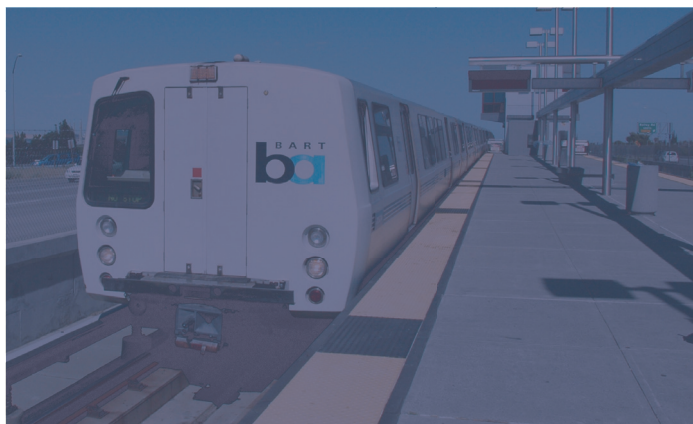




# PITTSBURG / BAY POINT BART MASTER PLAN

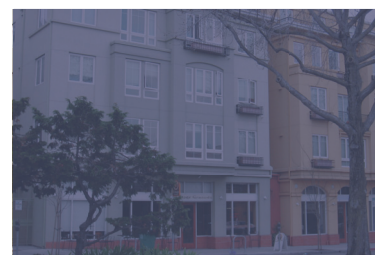
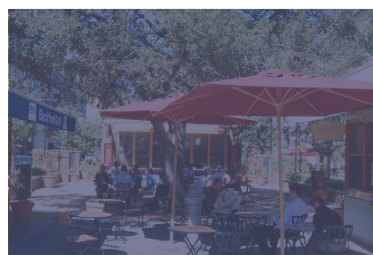
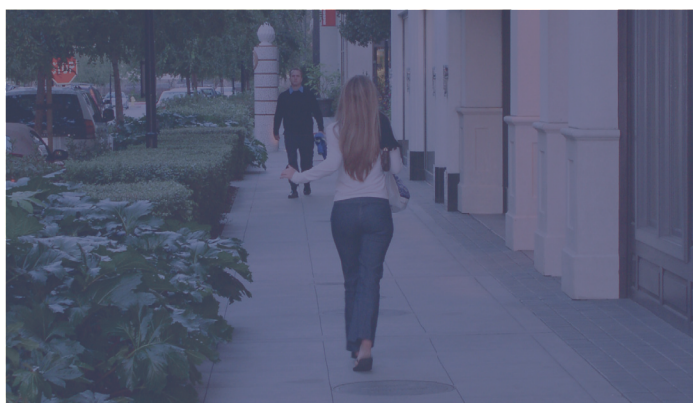




City Council Ordinance No. 11-1350



Adopted on October 17, 2011



# PITTSBURG / BAY POINT BART MASTER PLAN



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# CHAPTER I. INTRODUCTION





## I. INTRODUCTION

This chapter is organized into the following sections:

- 1.1 Background
- 1.2 Purpose
- 1.3 What is a Master Plan
- 1.4 What is Transit Oriented Development?
- 1.5 Relationship to other Documents.
- 1.6 Project Goals
- 1.7 Document Organization

### I.1 Background

The Pittsburg/Bay Point Bay Area Rapid Transit (BART) Station opened in 1996, and the area around the station has grown into a surface parking lot with 2,000 parking spaces and a 5-acre area set aside for bus, passenger loading/unloading, and short-term parking. As the population has grown east of the station area and with the imminent development of eBART extending the transit line deeper into east Contra Costa County, this surface parking lot provides an exciting opportunity for landmark development in the city, the county, and the region.

### I.2 Purpose

The Pittsburg/Bay Point BART Master Plan (the Master Plan) guides the future development of approximately 50.6 acres adjacent to the Pittsburg/Bay Point BART Station over the course of 20 years. This Master Plan describes allowed land uses and densities, transportation and circulation improvements, pedestrian pathways and improvements, urban design guidelines and standards, infrastructure

development and financing, and phasing and implementation strategies and guidelines. The Master Plan establishes the nature, character, and intensity of development in order to create a successful transit-oriented community, integrated with the existing neighborhood context. This document describes the City's intentions for the development of this important site. It is organized to allow for ease of use, implementation, and understanding by City staff, potential developers, and the community at large.

Connecting residents and businesses in Pittsburg to the larger Bay Area region through transit has long been a community priority as reinforced through the goals and policies in the City of Pittsburg's 2001 General Plan. The Bay Area Rapid Transit District (BART) adopted a System Expansion Policy in 1999 that proposed an extension of BART service from the current terminus at the Pittsburg/Bay Point BART Station through eastern Contra Costa County. In 2005, MTC adopted the Transit-Oriented Development (TOD) Policy that applies to the region's transit expansion program (Resolution 3434). The TOD Policy address multiple goals, including improving the cost-effectiveness of regional investments in new transit expansions, easing the Bay Area's chronic housing shortage, creating vibrant new communities and helping to preserve open space. To this end, the TOD Policy establishes housing thresholds to be achieved along each transit expansion corridor. Based on these thresholds, the average per station (existing and proposed) along the eBART corridor is 2,200 units within a one-half mile radius. MTC supports this policy through the Station Area Planning Program, funding local planning processes – including this Master Plan - to address the range of transit-

supportive features necessary to support high levels of transit ridership, including land use planning, station access and circulation strategies to support pedestrian and bicycle access, strategies to ensure station access and accessibility for all people, design policies and standards, parking demand analysis and management strategies, and an implementation and phasing plan.

Under the buildout assumptions set forth in the Environmental Impact Report (EIR) created for this project, this Master Plan could be expected to result in the addition of 1,168 new residential units, 146,361 new square feet of commercial space resulting in the employment of approximately 1,300 new employees as detailed in Table 1.1 below.

**Table I.1 - Master Plan Potential Development Program Summary**

Land Use Classification	Acres	Buildout Assumptions			Parking*			
		Residential Units	Employees	Sq. Ft. Commercial	Residential		Commercial	BART
					BART	WCHB		
Medium-Density Residential	20.2	848	-	-	115	1,496	-	-
High-Density Residential	4.2	252	-	-	290		-	-
Ground Floor Retail	1.3		650	45,302	-	-	136	-
Flex (Commercial and/or Residential)	2.9	68	650	101,059	78		303	-
Parking Garages**	3.3							2,000
<b>TOTAL</b>		<b>1,168</b>	<b>1,300</b>	<b>146,361</b>	<b>483</b>	<b>1,496</b>	<b>439</b>	<b>2,000</b>

\* Note that all parking standards are maximum standards; there is no minimum parking standard within the Master Plan area.

\*\* Assumes Garage 1 at six stories and Garage 2 at five stories for a total of 2,374 parking spaces within both garages.

MASTER PLAN

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## 1.3 What Is a Master Plan?

A Master Plan is a guiding document for future development of a specific area. It is based on public input, planning initiatives, existing development, physical characteristics, and social and economic conditions. A Master Plan is a useful tool for decision-makers, developers, and the general public in establishing the community's vision for the area. The Master Plan furthers the goals and policies outlined in the General Plan, and is consistent with both the General Plan and Zoning regulations.

## 1.4 What Is Transit-Oriented Development (TOD)?

Transit plays an important role in shaping the form of neighborhoods and communities. The concept of transit-oriented development (TOD) is based on the assumption that compact mixed-use urban development near transit stations will result in an increase in walking, biking, and transit trips and less reliance on the automobile. TODs locate a mix of housing, employment, and shopping close to major transit stations to encourage walkability and maximize use of public transportation. Research has shown that TODs can help create safer, healthier neighborhoods by keeping eyes on the street, reducing travel expenses, fostering healthier lifestyles through increased walking and bicycling, and creating a sense of community and place. The Pittsburg/Bay Point BART Station presents a tremendous opportunity for transit-oriented development, because of the BART system's connectivity to employment and housing centers throughout the region.

To reduce overall GHG emissions, the State of California passed Assembly Bill (AB) 32 and Senate Bill (SB) 375. AB 32 calls for a reduction in GHG emissions to 1990 levels by 2020 and an 80% reduction below 1990 levels by 2050. This can be accomplished by implementing emissions reduction measures such as vehicle efficiency measures, low carbon fuel standards, and green building standards, among others. SB 375 intends to implement AB 32 and reduce GHG emissions by providing incentives that support better land use planning such as the location of mixed-use communities near transit to reduce the number of vehicle miles people have to travel.

The City was awarded a FOCUS (Focusing Our Vision) grant from the Metropolitan Transportation Commission (MTC) and a T-PLUS (Transportation-Land Use Solutions Program) grant from the Contra Costa Transportation Agency to fund the development of the Pittsburg/Bay Point BART Master Plan. These grant programs are intended to increase transit ridership in the Bay Area and encourage local efforts to design and implement TODs through the development of station area plans.

## 1.5 Relationship to Other Documents

### General Plan/ Pittsburg Municipal Code (PMC)

The City of Pittsburg General Plan was adopted in 2001 and substantially updated over the years, with the latest update approved in July 2010. The General Plan is the City's overall guide for the use of the City's resources, expresses the development goals of the community, and is the foundation upon which all land use decisions are made. The Master Plan is



used as a tool for detailed implementation of the General Plan as it relates to the project area.

According to the Pittsburg General Plan, the whole of the Master Plan area is mixed use land use designation. The project site is zoned Mixed Use District. Zoning text amendments necessary to implement the plan will include creation of one or more mixed use sub-districts within the PMC.

## **Regulation and Development Review (RDR)**

Many Master Plan policies are implemented through regulations adopted by the City based on the city's "police power" to protect the public health, safety, and welfare. The City shall adopt an ordinance to put in place a development review process that provides for City review of individual project proposals and authorizes the City to approve, deny, or condition projects based on their consistency with this Master Plan. This Master Plan contains a framework for infrastructure improvements necessary to develop BART-owned property around the existing Pittsburg/Bay Point BART Station. Future development shall comply with the allowable uses, development standards and performance standards described within this Master Plan document.

## **Pittsburg/Bay Point BART Station Area Specific Plan**

In June 2002, the Contra Costa County Board of Supervisors adopted the Pittsburg/Bay Point BART Station Area Specific Plan (the Specific Plan), which included parts of Pittsburg and the Bay Point neighborhood in the project area. The Specific Plan was designed to guide development in an area of roughly 295 acres in the vicinity of the BART station.

The Master Plan is generally congruous with Area 1 of the Specific Plan, described by the Specific Plan as development of residential and commercial mixed use, including multi-family residential, parks, and other limited recreational uses. The Specific Plan prescribed up to 1,790 units in Area 1 along with 125,000 square feet of commercial development and at least one parking garage.

While Contra Costa County adopted the Pittsburg/ Bay Point BART Station Area Specific Plan, the City of Pittsburg has not. No entitlements have been granted by the City of Pittsburg according to the Specific Plan. The Specific Plan concerns an area much greater in size than the Master Plan (approximately six times the size), including significant portions that lie outside the City of Pittsburg. While the Master Plan is a separate document from the Specific Plan, it is important to note that the proposed Master Plan is generally consistent with the intent of the Specific Plan for the same property.

## **Railroad Avenue Specific Plan & eBART**

The Railroad Avenue Specific Plan was adopted in November 2009. It is a plan for new development around the proposed eBART station at the intersection of Railroad Avenue and State Route 4. It establishes a transit-oriented community with a range of housing options, neighborhood-serving retail, employment opportunities, and public amenities. The Pittsburg/Bay Point BART Master Plan project area is currently connected to this project by the local Tri-Delta Transit express bus service.

## 1.6 Project Goals

The Pittsburg/Bay Point BART Station presents a unique opportunity to develop an intensification of uses within walking distance to this major transit hub. The Pittsburg/Bay Point BART Master Plan is a transit-oriented development with a mix of medium- to high-density residential, commercial, flex space, and active public spaces with clear and safe access to adjacent existing residential neighborhoods and commercial areas. Specific project goals are to:

- 1) Establish the BART station area as a **regional focal point**.
- 2) **Reduce greenhouse gas emissions and automobile trips** by promoting sustainable development characterized by a mix of uses and a circulation system that prioritizes pedestrians, bicyclists, and transit riders over single-occupancy cars.
- 3) **Increase transit ridership** by developing a multimodal transit hub.
- 4) **Improve security** on the BART site and in the surrounding community by increasing the eyes on the street through increased density and by implementing crime prevention through environmental design principles and improved access and connectivity.
- 5) **Foster healthy lifestyles** by supporting walking and bicycling and improving pedestrian and bicycle linkages to/from the BART station.
- 6) **Support economic development** by facilitating access to existing commercial development and by providing commercial and retail development to support BART patrons, new residents of the TOD, and residents of the surrounding neighborhoods.
- 7) **Maintain flexibility in the plan** by creating a “flex space” land use designation that can be used as future commercial, office, or residential uses depending on future market conditions and demand.
- 8) **Improve employment opportunities for local residents** by increasing commercial development and supporting and linking to existing commercial uses around the station.
- 9) **Support a range of housing types** to support the diverse needs of the community and maximize housing opportunities for all income levels, age groups, and abilities.
- 10) **Create** attractive, usable, and inviting **public spaces**.
- 11) **Build a sense of community and of place** through good architecture and design of public and private spaces.

## 1.7 Document Organization

There are eight chapters that comprise the Master Plan, as outlined below.

**Chapter 1: Introduction** provides the framework for the Master Plan, including the purpose, project goals, and content of the document.

**Chapter 2: The Process** describes the planning process and public outreach strategy.

**Chapter 3: Existing Conditions** describes the project location, regional context, market conditions, circulation patterns, parking needs, and key opportunities and constraints of the project area.

**Chapter 4: Land Use Plan** outlines the land use designations, allowed uses, prescribed densities, and development standards.

**Chapter 5: Development Standards & Design Guidelines** prescribes design principles to guide the growth of the project area, including building typologies, heights, setbacks, and architectural details.

**Chapter 6: Circulation Plan** describes pedestrian, bicycle, transit, and vehicular access, circulation, and parking. Travel Demand Management and Parking Demand Management strategies are addressed in this chapter.

**Chapter 7: Pedestrian-Friendly Streetscape Plan** sets forth pedestrian-oriented public space and street design standards, recommended street furnishings, and traffic calming strategies.

**Chapter 8: Implementation Plan** identifies the phasing strategy, financing strategy, implementation strategy, and plan administration. This chapter identifies the public infrastructure needed to serve the Master Plan area and proposes financing strategies to fund the necessary improvements. The implementation strategy details critical actions necessary to complete the Master Plan project, and identifies the timeline, potential funding sources, and responsible party for each action.





# CHAPTER 2. THE PROCESS





2. THE PROCESS

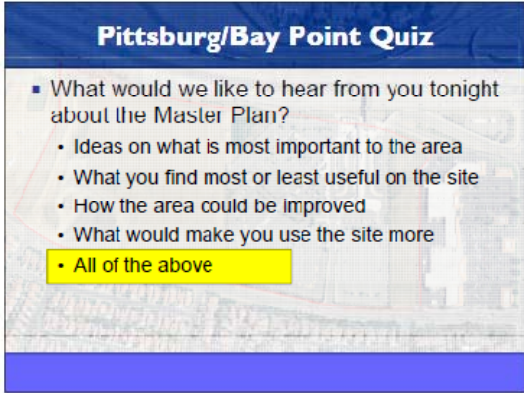
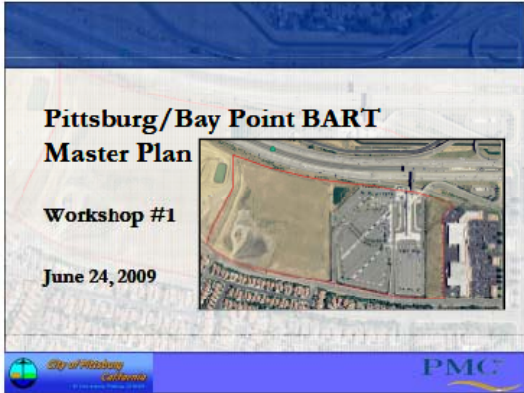
This chapter is organized into the following sections:

- 2.1 Phase 1: Establish the Foundation for the Project
- 2.2 Phase 2: Identify the Preferred Direction
- 2.3 Phase 3: Prepare the Master Plan

The master planning effort was a two-year process with extensive public involvement. The process was organized into three phases as described below.

2.1 Phase I: Establish the Foundation for the Project

During Phase 1, the project team analyzed the physical context, market conditions, and traffic and parking conditions. An initial public workshop was conducted to introduce the project and findings from the background studies to the community and invite public comment on how the community would like to see the site developed. About 70 members of the public attended the workshop, with representation from the Pittsburg City Council, the Pittsburg Planning Commission, and the Contra Costa County Planning Department. The project team presented existing conditions analysis, and members of the audience provided extensive comments on the site and surrounding area.



MASTER PLAN

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## 2.2 Phase 2: Identify the Preferred Direction

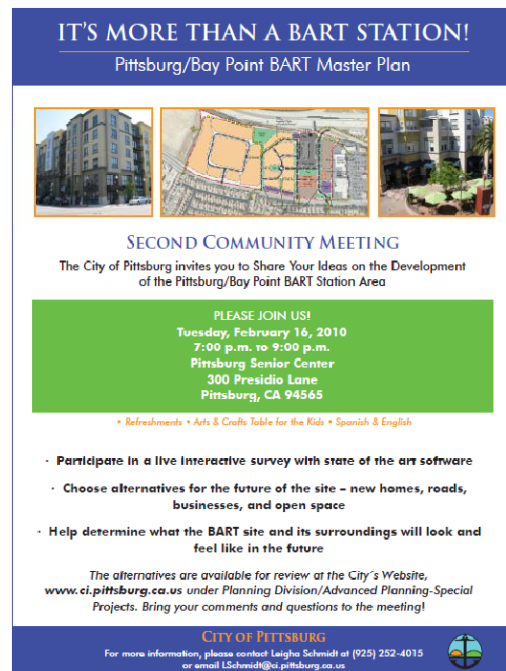
The project team synthesized the opportunities identified in the existing conditions analysis with the public comments to develop three land use and circulation plan alternatives and presented these options at a second public workshop. During the community meeting, attendees participated in a live polling survey using state-of-the-art software and participant response devices to determine which alternative, or aspects of each alternative, best reflect the needs and desires of the surrounding community.



A preferred land use and circulation plan was developed that incorporated elements from each of the three alternatives and integrated public comments and direction received from landowners. The preferred land use and circulation plan was presented at three public work-study sessions, including the Bay Point Municipal Advisory Committee (MAC), Pittsburg City Council, and Pittsburg Planning Commission, to review and refine the plan. Please see **Figure 4.1** for the preferred land use and circulation plan.

## 2.3 Phase 3: Prepare the Master Plan

With the land use and circulation plan finalized, the team moved forward with developing the various components of the Master Plan. This final stage of the planning process synthesized all previous analysis and input to develop text and images for the circulation plan, streetscape plan, design guidelines and standards, infrastructure plan, financing strategy, and phasing and implementation plan. The draft Master Plan was presented to the community for input and finally to the Planning Commission and City Council for adoption.



**IT'S MORE THAN A BART STATION!**  
Pittsburg/Bay Point BART Master Plan

**SECOND COMMUNITY MEETING**  
The City of Pittsburg invites you to Share Your Ideas on the Development of the Pittsburg/Bay Point BART Station Area

PLEASE JOIN US!  
Tuesday, February 16, 2010  
7:00 p.m. to 9:00 p.m.  
Pittsburg Senior Center  
300 Presidio Lane  
Pittsburg, CA 94565

\* Refreshments • Arts & Crafts Table for the Kids • Spanish & English

- Participate in a live interactive survey with state of the art software
- Choose alternatives for the future of the site - new homes, roads, businesses, and open space
- Help determine what the BART site and its surroundings will look and feel like in the future


The alternatives are available for review at the City's Website, [www.ci.pittsburg.ca.us](http://www.ci.pittsburg.ca.us) under Planning Division/Advanced Planning-Special Projects. Bring your comments and questions to the meeting!

**CITY OF PITTSBURG**  
For more information, please contact Leigha Schmidt at (925) 252-4015 or email [LSchmidt@ci.pittsburg.ca.us](mailto:LSchmidt@ci.pittsburg.ca.us)





CHAPTER 3.  
EXISTING CONDITIONS &  
OPPORTUNITIES





## 3. EXISTING CONDITIONS & OPPORTUNITIES

This chapter is organized into the following sections:

- 3.1 Location
- 3.2 Property Ownership
- 3.3 Market Conditions
- 3.4 Circulation & Parking Conditions
- 3.5 Opportunities & Constraints

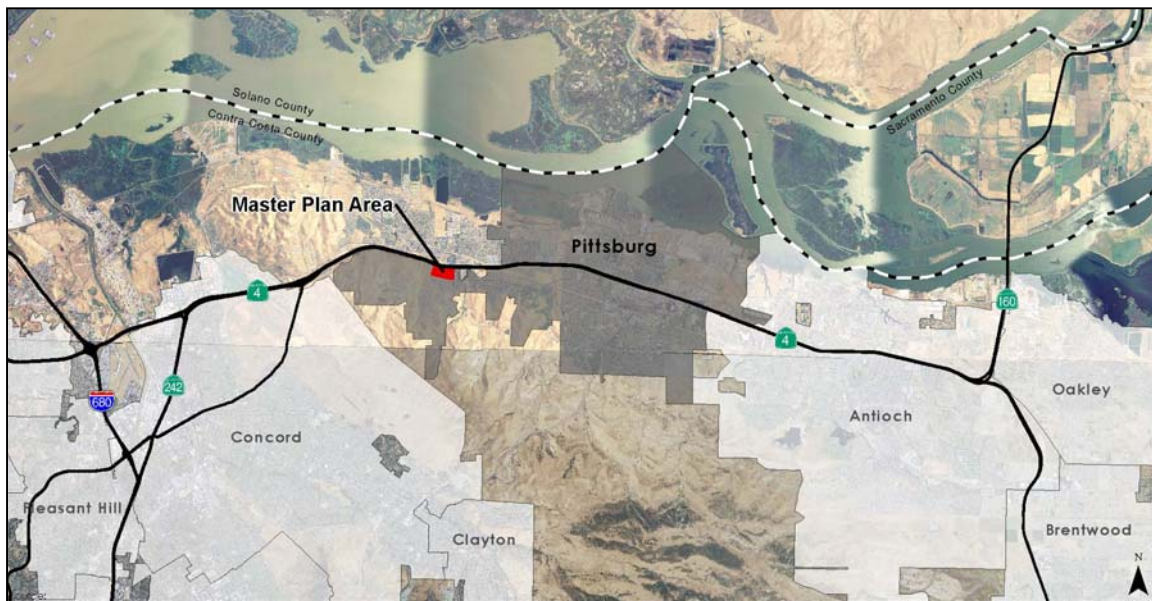
### 3.1 Location

The City of Pittsburg is located on the outskirts of the San Francisco Bay Area region in eastern Contra Costa County. Pittsburg is approximately 40 miles northeast of San Francisco and 72 miles southwest of Sacramento. Pittsburg is located between Interstate 680 (I-680) to the west and Interstate 5 to the east and is

primarily served by State Route 4, which directly borders the Master Plan area on the north. **See Figure 3.1 Location Map.**

The proposed project is located in the western portion of the City of Pittsburg, southwest of the intersection of State Route (SR) 4 and Bailey Road. The approximately 50.6-acre Master Plan area is adjacent to the Pittsburg/ Bay Point BART Station, which is currently the eastern terminus station on the BART line that runs from San Francisco International Airport. The project area is bounded by SR 4 to the north, the Oak Hills shopping center to the east, West Leland Road to the south, and the Alves Ranch project area to the west. The city boundary is located along SR 4, just north of the Master Plan area. The area north of SR 4 lies within unincorporated Contra Costa County in the community of Bay Point. **See Figure 3.2 Project Area Map.**




**Figure 3.1 – Location Map**

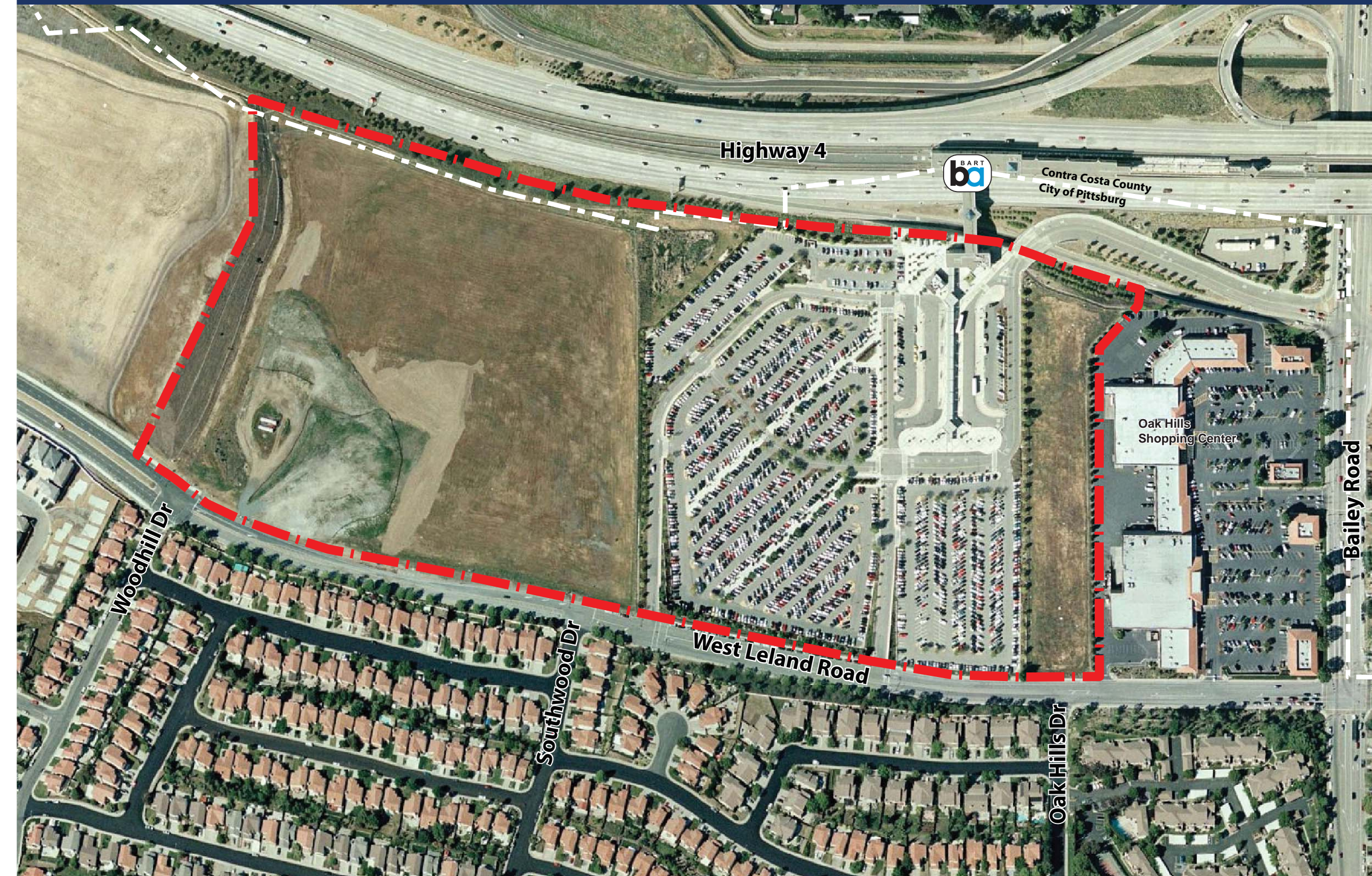


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FIGURE 3.2  
PROJECT AREA

legend

-  Pittsburg/Bay Point BART Station
-  Project Area
-  City Limits (shown in white on the map)





## 3.2 Property Ownership

The Master Plan area is currently owned by two entities: BART WCHB. WCHB owns the western half of the project area, comprising approximately 23.4 acres (APN 097-160-049). BART owns the remainder of the Master Plan area with approximately 27.2 acres, (APNs 097-160-041, -044, and -045.)<sup>1</sup> Please see **Figure 3.3 – Property Ownership Map** below and **Figure 3.4 – Opportunities and Constraints Diagram** at the end of this chapter for an illustration of the property ownership.

The policies, guidelines and standards identified in this Master Plan relate to the entire project area. However, infrastructure financing and phasing have not been addressed for the WCHB site. The developer will need to submit a planning application for development of their site that complies with the land use plan and applicable development standards, design guidelines, circulation standards, pedestrian friendly standards outlined in Chapters 4, 5, 6 and 7 of this Masterplan. Infrastructure financing for the WCHB site will be the full responsibility of the developer.

**Figure 3.3 – Property Ownership Map**

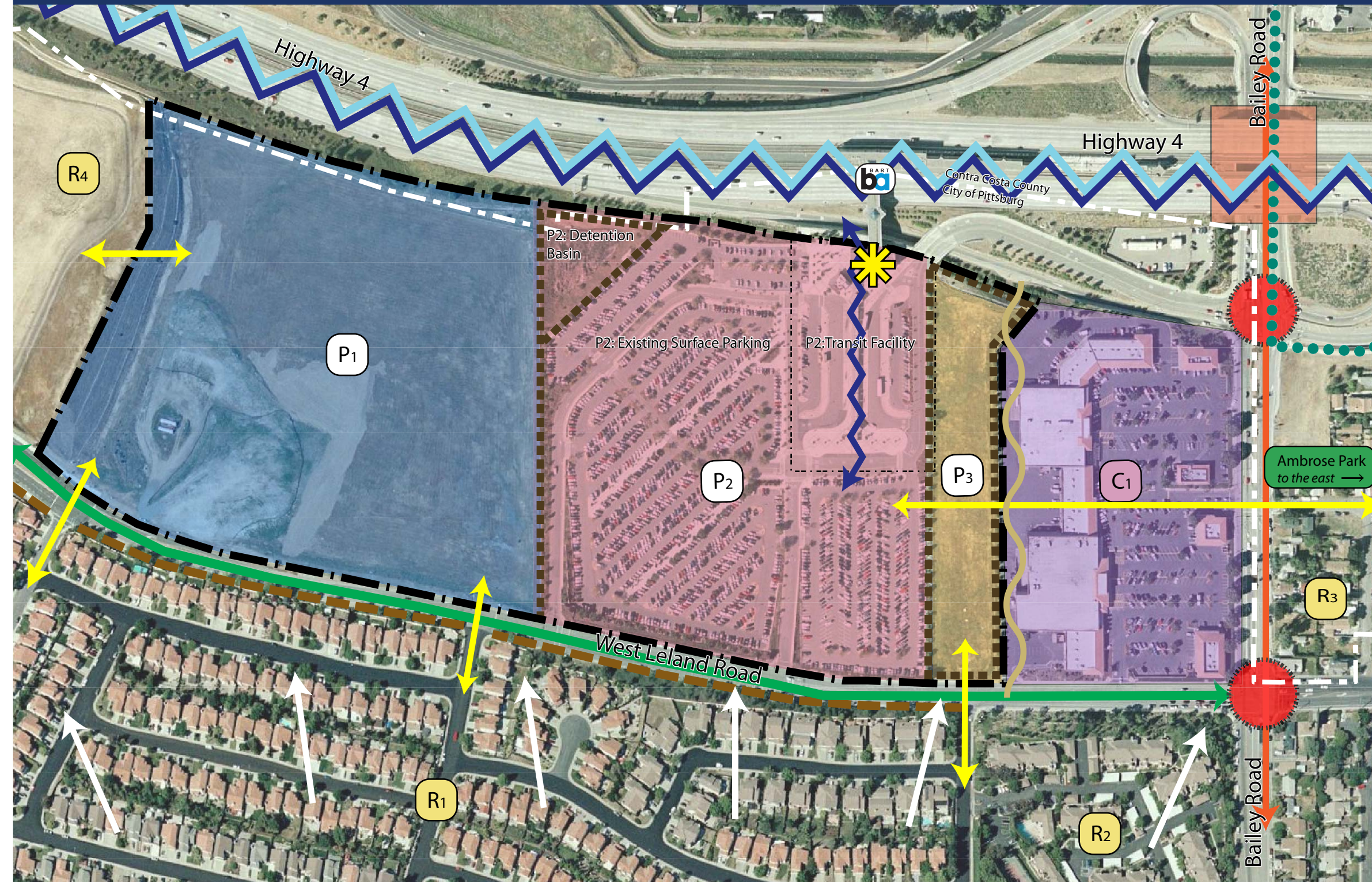


<sup>1</sup> A portion of APN 097-160-041 lies outside the Master Plan area. It is the northern 2.5 acres (approximate) containing the approach and exit ramps for the existing Bay Area Rapid Transit (BART) station. The approach and exit ramps are not a part of the project and would not be modified by the proposed Master Plan.

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FIGURE 3.4  
OPPORTUNITIES & CONSTRAINTS



- Legend**
- BART Station Access
  - Boundaries**
    - City/County Line (shown in white)
    - Project Area
  - Properties**
    - Properties within the Project Area
      - P1: West Coast Home Builders (WCHB) Property: 23.5 acres
      - P2: Existing BART Station: 23.65 acres
      - P3: Vacant BART Land: 3.45 acres
    - Adjacent Commercial
      - C1: Oak Hills Shopping Center
    - Adjacent Residential Areas
      - R1: Oak Hills Single-Family Homes
      - R2: Oak Hills Apartments
      - R3: Existing Residential Neighborhood
      - R4: Alves Ranch (entitled)
  - Opportunities**
    - Critical Intersection
    - Pedestrian Overpass Improvements
    - Potential Connection
    - Views (shown as white arrows)
    - Bailey Road Street Improvements
    - Future Class II Bike Lane and West Leland Road Linear Park
    - Delta de Anza Trail
  - Constraints**
    - BART / Shopping Center Interface
    - Traffic Noise Impact
    - Air Pollution Impact
    - Fence
    - 8' Block Wall & Terraced Landscaping



## 3.3 Market Conditions

Strategic Economics conducted a market study to inform the development program, timing, and product types for the Master Plan. Unlike a traditional market study, the analysis focused exclusively on the potential for TOD at the Pittsburg/ Bay Point BART station based on the idea that the right mix of uses at any given station can promote ridership and because land in close proximity to BART stations is limited (and therefore other uses that do not promote ridership should be encouraged to locate elsewhere in the region).

Strategic Economics' research concludes that certain household types and economic sectors show a greater propensity to locate near transit. These households and employers are more likely to move to an area simply to be located near a transit station, though they would not otherwise locate in that particular neighborhood or district. While transit is certainly a driving force in this location decision, the broader mix of land use types and the high-quality pedestrian environments that are also typically associated with TOD also account for some of the market draw. Thus, a regional level market analysis was utilized because the transit system and TOD are amenities that attract demand from throughout the region. This approach to TOD market analysis frequently yields a higher estimate of potential future demand than conventional market analysis techniques because it assumes that the market for TOD is regional, rather than local.

### Principal Findings

The market analysis for residential, office, and retail uses at Pittsburg/ Bay Point reveals the following key conclusions (12 total):

- 1) Pittsburg's demographic characteristic , commute patterns, locational advantages, and market strengths support the development of transit-oriented neighborhoods.
- 2) Pittsburg has relatively higher numbers of low-income residents, compared to other East County cities. This population has a predisposition to live in higher-density TODs.
- 3) The Master Plan area is located in a sector of Pittsburg that has a strong market for new residential development.
- 4) Much of the new development in Pittsburg planned and completed in recent years has occurred in the area in close proximity to the Pittsburg/ Bay Point BART Station.
- 5) The housing foreclosure crisis and economic recession have significantly impacted the sales volume and prices of homes in Pittsburg and East County.
- 6) In the short term (up to five years), the market for attached condominiums and townhouses will be very limited in Pittsburg.
- 7) Development of higher-density multi-family housing in the short term at Pittsburg/ Bay Point will be challenged by feasibility factors, such as current economic climate.
- 8) The feasibility analysis suggests that buildings of two to three stories with surface parking are an appropriate product type for the Pittsburg/ Bay Point area in the short to medium term (maximum density of 48 units per acre). In the next five years, the market could be stronger for rental multi-family buildings. In the medium term (six to nine years), the market is expected to support the construction

of condominium and townhouse units in two- and three-story buildings with surface parking. In the long term (10 to 15 or more years), the market is anticipated to support the construction of higher-density housing types such as four-story buildings with podium or underground parking (density of 65 units per acre).

- 9) Pittsburg/ Bay Point is not likely to attract office development.
- 10) The limited short-term potential for office development that exists in Pittsburg will likely be met by the planned office building adjacent to City Hall and the expanding County Courthouse.
- 11) The Master Plan area has limited market support for new retail development under existing conditions.
- 12) New residential development in the Master Plan area would support approximately 15,000 square feet of new retail space. However, improved connections to the Oak Hills Shopping Center could increase demand.
- 13) Enhanced pedestrian connections to the Oak Hills Shopping Center would better serve new residents at the station area and strengthen the proposed development's appeal to prospective homebuyers and renters. Direct pedestrian access between the Master Plan area and the Shopping Center would also improve the performance of existing retail uses and could result in between \$500,000 and \$740,000 in additional sales for the Shopping Center. The additional sales captured could support upgrades and/or the introduction of new retailers, such as cafes, to capture the increased demand.

## 3.4 Circulation & Parking Conditions

Fehr & Peers conducted an existing conditions analysis on Circulation and Parking Conditions to inform the Master Plan.

The Pittsburg/ Bay Point BART station serves as an end-of-the-line station for eastern Contra Costa County. BART identifies the Pittsburg/ Bay Point Station as an "auto-dependent" station, which is a station that has high ridership with high levels of auto access and relatively lower non-auto mode shares with a large parking lot that fills to capacity early in the morning. However, transit access mode share at the station has been increasing since the station opened.

BART provides service at the station from 4:02 AM to 11:59 PM, with typical headways of 15 minutes. About 150 BART trains serve the station on a typical weekday. As of 2008, about 5,100 daily riders used the station; about 72 percent of the BART riders access the station using auto modes (48 percent drive alone, 16 percent drop-off, and 9 percent carpool), about 22 percent use transit, and about 6 percent walk or bicycle. The high auto access mode at the station can be attributed to the station's 2,000-space parking lot and the station's very large and suburban catchment area. In addition, there are few uses within walking distance of the station.

Future plans include extending service east to Antioch with eBART, which would utilize a different train technology than typical BART trains. To facilitate transfers between BART trains and future eBART trains, a new transfer platform is planned

approximately one-half mile east of the Pittsburg/ Bay Point BART Station.

Existing characteristics of various access modes are summarized below.

## Pedestrian Access

Pedestrian access to the Pittsburg/ Bay Point BART Station is currently restricted by physical barriers and fencing to three access points: two BART station access road intersections on West Leland Road and the Bailey Road/ SR 4 Eastbound Ramps intersection. Pedestrians from the Bay Point community typically access the station from Bailey Road, while pedestrians from Pittsburg typically access the station from West Leland Road. Designated paths or sidewalks direct pedestrians from the access points and parking lots to the station.

Most surrounding streets include sidewalks, but lack street plantings and pedestrian-level lighting. Most signalized intersections feature pedestrian amenities, such as crosswalks, pedestrian signal heads, and pedestrian push buttons. However, many intersections do not meet current standards for accessibility.



*Pedestrian Tunnel under SR 4*

Pedestrian access between the station and the neighborhoods north of SR 4 is very limited. Pedestrians walking on Bailey Road under SR 4 are exposed to high noise levels and dark conditions due to the enclosed setting through the freeway underpass. The pedestrian path on the west side of Bailey Road requires pedestrians to walk out of the direct travel route to a pedestrian tunnel under a high-speed freeway off-ramp. The tunnel is not visible from the roadway, lacks lighting, and is subject to flooding. Most pedestrians bypass the tunnel and walk across the freeway off-ramp. On the east side of Bailey Road under SR 4, pedestrians are sandwiched between a vertical retaining wall and high-speed auto lanes on a 5-foot-wide sidewalk.

The City of Pittsburg and Contra Costa County are currently planning pedestrian improvements along Bailey and West Leland roads.

## Transit Access

Transit providers serving the Pittsburg/ Bay Point BART Station include Tri Delta Transit, which offers local and express bus service in eastern Contra Costa County as well as paratransit services, and Rio Vista Delta Breeze Transit, which operates one route twice a week to the station. Buses access the station from either Bailey Road or West Leland Road. All buses use the intermodal area, which incorporates a covered pedestrian path with seating that affords BART patrons a direct connection between the station entrance and the bus stops without crossing any roadways.

The intermodal area is restricted to buses, with eight “sawtooth” bus bays and a paratransit stop at the northeast entrance. All bus stops are currently in use by the transit providers, and several stops serve multiple routes.

Tri Delta Transit is the primary bus service provider in eastern Contra Costa County. As of May 2009, Tri Delta Transit operates nine weekday and three weekend and holiday bus routes that directly serve the Pittsburg/ Bay Point BART Station. Tri Delta Transit estimates that about 1,900 passengers board or alight buses at the BART station, corresponding to about 20 percent of the systemwide ridership.



Intermodal Area

## Bicycle Access

Similar to pedestrian access, bicycle access to the BART station is currently restricted by physical barriers and fencing to three access points: the two BART station access roads on West Leland Road and the Bailey Road/ SR 4 Eastbound Ramps intersection.

The roadways surrounding the station do not provide continuous bicycle facilities. Bicycle facilities on West Leland Road in the station’s vicinity include bicycle lane

markings and signage. Bicycle facilities on Bailey Road consist of a shoulder stripe but lack bicycle lane markings or signage. Bicycle-related improvements are planned for both roadways.

The BART station currently provides 44 bicycle parking spaces, including 20 keyed lockers, which are for single use and require a long-term rental agreement with BART, and 12 racks that can accommodate two bicycles per rack.



*Bicycle Parking*

### **Auto Access**

Vehicular access to the station is provided from Bailey Road and West Leland Road. The station is accessible via SR 4 and West Leland Road to the east and west and via Bailey Road to the north and south.

Vehicular access to the Pittsburg/ Bay Point BART station currently consists of three driveways. Two signalized driveways (one inbound and one outbound) provide access to and from West Leland Road. Signalized access to Bailey Road is available via a two-way access road south of SR 4 at the Bailey Road/ SR 4 Eastbound Ramps intersection.

The station currently incorporates separate bus, passenger loading, and parking circulation. These components are connected with pedestrian paths and

vehicular circulation roadways. The site is delineated by two-lane vehicular circulation roadways into four parking lots and an intermodal center. The roadways are two-way, except on the south end of the site where the two north-south roadways allow one-way inbound/outbound access to and from West Leland Road. The east-west circulation roadway becomes the access roadway that connects to Bailey Road. All internal intersections are unsignalized and most incorporate painted crosswalks. Most of the internal intersections are controlled by all-way stops.

Two designated pick-up/ drop-off areas are located east and west of the intermodal center. Taxis are available in the passenger loading curb space on the west side of the intermodal center. During the evenings, the passenger loading area on the east side of the intermodal center is the busiest.

Based on data collected in April 2009, about 11,300 vehicles enter and exit the BART station on a typical weekday. Most automobiles use the Bailey Road driveway to enter and exit the station.



*Auto Access from West Leland Road*



Station parking lot

## Parking

About 2,000 spaces are available for general public use. About 1,560 spaces have no restrictions and can be used by BART patrons at any time. Approximately 220 parking spaces are designated as Daily Reserved, which are spaces reserved until 10:00 AM for patrons who purchase single-use or monthly reserved permits. An additional 90 spaces are reserved for carpools only. Other parking spaces include those for ADA accessible, Late Morning Reserved, station agents and BART personnel, motorcycles, bicycles, taxis, passenger loading, and buses.

Off-site parking is limited to roughly 85 on-street parking spaces on nearby streets and in other limited off-street facilities. A preferred residential parking permit program restricts parking on streets in the residential neighborhood south of West Leland Road.

## 3.5 Opportunities & Constraints

An analysis was prepared to summarize the opportunities and constraints associated with the potential redevelopment of the project area into a transit-oriented development. The key opportunities and constraints from this analysis are illustrated in **Figure 3.4** –

**Opportunities and Constraints Diagram** at the end of this chapter and described below.

## Transportation, Circulation & Access

- Opportunity: Improve circulation for pedestrians, bicycles, buses, and vehicles in the project area.
- Opportunity: Enhance pedestrian and bicycle facilities, such as pedestrian-level lighting, benches, trees, bike racks, bike lockers, and bus shelters.
- Opportunity: Improve connections from the BART station to the adjacent shopping center.
- Constraint: Conflicts between multiple transportation modes.
- Constraint: Lack of connections to shopping center and poor pedestrian environment.
- Constraint: WCHB is not considering a connection between the project site and the shopping center or a public connection between the BART property and the WCHB' property.

## Land Use & Economics

- Opportunity: Vacant land and surface parking lots offer minimal barriers to new development.
- Opportunity: Remove barriers around the site and introduce features and design elements to enhance security and access.
- Opportunity: Improve jobs/ housing balance, both locally and regionally.
- Opportunity: Proximity to the shopping center, existing residents, and high profile site visible from SR 4



make this site desirable for new development.

- Constraint: Existing BART surface parking lot is an impediment to redevelopment due to the high cost of replacement parking.
- Constraint: Dual property ownership may cause conflicts.
- Constraint: Shopping center faces away from BART site, limiting potential interface options.
- Constraint: Continued recession could limit new investment and availability of funds for infrastructure.

## Image & Identity

- Opportunity: Vacant land surrounding station is available for the creation of a new identity for this area. Possibility to create a landmark site with regional destination features.
- Opportunity: Capitalize on excellent sightlines and views from the site to the north.
- Constraint: Station and surroundings are not perceived as safe after dark.

## Environmental

- Opportunity: Existing detention basin at northwest corner of site can become an open space amenity with improvements such as pedestrian paths.
- Opportunity: Reduce greenhouse gas emissions by promoting alternatives to single-occupancy vehicle travel through proximity to transit, buses, bike paths, wide sidewalks, and engaging streetscapes.
- Constraint: Freeway noise and air quality will be difficult to mitigate

given the close proximity to the freeway.

- Constraint: Air quality on site is considered poor at different locations, resulting from cars/ buses idling and proximity to freeway.





# CHAPTER 4. LAND USE PLAN





## 4. LAND USE PLAN

The Land Use Plan is the blueprint for the development and use of land at the Pittsburg/Bay Point BART Station. This chapter introduces the appropriate land uses, development types, and corresponding densities for development within the project area. The station area will be a transit- and pedestrian-friendly hub within the city that supports sustainable principles through a compact development pattern. The Land Use Plan defines the character for the community and is directly linked to the transit-oriented principles of this Master Plan. The Land Use Plan is comprised of the text in this chapter and the Conceptual Land Plan illustrating the land use mix and distribution within the Plan Area.

This chapter is organized into the following sections:

- 4.1 Land Use Designations
- 4.2 Land Use Mix and Distribution
- 4.3 Preferred Land Uses
- 4.4 Development Types

### 4.1 Land Use Designations

The following table defines and describes each of the land use designations allowed within the Plan Area. The mix and distribution of these land use designations is shown on the Conceptual Land Plan (**Figure 4.1**).

**Table 4.1 – Land Use Designations**

Symbol	Land Use	Net Density & Intensity	Purpose and Characteristics
<b>MDR</b>	Medium Density Residential	20–49 du/acre 2-story minimum	<p>This land use designation provides for attached homes such as duets, townhomes, rowhouses, condominiums, brownstones, stacked flats, and apartment complexes.</p> <p>Nonresidential uses, especially those with a public component, are allowed as long as they enhance and support the residential character of the category. Ground-floor retail is permitted as indicated on <b>Figure 4.1</b>. Please see retail designation below for allowable uses.</p> <p>Allowable ground floor land uses in this land use designation shall be the same as those of the M (Mixed Use) District as specified in Title 18 of the Pittsburg Municipal Code (PMC) and shall be located in accordance with Figure 4.1, Conceptual Land Use Plan.</p>
<b>HDR</b>	High Density Residential	50–70 du/acre	<p>This designation permits attached residential housing at higher densities. This designation is intended for condominiums, stacked flats, and apartment complexes. Provision of new public and private open spaces is critical to this higher-density residential area. Full blocks should provide public open space opportunities such as plazas, in addition to private common amenities such as interior courtyards or rooftop gardens.</p> <p>Allowable land uses in this land use designation shall be the</p>

Symbol	Land Use	Net Density & Intensity	Purpose and Characteristics
			same as those of the RH (High Density) District as specified in Title 18 of the PMC.
<b>R</b>	Ground-Floor Retail	0.5–1.0 FAR	This designation provides for retail and service uses. Allowable land uses in this land use designation shall be the same as those of the M (Mixed Use) District as specified in Title 18 of the PMC.
<b>F</b>	Flex	1.0–2.0 FAR; 20–70 du/acre	This designation allows for a range of land uses in order for development to respond to future market conditions and demand. Commercial, multi-family residential and public/quasi-public uses are also permitted. Allowable land uses in this land use designation shall be the same as those of the M (Mixed Use) District as specified in Title 18 of the PMC. Additional temporary land uses related to BART replacement parking and replacement bus stop facilities are discussed in Chapter 8, sections 8.1, 8.2 and 8.3.
<b>G</b>	Parking Garage	N/A	BART public parking garage structures are permitted in this land use designation. Additional temporary land uses related to BART replacement parking and replacement bus stop facilities are discussed in Chapter 8, sections 8.1, 8.2 and 8.3.
<b>OS</b>	Parks & Open Space	N/A	The Open Space category is reserved for open space, plazas for public congregation, and both active and passive recreational activities. This designation includes lands for parks, trails, parkways, community gardens, detention basins, and urban plazas. Mobile food vendors are permitted in accordance with the limitations set forth in PMC chapter 18.08, Use Classifications.
<b>P</b>	Urban Plaza	N/A	This designation provides lands for urban plazas for public congregation and will be furnished with pedestrian amenities such as benches, lighting, kiosks, fountains, and/or public art. Mobile food vendors are permitted in accordance with the limitations set forth in PMC chapter 18.08, Use Classifications.

## 4.2 Land Use Mix and Distribution

The Land Use Plan transforms the existing project area to a compact development with a mix of residential, retail, and flex

spaces. The intent is to allow some flexibility in uses as the market dictates. The plan creates a regional hub designed to enhance activity around the BART Station. The existing BART Station parking

lot will be converted to a mix of housing, retail commercial, and flex spaces. The existing BART plaza and intermodal area will be transformed to a larger pedestrian plaza and design focal point of the project, with a pedestrian promenade flanked by retail/restaurant uses on the ground floor, multi-family residential above, informational and commercial kiosks, and bus shelters adjacent to the reoriented bus bays. Parking will be transitioned from existing surface parking to two garages as new uses are developed. The western portion of the Master Plan area will house medium-density residential buildings, with green space interspersed throughout. The eastern portion of the Master Plan area is a mix of medium- and high-density housing, multi-family residential, retail, and flex uses. The result is a distinct neighborhood character between the developments on the BART and West Coast Homebuilders (WCHB) site.

The mix of land uses within the Plan Area is shown on the Conceptual Land Plan (**Figure 4.1**).

Two **Parking Garages** are located on the eastern portion of the site: one is located at the entrance to the project site from Bailey Road and the other is located near the C street project area entrance. These garages provide for replacement BART user parking as surface parking is converted to higher uses. Parking to serve the residential, commercial, and flex spaces will be provided under or adjacent to new buildings, either as surface parking, podium parking, lower-level garages under other uses, or combined between buildings.

**Parks, Open Space, and Plazas** within the project area include a number of parks, parkways and plazas. A community park



is provided in the residential area at the prominent intersection of C Street and Main Street. Linear parkways connect West Leland Road to the community park, the BART Station and to the inner portions of the site. These parkways are intended to provide enhanced pedestrian and/or bike facilities and natural storm drainage. A pedestrian plaza is created adjacent to the entrance of the BART Station, providing a gathering place for those waiting for trains or pick-ups. It is activated by a small retail/flex space, which fronts the Station Plaza. A continuation of the Station Plaza is located across the street from the BART Station and is activated with ground floor retail and restaurants with outdoor dining. These two plazas are connected by a Crescent Park that demarcates a clear and attractive entrance to the BART station and at-grade kiss-n-ride “shared space” multi-modal streets where all modes of travel hold equal priority. A linear transit plaza is integrated with the bus stop waiting area and is lined with shops, kiosks, and pedestrian amenities, providing a pleasant environment to wait for the bus.

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FIGURE 4.1  
CONCEPTUAL LAND PLAN








legend

-  Pittsburg/Bay Point BART Station
-  BART Entrance

Boundaries




-  Project Area
-  BART Property

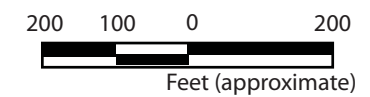
Land Uses

-  MDR - Medium Density Residential
-  HDR - High Density Residential
-  R - Ground Floor Retail
-  F - Flex\*
-  G - Parking Garage
-  OS - Parks & Open Space
-  P - Urban Plaza

\* Flex space can be residential, retail, office, public or what the market dictates when the development starts to build out

Circulation

-  Roadways
-  Major Ped/Bike Path
-  Minor Ped/Bike Path










## 4.3 Development Types

Table 4.3 provides a visual dictionary of building product type examples associated

with each of the land use designations listed in this chapter.

**Table 4.3 – Development Imagery**

Development Imagery	
MEDIUM DENSITY RESIDENTIAL (20 – 49 DU/ACRE)	
	
	
	

## Development Imagery

### HIGH DENSITY RESIDENTIAL (50 – 70 DU/ACRE)



Development Imagery

RETAIL (AS PART OF MIXED-USE DEVELOPMENT) (0.5-1.0 FAR)



# CHAPTER 4: LAND USE PLAN

## Development Imagery

FLEX (1.0–2.0 FAR OR 20–70 DU/ACRE)



MASTER PLAN

4

Development Imagery

PARKS & OPEN SPACE



MASTER PLAN

4

## Development Imagery

### URBAN PLAZA






Development Imagery


BART PARKING GARAGE







**CHAPTER 5.**  
**DEVELOPMENT STANDARDS &**  
**DESIGN GUIDELINES**





## 5. DEVELOPMENT STANDARDS & DESIGN GUIDELINES

This chapter is organized into the following sections:

- 5.1 Development Standards
- 5.2 Design Guidelines

### 5.1 Development Standards

Development standards establish rules for building form (e.g., height, setbacks, parking, and landscaping) for each of the land use designations introduced in Chapter 4. Standards are mandatory requirements that must be satisfied for all new development. The following development standards are intended to create a compact and walkable station area environment and to achieve the plan objectives described in Chapter 1.

Where there is a conflict between the development standards set forth in the Pittsburg Municipal Code, and the standards contained herein, the more restrictive standard shall govern.

Throughout this chapter, symbols are used to indicate whether a standard or guideline meets the following principles:



Green Design standard or guideline



ADA Accessibility standard or guideline



CPTED (Crime Prevention Through Environmental Design) standard or guideline

### Variance

A developer may apply for and receive a variance from a mandatory design standard if the Zoning Administrator or other deciding body finds that the applicable standard cannot be achieved due to special circumstances related to the site, and that the proposed design substantially complies with the intent and purpose of the Master Plan.

### Conditions of Approval

Prior to issuance of entitlements for development of BART-owned property, a comprehensive parking demand management and access study for all uses, including BART commuter parking, shall be completed by the developer. The analysis shall include use of the BART direct ridership model, the estimated impact of eBART service and parking, and the impact of parking pricing strategies (e.g., pricing of parking, unbundling of parking from land rent). A cost effectiveness analysis shall be conducted to compare the cost of providing parking with various strategies such as improved transit services, transit discounts, and pedestrian and bicycle amenities. Effective strategies and techniques to reduce parking demand on BART-owned properties shall be incorporated into future development proposals. Reductions in parking including reductions in size or number of the parking structures or surface parking areas shall not necessitate amendment of the Master Plan.

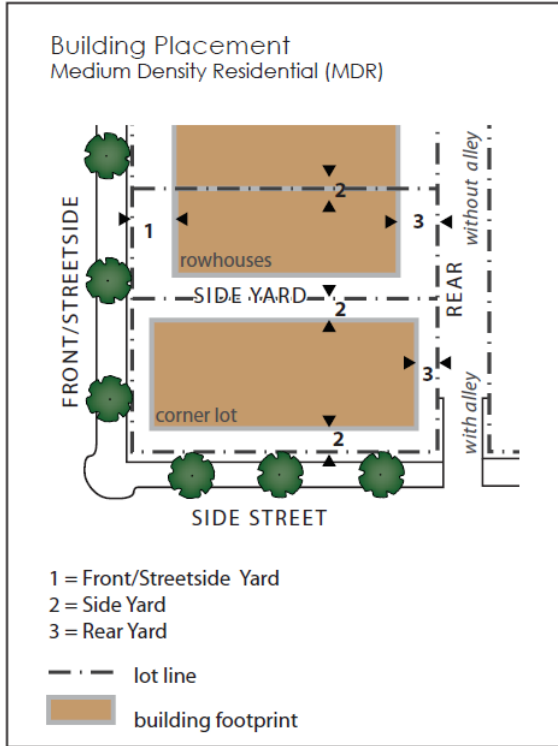
**Table 5.1 – Development Standards for Medium Density Residential (MDR)**

Development Feature	Development Standard
Building Height	2 Stories Minimum / 4 Stories Maximum
Front and Corner Side Yard (to back of sidewalk)	0' minimum; 15' maximum Step back upper stories of buildings 5' for every story over 3 stories in height to mask building height and reduce massing on the street level. (see <b>Figure 5.1</b> for building placement graphic)
Side Yard	0' for duets and attached rowhouses, otherwise up to 5' (see <b>Figure 5.1</b> )
Rear Yard	5' minimum with alley 15' minimum without alley (see <b>Figure 5.1</b> )
Architectural Encroachments	Balcony/Porch may encroach 6' maximum into front/rear yard only. Bay windows, chimneys, and eaves may encroach 2' maximum into all setback areas.
Allowed Frontage Types	Forecourt, Light Court, Dooryard/Terrace, Porch, Stoop (see <b>Table 5.8 – Frontage Type Imagery</b> )
Allowed Building Types	Duet, Small Stacked, Terraced, Multi-Family Faux House, Multi-Family Villa, Rowhouse, Courtyard Housing, Bungalow Court (see <b>Table 5.9 Building Type Imagery</b> )
Vehicular Parking	<p>a) Residential (BART site): 1.15 spaces/unit maximum*</p> <p>b) Residential (WCHB site): 2 spaces/unit maximum, plus one additional parking space per 1,000 square feet of on-site recreational space for guest parking.**</p> <p>c) Senior Housing: 0.5 spaces/unit maximum</p> <p>*An increase in the parking requirements is at the discretion of the Zoning Administrator or other deciding body, based on evidence supplied by the developer that the Master Plan maximums would not be adequate to meet parking demand and that TDM measures would not sufficiently reduce parking demand. Any increase in parking will be capped at a maximum of 2.0 spaces/unit on BART property.</p> <p>**The 2 spaces per unit, and one additional space per 1,000 square feet of on-site recreational space maximum standard, shall apply to vehicular surface parking. A higher ratio of parking spaces per unit may be developed on the WCHB site, provided that the additional parking spaces above the two spaces per unit standard are located within a parking structure, and that the footprint for the parking structure does not exceed the surface area that would be necessary to develop at the allowable standard of two parking spaces per unit.</p>
Bicycle Parking	<p>a) Multi-family dwelling with private garage for each unit: No spaces required</p> <p>b) Multi-family dwelling without private garage (including senior</p>

# CHAPTER 5: DEVELOPMENT STANDARDS & DESIGN GUIDELINES

Development Feature	Development Standard
	<p>housing): one covered, long term space/2 dwelling units minimum (BART site) and one covered, long term space/4 dwelling units minimum (WCHB site)</p> <p>Bicycle parking minimums may be modified subject to the discretion of the Zoning Administrator or other deciding body upon consideration of a specific development application.</p>
Parking & Access Standards	<p>To greatest extent practicable, all main building entries shall face the street. Private surface parking lots are not permitted in front of buildings. Locate on-site parking to the rear of the property or internal to the block and provide access to parking through alleys and driveways.</p>
Open Space & Landscaping Standards	<p>Development shall provide 10% of the total project area for landscaping and open space amenities such as courtyards or rooftop gardens.</p> <p>Provide a minimum of 1 tree per 6 parking spaces in surface parking lots.</p>
Additional Requirements	<p>Minimum requirements for laundry facilities, minimum private storage space per unit, and minimum private open space per unit shall be provided in accordance with PMC schedule 18.50.105, or other applicable regulation.</p> <p>Allow the minimum private open space per unit to be aggregated and satisfied by providing common open courtyards, accessible rooftop gardens or other common usable landscaping provided as part of the 10% development landscaping requirement.</p>

**Figure 5.1 – Building Placement for MDR**



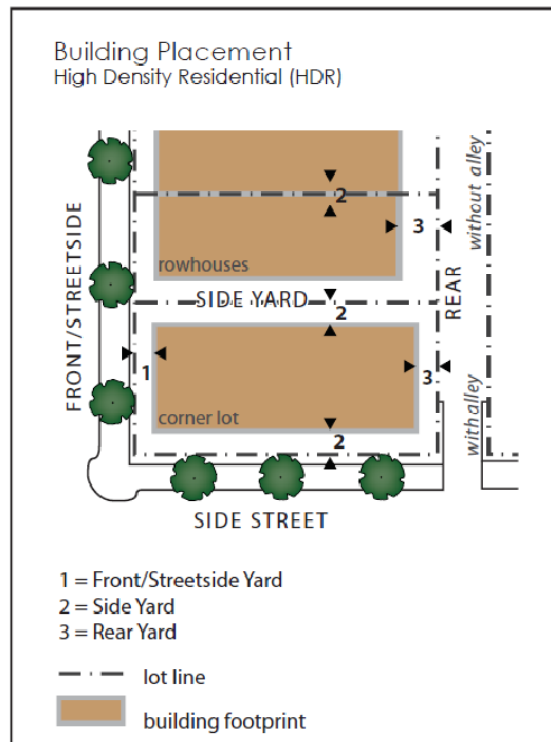


**Table 5.2 – Development Standards for High Density Residential (HDR)**



Development Feature	Development Standard
Building Height	3 Stories Minimum / 5 Stories Maximum
Front and Corner Side Yard (to back of sidewalks)	0' minimum; 15' maximum Step back upper stories of buildings 5' for every story over 3 stories in height to mask building height and reduce massing on the street level. (see <b>Figure 5.2 – Building Placement for HDR</b> )
Side Yard Setback	10' minimum (see <b>Figure 5.2</b> )
Rear Setback	5' minimum with alley 15' minimum without alley (see <b>Figure 5.2</b> )
Architectural Encroachments	Balconies/Porch may encroach 5' maximum into setback. Bay windows, chimneys, and eaves may encroach 2' maximum into all setback areas.
Allowed Frontage Types)	Forecourt, Light Court, Dooryard/Terrace, Porch, Stoop (see <b>Table 5.8 – Frontage Type Imagery</b> )
Allowed Building Types	Stacked, Terraced, Multi-Family Villa, Courtyard Housing (see <b>Table 5.9 Building Type Imagery</b> )
Vehicular Parking	a) Residential (BART site): 1.15 spaces/unit maximum* b) Senior Housing: 0.5 spaces/unit maximum *An increase in the parking requirements is at the discretion of the Zoning Administrator or other deciding body, based on evidence supplied by the developer that the Master Plan maximums would not be adequate to meet parking demand and that TDM measures would not sufficiently reduce parking demand. Any increase in parking will be capped at a maximum of 2.0 spaces/unit on BART property.
Bicycle Parking	a) Multi-family dwelling with private garage for each unit: No spaces required b) Multi-family dwelling without private garage (including senior housing): 1 covered, long term space/ 2 dwelling units minimum and 1 uncovered, short term space for every 5 dwelling units minimum for projects up to 50 units, for every 10 dwelling units for projects with 51 – 100 units, for every 15 dwelling units for projects over 100 units  Bicycle parking minimums may be modified subject to the discretion of the Zoning Administrator or other deciding body upon consideration of a specific development application.

Development Feature	Development Standard
Parking & Access Standards	All main building entries shall face the street. Private surface parking lots are not permitted in front of buildings. Locate on-site parking to the rear of the property or internal to the block and provide access to parking through alleys and driveways.
Open Space & Landscaping Standards	Development shall provide 10% of the total project area for landscaping and open space amenities such as patios, courtyards, or rooftop gardens. Provide a minimum of 1 tree per 6 parking spaces in surface parking lots.
Additional Requirements	Minimum requirements for laundry facilities, minimum private storage space per unit, and minimum private open space per unit shall be provided in accordance with PMC schedule 18.50.105, or other applicable regulation. Allow the minimum private open space per unit to be aggregated and satisfied by providing common open courtyards, accessible rooftop gardens or other common usable landscaping provided as part of the 10% development landscaping requirement.

**Figure 5.2 – Building Placement for HDR**



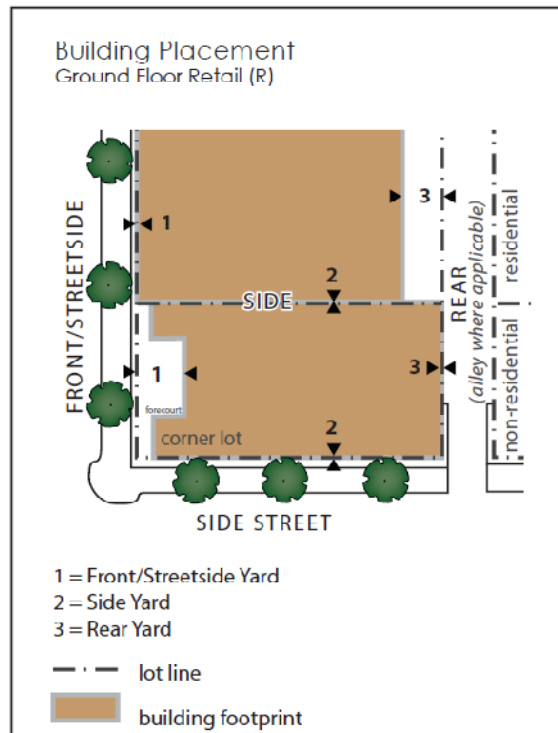
**Table 5.3 – Development Standards for Ground Floor Retail (R)**

Development Feature	Development Standard
Ceiling Height	20' min height for ground floor retail
Front or Corner Side Yard (to back of sidewalks)	0' minimum 10' maximum without forecourt 20' maximum with forecourt (see <b>Figure 5.3</b> )
Side Yard	0' minimum (see <b>Figure 5.3 – Building Placement Diagram</b> )
Rear Yard	No minimum unless rear or side property line abuts residential, where 10' minimum setback is required. (see <b>Figure 5.3</b> )
Architectural Encroachments	Bay windows and eaves may encroach 3' maximum into rear setback. Outdoor displays and Galleries may encroach into the public right-of-way.
Allowed Frontage Types	Arcade, Gallery, Shopfront, Forecourt, Light Court, Dooryard/Terrace Provide overhead protection such as awnings and arcades for commercial development fronting plazas. Integrate ledges, railings, and/or benches into building façades fronting plazas to provide protected sit and lean space for transit riders. (see <b>Table 5.8 – Frontage Type Imagery</b> )
Allowed Building Types	Podium, Full Block Liner, Half Block Liner, Infill, Stacked, Terraced (see <b>Table 5.9 Building Type Imagery</b> )
Ground-Floor Transparency	 Minimum of 70% transparency along street frontage.  Building façades and walls visible from the public right-of-way shall include articulation/variation a minimum of every 15 feet to avoid long expanses of blank walls. Where this is necessary due to interior layout of the building, the wall shall contain a mural, display, window box, or other decorative element to break up the massing.
Vehicular Parking	Commercial: 3 spaces/1,000 SF floor area maximum
Bicycle Parking	1 short-term space/2,500 SF floor area minimum 1 long-term space/12,000 SF floor area minimum



<sup>1</sup> The standards in this table only relate to the ground-floor retail as shown on the Land Use Map. Retail that is built as part of a development in an area designated Flex should comply with the standards outlined in **Table 5.4 – Development Standards for Flex**.

Development Feature	Development Standard
Parking & Access Standards	All main building entries shall face the street. Private surface parking lots are not permitted in front of buildings. Locate on-site parking to the rear of the property or internal to the block and provide access to parking through alleys and driveways.
Open Space & Landscaping Standards	No private landscaping or open space is required above what is required for MDR, HDR or Flex development..

**Figure 5.3 – Building Placement for Retail**



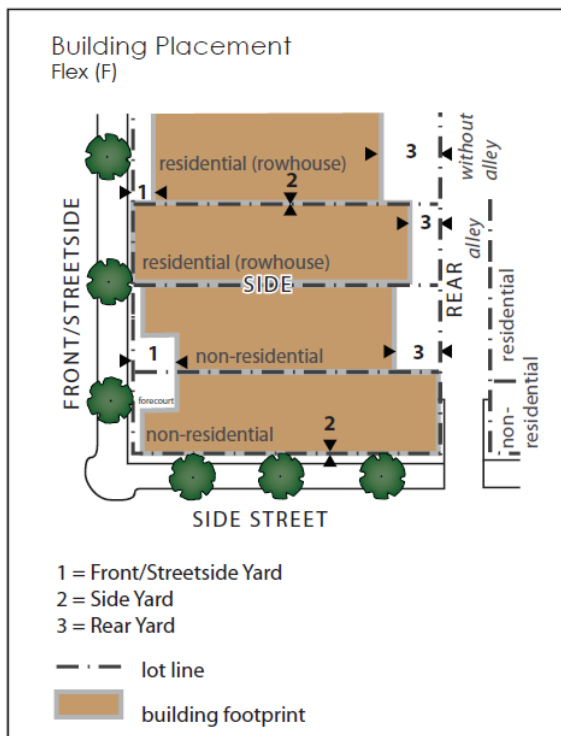
**Table 5.4 – Development Standards for Flex**

Development Feature	Development Standard
Building Height	2 Story Minimum / 5 Stories Maximum
Front Yard (to back of sidewalks)	0' minimum 15' maximum for residential 10' maximum for nonresidential without forecourt 20' maximum nonresidential with forecourt Step back upper stories of buildings 5' for every story over 3 stories in height to mask building height and reduce massing on the street level. (see <b>Figure 5.4 – Building Placement for Flex</b> )
Side Setback	Residential: The residential standard shall be in accordance with the standards for the MDR/HDR designation, as appropriate. Nonresidential: 0' minimum (see <b>Figure 5.4</b> )
Rear Setback	Residential: 5' minimum with alley; 15' minimum without alley Non-residential: No minimum unless abutting residential, where 10' minimum setback is required. (see <b>Figure 5.4</b> )
Architectural Encroachments	Bay window/ chimney/eave may encroach into rear yard in accordance with the standards for MDR/HDR, as appropriate.. Balconies/Porch may encroach into yard in accordance with the standards for MDR/HDR, as appropriate.. Gallery may encroach into the public right-of-way.
Allowed Frontage Types	Arcade, Gallery, Shopfront, Forecourt, Light Court, Dooryard/Terrace, Porch, Stoop Provide overhead protection such as awnings and arcades for commercial development fronting plazas. Integrate ledges, railings, and/or benches into building facades fronting plazas to provide protected sit and lean space for transit riders. (see <b>Table 5.8 – Frontage Type Imagery</b> )
Allowed Building Types	Small Lot Single Family, Duet, Podium, Full Block Liner, Half Block Liner, Infill, Stacked, Terraced, Rowhouse, Courtyard Housing (see <b>Table 5.9 Building Type Imagery</b> )
Ground-Floor Transparency	 Minimum of 70% transparency for ground-level retail and a minimum of 60% transparency for ground-level office uses.  Prohibit expanses of blank wall (i.e., uninterrupted by a window or primary entry) in excess of 15 feet along any portion of a building visible from the public right-of-way. Where this is necessary due to interior layout of the building, the wall shall contain a mural, display, window box, or other decorative element to break up the massing.
Vehicular Parking	a) Residential (BART site): 1.15 spaces/unit maximum* b) Senior Housing: 0.5 spaces/unit maximum c) Nonresidential: 3 spaces/1,000 SF net floor area maximum


# CHAPTER 5: DEVELOPMENT STANDARDS & DESIGN GUIDELINES

Development Feature	Development Standard
	<p>*An increase in the parking requirements is at the discretion of the Zoning Administrator or other deciding body, based on evidence supplied by the developer that the Master Plan maximums would not be adequate to meet parking demand and that TDM measures would not sufficiently reduce parking demand. Any increase in parking will be capped at a maximum of 2.0 spaces/unit on BART property.</p>
Bicycle Parking	<p>a) Multi-family dwelling with private garage for each unit: No spaces required</p> <p>b) Multi-family dwelling without private garage:                      1 covered, long term space/ 2 dwelling units minimum and                      1 uncovered, short term space for every 5 dwelling units minimum for projects up to 50 units, for every 10 dwelling units for projects with 51 – 100 units, for every 15 dwelling units for projects over 100 units</p> <p>c) Nonresidential:                      1 long-term space/10,000 SF floor area minimum                      1 short-term space/20,000 SF floor area minimum</p> <p>Bicycle parking minimums may be modified subject to the discretion of the Zoning Administrator or other deciding body upon consideration of a specific development application</p>
Access Standards	<p>All main building entries shall face the street. Private surface parking lots are not permitted in front of buildings. Locate on-site parking to the rear of the property or internal to the block and provide access to parking through alleys and driveways.</p>
Open Space & Landscaping Standards	<p>Development shall provide 10% of the total project area for landscaping and open space amenities such as plazas, patios, interior courtyards or rooftop gardens.</p> <p>Provide a minimum of 1 tree per 10 parking spaces in surface parking lots.</p>
Additional Requirements for Residential Portion	<p>Minimum requirements for laundry facilities, minimum private storage space per unit, and minimum private open space per unit shall be provided in accordance with PMC schedule 18.50.105, or other applicable regulation.</p> <p>Allow the minimum private open space per unit to be aggregated and satisfied by providing common open courtyards, accessible rooftop gardens or other common usable landscaping provided as part of the 10% development landscaping requirement.</p>


**Figure 5.4 – Building Placement for Flex**



**Table 5.5 – Development Standards for Parking Garages**


Development Feature	Development Standard
Access & Visibility Standards	<p>Design the pedestrian interface of the parking garages to minimize pedestrians crossing the main vehicular flow route.</p> <p>Ensure that parking garage driveways provide adequate sight distance. If adequate sight distance cannot be provided, install a warning system to alert pedestrians to potential vehicle flow.</p> <p>Garages shall be designed with open wall, windows and other design features to allow natural light and shall be well-lit during evening and night-time hours.</p>
Amenity Standards	<p>Provide overhead protection such as awnings for garage façades fronting plazas or bus stops.</p> <p>Integrate ledges, railings, and/or benches into building façades fronting plazas or bus stops to provide protected sit and lean space for transit riders.</p>
Ground-Floor Transparency	<p> Limit expanses of blank wall (i.e., uninterrupted by an opening or primary entry) in excess of 30 feet along any portion of a structure visible from the public right-of-way. Blank walls shall contain a mural, display, window box, or other decorative element to break up the massing.</p>
BART Parking	<p>BART parking garages shall be built to BART Facility Standards and BART specific carpool and bicycle parking shall be subject to the minimum requirements by the BART Customer Access Department.</p> <p>Bicycle parking for the BART station will be provided adjacent to the BART Plaza. See <b>Table 5.7 – Development Standards for Plaza</b> below.</p>

**Table 5.6 – Development Standards for Open Space**

Development Feature	Development Standard
Vehicular Parking	A minimum 1 ADA accessible parking space
Bicycle Parking	Provide a minimum of 1 bicycle space for every 5,000 SF open space.
Access Standards	<p> Open space should be at the same level as the sidewalk, or within a 3' grade change configured with code compliant stairs and a ramp or walk.</p>
Amenity Standards	<p>Provide one linear foot of sit or lean space in the form of benches, planters, or steps for every 100 square feet of open space.</p> <p>Provide amenities such as water features, and integral design features such as cobblestone or varied color pavers, public art, to enliven the space.</p>
Open Space & Landscaping Standards	<p>Provide shade trees to protect from sun and rain.</p> <p>Provide landscaped planters at seat height.</p>



**Table 5.7 – Development Standards for Plaza**











Development Feature	Development Standard
Vehicular Parking	A minimum of 1 ADA accessible parking space to be provided on-street adjacent to the Plaza.
Bicycle Parking	<ul style="list-style-type: none"> <li>a) Short-term bicycle racks: Provide a minimum of 30 spaces</li> <li>b) Long-term single-use keyed bicycle lockers: Provide a minimum of 20 spaces</li> <li>c) Bicycle parking shall be distributed throughout the Plaza areas</li> </ul>
Access Standards	 Plazas should be at the same level as the sidewalk, or within a 3' grade change configured with code compliant stairs and a ramp or walk
Amenity Standards	<p>Provide 1 linear foot of sit or lean space in the form of benches, leaning rails, planters, seat walls, steps, and arcade columns for every 10 square feet of plaza space.</p> <p>Plaza amenities such as planters, public art, and arcade walls should be designed at a suitable height and depth to allow for comfortable sitting and leaning.</p> <p>Vertical elements within the plaza should be located in a manner that provides clear sightlines in the direction of approaching buses, taxis, and/or passenger vehicles.</p> <p>(Please see <b>Chapter 7 Table 7.3</b> for Street Furnishing Standards, which also apply to plaza furnishings.)</p>
Open Space & Landscaping Standards	Plaza design should emphasize adequate areas of hardscape and seating to host a variety of activities and events. Provide limited landscaping areas such that plaza is suitable for events. Provide landscaped planters at seat height and shade trees in planter areas or tree grates such that use of the plaza space is maximized for pedestrian circulation and flexible use.

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**Frontage Types**

The following table provides a visual dictionary of the frontage types identified in the previous development standard tables. Definitions for each frontage type can be found in **Appendix A: Glossary**.

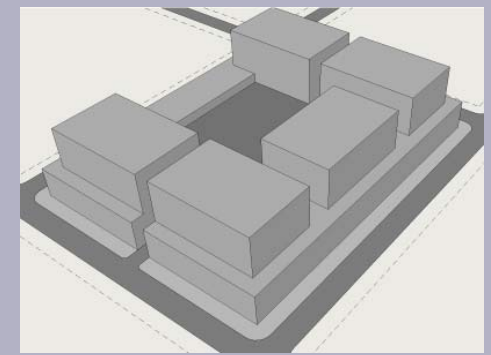
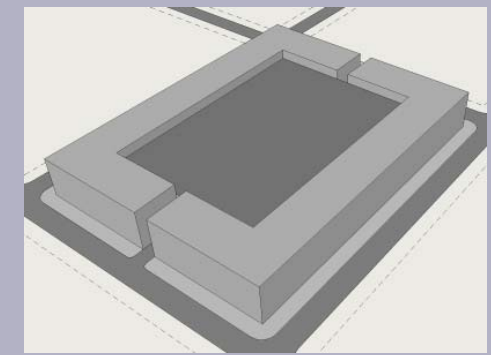
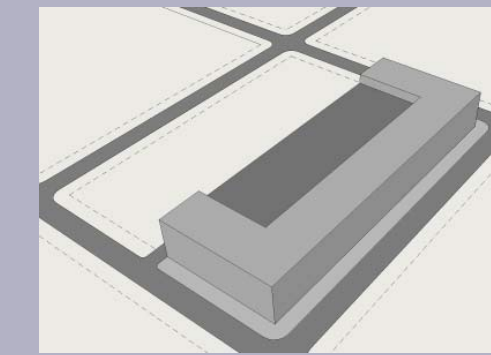
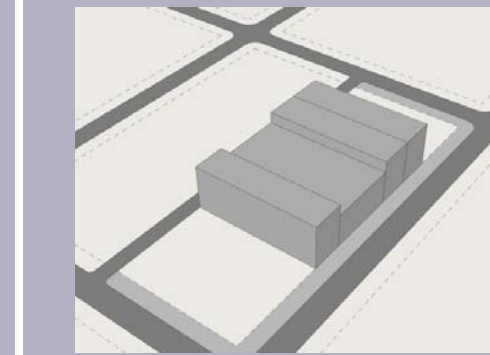

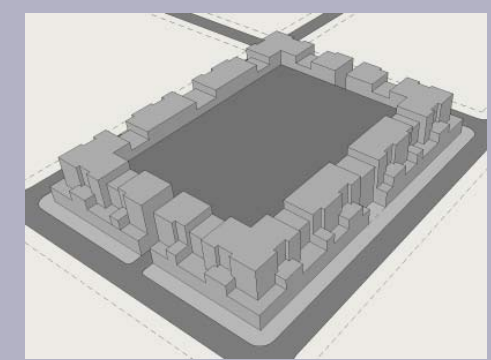

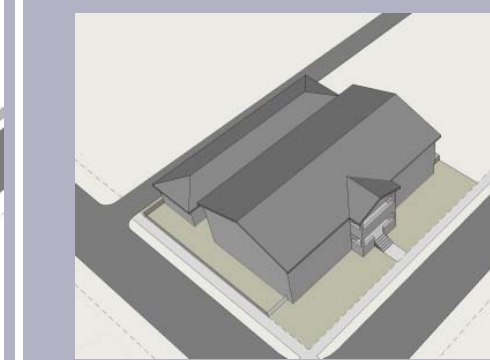
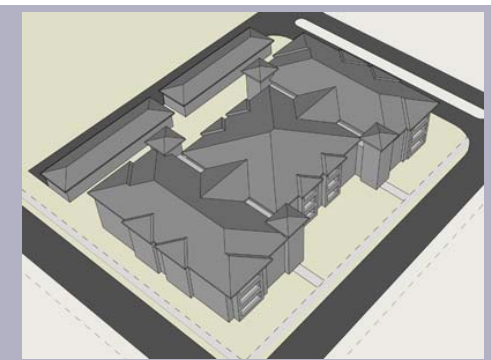



**Table 5.8 – Frontage Type Imagery**

Frontage Type Imagery			
ARCADE	GALLERY	SHOPFRONT	FORECOURT
			
<b>DOORYARD/TERRACE</b> (RESIDENTIAL EXAMPLE)	<b>DOORYARD/TERRACE</b> (COMMERCIAL EXAMPLE)	<b>LIGHT COURT</b> (RESIDENTIAL EXAMPLE)	<b>LIGHT COURT</b> (COMMERCIAL EXAMPLE)
			
PORCH	STOOP		
			

**Building Types**

The following table provides a visual glossary of the building types identified in the previous development standard tables. Definitions for each building type can be found in **Appendix A: Glossary**.





**Table 5.9 – Building Type Imagery**








Building Type Imagery			
PODIUM	FULL BLOCK LINER	HALF BLOCK LINER	INFILL
			
STACKED	TERRACED	DUET	MULTI-FAMILY FAUX HOUSE
			
MULTI-FAMILY VILLA	ROWHOUSE	COURTYARD HOUSING	SMALL LOT SINGLE FAMILY
			










## 5.2 Design Guidelines & Design Standards

This section provides design direction for private property within the Specific Plan Area and will guide new development to be consistent with the vision for the area. These guidelines describe and illustrate design that is appropriate for transforming the area into a transit oriented development, with consideration for sustainability.

**Table 5.10 – Design Guidelines**

Design Treatment	Design Guidelines	Graphic Example
<b>ARCHITECTURE GUIDELINES</b>		
<b>Articulated Façade &amp; Rooflines</b>	<p><b>Mandatory:</b></p> <ol style="list-style-type: none"> <li>1. Varied and well-articulated wall planes, rooflines, and building form shall be created to reduce the overall massing and scale of buildings while providing visually engaging designs.</li> <li>2. Long, flat, blank walls shall be avoided. Architectural details such as windows, awnings, recessed planes, display cases, murals, and trellises can be used to soften blank walls.</li> </ol>	
	<p><b>Recommended:</b></p> <ol style="list-style-type: none"> <li>1. The appearance of several well-articulated buildings rather than one large building is preferred to foster a more intimate, pedestrian-friendly scale.</li> </ol>	
<b>Use of Color</b>	<p><b>Mandatory:</b></p> <ol style="list-style-type: none"> <li>1. Complementary variations in color and materials shall be used to enhance the visual quality of building façades.</li> </ol>	
	<p><b>Recommended:</b></p> <ol style="list-style-type: none"> <li>1. Creative and appropriate use of color is encouraged and should be consistent with the overall architectural style or theme of the project.</li> <li>2. Colors and materials should be durable, low maintenance, and weather resistant.</li> <li>3. Use of light-colored materials is encouraged to reduce the heat island effect.</li> <li>4. Creative use color and the use of vibrant colors is encouraged to contribute to a vibrant atmosphere and energize the spaces between buildings.</li> </ol>	

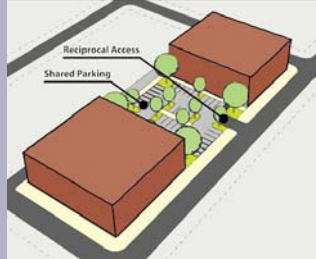





Design Treatment	Design Guidelines	Graphic Example
Windows	<p>Mandatory:</p> <ol style="list-style-type: none"> <li>Windows facing public areas shall be dressed with architectural details such as shutters, decorative crown molding, decorative window grille, balcony, canopy, and/or awning.</li> <li> In residential areas, a minimum of two windows (may include balconies and courtyards) shall be oriented toward public rights-of-way and other walkways, streets, or paths to encourage eyes on the space.</li> <li>A minimum of 70% transparency is required for storefronts along street frontage.</li> </ol>	
	<p>Recommended:</p> <ol style="list-style-type: none"> <li> Maximize windows facing public streets to heighten visibility of public spaces.</li> </ol>	
Enhanced Corner Treatments	<p>Recommended:</p> <ol style="list-style-type: none"> <li>Projects on the corners of prominent intersections should be treated as community gateways and should include special architectural features, such as a tower element or sign, which help to anchor the intersection. Corner buildings should have a strong tie to the front setback lines of each street.</li> </ol>	
Enhanced Building Entrances	<p>Mandatory:</p> <ol style="list-style-type: none"> <li>Main building entries shall be emphasized through building articulation and form and architectural details such as windows, arcades, changes in material, and landscaping.</li> </ol>	 
	<p>Recommended:</p> <ol style="list-style-type: none"> <li>Main building entrances should be designed to protect pedestrians from the elements. Entrances are greatly enhanced by canopies, awnings, recessed entries, covered courtyards, arcades, and other types of enclosures.</li> <li> Residential buildings should have main entrances from the street to facilitate pedestrian activity and increase security through more “eyes on the street.”</li> </ol>	








Design Treatment	Design Guidelines	Graphic Example
<b>Green Building Techniques</b>	<p><b>Mandatory:</b></p> <ol style="list-style-type: none"> <li>1.  To the greatest extent feasible, all projects should comply with the City’s Green Building Design Guidelines (Section VI of the Development Review Design Guidelines) or any applicable City green/efficient building regulations which are in effect at the time of development</li> <li>2.  Comply with best management practices (BMPs) for construction that are in place at the time of development, including:                             <ul style="list-style-type: none"> <li>• All construction within the Master Plan area shall implement measures to reduce the emissions of Toxic Air Contaminant (TAC) pollutants generated by equipment during construction.</li> <li>• Implement BAAQMD-approved criteria air pollutant-reducing Basic Construction Mitigation Measures to the maximum extent feasible.</li> </ul> </li> </ol> <p><b>Recommended:</b></p> <ol style="list-style-type: none"> <li>1.  Project designs that incorporate renewable energy sources, such as integrated solar panels, are strongly encouraged.</li> <li>2.  Low-flow fixtures and energy-efficient lighting should be installed to the greatest extent feasible.</li> <li>3.  Light-colored materials, high-albedo roofs, green roofs, windows, external shading, and larger eaves are encouraged to naturally control heat gain and heat loss in buildings.</li> <li>3.  To the maximum extent feasible, exceed California minimum energy efficiency standards (Title 24, Part 6) by 15 percent or more.</li> <li>4.  Implement green construction/ demolition techniques to divert at least 50% of these wastes from landfill and incineration disposal through recycling and/or re-use.</li> </ol>	  

Design Treatment	Design Guidelines	Graphic Example
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Green Building Materials</b></p>	<p><b>Mandatory:</b></p> <ol style="list-style-type: none"> <li> To the greatest extent feasible, all projects should comply with the City's Green Building Design Guidelines (Section VI of the Development Review Design Guidelines) or any applicable City regulations on green building materials which are in effect at the time of development</li> </ol>	
	<p><b>Recommended:</b></p> <ol style="list-style-type: none"> <li> Projects should use local building materials (within 100 miles) for at least 10% of all building materials, as feasible.</li> <li> Green materials may include sustainably certified lumber, recycled content surfaces, locally sourced flooring, and low-VOC paint.</li> <li> Building materials should be evaluated and selected based on the following characteristics:                     <ul style="list-style-type: none"> <li>- Durability</li> <li>- Reparability</li> <li>- Toxicity</li> <li>- Recycled content</li> <li>- Locally sourced</li> <li>- Ability to be recycled or reused</li> </ul> </li> </ol>	
<b>SITE PLANNING GUIDELINES</b>		
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Building Siting &amp; Orientation</b></p>	<p><b>Mandatory:</b></p> <ol style="list-style-type: none"> <li> Orient buildings toward the street to enhance street frontage, safety, and social interaction.</li> <li> Arrange buildings to define, connect, and activate pedestrian paths, bicycle paths and public spaces.</li> </ol>	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Circulation</b></p>	<p><b>Recommended:</b></p> <ol style="list-style-type: none"> <li>Circulation systems should be clearly defined and designed to avoid conflicts between vehicular, bicycle, bus, and pedestrian traffic.</li> </ol>	















# CHAPTER 5: DEVELOPMENT STANDARDS & DESIGN GUIDELINES

Design Treatment	Design Guidelines	Graphic Example
<b>Access</b>	<p>Recommended:</p> <ol style="list-style-type: none"> <li>1. Pedestrian, bicyclist, public transit, and vehicular entrances should be clearly identified and easily accessible.</li> <li>2. Encourage reciprocal access between adjoining nonresidential developments to minimize curb cuts and enhance safety, convenience, and efficiency.</li> </ol>	 <p>The diagram illustrates two adjacent rectangular buildings. A central area between them is labeled 'Shared Parking'. Arrows point from each building towards this shared area, with the label 'Reciprocal Access' positioned above the arrows, indicating that both buildings have direct access to the shared parking space.</p>
<b>Surface Parking</b>	<p>Mandatory:</p> <ol style="list-style-type: none"> <li>1. Side or rear parking is required for all projects on BART property to reduce conflicts with pedestrians.</li> <li>2.  Parking areas shall be well connected to the street by well-lit pedestrian paths.</li> <li>3.  Lot designs shall provide safe, well-lit and convenient designated pedestrian walkways to give clear direction to pedestrians and alert drivers of their presence.</li> <li>4. Permanent large parking fields shall be avoided except in early phases of the project development prior to construction of parking garages. . Instead, site designs should incorporate small, connected parking lots with shared driveways.</li> </ol> <p>Recommended:</p> <ol style="list-style-type: none"> <li>1. Access to on-site parking should be provided by alleys or side streets.</li> </ol>	 <p>The top photograph shows a street-level view of a parking lot with several cars parked in front of a multi-story building with a 'Carriero' sign. The bottom photograph shows a covered pedestrian walkway with a pergola-like structure supported by columns, leading through a parking lot.</p>
<b>Structured Parking</b>	<p>Mandatory:</p> <ol style="list-style-type: none"> <li>1.  Locate pedestrian entries and stairwells adjacent to major public streets.</li> <li>2. Provide architectural details, such as openings, variation in material and/or color, and articulation, along parking structures that face a public street.</li> <li>3. Garages shall be designed with open wall, windows and other design features to allow natural light and shall be well-lit during evening and night-time hours.</li> </ol>	 <p>The photograph shows a multi-story building with a structured parking garage integrated into its facade. The garage has an open wall design with windows and architectural details, allowing natural light and visibility from the street.</p>



Design Treatment	Design Guidelines	Graphic Example
	<p>Recommended:</p> <ol style="list-style-type: none"> <li>1. Create openings within the façade to appear similar to well-proportioned windows.</li> <li>2. Design the pedestrian interface of parking garages to minimize pedestrians crossing main vehicular flow route.</li> <li>3. Ensure that parking garage driveways provide adequate sight distance, otherwise install a warning system to alert pedestrians of approaching vehicles.</li> <li>4.  Emphasize stair towers and entries as distinctive architectural elements with open (transparent) views to and from the structure.</li> <li>5. Integrate decorative railings, screens, awnings, arcades, and/or trellis elements along façades facing public streets and pedestrian paths to provide interest and comfort for pedestrians.</li> </ol>	
<p>Plazas</p>	<p>Mandatory:</p> <ol style="list-style-type: none"> <li>1. Plazas shall provide ample pedestrian furnishings, including seating, lighting, planters, and bicycle racks. (See Table 5.7 for plaza amenity standards)</li> <li>2. Total square feet of the Crescent Park plus the Plazas adjacent to the bus-only roadway and kiss-and-ride streets must be more than the total square feet of the curb-to-curb right-of-way devoted to the adjacent bus-only roadway and kiss-and-ride streets.</li> </ol>	
	<p>Recommended:</p> <ol style="list-style-type: none"> <li>1. To provide interest, plazas should incorporate a variety of materials, color, texture, and focal elements such as fountains or public art.</li> <li>2. Shade trees and shaded seating areas are strongly encouraged to provide protection.</li> <li>3.  Plazas should be located adjacent to sidewalks, pedestrian paths, retail, and outdoor dining areas to maximize visibility.</li> </ol>	
<p>Pedestrian Spaces (Courtyards &amp; Paths)</p>	<p>Mandatory:</p> <ol style="list-style-type: none"> <li>1.  Provide a network of convenient and safe pedestrian paths to connect areas within the project to building entrances, adjacent properties, transit stops, and public rights-of-way. Provide directness, continuity, street crossings, visual interest, shade, site furnishings, and safety for pedestrians within and entering the project.</li> </ol>	

# CHAPTER 5: DEVELOPMENT STANDARDS & DESIGN GUIDELINES




Design Treatment	Design Guidelines	Graphic Example
	<p>Recommended:</p> <ol style="list-style-type: none"> <li>Covered walkways, shaded patios, and courtyards are encouraged to contribute to a rich and comfortable pedestrian environment.</li> </ol>	
Service & Storage	<p>Mandatory:</p> <ol style="list-style-type: none"> <li>Loading and delivery shall be located at rear of development or along alley.</li> </ol>	
	<p>Recommended:</p> <ol style="list-style-type: none"> <li>Services and storage, including garbage collection, recycling, fire, and utilities, should be adequately planned and screened from public view, in accordance w/ PMC section 18.80.035.</li> <li>Screening materials and colors should be consistent with and complementary to building materials, colors, and finishes.</li> <li>Recycling/garbage enclosures should be designed as integral part of main structure</li> <li>Utilities and transformers shall be screened from view or placed underground.</li> </ol>	
Green Site Design	<p>Mandatory:</p> <ol style="list-style-type: none"> <li>  To the greatest extent feasible, all projects should comply with the City's Green Building Design Guidelines (Section VI of the Development Review Design Guidelines) or any applicable City green site design regulations which are in effect at the time of development.                 </li> </ol>	




Design Treatment	Design Guidelines	Graphic Example
	<p>Recommended:</p> <ol style="list-style-type: none"> <li>1.  Buildings should be oriented to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural vegetation, maximize natural ventilation and promote effective use of daylight. Building orientation shall also optimize opportunities for on-site solar generation where feasible.</li> <li>2.  Stormwater runoff should be detained and retained by maximizing the use of pervious surfaces, vegetated bioswales, and vegetative ground cover to the greatest extent practicable.</li> <li>3.  The use of recycled water for landscaping is encouraged.</li> <li>4.  Multiple developments are encouraged to share C.3 retention/treatment measures.</li> </ol>	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Sustainable Site Materials</b></p>	<p>Recommended:</p> <ol style="list-style-type: none"> <li>1.  Site materials should be selected based on the following characteristics, to the greatest extent practicable                             <ul style="list-style-type: none"> <li>– Durability</li> <li>– Reparability</li> <li>– Toxicity</li> <li>– Recycled content</li> <li>– Regionally sourced</li> <li>– Ability to be recycled or reused</li> </ul> </li> <li>2.  Sustainable site materials may include recycled content paving materials, permeable paving, low-VOC paint, and high-albedo surfaces and roofs.</li> </ol>	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Landscaping</b></p>	<p>Mandatory:</p> <ol style="list-style-type: none"> <li>1.  Landscaping shall be properly maintained and trimmed to maximize visibility.</li> <li>2. All developments are required to comply with the City's Landscaping, Irrigation and Hydroseeding Ordinance (PMC sections 18.84.300 et seq).</li> </ol>	


# CHAPTER 5: DEVELOPMENT STANDARDS & DESIGN GUIDELINES

Design Treatment	Design Guidelines	Graphic Example
	<p>Recommended:</p> <ol style="list-style-type: none"> <li>  Plants used for landscaping in the project area should be either native or drought tolerant to minimize water use and maintenance requirements.                 </li> </ol>	


## STOREFRONT & COMMERCIAL SIGN GUIDELINES

Storefronts	<p>Recommended:</p> <ol style="list-style-type: none"> <li>Storefront elements should be unified. These elements include signs, graphics, awnings, materials, lighting, and color.</li> <li>  Storefronts should contain a high percentage of glass to display goods and allow for natural surveillance.                 </li> <li>The use of recessed entries, awnings, and canopies is encouraged to protect pedestrians and add interest to storefronts.</li> <li>The design and placement of awnings, canopies, galleries, and arcades should correspond to the building's scale, proportion, and overall design.</li> </ol>	
Commercial Signs	<p>Mandatory:</p> <ol style="list-style-type: none"> <li>All signs shall comply with PMC title 19, Sign regulations.</li> <li>The use of pole signs, roof signs, plastic signs, and internally illuminated box signs is not permitted.</li> </ol>	

Design Treatment	Design Guidelines	Graphic Example
	<p>Recommended:</p> <ol style="list-style-type: none"> <li>1. Signs should complement the style and character of the building.</li> <li>2. Signs should be designed for pedestrians, bicyclists, and motorists.</li> <li>3. Signs should feature colors and materials that are compatible with the building façade.</li> <li>4. Signs should be scaled and proportioned to the façade.</li> <li>5. Signs should be professionally designed and fabricated.</li> <li>6. Sign materials may include metal, wood, concrete, tile, screen print on canvas awnings, or painted graphics on building surfaces.</li> <li>7. The use of hanging signs, projecting signs, window signs, wall signs, and awning signs is encouraged.</li> <li>8. The use of flashing, moving, or animated illumination is strongly discouraged.</li> <li>9. A-frame signs are permitted with approval of a Temporary Sign Permit from the Planning Division, provided that the signs are located on an internal street, and that the sign is located within 750 feet of the business.</li> </ol> <p>Public Signage and Wayfinding standards are addressed in Chapter 7 Section 7.7.</p>	<p>Signs complement the building character</p>  <p>Projecting Sign / Blade Sign</p>  <p>Awning Sign</p>  <p>Wall Sign</p>



# CHAPTER 6. CIRCULATION







## 6. CIRCULATION

### 6.1 Introduction

This chapter describes the circulation system for the Master Plan area. The circulation plan is in compliance with the City's existing street standards, and the standards located here are those that exceed or are unique from the City's adopted standards. The Master Plan circulation system is designed to serve all travel modes (walking, transit, bicycle, and automobile). The circulation system will serve developments in the Master Plan area, as well as the existing Pittsburg/Bay Point BART Station.

This chapter is organized into the following sections:

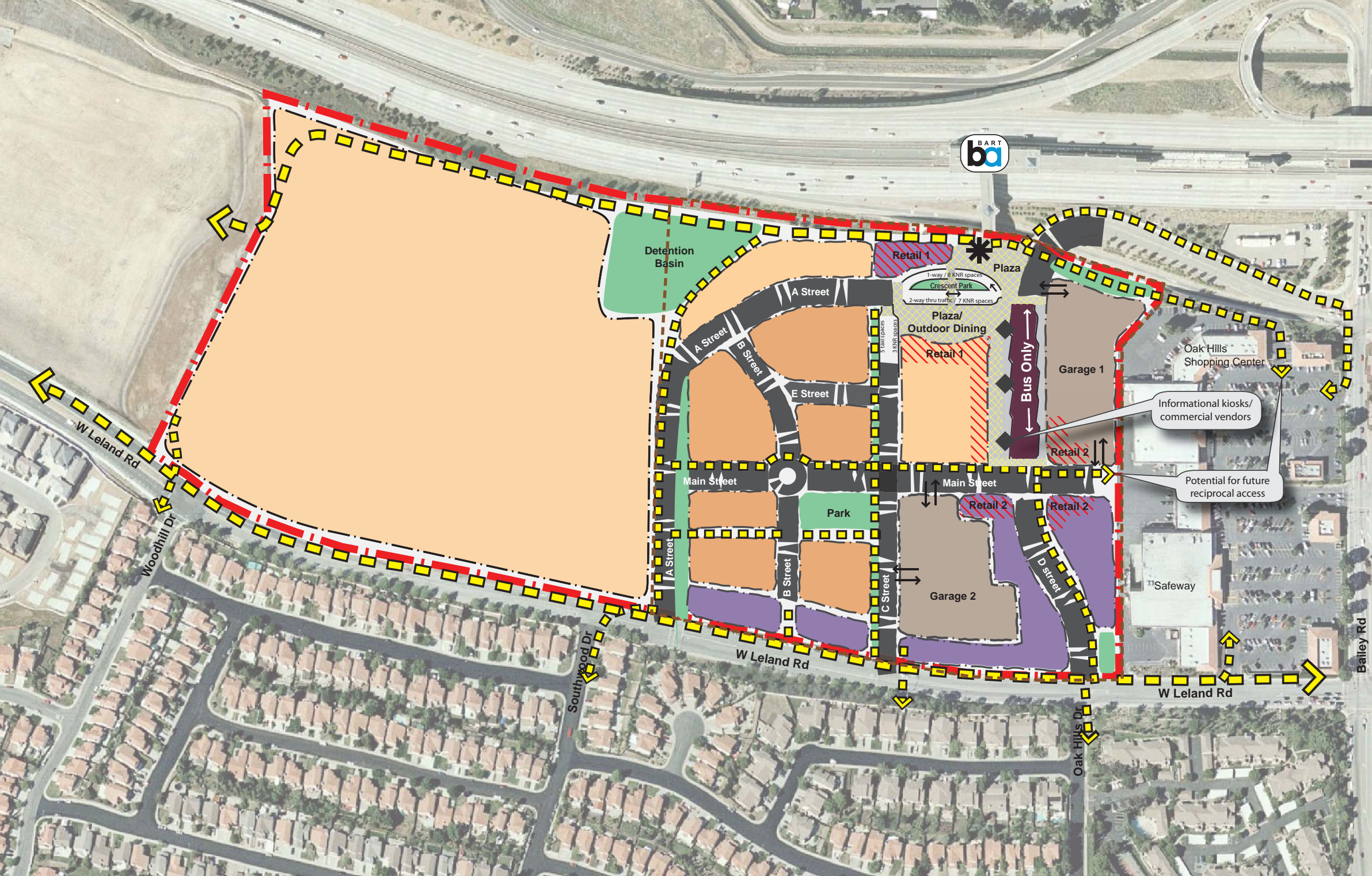
- 6.1 Introduction
- 6.2 Transportation and Circulation Goals and Objectives
- 6.3 Access and Circulation
- 6.4 Parking
- 6.5 Circulation Design Elements
- 6.6 Station Access Improvement Recommendations
- 6.7 Station Area Development Strategies

**Figure 6.1** shows the Conceptual Circulation Plan for the project area.



The Conceptual Circulation Plan reflects the recommendations from the Access/Accessibility Plan and complies with BART's Access Hierarchy framework, each described below.

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FIGURE 6.1  
CIRCULATION PLAN





legend

-  Pittsburg/Bay Point BART Station
-  BART Entrance








Circulation

-  Roadways
-  Major Pedestrian/Bike Path
-  Minor Pedestrian/Bike Path
-  Bus-Only Street

Boundaries

-  Core Project Area
-  BART Property

Land Uses

-  MDR - Medium Density Residential
-  HDR - High Density Residential
-  R - Ground Floor Retail
-  F - Flex\*
-  G - Parking Garage
-  OS - Parks & Open Space
-  P - Urban Plaza

\* Flex space can be residential, retail, office, public or what the market dictates when the development starts to build out

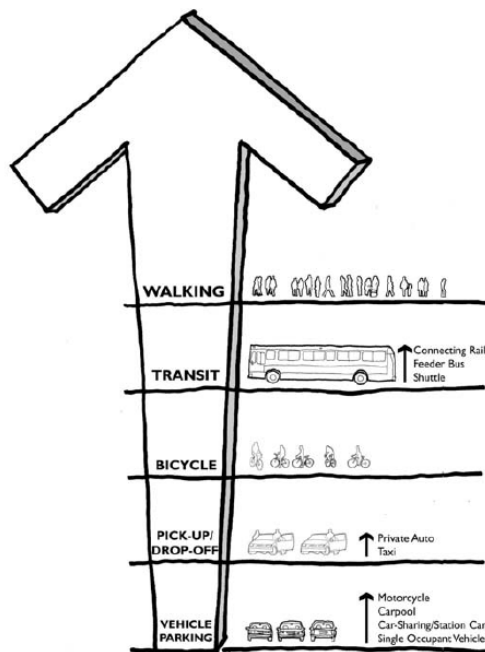




## Access Hierarchy

The BART Station Access Guidelines include an access hierarchy, a tool to help resolve competing demands for funding and physical space between different access modes. As illustrated in **Figure 6.2**, the hierarchy prioritizes walking, transit, and bicycle access modes for their current importance and especially for their projected role in enhancing multimodal access to the station area. The BART access hierarchy is used to resolve potential conflicts between various travel modes in the Master Plan area.

**Figure 6.2 – Access Hierarchy**



Source: BART Station Access Guidelines (2008)

## Access/Accessibility Plan

The Pittsburg/Bay Point BART Station Access/ Accessibility Plan was prepared in parallel to this Master Plan. The Access/Accessibility Plan addresses access for all travel modes with a focus on improving and encouraging alternatives to the drive-alone mode for the BART Station and the Master Plan area. In addition, the Access/Accessibility Plan also addresses accessibility issues to ensure that the BART Station and the Master Plan area are fully accessible to people with disabilities.

## 6.2 Transportation and Circulation Goals and Objectives

Access and circulation for the Master Plan area is organized based on the Complete Streets concept. Traditionally, street networks have been designed primarily to serve automobiles, with other travel modes accommodated as an afterthought. Complete Streets acknowledges that various users, including pedestrians, bicycles, buses, automobiles, and trucks, use the street network. Thus, the street network should be designed to accommodate all users safely and efficiently. Since the physical space available for streets can be limited and the different travel modes may conflict with each other, Complete Streets does not require that all streets fully accommodate all travel modes. Rather, the overall street network should provide for safe and convenient mobility of the various travel modes used to access and move within the Master Plan area.

The access and circulation goals of the Master Plan are:

- 1) Make the Master Plan area a walkable transit-oriented community accessible to all travel modes.
- 2) Preserve access to the existing Pittsburg/Bay Point BART Station and enhance access by non-automobile travel modes.

Based on current conditions and anticipated access needs associated with an activated, mixed-use development, the following objectives facilitate achieving the access and circulation goals stated above:

- 1) Promote land use types, density, and mix of uses that support an active pedestrian environment.
- 2) Provide quality pedestrian facilities and amenities to create an aesthetically pleasing environment that encourages walking.
- 3) Provide safe and efficient connections to the BART Station and the intermodal station for all travel modes.
- 4) Design public spaces and rights-of-way for universal access to meet or exceed Americans with Disabilities Act (ADA) guidelines.
- 5) Improve pedestrian and bicycle connections to surrounding neighborhoods.
- 6) Offer sufficient and secure bicycle parking.
- 7) Provide for efficient access between the BART Station and the bus-only area.

- 8) Minimize traffic congestion impact on bus travel times.
- 9) Provide for efficient but slow-speed automobile access and circulation within the Master Plan area.
- 10) Implement parking management strategies to efficiently use the available parking resources and reduce overall auto dependency.

## Street Classification

The street network within the BART Property can be classified into the following street types:

- Arterial Streets
- Collector streets
- Local streets
- Bus-only street
- Shared space

The first two street types are consistent with the City of Pittsburg's General Plan; however, the last two street types are unique to the Master Plan area.

Each street type is described in detail below. The streets within the WCHB site will be private.

### Arterial Streets

West Leland Road is the only arterial in the vicinity of the project area. While the Master Plan contains specific improvements to intersections along West Leland Road, it does not contain specific development standards for the roadway. Rather, the General Plan contains specific policies related to the roadway including construction of a linear multi-use pathway and parkway, and for the development of

a pedestrian oriented, mixed use village designed and oriented toward public spaces along West Leland Road (General Plan Policies 4-P-59 and 4-P-60, respectively). In addition, General Plan Policy 2-P-94 calls for construction of a landscaped multi-use path that accommodates bicyclists along West Leland Road from Pittsburg/Bay Point BART Station to San Marco Boulevard.

The intersections of A, C, and D streets along West Leland Road will be signalized. The intersections of A and C currently have traffic signals that will need modification, and a new traffic signal will be installed at D Street. The D Street/A Street/BART access road intersection may also need to be signalized. All other intersections within the Master Plan area will be stop-controlled.

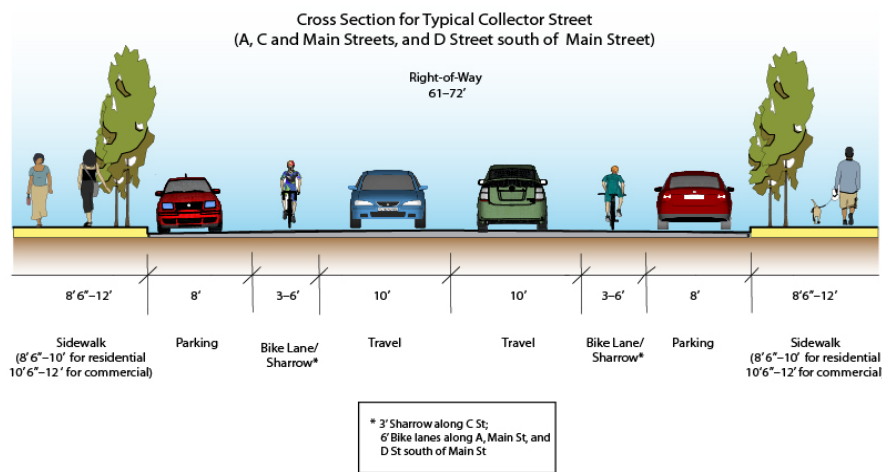
### Collector Streets

Collectors afford access to the Master Plan area and connect the Pittsburg/Bay Point BART Station with the regional roadway network. Collector streets on the WCHB site will be private and shall comply with the City's adopted street standards at the

time of plan adoption, if applicable. Collectors in the BART portion of the Master Plan area are A Street, C Street, Main Street, and D Street south of Main Street. Collector streets on the BART site provide the following:

- One automobile travel lane in each direction (additional turn lanes may be needed at signalized intersections on West Leland Road). Travel lanes will be 10 feet wide.
- Bicycle facilities on both sides of the street. A Street, Main Street, and D Street south of Main Street will incorporate 6-foot bicycle lanes. C Street includes 3-foot sharrows.
- 8-foot parking lanes on both sides of the street.
- Sidewalks on both sides of the street with planter strips separating them from the parking lane. Sidewalks are to be 8-feet 6-inch to 10 feet wide along collectors with residential frontage and 10-feet 6-inch to 12 feet wide along nonresidential uses.

**Figure 6.3 – Cross Section for Typical Collector Street**



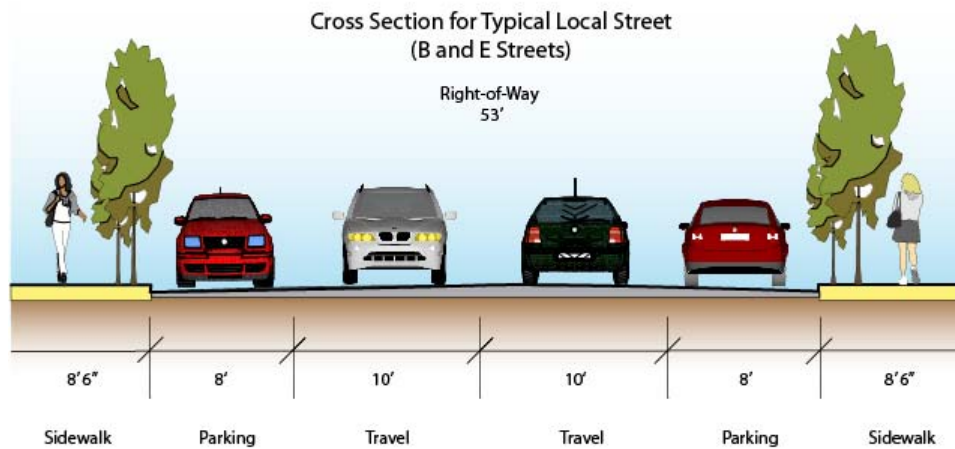
## Local Streets

Local streets typically have very low traffic volumes and provide direct access to adjacent residential uses. Local streets on the WCHB site shall comply with the City’s adopted street standards at the time of plan adoption, if applicable. Local streets on the BART portion of the Master Plan are B Street and E Street and provide:

- One 10-foot automobile travel lane in each direction.
- 8-foot parking lanes on both sides of the street.

- Sidewalks with a width of 8-feet 6-inches on both sides of the street with planter strips separating them from the parking lane.
- Access to and from B Street on West Leland Road should be restricted to right-in/right-out only in order to reduce the amount of traffic on this residential street.

**Figure 6.4 – Cross Section for Typical Local Street**



## Bus-Only Street (D Street north of Main Street)

The segment of D Street between Main and A streets is designated as a bus-only street. Automobile access to this segment of D Street will be prohibited. The bus-only area would be accessed from both Bailey and West Leland roads. The area includes five bus bays on each side of the street. Up to ten buses could simultaneously use the bus loading area. The bus-only street provides:

- One 12-foot bus-only lane in each direction.
- 20-foot bus loading areas on both sides of the street. Similar to the existing station, the bus loading areas will have a sawtooth configuration that delineates each bus stop and extends the sidewalk to create additional passenger waiting areas.
- Sidewalks with minimum width of 12 feet on both sides of the street. Benches, bus shelters, and other

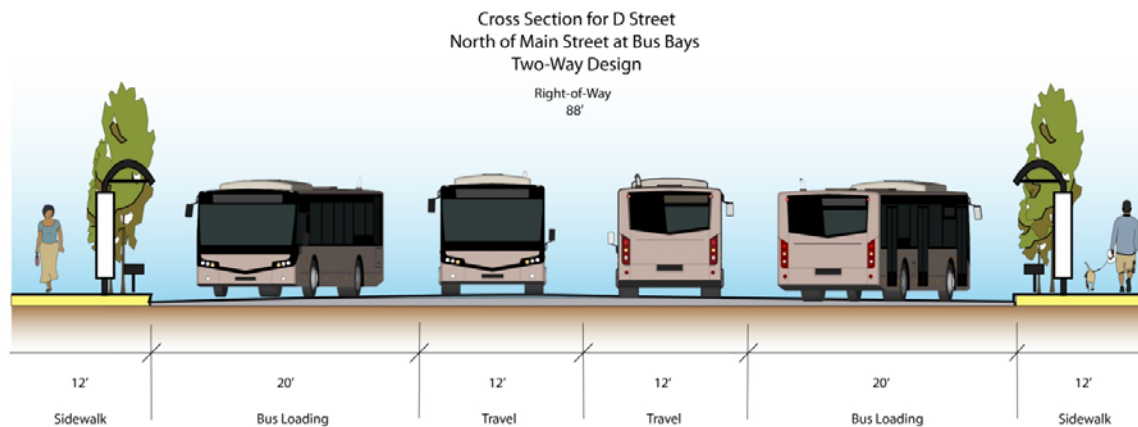


amenities will be furnished at the bus stops.

- Pedestrian crossings at both ends of the bus-only street segment shall be on raised speed tables and at the same elevation as the curb and sidewalk to enhance pedestrian visibility.

Crosswalks shall be delineated with different paving material and colors to further emphasize pedestrian priority. Bollards and/or other features will be installed to safely manage pedestrian movement at these intersections.

**Figure 6.5 – Cross Section for Bus-only D Street (north of Main Street)**



Signage at both ends of the bus-only segment of D Street will prohibit access by automobiles and direct automobiles to other destinations in the Master Plan area, such as the garages or the kiss-and-ride area (i.e., pick-up/drop-off area) in the shared space. Restricting auto access separates buses from autos in the bus-only area and allows for more efficient bus operations, as buses would not be delayed by autos driving through or waiting on that segment of D Street.

### Shared Space

The section of A Street between C and D streets and the adjacent crescent-shaped street near the BART entrance is designated as a shared space.

The Pittsburg/Bay Point BART Station and plaza are just north of the shared space

area, with commercial uses on both the north and south sides.



*Shared Space, Middlefield Avenue in Redwood City, CA*



*Pick-up/Drop-off Area at the Same Elevation as Sidewalk in Walnut Creek, CA*

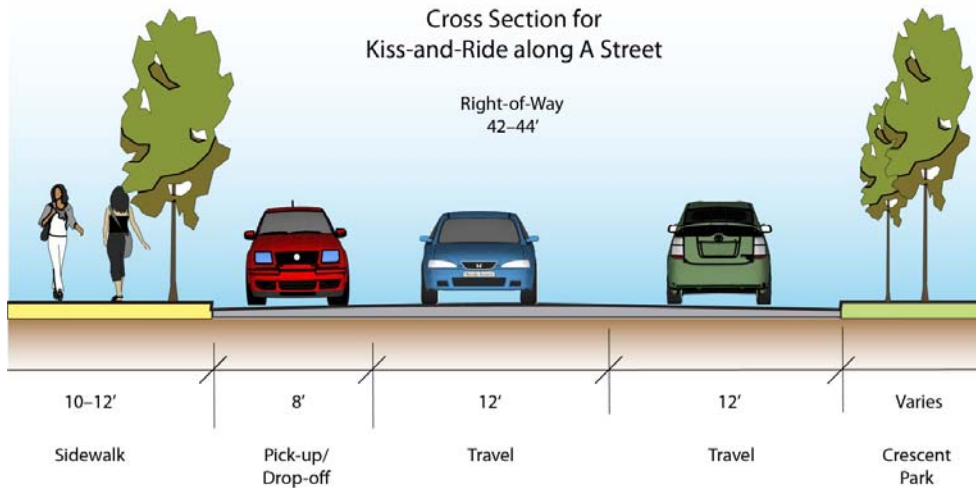
The shared space is also designated for a kiss-and-ride area (i.e., pick-up/drop-off area). It will be used by automobiles accessing the kiss-and-ride area and by pedestrians walking to and from the BART Station as well as the adjacent commercial uses. Since this area will be heavily used by both pedestrians and automobiles, it is designated as a shared space (also known as “living street” or woonerf). Shared space is defined as a street where pedestrians, cyclists, and motorists share the same physical facility.

The shared space streets will be on a raised table and at the same elevation as the curb and sidewalk. The same paving material will be used on the streets and the adjacent plaza. Bollards and/or planter boxes and other features define the edge of the street travel way. The change in elevation and texture, along with signage, define this area as a unique shared space. Crosswalks at both ends of the streets and midblock will be delineated with different paving material and colors to further emphasize pedestrian priority. These characteristics contribute to an environment where autos travel at low speeds (20 mph or less).

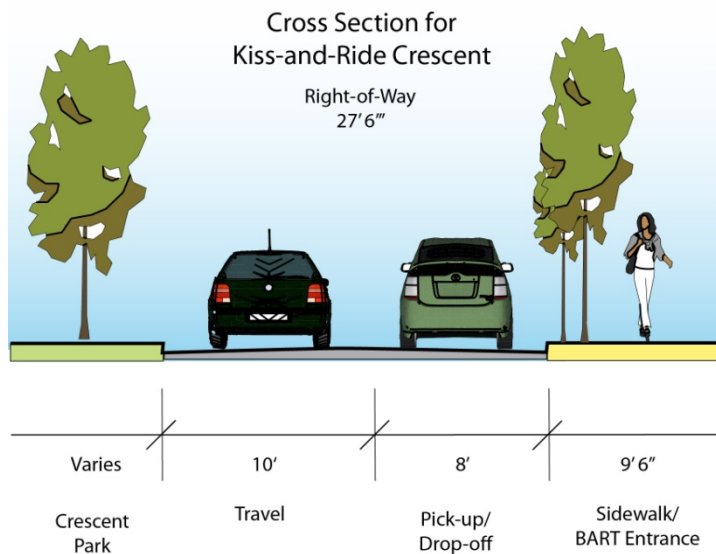
The shared space consists of the following:

- The kiss-and-ride area along A Street with 12-foot travel lanes in each direction plus an 8-foot pick-up/drop-off area and a 10- to 12-foot sidewalk on the south side of the street.
- The kiss-and-ride crescent, which provides counterclockwise circulation beginning and ending at A Street, with one 10-foot travel lane with an 8-foot pick-up/drop off area and an 9-foot 6-inch sidewalk on the north side of the street.
- See **Section 7.6** for shared space design standards.

**Figure 6.6 – Cross Section for Kiss-and-Ride along A Street**



**Figure 6.7 – Cross Section for Kiss-and-Ride Crescent Street**



## 6.3 Access and Circulation

Access and circulation for the major travel modes (walking, transit, cycling, and auto) is described below. The travel modes are presented in the order of their importance and priority for the station area development. Physical and programmatic improvements that support the modal access plans are listed later in this chapter

### Pedestrian Access and Circulation

Most trips begin and/or end with a pedestrian trip. Thus, the walking environment is one of the most basic elements of the public space. All internal streets in the station area incorporate sidewalks and other pedestrian amenities on both sides of the street. The Master Plan area would include sidewalks and appropriate amenities along the pedestrian desire lines (i.e., where most pedestrians prefer to walk) and minimize potential conflicts with autos.

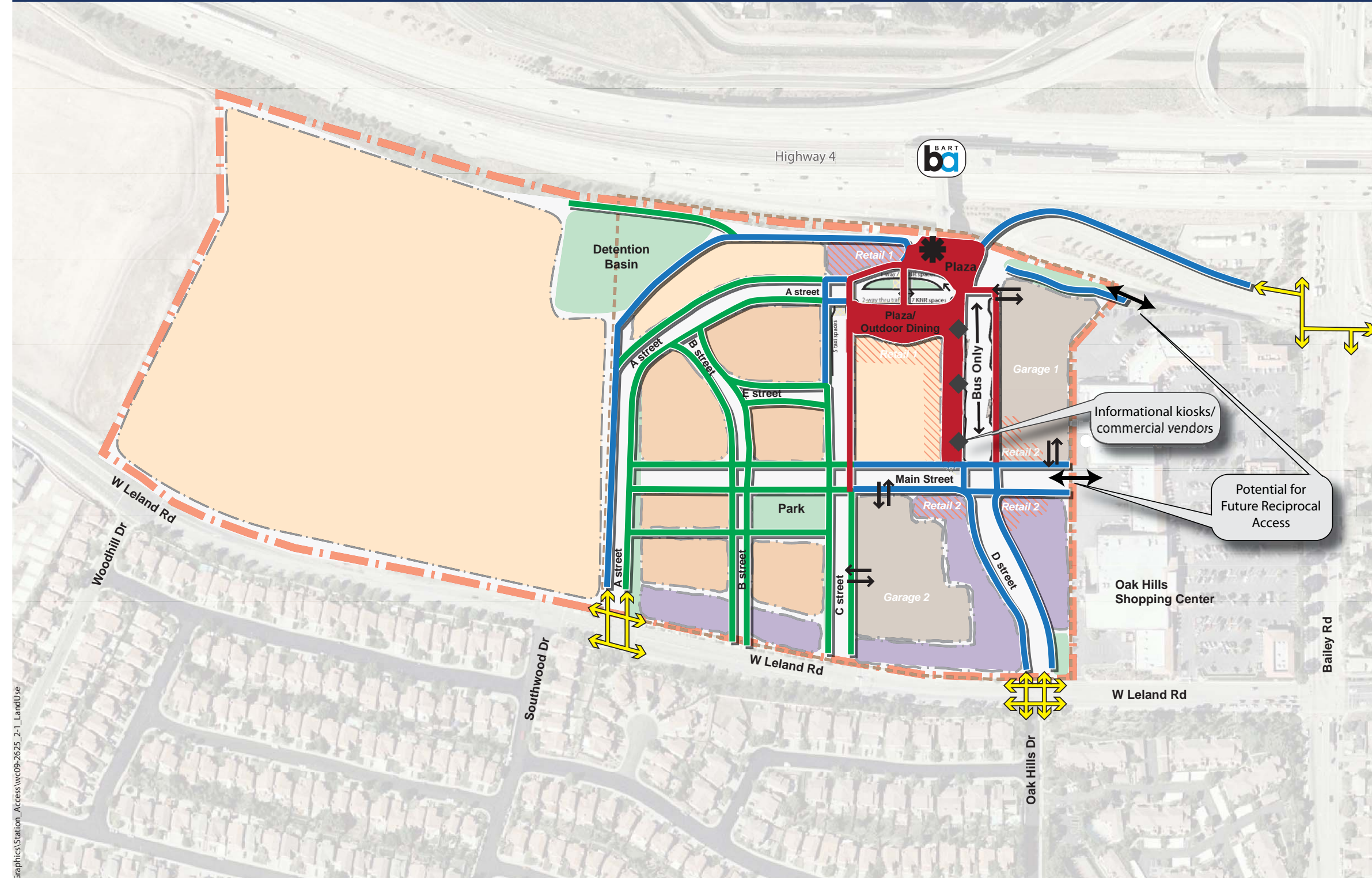
Primary pedestrian access to the Pittsburg/Bay Point BART Station and the station area development will be provided through a sidewalk on the north side of the access road connecting to Bailey Road and the Delta de Anza Trail and on sidewalks on both sides of A and D streets connecting to West Leland Road. These three primary pedestrian corridors connect to the major arterials (i.e., Bailey and West Leland roads) at signals and include protected (i.e., signalized) pedestrian crossings. D Street will be aligned with Oak Hills Drive, and a signal will be added to directly connect the project area with the Oak Hills neighborhood south of West Leland Road.

The plaza and the shared space in front of the BART Station entrance will serve as the major pedestrian node in the station area.

The area will be used by all BART patrons including those picked up or dropped off in the shared space and those walking to and from the garages or the bus stops. The BART plaza will also feature retail/commercial uses with outdoor seating areas, which will be used by BART patrons, area residents, and visitors. The Master Plan proposes a Class 1 pedestrian/bicycle path on the north side of the project area connecting the BART plaza with the WCHB site and the planned developments to the west. The Master Plan also plans for potential future non-motorized access to the adjacent Oak Hills Shopping Center to the east of the BART Station, as shown on **Figure 6.1**.

**Figure 6.8** shows pedestrian activity in the Master Plan area. The shared space and the adjacent plazas and bus waiting and kiss-and-ride areas will experience the highest pedestrian activity in the Master Plan area, followed by sidewalks providing pedestrian connections to the garages and the gateways to the Master Plan area. Sidewalks along the residential components of the project will experience the lowest amount of pedestrian activity.

FIGURE 6.8  
PEDESTRIAN ACTIVITY



legend

Pittsburg/Bay Point BART Station

BART Entrance

*Pedestrian Activity Level*

High

Medium

Low

Major Pedestrian Gateway

*Boundaries*

Project Area

BART Property

*Land Uses*

MDR - Medium Density Residential

HDR - High Density Residential

R - Ground Floor Retail

F - Flex\*

G - Parking Garage

OS - Parks & Open Space

P - Urban Plaza

\* Flex space can be residential, retail, office, public or what the market dictates when the development starts to build out

Map Not to Scale





### Transit Access and Circulation

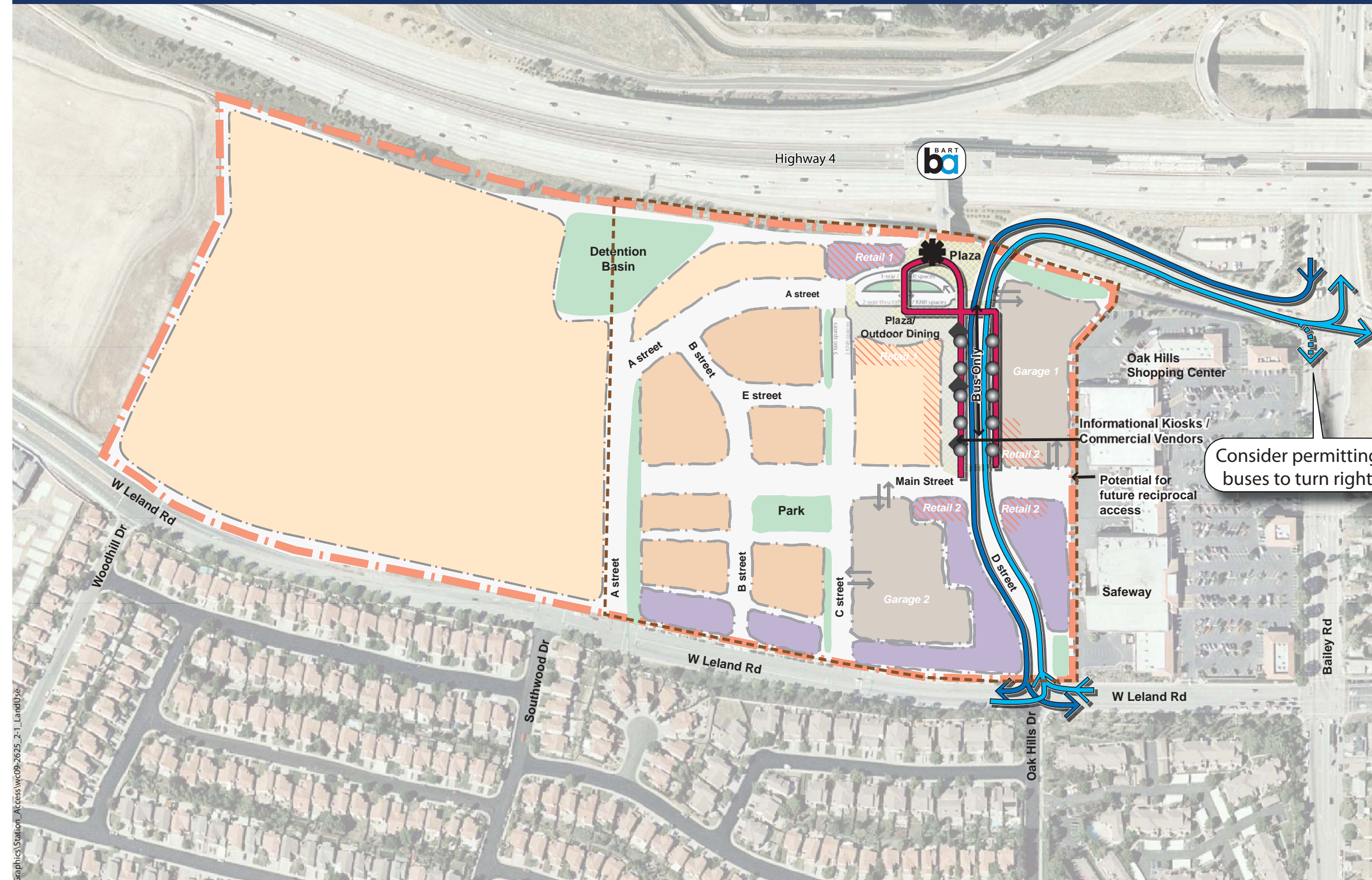
The Master Plan consolidates the existing intermodal center at the BART Station with a bus-only street on D Street between Main Street and the BART plaza. Buses will only be allowed on D Street and on the access road to Bailey Road. Buses will be prohibited on all other Master Plan area streets. Either buses enter the site from West Leland Road and exit to Bailey Road using the access road or they enter the site from Bailey Road and exit to West Leland Road. Since buses are not expected to regularly use other streets in the Master Plan area, other internal streets do not need to accommodate them and can be designed to enhance pedestrian mobility. The bus-only area will separate buses and automobiles and eliminate potential conflicts between bus loading/unloading and automobile pick-up/drop-offs. Pedestrian crossings at both ends of the bus-only street segment will be on raised speed tables and at the same elevation as the curb and sidewalk to enhance pedestrian visibility. Crosswalks will be delineated with different paving material and colors to further emphasize pedestrian priority.

The bus bays are located close to the Pittsburg/Bay Point BART Station entrance to allow bus passengers to connect easily to trains. **Figure 6.9** shows the bus circulation in the Master Plan area as well as pedestrian circulation between the bus loading areas and the BART Station. As shown in the figure, pedestrians will travel between the bus stops and the BART Station by crossing one or two streets.

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FIGURE 6.9  
BUS ACCESS & CIRCULATION



legend

- Pittsburg/Bay Point BART Station
  - BART Entrance
  - Bus Routes & Facilities**
  - Bus Stop
  - Walking Path between BART Station and Bus Stops
  - Northbound Bus Route
  - Southbound Bus Route
  - Boundaries**
  - Project Area
  - BART Property
  - Land Uses**
  - MDR - Medium Density Residential
  - HDR - High Density Residential
  - R - Ground Floor Retail
  - F - Flex\*
  - G - Parking Garage
  - OS - Parks & Open Space
  - P - Urban Plaza
- \* Flex space can be residential, retail, office, public or what the market dictates when the development starts to build out

Consider permitting buses to turn right

Map Not to Scale





### Bicycle Access and Circulation

All streets within the station area accommodate cyclists. **Figure 6.10** shows the bicycle access and circulation system in the Master Plan area.

The station area will provide Class II bicycle lanes along A Street, Main Street, and the portion of D Street south of Main Street. In addition, C Street will be widened by 3 feet in either direction to provide shared lane bicycle stencils (i.e., “sharrows”). A Class I path is also proposed along the north side of the Master Plan area, adjacent to the freeway, connecting the BART plaza with developments to the west.

A Class I path on the existing access road to Bailey Road is proposed. This path will connect the BART plaza with Bailey Road and the Delta de Anza Trail. Additional potential non-motorized connections to the Oak Hills Shopping Center and the residential neighborhoods to the west of the WCHB site may also be provided in the future.



Sample “Sharrow” Marking

### Bicycle Parking

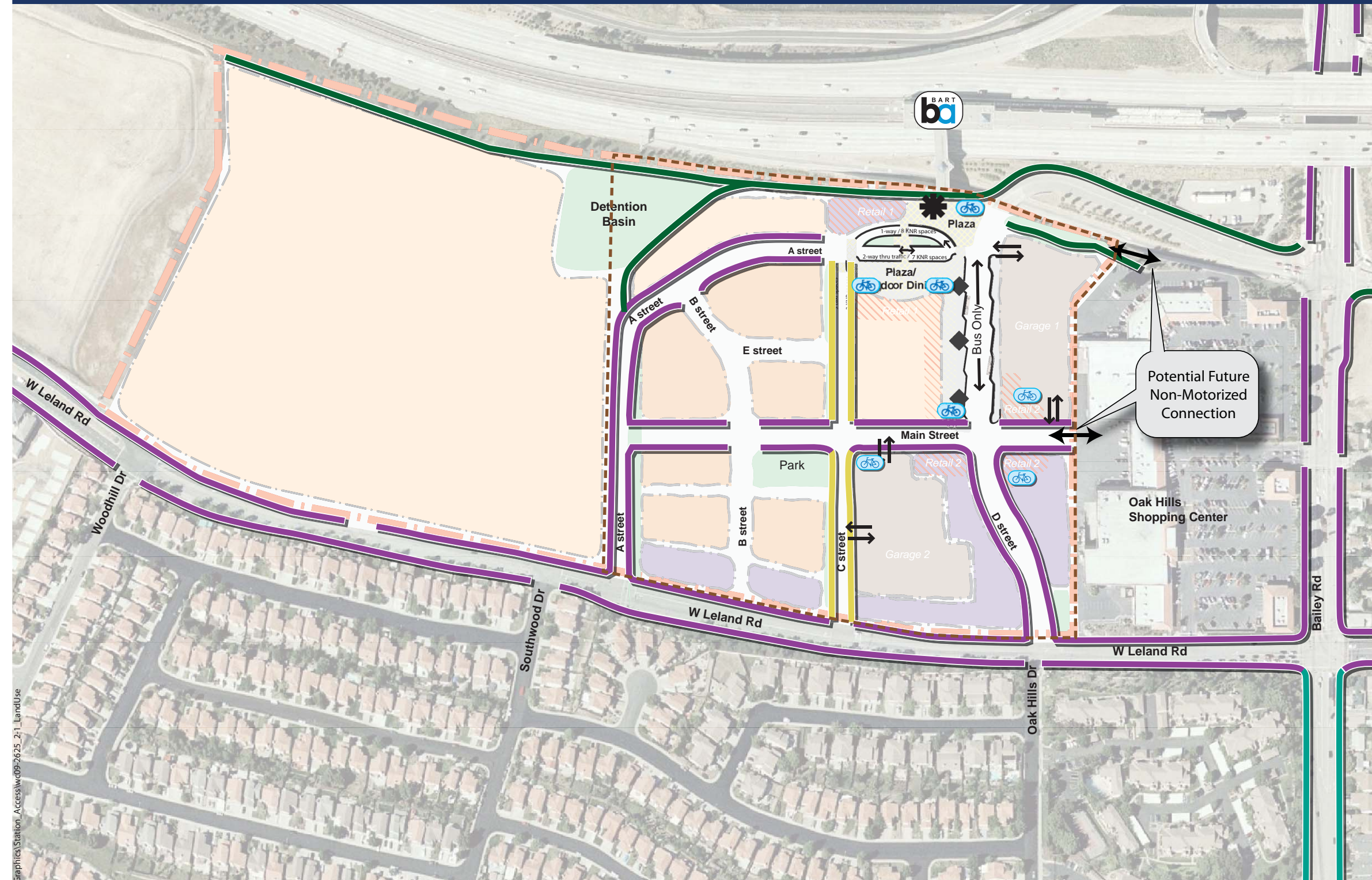
Bicycle parking can be classified as:

- Long-term bicycle parking, which consists of a locker or locked enclosure that provides protection for each bicycle from theft, vandalism, and weather. Long-term bicycle parking is meant to accommodate residents, employees, and others who are expected to park for more than two hours. Long-term bicycle parking can be consolidated in central locations, located in the ground level of garages or buildings, and should be easily accessible by bicycles.
- Short-term bicycle parking, which typically consists of bicycle racks, and is meant to accommodate visitors, messengers, or others expected to park for less than two hours. Bicycle racks can be located on sidewalks or plazas throughout the project area. They should be located near building entrances in visible areas and be designed to minimize potential conflicts between pedestrians and bicycles.

The Pittsburg/Bay Point BART Station currently provides short-term bicycle racks for 24 bicycles and long-term single-use keyed lockers for 20 bicycles. The current parking supply seems adequate to meet current demand. However, additional bicycle parking may be needed in the future to meet the expected increased demand in cycling resulting from the planned and proposed bicycle access improvements. The bicycle parking for the BART Station should be provided in the BART plaza. Future bicycle parking allocations shall be determined by the BART Customer Access Department.

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FIGURE 6.10  
BICYCLE ACCESS & CIRCULATION



legend

- Pittsburg/Bay Point BART Station
- BART Entrance

Bicycle Facilities

- Class I Path
- Class II Bicycle Lane
- Class III Route
- Class III Route with Sharrow
- Bicycle Parking

Boundaries

- Project Area
- BART Property

Land Uses

- MDR - Medium Density Residential
- HDR - High Density Residential
- R - Ground Floor Retail
- F - Flex\*
- G - Parking Garage
- OS - Parks & Open Space
- P - Urban Plaza

\* Flex space can be residential, retail, office, public or what the market dictates when the development starts to build out

Map Not to Scale





As the bicycle network in the City of Pittsburg is enhanced, an increase in bicycle traffic is expected. The availability of secure and convenient parking is as critical to bicyclists as it is for motorists. The availability of short- and long-term bicycle parking at key destinations is a vital part of a complete bicycle network.

Minimum bicycle parking requirements outlined in **Table 6.1** should be used for

new development in the Master Plan area to promote bicycling. In addition, **Figure 6.10** suggests locations for bicycle parking. Long-term bicycle parking can be located in the parking garages as bicycle cages or keyed or electronic bicycle lockers. Short-term bicycle parking can be provided in the form of bicycle racks on sidewalks near major building entrances without impeding automobile or pedestrian circulation.

**Table 6.1 –Bicycle Parking Requirements**

Use	Covered Long Term	Uncovered Short Term
Multi-Family Residential	None if private garage is provided 1 covered, long term space/ 2 dwelling units minimum	1 uncovered, short term space for every 5 dwelling units minimum for up to 50 units, for every 10 dwelling units for 51 – 100 units, for every 15 dwelling units for over 100 units
Retail	1 space per 12,000 SF floor area minimum	1 space per 2,500 SF floor area minimum
Flex	1 space/10,000 SF floor area minimum	1 space per 20,000 SF floor area minimum

Source: Fehr & Peers 2011

## Auto Access and Circulation

Similar to current conditions, regional automobile access to the Master Plan area will continue to be provided from State Route 4 and the interchange at Bailey Road. Automobiles will continue to access the site from either Bailey Road or West Leland Road. From Bailey Road, the BART access road will immediately connect to the BART plaza and Garage 1. Automobiles can also travel through the shared space to access the rest of the developments in the station area. From West Leland Road, A and B streets will provide the most convenient access to the residential components of the site, while C and D streets will provide access to the non-residential components and both

garages. **Figure 6.11** shows the auto access and circulation for the different components of the project.

Most kiss-and-ride activity (pick-ups and drop-offs) for the BART Station will occur along designated areas in the shared space along the one-way counterclockwise crescent adjacent to the BART plaza, on A Street between C and D streets, and near the north end of C Street. The configuration of the designated kiss-and-ride areas will allow automobiles to access the area from either Bailey Road or West Leland Road. The one-way crescent allows automobiles to turn around and exit from the same direction they entered if needed. Taxis will be accommodated on the north end of C Street.

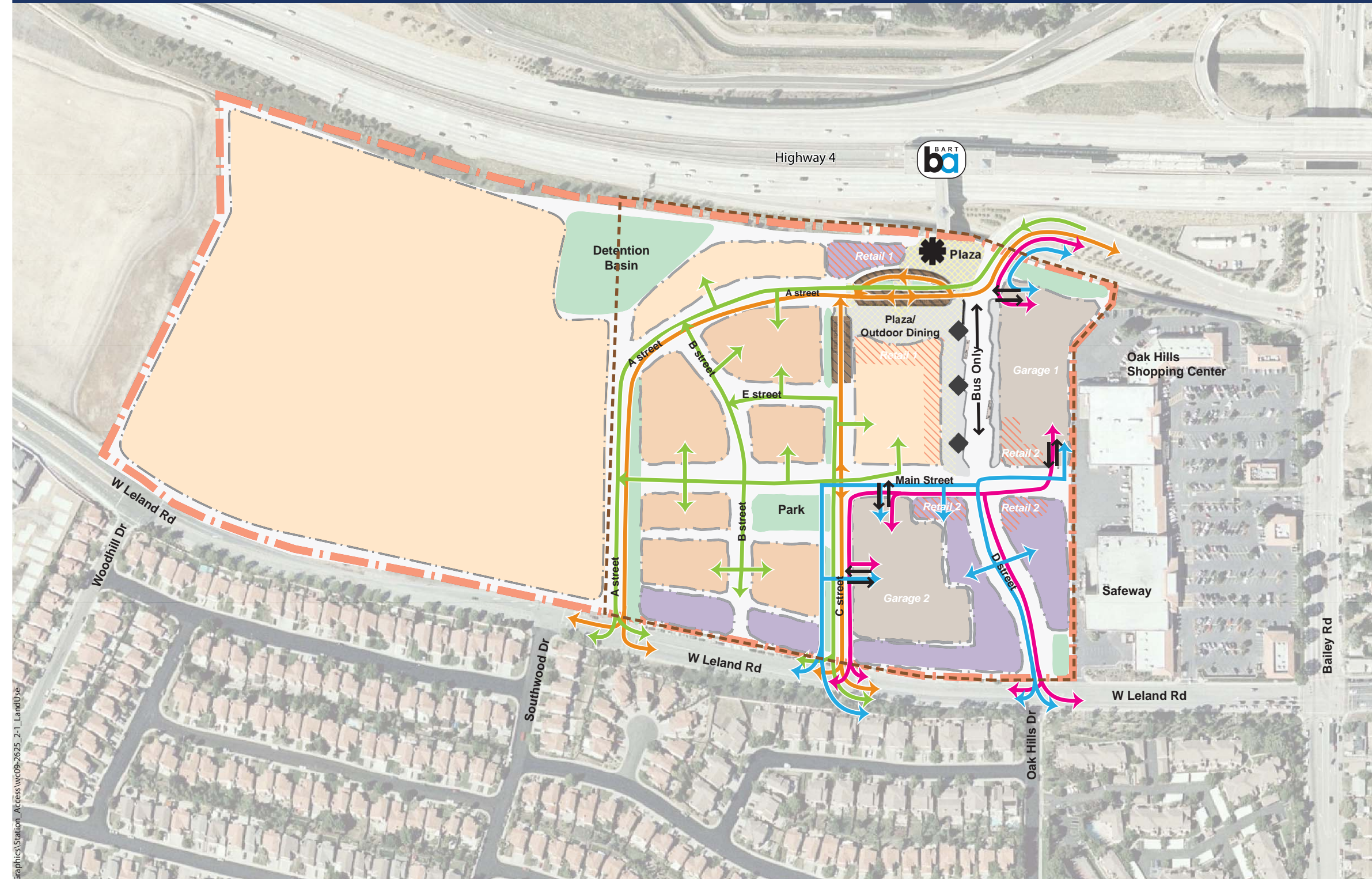
The configuration of the kiss-and-ride spaces, along with the designation of D Street as a bus-only street, will separate bus loading/unloading from passenger pick-up/drop-offs. This option reduces some of the conflicts in the existing BART Station and provides for a more efficient and safe operation for both car and bus travel modes.

The shared space will be used by BART riders as well as residents, employees, and visitors to the station area developments. The site users will travel by different modes. Considering the presence of pedestrians and cyclists, the shared space is designed for very slow automobile speeds. The narrow travel lanes, change in elevation, different paving textures, and frequent pedestrian crossings contribute to creating an environment with low automobile speeds in the shared space.



All internal streets within the BART property will provide on-street parking on both sides of the street and incorporate minimum 10-foot travel lanes. Various characteristics of the internal streets, such as narrow travel lanes, adjacent bicycle facilities, on-street parking, short blocks, small corner radii at intersections, and a traffic circle at the B Street/Main Street intersection, are designed to discourage automobile speeding and encourage non-motorized travel. Since the internal streets in the Master Plan area are designed for low auto speed, additional traffic calming measures, excessive signage, or other engineering measures to reduce auto travel speeds may not be necessary.



FIGURE 6.11  
AUTOMOBILE CIRCULATION





legend

-  Pittsburg/Bay Point BART Station
-  BART Entrance








Automobile Circulation

-  Kiss-and-Ride Traffic
-  BART Garage Traffic
-  Residential Traffic
-  Commercial Traffic
-  Designated Kiss-and-Ride Area

Boundaries

-  Project Area
-  BART Property

Land Uses

-  MDR - Medium Density Residential
-  HDR - High Density Residential
-  R - Ground Floor Retail
-  F - Flex\*
-  G - Parking Garage
-  OS - Parks & Open Space
-  P - Urban Plaza

\* Flex space can be residential, retail, office, public or what the market dictates when the development starts to build out

Map Not to Scale





## 6.4 Parking

The Master Plan consolidates parking for the BART Station into two garages:

- Garage 1, located in the northeast corner of the station area and accessed from Main and D streets/BART access road, is estimated to offer about 1,260 spaces in four stories.
- Garage 2, located in the south end of the station area and accessed from C and Main streets, is expected to either supply about 890 spaces in four stories or 1,110 spaces in five stories.

Similar to current conditions, about 2,000 spaces in the two garages will furnish parking for BART patrons. The rest of the spaces (about 150 or 370, depending on the garage configuration) will be available for the station area development. In addition, internal streets in the station area will provide on-street parking on both sides of the street, unless additional space is needed for turn lanes at intersections (currently, turn lanes are expected on A, C, and D streets at intersections with West Leland Road). It is estimated that at least 220 on-street parking spaces will be available in the station area.

The Master Plan includes maximum parking requirements that limit the amount of parking for each use:

- Multi-Family Residential within station area: 1.15 spaces per dwelling unit
- Multi-Family Residential within the WCHB site: 2 spaces per dwelling unit
- Senior Housing: 0.5 spaces per dwelling unit
- Retail/Flex: 3.0 spaces per 1,000 square feet

These parking requirements are lower than typical suburban developments because of the close proximity of the proposed developments to the BART Station and to further encourage the use of non-automobile travel modes. Potential strategies and policies to better manage the available parking supply are listed later in this chapter. The parking maximums and parking management strategies would make the proposed development projects eligible for GreenTRIP certification.<sup>1</sup>

An increase in the maximum parking requirements is at the discretion of the Zoning Administrator or other deciding body. Based on evidence supplied by the developer that the Master Plan maximums are not adequate and will not be detrimental to the pedestrian or bicycle oriented nature of the development and that Travel Demand Management (TDM) measures would not reduce parking demand adequately.

Required parking for each residential development within the project will be provided as part of each individual development. The combination of the larger Garage 2 and on-street parking will supply adequate parking to meet the maximum parking requirement for the nonresidential components of the station area.<sup>2</sup> Consolidating the nonresidential

<sup>1</sup> GreenTRIP certification, administered by TransForm, certifies development projects that implement best strategies to reduce traffic generation and greenhouse gas emissions. See GreenTRIP.org for more information.

<sup>2</sup> The project would include up to 146,400 square feet of nonresidential uses. Assuming the maximum parking requirement of 3.0 spaces per 1,000 square feet, the nonresidential uses would require 439 parking spaces, which is less than the 590 non-BART spaces that would be supplied by the larger Garage 2 (370 spaces) combined with on-street parking (220 spaces).

parking in one or two garages will facilitate implementation of shared parking. In addition, visitors to the area can park once and visit multiple uses without driving their car.

## Parking Accessibility

The federal Americans with Disabilities Act (ADA) requires public rights-of-way and facilities, including parking facilities, to be accessible to persons with disabilities. The existing BART parking lot incorporates 35 accessible parking spaces, which exceeds the 30 spaces required by the Accessible Guidelines for Buildings and Facilities (ADAAG). These spaces are currently fully occupied on typical weekdays, indicating that demand exceeds supply for accessible parking spaces.

The following elements meet or exceed accessible parking requirements in the Master Plan area:

- All accessible spaces for BART riders will be included in Garage 1, preferably on the ground level at the north end of the garage to minimize the distance, eliminate vertical circulation, and provide the shortest travel paths to the BART entrance. In addition, the number of BART accessible spaces should be increased and regularly monitored to meet the demand and increase accessibility at the station.
- All public parking facilities in the Master Plan area will provide the required number of accessible parking spaces.
- All spaces for the senior housing component of the Master Plan will be accessible.

- Although no accessible on-street parking spaces are required, consider supplying one or two accessible on-street parking spaces adjacent to the main entrance for the senior housing development.

## 6.5 Circulation Design Elements

Research has shown that people walk more when destinations are within close proximity, along flat routes with easy street crossings, and through interesting areas with storefronts, street trees, street furniture, parks, and other pedestrian-oriented amenities. The proposed Master Plan incorporates the following characteristics and design elements that encourage the use of non-automobile transportation modes:

- Mix of residential and commercial uses with sufficient density and proximity to transit; various uses within walking distance of each other.
- Proximity to the BART Station, which provides regional transit access and additional BART ridership.
- A Tri-Delta bus intermodal center, which provides transit access to the east Contra Costa County area.
- Commercial uses along heavily traveled pedestrian routes.
- Minimized bus and truck turning within the project area, which allows for pedestrian-friendly intersections.
- Aggressive parking management strategies that reduce parking supply on the BART property.

In addition to new residential and commercial uses, the Master Plan includes significant infrastructure improvements, including new streets. While all travel

modes will be accommodated and automobile access will be maintained, the Master Plan intends to enhance the walking experience to encourage walking.

## 6.6 Station Access Improvement Recommendations

Physical infrastructure improvements and strategies to improve access for the Pittsburg/Bay Point BART Station are listed below and summarized in **Figure 6.12**. While these recommendations support the proposed Master Plan, most could be implemented independent of the Master Plan and still provide substantial benefit. Although most of these recommendations affect more than one travel mode, they are organized by the primary affected travel model. The Station Access/Accessibility Plan discusses these improvements in detail.

### Pedestrian Access

- Provide potential direct pedestrian connections to Oak Hills Shopping Center
- Provide protected pedestrian connection to the Oak Hills neighborhood
- Provide non-motorized connection to residential neighborhoods to the west

### Transit Access

- Consider bus operations improvements such as improved coordination with BART trains, display of real-time bus arrivals and departures, and bus signal actuations
- Implement more frequent bus service to the surrounding neighborhoods

- Coordinate with Tri-Delta Transit to reorganize bus service after eBART completion

### Bicycle Access

- Supply electronic bicycle lockers
- Include a bicycle path on the access road between the BART Station and Bailey Road

### Auto Access and Parking

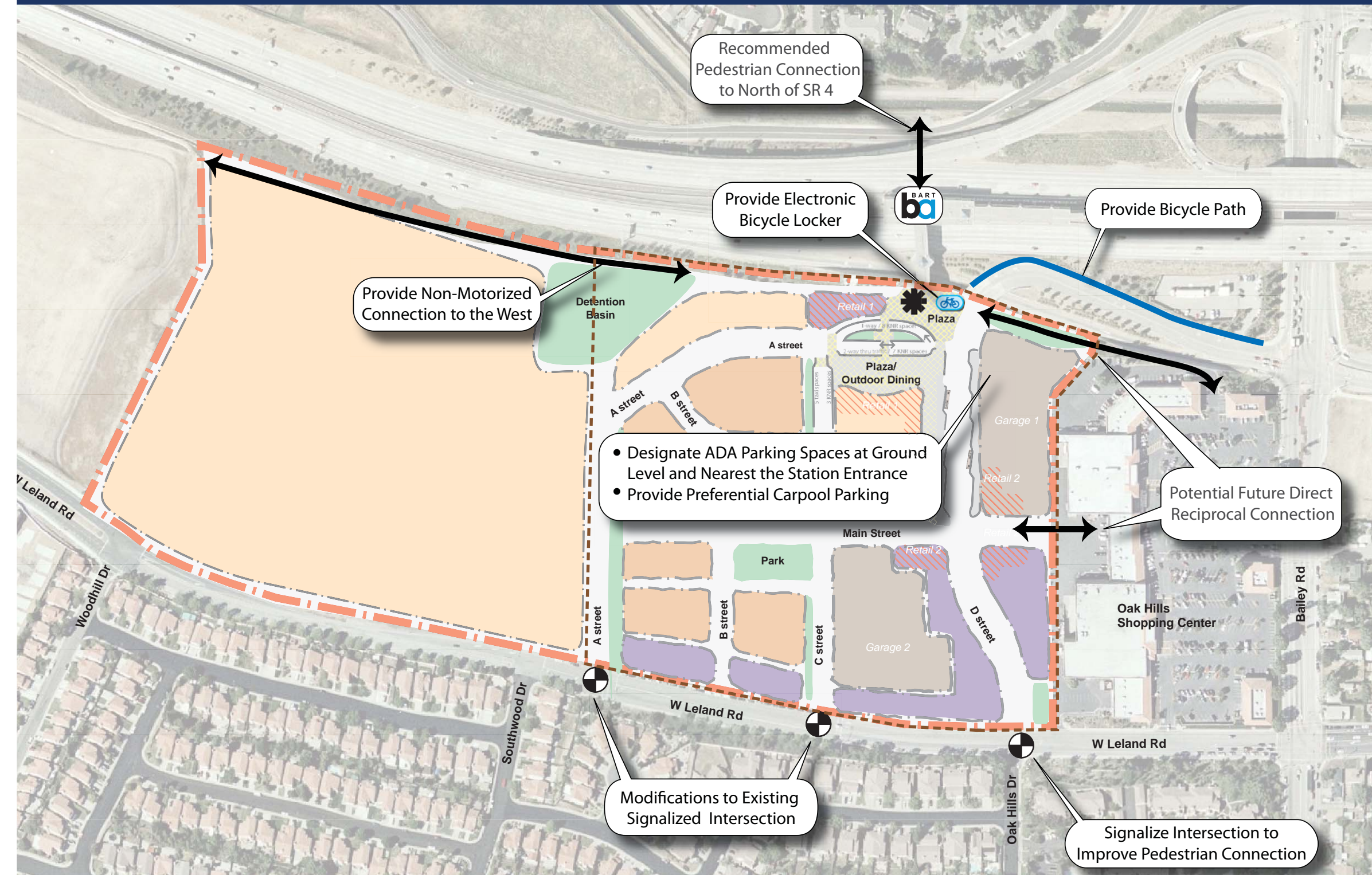
- Expand preferential carpool parking
- Designate parking spaces for pick-up only during the weekday PM peak period

### Supporting Programs

- Provide uniform wayfinding for all travel modes in the station area and the surrounding areas (**See Chapter 7 Section 7.7 Wayfinding Program for more information**)
- Create station area maps/area branding
- Offer a Guaranteed Ride Home Program and taxi service
- Implement a neighborhood ridematching and ridesharing service
- Create and maintain station/TDM website
- Improve personal security and consider providing blue-light phones

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FIGURE 6.12  
STATION ACCESS IMPROVEMENTS



legend

Pittsburg/Bay Point BART Station

BART Entrance

Station Access Improvements

New Traffic Signal or Traffic Signal Modifications

Bike Locker

Non-Motorized Connection

Bike Path

Boundaries

Project Area

Land Uses

MDR - Medium Density Residential

HDR - High Density Residential

R - Ground Floor Retail

F - Flex\*

G - Parking Garage

OS - Parks & Open Space

P - Urban Plaza

\* Flex space can be residential, retail, office, public or what the market dictates when the development starts to build out

Map Not to Scale







## 6.7 Station Area Development Strategies

This section lists potential parking management and Transportation Demand Management (TDM) strategies for BART owned property in the station area to reduce dependence on single-occupancy automobiles, reduce parking requirements for the project, encourage use of other travel modes, and increase BART ridership. Although these programs and strategies are primarily aimed at the station area developments, they will also improve access for and benefit BART patrons.

These recommended strategies have three primary purposes:

- To encourage non-auto access to BART and the proposed station area developments, while recognizing that not all BART and station area patrons would have a non-auto access alternative.
- To support local businesses by maintaining parking availability in the retail areas.
- To improve community livability and mitigate on-street patron parking in residential areas through expanding the existing Residential Parking Permit Program (RPP) and/or initiating a Parking Benefit District.

Many of the strategies discussed in this section complement each other. Although there are overlaps between these strategies, when combined these strategies can drastically reduce the traffic generated and the parking supply needed for the proposed project. The Station Access/Accessibility Plan discusses these improvements in detail.

## Parking Management Strategies

A key challenge for urban mixed-use developments is providing adequate parking. Too much parking unnecessarily adds to the cost of the project, wastes valuable land, and further encourages driving to the project area; inadequate parking may result in excessive circulation by vehicles looking for parking, parking spillover into surrounding residential neighborhoods, and discouraging potential shoppers from visiting the site. The proposed station area commercial uses compete with other retail in the area. Thus, availability and cost of parking may be a key factor for many shoppers in deciding to shop in the station area.

The following strategies should be considered for their potential to manage parking demand on BART-owned property:

- Offer unbundled residential parking
- Provide shared parking in the station area
- Furnish a Automatic Parking Space Counting System (APSCS) for the garages in the station area
- Supply metered or time-limited parking along commercial streets within the station area
- Implement parking pricing to control parking demand
- Consider establishing a Parking Benefit District within the BART property area and/or in existing adjacent and nearby single family developments
- Implement Residential Parking Permits (RPP) along the residential streets in the project area

- Monitor parking demand and if necessary adjust strategies and parking supply for later phases of the project

## **TDM Strategies**

A comprehensive TDM program encourages project area residents and employees to use non-auto travel modes. The following elements should be considered in the TDM program:

- Offer car sharing in the project area
- Provide free or subsidized transit passes for project area residents and employees
- Offer commuter benefits (employees only)
- Offer carpools/vanpools (employees only)
- Implement a Guaranteed Ride Home Program (employees only)
- Encourage compressed work weeks, flex time, and telecommuting (employees only)
- Designate a Transportation Demand Management (TDM) Coordinator for the BART property
- Provide a centralized project area transit information center



CHAPTER 7.  
PEDESTRIAN-FRIENDLY  
STREETScape STANDARDS





## 7. PEDESTRIAN-FRIENDLY STREETScape STANDARDS

The purpose of the Pedestrian-Friendly Streetscape Standards is to establish a walkable environment in the project area, where traffic is calmed and streetscapes are activated. All new streets and pathways are designed to maximize pedestrian safety and enhance the quality of the pedestrian experience by designing for slower traffic speeds, safer pedestrian crossings, and more attractive and ample pedestrian zones (e.g., sidewalks). The strategies outlined in this chapter exceed the City’s adopted street and pedestrian path design standards.

The street, sidewalk and street furnishing design standards contained herein are generally applicable to public rights-of-way within the Master Plan area. Where an application is made to develop private streets in the Master Plan area, pedestrian friendly design elements such as the inclusion of safely designed sidewalks, pedestrian scale lighting, well maintained landscaping, and appropriate materials, surfaces and finishes shall be considered and included to the greatest extent practicable for all roadways within the Master Plan area.

The pedestrian-friendly streetscape standards meet the following objectives:

- Enhance pedestrian connectivity, safety, and comfort.
- Maximize the visibility of pedestrians in the project area.
- Activate streets and public spaces.
- Unify the station area and create a distinctive place within the City of Pittsburg.

- Calm traffic.
- Establish a clear wayfinding system that makes the station area easy to navigate for pedestrians, cyclists, and motorists alike.
- Design in accordance with Americans with Disabilities Act (ADA) regulations and Crime Prevention Through Environmental Design (CPTED) standards.

This chapter is organized into the following sections:

- 7.1 Pedestrian-Oriented Street Design Elements
- 7.2 Sidewalk Standards
- 7.3 Street Furnishing Standards
- 7.4 Pedestrian Crossing Design Standards
- 7.5 Pedestrian-Only Path Design Standards
- 7.6 Shared Space Design Standards
- 7.7 Wayfinding Program

Throughout this chapter, symbols are used to indicate whether a standard or guideline meets the following principles:



Green Design standard or guideline



ADA Friendly standard or guideline



CPTED (crime prevention through environmental design) standard or guideline

## 7.1 Pedestrian-Oriented Street Design Elements

The pedestrian realm can be greatly improved through the use of a number of design elements. While Chapter 6 outlined the overall street dimensions and standards, such as narrow lanes and short blocks, to promote an efficient and safe circulation network, the design recommendations that follow should be



used to enhance pedestrian facilities throughout the project area. These design strategies aim to provide a safe, comfortable, and attractive pedestrian environment while moderating vehicle speeds by providing visual cues to increase awareness of the presence of pedestrians.

**Table 7.1 Pedestrian Street Design Elements**

Recommended Pedestrian Design Elements		
RECOMMENDED FACILITY OR DESIGN TREATMENT	DESCRIPTION AND DESIGN STANDARDS	GRAPHICAL EXAMPLE
Wide and Continuous Sidewalks	<ul style="list-style-type: none"> <li>• Continuous sidewalk networks improve mobility for all pedestrians and are particularly important for pedestrians with disabilities.</li> <li>• Sidewalks are critical for achieving a pedestrian-friendly environment.</li> <li>• <b>See Section 7.2 Sidewalk Standards.</b></li> </ul>	
Street Furniture	<ul style="list-style-type: none"> <li>• Street furnishings create a comfortable, attractive, and pleasant streetscape environment for pedestrians.</li> <li>• Pedestrian furniture can be an effective traffic calming strategy, as the presence of pedestrian furnishings along the sidewalk provides visual cues to help drivers recognize that they are entering a pedestrian area, and they may respond by reducing vehicle speeds.</li> <li>• <b>See Section 7.3 Street Furnishing Standards.</b></li> </ul>	

# CHAPTER 7: PEDESTRIAN-FRIENDLY STREETScape STANDARDS

Recommended Pedestrian Design Elements		
RECOMMENDED FACILITY OR DESIGN TREATMENT	DESCRIPTION AND DESIGN STANDARDS	GRAPHICAL EXAMPLE
Bulbouts	<ul style="list-style-type: none"> <li>Bulbouts extend the curbs at intersections to widen the sidewalk area at crosswalk locations.</li> <li>Bulbouts reduce pedestrian crossing distances, increase pedestrian visibility, and add space to sidewalks that can be used for pedestrian amenities.</li> <li>The use of bulbouts is suggested at most intersections within the project area.</li> <li>Bulbouts should extend a minimum of 6 feet into the street, replacing the parallel parking lane, but stop 1 foot short of the parking zone for bicycle safety.</li> </ul>	
Pedestrian Crossing Treatments	<ul style="list-style-type: none"> <li>Special markings, signals, or other treatments at crosswalks increase pedestrian visibility and safety.</li> <li>Treatments can include automated detection, curb extensions, in-pavement lighting, flashing beacons, in-roadway signs, lane reductions, rumble strips, markings, overhead signs, refuge islands, street lighting, raised crossings, painted striping, and various textured and/or colored pavement treatments.</li> <li>The type of treatment should be based on an evaluation of the crossing location.</li> <li><b>See Section 7.4 Pedestrian Crossing Design Standards.</b></li> </ul>	 
Pedestrian-Only Paths	<ul style="list-style-type: none"> <li>Pedestrian passageways improve connections within the station area.</li> <li>Paths add to pedestrian interest and to overall quality of the station area.</li> <li>Retail opportunities can be expanded along pathways by allowing side entrances to commercial spaces and by providing</li> </ul>	

Recommended Pedestrian Design Elements		
RECOMMENDED FACILITY OR DESIGN TREATMENT	DESCRIPTION AND DESIGN STANDARDS	GRAPHICAL EXAMPLE
	<p>outdoor space for restaurants and cafes.</p> <ul style="list-style-type: none"> <li>• See Section 7.5 Pedestrian-Only Path Design Standards.</li> </ul>	
Shared Space	<ul style="list-style-type: none"> <li>• Shared space is defined as a street where pedestrians, cyclists, and motorists share the same physical facility and pedestrians are given priority.</li> <li>• See Section 7.6 Shared Space Design Standards</li> </ul>	
Wayfinding Signage, Informational Kiosks, and Pedestrian Maps	<ul style="list-style-type: none"> <li>• Kiosks can provide a variety of information such as locational maps, route schedules, news, and special events.</li> <li>• Pedestrian- and auto-oriented signage helps facilitate connections to and from the BART Station and Station area.</li> <li>• See wayfinding signage types and location diagram in Section 7.7 Wayfinding.</li> </ul>	

## 7.2 Sidewalk Standards

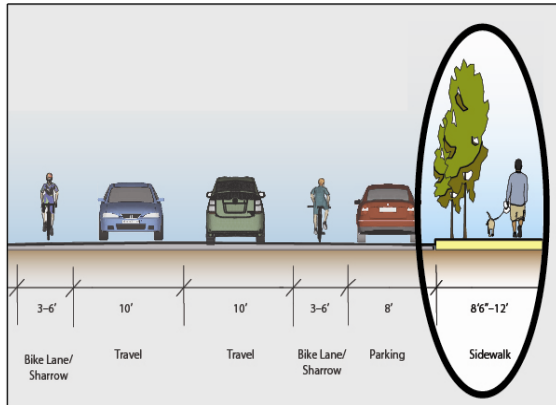
### Sidewalk Corridors

Sidewalk corridors are the most important component of the station area pedestrian circulation network, see **Figure 7.1** for an illustration of the sidewalk corridor. Sidewalks offer pedestrian access to

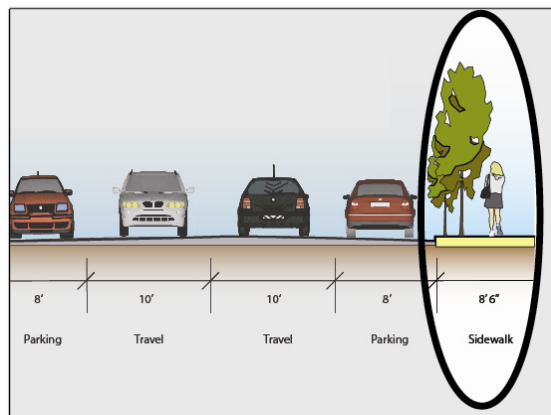
virtually every activity and provide critical connections between other modes of travel, including bicycles, public transit, and automobiles. The sidewalk corridor is located within the public right-of-way between the roadway edge and the property line.



**Figure 7.1: Sidewalk Corridor for Collector Street**



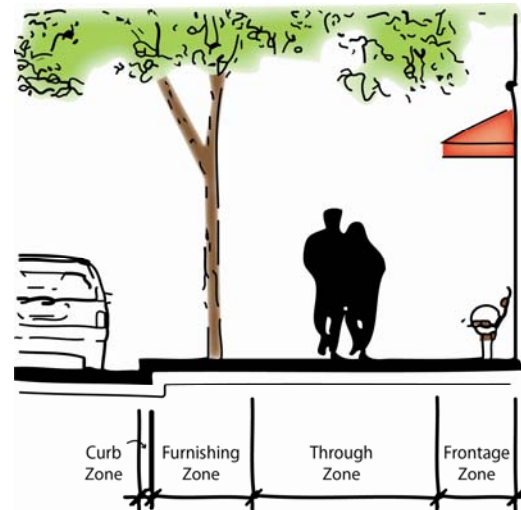
**Figure 7.2: Sidewalk Corridor for Local Street**



## Sidewalk Zones

The sidewalk corridor contains four distinct zones: the curb zone, the furnishing zone, the through zone, and the frontage zone. These zones are described below, and **Table 7.2** includes standards for each zone.

**Figure 7.3 – Sidewalk Zones**



### Curb Zone

The curb zone should create a clear delineation between the vehicular realm and the pedestrian realm.

### Furnishing Zone

The furnishing zone buffers pedestrians from the adjacent roadway and is the area where elements such as street trees, utility poles, streetlights, signs, parking meters, tree grates, and street furniture are located. This zone lies between the through zone and the curb zone. To the extent possible, street furniture such as newspaper racks should be grouped to keep space clear for pedestrian travel. Items placed within the furnishing zone may include:

- Bus shelters
- Trees, planters, and landscaping
- Trash and recycling receptacles
- Bicycle racks
- Streetlights
- Clocks
- Public art

- Banners and flags
- Information kiosks
- Wayfinding/signage
- Benches
- Consolidated news racks
- Fountains

See Section 7.3 of this chapter for standards on street furnishings.

entirely free of permanent and temporary objects. The sidewalk surface must be stable, firm, smooth, and slip-resistant.

### Frontage Zone

The frontage zone is located within the setback area between the building facade and the sidewalk. The zone should be used by businesses to engage passers-by and provide items of visual interest.

### Through Zone

The through zone is the area intended for pedestrian travel. This zone should be

**Table 7.2 – Sidewalk Standards by Zone**


Design Feature	Dimension Standard	Other Standards
Total Sidewalk Corridor	<ul style="list-style-type: none"> <li>• 8-foot 6-inch minimum for residential</li> <li>• 10-foot 6-inch minimum for nonresidential</li> </ul>	
Curb Zone	<ul style="list-style-type: none"> <li>• 6-inch minimum width and 6-inch minimum height</li> </ul>	<ul style="list-style-type: none"> <li>• Offset driveways and intersections should be minimized to make pedestrian street crossings convenient and safe.</li> <li>• Driveways shall have adequate sight distance for motorists to see pedestrians and cyclists and for pedestrians and cyclists to see motorists.</li> <li>• Minimize the number of curb-cuts/driveways on streets with high pedestrian usage to reduce the potential pedestrian/vehicle conflict areas and minimize interruptions to pedestrian flow.</li> <li>• See Section 7.4 Pedestrian Crossing Design Standards</li> </ul>

Design Feature	Dimension Standard	Other Standards
Furniture Zone	<ul style="list-style-type: none"> <li>• 3-foot minimum for residential</li> <li>• 4-foot minimum for nonresidential</li> </ul>	<ul style="list-style-type: none"> <li>• In commercial areas, this zone should be paved; in residential areas, this zone may be landscaped.</li> <li>• Where feasible, driveway cross-slopes should be placed in the furniture zone rather than across the through zone portion of the sidewalk in order to maintain a flat surface for pedestrians across the driveway.</li> <li>• See Section 7.3 Street Furnishing Standards.</li> </ul>
Through Zone	<ul style="list-style-type: none"> <li>• 5-foot minimum for residential</li> <li>• 6-foot minimum for nonresidential</li> </ul>	<ul style="list-style-type: none"> <li>• A sidewalk surface must be stable, firm, smooth, and slip-resistant, per ADA accessibility standards. In contrast, road surfaces should be rougher to assist visually impaired pedestrians.</li> <li>• These standards exceed ADA standards, which require a minimum 4-foot width through zone.</li> <li>• Average grade for each street segment shall not exceed 5%. Maximum grade for any 24-inch segment of sidewalk is 14%.</li> </ul>
Frontage Zone	<ul style="list-style-type: none"> <li>• No minimum</li> <li>• See Setback Standards in Chapter 5: Development Standards.</li> </ul>	<ul style="list-style-type: none"> <li>• See Frontage Type Standards in Chapter 5: Development Standards.</li> </ul>

## 7.3 Street Furnishing Standards







In order to transform the public streetscape from mere transportation facility to vibrant public open space, it is important to add amenities that allow people to stop and linger, provide services and information, and engage the senses. Streetscape furnishings animate the public realm and help establish the character and identity of an area.

The station area development provides an opportunity to update the station area amenities and to incorporate a branding strategy. A coordinated palette of street furniture, lighting, wayfinding, and signage throughout the station and the station area could contribute to a heightened awareness of the area, attracting visitors, residents, and transit riders. This branding can include customized poles and mounts for regulatory signs and lighting fixtures, and an area logo, font, and color scheme, among other techniques.

 Pedestrian furnishings and amenities must be located within the furnishing zone of the sidewalk area to ensure ADA compliance and a clear path of travel for pedestrians. The following characteristics should be considered when selecting street furnishings for the station area:



- Usability
- Comfort
- Safety
-  Universal access
- Ease of maintenance
-  Energy efficiency

- Uniformity and/or compatibility in design style, color, and material

-  Durability
-  Reparability
-  Nontoxic
-  Regionally sourced
-  Recycled content
-  Ability to be recycled or reused

The table below identifies the desired street furnishings in the project area, along with any design considerations and a pictorial example.





**Table 7.3 Street Furnishing Types & Standards**

Furnishing	Key Design Elements or Considerations	Graphic Example(s)
Bench	<ul style="list-style-type: none"> <li>• In commercial areas, benches shall be placed at regular intervals no greater than 250 feet.</li> <li>• Material selection shall consider resistance to elements, graffiti and ease of maintenance.</li> <li>• Finish shall be coordinated with other on-site furnishings.</li> <li>• Public furnishings shall be permanently fixed to the ground.</li> </ul>	
Bicycle Rack	<ul style="list-style-type: none"> <li>• Racks shall ensure that parked bicycles do not block the travel path of pedestrians.</li> <li>• In commercial areas, bike racks shall be placed at regular intervals no greater than 250 feet.</li> <li>• Integration of public art into bike rack design is encouraged.</li> </ul>	

# CHAPTER 7: PEDESTRIAN-FRIENDLY STREETScape STANDARDS

Furnishing	Key Design Elements or Considerations	Graphic Example(s)
Bollard	<ul style="list-style-type: none"> <li>• Use bollards to prevent vehicles from entering pedestrian zones, such as at the interface of plazas and shared space streets or bus-only streets.</li> <li>• Removable bollards may be appropriate to balance pedestrian protection with emergency access.</li> <li>• Creative use of materials such as planters as bollards or integration of public art into bollard design is encouraged.</li> </ul>	
Bus Shelter	<ul style="list-style-type: none"> <li>• Selection of shelters should be in accordance with TriDelta, BART or City standards, as appropriate.</li> <li>• Creative use of color, material and shelter design is encouraged.</li> </ul>	
Landscaping	<ul style="list-style-type: none"> <li>•  Low-level ground cover or shrubs should be used in the furnishing zone of sidewalks and adjacent to pedestrian pathways to not impede visibility of pedestrians or approaching traffic.</li> <li>•  Native and/or drought-tolerant species shall comprise 100% of all landscape areas.</li> </ul>	
Lighting	<ul style="list-style-type: none"> <li>•  Pedestrian lighting shall be placed on all streets and pedestrian paths in the Master Plan area at regular intervals not to exceed 125 feet, on both sides of the street.</li> <li>• Light poles should be pedestrian-scaled, and the light source shall not exceed 16 feet above the ground.</li> <li>•  Lamps should be energy-efficient, such as LEDs.</li> <li>•  Lighting shall be consistent with the City's minimum lighting level standards to increase pedestrian safety.</li> <li>• Consider selecting poles with brackets to hang banners and/or flower baskets.</li> <li>• Install in-ground uplighting along buildings</li> </ul>	

# CHAPTER 7: PEDESTRIAN-FRIENDLY STREETScape STANDARDS

Furnishing	Key Design Elements or Considerations	Graphic Example(s)
	<p>and pathways, where appropriate.</p> <ul style="list-style-type: none"> <li>• Lighting shall be consistent throughout developments.</li> <li>• Low level, pedestrian oriented lighting shall be incorporated throughout developments.</li> </ul>	
Newspaper Rack	<ul style="list-style-type: none"> <li>• Newspaper racks shall be consolidated.</li> <li>• Co-locate racks adjacent to transit stops and the BART entrance.</li> </ul>	
Paving	<ul style="list-style-type: none"> <li>• A coordinated, high-quality paving scheme shall define the public realm and contribute to pedestrian access.</li> <li>• Decorative paving materials, patterns, textures, and colors should be used to highlight important pedestrian zones, including crosswalks.</li> <li>•  Paving must maintain smooth and level surfaces that meet universal accessibility requirements and be slip resistant.</li> </ul>	
Planters	<ul style="list-style-type: none"> <li>• Aboveground planters should serve as seating walls by being designed with seat-like heights and widths.</li> <li>• Planters shall not pose as an obstruction to the pedestrian through zone and should be permanently fixed to the ground.</li> </ul>	

# CHAPTER 7: PEDESTRIAN-FRIENDLY STREETScape STANDARDS

Furnishing	Key Design Elements or Considerations	Graphic Example(s)
Trash/Recycling Receptacle	<ul style="list-style-type: none"> <li>• Locate trash receptacles at intersections and adjacent to outdoor seating.</li> <li>•  Receptacles for recycling shall be provided adjacent to or integrated with all trash receptacles.</li> <li>• Receptacles should be clustered around other furnishings and at logical locations where pedestrian interaction is highest.</li> </ul>	
Tree Grate	<ul style="list-style-type: none"> <li>• Tree grates shall be used in commercial areas to protect trees and reduce safety hazards.</li> <li>•  Grates must be ADA compliant to ensure they do not present an obstacle for persons with mobility impediments.</li> </ul>	
Trees	<ul style="list-style-type: none"> <li>• Trees should be planted in the furnishing zone at consistent intervals of approximately 25 to 35 feet.</li> <li>•  Use native and/or drought-tolerant species.</li> <li>• Select trees that provide shade and are not extremely difficult to maintain.</li> </ul>	


## 7.4 Pedestrian Crossing Design Standards

### Crosswalk Standards

Crosswalks and mid-block pedestrian crossings shall provide the following:

- A minimum crosswalk width dimension equal to the Through Zone on the approaching sidewalk.
- Curb extensions or bulbouts that extend to the edge of the travel way or bicycle lane to maximize pedestrian visibility.
- Adequate sight distance so that pedestrians have an unobstructed view

of approaching vehicles and so that approaching motorists and cyclists are able to see waiting pedestrians easily.

- Advanced vehicle stop bars on stop-controlled approaches.
- Pedestrian crossings at both ends of the bus-only street segment shall be on raised speed tables and at the same elevation as the curb and sidewalk to enhance pedestrian visibility. Crosswalks shall be delineated with different paving material and colors to further emphasize pedestrian priority.
-  Use of enhanced crosswalk markings along high volume pedestrian corridors to provide visual cues to drivers that they are entering an area of increased pedestrian activity. Crosswalk markings may include textured and/or colored paving, painted striping, and/or raised crosswalks. Textured pavement, such as stamped concrete, is preferred over brick or unit pavers in order to minimize potential conflicts with ADA requirements.

## 7.5 Pedestrian-Only Path Design Standards

Pedestrian-only pathways are a series of connecting walkways that join streets, alleys, open plazas, courtyards, and parking areas through central portions of blocks. These offer mid-block connections between sidewalks, parking areas, and other public spaces. They promote pedestrian activity by creating spaces scaled to pedestrian use, reducing conflicts with automobile traffic, and providing more direct routes between origins and destinations. They also offer the benefit of increasing the amount of potential retail

frontage and supplying outdoor space for restaurants and cafes.

Pedestrian pathway entrances should be designed to impart a sense of welcome to supply visual cues for pedestrians that these are safe and unique spaces.








*Pedestrian path with trellis*

Pedestrian paths should enhance the Station Area experience by:

- Providing linkages where vehicular connections are infeasible.
- Improving access to businesses, parking areas, public streets, transit stops, and open spaces.
- Providing pedestrian amenities like seating, decorative lighting, planters, fountains, distinctive paving, public art, landscaping and bicycle racks.

Pedestrian-only paths must meet the following standards:



-  Pathways shall be well-lit.
-  Pathways shall have a clear visual termination point so that people can see from one end to the other.
-  The travel zone of the pathway must be a minimum of 5 feet wide and free from temporary or permanent obstructions.
-  Paving materials must meet ADA accessibility standards.
-  Meandering paths should be discouraged. They are challenging for visually impaired pedestrians and lengthen travel distance.



*Pedestrian path with retail frontage*

## 7.6 Shared Space Design Standards

The kiss-and-ride locations near the BART entrance are designated as a shared space. This space would be used by automobiles accessing the kiss-and-ride area and by pedestrians walking to and from the BART Station as well as the adjacent commercial uses. Since this area would be heavily used by both pedestrians and automobiles,

it is designated as a shared space. Shared space is defined as a street where pedestrians, cyclists, and motorists share the same physical facility and pedestrians are given priority.

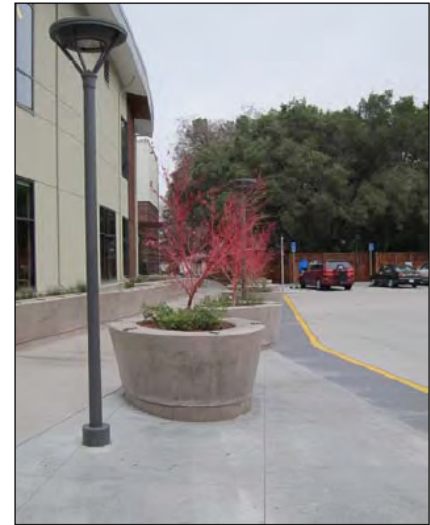
Unlike the rest of the Master Plan area, the shared space in front of the BART plaza does not delineate the pedestrian realm from the auto realm with curbs. This design feature allows for increased mobility for wheelchair users; however, it can be challenging for visually impaired pedestrians. The following characteristics should be used in designing the shared space:

- Shared space will be on a raised table and at the same elevation as the curb and sidewalk.
- The plazas, crosswalks, and automobile travel ways should be defined through use of different and distinguishable paving material, textures, and/or colors.
- The edge of the automobile travel way should be delineated with a colored truncated dome tactile surface.
- Removable bollards and/or planters and other features will define the edge of the street travel way.
- Crosswalks at both ends of the streets and mid-block will be clearly demarcated by different paving materials and colors to further emphasize pedestrian priority.
- Landscaping along the shared space and at crossings will not obstruct a driver's view of crossing pedestrians.
- Plazas on either side of the shared space should provide a variety of amenities, such as information kiosks or outdoor dining furniture. These

amenities should not obstruct the major pedestrian travel paths linking the BART Station entrance, the garages, bus stops, commercial areas, and the kiss-and-ride areas.

unique shared space area. The above characteristics will contribute to an environment where pedestrians are given priority and autos travel at slow speeds (20 mph or less).

The change in elevation and texture, along with signage, would define this area as a



*Shared Space Streets*

## 7.7 Wayfinding Program

At many BART stations throughout the system, there is a need for improved wayfinding. Wayfinding comprises signs, maps, kiosks, and other graphic or architectural methods to convey location and directions to travelers. This system of signage will announce that visitors and residents have entered a special place, separate and unique from the rest of the city. A primary goal of enhanced wayfinding is to solve the “last mile” connection problem by facilitating transit, bicycle, and pedestrian trip planning to and from BART. Additionally, pedestrian and bicycle safety will be improved by delineating clear paths and access points for these modes to, from, and within the station area. Wayfinding encourages BART patrons to visit the various destinations in


the vicinity of the Pittsburg/Bay Point BART Station.

### Wayfinding Signage Types

The following table demonstrates the various types of pedestrian and auto-oriented signage that should be included in the Station Area wayfinding program.

**Table 7.4 Wayfinding Signage Types**

Wayfinding Signage Type	Key Design Elements or Considerations	Graphic Example(s)
<p>Pedestrian-Oriented Signs, Maps, and/or Kiosks</p>	<p>Pedestrian signs, maps, and kiosks should be placed throughout the station area to direct visitors to local businesses, community amenities, and parking areas. Pedestrian-oriented signs and maps should be located at key pedestrian activity nodes in the station area, such as transit stops, plazas, shopping areas, and paseos.</p>	
<p>Transit Stop Signage</p>	<p>Transit stop signage should be provided along the bus-only street and any other bus stops in the project area. Signage should provide clear information on bus route numbers, schedules, and fares to facilitate transit ridership. Where bus stops include a passenger shelter, additional information displays such as route maps should be provided. Transit stop signage should be well lit.</p>	
<p>Auto-Oriented Directional Signage</p>	<p>The signage program shall include a common directional sign with directional arrows and labeling to denote key destinations, parking, and kiss-and-ride. Directional signs shall be oriented to vehicular traffic. Signs should be lighted, landscaped, and placed permanently at roadsides or within medians at key locations throughout the station area.</p>	
<p>Banners</p>	<p>Banners or flags on streetlight poles should be included in the signage program. Banners may be changed periodically to provide advertisement for special events and promotions in the station area.</p>	

Wayfinding Signage Type	Key Design Elements or Considerations	Graphic Example(s)
Gateway	Gateway features provide a sense of arrival and transition to unique places within the station area. These visual features can serve to promote the distinct identity of the station area. Entrance features may consist of a combination of plant materials, hardscape elements (such as archways, trellises, and special paving), and signage. Gateways can provide an opportunity for architectural features, monuments, public art, murals, banners, and lighting features that serve as identifiable community landmarks.	

### Wayfinding Signage Locations

Wayfinding signs should be placed at strategic locations throughout the station area, providing directions to:

- Fare gates
- Parking facilities (auto and bicycle)
- BART Information Booth
- Kiss-and-ride locations
- Taxi stand
- Transit stops
- Walk and bike routes to nearby parks, plazas, neighborhoods, and destinations

**Figure 7-6** includes suggestions for the placement of wayfinding signage throughout the Master Plan area.

### Station Area Maps

Both static and takeaway paper and electronic maps are needed to facilitate multimodal circulation to, from, and within the station. Large area maps should be placed at the main exits at the BART Station, at entrances to the station area, and at the station information booth. Large

“you are here” maps provide an opportunity to locate the station within a broader regional context. These maps could be combined with local area information/history, advertising, events calendars, etc. Multimodal local area maps should highlight:

- Area bike routes
- Area walking routes
- Area transit routes
- Area vehicle routes, including kiss-and-ride locations
- Automobile and bicycle parking facilities
- Retail and restaurant locations

### Wayfinding Standards

The station area wayfinding system should:

- Provide directional and information signs that are attractive, clear, and consistent in theme, location, and design.
- Identify key destinations and facilities, such as public parking, kiss-and-ride,

# CHAPTER 7: PEDESTRIAN-FRIENDLY STREETScape STANDARDS

transit stops, parks, shopping, and civic destinations.

- Be co-located with other streetscape furniture, such as light standards and transit shelters, where possible, to enhance visibility and reduce visual clutter in the public realm.
- Be designed as part of a coordinated palette of signage and street furniture throughout the station area. This branding can include customized poles and mounts for regulatory signs and lighting fixtures, and an area logo, font, and color scheme.
- Include elements such as pole banners or decorative paving elements that can serve as both public art, branding, or wayfinding.
- Include bilingual signs in Spanish and English throughout the Master Plan area.
- Comply with the BART Wayfinding and Signage Standard.



*Integrated wayfinding signage with district logo, auto-oriented directional sign, and pedestrian map*






*Coordinated palette of wayfinding signage*



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FIGURE 7.6  
WAYFINDING DIAGRAM





Legend

-  Pittsburg/Bay Point BART Station
-  BART Entrance
-  Wayfinding Locations





Boundaries

-  Project Area
-  BART Property

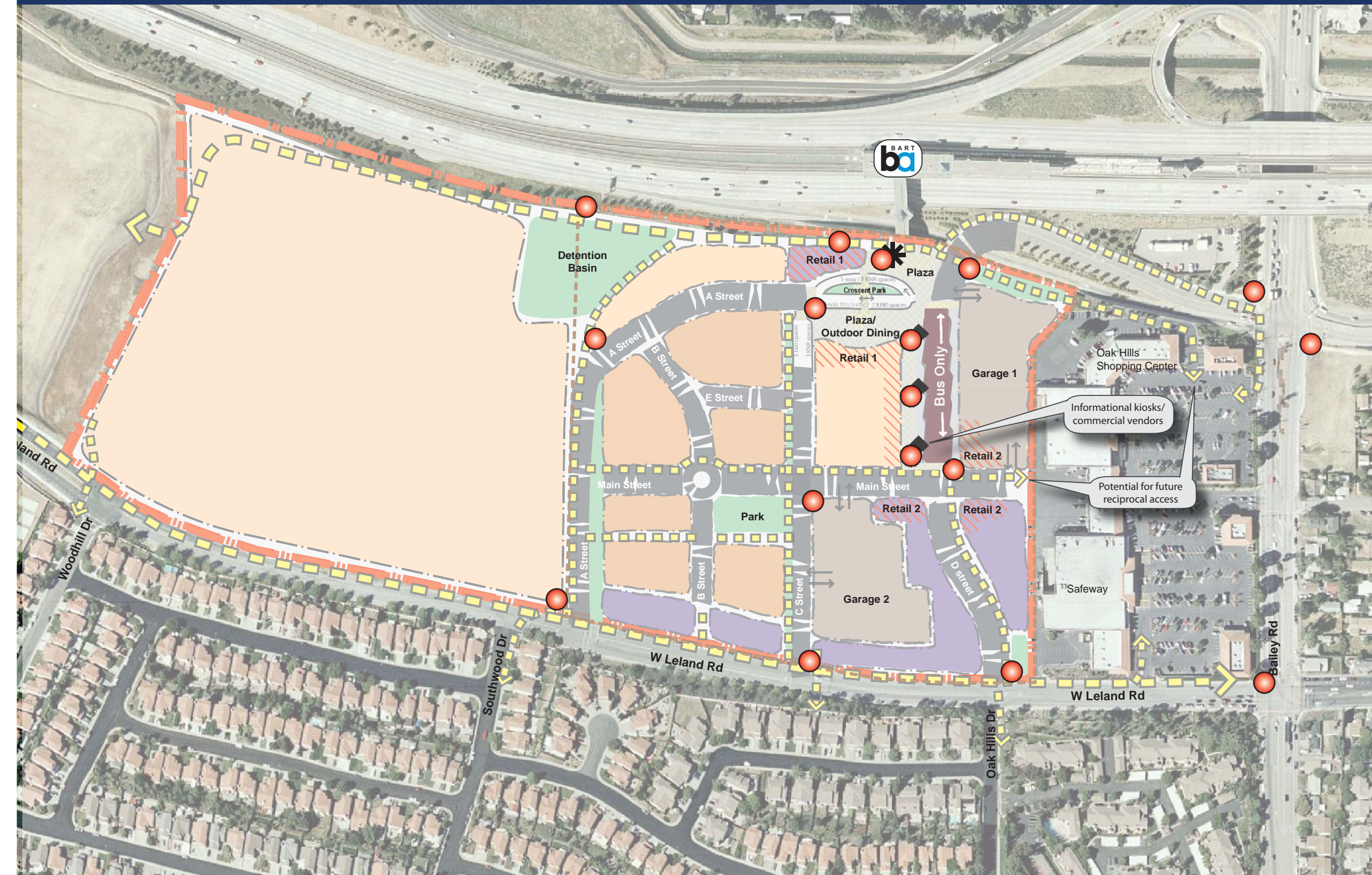
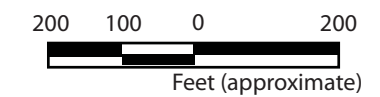
Circulation

-  Roadways
-  Major Pedestrian/Bike Path
-  Minor Pedestrian/Bike Path
-  Bus-Only Street

Land Uses

-  MDR - Medium Density Residential
-  HDR - High Density Residential
-  R - Ground Floor Retail
-  F - Flex\*
-  G - Parking Garage
-  OS - Parks & Open Space
-  P - Urban Plaza

\* Flex space can be residential, retail, office, public or what the market dictates when the development starts to build out









# CHAPTER 8. IMPLEMENTATION PLAN





## 8. IMPLEMENTATION PLAN

This chapter addresses the development of the BART property only and does not include the WCHB site. It is organized into the following sections:

- 8.1 Phasing Strategy
- 8.2 Funding & Financing Strategy
- 8.4 Implementation Strategy
- 8.5 Plan Administration

### 8.1 Phasing Strategy

The development of the project will occur over five phases. The phases have been developed based on market conditions, anticipated costs, need for improvements tied to land uses, and design factors critical to the success of the project.

#### Phase 1

The focus of Phase 1 is the construction of senior and market-rate housing, flex space, and ground-floor retail fronting an expanded BART plaza on the existing intermodal and plaza site. During Phase 1, the BART Parking Garage 1 site that is currently vacant will serve as a temporary surface park and ride facility with bus stops, taxi loading, and kiss-and-ride areas until D Street and the A Street kiss-and-ride are complete. The area to the south of Garage 1 will become available for temporary surface parking and/or construction parking or storage for construction materials until phase 4 construction. D Street will temporarily be open to through traffic. Improvements to the circulation system include pedestrian/bicycle pathways along the BART access road to Bailey Road and from the BART site along the northern part of the Oak Hills Shopping Center.

#### Phase 2

The focus of Phase 2 is the construction of BART Parking Garage 1 and ground-floor retail nearest the BART plaza. The segment of D Street north of Main Street will become a bus-only corridor, directing bus traffic to the sawtoothed bus bays. Phase 1 residential will support and complement the new flex use and retail development built during this phase.

#### Phase 3

The focus of Phase 3 is the construction of high-density residential development in the northwest quadrant of the BART site. Improvements to the circulation system include the completion of Main Street and E Street and portions of B Street and A Street to serve the new residential development built in this phase.

#### Phase 4

The focus of Phase 4 is the construction of BART Parking Garage 2 wrapped with flex space, ground-floor retail along Main Street and flex space at the intersection of West Leland Road and D Street, which will be enhanced as a gateway to mark this main entrance to the station area.

#### Phase 5

The focus of Phase 5 is the completion of the West Leland Road street frontage, to be lined with flex space. Located behind West Leland Road is high-density residential development and a community park. The final segments of A Street and B Street will be constructed during this phase to complete the circulation system.

The following phasing diagram identifies the five phases that will guide development of the project. The West Coast Home Builders (WCHB) site has not

been included in the phasing, as it may occur at any time and it is not known when this project will break ground.

## 8.2 Funding & Financing Strategy

This section provides the funding and financing strategy for the Pittsburg/Bay Point BART Master Plan. The plan has identified a variety of specific infrastructure improvements that will be necessary to facilitate development. The financing strategy identifies funding sources for the capital improvements on the site, but does not cover the costs of operations and maintenance of the infrastructure.

### Key Infrastructure Items

Mark Thomas and Company estimated the cost of infrastructure improvements for the Master Plan area, shown in **Table 8.1**. As shown, the total cost is approximately \$56.9 million and includes new streets, a kiss-and-ride, storm drain improvements, sanitary sewer improvements, water improvements, a joint trench, two structured parking garages, and a community park.

### Parking Garages

The most costly elements of the infrastructure improvement program are the two parking garages that will serve to replace existing BART parking and provide additional parking for new housing and retail uses. Of the \$56.9 million budget for infrastructure improvements, over \$42.8 million (75 percent) is attributable to these garages. Because parking must be maintained for uninterrupted access to BART and existing retail, at least one garage must necessarily be phased prior to any other development on the BART site. As a consequence, the first parking garage

is planned in Phase 2 at a cost of \$22.8 million, with the second garage built in Phase 4. Because of the magnitude of the cost, the parking garages are likely to require significant contributions from public sources, including potentially the Metropolitan Transportation Commission (MTC), the Pittsburg Redevelopment Agency or other appropriate body, Contra Costa County, and the City of Pittsburg.

### New Streets

The Master Plan includes the construction of seven new streets and a new kiss-and-ride lane at the BART site. Although a portion of these improvements can be delayed until the latter stages of development, many will need to be frontloaded in order to provide access to the site. The cost of new streets is approximately \$6 million, with more than half of the cost borne in the first phase.

### Temporary Surface Park and Ride

In the first phase of the master plan, there will be a need to construct temporary surface park and ride facilities to replace the intermodal area and lost surface parking that will be developed into other uses. A temporary surface park and ride facility with bus stops, taxi loading, and kiss-and-ride areas will be provided at the site of Garage 1 until phase 2 construction. The area to the south of Garage 1 will become available for temporary surface parking and/or construction parking or storage for construction materials until phase 4 construction. According to preliminary figures, the cost of these improvements will total approximately \$1.2 million.

PHASING DIAGRAM

**Phase 1**

- o Garage 1 site (currently vacant) will serve as temporary surface parking, bus and taxi loading and kiss-n-ride until A street kiss-n-ride and D streets are complete
- o South of Garage 1 site will temporarily become available for surface parking, and/or construction parking/materials until phase 4 construction
- o D street is open to through traffic
- o Construction of senior and market-rate housing, ground floor retail, and flex on existing intermodal and plaza site
- o Improvements to pedestrian/bicycle pathways along the BART Access Road to Bailey Road, and from the BART site along the northern part of Oak Hills Shopping Center

**Phase 2**

- o North segment of D street will become bus only
- o Construction of Garage 1 with ground floor retail

**Phase 3**

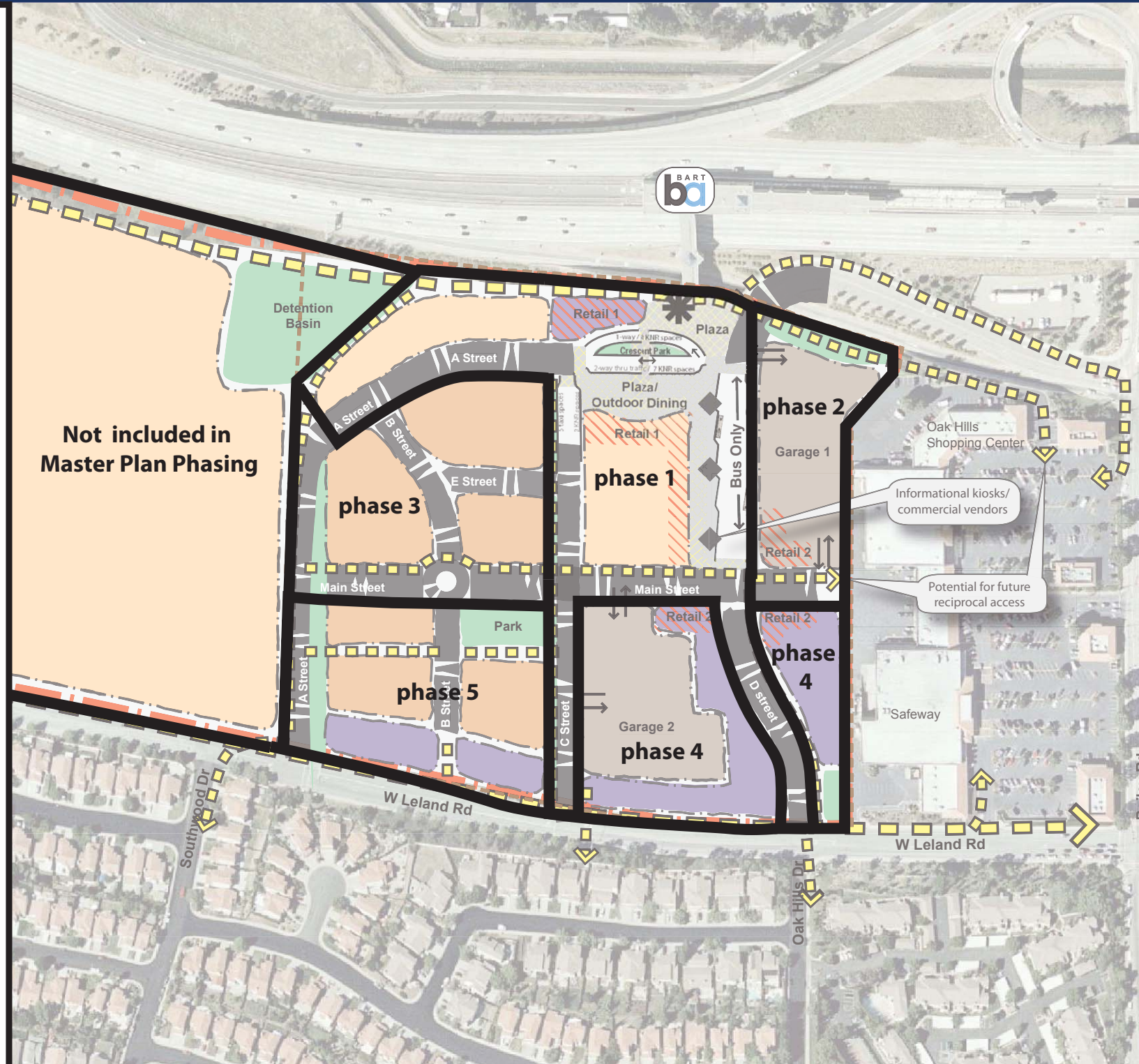
- o New high density residential development in northwest quadrant of BART site
- o Completion of Main street and E street and portions of B street and A street

**Phase 4**

- o Flex and ground floor retail at the temporary surface lot south of Garage 1
- o Construction of Garage 2 wrapped with flex and ground floor retail along Main street
- o These developments create the gateway into the site from Leland Rd

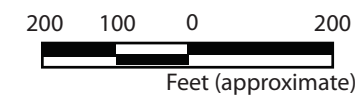
**Phase 5**

- o Completion of Leland Rd street frontage, with flex fronting Leland Rd, and high density residential and community park located behind
- o Completion of A street and B street



**legend**

- Pittsburg/Bay Point BART Station
  - BART Entrance
  - Boundaries**
    - Project Area
    - BART Property
  - Land Uses**
    - MDR - Medium Density Residential
    - HDR - High Density Residential
    - R - Ground Floor Retail
    - F - Flex\*
    - G - Parking Garage
    - OS - Parks & Open Space
    - P - Urban Plaza
  - Circulation**
    - Roadways
    - Major Ped/Bike Path
    - Minor Ped/Bike Path
- \* Flex space can be residential, retail, office, public or what the market dictates when the development starts to build out





### New Park

Phase 5 of the Master Plan includes the development of a park to serve the residents of the new housing units. Estimated at \$300,000, this park represents less than one percent of the total cost of infrastructure planned. Because this park is planned for development near the conclusion of the implementation, it is possible that the proceeds of a privately funded financing mechanism such as benefit assessment district or a community facilities district could be used without the need for debt finance. This could be supplemented by other public funding sources.

### Water, Sewer, and Stormwater Improvements

Similar to the streets, the storm drains, detention basin, sanitary sewers, water pipes, and trenches can be constructed alongside the new development. Of the \$4.9 million in improvements (9 percent of total costs), \$3 million is planned for Phases 1 and 2, with the remaining \$1.9 million planned for the later phases. As with streets, these improvements could be financed through a combination of developer agreements, assessment districts, and other sources of public funding.

### Financing Infrastructure

**Table 8.2** on the following page identifies a variety of mechanisms that can be employed to fund or finance infrastructure projects. This list should be approached as a menu of options rather than as a recommendation for any particular financing strategy. The ability for the Master Plan to utilize the potential sources described will vary depending on market conditions, funding availability, consent from property owners, and other factors.

To arrive at the appropriate funding strategy, the City will have to make a series of decisions about the implementation process for each of the projects.

### Pay-As-You-Go or Debt Financing

There are two ways to approach infrastructure financing for a plan area: pay-as-you-go or debt financing. Each of these has advantages and disadvantages, shown in **Table 8.3** below.

In the pay-as-you-go approach, the improvement would only be made once a sufficient amount of tax or fee revenue is gathered to fund the improvement. For example, Pittsburg currently maintains a citywide Landscape and Lighting District that, through annual property-based assessments, provides an ongoing source of revenue for the cost of streetlights, street trees, sidewalks, parks, and facilities in the public realm.

This contrasts with the debt financing approach, where the improvement is financed immediately by borrowing from future revenues and issuing bonds that are paid back over time through taxes or fee payments. For example, from 2010 to 2014, the Pittsburg Redevelopment Agency has committed nearly \$11 million in property tax increment revenue bonds to the Los Medanos Project Area on activities such as commercial rehabilitation, property acquisition and disposition, and the construction of affordable housing.

**Table 8.1: Estimated Cost of Infrastructure Improvements by Development Phase**

Infrastructure Improvement	Estimated Cost by Development Phase					Total Cost
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	
Streets	\$3,656,000	\$236,000	\$1,601,000		\$606,000	\$6,099,000
Class I Bike Lane	\$57,000					\$57,000
Temporary Surface Park and Ride (phase 2 area, and phase 4 area east of D street)	\$1,199,000					\$1,199,000
Kiss and Ride (includes Crescent Park)	\$542,000					\$542,000
Storm Drain	\$1,081,000		\$248,000		\$238,000	\$1,567,000
Sanitary Sewer	\$370,000	\$9,000	\$83,000		\$37,000	\$499,000
Water	\$621,000	\$52,000	\$278,000		\$145,000	\$1,096,000
Joint Trench	\$928,000	\$57,000	\$358,000		\$171,000	\$1,514,000
Parking Garage #1		\$22,823,000				\$22,823,000
Parking Garage #2				\$20,042,000		\$20,042,000
BART Plaza	\$362,000					\$362,000
Leland Road Traffic Signalization	\$607,000				\$217,000	\$824,000
Park					\$289,000	\$289,000
<b>Total</b>	<b>\$9,423,000</b>	<b>\$23,177,000</b>	<b>\$2,568,000</b>	<b>\$20,042,000</b>	<b>\$1,703,000</b>	<b>\$56,913,000</b>

Source: PMC; Mark Thomas & Company, January 27, 2011.



Table 8.2 – Funding Sources for Infrastructure Improvements

Public Improvement	Potential Funding Sources										
	Assessment Districts		Private Investment	Direct City Financing			Other Government Sources of Funding			User Fees	
	Benefit Assessment District	Community Facilities District	Development Agreement	City General Fund	Impact & Usage Fees	Redevelopment Agency	MTC's Transportation for Livable Communities	Contra Costa County Transportation Authority Measure J	Proposition 13 C Funds		Regional Transportation Plan
<b>PHASE I</b>											
Streets	•	•	⊖	⊖	⊖	○	⊖	○	○	○	○
Class I Bike Lane	⊖	⊖	⊖	⊖	⊖	○	•	⊖	○	○	○
Kiss and Ride (includes Crescent Park)	•	•	⊖	⊖	○	○	•	○	○	○	○
Temporary Surface Park and Ride (phase 2 area, and phase 4 area east of D street)	•	•	⊖	⊖	○	○	⊖	○	○	○	○
Storm Drain	•	•	⊖	⊖	⊖	○	⊖	○	○	○	○
Sanitary Sewer	•	•	⊖	○	⊖	○	⊖	○	○	○	○
Water	•	•	⊖	○	⊖	○	⊖	○	○	○	○
Joint Trench	•	•	⊖	⊖	⊖	○	⊖	○	○	○	○
BART Plaza	⊖	⊖	⊖	⊖	○	○	•	⊖	○	○	○
Leland Road Traffic Signalization	⊖	⊖	⊖	⊖	⊖	○	⊖	⊖	○	○	○

MASTER PLAN

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Public Improvement	Potential Funding Sources										User Fees
	Assessment Districts		Private Investment	Direct City Financing			Other Government Sources of Funding				
	Benefit Assessment District	Community Facilities District	Development Agreement	City General Fund	Impact & Usage Fees	Redevelopment Agency	MTC's Transportation for Livable Communities	Contra Costa County Transportation Authority Measure J	Proposition 13 C Funds	Regional Transportation Plan	
<b>PHASE 2</b>											
Streets	●	●	∅	∅	∅	○	∅	○	○	○	○
Sanitary Sewer	●	●	∅	○	∅	○	∅	○	○	○	○
Water	●	●	∅	○	∅	○	∅	○	○	○	○
Joint Trench	●	●	∅	∅	○	○	∅	○	○	○	○
Parking Garage #1	∅	∅	∅	∅	○	○	∅	∅	○	○	∅
<b>PHASE 3</b>											
Streets	●	●	∅	∅	∅	○	∅	○	○	○	○
Storm Drain	●	●	∅	∅	∅	○	∅	○	○	○	○
Sanitary Sewer	●	●	∅	○	∅	○	∅	○	○	○	○
Water	●	●	∅	○	∅	○	∅	○	○	○	○
Joint Trench	●	●	∅	∅	○	○	∅	○	○	○	○

Public Improvement	Potential Funding Sources										
	Assessment Districts		Private Investment	Direct City Financing			Other Government Sources of Funding				User Fees
	Benefit Assessment District	Community Facilities District	Development Agreement	City General Fund	Impact & Usage Fees	Redevelopment Agency	MTC's Transportation for Livable Communities	Contra Costa County Transportation Authority Measure J	Proposition 13 Funds	Regional Transportation Plan	
<b>PHASE 4</b>											
Parking Garage #2	∅	∅	∅	∅	○	○	∅	∅	○	○	∅
<b>PHASE 5</b>											
Streets	●	●	∅	∅	∅	○	∅	○	○	○	○
Storm Drain	●	●	∅	∅	∅	○	∅	○	○	○	○
Sanitary Sewer	●	●	∅	○	∅	○	∅	○	○	○	○
Water	●	●	∅	○	∅	○	∅	○	○	○	○
Joint Trench	●	●	∅	∅	∅	○	∅	○	○	○	○
Park	●	●	∅	∅	∅	○	∅	○	○	○	∅
Leland Road Traffic Signalization	∅	∅	∅	∅	∅	○	∅	∅	○	○	○

Key:

- ∅ Partial funding possible
- Full funding possible
- Funding unlikely or uncertain

Note: Sanitary sewer and water would be funded partially thru impact fees and partially through water/sewer enterprise funds.

MASTER PLAN

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**Table 8.3 – Advantages and Disadvantages of Pay-As-You-Go and Debt Financing Tools**

	Advantages	Disadvantages
Pay-As-You-Go	<ul style="list-style-type: none"> <li>• Very little financial risk to City or district</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement takes longer to finance. Difficult to apply to larger-scale, more costly improvements.</li> </ul>
Debt Financing	<ul style="list-style-type: none"> <li>• Improvements can be made immediately.</li> <li>• Allows for financing of larger-scale, costly improvements.</li> </ul>	<ul style="list-style-type: none"> <li>• Some risk that future revenues will be insufficient to pay off debt within time frame.</li> <li>• Many cities and redevelopment agencies have reached their bonding capacity.</li> </ul>

### Funding Sources

A number of funding sources are available for the types of infrastructure improvements envisioned in the Master Plan area. Sources include land-based financing tools, which leverage the value of the real estate development on the site, negotiated developer agreements between the public sector and the master developer, parking fees, and regional and state grants. Each of these funding sources is described in more detail below.

#### Land-Based Financing Tools

In California, the most commonly used land-based financing tools include the formation of benefit assessment districts, community facilities districts, and tax increment financing districts. These tools all depend on new real estate development to generate parcel-based taxes or property tax revenues to finance the improvements.

- A benefit assessment district is formed to include a geographical area in which all property owners would equally benefit from the proposed improvement. To be enacted, a benefit

assessment district requires a majority vote from property owners. Once passed, owners within the district pay an additional tax or fee in the amount necessary to pay for the improvement in the desired time frame, in accordance to the property's proportional share of the benefit. The individual property owner's tax or fee may be lower if the district encompasses a large area or is financed over a long time period.

- Mello-Roos community facilities districts (CFDs) are similar to benefit assessment districts in several aspects. Like benefit assessment districts, CFDs are formed when the property owners in a geographical area agree to impose a tax or fee on the land in order to fund infrastructure improvements. Unlike benefit assessment districts, however, CFDs are most commonly formed in cases where the geographic area encompasses a small number of property owners who intend to subdivide the land for sale. To be enacted, CFDs require a two-thirds vote of property owners, but this threshold is often only a nominal requirement, as in the cases where

there are few owners. One provision of the Mello-Roos Community Facilities District Act is that these fees can also be proportionally subdivided and passed on to the future landowners. These fees can then be used either for pay-as-you-go financing or to pay off bonds issued against the anticipated revenue from the CFD.

- Tax increment financing (TIF) is administered at no additional cost to the property owner or individual businesses, by freezing the property tax revenue at its “base rate” in the current year and diverting any additional tax revenue each year into a separate pool of money used to finance the improvements. Tax increment financing is only implemented with the establishment of a redevelopment agency.

TIF has been a critical tool for funding station area redevelopment projects in the Bay Area. Because these parcels lie

within an existing redevelopment area, the use of tax increment financing for these public improvements could be possible. However, the Pittsburg Redevelopment Agency has committed all of its bonding capacity to existing and planned projects. The only available funds from the Redevelopment Agency are the housing set-aside dollars, which can be dedicated to affordable housing projects within the project area. In addition, Governor Brown’s proposed state budget would eliminate local redevelopment agencies, which jeopardizes the potential for using this revenue source to fund transit-related improvements in the Master Plan area and other project areas.

**Table 8.4 – Advantages and Disadvantages of Land-Based Financing Tools**

	Advantages	Disadvantages
Benefit Assessment District (BAD)	<ul style="list-style-type: none"> <li>• Less financial risk to City or public agency; risk transferred to individual property owners.</li> <li>• Requires basic majority vote of property owners.</li> <li>• Could lead to increased tax revenue based on private reinvestment.</li> </ul>	<ul style="list-style-type: none"> <li>• Individual property owners may be unwilling to absorb financing risk, especially for debt financing.</li> <li>• Assessment can be politically infeasible if existing property tax assessments total 2 percent of assessed value.</li> </ul>
Community Facilities District (CFD)	<ul style="list-style-type: none"> <li>• Less financial risk to City or public agency; individual property owners take on more risk.</li> <li>• Because fees are passed on to end-users, developers are generally more receptive to their use.</li> </ul>	<ul style="list-style-type: none"> <li>• Property owners may fear that imposing fees will dissuade buyers or reduce achievable sales prices.</li> <li>• Assessment can be politically infeasible if existing property tax assessments total 2 percent of assessed value.</li> </ul>

	Advantages	Disadvantages
Tax Increment Financing (TIF)	<ul style="list-style-type: none"> <li>Improvement does not cost individual property owners additional fees or taxes.</li> <li>Improvements may lead to increases in sales and property tax revenue adjacent to redevelopment area.</li> </ul>	<ul style="list-style-type: none"> <li>Some risk to City if future property tax revenue falls short of projections.</li> <li>Diverts future tax revenue from general fund.</li> </ul>

An important consideration in the case of both CFDs and assessment districts is that there is a limit to the amount that property owners are typically willing to contribute in annual property tax assessments. A commonly used rule of thumb for calculating the feasibility of implementing new assessments states that total property taxes, assessments, and obligations should not exceed two percent of the property's assessed value. In addition to the statewide one percent ad valorem property tax assessment, there are existing parcel taxes on the properties in the Master Plan area, which include taxes to support schools and an assessment for lighting and landscaping. Altogether, a private property owner would be obligated to pay assessments totaling \$790, in addition to the ad valorem tax. Under the existing tax structure, a property owner with a housing unit valued at \$350,000 would be paying taxes and fees totaling approximately 1.2 percent of assessed value, indicating that the implementation of new assessments would likely be a feasible strategy.

### Developer Agreements (DA)

In addition to the funding sources outlined above, there is some potential for direct contributions from the master developer to help pay for infrastructure needed to accommodate the anticipated development program. Structured negotiations between cities and

developers are often conducted to obtain desired improvements in exchange for development rights. The extent to which a new project can contribute to the provision of infrastructure depends on a number of factors, including the anticipated prices for new housing units, construction costs, lot size and configuration, and parking ratios. All of these factors will vary depending on the final format and timing of development, and therefore the amount of public benefits that can be provided is unpredictable and will have to be negotiated.

### User Fees

Currently, BART charges a daily fee of \$1 per day and a monthly fee of \$63 for patron parking at the surface lots in the Pittsburg/Bay Point station area. The fees have been recently implemented at this station area. The revenues generated from user fees help offset operations and maintenance costs. If the fees could be increased, it may be possible to use some portion of that revenue toward financing the capital costs of the garage facilities. However, the feasibility of raising rates depends on a variety of factors and would require further study to determine its applicability to this project.

## Regional and State Grants

### Proposition 1C

Approved by California voters in the November 2006 election, the proceeds of this bond issuance have been among the primary sources of funding for transit-oriented development around the state in recent years. As of February 2010, however, the State of California has placed a hold on the remaining funds due to the ongoing budget crisis. Consequently, the availability of this funding source is currently in jeopardy.

### Transportation for Livable Communities (TLC)

The Bay Area's regional metropolitan planning organization, Metropolitan Transportation Commission (MTC), offers grants of up to \$6 million for projects that support community-based transportation projects near transit. To date, MTC has not applied the TLC grants to fund parking garages, but these are eligible projects for the program.

### Contra Costa County Measure J (J)

The Contra Costa Transportation Authority distributes grants for transportation projects throughout Contra Costa County, using revenue generated from an increase in the sales tax for transportation projects approved by voters under Measure J in 2004. While the majority of funds that were available under Measure J have already been allocated to projects, a pool of \$100 million has been set aside to fund a countywide program called Transportation for Livable Communities. This program has similar goals to MTC's program of the same name, and funds are often used toward the county's required match for MTC's TLC grants.

## Regional Transportation Plan

As required by federal law, the Metropolitan Transportation Commission assembles its Regional Transportation Plan (RTP) every five years. This document outlines how MTC intends to distribute the transportation funds that it expects to receive from the federal government over a 25-year period. As a consequence, inclusion in the RTP significantly enhances the potential for a project to receive these funds. MTC will likely be soliciting submissions for the projects to be included in the next RTP in 2012 and 2013. To be considered, the project's sponsors must work with their county's Congestion Management Agency (in the case of Pittsburg/Bay Point, the Contra Costa Transportation Authority) and undergo a competitive evaluation process.

## 8.3 Implementation Strategy

The Implementation Strategy details critical action steps necessary for ensuring timely development of each phase of the project buildout. This section lists actions, the timeline for their implementation, the responsible party to complete each action, and potential funding sources. This information is distilled into a simple implementation matrix. In addition to the action items in the table below, a list of environmental mitigation measures is contained in Appendix B of this document.

In June 2010, the BART Board authorized the General Manager or her designee to execute a Joint Exercise of Powers Agreement (JPA) with the City of Pittsburg for the Pittsburg Bay Point BART Station by and between BART, and the Redevelopment Agency of the City of Pittsburg. Upon approval by all necessary boards and bodies, the JPA will solicit for

a Master Developer for the site, and then negotiate and execute an agreement with the Master Developer. The Master Developer, working with the JPA, would be responsible for implementing the BART-owned portion of this Master Plan, including public and private improvements.



**Table 8.5 – Implementation Matrix**

CATEGORY	Timing: 1 = Phase 1 2 = Phase 2 3 = Phase 3-5 Ongoing	Responsible Party	Factors/ Requirements	Funding Sources
Action				
<b>CONDITIONS OF APPROVAL</b>				
Prior to issuance of entitlements for development of BART-owned property, a comprehensive parking demand management and access study for all uses, including BART commuter parking, shall be completed by the developer. The analysis shall include use of the BART direct ridership model, the estimated impact of eBART service and parking, and the impact of parking pricing strategies (e.g., pricing of parking, unbundling of parking from land rent). A cost effectiveness analysis shall be conducted to compare the cost of providing parking with various strategies such as improved transit services, transit discounts, and pedestrian and bicycle amenities. Effective strategies and techniques to reduce parking demand on BART-owned properties shall be incorporated into future development proposals. Reductions in parking including reductions in size or number of the parking structures or surface parking areas shall not necessitate amendment of the Master Plan.	Prior to Phase 1	JPA, Private		na
<b>POLICY/LAND USE CHANGES</b>				
Adopt Master Plan and EIR	I	D		na
Mitigation Requirements/ Technical Studies Identified in the EIR (See Appendix B Mitigation Measures Checklist)	I	Private		na
Develop shared parking/reciprocal access agreements	I	D, Private, JPA		na

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# CHAPTER 8: IMPLEMENTATION

CATEGORY	Timing: 1 = Phase 1 2 = Phase 2 3 = Phase 3-5 Ongoing	Responsible Party	Factors/ Requirements	Funding Sources
Action				
<b>PUBLIC IMPROVEMENTS</b>				
<b>ON SITE IMPROVEMENTS</b>				
Streets (bikelane, curb, gutter, sidewalk, landscaping, bus bays)	Ongoing	D, PW, JPA, Private		BAD, CFD, DA, GF, TLC Grant
Installation of streetscape improvements: landscaping, coordinated benches, trash cans, lighting, decorative paving, planters and tree grates	Ongoing	D, PW, Private		DA
Kiss and Ride & Crescent Park	1	D, PW, JPA		BAD, CFD, DA, GF, TLC Grant
Storm Drain	1, 3	D, PW, JPA, Private		BAD, CFD, DA, GF, TLC Grant
Sanitary Sewer	Ongoing	D, PW, JPA, Private		BAD, CFD, DA, GF, TLC Grant
Water	Ongoing	D, PW, JPA, Private		BAD, CFD, DA, GF, TLC Grant
Joint Trench	Ongoing	D, JPA, Private		BAD, CFD, DA, GF, TLC Grant
Temporary Surface Park and Ride (phase 2 area, and phase 4 area east of D street)	1	D, JPA		BAD, CFD, DA, GF, TLC Grant
Parking Garage #1	2	JPA		BAD, CFD, DA, GF, TLC Grant, Measure J, User Fees
Parking Garage #2	3	JPA		BAD, CFD, DA, General Fund,

CATEGORY	Timing: 1 = Phase 1 2 = Phase 2 3 = Phase 3-5 Ongoing	Responsible Party	Factors/ Requirements	Funding Sources
Action				
				TLC Grant, Measure J, User Fees
Park	3	D, PW, JPA		BAD, CFD, DA, GF, TLC Grant, User Fees
Class I Bike Path Along northern boundary	1	D, PW, JPA, Private	Can be done with or without the development	DA/RDA/TLC Grants
<b>OFF SITE IMPROVEMENTS</b>				
Bailey Rd Bike and Ped Improvements	Ongoing	D, PW, County	Would be done regardless of the development. County still needs full funding and approvals.	
Bailey Rd Widening Improvement	City expects to complete by end of 2011	D, PW	Would be done regardless of the development.	
eBART Extension	Ongoing	BART	scheduled to be in service by 2015	
Install new signal or modify existing signals at four intersections along Leland Rd	1,3	D, PW		DA

# CHAPTER 8: IMPLEMENTATION

CATEGORY	Timing: 1 = Phase 1 2 = Phase 2 3 = Phase 3-5 Ongoing	Responsible Party	Factors/ Requirements	Funding Sources
Action				
Installation of streetscape improvements: landscaping, coordinated benches, trash cans, lighting, decorative paving, planters and tree grates	Ongoing	D, PW, JPA, Private		DA
<b>PROJECTS</b>				
Senior Housing Implementation	1	JPA, Private		
Explore direct pedestrian access to the Oak Hills Shopping mall via a pedestrian-only route that continues east from Main street.	3	D, JPA, Private		
<b>PROGRAMS</b>				
Explore establishing a CFD	1	D, JPA, Private		
Explore establishing a BAD	1	D, JPA, Private		
Branding Program	Ongoing	D, JPA		BART,RDA,DA
Wayfinding Program	Ongoing	D, JPA	needed during construction and after project completion	BART,RDA,DA
BART Ridership Information/Education	Ongoing	D, BART		BART
Parking Demand Management Strategies such as RPP, Benefit Districts, and parking meters	Ongoing	BART, D, JPA	Parking should be monitored after each phase of development to determine appropriate strategies	
Transportation Demand Management Strategies	Ongoing	BART, D, JPA		Homeowners Association

CATEGORY	Timing: 1 = Phase 1 2 = Phase 2 3 = Phase 3-5 Ongoing	Responsible Party	Factors/ Requirements	Funding Sources
Action				
				fees, Rent, CFD, BAD
Active business recruitment for open tenant space	Ongoing	JPA, Private		
Public Events Program (for Plaza)	Ongoing	D, RDA, JPA, BART		
Maintenance of Streets, Parks, Plazas	Ongoing	D, PW, JPA		
Public Art Program	3	D, JPA		
Explore GreenTRIP Certification	3	D		
<b>SECURE FUNDING</b>				
Write grant application for MTC's Transportation for Livable Communities	I	D		
Establish CFD or BAD	I	D, JPA, Private		
<b>LEGEND</b>				
<b>Responsible Department:</b>	<b>Funding Sources:</b>			
D = Development (includes Planning, Building, Engineering)	DA = Developer Agreement			
RDA = Redevelopment Agency	BAD = Benefit Assessment District			
PR = Parks & Recreation	CFD = Community Facilities District			
PW = Public Works	GF = City General Fund			
HA = Housing Authority	RDA = Redevelopment Agency			
JPA = Master Developer for JPA on BART property	TLC Grant = MTC's Transportation for Livable Communities Grant			
Private = Private Developer / Building Owner	Measure J = Contra Costa County Transportation authority Measure J			

## 8.4 Plan Administration

This Master Plan shall be reviewed, maintained, and implemented in a systematic and consistent manner. The implementation Matrix presented in this chapter summarizes all of the most important programs, policies and projects for implementing the station's development with priorities set for actions that need to be undertaken in the first years after adoption. The following section outlines requirements for Master Plan administration consistent with its goals, policies, standards, and programs.

### Five-Year Master Plan Review

At least once every five years, the City will thoroughly review the Master Plan and revise and update it as necessary. This review and update process will encompass the entire Plan including the goals, policies, and implementation programs.



# APPENDIX A. GLOSSARY







## A. GLOSSARY

### A.1 Frontage Type Terms

#### Arcade

A façade with an attached colonnade at the ground floor that is covered by the upper stories. The upper stories of the building may project over the public sidewalk and encroach into the public right-of-way. The sidewalk must be fully absorbed within the colonnade so that a pedestrian may access it. This frontage is typically for retail use. An encroachment permit is needed to construct this frontage type, but it can be approved as part of Design Review.

#### Dooryard/Terrace

Dooryards are elevated gardens or terraces that are set back from the street property line. This type of frontage can be used to buffer residences from the street or elevate outdoor dining areas.

#### Forecourt

Most of the building façade is at the property line with a portion of the façade set back. The resulting forecourt is suitable for gardens, restaurant seating, or an entry plaza. This type should be used sparingly and in conjunction with other frontage types, as an extensive setback deters pedestrians. A low wall or fence no greater than 36 inches high may also be placed at the property line.

#### Gallery

Characterized by a façade that is aligned close to or directly abutting the right-of-way line with the building entrance at sidewalk grade and with an attached colonnade that projects over the public sidewalk and encroaches into the public right-of-way. The sidewalk must be fully absorbed within the colonnade so that a

pedestrian may access it. An encroachment permit is needed to construct this frontage type, but it can be approved as part of Design Review.

#### Light Court

Characterized by a façade that is set back from the street property line by a sunken light court. This frontage type buffers residential uses from the sidewalk and is suitable for outdoor dining.

#### Porch

Characterized by a façade which is set back from the property line with a front yard and by a porch which is appended to the front façade (the porch may encroach into the front setback).

#### Shopfront

Characterized by a façade that is aligned close to or directly on the right-of-way line with the building entrance at sidewalk grade. A shopfront frontage has substantial glazing on the ground floor. Building entrances may provide a canopy or awning, or alternatively, may be recessed behind the front building façade.

#### Stoop

Characterized by a façade that is aligned close to the frontage line with the ground story elevated from the sidewalk to provide privacy for the ground-floor uses. The entrance is usually an exterior stair or landing which may be combined with a small porch or roof. The stoop frontage type is suitable for ground-floor residential uses with short setbacks.

### A.2 Building Type Terms

#### Courtyard Housing

A group of attached dwelling units arranged to share one or more common courtyards. Courtyards can occur at the front or side of a development. Dwelling

units are accessed from the street or the courtyard(s). Dwelling units generally occur as attached townhouses or stacked apartments/condos. The courtyard is intended to be a semi-public space that can be an extension of the public realm.

### **Duet**

A building type that contains two attached dwelling units, individually owned. Each unit is accessed directly from the street.

### **Full Block Liner**

An attached building with a frontage that spans the length of a downtown block and that has the minimum allowable side yard setbacks. It is used for mixed-use, residential, and commercial development.

### **Half Block Liner**

An attached building with a frontage of approximately one-third to one-half the length of a downtown block and that has the minimum allowable side yard setbacks. It is used for mixed-use, residential, and commercial development.

### **Infill**

An attached building with a frontage that is less than one-third the length of a downtown block and that has the minimum allowable side yard setbacks. It is used for mixed-use, residential, and commercial development.

### **Multi-Family Faux House**

A detached building that has a street appearance of a single large house which contains four or more dwellings. Each dwelling is individually accessed from a central lobby, which in turn is accessed directly from the street.

### **Multi-Family Villa**

Multi-unit detached building that contains between four and twelve dwellings. Dwellings are individually accessed.

### **Podium**

A commercial building up to four stories tall that has a larger first floor area compared to the other floors.

### **Rowhouse**

Two or more attached two- or three-story dwellings with zero side yard setbacks. A rowhouse may be used for nonresidential purposes.

### **Small Lot Single Family Housing**

A building type that contains a single family detached dwelling on a small lot.

### **Stacked**

A residential building comprising vertically stacked dwelling units. The main entrance to the building is through a street-level lobby.

### **Terraced Lot**

A mixed-use, residential, or commercial building characterized by individual units that are accessed via multi-level outdoor terraces. The terraces are intended to be semi-public spaces that are extensions of the public realm.

## **A.3 Circulation & Access Terms**

### **Access Mode Share**

The proportion of BART riders who arrive at the station using a particular mode (walking, biking, transit, or automobile).

### **Access Hierarchy**

Attempts to resolve conflicts and competing demands between modes by prioritizing access modes in this order (from high priority to lowest priority): walking, transit, bicycle, pick-up/drop-off,

vehicle parking. (Source: *Access BART*, 2006)

### **Access Typology Matrix**

Developed by BART to categorize stations with certain characteristics. The five types are urban, urban with parking, balanced multimodal, auto reliant, and auto dependent. (Source: *Access BART*, 2006)

### **Americans with Disabilities Act (ADA)**

Enacted by the federal government in 1990, ADA requires all public facilities to be accessible to people with various physical disabilities including visual and hearing impaired.

### **Auto-Dependent Station**

In BART's access typology matrix, an auto-dependent station represents the highest level of investment in auto-based access. With a large station footprint, structured and/or surface parking, and adjacent highway access, the station's ridership is considered low to moderate. The large footprint may also allow for a small to moderate-sized multimodal station. For many stations with parking garages, transit and walk mode shares vary widely. (Source: *Access BART*, 2006)

### **Auto-Reliant Station**

In BART's access typology matrix, an auto-reliant station is well served by transit, and parking is provided on a medium-size station footprint. The station would be found in a suburban grid or suburban residential area. A medium-to-large transit terminal is provided on-site, serving regional and local transit; the station is probably designated a regional transit hub. Walk access is lower than average. Parking spaces do not necessarily fill early because there is a large amount of parking. Nonetheless, parking utilization rates are high. (Source: *Access BART*, 2006)

### **Balanced Multimodal Station**

In BART's access typology matrix, a balanced multimodal station is well served by transit, though there might be some provision for parking on a small or medium-size station footprint. The station is typically on an urban or suburban grid network. A medium-to-large transit terminal is provided onsite, serving primarily corridor and local transit. Walk access is about average. Parking spaces fill early because the parking lot is not very large. (Source: *Access BART*, 2006)

### **Complete Streets**

A concept acknowledging that various users, including pedestrians, bicycles, buses, automobiles, and trucks, use the street network. Thus, the street network should be designed to accommodate them. Since the physical space available for streets can be limited and the different travel modes may conflict with each other, Complete Streets does not require that all streets fully accommodate all travel modes. Rather, the overall street network should provide for safe and convenient mobility of the various travel modes used to access and move within the Master Plan area.

### **Home-Origin Stations**

BART stations where most passengers start their trip from their home. These stations are typically located in suburban areas. Most BART boardings occur during the morning and most alightings occur during the afternoon and evening.

### **Mode of Access**

The mode of transportation (walking, biking, transit, or automobile) by which BART riders use to arrive at or leave the station.

### **MTC Regional Hub**

A station is designated as a regional hub by the Metropolitan Transportation Commission's (MTC) Transit Connectivity Study. (Source: *Access BART*, 2006)

### **Parking Benefit District**

A program through which the local jurisdiction returns all or a portion of the parking revenue generated through meters or nonresident parking permits in a specified district to an entity representing the district for maintenance, security, beautification, or other projects in the district. This concept can be applied in both residential and nonresidential areas.

### **Pedestrian Scramble Phase**

Stops traffic on all approaches to a signalized intersection to allow pedestrians to diagonally cross the signalized intersection.

### **Residential Parking Permit (RPP)**

Under an RPP, local area residents can obtain a permit that allows them unlimited on-street parking. Parking for motorists without a permit would be limited to short periods of time.

### **Shared Parking**

The ability to share parking spaces as the result of two conditions: variations in the accumulation of vehicles by hour, by day, or by season at individual land uses, and relationships among land uses that result in visiting multiple land uses on the same auto trip.

### **Shared Space**

A street where pedestrians, cyclists and motorists share the same space (i.e., street). Also known as a living street or woonerf.

### **Signal Warrant**

The *Manual on Uniform Traffic Control Devices* includes eight warrants based on traffic volumes at an intersection, collision data, and other factors to determine if an intersection should be signalized. An intersection satisfying one or more of the warrants may be considered for signalization. However, meeting one or more of the signal warrants does not mean that the intersection must be signalized.

### **Transit Mode Share**

The proportion of BART riders who access/egress the station via other transit modes such as bus.

### **Transit-Oriented Development (TOD)**

Generally defined as a development surrounding a transit stop designed to maximize transit access. TODs are typically mixed-use residential and/or commercial developments with high densities and provide typical urban amenities within walking distance to minimize automobile usage.

### **Travel Modes**

For the purposes of this study, the four principal travel modes considered are walk, transit, bicycle, and drive. Drive mode can be further classified into drop-off/pick-up, carpool, drive alone, taxi, and motorcycle.

### **Transportation Demand Management (TDM)**

Strategies and policies used to reduce the amount of automobile traffic generated by and the amount of parking needed for a development.

### **Universal Access**

Buildings, streets, and environments that are accessible by both able-bodied and disabled people.



**APPENDIX B.  
MITIGATION MEASURE  
CHECKLIST**





## B. MITIGATION MEASURE CHECKLIST

### B.1 Introduction

This document is the Final Mitigation Monitoring and Reporting Program (FMMRP) for the Pittsburg/Bay Point BART Master Plan. This FMMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to “adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” A FMMRP is required for the proposed project because the EIR has identified significant adverse impacts, and measures have been identified to mitigate those impacts.

The numbering of the individual mitigation measures follows the numbering sequence as found in the EIR. All revisions to mitigation measures that were necessary, as a result of responding to public comments or in response to non-substantive internal inconsistencies or errors found within the Draft EIR. This FMMRP will be incorporated into the project as Appendix B to the Master Plan and as Exhibit D to the City Council Resolution certifying the EIR for the project.

### B.2 Mitigation Monitoring and Reporting Program

The FMMRP, as outlined in the following table, describes mitigation timing, monitoring responsibilities, and compliance verification responsibility for all mitigation measures identified in this Final EIR.

The City of Pittsburg will be the primary agency, but not the only agency responsible for implementing the mitigation measures. In some cases, other public agencies will implement measures. In other cases, the project applicant will be responsible for implementation of measures and the City’s role is exclusively to monitor the implementation of the measures. In such cases, the project applicant may choose to require the construction contractor to implement specific mitigation measures prior to and/or during construction. The City will continue to monitor mitigation measures that are required to be implemented during the operation of the project.

The FMMRP is presented in tabular form on the following pages. The components of the FMMRP are described briefly below:

**Mitigation Measures:** The mitigation measures are taken from the Draft EIR, in the same order that they appear in the Draft EIR. The Final MMRP contains revisions to mitigation measures, as well as new mitigation measures.

**Mitigation Timing:** Identifies at which stage of the project mitigation must be completed.

**Monitoring Responsibility:** Identifies the department within the City, project applicant, or consultant responsible for mitigation monitoring.

**Compliance Verification Responsibility:** Identifies the department of the City or other State agency responsible for verifying compliance with the mitigation. In some cases, verification will include contact with responsible state and federal agencies.

**Table B-1: Final Mitigation Monitoring and Reporting Program**

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
MM 4.4.2	<p>Future developers shall develop a construction management plan for review and approval by the City of Pittsburg Engineering Division. The plan shall include at least the following items:</p> <p>Development of a construction truck route that would appear on all construction plans to limit truck and auto traffic on nearby residential streets.</p> <p>Comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak hour traffic hours and peak activity of the BART station, detour signs if required, lane closure procedures, sidewalk closure procedures, cones for drivers, and designated construction access routes.</p> <p>Identification of alternative parking supplies for existing BART patrons and construction workers when existing parking facilities are unavailable.</p> <p>Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures would occur.</p> <p>Location of construction staging areas for materials, equipment, and vehicles.</p> <p>Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation and safety, and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the developer. Where identified haul roads would include Contra Costa County roads, the plan shall be submitted to the Contra Costa County Department of Public Works for review.</p>	City of Pittsburg Engineering Division	Mitigation to occur prior to and during construction. Plan shall be submitted prior to issuance of grading permit.	



# APPENDIX B: MITIGATION MEASURE CHECKLIST

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Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an on-site complaint manager.			
MM 4.4.4	The City of Pittsburg shall complete the planned bicycle network along Bailey Road from West Leland to Willow Pass Road, along West Leland to San Marco Boulevard and along San Marco Boulevard from Rio Verde Circle to West Leland Road prior to issuance of certificates of occupancy for the final phase of development.	<i>City of Pittsburg Development Services Department</i>	<i>Payment of future development projects' fair share shall be made on a pro rata basis concurrent with the issuance of building permits.</i>	
MM 4.4.5a	The City of Pittsburg shall cooperate with Caltrans to develop a program to fund and implement improvements that could include:  construction of additional turn lanes so as to improve operations at the San Marco Boulevard/SR 4 Eastbound Ramps intersection;  the conversion of the center eastbound left-turn lane to a left-right shared lane at the intersection of Willow Pass Road and Eastbound SR 4;  Future development projects in the Master Plan Area shall contribute their fair share of transportation-related fees to these future improvements.	<i>Caltrans and City of Pittsburg Development Services Department</i>	Payment of future development projects' fair share shall be made on a pro rata basis concurrently with the approval of any building permits or in accordance with any future agreements between Caltrans and the City, if existing at the time of issuance of building permit.	
MM 4.4.5b	Future development projects in the Master Plan Area shall contribute their fair share of transportation-related fees to implement improvements that would improve intersection operations at the San Marco Boulevard/West Leland Road intersection, including:  Westbound: Modify north leg of intersection to provide a third receiving lane to permit free westbound right-turn movement.  Northbound: Modify to provide one left-turn lane, two through lanes, and a right-turn only lane.	<i>City of Pittsburg Development Services Department</i>	Payment of future development projects' fair share shall be made a pro rata basis concurrent with the issuance of any building permits.	

# APPENDIX B: MITIGATION MEASURE CHECKLIST

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	These improvements may require traffic signal modifications.			
MM 4.4.5c	As part of development of the BART parcels, the City of Pittsburg shall ensure that construction of the northbound approach of the West Leland Road/Oak Hills Drive/D Street intersection provides a left-turn and a through-right shared lane and modification of the traffic signal to provide protected north-south left-turn movements. Future development projects in the Master Plan Area shall contribute their fair share of transportation-related fees to implement intersection improvements.	<i>City of Pittsburg Development Services Department in consultation with BART</i>	Payment of future development projects' fair share shall be made on a pro rata basis concurrent with issuance of building permits on BART - owned properties.	
MM 4.4.5d	The City of Pittsburg shall cooperate with Contra Costa County to develop a program to fund and implement improvements that would result in acceptable intersection operations at the Bailey Road/Willow Pass Road intersection. Future development projects in the Master Plan Area shall contribute their fair share of transportation-related fees to these improvements.	<i>Contra Costa County Public Works Department and City of Pittsburg Development Services Department</i>	Payment of future development projects' fair share shall be made on a pro rata basis concurrent with issuance of building permits or in accordance with any future agreements between the County and the City, if existing at the time of issuance of building permit.	
MM 4.4.5e	Future development projects in the Master Plan Area shall contribute their fair share of transportation-related fees to implement the following improvements that would improve operations at Bailey Road/West Leland Road intersection:  Restripe the northbound approach to provide dual left-turn lanes.  Widen the eastbound approach to add a second left-turn	<i>City of Pittsburg Development Services Department</i>	Payment of future development projects' fair share shall be made on a pro rata basis concurrent with issuance of any building permits.	

# APPENDIX B: MITIGATION MEASURE CHECKLIST

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	<p>lanes and one right-turn lane</p> <p>These improvements are consistent with the City of Pittsburg's Five Year Capital Improvement Program 2011-2012 through 2016-2017). These improvements may require traffic signal modifications.</p>			
MM 4.4.5f	<p>The City of Pittsburg shall cooperate with City of Concord to amend the Bailey Road Traffic Mitigation Measure Inter-Agency Funding Agreement to include the proposed developments included in the Pittsburg/Bay Point BART Master Plan. Future development projects in the Master Plan Area shall contribute their fair share of transportation-related fees to implement the identified improvements.</p>	<p><i>City of Pittsburg Development Services Department and City of Concord</i></p>	<p><i>Payment of future development projects' fair share shall be made on a pro rata basis concurrent with issuance of building permits or in accordance with any future agreements between the the City of Concord and Pittsburg, if existing at the time of issuance of building permit.</i></p>	
MM 4.5.1	<p>All future development in the Master Plan Area shall conform to the following noise requirements:</p> <ol style="list-style-type: none"> <li>a. Construction activities (excluding activities that would result in a safety concern to the public or construction workers) shall be limited to between the hours of 8:00 AM and 5:00 PM on weekdays, or as approved by the City Engineer. Construction activities shall be prohibited on federal holidays.</li> <li>b. Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and shrouds, in accordance with manufacturers' recommendations. In the absence of manufacturers' recommendations, the Director</li> </ol>	<p><i>City of Pittsburg Development Services Department</i></p>	<p><i>Prior to and during construction</i></p>	

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# APPENDIX B: MITIGATION MEASURE CHECKLIST

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	<p>of Public Works may prescribe such means of achieving maximum noise attenuation.</p> <p>c. Construction equipment staging areas shall be located at the furthest distance possible from nearby noise-sensitive land uses.</p> <p>d. All motorized construction equipment and vehicles shall be turned off when not in use.</p>			
MM 4.5.3a	<p>Prior to construction of any parking garages, BART or their assigned agent or developer shall undertake one of the two options:</p> <p>a. Provide increased noise shielding for planned adjacent residential land uses. The proposed multi-story parking garages shall be designed and constructed so that the façades of the parking structure facing nearby noise-sensitive land uses are of solid construction, sufficient to shield line-of-sight between interior parking areas and outdoor activity areas of the adjacent planned residential land uses. To effectively reduce sound transmission, the material chosen must be rigid and sufficiently dense (at least 4 lbs/square foot [20 kilograms/square meter]). Furthermore, planned residential land uses located within 75 feet of the bus transit center and proposed parking garages shall be designed and constructed so that exterior activity areas (e.g., courtyards, patios, private areas) are shielded from direct line-of-sight of the bus transit center and proposed parking garages.</p> <p>-OR-</p> <p>b. An acoustical analysis shall be prepared for each of the proposed parking structures once more detailed design-related information for the</p>	<p><i>City of Pittsburg Development Services Department</i></p>	<p><i>Prior to approval or issuance of any grading or construction permits for the parking garages</i></p>	

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	proposed parking structure and/or adjacent planned residential land uses becomes available. The acoustical analysis shall identify noise control devices (e.g., barriers, acoustical vents and screens), to ensure that predicted noise levels at the adjacent planned residential land uses would not exceed acceptable levels.			
MM 4.5.3b	All loading and unloading activities for proposed on-site commercial and retail land uses, including waste collection activities, shall be limited to between the hours of 7:00 AM and 10:00 PM.	City of Pittsburg Development Services Department	As a Condition of Approval for any building or development permits	
MM 4.5.3c	All proposed residential land uses shall comply with California Code of Regulations Title 24 noise standards for allowable interior noise levels (California Building Code, 1998 edition, Volume 1, Appendix Chapter 12, Section 1208A). An acoustical study shall be prepared by a qualified professional demonstrating compliance with applicable interior noise standard of 45 dBA CNEL in habitable rooms.	City of Pittsburg Development Services Department	<i>Noise study must be completed and approved by the Planning Division prior to issuance of entitlements for a development project.</i>	
MM 4.5.3d	All proposed commercial, retail, flex, and residential land uses shall be equipped with fresh air supply systems or air conditioning systems to allow windows to remain closed during inclement weather conditions.	City of Pittsburg Development Services Department	As a Condition of Approval for any building or development permits.	
MM 4.5.5	Impact pile-driving equipment used within 160 feet of nearby structures shall be substituted with equipment or procedures that would generate lower levels of groundborne vibration, to the extent that geological conditions would permit their use. For instance, in comparison to impact pile drivers, drilled piles or the use of a sonic or vibratory pile drivers are preferred alternatives. In the event that the use of impact pile drivers is required due to geological conditions, groundborne vibration monitoring shall be conducted for impact pile driving that occurs within 160 feet of existing	City of Pittsburg Development Services Department	As a Condition of Approval for any building or construction permit for the parking garages.	

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	<p>structures. Pile-driving activities shall be suspended if measured groundborne vibration levels approach within 0.1 in/sec ppv of commonly applied threshold of 0.5 in/sec ppv for structural damage. In such instances, additional attenuation measures or changes in pile-driving techniques shall be implemented, prior to recommencing pile-driving activities, to reduce groundborne vibration levels. For impact pile-driving activities that occur within approximately 75 feet of existing structures, a building conditions survey shall be conducted for existing structures in order to document existing structural conditions. Any structural damage resulting from nearby impact pile-driving activities shall be repaired in a timely manner by the developer. The building conditions survey shall be conducted by a licensed professional engineer and shall include pre- and post-construction surveys. The surveys shall, at a minimum, include the following:</p> <p>Photographic and videotape documentation of the interior and exterior condition of the building(s);</p> <p>The extent and location of existing signs of building distress such as cracks, spalling, signs of settlement, flooding, leaking, etc.</p>			
MM 4.6.1	<p>All future development in the Master Plan area shall implement BAAQMD-approved criteria air pollutant-reducing Basic Construction Mitigation Measures to the maximum extent feasible, whether or not construction-related emissions exceed applicable thresholds of significance. The developer shall use the best management practices that are in place at the time of development. Current best management practices shall include the following:</p> <ol style="list-style-type: none"> <li>I. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per</li> </ol>	<p><i>City of Pittsburg Development Services Department</i></p>	<p><i>As a Condition of Approval for all development permits.</i></p>	

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<div style="writing-mode: vertical-rl; transform: rotate(180deg); background-color: #FFD700; padding: 5px; font-weight: bold;">MASTER PLAN</div> <div style="background-color: #FFD700; padding: 5px; font-weight: bold; text-align: center;">B</div>	<p>day.</p> <ol style="list-style-type: none"> <li>2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</li> <li>3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</li> <li>4. All vehicle speeds on unpaved roads shall be limited to 15 mph.</li> <li>5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.</li> <li>6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.</li> <li>7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.</li> <li>8. All project developers shall post a publicly visible sign with the telephone number and person to contact at the City of Pittsburg regarding dust complaints during any construction activities. This person shall respond and take corrective</li> </ol>			

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	<p>action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations (BAAQMD 2010).</p> <p>The above measures or any additional or modified measures listed by the Bay Area Air Quality Management District at the time of construction shall be implemented to the degree mandated by the discretion of the City at the time of issuance of any development permits.</p>			
MM 4.6.3	To the greatest extent feasible, future development proposals in the Master Plan Area shall comply with the City's adopted Green Building Design Guidelines, or any applicable City green/efficient building regulations which are in effect at the time of development.	<i>City of Pittsburg Development Services Division</i>	<i>Prior to issuance of Planning entitlements for development projects in the Master Plan Area.</i>	
MM 4.6.5a	Tiered plantings of trees such as redwood, deodar cedar, live oak, and oleander shall be installed between State Route 4 and the proposed Master Plan area in order to reduce TAC and PM exposure.	City of Pittsburg Development Services Department	<i>As a Condition of Approval for any project within 500 feet of State Route 4</i>	
MM 4.6.5b	<p>As a part of future development proposals in the Master Plan Area, the project proponent(s) shall secure the services of a qualified air quality professional for the preparation of site-specific air quality modeling, as required by the Bay Area Air Quality Management District (BAAQMD). If site-specific modeling indicates that significant exposure to criteria pollutants, including toxic air contaminants, would occur, future development shall comply to the maximum extent feasible with mitigation measures provided by BAAQMD for the reduction of air quality impacts. These measures shall comply with the most current regulations available at the time of development and will likely include some or all of the following measures:</p> <ul style="list-style-type: none"> <li>• Modification to the location and height of intakes</li> </ul>	<i>City of Pittsburg Development Services Department in consultation with the Bay Area Air Quality Management District.</i>	<i>Prior to approval of any planning entitlements for development projects in the Master Plan Area.</i>	

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<p style="writing-mode: vertical-rl; transform: rotate(180deg);">MASTER PLAN</p> <p style="text-align: center;">B</p>	<p>to the ventilation system;</p> <ul style="list-style-type: none"> <li>• Addition of HEPA air filtration systems;</li> <li>• Limiting the placement of recreational use areas, such as patio areas and balconies, to interior courtyards requiring that they be shielded by the structure;</li> <li>• Triple-paned windows;</li> <li>• Central heating, ventilation, and air conditioning (HVAC) systems with high-efficiency filters,</li> <li>• Locating air intake systems for the HVAC systems as far away from the roadway as possible; and/or</li> <li>• An ongoing HVAC maintenance plan.</li> </ul> <p>These measures shall be designed and implemented to the satisfaction of the City in consultation with BAAQMD. Site-specific modeling shall be conducted for all development within the project area that falls within a 10 in a million risk threshold, at the time of development. Currently, BAAQMD measures that risk to cover areas within 900 feet of State Route 4 at the time of the publication of the EIR. The developer shall use the most current standards and mitigations applicable at the time of the modeling are included</p>			
	<p>MM 4.6.5c</p>	<p>All construction within the Master Plan area shall implement measures to reduce the emissions of TAC pollutants generated by heavy-duty diesel-powered equipment during construction.</p> <ol style="list-style-type: none"> <li>a. Keep all construction equipment in proper tune in accordance with manufacturer’s specifications.</li> <li>b. Use late model heavy-duty diesel-powered equipment during construction to the extent that it is readily available in the San Francisco Bay</li> </ol>	<p><i>City of Pittsburg Development Services Department</i></p>	<p>As a Condition of Approval for any grading or construction permit</p>

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	<p>Area.</p> <ul style="list-style-type: none"> <li>c. Use diesel-powered equipment that has been retrofitted with after-treatment products (e.g., engine catalysts) to the extent that it is readily available in the San Francisco Bay Area.</li> <li>d. Use low-emission diesel fuel for all heavy-duty diesel-powered equipment operating and refueling at construction sites to the extent that it is readily available and cost effective in the San Francisco Bay Area (this does not apply to diesel-powered trucks traveling to and from the site).</li> <li>e. Utilize alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline) to the extent that the equipment is readily available and cost effective in the San Francisco Bay Area.</li> <li>f. Limit truck and equipment idling time to five minutes or less.</li> <li>g. Rely on the electricity infrastructure surrounding the construction sites rather than electrical generators powered by internal combustion engines to the extent feasible.</li> </ul>			
MM 4.7.3	<p>Prior to approval of any building permits, grading permits, or other approval that would result in ground disturbance, a geotechnical analysis shall be prepared by a registered geologist or other professional approved by the City and presented to the City for approval for each phase of project construction. The required geotechnical analysis shall include consideration of all potential soil and seismic effects, including but not limited to liquefaction, soil stability, and soil shrink/swell potential and shall include recommended actions to reduce the</p>	<p><i>City of Pittsburg Development Services Department</i></p>	<p><i>Prior to approval of any grading permit, building permit, or other approval that would result in ground disturbance for each phase of project construction</i></p>	

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	<p>effects of such conditions on the proposed construction. These recommendations shall be enacted to the satisfaction of the City in order to minimize these effects.</p> <p>Because subsurface and soil conditions change only very slowly (on the order of millennia), a geotechnical analysis shall be prepared and submitted to the Engineering Division for approval for all proposed development proposed under the Master Plan.</p>			
MM 4.9.1	<p>Prior to approval of any ground disturbing permits, project proponents within the Master Plan Area shall secure the services of a qualified biologist to prepare a Planning Survey Report (PSR) consistent with the requirements of the East Contra Costa County HCP/NCCP, along with any related supporting studies. For any special status species or habitat identified by the PSR, avoidance and minimization measures provided by the HCP/NCCP shall be implemented during both construction and operation of the project.</p> <p>Separate PSRs shall be prepared for each property within the Master Plan Area prior to the time of ground disturbance for that property in the Master Plan Area.</p>	<p><i>City of Pittsburg Development Services Department in consultation with the East Contra Costa County HCP/NCCP.</i></p>	<p><i>Studies shall be prepared prior to approval of any ground disturbing permits (development, grading, etc.). Avoidance and minimization measures indicated by the PSR shall be made a Condition of Approval for those permits.</i></p>	
MM 4.9.4	<p>Prior to any disturbance on the BART property within 150 feet of the bottom of the existing on-site detention basin, a qualified biologist shall make a determination as to the jurisdictional status of the detention basin, including but not limited to a verified wetland delineation and direct consultation with the U.S. Army Corps of Engineers (USACE). If the detention basin is determined to be a jurisdictional water or wetland, then all required permits shall be secured from USACE and all avoidance and minimization measures required by the U.S. Army Corps of Engineers shall be undertaken. Prior to any disturbance on the WCHB property within 50 feet of the bottom of the existing on-site detention basin on the BART property, a qualified biologist shall conduct a preconstruction</p>	<p><i>City of Pittsburg Development Services Department</i></p>	<p><i>Prior to approval of any grading permit or other ground disturbance within 150 feet of the on-site detention basin</i></p>	

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	survey to determine the presence or absence of protected species within the WCHB property.			
MM 4.10.2	Landscaping and building placement along the northern boundary of the project site shall consider viewpoints from State Route 4 to the north. To the maximum extent feasible, buildings throughout the site shall be broken up to allow for retention of viewsheds to the hills, and landscaping shall be staggered so that it does not block those views. Landscaping along the northern boundary of the Master Plan area shall be maintained and kept in good condition throughout the use of the property.	<i>City of Pittsburg Development Services Department</i>	<i>Prior to issuance of Planning entitlements for development projects in the Master Plan Area.</i>	

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