



Pittsburg Moves – Active Transportation Plan

Public Draft Initial Study – Mitigated Negative Declaration

prepared by

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

prepared with the assistance of

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

August 2020



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

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Appendix A Proposed Active Transportation Projects

Initial Study

1. Project Title

Pittsburg Moves – Active Transportation Plan

2. Lead Agency Name and Address

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

3. Contact Person and Phone Number

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

4. Project Location

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

5. Project Sponsor's Name and Address

Same as Lead Agency

6. General Plan Designation

N/A, Citywide

7. Zoning

N/A, Citywide

8. Description of Project

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

Figure 2 Project Location



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Fig. 2 Project Location

The Plan's objectives include:

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

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

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

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

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

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

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

Figure 3 Proposed Bicycle Network

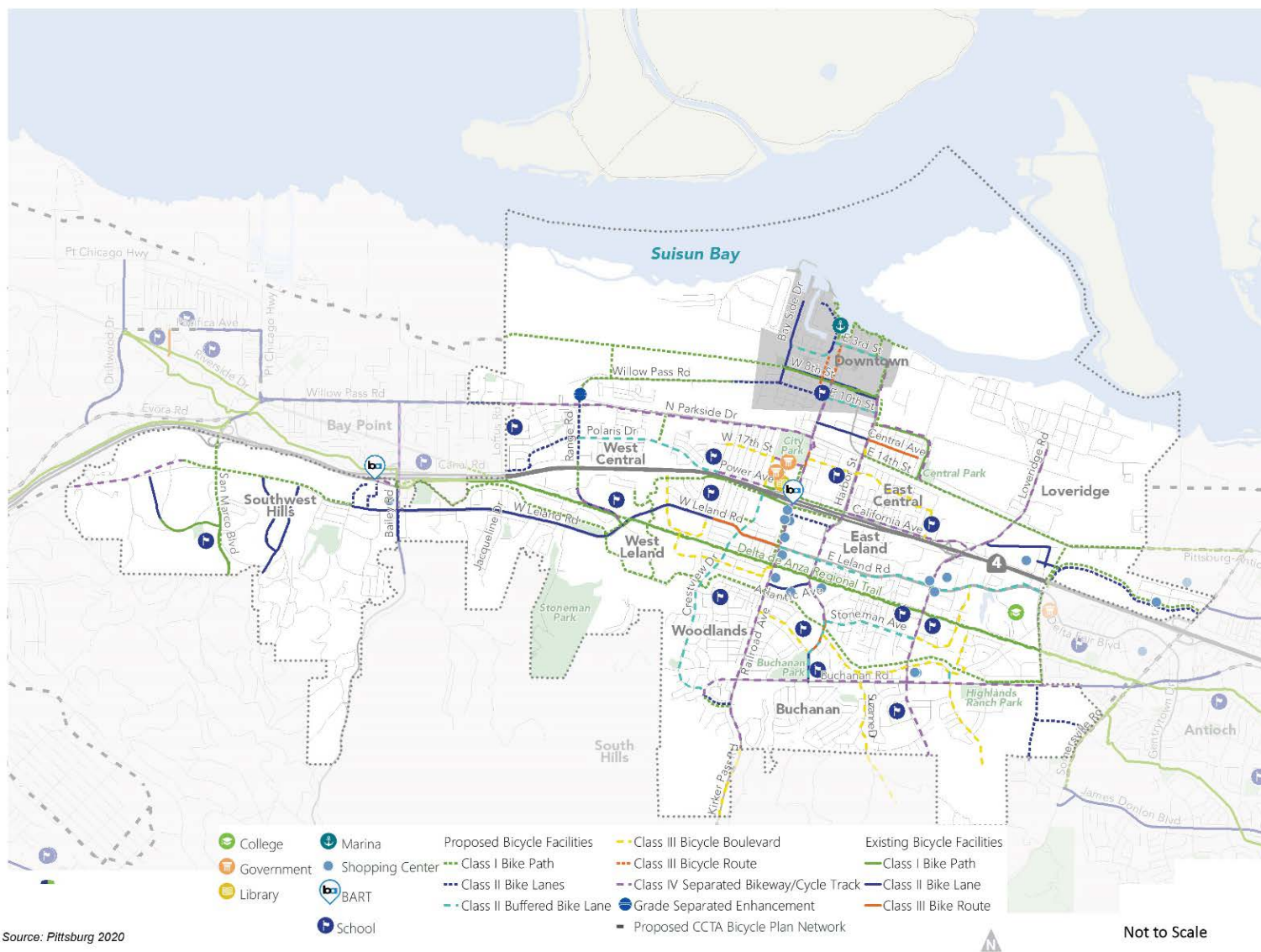
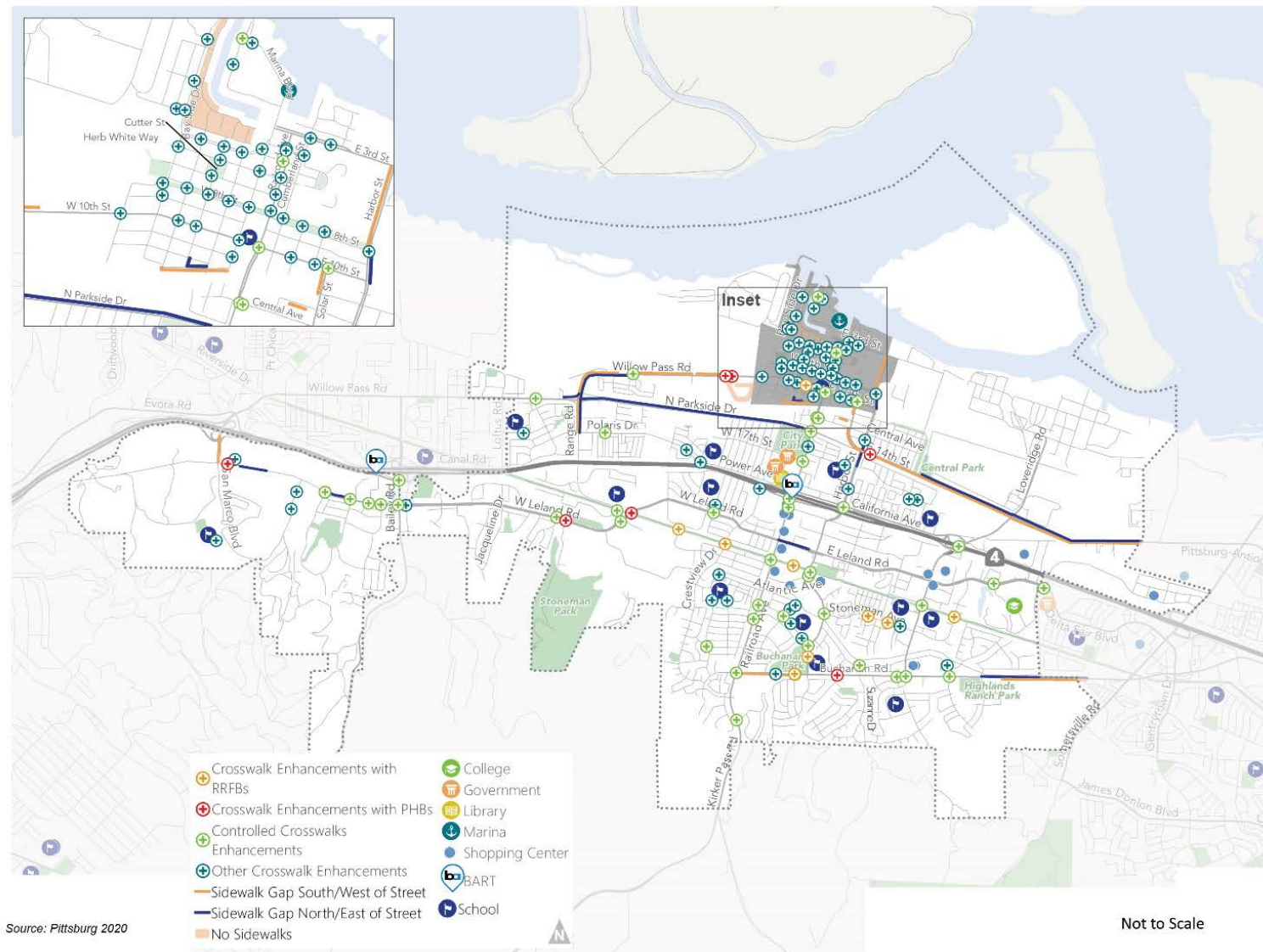


Figure 4 Proposed Pedestrian Projects



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

9. Surrounding Land Uses and Setting

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

10. Other Public Agencies Whose Approval is Required

None.

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

No.

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Environmental Factors Potentially Affected

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

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

Determination

Based on this initial evaluation:

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

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



Signature

Hector Rojas

Printed Name



Date

Senior Planner

Title

Environmental Checklist

1 Aesthetics

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

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

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

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

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

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

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

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

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

LESS THAN SIGNIFICANT IMPACT

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

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

NO IMPACT

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

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

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

LESS THAN SIGNIFICANT IMPACT

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

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

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

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

LESS THAN SIGNIFICANT IMPACT

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



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

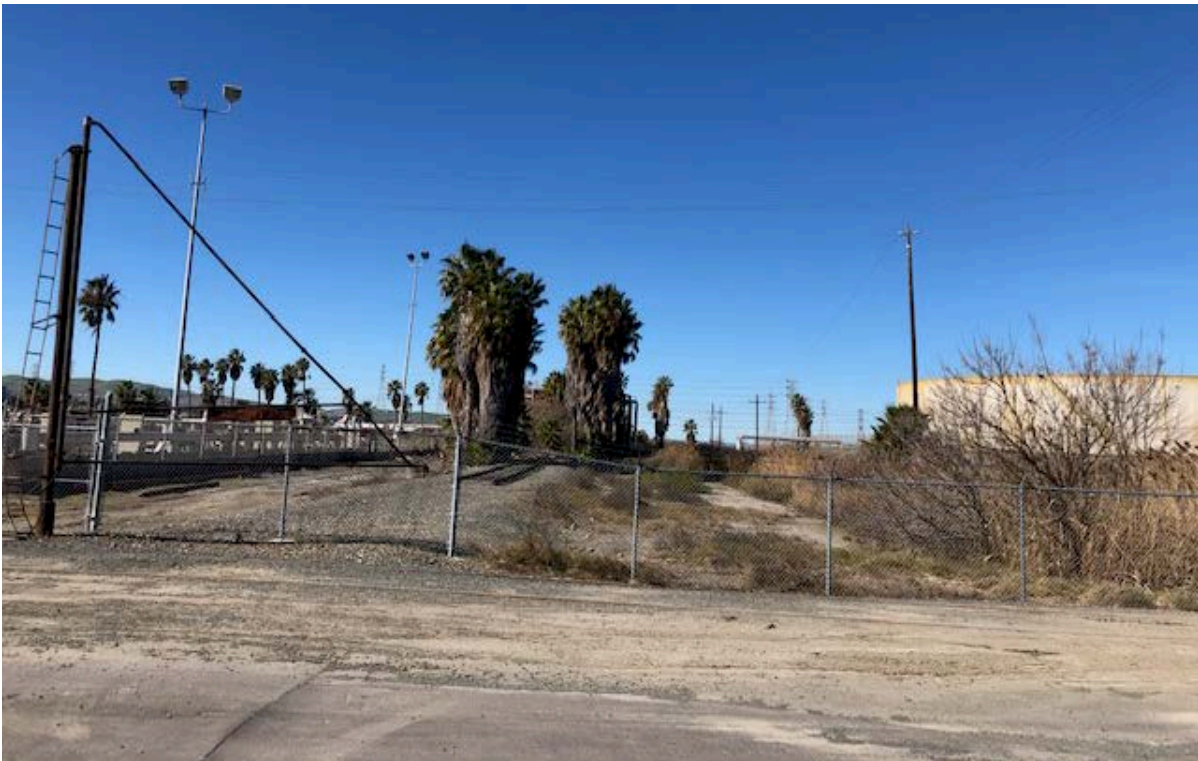


Photograph 2. Range Road, looking northward from Polaris Drive, where trees in the center median would be removed to add Class II bike lanes.

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



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



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

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2 Agriculture and Forestry Resources

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

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

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

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

LESS THAN SIGNIFICANT IMPACT

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

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

NO IMPACT

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

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

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

NO IMPACT

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

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

NO IMPACT

3 Air Quality

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

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

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

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

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

Pittsburg is within the jurisdiction of BAAQMD. The BAAQMD region is currently in non-attainment of state and national ambient air quality standards for ozone and fine particulate matter (PM_{2.5}) and of state standards for large particulate matter (PM₁₀) (CARB 2018). Emissions of ozone precursors and particulate matter during construction of the proposed active transportation projects listed in the Plan could incrementally contribute to an existing air quality violation. Because the proposed facilities would not contribute to urban growth or generate additional motor vehicle trips, they would not introduce new long-term sources of air pollutants into the BAAQMD region; in fact, improvements to bicycle and pedestrian facilities could encourage people to substitute bicycling and walking for driving, incrementally reducing emissions associated with motor vehicle use.

The construction of active transportation projects would generate temporary emissions from three primary sources: the operation of construction vehicles (e.g., scrapers, loaders, and dump trucks); ground disturbance during clearing and grading, creating fugitive dust; and the application of asphalt, paint, or other oil-based substances. The extent of daily emissions, particularly reactive organic gases (ROGs) and nitrogen oxide (NO_x) emissions, generated by construction equipment would depend on the quantity of equipment used and the hours of operation for each project. The extent of fugitive dust (PM_{2.5} and PM₁₀) emissions would depend upon the following factors: 1) the amount of disturbed soils; 2) the length of disturbance time; 3) whether existing structures are demolished; 4) whether excavation is involved; and 5) whether transporting excavated materials offsite is necessary. The amount of ROG emissions generated by paints and oil-based substances such as asphalt depends upon the type and amount of material utilized.

BAAQMD's May 2017 *CEQA Air Quality Guidelines* provide thresholds for plan-level impacts for criteria pollutants and precursors (BAAQMD 2017). There are no construction emissions thresholds for plans. However, impacts would be significant if the project is not consistent with the current air quality plan and if projected vehicles miles traveled or vehicle trip increase would be less than or equal to projected population increase.

Under BAAQMD's methodology, a determination of consistency with CEQA Guidelines thresholds should demonstrate that a project:

- Supports the primary goals of the 2017 Clean Air Plan;
- Includes applicable control measures from the 2017 Clean Air Plan; and
- Does not disrupt or hinder implementation of any 2017 Clean Plan control measures

The primary goals of the 2017 Clean Air Plan are to protect air quality and health at the regional and local scale and to protect the climate. The Plan would improve bicycle and pedestrian facilities throughout Pittsburg. By facilitating bicycling and walking as modes of transportation, it is expected that the Plan would reduce motor vehicle trips and vehicle miles traveled in Pittsburg and greater Contra Costa County, improving regional air quality. In addition, the Plan would promote health by increasing recreational opportunities in the city. As described above under Item a, the Plan would be consistent with 2017 Clean Air Plan Transportation Control Measures TR 7 and TR9 to encourage planning for safe routes to schools and for bicycle access and pedestrian facilities. Therefore, the Plan includes applicable control measures from the 2017 Clean Air Plan and would not disrupt or hinder implementation of the Clean Air Plan.

Because implementation of the Plan would decrease vehicle miles traveled and would not result in a population increase, it would not result in exceedance of the BAAQMD threshold for criteria pollutants and precursors. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Proposed bicycle and pedestrian projects adjacent to travel lanes for motor vehicles would temporarily expose users of these facilities to particulate matter, carbon monoxide, and other pollutants from motor vehicle exhaust; however, users would only be exposed to air pollutants for brief periods while using bicycle and pedestrian projects and are not considered sensitive receptors. In addition, according to a 2017 review of scientific literature published in the *Lancet Public Health* journal, “consensus exists that despite the harmful effects of air pollution exposure, physical activity from active commuting provides more gains in health outcomes than air pollution exposure provides losses” (Cepeda et. al 2017). Therefore, it is anticipated that the health benefits from increased bicycling and pedestrian activity under the Plan would outweigh the risks from exposure to air pollution.

The proposed active transportation projects would not generate operational pollutants that would expose adjacent sensitive receptors such as homes, hospitals, and schools to substantial pollutant concentrations. Furthermore, because the Plan is intended to facilitate additional bicycling and walking, it would reduce vehicle miles traveled in Pittsburgh, thereby incrementally reducing the exposure of sensitive receptors to pollutant concentrations from motor vehicles. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

During construction of the proposed active transportation projects, emissions from construction equipment could potentially result in minor odors. However, construction activities would be temporary and would not involve materials or activities that are a potential source of significant odors. They would not result in the creation of objectionable odors affecting a substantial number of people. Furthermore, bicyclists and pedestrians would not be exposed to any objectionable odors from construction because active transportation facilities would be closed to the public when under construction. Therefore, the impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Historically, vegetation communities in Pittsburgh broadly included native grassland, oak woodlands, riparian communities, and coastal salt and brackish marsh, as described in the City's Existing Conditions Report (Pittsburgh 2019a). The southern portion of the city is largely undeveloped open space with large areas of rolling grassy hills, while the northern edge consists of salt and brackish marshlands at the New York Slough. Areas of notable biological sensitivity within the city include Browns Island Regional Shoreline and Black Diamond Mines Regional Preserve and its environs. These natural areas have potential to support several threatened and endangered plant and animal species. Seventy special-status plant species and 82 special status animal species have been observed within approximately 15 miles of the city (Pittsburgh 2019a).

Agricultural and ruderal vegetation in and surrounding Pittsburgh provides habitat for both common and special-status wildlife populations. Commonly observed wildlife species in the region include: California ground squirrel (*Spermophilus beecheyi*), California vole (*Microtus californicus*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus cyaneus*), American kestrel (*Falco sparverius*), white-tailed kite (*Elanus leucurus*), American killdeer (*Charadrius vociferus*), gopher snake (*Pituophis melanoleucus*), garter snake (*Thamnophis species*), western fence lizard (*Sceloporus occidentalis*), and various regionally occurring species of bats.

Development has altered much of Pittsburgh's landscape, restricting natural vegetation primarily to undeveloped hillside areas. Many species are locally rare or no longer occur in portions of Pittsburgh as a result of agricultural and urban development within the city limits. A review of records from the California Natural Diversity Database (CNDDDB) (queried in January 2020) identified 40 special-status animal species and 37 special-status plant species with occurrence records within a five-mile radius of city limits, including 29 federal and/or state listed species. The records search also showed that critical habitat for Delta smelt (*Hypomesus transpacificus*), Alameda whipsnake (*Masticophis lateralis euryxanthus*), Antioch Dunes evening-primrose (*Oenothera deltoides subsp. howellii*), and Contra Costa wallflower (*Erysimum capitatum var. angustatum*) is located within city limits or within that five-mile buffer.

Birds protected under the California Fish and Game Code (CFGF) nest in a wide range of habitats including previously disturbed and ruderal areas (e.g., medians and road shoulders) and within areas of maintained ornamental vegetation (i.e., lawns, gardens, parks and trails). Wetlands and associated riparian areas often function as habitat for special-status species and may act as important wildlife movement corridors.

Approach to Impacts Analysis

As a programmatic evaluation, this section considers the potential for direct and indirect impacts to sensitive biological resources that could occur at the project-level if active transportation projects listed in the Plan are constructed in specific vegetation communities or habitats. Many of the proposed bicycle and pedestrian facilities listed in the Plan would be located within the limits of existing roads, sidewalks, or other previously disturbed areas and would be unlikely to affect sensitive biological resources; however, the construction of proposed Class I shared-use paths and Class II bike lanes that require roadway widening or the loss of medians could result in the loss of vegetation. Some pedestrian projects such as new sidewalks also may require additional paving along existing roadways and installation of lighting on streets and paths, which could directly affect special-status or sensitive biological resources. Table 1 lists representative projects included in the Plan that have the potential to impact biological resources and includes a brief description of the proposed project activities.

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

Project Name	Limits (From/To)	Project Type	Description	Miles
Trail Projects				
California Delta Trail	Western City limit to 8th Street Greenbelt	Trail	Install a Class I path through the Pittsburg Wetlands as part of the Great California Delta Trail that connects to the County's alignment. This project would involve construction next to wetlands and could result in tree removal.	3.0
Harbor Street	East 8th Street to Pittsburg-Antioch Highway	Trail	Install a new Class I facility on the east side of Harbor Street from just north of Pittsburg-Antioch Highway to East 8th Street. The new path requires widening the existing sidewalk and new retaining wall underneath the railroad tracks. This project could require the removal of street trees.	0.2
Frontage Road	Chelsea Way to Dover Way	Trail	Add a Class I facility using abandoned land south of freeway. This project could require tree removal.	0.3
Railroad Avenue	California Avenue to Delta de Anza Trail	Trail	Install a Class I shared-use path on the west side of Railroad Avenue with pedestrian-scale lighting amenities, landscape buffer from the street, and a minimum 10' usable width. This project could involve the removal of street trees.	0.5
Railroad Avenue	California Avenue to City Park	Trail	Widen existing sidewalk to provide Class I shared-use path with minimum 5' landscape buffer from Railroad Avenue. This project could involve the removal of street trees.	0.3
San Marco Boulevard	Evora Road to Rio Verde Circle	Trail	Add a Class I facility on the west side of the roadway that ties into the West Leland Road intersection. This project could include the removal of street trees.	1.2
Century Boulevard Greenway	East Leland Road to City limits	Trail	Add a Class I facility as the area redevelops to provide a connection to the shopping center. This project would potentially remove trees next to the existing sidewalk.	1.2
Willow Pass Road	Parkside Drive to Enterprise Circle	Trail	Install a Class I facility (10' shared-use path with 5' landscape buffer) through redevelopment. This project could involve tree removal.	1.2
Range Road/Willow Pass Road	Railroad bridge over Willow Pass Road to SR 4	Class II Bicycle Lanes	Add Class II bike lanes (5') by narrowing travel lanes and removing or narrowing center median. Relocate lighting in center median. This project would require some tree removal in the center median.	0.5
West 10th Street/East 10th Street	Montezuma Avenue to Railroad Avenue	Class II Bicycle Lanes	Widen existing Class II bike lanes by removing median and restriping street. This project would involve tree removal in the medians.	0.4

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Based on the locations of proposed active transportation projects listed in the Plan, as shown in Figure 3 and Figure 4, these projects would be within existing paved, disturbed, or graded rights-of-way. Even the proposed Class I shared-use paths would be routed through existing utility corridors and other rights-of-way disturbed ground. If all construction work, staging, parking and associated

activity is fully contained within previously disturbed areas, the projects would not modify or otherwise impact suitable habitat for sensitive species. It is not expected that projects would directly disturb natural habitat, where soil compaction could cause direct mortality from the collapse of underground burrows, or the trimming or removal of obligate host plants could cause direct mortality or loss of suitable habitat for special-status species. Therefore, projects occurring entirely within existing disturbed areas would not result in significant impacts to non-avian federal or state listed species or other non-avian special-status species.

Some proposed Class I shared-use paths would be located adjacent to wetlands or shoreline habitat that could have special-status species. The proposed California Delta Trail segment from 8th Street to the western city limit would be located on a disturbed utility corridor next to the Pittsburgh Wetlands, while the Delta Waterfront Trail near Koch Carbon could be constructed in the vicinity of wetland vegetation at the shoreline of New York Slough. In the unlikely event of filling of seasonal or perennial wetlands, or removal of riparian vegetation next to wetlands, projects could result in direct mortality of special-status species. In addition, these activities could result in the loss of breeding, foraging, and refuge habitat.

These proposed Class I shared-use paths would have the potential to temporarily or permanently disturb or remove natural habitat, which could directly impact special-status species. In addition, higher usage of new sidewalks or widened roads, bike paths, and trails could cause increased mortality of species in nearby natural habitat. Construction and maintenance activities for individual active transportation projects could result in potentially significant impacts to federal and state listed species under all circumstances, while impacts to non-listed species may be considered significant under CEQA if they result in reduced viability of the survival of a local or regional population. Therefore, the proposed active transportation projects result in direct and indirect effects on sensitive biological resources including special-status species, resulting in a potentially significant impact.

Many projects also would require the removal of vegetation that could serve as habitat for migratory birds protected under the CFGC. Table 1 lists representative projects that could involve vegetation removal. For example, several projects would remove medians planted with street trees. Other projects would remove ruderal vegetation, ornamental roadside vegetation, or street trees along roadways. Protected migratory birds can be expected to nest within and adjacent to a wide range of disturbed areas, including existing trails, road medians, road and sidewalk shoulders, ornamental vegetation and ruderal areas. Construction noise and activity in previously disturbed areas could result in nest abandonment, injury or mortality of birds protected under the CFGC, violating State regulations to protect migratory birds. Potentially significant impacts on special-status migratory birds include:

- Direct mortality resulting from the movement of equipment and vehicles through an individual project area
- Direct mortality resulting from removal of trees with active bird nests
- Abandoned eggs or young and subsequent nest failure for special-status nesting birds, including raptors, and other non-special-status migratory birds resulting from construction-related noises
- Loss or disturbance of rookeries and other colonial nests

These adverse effects on listed or special status bird species would be a potentially significant impact under CEQA.

Maintaining the consistency of individual projects with adopted federal and state regulations that protect special-status species, including their habitat and movement corridors, would ensure that the City incorporate appropriate design measures, including avoidance, if appropriate. In addition, individual projects with the potential to result in significant impacts would be required to undergo project-specific CEQA review at the time they are proposed. Mitigation Measures BIO-1 and BIO-2 would further ensure potential impacts are avoided or reduced to less than significant. These measures would require assessment of biological resources at a project-specific level, mitigation of impacts to special-status species, and protection of such species during construction. The City shall implement the following mitigation measures for the applicable bicycle and pedestrian improvements identified in Table A-1 in Appendix A.

Mitigation Measures

BIO-1 Biological Resources Screening and Assessment

The following development standard shall be added to the proposed Plan:

“Prior to final design approval of individual active transportation projects listed in the Plan that involve ground disturbance in or directly adjacent to natural habitat, or the removal or trimming of trees, the City shall have a qualified biologist conduct an analysis of the project to identify biological constraints and potential impacts to sensitive biological resources, including potential impacts to special-status plants, animals, and their habitats, as well as protected natural communities including wetland and terrestrial communities and protected trees. For those projects where ground disturbance would not affect natural habitat (i.e., work is limited to paved, ruderal, or developed areas only), a desktop analysis to identify biological constraints for the project may be sufficient. This analysis shall include queries of agency databases such as the CNDDDB, the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Plants of California*, the U.S. Fish and Wildlife Service (USFWS) *Information for Planning and Consultation (IPaC)*, USFWS *Critical Habitat Portal*, and USFWS *National Wetlands Inventory (NWI)* as well as other relevant literature for baseline information on special-status species and other sensitive biological resources occurring at the individual project site and in the immediate surrounding area. The qualified biologist shall determine, based on the nature of construction activities, if a field reconnaissance is necessary for such projects to completely assess biological constraints.

If the biologist identifies protected biological resources within the limits of and/or potentially adversely affected by the project, the City shall first prepare alternative designs that seek to avoid and/or minimize impacts to the biological resources. If the project cannot be designed without complete avoidance, the City shall have the qualified biologist identify the specific impacts to special-status species, develop project-specific avoidance and mitigation procedures to be followed to reduce biological impacts to a less-than-significant level, identify any state or federal listed species that would necessitate coordination with the appropriate regulatory agency (i.e., USFWS, National Marine Fisheries Services [NMFS], California Department of Fish and Wildlife [CDFW], U.S. Army Corps of Engineers [USACE]) to obtain regulatory permits, and implement project-specific avoidance and mitigation measures prior to and during any construction activities.

Mitigation actions that may be required should impacts to special-status species be identified include:

- Pre-construction surveys to identify the presence of special-status species within and adjacent to work areas.

- Worker Environmental Awareness Program training for all construction personnel.
- Complete avoidance of special-status species where and if possible. Avoidance measures may include:
 - Delimiting and flagging of special-status species avoidance buffer areas (Environmentally Sensitive Areas or ESAs)
 - Monitoring of construction activity near ESAs
 - Installation of special-status species exclusion fencing.
- Relocation of special-status species out of work areas (with applicable permits and authorizations as necessary).
- Restoration of temporarily disturbed special-status species' habitat.
- Compensatory mitigation for impacts to special-status species habitat at a minimum ratio appropriate for extent and quality of permanently disturbed habitat. Mitigation ratios may vary from 1:1 to 5:1."

BIO-2 Construction Best Management Practices

The following development standard shall be added to the proposed Plan:

"Based on the results of the biological resources screening and assessment required by Mitigation Measure BIO-1 for certain active transportation projects, and the extent of potential impacts to special-status species, the City shall incorporate one or more of the following construction Best Management Practices (BMPs) as recommended by a qualified biologist into all grading and construction plans:

- A 20 mile-per-hour speed limit shall be designated in all construction areas to minimize dust emissions and noise.
- All vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas, and clearing of vegetation for vehicle access shall be avoided to the greatest extent feasible.
- The number of access routes, number, and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the goal of the project.
- Equipment washout and fueling areas shall be located within the limits of grading at a minimum of 100 feet from waters, wetlands, or other sensitive resources as identified by a qualified biologist. Washout areas shall be designed to fully contain polluted water and materials for subsequent removal from the site.
- Daily construction work schedules shall be limited to daylight hours only (consistent with the City's noise ordinance).
- Mufflers shall be used on all construction equipment and vehicles shall be in good operating condition.
- Drip pans shall be placed under all stationary vehicles and mechanical equipment.
- All trash shall be placed in sealed containers and shall be removed from the project site a minimum of once per week.
- No pets are permitted on project site during construction."

Implementation of Mitigation Measures BIO-1 and BIO-2 would protect special-status species that may be affected by construction of the proposed active transportation projects, reducing potential impacts to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Naturally occurring plant communities in California are primarily identified in the *List of Vegetation Alliances and Associations (Natural Communities List)* (CDFW 2019). This document provides comprehensive lists of officially recognized plant communities occurring in Contra Costa County and the State of California. In this document, each plant community is assigned a conservation status rank (also known as "Rare Rank"), which is used to determine the sensitivity of the plant community. Plant communities with global or state status ranks of G1 through G3, or S1 through S3, respectively, are considered sensitive, and are referred to as "natural communities of special concern." Plant communities are classified based on plant species composition and abundance, as well as the underlying abiotic conditions of the stand, such as slope, aspect, or soil type.

Pittsburg and its surroundings support a combination of native grassland, oak woodlands, riparian communities, and coastal salt and brackish marshes. The region within 15 miles of the city has the potential to support nine natural communities of special concern: Alkali Meadow, Alkali Seep, Cismontane Alkali Marsh, Coastal and Valley Freshwater Marsh, Coastal Brackish Marsh, Northern Claypan Vernal Pool, Serpentine Bunchgrass, Valley Needlegrass Grassland, and Valley Sink Scrub. Of these sensitive natural communities, one community, Coastal Brackish Marsh, occurs within city limits. Coastal Brackish Marsh is located along the waterfront area in the western portion of the city, as well as on Chipps Island, Browns Island, and Winter Island. Proposed active transportation projects that would require ground disturbance or widening of existing roads and rights-of-way are not planned in or near areas containing natural communities of special concern; therefore, implementation of the Plan would not result in significant impacts to any sensitive natural communities.

Riparian habitat occurs along several rivers and creeks in the region and may be affected by the development of individual bicycle and pedestrian projects, especially new Class I shared-use paths (USFWS 2020). Riparian habitat associated with Waters of the State falls under the jurisdiction of CDFW as discussed below under Item c. Individual active transportation projects could potentially result in construction work within jurisdictional limits including cut and fill below the top of delineated banks, removal or modification to wetlands, or trimming and clearing of riparian vegetation. Therefore, implementation of the Plan would have a potentially significant impact on riparian habitat. Mitigation Measures BIO-3 and BIO-4 would ensure avoidance of impacts or mitigate those impacts to less than significant through a project-level analysis to delineate sensitive aquatic environments, and design or modify the project to avoid direct and indirect impacts on these areas through compensatory mitigation.

Mitigation Measures

BIO-3 Riparian Communities

The following development standard shall be added to the proposed Plan:

“For trail projects located within or immediately adjacent to natural areas, if the initial screening of biological resources under Mitigation Measure BIO-1 identifies the presence of riparian communities within or adjacent to a project site, the City shall design or modify the project to avoid direct and indirect impacts on these habitats, if feasible. Additionally, the City shall minimize the loss of riparian vegetation by trimming rather than removal where feasible.

Prior to construction, the City shall install orange construction barrier fencing to identify environmentally sensitive areas around the riparian area (50 feet from edge) and other sensitive natural communities (50 feet from edge), or as defined by the agency with regulatory authority over the resource(s). The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The fencing shall be installed before construction activities are initiated and shall be maintained throughout the construction period. The following paragraph shall be included in the construction specifications:

The Contractor’s attention is directed to the areas designated as “environmentally sensitive areas.” These areas are protected, and no entry by the Contractor for any purpose will be allowed unless specifically authorized in writing by lead agency overseeing the bicycle improvement project. The Contractor will take measures to ensure that the Contractor’s forces do not enter or disturb these areas, including giving written notice to employees and subcontractors.

Temporary fences around the environmentally sensitive areas shall be installed as the first order of work. Temporary fences shall be furnished, constructed, maintained, and removed as shown on the plans, as specified in the special provisions, and as directed by the project engineer. The fencing shall be commercial-quality woven polypropylene, orange in color, and at least 4 feet high (Tensor Polygrid or equivalent). The fencing shall be tightly strung on posts with maximum 10-foot spacing.

Immediately upon completion of construction activities, the contractor shall stabilize exposed soil/slopes. On highly erodible soils/slopes, the contractor shall use a non-vegetative material that binds the soil initially and breaks down within a few years. If more aggressive erosion control treatments are needed, geotextile mats, excelsior blankets, or other soil stabilization products shall be used. All stabilization efforts should include habitat restoration efforts.”

BIO-4 Compensatory Mitigation

The following development standard shall be added to the proposed Plan:

“If individual trail projects located within or immediately adjacent to natural areas involve the disturbance of riparian communities during construction, the City shall compensate for the disturbance to ensure no net loss of habitat functions and values. Compensatory mitigation ratios shall be determined on a project-by-project basis during the project-level CEQA review, once project impacts have been determined. Compensatory mitigation shall be at a minimum ratio of two acres restored, created, and/or preserved for each acre disturbed. Compensation may comprise on-site restoration/creation, off-site restoration, preservation, or mitigation credits (or a combination of these elements). The City shall develop and implement a restoration and monitoring plan that describes how the habitat shall be created, the success criteria that will be used to quantify mitigation success, and the frequency and duration of monitoring.”

By delineating, avoiding, and/or compensating for the loss of sensitive habitats, implementation of Mitigation Measures BIO-3 and BIO-4 would reduce the impact on sensitive habitats to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Individual proposed active transportation projects may be located in or adjacent to wetlands and several creeks, canals, and drainages. Specifically, the Class I shared-use paths planned along and just north of Willow Pass Road would be constructed adjacent to or through freshwater emergent wetlands in the northern portion of the city. Implementation of the Plan has the potential to impact federal and state Jurisdictional Waters under Sections 401 and 404 of the Clean Water Act and Sections 1600-1616 of the CFGC. Cut and fill activity below the top of delineated banks, removal or modification to wetlands, or trimming and clearing of riparian vegetation could affect state or federally regulated aquatic resources in several ways including disturbances to the hydrologic structure, increased siltation, and modifications to bed and bank.

A formal Jurisdictional Delineation would be required to assess the extent of impacts to waters of the state and waters of the U.S., and to support Clean Water Act and Sections 1600-1616 permitting for projects that could directly impact USACE, CDFW, or Regional Water Quality Control Board (RWQCB) jurisdictional areas. If it is determined that a bicycle or pedestrian project would impact wetland resources, the appropriate permits under Sections 401 and 404 of the Clean Water Act and Sections 1600-1616 of the CFGC would be required. Mitigation Measure BIO-5 would ensure avoidance of impacts or mitigate those impacts to less than significant through a project-level analysis to delineate jurisdictional waters and wetlands and perform restoration if necessary.

Mitigation Measures

BIO-5 Jurisdictional Delineation and Restoration for Impacts to Waters and Wetlands

The following development standard shall be added to the proposed Plan:

“For individual trail projects listed in the Plan, if waters of the state or waters of the U.S. are present within or immediately adjacent to the area of construction, a qualified wetlands biologist shall perform a wetland delineation following the 1987 Army Corps of Engineers Wetlands Delineation Manual and any applicable regional supplements to the Delineation Manual. The jurisdictional delineation shall determine the extent of the jurisdiction for CDFW, USACE, and/or RWQCB, and shall be conducted in accordance with the requirement set forth by each agency. The result shall be a preliminary jurisdictional delineation report to be submitted to the implementing agency, USACE, RWQCB, and CDFW, as appropriate, for review and approval. Jurisdictional areas shall be avoided to the maximum extent possible.

Impacts to waters and wetlands shall be mitigated through one or more options to meet the required amount of mitigation based on direct impacts from project development under the mitigation ratios outlined below. Mitigation for impacts to waters and wetlands can be achieved through the acquisition and in-perpetuity management of similar habitat or through the in-lieu funding of such through an existing mitigation bank. Funding and management of internal

mitigation areas can be managed internally. Funding and management of off-site mitigation lands shall be provided through purchase of credits from an existing, approved mitigation bank or land purchased by implementing entity and placed into a conservation easement or other covenant restricting development (e.g., deed restriction). Internal mitigation lands, or in lieu funding sufficient to acquire lands shall provide habitat at a minimum 1:1 ratio for impacted lands, comparable to habitat to be impacted by individual project activity. Compensatory mitigation for wetlands communities can be combined with other compensatory mitigation (e.g., sensitive vegetation communities) as applicable.”

BIO-6 General Avoidance and Minimization

The following development standard shall be added to the proposed Plan:

“For individual trail projects located within or immediately adjacent to waters of the state, waters of the U.S., or wetlands, potential jurisdictional features identified in jurisdictional delineation reports shall be avoided. Identified jurisdictional features shall be documented in a report detailing how all identified jurisdictional features should be avoided.

- Material/spoils generated from project activities shall be located away from jurisdictional areas or special-status habitat and protected from storm water run-off using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls (non- monofilament), covers, sand/gravel bags, and straw bale barriers, as appropriate.
- Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and generally at least 50 feet from the top of bank.
- Spillage of material shall be stopped if it can be done safely. The contaminated area shall be cleaned, and any contaminated materials properly disposed. For all spills, the project foreman or designated environmental representative shall be notified.”

Implementation of these measures would reduce the level of impact on wetlands to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

Wildlife movement corridors can be both large and small scale. Regionally, the City is not located within an Essential Connectivity Area (ECA) as mapped in the report California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California (Spencer et al. 2010). ECAs represent principle connections between Natural Landscape Blocks. ECAs are regions in which land

conservation and management actions should be prioritized to maintain and enhance ecological connectivity. ECAs are mapped based on coarse ecological condition indicators, rather than the needs of particular species and thus serve the majority of species in each region. No mapped wildlife movement corridors are present in Pittsburgh.

Pittsburg supports a diversity of wildlife and has several creek channels which tend to serve as smaller scale movement corridors for both terrestrial and aquatic species throughout the city. The southern portion of the city is largely undeveloped open space with large areas of rolling grassy hills, while the northern edge consists of salt and brackish marshlands at the New York Slough. These areas, combined with the Browns Island Regional Shoreline and Black Diamond Mines Regional Preserve, provide discontinuous habitat blocks and patches. The proposed Plan is not anticipated to affect wildlife movement in areas of paved and disturbed rights-of-way. Although some active transportation projects such as Class I shared-use paths would be adjacent to riparian corridors and waterways, the location of these projects would not disrupt a critical wildlife movement corridor as described above. Wildlife can cross a pedestrian or bicycle path with relative ease, and the level and speed of path use is not a substantial overall deterrent to wildlife moving across the proposed path. Adverse effects on the movement of terrestrial species would be temporary and limited to specific activities including installation of temporary fencing, night lighting, construction noise, construction of multi-use paths, and the presence of construction personnel during working hours. Pedestrian and bicycle path development is not expected to result in significant changes to the genetic connectivity among local populations of wildlife, or within a broader regional context, and is not expected to prevent local wildlife movement. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The City has established a Tree Preservation and Protection Ordinance in Article XIX of the Pittsburgh Municipal Code. This ordinance has provisions regarding the protection of trees, removal of “protected” trees as part of development applications, and replacement of protected trees that are removed. The City requires a permit for the removal of protected trees, and specific bicycle and pedestrian projects proposed under the Plan would be subject to the City’s requirements. The City also has a Street Tree Ordinance as prescribed in Section 12.32.070 of the City’s Municipal Code. Pittsburgh Municipal Code Section 12.32.070(A) requires that a street tree permit be obtained before a person plants, cuts, trims, removes, prunes, shapes, injures, interferes with, or does maintenance work on a street tree.

Tree trimming and the removal of some streetscape trees may be required for some of the individual projects that involve street modifications. Any proposed active transportation projects involving tree trimming or removal of protected or street trees would require permits from the City, under these two ordinances. Additionally, the City would be required to draft and implement a tree replacement plan in accordance with City standards, at a replacement ratio of either 4:1 for 24-inch box trees or 12:1 for 15-gallon trees (trees planted to trees removed). With adherence to the City’s Tree Preservation and Protection Ordinance and Street Tree Protection Ordinance, proposed active transportation projects would not conflict with local policies and ordinances and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Pittsburg is inside the “inventory area” of the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP) (2006). The HCP/NCCP serves as a comprehensive, multi-jurisdictional habitat conservation plan, pursuant to Section (a)(1)(B) of the federal Endangered Species Act, as well as a natural communities conservation plan under the California Natural Community Conservation Planning Act of 2001. The City adopted the HCP/NCCP in 2007, under Pittsburg Municipal Code Section 15.108, *Habitat Conservation Plan/Natural Community Conservation Plan Implementation Ordinance*. The primary intent of the HCP/NCCP is to provide for the conservation of a range of plants and animals and in return, provide take coverage and mitigation for covered projects throughout eastern Contra Costa County to avoid the cost and delays of mitigating biological impacts on a project-by-project basis. It would allow the incidental take (for development purposes) of species and their habitat from development. The City is a permittee to the HCP/NCCP, and any new proposed project is required to comply with applicable provisions of the plan.

The proposed active transportation projects under the Plan would occur in the HCP/NCCP inventory area; therefore, each project would be subject to the requirements of Pittsburg Municipal Code Section 15.108. For development projects such as the proposed active transportation facilities, the HCP/NCCP requirements include the submittal of an HCP/NCCP application and payment of all applicable HCP/NCCP fees prior to the issuance of a grading or building permit.

The City of Pittsburg, as a signatory of the HCP, would implement all conditions and requirements of the plan on a project-by-project basis, consistent with the HCP/NCCP policies, conservation measures, and fees. As required by Pittsburg Municipal Code Section 15.108, project sites identified as containing ruderal land cover types and larger than one acre are required to submit an HCP/NCCP application and pay all applicable HCP fees prior to ground disturbing activities. As a result, impacts related to consistency with the HCP/NCCP would be less than significant.

LESS THAN SIGNIFICANT IMPACT

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This cultural resources analysis draws from the City's 2019 Existing Conditions Report which was prepared in support of the General Plan update (City of Pittsburg 2019a). This document presents an inventory of previously recorded cultural resources within the City's Planning Area, which encompasses and exceeds city limits and the corresponding boundary of the proposed Plan. The inventory was compiled through a search of the California Historical Resources Information System completed at the Northwest Information Center (NWIC) in May 2019 and identified 137 previously recorded cultural resources within the City's Planning Area. It includes both prehistoric and historic resources, such as rock art panels, railroads, boat landings, schools, buildings, and residences. Although it does not identify potential historical resources eligibility, the inventory does list an NWIC Property Number, address, resource type, and name as available. The Existing Conditions Report also indicates there are properties in the larger Planning Area that are listed in the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and/or Contra Costa County Historic Property Data File.

Methodology and Significance Thresholds

The significance of a cultural resource and subsequently the significance of any impact is determined by among other things, consideration of whether that resource can increase our knowledge of the past. The determining factors are site content and degree of preservation. A finding of archaeological significance follows the criteria established in the *CEQA Guidelines*.

CEQA Guidelines Section 15064.5 (Determining the Significance of Impacts to Archaeological Resources) states:

(a)(3) [...] Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (Public Resources Code, Section 5024.1, Title 14 CCR, Section 4852).

(a)(4) The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to section 5020.1(k) of the

Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

(b) A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

A substantial adverse change in the significance of a historical resource means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. Generally, impacts to historical resources can be mitigated to below a level of significance by following the Secretary of the Interior's Guidelines for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Standards) [Guidelines § 15064.6(b)]. In some circumstances, documentation of an historical resource by way of historic narrative photographs or architectural drawings will not mitigate the impact of demolition below the level of significance [Guidelines Section 15126.4(b)(2)].

Preservation in place is the preferred form of mitigation for archaeological resources as it retains the relationship between artifact and context and may avoid conflicts with groups associated with the site [Guidelines Section 15126.4 (b)(3)(A)].

Project Impacts and Mitigation

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

As discussed above, there are numerous previously recorded cultural resources within city limits. In addition, other properties in Pittsburgh have the potential to be historical resources pending further evaluation. According to the California Office of Historic Preservation, any physical evidence of human activities over 45 years of age can be recorded and evaluated for consideration as historical resources (California Office of Historic Preservation 1995). This includes not only buildings, but also structures, objects, sites, and districts.

The Plan proposes a variety of active transportation projects, which would be constructed in existing public rights-of-way and (with minor exceptions) would not require the acquisition of private property that could contain historical structures or contributing features in their surrounding landscapes. One proposed project would be located along 4.9 miles of the Contra Costa Canal, an engineering structure that has been found eligible for listing in the CRHR, and is therefore considered a historical resource as defined by CEQA. However, this project would only be a feasibility study for a future Class I shared-use path. Studying the feasibility of adding a new trail would not involve physical construction that could adversely affect the historical resource. If this trail is proposed for construction in the future, a project-specific review of environmental impacts under CEQA may be required at that time. Therefore, implementation of the Plan itself would not result in the demolition or alteration of structures which are or would qualify as historical resources. Further, although active transportation projects would introduce new street features such as curbs, planter boxes, striping, and signs; the modest scale and nature of these project elements would be consistent with the function and character of existing roadways proposed for modification.

The Plan therefore would not substantially alter the general setting or indirectly impact any known or potential historical resources such that its significance would be materially impaired. As a result,

the Plan would not cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?*

Previous archaeological sites have been identified within the Plan area. Archaeological materials associated with Native American and early Euro-American occupation may exist throughout the city, including where proposed active transportation projects are located, and have the potential to provide important scientific information regarding history and prehistory. Therefore, the Plan could affect known and unknown cultural resources. Because the Plan is being analyzed on a program level, the majority of projects do not yet have complete design plans and known archaeological resources cannot be identified at this time. The proposed active transportation projects would occur in already disturbed corridors in an urban environment, where it is unlikely that ground disturbance would encounter intact archaeological resources. However, ground-disturbing activities associated with implementation of the Plan would still have the potential to damage or destroy archaeological resources, especially if they occur below the existing road base or in less disturbed sediments. Consequently, mitigation is necessary to ensure that potential impacts to cultural resources are reduced to a less-than-significant level.

Mitigation Measures

CUL-1 Archaeological Resources Assessment

The following development standard shall be added to the proposed Plan:

“If cultural resources are encountered during ground-disturbing activities for a proposed active transportation project listed in the Plan, work in the immediate area shall be halted and an archaeologist meeting the Secretary of the Interior’s Professional Qualification Standards for archaeology in either prehistoric or historic archaeology shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work such as excavating the cultural deposit to fully characterize its extent, and collecting and curating artifacts may be warranted to mitigate any significant impacts to cultural resources. In the event that archaeological resources of Native American origin are identified during project construction, a qualified archaeologist will consult with the City to begin Native American consultation procedures.”

By implementing Mitigation Measure CUL-1, the City would evaluate and protect significant archaeological resources if encountered during construction, resulting in a less than significant impact.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. Disturb any human remains, including those interred outside of formal cemeteries?*

Ground disturbing activities during implementation of the Plan could potentially encounter human remains. If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance occur until the county coroner has made the necessary findings as to the origin and disposition pursuant to the Public Resources Code Section 5097.98. If the remains are

determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site and make recommendations to the landowner within 48 hours of being granted access. With adherence to these existing regulations, impacts to human remains would be less than significant.

LESS THAN SIGNIFICANT IMPACT

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Construction of the proposed active transportation projects listed in the Plan would result in short-term consumption of energy from the use of construction equipment and processes. Energy use during construction would be primarily from fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. The scope of construction activity that requires energy use would be limited because many facilities would simply require restriping of or surface treatments on existing paved rights-of-way, while others would add narrow linear strips of pavement to widen existing roadways or construct new shared-use paths. Therefore, the project would not result in wasteful or inefficient use of energy during construction.

After construction, proposed active transportation projects would provide a safe and better connected non-motorized transportation system in Pittsburgh, facilitating an increase the number of bicyclists and pedestrians and a decrease in the number of motor vehicle trips. Decreasing the number of personal vehicles on roadways would reduce overall energy consumption in Pittsburgh, mainly from fuel consumption. Some proposed shared-use paths, pedestrian routes to BART stations, and crosswalk enhancements would include light fixtures that would require energy use at nighttime. However, energy for lighting would be minimal relative to existing lighting in Pittsburgh and offset by the reduced use of fossil fuels for vehicle transport. Therefore, the Plan would have a less than significant impact from wasteful, inefficient, or unnecessary consumption of energy resources.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The City of Pittsburgh has not adopted an energy efficiency plan. However, by improving the active transportation network in Pittsburgh, the Plan would result in an overall reduction in motor vehicle trips and an improvement in energy efficiency. In addition, as described in Section 3, *Air Quality*, and

Section 8, *Greenhouse Gas Emissions*, the project would be consistent with the 2017 Clean Air Plan. Therefore, the Plan would not conflict with any state or local plans for energy efficiency, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

The proposed active transportation projects listed in the Plan would be located in the San Francisco Bay Area, a region of intense seismic activity. According to the U.S. Geological Survey (USGS), one late Quaternary fault (with evidence of movement in the last 130,000 years) is located in the city of Pittsburg: the Rio Vista Fault (USGS 2020, 2017). This potentially active fault has been mapped on a northwest-southeast axis from Central Avenue through Marina Park to Chipps Island (USGS 2020). Because the Rio Vista Fault has not caused surface displacements in the last 11,000 years, it is not defined as an “active fault” (Pittsburg 2010a). Figure 5.4-3 in the City’s Existing Conditions Report also maps three fault zones as located in Contra Costa County near Pittsburg: the Concord, Clayton, and Antioch faults (Pittsburg 2019a). However, these mapped fault zones are located outside city limits. Therefore, users of new active transportation facilities listed in the Plan would not be subject to a substantial risk of fault rupture. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

Major earthquakes have occurred in the vicinity of Pittsburg in the past and can be expected to occur again in the near future (Pittsburg 2010a). Strong ground shaking at any of the proposed active transportation projects could result from a rupture of faults near Pittsburg or of the major regional earthquake faults in the Bay Area. Such strong ground shaking could damage pavement at proposed bicycle and pedestrian facilities listed in the Plan. However, the City would resurface pavement that is substantially damaged by ground shaking to prevent a long-term risk of injury. The Plan also does not include proposed bridges or habitable structures that could be vulnerable to collapse during ground shaking. Therefore, the Plan would not expose people or structures to substantial adverse effects of seismic ground shaking. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

Liquefaction, which is primarily associated with unconsolidated, saturated materials, is most common in areas of sand and silt or on reclaimed lands. In these areas, ground failure and differential settlement could result from a severe earthquake, damaging paved surfaces and elevated structures. Liquefaction potential is highest in areas underlain by poorly engineered Bay fills, Bay mud, and unconsolidated alluvium. As mapped in Figure 5.4-4 in the City’s Existing Conditions Report, low-lying parts of Pittsburg near Suisun Bay and in valleys descending from the southern hills are susceptible to liquefaction (Pittsburg 2019a). Proposed bicycle and pedestrian projects listed in the Plan would not include habitable structures that could expose people to adverse effects from seismic-related ground failure, including liquefaction. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

As mapped in Figure 10-1 in the Pittsburg General Plan, moderately unstable and generally unstable slopes are located in the southern portion of the city (Pittsburg 2010a). Unstable slopes that may be susceptible to landslides within the city limits are primarily to the south of W. Leland Road and west of Railroad Avenue. Proposed bicycle facilities would not be located in areas mapped as having moderately or generally unstable slopes. Crosswalk enhancements listed in the Plan would not have the potential to cause loss, injury, or death from landslide events. Therefore, the impact from exposure to landslides would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

The active transportation projects listed in the Plan that would be constructed within existing paved rights-of-way are unlikely to cause substantial soil erosion or loss of topsoil. However, the construction of proposed shared-use paths and bicycle facilities that require roadway widening would involve ground disturbance of unpaved areas. This construction activity could cause erosion and sedimentation. However, any grading activity within city limits is subject to the erosion control requirements of Chapter 15.88 of the Pittsburg Municipal Code. Pursuant to Section 15.88.030.B of the Municipal Code, “all land-disturbing or land-filling activities or soil storage shall be undertaken in a manner designed to minimize surface runoff, erosion and sedimentation.” In addition to local erosion control regulations, if any proposed bicycle facility would involve disturbance of an area over one acre in size, it would be required to comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit Requirements, which would limit peak post-project runoff levels to pre-project levels. The City would also be required to prepare a Storm Water Pollution Prevention Plan (SWPPP), a sediment and erosion control plan that describes the activities to prevent stormwater contamination, control sedimentation and erosion, and comply with the requirements of the statewide permit. Therefore, the Plan would have a less than significant impact from soil erosion or the loss of topsoil.

LESS THAN SIGNIFICANT IMPACT

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

The proposed active transportation projects that would be constructed within existing paved rights-of-way would not result in landslides, lateral spreading, subsidence, liquefaction, or collapse because they would occur on already developed land. Proposed facilities that would occur on undeveloped parcels would adhere, as applicable, to Mitigation Measure G-1 (below) to minimize the risk of expansive soils. Therefore, the Plan would not result in unstable geologic units or soils and impacts would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

According to the Natural Resource Conservation Service’s Web Soil Survey, multiple soil types that occur in Pittsburg have a potential for shrinking and swelling behavior, including but not limited to

Brentwood clay loam, Capay clay, and Clear Lake clay (NRCS 2020). In areas underlain by expansive soils, the shrinking and swelling of soil can disrupt or damage paved surfaces. Proposed bicycle and pedestrian projects located within existing paved rights-of-way would be unlikely to experience substantial shrink-swell from soil movement. However, proposed Class I shared-use paths on previously unpaved ground could endanger trail users, if expansive soils are present and cause pavement to crack. For these projects, site-specific geotechnical investigations would be required. The impact of expansive soils would be potentially significant.

Mitigation Measures

Mitigation Measure G-1 would be required to reduce potential hazards from expansive soils.

G-1 Expansive Soils

The following development standard shall be added to the proposed Plan:

“If a Class I shared-use path project listed in the Plan is located in an area mapped as having expansive underlying soil, the City shall ensure that a site-specific geotechnical investigation is conducted by a qualified engineer. The investigation shall identify hazardous conditions and recommend appropriate design factors to minimize hazards. Such measures could include concrete slabs on grade with increased steel reinforcement, removal of highly expansive material and replacement with non-expansive import fill material, or chemical treatment with hydrated lime to reduce the expansion characteristics of the soils.”

With implementation of this mitigation measure, expansive soils would be remediated on a site-specific basis, and potential impacts would be reduced to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

None of the projects listed in the proposed Plan would involve the construction of septic tanks or alternative wastewater disposal systems. No impact would occur.

NO IMPACT

- f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Significant paleontological resources are fossils or assemblages of fossils that are unique, unusual, rare, uncommon, diagnostically important, or are common but have the potential to provide valuable scientific information for evaluating evolutionary patterns and processes, or which could improve our understanding of fossil chronologies, the ecology and geographic distribution of fossil organisms, or the history of geologic layers. Evaluating the potential for impacts to paleontological resources from implementing the Plan involves three distinct steps: 1) identify the geologic units that occur (i.e., are mapped at the surface or may be directly underlying mapped units) within the study area; 2) determine the paleontological sensitivity of mapped or underlying geologic units; and 3) determine if the active transportation projects proposed in the Plan have the potential to disturb paleontologically sensitive geologic units.

Paleontological Resource Potential

The Society of Vertebrate Paleontology (SVP) (2010) describes sedimentary rock units as having a high, low, undetermined, or no potential for containing significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. While these standards were written specifically to protect vertebrate paleontological resources, all fields of paleontology have adopted these guidelines, which are given here verbatim:

- I. **High Potential (sensitivity)** – Rock units from which significant vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations that contain significant nonrenewable paleontological resources anywhere in their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical; and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas that contain potentially datable organic remains older than Recent, including deposits associated with nests or middens, and areas which may contain new vertebrate deposits, traces, or trackways are also classified as significant.
- II. **Low Potential (sensitivity)** – Sedimentary rock units that are potentially fossiliferous, but have not yielded fossils in the past, or contain common and/or widespread invertebrate fossils of well documented and understood taphonomic, phylogenetic species and habitat ecology. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potential for yielding significant fossils prior to the start of construction. Generally, these units will be poorly represented by specimens in institutional collections and will not require protection or salvage operations. However, as excavation for construction proceeds, it is possible that significant and unanticipated paleontological resources might be encountered and require a change of classification from Low to High Potential and, thus, require monitoring and mitigation if the resources are found to be significant.
- III. **Undetermined Potential (sensitivity)** – Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.
- IV. **No Potential** – Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing significant paleontological resources.

Existing Conditions

Pittsburg is located in the Sacramento-San Joaquin River Delta area within the southern Coast Ranges, one of 11 major geomorphic provinces in California (California Geological Survey 2002). A geomorphic province is a region of unique topography and geology that is distinguished from other regions based on its landforms and geologic history. During the Cenozoic era, the area of the present-day Coast Ranges was covered by seawater and a thick deposit of marine to nonmarine

shale, sandstone, and conglomerate accumulated on the Franciscan basement rock (Bartow and Nilsen 1990). Later, during the late Miocene to Pliocene eras, a mountain-building episode occurred in the vicinity of the present-day Coast Ranges, resulting in their uplift above sea level. Subsequently, from the late Pliocene to Pleistocene eras, extensive deposits of terrestrial alluvial fan and fluvial sediments were deposited in the Coast Ranges (Norris and Webb 1990).

Paleontological Impact Analysis

According to the published mapping, the proposed active transportation projects are underlain by the following mapped geologic units:

- Holocene (i.e., Qa, Qal) to late Pleistocene (i.e., Qoa) alluvial sediments, consisting of various compositions of gravel, sand, and silt
- Holocene bay mud deposits (i.e., Qbm), composed of blueish-gray to black silty clay with interspersed layers of sand, gravel, peat, and shell fragments
- Pliocene to Pleistocene Oro Loma Formation (i.e., Tol) (Dibblee and Minch 2006; Sims et al. 1973), interbedded, terrestrial sandstone, claystone, and pebble conglomerate derived from Franciscan detritus (Dibblee and Minch 2006).

Based on a literature review and in accordance with SVP guidelines (2010), the geologic units underlying the proposed facilities were determined to have low to high paleontological sensitivity. Intact Holocene deposits (i.e., Qa, Qal, Qbm) underlying Pittsburg, particularly those younger than 5,000 years old, are considered too young to preserve paleontological resources and are assigned a low paleontological sensitivity (SVP 2010). However, Holocene sediments may grade downward into older deposits of late Pleistocene age (i.e., Qoa) that could preserve fossil remains at shallow or unknown depths. Pleistocene alluvial sediments have a well-documented record of abundant and diverse vertebrate fauna throughout California. Localities have produced fossil specimens of mammoth (*Mammuthus columbi*), horse (*Equus*), camel (*Camelops*), and bison (*Bison*), as well as various birds, rodents, and reptiles (Agenbroad 2003; Bell et al. 2004; Jefferson 1991; Merriam 1911; Savage et al. 1954; Springer et al. 2009; Wilkerson et al. 2011; Winters 1954).

Accurately assessing the boundaries between younger and older units is generally not possible without site-specific stratigraphic data, some form of radiometric dating or fossil analysis, so conservative estimates of the depth at which paleontologically sensitive units may occur ensures impact avoidance. Given the short distance between Pittsburg and the surrounding mountains and the prevalence of older Quaternary sediments mapped at the surface, Rincon estimates the transition to Quaternary sediments likely to occur at about five feet below ground surface. A search of the paleontological locality records maintained in the online Paleobiology Database indicates that the Pliocene to Pleistocene Oro Loma Formation (i.e., Tol) has produced significant fossil specimens of horse (*Hipparion tehonense*, *Neohipparion leptode*, *Dinohippus* sp.) and camel (*Alforias* sp.) throughout California (Paleobiology Database 2020). Therefore, Pleistocene alluvial deposits and the Pliocene to Pleistocene Oro Loma Formation are assigned a high paleontological sensitivity.

The active transportation projects listed in the Plan that would be constructed within developed areas (i.e., existing paved rights-of-way) are unlikely to impact paleontological resources of high sensitivity. Although proposed shared-use paths and bicycle facilities that require roadway widening would involve ground disturbance outside existing paved surfaces, all these projects would be located in corridors where the ground has already been disturbed and graded (e.g., utility corridors, landscaped or ruderal strips adjacent to streets). Based on previous trails constructed in Pittsburg, the City anticipates that the maximum depth of grading for new shared-use paths would not exceed

one foot below the ground surface. This depth of grading would be shallower than the estimated five-foot depth at which Quaternary sediments that may have intact fossil resources could begin to occur. Disturbed sediments at less than five feet below the ground surface would not likely yield paleontological resources, and any such resources if present would not be found in intact sedimentary formations that provide historical context. Therefore, the impact on paleontological resources would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Climate Change and Greenhouse Gas Emissions

Climate change is the observed increase in the average temperature of the earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The term "climate change" is often used interchangeably with the term "global warming," but "climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years. Per the United Nations Intergovernmental Panel on Climate Change (IPCC 2013), the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-20th century (IPCC 2013).

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Observations of CO₂ concentrations, globally-averaged temperature, and sea level rise are generally well within the range of the extent of the earlier IPCC projections. The recently

observed increases in CH₄ and N₂O concentrations are smaller than those assumed in the scenarios in the previous assessments. Each IPCC assessment has used new projections of future climate change that have become more detailed as the models have become more advanced.

Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆ (CalEPA 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as “carbon dioxide equivalent” (CO₂e), and is the amount of a GHG emitted multiplied by its GWP. CO₂ has a 100-year GWP of one. By contrast, CH₄ has a GWP of 25, meaning its global warming effect is 25 times greater than CO₂ on a molecule per molecule basis over a 100-year period (IPCC 2007).

The accumulation of GHGs in the atmosphere regulates the earth’s temperature. Without the natural heat trapping effect of GHGs, Earth’s surface would be about 34° C cooler (CalEPA 2006). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Based on the California Air Resources Board (CARB) California Greenhouse Gas Inventory for 2000-2017, California produced 424 million metric tons (MMT) CO₂e in 2017 (CARB 2019). The largest single source of GHG in California is transportation, contributing 40 percent of the State’s total GHG emissions. California emissions are due in part to its large size and large population compared to other states. However, the state’s mild climate reduces California’s per capita fuel use and GHG emissions as compared to other states.

Regulatory Setting

In response to an increase in man-made GHG concentrations over the past 150 years, California has implemented Assembly Bill (SB 32), which requires the State to reduce greenhouse gases (GHGs) to 40 percent below 1990 levels by 2030. On December 14, 2017, the California Air Resources Board (CARB) adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) CO₂e by 2030 and two MT CO₂e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.

On September 10, 2018, the governor issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 32 and other legislation. EO B-55-18 also tasks CARB with including a pathway toward the EO B-55-18 carbon neutrality goal in the next Scoping Plan update.

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

The vast majority of individual projects, in themselves, do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

Many proposed active transportation projects listed in the Plan would include minor surface treatments like restriping of lines and enhancing crosswalks, which would not involve construction activity that generates GHG emissions. Some projects, though, would require grading and paving activity, especially to widen paved areas or construct new shared-use paths. The use of trucks to haul soil and grading equipment for earth movement typically emits the greatest amount of GHG emissions during construction. Because the Plan provides a list of projects for future implementation, not for immediate construction, the precise timing of construction and the list of construction equipment for individual projects is not precisely known at this time. At this programmatic level of analysis, construction-related emissions are speculative; such emissions depend on the characteristics of individual active transportation projects. BAAQMD's *CEQA Air Quality Guidelines* (2017) have no thresholds for determining plan-level impacts from construction emissions. Therefore, construction emissions would not exceed an applicable plan-level threshold.

This section analyzes the Plan's long-term effect on GHG emissions by a qualitative discussion of its consistency with applicable plans and policies to reduce emissions. This approach is consistent with guidance from the BAAQMD's *CEQA Air Quality Guidelines* for plan-level analysis. The BAAQMD's 2017 Clean Air Plan sets goals to reduce vehicle emissions and contribute to protecting the climate. The Plan would be consistent with these goals because it would facilitate walking and biking as substitute modes of travel for driving motorized vehicles. Currently an estimated 67 percent of Pittsburgh residents drive alone to work, and another 17 percent carpool (Pittsburgh 2019a). Combined, approximately 84 percent of residents drive to work. By contrast, it is estimated that only 2 percent of residents walk or bike to work. By improving connectivity and safety for pedestrians and bicyclists, the Plan would make active transportation a more viable alternative to driving for people who work locally. The proposed improvements also would make it easier for people to reach local BART stations without driving and then commute to regional work sites in the greater Bay Area. This would address the so-called "first-mile/last-mile" problem where it is difficult for people to move between a transit stop and an origin or destination. Furthermore, a long-term increase in walking and bicycling behavior in Pittsburgh would offset any emissions from constructing new active transportation projects or from additional electricity use for light fixtures. Therefore, as discussed in Section 3, *Air Quality*, the Plan would be consistent with the primary goals of the 2017 Clean Air Plan.

The 2017 Clean Air Plan also contains 85 control strategies aimed at reducing air pollution and protecting the climate in the Bay Area. Applicable control measures to the Plan are measures TR2 (Trip Reduction Programs) and TR9 (Bicycle and Pedestrian Access Facilities). Control Measure TR2

encourages trip reduction policies and programs in local plans and Control Measure TR9 encourages planning for bicycle and pedestrian facilities in local plans.

TR2 Trip Reduction Programs

Implement the regional Commuter Benefits Program (Rule 14-1) that requires employers with 50 or more Bay Area employees to provide commuter benefits. Encourage trip reduction policies and programs in local plans (e.g., general and specific plans), while providing grants to support trip reduction efforts. Encourage local governments to require mitigation of vehicle travel as part of new development approval, to adopt transit benefits ordinances in order to reduce transit costs to employees, and to develop innovative ways to encourage rideshare, transit, cycling, and walking for work trips. Fund various employer-based trip reduction programs.

TR7 Safe Routes to Schools and Safe Routes to Transit

Provide funds for the regional Safe Routes to School and Safe Routes to Transit Programs.

TR9 Bicycle and Pedestrian Access and Facilities

Encourage planning for bicycle and pedestrian facilities in local plans (e.g., general and specific plans, fund bike lanes, routes, paths and bicycle parking facilities).

By improving connectivity and safety for bicyclists and pedestrians, the Plan would make it easier for people to commute by cycling and walking, consistent with Control Measure TR2 to reduce work trips by motor vehicle. Planning for bicycle and pedestrian facilities at a local level would be consistent with Control Measure TR9. Pedestrian projects listed in the Plan also focus on closing sidewalk gaps and enhancing safety near schools. By planning for safe routes to schools, the Plan would facilitate the City's efforts to get funding for individual pedestrian safety projects, consistent with Control Measure TR9. Implementation of the Plan also would not preclude any planned transit or bicycle pathways, and would not otherwise disrupt regional planning efforts to reduce vehicle miles traveled (VMT) and meet federal and State air quality standards. Therefore, the Plan would not hinder implementation of any 2017 Clean Air Plan's control measures.

The Plan also would be consistent with State targets for reducing GHG emissions. California's 2017 Climate Change Scoping Plan to achieve the target of cutting statewide emissions 40 percent from 1990 baseline levels encourages using streets for active transportation as one measure to reduce emissions from transportation (CARB 2017). As stated in the 2017 Scoping Plan, policies that increase active transportation "will need to play a greater role as California strives to achieve its 2030 and 2050 climate targets." The Plan would implement this approach at a local level, consistent with State policy to reduce GHG emissions in compliance with SB 32 and Executive Order B-55-18, eventually achieving statewide carbon neutrality by 2045.

Therefore, the Plan would have a less than significant impact on the environment from GHG emissions, and would not conflict with applicable plans to reduce GHG emissions.

LESS THAN SIGNIFICANT IMPACT

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

None of the proposed active transportation projects listed in the Plan would involve the transport, use, or disposal of hazardous materials other than the routine use of chemicals during construction (e.g., fuel and engine fluids for equipment, paint, and asphalt) and would not create conditions which could lead to the release of hazardous substances. Users of new active transportation facilities would be subject to a very small risk of exposure to upset and accident conditions from the release of hazardous materials being transported on adjacent travel lanes for motor vehicles. However, this is not a reasonably foreseeable risk to pedestrians and bicyclists. These impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

As shown in Figures 3 and 4, many bicycle and crosswalk projects listed in the Plan would be located within one-quarter mile of schools. These are considered “safe route to school” projects, which improve connectivity and safety for students traveling to and from schools. Ground disturbance during construction of these projects could temporarily expose students and staff to emissions of fugitive dust. However, construction activity would be temporary, which would reduce the time of exposure to dust emissions. Bicycle projects near schools also would be constructed in linear pathways, which would reduce the amount of construction time near schools as construction proceeds along the proposed alignment. Therefore, construction within one-quarter mile of schools would be short-term and would result in minimal fugitive dust emissions. In addition, the projects would not involve hazardous emissions or handling of hazardous materials beyond the routine temporary use of fuel and engine fluids for construction equipment and the application of materials like asphalt and paints. The potential impact to schools would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

According to databases of hazardous material sites maintained by the California Department of Toxic Substances Control (EnviroStor) and the California State Water Resources Control Board (GeoTracker), Pittsburg has the following types of hazardous sites that are still active or need further investigation: leaking underground storage tanks (LUSTs), school investigation sites, voluntary cleanup sites, corrective action sites, evaluation sites, and state response sites (DTSC 2020, SWRCB 2020). These sites are dispersed across many parts of Pittsburg but clustered in the industrial area east of Harbor Street and north of Pittsburg-Antioch Highway and along Railroad Avenue and Willow Pass Road. Many of these sites are at gas stations or industrial facilities that would not be affected by the construction of active transportation projects on public rights-of-way. However, proposed projects that involve the disturbance of soil at or near listed hazardous materials sites could potentially expose people and the environment to hazardous substances. For example, a proposed

Class I shared-use path would be constructed along Willow Pass Road, and a Class IV separated bikeway would be installed on Railroad Avenue, areas which are currently near identified hazardous material sites. Therefore, the impact related to listed hazardous material sites would be potentially significant.

Mitigation Measures

Mitigation Measure HAZ-1 would be required to identify listed hazardous material sites on and near proposed bicycle and pedestrian improvements located near hazardous materials releases, to mitigate for hazardous contaminants where necessary.

HAZ-1 Hazardous Material Sites Investigation and Remediation

The following development standard shall be added to the proposed Plan:

“Prior to construction of any active transportation project listed in the Plan that requires ground disturbance, the City shall consult lists of hazardous material sites maintained by the California Department of Toxic Substances Control (DTSC), the State Water Resources Control Board (SWRCB), and the Contra Costa Hazardous Materials Programs. Where a proposed improvement is located on or adjacent to an identified site, follow up Phase I, and as appropriate, Phase II hazardous waste site investigations shall be completed, and any contaminants shall be remediated to concentrations below applicable screening-level thresholds for human health. No disturbance of contaminated soil shall be permitted unless an approved site cleanup and remediation plan has been implemented for the identified hazardous waste sites.”

By implementing Mitigation Measure HAZ-1, the City would investigate hazardous material sites and remediate contaminants, where applicable, so that people are not exposed to concentrations exceeding screening-level thresholds. This would reduce the impact to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The nearest publicly available airport to Pittsburg is Buchanan Field Airport, which is located approximately 4 miles southwest of city limits. Pittsburg is outside the Airport Influence Area for Buchanan Field Airport, as mapped in the Contra Costa County Airport Land Use Compatibility Plan (Contra Costa County Airport Land Use Commission 2000). Therefore, the Plan would be located outside the scope of an airport land use plan and more than two miles from the nearest airport, and it would not result in a safety hazard or excessive noise from airport activity. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- f. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed active transportation projects would augment Pittsburg’s existing circulation system, giving people better multi-modal options to escape from a hazard. Although construction could temporarily close travel lanes, no streets would be permanently closed or blocked under the Plan.

Therefore, the Plan would not impair the implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan.

NO IMPACT

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

As shown in Figure 4.4-1 in the City's Existing Conditions Report, the southern and western edges of Pittsburgh are partly located in a high fire hazard severity zone in a state responsibility area (Pittsburg 2019a). However, Pittsburgh and its surroundings are not located in or near a very high fire hazard severity zone. As discussed in Section 20, *Wildfire*, the Plan would not result in the exposure of people to significant risks associated with very high fire hazard severity zones. Furthermore, the proposed active transportation projects would almost entirely be located in urbanized or low-lying parts of Pittsburgh that are not prone to high fire risk. Therefore, the Plan would not result in a significant risk of loss, injury, or death involving wildland fires.

LESS THAN SIGNIFICANT IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Proposed active transportation projects that would be constructed within an existing paved right-of-way, such as Class III bicycle routes and boulevards, most Class II bike lanes, and crosswalk enhancements, would not degrade ground water quality because they would not result in additional runoff or pollutants. However, ground disturbance outside existing paved rights-of-way, especially grading and vegetation removal for Class I shared-use paths and for Class II bike lanes that require roadway widening, may result in soil erosion. In addition, converting pervious surfaces into paved facilities could increase the amount of runoff from urban areas and thus decrease water quality.

The proposed active transportation projects may be subject to stormwater requirements under the Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (Order Number R2-2015-0049) for the San Francisco Bay Area. This permit is intended to reduce the discharge of pollutants in the City's municipal separate storm sewer system (MS4). The MS4 permit was issued jointly to the City and other local agencies in the regional Contra Costa Clean Water Program (California Regional Water Quality Control Board 2015). To achieve compliance with the regional program, and thus with the conditions of the most recently issued MS4 permit, the City has adopted local regulations. Specifically, Chapter 13.28 of the Pittsburgh Municipal Code establishes discharge requirements for all water entering the storm drain system generated on any developed and undeveloped lands lying within city limits (Pittsburg 2019b).

Under Section 13.28.090 of the Pittsburgh Municipal Code, the City requires best management practices (BMPs) to control the volume, rate, and potential pollutant load of stormwater runoff from new development and redevelopment projects as required by the City's MS4 permit (Pittsburg 2019b). Such BMPs include, where appropriate, Low Impact Development techniques to be implemented at New Development and Significant Redevelopment project sites. These techniques include infiltrating, storing, detaining, evapotranspiring (the release of water vapor from soil, other surfaces, and plants), and biotreating stormwater runoff close to its source (California Regional Water Quality Control Board 2015). If any proposed active transportation project would create 10,000 square feet or more of impervious surface, it would constitute "New Development" under the MS4 permit and would be required to implement BMPs.

In addition, if a proposed active transportation facility would involve disturbance of an area over one acre in size, it would be required to comply with NPDES Construction General Permit Requirements, which would limit peak post-project runoff levels to pre-project levels. Grading activity for some proposed Class I shared-use paths, among other bicycle facilities listed in the Plan, may disturb more than one acre. For such projects to comply with the Construction General Permit, the City would have to prepare a Storm Water Pollution Prevention Plan (SWPPP), which includes BMPs to control erosion and sediment. Construction BMPs could include silt fencing, fiber rolls, stabilized construction entrances, stockpile management, and solid waste management. Post-construction stormwater performance standards are also required.

Compliance with existing regulatory requirements would ensure that the proposed active transportation projects would not violate water quality standards or waste discharge requirements and would not create substantial runoff water or otherwise degrade water quality. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*
- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Some proposed active transportation projects would use water during operation. Water stations providing potable water would be added on the Delta de Anza Trail, and new landscaping and shade trees next to active transportation facilities would require watering. The proposed water stations could incrementally increase demand for groundwater in Pittsburg. In 2015, 13 percent of potable water was sourced from local groundwater wells (Pittsburg 2019a). Because of the small scale of additional water demand for users of the Delta de Anza Trail, and the minor share of potable water sourced from local groundwater, the additional use of potable water would not substantially decrease groundwater supplies. Pittsburg relies on recycled water for street-side landscaping and city parks (Pittsburg 2019a), so additional landscaping under the Plan would not draw from groundwater. Therefore, the Plan would not substantially decrease groundwater supplies.

Proposed active transportation projects that would be constructed within existing paved rights-of-way, such as Class III bicycle routes and boulevards, most Class II bike lanes, and crosswalk enhancements, would not result in new impermeable surfaces and thus would not interfere with groundwater recharge. However, new facilities constructed outside of existing paved rights-of-way, such as Class I shared-use paths and Class II bike lanes that require roadway widening, would increase the volume of impermeable surfaces in Pittsburg. As a result, the proposed facilities could marginally reduce groundwater recharge and increase the amount of surface runoff. However, projects that disturb at least one acre would comply with the NPDES Construction General Permit by implementing BMPs to maintain or replicate the pre-development hydrologic regime. Implementation of required BMPs would minimize impacts related to groundwater recharge. Therefore, the Plan would not substantially interfere with groundwater recharge.

Pittsburg is under the jurisdiction of the San Francisco Regional Water Quality Control Board (RWQCB), which is responsible for preparing the Water Quality Control Plan for the region (Basin Plan). The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality objectives. The State has developed total maximum daily loads (TMDLs), which are a calculation of the maximum amount of a pollutant that a water body can have and still meet water quality objectives established by the region. As discussed under checklist Item a, active transportation projects listed in the Plan that would disturb at least one acre would be required to comply with the State's Construction General Permit, which would minimize and avoid water quality impacts associated with soil erosion and stormwater runoff from project sites. Implementation of proposed active transportation projects would not violate water quality objectives for beneficial uses in the vicinity of the project site or exceed TMDLs. Therefore, the Plan would not conflict with a water quality control plan.

The city overlies the Pittsburg Plain Groundwater Basin (Pittsburg 2019a). In September 2014, the California Legislature enacted comprehensive legislation aimed at strengthening local control and management of groundwater basins throughout the state. Known as the Sustainable Groundwater Management Act (SGMA), the legislation provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for state intervention when necessary to protect the resource. In 2019 the California Department of Water Resources ranked the Pittsburg Plain Groundwater Basin as a "very low" priority under SGMA (California Department of Water Resources 2019). Because the basin is not identified as a high or medium priority, it is not required

to submit a Groundwater Sustainability Plan. Therefore, the Plan would not conflict with any sustainable groundwater management plan.

Impacts related to groundwater would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

Proposed active transportation projects that would be constructed within existing paved rights-of-way, such as Class III bicycle routes and boulevards and most Class II bike lanes, would not alter existing drainage patterns. New facilities located outside of existing paved rights-of-way, such as Class I shared-use paths and bike lanes that would require widening of roadways, could alter existing drainage patterns by introducing new impervious surfaces. However, proposed bicycle facilities would comply with erosion control systems and construction BMPs per the City's MS4 permit. BMPs may include directing runoff to permeable areas, maximizing stormwater storage for reuse, and incorporating porous materials into the project design. Compliance with these requirements would ensure that stormwater would be captured and retained on-site, and would minimize the risks of erosion, flooding, or excess stormwater in the local stormwater drainage system. No bridges or stream and river crossings are proposed in the Plan. Proposed active transportation projects would cross drainages using existing infrastructure. Therefore, the Plan would have a less than significant impact related to drainage patterns.

LESS THAN SIGNIFICANT IMPACT

- c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*
- d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

As discussed above, proposed bicycle facilities constructed outside of existing paved rights-of-way would result in the addition of new impervious surfaces. However, proposed bicycle facilities would not include any new structures such as bridge abutments that could impede or redirect flood flows. Therefore, implementation of the Plan would not impede or redirect flood flows.

In the City's Existing Conditions Report, Table 4.2-4 indicates that Pittsburgh is not at risk from tsunamis, while Figure 4.5-1 shows that low-lying part of the city near the Delta shoreline are

located in a 100-year flood zone designated by the Federal Emergency Management Agency (FEMA) (Pittsburg 2019a). Some proposed active transportation projects in the Plan would be located in the 100-year flood zone, but the operation of bikeways and pedestrian facilities would not involve the use of pollutants that could be released during inundation. Proposed facilities also are not located near a large standing body of water that may be subject to a seiche, or standing wave. Therefore, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Would the project physically divide an established community?

The purpose of the proposed active transportation projects listed in the Plan is to increase connectivity in the community of Pittsburg by improving bicycle and pedestrian access. Although the Plan would redesign existing streets for improved multi-modal access, no new roads or other large or linear facilities that would physically divide existing neighborhoods would be constructed. Therefore, the Plan would not divide an established community, but rather would enhance its connectivity. No impact would occur.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The Plan was developed in coordination with the City's existing General Plan and its current General Plan update process. As discussed in Section 17, *Transportation*, the Plan would be consistent with multiple policies in the Transportation Element of the existing General Plan (adopted in 2001 and last amended in 2010) to improve pedestrian and bicyclist circulation. These policies are intended to reduce safety hazards in the circulation system and increase the share of active transportation users in Pittsburg. Increasing active transportation would reduce environmental impacts associated with vehicle miles traveled. All projects listed in the Plan would also comply with policies in the adopted General Plan that are explicitly designed to avoid or mitigation environmental effects.

The City's Vision and Opportunities report for the General Plan update, released in July 2019, identifies active transportation as a key priority of the community, based on feedback from public workshops and pop-up demonstrations (Pittsburg 2019c). As stated in this report, "Pittsburg's future should incorporate concepts of 'complete streets' that serve all modes of transportation, not just cars." The City also identifies "strategic opportunities to enhance public safety through improved bicycle and pedestrian routes and amenities." The Plan's policies to promote active transportation and list of proposed active transportation projects are consistent with themes in the visioning process for the General Plan update, which are intended to reduce environmental impacts from transportation.

In addition, the Plan would also be consistent with the resilience objectives in ABAG's Plan Bay Area (2040): to enhance climate protection and adaptation efforts, strengthen open space protections, create healthy and safe communities, and protect communities against natural hazards. As discussed in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, the Plan would facilitate a reduction in long-term air pollution and GHG emissions by encouraging people to substitute bicycling and walking for driving motor vehicles. The Plan would also further public health goals of increasing physical activity through bicycling and walking. Therefore, the Plan would support ABAG's objectives to enhance climate protection and create healthy and safe communities.

The Plan would be consistent with applicable local and regional plans and policies to reduce environmental impacts. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

There are no significant mineral deposits or active mining operations in the City's Planning Area (Pittsburg 2019a). Therefore, the Plan would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. No impact would occur.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Noise Setting

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs (e.g., the human ear). Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013a).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (Hz) and less sensitive to frequencies around and below 100 Hz (Kinsler, et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as a doubling of traffic volume, would increase the noise level by 3 dB; similarly, dividing the energy in half would result in a decrease of 3 dB (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive an increase (or decrease) of up to 3 dBA in noise levels (i.e., twice [or half] the sound energy); that a change of 5

dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (or half) as loud (10.5 times the sound energy) (Crocker 2007).

The impact of noise is not a function of sound level alone. The time of day when noise occurs and the duration of the noise are also important. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. Typically, L_{eq} is summed over a one-hour period.

The City's General Plan and Municipal Code regulate noise in Pittsburgh. Policy 12-P-9 in the Noise Element of the General Plan limits the generation of loud noises on construction sites adjacent to existing development to normal business hours between 8 a.m. and 5 p.m. In the Pittsburgh Municipal Code, Section 9.44.010 prohibits the use of pile drivers, pneumatic hammers, and similar equipment between the hours of 10 p.m. and 7 a.m. (Pittsburg 2019b). The City's Building and Construction Ordinance (Section 15.88.060.A.5) also prohibits grading noise, including warming up equipment motors, within 1,000 feet of a residence between the hours of 5:30 p.m. and 7 a.m. on weekdays, unless otherwise approved by the City Engineer. However, the Pittsburgh Municipal Code does not establish numeric standards for construction noise.

Vibration Setting

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of hertz (Hz). The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body is from a low of less than 1 Hz up to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise may result in adverse effects, such as building damage, when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz). The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. Particle velocity is the velocity at which the ground moves. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the greatest magnitude of particle velocity associated with a vibration event. Although the City does not have standards for human annoyance or structural damage from vibration, Caltrans has published applicable guidelines for these vibration impacts. Table 2 and Table 3, respectively, show the recommended Caltrans criteria for vibration annoyance and structural damage.

Table 2 Caltrans Criteria for Vibration Annoyance

Human Response	Maximum PPV (in/sec)	
	Transient Sources ¹	Continuous/Frequent Intermittent Sources ¹
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

¹ Caltrans defines transient sources as those that create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources can include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2013b

Table 3 Caltrans Criteria for Vibration Damage

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans 2013b

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

This analysis covers temporary increases in ambient noise from construction activity and permanent increases from noise generated during the operation of active transportation projects.

Construction Noise

Construction of the active transportation projects listed in the Plan would generate elevated noise levels on a temporary basis in the immediate vicinity of project sites. As shown in Table 4, average noise levels associated with using heavy equipment at construction sites can range from approximately 76 to 88 dBA at 50 feet from the source, depending upon the types of equipment in operation at any given time and the phase of construction. The highest noise levels generally occur during excavation and grading, which involve using such equipment as backhoes, bulldozers, shovels, and front-end loaders. Although many active transportation projects would simply require restriping and signage, some projects would require heavy equipment for demolition and grading. For example, crosswalk enhancements could involve jackhammering of existing pavement and concrete to extend curbs, upgrade curb ramps, and install pedestrian beacons.

Table 4 Typical Construction Noise Levels

Equipment	25 feet from Source (dBA L_{eq})	50 feet from Source (dBA L_{eq})	100 feet from Source (dBA L_{eq})	200 feet from Source (dBA L_{eq})	500 feet from Source (dBA L_{eq})
Air Compressor	86	80	74	68	60
Backhoe	86	80	74	68	60
Concrete Mixer	91	85	79	73	65
Grader	91	85	79	73	65
Jack Hammer	94	88	82	76	68
Paver	91	85	79	73	65
Roller	91	85	79	73	65
Saw	82	76	70	64	56
Scraper	91	85	79	73	65
Truck	90	84	78	72	64

Note: pile drivers will not be used for active transportation projects.

Source: Noise level at 50 feet from Federal Transit Administration, 2018. Noise levels at 25 feet, 100 feet, 200 feet, and 500 feet were extrapolated using a 6 dBA attenuation rate per doubling of distance. Each noise level assumes the piece of equipment is operating at full power for the expected duration to complete the construction activity. The duration varies widely between each piece of equipment. Noise levels also depend on the model and year of the equipment used.

Noise levels from point sources such as equipment at construction sites typically attenuate at a rate of 6 dBA per doubling of distance. Therefore, only areas within several hundred feet of construction sites would typically be exposed to perceptible construction noise levels. As noted above, the Pittsburgh Municipal Code does not establish numeric standards for construction noise. However, construction noise that substantially exceeds existing ambient noise levels could disturb sensitive receptors, such as residences and schools.

Construction activity under the Plan would be required to comply with Policy 12-P-9 in the City’s Noise Element, which would “limit generation of loud noises on construction sites adjacent to existing development to normal business hours between 8:00 AM and 5:00 PM.” This policy would prevent loud construction activity during evening and nighttime hours when nearby residences are most sensitive to noise. However, as discussed above, daytime construction noise could still disturb sensitive receptors. Therefore, the construction of active transportation projects could have a potentially significant impact on sensitive receptors from temporary increases in ambient noise levels.

Mitigation Measures

In addition to requirements for construction noise in the City’s Noise Element and Municipal Code, the following mitigation measures are required to reduce the exposure of sensitive receptors to construction noise:

N-1 Noise Reduction Measures Near Sensitive Receptors

The following development standard shall be added to the proposed Plan:

“The City shall ensure that, where residences, schools, or other noise-sensitive uses are located within 500 feet of construction sites for active transportation projects listed in the Plan, appropriate measures shall be implemented to reduce noise exposure to the extent feasible. Specific techniques may include, but are not limited to:

- Locating stationary noise-generating construction equipment as far from sensitive receptors as feasible.
- Installing temporary noise barriers to block and deflect noise.”

N-2 *Noise Control Equipment*

The following development standard shall be added to the proposed Plan:

“The City shall ensure that equipment and trucks used for construction of active transportation projects listed in the Plan utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds).”

N-3 *Impact Equipment*

The following development standard shall be added to the proposed Plan:

“The City shall ensure that impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for construction of active transportation projects listed in the Plan be hydraulically or electrically powered wherever feasible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, use of an exhaust muffler on the compressed air exhaust can lower noise levels from the exhaust by up to about 10 dBA. When feasible, external jackets on the impact equipment can achieve a reduction of 5 dBA. Whenever feasible, use quieter procedures, such as drilling rather than impact equipment operation.”

With implementation of local noise control requirements and proposed mitigation, temporary construction noise would be reduced to the extent feasible. Therefore, this impact would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

Operational Noise

The operation of proposed active transportation projects could generate temporary, intermittent noise from human conversations and the use of bicycles near sensitive residential uses. However, these noise sources would not substantially increase ambient noise levels relative to existing roadway traffic. The substitution of bicyclist and pedestrian trips for motor vehicle trips on proposed facilities also would incrementally reduce traffic noise. Therefore, the impact from permanent increases in noise would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

The use of heavy construction equipment can generate substantial vibration near the source. It is expected that construction of some proposed active transportation projects would generate temporary vibration from jackhammering to break up existing pavement, bulldozers for earthmoving, trucks loaded with construction materials, and vibratory rollers to even out the surface of new asphalt.

Similar to construction noise, vibration levels would vary depending on the type of construction project and related equipment use. In general, the construction of bicycle facilities projects would be unlikely to generate substantial vibration. Table 5 estimates vibration levels from equipment that may be used during construction of the proposed facilities.

Table 5 Vibration Levels for Construction Equipment

Equipment	PPV (in/sec)		
	25 Feet	50 Feet	100 Feet
Vibratory Roller	0.210	0.098	0.046
Large Bulldozer	0.089	0.042	0.019
Loaded Trucks	0.076	0.035	0.017
Jackhammer	0.035	0.016	0.008

Source: Caltrans 2013b

As shown in Table 5, construction activity would generate vibration levels reaching an estimated 0.098 PPV at a distance of 50 feet, during paving of new bicycle facilities. Because this vibration level would not exceed 0.25 PPV, Caltrans' recommended criterion for distinctly perceptible vibration from transient sources, it would not result in substantial annoyance to people of normal sensitivity. Construction activity that generates loud noises (and therefore vibration) also would be limited to normal business hours, which would prevent the exposure of sensitive receptors to vibration during evening and nighttime hours. Furthermore, maximum vibration levels would not exceed the Caltrans criteria of 0.5 PPV for potential damage of historic and old buildings from transient vibration sources. Even if construction activity generated vibration as close as 25 feet from sensitive receptors, vibration levels reaching 0.21 PPV (as shown in Table 5) still would not exceed applicable Caltrans criteria for human annoyance and structural damage. Therefore, vibration would not be excessive, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

As discussed in Section 9, *Hazards and Hazardous Materials*, the nearest publicly available airport to Pittsburg is Buchanan Field Airport, which is located approximately four miles southwest of city limits. Pittsburg is outside the Airport Influence Area for Buchanan Field Airport, as mapped in the Contra Costa County Airport Land Use Compatibility Plan (Contra Costa County Airport Land Use Commission 2000). No private airstrips are located in the vicinity of Pittsburg. Therefore, the Plan would not expose active transportation users to excessive noise levels from aircraft. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

☐
☐
☐
☒

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

☐
☐
☐
☒

a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

Implementation of the Plan would not involve the construction of infrastructure that could induce substantial population growth, such as new or increased capacity sewer or water lines, or the construction of new streets and roads, but rather would serve existing populations. While these local improvements would make the area more attractive to tourists, this would not be a substantial growth-inducing effect in Pittsburg. Proposed on-street bicycle facilities and crosswalk enhancements also would be located within existing road corridors and would not require the extension of roads. In addition, because the proposed active transportation projects would be located in existing roadway corridors or open space areas, they would not require displacement of housing or people. No impact related to population and housing would occur.

NO IMPACT

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15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Proposed Class I shared-use paths listed in the Plan that would be located outside existing rights-of-way would provide public access to areas that are not currently accessible and could require expanded police and fire protection service in these corridors. However, new shared-use paths could also increase access for police and fire providers into areas with poor existing access (e.g., the Pittsburg Wetlands). In addition, proposed active transportation projects would be located in the urbanized community of Pittsburg, which is already served by police and fire protection. The proposed projects would not involve residential, commercial, or other development that could

substantially increase demand for police or fire protection services in Pittsburgh. Therefore, the Plan would have a less than significant impact related to these public services.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

The Plan would facilitate active transportation improvements, not the construction of residences or places of employment that would increase the population of school-age children in Pittsburgh. Because the Plan would not increase demand for school facilities, no impact would occur.

NO IMPACT

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

The Plan would not facilitate the construction of residences or places of employment that would increase the service population for park facilities in Pittsburgh. However, it would improve public access to existing parks. Projects listed in the Plan would complete bicycle connections and improve pedestrian access to Buchanan Park, City Park, Ambrose Park, Highlands Ranch Park, Stoneman Park, and Central Park. Therefore, the Plan would not have an adverse environmental impact from the construction of parks.

NO IMPACT

a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

As discussed above, the Plan would not facilitate an increase in Pittsburgh's population. Therefore, it would not increase demand for libraries or other governmental facilities.

NO IMPACT

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

As discussed in Section 15, *Public Services*, projects listed in the Plan would complete bicycle connections and improve pedestrian access to Buchanan Park, City Park, Ambrose Park, Highlands Ranch Park, Stoneman Park, and Central Park. Therefore, the Plan would improve access to local parks in Pittsburg. The proposed construction of local segments of the regional Delta de Anza and California Delta trails would also improve access to parks beyond city limits, such as the Bay Point Regional Shoreline. Improved access to local and regional parks could incrementally increase the number of visitors at these recreational facilities. However, the proposed active transportation projects would mainly serve existing residents and employees in Pittsburg, and they would not increase the service population for local parks. Therefore, it is not anticipated that improved access to parks would increase public use to the extent that would significantly accelerate or cause the physical deterioration of parks, requiring repair or expansion. his impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Certain active transportation projects proposed in the Plan, particularly Class I shared-use paths, would serve as new recreational facilities. The construction of these recreational facilities could have adverse environmental impacts, as described elsewhere in this IS-MND, before the implementation of mitigation measures. As discussed in Section 4, *Biological Resources*, impacts to special-status species, nesting birds, and wetlands and riparian communities during construction would be potentially significant. Section 5, *Cultural Resources*, notes that impacts to archaeological resources from ground disturbance could be significant. As discussed in Section 7, *Geology and Soils*, new bicycle paths on undisturbed soil could be subject to unstable conditions from expansive soils. Section 9, *Hazards and Hazardous Materials*, also indicates that soil disturbance could expose

people to hazardous contaminants. Section 18, *Tribal Cultural Resources*, notes that impacts to Native American resources from ground disturbance could be significant. Mitigation measures in these respective sections would reduce potential environmental impacts to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*
- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The Plan has been developed in coordination with the Transportation element of Pittsburg's existing General Plan and with the City's General Plan update process, taking into consideration multiple modes of circulation including transit, roadway, bicycle, and pedestrian facilities.

Transit Facilities

Proposed active transportation routes in the Plan, as well as proposed bike racks and lockers at the Pittsburg Bay Point BART station, would improve multi-modal access to transit facilities. In addition, proposed crosswalk enhancements would improve safety for pedestrians accessing bus stops. The Plan would not affect the capacity of transit facilities to accommodate public demand. Therefore, the Plan would not conflict with policies in the City's Transportation Element (2010) to improve transit access.

Roadway Facilities

The projects listed in the Plan, by their nature, would have little to no impact on roadway circulation for motor vehicles in Pittsburg. One of the Plan's core objectives is to reduce vehicle miles traveled by improving access for pedestrians and bicyclists, allowing people to substitute active transportation for driving. While increased bicycle activity on area roadways could incrementally increase travel times for motorized vehicles having to pass bicyclists or wait for them to cross

intersections, this increase would be negligible and potentially offset by the reduction of local vehicle trips. Therefore, the Plan would not conflict with policies related to roadway facilities in the City's Transportation Element (2010), and it would not conflict with statewide policy to reduce vehicle miles traveled under CEQA Guidelines section 15064.3, subdivision (b).

Bicycle Facilities

The City's Existing Conditions Report identifies gaps in Pittsburgh's bike lane network and higher stress for bicyclists even where bike lanes are provided adjacent to 35 mph motor vehicle speeds (Pittsburg 2019a). In addition, key constraints to bicycling in Pittsburgh include a relative lack of north-south connections while most designated bikeways have a high degree of traffic stress for bicyclists. The Plan proposes a comprehensive set of improvements to address these deficiencies in connectivity and safety. As shown in Figure 3, the Plan would provide for a citywide network of shared-use paths, bike lanes, and bike routes and boulevards. This would implement Policy 7-P-44 in the City's Transportation Element to develop a citywide Bicycle Master Plan (Pittsburg 2010). The California Delta Trail segment west of 8th Street also would implement Policy 7-P-47 to develop a multi-use bike path along the abandoned railroad tracks north of Willow Pass Road. Therefore, the Plan would not conflict with applicable policies for bicycle facilities.

Pedestrian Facilities

While the pedestrian network is generally well developed in Pittsburgh, there are some locations where gaps or barriers limit pedestrian circulation, including lengthy crossings of busy streets and discontinuous street patterns in newer developments (Pittsburg 2019a). Sidewalk gaps exist on an estimated 13 miles of the City's roadway network. Proposed pedestrian facilities in the Plan would comprehensively improve pedestrian access and safety in Pittsburgh, consistent with applicable policies. For example, the proposed projects to close gaps in the City's sidewalk network would implement Policy 7-P-38 to "develop a series of continuous pedestrian systems within Downtown and residential neighborhoods." Proposed crosswalk enhancements also would implement Policy 7-P-42 to improve pedestrian crossing safety at heavily used intersections. Therefore, the Plan would not conflict with policies related to pedestrian facilities.

NO IMPACT

- c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

According to the City's Existing Conditions Report, pedestrians and bicyclists are typically the most vulnerable users to roadway hazards (Pittsburg 2019a). When collisions do occur, the extent of their injuries is typically greater and increases exponentially with the speed of the roadway. The Plan would add geometric design features at existing intersections for the purpose of improving public safety for pedestrians and bicyclists. Crosswalk enhancements would include features such as curb extensions to shorten pedestrian crossings, raised crosswalks to indicate that drivers should slow down at intersections, and upgraded curb ramps to improve access for pedestrians with mobility restrictions. Instead of introducing hazards to the circulation system, proposed geometric features would decrease existing hazards identified in the Existing Conditions Report. Potentially incompatible uses such as farm equipment also are not proposed in the Plan. Therefore, no impact related to roadway hazards would occur.

NO IMPACT

d. Would the project result in inadequate emergency access?

Individual active transportation projects listed in the Plan would have to conform to local, State, and national standards and manuals, as applicable, regarding safety, proper design, emergency access, and construction. These standards would require proper emergency access as part of the design and through construction of projects. Adherence to these required design and construction standards would reduce potential impacts related to emergency access to a less-than-significant level.

LESS THAN SIGNIFICANT IMPACT

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18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PRC Section 21074 (a)(1)(A) and (B) define tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe.” These resources are:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
2. Determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

Assembly Bill (AB) 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

The City of Pittsburg prepared and mailed letters to local Native Americans who have requested notification under AB 52 on February 18, 2020. Under AB 52, tribes have 30 days to respond and

request consultation. The 30-day window for requesting consultation on the Plan elapsed in late March. On April 22, 2020, the Governor signed Executive Order N-54-20, which suspended for 60 days the period in which a tribe must request consultation on a project during the CEQA process, due to the coronavirus pandemic (Newsom 2020). Because the entire consultation period for the Plan predated the Executive Order's statewide suspension of consultation periods, the Executive Order is not applicable in this case. No tribes responded during the 30-day period to request consultation.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1?*

Because no tribes have requested AB 52 consultation over the Plan, the City assumes that no known tribal cultural resources are present within Pittsburgh. However, it is possible that ground disturbance during construction of the proposed active transportation project would encounter unknown tribal cultural resources or known cultural resources that may be identified as tribal cultural resources. Therefore, the Plan has the potential to significantly impact tribal cultural resources through ground disturbance and looting or vandalism of encountered resources. Mitigation is required to ensure that any unanticipated discoveries of tribal cultural resources are avoided or, where avoidance is infeasible, mitigated to a less than significant level.

Mitigation Measures

TCR-1 Suspension of Work Around Tribal Cultural Resources

The following development standard shall be added to the proposed Plan:

“In the event that cultural resources of Native American origin are identified during construction of an active transportation project listed in the Plan, all earth-disturbing work in the vicinity of the find shall be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find as a cultural resource and an appropriate local Native American representative is consulted. If the City, in consultation with local Native Americans, determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with local Native American group(s). The plan shall include avoidance of the resource or, if avoidance of the resource is infeasible, the plan shall outline the appropriate treatment of the resource in coordination with the appropriate local Native American tribal representative and, if applicable, a qualified archaeologist. Examples of appropriate mitigation for tribal cultural resources include, but are not limited to, protecting the cultural character and integrity of the resource, protecting traditional use of the resource, protecting the confidentiality of the resource, or heritage recovery.”

Implementation of Mitigation Measure TCR-1 would protect tribal cultural resources in the event of their discovery on construction sites, reducing the potential impact on such resources to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

Proposed active transportation projects that would be constructed within existing paved rights-of-way, such as most bike lanes, routes, and boulevards, and crosswalk enhancements, would be located on existing roadways and would not impact stormwater drainage. However, as discussed in Section 10, *Hydrology and Water Quality*, proposed bicycle facilities that would be constructed outside existing paved rights-of-way, such as shared-use paths and bike lanes that may require roadway widening, would increase the volume of impermeable surfaces in Pittsburgh. In compliance

with the NPDES Construction General Permit, such projects would be required to implement BMPs to maintain or replicate the pre-development hydrologic regime. Implementation of required BMPs would minimize impacts related to stormwater drainage.

Some active transportation projects would be located in utility corridors or in roadway rights-of-way that may overlay utility infrastructure. For example, a proposed trail within a PG&E corridor would connect Bodega Drive to Rancho Medanos Junior High School. Such facilities would not require trenching or excavation to the extent that relocation of existing utility infrastructure would be necessary. In addition, although some new facilities would include pedestrian-scale lighting that uses electricity, new bicycle and pedestrian projects would not exert substantial demand on utilities such as electric power and natural gas. Therefore, they would not result in the need to build new utility infrastructure. The Plan would have a less than significant impact related to the relocation or construction of utility infrastructure.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

The City obtains 85 to 95 percent of its water supply from the Contra Costa Water District (CCWD) pursuant to a contractual arrangement allowing the City to obtain water as is necessary to meet its needs, subject to rationing restrictions in the event of drought or other extraordinary circumstances (Pittsburg 2019a). CCWD's future supply projections indicate adequate availability of surface water delivered through its contract with the U.S. Bureau of Reclamation, along with other available sources and short-term purchases under normal conditions. In the event of multiple consecutive dry years, the City projects that its water supply would still exceed demand through the year 2030. However, projected demand would begin to exceed supply around 2035 if actions to manage demand are not pursued.

To ensure that Pittsburg's water supply remains sufficient in future years, the City has developed a four-stage rationing plan for implementation during declared water shortages (Pittsburg 2019a). The rationing plan includes voluntary and mandatory rationing, depending on the causes, severity, and anticipated duration of the water supply shortage. Implementation of this plan would reduce water consumption by up to 50 percent as needed during drought years.

During the construction of active transportation projects listed in the Plan, water may be required on a temporary basis to wet down disturbed areas and minimize emissions of fugitive dust. However, water use would be temporary occurring only during construction activities. As discussed in Section 10, *Hydrology and Water Quality*, some new facilities would use water after construction. These include water stations to provide potable water on the Delta de Anza Trail, and additional landscaping and shade trees. The increase in water demand by active transportation users and landscaping would be small in scale relative to existing citywide use and would not substantially decrease water supplies. Furthermore, Pittsburg relies on recycled water for street-side landscaping and city parks (Pittsburg 2019a), so additional landscaping under the Plan would not draw from groundwater. Any additional water demand would be offset by water rationing during drought years on an as-needed basis. Therefore, the Plan would have a less than significant impact on water supplies.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Construction of the proposed active transportation projects would not include new restrooms or septic systems that could generate additional wastewater. Although new restrooms could potentially be installed at staging areas for shared-use paths, they are not proposed as elements of the projects listed in the Plan. Therefore, implementation of the Plan itself would not affect the ability of wastewater treatment providers to accommodate wastewater generated in Pittsburgh. No impact would occur.

NO IMPACT

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The proposed active transportation projects would not lead to a permanent increase in solid waste generated in Pittsburgh. During construction, waste would be limited to debris from the removal of linear strips of existing pavement or subsurface material. Most individual facilities would involve surface treatments like the painting of stripes for bike lanes or sharrows for bike routes, and the installation of crosswalk enhancements, the construction of which would not generate a substantial amount of solid waste. Furthermore, the long-term use of new on-street facilities would not generate solid waste. Although trash cans may be installed on planned shared-use path segments, the disposal of waste by trail users would generate minimal additional solid waste for disposal at a landfill. The construction and operation of active transportation projects would not substantially increase solid waste generation. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

As shown in Figure 4.4-1 in the City's Existing Conditions Report, some of the southern and western edges of Pittsburg are located in a high fire hazard severity zone in a state responsibility area (Pittsburg 2019a). However, Pittsburg and its surroundings are not located in or near a very high fire hazard severity zone.

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

No proposed active transportation projects listed in the Plan would be located in a very high fire hazard severity zone. One facility, a Class III bicycle boulevard on Kirker Pass Road, would be located in a high fire hazard severity zone. This project would involve striping and signage for motor vehicles to share the road with bicyclists, and would not alter the roadway's capacity to accommodate emergency response vehicles or evacuations from Pittsburg. Therefore, the Plan would not impair

an adopted emergency response plan or emergency evacuation plan related to wildfire. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

As discussed above, the Plan would not be located in or near a very high fire hazard severity zone. Therefore, the proposed active transportation projects would not exacerbate wildfire risks related to slope, prevailing winds, or the addition of flammable material. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

The Plan would not be located in or near a very high fire hazard severity zone. Furthermore, proposed active transportation projects would not require the installation of new infrastructure such as roads, fuel breaks, emergency water sources, or power lines that may exacerbate fire risk or result in other environmental impacts. No impact would occur.

NO IMPACT

- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

Because the Plan would not be located in or near a very high fire hazard severity zone, it would not expose people to significant risks as a result of runoff, post-fire slope instability, or drainage changes. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

As discussed in Section 4, *Biological Resources*, certain proposed active transportation projects listed in the Plan could reduce the habitat of special-status species, disrupt nesting birds, and impair wetlands and riparian habitat. As discussed in Section 5, *Cultural Resources*, the construction of proposed projects would not impact historical resources; however, they may impact unanticipated archaeological resources. Potential impacts to biological resources would be reduced to a less-than-significant level with implementation of Mitigation Measures BIO-1 through BIO-6 to study, protect, and compensate for the loss of sensitive biological resources. Impacts to cultural resources would

be reduced to a less-than-significant level with implementation of Mitigation Measure CR-1 for the protection and recovery of cultural resources if discovered on construction sites. Therefore, impacts to biological and cultural resources would be reduced to less-than-significant levels with implementation of identified mitigation measures.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

As described in the discussion of environmental checklist Sections 1 through 20, the Plan would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated, with respect to all environmental issues. Cumulative impacts of several resource areas have been addressed in the individual resource sections above: Air Quality, Greenhouse Gases, Noise, and Transportation/Traffic (See CEQA Guidelines Section 15064(h)(3)). Proposed active transportation projects would reduce vehicle miles traveled and greenhouse gas emissions while improving overall air quality. Therefore, the Plan would not result in a cumulative traffic impact. Cumulative noise impacts would be less than significant because proposed facilities would not increase traffic on area roadways. Other resource areas (population/housing and mineral) were determined to have no impact. Therefore, the Plan would not contribute to cumulative impacts related to these issues. Several resource issues (e.g., geology, hazards and hazardous materials) are by their nature project-specific and impacts at one location do not add to impacts at other locations or create additive impacts. As such, cumulative impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in Section 3, *Air Quality*, proposed active transportation projects would not result in a direct or indirect air quality impact. As discussed in Section 13, *Noise*, construction of the proposed facilities may affect nearby sensitive receptors, but implementation of Mitigation Measures N-1 through N-3 would reduce construction noise impacts by requiring noise control measures to the extent feasible, such as locating stationary construction equipment as far from sensitive receptors as feasible and using the best available noise control techniques on equipment. Similarly, as discussed in Section 9, *Hazards and Hazardous Materials*, construction of active transportation projects could occur on or near listed hazardous material sites, but implementation of Mitigation Measure HAZ-1 would reduce impacts by requiring assessment and remediation for any such active sites. Impacts to human beings would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

References

Bibliography

- Agenbroad, L.D. 2003. New Localities, Chronology, and Comparisons for the Pygmy Mammoth (*Mammuthus exilis*), in J. Reumer (ed.): Advances in Mammoth Research, Proceedings of the 2nd International Mammoth Conference, Rotterdam, the Netherlands. DEINSEA 9:1-16.
- Bartow, J.A., and Nilsen, T.H. 1990. Review of the Great Valley Sequence, Eastern Diablo Range and Northern San Joaquin Valley, Central California. U.S. Geological Survey Open-File Report 90-226.
- Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May 2017. Available at:
http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en
- Bell, C.J., E.L. Lundelius, Jr., A.D. Barnosky, R.W. Graham, E.H. Lindsay, D.R. Ruez, Jr., H.A. Semken, Jr., S.D. Webb, and R.J. Zakrzewski. 2004. The Blancan, Irvingtonian, and Rancholabrean Mammal Ages, in Woodburne, M.O. (ed.) Late Cretaceous and Cenozoic Mammals of North America: Biostratigraphy and Geochronology. Columbia University Press, New York, pp. 232-314.
- California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. December 14, 2017. Available at:
https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.
- _____. 2018. Maps of State and Federal Area Designations. October 2018. Available at:
<https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>
- _____. 2019. California Greenhouse Gas Emissions for 2000 to 2017: Trends of Emissions and Other Indicators. Available at:
https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf
- California Department of Conservation. 2017. California Important Farmland Finder. Available at:
<https://maps.conservation.ca.gov/DLRP/CIFF/> (accessed February 2020).
- California Department of Fish and Wildlife (CDFW). 2019. California Natural Community List. Updated November 8, 2019. Available at: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities> (accessed January 2020).
- _____. 2020. California Natural Diversity Database (CNDDB) - Rarefind 5. Available at:
<https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data> (accessed January 2020).
- California Department of Toxic Substances Control (DTSC). 2020. EnviroStor database. Available at:
<https://www.envirostor.dtsc.ca.gov/public/> (accessed February 2020).
- California Department of Water Resources. 2019. Sustainable Groundwater Management Act 2019 Basin Prioritization: Process and Results. Available at:
https://www.emwd.org/sites/default/files/file-attachments/sgma_basin_prioritization_2019_results.pdf?1559164669

- California Environmental Protection Agency (CalEPA). 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature. Available at: <https://calisphere.org/item/ark:/86086/n26972h4/>
- California Geological Survey (CGS). 2002. California Geomorphic Provinces, Note 36. Available at: <https://www.contracosta.ca.gov/DocumentCenter/View/34134/CGS-2002-California-Geomorphic-ProvincesNote-36-PDF>
- California Office of Historic Preservation. 1995. Instructions for Recording Historical Resources. Published March 1995. Available at: <http://scic.org/docs/OHP/manual95.pdf>
- California Regional Water Quality Control Board, San Francisco Bay Region. 2015. Municipal Regional Stormwater NPDES Permit. Order No. R2-2015-0049. Available at: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/R2_2015_0049_amended.pdf
- Caltrans. 2013a. Technical Noise Supplement to the Traffic Noise Analysis Protocol. (CT-HWANP-RT-13-069.25.2) September. Available at: <https://evogov.s3.amazonaws.com/media/17/media/119602.pdf>
- _____. 2013b. Transportation and Construction Vibration Guidance Manual (CT-HWANP-RT-13-069.25.3). September. Available at: http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf
- _____. 2019. List of Eligible and Officially Designated State Scenic Highways. August 2019. Available at: https://dot.ca.gov/-/media/dot-media/programs/design/documents/design-and-eligible-aug2019_a11y.xlsx
- Cepeda et. al. 2017. “Levels of Ambient Air Pollution According to Mode of Transport: A Systematic Review.” *Lancet Public Health*, January 2017, Vol 2: e23-34. Available at: [https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667\(16\)30021-4.pdf](https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667(16)30021-4.pdf)
- Contra Costa County Airport Land Use Commission. 2000. Contra Costa County Airport Land Use Compatibility Plan. Available at: <https://www.contracosta.ca.gov/4307/Airport-Land-Use-Commission-ALUC>
- Crocker, Malcolm J. Crocker (Editor). 2007. *Handbook of Noise and Vibration Control Book*, ISBN: 978-0-471-39599-7, Wiley-VCH, October.
- Dibblee, T.W., and Minch, J.A., 2006. Geologic map of the Clayton quadrangle, Contra Costa County, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-192, scale 1:24,000.
- _____. 2006. Geologic map of the Vine Hill & Honker Bay quadrangles, Contra Costa & Solano Counties, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-191, scale 1:24,000.
- East Contra Costa County Habitat Conservation Plan Association. 2006. Final East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan. Available at: https://www.contracosta.ca.gov/depart/cd/water/HCP/archive/final-hcp/final_hcp_nccp.html (accessed January 2020).

- Federal Transit Administration (FTA). Transit Noise and Vibration Impact Assessment Manual. September 2018. Available at:
https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf
- Intergovernmental Panel on Climate Change (IPCC). 2007. *Summary for Policymakers*. In: *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Available at:
<https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-spm-1.pdf>
- _____. 2013: Summary for Policymakers. In: *Climate Change 2013: The Physical Science Basis*. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available at:
https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_SPM_FINAL.pdf
- Jefferson, G.T. 1991 A Catalogue of Late Quaternary Vertebrates from California, Part Two, Mammals. Natural History Museum of Los Angeles County Technical Report, 7:1-129.
- Kinsler, Lawrence E., et al. 1999. *Fundamentals of Acoustics*, 4th Edition. ISBN 0-471-84789-5. Wiley-VCH, December 1999.
- Merriam, J.C. 1911. The Fauna of Rancho La Brea; Part I: Occurrence. *Memoirs of the University of California*, 1(2):197-213.
- Newson, Gavin. 2020. Executive Order N-54-20. April 22, 2020. Available at:
<https://www.gov.ca.gov/wp-content/uploads/2020/04/N-54-20-COVID-19-text-4.22.20.pdf>
- Norris, R. M. and Webb, R. W. 1990. *Geology of California*. John Wiley and Sons, Inc. New York.
- Oakland, City of. 2020. Bikeway Project FAQs. Available at:
<https://www.oaklandca.gov/resources/bikeway-project-faqs> (accessed February 2020).
- Paleobiology Database. 2020. Fossilworks web-based portal, <http://fossilworks.org> and paleodb.org (accessed February 2020).
- Pittsburg, City of. 2010a. City of Pittsburg General Plan. Adopted 2001, last amended 2010. Available at:
https://static1.squarespace.com/static/5c741fe1b10f25b8de62226a/t/5c917a7724a6949d02f90591/1553037981743/Pittsburg_GeneralPlan2020_Consolidated_web.pdf
- _____. 2010b. Interactive Zoning Map. Available at:
<http://www.ci.pittsburg.ca.us/index.aspx?page=500> (accessed February 5, 2020).
- _____. 2019a. Existing Conditions Report: City of Pittsburg General Plan Update. Available at:
<https://pittsburg.generalplan.org/documents-and-maps>
- _____. 2019b. Pittsburg Municipal Code. Updated November 2019. Available at:
<https://www.codepublishing.com/CA/Pittsburg> (accessed February 7, 2020).
- _____. 2019c. Vision and Opportunities Report: City of Pittsburg General Plan Update. July 2019. Available at:
https://static1.squarespace.com/static/5c741fe1b10f25b8de62226a/t/5d40c1cd146675000198636c/1564525016590/VisioningReport_7-29-19-compressed.pdf

- Reynolds, R.E., R.L. Reynolds, and A.F. Pajak III. 1991. Blancan, Irvingtonian, and Rancholabrean(?) Land Mammal Age Faunas from Western Riverside County, California, in R.E. Reynolds, and D.P. Whistler (eds.) *Inland Southern California: the Last 70 million Years*. M.O. Woodburne, San Bernardino County Museum Association Quarterly, 38(3-4):37-40.
- Savage, D.E., T. Downs, and O.J. Poe. 1954. Cenozoic Land Life of Southern California, in R.H. Jahns ed., *Geology of Southern California*. California Division of Mines and Geology, 170, Ch III, pp. 43-58.
- Scott, E. and S.M. Cox. 2008. Late Pleistocene Distribution of Bison (Mammalia; Artiodactyla) from the Mojave Desert of Southern California and Nevada, in X. Wang and L.G. Barnes (eds.) *Geology and Vertebrate Paleontology of Western and Southern North America: Contributions in Honor of David P. Whistler*. Natural History Museum of Los Angeles County, Science Series, 41:359-82.
- Sims, J.D. Fox, K.F. Bartow, J.A., and Helley, E.J. 1973. Preliminary geologic map of Solano County and parts of Napa, Contra Costa, Marin, and Yolo Counties, California: U.S. Geological Survey, Miscellaneous Field Studies Map MF-484, scale 1:62,500.
- Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee. Bethesda, MD. Available at: http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx
- Springer, K., E. Scott, J.C. Sagebiel, and L.K. Murray. 2009. The Diamond Valley Lake Local Fauna: Late Pleistocene Vertebrates from Inland Southern California, in Albright, L.B. III (ed.), *Papers on Geology, Vertebrate Paleontology, and Biostratigraphy in Honor of Michael O. Woodburne*. Museum of Northern Arizona Bulletin, 65:217-36.
- State Water Resources Control Board (SWRCB). 2020. GeoTracker database. Available at: <https://geotracker.waterboards.ca.gov/> (accessed February 2020).
- United States Fish and Wildlife (USFWS). 2020. National Wetlands Inventory. Available at: <https://www.fws.gov/wetlands/data/Mapper.html> (accessed January 2020).
- United States Geological Survey (USGS). 2017. Quaternary Fault and Fold Database of the United States: Rio Vista Fault (Class A) No. 246. Available at: https://earthquake.usgs.gov/cfusion/qfault/show_report_AB_archive.cfm?fault_id=246§ion_id=
- _____. 2020. Quaternary Fault and Fold Database of the United States: Interactive Fault Map. Available at: <http://www.ci.pittsburg.ca.us/Modules/ShowDocument.aspx?documentid=1390>
- Wilkerson, G., T. Elam, and R. Turner. 2011. Lake Thompson Pleistocene Mammalian Fossil Assemblage, Rosamond, in Reynolds, R.E. (ed.) *The Incredible Shrinking Pliocene: The 2011 Desert Symposium Field Guide and Proceedings*. California State University Desert Studies Consortium, Pp. 88-90.
- Winters, H.H. 1954. The Pleistocene fauna of the Manix Beds in the Mojave Desert, California. Master's Thesis, California Institute of Technology. 71 pp.

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Appendix A

Proposed Active Transportation Projects

Table A-1 Proposed Pedestrian and Bicycle Improvement Projects

Project Name	Limits (From/To)	Project Type	Description	Miles
Trail Projects				
De Anza Trail				
Delta de Anza Trail	Western City limit to Eastern City Limit	Trail	<ul style="list-style-type: none"> ▪ Add pedestrian-scale lighting and verify lighting levels at crossings ▪ Identify a security strategy for the trail, which might include blue light phones, cameras, and/or increased trail enforcement ▪ Add trail amenities, such as trash cans and water stations ▪ Provide shade trees and landscaping to increase comfort and aesthetics of the trail ▪ Work with local groups and East Bay Regional Park District (EBRPD) to develop placemaking strategies and installations, such as community gardens and artwork ▪ Explore opportunities to convert the Delta de Anza Trail into a linear park, like the Richmond Greenway Trail, to provide park access to park-poor areas ▪ Add staging areas with parking and wayfinding signs to provide greater access to the trail. Potential locations to explore include the parcel on the east side of Railroad Avenue just north of the Delta de Anza Trail and at Small World Park. 	4.9
Delta de Anza Trail Extension	On-street trail alignment between Delta de Anza Canal Road Extension and Delta de Anza Trail south of SR 4	Trail	See Bailey Road improvements	n/a
Delta de Anza Canal Road Extension (in Bay Point)	Franklin Avenue to Canal Road	Trail	<ul style="list-style-type: none"> ▪ Work with East Bay Municipal Utility District (EBMUD) and County to pave existing unpaved trail ▪ Work with EBMUD and County to mark enhanced trail crossings at Emerald Cove Drive to connect the EBMUD Utility Trail and Canal Road per Pittsburg Moves Crosswalk Policy 	0.6

Project Name	Limits (From/To)	Project Type	Description	Miles
Delta de Anza Trail	Delta de Anza Trail at Uncontrolled Intersections with Atherton Avenue, Crestview Drive, Presidio Lane, and Gladstone Drive	Crosswalk	<ul style="list-style-type: none"> Per City's Crosswalk Policy, upgrade Delta de Anza Trail crossings at Atherton Avenue, Crestview Drive, Presidio Lane, and Gladstone Drive to include: <ul style="list-style-type: none"> Rectangular Rapid Flashing Beacons (RRFBs) Wayfinding Signs High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Curb extensions Upgraded curb ramps Trail crossing striping Advanced yield markings with Yield Here to Pedestrian sign Install a raised crosswalk at Atherton Avenue and Gladstone Drive Install a median refuge at Crestview Drive. 	n/a
Delta de Anza Trail	Delta de Anza Trail at West Leland Road and at Range Road Intersections	Trail	<ul style="list-style-type: none"> In the long-term, work with the adjacent property owner to install a trail diagonally between the Ackerman Drive/Range Road intersection and West Leland road/Delta De Anza Trail intersection. Install a Pedestrian Hybrid Beacon (PHB) as part of the project. In the near-term, follow an on-street alignment on Range Road and West Leland Road that goes through the Range Road/West Leland Road intersection. Repurpose Class II bike lanes, sidewalk, and excess roadway width into a Class I path on the west side of Range Road and south side of West Leland Road, and install wayfinding, curb ramps, and crosswalk striping at the intersection of West Leland Road and Golf Club Road. See Range Road projects for additional information. 	0.1

Project Name	Limits (From/To)	Project Type	Description	Miles
Harbor Street	Harbor Street and Atlantic Avenue Intersection	Crosswalk	<ul style="list-style-type: none"> ▪ In near-term, stripe north crosswalk as a trail crossing. ▪ Install trail wayfinding ▪ Install "turning vehicle yield to bikes/pedestrian" signs ▪ Install median refuge with existing median ▪ Investigate if accessibility upgrades needed to push buttons and countdown signals ▪ Upgrade curb ramps <p>As funding is available, install trail crossing with a PHB or signal 180' north of the intersection</p>	n/a
Delta de Anza Trail	Delta de Anza Trail at Railroad Avenue Intersection	Crosswalk	<ul style="list-style-type: none"> ▪ Study feasibility of protected intersection ▪ Protect eastbound left-turn movement to separate from trail crossing ▪ Remove slip lane on NW corner and southbound right-turn pocket and install curb extensions to shorten trail crossing ▪ Straighten west crosswalk and push back ~10' to align with new Curb extensions; install direction ramps ▪ Straighten south crosswalk and install directional ramp on west side ▪ Work with East Bay Regional Park District to set back existing fence and signal pole to widen out sidewalk space at intersection and allow for two-stage turn from northbound separated bikeway to westbound Delta De Anza Trail ▪ Install bike ramp from southbound separated bikeway to new Curb extensions to provide access to Delta De Anza Trail ▪ Install bike box at southbound approach to provide connection from Trail to Railroad Avenue Class IV facility ▪ Investigate need for countdown signals 	n/a
Delta de Anza Trail	Delta de Anza Trail at Harbor Street Intersection	Crosswalk	Install new trail crossing signal. Signal will coordinate with adjacent signal at Atlantic Avenue. Install median refuge, trail crossing striping, and trail wayfinding signage.	n/a
Delta de Anza Trail	Delta de Anza Trail at Harbor Street	Trail	Pave the remaining 5' section between the trail and the sidewalk (East side of Harbor Street).	0.05

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Project Name	Limits (From/To)	Project Type	Description	Miles
Delta de Anza Trail	Delta de Anza Trail and Loveridge Road Intersection	Crosswalk	Restripe current crosswalk to trail crossing striping per Pittsburg Moves Design Guidelines. Install trail wayfinding signs and widen curb ramps.	n/a
California Delta Trail				
California Delta Trail	Western City limit to 8th Street Greenbelt	Trail	Work with East Bay Regional Park District (EBRPD) and PG&E to install a Class I path through the Pittsburg Wetlands as part of the Great California Delta Trail that connects to the County's alignment.	3
California Delta Trail spur	Willow Pass Road to California Delta Trail	Trail	Explore the feasibility of adding a Class I facility spur connection between Willow Pass Road and the California Delta Trail to provide another access point. This requires coordination with property owners.	0.2
8th Street Greenbelt	West Street to Harbor Street	Crosswalk	Mark crosswalks at each intersection with trail crossing striping and enhancements per Pittsburg Moves Design Guidelines and Crosswalk Policy.	n/a
Harbor Street	East 3rd Street to East 8th Street	Trail	Add a Class I facility on the west side of the street consistent with the Making Waves Academy development proposal. This facility would run parallel to the Class IV facility proposed in the right-of-way.	0.3
Harbor Street	East 8th Street to Pittsburg-Antioch Highway	Trail	<ul style="list-style-type: none"> Install a new Class I facility on the east side of Harbor Street from just north of Pittsburg-Antioch Highway to East 8th Street. This is in addition to the Class IV facilities proposed on Harbor Street, shown on the Harbor Street project list. New path requires widening the existing sidewalk and new retaining wall underneath the railroad tracks. Install a connection between bike path north of East Santa Fe Ave to Harbor Street and Pittsburg-Antioch Highway bike path. Install trail crossing at 8th Street per the Uncontrolled Crosswalk Upgrades list. Connect to a new Class I path along the west side of Harbor Street through the sports field and the existing 8th Street Greenway 	0.2

Project Name	Limits (From/To)	Project Type	Description	Miles
Harbor Street	Harbor Street and Pittsburg-Antioch Highway Intersection	Minor Signalized Intersection Improvements	<ul style="list-style-type: none"> Stripe the east crosswalk as a trail crossing. Install a speed table across the slip lane or remove if necessary, truck access can be maintained 	n/a
East 14th Street	On-street trail alignment between Harbor Street and East City Limits		See Pittsburg-Antioch Highway improvements.	n/a
Central Park Path	n/a	Lighting	Add lighting in Central Park paths	0.3
Los Medanos to Pittsburg Center BART Trail				
Frontage Road	Crestview Lane to Burton Avenue	Trail	Add a Class I facility using abandoned land south of freeway to connect existing Class I facilities. May require widening into Frontage Road to provide usable path space around overhead utility lines.	0.4
Frontage Road	Chelsea Way to Dover Way	Trail	Add a Class I facility using abandoned land south of freeway.	0.3
PG&E Corridor				
PG&E Corridor	Dover Way to West Leland Road	Trail	Work with PG&E to conduct a feasibility study for a Class I path to determine a preferred alignment within in the PG&E Corridor, which is designated open space in the General Plan.	0.2
PG&E Corridor	West Leland Road to Delta de Anza Trail to proposed Contra Costa Canal Trail Extension	Trail	Work with PG&E to conduct a feasibility study adding a Class I path to determine a preferred alignment within the PG&E Corridor, which is designated open space in the General Plan.	0.5
PG&E Corridor	North Parkside Drive to Power Avenue	Trail	Work with PG&E to conduct a feasibility study for a Class I facility between N Parkside Drive and Power Avenue. Topography may be a constraint.	0.5
Rancho Medanos Junior High School	Bodega Drive at Rancho Medanos Junior High School	Trail	Create a trail that connects Bodega Drive to Rancho Medanos Junior High School and the planned utility corridor trail. This would provide the neighborhood walking access to the school, West Leland Road, the planned utility corridor trail, and the Delta de Anza Trail. Work with Rancho Medanos, the community, and other stakeholders to develop a joint use agreement for the gated area adjacent to the school.	0.2

Project Name	Limits (From/To)	Project Type	Description	Miles
SR 4	n/a	Grade Separated Crossing	Study feasibility of providing a trail connection across SR 4 in the context of all citywide needs to improvement connectivity over SR 4. See SR 4 grade separation feasibility study for more information	n/a
Delta Waterfront Access Trail				
Delta Waterfront Access Trail	East 3rd Street to Delta Access Trail	Trail	Install Class I path that connects East 3rd Street to the waterfront Delta Access Trail as part of school redevelopment, connecting to 8th Street.	0.6
Delta Waterfront Access Trail	Western subdivision to Koch Carbon Inc (near to eastern end point of East 3rd Street)	Trail	Add a bicycle/pedestrian path along the shoreline that connects the western subdivision to the industrial property east of downtown.	0.5
Railroad Avenue Greenway				
Railroad Avenue	California Avenue to Delta de Anza Trail	Trail	Install a Class I shared-use path on the west side of Railroad Avenue with pedestrian-scale lighting amenities, landscape buffer from the street, and a minimum 10' usable width. Use trail crossing striping instead of typical crosswalk markings at intersections.	0.5
Railroad Avenue	California Avenue to City Park	Trail	Widen existing sidewalk to provide Class I shared-use path with minimum 5' landscape buffer from Railroad Avenue. Provide trail crossing intersection improvements, including trail crossing striping.	0.3
Railroad Avenue	All Greenway Intersections	Signal Improvements	<ul style="list-style-type: none"> ▪ Mark all Greenway crossings with trail crossing striping Pittsburgh Moves Design Guidelines ▪ Enhance crosswalks consistent with per Pittsburgh Moves Crosswalk Policy ▪ Consider LPI/LBI for trail crossing ▪ Make push buttons accessible for people on bikes ▪ See Railroad Avenue section for trail crossing improvements at the intersection of Railroad Avenue and California Avenue (SR 4 westbound on-ramp) and at Railroad Avenue and the SR 4 eastbound on-ramps 	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
Other Trail Projects				
Contra Costa Canal Trail Extension	Citywide	Trail	Work with Contra Costa County Water District to conduct feasibility study of Class I path to extend the Contra Costa Canal Trail into Pittsburg.	4.9
Bay to Black Diamond Trail	Citywide	Trail	Work with EBRPD and City of Antioch to conduct a feasibility study for a new "Bay to Black Diamond Trail" to connect the waterfront with the Black Diamond Mines Regional Preserve.	n/a
Utility Easement East of Los Medanos College	Buchanan Road to Pittsburg Antioch Highway	Trail	Work with property owners and Antioch to secure easement for Class I shared-use path with lighting, amenities, and connection points to the Delta de Anza trail and East Leland Road. Requires consideration of SR 4 and railroad grade separations, as well as trail crossings per the design guidelines. Consider connections to future waterfront trails if properties redevelop.	1.1
Delta View Golf Course	n/a	Trail	Conduct a feasibility study for a Class I perimeter loop path around the Delta View Golf Course	3.0
BART Projects				
Pittsburg Bay Point BART access road	BART Station to Bailey Road	Class IV Separated Bikeways	Add Class IV facilities on the access road on the north edge of the Pittsburg Bay Point BART site, consistent with the North Concord to Antioch BART Access Study.	0.2
Pittsburg Bay Point BART Station	n/a	Pedestrian treatment	Add pedestrian improvements on the BART site per the North Concord to Antioch BART Access Study, such as ADA ramps, pedestrian access stairway/ramp from West Leland Road, and marked crosswalks.	n/a
Pittsburg Bay Point BART Station	n/a	Class IV Separated Bikeways	In near-term, stripe Class II bike lanes through narrowing travel lanes to 10-11'. With future development, add Class IV separated bikeways.	0.6
Pittsburg Center BART Station	TBD	Bike parking	Coordinate with BART to provide additional bike parking at the Pittsburg Center BART station. This should include bike racks on the Railroad Avenue overpass for short-term parking as well as bike lockers in the Park & Ride and south of the station.	n/a
BART Station		Lighting	Add additional lighting on streets adjacent to BART stations and pedestrian scale lighting from the public right of way to BART stations.	0.2

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Project Name	Limits (From/To)	Project Type	Description	Miles
North-South Corridors				
San Marco Boulevard				
San Marco Boulevard	Evora Road to Rio Verde Circle	Trail	Add a Class I facility on the west side of the roadway that ties into the West Leland Road intersection. Explore extending the facility through the SR 4 interchange into Contra Costa County to connect with the Delta de Anza Trail (A Class I facility is proposed in Pittsburg 2020 from West Leland Road to Rio Verde Circle).	1.2
Tomales Bay Drive/Alves Ranch Road				
Tomales Bay Drive	West Leland Road to Alves Ranch Road	Class II Bicycle Lanes	Restripe bike lanes with two white stripes, with 10' travel lanes (no center line per existing condition), 6' bike lanes, and 8' parking, and add traffic calming treatments to make the existing class II bike lane lower stress.	0.6
Alves Ranch Road	West Leland Road to end of the road	Class II Bicycle Lanes	Restripe bike lanes with two white stripes, with 10' travel lanes (no center line per existing condition), 6' bike lanes, and 8' parking, and add traffic calming treatments to make the bike lanes lower stress.	0.7
Alves Ranch Road	Kapalua Bay Circle Intersection	Crosswalk	Install crosswalk enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines ▪ Pedestrian refuge island on north crosswalk ▪ Curb extensions ▪ Consider RRFBs if there is low driver compliance 	n/a
Alves Ranch Road	Maho Bay Circle/Botany Bay Drive Intersection	Crosswalk	Install crosswalk enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines ▪ Pedestrian refuge through narrowing travel lanes to 10-11' ▪ Reduce curb radius on Northeast corner 	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
Bailey Road				
Bailey Road (outside City limits)	Willow Pass Road to Canal Road	Class IV Separated Bikeways	Narrow lanes to 11' and 10' to provide a Class IV separated bikeways with 7' bikeway and 4' buffer. Add bicycle and pedestrian oriented wayfinding and signage on Bailey Road to connecting routes and destinations, such as the BART station.	0.3
Bailey Road	Canal Road to BART Access Road	Class IV Separated Bikeways, Trail	<ul style="list-style-type: none"> In the long-term, work with County, CCTA, Caltrans, EBRPD, and BART to widen the existing sidewalk to provide a minimum 10' Class I path with 5' landscape buffer on the west side of the street. This could incorporate the width of the SB bike lane. Note that this is the Delta De Anza Trail. In the near-term, upgrade the bike lanes to Class IV separated bikeway through narrowing travel lanes to 11' and creating a 5' bike lane with 2' buffer and posts. Add bicycle and pedestrian oriented wayfinding signage on Bailey Road to connecting routes and destinations, such as the BART station. 	0.1
Bailey Road	Bailey Road and SR 4 eastbound Off-Ramps/BART Access Road Intersection	Minor Signalized Intersection Improvements	<ul style="list-style-type: none"> Stripe trail crossing markings on the west and south crosswalks to highlight the trail and allow for two-stage crossing through the intersection and intersection enhancements consistent with the Pittsburg Moves Design Guidelines Stripe east crosswalk as high-visibility Stripe advanced stop bars at all approaches Provide leading pedestrian intervals and consider protecting right-turns to remove pedestrian-auto conflicts per the Pittsburg Moves Crosswalk Policy 	n/a
Bailey Road	BART Access Road to West Leland Road	Class IV Separated Bikeways	Narrow travel lanes to 11' outside and 10' inside to created Class IV separated bikeway (5-6' bike lane with 2-4' buffer). Add bicycle and pedestrian oriented wayfinding and signage on Bailey Road to connecting routes and destinations, such as the BART station.	0.2

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Project Name	Limits (From/To)	Project Type	Description	Miles
Bailey Road	West Leland Road Intersection	Minor Signalized Intersection Improvements	<ul style="list-style-type: none"> Stripe high-visibility crosswalk markings with advanced stop bars Install missing crosswalk on south leg Formalize median refuge with nose and pedestrian push button on north crosswalk Install LPI on north crosswalk 	n/a
Bailey Road	West Leland Road to 500' south of Leland Road	Class II Bicycle Lanes	Add 6-7' Class II bike lanes through narrowing travel lanes to 10-11' and maintaining parking.	0.1
Bailey Road	West Leland Road to 250' south of Leland Road	Sidewalk	Work with homeowners to close sidewalk gap on east side of street	0.05
Bailey Road	500' south of Leland Road to Southern City Limits	Class II Bicycle Lanes	<ul style="list-style-type: none"> Add Class II bike lane southbound to support bicyclists climbing the grade Explore feasibility of widening roadway to provide bike lanes in both directions based on available ROW Stripe green-backed sharrows and sign as Class III bicycle route in northbound direction 	0.1
Bailey Road	n/a	Trail	See related projects in the Delta de Anza Trail list	n/a
Range Road				
Range Road/Willow Pass Road	Railroad bridge over Willow Pass Road to SR 4	Class II Bicycle Lanes	Add Class II bike lanes (5') by narrowing travel lanes and removing or narrowing center median. Relocate lighting in center median. Will require some tree removal. This should connect to the grade separated treatment that is proposed at the Railroad Bridge, listed under Willow Pass Road projects.	0.5
Range Road Extension/SR 4 Grade Separation	Existing terminus of Range Road north of SR 4 to Wedgewood Drive	Trail	Study the feasibility of extending Range Road with grade separation at SR 4, either as a roadway or pedestrian/bicycle only access	0.2

Project Name	Limits (From/To)	Project Type	Description	Miles
Range Road	Wedgewood Drive to West Leland Road	Class IV Separated Bikeways	<ul style="list-style-type: none"> Upgrade existing Class II bike lanes to Class IV separated bikeways with a lane reduction between Ackerman Drive and West Leland Road. If PG&E right-of-way alignment for Delta de Anza Trail is not feasible, implement a lane reduction from 1200' north of Ackerman Drive to West Leland Road and use excess width to widen the west side to 10' Class I shared use path with 5' landscape buffer. Stripe trail crossings on west and south crosswalks at Leland Road and provide space for bikes and people to queue on each corner Consider a LPI to support crossings at Leland Road per the Pittsburg Moves Crosswalk Policy 	0.4
Range Road	Ackerman Drive to West Leland Road	Class IV Separated Bikeways	As an interim, near-term bike treatment, complete a lane reduction between Ackerman Drive and West Leland Road to provide Class IV separated bikeways	0.1
Range Road	Delta de Anza Trail at Range Road and at West Leland Road Intersections	Crosswalk	See Delta de Anza Trail projects for trail crossing enhancement at Range Road and at West Leland Road.	n/a
Range Road	Ackerman Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> Mark high-visibility trail crossings to highlight Delta De Anza Trail, parking restrictions on crosswalk approach, and maintain adequate nighttime lighting levels Advance Yield Here to Pedestrians signs and yield lines Pedestrian refuge 	n/a
Crestview Drive				
Crestview Drive	Frontage Road to Castlewood Drive	Class II Buffered Bicycle Lanes	Upgrade the existing Class II bike lanes to Class II buffered bike lanes.	1.7
Crestview Drive	Crestview Drive to Crowley Avenue	Trail	Formalize the trail connection adjacent to Mt Zion Baptist Church that connects Crestview Drive to Crowley Avenue. This will require coordination with and permission from Mt Zion Baptist Church.	0.04

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Crestview Drive	Crestview Drive at Buchanan Road	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Trail crossing striping on east and west crosswalks 	n/a
Crestview Drive	West Buchanan Road to Kirker Pass Road	Class II Bicycle Lanes; Class III Bicycle Route	Install Class II bike lanes in WB direction through parking prohibition (consider allowing overnight parking) and install Class III bicycle route EB. Consider allowing daytime parking prohibition on south side of the street to provide Class II bike lanes in the EB direction.	0.2
Marina Boulevard				
Marina Boulevard	Cutter Avenue to East 5th Street	Class II Bicycle Lanes	Add Class II bike lanes through a 4 to 3 lane reduction with 11' travel lanes, 6' bike lanes, and 8' parking.	0.4
Marina Boulevard	East 5th Street to Herb White Way	Class II Buffered Bicycle Lanes	Restripe the roadway to accommodate 11' travel lanes, 6' bike lanes with a 3' buffer, and 8' parking lanes.	0.3
Marina Boulevard	Cutter Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Advance Yield Here to Pedestrians signs and yield lines Curb extensions Pedestrian refuge Upgraded curb ramps Consider RRFBs if there is low driver compliance 	n/a
Marina Boulevard	East 5th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Advance Yield Here to Pedestrians signs and yield lines Curb extensions Widened median to create pedestrian refuge Upgraded curb ramps Consider RRFBs if there is low driver compliance 	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
Marina Boulevard	West Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach Advance Yield Here to Pedestrians signs and yield lines Curb extensions Pedestrian refuge Consider RRFBs if low driver compliance at crosswalk Upgraded curb ramps 	n/a
Marina Boulevard	York Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach Advance Yield Here to Pedestrians signs and yield lines Curb extensions Upgraded curb ramps Consider RRFBs if there is low driver compliance 	n/a
Railroad Avenue/Kirker Pass Road				
Railroad Avenue	East 3rd Street to East 8th Street	Class III Bicycle Route	Add signage designating this segment of Railroad Avenue as a Class III Bicycle Route. City may want to consider back-in angle parking in the future to allow for Class II lanes, which would minimize pedestrian and bicyclist conflicts with vehicles.	0.3
Railroad Avenue	Railroad Avenue at East 8th Street	Bike parking	Establish the corner of Railroad Avenue and 8th Street outside Marina Vista Elementary School as a mobility hub, which includes bike parking.	n/a
Black Diamond Street	Marina Boulevard to East 8th Street	Class III Bicycle Route	Install a Class III Bicycle Route to provide an alternate north-south route through Downtown that avoids the angled parking present on Railroad Avenue and Cumberland Street.	0.3
Railroad Avenue	East 8th to East 10th Streets	Class IV Separated Bikeways	Add directional Class IV separated bikeways through removal of parking on one side of the street.	0.1
Railroad Avenue	Railroad Avenue at 5th Street	Intersection Improvement	<ul style="list-style-type: none"> Install new north leg marked crosswalk Install curb extensions at NE and SE corners Relocate bus stop to far side of intersection or south of 5th Street 	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
Railroad Avenue	Railroad Avenue and Central Avenue Intersection	Major Signalized Intersection Improvements	<ul style="list-style-type: none"> Conduct study to reassess access and circulation at Cornwall Street and Railroad Lane to narrow intersection and remove additional legs to enhance safety. Consider moving the angled parking from the east to west sides of Railroad Lane and bulbing out to provide space for vehicles to queue at the WB approach Prohibit NB left-turn at Railroad Lane, and direct truck east on Central Avenue/Solari Street to SR 4. Tighten curb radii where feasible while maintaining truck access Consider adding LPIs per the Pittsburgh Moves Crosswalk Policy Restripe crosswalks and add advanced stop bars Upgrade curb ramps Add protected left turns Investigate if accessibility upgrades are needed to push buttons and countdown signals 	n/a
Railroad Avenue	Railroad Avenue and Parkside Drive Intersection	Intersection Improvement	<ul style="list-style-type: none"> Remove pork chop island on east crosswalk and tighten corner radii to reduce auto speeds and crossing distance Stripe crosswalks as high-visibility with advanced stop bars and upgrade curb ramps If feasible with topography and sight distance, bring the SB on-ramp in at closer to 90 degree alignment with Railroad Avenue 	n/a
Railroad Avenue	Railroad and Civic Avenue Intersection	Major Signalized Intersection Improvements	<ul style="list-style-type: none"> Mark south crosswalk at Civic Avenue Add LPI on north and south crosswalks Consider making Oak Place right-in/right-out only to simplify intersection and allow U-turns at School Street to provide full access for residents Add high-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels 	n/a
Railroad Avenue	10th Street to California Avenue	Class IV Separated Bikeways	Add directional Class IV separated bikeways (8' bike lane, 4' buffer) by reducing travel lane widths to 12'.	0.2

Project Name	Limits (From/To)	Project Type	Description	Miles
Railroad Avenue	California Avenue to Central Avenue	Class II Bicycle Lanes	<p>As a near-term, interim improvement:</p> <ul style="list-style-type: none"> ▪ Mark Class II bicycles lanes continuous in both directions to address existing gaps. ▪ Mark bikeways up to intersections. ▪ Stripe bike lanes with solid stripe for last 50' before the intersection. ▪ At intersections, stripe bike lane between the right turn and through lane with green conflict zone markings ▪ Mark green conflict zone striping at Parkside Drive ramps, bus stops, and slip lane at SB California Avenue. 	0.6
Railroad Avenue	Center Drive to Bliss Avenue	Streetscape	Improve Railroad Avenue sidewalk with lighting, attractive traffic barrier, and pedestrian amenities per the North Concord to Antioch BART Access Study.	0.2
Railroad Avenue	Railroad Avenue and Bliss Avenue Intersection	Minor Signalized Intersection Improvements	<ul style="list-style-type: none"> ▪ Close the sidewalk gap at the west intersection approach (see Bliss Avenue for more information) ▪ Mark the north crosswalk ▪ Add pedestrian refuge on north and south crosswalks ▪ Upgrade curb ramps ▪ Investigate if accessibility upgrades needed to push buttons and countdown signals 	n/a
Railroad Avenue	California Avenue to SR 4 ramps	Class IV Separated Bikeways	On the Railroad Avenue overpass, add directional Class IV separated bikeways with buffers and delineators. This will require coordination with Caltrans.	0.1

Project Name	Limits (From/To)	Project Type	Description	Miles
Railroad Avenue	SR 4 WB On-Ramp/California Avenue Intersection	Major Signalized Intersection Improvements	<ul style="list-style-type: none"> At the southeast corner of Railroad Ave & California Ave, add a bulb out to provide increased pedestrian visibility and slow northbound-right turning vehicles at intersection. Route the bike lane into bulb out for a semi-protected corner. At the northwest corner of Railroad Ave & California Ave, explore signalizing the southbound right turn lane from Railroad Avenue to the SR-4 westbound onramp in order to increase pedestrian visibility. Install green paint for a 2-step trail crossing across Railroad Avenue at California Avenue (north and east legs). Add new south crosswalk Install leading pedestrian interval (LPI) for east crosswalk Install BART wayfinding 	n/a
Railroad Avenue	SR 4 EB Ramps Intersection	Major Signalized Intersection Improvements	<ul style="list-style-type: none"> Install green paint for a 2-step trail crossing across Railroad Avenue at the SR 4 eastbound off ramp (south and east legs) to connect trail users from the 2-way Class IV facility on the overpass to the bike facilities south of the overpass (Class I facility on the west side and directional Class IV facilities on Railroad Avenue). Trail crossing striping on south crosswalk. Add north crosswalk Widen pedestrian refuge on south crosswalk to 10' and add truncated domes and pedestrian push button Upgrade curb ramps, including relocating truncated domes on SE corner ramps Investigate if accessibility upgrades needed to push buttons and countdown signals Install wayfinding to BART 	n/a
Railroad Avenue	SR 4 ramps to Delta de Anza Trail	Class IV Separated Bikeways	Add a Class IV bicycle facility (7' bike lane, 4' buffer) by reducing travel lane widths to 10' and 11' in each direction.	0.5

Project Name	Limits (From/To)	Project Type	Description	Miles
Railroad Avenue	Railroad Avenue and Yosemite Drive Intersection	Minor Signalized Intersection Improvements	<ul style="list-style-type: none"> Install south leg marked crosswalk with protected left turns Add new directional curb ramps (clear of driveway on west side) Install "Bikes Use Ped Signal" sign and two-stage turn box to support southbound left movements onto Yosemite Drive Investigate need for countdown signals 	n/a
Railroad Avenue	Railroad Avenue and Linscheid Drive Intersection	Minor Signalized Intersection Improvements	Install north leg marked crosswalk and investigate need for countdown signals.	n/a
Railroad Avenue/Kirker Pass Road	Delta de Anza Trail to Pheasant Drive	Class IV Separated Bikeways	<p>Install Class IV separated bikeways by narrowing the travel lanes to 10' inside and 11' outside lanes.</p> <ul style="list-style-type: none"> With the James Donlan Boulevard extension, reduce the long right turn pocket on the northbound approach of Buchanan Road and mark the Class IV separated bikeways up to the intersection. 	1.3
Railroad Avenue	Railroad Avenue and Buchanan Road Intersection	Major Signalized Intersection Improvements	<ul style="list-style-type: none"> Add high-visibility crosswalk markings, adequate nighttime lighting levels Add advanced stop lines Add new south leg marked crosswalk Consider adding a pedestrian refuge with widened north, south median Close sidewalk gap on NE corner (see Buchanan projects for more information) Close bike lane gaps (see Buchanan projects for more information) 	n/a
Railroad Avenue	4th Street	Crosswalk	<p>Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy:</p> <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Consider raised intersection (or crosswalks) Upgraded curb ramps Curb extensions 	n/a
Railroad Avenue	6th Street	Crosswalk	<p>Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy:</p> <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels 	n/a

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Project Name	Limits (From/To)	Project Type	Description	Miles
Railroad Avenue	7th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, adequate nighttime lighting levels 	n/a
Railroad Avenue	8th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, adequate nighttime lighting levels Consider relocate decorative flagpoles or RRFB to make the RRFB more visible to NB drivers 	n/a
Railroad Avenue	17th Street	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> Advance Yield Here to Pedestrians sign and yield line 	n/a
Kirker Pass Road	Pheasant Drive to Southern City Limit	Class IV Separated Bikeways	Convert shoulder to Class IV separated bikeways	0.3
Kirker Pass Road	Kirker Pass Road and Pheasant Drive Intersection	Minor Signalized Intersection Improvements	<ul style="list-style-type: none"> Remove the NE and SE slip lanes and straighten east crosswalk Add pedestrian refuge on east crosswalk Upgrade curb ramps 	n/a
Kirker Pass Road	Kirker Pass Road at City boundary to Buchanan Road	Traffic calming	Install rumble strips, flashing beacons, and speed feedback signs to reduce speeds entering Pittsburgh. Time signals to slow speeds. This will require coordination with County outside City limits.	0.5
Harbor Street				
Harbor Street	East 8th Street to Pittsburgh-Antioch Highway	Class II Bicycle Lanes	As a near term, interim improvement on Harbor Street: <ul style="list-style-type: none"> Refresh bike lane markings and add more frequent bike lane markings. Stripe bike lanes with solid stripe starting 50' before the intersection. Add green conflict zone markings at intersection with East Santa Fe Avenue/Pittsburg-Antioch Highway 	0.2
Harbor Street	East 3rd Street to Army Street	Class IV Separated Bikeways	Add a Class IV bicycle facility through either (1) a 4-3 lane reduction (7' bike lane, 3-4' buffer) or (2) between Pittsburgh-Antioch Highway and Hawthorne Street, remove parking on one side of the street.	1.1

Project Name	Limits (From/To)	Project Type	Description	Miles
Harbor Street	Army Street to California Avenue	Class II Bicycle Lanes	In the near term, interim improvement on Harbor Street: <ul style="list-style-type: none"> Close bike lane gap in southbound direction Stripe green conflict zone markings at California Avenue intersection Prohibit parking on west side during daytime when bicyclists would use the street 	0.1
Harbor Street	Army Street to California Avenue	Class IV Separated Bikeways	Install Class IV separated bikeways: <ul style="list-style-type: none"> Northbound: narrow travel lanes to 10' and 11' respectively to make room for a 6' bike lane with 3' protected buffer Southbound: widen the roadway on the west side of Harbor Street into the oversized landscape strip to provide parking and a buffered bike lane for southbound travel OR prohibit parking on the west side of Harbor Street. 	0.1
Harbor Street	Harbor St at Atlantic Avenue Intersection	Minor Signalized Intersection Improvements	Place the pedestrian push buttons at convenient locations for people biking, as the Delta De Anza Trail jogs through this intersection.	n/a
Harbor Street	California Avenue to Bliss Avenue	Class IV Separated Bikeways	Install Class IV separated bikeways through narrowing travel lanes to 10' inside and 11' outside (2' buffer, 5' bicycle lane)	0.1
Harbor Street	Bliss Avenue to Stoneman Avenue	Class IV Separated Bikeways	Upgrade the existing Class II bike lanes to a Class IV bicycle facility (7' bike lane, 4' buffer) by narrowing the travel lanes to 10' and 11' respectively.	0.8
Harbor Street	East Leland Road Intersection	Class II Bicycle Lanes	As a near term, interim improvement on Harbor Street: <ul style="list-style-type: none"> Mark the northbound bike lane up to the intersection Mark green conflict zone striping on all approaches and through bus stops 	0.1
Harbor Street	Stoneman Avenue to Yosemite Drive	Class II Buffered Bicycle Lanes	Install Class II Buffered Bike Lanes (5' bike lane with 3' buffer) through a 4-3 lane reduction.	0.3
Harbor Street	Harbor Street at Stoneman Drive	Roundabout	<ul style="list-style-type: none"> Install single-lane roundabout OR narrow intersection through median refuge and bulbouts Mark south crosswalk 	n/a

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Project Name	Limits (From/To)	Project Type	Description	Miles
Harbor Street	Harbor Street and Yosemite Drive Intersection	Minor Signalized Intersection Improvements	<ul style="list-style-type: none"> Align the intersection so that Yosemite Drive intersects Harbor Street close to 90 degrees Install curb extensions on the SW and NW corners and east side of street Add LPI on north and south crosswalks Investigate if accessibility upgrades are needed to push buttons and countdown signals 	n/a
Harbor Street	Yosemite Drive to Buchanan Road	Class II Buffered Bicycle Lanes	Add Class II Buffered Bike Lanes (6' bike lane with 2' buffer) by narrowing travel lanes to 11'.	0.2
Harbor Street	Harbor Street at Highlands Elementary/Buchanan Park Driveway	Crosswalk with RRFBs	<ul style="list-style-type: none"> Mark new high-visibility crosswalk and install an RRFB across Harbor Street at the Highlands Elementary School driveway (on the north side, with both a median refuge and curb extension) per the Pittsburg Moves Crosswalk Policy Install a crosswalk ahead warning sign on the southbound approach (with the curve). Install curb extensions 	n/a
Harbor Street	East 8th Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, adequate nighttime lighting levels Advance Yield Here to Pedestrians signs and yield lines Pedestrian refuge island Consider RRFBs if there is low driver compliance 	n/a
Harbor Street	Stone Harbor Drive/Army Street	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Advance Yield Here to Pedestrians signs and yield lines Pedestrian refuge island 	n/a
Harbor Street	East 3rd Street to Pittsburg-Antioch Highway	Trail	See trail connections identified in the California Delta Trail to Antioch project list.	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
Loveridge Road				
Loveridge Road	California Avenue/N Park Boulevard to Pittsburg-Antioch Highway	Class II Bicycle Lanes	As an interim solution, close gaps in the existing bike lanes, including missing segments of southbound bike lane, consistent bike lane width and markings, and striping bikeway up to and through the intersection	0.4
Loveridge Road	North terminus of roadway to California Avenue	Class IV Separated Bikeways	Reduce travel lanes to 11' and install 7' separated bikeways (5' bike lanes, 2' buffer)	0.9
Loveridge Road	California Avenue to SR 4 EB Ramps	Class IV Separated Bikeways	Upgrade the existing Class II bike lanes to a Class IV bicycle facility.	0.1
Loveridge Road	SR 4 EB Ramps to Buchanan Road	Class IV Separated Bikeways	Upgrade the existing Class II bike lanes to a Class IV bicycle facility (7' bike lane, 2' buffer) by narrowing travel lanes to 10' and 11' respectively.	1.1
Loveridge Road	Loveridge Road and Buchanan Street Intersection	Minor Signalized Intersection Improvements	<ul style="list-style-type: none"> ▪ To address southbound motorists not yielding to pedestrians when turning right: Install "Turning Vehicles Yield to Pedestrians" sign for southbound right traffic ▪ Install a median refuge with pedestrian push button on Buchanan Street at the western crosswalk ▪ Tighten curb radii on the NW and NE corners to slow the speed of turning traffic ▪ Install school zone 25 MPH signage ▪ Modify the signal timing to add a leading pedestrian interval for southbound vehicles turning right ▪ Consider prohibiting right turns on red and adding LPI on east and west crosswalks per the Pittsburg Moves Crosswalk Policy 	n/a
Loveridge Road	Loveridge Road and California Avenue Intersection	Major Signalized Intersection Improvements	<ul style="list-style-type: none"> ▪ Install pork chop islands with raised crosswalks at all corners of the intersection, which will shorten crossing distances for pedestrians. ▪ Restripe the crosswalks and install median refuges with push buttons if they still enable left turns. 	n/a
Stoneman Avenue/Gladstone Drive	Loveridge Road to East Leland Road	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding and sharrows. Explore additional traffic calming. (Some traffic calming already exists in some segments.)	0.7

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Project Name	Limits (From/To)	Project Type	Description	Miles
Roundhill Drive/Norine Drive	Ventura Drive to Roundhill Drive to Delta de Anza Trail	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding and sharrows. Explore additional traffic calming. This would tie into the bicycle boulevard proposed on Ventura Drive.	0.4
North Park Boulevard				
North Park Boulevard	Pace Boulevard to Century Boulevard	Class II Bicycle Lanes	Refresh bike lane markings; relocate bike lane to be between the EBL and EBR lanes and add green conflict zone markings.	0.2
North Park Boulevard	Pace Boulevard to Century Boulevard	Sidewalk	Close the sidewalk gap on the north side of N Park Boulevard. This may require coordination with private property owner.	0.6
Century Boulevard				
Century Boulevard	East Leland Road to City limits	Class II Bicycle Lanes	Add 5' Class II bike lanes given limited right-of-way - requires widening the paved width of the roadway between East Leland Road and Century Way. Where roadway is improved, reduce travel lane width to 10-11' to provide bike lanes. As the area redevelops, add a Class I facility off-street in addition.	1.2
Century Boulevard Greenway	East Leland Road to City limits	Trail	Add a Class I facility as the area redevelops to provide a connection to the shopping center. This will require coordination with the City of Antioch.	1.2 ¹
Somersville Road (coordinate with Antioch)				
Somersville Road	Delta de Anza Trail to James Donlon Boulevard	Trail	Add a Class I facility by widening the existing sidewalk.	0.9
Tuscany Meadows Drive	James Donlon Boulevard to Buchanan Road	Class II Buffered Bicycle Lanes	Install Class II buffered bike lanes per the Tuscany Meadows EIR.	0.5
Sequoia Drive	Tuscany Meadows Drive to Somersville Road	Class II Buffered Bicycle Lanes	Install Class II buffered bike lanes per the Tuscany Meadows EIR.	0.5
East-West Corridors				
E 3rd Street				
East 3rd Street	Marina Boulevard to East of Riverway Driveway	Class II Buffered Bicycle Lanes	Install Class II buffered bike lanes with a lane reduction. Assume 11' travel lane and 8' parking, leaving 13' remaining for bike lane and buffer	0.3
East 3rd Street	East of Riverway Driveway to Harbor Street	Class II Buffered Bicycle Lanes	Install Class II buffered bike lanes when the road is widened through redevelopment.	0.2

¹ Most of the proposed 1.2-mile Century Boulevard Greenway would be located within Antioch city limits.

Project Name	Limits (From/To)	Project Type	Description	Miles
East 3rd Street	Cardinale Court Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach Advance Yield Here to Pedestrians signs and yield lines Pedestrian refuge island Curb extensions Upgraded curb ramps Consider RRFBs if there is low driver compliance Assumes 4 to 3 lane road diet 	n/a
East 3rd Street	Cumberland Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Advance Yield Here to Pedestrians signs and yield lines Pedestrian refuge island Curb extensions Upgraded curb ramps Consider RRFBs if there is low driver compliance Assumes 4 to 3 lane road diet 	n/a
Willow Pass Road/West 10th Street/East 10th Street				
Willow Pass Road	Parkside Drive to Enterprise Circle	Trail	<ul style="list-style-type: none"> Install a Class I facility (10' shared-use path with 5' landscape buffer) through redevelopment. Conduct a right-of-way assessment to determine if path or shoulder widening opportunities are possible in the interim. Study additional options for providing bicycle/pedestrian access at pinch points underneath railroad bridges (not included in cost) 	1.2
Willow Pass Road	Willow Pass Road and Nantucket Drive	Minor Signalized Intersection Improvements	<ul style="list-style-type: none"> Mark east leg crosswalk Upgrade curb ramps Investigate if accessibility upgrades are needed to push buttons and countdown signals 	n/a
West 10th Street	Enterprise Circle to Montezuma Street	Class II Bicycle Lanes	Restripe existing Class II bike lanes to define parking lanes and bike lanes. Narrow travel lanes to 11' and restripe parking at 8' and bike lane at 6'.	0.3
West 10th Street/East 10th Street	Montezuma Avenue to Railroad Avenue	Class II Bicycle Lanes	Widen existing Class II bike lanes by removing median and restriping street with 11' travel lanes, 10' left-turn pocket, 6' bike lanes, and 8' parking lane.	0.4

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Project Name	Limits (From/To)	Project Type	Description	Miles
Willow Pass Road	10th Street Intersection (Commerce Center Driveway)	Crosswalk with PHB	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ PHB ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines ▪ Pedestrian refuge island ▪ Curb extensions ▪ Upgraded curb ramps ▪ Assumes lane reduction to remove EB right-turn lane and extend bikeway 	n/a
West 10th Street	Enterprise Circle Intersection	Crosswalk with PHB	<ul style="list-style-type: none"> ▪ Relocate crosswalk to west side of the street, clear of driveways and relocate bus stop to far side of intersection. ▪ Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: ▪ PHB ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines ▪ Pedestrian refuge island ▪ Curb extensions ▪ Upgraded curb ramps 	n/a
West 10th Street	Black Diamond Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines 	n/a
West 10th Street	Cutter Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines 	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
West 10th Street	East Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians sign and yield line ▪ Pedestrian refuge island ▪ Upgraded curb ramps and install missing curb ramps at crosswalk ▪ Curb extension shadowing parking ▪ Consider RRFB if there is low driver compliance 	n/a
West 10th Street	York Street Intersection	Crosswalk with RRFBs	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines ▪ Curb extensions ▪ RRFBs 	n/a
West 10th Street	West Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Advance Yield Here to Pedestrians signs and yield lines ▪ Consider RRFBs if there is low driver yielding 	n/a
East 10th Street	East Street Intersection	Curb Ramps	Install missing curb ramps at crosswalk	n/a
East 10th Street	50' west of Solari Street	Curb Ramps	Install missing curb ramps at driveway	n/a
East 10th Street	East 10th Street at Solari Drive	Intersection Improvement	<ul style="list-style-type: none"> ▪ Relocate crosswalk to west side of intersection to make crosswalk accessible ▪ Install curb extension on SW corner ▪ Stripe high-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Stripe Advance Yield Here to Pedestrians signs and yield lines 	
East 10th Street	Railroad Avenue and East 10th Street	Major Signalized Intersection Improvements	<ul style="list-style-type: none"> ▪ Remove slip lane on SE corner ▪ Add pedestrian refuge on south crosswalk ▪ Add leading pedestrian interval (LPI) on east and west crosswalks ▪ Add high visibility crosswalk marking 	n/a

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Project Name	Limits (From/To)	Project Type	Description	Miles
East 10th Street	Railroad Avenue to Harbor Street	Class II Buffered Bicycle Lanes	Add Class II buffered bike lanes (8') through a 4-3 lane reduction and parking removal on one side.	0.4
E 14th Street/Pittsburg-Antioch Highway				
Central Avenue	Harbor Street to Pittsburg-Antioch Highway	Crosswalk with PHB	Add Pedestrian Hybrid Beacon (PHB) to connect the bike facility on the west side of Harbor Street to the driveway/bike connection on the east side of the street.	n/a
East 14th Street	Harbor Street to Pittsburg-Antioch Highway	Crosswalk	Add trail crossing on East 14th Street just east of the bridge, providing a connection between the Class I facility on East 14th Street and the driveway that connects to Harbor Street.	n/a
East 14th to Harbor Bike Boulevard Connector	Harbor Street and Hawthorne Street/Driveway Intersection	Class III Bicycle Boulevard	To provide a connection between East 14th Street and Harbor Street, make the City-owned driveway a designated bicycle boulevard by adding wayfinding and sharrows. Explore additional traffic calming.	0.1
East 14th to Harbor Bike Boulevard Connector	East 14th Street at City-owned driveway (just east of Harbor Street overcrossing)	Class IV Separated Bikeways	Add a Class IV bicycle facility (7' bike lane, 3' buffer) by utilizing existing shoulders and narrowing travel lanes to 11'.	1.7
East 14th to Harbor Bike Boulevard Connector	East 14th Street to Harbor Street	Trail	Add Class I Multi Use Path on Pittsburg-Antioch Highway by narrowing the travel lanes to 11' and turn lanes to 10' and utilizing the unpaved shoulders.	1.7
Pittsburg-Antioch Highway	Harbor Street to East 14th Street	Crosswalk with PHB	Add Pedestrian Hybrid Beacon (PHB) to connect the bike facility on the west side of Harbor Street to the driveway/bike connection on the east side of the street.	n/a
Pittsburg-Antioch Highway	East 14th Street to Arcy Lane	Crosswalk	Add trail crossing on East 14th Street just east of the bridge, providing a connection between the Class I facility on East 14th Street and the driveway that connects to Harbor Street.	n/a
North Parkside Drive/Willow Pass Road				
Willow Pass Road	Riverview Mobile Home Park to Dory Road	Class IV Separated Bikeways	Add a Class IV bicycle facility by repurposing space for existing 5-6' Class II facility, narrowing travel and turn lanes to 11', and eliminating parking. This assumes road widening as redevelopment occurs.	1
North Parkside Drive	Railroad Avenue to Amberhill Court	Class IV Separated Bikeways	Add a Class IV bicycle facility by narrowing travel lanes to 10'.	0.3
North Parkside Drive	Amberhill Court to Parkview Drive	Class IV Separated Bikeways	Add a Class IV bicycle facility (7' bike lane plus minimum 2' buffer) by narrowing travel lanes to 11' and turn lanes to 10'.	0.5

Project Name	Limits (From/To)	Project Type	Description	Miles
North Parkside Drive	Parkview Drive to Range Road	Class IV Separated Bikeways	Add a Class IV bicycle facility (7' bike lane plus buffer) by narrowing travel lanes and using space from existing 6' Class II facility. Over the bridge at Range Rd, add Class II bike lanes (5') with 11' travel lanes.	0.4
North Parkside Drive/Willow Pass Road	Range Road to Commodore Court	Class IV Separated Bikeways	Convert existing 13' Class II facility into Class IV bicycle facility (7' bike lane plus buffer).	0.2
Willow Pass Road	Commodore Court to Loftus Road	Minor Signalized Intersection Improvements	<ul style="list-style-type: none"> Mark west crosswalk Investigate if accessibility upgrades needed to push buttons and countdown signals 	n/a
Willow Pass Road	Willow Pass Road and Balclutha Way Intersection	Class II Bicycle Lanes	Restripe 6' Class II bike lanes to refresh markings and clearly defined parking and biking lanes.	0.2
Willow Pass Road	Loftus Road to City Limits	Class IV Separated Bikeways	Add a Class IV bicycle facility by repurposing space for existing 5-6' Class II facility, narrowing travel and turn lanes to 11', and eliminating parking. This assumes road widening as redevelopment occurs.	1
School Street/Civic Avenue/W 17th Street				
West 17th Street	Cassia Street to Davi Avenue	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming, per the Railroad Avenue Specific Plan.	0.4
Civic Avenue	Davi Avenue to Railroad Avenue	Class II Bicycle Lanes	Add Class II bike lanes per the Railroad Avenue Specific Plan.	0.3
Davi Avenue	Power Avenue to Civic Avenue	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming, per the Railroad Avenue Specific Plan.	0.2
School Street	Railroad Avenue to Harbor Street	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Work with school district to provide bike cut through where gates currently block auto traffic on School Street.	0.4
School Street	Mid-Block location	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> Parking restriction on crosswalk approach, adequate nighttime lighting levels Consider raised crosswalk 	n/a

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Project Name	Limits (From/To)	Project Type	Description	Miles
School Street/Treatro Street/El Pueblo Avenue/Diane Avenue	Harbor Street to Treatro Street to El Pueblo Avenue to Diane Avenue to California Avenue	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming.	0.8
Polaris Drive/Power Avenue/California Avenue				
Polaris Drive/Schooner Way	Schooner Way (City Limits to Polaris Drive) and Polaris Drive (Schooner Way to Range Road)	Class II Bicycle Lanes	Add Class II bike lanes. Where houses front the street, allow overnight parking/time of day bike lanes. Where houses do not front the street, prohibit parking in the bike lane.	0.68
Polaris Drive/Power Avenue	Range Road to Andrew Boulevard	Class II Buffered Bicycle Lanes	Add Class II buffered bike lanes (at minimum, 6' bike lane, 2' buffer) by narrowing travel lanes to 11'. On Power Avenue, remove parking on the south side.	1.07
Power Avenue	Andrew Boulevard to Davi Avenue	Class IV Separated Bikeway (Two-Way)	Install a 16' 2-way Class IV separated bikeway (12' bike lanes, 4' buffer) on the south side of the street.	0.34
Polaris Drive	Polaris Drive at Schooner Way	Intersection Improvement	<ul style="list-style-type: none"> Install new south crosswalk Tighten NE and NW curb radii Install pedestrian refuges on east and west leg crosswalks Upgrade curb ramps 	
Power Avenue	Jorgensen Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Advance Yield Here to Pedestrians signs and yield lines Pedestrian refuge Upgraded curb ramps Consider RRFBs if there is low driver compliance 	n/a
Power Avenue	Mid-Block location (at 1000 Power Avenue shopping center)	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, adequate nighttime lighting levels Pedestrian refuge Raised crosswalk 	n/a
California Avenue	Railroad Avenue to Harbor Street	Trail	Assess the feasibility of installing a Class I path on the south side of California Avenue (widen the proposed 8' path to 14') and add a minimum 5' landscape buffer between the parking area and the path, narrowing the 15' proposed travel lanes and proposed pull out lanes. Coordinate with PG&E.	0.4

Project Name	Limits (From/To)	Project Type	Description	Miles
California Avenue	Harbor Street to Loveridge Road	Class IV Separated Bikeway (Two-Way)	If the path option is infeasible, install a two-way Class IV bike facility on the north side of California Avenue from Harbor Street to Loveridge Road. Implement a lane reduction to gain the necessary right of way.	0.9
California Avenue	California Avenue and Harbor Street Intersection	Minor Signalized Intersection Improvements	<ul style="list-style-type: none"> ▪ Tighten curb radii at corners where feasible to reduce crossing distances ▪ Add south leg marked crosswalk ▪ With bikeway installation, stripe two-stage turn boxes to support bicyclists traveling from Harbor to BART via California Avenue 	n/a
Bliss Avenue				
Bliss Avenue	Railroad Avenue to Harbor Street	Class III Bicycle Route	In the near-term, repave Bliss to provide a smoother riding surface to the BART station. Stripe green-back sharrows in the center of travel lane. Add a two-stage turn box on Harbor Street at Bliss Avenue to facilitate lefts onto Bliss Avenue.	0.3
ROW north of Bliss Avenue	Railroad Avenue to Harbor Street	Trail	Install a bicycle trail south of and parallel to SR 4.	0.3
Bliss Avenue	Railroad Avenue to Harbor Street	Class II Bicycle Lanes	With redevelopment, improve the street frontage to provide a consistent minimum 50' curb-to-curb cross-section (Two 11' travel lanes, 6' bike lanes, and 8' parking on both sides of the street). Make a Class IV separated bikeway if there is ROW available. Work with property owners to prohibit perpendicular parking in future.	0.3
Bliss Avenue	Railroad Avenue to Harbor Street	Sidewalk	Close all sidewalk gaps with minimum 8' sidewalk with street trees. Work with property owners to prohibit perpendicular parking in future.	0.3
Leland Road				
West Leland Road Extension	Avila Road to West Leland Road	Class IV Separated Bikeways	When West Leland Road is extended via development, add Class IV separated bikeway	0.5
West Leland Road	S Broadway Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ Add marked crosswalk and install curb ramps across Broadway Avenue 	n/a
West Leland Road	Villa Drive to Tomales Bay Drive	Trail	Add Class I Multi Use Path on the south side of West Leland Road.	0.6

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Project Name	Limits (From/To)	Project Type	Description	Miles
West Leland Road	Valente Drive intersection	Crosswalk with PHB	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> Add a Pedestrian Hybrid Beacon (PHB) on West Leland Road at Valente Drive to provide access to Ray Giacomelli Park, the playground, and dog park. Mark on east leg with median refuge. 	n/a
West Leland Road	Tomales Bay Drive to BART Access Road	Trail	Add Class I Multi Use Path on the north side of West Leland Road.	0.8
West Leland Road	West Leland Road and Woodhill Drive Intersection	Major Signalized Intersection Improvements	<ul style="list-style-type: none"> Mark east and west leg crosswalks Close sidewalk gap Upgrade SE curb ramp Investigate if accessibility upgrades are needed to push buttons and countdown signals 	n/a
West Leland Road	Woodhill Drive to BART Access Road	Sidewalk	Close sidewalk gap on the north side of West Leland Road	0.2
West Leland Road	West Leland Road and Southwood Drive	Major Signalized Intersection Improvements	<ul style="list-style-type: none"> Mark east and west leg crosswalks Upgrade curb ramps Investigate if accessibility upgrades needed to push buttons and countdown signals This project should be coordinated with the crosswalk improvements proposed at the BART driveway. 	n/a
West Leland Road	West Leland Road and BART Driveway Intersection	Major Signalized Intersection Improvements	<ul style="list-style-type: none"> Add west leg marked crosswalk Add high visibility crosswalk marking Add BART wayfinding Install leading pedestrian interval (LPI) on east and west crosswalks Investigate if accessibility upgrades needed to push buttons and countdown signals This project should be coordinated with the crosswalk improvements proposed at the intersection of West Leland Road and Southwood Drive. 	n/a
West Leland Road	West Leland Road and Oak Hills Drive Intersection	Minor Signalized Intersection Improvements	Add west leg marked crosswalk	n/a
West Leland Road	West Leland Road and Montevideo Drive Intersection	Minor Signalized Intersection Improvements	<ul style="list-style-type: none"> Add west leg marked crosswalk Upgrade curb ramp on the SW corner Investigate if accessibility upgrades needed to push buttons and countdown signals 	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
West Leland Road	West Leland Road at John Henry Johnson Parkway	Crosswalk with PHB	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> Add new high visibility crosswalk with PHB to connect residential neighborhood to John Henry Johnson Park. Locate on west leg and move bus stops from nearside to farside. Install median refuge that maintains fire access. 	n/a
West Leland Road	West Leland Road at John Henry Johnson Park parking lot driveway	Crosswalk with PHB	With future redevelopment of the former golf course, consider if pedestrian demand would warrant marking new high visibility crosswalk with Pedestrian Hybrid Beacon (PHB) and median refuge if pedestrian demand exists per Pittsburgh Moves Crosswalk Policy. Locate crosswalk on east leg with median refuge.	n/a
West Leland Road	Range Road to Dover Way	Sidewalk	Work with adjacent landowners to widen sidewalk on south side of the street to 10' to support children walking to Rancho Medanos Junior High School	0.4
Atherton Avenue/ Sherman Street/Alvarado Street	Dover Way to Railroad Avenue	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Remove parking on Alvarado Street and potentially Dover Way.	1
West Leland Road	100' east of Railroad Avenue	Sidewalk	Close sidewalk gap between Pittsburgh Funeral Chapel and Pittsburgh Ace Hardware. Install temporary treatment such as an asphalt path.	0.1
Dover Way	Frontage Road to Atherton Avenue to West Leland Road	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Explore removing parking.	0.8
West Leland Road	West Leland Road and Burton Avenue	Minor Signalized Intersection Improvements	<ul style="list-style-type: none"> Add east leg marked crosswalk Install countdown signals Add LPI on east and west crosswalks 	n/a
East Leland Road	East Leland Road at Harbor Street	Class II Bicycle Lanes	As a near-term, interim improvement: <ul style="list-style-type: none"> Mark eastbound and westbound bike lanes up to intersection Mark green conflict zone striping on all approaches and through bus stops 	0.1
East Leland Road	Railroad Ave to City Limits	Class IV Separated Bikeways	Upgrade the existing Class II bike lanes to Class IV separated bikeways by narrowing the 12' travel lanes to 10' and 11' respectively and turn lanes to 10'.	2

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Project Name	Limits (From/To)	Project Type	Description	Miles
East Leland Road	East Leland Road and Los Medanos College	Major Signalized Intersection Improvements	<ul style="list-style-type: none"> Create gateway to Los Medanos College through squaring-up intersection relative to Diamond Hills Apartment Complex driveway and install curb extensions Consider wide median with refuge on the south crosswalk to create a grand campus entrance Add marked crosswalks at each approach and mark crosswalks consistently Upgrade curb ramps at each approach Add bike boxes on NB and SB approaches to support turning movements into/out of the College 	n/a
Delta Fair Boulevard	Century Boulevard/East Leland Road to Somersville Road	Class IV Separated Bikeways	Work with Antioch to extend Class IV separated bikeways into Antioch to provide access to the County Employment & Human Services offices and beyond. Mark crosswalks at Century Boulevard intersection.	1.1
Stoneman Avenue	Harbor Street to Loveridge Road	Class II Buffered Bicycle Lanes	Convert existing bike lanes to Class II buffered bike lanes (6' bike lanes with 2' buffers) by narrowing travel lanes to 11' (with 10' left turn lane) and marking parking at 8'.	0.7
Stoneman Avenue	Briarcliff Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Upgrade curb ramp on SW corner Advance Yield Here to Pedestrians signs and yield lines Pedestrian refuge island with removed WB left-turn pocket 	n/a
Stoneman Avenue	Meadowbrook Avenue Intersection	Crosswalk with RRFBs	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> Relocate crosswalk to west side of the street to provide pedestrian refuge island assuming stopping sight distance met Use yellow school zone markings High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Advance Yield Here to Pedestrians signs and yield lines Curb extensions Replace in-pavement flashers with PHB or RRFB 	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
Stoneman Avenue	Meadowbrook Circle Intersection	Crosswalk with RRFBs	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Advance Yield Here to Pedestrians signs and yield lines Curb extensions Replace in-pavement flashers with PHB or RRFB 	n/a
Buchanan Road				
Buchanan Road	100' west of Railroad Avenue to Heights Avenue	Sidewalk	Close sidewalk gap on the south side of the street. Requires a significant retaining wall between Quercus Lane and Heights Avenue (not included in cost, require further feasibility study).	0.4
Buchanan Road	Buchanan Road at Railroad Avenue	Class II Bicycle Lanes	<ul style="list-style-type: none"> In the long-term, create consistent roadway edge on SE side of intersection. See Railroad Avenue for more information. As a near-term, interim improvement: <ul style="list-style-type: none"> Mark EB and WB bike lanes up to intersection Mark green conflict zone striping 	0.1
Buchanan Road	Castlewood Drive to Loveridge Road	Class IV Separated Bikeways	Add a Class IV bicycle facility (6' bike lane, 3' buffer) using existing right-of-way. This assumes 11' travel lanes and a 10' two-way left turn lane. This may require removing on-street parking between Railroad Avenue and Brookside Drive.	1.5
Buchanan Road	Buchanan Road at Castlewood Drive Intersection	Intersection Improvement	<ul style="list-style-type: none"> Mark west and north leg high-visibility crosswalks. Install advanced yield markings and signage on north crosswalk. Install median refuge on north crosswalk Install bicycle wayfinding 	n/a
Buchanan Road	Buchanan Road at Heights Ave	Intersection Improvement	<ul style="list-style-type: none"> Enhance existing crosswalk with RRFBs and advanced yield markings to access the park Reduce curb radius on SW corner and straighten crosswalk across side street Close sidewalk gap on SW corner (see Buchanan Road sidewalk gap closure project, cost not included here) 	n/a

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Buchanan Road	Buchanan Road at Loveridge Road	Class II Bicycle Lanes	As a near-term, interim improvement: <ul style="list-style-type: none"> ▪ Mark westbound bike lanes up to intersection ▪ Mark green conflict zone striping and at bus stops 	0.1
Buchanan Road	Buchanan Road at Mcfaul Drive	Intersection Improvement	Convert existing median to median refuge and check lighting levels	
Buchanan Road	Loveridge Road to City Limits	Class IV Separated Bikeways	Upgrade existing Class II bike lanes to Class IV separated bikeways by narrowing travel lanes to 11' (6' bike lanes with 4' buffer).	1.6
Buchanan Road	Buchanan Road and Ventura Drive Intersection	Major Signalized Intersection Improvements	<ul style="list-style-type: none"> ▪ Install east crosswalk and protect conflicting northbound and southbound left-turns ▪ Add advanced stop bars on each approach ▪ Add bike boxes on northbound and southbound approaches to support turning movement on to/off of Buchanan Road 	n/a
Buchanan Road	Santa Ana Drive Intersection	Crosswalk with PHB	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ Restriped yellow high-visibility crosswalks for school zone ▪ PHB with advanced stop bars ▪ Parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ School crosswalk signage ▪ Pedestrian refuges at crosswalks on side-streets 	n/a
Yosemite Drive	Railroad Avenue to Harbor Street	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. Provides an interim east-west option to the future Contra Costa Canal Trail.	0.5
Yosemite Drive	Brookside Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Raised crosswalk ▪ Curb extensions ▪ Upgraded curb ramps 	n/a
Yosemite Drive	Mid-block at Hillview Junior High	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Consider raised crosswalk 	n/a

Project Name	Limits (From/To)	Project Type	Description	Miles
Yosemite Drive	Yosemite Drive at San Juan Drive	Intersection Improvement	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> Stripe consistent high-visibility crosswalk markings, add parking restriction on crosswalk approach, and adequate nighttime lighting levels Install curb extensions with directional curb ramps 	
Ventura Drive	Harbor Street to Norine Drive	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding and sharrows. Speed calming treatments are already installed. Provides an interim option for the future Contra Costa Canal Trail.	1.1
Ventura Drive	Norine Drive to Buchanan Road	Class II Buffered Bicycle Lanes	Add Class II buffered bike lanes (5' bike lanes with 2' buffer) by reducing travel lanes to 11' (10' left-turn pocket). Mark parking at 8'.	0.1
Ventura Drive	Buchanan Road to James Donlon Boulevard	Class III Bicycle Boulevard	Make this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming. City may want to consider upgraded facilities in the future as this area redevelops.	0.1
Ventura Drive	Ventura Drive at Norine Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Raised crosswalk Curb extensions on NE and SE corners to narrow large intersection and reduce speeds Pedestrian refuge island Upgraded curb ramps 	n/a
Ventura Drive	Ventura Drive at Suzanne Drive Intersection	Intersection Improvement	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> Install high-visibility crosswalk markings, parking restrictions on crosswalk approaches, and appropriate nighttime lighting levels Provide new east leg marked crosswalk with directional curb ramps 	
Suzanne Drive	Ventura Drive to James Donlon Boulevard	Class III Bicycle Boulevard	Connect Buchanan Road and Ventura Drive bikeways through making this roadway a designated bicycle boulevard by adding wayfinding, sharrows, and traffic calming.	0.1

Project Name	Limits (From/To)	Project Type	Description	Miles
State Route 4 Crossing Study				
SR 4 Crossing	n/a	Grade Separated Crossing	Study feasibility of grade-separated crossings for bicyclists and pedestrians across SR 4, including at: <ol style="list-style-type: none"> Between Parkside and Los Medanos Elementary Schools. Near the Pittsburgh Center BART Station At Range Road Pittsburg Bay Point BART Station (in County) 	n/a
Other Uncontrolled Crosswalk Enhancements				
West 4th Street	Bay Side Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Pedestrian refuges on north and south crosswalks through narrowing the travel lanes to 10-11' 	
East 4th Street	Cumberland Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach Advance Yield Here to Pedestrians signs and yield lines Upgraded curb ramps 	
West 4th Street	Odessa Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Consider raised crosswalk Reduce curb radii 	
6th Street	Black Diamond Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels 	
6th Street	Cutter Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Raised intersection (near Marina Walk Park) Upgraded curb ramps 	

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6th Street	Herb White Way Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels 	
7th Street	Cutter Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Raised intersection Crosswalk signage Upgraded curb ramps on all corners 	
8th Street	Cumberland Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Upgraded curb ramps 	
8th Street	Herb White Way Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> Truncated domes in median refuges (north, west and south crosswalks) and curb extensions (SE and SW corners) Advance Yield Here to Pedestrians sign and yield line 	
9th Street	Herb White Way Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, adequate nighttime lighting levels Crosswalk signage Advance Yield Here to Pedestrians signs and yield lines 	
11th Street	Black Diamond Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels 	
Bay Side Drive	River Park Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Consider curb extensions on NE and SE corners Upgraded curb ramps 	

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Bay Side Drive	2nd Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Consider curb extensions on NE and SE corners ▪ Upgraded curb ramps 	
Cutter Avenue	Pelican Court Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ Straighten north crosswalk ▪ Upgraded curb ramps ▪ Remove pork chop 	
Pelican Court	Pelican Loop Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ Curb extensions on NE corner to narrow intersection while still allow for truck/boat trailers to make all movements and remove striped pork chop ▪ Straighten north crosswalk ▪ High-visibility crosswalks on all approaches with advanced yield markings and signage ▪ Upgraded curb ramps 	
Pelican Loop	Mid-block location	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach ▪ Raised crosswalk ▪ Upgraded curb ramps 	
Burton Avenue	Crowley Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Reduce curb radii on SE corner and straighten west crosswalk 	
El Pueblo Avenue	Hermosa Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ Parking restriction on crosswalk approach, adequate nighttime lighting levels 	
El Pueblo Avenue	Treatro Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ Parking restriction on crosswalk approach, adequate nighttime lighting levels 	

Project Name	Limits (From/To)	Project Type	Description	Miles
Hanlon Way	Cove Way Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels 	
Pacini Avenue	Riverview Drive/Marks Boulevard Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> Square-up intersection by T-ing Riverview Drive and Marks Boulevard into Pacini Avenue Remove stop control on Pacini Avenue to make two distinct side-street stop-controlled intersections High-visibility ladder-striped crosswalks on all approaches Upgraded curb ramps 	
Pilar Ridge Drive	Rio Verde Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels 	
Portofino Drive	Valente Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels 	
Riverview Drive	Alturas Avenue Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Consider raised crosswalk 	
Riverview Drive	Mori Street Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Raised crosswalk 	
San Juan Drive	Calistoga Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburgh Moves Crosswalk Policy: <ul style="list-style-type: none"> High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels Consider raised crosswalk (Hillview Junior High School) 	

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San Juan Drive	Mariposa Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: ▪ High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels ▪ Consider raised crosswalk (Hillview Junior High School) 	
Seeno Avenue	Tiffany Drive Intersection	Crosswalk	Install crosswalks enhancements per the Pittsburg Moves Crosswalk Policy: <ul style="list-style-type: none"> ▪ Refresh high-visibility crosswalk striping, parking restriction on crosswalk approach, ensure adequate nighttime lighting levels ▪ Raised crosswalk (near Heights Elementary School) ▪ Consider curb extensions 	
Notes: Class I = multi-use path, Class II = bike lane, Class III = bike boulevard, Class IV = separated bike lane				