impermeable surfaces on the site other than the footings of the existing utility towers. The project would not add impermeable surfaces to the site. However, development of the site may introduce new impermeable surfaces, which could reduce groundwater recharge and increase the amount of surface runoff. However, projects that disturb at least one acre would comply with the NPDES Construction General Permit by implementing BMPs to maintain or replicate the pre-development hydrologic setting. Implementation of required BMPs would minimize impacts related to groundwater recharge. Therefore, the project would not substantially interfere with groundwater recharge.

The City is under the jurisdiction of the San Francisco Board RWQCB, which is responsible for preparing the Water Quality Control Plan for the region (Basin Plan). The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality objectives. The State has developed total maximum daily loads (TMDLs), which are a calculation of the maximum amount of a pollutant that a water body can have and still meet water quality objectives established by the region. As discussed under checklist Item a, future development on the site that would disturb at least one acre would be required to comply with the State’s Construction General Permit, which would minimize and avoid water quality impacts associated with soil erosion and stormwater runoff from the project site. Implementation of the project would not violate water quality objectives for beneficial uses in the vicinity of the project site or exceed TMDLs. Therefore, the project would not conflict with a water quality control plan.

The City overlies the Pittsburg Plain Groundwater Basin (Pittsburg 2019a). In September 2014, the California Legislature enacted comprehensive legislation aimed at strengthening local control and management of groundwater basins throughout the state. Known as the Sustainable Groundwater Management Act (SGMA), the legislation provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for state intervention when necessary to protect the resource. In 2019 the California Department of Water Resources ranked the Pittsburg Plain Groundwater Basin as a “very low” priority under SGMA (California Department of Water Resources 2019). Because the basin is not identified as a high or medium priority, it is not required to submit a Groundwater Sustainability Plan. Therefore, the project would not conflict with any sustainable groundwater management plan.

Impacts related to groundwater would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

The proposed project would not directly involve construction or operation of the project site and thus, would not alter existing drainage patterns. Secondary impacts of the project may include the construction and operation of the project site that would alter existing drainage patterns by introducing impervious surfaces. Development would be required to comply with erosion control systems and construction BMPs per the City’s MS4 permit. BMPs may include directing runoff to permeable areas, maximizing stormwater storage for reuse, and incorporating porous materials into the project design. Compliance with these requirements would ensure that stormwater would be captured and retained on-site, and would minimize the risks of erosion, flooding, or excess stormwater in the local stormwater drainage system. No bridges or stream and river crossings are proposed as part of the project. Therefore, the project would have a less than significant impact related to drainage patterns.

LESS THAN SIGNIFICANT IMPACT

- c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*
- d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The proposed project would not directly result in the addition of new impervious surfaces. However, secondary impacts associated with potential future development on the site could result in the addition of new impervious surfaces. Due to site's physical constraints, no new structures such as bridge abutments that could impede or redirect flood flows, would be constructed. Therefore, project implementation would not impede or redirect flood flows.

According to the Federal Emergency Management Agency Flood Insurance Rate Map, the project site is located in Zone X, which is characterized as an area of minimal flood hazard and having a less than 0.2 percent annual chance to be inundated by flood waters as a result of a storm event (Map #06013C0119G, September 30, 2015) (Federal Emergency Management Agency 2020). According to the California Governor's Office of Emergency Services (Cal OES) MyHazards online database, the project site is not located in a 100-year floodplain (Cal OES 2015).

The City's Existing Conditions Report, Table 4.2-4 indicates that the City is not at risk from tsunamis (City of Pittsburgh 2019a). The project site is located approximately 1.7 miles south of Suisun Bay. The nearest body of water that could experience seiche (water level oscillations in an enclosed or partially enclosed body of water) is the Suisun Bay. No other large bodies of water with the potential to inundate the project site by a seiche are located near the site. Therefore, the project would not result in the risk of release of pollutants due to inundation by a tsunami, seiche, or flooding. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Setting

As stated in the *Project Description*, the project site currently has a land use designation of Park and has a vacant zoning designation.

The Park land use designation provides for parks, recreation complexes, community fields, public golf courses, stadiums, and greenways. Local and regional trail network would also be accommodated under this designation. Ancillary facilities such as concession stands, clubhouses, and equipment rental are also allowed.

Impact Analysis

a. Would the project physically divide an established community?

The project site is located at the northern perimeter of a single-family residential area and directly abuts State Route 4. The proposed project would amend the General Plan designation and rezone the site and thus, would not directly require the construction of new roads, linear infrastructure, or other development features that would divide an established community or limit movement, travel, or social interaction between established land uses. Secondary impacts associated with potential future development of the project would not include the construction of new roads, linear infrastructure, or other development features that would divide an established community or limit movement, travel, or social interaction between established land uses because development would be limited to utilities, telecommunication facilities, or other small uninhabitable structures. Project implementation would not physically divide an established community; therefore, there would be no impact to established communities.

NO IMPACT

- b. *Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

The project site is located entirely in the City of Pittsburgh. The City's General Plan is the fundamental document governing land use development and includes goals and policies relating to economic vitality, land use, growth management, transportation, parks, open space, conservation, safety, noise, public facilities, and utilities. The project would amend the General Plan designation and rezone the site to Community Commercial from a land use designation of Park and a vacant zoning designation. Project approval would allow for utilities, telecommunication facilities, or small structures. Given the physical constraints of the site, a small structure could be constructed, or the site could be used for additional minor utilities or telecommunication facilities, such as electronic billboards. Future development would be required to comply with Design Guidelines for the City of Pittsburgh and development regulations for the Community Commercial zoning designation as outlined in Pittsburgh Municipal Code Chapter 18.52. Therefore, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Setting

Extractive resources known to exist in Contra Costa County include crushed rock near Mt. Zion, on the north side of Mt. Diablo, in the Concord area; shale in the Port Costa area; and sand and sandstone deposits, mined from several locations. Resources are mostly focused in the Byron area of southeast County (Contra Costa County 2005).

Regulatory Setting

Surface Mining and Reclamation Act of 1975

Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975, the State Mining and Geology Board requires all cities to incorporate into their general plans mapped mineral resources designations approved by the State Mining and Geology Board. Some mineral resources can be found within Contra Costa County. However, there are no mineral resources in the Pittsburg area subject to the Surface Mining and Reclamation Act (Contra Costa County 2005).

Impact Analysis

- Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

There are no significant mineral deposits or active mining operations within the City of Pittsburg (City of Pittsburg 2019a). Therefore, the project would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. No impact would occur.

NO IMPACT

This page intentionally left blank.

13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Noise Setting

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs (e.g., the human ear). Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (Hz) and less sensitive to frequencies around and below 100 Hz (Kinsler, et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as a doubling of traffic volume, would increase the noise level by 3 dB; similarly, dividing the energy in half would result in a decrease of 3 dB (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive an increase (or decrease) of up to 3 dBA in noise levels (i.e., twice [or half] the sound energy); that a change of 5

dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (or half) as loud (10.5 times the sound energy) (Crocker 2007).

The impact of noise is not a function of sound level alone. The time of day when noise occurs and the duration of the noise are also important. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. Typically, L_{eq} is summed over a one-hour period.

The City's General Plan and Municipal Code regulate noise in Pittsburgh. Policy 12-P-9 in the Noise Element of the General Plan limits the generation of loud noises on construction sites adjacent to existing development to normal business hours between 8 a.m. and 5 p.m. In the Pittsburgh Municipal Code, Section 9.44.010 prohibits the use of pile drivers, pneumatic hammers, and similar equipment between the hours of 10 p.m. and 7 a.m. (Pittsburgh 2019b). The City's Building and Construction Ordinance (Section 15.88.060.A.5) also prohibits grading noise, including warming up equipment motors, within 1,000 feet of a residence between the hours of 5:30 p.m. and 7 a.m. on weekdays, unless otherwise approved by the City Engineer. However, the Pittsburgh Municipal Code does not establish numeric standards for construction noise.

Vibration Setting

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of hertz (Hz). The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body is from a low of less than 1 Hz up to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise may result in adverse effects, such as building damage, when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz). The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. Particle velocity is the velocity at which the ground moves. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the greatest magnitude of particle velocity associated with a vibration event.

Impact Analysis

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

The project would not result in the substantial temporary or permanent increase in ambient noise levels in the project vicinity. The project would allow for future development which could have the potential to introduce new sources of noise. However, as noted in Section 8, *Project Description*, the site has physical constraints which would limit development potential, and a proposed Class I Trail would be constructed on the site.

Construction Noise

The proposed project would not result in any direct impacts, as the proposed General Plan Amendment and rezone would not require construction of the project site. However, secondary impacts associated with potential future development of the project site may occur and impacts associated with that development may include noise from construction activities. Construction of the project site would generate elevated noise levels on a temporary basis in the project vicinity. As shown in Table 1, average noise levels associated with using heavy equipment can range from approximately 76 to 88 dBA at 50 feet from the source, depending upon the types of equipment in operation at any given time and the phase of construction. The highest noise levels generally occur during excavation and grading, which involve using such equipment as backhoes, bulldozers, shovels, and front-end loaders.

Table 1 Typical Construction Noise Levels

Equipment	25 feet from Source (dBA L _{eq})	50 feet from Source (dBA L _{eq})	100 feet from Source (dBA L _{eq})	200 feet from Source (dBA L _{eq})	500 feet from Source (dBA L _{eq})
Air Compressor	86	80	74	68	60
Backhoe	86	80	74	68	60
Concrete Mixer	91	85	79	73	65
Grader	91	85	79	73	65
Jack Hammer	94	88	82	76	68
Paver	91	85	79	73	65
Roller	91	85	79	73	65
Saw	82	76	70	64	56
Scraper	91	85	79	73	65
Truck	90	84	78	72	64

Source: Noise level at 50 feet from Federal Transit Administration, 2018. Noise levels at 25 feet, 100 feet, 200 feet, and 500 feet were extrapolated using a 6 dBA attenuation rate per doubling of distance. Each noise level assumes the piece of equipment is operating at full power for the expected duration to complete the construction activity. The duration varies widely between each piece of equipment. Noise levels also depend on the model and year of the equipment used.

Noise levels from point sources such as equipment at construction sites typically attenuate at a rate of 6 dBA per doubling of distance. Therefore, only areas within several hundred feet of construction sites would typically be exposed to perceptible construction noise levels. As noted above, the Pittsburg Municipal Code does not establish numeric standards for construction noise. However, construction noise that substantially exceeds existing ambient noise levels could disturb sensitive

receptors, such as residences and schools. Sensitive receptors include the Los Medanos Elementary School located directly east and residences located approximately 50 feet to the east, south, and west.

Construction activity would be required to comply with Policy 12-P-9 in the City’s Noise Element, which would “limit generation of loud noises on construction sites adjacent to existing development to normal business hours between 8:00 AM and 5:00 PM.” This policy would prevent loud construction activity during evening and nighttime hours when nearby residences are most sensitive to noise. However, as discussed above, daytime construction noise could still disturb sensitive receptors. Therefore, construction on the project site that would exceed 14 days may require subsequent CEQA analysis, and may require mitigation measures to reduce impacts associated with temporary increases in ambient noise levels.

Operational Noise

The project would not generate operational noise. Given the site’s physical constraints, no habitable structures could be constructed and no increase in ambient noise levels in the project vicinity would occur. For minor utilities or telecommunication facilities developed on the site, vehicle trips would be minimal and infrequent. Operational vehicle trips would not substantially increase ambient noise levels in the project vicinity.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

As stated under *criterion (a)*, the project would not construct on the project site. Construction of a potential future development could use heavy machinery which has the potential to generate vibration near the source. Allowable uses would not generate significant ongoing operational groundborne vibration because none of the uses require the use of heavy industrial machinery. Therefore, this analysis considers vibration impacts from future construction only.

Similar to construction noise, vibration levels would vary depending on the type of construction project and related equipment use. In general, future construction activities are likely to be limited to minor utilities or telecommunication facilities and would be unlikely to generate substantial vibration. Table 2 estimates vibration levels from construction equipment.

Table 2 Vibration Levels for Construction Equipment

Equipment	PPV (in/sec)		
	25 Feet	50 Feet	100 Feet
Vibratory Roller	0.210	0.098	0.046
Large Bulldozer	0.089	0.042	0.019
Loaded Trucks	0.076	0.035	0.017
Jackhammer	0.035	0.016	0.008
Source: Caltrans 2013			

As shown in Table 2, potential construction activity would generate vibration levels reaching an estimated 0.098 PPV at a distance of 50 feet during paving activities. Because this vibration level would not exceed 0.25 PPV, Caltrans’ recommended criterion for distinctly perceptible vibration

from transient sources, it would not result in substantial annoyance to people of normal sensitivity. Construction activity that generates loud noises (and therefore vibration) also would be limited to normal business hours per General Plan Policy 12-P-9 and Municipal Code Section 9.44.010 prohibiting the use of pile drivers, pneumatic hammers, and similar equipment between the hours of 10 p.m. and 7 a.m. which would prevent the exposure of sensitive receptors to vibration during evening and nighttime hours. Furthermore, maximum vibration levels would not exceed the Caltrans criteria of 0.5 PPV for potential damage of historic and old buildings from transient vibration sources. Therefore, vibration would not be excessive, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

As discussed in Section 9, *Hazards and Hazardous Materials*, the nearest publicly available airport is Buchanan Field Airport, which is located approximately 8 miles southwest of the project site. The project site is outside the Airport Influence Area for Buchanan Field Airport, as mapped in the Contra Costa County Airport Land Use Compatibility Plan (Contra Costa County Airport Land Use Commission 2000). No private airstrips are located in the vicinity. Therefore, the project would not expose sensitive receptors to excessive noise levels from aircraft. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

This page intentionally left blank.

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Setting

According to the California Department of Finance (DOF), Pittsburg has an estimated population of 74,321 with 23,506 housing units (DOF 2020). The average number of persons per household is estimated at 3.36. The Association of Bay Area Governments (ABAG) provides projections for population in Pittsburg through the year 2040. ABAG projects the population of Pittsburg to be 91,615 by the year 2040 (ABAG 2017).

Impact Analysis

- Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*
- Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The project would not involve the construction of infrastructure that could induce substantial population growth, such as new or increased capacity sewer or water lines, or the construction of new streets and roads, but rather would serve existing populations. The project would not introduce new commercial development to the site and would not introduce any new populations to the project site. In addition, the project would not require the displacement of housing or people because there are no existing residences on the site. No impact related to population and housing would occur.

NO IMPACT

This page intentionally left blank.

15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1 Fire protection?	☐	☐	☐	☒
2 Police protection?	☐	☐	☐	☒
3 Schools?	☐	☐	☐	☒
4 Parks?	☐	☐	☐	☒
5 Other public facilities?	☐	☐	☐	☒

Setting

The Contra Costa County Fire Protection District (CCCYPD) provides fire and emergency medical services to the Bay Area Rapid Transit (BART) stations, regional parks, and unincorporated areas in the county, and fifteen cities including Pittsburg. CCCYPD operates three stations in Pittsburg (Station 84, Station 85, and Station 87).

The Pittsburg Police Department (PPD) provides police protection services to the City. PPD operations division operates one police station in the City. The PPD patrol division is a 24/7 operation with more than 35 officers assigned to one of five patrol shifts (Pittsburg Police Department 2019). In 2018, the PPD responded to 80,133 calls for service, which resulted in more than 2,800 arrests. The Pittsburg Police Department also operates the traffic division, investigations division, SWAT, crisis negotiation team, canine team, school resource officers, and several other divisions.

The City of Pittsburg is served by three different school districts: the Pittsburg Unified School District, the Antioch Unified School District, and the Mt. Diablo Unified School District (Pittsburg 2020). In addition, adult education programs are available through the Pittsburg Adult Education Center, Los Medanos College, and Project Second Chance (Pittsburg 2020).

The Pittsburg Public Works Department administers and maintains parks and other recreational facilities including community and senior centers. Public Works Department maintains

approximately 322 acres spread over 26 park facilities within the City of Pittsburg (City of Pittsburg 2020).

Impact Analysis

a. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

- 1 *Fire protection?*
- 2 *Police Protection?*
- 3 *Schools?*
- 4 *Parks?*
- 5 *Other public facilities?*

CCCYPD Fire Station 87 is approximately 0.8 mile southwest of the project site, at 800 W Leland Road, Pittsburg, California. The project would be required to comply with all applicable fire code standards. In addition, the project site is in an urban area that is already served by the CCCYPD. Development of the site would be subject to review by the CCCYPD if applicable and would be required to meet all California Fire Code regulations for construction and operation. The project would not incrementally increase population in the area nor introduce structures which could generate the need for increased levels of fire department response.

The PPD is located approximately 0.5-mile northeast of the project site. The project would not introduce a new population and no habitable structures could be constructed on site. Therefore, the project would not incrementally increase population in the area nor introduce structures which could generate the need for increased levels of police response.

Los Medanos Elementary School is located directly east of the project site. However, the project would not construct residences that would increase the number of school-aged children in the City. Therefore, the project would not result in the need for new or physically altered school facilities.

City Park is located approximately 0.5-mile northeast of the project site. The project would not increase the population in the City. No habitable structures could be constructed on site. Therefore, the project would not add population that would contribute to substantial physical deterioration of existing recreational facilities.

The project would not result in significant impacts to public services within the City of Pittsburg.

NO IMPACT

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Setting

The City of Pittsburgh Public Works and Recreation Departments administer and maintain parks and other recreational facilities including community and senior centers. The Public Works Department maintains approximately 322 acres spread over 26 park facilities within the City of Pittsburgh (City of Pittsburgh 2020). Recreational activities and centers are also managed by the Recreation Department.

Parks nearest the project site include City Park, approximately 0.5 mile northeast of the project site, Americana Park located approximately 0.5 mile northwest of the project site, John Henry Johnson Park located approximately 0.7 mile southwest of the project site, and the Stoneman Trailhead is located approximately 1 mile southwest of the project site.

Impact Analysis

- Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

As discussed in Section 15, *Public Services*, the project would not increase population and thus, would not increase, significantly accelerate or cause the physical deterioration of parks. No habitable structure could be constructed on the site, and thus, the project would not introduce population to the City. Therefore, the project would not contribute to the acceleration or physical deterioration of parks. There would be no impact.

NO IMPACT

This page intentionally left blank.

17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☒	☐

Setting

Existing Roadway System

- **State Route 4** is an eight-lane east-west freeway with High Occupancy Vehicle (HOV) Lane in each direction that carries a high volume of traffic exceeding 140,000 vehicles in Pittsburg. The freeway's median accommodates the Antioch BART line.
- **Leland Road** is an east-west roadway south of the project site. It has two travel lanes in each direction and sidewalks are provided on both sides of the roadway. The posted speed limit is 35 miles per hour (mph).
- **Crestview Drive** is a north-south roadway east of the project site. It has one travel lane in each direction and sidewalks are provided on both sides of the roadway. The posted speed limit is 35 mph.
- **Railroad Avenue** is a north-south roadway further east of the project site. It has two travel lanes in each direction and sidewalks are provided on both sides of the roadway. The posted speed limit is 35 mph.

Existing Pedestrian and Bicycle Facilities

Pedestrian facilities in the study area include sidewalks, crosswalks, and signals. Sidewalks surrounding the project site vary in width from 2 to 3 feet. At the signalized intersections in the area, crosswalks and pedestrian push-button actuated signals are provided. Crosswalks are not marked at unsignalized intersections in the study area.

Bicycle facilities in the City (following the Caltrans bicycle facility classification) include the following:

- **Class 1 Bike Trail (Class I Bike Path)** – Bike paths provide a separate right-of-way and are designated for the exclusive use of people riding bicycles and walking with minimal cross-flow traffic. Such paths can be well situated along creeks, canals, and rail lines. Class 1 Bikeways can also offer opportunities not provided by the road system by serving as both recreational areas and/or desirable commuter routes.
- **Class 2 Bike Trail (Class II Bike Path)** – Bike lanes provide designated street space for bicyclists, typically adjacent to the outer vehicle travel lanes. Bike lanes include special lane markings, pavement legends, and signage. Bike lanes may be enhanced with painted buffers between vehicle lanes and/or parking, and green paint at conflict zones (such as driveways or intersections).
- **Class 3 Bike Route (Class III Bike Path)** – Bike routes provide enhanced mixed-traffic conditions for bicyclists through signage, striping, and/or traffic calming treatments, and to provide continuity to a bikeway network. Bike routes are typically designated along gaps between bike trails or bike lanes, or along low-volume, low-speed streets. Bicycle boulevards provide further enhancements to bike routes to encourage slow speeds and discourage non-local vehicle traffic via traffic diverters, chicanes, traffic circles, and/or speed tables. Bicycle boulevards can also feature special wayfinding signage to nearby destinations or other bikeways.

The City of Pittsburg currently has 43 miles of bikeways including 28 miles of Class II Bicycle Lanes and 13 miles of Class I Multi-Use paths including the 6.8-mile Delta de Anza Trail that connects with Bay Point and Antioch. Most streets within the City such as Buchanan Road, Harbor Street, California Avenue, Center Avenue, Loveridge Road, and Willow Pass Road have bike lanes with some gaps (City of Pittsburg 2019a). The City anticipates adoption of its updated bicycle plan, Pittsburg Moves, in Winter 2021.

Existing Transit Service

The Eastern Contra Costa Transit Authority operates Tri Delta Transit which provides transit service in Eastern Contra Costa County, serving the communities of Antioch, Brentwood, Pittsburg, Oakley, and the county of Contra Costa. The Eastern Contra Costa Transit Authority operates fixed-route and paratransit services (Tri Delta Transit 2018). In the project vicinity, there are two bus stops along Leland Road.

Bay Area Rapid Transit (BART) provides fixed rail transit to eastern Contra Costa County. Currently, the terminus station for the East Bay Area's yellow line is in Antioch. Weekday service is provided on approximately 15-minute headways and weekend service is provided on approximately 20-minute headways. The Antioch-SFO/Millbrae Line connects to key regional employment centers, including Concord, Pleasant Hill, Walnut Creek, Oakland and San Francisco. Transfers to other lines can be made in Oakland. The Pittsburg Center BART station is approximately 0.7 mile from the project site.

Impact Analysis

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*
- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The project would not generate additional vehicle trips to or from the project site. As part of the Pittsburgh Moves Plan, a Class I Bike Trail is proposed on a portion of the site along the Frontage Road. Development on the site would be limited by the Class I Bike Trail. Minor utilities or telecommunication facilities on the site could increase vehicle trips to and from the site during construction and for service calls during operation. Because no habitable structures could be constructed on the site, no increased population would affect the capacity of transit facilities to accommodate public demand. The project would not introduce uses to the site that would be hazardous to users of the proposed bike trail or conflict with applicable policies for bicycle facilities or pedestrians. Therefore, the project would not conflict with policies in the City's Transportation Element regarding roadways, to improve transit access, or bicycle and pedestrian access.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

The project would not alter the project site in a manner that would increase hazards due to a geometric design feature or incompatible use. Development on the project, such as minor utilities or telecommunication facilities, would also not increase hazards due to a geometric design feature or incompatible use. Therefore, no impact related to roadway hazards would occur.

NO IMPACT

- d. *Would the project result in inadequate emergency access?*

The project site would be accessible via Frontage Road which is accessible via Dover Way, Chelsea Way, or Covington Drive. Future potential project construction would be required to provide proper emergency access to the site as part of development design and would be required to comply with 2016 California Fire Code for access. Adherence to these required design and construction standards would reduce potential impacts related to emergency access to less than significant. The project would have a less than significant impact on emergency access to the project site.

LESS THAN SIGNIFICANT IMPACT

This page intentionally left blank.

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☒	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

California Government Code Section 65352.3 (adopted pursuant to the requirements of Senate Bill 18 of 2004) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government’s jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research’s Tribal Consultation Guidelines (2005), “The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.”

The City has not received any requests from California Native American tribes to be notified of proposed projects in the city, pursuant to PRC Section 21080.3.1. Nevertheless, on August 10, 2020, the City sent a notice to representatives of Native American Tribes that may have an interest in development of the project site. The City did not receive any replies requesting further consultation regarding the proposed project.

Impact Analysis

- a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*
- b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1?*

Because no tribes have requested AB 52 or SB 18 consultation over the project, the City assumes that no known tribal cultural resources are present within Pittsburgh. However, it is possible that ground disturbance during potential future construction activities would encounter unknown tribal cultural resources or known cultural resources that may be identified as tribal cultural resources. Therefore, future development may require subsequent CEQA analysis and may require mitigation measures to reduce potential impacts to tribal cultural resources.

LESS THAN SIGNIFICANT IMPACT

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Setting

Potable Water

Potable water would be provided to the project site by the CCWD. The City is a retail water purveyor that obtains most of its potable water supply under a wholesale contract with the Contra Costa Water District (CCWD). This water is diverted as raw water from CCWD's Contra Costa Canal. The remainder of the potable water supply is obtained from the City's two groundwater wells. In 2015, 87 percent of the City's potable water supply was provided by CCWD and 13 percent was from local groundwater wells (City of Pittsburg 2019a).

Wastewater

Sewer services in the City of Pittsburg are provided by the City and the Delta Diablo. The City of Pittsburg maintains and owns the local sewage collection system that serves the City’s municipal users and the City’s wastewater is conveyed to Delta Diablo facilities for treatment. The City’s collection system consists of approximately 174 miles of sewer lines and one sewage lift station. Wastewater from developments south of SR-4 enter the Delta Diablo interceptor system on the Pittsburg-Antioch Highway (Pittsburg 2019a). The Delta Diablo wastewater treatment plan has a 54 square mile service area with an average wastewater flow of 12.4 million gallons per day (mgd) (City of Pittsburg 2019a).

Stormwater

The site currently drains to storm drains in the adjacent roadway on Frontage Road where the flow joins with the Pittsburg stormwater system. Stormwater runoff is collected and disposed of by an integrated system of storm drains, inlets, curbside gutters, catch basins, drainage ditches, and man-made channels. Ultimately, stormwater that enters the City’s system drains to the Suisun Bay. The City of Pittsburg maintenance personnel inspect, clean, and maintain storm drains within the City and ensure inlets and drains are clear of debris to ensure stormwater flows freely (City of Pittsburg 2020b).

Solid Waste

Mt. Diablo Resource Recovery manages all trash and recycling services in Pittsburg. Both residential and commercial solid waste is currently transported to and disposed of at the Keller Canyon Landfill southwest of the City. Table 3 shows the estimated remaining capacity and anticipated closure dates at Keller Canyon Landfill (CalRecycle 2019).

Table 3 Estimated Landfill Capacities and Closure Dates

Landfill Facility	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Anticipated Closure Date
Keller Canyon	75,018,280	63,408,410	2030

Source: CalRecycle 2019b

Other Utilities

Gas and electric utilities to the project site would be provided by PG&E or MCE (City of Pittsburg 2020c). Infrastructure capable of supporting electric and telecommunications exists on the project site and in the project vicinity.

Impact Analysis

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*
- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Water

The project would not result in any direct impacts to water because the project does not require construction or operation of the project site. However, secondary impacts associated with future development of the project site may occur and impacts associated with that development may include impacts to water facilities. No habitable structures could be constructed on the site and thus, would not increase water use due to the site's physical constraints. Minor utilities or electronic billboards would not require potable water. As discussed in Section 10, *Hydrology and Water Quality*, and below under criterion b, CCWD has adequate water supply to serve the project. However, no new water infrastructure or off-site utilities would be required to convey water to the project site. Therefore, the project would not result in the need for new or expanded water facilities.

Wastewater

No habitable structures would be constructed on site; therefore, no additional wastewater would be generated. Therefore, the project would not impact the treatment capacity of existing municipal wastewater treatment providers.

Stormwater

Development of the site would comply with City standards and convey stormwater to the City's storm drain system. However, the volume of stormwater would be minimal given the potential for minor utilities or electronic billboard structures. Potential development of a portion of the project site with a bicycle trail as part of the proposed *Pittsburg Moves* plan would require BMPs to maintain existing stormwater drainage. Therefore, impacts to the municipal stormwater system would be less than significant.

Electricity, Natural Gas, and Telecommunications

As discussed in Section 6, *Energy*, the project would not result in the wasteful, inefficient, or unnecessary consumption of energy. The project would not result in direct impacts as the proposed General Plan amendment and rezone would not propose construction or operation of the project site and thus would not require the construction of new electric power, natural gas, or telecommunications facilities. Secondary impacts associated with the future development on the project site may occur and impacts associated with that development may include the construction and operation of minor utilities or telecommunication facilities on the project. Development of these facilities would be required to comply with all state and federal regulations regarding energy

efficiency. Therefore, the project would not result in significant environmental impacts due to the construction of new utility facilities. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

Development on the site could temporarily use water to wet down disturbed areas and minimize emissions of fugitive dust. However, water would be needed only during construction activities. Because no habitable structure could be constructed on site, no potable water would be needed during normal, dry and multiple dry years. Furthermore, the City relies on recycled water for street-side landscaping and city parks, so additional landscaping on the project site would not draw from water supplies (City of Pittsburgh 2019a). Therefore, the project would have a less than significant impact.

LESS THAN SIGNIFICANT IMPACT

- d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Development on the site would potentially generate solid waste during construction. However, projects would be required to divert 75 percent of solid waste per AB 341 and would be required to comply with Chapter 8.06 of the Pittsburgh Municipal Code, which outlines how solid waste is removed and disposed of from a site. No habitable structures could be constructed on the site; therefore, no solid waste would be generated during operation. The project would not adversely affect solid waste facilities.

LESS THAN SIGNIFICANT IMPACT

20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Setting

The City of Pittsburg is not located within or near a very high fire hazard severity zone. However, some of the southern and western edges of Pittsburg are located in a high fire hazard severity zone in a state responsibility area (Pittsburg 2019a).

Impact Analysis

- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*
- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project site is not in a CAL FIRE designated very high fire hazard severity zone and is located approximately 12 miles northeast of the nearest very high fire hazard severity zone (CAL FIRE 2020). As such, project implementation would not impair any adopted emergency response plan or emergency evacuation plan; exacerbate wildfire risks; require the installation or maintenance of associated infrastructure that may exacerbate fire risk; or expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post fire slope instability, or drainage changes in or near state responsibility areas or lands classified as very high fire severity zones. No impact would occur.

NO IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

- a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

As discussed throughout the Initial Study, potential environmental impacts related to the quality of the environment would be less than significant. Future development of the project site may require subsequent CEQA analysis and could require mitigation measures to reduce potential impacts as a result of development.

LESS THAN SIGNIFICANT IMPACT

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Pursuant to CEQA Guidelines Section 15064(h)(3), cumulative impacts associated with some of the resource areas have been addressed in the individual resource sections above: Air Quality, Greenhouse Gases, Water Supply, and Solid Waste. As discussed in these sections, impacts (including cumulative impacts) would be less than significant. Some of the other resource areas were determined to have no impact in comparison to existing conditions and therefore would not contribute to cumulative impacts, such as mineral resources and agriculture and forestry resources. As such, cumulative impacts in these issue areas would also be less than significant (not cumulatively considerable). Other issues (e.g., aesthetics, hazards and hazardous materials) are site-specific by nature, and impacts at one location do not add to impacts at other locations or create additive impacts. The project would amend the General Plan and rezone the site to Community Commercial but would not allow for large developments on the project site with significant impacts. Therefore, the project’s impacts would not be cumulatively considerable.

LESS THAN SIGNIFICANT IMPACT

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in Section 3, *Air Quality*, the proposed project would not result in a direct or indirect air quality impact. As discussed in Section 13, *Noise*, the project would not generate significant impacts related to ambient noise or groundborne vibration or make a cumulatively considerable contribution to significant cumulative noise impacts. Similarly, as discussed in Section 9, *Hazards and Hazardous Materials*, impacts related to groundwater, vapor, or soil contamination would not be significant as a result of project implementation and would not have a cumulatively considerable contribution to significant cumulative hazards impacts. Impacts to human beings would be less than significant.

LESS THAN SIGNIFICANT IMPACT

References

Bibliography

- Association of Bay Area Governments (ABAG). 2017. Projections 2040 By Jurisdiction (Curated). <http://projections.planbayarea.org/> (accessed July 2020).
- Bay Area Air Quality Management District (BAAQMD). 2017a. Spare the Air Cool Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area. Final 2017 Clean Air Plan. Adopted April 19, 2017. http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en (accessed July 2020).
- _____. 2017b. California Environmental Quality Act Air Quality Guidelines. San Francisco, CA. May 2017. http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (accessed July 2020).
- California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. December 14, 2017. Available at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. (accessed July 2020).
- _____. 2018. Maps of State and Federal Area Designations. October 2018. Available at: <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations> (accessed July 2020)
- California Department of Conservation (DOC). 2016. Division of Land Resource Protection: Important Farmland Finder. <https://maps.conservation.ca.gov/DLRP/CIFF/> (accessed July 2020).
- California Department of Finance (DOF). 2020. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020 with 2010 Census Benchmark. <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/> (accessed July 2020).
- California Department of Fish and Game (CDFG). 2012. *Staff Report on Burrowing Owl Mitigation*. March 7, 2012.
- California Department of Fish and Wildlife (CDFW). 2019. *Special Animals List*. Biogeographic Data Branch, California Natural Diversity Database. August 2019.
- _____. 2020a. California Natural Diversity Database (CNDDDB) - Rarefind 5. Available at: <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data> (accessed July 2020).
- _____. 2020b. Biogeographic Information and Observation System (BIOS). Available at <http://bios.dfg.ca.gov> (accessed July 2020).
- _____. 2020c. *Special Vascular Plants, Bryophytes, and Lichens List*. Biogeographic Data Branch, California Natural Diversity Database. March 2020.
- California Department of Forestry and Fire Protection (CAL FIRE). 2020. California Fire Hazard Severity Zone Viewer [map] Tabular digital data and vector digital data. <https://egis.fire.ca.gov/FHSZ/> (accessed July 2020).

- California Department of Resources Recycling and Recovery (CalRecycle). 2019. SWIS Facility Detail: Keller Canyon Landfill (07-AA-0032).
<https://www2.calrecycle.ca.gov/swfacilities/Directory/07-AA-0032> (accessed July 2020).
- California Department of Toxic Substances Control (DTSC). 2020a. EnviroStor Database [online database]. <https://www.envirostor.dtsc.ca.gov/public> (accessed July 2020).
- _____. 2020b. Hazardous Waste and Substances Site List (Cortese) [online database].
<http://www.envirostor.dtsc.ca.gov/public/search?> (accessed July 2020).
- California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. (CT-HWANP-RT-13-069.25.2) September. Available at:
<https://evogov.s3.amazonaws.com/media/17/media/119602.pdf> (accessed July 2020).
- _____. 2019. State Scenic Highway Locations. [tabular dataset]. Sacramento, CA. August 2019.
<https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways> (accessed July 2020).
- _____. 2020. Outdoor Advertising (ODA). <https://dot.ca.gov/programs/traffic-operations/oda> (accessed August 2020).
- California Department of Water Resources. 2019. Sustainable Groundwater Management Act 2019 Basin Prioritization: Process and Results. Available at:
https://www.emwd.org/sites/default/files/file-attachments/sgma_basin_prioritization_2019_results.pdf?1559164669 (accessed July 2020)
- California Energy Commission. 2018a. Total System Electric Generation.
<https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2018-total-system-electric-generation> (accessed July 2020).
- _____. 2018b. Gas Consumption by County. <http://ecdms.energy.ca.gov/gasbycounty.aspx> (accessed July 2020).
- _____. 2018c. Electricity Consumption by County. <https://ecdms.energy.ca.gov/elecbycounty.aspx> (accessed July 2020)
- _____. 2020. Cal-Adapt. <https://cal-adapt.org/tools/annual-averages/> (accessed July 2020).
- California Governor's Office of Emergency Services (Cal OES). 2015. MyHazards database.
<http://myhazards.caloes.ca.gov/> (accessed July 2020).
- California Native Plant Society (CNPS). Rare Plant Program. 2020. Inventory of Rare and Endangered Plants (online edition, v8-03 0.45). California Native Plant Society, Sacramento, CA. Available at: <http://www.rareplants.cnps.org> (accessed July 2020).
- California Regional Water Quality Control Board, San Francisco Bay Region. 2015. Municipal Regional Stormwater NPDES Permit. Order No. R2-2015-0049. Available at:
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/R2_2015_0049_amended.pdf (accessed July 2020).
- Contra Costa, County of. 2005. Contra Costa County General Plan, Open Space Element. Adopted January 18, 2005. <https://www.contracosta.ca.gov/DocumentCenter/View/30918/Ch8-Conservation-Element?bidId=> (accessed July 2020).

- _____. 2012. Local Hazard Mitigation Plan. Available at: <https://www.contracosta.ca.gov/6416/Current-Local-Hazard-Mitigation-Plan> (accessed August 2020).
- Contra Costa Clean Water Program (CCCWP). 2017 Stormwater C.3 Guidebook. May 2017. https://www.cccleanwater.org/userfiles/kcfinder/files/Stormwater_C3_Guidebook_7th_Edition_2017-05-12%281%29.pdf (accessed July 2020).
- Contra Costa County Airport Land Use Commission. 2000. Contra Costa County Airport Land Use Compatibility Plan. Available at: <https://www.contracosta.ca.gov/4307/Airport-Land-Use-Commission-ALUC> (accessed July 2020).
- Contra Costa Health Services. 2020. Business Plan Program. <https://cchealth.org/hazmat/business-plan/> (accessed July 2020).
- Contra Costa Water District (CCWD). 2016. 2015 Urban Water Management Plan for the Contra Costa Water District. <https://www.ccwater.com/DocumentCenter/View/2216/2015-Urban-Water-Management-Plan-PDF?bidId=> (accessed July 2020).
- Crocker, Malcolm J. Crocker (Editor). 2007. *Handbook of Noise and Vibration Control Book*, ISBN: 978-0-471-39599-7, Wiley-VCH, October.
- East Contra Costa County Habitat Conservation Plant/Natural Community Conservation Plan (ECCC HCP/NCCP). 2006. Accessed via: https://www.contracosta.ca.gov/depart/cd/water/HCP/archive/final-hcp/final_hcp_nccp.html (accessed July 2020).
- Federal Emergency Management Agency. 2020. Flood Insurance Rate Map 06013C0119G. [map]. Tabular digital data and vector digital data. <https://msc.fema.gov/portal/home> (accessed July 2020).
- Federal Transit Administration (FTA). Transit Noise and Vibration Impact Assessment Manual. September 2018. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf (accessed July 2020).
- Kinsler, Lawrence E., et al. 1999. *Fundamentals of Acoustics*, 4th Edition. ISBN 0-471-84789-5. Wiley-VCH, December 1999.
- Lamphier-Gregory. 2019. 345 Shaw Road Billboard and Additional Digital Billboards Project Initial Study and Mitigated Negative Declaration. November 2019. Available online: https://files.ceqanet.opr.ca.gov/257016-2/attachment/c1W6nLUAb-Hfc1W6NoDWiSCEdvIZQJuQqgDnc9PyDn4n-btNsYEAPqZ16b_q8oQQdGTSNhOPoDO6KvK10 (accessed August 2020).
- Louis Berger International, Inc. 2011. Digital Signage: Technological Advancements Driving Reductions in Energy Consumption, June 2011.
- Marin Clean Energy (MCE). 2019. MCE 2020 Integrated Resource Plan. https://www.mcecleanenergy.org/wp-content/uploads/2019/12/MCE-Integrated-Resource-Plan-2020_100319.pdf (accessed July 2020).
- Natural Resources Conservation Service. 2019. Web Soil Survey. <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm> (accessed July 2020).

- Pittsburg, City of. 2010a. Interactive Zoning Map. Available at:
<http://www.ci.pittsburg.ca.us/index.aspx?page=500> (accessed July 2020).
- _____. 2010b. City of Pittsburg General Plan. Adopted 2001, last amended 2010. Available at:
https://static1.squarespace.com/static/5c741fe1b10f25b8de62226a/t/5c917a7724a6949d02f90591/1553037981743/Pittsburg_GeneralPlan2020_Consolidated_web.pdf (accessed July 2020).
- _____. 2017. Local Hazard Mitigation Plan. Available at:
<http://www.ci.pittsburg.ca.us/Modules/ShowDocument.aspx?documentid=9646> (accessed August 2020).
- _____. 2019a. Existing Conditions Report: City of Pittsburg General Plan Update. Available at:
<https://pittsburg.generalplan.org/documents-and-maps> (accessed July 2020)
- _____. 2019b. Pittsburg Municipal Code. Updated November 2019. Available at:
<https://www.codepublishing.com/CA/Pittsburg> (accessed July 2020).
- _____. 2020a. Schools and Educational Opportunities.
<http://www.ci.pittsburg.ca.us/index.aspx?page=383> (accessed July 2020).
- _____. 2020b. Sewer System. <http://www.ci.pittsburg.ca.us/index.aspx?page=773> (accessed July 2020).
- _____. 2020c. MCE Clean Energy. <http://www.ci.pittsburg.ca.us/index.aspx?page=993> (accessed July 2020).
- Pittsburg Parks and Recreation Department (PRPD). 2020. Parks at a Glance.
<http://www.ci.pittsburg.ca.us/index.aspx?page=440> (accessed July 2020).
- Pittsburg Police Department (PPD). 2019. 2019 Annual Report.
<http://www.ci.pittsburg.ca.us/Modules/ShowDocument.aspx?documentid=10966> (accessed July 2020).
- San Francisco Bay Regional Water Quality Control Board (RWQCB). 2017. Water Quality Control Plan (Basin Plan). May 2017.
https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html (accessed July 2020).
- State Water Resources Control Board. 2020. GeoTracker. <https://geotracker.waterboards.ca.gov> (accessed July 2020).
- Tri-Delta Transit. 2018. About Us. http://trideltatransit.com/about_09.aspx (accessed July 2020).
- United States Department of Agriculture (USDA), Natural Resources Conservation Service. 2019. Web Soil Survey. Soil Survey Area: Kings County, California. Soil Survey Data: Version 8. Available at: <http://websoilsurvey.nrcs.usda.gov/app/>. (Accessed July 2020).
- United States Environmental Protection Agency (USEPA). 2020a. Superfund: Search Superfund Site Information. <https://www.epa.gov/superfund/search-superfund-sites-where-you-live> (accessed July 2020).
- _____. 2020b. System Data Searches: SEMS. <https://www.epa.gov/enviro/sems-search> (accessed July 2020).
- United States Fish and Wildlife Service (USFWS). 2020a. Information for Planning and Consultation. Available at: <https://ecos.fws.gov/ipac/> (accessed July 2020).

- _____. 2020b. Critical Habitat Portal. Available at:
<https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77> (accessed July 2020).
- _____. 2020c. National Wetlands Inventory (NWI). Version 2. Updated March 18, 2019. Available at: <https://www.fws.gov/wetlands/Data/Mapper.html> (accessed July 2020).
- United States Geological Survey (USGS). 2016. Earthquake Zones of Required Investigation. [map]. Tabular digital data and vector digital data. California Geological Survey. Sacramento, CA. <https://maps.conservation.ca.gov/cgs/EQZApp/> (accessed July 2020)
- _____. 2018. Honker Bay, CA. [map]. Tabular digital data and vector digital data. <https://ngmdb.usgs.gov/topoview/viewer/#15/38.0192/-121.9046> (accessed July 2020)
- _____. 2019. U.S. Landslide Inventory and Interactive Map. [map]. Tabular digital data and vector digital data. <https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=ae120962f459434b8c904b456c82669d> (accessed July 2020).
2020. Quaternary Fault and Fold Database of the United States: Interactive Fault Map. Available at: <http://www.ci.pittsburg.ca.us/Modules/ShowDocument.aspx?documentid=1390> (accessed July 2020).
- University of California Museum of Paleontology. 2019. UCMP specimen search portal. [database]. <http://ucmpdb.berkeley.edu/> (accessed July 2020).
- Xerces Society, Defenders of Wildlife, and the Center for Food Safety. 2018. A Petition to the State of California Fish and Game Commission to List the Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and western bumble bee (*Bombus occidentalis occidentalis*) as Endangered under the California Endangered Species Act. Available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=161902&inline>.
- Xerces Society, Wildlife Preservation Canada, York University, The Montreal Insectarium, The London Natural History Museum, and BeeSpotter. 2020. Data accessed from Bumble Bee Watch, a collaborative website to track and conserve North America's bumble bees. Available from: <http://www.bumblebeewatch.org/app/#/bees/lists> [Accessed July 2020].

List of Preparers

Rincon Consultants, Inc. prepared this IS-MND under contract to the City of Pittsburg. Persons involved in data gathering analysis, project management, and quality control are listed below.

RINCON CONSULTANTS, INC.

Matthew Maddox, AICP, Principal
 Darcy Kremin, AICP, Project Manager
 Leslie Trejo, Assistant Project Manager
 Anastasia Ennis, Associate Biologist
 Annette Tran, MESM, GIS Analyst
 Hannah Haas, MA, RPA, Senior Archaeologist
 Courtney Montgomery, Archaeologist

This page intentionally left blank.



December 3, 2020

Kristin Pollot
City of Pittsburg
65 Civic Ave
Pittsburg, CA 94565

Ref: Gas and Electric Transmission and Distribution

Dear Kristin Pollot,

Thank you for submitting the AP-20-1544 plans for our review. PG&E will review the submitted plans in relationship to any existing Gas and Electric facilities within the project area. If the proposed project is adjacent/or within PG&E owned property and/or easements, we will be working with you to ensure compatible uses and activities near our facilities.

Attached you will find information and requirements as it relates to Gas facilities (Attachment 1) and Electric facilities (Attachment 2). Please review these in detail, as it is critical to ensure your safety and to protect PG&E's facilities and its existing rights.

Below is additional information for your review:

1. This plan review process does not replace the application process for PG&E gas or electric service your project may require. For these requests, please continue to work with PG&E Service Planning: https://www.pge.com/en_US/business/services/building-and-renovation/overview/overview.page.
2. If the project being submitted is part of a larger project, please include the entire scope of your project, and not just a portion of it. PG&E's facilities are to be incorporated within any CEQA document. PG&E needs to verify that the CEQA document will identify any required future PG&E services.
3. An engineering deposit may be required to review plans for a project depending on the size, scope, and location of the project and as it relates to any rearrangement or new installation of PG&E facilities.

Any proposed uses within the PG&E fee strip and/or easement, may include a California Public Utility Commission (CPUC) Section 851 filing. This requires the CPUC to render approval for a conveyance of rights for specific uses on PG&E's fee strip or easement. PG&E will advise if the necessity to incorporate a CPUC Section 851 filing is required.

This letter does not constitute PG&E's consent to use any portion of its easement for any purpose not previously conveyed. PG&E will provide a project specific response as required.

Sincerely,

Plan Review Team
Land Management



Attachment 1 – Gas Facilities

There could be gas transmission pipelines in this area which would be considered critical facilities for PG&E and a high priority subsurface installation under California law. Care must be taken to ensure safety and accessibility. So, please ensure that if PG&E approves work near gas transmission pipelines it is done in adherence with the below stipulations. Additionally, the following link provides additional information regarding legal requirements under California excavation laws: <https://www.usanorth811.org/images/pdfs/CA-LAW-2018.pdf>

1. **Standby Inspection:** A PG&E Gas Transmission Standby Inspector must be present during any demolition or construction activity that comes within 10 feet of the gas pipeline. This includes all grading, trenching, substructure depth verifications (potholes), asphalt or concrete demolition/removal, removal of trees, signs, light poles, etc. This inspection can be coordinated through the Underground Service Alert (USA) service at 811. A minimum notice of 48 hours is required. Ensure the USA markings and notifications are maintained throughout the duration of your work.
2. **Access:** At any time, PG&E may need to access, excavate, and perform work on the gas pipeline. Any construction equipment, materials, or spoils may need to be removed upon notice. Any temporary construction fencing installed within PG&E's easement would also need to be capable of being removed at any time upon notice. Any plans to cut temporary slopes exceeding a 1:4 grade within 10 feet of a gas transmission pipeline need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.
3. **Wheel Loads:** To prevent damage to the buried gas pipeline, there are weight limits that must be enforced whenever any equipment gets within 10 feet of traversing the pipe.

Ensure a list of the axle weights of all equipment being used is available for PG&E's Standby Inspector. To confirm the depth of cover, the pipeline may need to be potholed by hand in a few areas.

Due to the complex variability of tracked equipment, vibratory compaction equipment, and cranes, PG&E must evaluate those items on a case-by-case basis prior to use over the gas pipeline (provide a list of any proposed equipment of this type noting model numbers and specific attachments).

No equipment may be set up over the gas pipeline while operating. Ensure crane outriggers are at least 10 feet from the centerline of the gas pipeline. Transport trucks must not be parked over the gas pipeline while being loaded or unloaded.

4. **Grading:** PG&E requires a minimum of 36 inches of cover over gas pipelines (or existing grade if less) and a maximum of 7 feet of cover at all locations. The graded surface cannot exceed a cross slope of 1:4.
5. **Excavating:** Any digging within 2 feet of a gas pipeline must be dug by hand. Note that while the minimum clearance is only 12 inches, any excavation work within 24 inches of the edge of a pipeline must be done with hand tools. So to avoid having to dig a trench entirely with hand tools, the edge of the trench must be over 24 inches away. (Doing the math for a 24 inch



wide trench being dug along a 36 inch pipeline, the centerline of the trench would need to be at least 54 inches [$24/2 + 24 + 36/2 = 54$] away, or be entirely dug by hand.)

Water jetting to assist vacuum excavating must be limited to 1000 psig and directed at a 40° angle to the pipe. All pile driving must be kept a minimum of 3 feet away.

Any plans to expose and support a PG&E gas transmission pipeline across an open excavation need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

6. Boring/Trenchless Installations: PG&E Pipeline Services must review and approve all plans to bore across or parallel to (within 10 feet) a gas transmission pipeline. There are stringent criteria to pothole the gas transmission facility at regular intervals for all parallel bore installations.

For bore paths that cross gas transmission pipelines perpendicularly, the pipeline must be potholed a minimum of 2 feet in the horizontal direction of the bore path and a minimum of 12 inches in the vertical direction from the bottom of the pipe with minimum clearances measured from the edge of the pipe in both directions. Standby personnel must watch the locator trace (and every ream pass) the path of the bore as it approaches the pipeline and visually monitor the pothole (with the exposed transmission pipe) as the bore traverses the pipeline to ensure adequate clearance with the pipeline. The pothole width must account for the inaccuracy of the locating equipment.

7. Substructures: All utility crossings of a gas pipeline should be made as close to perpendicular as feasible ($90^\circ \pm 15^\circ$). All utility lines crossing the gas pipeline must have a minimum of 12 inches of separation from the gas pipeline. Parallel utilities, pole bases, water line 'kicker blocks', storm drain inlets, water meters, valves, back pressure devices or other utility substructures are not allowed in the PG&E gas pipeline easement.

If previously retired PG&E facilities are in conflict with proposed substructures, PG&E must verify they are safe prior to removal. This includes verification testing of the contents of the facilities, as well as environmental testing of the coating and internal surfaces. Timelines for PG&E completion of this verification will vary depending on the type and location of facilities in conflict.

8. Structures: No structures are to be built within the PG&E gas pipeline easement. This includes buildings, retaining walls, fences, decks, patios, carports, septic tanks, storage sheds, tanks, loading ramps, or any structure that could limit PG&E's ability to access its facilities.

9. Fencing: Permanent fencing is not allowed within PG&E easements except for perpendicular crossings which must include a 16 foot wide gate for vehicular access. Gates will be secured with PG&E corporation locks.

10. Landscaping: Landscaping must be designed to allow PG&E to access the pipeline for maintenance and not interfere with pipeline coatings or other cathodic protection systems. No trees, shrubs, brush, vines, and other vegetation may be planted within the easement area. Only those plants, ground covers, grasses, flowers, and low-growing plants that grow unsupported to a maximum of four feet (4') in height at maturity may be planted within the easement area.



11. Cathodic Protection: PG&E pipelines are protected from corrosion with an “Impressed Current” cathodic protection system. Any proposed facilities, such as metal conduit, pipes, service lines, ground rods, anodes, wires, etc. that might affect the pipeline cathodic protection system must be reviewed and approved by PG&E Corrosion Engineering.

12. Pipeline Marker Signs: PG&E needs to maintain pipeline marker signs for gas transmission pipelines in order to ensure public awareness of the presence of the pipelines. With prior written approval from PG&E Pipeline Services, an existing PG&E pipeline marker sign that is in direct conflict with proposed developments may be temporarily relocated to accommodate construction work. The pipeline marker must be moved back once construction is complete.

13. PG&E is also the provider of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E’s facilities must be reviewed and approved by PG&E to ensure that no impact occurs which may endanger the safe operation of its facilities.



Attachment 2 – Electric Facilities

It is PG&E's policy to permit certain uses on a case by case basis within its electric transmission fee strip(s) and/or easement(s) provided such uses and manner in which they are exercised, will not interfere with PG&E's rights or endanger its facilities. Some examples/restrictions are as follows:

1. **Buildings and Other Structures:** No buildings or other structures including the foot print and eave of any buildings, swimming pools, wells or similar structures will be permitted within fee strip(s) and/or easement(s) areas. PG&E's transmission easement shall be designated on subdivision/parcel maps as **"RESTRICTED USE AREA – NO BUILDING."**
2. **Grading:** Cuts, trenches or excavations may not be made within 25 feet of our towers. Developers must submit grading plans and site development plans (including geotechnical reports if applicable), signed and dated, for PG&E's review. PG&E engineers must review grade changes in the vicinity of our towers. No fills will be allowed which would impair ground-to-conductor clearances. Towers shall not be left on mounds without adequate road access to base of tower or structure.
3. **Fences:** Walls, fences, and other structures must be installed at locations that do not affect the safe operation of PG&E's facilities. Heavy equipment access to our facilities must be maintained at all times. Metal fences are to be grounded to PG&E specifications. No wall, fence or other like structure is to be installed within 10 feet of tower footings and unrestricted access must be maintained from a tower structure to the nearest street. Walls, fences and other structures proposed along or within the fee strip(s) and/or easement(s) will require PG&E review; submit plans to PG&E Centralized Review Team for review and comment.
4. **Landscaping:** Vegetation may be allowed; subject to review of plans. On overhead electric transmission fee strip(s) and/or easement(s), trees and shrubs are limited to those varieties that do not exceed 15 feet in height at maturity. PG&E must have access to its facilities at all times, including access by heavy equipment. No planting is to occur within the footprint of the tower legs. Greenbelts are encouraged.
5. **Reservoirs, Sumps, Drainage Basins, and Ponds:** Prohibited within PG&E's fee strip(s) and/or easement(s) for electric transmission lines.
6. **Automobile Parking:** Short term parking of movable passenger vehicles and light trucks (pickups, vans, etc.) is allowed. The lighting within these parking areas will need to be reviewed by PG&E; approval will be on a case by case basis. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications. Blocked-up vehicles are not allowed. Carports, canopies, or awnings are not allowed.
7. **Storage of Flammable, Explosive or Corrosive Materials:** There shall be no storage of fuel or combustibles and no fueling of vehicles within PG&E's easement. No trash bins or incinerators are allowed.



8. Streets and Roads: Access to facilities must be maintained at all times. Street lights may be allowed in the fee strip(s) and/or easement(s) but in all cases must be reviewed by PG&E for proper clearance. Roads and utilities should cross the transmission easement as nearly at right angles as possible. Road intersections will not be allowed within the transmission easement.

9. Pipelines: Pipelines may be allowed provided crossings are held to a minimum and to be as nearly perpendicular as possible. Pipelines within 25 feet of PG&E structures require review by PG&E. Sprinklers systems may be allowed; subject to review. Leach fields and septic tanks are not allowed. Construction plans must be submitted to PG&E for review and approval prior to the commencement of any construction.

10. Signs: Signs are not allowed except in rare cases subject to individual review by PG&E.

11. Recreation Areas: Playgrounds, parks, tennis courts, basketball courts, barbecue and light trucks (pickups, vans, etc.) may be allowed; subject to review of plans. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications.

12. Construction Activity: Since construction activity will take place near PG&E's overhead electric lines, please be advised it is the contractor's responsibility to be aware of, and observe the minimum clearances for both workers and equipment operating near high voltage electric lines set out in the High-Voltage Electrical Safety Orders of the California Division of Industrial Safety (<https://www.dir.ca.gov/Title8/sb5g2.html>), as well as any other safety regulations. Contractors shall comply with California Public Utilities Commission General Order 95 (http://www.cpuc.ca.gov/gos/GO95/go_95_startup_page.html) and all other safety rules. No construction may occur within 25 feet of PG&E's towers. All excavation activities may only commence after 811 protocols has been followed.

Contractor shall ensure the protection of PG&E's towers and poles from vehicular damage by (installing protective barriers) Plans for protection barriers must be approved by PG&E prior to construction.

13. PG&E is also the owner of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs that may endanger the safe and reliable operation of its facilities.



From: Coreen Meredith-Perez <[REDACTED]>
To: kpollot@ci.pittsburg.ca.us

Content expires Feb 18, 2021

Notice of Public Hearing - Frontage Road

Hi Kristin:

Jan 19, 2021, 7:00:29 PM

I received your Notice of Public Hearing for Frontage Road and am very interested in getting more information regarding the plans for this project. I have lived on Rossmoor Court for 41 years and until recently this was a very safe family friendly neighborhood. In the last couple of years we have had issues with people having sex and using drugs plus leaving their garbage all hours of the day and night. The hope is that whatever the plans are for the 3 acres across the street will be a positive change for our neighborhood.

I look forward to hearing back from you.

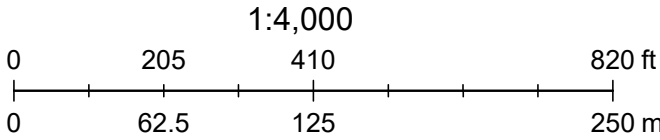
Best regards,
Coreen Perez

Attach 4: Map of Surrounding Uses



1/20/2021, 10:01:48 AM

Caltrans ROW
Parcel



USDA FSA, GeoEye, Maxar, Esri, HERE, Garmin, iPC, Sources: Esri, HERE, DeLorme, USGS, INCREMENT P, NRCAN, © OpenStreetMap contributors, and the GIS User Community



City of Pittsburg

Community Development Department – Planning Division

65 Civic Avenue, Pittsburg, CA 94565 | Tel: (925) 252-4920 | Fax: (925) 252-4814

NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the **PLANNING COMMISSION** of the **City of Pittsburg** will conduct a public hearing on:

DATE: January 26, 2021
TIME: 7:00 p.m.
PLACE: Streaming Video (see public advisory on next page)

Concerning the following matter:

Frontage Road General Plan Amendment and Rezone, AP-20-1544 (GP, RZ)

This is a request for recommendation of City Council approval of a general plan amendment and rezoning of a city-owned undeveloped parcel and an unmapped portion of an abandoned right-of-way, to 'Community Commercial' and CC (Community Commercial) District, respectively. The site totals less than three acres in size and is located along the northern side of Frontage Road, between Dover Way and Chelsea Way. APN 087-227-001

PROJECT PLANNER: Kristin Pollot, (925) 252-6941 or kpollot@ci.pittsburg.ca.us

Why am I receiving this notice?

You are receiving this notice because you have either previously requested notifications from the Planning Division, or a project has been proposed in your neighborhood and all property owners within a minimum 300-foot radius of the project site are being notified.

Where can I get more information about this project?

The file for this project is available for public inspection; please contact the project planner listed above to make necessary arrangements.

What can I do if I have comments on the project?

Comments or objections to the project can be made by writing or through oral testimony during the public hearing. Written comments citing the project name may be emailed to the project planner listed above or may be mailed to: Pittsburg Planning Division, 65 Civic Avenue, Pittsburg, CA 94565. You may also register your comments or objections by attending the virtual public hearing on the date and time listed above (see meeting agenda, once published, for details on how to register a phone-in comment).

Pursuant to Section 65009 of the California Government Code, if you challenge this matter in court, you may be limited to those issues you or someone else raised at the public hearing described in this notice, or in written correspondence on the matter delivered to this agency at, or prior to the public hearing. Any written correspondence delivered to the address noted above before the hearing body's action on the matter will become a part of the administrative record.

KRISTIN POLLOT, AICP, SECRETARY
 PITTSBURG PLANNING COMMISSION

Project Title: Frontage Road General Plan Amendment and Rezone, AP-20-1544 (GP, RZ)
Location: Northern side of Frontage Rd, between Dover Wy and Chelsea Wy. APN 087-227-001



PUBLIC ADVISORY: THE CITY COUNCIL CHAMBER WILL NOT BE OPEN TO THE PUBLIC

Pursuant to Section 3 of Executive Order N-29-20, issued by Governor Newsom on March 17, 2020, the regular meeting of the Planning Commission on January 26, 2021, will be conducted telephonically via Zoom and broadcast live through Granicus on the City's website (www.ci.pittsburg.ca.us).

Please be advised that pursuant to the Executive Order, and to ensure the health and safety of the public by limiting human contact that could spread the COVID-19 virus, the Council Chamber will not be open for the meeting. The City Council will be participating telephonically and will not be physically present in the Council Chamber.

Written comments that are to be provided to Planning Commission in advance and not read at the meeting will be distributed to the prior to the meeting if received by 5:00 p.m. the date of the meeting. Comments via text and social media (Facebook, Twitter, etc.) will not be accepted.

The City of Pittsburg thanks you in advance for taking all precautions to prevent spreading the COVID-19 virus.



City of
Pittsburgh

Frontage Road
General Plan Amendment and Rezone Project
AP-20-1544 (GP, RZ)

Background

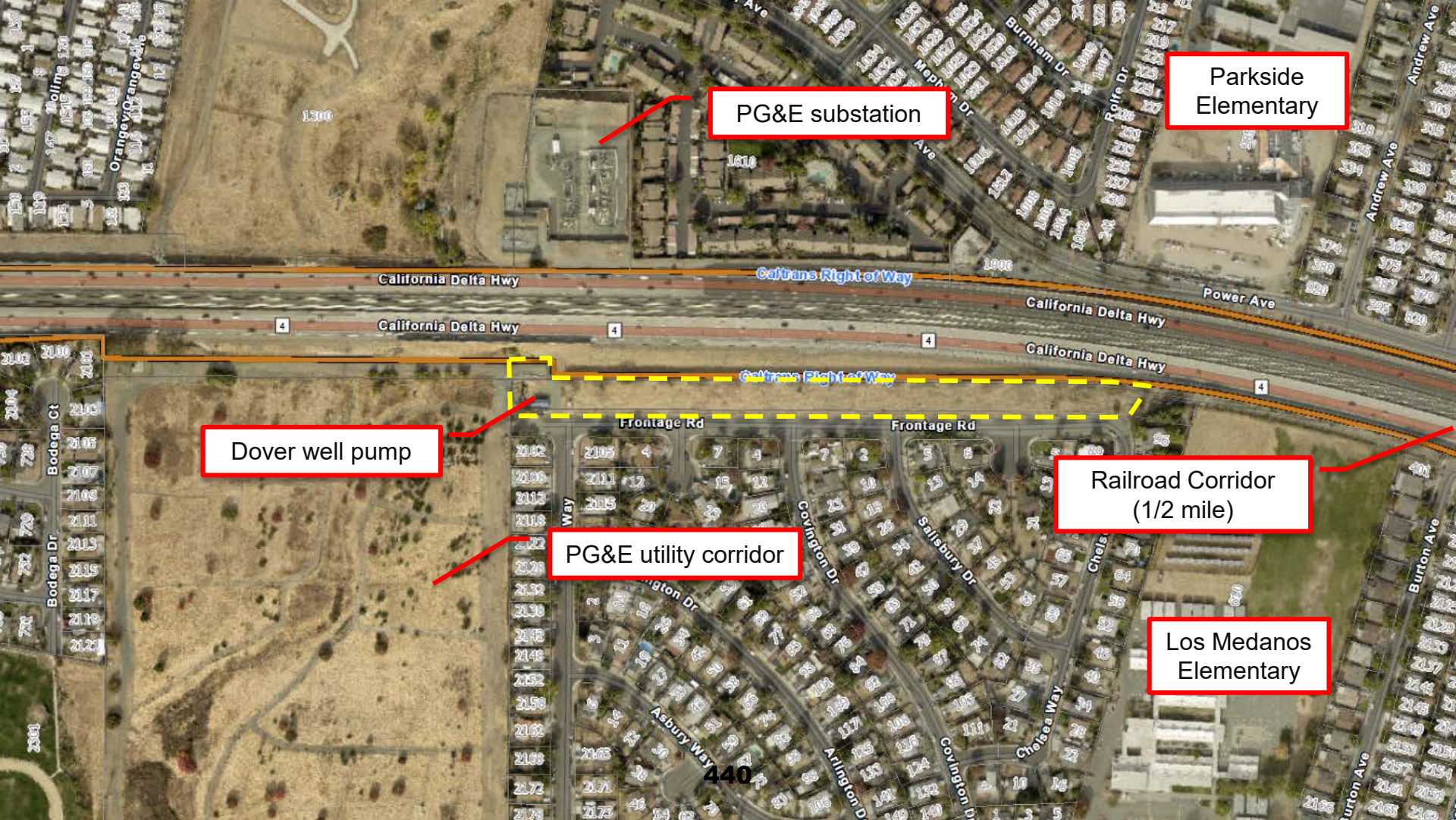


- Area was previously excess right-of-way
- Currently does not have zoning designation
- Area is mainly utility infrastructure, access roadway, Dover Well pump station
- 0.11 ac. portion of site unmapped – not a parcel
- Long-standing goal of the City Council to further economic development

Project



- **February 2020:** Study initiated by the City Council
- **Summer 2020:** Project initiated by Economic Development Department
- **Request:** GPA and zoning map amendment
 - GP: *Park to Community Commercial*
 - Zoning: “undesigned” to “CC” (Community Commercial)



a Hwy

Caltrans Right of Way

1000

a Hwy

4

4

California Delta Hwy

California Delta Hwy

Caltrans Right of Way

Frontage Rd

Frontage Rd

2102

2105

4

7

4

7

2

5

6

5

19

95

2108

2111

12

15

12

25

10

13

14

27

85

90

2112

2115

20

23

20

31

16

25

22

77

84

2118

15

22

25

28

36

44

53

59

47

55

65

71

76

2122

2128

2132

2138

2145

Dover Way

Arlington Dr

Covington Dr

Salisbury Dr

Chelsea Way

441



- Initial Study prepared to examine the project
- Impacts resulting from the proposed changes would be less than significant:
 - Mainly due to easements and utilities
 - Standards used are prescribed by expert agencies, vetted through the Initial Study
- IS/ND released for 30-day review

Findings to be Made



GPA:

- Must be in the public interest
- Max 4 GPAs per year

Zoning Map Amendment:

- Must be consistent with the General Plan
- There must be a community need
- Must conform with public convenience, general welfare, and good zoning practice

Key Considerations



- **No habitable structures** could be constructed
 - Minor utilities, telecom facilities, small structures
 - Future development of non-habitable uses will be sought (not currently proposed)
- **Future development subject to:**
 - Applicable approvals, review, noticing
 - Development standards
 - Environmental review(s)

Goals of the Project



- How can we bring value to the area?
 - Increase utility of the parcel
 - Protect the area from additional traffic, noise, etc.
 - Providing a public benefit
- How can we promote economic development, achieve the goals of the General Plan?

Economic Development



- A self-sustaining city
- Maintain and improve quality of life, make Pittsburg a place to live, work, and play
- **How can we:**
 - Support existing businesses
 - Attract new businesses
 - Increase educational achievement
 - Promote Pittsburg, further outreach

Recommendation



1. Open the public hearing;
2. Take public comment;
3. Close the public hearing; and
4. Move to adopt Resolution No. 10163, recommending City Council adoption of the General Plan and zoning map amendments proposed.

**CITY OF PITTSBURG
PLANNING COMMISSION
STAFF REPORT
January 26, 2021**

ITEM: Notice of Intent to Exercise Delegated Design Review Authority, Submittal of Adopted Zoning Administrator Resolutions.

ORIGINATED BY: City of Pittsburg, Zoning Administrator, 65 Civic Avenue, Pittsburg, CA 94565.

SUBJECT: The Zoning Administrator submits two notices of intent to exercise delegated design review authority for: 1) a remodel of the existing Ace Hardware store located at 125 E. Leland; and 2) a new 60-foot monopole for microwave communications at 570 W. 10th Street. The Zoning Administrator also submits one resolution previously approved under the delegated authority (Planning Commission Resolution No. 9918).

RECOMMENDATION:

Staff recommends that the Commission acknowledge receipt of the two attached Notices of Intent to Exercise Design Review Authority, and the attached adopted Zoning Administrator resolution.

BACKGROUND:

Delegated Design Review Authority: Planning Commission Resolution No. 9444, as later amended by Resolution No. 9918, allows for delegation of nine categories of design review applications from the Planning Commission to the Zoning Administrator, as follows:

1. Freestanding signs: Applicable to signs not already part of a sign program; must be consistent with sign standards and architecturally compatible with associated building.
2. Wireless Communication Equipment: New or replacement antennas on existing poles and their related equipment.
3. Minor Building Remodels: Limited to changes in building colors, awnings, fenestration, and finishes.
4. Changes to Existing Parking Lots.
5. Changes to Existing Landscaping.
6. Additions to Existing Buildings: Additions must be smaller than 2,500 square feet and designed to complement existing building architecture.
7. New Model Homes in Approved Subdivisions. Must be consistent with the general size, quality of architecture and materials, and general character of the

originally approved models. Must comply with approved zoning development standards.

8. Ancillary Structures: Structures in any district where visual impacts are minimal, including miscellaneous mechanical equipment associated with legal uses in the Industrial Districts.

The intent of the delegation is to allow a more efficient approval process for non-controversial design review applications, without compromising the integrity of the design review process or removing from public scrutiny those projects that would be most visible or of high interest to the general public. Prior to approving any delegated design review application, the Zoning Administrator must notify the Commission of his or her intent to exercise delegated design review authority. Copies of resolutions approving any delegated design review application must also be provided to the Commission.

PROJECT DESCRIPTION:

Since the last Commission meeting, staff has received two applications requesting design review approval which qualify within one or more of the nine categories of delegated authority established by Resolution No. 9918:

1. Ace Hardware Remodel, AP-20-1547 (AD) – Delegated Design Review Category 3.

This is an application by Jeff Leopold of Ace Hardware, requesting administrative design review approval of an exterior remodel introducing new materials, paint colors and building signage to the exterior façade with additional improvements to the parking lot of an existing Ace Hardware, located in 125 E. Leland Road in the Planned Development, PD-1319 (Railroad Avenue Specific Plan) District.
APN: 088-183-016

2. Trans Bay Cable Microwave Communications, AP-20-1550 (AD) – Delegated Design Review Category 8.

This is an application filed by Richard Van Horn, on behalf of Trans Bay Cable, requesting administrative design review approval to construct a 60-foot monopole for microwave communications, at 570 W. 10th Street in the CS-O (Service Commercial with Limited Overlay, City Council Ordinance No. 06-1277) District.
Assessor's Parcel Number 085-270-018.

The Zoning Administrator has also adopted two resolutions approving delegated design review applications, as follows:

1. Resolution No. 365: San Marco Village E Model Homes, AP-20-1542 (AD)

GENERAL PLAN/CODE COMPLIANCE:

Delegated Design Review Authority: Resolution No. 9918 established nine categories of design review applications upon which the Commission would authorize the Zoning Administrator to act. Resolution No. 9918, and PMC section 18.10.100, direct staff to notify the Planning Commission of intent to exercise delegated design review authority on any application that falls within one of those nine categories, prior to approving the application. Upon receiving such notification, a majority of the Commission may direct that the matter be scheduled for future consideration by the entire Commission. Resolution No. 9918 also directs staff to keep the Commission informed about delegated design review application approvals by providing copies of resolutions adopted by the Zoning Administrator.

ANALYSIS:

Not applicable.

ACTION REQUIRED:

Acknowledge receipt of the attached Notices of Intent and the adopted Zoning Administrator resolutions.

ATTACHMENTS:

1. Notice of Intent: Ace Hardware Remodel, AP-20-1547 (AD)
2. Notice of Intent: Trans Bay Cable Microwave Communications, AP-20-1550 (AD)
3. Zoning Administrator Resolution No. 365

Prepared by: Kristin Pollot, AICP, Zoning Administrator

**NOTICE OF INTENT
TO CONDUCT A DESIGN REVIEW AUTHORITY DELEGATED TO STAFF
PURSUANT TO PLANNING COMMISSION RESOLUTION NO. 9918**

Ace Hardware Remodel, AP-20-1547 (AD).

This is an application by Jeff Leopold of Ace Hardware, requesting administrative design review approval of an exterior remodel introducing new materials, paint colors and building signage to the exterior façade with additional improvements to the parking lot of an existing Ace Hardware, located in 125 E. Leland Road in the Planned Development, PD-1319 (Railroad Avenue Specific Plan) District. APN: 088-183-016

This project is delegated to staff under Category 3 (Minor Building Remodels, limited to changes in building colors, awnings, fenestration and finishes) of Planning Commission Resolution No. 9918.

Ace Hardware
125 E. Leland Rd.
Pittsburg, CA 94565

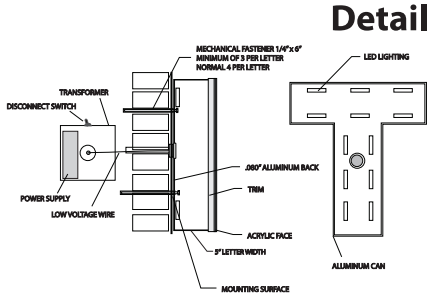
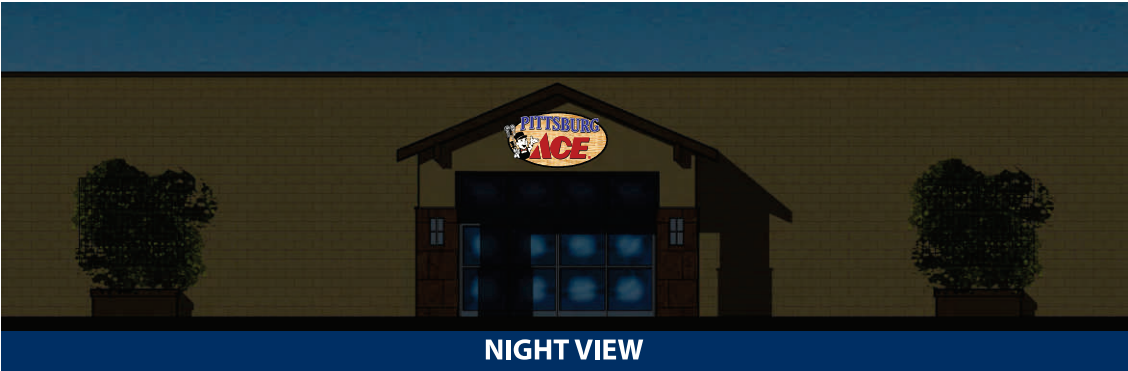


Channel Letter Pill - Stud Mounted
OPTION B

- Quantity: 1
- Trim: 1" Black Gemtrim
- Return Color: Black
- Face: 1/8" Red Acrylic
- Letter Interior: Gloss White
- Internal Illumination: White LED's
- Mounting: Studded Flush to Fascia

Sq. Ft. Signage: 30.08

Sq. Ft. Allowance: T.B.D.



Claude Ballbe	claude@signsunlimitedusa.com
919-552-8689	www.signsunlimitedusa.com
12.10.20	Underwriters Laboratories Inc.® UL File #E228670

Approval Signature:

Please check all spelling, quantities, colors, and materials before approving

Notes: **NEED SURVEY TO CONFIRM SCALE PRIOR TO MANUFACTURE**

SIGNS UNLIMITED
communicate your identity

6801 Mount Hermon Church Rd, Building C
Durham, NC 27705



PROJECT DATA

PROJECT DESCRIPTION: PROJECT INCLUDES THE STOREFRONT RENOVATION AND NEW SIGNAGE TO AN EXISTING AND OPERATING COMMERCIAL RETAIL BUILDING

PROJECT ADDRESS: 125 E. LELAND RD.
PITTSBURG, CA 94565
CONTRA COSTA COUNTY

APN: 088-183-016-0

ZONING: PD

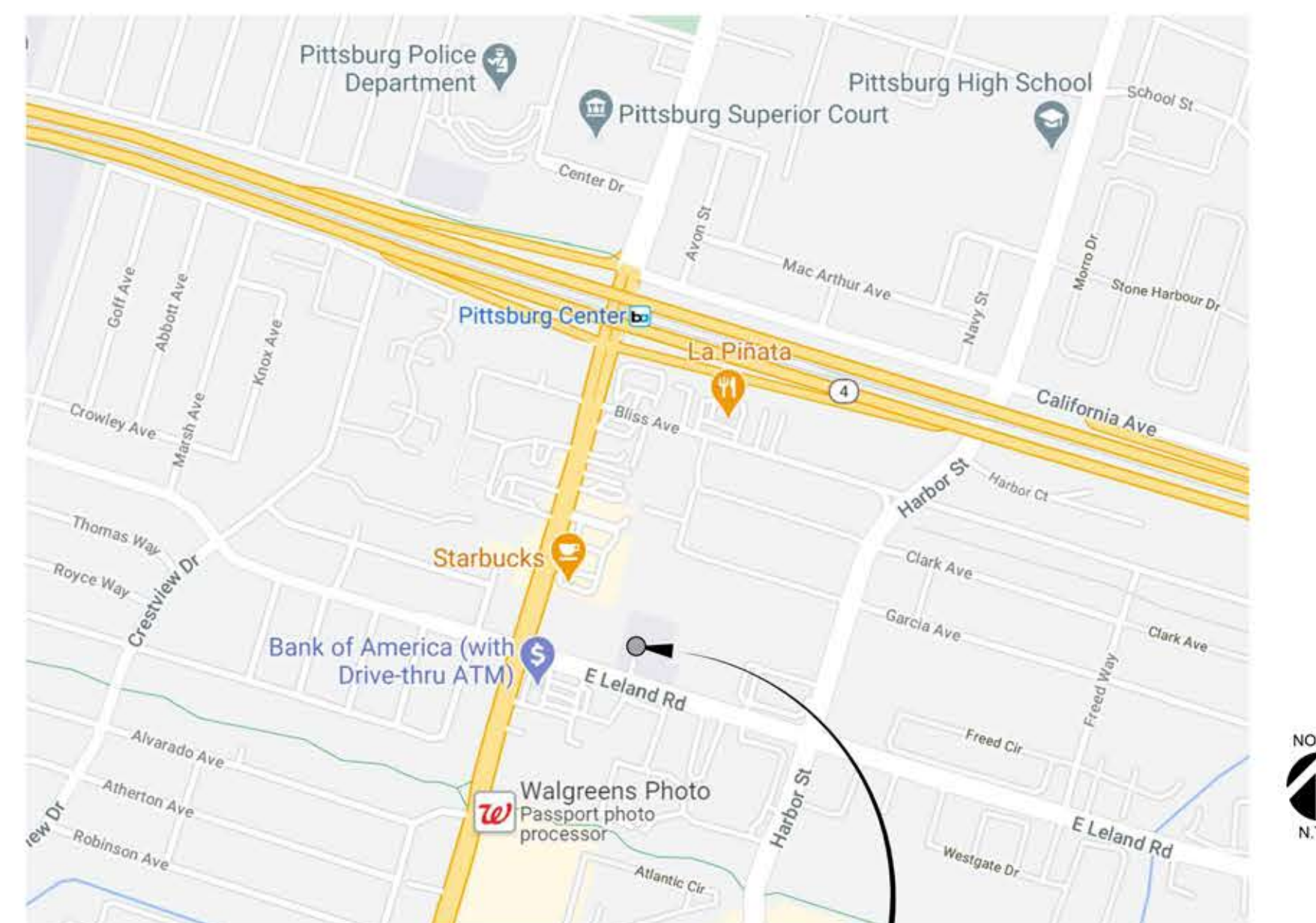
USE TYPE: RETAIL SALES

PROJECT TEAM

OWNER
PITTSBURG ACE
125 E. LELAND RD.
PITTSBURG, CA 94565
CONTACT: JEFF LEOPOLD
PH: (415) 213-0361

ARCHITECT
STIRLING ARCHITECTS, INC.
1145 SECOND ST., STE. 188
BRENTWOOD, CA 94513
PH: (925) 634-0095
FX: (925) 226-4816
CONTACT: DON STIRLING

VICINITY MAP



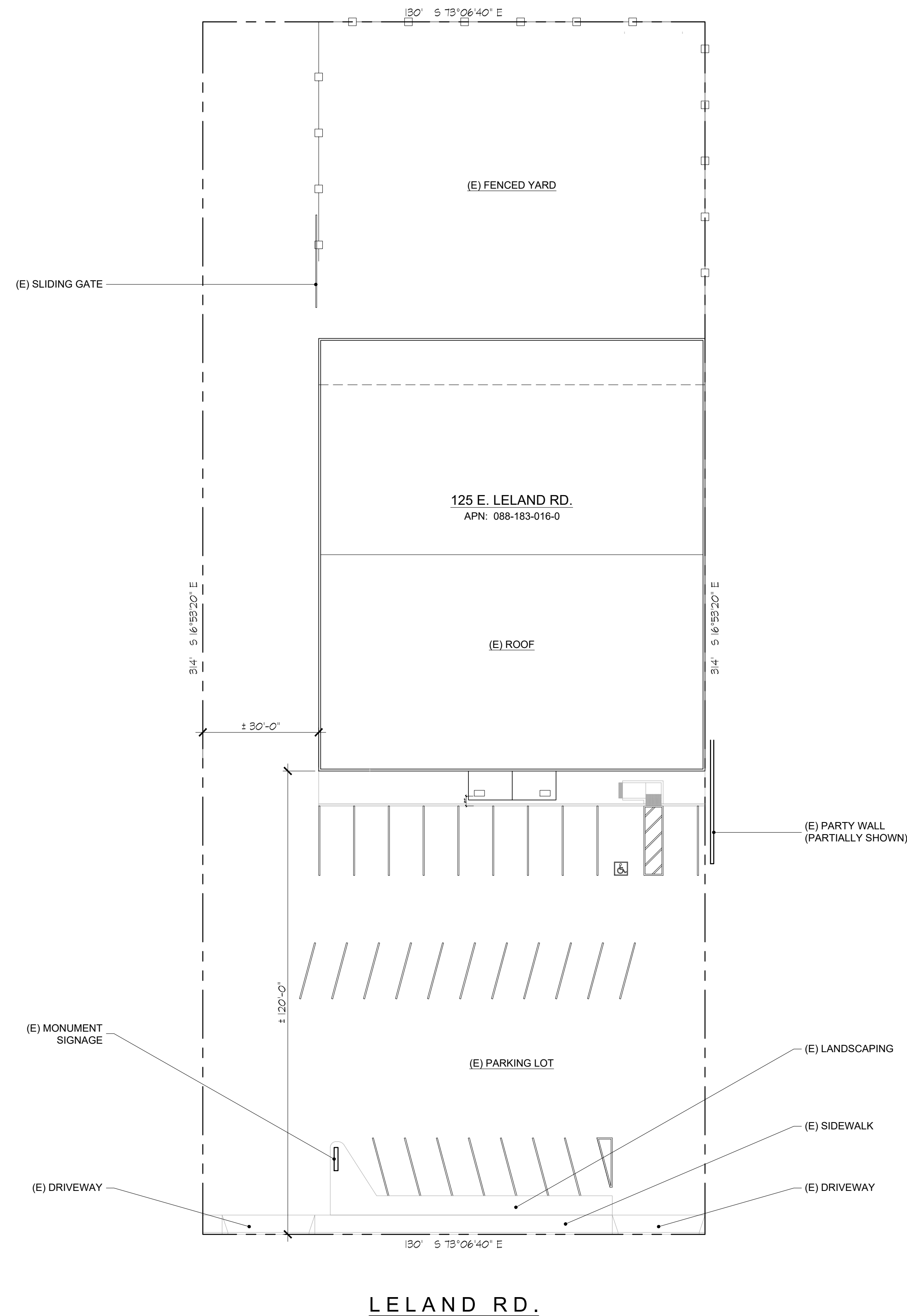
PROJECT LOCATION
125 E. LELAND RD.
PITTSBURG, CA 94565

SHEET INDEX

1. COVER SHEET
2. ARCHITECTURAL SITE PLAN
3. PROPOSED STOREFRONT PLAN
4. PROPOSED ELEVATIONS
5. COLORED ELEVATION
6. EXISTING STOREFRONT PLAN
7. EXISTING ELEVATIONS
8. REFERENCE PHOTOS

SCOPE OF WORK

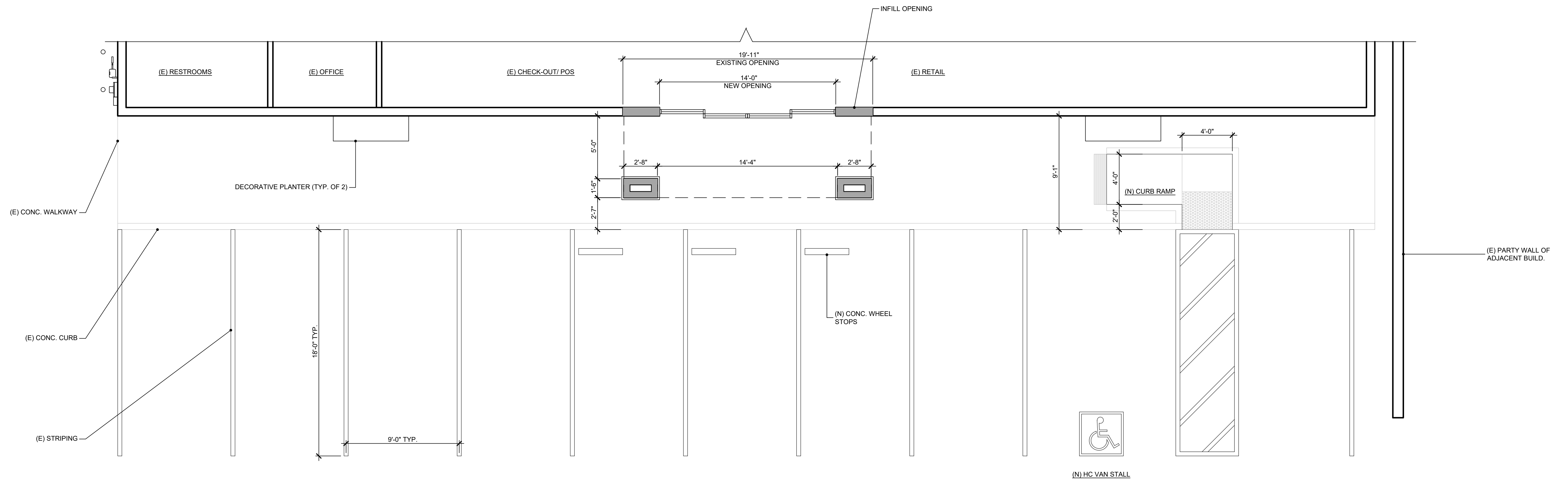
ENHANCE STORE IDENTITY WITH NEW ENTRY ELEMENT AND NEW SIGNAGE



EXISTING/ PROPOSED SITE PLAN/ ROOF PLAN

PARCEL INFORMATION

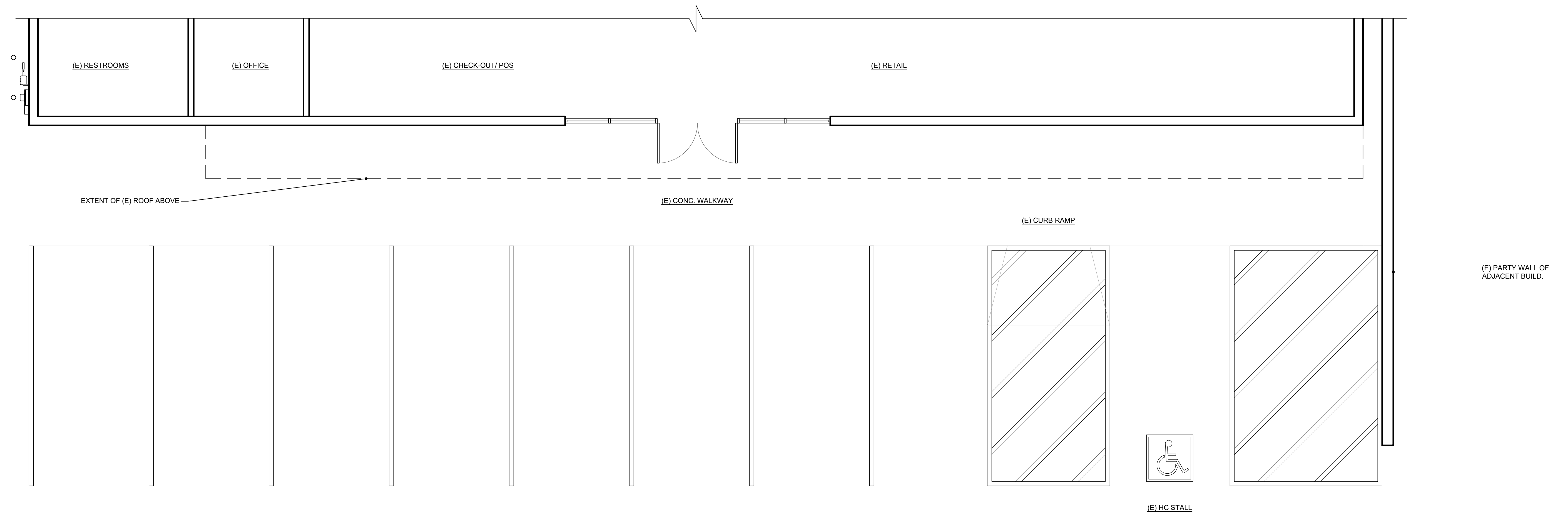
EXISTING FLOOR AREA:	10,000 SQ. FT.
LOT ACRES:	0.940 AC.
LOT SQ. FT.:	40,946 SQ. FT.
EXISTING LOT COVERAGE:	+/- 24.4%



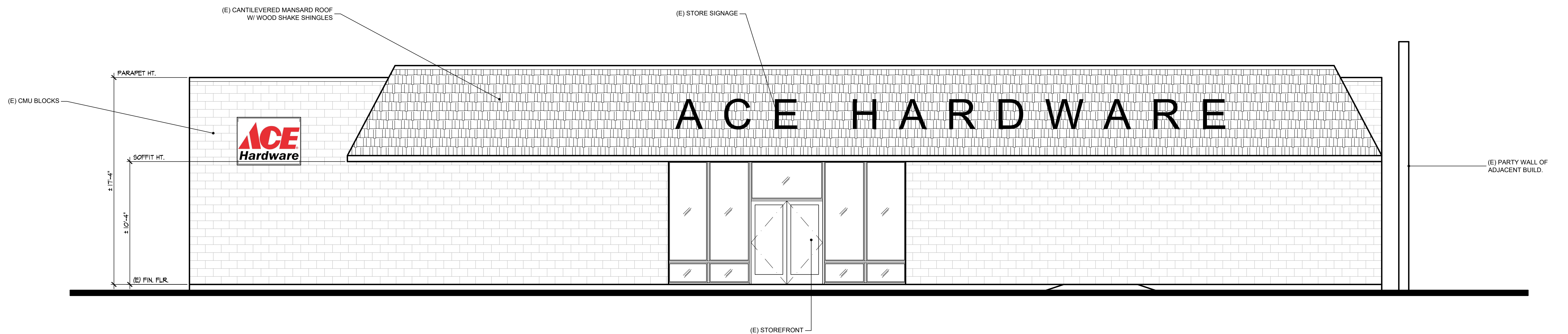
PROPOSED STOREFRONT PLAN



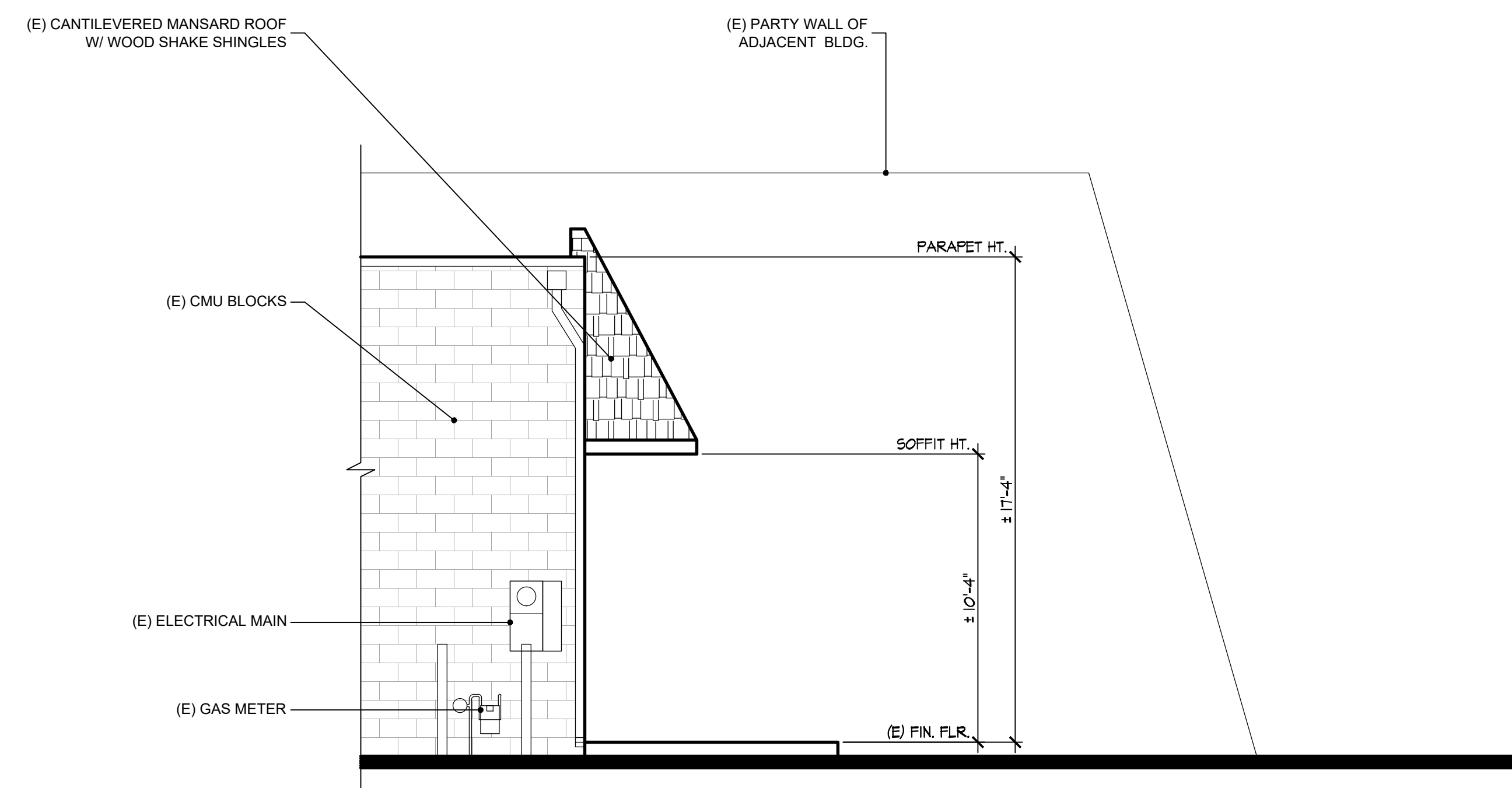
PROPOSED SOUTH ELEVATION (FRONT VIEW)



EXISTING STOREFRONT PLAN



EXISTING SOUTH ELEVATION (FRONT VIEW)



EXISTING PARTIAL WEST ELEVATION (LEFT VIEW)



REFERENCE PHOTO



REFERENCE PHOTO



REFERENCE PHOTO



REFERENCE PHOTO



Color Board

125 E. Leland Rd., Pittsburg, CA

December 2, 2020

Main Body Color:
163-D Khaki Shorts



Trim Color:
D21-6 Sadyhook





Color Board

125 E. Leland Rd., Pittsburg, CA

December 2, 2020

Roof Tile:

Eagle Roofing Products

Concrete Tile - 1634 Kings Canyon Blend

Profile: Golden Eagle

Weight: Conventional

Description:

Blend of Dark Green, Tan, Red and Black Streaks



Wainscot:

Daltile

SlimLite Slate & Quartzite

Natural Stone

Color: California Gold S700

24X24 Tiles



NOTICE OF INTENT

TO EXERCISE DESIGN REVIEW AUTHORITY DELEGATED TO STAFF PURSUANT TO PLANNING COMMISSION RESOLUTION NO. 9918

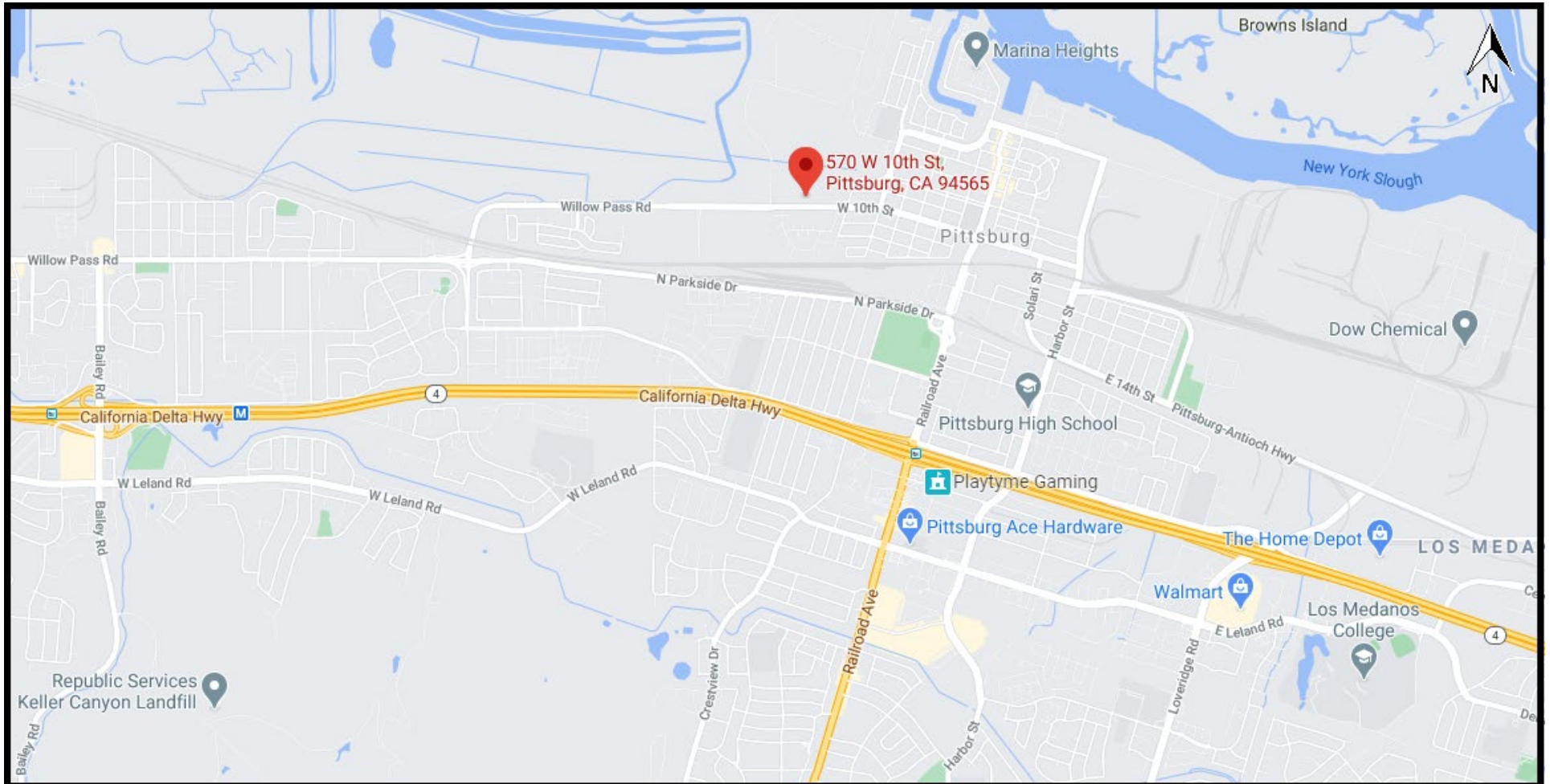
Trans Bay Cable Microwave Communications, AP-20-1550 (AD).

This is an application filed by Richard Van Horn, on behalf of Trans Bay Cable, requesting administrative design review approval to construct a 60-foot monopole for microwave communications, at 570 W. 10th Street in the CS-O (Service Commercial with Limited Overlay, City Council Ordinance No. 06-1277) District. Assessor's Parcel Number 085-270-018.

This project is delegated to staff under Category 8 Ancillary Structures (Structures in any district where visual impacts are minimal, including miscellaneous mechanical equipment associated with legal uses) of Planning Commission Resolution No. 9918.

Trans Bay Cable Microwave Communications – Vicinity Map

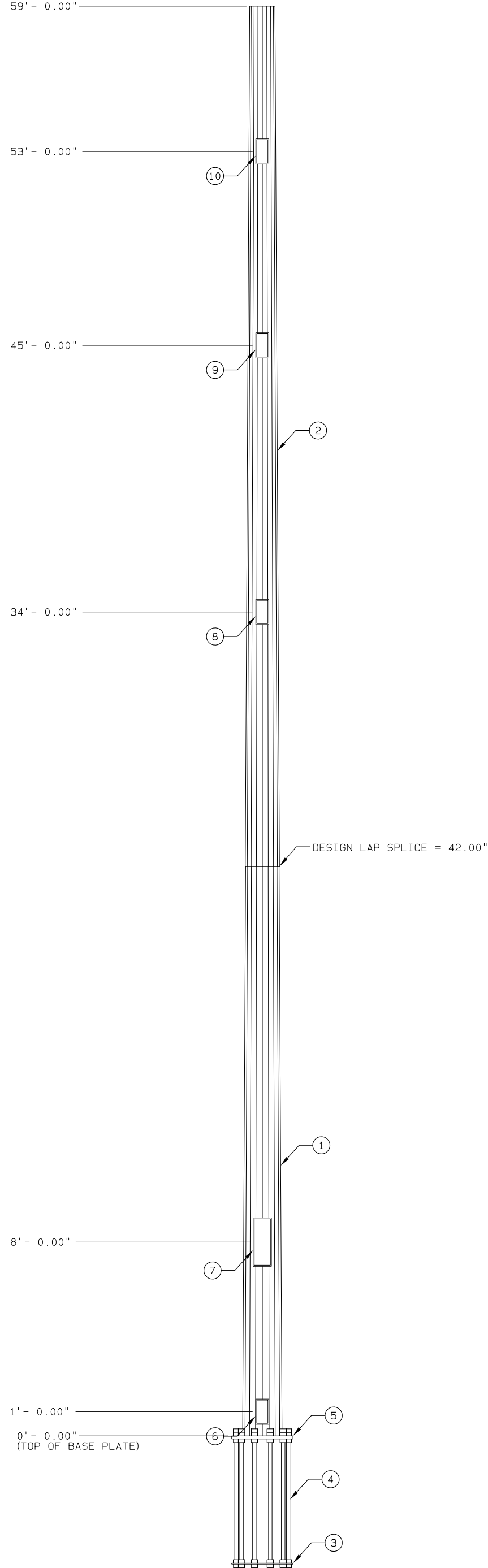
AP-20-1550	570 W. 10 th Street
Administrative Design Review	APN: 085-270-018



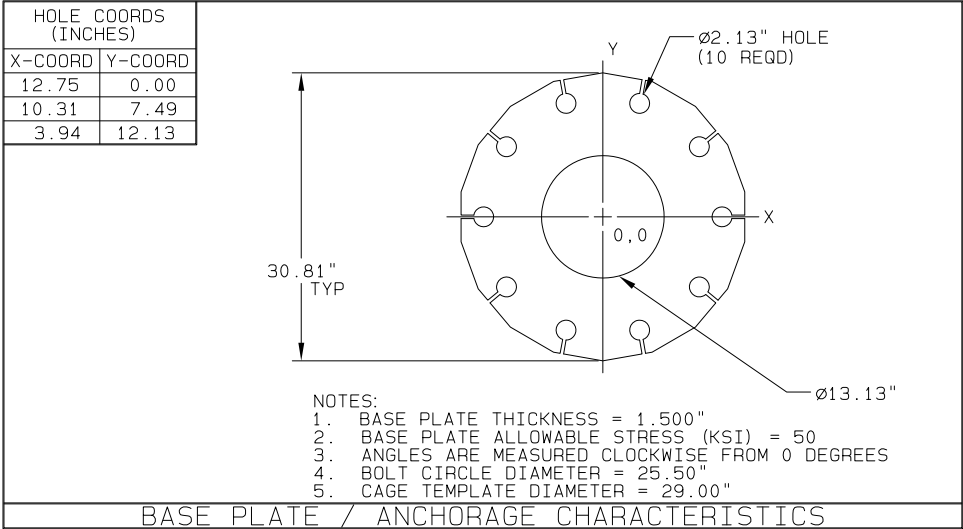
Trans Bay Cable Microwave Communications – Aerial Map

AP-20-1550	570 W. 10 th Street
Administrative Design Review	APN: 085-270-018





ITEM ID	NO. REQD	FEATURES	UNIT WEIGHT (LBS)	WEIGHT (LBS)
1	1	SECTION A VALMONT S-22 0.188" THK (A572 GR65)	957	957
2	1	SECTION B VALMONT S-22 0.188" THK (A572 GR65)	1,036	1,036
3	1	BOTTOM CAGE PLATE	49	49
4	10	1.75" ANCHOR BOLT, LENGTH=5.50' A615 GR75		
5	1	BASE PLATE VALMONT S-56 1.500" THK (A572 GR50)	188	188
	1	TOP CAGE PLATE (REMOVE BEFORE SETTING POLE)	67	67
	1	SAFETY CLIMBING CABLE (LENGTH = 49.00')	61	61
	3	GROUNDING LUG	2	6
		GALVANIZING	76	76
	63	STEP AND CLIP (VALMONT STANDARD)	1	63
6	1	HAND HOLE STD (6" x 12")	22	22
7	1	HAND HOLE HVY (9" x 24")	66	66
8	1	HAND HOLE STD (6" x 12")	22	22
9	1	HAND HOLE STD (6" x 12")	22	22
10	1	HAND HOLE STD (6" x 12")	11	11
	1	POLE CAP	10	10



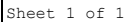
- NOTES:
1. FACTORED BASE REACTIONS.
MOMENT = 911 IN-KIPS
SHEAR = 2,103 #
VERTICAL = 2,987 #
 2. GALVANIZED PER ASTM A-123.
 3. DESIGN CRITERIA: ANSI/TIA 222-H
 4. THIS STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING LOADING:
EXPOSURE CATEGORY = C
TOPOGRAPHY CATEGORY = 1
RISK CATEGORY = 2
SITE ELEVATION = 7 FT
EARTHQUAKE SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS S_s = 1.82
EARTHQUAKE SPECTRAL RESPONSE ACCELERATION AT ONE SECOND S₁ = 0.62
EARTHQUAKE SITE CLASS = D
WIND LOAD CASES ARE BASED ON 3 SECOND GUST AND 700 YEAR MRI
A. CASE 1: WIND = 121 MPH WIND SPEED
B. CASE 2: WIND = 60 MPH WIND SPEED
C. CASE 3: SEISMIC
D. CASE 4: SEISMIC
E. EQUIPMENT
- | DESCRIPTION | ABP MTG HT. (FT) | ABP CENTROID HT. (FT) | WITHOUT ICE EPA WT (FT**2) | ICE WT (LBS) | WITH ICE EPA WT (FT**2) | ICE WT (LBS) |
|---------------------------|------------------|-----------------------|----------------------------|--------------|-------------------------|--------------|
| 1-1/2" X 4' LIGHTNING ROD | 59.00 | 61.00 | 0.20 | 14 | 0.20 | 14 |
| 1-2' SOLID DISH (11GHZ) | 56.00 | 56.00 | 6.19 | 143 | 6.19 | 143 |
| 1-2' SOLID DISH (11GHZ) | 54.00 | 54.00 | 6.19 | 143 | 6.19 | 143 |
5. FEEDLINES ARE PLACED INTERIOR TO POLE SHAFT (UNLESS NOTED OTHERWISE) .
 6. TOTAL POLE HEIGHT IS 60 FT AGL .
 7. ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE (APPROX. 1 FT AGL) .
 8. 18 SIDED SHAFT
 9. SAFFIR/SIMPSON CAT-2 HURRICANE WIND OF 110 MPH CONVERTED TO 121 MPH.
 10. POLE RATING: 23%

Jeffrey E Grassman

Digitally signed by Jeffrey E Grassman
Date: 2020.11.03 12:37:23 -08'00'



						A REV D	10/26/20 DATE	JVA REV B	HAND HOLE ADDED AT 45' ABP AND OTHER REVISIONS				
SECTION INFORMATION						DESCRIPTION							
ITEM ID	LENGTH	BASE OD	TOP OD	THK	MATL	ORDER 494226	PROJECT	FILE ID 494226-P1	SCALE NONE	DATE 10/26/20	ENGR JA70	valmont 	
1	27' - 0.00"	19.50"	16.13"	0.188"	A572 65 KSI	DESCRIPTION AVIAT NET 59.0' POLE, SITE: PITTSBURG - PITTSBURG, CA							
2	35' - 6.00"	16.94"	12.50"	0.188"	A572 65 KSI								





Planning Application

City of Pittsburgh, Community Development Department – Planning Division
65 Civic Avenue, Pittsburgh, CA 94565 | Tel: (925) 252-4920 | Fax: (925) 252-4814

TYPE OF APPLICATION REQUESTED:

- | | |
|---|---|
| ☐ UP Conditional Use Permit | ☐ ZA Zoning Administrator |
| ☐ DR Design Review | ☐ TRP Tree Removal Permit |
| ☒ ADR Design Review (Admin) | ☐ TA Temporary Activity |
| ☐ GP General Plan Amendment | ☐ PPR Preliminary Plan Review |
| ☐ RZ Rezoning (Includes PUD) | ☐ MM Minor Modification (wireless) |
| ☐ SUB Major Subdivision | ☐ SR Sign Review (Type: _____) |
| ☐ MS Minor Subdivision | |
| ☐ VA Variance | ☐ Other: _____ |

STAFF USE ONLY

Application Number: AP-20-1550 Date Filed: 12/22/20

PROJECT INFORMATION:

Project Name (Business/Development): Trans Bay Cable Microwave Communications Monopole.

Address/Location of Project: 570 W. 10th Street

Assessor's Parcel No(s): 085-270-018, 085-270-019 and 085-270-025.

Mapping Address (Latitude/Longitude): 38 01 49.41 N 121 53 48.20 W

Existing General Plan / Zoning Designations: Industrial – L39

Proposed General Plan / Zoning Designations: Industrial – L39

Existing Use: Power Substation

Proposed Use: Power Substation

Size of Existing Structure(s): 65 ft

Size of Proposed Additions / New Structure(s): 60 ft

Amount of New Impervious Surfaces (s.f. or acres)¹: 16 s.f.

Property Size (s.f. or acres): 5.60 AC No. of Existing Lots: 1 Proposed: 1

Days/Hours of Operation: 7/24

No. of Employees, Existing: 25 Proposed: 25

No. of On-Site Parking Stalls, Existing: 27 Proposed: 27

HCP Land Cover Type: N/A Cortese List: Yes ☐ No ☒

¹ If over 10,000 square feet, a stormwater control plan and related documents may be required per PMC §13.28.050(A)(2). Please contact Planning staff or refer to the Stormwater C.3 Guidebook available at www.cccleanwater.org/construction/nd.php for further guidance.

Proposed Project/Use Description:

(Attach additional sheets if necessary. For sign permits, include length x width x height dimensions, sign copy, colors, and length of building frontage.)

The Microwave System being deployed by Trans Bay Cable is part of an industry standard redundant data monitoring system for Trans Bay Cable, a Federally Regulated Public Utility. This system provides backup communication for the two substations located at Pittsburg and Potrero in the case of a system disruption to assure power security for the citizens in the Bay Area. This system is part of a public utility system, not part of the 5G deployment by commercial cellular carriers.

APPLICANT INFORMATION:

Applicant Name: Total Telco Specialist Primary Contact: Richard Van Horn
 E-Mail: rvanhorn@totaltelco.net Phone: 650-207-6124
 Mailing Address: 46750 Fremont Blvd. Suite 103 Fremont, CA 94538

Property Owner(s): Trans Bay Cable
 E-Mail: Mitchell.Boltz@Transbaycable.com Phone: 808-342-2714
 Mailing Address: 570 W. 10th St. P.O. Box 666 Pittsburg, CA 94565

Notarized Signature of Agent and/or Property Owner:

Agent (Attach Notary): _____ Date: _____
 Property owner/manager (attach notary):  Date: 15 DEC 2020

(If not property owner or manager, provide letter from property owner authorizing agent to sign application.)

SUBMITTAL REQUIREMENTS: (to be completed by the applicant)

- ☐ Consultation with Planning Division
- ☐ Completed Planning Application Form
- ☐ 2 sets (minimum) of Project Plans* + 1 electronic set on a flash drive or CD
- ☐ Correct Filing Fees (if paying by check, make payable to "City of Pittsburg")
- ☐ Anticipated Postage Fees for Public Notices (check with Planning Division if applicable)

*One full-sized and one reduced (8.5" x 11" or 11" x 17") required. Please review the Planning Application Submittal Checklist (separate handout) for details about what needs to be included on the project plans.

STAFF USE ONLY

TOTAL FEES PAID*: \$1200 Date Rec'd: 12/22/20 By: JOHN D.

*Attach Copy of Completed Planning Receipt Form or Developer Deposit Request

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

County of SAN JOAQUIN

Subscribed and sworn to (or affirmed) before me on this 15 day of DEC.

20 20, by MITCHELL LEE BOLTZ and

_____, proved to me on the basis of _____

UHL

DONALD H PARKER

UPSSG

DONALD H. PARKER
Comm. # 2282643
Notary Public - California
San Joaquin County
Comm Expires Mar. 24, 2023

PLANNING APPLICATION

containing 2 pages, and dated 12/15/2020

☐ Affiant(s) Thumbprint(s) ☐ Describe: _____

701.03

ZA

RESO

365

12-14-20

XP



City of Pittsburg

Community Development Department – Planning Division

65 Civic Avenue, Pittsburg, CA 94565 | Tel: (925) 252-4920 | Fax: (925) 252-4814

Date: 12/14/20

Dear Applicant:

SUBJECT: RESOLUTION No. 365

Enclosed is a copy of the resolution adopted by the Zoning Administrator. A copy of our Standard Conditions of Development is also included. Please read the enclosed documents and retain them for your files. All conditions of approval shall be incorporated into subsequent plan submittals and construction documents, where appropriate.

The enclosed resolution is valid for a limited period of time as specified in the resolution. Please make a note of the applicable expiration date and plan your construction timeline accordingly to avoid the loss of your entitlements.

If you have any questions about the enclosed resolution, please contact the Planning Division at the number listed above.

Sincerely,

Kristin Pollot, AICP
Planning Manager

Enclosures: (2)

Resolution No. 365
Standard Conditions of Development

BEFORE THE ZONING ADMINISTRATOR OF THE CITY OF PITTSBURG

In the Matter of:

Resolution Granting Design Review)
Approval of Revised Architectural Plans)
for Six House Plans to be Constructed on)
Lots in Unit 13 and Subsequent Units of)
the San Marco Development, for "San)
Marco Village E Model Homes, AP-20-)
1542 (AD).")

Resolution No. 365

The Zoning Administrator DOES RESOLVE as follows:

Section 1. Background

- A. On November 17, 2020, Josh Randles on behalf of Discovery Builders ('the developer'), filed Administrative Design Review Application No. 20-1542, requesting approval of six revised house plans, each with three unique elevations, to be added to the mix of houses to be built in the San Marco Development, commencing with Unit 13. The project site is zoned PD (Planned Development, Ordinance No. 12-1362) District. Assessor's Parcel Numbers: various.
- B. On January 19, 1993, the City Council held a duly noticed public hearing to consider the Final Subsequent Environmental Impact Report (FSEIR) and Rezoning Application No. Z-90-04 for the San Marco Development. At the close of the public hearing, the Council adopted Resolution 93-7888 certifying the FSEIR and adopting Findings of Fact and a Statement of Overriding Considerations for the San Marco Development. At the subsequent Council meeting on February 1, 1993, the Council adopted Ordinance 93-1057 approving Rezoning Application No. Z-90-04 and classifying the site of the San Marco Development to Planned Development (Ordinance No. 93-1057) District, and adopted Resolution 93-7889 approving the tentative map for the San Marco Development (Subdivision No. 7362).
- C. On January 21, 2003, the City Council held a duly noticed public hearing to consider an amendment to various Planned Developments in the City, including the San Marco PD-1057, which would increase the maximum allowable lot coverage standard for lots smaller than 8,000 square feet. On February 3, 2003, the City Council adopted Ordinance No. 03-1204 amending the maximum lot coverage standard accordingly.
- D. On August 7, 2006, the City Council held a duly noticed public hearing to consider a 2nd amendment to San Marco PD-1057, as amended by Ordinance

03-1204, that would modify the text of various provisions of the ordinance pertaining to parks in the San Marco Development. The amendment would also serve to clarify that development standards not specified in the PD ordinance were to be established by the respective resolutions of design review approval adopted by the Planning Commission or Zoning Administrator, as applicable. On August 21, 2006, the City Council adopted Ordinance No. 06-1270 amending the San Marco PD-1057 accordingly.

- E. On October 15, 2012, the City Council adopted Ordinance No. 12-1362 approving an amended development plan for San Marco for the purpose of transferring 176 units from townhouse Village 'O' located in the southwest quadrant of San Marco Boulevard and West Leland Road, to single-family Village 'A' (proposed 'Toscana' neighborhood) located in the northeast quadrant of San Marco Boulevard and West Leland Road.
- F. Conditions of approval of PD-1057, as amended, required specific design elements to be incorporated in the San Marco Development house plans. These design elements are identified in Ordinance No. 93-1057, as amended, and include a requirement for concrete tile roofs (Condition 6) and subdued colors that would integrate into the hillside landscape (Condition 7).
- G. On November 28, 2000, the Planning Commission adopted Resolution No. 9180 approving six floor plans, each with three unique exterior elevations, for houses to be built in Unit 1 (Serrano) of the San Marco Development. The developer continued to use these approved house plans and elevations in the construction of Unit 2 of the San Marco Development.
- H. On September 25, 2012, the Planning Commission adopted Resolution No. 9918, delegating certain types of design review projects to the Zoning Administrator. Section 7 (New Model Homes in Approved Subdivisions) of Planning Commission Resolution No. 9918 authorized the Zoning Administrator to consider design review applications for new model homes in approved subdivisions, provided that the new model homes conformed to the approved zoning development standards and were consistent with the general size, quality of architecture and materials, and general character of the originally approved models.
- I. On December 8, 2020, a Notice of Intent to exercise staff delegated authority for this project was included on the Planning Commission agenda.
- J. The proposed house plans and elevations are governed by the standards in Ordinance No. 93-1057, as amended, and with the City's adopted Design Review Guidelines (Planning Commission Resolution No. 9864) and the City's General Plan. Additional standards that the Zoning Administrator must use in determining whether to approve a design review application is listed in Pittsburg Municipal Code (PMC) section 18.36.220 (B).

- K. On December 15, 2020, the Zoning Administrator reviewed Administrative Design Review Application No. 20-1542.

Section 2. Findings

- A. Based on all the information contained in the Planning Division files on this project, incorporated here by reference and available for review in the Planning Division located at 65 Civic Avenue in Pittsburgh, and based on evidence presented to the Zoning Administrator on December 15, 2020, the Zoning Administrator finds that:
1. All recitals above are true and correct and are incorporated herein by reference.
 2. In accordance with the requirements of PMC 18.36.220 (B):
 - a. The proposed single-family houses comply with Conditions 6(b) and 7 of the development plan specified in Ordinance No. 93-1057, as amended, which designates the site for single-family development. In accordance with the PD Ordinance, each elevation of the proposed house models has tile concrete roofs (Condition 6(b)). Main colors proposed to be used on the houses' exteriors include shades of beige, brown and gray-green that can be found on other approved models in the San Marco Development. Beige tones that are proposed reflect the gold seen in grasses that grow in the hills in the dry months of the year (Condition 7).
 - b. The additional house plans and elevations conform with good taste and design in their appearance and in general contribute to the character and image of the City as a place of high quality, in that the houses would have architectural embellishment of side and rear elevations that abut and are visible from streets, in order to suggest the illusion that decorative details (such as window trims and wainscoting) are extended around all four elevations of the house (360 degree architecture). In order to give the appearance that proposed decorative shutters are functioning, elevations with the shutter detail should be adjusted so that each shutter is roughly half the width of the window to which it abuts (where shutters flank both sides of the window) or roughly equal to the width of the window (where only one shutter is placed alongside the window).
 - c. The additional floor plans and elevations have an exterior design and appearance that is not of inferior quality as to cause the nature of the neighborhood to materially depreciate in appearance and value, in that the plans indicate building materials and an

architectural style that are the same as those used on homes in the San Marco Development, and proposed earth-toned colors that are reflected in the surrounding hills.

- d. The additional floor plans and elevations are in harmony with proposed developments on land in the general area, in that they are of a design that is intended to be compatible with existing residential development in the vicinity by matching construction materials (stucco, stone veneer, shutters, flat and barrel tile roofs) and Mediterranean architectural elements with those used on other houses built in San Marco.
- e. The proposed house elevations are generally consistent with the City's adopted Development Review Design Guidelines (DRDGs) for single-family residential development. The exterior elevations include concrete tile roofs, grid-paned windows on select elevations, window trim on all elevations, roof slopes of 5:12 and 6:12, and two-car garages that will not occupy more than 60 percent of the width of the lots on which the plan will be built, consistent with DRDGs I.a, I.b, I.f and I.j. In an attempt to comply with DRDG I.a encouraging 360 degree architecture, the applicant has proposed window trim for side and rear elevations of each model, and has extended ledge details to all four sides of two-story houses. Proposed extension of decorative wainscoting details from the front around corners to the fence line also gives the impression that the detail extends around the whole house and reduces the impression that the veneer is just a façade detail.

Section 3. Decision

- A. Based on the findings set forth above, the Zoning Administrator hereby approves the project plans for Administrative Design Review Application No. 20-1542, for construction in Unit 13 and subsequent units of the San Marco Development, subject to the following conditions.

Design Review:

- 1. The homes shall be built in substantial conformity with the project plans, consisting of the master plotting plans, architectural drawings, materials and color board, and landscape architectural construction documents date-stamped November 17, 2020, and as shown on the attached Exhibit A, except as modified by the conditions below.
- 2. The houses shall be constructed in compliance with City Council Ordinance No. 93-1057, as amended by Ordinances Nos. 03-1204, 06-1270, and 12-1362, rezoning the property to PD District.

3. All houses constructed in San Marco Unit 13 (Village E) shall comply with the maximum lot coverage standards established by Ordinance 03-1204, and shall have the following minimum yard requirements, as summarized below:
 - a. **Maximum Lot Coverage:** 40 percent for all lots with 8,000 or more square feet; 50 percent for two-story houses built on lots with less than 8,000 square feet; and 55 percent for one-story houses built on lots with less than 8,000 square feet;
 - b. **Minimum Front Yard:** 15 feet between the front property line and nearest wall of the house, 10 feet between the front property line and any porches or architectural projections, and 18 feet between the garage door and the back of the sidewalk in front of the house;
 - c. **Minimum Side Yard:** 4 feet;
 - d. **Minimum Corner Side Yard:** 10 feet;
 - e. **Minimum Rear Yard:** 5 feet.
4. Prior to issuance of building permits for each home, the developer shall submit individual plot plans for each home. Plot plans shall be subject to review by the Planning and Engineering Divisions in order to ensure compliance with the development standards, regulations of this resolution, Ordinance No. 93-1057, as amended, and the City's standard specifications, including those for driveway grades. Except where specified in this resolution and Ordinance No. 93-1057, as amended, use and development regulations shall be the same as those of the RS-4 (Single-Family Residential) District.
5. The developer shall install, on each residence, minimum four-inch high block style numbers that contrast with the building façade for address identification. The numbers shall be in a color that is contrasting to the background surface to which they are adhered and shall be readily visible from the street. The construction drawings submitted for each house plan shall identify the location of the address box or number(s) on the house façade, along with a detail or keynote that describes how the house number will be illuminated or made identifiable from the street.
6. Prior to occupancy of the homes by residents, the developer shall complete installation of landscaping and automatic irrigation systems in street landscape areas and front and corner side yards of respective residential lots, in accordance with Article VII (Landscaping, Irrigation and Hydroseeding) of PMC Chapter 18.84 or other applicable water efficient

landscaping ordinance, subject to approval by the Planning and Engineering Divisions. The developer shall provide the irrigation system controller map, programming table, and annual maintenance schedules to new owners upon sale/transfer of ownership of the residential property from the developer to the buyer. Typical front yard landscaping shall include a minimum of one street tree and one smaller ornamental tree per lot, along with a combination of lawn, accent shrubbery and ground cover. If required landscaping is not completed prior to final inspection and occupancy, the developer shall post a bond to assure that the work is completed to the satisfaction of the City.

7. The developer shall provide estimated water use calculations to show compliance with the City's water efficient landscape ordinance.
8. The developer shall include, as part of the options package for buyers of single-family houses in the development, an option that includes installation of one or more rain barrels or similar rainwater harvesting system on the property, for purposes of non-edible plant irrigation.
9. The developer shall make available to potential buyers brochures or other written or graphic media that informs visitors and potential buyers about the principles of water-efficient landscapes, including but not limited to those principles that are described in PMC chapter 18.84, article VII.
10. The developer shall fence all rear and side yards of all residential parcels with board-on-board redwood fencing in conformance with the height and sight distance regulations of the Zoning Ordinance and subject to approval by the Planning Division, except where such rear or side yard is enclosed by a masonry subdivision wall. View fences may be installed in lieu of board-on-board fencing in order to preserve views, but must be approved by the Planning Division prior to installation. Barbed wire fencing is prohibited.
11. Garage doors installed on each residential unit shall be equipped with automatic openers.
12. Air conditioning units shall be placed along the wall in the rear or side yards with a minimum of three feet unobstructed access around the unit, except that one side of the unit may have less than a three-foot separation between the unit and a wall of the house.
13. No more than two of the same model homes shall be adjacent to one another. No two homes of the same model shall be constructed directly across the street from a third house of the same model.

14. No two of the same models that are adjacent to one another or located directly across the street from one another shall have the same elevation or color scheme.
15. Decorative attic vents shall be painted in the contrasting trim or accent color.
16. Roof vents shall be painted the same color as roofing material to which they are adjacent. Downspouts, side vents, attached utility boxes and hose bibs shall be painted the same color or colors as the surface or surfaces to which they are adjacent.
17. Each decorative shutter installed on the houses shall be approximately equal to the width of the window to which it is adjacent (for single shutters), or at least half the width of the window to which it is adjacent (where two shutters flank either side of the window), in order to appear as a functioning, closeable shutter.
18. The model and elevations approved by this resolution may be constructed in future phases of the San Marco Development, subject to the conditions of this resolution.

Engineering Conditions:

19. The developer shall provide appropriate wind erosion control in addition to site erosion and sedimentation controls as required in the project Storm Water Pollution Prevention Plan. The developer shall apply water or other dust palliatives to prevent or minimize dust nuisance.
20. All public and pedestrian facilities shall be designed in accordance with Title 24, Handicap Access, and the California Department of State Architect's standards for accessibility compliance. Residential driveway approaches are to be constructed in accordance with City standard detail R-2.
21. The developer shall pay the City of Pittsburg Facilities Reserve Charge (PMC Chapters 13.08, 13.12 and 13.24) (the "FRC") for water and sewer service in the amounts in effect when the applicant obtains a building permit. The developer understands that the current water FRC is described in the fee schedule approved by Resolution No. 12-11778, effective April 21, 2012, a copy of which is available at the City. The water and sewer FRCs shall be paid prior to the issuance of a building permit. If there is a conflict with the requested fees in this condition and the agreed upon fee schedule in the San Marco Development Agreement, the terms of the Development Agreement shall govern.

22. The developer shall pay the Regional Transportation-Development Impact Mitigation Fee (PMC Chapter 15.103) (the "RTDIM") amount in effect when the applicant obtains a building permit. The RTDIM will be automatically increased or decreased on January 1 of each year based on the percent change in the Engineering News-Record Construction Costs Index – San Francisco Bay Area, between September 1 and September 1 of the preceding two calendar years.
23. The developer shall continue to incorporate best management practices during the construction phase of the homes, in accordance with the SWPPP submitted to the Regional Water Quality Control Board.
24. The developer shall incorporate long-term best management practices (BMP's) for the reduction or elimination of storm water pollutants. The project design shall incorporate wherever feasible, the following long term BMPs to limit pollutant generation, discharge, and runoff. Such source control design measures may include:
 - a. Incorporating landscaping that minimizes irrigation and runoff, promotes surface infiltration where possible, minimizes the use of pesticides and fertilizers, and incorporates appropriate sustainable landscaping practices;
 - b. Use pavers for walkways and other appropriate hardscape surfaces as an option to buyers to minimize impervious areas;
 - c. Minimizing the amount of directly connected impervious surface area;
 - d. Marking of all storm drains with "No Dumping, Drains to Delta" permanent markings; and
 - e. Constructing concrete driveway weakened plane joints at angles to assist in directing run-off to landscaped/pervious areas prior to entering the street curb and gutter.

Standard Conditions:

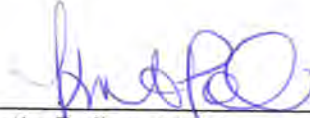
25. The Standard Conditions of Development as adopted by the Pittsburg Planning Commission by Resolution No. 8931 shall apply as conditions of approval of this project, as applicable. Where there is a conflict between Planning Commission Resolution No. 8931 and the conditions identified herein, the specific conditions of this resolution shall apply. If there are any conflicts between this specific Resolution, Resolution No. 8931 and the agreed upon terms of the San Marco Development Agreement, the terms of the Development Agreement shall apply.

26. The developer shall comply with all the requirements of the City's Community Development Department, Contra Costa County Fire Protection District, and all other applicable local, state and federal agencies. It is the responsibility of the developer to contact each local, state, or federal agency for requirements that may apply to this project.
27. Developer agrees to indemnify, defend, and hold harmless the City, its officials, officers, employees, agents and consultants from any and all administrative, legal or equitable actions or other proceedings instituted by any person challenging the validity of this project approval, subsequent project approval, or other action arising out of, or in connection with, this project approval. The parties shall cooperate in defending such action or proceeding. The parties shall use reasonable efforts to select mutually agreeable defense counsel but, if the parties cannot reach agreement, City may select its own legal counsel at applicant's sole cost and expense. Developer may select its own legal counsel to represent developer's interests at developer's sole cost and expense. Developer shall pay for City's costs of defense, whether directly or by timely reimbursement to City on a monthly basis. Such costs shall include, but not be limited to, all court costs and attorneys' fees expended by City in defense of any such action or other proceeding, plus staff and City Attorney time spent responding to and defending the claim, action or proceeding.
28. The conditions of approval set forth herein include certain fees, dedication requirements, reservation requirements and other exactions. Pursuant to Government Code § 66020 (d)(1), these conditions constitute written notice of a statement of the amount of such fees, and a description of the dedications, reservations and other exactions. The developer is hereby notified the 90-day approval period in which you (the developer) may protest these existing fees, dedications, reservations and exactions, pursuant to Government Code § 66020 (a) has begun. If you (the developer) fail to protest within this 90-day period by complying with all of the requirements of § 66020, you (the developer) will be legally barred from later challenging such exactions.
29. This approval will expire on December 15th, 2022, unless a building permit or grading permit has been issued for the model approved by this resolution, or a written request for extension of this approval is filed with the Planning Division prior to the expiration date and is subsequently approved by the Zoning Administrator. The approval shall be valid for no more than six months from the date of permit issuance, unless work is commenced and diligently pursued prior to the expiration of the permit.

Section 4. Effective Date

This resolution shall take effect immediately upon adoption of this resolution.

The foregoing resolution was passed and adopted the 15th day of December 2020, by the Zoning Administrator of the City of Pittsburg, California.



Kristin Pollot, AICP
ZONING ADMINISTRATOR

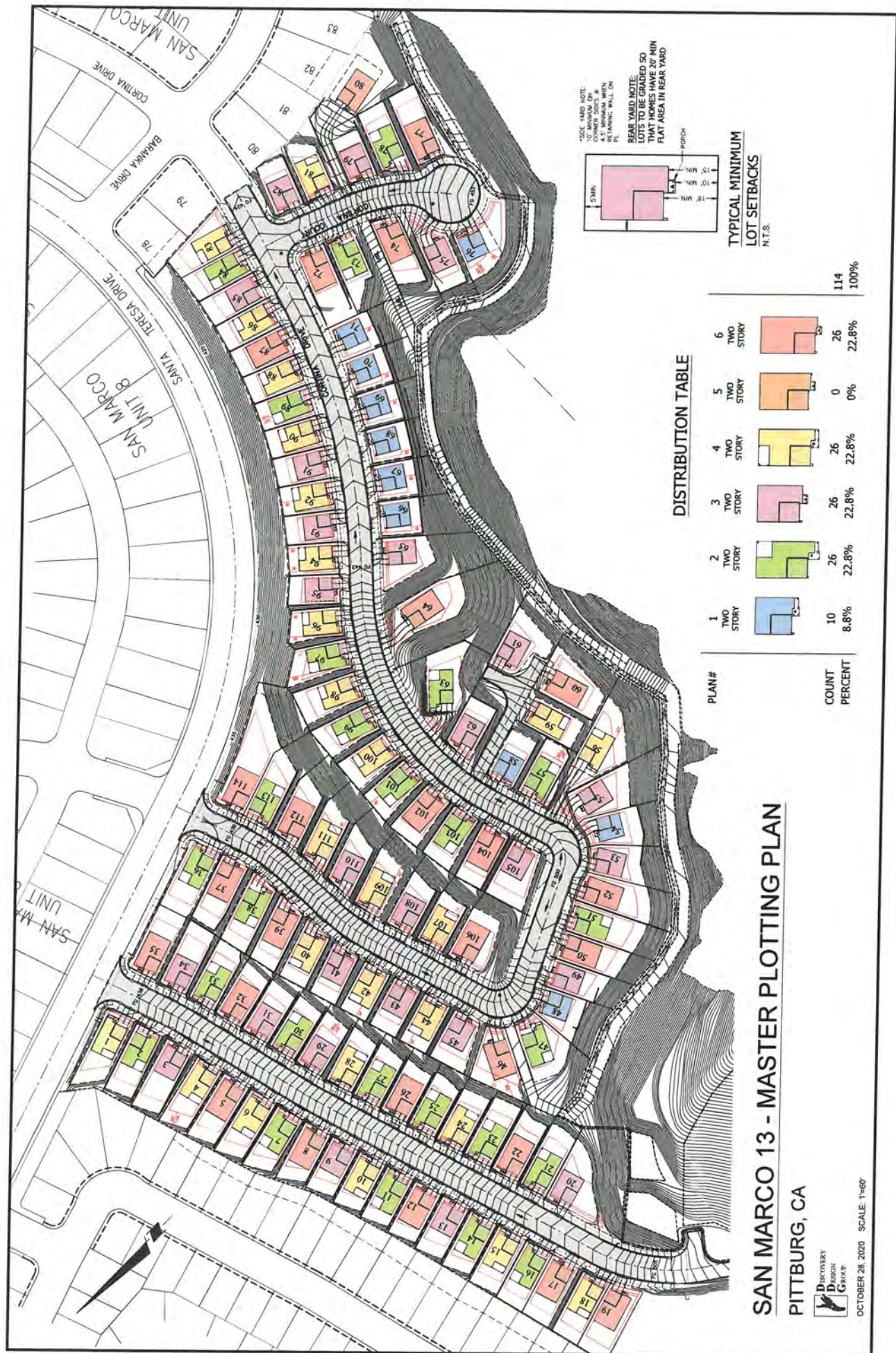


SAN MARCO UNIT 13

PITTSBURG, CA

DISCOVERY
DESIGN
GROUP
Discovery Builders Inc.
Date 11/05/2020

ZA RPSO-305 -
"EXHIBIT A"



SAN MARCO 13 - MASTER PLOTTING PLAN PITTSBURG, CA



OCTOBER 28, 2020 SCALE: 1"=60'

MATERIAL LEGEND

- A** VILLA CONCRETE TILE ROOFING
HIP & GABLE END ROOFS
STUCCO BODY
STUCCO TRIM
MCK TILE VENTS
SIMULATED BRICK VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES
- B** FLAT CONCRETE TILE ROOFING
HIP ROOFS
STUCCO BODY
STUCCO TRIM
MCK SHUTTERS
SIMULATED STONE VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES
- C** FLAT CONCRETE TILE ROOFING
HIP & GABLE END ROOFS
STUCCO BODY
STUCCO TRIM
MCK VENTS
MCK SHUTTERS
SIMULATED STONE VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES



Elevation A - Scheme #1



Elevation B - Scheme #10



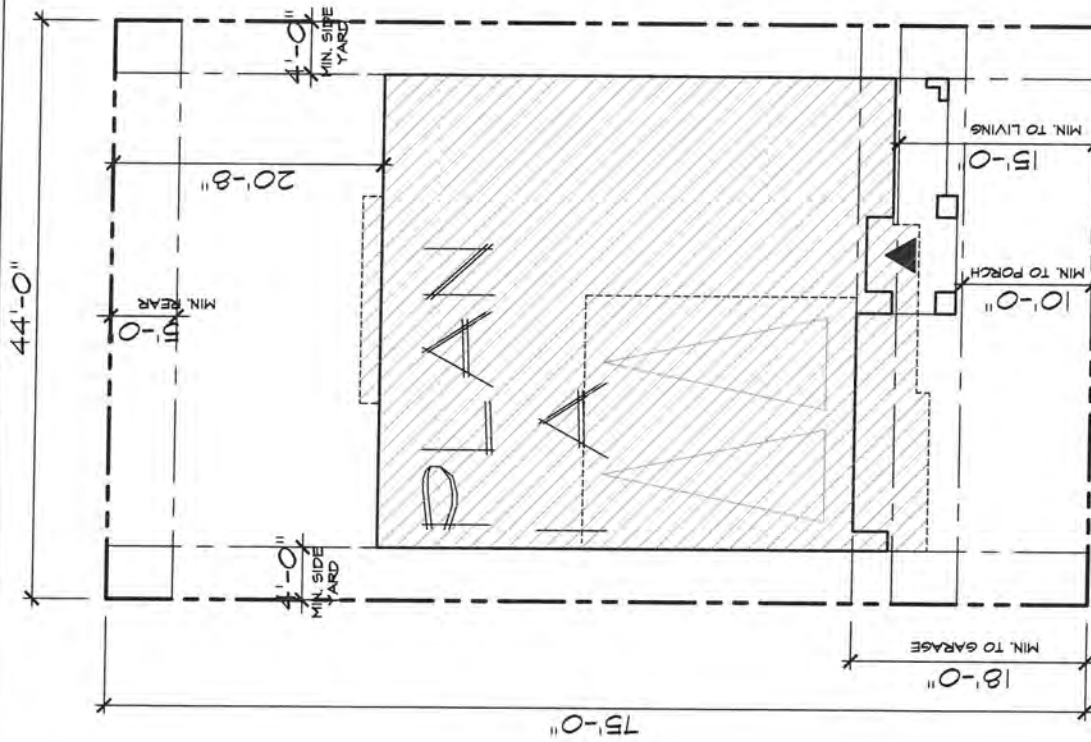
Elevation C - Scheme #8

Plan 1

Front Elevations
SAN MARCO
UNIT 13
PITTSBURG, CA



Discovery
Design
Group
Discovery Builders Inc.
Date 11/05/2020



SECOND FLOOR

City of Pittsburgh MINIMUM REQUIREMENTS	
FRONT SETBACK - TO LIVING	15' MIN.
FRONT SETBACK - TO GARAGE	10' MIN.
SIDE YARD - SETBACK	4' MIN.
CORNER SIDE YARD - SETBACK	10' MIN.
REAR YARD - SETBACK	5' MIN.
PORCH SETBACK -	10' MIN.
LOT SIZE -	2,900 SQ. FT.
MAX COVERAGE - 2-STORY	50%

Plan 1 Site Plan

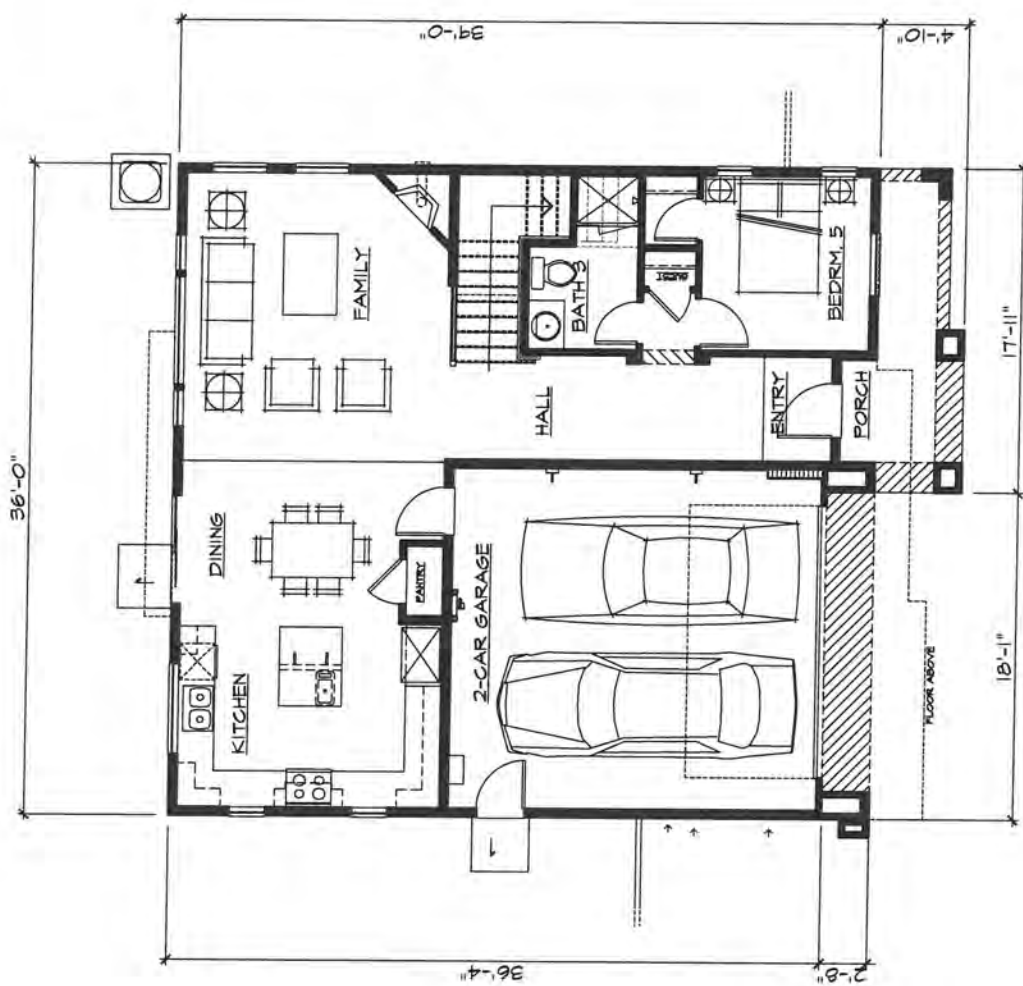


**SAN MARCO
UNIT 13**
PITTSBURGH, CA



Discovery Builders Inc.
Date 11/05/2020

LOT COVERAGE	
TYPICAL LOT SIZES	FOOTPRINT
44' x 75' = 3,300 SQ. FT.	1,430 SQ. FT.
COVERAGE	
BACKYARD	20'-8"
43%	

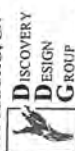


Plan 1 **First Floor Plan**

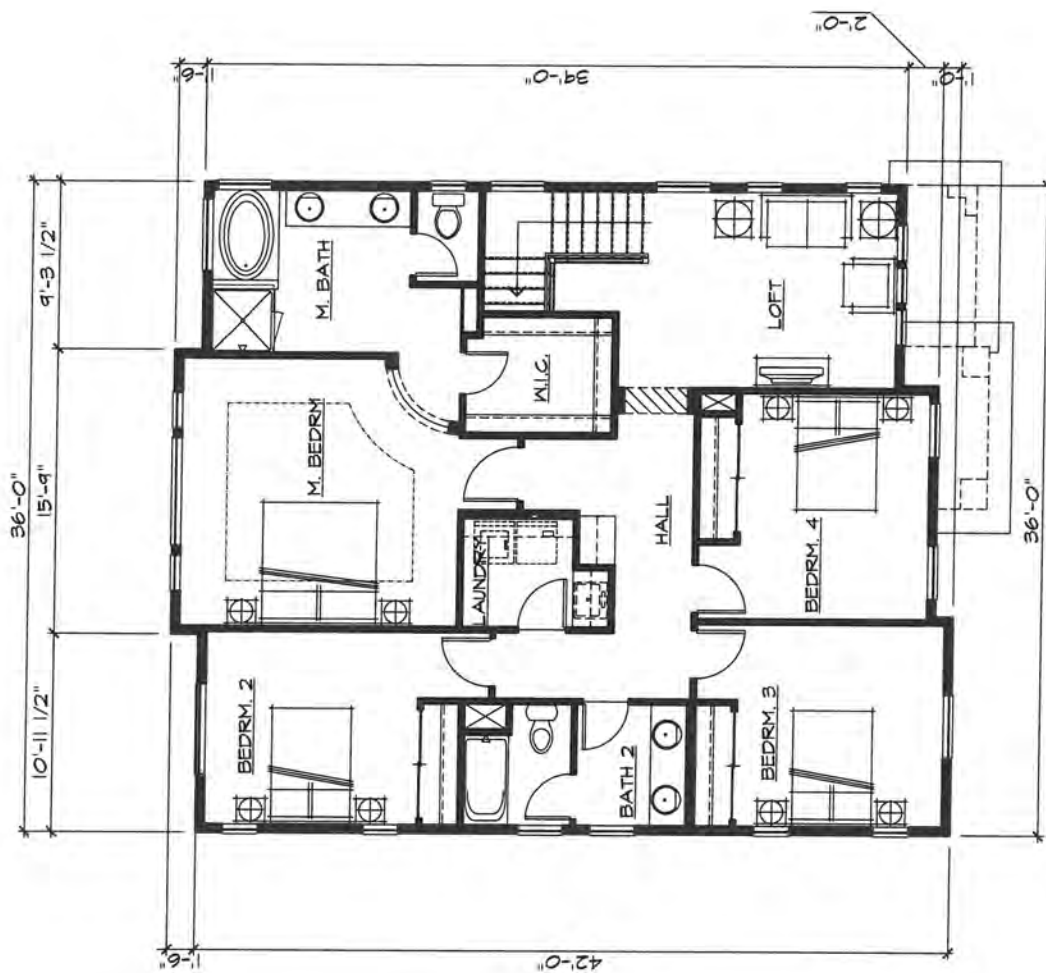
SQUARE FOOTAGE	
FIRST FLOOR	940 SF
SECOND FLOOR	1446 SF
TOTAL LIVING AREA	2387 SF
GARAGE	400 SF
PORCH	90 SF
FOOTPRINT	1430 SF



SAN MARCO
UNIT 13
PITTSBURG, CA

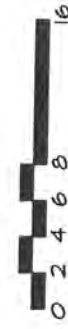


Discovery Builders Inc.
Date 11/05/2020



Plan 1 **Second Floor Plan**

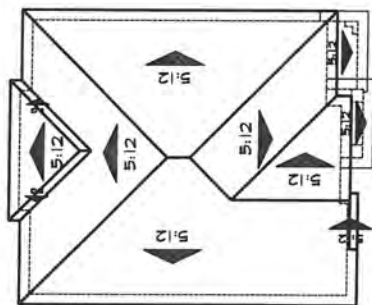
SQUARE FOOTAGE	
FIRST FLOOR	940 SF
SECOND FLOOR	1446 SF
TOTAL LIVING AREA	2387 SF
GARAGE	400 SF
PORCH	90 SF
FOOTPRINT	1430 SF



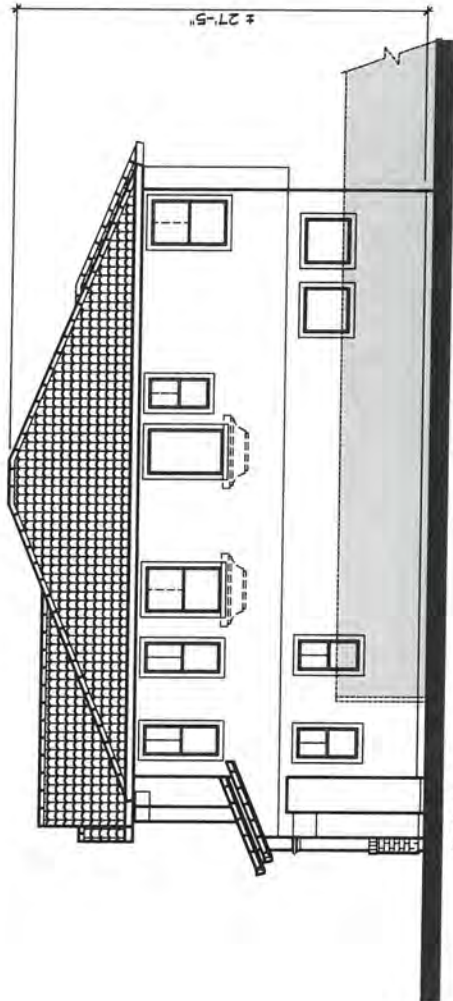
SAN MARCO
UNIT 13
PITTSBURG, CA



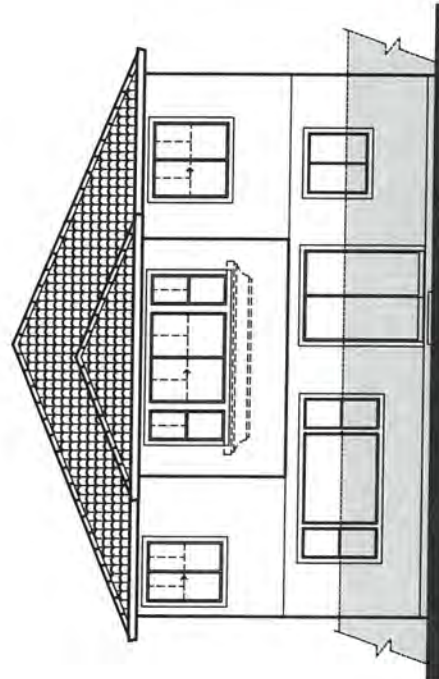
Discovery Builders Inc.
Date 11/05/2020



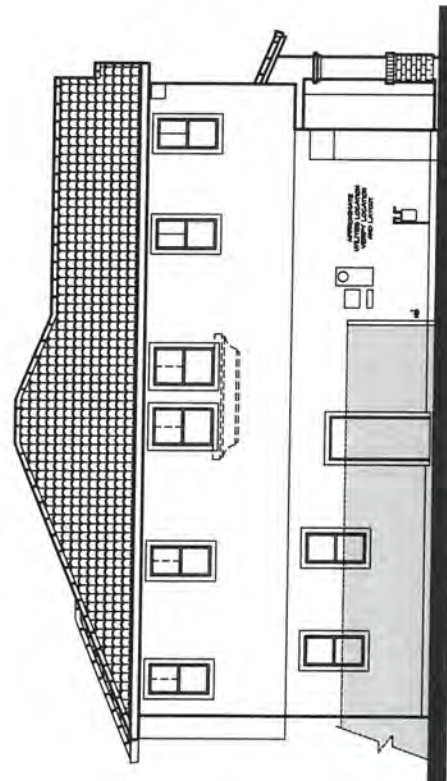
Roof Plan 'A'



Right



Rear



Left

**Plan 1
Elevations - 'A'**

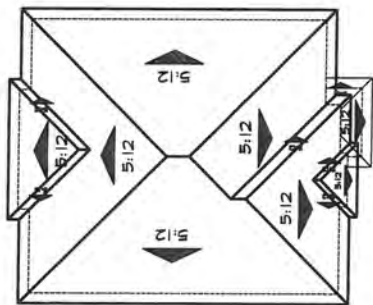


**SAN MARCO
UNIT 13**
PITTSBURG, CA

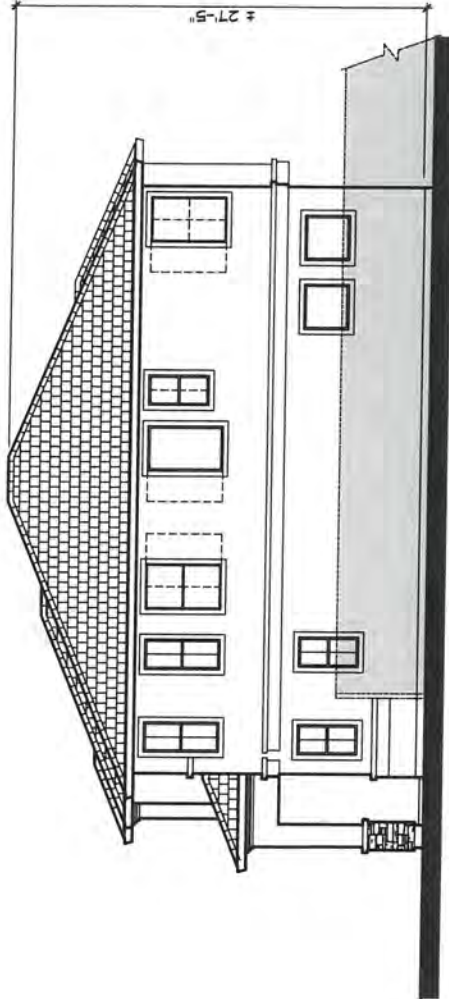


**Discovery
Design
Group**
Discovery Builders Inc.
Date 11/05/2020

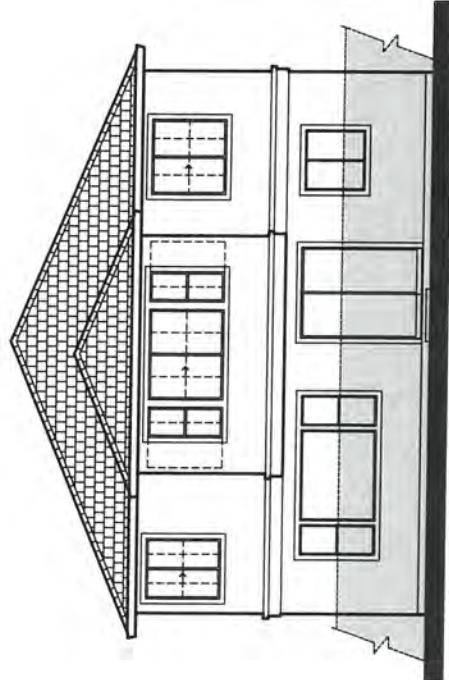
DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.



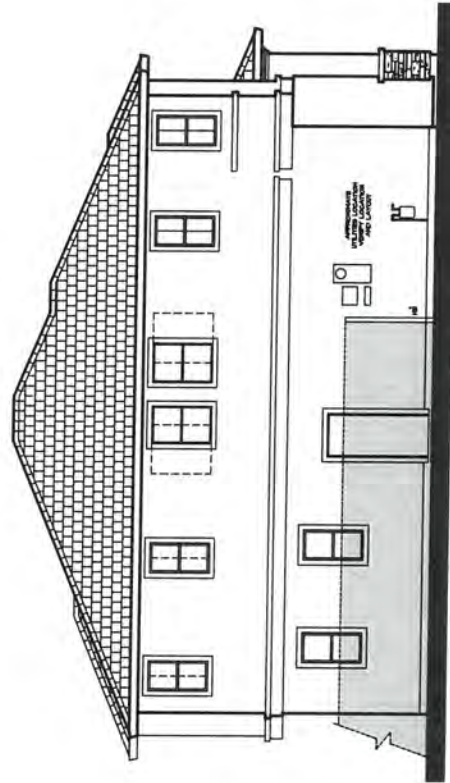
Roof Plan 'B'



Right



Rear



Left

**Plan 1
Elevations - 'B'**

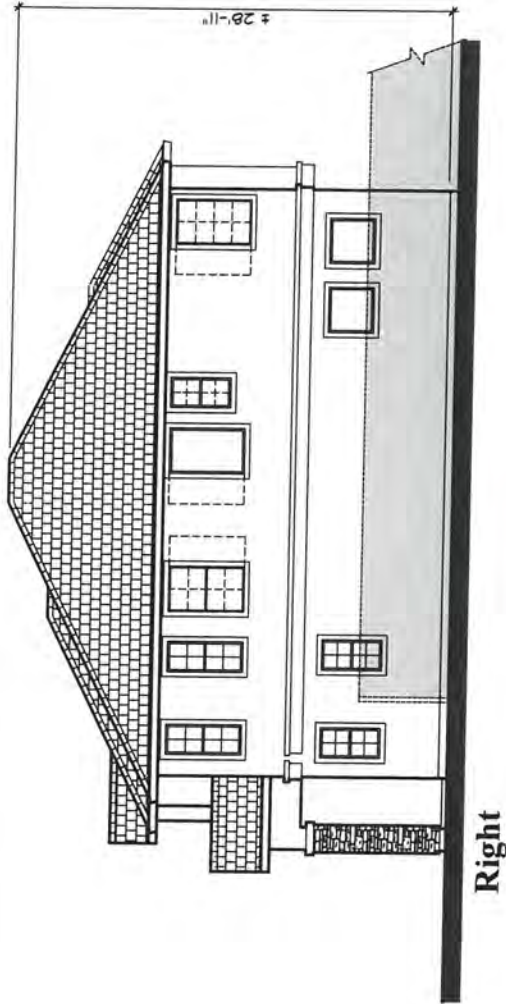


**SAN MARCO
UNIT 13**
PITTSBURG, CA

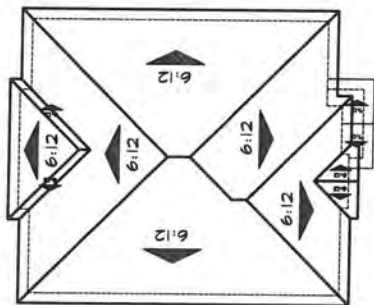


Discovery Builders Inc.
Date 11/05/2020

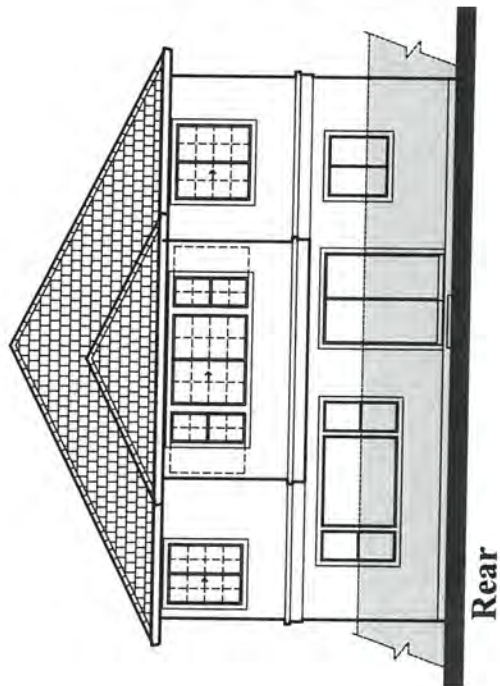
DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.



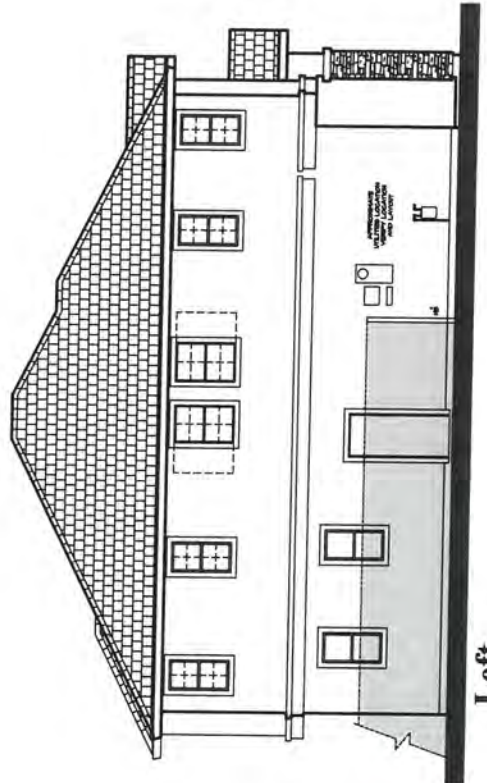
Right



Roof Plan 'C'



Rear



Left

Plan 1
Elevations - 'C'



SAN MARCO
UNIT 13
PITTSBURG, CA



Discovery Builders Inc.
Date 11/05/2020

DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.

MATERIAL LEGEND

- A** VILLA: CONCRETE TILE ROOFING
HIP & GABLE END ROOFS
STUCCO BODY
STUCCO TRIM
SIMULATED BRICK VENEER
MOCK TILE VENTS
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES
- B** FLAT CONCRETE TILE ROOFING
HIP ROOFS
STUCCO BODY
STUCCO TRIM
MOCK SHUTTERS
SIMULATED STONE VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES
- C** FLAT CONCRETE TILE ROOFING
HIP & GABLE END ROOFS
STUCCO BODY
STUCCO TRIM
MOCK VENTS
MOCK SHUTTERS
SIMULATED STONE VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES



Elevation A - Scheme #3

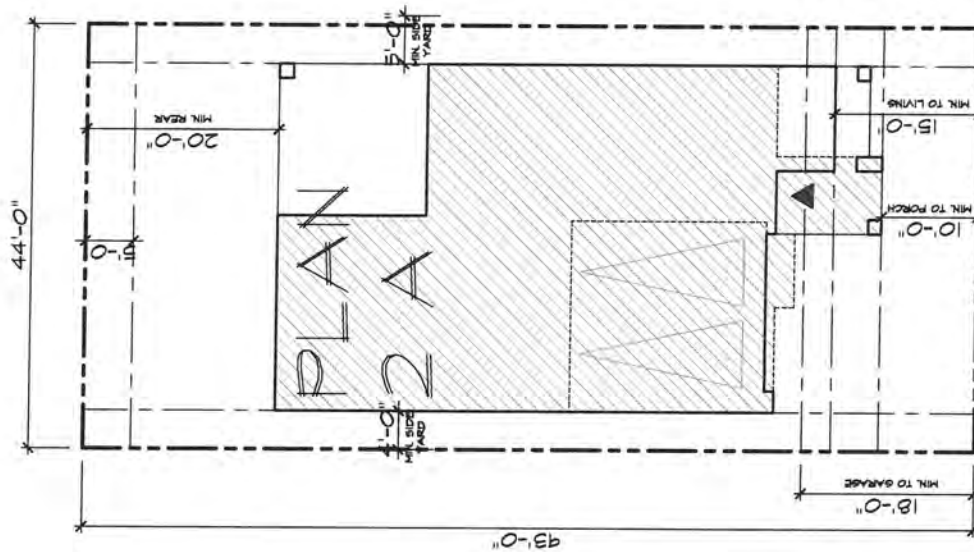


Elevation B - Scheme #6



Elevation C - Scheme #11

Plan 2
Front Elevations
SAN MARCO
UNIT 13
 PITTSBURGH, CA
 DISCOVERY
 DESIGN
 GROUP
 Discovery Builders Inc.
 Date 11/05/2020



TYPICAL LOT SIZES	LOT COVERAGE		
	FOOTPRINT	COVER	BACKYARD
44' x 93' = 4092 SQ. FT.	2032 SQ. FT.	50%	20'-0"

City of Pittsburgh MINIMUM REQUIREMENTS	
FRONT SETBACK - TO LIVING	15' MIN.
FRONT SETBACK - TO GARAGE	18' MIN.
SIDE YARD - SETBACK	4' MIN.
CORNER SIDE YARD - SETBACK	10' MIN.
REAR YARD - SETBACK	5' MIN.
PORCH SETBACK - LOT SIZE -	10' MIN. 2900 SQ. FT.
MAX COVERAGE - 2-STORY	50%

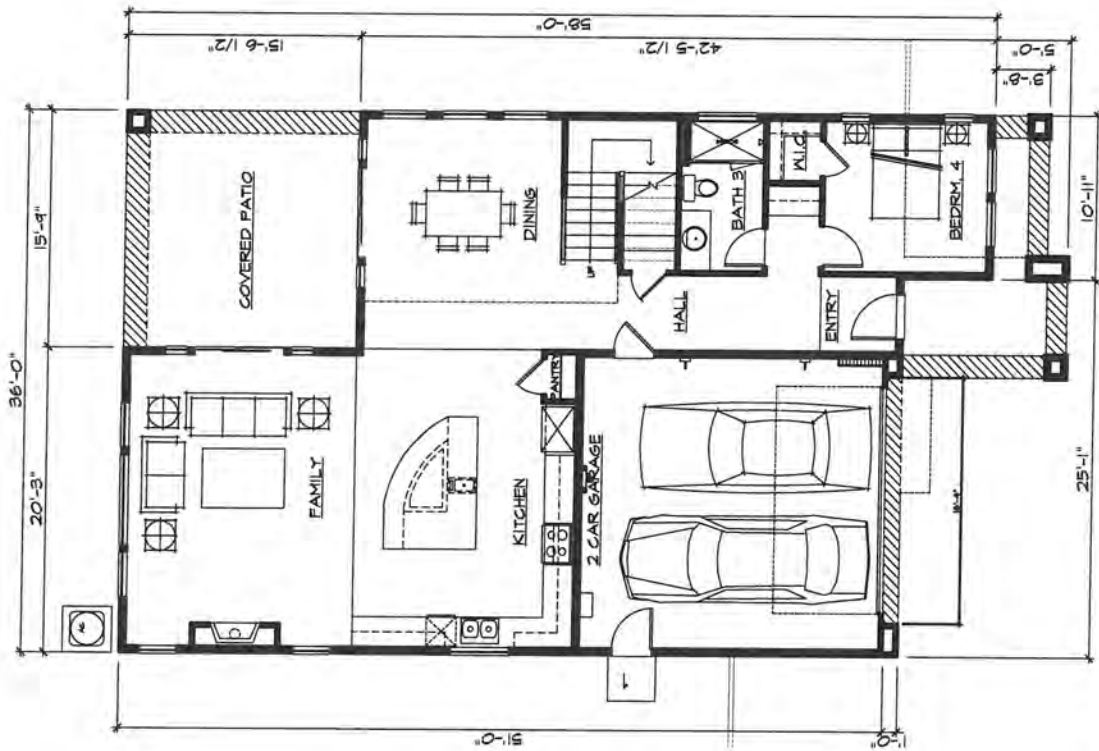
Plan 2 Site Plan



**SAN MARCO
UNIT 13**
PITTSBURGH, CA



Discovery Builders Inc.
Date 11/05/2020



Plan 2 First Floor Plan

SQUARE FOOTAGE	
FIRST FLOOR	1271 SF
SECOND FLOOR	1408 SF
TOTAL LIVING AREA	2679 SF
GARAGE	402 SF
PORCH	114 SF
COVERED PATIO	402 SF
FOOTPRINT	2092 SF



SAN MARCO
UNIT 13
PITTSBURG, CA



Discovery Builders Inc.
Date 11/05/2020

Plan 2 Second Floor Plan

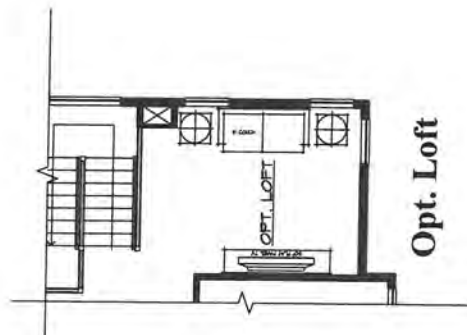
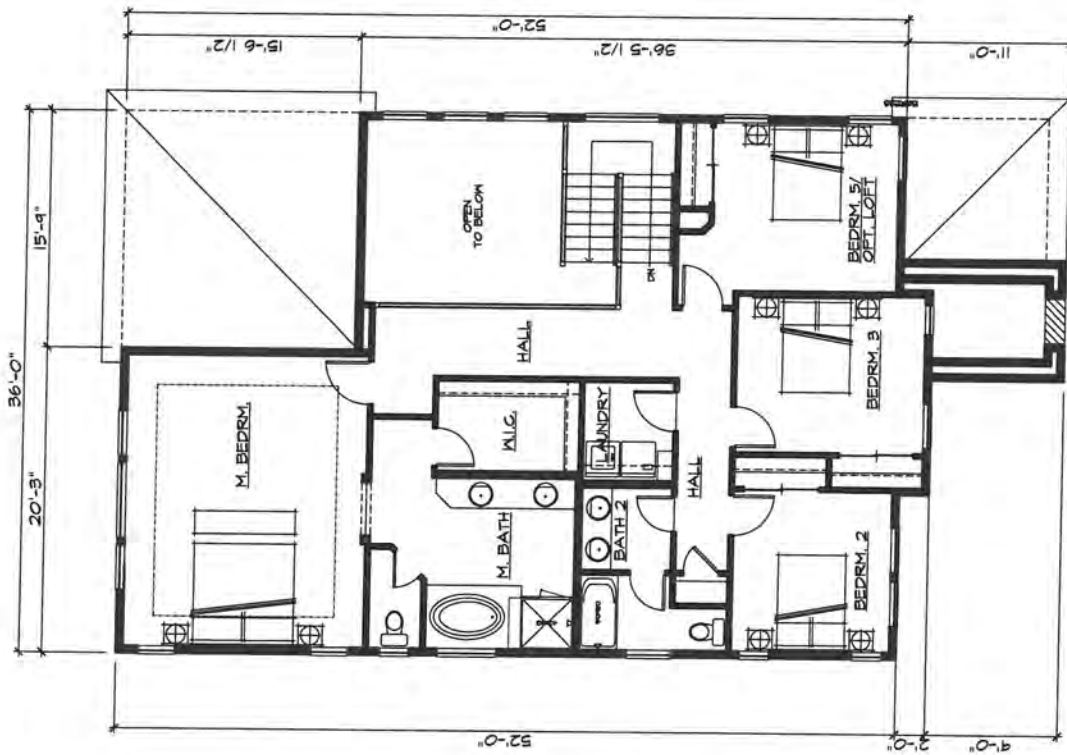
SQUARE FOOTAGE	
FIRST FLOOR	1271 SF
SECOND FLOOR	1408 SF
TOTAL LIVING AREA	2679 SF
GARAGE	402 SF
PORCH	114 SF
COVERED PATIO	402 SF
FOOTPRINT	2032 SF

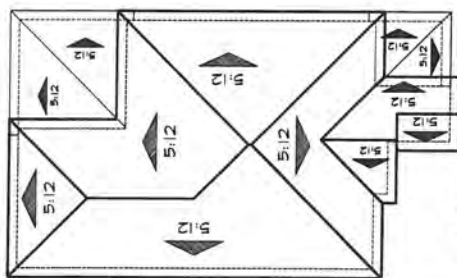


SAN MARCO
UNIT 13
PITTSBURG, CA

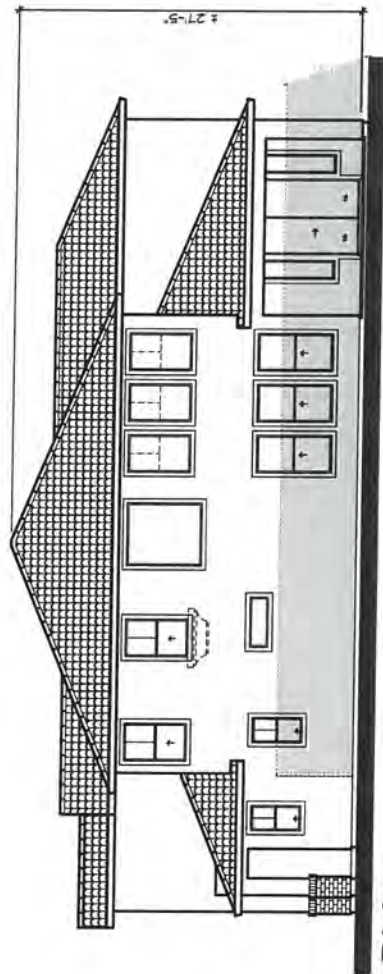


Discovery Builders Inc.
Date 11/05/2020

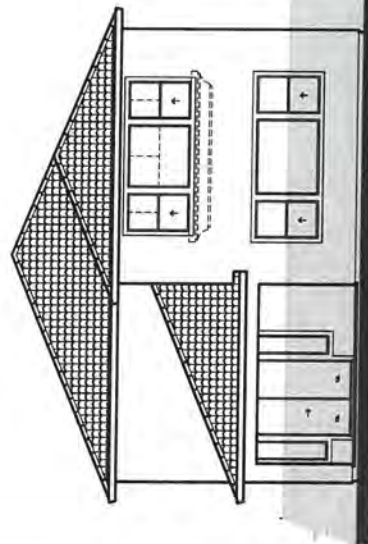




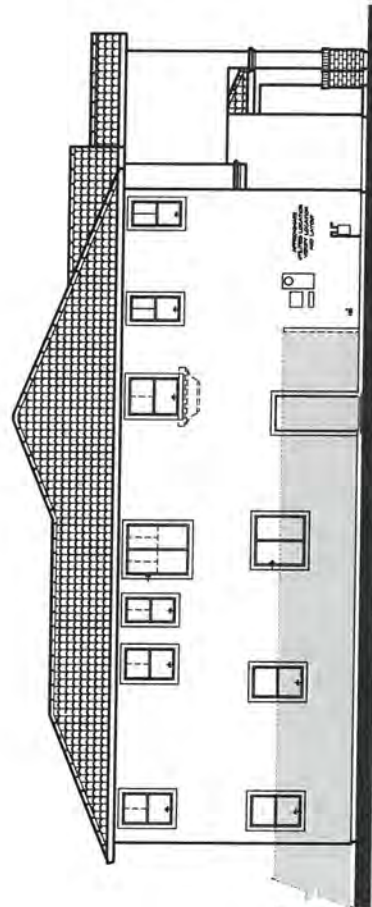
Roof Plan 'A'



Right



Rear



Left

**Plan 2
Elevations - 'A'**

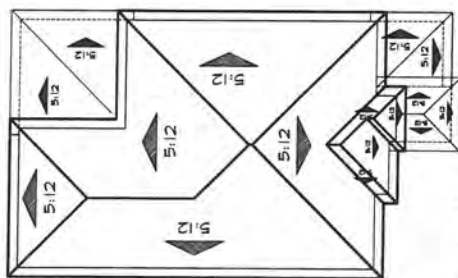


**SAN MARCO
UNIT 13**
PITTSBURG, CA

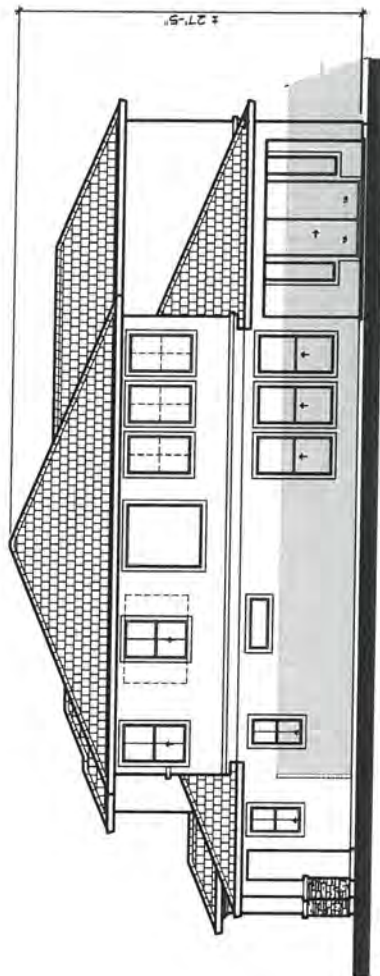


Discovery Builders Inc.
Date 11/05/2020

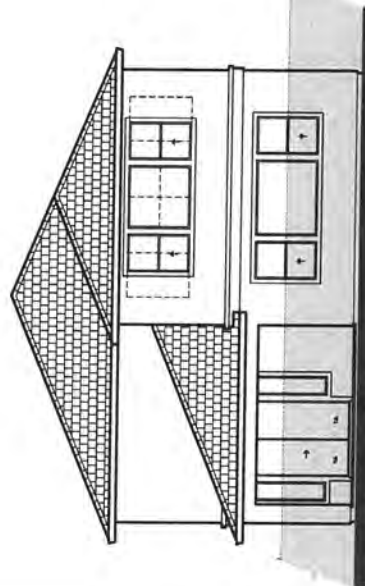
DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.



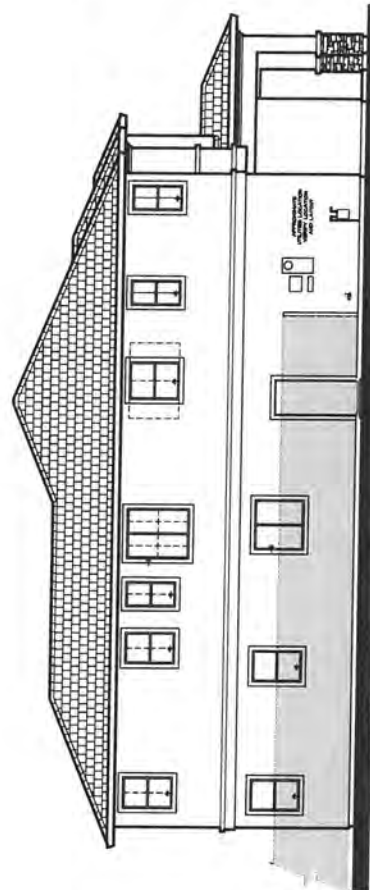
Roof Plan 'B'



Right

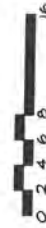


Rear



Left

**Plan 2
Elevations - 'B'**

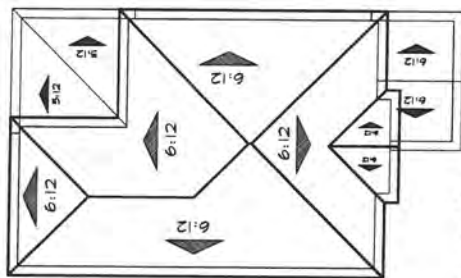


**SAN MARCO
UNIT 13**
PITTSBURG, CA

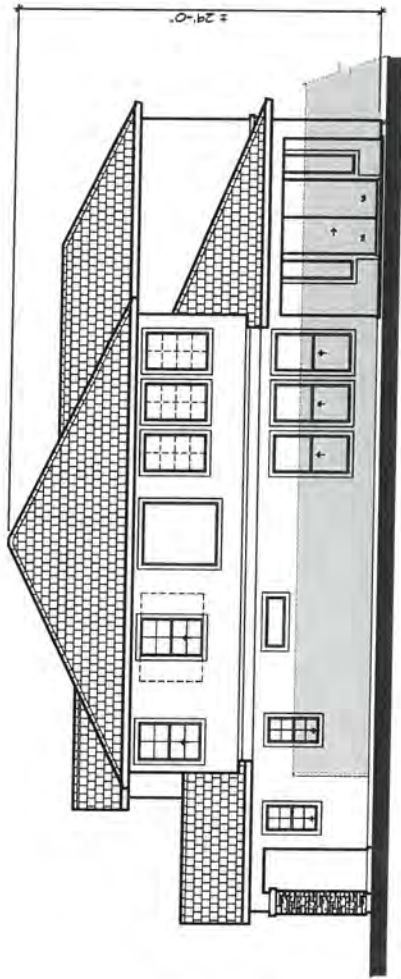


Discovery Builders Inc.
Date 11/05/2020

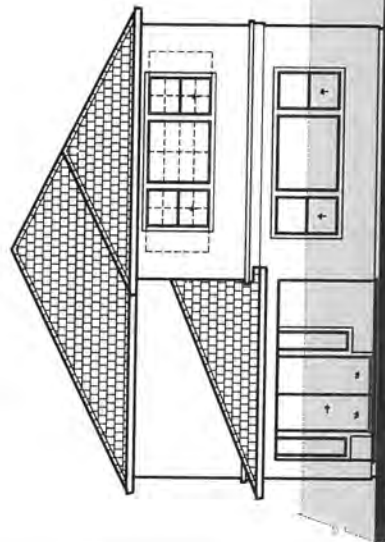
DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.



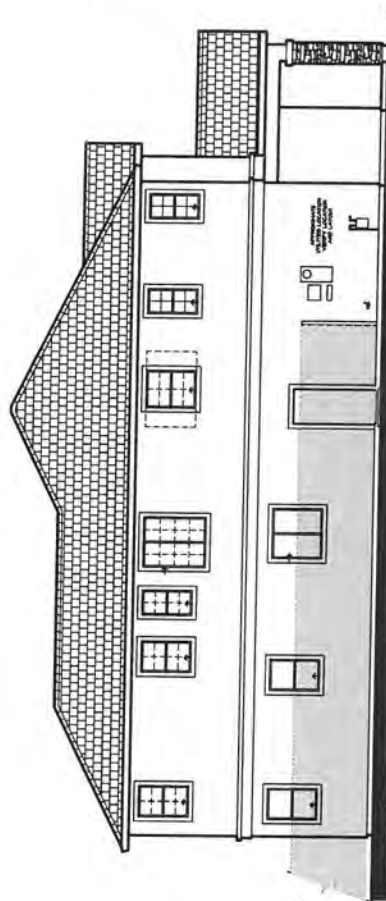
Roof Plan 'C'



Right



Rear



Left


 DENOTES WINDOW GRIDS AND
 SHUTTERS AT SIDE ELEVATIONS
 FACING STREETS.

**Plan 2
Elevations - 'C'**



**SAN MARCO
UNIT 13**
PITTSBURG, CA



Discovery Builders Inc.
Date 11/05/2020

MATERIAL LEGEND

- A** VILLA CONCRETE TILE ROOFING
HIP & GABLE END ROOFS
STUCCO BODY
STUCCO TRIM
SIMULATED BRICK VENEER
MOCK TILE VENTS
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES
- B** FLAT CONCRETE TILE ROOFING
HIP ROOFS
STUCCO BODY
STUCCO TRIM
MOCK SHUTTERS
SIMULATED STONE VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES
- C** FLAT CONCRETE TILE ROOFING
HIP & GABLE END ROOFS
STUCCO BODY
STUCCO TRIM
STUCCO/FOAM CORBELS
MOCK VENTS
MOCK SHUTTERS
SIMULATED STONE VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES



Elevation A - Scheme #4

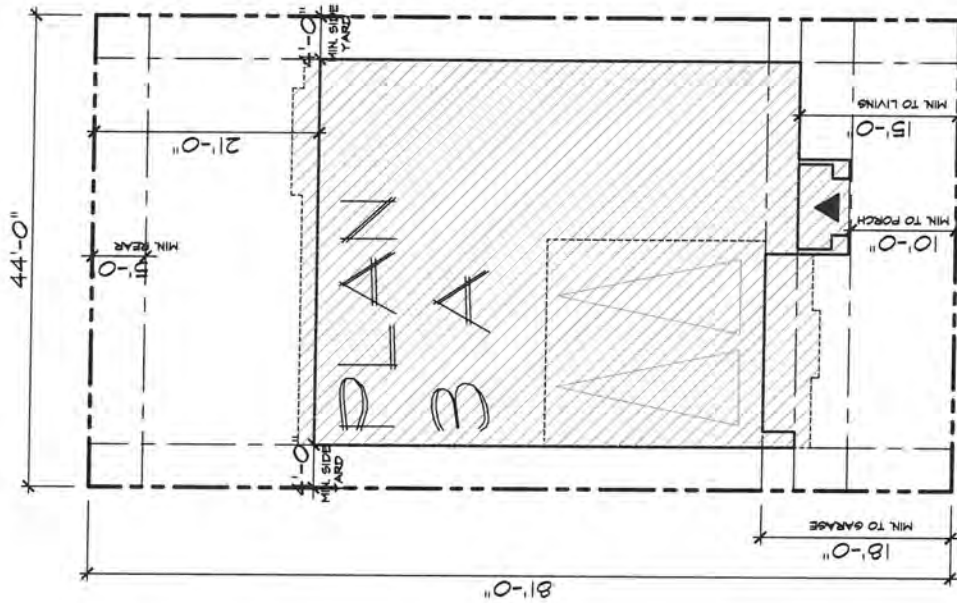


Elevation B - Scheme #7



Elevation C - Scheme #12

Plan 3
Front Elevations
SAN MARCO
UNIT 13
 PITTSBURG, CA
 DISCOVERY
 DESIGN
 GROUP
 Discovery Builders Inc.
 Date 11/05/2020



TYPICAL LOT SIZES		LOT COVERAGE	
FOOTPRINT	BACKYARD	FOOTPRINT	BACKYARD
44' x 81' = 3564 SQ. FT.	1561 SQ. FT.	43%	21'-0"



City of Pittsburgh MINIMUM REQUIREMENTS	
FRONT SETBACK -	15' MIN.
TO LIVING	
FRONT SETBACK -	18' MIN.
TO GARAGE	
SIDE YARD -	4' MIN.
SETBACK	
CORNER SIDE YARD -	10' MIN.
SETBACK	
REAR YARD -	5' MIN.
SETBACK	
PORCH SETBACK -	10' MIN.
LOT SIZE -	2,900 SQ. FT.
MAX COVERAGE -	50%
2-STORY	

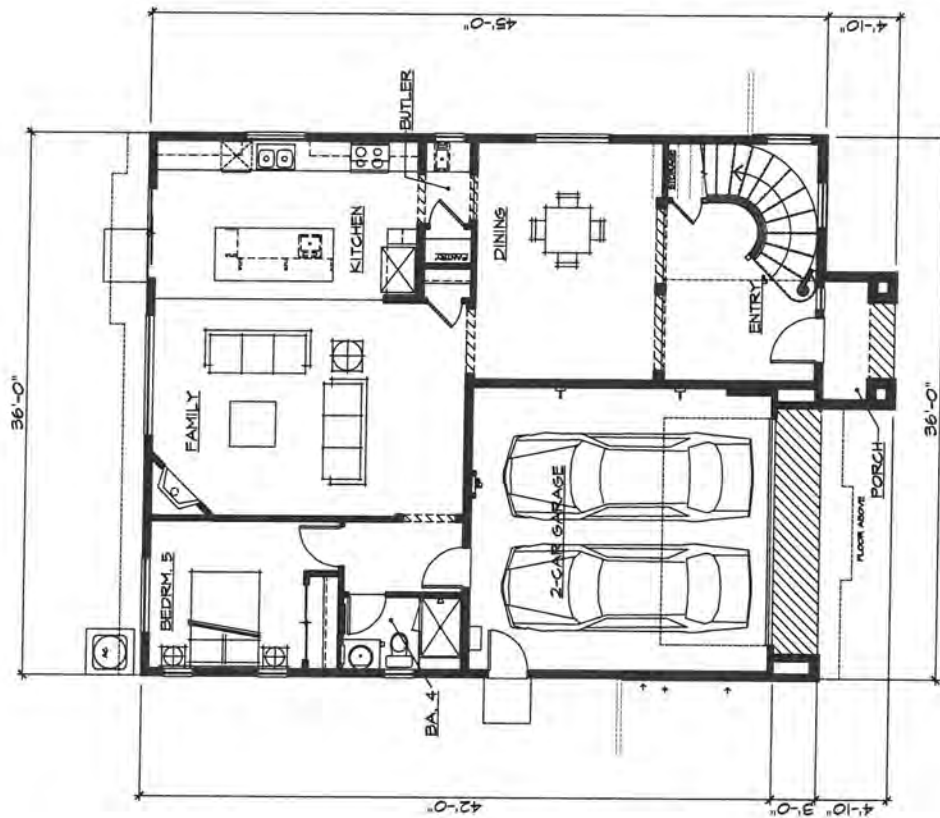
Plan 3 Site Plan



**SAN MARCO
UNIT 13**
PITTSBURGH, CA

**DISCOVERY
DESIGN
GROUP**

Discovery Builders Inc.
Date 11/05/2020



Plan 3 First Floor Plan

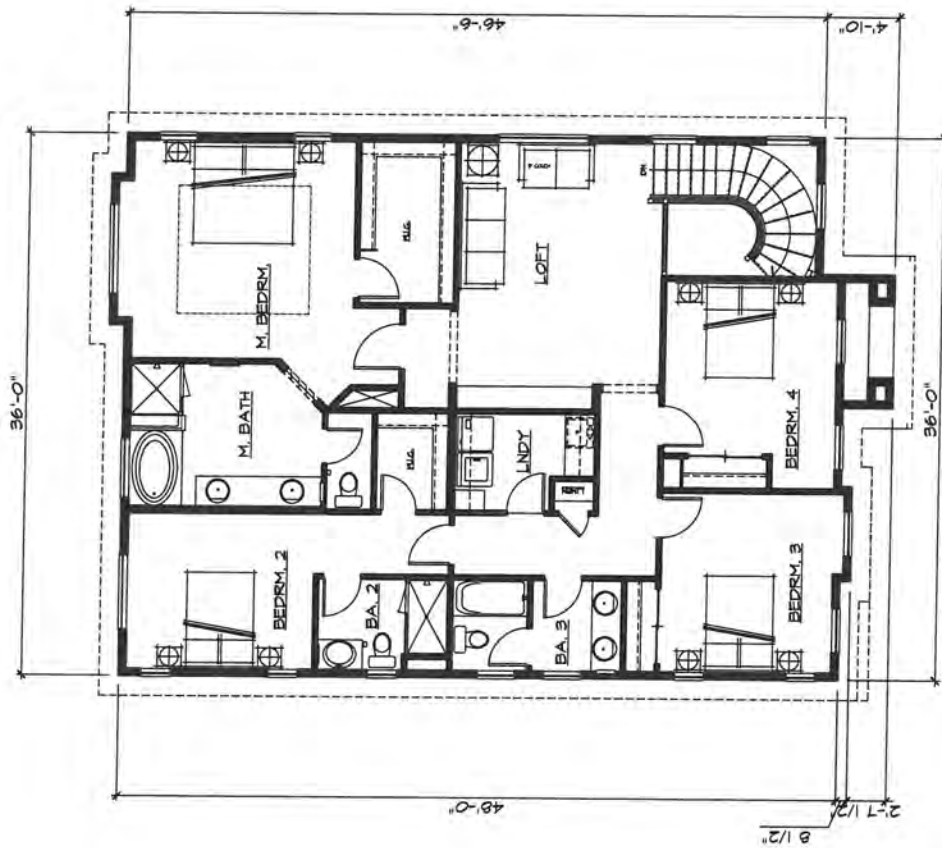
SQUARE FOOTAGE	
FIRST FLOOR	1170 SF
SECOND FLOOR	1636 SF
TOTAL LIVING AREA	2806 SF
GARAGE	341 SF
PORCH	43 SF
FOOTPRINT	1561 SF



SAN MARCO
UNIT 13
PITTSBURG, CA



Discovery Builders Inc.
Date 11/05/2020



Plan 3 Second Floor Plan

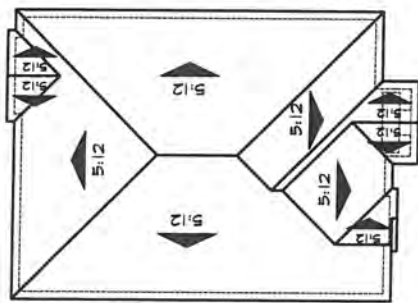
SQUARE FOOTAGE	
FIRST FLOOR	1170 SF
SECOND FLOOR	1656 SF
TOTAL LIVING AREA	2806 SF
GARAGE	341 SF
PORCH	43 SF
FOOTPRINT	1561 SF



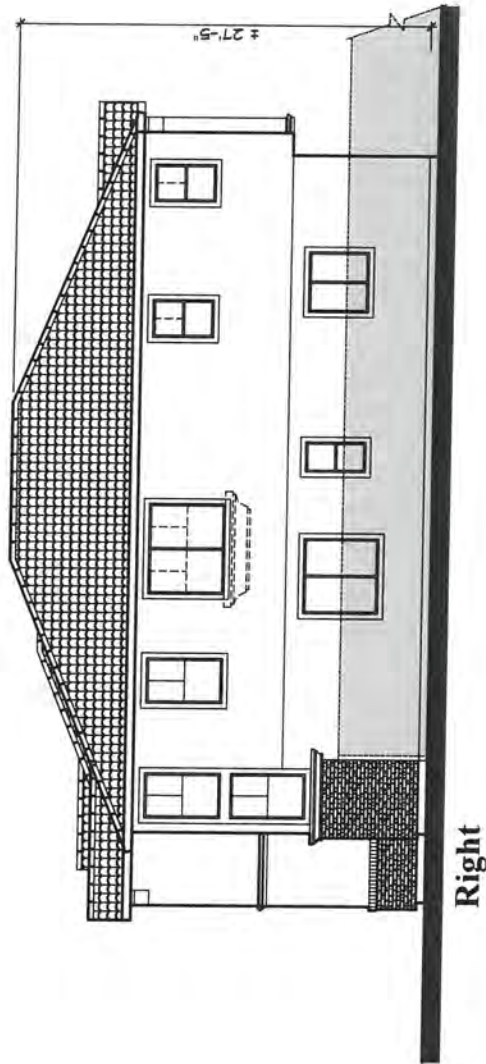
SAN MARCO
UNIT 13
PITTSBURG, CA



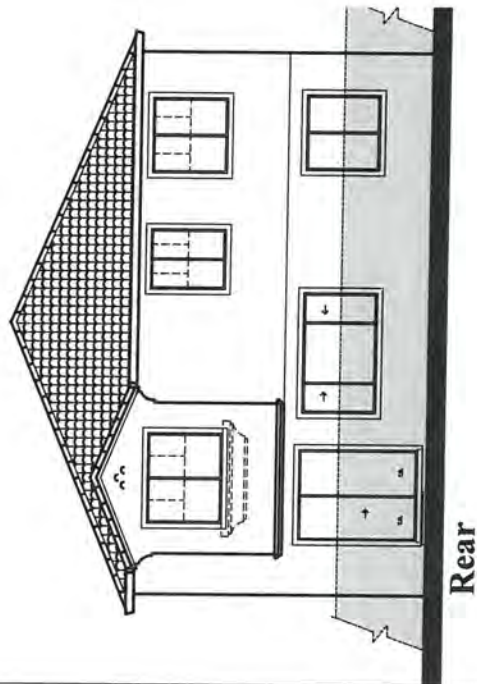
Discovery Builders Inc.
Date 11/05/2020



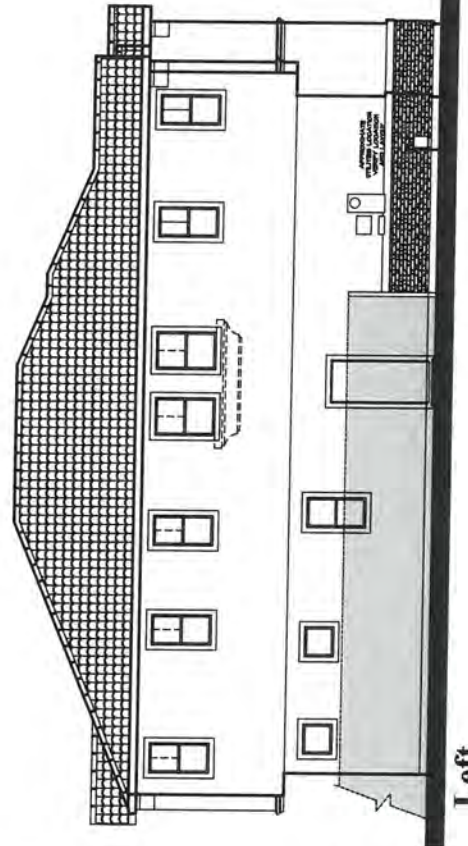
Roof Plan 'A'



Right



Rear



Left

**Plan 3
Elevations - 'A'**

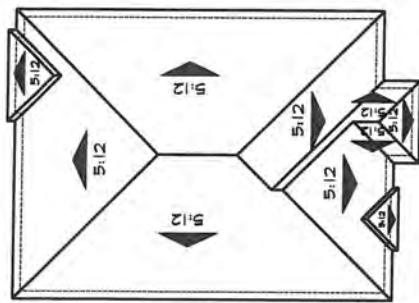


**SAN MARCO
UNIT 13**
PITTSBURG, CA

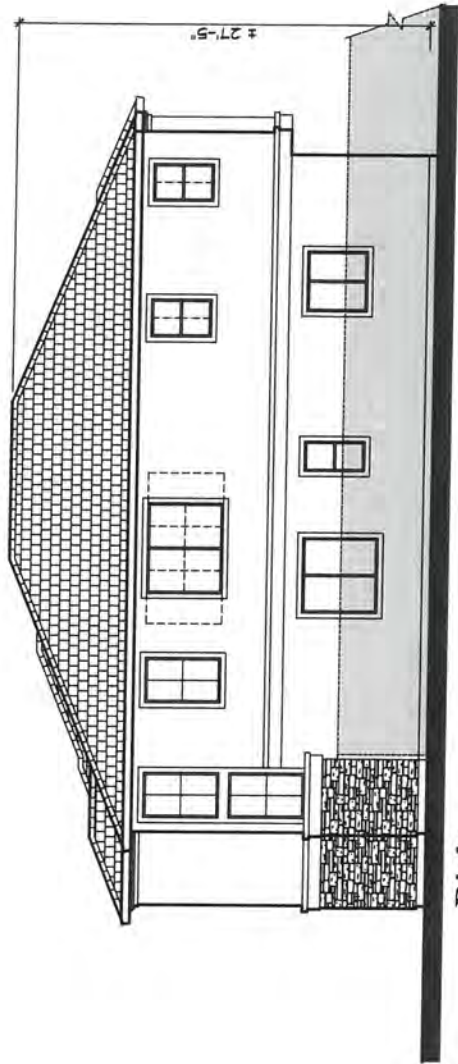


Discovery Builders Inc.
Date 11/05/2020

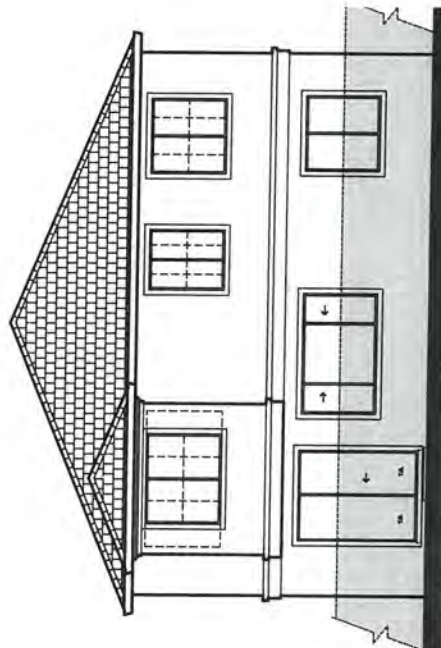
DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.



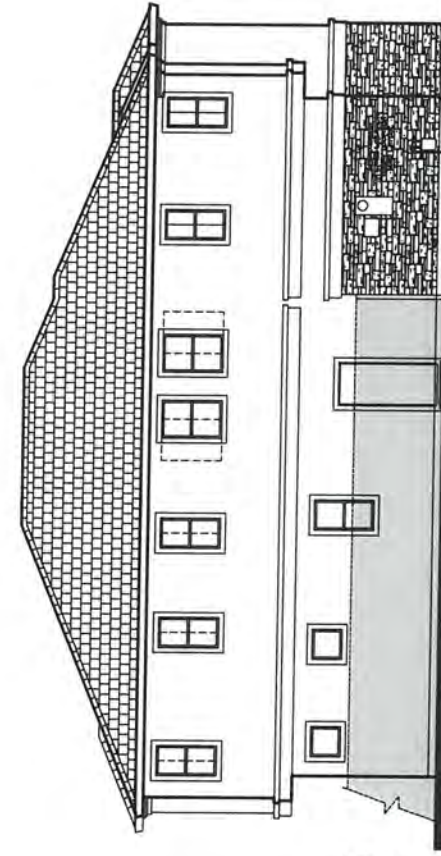
Roof Plan 'B'



Right

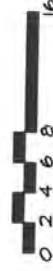


Rear



Left

**Plan 3
Elevations - 'B'**

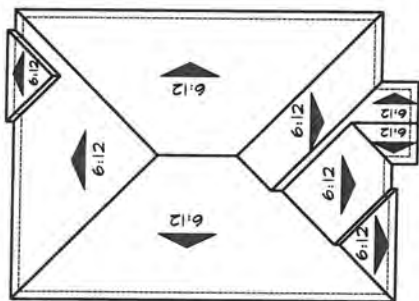


**SAN MARCO
UNIT 13**
PITTSBURG, CA

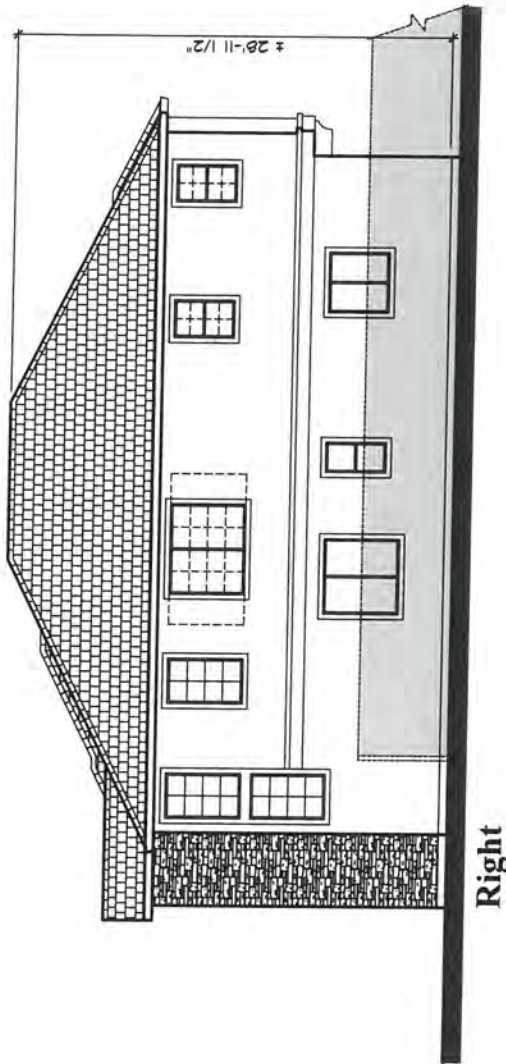


Discovery Builders Inc.
Date 11/05/2020

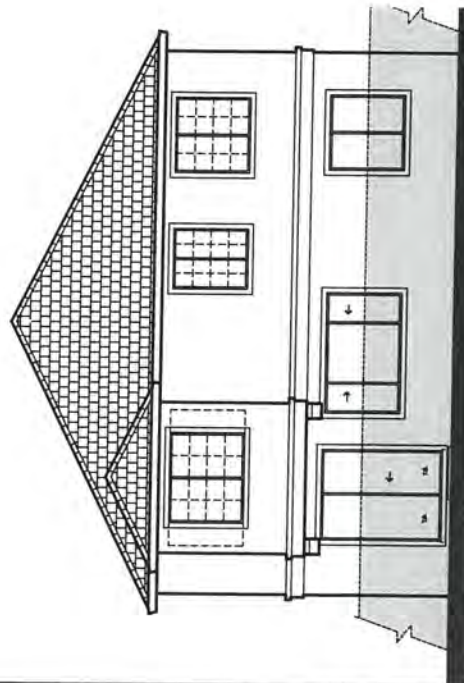
--- DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.



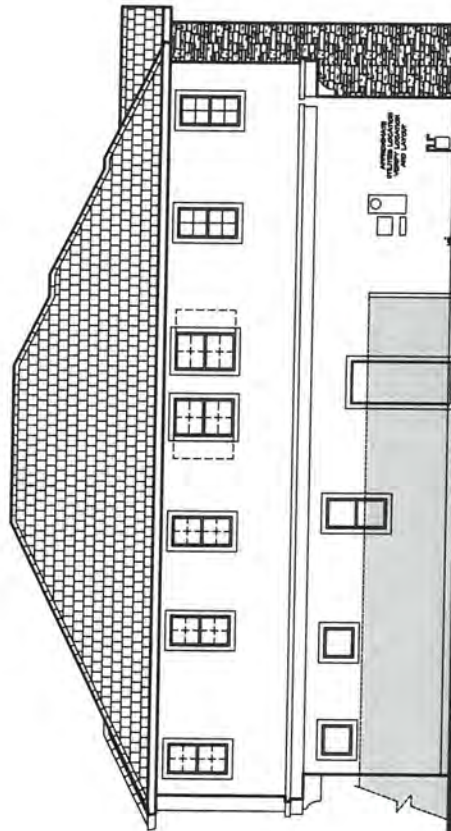
Roof Plan 'C'



Right



Rear



Left

**Plan 3
Elevations - 'C'**



**SAN MARCO
UNIT 13**
PITTSBURG, CA



Discovery Builders Inc.
Date 11/05/2020

□ DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.

MATERIAL LEGEND

- A** VILLA CONCRETE TILE ROOFING
HIP & GABLE END ROOFS
STUCCO BODY
STUCCO TRIM
SIMULATED BRICK VENEER
MOCK TILE VENTS
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES
- B** FLAT CONCRETE TILE ROOFING
HIP ROOFS
STUCCO BODY
STUCCO TRIM
MOCK SHUTTERS
SIMULATED STONE VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES
- C** FLAT CONCRETE TILE ROOFING
HIP & GABLE END ROOFS
STUCCO BODY
STUCCO TRIM
STUCCO/FOAM CORBELS
MOCK VENTS
MOCK SHUTTERS
SIMULATED STONE VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES



Elevation A - Scheme #1

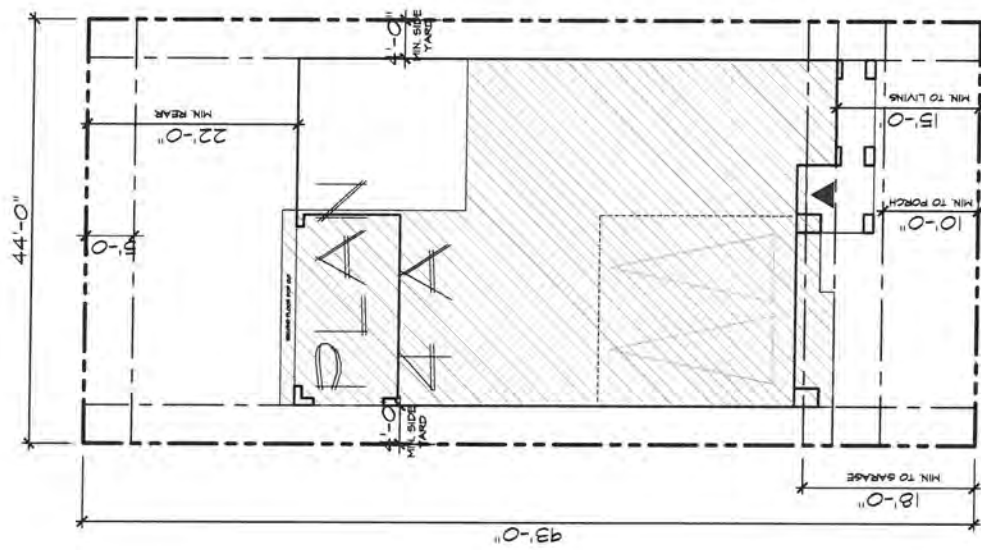


Elevation B - Scheme #8



Elevation C - Scheme #11

Plan 4
Front Elevations
SAN MARCO
UNIT 13
 PITTSBURG, CA
 DISCOVERY
 DESIGN
 GROUP
 Discovery Builders Inc.
 Date 11/05/2020



TYPICAL LOT SIZES		LOT COVERAGE	
44' x 93' = 4092 SQ. FT.	2011 SQ. FT.	FOOTPRINT	COVER
	49%		
			BACKYARD
			22'-0"



City of Pittsburgh MINIMUM REQUIREMENTS	
FRONT SETBACK -	15' MIN.
TO LIVING	
FRONT SETBACK -	18' MIN.
TO GARAGE	
SIDE YARD -	4' MIN.
SETBACK	
CORNER SIDE YARD -	10' MIN.
SETBACK	
REAR YARD -	5' MIN.
SETBACK	
PORCH SETBACK -	10' MIN.
LOT SIZE -	2900 SQ. FT.
MAX COVERAGE -	50%
2-STORY	

Plan 4 Site Plan



**SAN MARCO
UNIT 13**
PITTSBURG, CA

**DISCOVERY
DESIGN
GROUP**

Discovery Builders Inc.
Date 11/05/2020

Plan 4 First Floor Plan

	SQUARE FOOTAGE
FIRST FLOOR	1290 SF
SECOND FLOOR	1654 SF
TOTAL LIVING AREA	2945 SF
GARAGE	405 SF
PORCH	95 SF
OUTDOOR LIVING	219 SF
FOOTPRINT	2011 SF

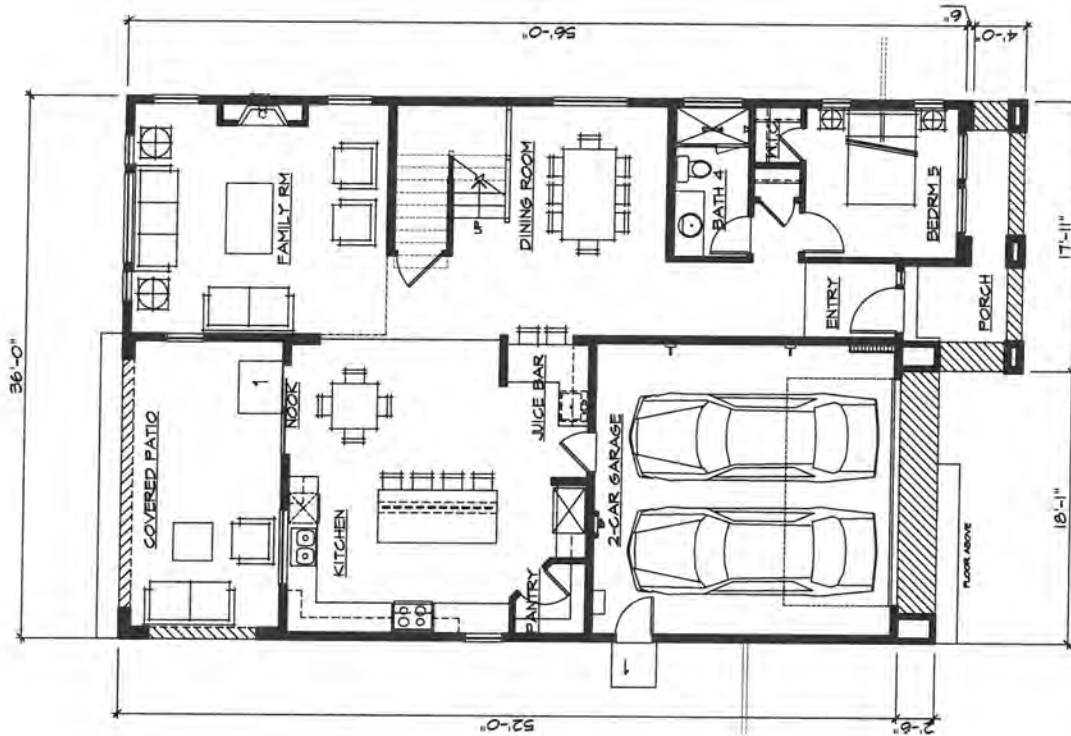


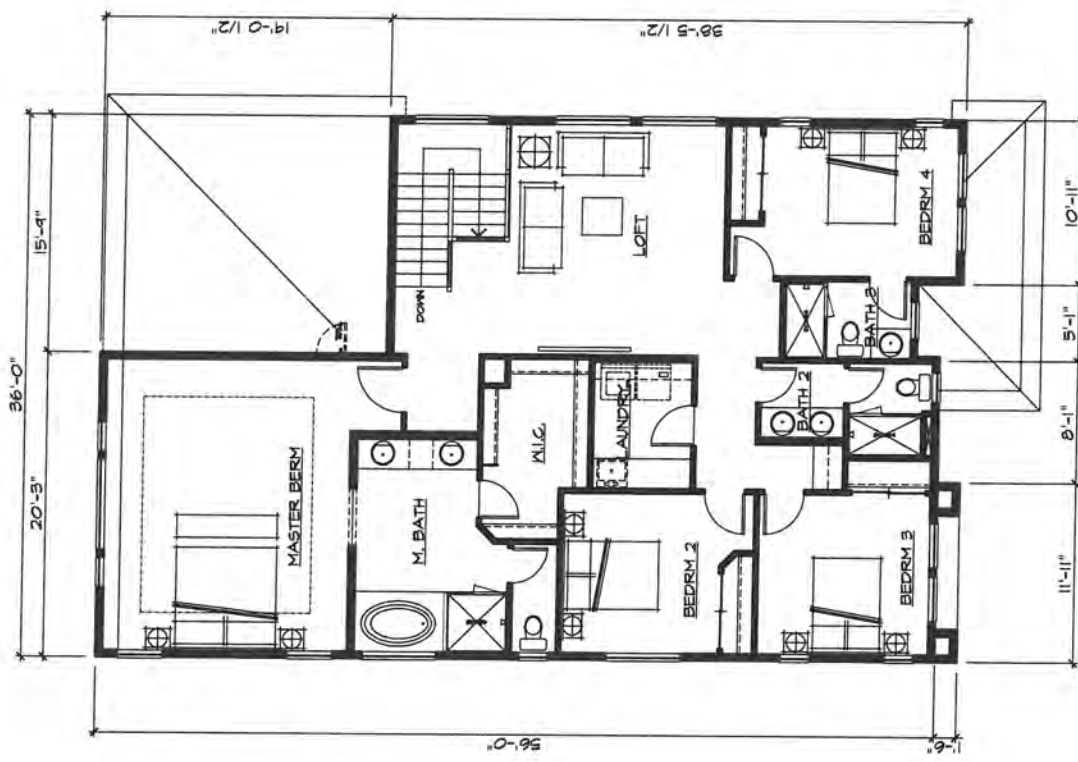
**SAN MARCO
UNIT 13
PITTSBURG, CA**



**DISCOVERY
DESIGN
GROUP**

Discovery Builders Inc.
Date 11/05/2020





Plan 4 Second Floor Plan

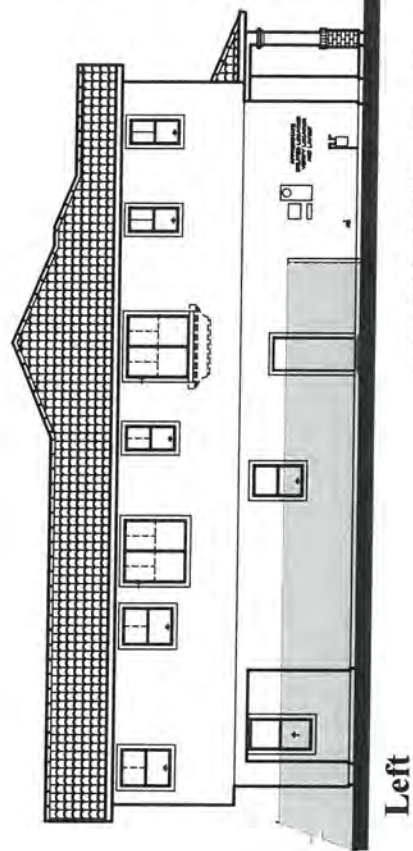
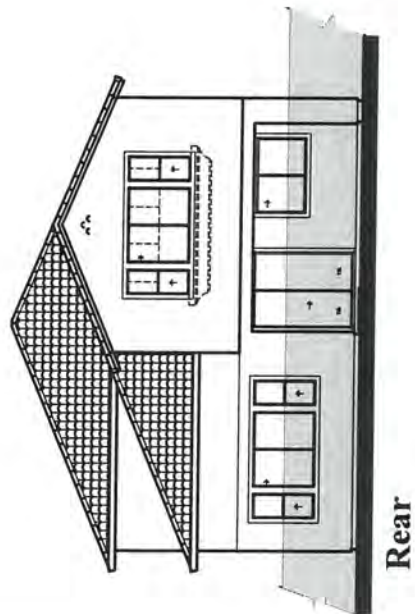
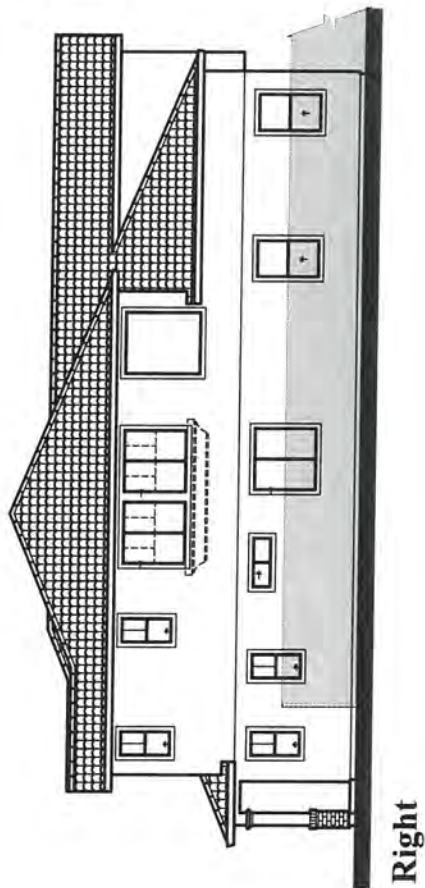
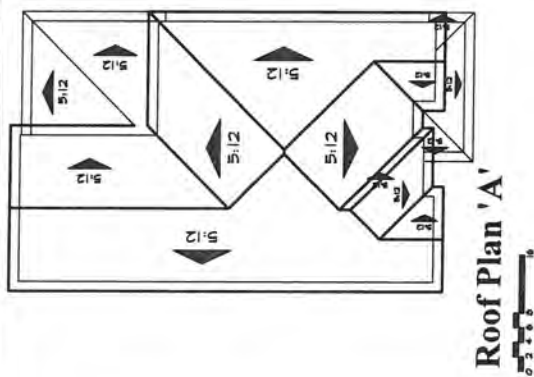
SQUARE FOOTAGE	
FIRST FLOOR	1240 SF
SECOND FLOOR	1664 SF
TOTAL LIVING AREA	2467 SF
GARAGE	405 SF
PORCH	95 SF
OUTDOOR LIVING	215 SF
FOOTPRINT	2011 SF



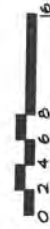
SAN MARCO
UNIT 13
 PITTSBURG, CA

DISCOVERY
 DESIGN
 GROUP

Discovery Builders Inc.
 Date 11/05/2020



**Plan 4
Elevations - 'A'**

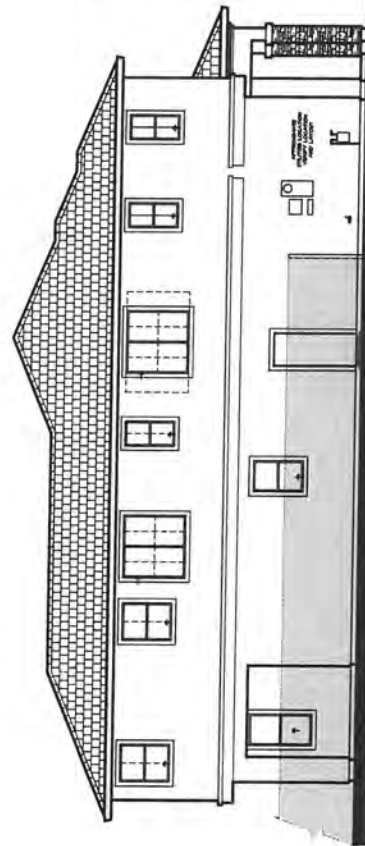
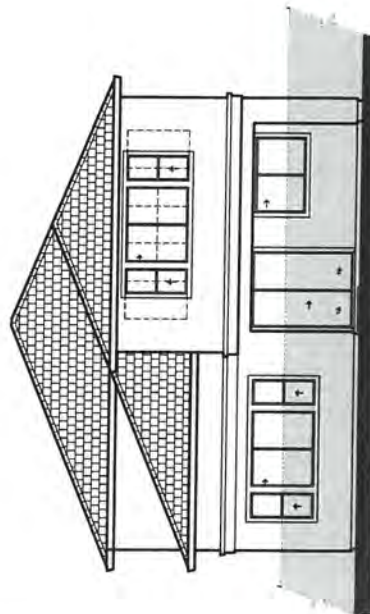
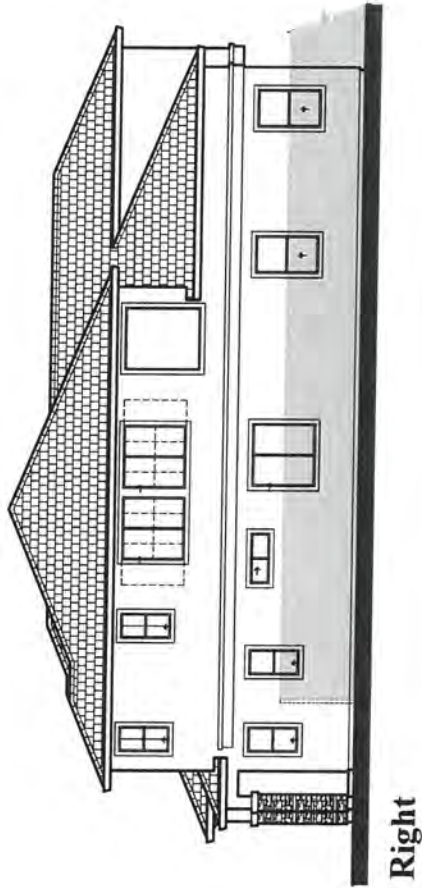
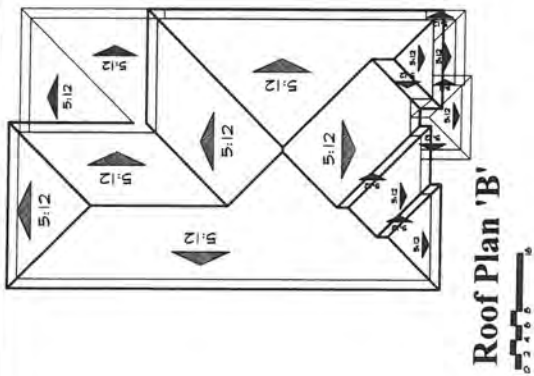


**SAN MARCO
UNIT 13**
PITTSBURG, CA



Discovery Builders Inc.
Date 11/05/2020

□ DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.



**Plan 4
Elevations - 'B'**



**SAN MARCO
UNIT 13**
PITTSBURG, CA



Discovery Builders Inc.
Date 11/05/2020

DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.





MATERIAL LEGEND

- A** VILLA CONCRETE TILE ROOFING
HIP & GABLE END ROOFS
STUCCO BODY
STUCCO TRIM
MOCK TILE VENTS
SIMULATED BRICK VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES
- B** FLAT CONCRETE TILE ROOFING
HIP ROOFS
STUCCO BODY
STUCCO TRIM
MOCK SHUTTERS
SIMULATED STONE VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES
- C** FLAT CONCRETE TILE ROOFING
HIP & GABLE END ROOFS
STUCCO BODY
STUCCO TRIM
STUCCO/FOAM CORBELS
MOCK VENTS
MOCK SHUTTERS
SIMULATED STONE VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES



Elevation A - Scheme #2

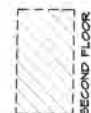
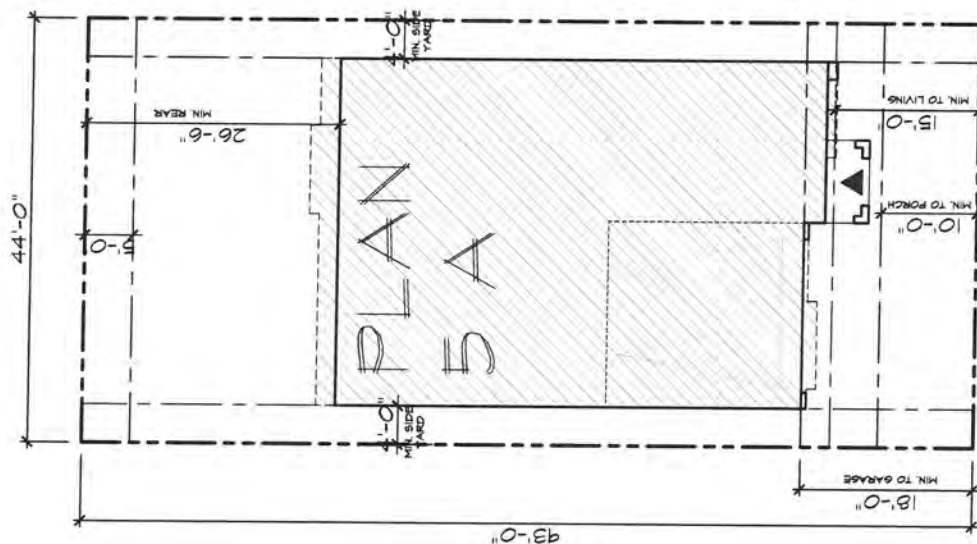


Elevation B - Scheme #5



Elevation C - Scheme #9

Plan 5
Front Elevations
SAN MARCO
UNIT 13
 PITTSBURG, CA
 DISCOVERY
 DESIGN
 GROUP
 Discovery Builders Inc.
 Date 11/05/2020



TYPICAL LOT SIZES	LOT COVERAGE		
44' x 93' = 4092 SQ. FT.	FOOTPRINT	COVERAGE	BACKYARD
	1822 SQ. FT.	45%	26'-6"

City of Pittsburgh MINIMUM REQUIREMENTS

FRONT SETBACK -	15' MIN.
TO LIVING	
FRONT SETBACK -	15' MIN.
TO GARAGE	
SIDE YARD -	4' MIN.
SETBACK	
CORNER SIDE YARD -	10' MIN.
SETBACK	
REAR YARD -	5' MIN.
SETBACK	
PORCH SETBACK -	10' MIN.
LOT SIZE -	2,900 SQ. FT.
MAX COVERAGE -	50%
2-STORY	

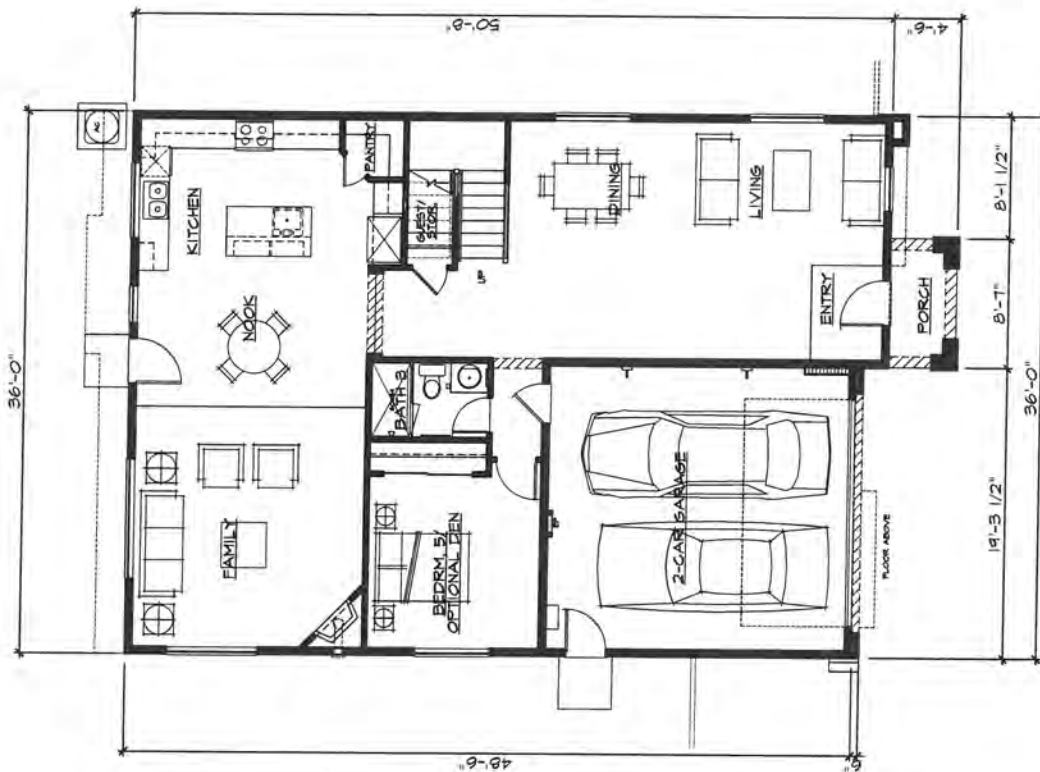
Plan 5 **Site Plan**



SAN MARCO
UNIT 13
PITTSBURGH, CA



Discovery Builders Inc.
Date 11/05/2020



Plan 5 First Floor Plan

SQUARE FOOTAGE	
FIRST FLOOR	1988 SF
SECOND FLOOR	1824 SF
TOTAL LIVING AREA	3217 SF
GARAGE	945 SF
PORCH	34 SF
FOOTPRINT	1922 SF



SAN MARCO
UNIT 13
PITTSBURG, CA



Discovery Builders Inc.
Date 11/05/2020



Plan 5 Second Floor Plan

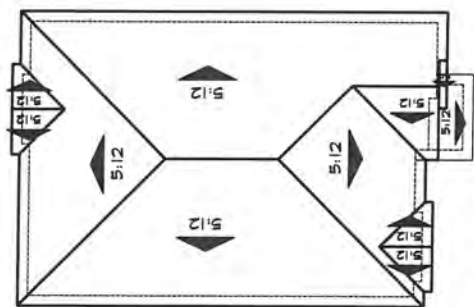
SQUARE FOOTAGE	
FIRST FLOOR	1998 SF
SECOND FLOOR	1924 SF
TOTAL LIVING AREA	3217 SF
GARAGE	345 SF
PORCH	94 SF
FOOTPRINT	1922 SF



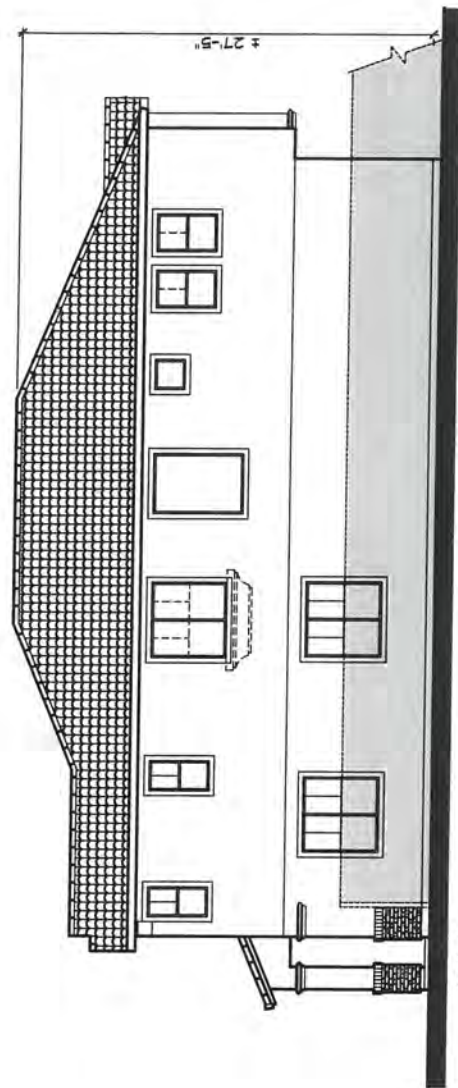
SAN MARCO
UNIT 13
PITTSBURG, CA



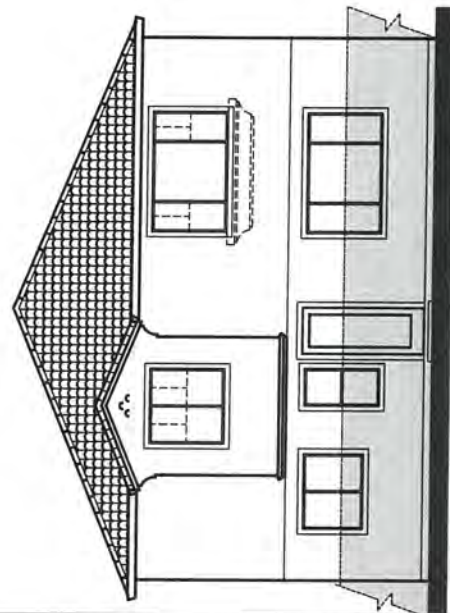
Discovery Builders Inc.
Date 11/05/2020



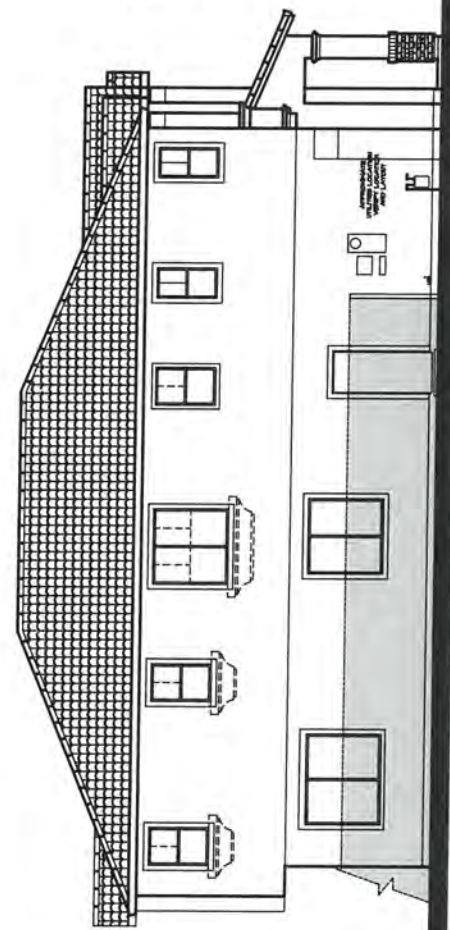
Roof Plan 'A'



Right



Rear



Left

Plan 5
Elevations - 'A'

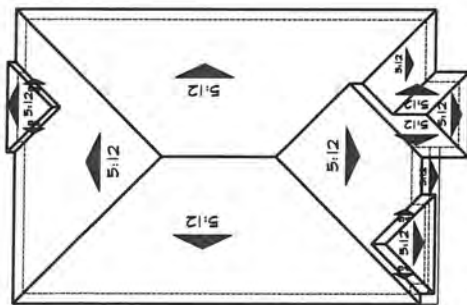


SAN MARCO
UNIT 13
PITTSBURG, CA

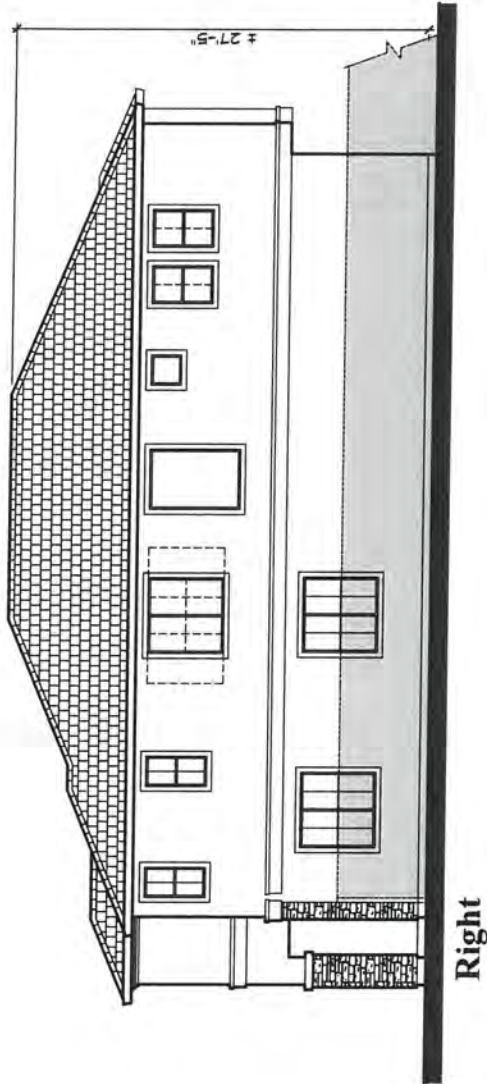


Discovery
Design
Group
Discovery Builders Inc.
Date 11/05/2020

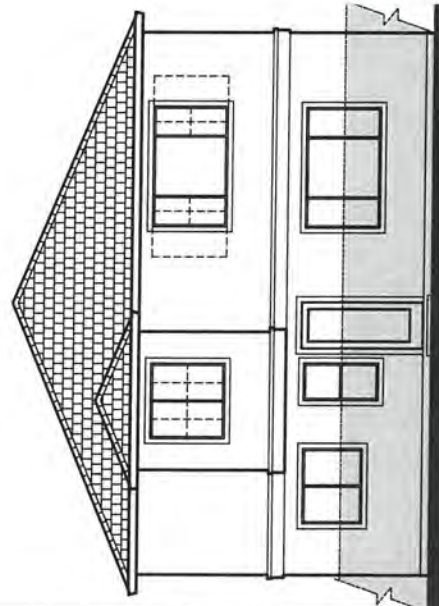
DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.



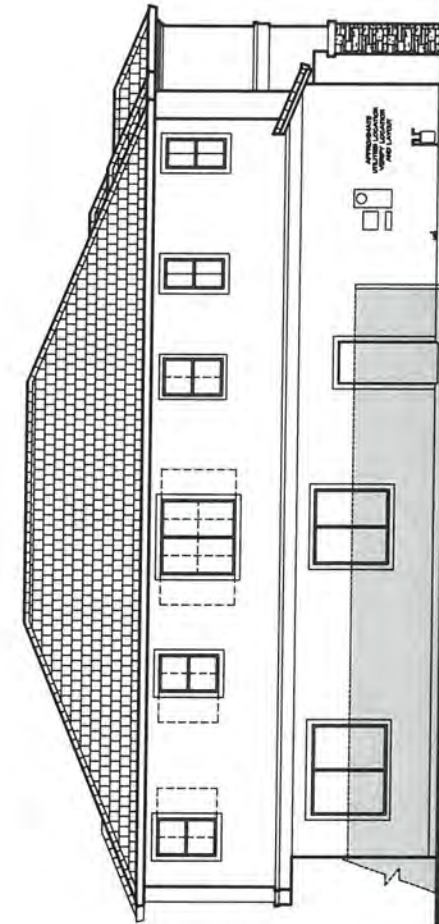
Roof Plan 'B'



Right



Rear



Left

**Plan 5
Elevations - 'B'**

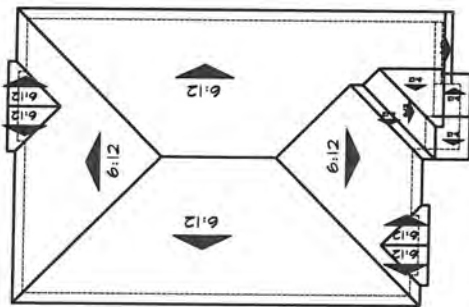


**SAN MARCO
UNIT 13**
PITTSBURG, CA

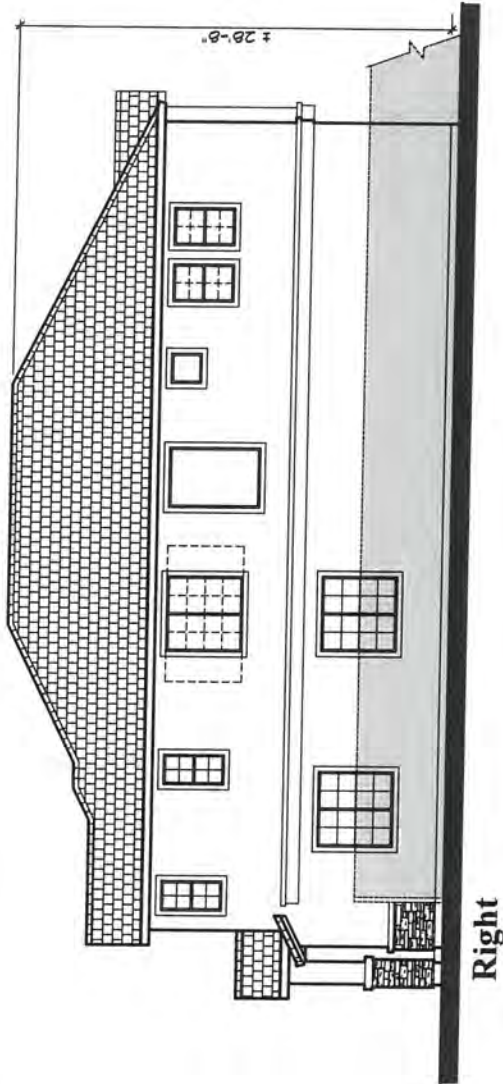


Discovery Builders Inc.
Date 11/05/2020

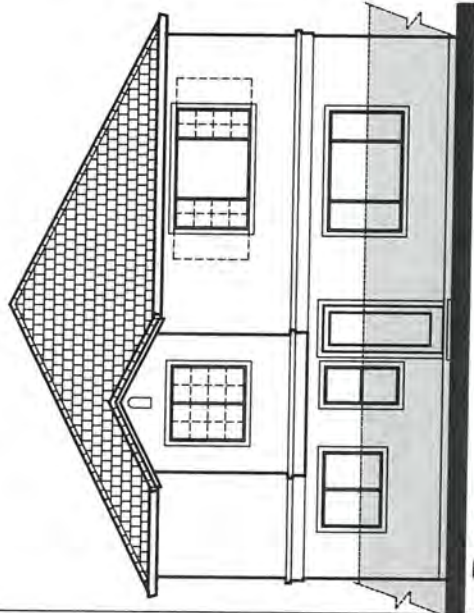
DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.



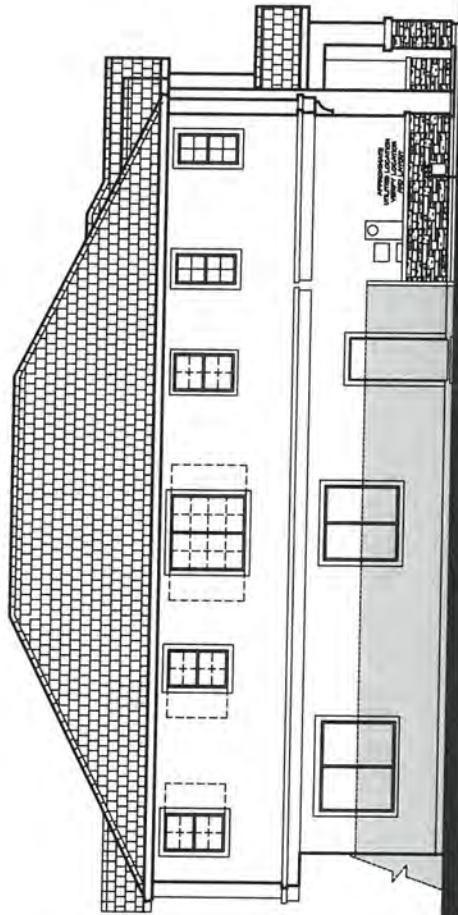
Roof Plan 'C'



Right



Rear



Left

**Plan 5
Elevations - 'C'**



**SAN MARCO
UNIT 13**
PITTSBURG, CA



Discovery Builders Inc.
Date 11/05/2020

□ DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.

MATERIAL LEGEND

- A** VILLA CONCRETE TILE ROOFING
HIP & GABLE END ROOFS
STUCCO BODY
STUCCO TRIM
MOCK TILE VENTS
SIMULATED BRICK VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES
- B** FLAT CONCRETE TILE ROOFING
HIP ROOFS
STUCCO BODY
STUCCO TRIM
MOCK SHUTTERS
SIMULATED STONE VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES
- C** FLAT CONCRETE TILE ROOFING
HIP & GABLE END ROOFS
STUCCO BODY
STUCCO TRIM
STUCCO/FOAM CORBELS
MOCK VENTS
MOCK SHUTTERS
SIMULATED STONE VENEER
ROLL-UP GARAGE DOORS
W/ OPT. WINDOW LITES



Elevation A - Scheme #4



Elevation B - Scheme #6

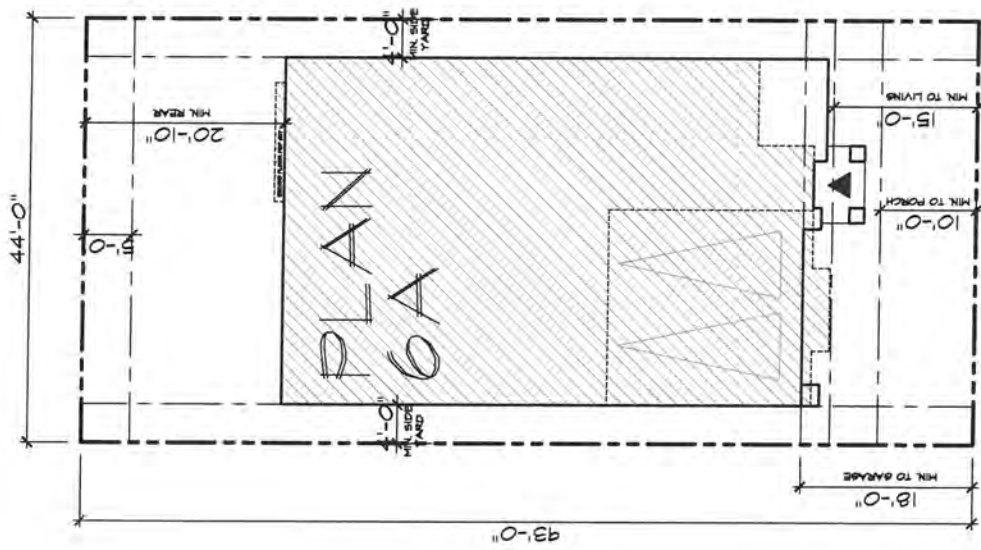


Elevation C - Scheme #10

**Plan 6
Front Elevations
SAN MARCO
UNIT 13
PITTSBURG, CA**



Discovery Builders Inc.
Date 11/05/2020



City of Pittsburgh
MINIMUM REQUIREMENTS

FRONT SETBACK -	15' MIN.
TO LIVING	
FRONT SETBACK -	18' MIN.
TO GARAGE	
SIDE YARD -	4' MIN.
SETBACK	
CORNER SIDE YARD -	10' MIN.
SETBACK	
REAR YARD -	5' MIN.
SETBACK	
PORCH SETBACK -	10' MIN.
LOT SIZE -	2,900 SQ. FT.
MAX COVERAGE -	50%
2-STORY	

Plan 6
Site Plan

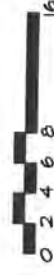
SAN MARCO
UNIT 13
PITTSBURGH, CA

DISCOVERY DESIGN GROUP
Discovery Builders Inc.
Date 11/05/2020

TYPICAL LOT SIZES		LOT COVERAGE		FOOTPRINT		COVERAGE		BACKYARD	
44' x 93' = 4092 SQ. FT.		2019 SQ. FT.	49%	20'-10"		20'-10"		20'-10"	

Plan 6 First Floor Plan

	SQUARE FOOTAGE
FIRST FLOOR	1561 SF
SECOND FLOOR	1848 SF
TOTAL LIVING AREA	3415 SF
GARAGE	413 SF
PORCH	39 SF
FOOTPRINT	2019 SF

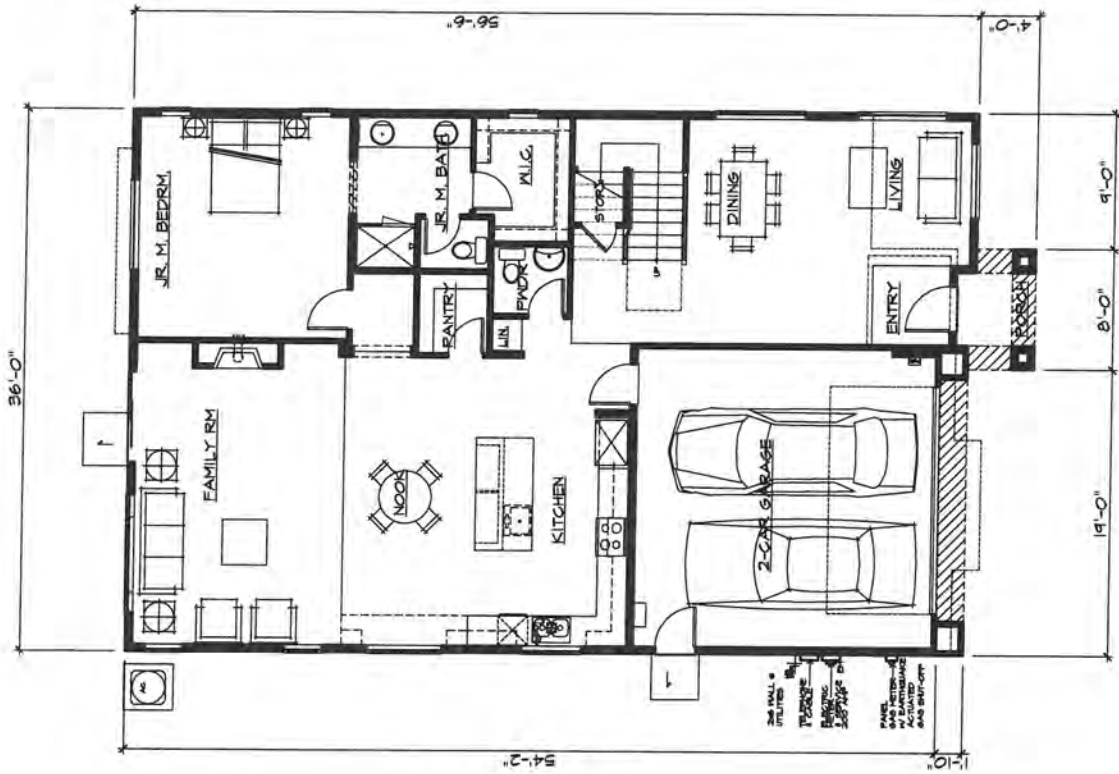


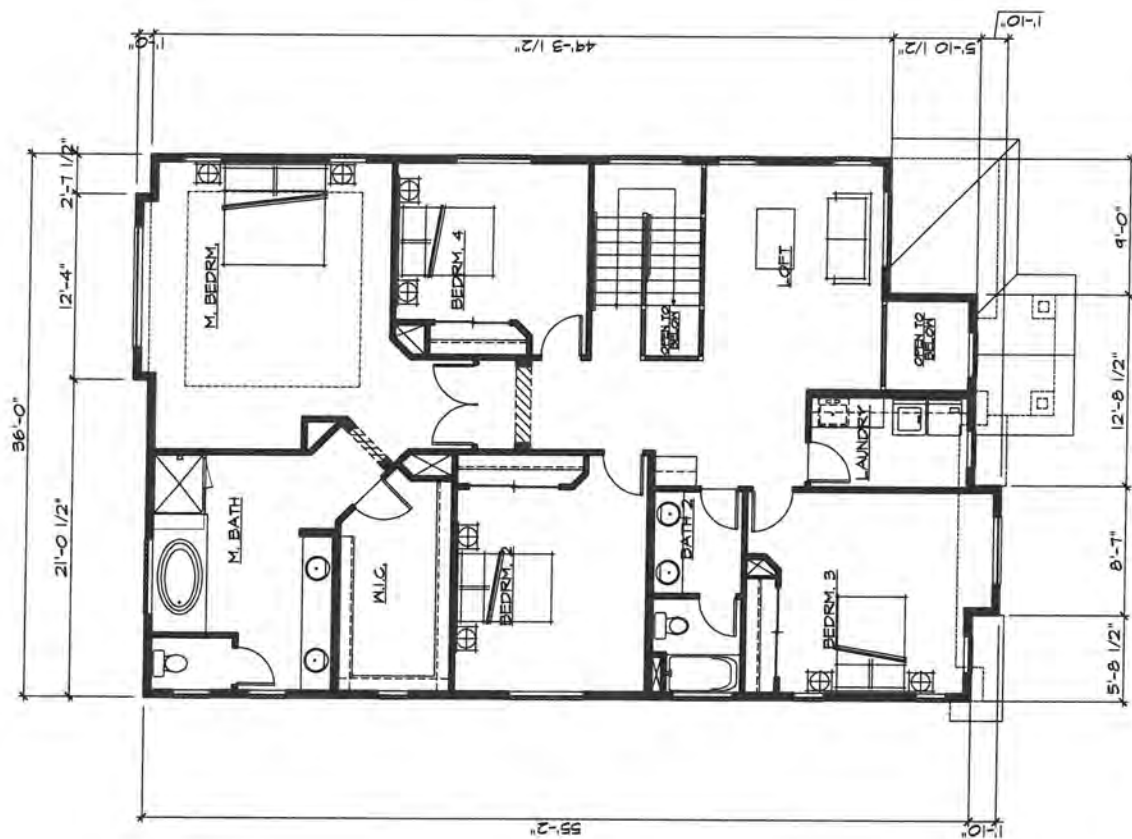
**SAN MARCO
UNIT 13
PITTSBURG, CA**



DISCOVERY
DESIGN
GROUP

Discovery Builders Inc.
Date 11/05/2020





Plan 6 Second Floor Plan

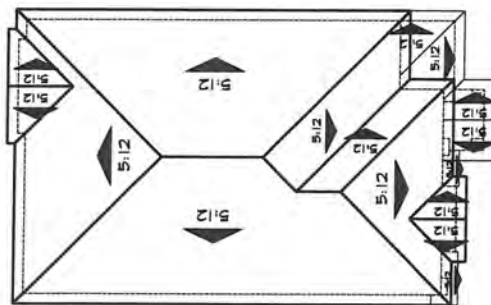
SQUARE FOOTAGE	
FIRST FLOOR	1567 SF
SECOND FLOOR	1848 SF
TOTAL LIVING AREA	3415 SF
GARAGE	413 SF
PORCH	34 SF
FOOTPRINT	2014 SF



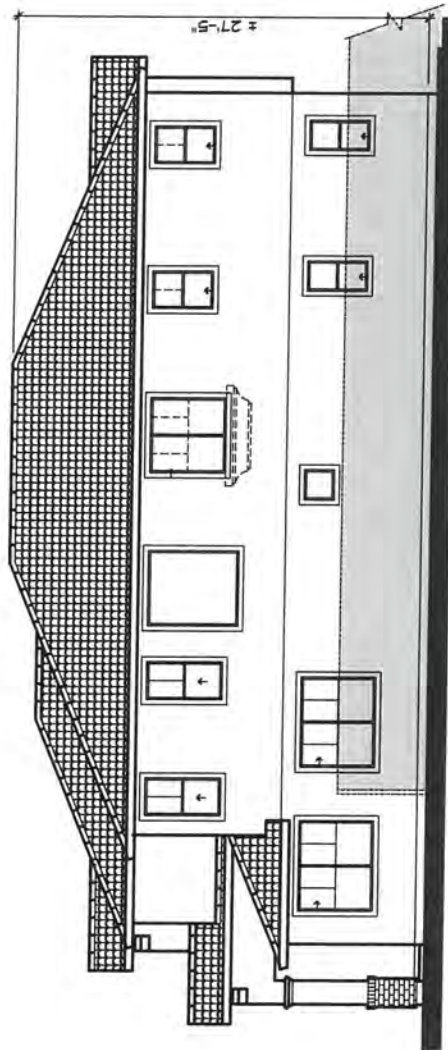
SAN MARCO
UNIT 13
 PITTSBURG, CA

DISCOVERY
DESIGN
GROUP

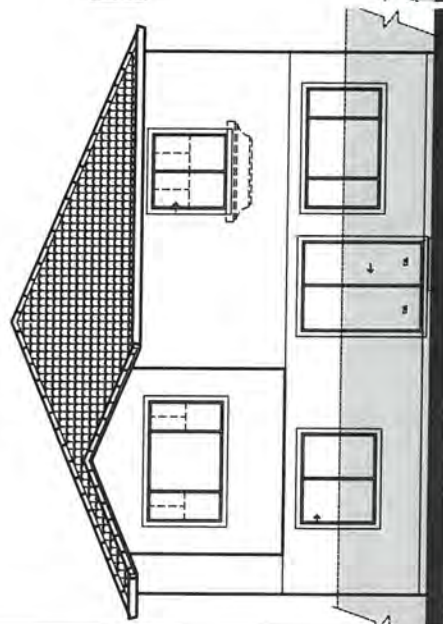
Discovery Builders Inc.
 Date 11/05/2020



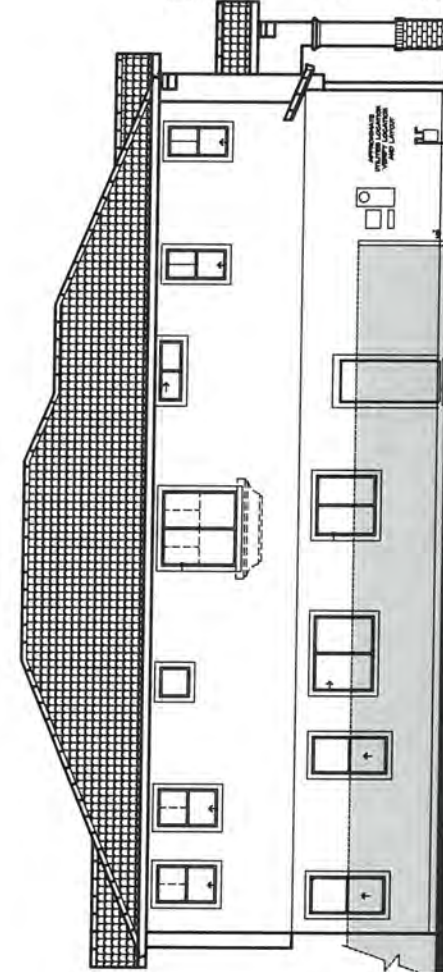
Roof Plan 'A'



Right



Rear



Left

**Plan 6
Elevations - 'A'**

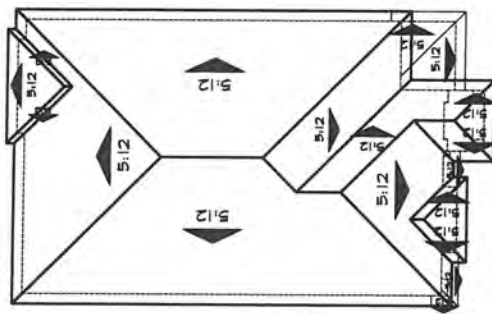


**SAN MARCO
UNIT 13**
PITTSBURG, CA

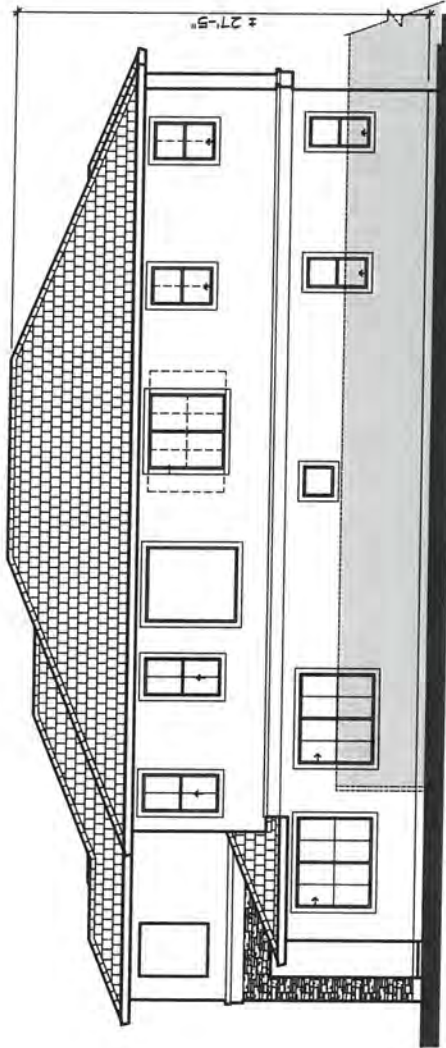


Discovery Builders Inc.
Date 11/05/2020

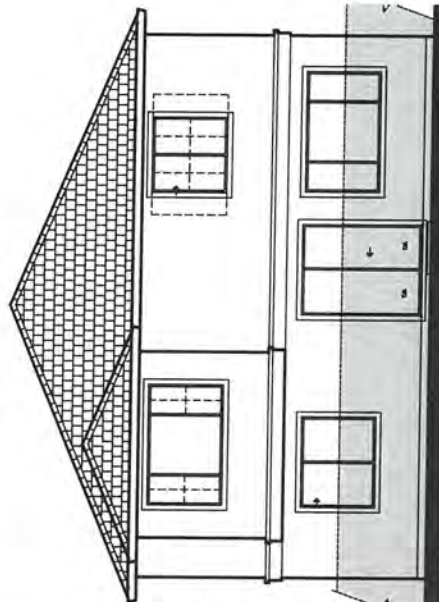
DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.



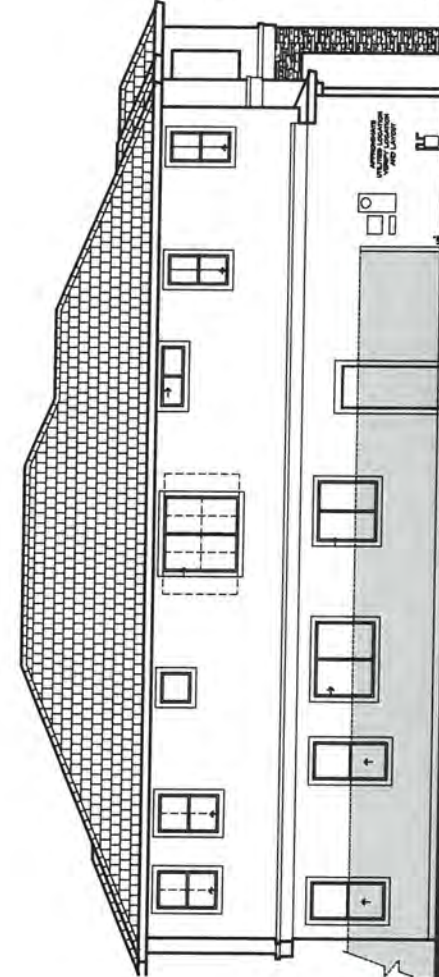
Roof Plan 'B'



Right



Rear



Left

**Plan 6
Elevations - 'B'**

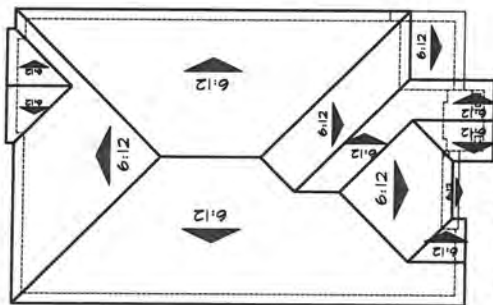


**SAN MARCO
UNIT 13**
PITTSBURG, CA

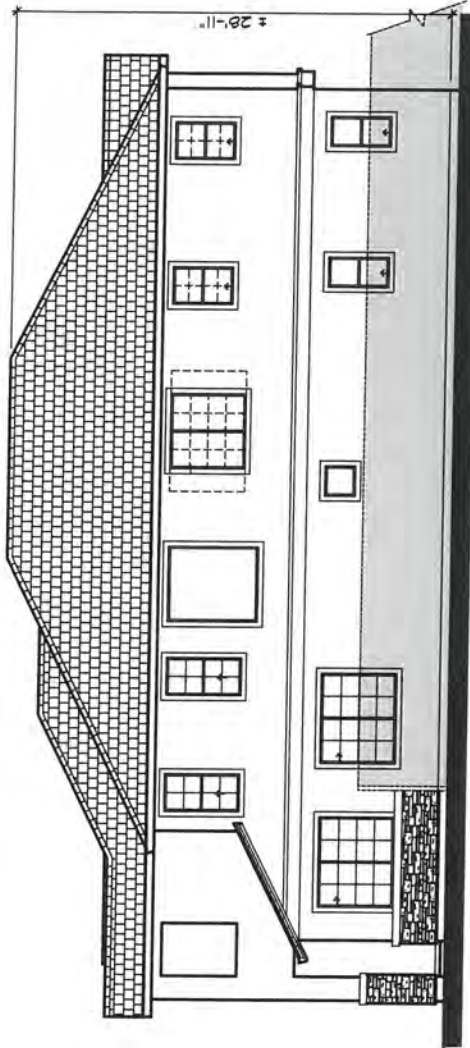


Discovery Builders Inc.
Date 11/05/2020

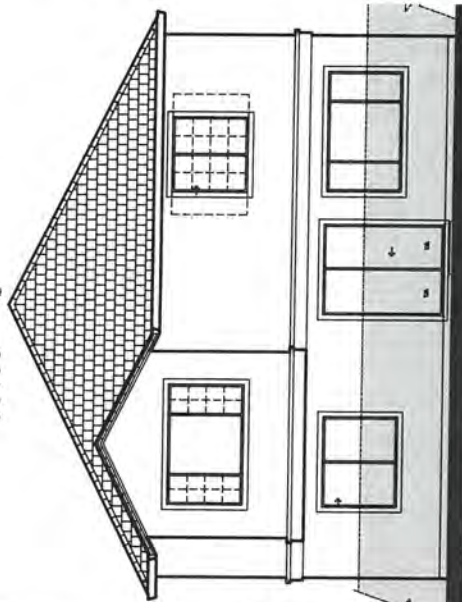
□ DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.



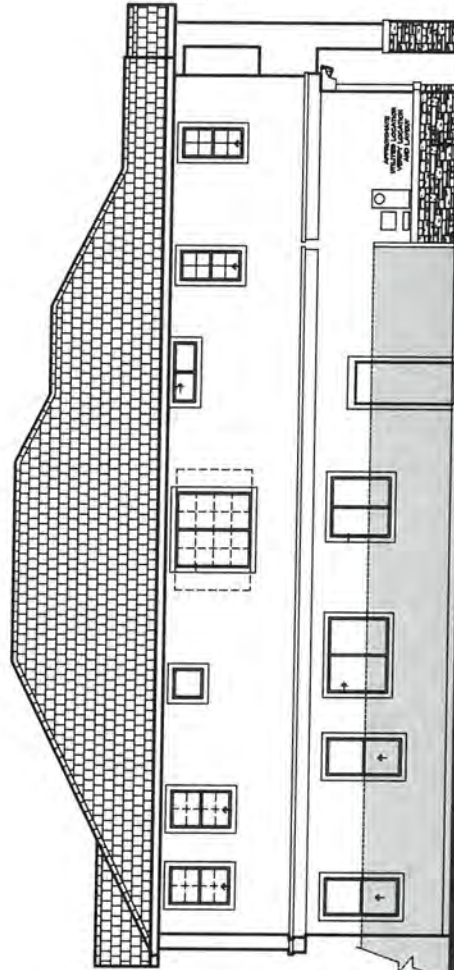
Roof Plan 'C'



Right



Rear



Left

**Plan 6
Elevations - 'C'**



**SAN MARCO
UNIT 13**
PITTSBURG, CA

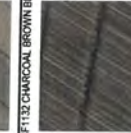


Discovery Builders Inc.
Date 11/05/2020

□ DENOTES WINDOW GRIDS AND
SHUTTERS AT SIDE ELEVATIONS
FACING STREETS.

SUBDIVISION: SAN MARCO UNIT 13

PITTSBURG, CA

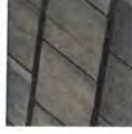
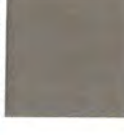
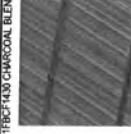
SCHEME	VILLA TILE	FLAT TILE	BODY 1	BODY 2	TRIM & GARAGE DOOR	ACCENT & FRONT DOOR	STONE	BRICK
SCHEME 1	1WC3223 BROWN BLEND 	1FAC31132 CHARCOAL BROWN BLEND 	KM4728-1 CLAM 	KM5784-3 CREEK BAY 	KM5723-3 STACKED STONE 	KM4582 BEAVER PELT 	BLACK MOUNTAIN PRO-FIT ALPINE LEDGESTONE 	MARSH PONTE 
SCHEME 2	1WC27330 VERONA GLAY 	1FAC31132 CHARCOAL BROWN BLEND 	KM4715-1 POCO SANDS 	KM5785-3 COUNTRY CLUB 	KM4777 CANNERY PARK 	KM4587-2 VIM MIST 	GRAND MESA COUNTRY LEDGESTONE 	TOBACCO ROAD 
SCHEME 3	1WC50041 DESERT SAGE 	1FBC71132 CHARCOAL BROWN BLEND 	KM4533-1 CZECH BAKERY 	KM4527-3 CAPPUCCINO FROTH 	KM4561-1 LILY WHITE 	KM5744-3 MENDOCINO HILLS 	HUGSON BAY COUNTRY LEDGESTONE 	SANDY CREEK 
SCHEME 4	1WC3223 BROWN BLEND 	1FBC71430 CHARCOAL BLEND 	KM4567-2 BREED GRAUS 	KM4574-3 DRY DOCK 	KM4571-1 COBBLESTONE STREET 	KM4573-5 JUNGLE COVER 	ECHO RIDGE PRO-FIT ALPINE LEDGESTONE 	OLD EDISTO 
SCHEME 5	1WC50041 DESERT SAGE 	1FBC71430 CHARCOAL BLEND 	KM4584-2 BAY AREA 	KM4711-1 BAUHAUS TAN 	KM4525-3 CLAY BATH 	KM4765 LOG CABIN 	ASPEN COUNTRY LEDGESTONE 	SANDY CREEK 
SCHEME 6	1WC3223 BROWN BLEND 	1FAC31132 CHARCOAL BROWN BLEND 	KM4576-1 WHISPER RIDGE 	KM4537 PAW PRINT 	KM4724-1 BUD'S BALLS 	KM4523-3 RUB ELBOWS 	SUMMIT PEAK PRO-FIT ALPINE LEDGESTONE 	COASTAL BLUFF 

ROOFING: BORAL CONCRETE TILE OR EQUIVALENT
STONE: BORAL CULTURED STONE/CULTURED BRICK EQUIVALENT
PAINT: KELLY MOORE OR EQUIVALENT

REVISED: 08/04/2020

SUBDIVISION: SAN MARCO UNIT 13

PITTSBURG, CA

SCHEME	VILLA TILE	FLAT TILE	BODY 1	BODY 2	TRIM & GARAGE DOOR	ACCENT & FRONT DOOR	STONE	BRICK
SCHEME 7	1VCS2323 BROWN BLEND 	1FACS2330 APPALACHIAN BLEND 	KM4765-3 RUSTIC HACIENDA 	KM5765-5 RIVER BANK 	KM4764-2 DUSTY TRAIL RIDER 	HE54201 ADORSE WHITE 	GRAY SOUTHERN LEDGESTONE 	OLD EUSTO 
SCHEME 8	1VCS2323 BROWN BLEND 	1FACS1430 CHARCOAL BLEND 	KM4842-2 TIN MAN 	KM4842-8 BECKETT PASSAGEWAY 	KM4765-1 FRESH LINEN 	KM4827 CARBON 	BLACK MOUNTAIN PRO-FIT ALPINE LEDGESTONE 	TOBACCO ROAD 
SCHEME 9	1VCS2024 DESERT SAGE 	1FACS1430 CHARCOAL BLEND 	308 BROWNWOOD 	KM4838 GROUNDHOG BADGER 	27 BONE 	KM4862-3 OLD SCHOOL 	SUMMIT PEAK PRO-FIT ALPINE LEDGESTONE 	TOBACCO ROAD 
SCHEME 10	1VCS1430 VERONA CLAY 	1FACS1133 CHARCOAL BROWN BLEND 	KM4863-2 GOLD WASH 	KM5779-3 EAGLE'S MEADOW 	KM4741 GINKGO GLOVE 	KM4819-6 TURKISH COFFEE 	WOLF CREEK COUNTRY LEDGESTONE 	COASTAL BLUFF 
SCHEME 11	1VCS2323 BROWN BLEND 	1FACS1430 CHARCOAL BLEND 	48 ACOUSTIC WHITE 	KM5765-1 WHISPER RIDGE 	KM4771-2 APPLE HILL 	KM5772 PALM LANE 	HUDSON BAY COUNTRY LEDGESTONE 	MARSH POINTE 
SCHEME 12	1VCS2024 DESERT SAGE 	1FACS1430 CHARCOAL BLEND 	KM4841 CITY DWELLER 	KM5223-3 VOLCANIC ROCK 	KM4749 GREEN WHITE 	KM4863 BLACKDUCK 	ECHO RIDGE PRO-FIT ALPINE LEDGESTONE 	COASTAL BLUFF 

ROOFING: BORAL CONCRETE TILE OR EQUIVALENT
STONE: BORAL CULTURED STONE/CULTURED BRICK EQUIVALENT
PAINT: KELLY MOORE OR EQUIVALENT

REVISED: 08/04/2020

STANDARD CONDITIONS OF DEVELOPMENT
(Planning Commission Resolution No. 8931)

All projects approved by the Planning Commission must meet the following standard conditions unless specifically exempted by the Commission or Council.

A. Project Site.

1. The applicant shall comply with all regulations and code requirements of the Building Division, Engineering Division, Contra Costa Fire Protection District, the Police Department and any other agencies requiring review of the project. If required, these agencies shall be supplied copies of the final building and site plans.
2. Developer shall provide written notification to adjacent property owners for any drainage work required to collect or convey storm water runoff, which may or will affect their properties.
3. During construction water trucks or sprinkler systems are to be used in sufficient quantities to prevent dust from leaving the site during any earthmoving and/or construction activities. Nonpotable water shall be used from a source approved by the City Engineer. (Title 15 of PMC)
4. Continuous 6" high Portland Concrete Cement curbing shall be provided between all driveways and landscaped areas as indicated in the City of Pittsburg Standard Details. In addition to above, curbing between length of parking space and landscaped area shall include a 12" wide "Courtesy Curb."
5. CC&R's (Covenants, Conditions and Restrictions) for the project shall contain appropriate provisions for joint maintenance of any infrastructure, roadways, utilities, landscaping and irrigation as determined necessary by the City Engineer.
6. Developer shall submit a study addressing on and off-site storm water and sewer system capabilities. If the study indicates that the present system is inadequate, the developer must provide plans and install any additional storm water and sanitary and sanitary sewer facilities including off-site improvements to correct storm water runoff and sanitary sewer demands anticipated for upstream buildout in accordance with the Pittsburg General Plan.
7. Environmental and engineering studies, as directed by the Planning and Building Director, must be complete and on file prior to commencement to plan checking. Developer shall install off-street improvements determined necessary by the City Engineer to provide safe traffic conditions.
8. Developer shall underground existing and required on and off-site utilities as specified in Chapter 17 of the Municipal Code or as deemed necessary by the City Engineer.
9. All site development shall comply with title 12 (Streets, Sidewalks and Utilities), Title 13 (Water and Sewers) and Chapter 15.88 (Grading, Erosion and Sediment Control) of the Pittsburg Municipal Code as determined by the City Engineer. Issuance of a site development permit will be required whereby specific engineering requirements will be made as conditions of approval of that permit.
10. The CC&R's shall restrict the storage of recreational vehicles on this site or parcels unless they are the principle source of transportation for the

owner and prohibit parking on the public street for long than 72 hours.

11. All retaining wall adjacent to public right-of-ways shall be provided with decorative treatment, subject to approval by the Planning Division.

12. The design of any masonry soundwall shall be approved by the Planning and Building Department. It shall match or harmonize with existing soundwalls of neighboring projects along that street.

B. Architecture.

1. All mechanical, irrigation, ground and/or roof mounted equipment shall be architecturally screened from view from all public right-of-ways prior to issuance of certificate of occupancy.

2. All trash enclosures shall be constructed of masonry material with self-enclosing doors and have a second access. The enclosure shall have materials and colors consistent with the primary building.

3. All vents, gutters, downspouts, flashing electrical conduits, etc., shall be painted or finished to match the color of the adjacent surface unless otherwise directed by the Planning Commission.

4. Soffits and other architectural elements visible from view but not detailed on the plans shall be finished in a material in harmony with the exterior of the building.

5. Finish quality of exterior design elements including, but not limited to, building façades and landscaping shall be subject to approval of the Planning Division prior to issuance of Certificate of Occupancy.

C. Landscaping.

1. Specific landscaping for screening shall have an appearance of mature growth subject to a field check and approval by the Planning Division prior to Certificate of Occupancy.

2. The area under the drip line of all existing trees, which are to be saved, shall be fenced during construction. Grading shall be restricted under them to prevent soil compaction around the trees and to protect them from damage.

3. An existing tree inventory shall be created and included on the site plan for all new projects prior to approval of grading plan.

4. All slope banks in excess of five (5) feet in vertical height and 2:1 or greater slope shall be landscaped and irrigated for erosion control and to soften their appearance as follows: one 15-gallon or larger size tree per each 150 sq. ft. of slope area, one 1-gallon or larger size shrub per each 100 sq. ft. of slope area, and appropriate ground cover 12-24 inches on-center. In addition, slope banks in excess of eight (8) feet in vertical height and 2:1 or greater slope also include one 5-gallon or larger size tree per each 250 sq. ft. of slope area. Trees and shrubs shall be planted in staggered clusters to soften and vary slope plane. Slope planting required by this condition shall include a permanent irrigation system to be installed by the developer prior to occupancy.

5. All planting shall be maintained in good growing condition. Such maintenance shall include, where appropriate, pruning, mowing, weeding, cleaning of debris and trash, fertilizing and regular watering. Whenever necessary, planting shall be replaced with other plant materials to insure continued compliance with applicable landscaping requirements. Required

irrigation systems shall be fully maintained in sound operating condition with heads periodically cleaned and replaced when missing to insure continued regular watering of landscape areas, and health and vitality of landscape materials.

D. General Requirements

1. Final inspection for occupancy permits will not be granted until all construction and landscaping is complete in accordance with approved plans.
2. The applicant shall defend, indemnify and hold harmless the City of Pittsburg, its agents, officers, and employees from any claim, action, or proceeding against the City or its agents, officers, or employees to attack, set aside, void or annul this approval, or any aspect of the City's consideration of applicant's project. The applicant recognizes and agrees that applicant's voluntary commitment to meet the obligations described in this condition is an integral factor in the City's approval of this project. The intent of this condition is to require the applicant to bear the cost of any and all litigation instituted to overturn or in any way modify the City's approval of this project. Such costs include without limitation, any award of attorney's fees and costs to a prevailing plaintiff or petitioner. In the event the city becomes aware of any such claim, action, or proceeding, the City shall promptly notify the applicant and shall cooperate fully in the defense. If the City fails to promptly notify the applicant, or if the City fails to cooperate fully in the defense, the applicant shall not thereafter be responsible to defend, indemnify, or hold harmless the City. Nothing contained in this condition prohibits the City from participating in the defense of any claim, action, or proceeding, if both the following occur:
(a) the City bears its own attorneys' fees and costs; and (b) the City defends the action in good faith. The applicant shall not be required to pay or perform any settlement unless the applicant approves the settlement.
3. It is required by State Law (Business and Professional Code Section No. 5537 & 5538 and Section 302(b) of the Uniform Building Code) that all commercial buildings, new or existing must have a licensed professional designer (Architect, Civil or Structural Engineer) to design all changes of use or occupancy as well as new construction.
4. The applicant shall submit a complete area water pressure availability study for all phases of the Project prior to issuance of any development permits. If the study indicates that the present system is inadequate, the Applicant must provide plans, which will demonstrate any remedial action necessary to abate the deficiency and shall take all necessary actions at the applicant's expense.
5. This use permit may be recalled to the Planning Commission for review at any time due to complaints regarding lack of compliance with conditions of approval, traffic congestion, noise generation, or other adverse operating characteristics. At such time, the Commission may revoke the use permit or add/modify conditions approval.
6. It is the responsibility of the applicant or developer to check with each agency for requirements that may pertain to their project.
7. All signs shall be submitted to the Planning Division for design review per Title 19 of the Pittsburg Municipal Code.
8. All landscape areas shall be maintained in a healthy, thriving and weed free condition.

9. The site shall be maintained in a neat and clean manner free of trash and debris.

10. All outdoor mechanical equipment, satellite dishes, fire main and all rooftop equipment shall be fully visually screened upon installation subject to the approval of the Planning Division. Screening devices shall be shown on construction and/or landscape plans.

11. All exterior light fixtures shall be shown on plans subject to staff review and approval. All lights attached to buildings shall provide a soft "wash" of light against the wall. All building and parking or yard lights shall conform to City Parking Standards 18.78.050 (F) and Performance Standards 18.82.030 (B) and shall compliment the site and building architecture.

12. Prior to occupancy, the developer shall supply the City with an ACAD computer disk file showing plans that reflect the project as it was build (As-Builts) at the discretion of the Planning and Building Director.

E. Standard Conditions of Approval
Requiring Minimum Construction Site
Management Practices

1. (Projects involving land disturbances of less than five (5) acres) – During construction activities, the project sponsor shall reduce or prevent to the maximum extent practicable the direct or indirect discharge of any pollutant into the storm drain system utilizing best management practices contained in the California Storm Water Best Management Practices Handbook for Construction Activities. Construction activities include, but are not limited to: watering operations; roadwork and paving operations; concrete and painting; structure construction and painting; construction material storage and

handling; construction waste/debris storage and disposal; and, construction equipment/vehicle cleaning, maintenance and fueling operations. The project sponsor is also responsible for training all contractors and subcontractors on the best management practices which are identified in the California Storm Water Best Management Practices Handbook for Construction Activities which will be available at the pre-construct meeting of the project.

or

2. (Projects involving land disturbances of five (5) acres or more) – Prior to commencement of any site work that will result in a land disturbance of five acres or more, the project sponsor shall submit to the City a copy of the Notice of Intent (NOI) sent the State Water Resources Control Board and the Stormwater Pollution Prevention Plan (SWPPP) prepared for the project, as required by the State's General Construction Activity Permit.

3. All storm drains, which serve the site, shall be protected from spills and soil runoff (from unpaved parking areas). The applicant may use "Any Source Control" BMP (Best Management Practice) as listed in the California Storm Water Best Management Practice Handbook for storm water run-off for commercial and industrial sites. Storm drains will be inspected periodically. Questions may be referred to City NPDES Coordinator, at 252-4920.