



PITTSBURG MOVES

Active Transportation Plan

Prepared by



Local
Government
Commission



FEHR & PEERS

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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

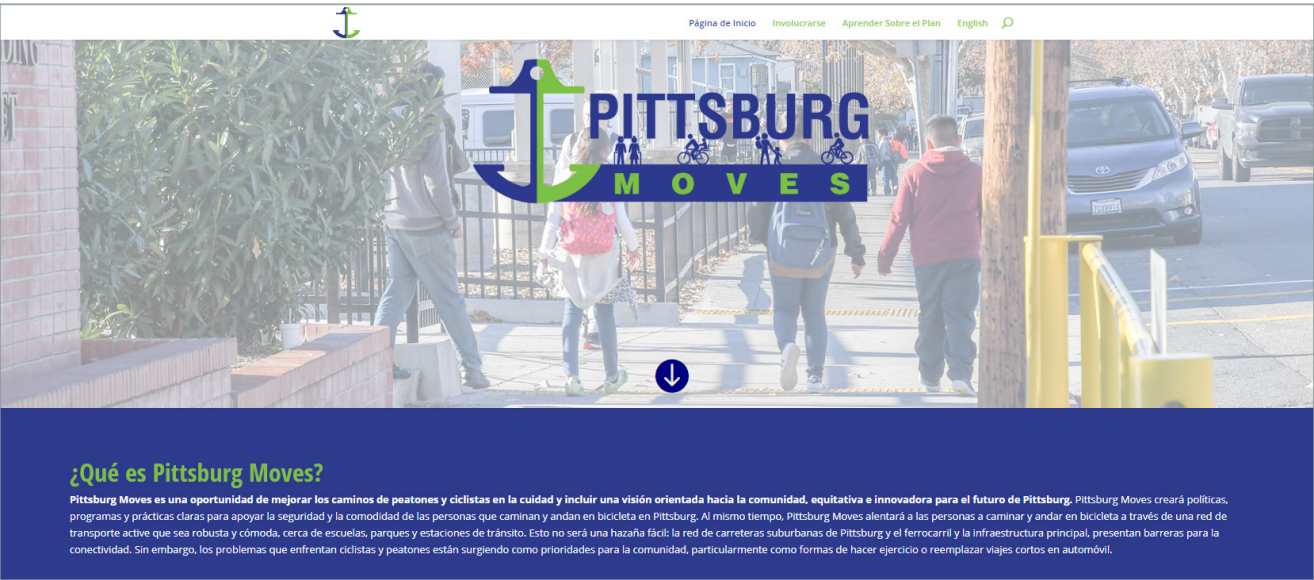
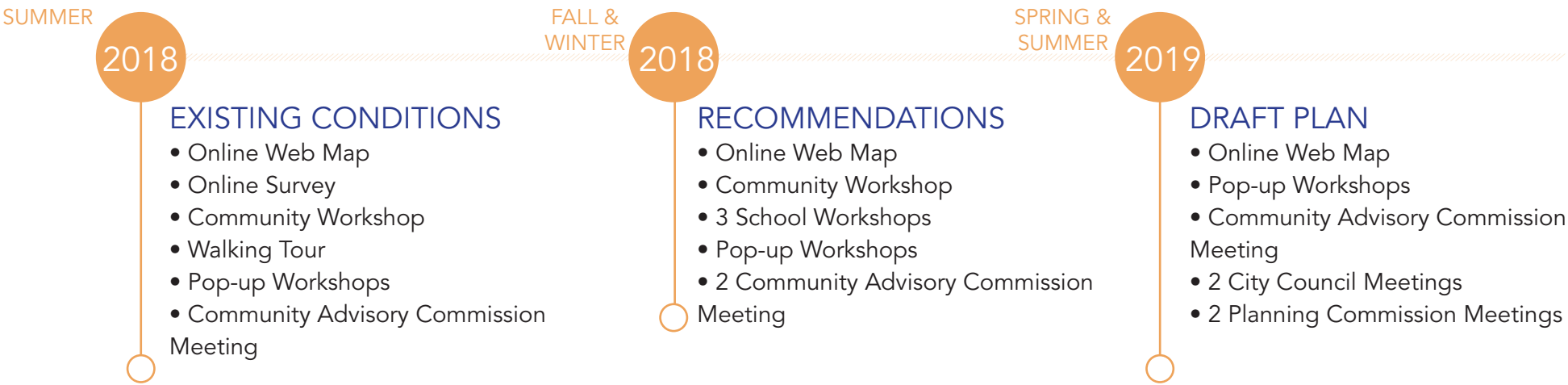


FIGURE I-2
THE PITTSBURG MOVES WEBSITE
DISTRIBUTED INFORMATION
ABOUT UPCOMING EVENTS
AND HOSTED SURVEYS AND
ONLINE WEBMAPPING INPUT

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 1-3
PITTSBURG MOVES COMMUNITY PROCESS SURVEY

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 Pittsburg also established an interactive, bilingual website (www.pittsburg-moves.com) for Pittsburg 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



STREET
MAINTENANCE



COMPLETE
NEIGHBORHOODS



PERSONAL
SECURITY



COMPLETE
STREETS



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 Streets:** 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

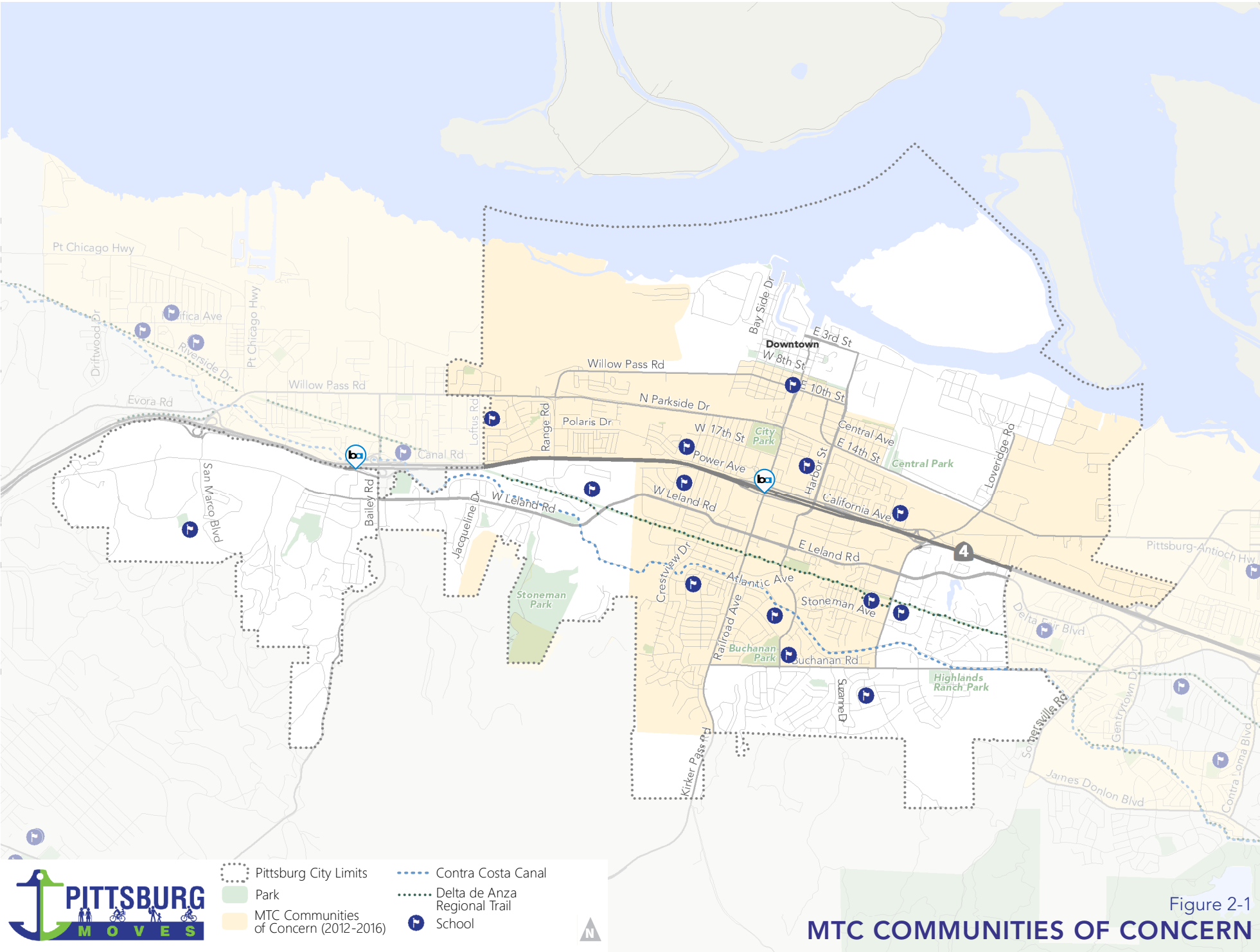


Figure 2-1

MTC COMMUNITIES OF CONCERN

Source: City of Pittsburg (2018) and MTC (2012-2016)



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.

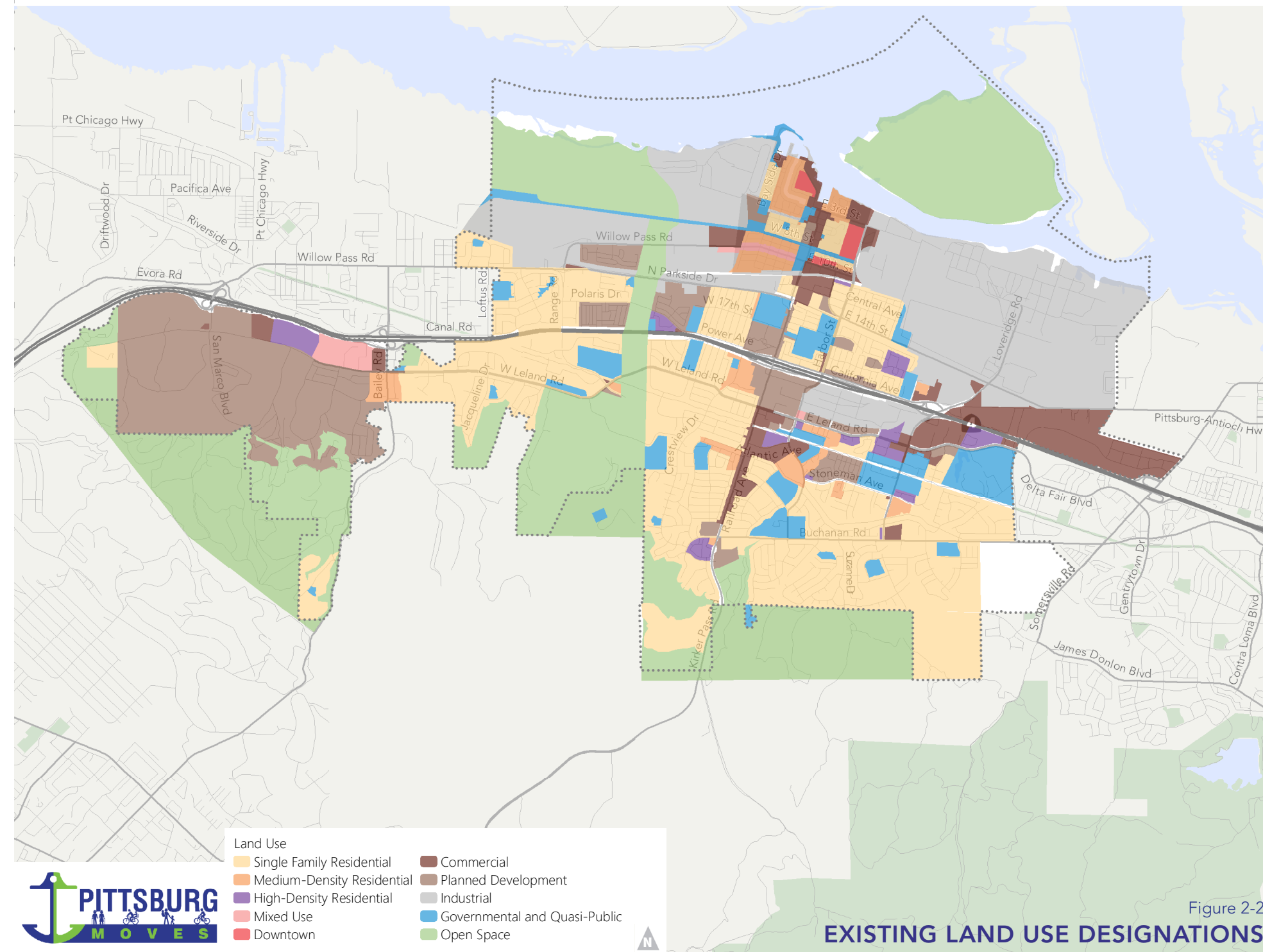


Figure 2-2

Source: City of Pittsburg (2018, Zoning Code)

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.

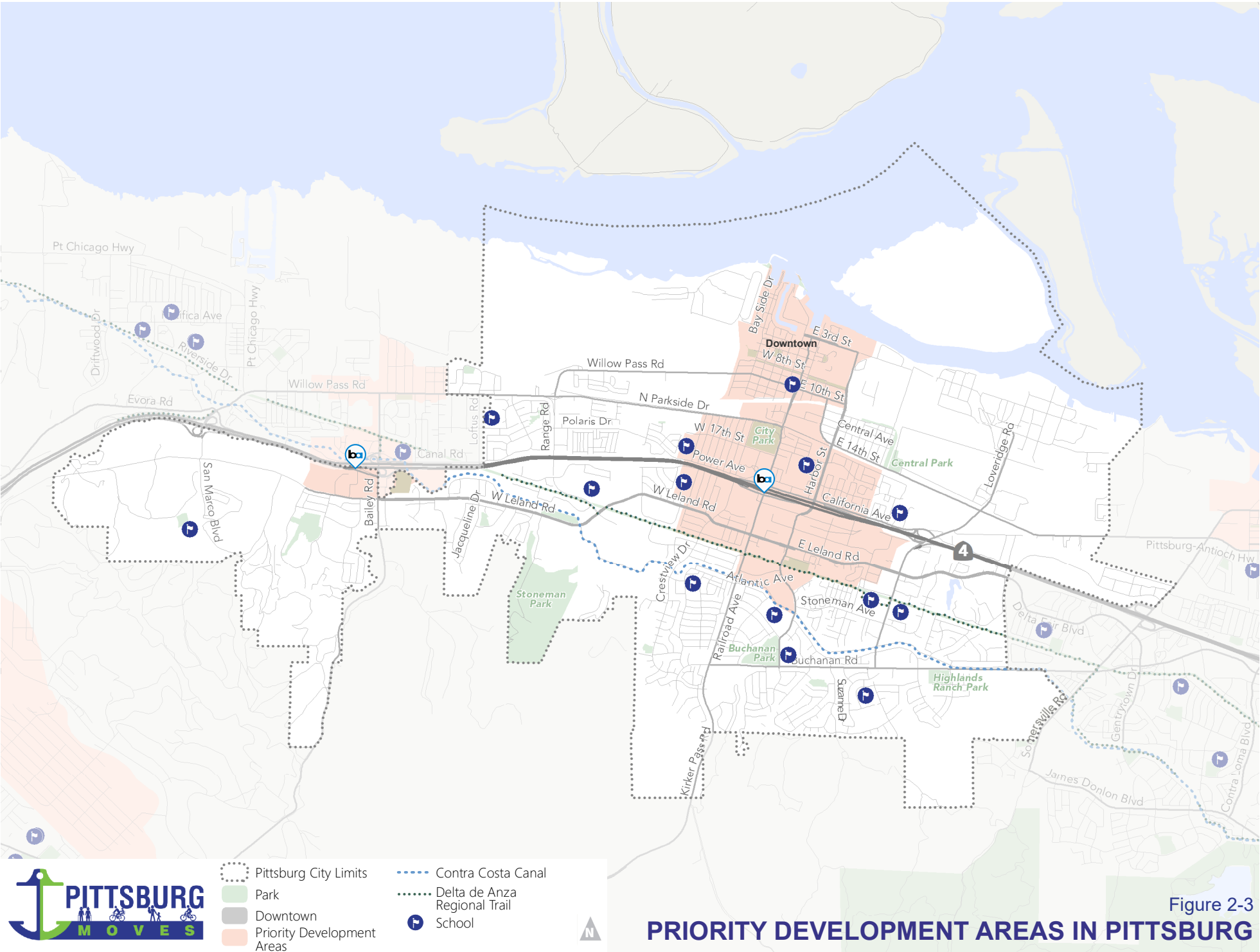
There are three PDAs in Pittsburg:

- 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)

Figure 2-3

PRIORITY DEVELOPMENT AREAS IN PITTSBURG

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**.

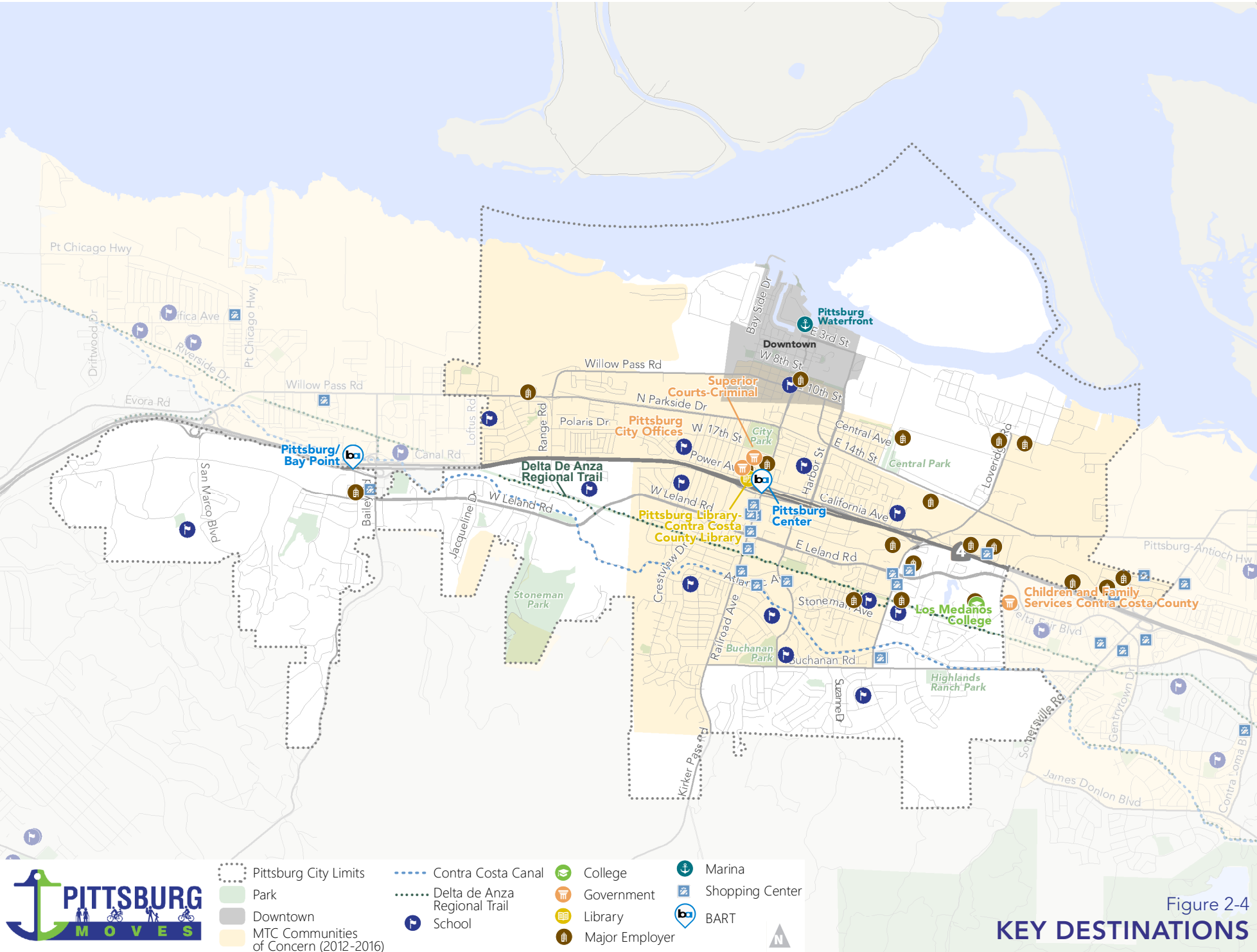
- **Downtown:** The Downtown extends from the BNSF railroad tracks in the south to the Sacramento River Delta waterfront in the north. Its eastern and western boundaries are generally defined by Harbor and Beacon streets. Pittsburg's downtown is one of the oldest in the county, and one of the few with 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.



Source: City of Pittsburg (2018) and MTC (2012-2016)

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

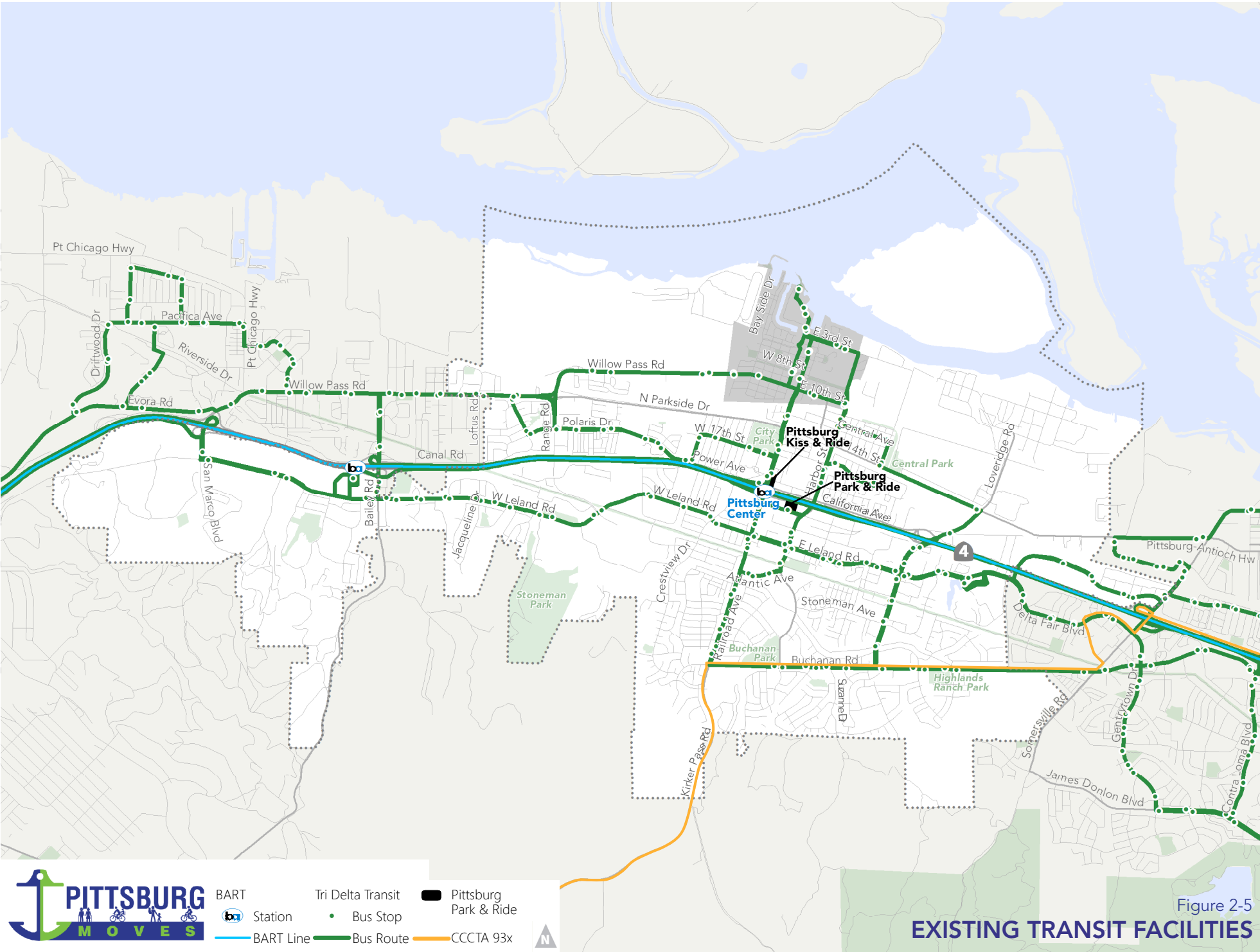
Station are "intermodal - auto reliant" and "auto-dependent". Per BART's Multimodal Access Design Guidelines (2017), these station types mean improving walking environment should be prioritized. The station is difficult to access for people walking and biking. In many cases, the sidewalk around the station 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.



Source: TriDelta Data (2018)

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

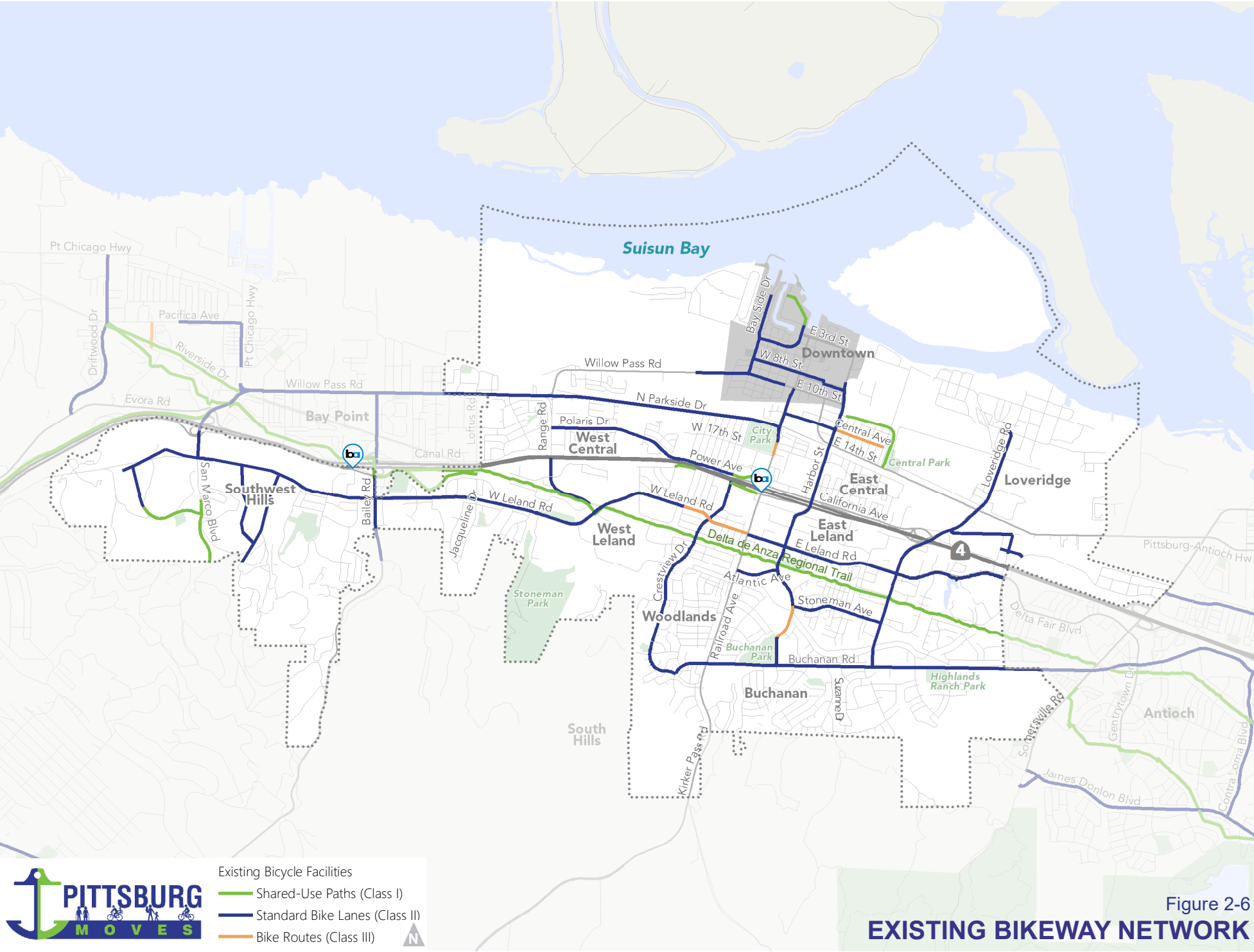
The city's existing bikeway network consists of three different bikeway types: shared-use paths (Class I); standard bike lanes (Class II); and bike routes (Class III). Together, these bikeways cover about 43 linear miles (see **Table 2-2**). Most of the city's bikeways are standard bike lanes like those 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

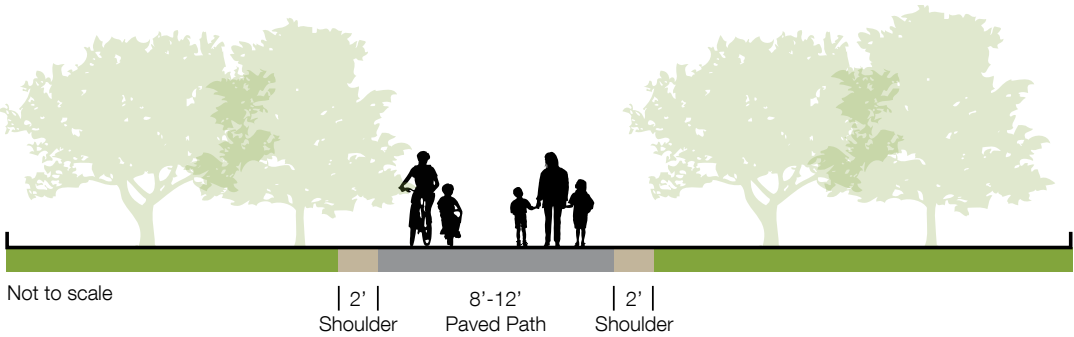


Shared-Use Paths (Class I)

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.

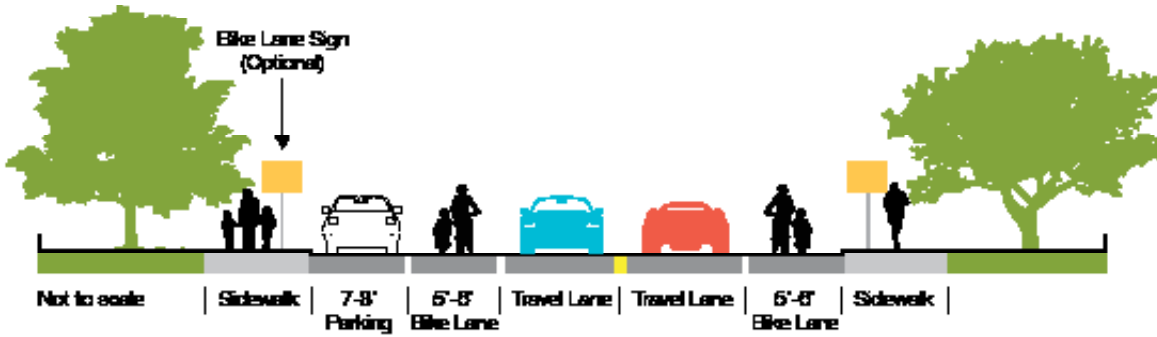


Standard Bike Lanes (Class II)

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.

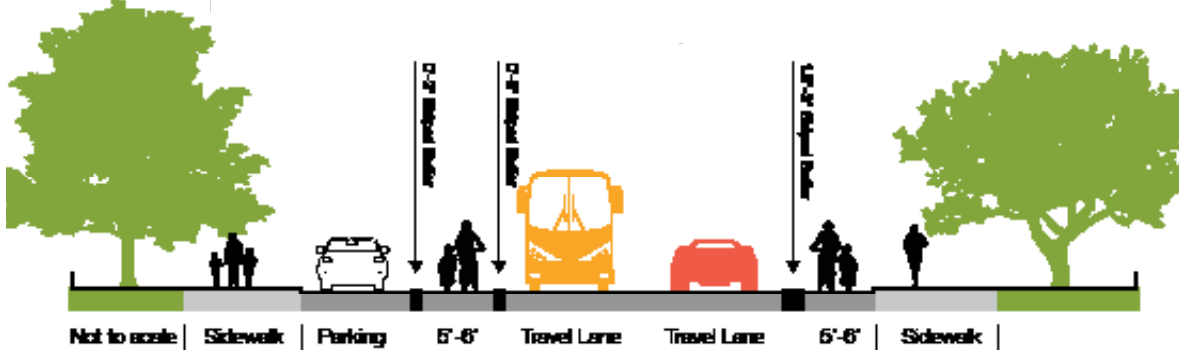


Buffered Bike Lanes (Class II)

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.



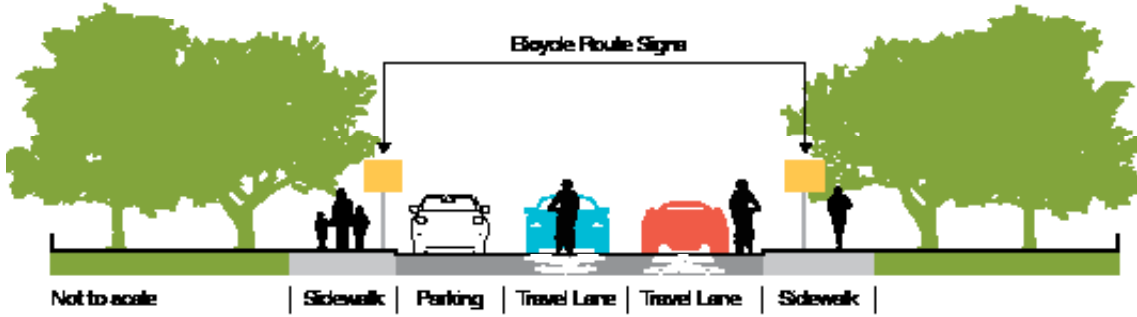
Bike Routes and Boulevards (Class III)

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.

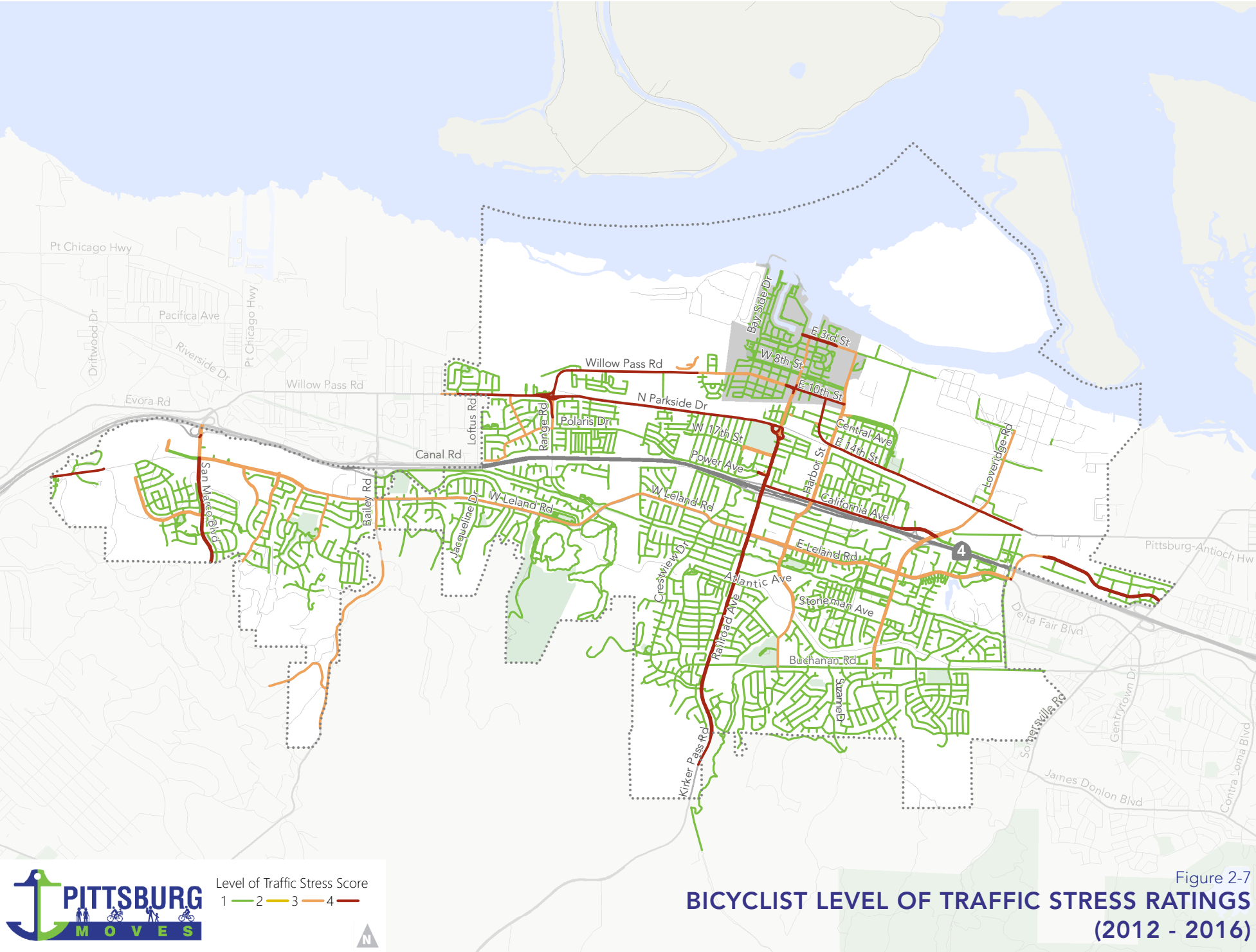


Figure 2-7

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.

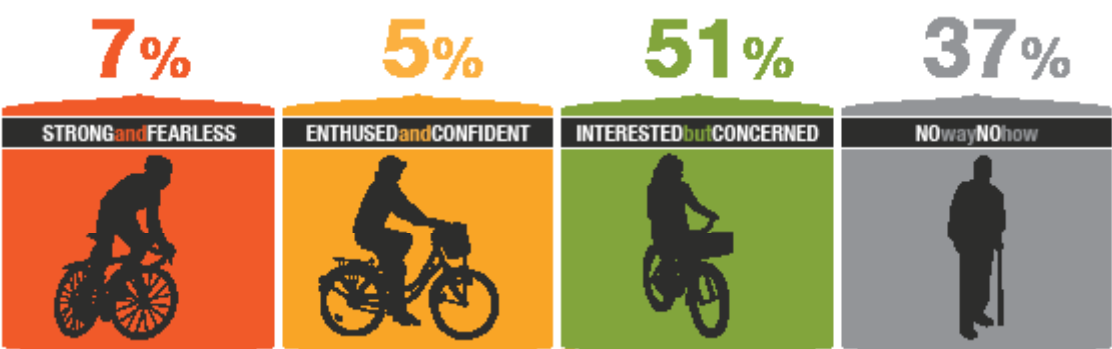
Since most of Pittsburgh’s arterials exhibit a high level of traffic stress (LTS 3 and 4), it would appear bicycling between neighborhoods is currently an unattractive option for everyone in the community except those with a “strong and fearless” attitude toward bicycling.

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

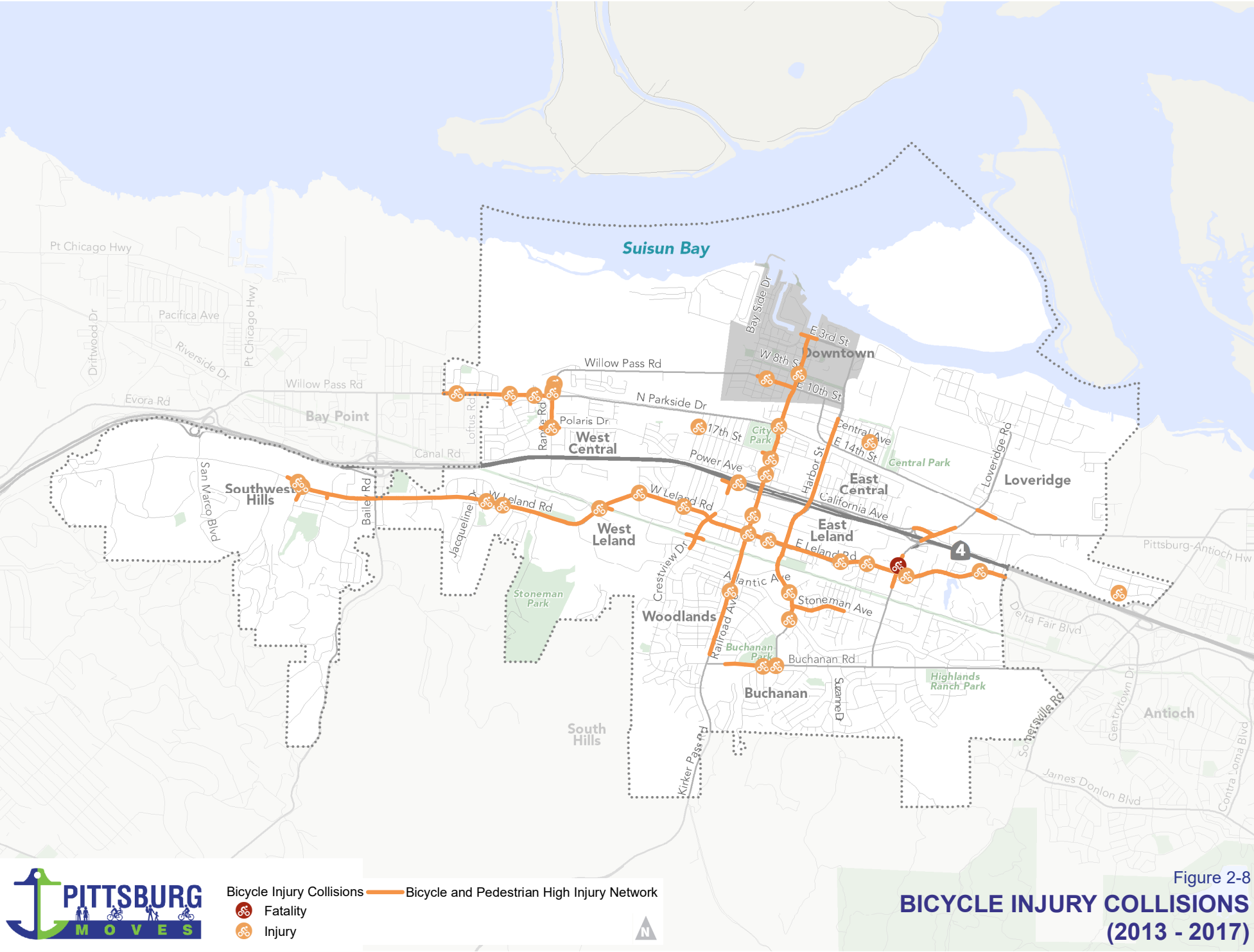
Source: SWITRS via TIMS, 2013-2017

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.

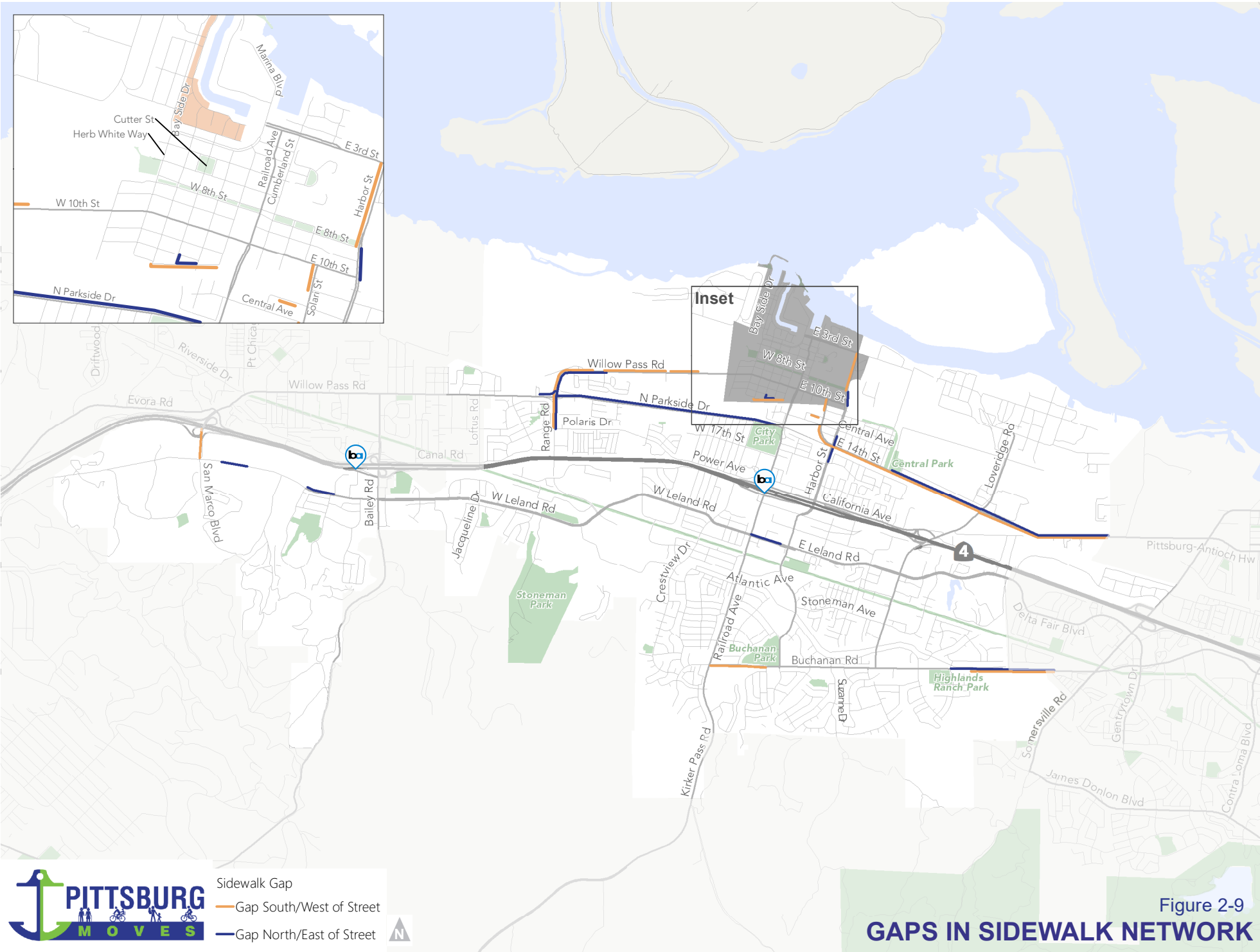
Sidewalks and Shared-Use Paths

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.



Source: City of Pittsburg and Fehr & Peers (2018)

Crosswalks

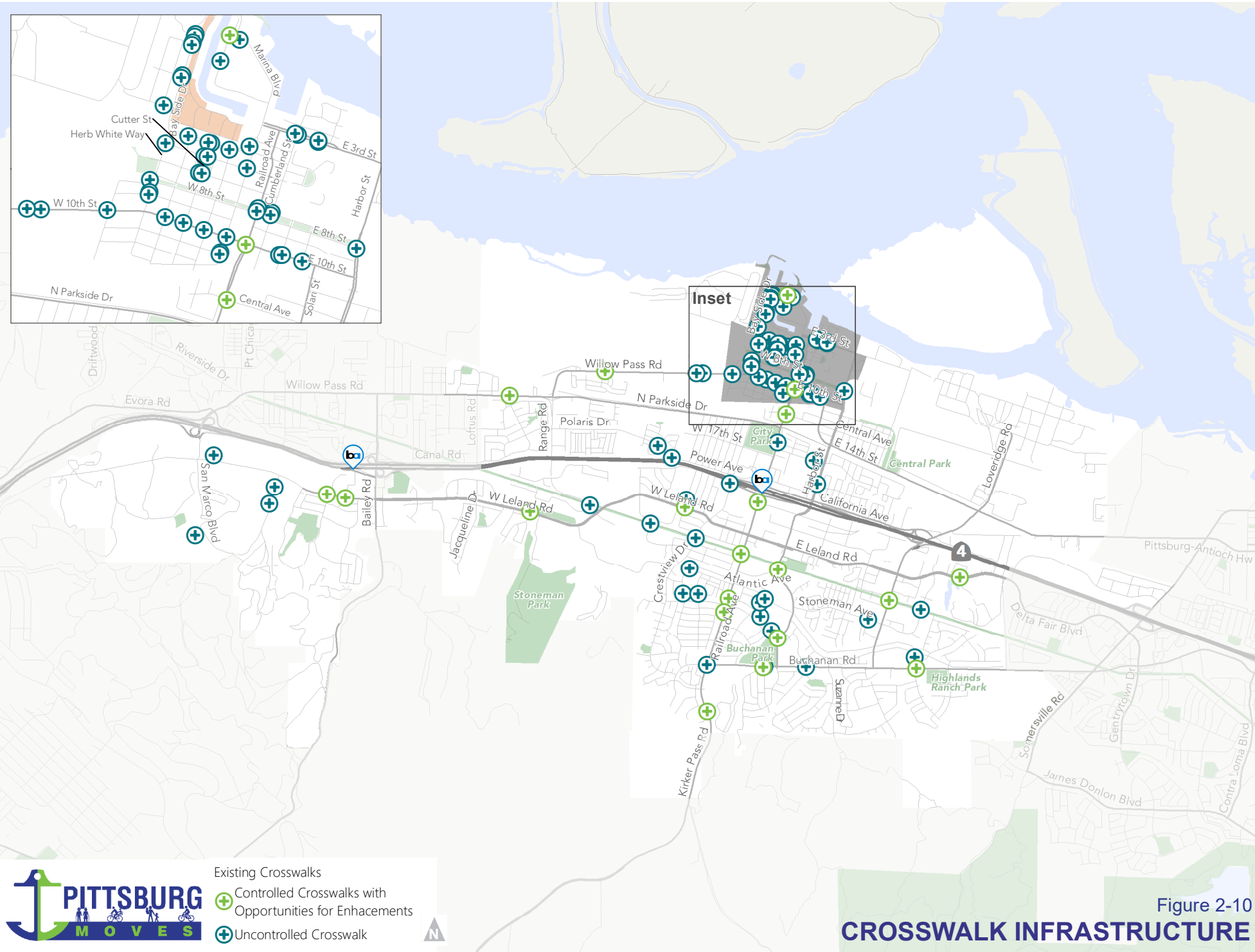
Crosswalks identify the preferred areas for pedestrians to cross the street. There are two kinds of crosswalks:

- **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 Pittsburg Moves Crosswalk Policy in Appendix B for a full discussion of potential enhancements.

Most uncontrolled crosswalks in Pittsburg are located on two-lane roadways with low average daily traffic (ADT) and a speed limit of 25-30 miles per hour (mph). In some cases, they are located on wider roads with a four-lane cross-section and speeds of 35 mph. Particularly near schools, those locations have flashing beacons to call attention to the crosswalk. The location of uncontrolled crosswalks in the city are also shown in **Figure 2-10**.



Source: City of Pittsburg and Fehr & Peers (2018)

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

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)

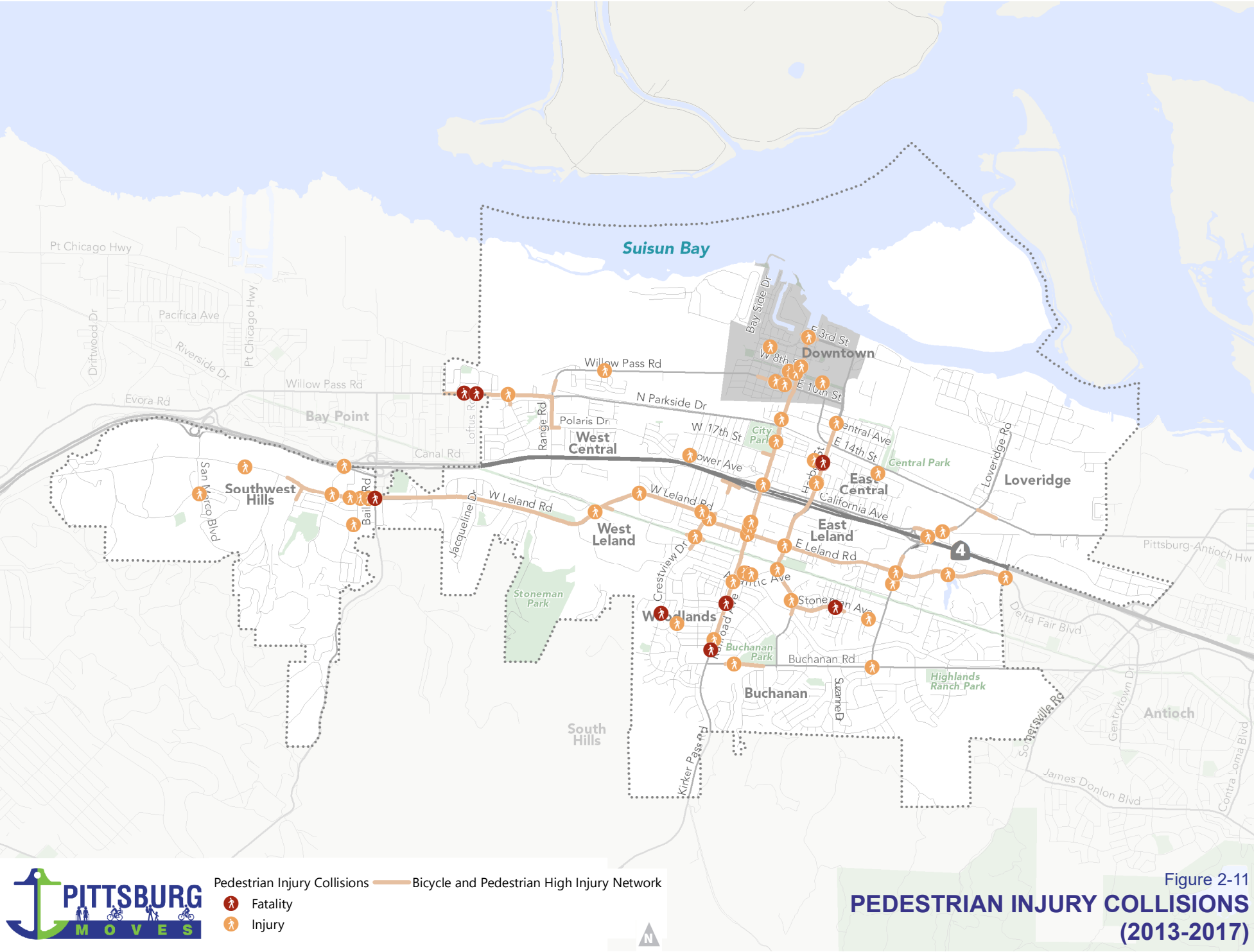
Violation Type	Collisions
Pedestrian Right of Way	28
Pedestrian Violation	27
Improper Turning	9
Unsafe Speed	6
Driving or Bicycling Under the Influence of Alcohol or Drug	2
Automobile Right of Way	1
Impeding Traffic	1
Improper Passing	1
Unsafe Lane Change	1
Traffic Signals and Signs	1
Other/Unknown/Not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

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

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).

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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



Table 2-9 lists the streets on Pittsburgh'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 injuries along the HIN involved bicyclists.

52 | ● ● ● ● ●

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

The map displays the Pittsburgh area with various neighborhoods and roads. The Bicycle and Pedestrian High Injury Network is highlighted in orange. Key roads shown include Pt Chicago Hwy, Pacifica Ave, Riverside Dr, Willow Pass Rd, Canal Rd, W Leland Rd, W 17th St, N Parkside Dr, Harbor St, Central Ave, E 14th St, California Ave, E Leland Rd, Stoneman Ave, Buchanan Rd, and James Donlon Blvd. Neighborhoods labeled include Downtown, East Central, West Central, Southwest Hills, Bay Point, Woodlands, Buchanan, and Antioch. Parks such as Stoneman Park, City Park, Central Park, and Highlands Ranch Park are also marked. A legend at the bottom left shows the 'Pittsburgh Moves' logo and the orange line representing the 'Bicycle and Pedestrian High Injury Network*'. A north arrow is located at the bottom center.

Figure 2-12
**BICYCLE AND PEDESTRIAN
HIGH INJURY NETWORK**

BICYCLE AND PEDESTRIAN HIGH INJURY NETWORK

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 Pittsburg Moves Project List (Appendix A).
 7. Prepare an annual report on the City's progress toward implementation of Pittsburg 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 Pittsburg's bikeway mileage over the most recent five-year period.
 - Tables summarizing Pittsburg's bicycle
 8. Apply for and achieve a League of American Bicyclists Bicycle Friendly Community status upon adoption of Pittsburg 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 Pittsburg 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 Pittsburg.*

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.

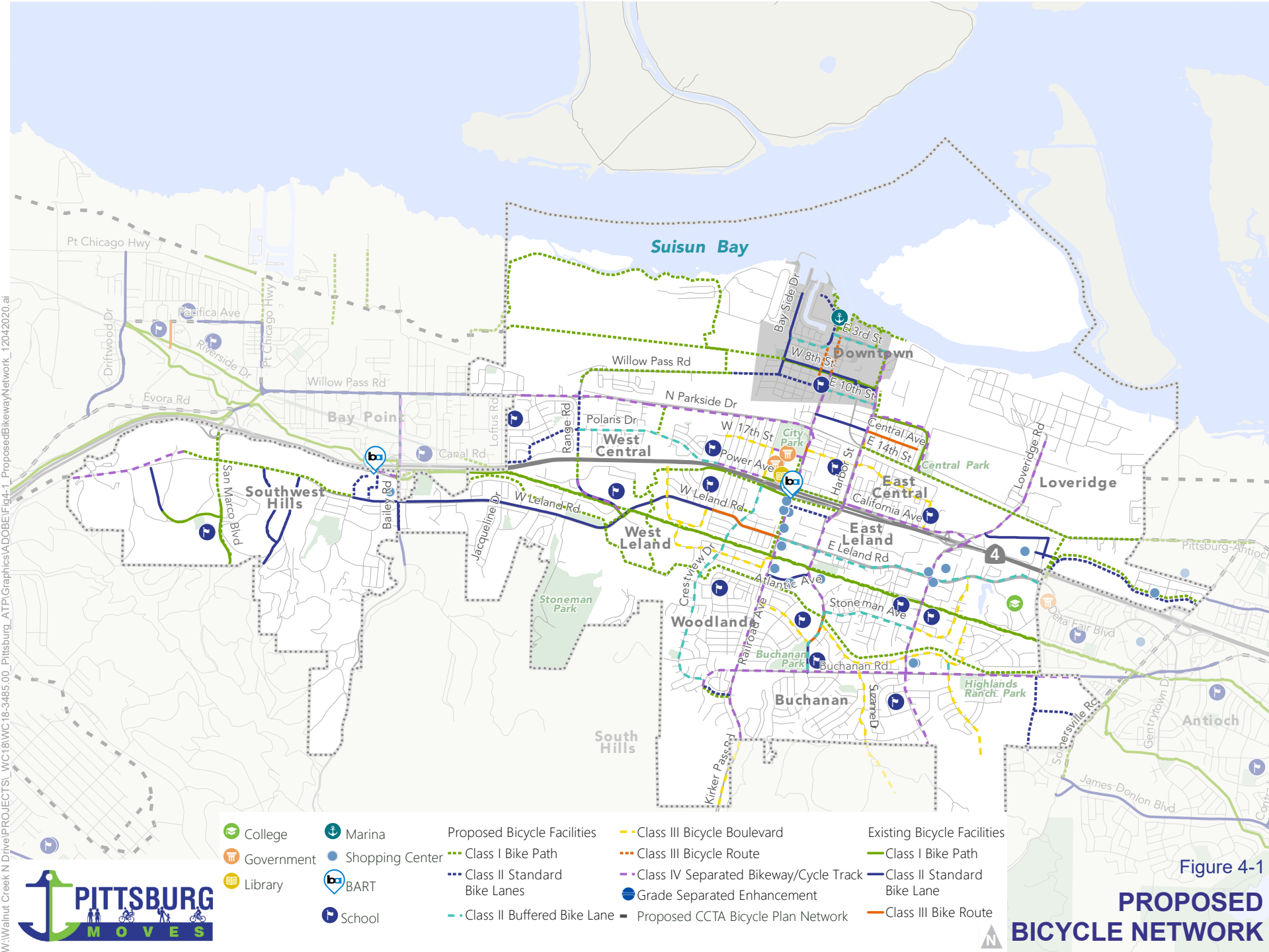
Bicycle Improvements

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



Source: City of Pittsburg and Fehr and Peers

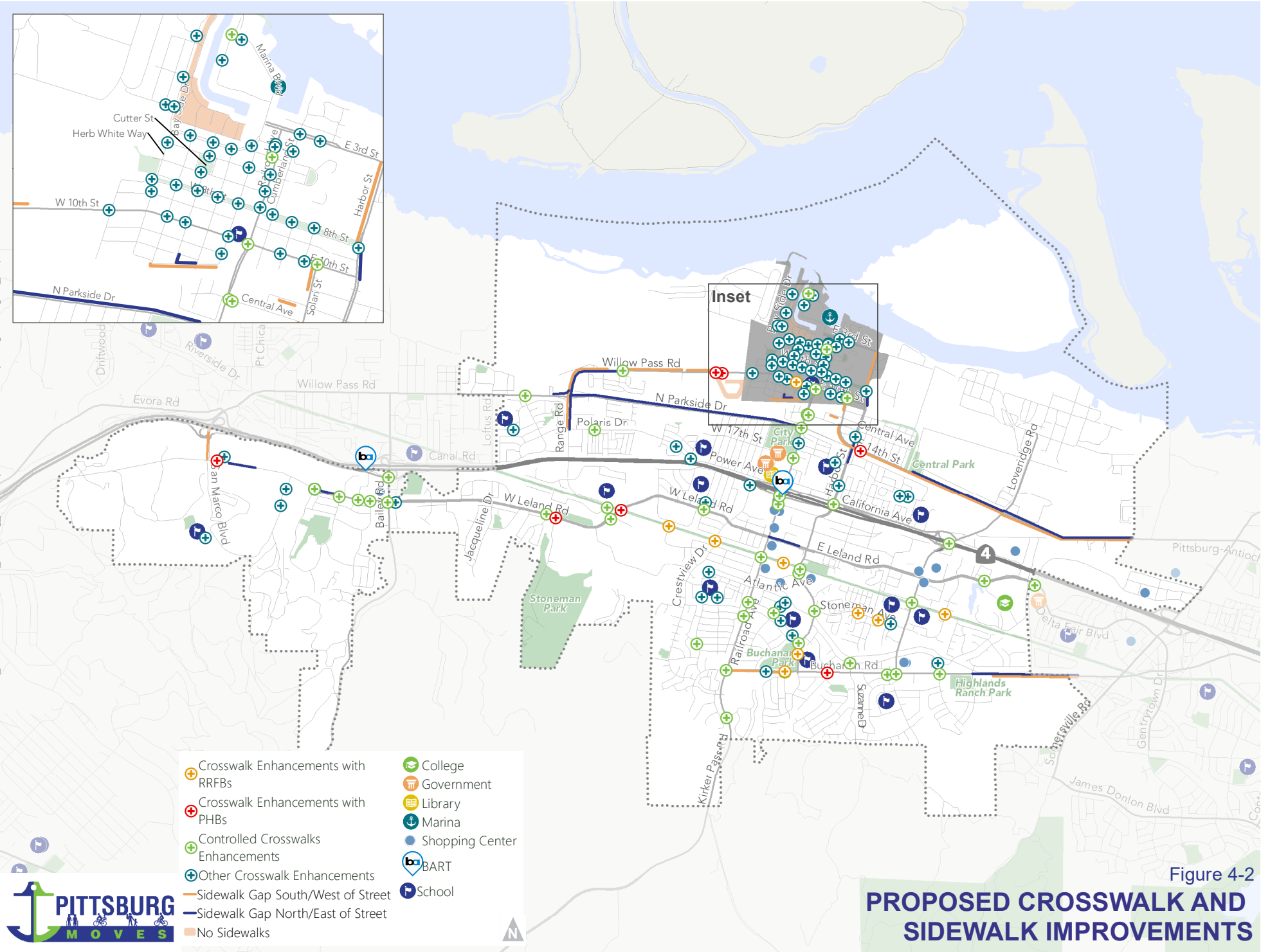
Figure 4-1

PROPOSED
BICYCLE NETWORK

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).



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.

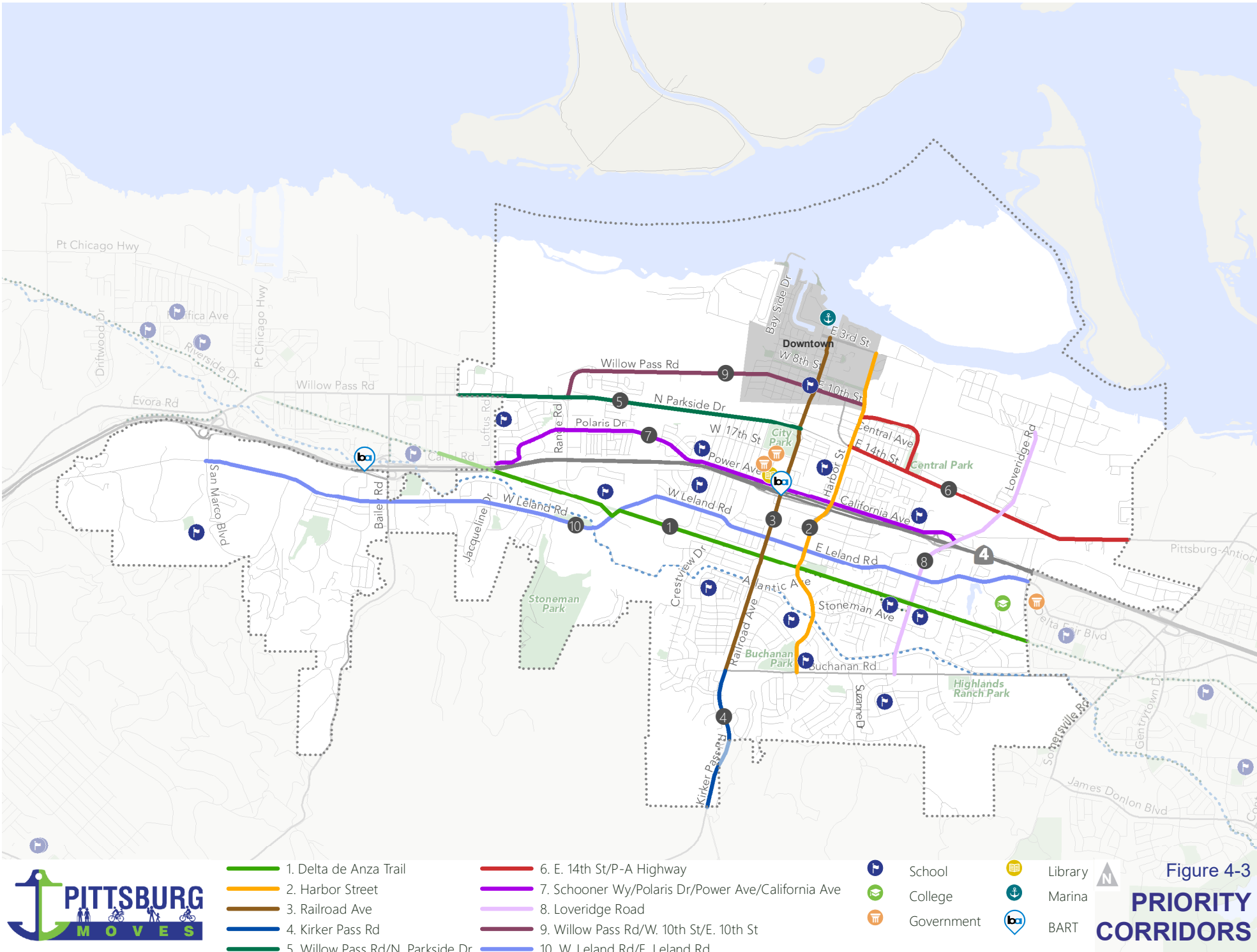


Figure 4-3
PRIORITY CORRIDORS

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

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.

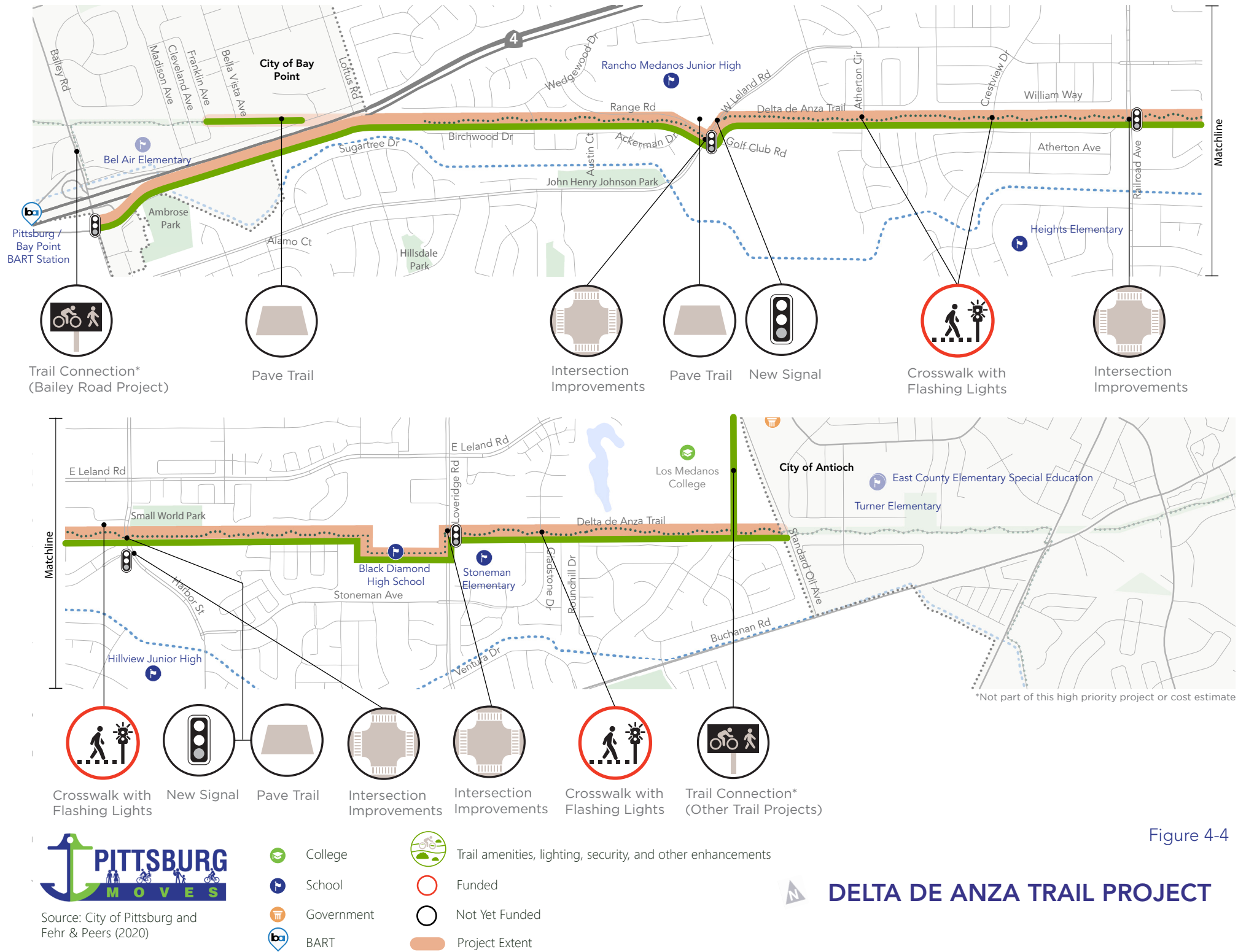


Figure 4-4

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:

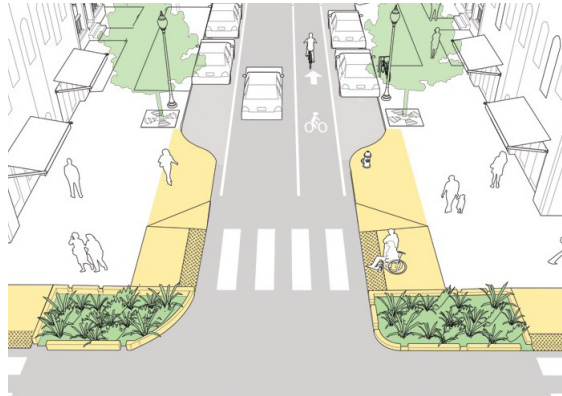
11*

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.

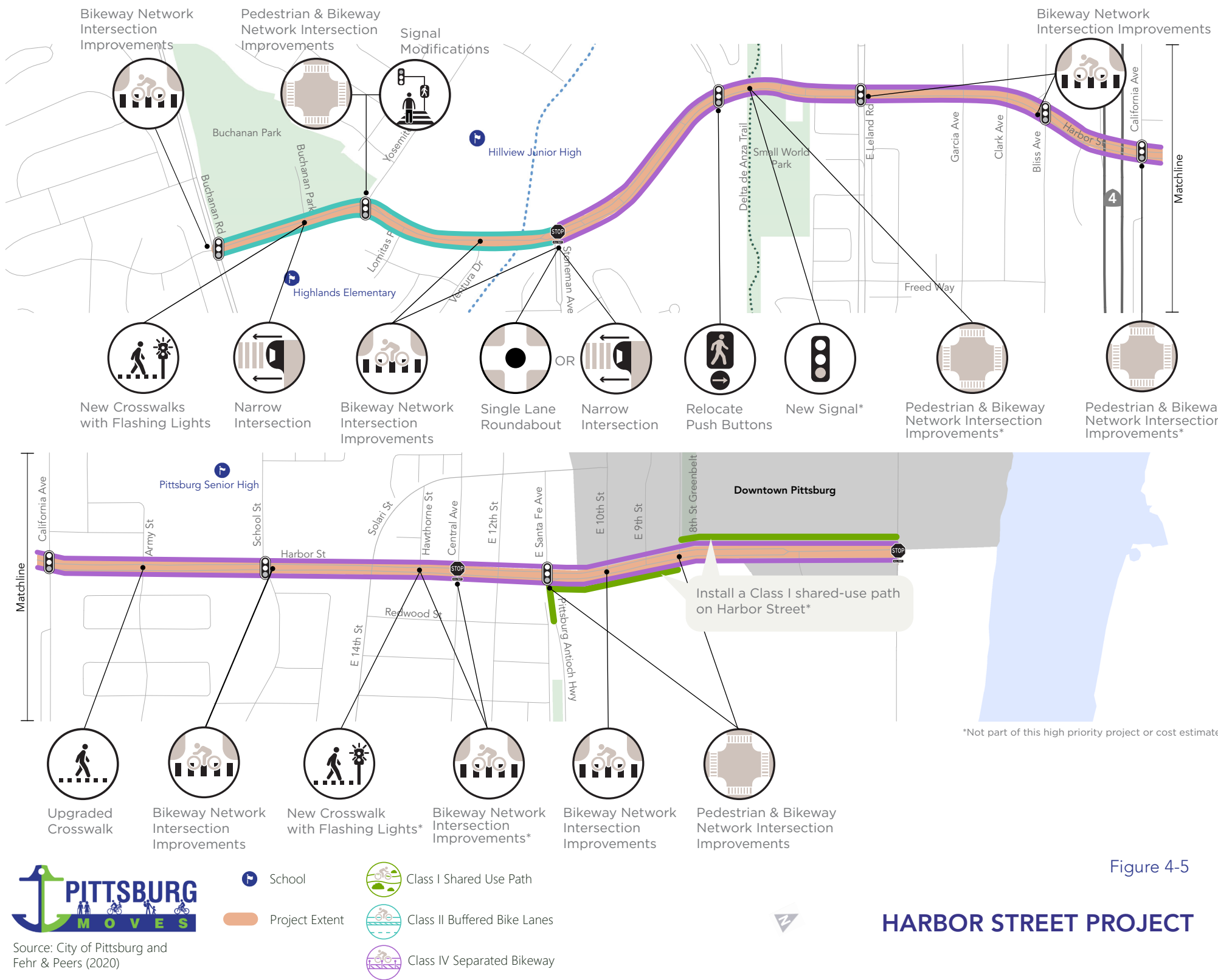


Figure 4-5

HARBOR STREET PROJECT



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

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.

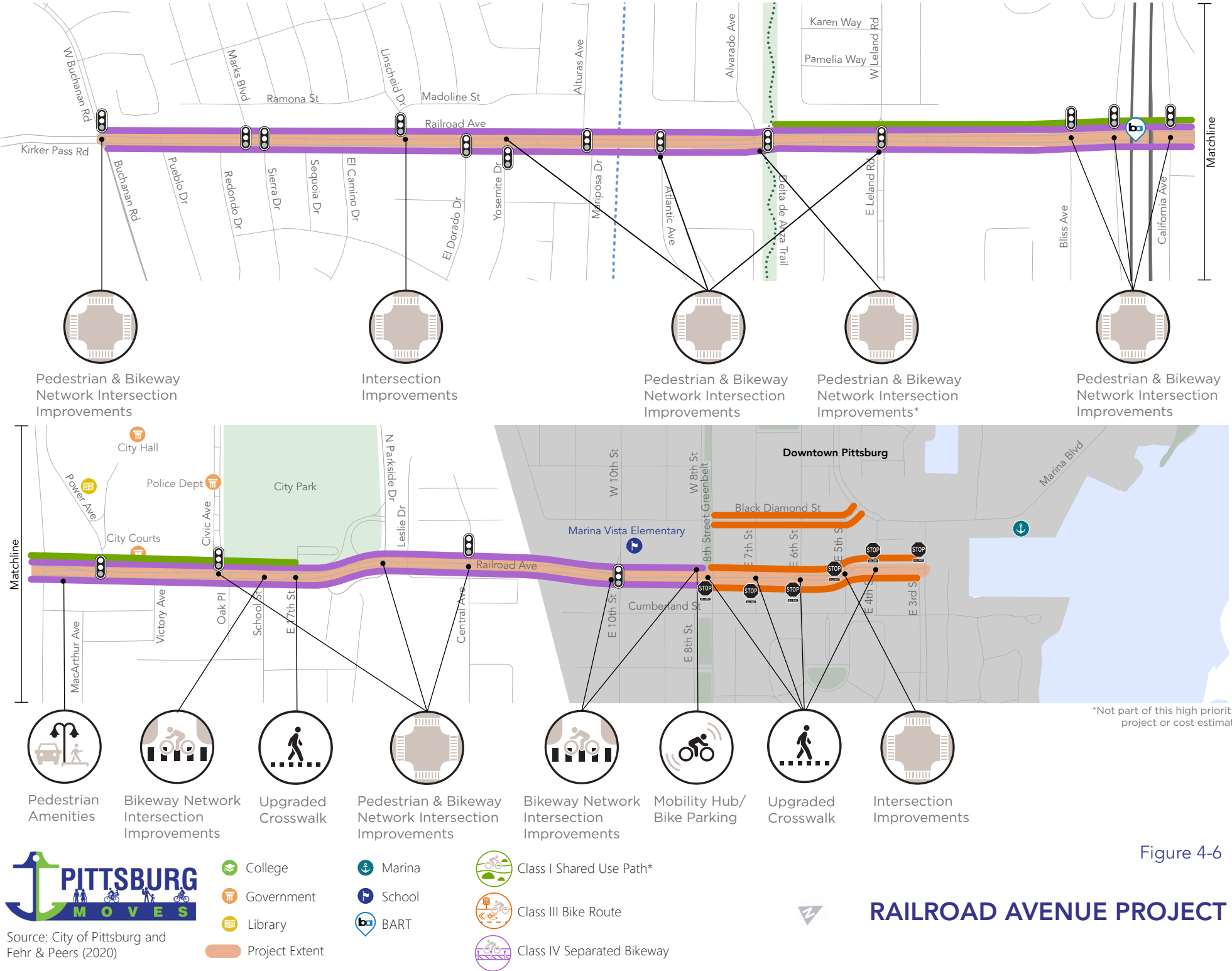


Figure 4-6

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.

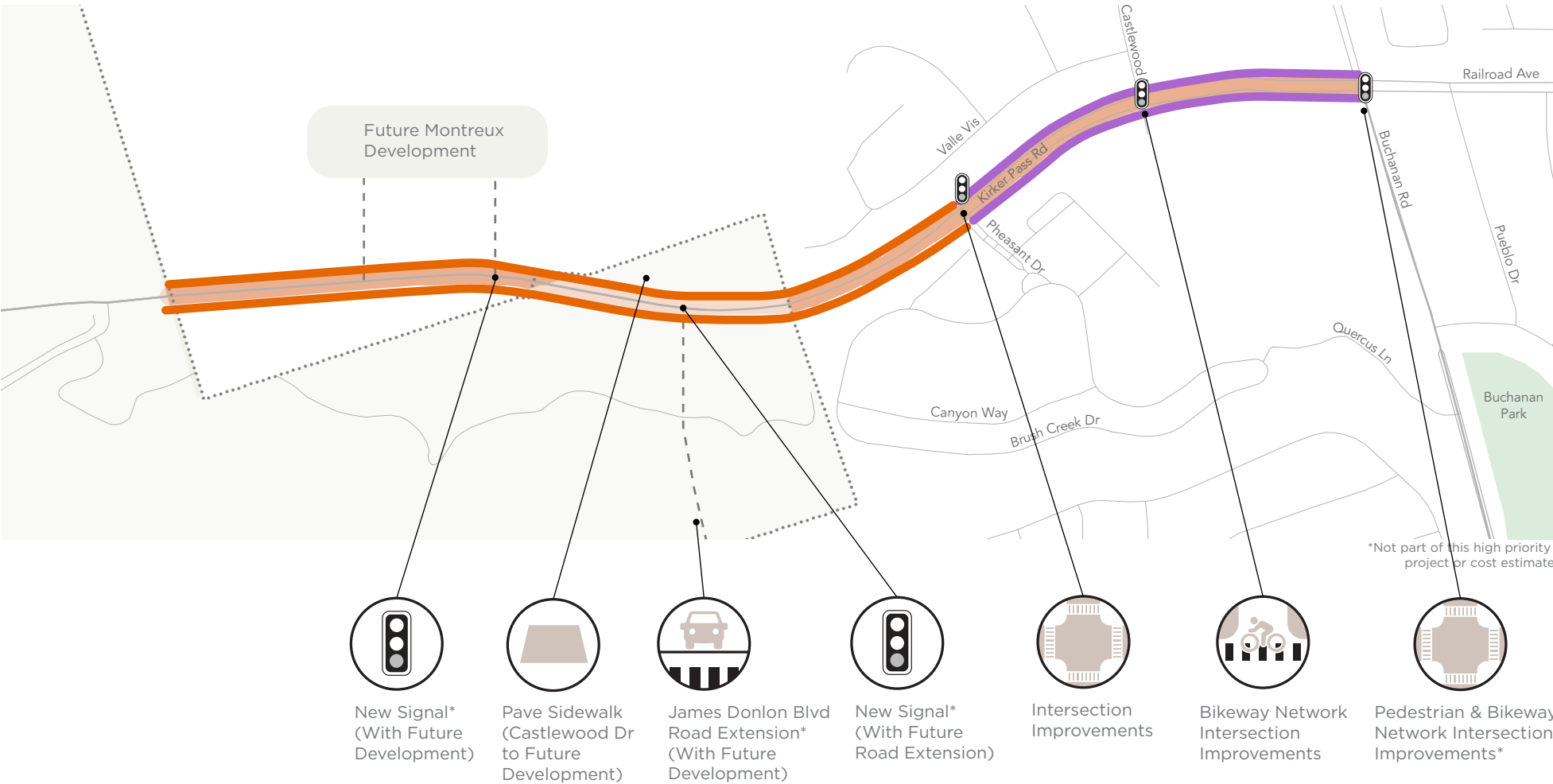


Figure 4-7



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.

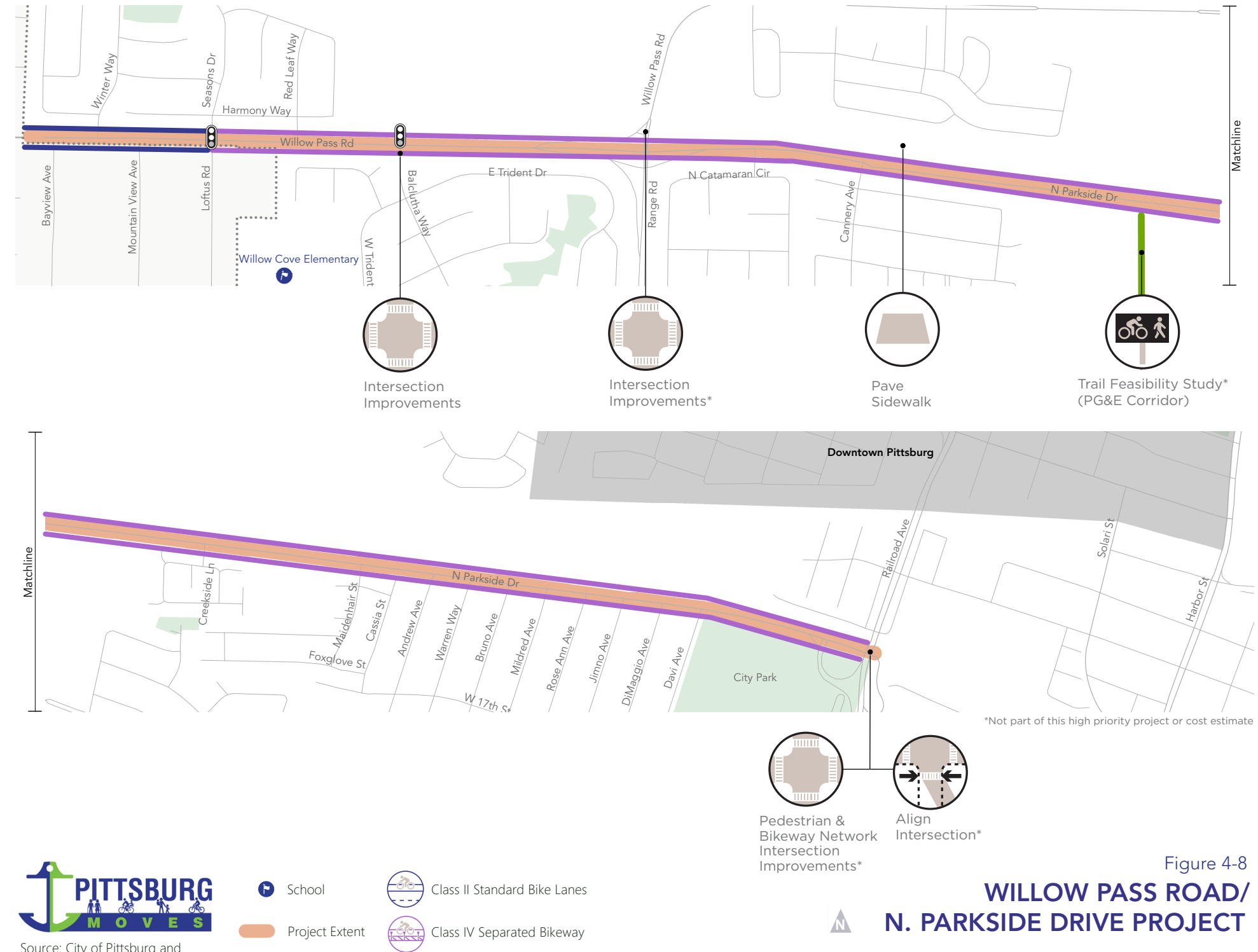
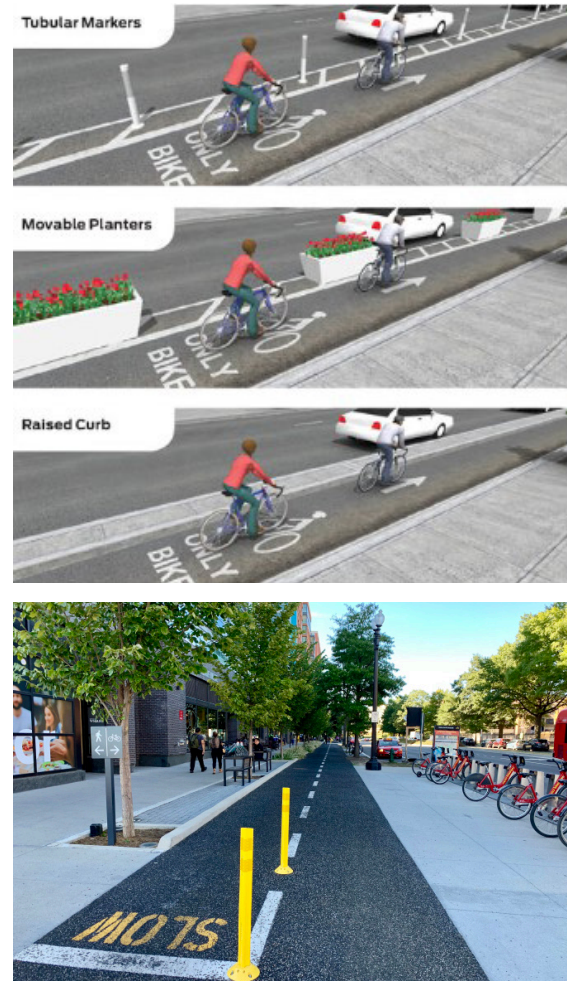


Figure 4-8
WILLOW PASS ROAD/
N. PARKSIDE DRIVE PROJECT

PITTSBURG MOVES

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

● School

● Project Extent

● Class II Standard Bike Lanes

● Class IV Separated Bikeway

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

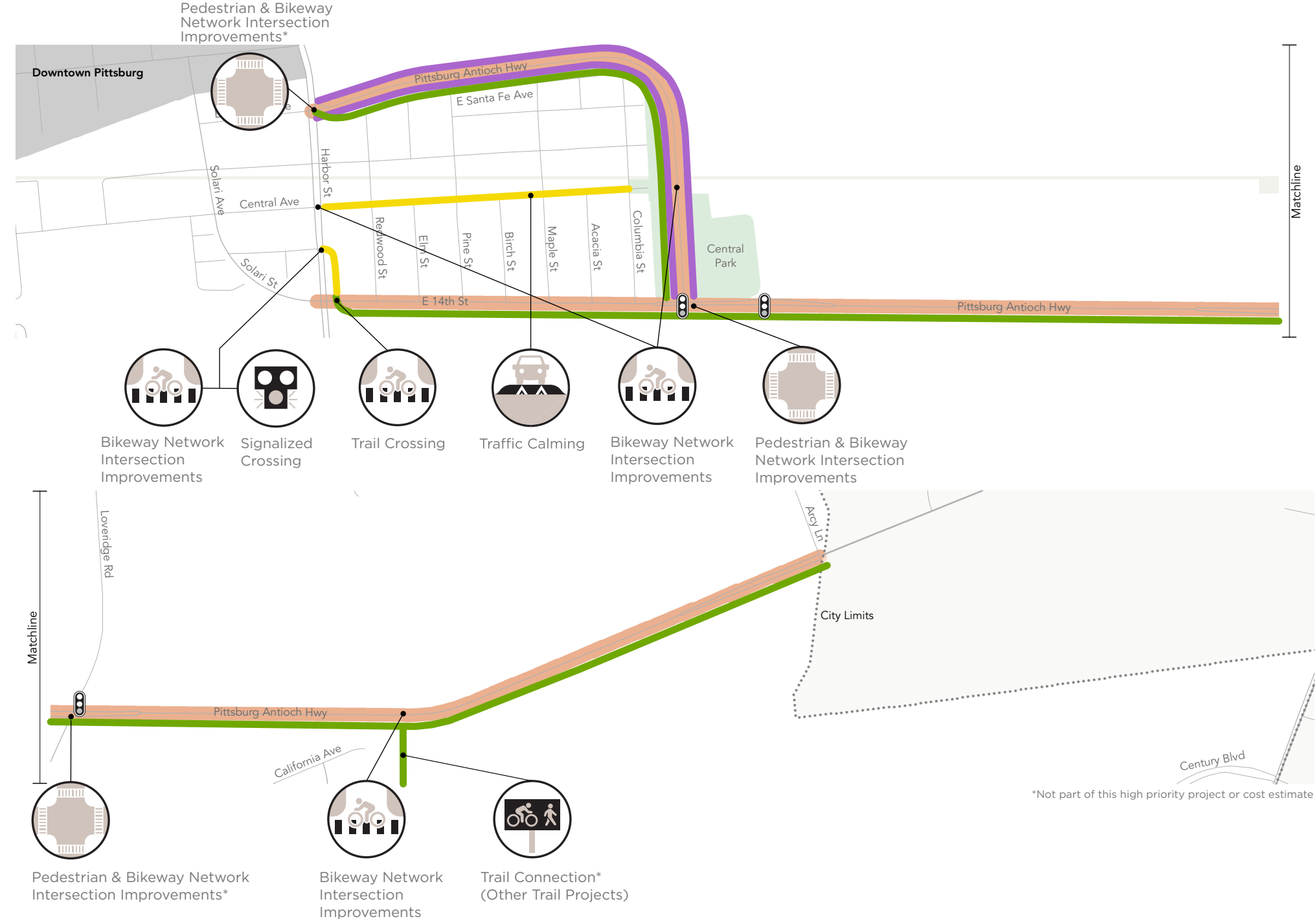
- Install a shared-use path from Harbor Street to the eastern city limit.
- Designate the unnamed roadway east of Harbor Street, between Hawthorne Street and E. 14th Street as a bike boulevard.
- Add a PHB at the Harbor Street/Hawthorne Street intersection and a trail crossing on E. 14th Street, just 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 Pittsburg 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

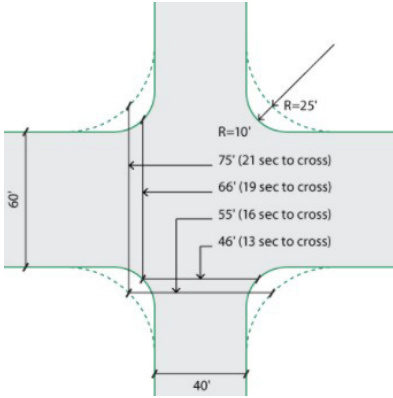
Schooner Way/
Polaris Drive/
Power Avenue/
California Avenue

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.

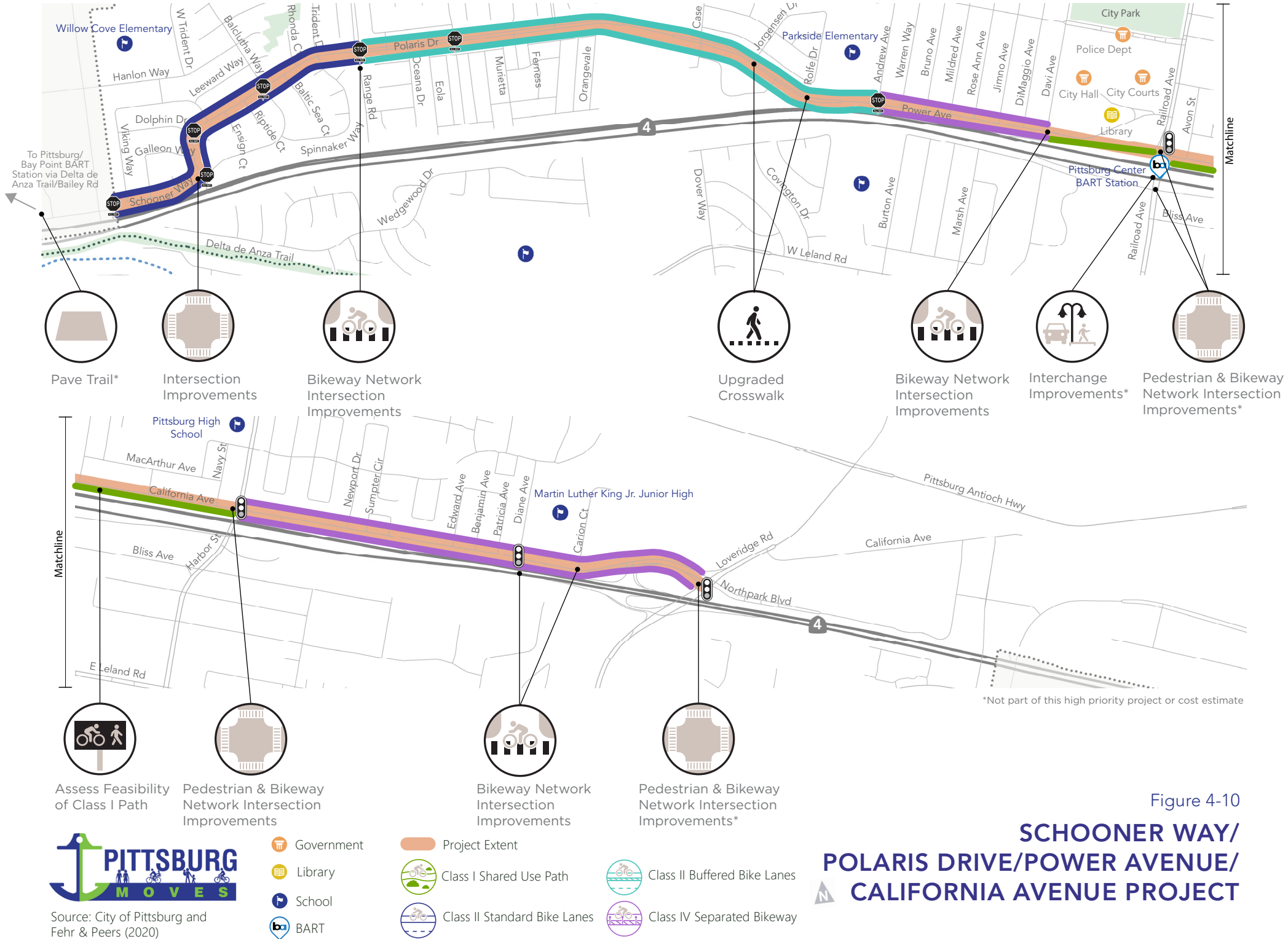


Figure 4-10
SCHOONER WAY/
POLARIS DRIVE/POWER AVENUE/
CALIFORNIA AVENUE PROJECT

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.

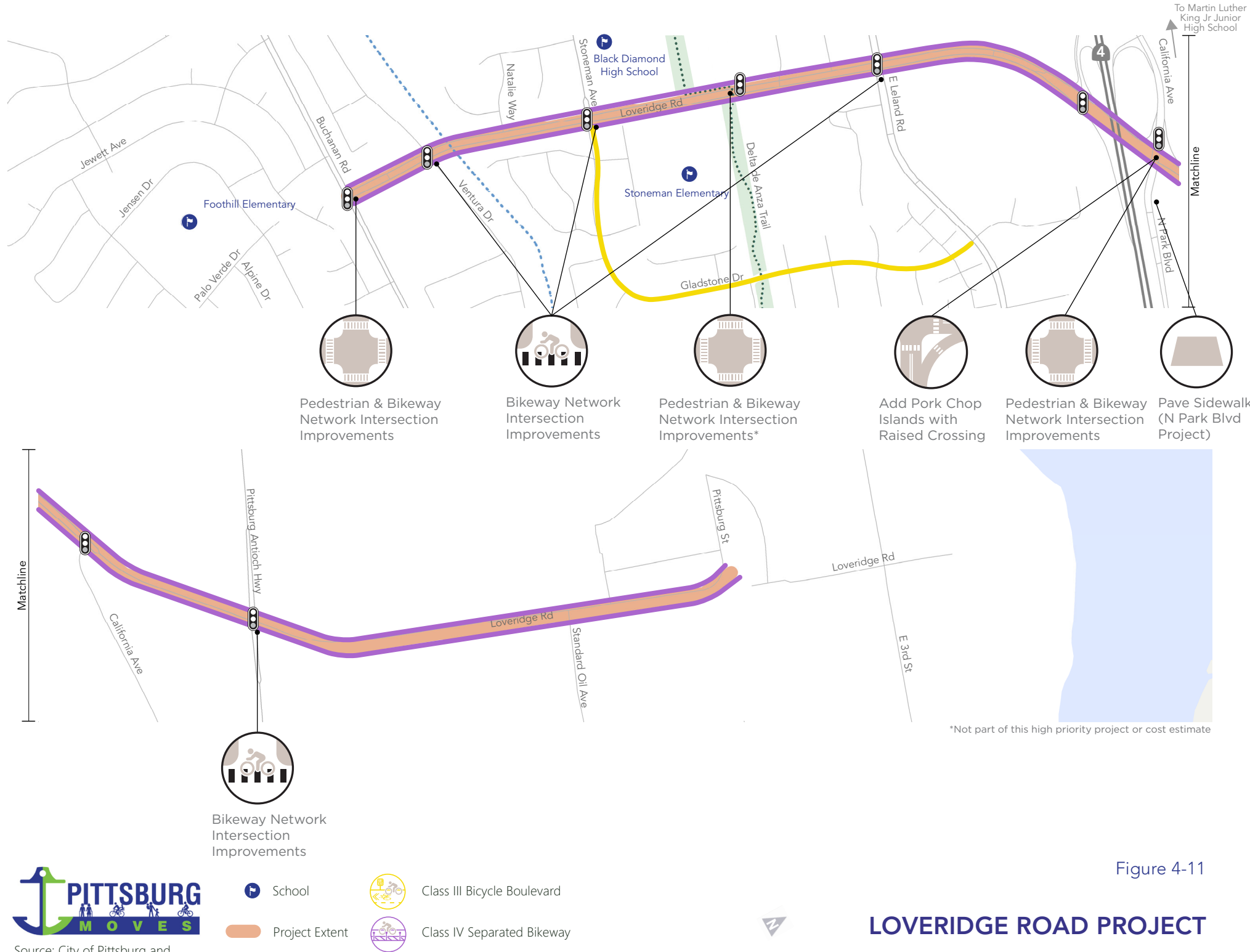
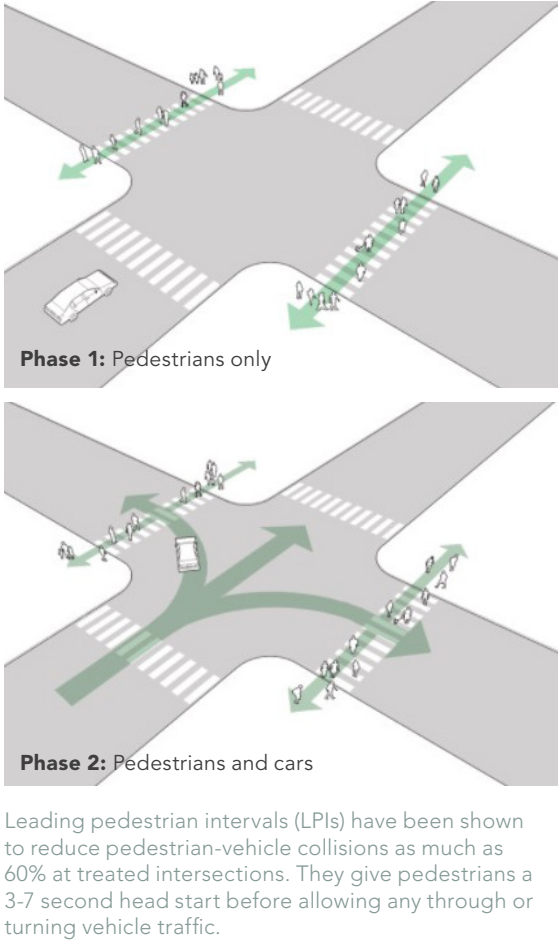


Figure 4-11

LOVERIDGE ROAD PROJECT

**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*

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

- 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 a 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.

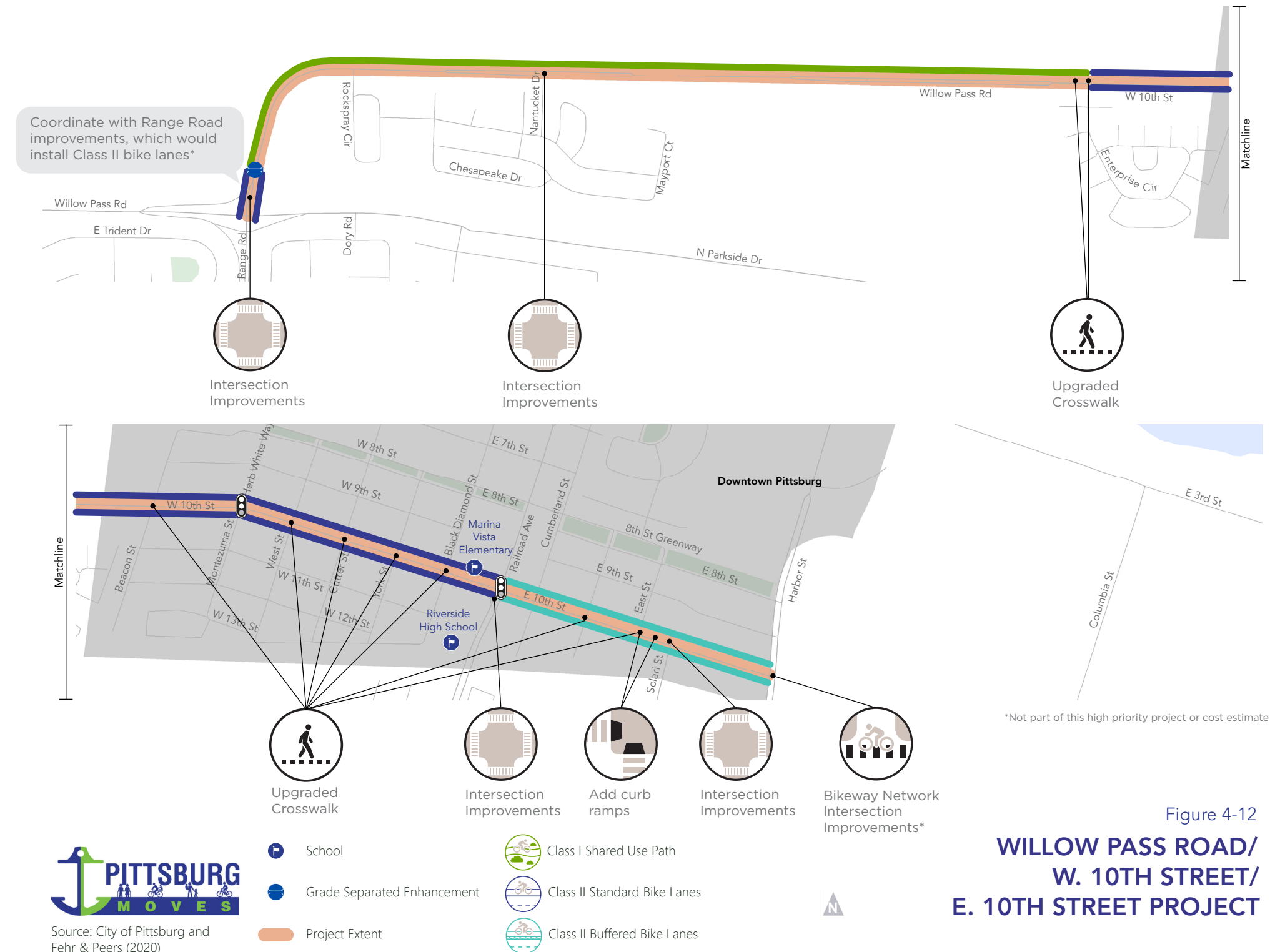


Figure 4-12

**WILLOW PASS ROAD/
W. 10TH STREET/
E. 10TH STREET PROJECT**

Priority Corridor #10

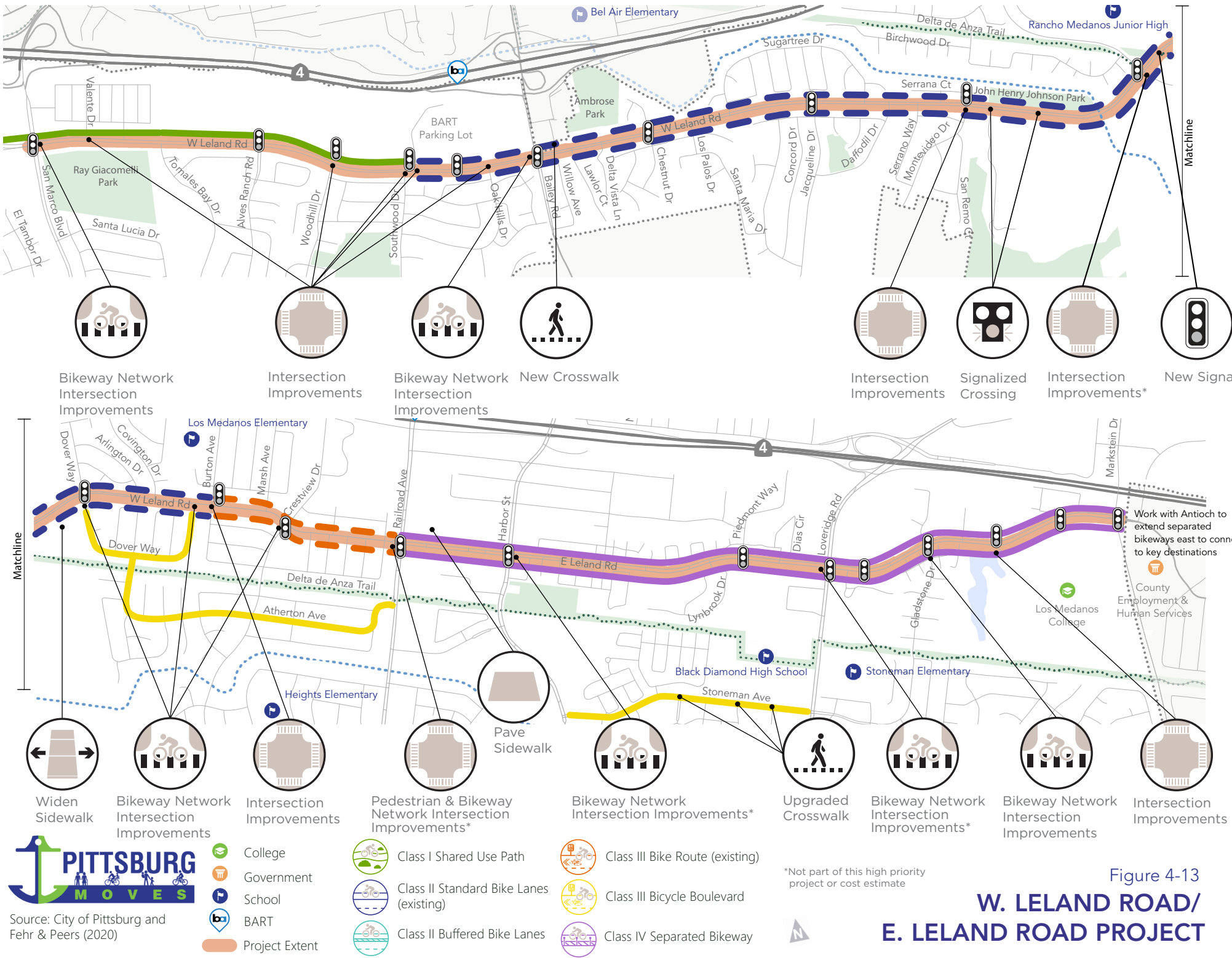
W. Leland Road/E. Leland Road

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.



*Not part of this high priority project or cost estimate

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

Cost Estimates

Table 4-2 summarizes the estimated costs for implementation of the Pittsburgh 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 Pittsburgh 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 Pittsburgh 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 Pittsburgh may use to fund implementation of the Pittsburgh 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