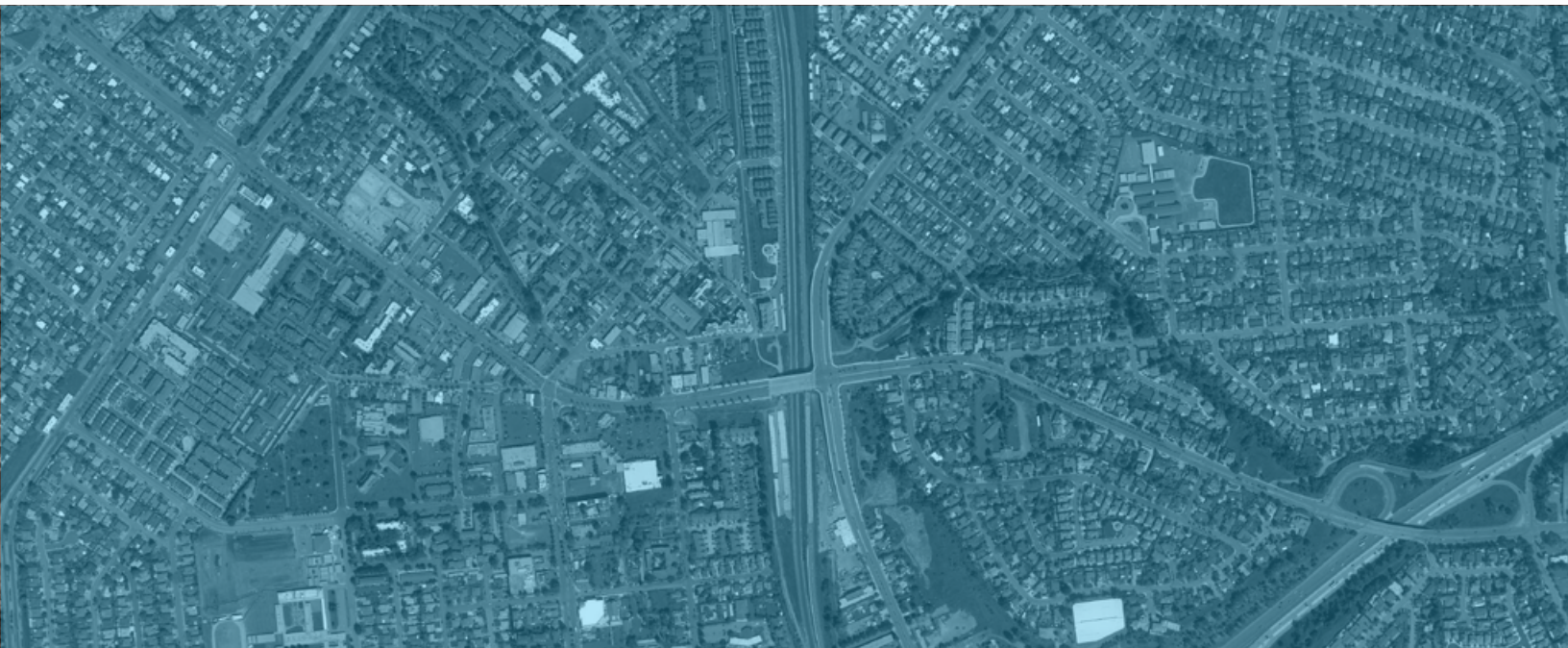
Irvington BART Station Area Plan

Adopted July 16, 2019
Council Resolution 2019-54



ACKNOWLEDGEMENTS

City of Fremont
Jim Pierson, Project Manager
Hans Larsen, Public Works Director
Noe Veloso, Principal Transportation Engineer
Mirabel Aguilar, Senior Civil Engineer
Dan Schoenholz, Community Development Director
Kristie Wheeler, Planning Manager
Wayland Li, Principal Planner

Bay Area Rapid Transit (BART)
Val Menotti, Chief Planning & Development Officer
Susan Poliwka, Senior Planner
Paul Medved, Principal Engineer
David Silva, Principal Engineer
Zhiming Fan, Principal Engineer

Alameda County Transportation Commission (ACTC)
Stewart Ng, Deputy Director, Programs & Projects
Jhay Delos Reyes, Senior Transportation Engineer
James O'Brian, Consultant to ACTC
Andrea Gomez, Assistant Transportation Planner

Fremont City Council
Lily Mei, Mayor
Raj Salwan, Vice Mayor
Vinnie Bacon, Councilmember At-large
Teresa Keng, Councilmember, District 1
Rick Jones, Councilmember, District 2
Jenny Kassan, Councilmember, District 3
Yang Shao, Councilmember, District 4

Fremont Planning Commission
Craig Steckler, Chair
Kathryn McDonald, Vice Chair
Roman Reed
Reena Rao
Benjamin Yee
Jose Oropeza
Robert Daulton

Consultant Team

Urban Planning Partners
Lynette Dias, President and Project Manager
Carla Violet, Senior Planner and Deputy Project Manager
Kelly Beggs, Associate Planner
Meredith Rupp, Associate Planner
Brandon Northart, Planner
Emilio Balingit, Planner
Melody Lin, Planner
Alyssa Chung, Assistant Planner

Urban Field Studio
Jane Lin, Founding Partner
Heidi Sokolowsky, Founding Partner
Frank Fuller, Partner

Fehr & Peers
Sam Tabibnia, Senior Associate
Lee Reis, Transportation Planner

Economic & Planning Systems
Ashleigh Kanat, Principal

Siegel and Strain
Lindsey Moder, Director of Historic Preservation

PGA Landscape Architects
Cathy Garrett, President
Mark Wessels, Associate

TABLE OF CONTENTS

FIGURES

TABLES

INTRODUCTION

This Irvington BART Station Area Plan has been prepared to provide a framework for achieving the City of Fremont's longstanding vision of a transit-oriented, active area strategically integrated with the Irvington BART Station, consistent with the City's 2011 General Plan and Irvington Community Plan goals.

The Irvington BART Station site is located at the intersection of Osgood Road and Washington Boulevard, approximately halfway between the Fremont BART Station and the Warm Springs/ South Fremont BART Station along a line that will ultimately extend to San Jose, as shown in Figure 1-1. The long-planned station has been in the City of Fremont's General Plan since 1991 and in BART's Capital Plan since 2003. The Irvington BART Station is expected to be completed in 2026.

In anticipation of the Irvington BART Station, the City's 2011 General Plan established land use designations around the Irvington BART Station site to facilitate Transit-Oriented Development (TOD), which is development intended to increase transit use, vitality, and activity through land use, building form, and design. This Station Area Plan does **not** propose to amend these existing General Plan land use designations, but rather addresses urban design and improvements to ensure successful integration and connectivity between the BART station, new TOD, and existing neighborhoods around the station.

Figure 1-1 - Irvington BART Station Regional Context

1.1 PURPOSE AND VISION

As explained in more detail in Chapter 2, the primary purpose of the Station Area Plan is to ensure successful integration and connectivity between the Irvington BART Station, new development, and existing neighborhoods. The vision statement for the Station Area Plan is as follows:

> **The Irvington BART Station will connect the Plan Area neighborhoods to the region, putting residents in easy reach of the Bay Area's employment centers and attractions. The existing, established residential neighborhoods in the Plan Area will retain their character, and new multifamily residential and mixed-use development will revitalize the area adjacent to the station while complementing the character of Irvington's historic buildings.**

1.2 PLAN AREA AND CONTEXT

This Station Area Plan focuses on the area within a convenient 10- to 15-minute walk of the Irvington BART Station site at the Washington Boulevard and Osgood Road intersection and corresponds to land within an approximately ½-mile radius of the station (Plan Area).

As shown in Figure 1-2, the Plan Area is divided into five geographic subareas based on existing land uses and character. They are as follows:

Subareas with Primary Influence - *Subareas that will transform with the station and include more TOD consistent with the City's 2011 General Plan:*

- **Osgood** – south of the station along both sides of Osgood Road
- **Town Center** – area surrounding Five Corners (the "heart" of the Irvington Business District at the intersection of Fremont Boulevard, Washington Boulevard, Bay Street, and Union Street)

Subareas with Secondary Influence – *Subareas that will maintain their existing character and residential nature:*

- **High** – north of Main Street between Lee Street and the BART tracks
- **Washington** – east of Osgood and Driscoll Roads
- **Roberts** – south of Irvington Avenue

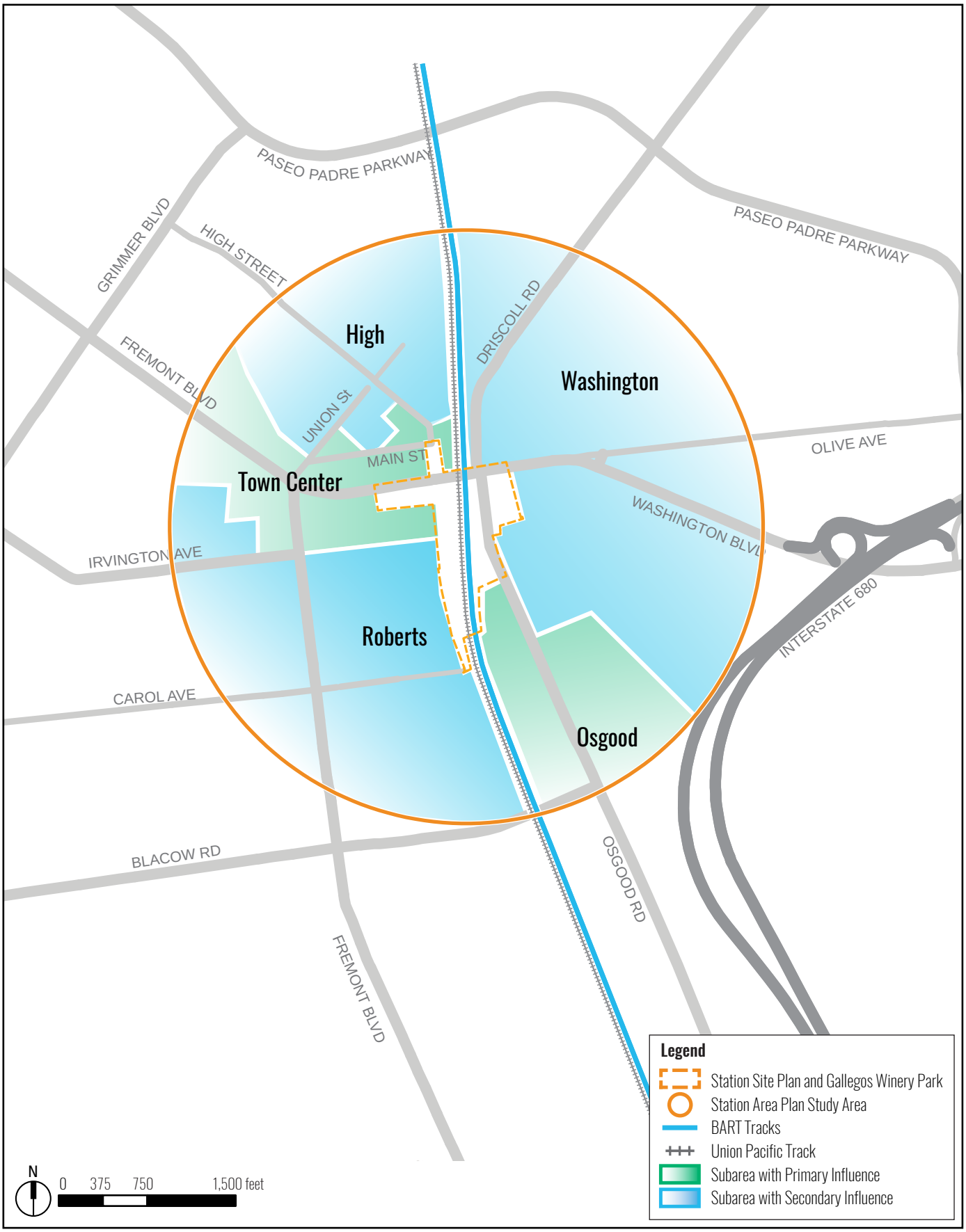


Figure 1-2 - Area Plan Subareas

1.3 COMMUNITY ENGAGEMENT

As part of the process of preparing this Station Area Plan, the City and BART invited input from residents, local business owners, property owners, developers, community organizations, transportation agencies, and students in the following ways:

- Focused stakeholder meetings with property owners in the area, the Irvington Business Association, and the Washington Township Historic Society.
- Community workshops that were open to the public.
- Online forums, including a website, video, Open City Hall discussion, and two surveys.
- Information sessions at the Irvington Farmers' Market and Irvington High School.

Through these outreach efforts, the City met with approximately 180 stakeholders and heard from over 850 residents. A summary of that community feedback is provided in Appendix B.

Presentation to Irvington Business Association, September 2017.

Community members provide feedback at the Second Community Meeting, May 2018.

1.4 PLAN ORGANIZATION

This Station Area Plan is organized into the following chapters:

- Chapter 1, Introduction, provides context on the Plan Area and planning process.
- Chapter 2, Vision and Goals, provides a vision statement and set of goals for the Plan Area and summarizes prior vision statements and goals prepared for the Irvington Community Plan Area.
- Chapter 3, Access and Mobility, details multimodal access to the Irvington BART Station and describes the potential public improvements that will enhance connectivity to the station.
- Chapter 4, Site and Building Design, addresses the design of TOD and provides design rules and guidelines for the public realm and mixed-used, commercial, and urban residential development.
- Chapter 5, Implementation and Financing Plan, details the process for adopting this Station Area Plan and for financing public improvements.

2

VISION

The City of Fremont General Plan (2011) calls for a more "strategically urban" city that focuses future growth in strategic locations near transit hubs to support the use of transit and reduce vehicle miles traveled and greenhouse gas emissions. The General Plan envisions future growth around transit hubs to create vibrant, pedestrian-oriented neighborhoods that are connected by strong pedestrian and bicycle networks. This Station Area Plan provides a framework to successfully achieve the envisioned "strategically-urban" environment around the Irvington BART Station.

This Station Area Plan is informed by existing City policy and associated visioning work, in particular the Irvington Community Plan, a chapter of the General Plan which provides a more fine-grained vision for the Irvington Community Plan Area than the Land Use Element of the General Plan (see box on next page for relevant goals from the Irvington Community Plan). The vision detailed below has evolved from these prior efforts as well as the planning and community engagement work completed as part of the planning processes for BART's Station Site Plan and this Station Area Plan. (See Appendix A for more detail regarding policy documents that have shaped the Station Area Plan.) The vision also takes into account input received from the community (see Chapter 1 for Community Outreach Summary). Figure 2-1 shows how the Plan Area subareas (described below) relate to existing Community Plan Areas.

2.1 VISION

The Irvington BART Station will connect the Plan Area neighborhoods to the region, putting residents in easy reach of the Bay Area's employment centers and attractions. The existing, established residential neighborhoods in the Plan Area will retain their character, and new multifamily residential and mixed-use development will revitalize the area adjacent to the station while complementing the character of Irvington's historic buildings.

It is envisioned that the Subareas with Primary Influence in the Plan Area (the Town Center and Osgood Subareas) will evolve with more Transit-Oriented Development (TOD) in association with the anticipated completion of the Irvington BART Station in 2026. The established neighborhoods in the Plan Area will retain their residential character, while many of the existing light industrial and commercial sites near the station are anticipated to be redeveloped with high quality mixed-use and multifamily residential buildings consistent with the City's 2011 General Plan.

The Irvington BART Station is the focal point of the Plan Area. It will connect the neighborhoods to the region, putting residents in easy reach of the Bay Area's employment

Example of TOD (Bay Meadows near Hillsdale Caltrain Station, San Mateo).

centers and attractions. Improvements within the Plan Area will provide comprehensive, safe, and convenient pedestrian and bicycle access to the station, encouraging the use of active transportation. The Plan Area itself will benefit from increased commercial viability and pedestrian improvements, but is not expected to become a major employment center or a primary destination for BART users who are not local residents. Local streets will be protected from parking overflow with a residential parking permit (RPP) program. A vibrant commercial corridor with active ground-floor retail and local businesses will connect the BART station to Five Corners, the historic "heart" of Irvington, and future development will complement the style and echo the form of Irvington's historic buildings, replacing auto-oriented strip malls with pedestrian-oriented design.

Relevant Irvington Community Plan Goals (General Plan, 2011)

- Strengthen the historic heart of Irvington as one of Fremont's five Town Centers.
- Maintain a distinct identity for Irvington that reflects its history and cultural diversity.
- Attract unique shopping, dining, and neighborhood services to Irvington.
- Establish clear, walkable connections between the Irvington BART Station and the Irvington Business District, commonly referred to as Five Corners.
- Manage parking in a way that supports businesses, BART, and local transit.
- Provide a well-designed pedestrian and bicycle network that connects neighborhoods, open spaces, commercial areas, and transit facilities.
- Promote TOD around the Irvington BART Station.
- Transform underperforming shopping centers into vibrant new mixed-use developments.
- Improve the appearance of streets, neighborhoods, and business districts—especially the Grimmer Boulevard and Fremont Boulevard corridors.

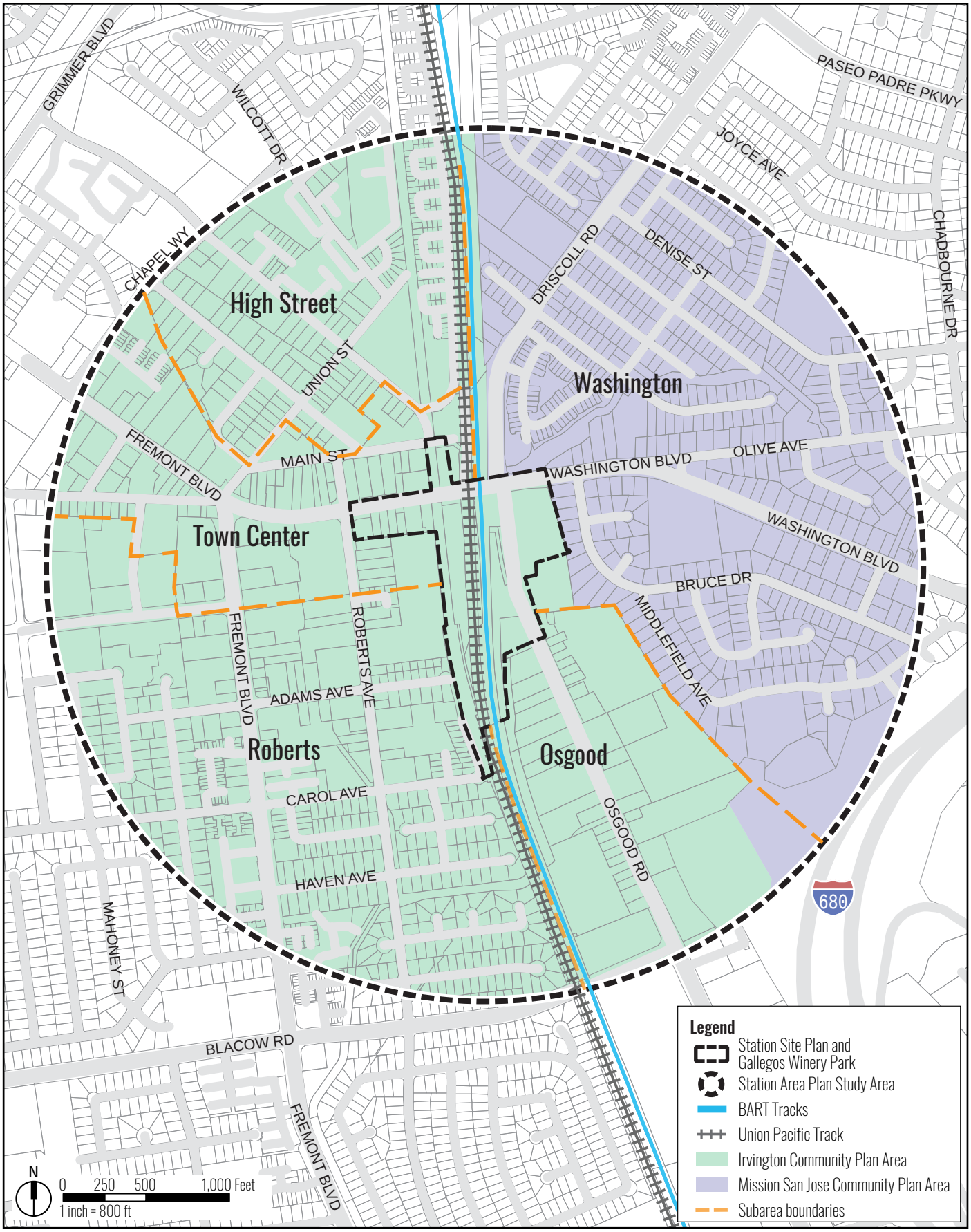


Figure 2-1 - Community Plan Areas and Station Area Plan Subareas

SUBAREA VISIONS

As described in Chapter 1, the Plan Area includes five subareas: Osgood, Town Center, High, Roberts, and Washington. The two Subareas with Primary Influence—Osgood and Town Center—will transform with the addition of the Irvington BART Station; this transformation will continue as new TOD occurs to take advantage of the station location. The Subareas with Secondary Influence— High, Roberts, and Washington—will maintain their existing character and residential nature. These Subareas with Secondary Influence will benefit from an improved pedestrian and bicycle network, and enhanced connectivity to the BART Station. The existing residential neighborhoods will be protected from parking overflow through an RPP program (see Chapter 3 for more details about the RPP program.)

Anticipated changes to the Subareas with Primary Influence, as well as the BART Station Site, are described below.

OSGOOD SUBAREA

The Osgood Subarea will transition from primarily light industrial area into a vibrant, primarily multifamily residential neighborhood consistent with the City's 2011 General Plan. Direct access to the BART station throughout the subarea will be available via wide sidewalks, safe roadway crossings, and bike lanes. The station is less than a 10-minute walk from anywhere in this subarea. New residential TOD will create a greater sense of place and vitality for this subarea.

TOWN CENTER SUBAREA

New development and improved pedestrian and bicycle connections to the BART station in the Town Center Subarea will emphasize and strengthen Five Corners as the "heart of Irvington." This subarea will retain its historic charm, but will feature new places for locals to dine, shop, live, and gather. Infill development with ground-floor retail and facade improvements to existing buildings will further enhance the pedestrian atmosphere.

The Monument and Irvington Plaza (Safeway) shopping centers may be redeveloped with new commercial and mixed-use buildings with neighborhood-serving retail, including a large-scale grocer, with opportunities for office and residential uses on upper floors. This Station Area Plan provides a framework to guide new development on Fremont Boulevard and Washington Boulevard, scaled to these large streets that will continue to serve as cross-town arterials. On Union Street and Main Street within the Town Center Subarea, new development on underutilized parcels will be required to front the sidewalk and fill in gaps along the front facades of buildings, helping the neighborhood become more vibrant and walkable.

Example of a mixed-use development (Hayes Valley, San Francisco).

STATION SITE

The Station Site will undergo the greatest change, with its existing light industrial land uses being redeveloped with a regional transportation hub. The Station Site Plan dictates the station footprint and situates the station components, including the station platforms, concourse, pedestrian and bicycle access points, pick-up and drop-off zones, and vehicle parking. East of the Station Site at Washington Boulevard and Osgood Road, there will be a public park at the historic Gallegos Winery site. Figure 2-2 is an illustrative diagram of the Station Site Plan and Gallegos Winery Park. The station will be a neighborhood-serving origin station and prioritize access for pedestrians, bicyclists, and transit riders.

2.2 STATION AREA PLAN GOALS

The overarching goal of the Station Area Plan is to enhance and implement the longstanding vision of transforming the area around the Irvington BART Station into a transit-oriented, active environment. The Station Area Plan's goals are described below.

Example of protected bike lane (Polk Street, San Francisco).

GENERAL PLAN VISION

Implement the General Plan vision for the area by maintaining existing land use designations and zoning.

In the 2011 General Plan, the City established land use designations around the Irvington BART Station site to facilitate TOD. This Station Area Plan provides design rules and guidelines to bring the General Plan vision to fruition.

ACTIVE STREETS

Plan for vibrant, walkable, pedestrian-friendly residential, mixed-use, and commercial neighborhoods around the station.

Development of the BART station provides the Plan Area with an opportunity to increase pedestrian activity. Streets and buildings will be designed to support this increased activity, with landscaping, lighting, seating, and other amenities contributing to a pleasant and attractive pedestrian environment. Transparent, well-designed storefronts and ground-level uses will engage and activate the public realm. Barriers that inhibit pedestrian movement will be discouraged, and streets will be designed to support and protect cyclists and pedestrians.

SAFE CONNECTIONS

Provide opportunities for safe connectivity to the Station Site for varying modes of transportation.

Consistent with the Active Streets goal, Plan Area streets will accommodate a more balanced use of the public right-of-way, so that they are attractive, safe, and efficient for all modes of travel, not just cars. This will include a bicycle network that provides safe and efficient connections to the station and targeted infrastructure improvements to enhance the pedestrian environment consistent with the City's Pedestrian Master Plan and Bicycle Master Plan.

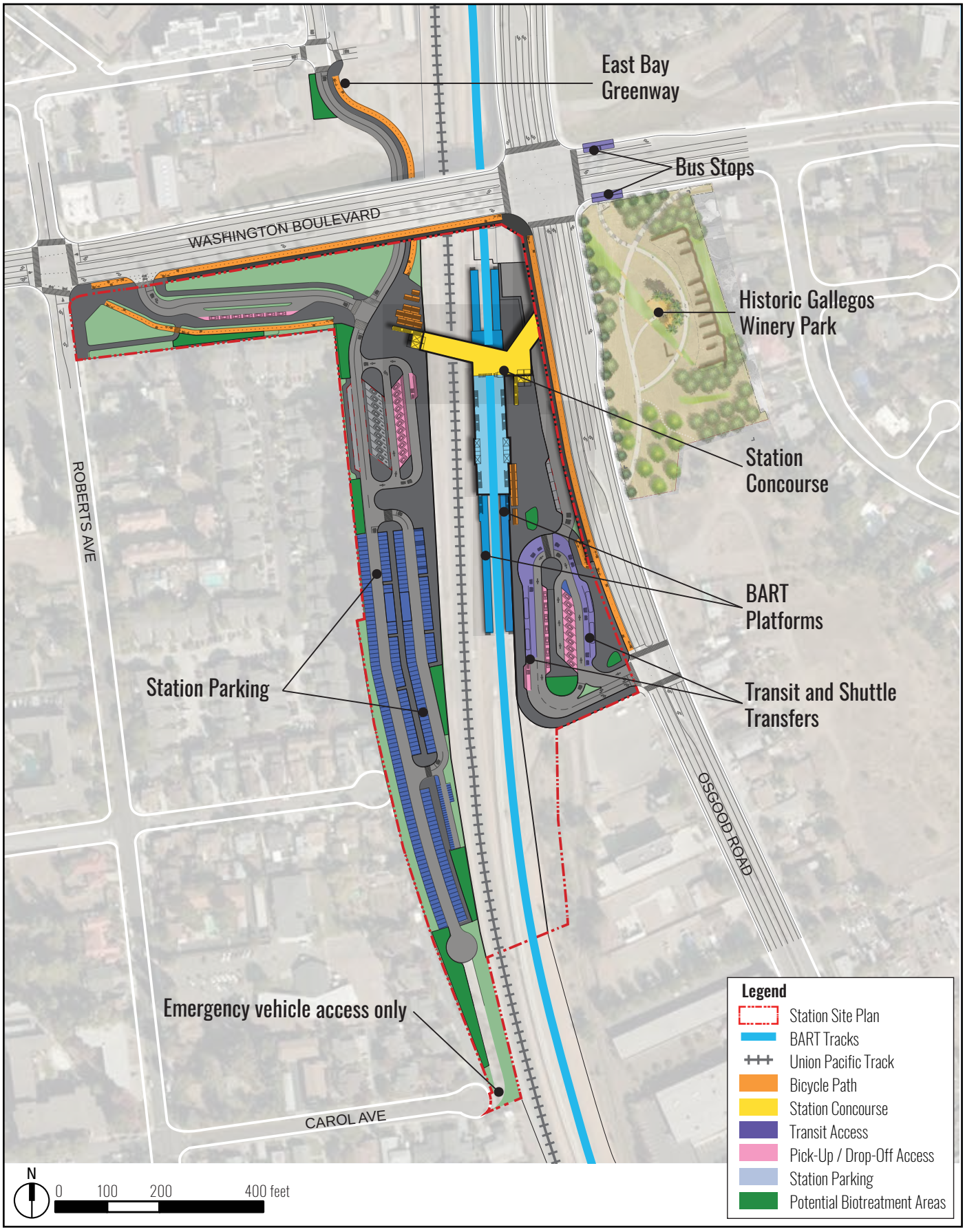


Figure 2-2 - Station Site Plan and Gallegos Winery Park

Example of pedestrian-oriented shopping district (Walnut Creek).

These improvements will focus heavily on the station access points and the immediate area around the station, as these locations are expected to have the highest intensity of bicycle and pedestrian use. Some improvements around the station will focus on managing traffic speeds in the area. Others, such as curb extensions and high-visibility crosswalks, will make pedestrians more visible to drivers and cyclists. These Safe Connections strategies will ensure that, even as activity in the area increases, visitors and station patrons will be able to arrive safely on foot, bike, or bus, while minimizing increases in automobile traffic.

CONTEXT-SENSITIVE AND TOD DESIGN RULES AND GUIDELINES

Develop context-sensitive design rules and guidelines to encourage future TOD that is integrated with the station and existing neighborhoods.

The Plan Area contains underutilized land ideal for redevelopment in close proximity to established residential neighborhoods. New development will be designed to complement the existing context and provide a well-conceived

Example of TOD (Pleasant Hill BART Station).

Irvington Monument.

progression in density between higher- and lower-density developments. The character of established residential neighborhoods will be retained.

With the development of the Irvington BART Station, the Plan Area is well-positioned to make transit a dominant mode of transportation for existing and future residents. New development within the Plan Area near the station will be within walking distance of the station and dense enough to leverage the area's enhanced transit service, increase local ridership, and decrease the number of people driving to the station.

FIVE CORNERS CONNECTION

Establish clear, walkable connections between the BART station and Five Corners.

Five Corners, the historic heart of Irvington, is located near the BART station. This close proximity provides an opportunity for strengthened connectivity, drawing patrons up and down Washington Boulevard, Bay Street, Union Street, and Main Street. This connection will be clearly defined through pedestrian-friendly streets with wide, continuous sidewalks, crosswalks, and active ground-floor uses.

PRESERVE HISTORIC RESOURCES

Preserve and enhance Historic Resources within the Plan Area.

The Plan Area includes an array of historic resources, from historic buildings to the remnants of the Gallegos Winery. As these assets are key to Irvington's unique character, they will be preserved and enhanced by new development in the area.

Historic Gallegos Winery Ruins.

MANAGED PARKING

Develop parking management strategies and programs that will minimize impacts to existing neighborhoods and support business, BART, and local transit.

While the BART station will prioritize pedestrian and bicycle access, more vehicles will inevitably be attracted to the area. A balanced provision of parking at the station and actively managed on-street parking around the station will reduce the effects of additional vehicles on area streets and motorists.

3

ACCESS AND MOBILITY

The vision for the Plan Area emphasizes improved pedestrian and bicycle connectivity, active streets, and safe connections for all modes of transportation. The primary purpose of this chapter is to further the implementation of previously-approved access and mobility projects in the Plan Area and to propose additional improvements to encourage walking, biking, and taking transit.

This chapter begins by summarizing the policy context and existing conditions that have informed the Station Area Plan, including the policy background, existing circulation network, and planned station access. Following the background information, the chapter describes future improvements in the Plan Area. The chapter: 1) compiles improvements that have been established in other planning documents; and 2) identifies additional improvements. This chapter presents the improvements by mode of travel—pedestrian, bicycle, bus, auto—and a complete list can also be found in Appendix C. Finally, this chapter demonstrates how potential improvements could look with Complete Streets. Potential funding mechanisms are discussed in Chapter 5.

3.1 CONTEXT

This section briefly summarizes existing City policies and existing conditions relevant to access and mobility in the Plan Area.

EXISTING POLICIES

The existing policy documents, listed below and described further in Appendix A, serve as the basis for most of the recommendations for bicycle, pedestrian, and bus infrastructure improvements in the Plan Area, presented in this Station Area Plan.

- **Fremont's General Plan Land Use Element (2011).** Identifies the Plan Area as a Priority Development Area (PDA) for future growth, creating the potential for increased bus and BART transit ridership and future development that is pedestrian- and bicyclist-friendly.
- **General Plan Mobility Element (2011).** Includes policies to ensure convenient access and intermodal transfer to and from BART

stations, including policies to strengthen pedestrian connections to all BART stations and coordinate scheduling for intermodal connections, and design of the Irvington BART Station for intermodal transfers.

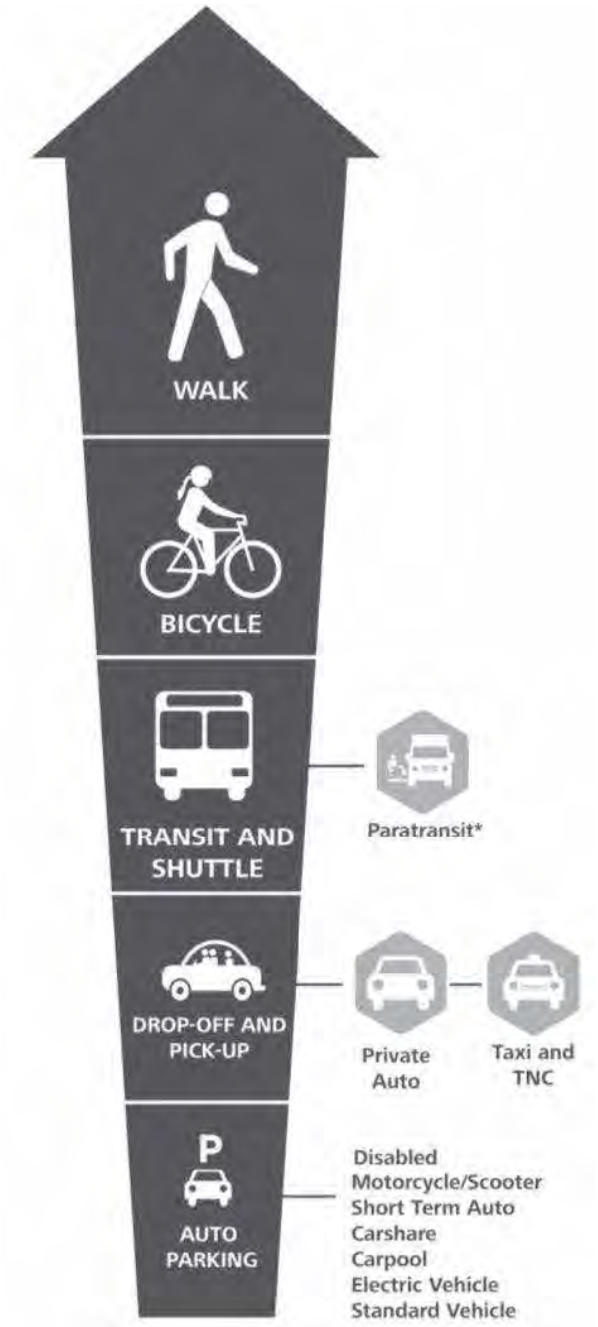
- **City of Fremont Complete Streets Policy (2013).** Establishes Fremont's commitment to comprehensive and integrated streets designed for all users.
- **Vision Zero 2020 (2016).** Identifies safety as the highest priority for the design and operation of the transportation system.
- **Pedestrian Master Plan (PMP) (2016).** Includes programmatic improvements and specific projects to inspire people of all ages and abilities to walk.
- **Bicycle Master Plan (BMP) (2018).** Includes programmatic improvements and specific projects to create a bicycle network that is pleasant, safe, convenient, and comfortable.
- **Americans with Disabilities Act (ADA) (1990)**. The ADA requires all newly constructed and altered facilities, including sidewalks and transit stations, to be accessibly to persons with disabilities.

Additionally, BART's Station Access Policy has informed the Station Area Plan. The Irvington BART Station will be a neighborhood-serving origin station and will prioritize pedestrian access, consistent with BART's Station Design Hierarchy (shown in Figure 3-1). The Station Area Plan uses the hierarchy as a guideline to provide appropriate connectivity to the BART station, while serving everyone throughout the Plan Area.

EXISTING CONDITIONS

In anticipation of the Irvington BART Station, the City has completed significant improvements to the transportation network within the Plan Area, with the most significant being the Washington Boulevard and Paseo Padre Parkway Grade Separation, which created the Washington Boulevard overpass, realigned the Union Pacific Railroad (UPRR) track and raised the

Figure 3-1 BART Station Design Hierarchy



Source: BART Station Access Policy, 2016

Washington Boulevard/Osgood Road/Driscoll Road intersection to align with the new overpass. In addition, the City reconstructed Osgood Road south of Washington Boulevard adding sidewalks, bike lanes and some median landscaping along Osgood Road. The City has also installed some sidewalks along Roberts Avenue.

The following section describes existing access

and mobility conditions for the Plan Area, including the street network, current circulation, and planned BART service in Fremont.

STREET NETWORK

Primary local roads serving the Plan Area are shown in Figure 3-2 and include:

- **Washington Boulevard**. A four-lane primary arterial with buffered Class II bicycle lanes west of Roberts Avenue, Class II bicycle lanes east of Roberts Avenue, and continuous sidewalks.
- **Fremont Boulevard**. A four-lane primary arterial with a bicycle lane in each direction and continuous sidewalks.
- **Osgood Road**. A four-lane primary arterial that has a bicycle lane in each direction and continuous sidewalks
- **Driscoll Road**. A four-lane minor arterial with a bicycle lane in each direction and continuous sidewalks.
- **High Street**. A two-lane collector street that shares the roadway with bicycles (a Class III bicycle route), has sidewalk gaps, and provides on-street parking in each direction.
- **Main Street**. A two-lane collector street with a Class III bicycle route on a small stretch, sidewalk gaps, on-street parking in each direction.
- **Roberts Avenue**. A two-lane collector street with a Class III bicycle route, continuous sidewalks, and on-street parking in each direction.

Interstate Highway (I)-680 provides regional access to the Plan Area via Washington Boulevard. I-680 is approximately 0.75 miles east of the station.

EXISTING PLAN AREA ACCESS

This section describes existing access to and through the Plan Area for each mode of transportation.

Pedestrian and Bicycle Access

Pedestrian Network and Facilities

Fremont's existing pedestrian system primarily consists of sidewalks, with some recreational trails (mostly in parks). The Town Center Subarea is a well-established environment for pedestrians, with many businesses fronting the sidewalk. Bay Street is especially pedestrian-friendly, with features such as street furniture, lighting, and crosswalks. However, other streets within the Plan Area have gaps in the sidewalk network (as shown in Figure 3-5), narrow sidewalks, or sidewalks with utility obstructions. The City's PMP identifies about 17 miles of sidewalk gaps within Fremont, 1.3 miles of which are within the Plan Area. Pedestrian access to many of the commercial buildings in the Plan Area is also constrained, as buildings are set back from the street and surrounded by parking, not easily accessible for pedestrians.

Bicycle Network and Facilities

Within the Plan Area, Class II bikes lanes exist on Washington Boulevard, Osgood Road, and Driscoll Road. Class III bike routes exist on short segments of Roberts Avenue and High Street. There is also a Class I (off-street) bike and pedestrian trail between the Station Site and Central Park that is described below. The existing bicycle infrastructure in the Plan Area is shown in Figure 3-3.

Trails

The East Bay Greenway (EBGW) is a proposed bicycle and pedestrian trail envisioned to extend through Alameda County from Albany to Santa Clara County. The segment of the trail between the station and Central Park was developed within the former railroad right-of-way and spans 1.25 miles.

The completion of approximately eight miles of the EBGW trail in Fremont—to connect the Community Plan Areas in northern and southern Fremont—has been planned, but several of the connections have not been completed. More information on the EBGW trail is discussed in Section 3.2, Plan Area Improvements, of this chapter.

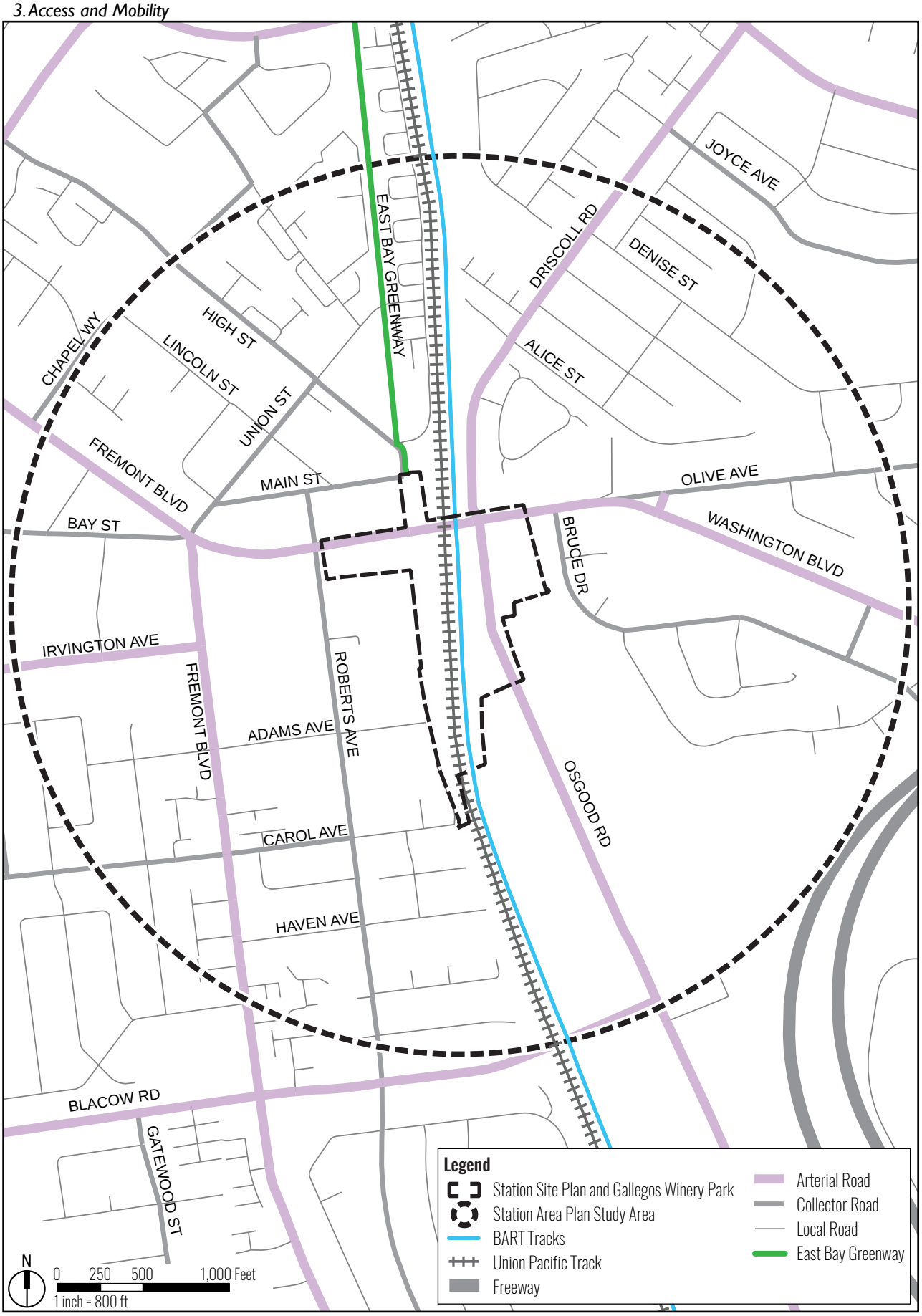


Figure 3-2 - Existing Street Network

The Sabercat Creek Trail, just outside the Plan Area to the southeast, follows one of the last natural riparian areas in Fremont. The City has a scoping effort underway to evaluate a path across I-680 to connect the Plan Area to the existing Sabercat Creek Trail east of I-680.

Transit Access

Existing BART service in Fremont and bus transit service in the Plan Area is described below.

BART

Two BART stations currently serve Fremont: the Fremont BART Station (in Central Fremont) and the Warm Springs/South Fremont BART Station. Both stations are over 1.5 miles from the Plan Area. The two stations are located along both the Warm Springs/Richmond line and the Warm Springs/Daly City line. Each line has 15-minute headways during weekday service hours (4:00 a.m. – midnight) and 20-minute headways on weekends (6:00 a.m. – midnight on Saturdays; 8:00 a.m. – midnight on Sundays).

The Warm Springs/South Fremont Station is currently BART's southernmost station in the East Bay. Due to its nature as a BART line terminus and the primarily suburban nature of the surrounding area, most riders currently access the station by vehicle. This will change over time as the area around the station evolves in accordance with the Warm Springs/South Fremont Community Plan (2014). The Fremont BART Station is also primarily accessed by vehicle. According to 2015 (most recently available) survey data, 44 percent of BART riders drive and park at the Fremont BART Station (single or carpool), 33 percent are dropped off, 15 percent walk or bike, and eight percent take bus transit.

In June 2018, there were about 7,000 daily boardings at the Fremont BART Station and about 3,600 daily boardings at the Warm Springs/South Fremont BART Station. Many Fremont residents use BART to commute north to work in Oakland, San Francisco, and other central Bay Area employment hubs. The future extension of BART service south to Santa Clara County, including San Jose, will provide access to jobs south of the station.

Bus Transit Service Network and Facilities

Several Alameda-Contra Costa Transit District (AC Transit) bus lines currently serve the Plan Area and the majority have 30-minute headways during most of the day. However, AC Transit is planning major service changes in the near future that will consolidate several lines into high priority corridors to provide more frequent service in those corridors. See Transit Access Improvements under Section 3.2 for more information. According to the City's General Plan, Fremont Boulevard, Washington Boulevard, and Osgood Road are considered primary transit routes in Fremont. The closest bus stops to the Station Site are on Washington Boulevard at Bruce Drive, on Washington Boulevard between Fremont Boulevard and Roberts Avenue, and on Osgood Road adjacent to the Station Site. No private shuttles (e.g., employer shuttles) are known to operate in the area of the Irvington BART Station.

Automobile Access

The I-680/Washington Boulevard interchange, located approximately 0.75 miles east of the Irvington BART Station, provides drivers with convenient freeway access to the Plan Area. Fremont Boulevard, Washington Boulevard, and Osgood Road/Driscoll Road will continue to function as primary and minor arterials through the Plan Area.

3.2 PLAN AREA IMPROVEMENTS

This Station Area Plan builds upon adopted City policies, plans, and recommendations to refine and identify additional access improvements to improve connectivity in the Plan Area. As certain portions of the Plan Area see more Transit-Oriented Development (TOD), the increased population concentration can bolster both bus and BART transit ridership. This Station Area

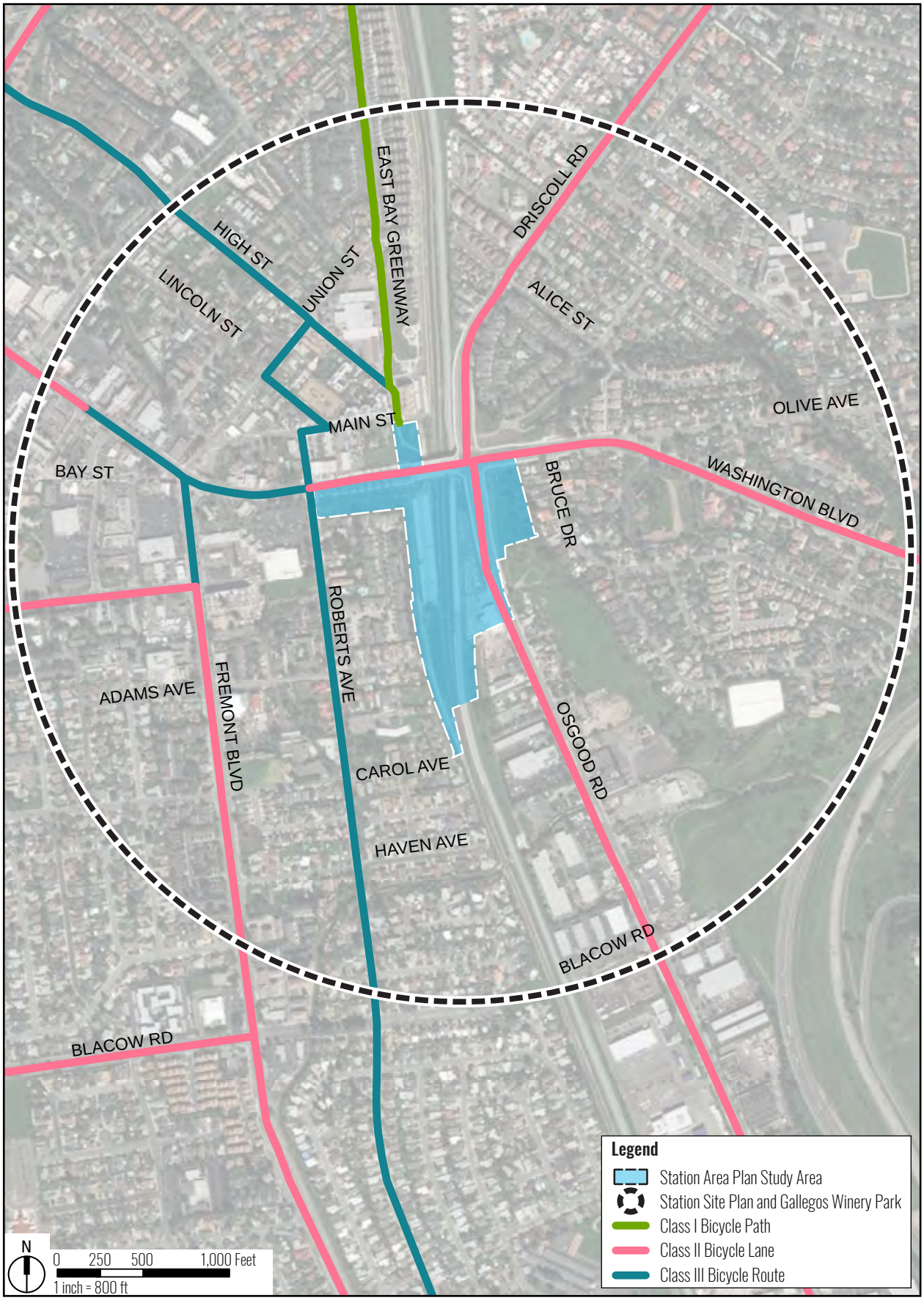


Figure 3-3 - Existing Bicycle Conditions

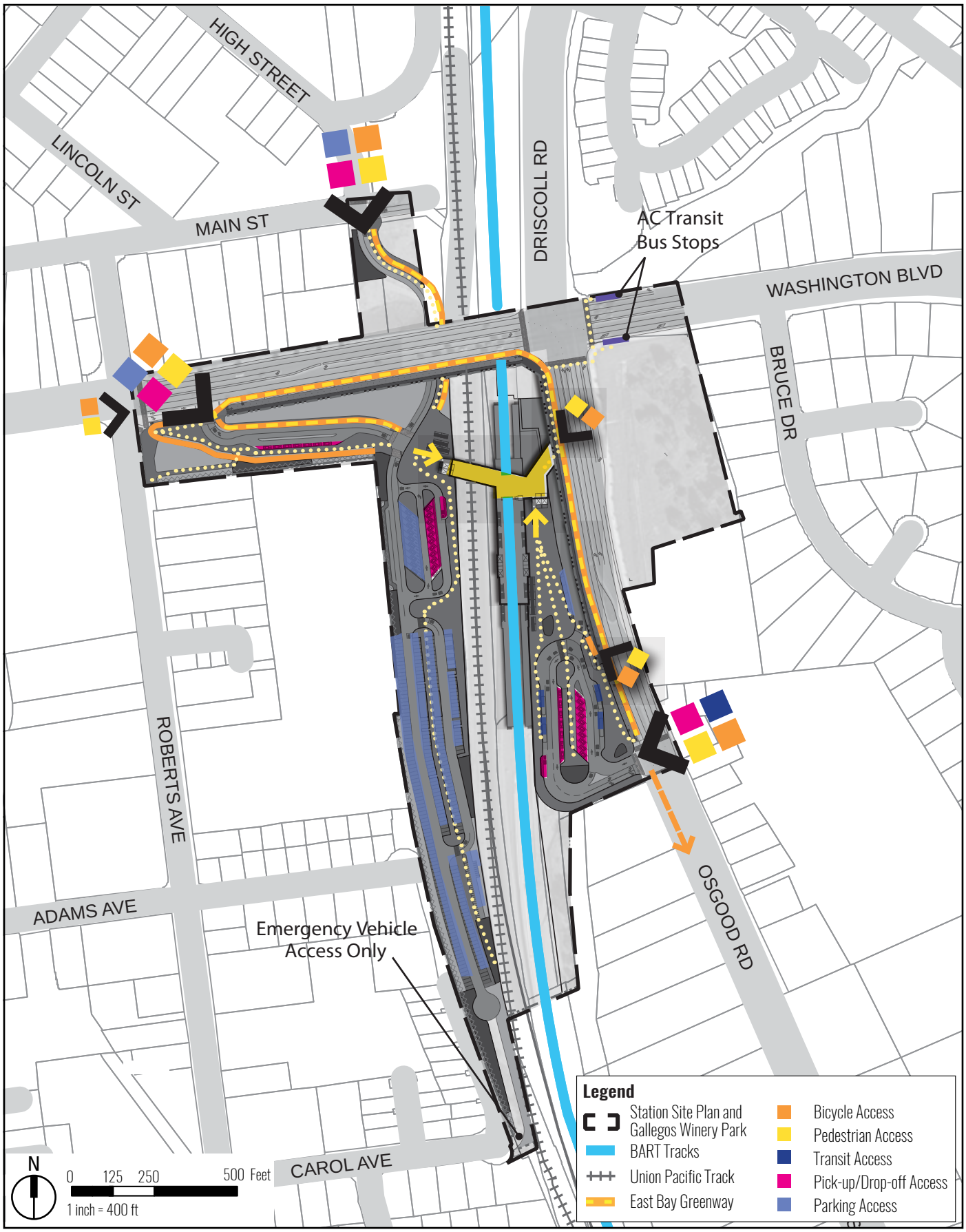


Figure 3-4 - Station Site Plan - Access Map

Plan seeks to facilitate safer and more convenient walking and biking throughout the Plan Area.

This section identifies improvements on local streets for both pedestrians and bicyclists, as well as design solutions for transit staging adjacent to the station and connections from bus, drop-off, and active transportation. The following infrastructure improvements are described by mode and generally by type of improvement. For each mode, the improvements are differentiated between: 1) those that are identified in existing City policy; and 2) additional improvements proposed as part of this Station Area Plan that could be implemented by the City over time as resources permit. Improvements unique to this Station Area Plan are indicated in *italics*. Some of the previously identified improvements are programmatic in nature. Specific locations for the programmatic improvements are provided within the Plan Area.

The improvements identified in the Station Area Plan will be implemented over time either through inclusion in the City of Fremont's Capital Improvement Program (CIP) or by development projects near or adjacent to the new development.

PEDESTRIAN ACCESS IMPROVEMENTS

Continuous sidewalks with appropriate pedestrian amenities will provide safe pedestrian access to the Irvington BART Station from all directions. In compliance with the Americans with Disabilities Act, all newly constructed and improved pedestrian facilities shall be accessible to individuals with disabilities, including those with impaired vision and/or mobility. This section reviews programmatic pedestrian improvements and specific projects from previous planning documents, identifies known sidewalk gaps, and provides additional Station Area Plan recommendations. This section also analyzes potential increases in the pedestrian "walk shed" (the area within a walkable distance to the station) associated with projects that provide improved connectivity.

FREMONT PEDESTRIAN MASTER PLAN RECOMMENDED IMPROVEMENTS

The Fremont PMP recommends a range of citywide pedestrian improvements for the City to consider. Those relevant to the Station Area Plan are summarized in Table 3-1.

Sidewalk Gaps

The PMP recommends continuous sidewalks along all Fremont roadways. Figure 3-5 illustrates the results of a sidewalk gap analysis based on aerials and field work in the Plan Area. Completing the sidewalk where gaps exist will be a priority within the Plan Area to enhance pedestrian access to and from the station. It is expected that most sidewalk gaps will be completed as adjacent properties are developed. However, the City may improve other sidewalks in the Plan Area and will prioritize those that provide direct access to the station.

Pedestrian Crossings

The Fremont PMP also identifies a number of specific locations near the station for uncontrolled crosswalk improvements, although no specific improvements are identified. Some of the potential design solutions included in the PMP Toolkit are flashing beacons, curb extensions, and refuge islands. The specific locations near the station are listed in Table 3-2 and shown in Figure 3-6.

In addition to the pedestrian improvements identified in the PMP as shown in Table 3-1, the Station Area Plan identifies the following improvements for implementation as resources permit, to realize the vision for the Plan Area. Each improvement is shown in Figures 3-7a and 3-7b, as indicated in the parentheses.

- *Extend the curb at the southeast corner of the Fremont Boulevard/Papazian Way intersection.* This improvement is proposed as part of the Station Area Plan (See #1, Figure 3-7a)
- *Square the Union Street/Main Street intersection and provide a traffic calming measure, such as a traffic circle, at the intersection.* This improvement is proposed as part of the Station Area Plan. (See #2, Figure 3-7a)

- *Provide a path between the Washington Boulevard/Osgood Road/Driscoll Road intersection and Alice Street along the existing emergency vehicle access.* This improvement is proposed as part of the Station Area Plan. (See #3, Figure 3-7a)
- *Provide a path between the station and the Middlefield Reservoir, with a future connection to the Sabercat Creek Trail.* The City has a scoping effort underway to evaluate the path across I-680. (See #4, Figure 3-7a)
- *As part of the overall improvements at Five Corners, consider one or more of the following at the Washington Boulevard/Fremont Boulevard/ Union Street/Bay Street intersection*: (See #5, Figure 3-7b)
  - *Close Bay Street at the intersection to improve access and circulation for all modes of transportation.* One option is to convert Bay Street between Washington Boulevard/Fremont Boulevard and the traffic circle into a pedestrian plaza; this would simplify the intersection and reduce both pedestrian/automobile conflict points and signal cycle length. Closing Bay Street is a major policy decision that would require further analysis and review and City Council approval.
  - *Reduce the corner radius on the northeast and southeast corners of the intersection, which would potentially include removing the pork chop island.*[1] Removal of pork chop islands was programmatically identified in the BMP; this specific location is identified through the Station Area Plan.
- *Remove the pork-chop islands at the Osgood Road/Blacow Road intersection.* Removal of pork chop islands was programmatically identified in the BMP; this specific location is identified through the Station Area Plan. (See #6, Figure 3-7a)
- *Implement traffic calming measures, such as speed humps and/or chicanes, on High Street.* High Street is a Class III bicycle route, identified in the City's General Plan as a collector street, that would experience additional traffic as a result of Irvington BART Station. Implementing traffic calming on this street would make it more attractive to pedestrians walking to and from the station. This improvement is proposed as part of the Station Area Plan. (See #7, Figure 3-7a)
- *Redesign the Washington Boulevard/Olive Avenue intersection for a traditional T-intersection and restrict the westbound approach as exit only.* Shift the existing bus stop on the south side of the intersection away from the crosswalk. (See #8, Figure 3-7b).
- *Consider reducing the corner radius at all corners of the Osgood Road/Driscoll Road/ Washington Boulevard intersection, and/or reducing lane widths on Driscoll Road to reduce pedestrian crossing distances and vehicle speeds.* This improvement is proposed as part of the Station Area Plan (See #9, Figure 3-7b)
- Remove one eastbound lane on Washington Boulevard, and reduce lane and median widths on Osgood Road to provide space for the EBGW and reduce pedestrian crossing distances. This improvement is identified in the Station Site Plan. (See Figure 3-7b and the "East Bay Greenway Access Improvements" section below)

[1] Pork chop islands are triangular pedestrian refuge areas at intersections that provide a slip lane for vehicles to turn right.

Table 3-1 2016 Pedestrian Master Plan Recommended Improvements

Engineering Improvement	Description	Plan Area Treatments	Status and Notes
Reduction of Curb Radii	• Wide curb radii mean that pedestrians have further to walk across the street and can encourage higher vehicle speeds. Consider reducing corner turn radii when determined by an engineering study.	• Northeast and southeast corners of the Fremont Boulevard/ Washington Boulevard/ Union Street/ Bay Street intersection; south corners of the Washington Boulevard/ Roberts Avenue intersection	• Programmatically adopted in PMP; specific locations recommended as part of Station Area Plan. • Reconstruction of the Washington Boulevard/ Roberts Avenue intersection to be part of the Irvington BART Station construction.
Curb Ramps	• The City would generally retrofit non-compliant curb ramps as part of roadway repaving per ADA requirements. • Continue to install curb ramps and upgrade existing ramps to current standards, and install perpendicular curb ramps at major intersections in high pedestrian zones for enhanced pedestrian comfort and safety.	• Throughout the Plan Area	• Fremont's forthcoming ADA Transition Plan will identify citywide improvements, including curb ramps.
Truncated Domes	• Also known as tactile warnings, they provide a cue to visually-impaired pedestrians that they are entering a street or intersection. • Not required to install at existing curb ramps that were built prior to 2002, but required when repaving and upgrading existing curb ramps. • The PMP recommends proactively installing truncated domes at all arterial/arterial and arterial/collector intersections that are adjacent to commercial land uses in pedestrian districts.	• Washington Boulevard/ Olive Avenue, Fremont Boulevard/Carol Avenue, Fremont Boulevard/ Adams Avenue, Union Street/Main Street/Lee Street intersections	• Programmatically adopted in PMP; specific locations recommended as part of Station Area Plan. • Fremont is developing an ADA Transition Plan to identify citywide improvements.

Table 3-1 2016 Pedestrian Master Plan Recommended Improvements

Engineering Improvement	Description	Plan Area Treatments	Status and Notes
Audible Signals	• Install audible signals, which provide crossing information in non-visual formats, at all new and modified signalized intersections.	• Bay Street/Fremont Boulevard/Union Street/Washington Boulevard, and Fremont Boulevard/Carol Avenue intersections	• Bay Street/Fremont Boulevard/Union Street/Washington Boulevard intersection was specifically identified in the PMP; other locations were programmatically identified in the PMP and are recommended as part of the Station Area Plan. • Signal improvements at the Washington Boulevard/ Roberts Avenue intersection to be part of the Irvington BART Station construction.
High-Visibility Crosswalk Markings	• The PMP specifies that, "Fremont should install ladder crosswalk marking at all uncontrolled crosswalk locations on arterials and collectors where there are existing transverse style markings." Ladder crosswalks consist of two parallel lines along the crossing with perpendicular ladder bars striped across the width of the crosswalk. • The PMP Pedestrian Design Toolkit (PMP Appendix C) includes recommendations for when to enhance crosswalks beyond crosswalk markings.	• This style of crosswalk should be included at all intersections adjacent to the Irvington BART Station	• Programmatically identified in PMP and has since been adopted as a new city standard
Curb Extensions	• Also known as "bulb-outs," these engineering improvements reduce pedestrian crossing distance and are intended to increase pedestrian visibility. The PMP recommends, "Fremont should consider installing curb extensions at crosswalk locations where appropriate."	• Northeast corner of the Washington Boulevard/ Olive Avenue intersection	• Fremont has a Highway Safety Improvement Program grant project currently under design to provide pedestrian improvements, including curb extensions, at this intersection.

Sources: City of Fremont Pedestrian Master Plan, 2016; Fehr & Peers, 2019.

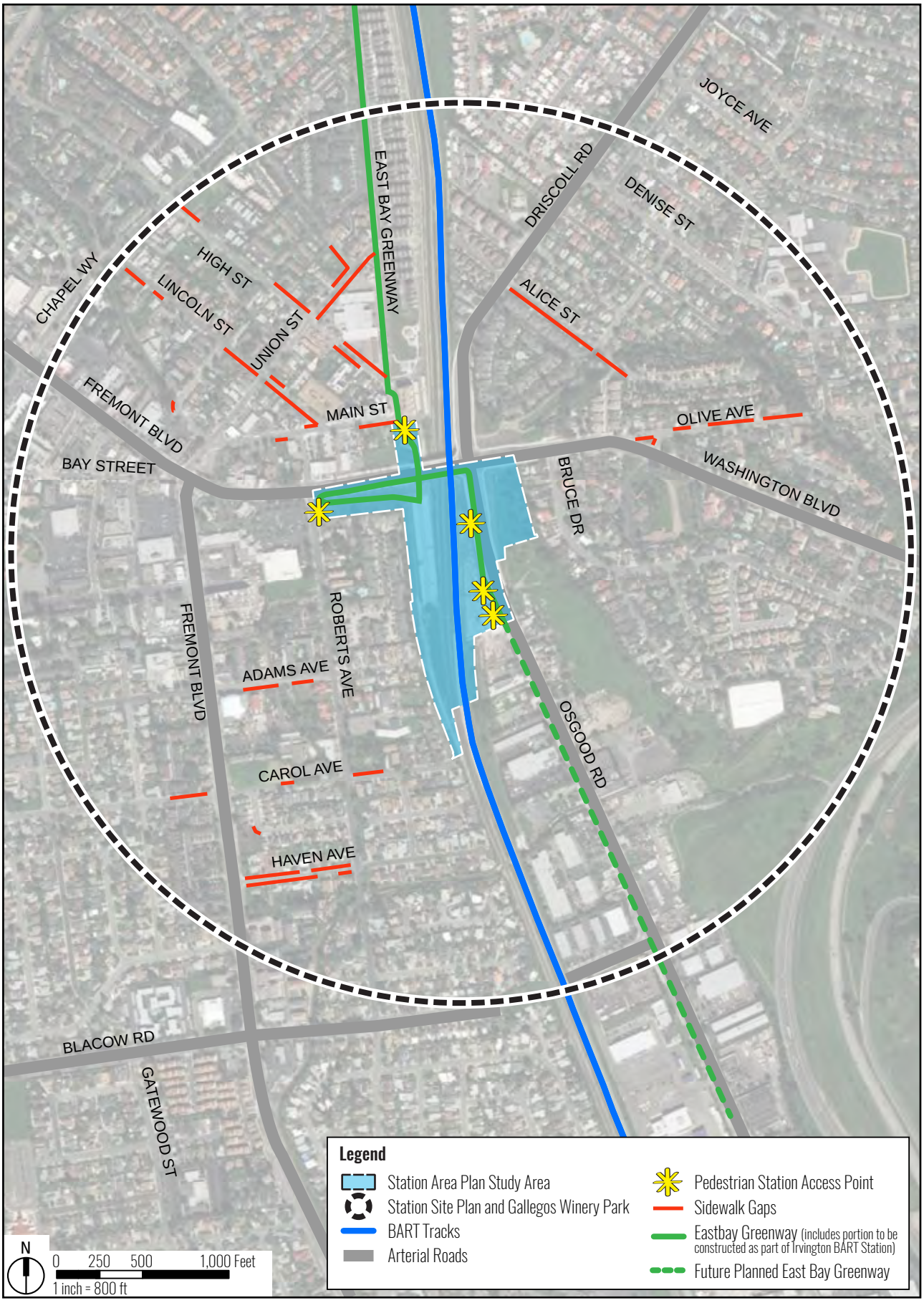


Figure 3-5 - Sidewalk Gaps

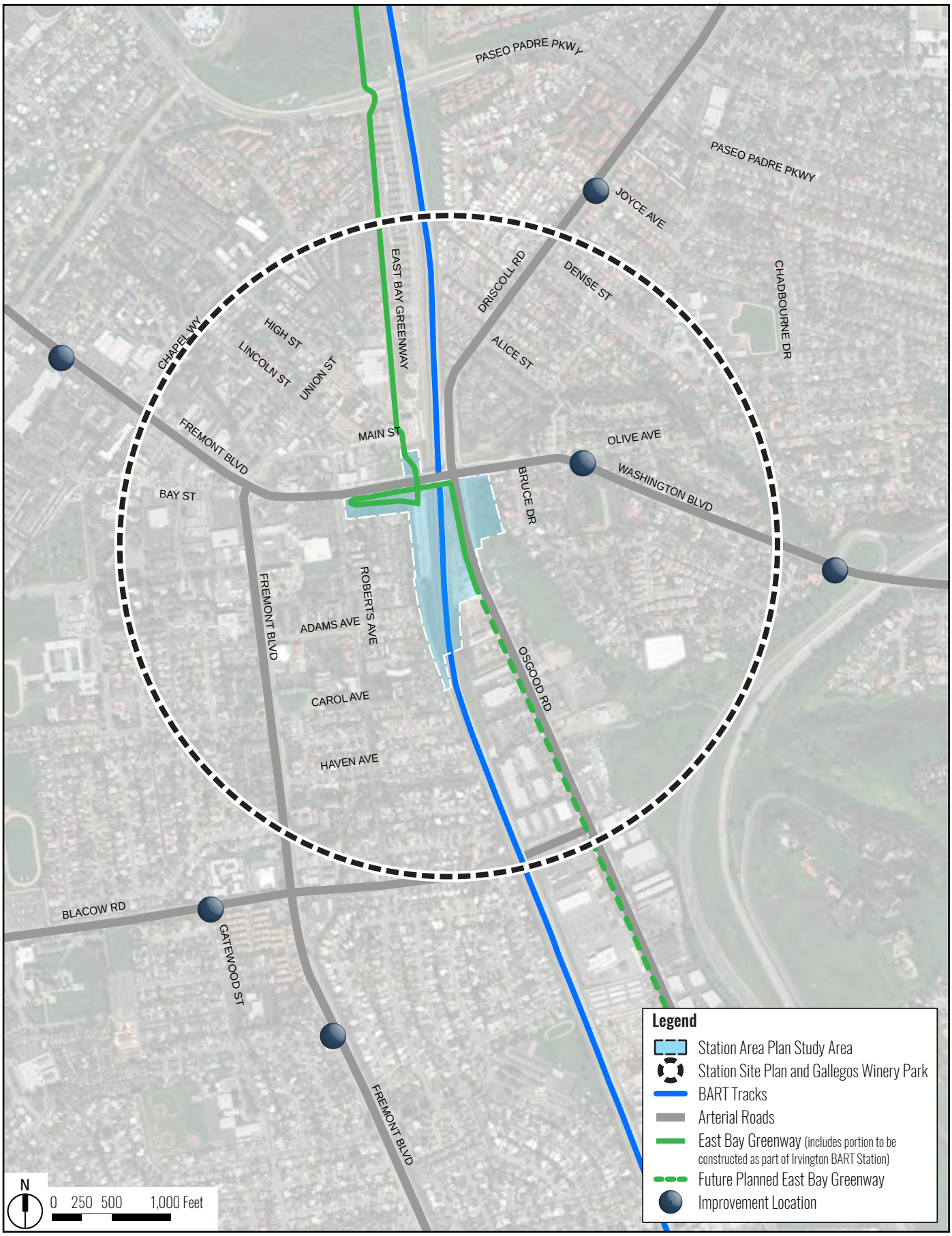


Figure 3-6 - PMP Recommended Uncontrolled Crossing Improvement Locations

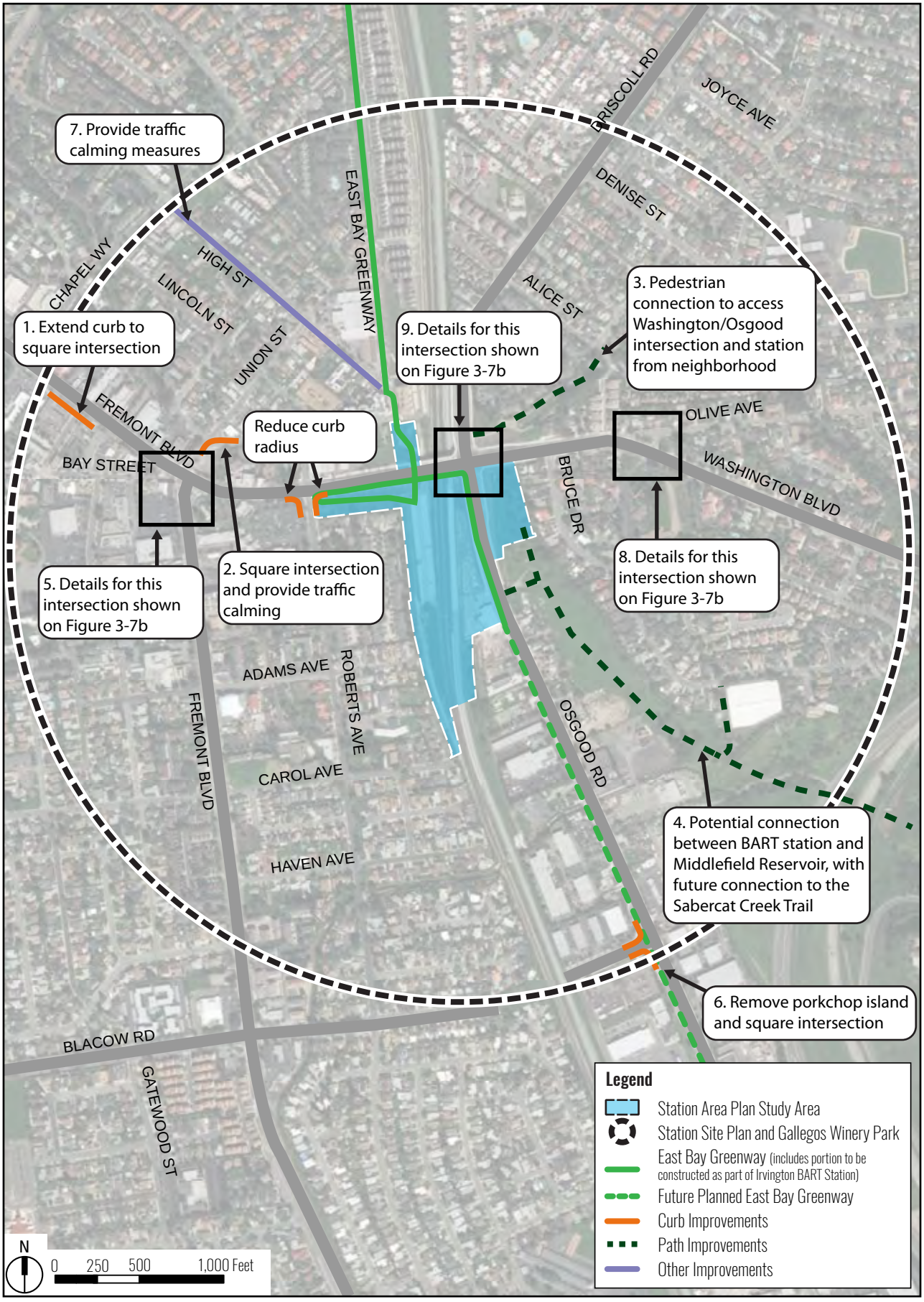


Figure 3-7a - Potential Major Pedestrian Improvements

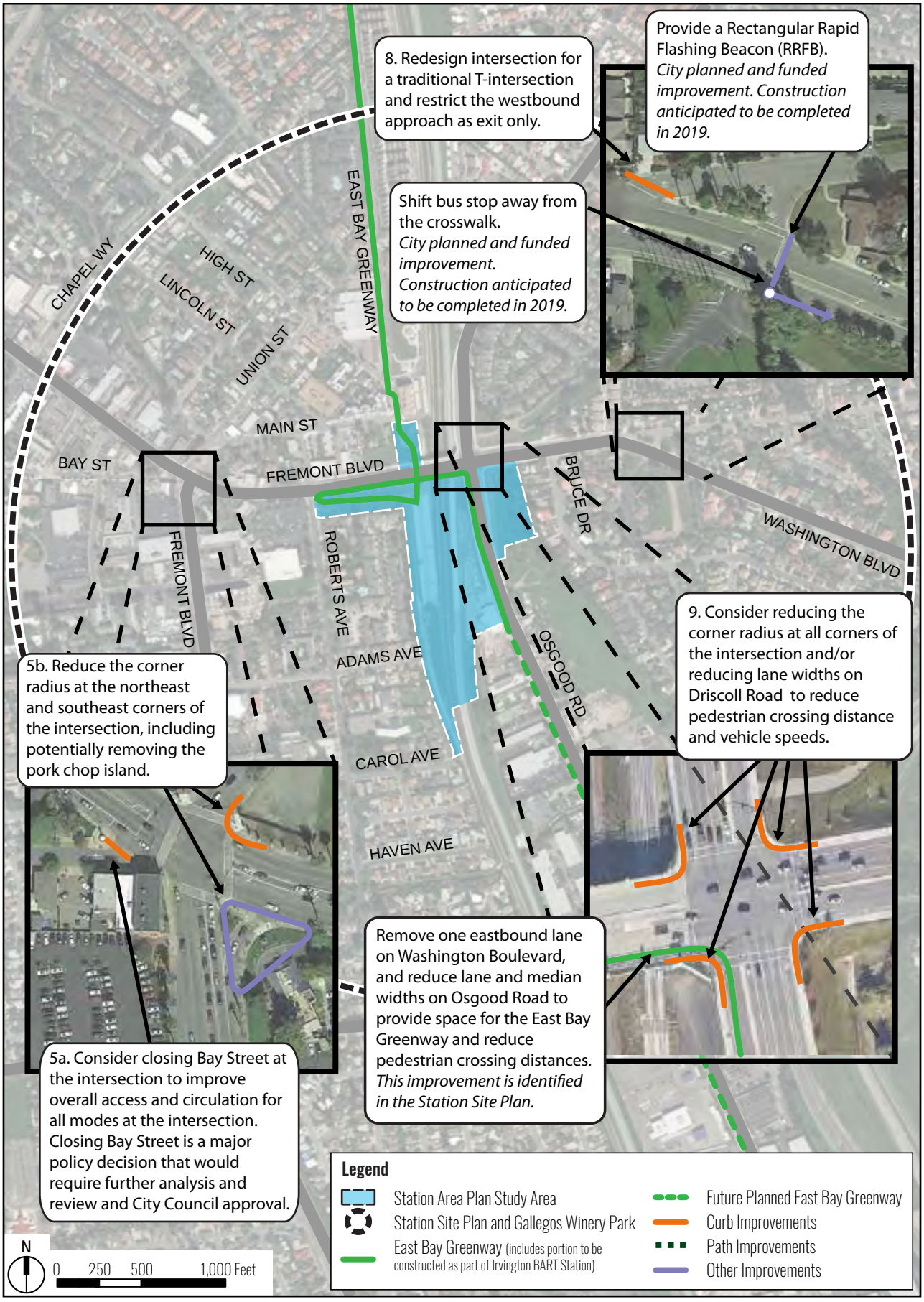


Figure 3-7b - Potential Major Pedestrian Improvements

Table 3-2 Pedestrian Master Plan Recommended Uncontrolled Pedestrian Crossing Improvements

Locations	PMP Listed Priority	Walking Distance from Irvington BART Station	Potential Improvements from PMP Toolkit	Notes
Fremont Boulevard/ Michael Avenue	Higher	1.1 miles	• Flashing beacons • Median refuge • Ladder crossing	
Washington Boulevard/ Olive Avenue	Higher	0.2 mile	• Flashing beacons • Median refuge • Curb extension • Ladder crossing	• Fremont has a Highway Safety Improvement Program grant project currently under design to provide a flashing beacon, median refuge, curb extension, and ladder crossing at this intersection.
Blacow Road/ Gatewood Street	Medium-High	1.0 mile	• Flashing beacons • Median refuge • Ladder crossing	• Fremont has a traffic signal project currently under design at this intersection, which will be under construction in 2019.
Driscoll Road/ Joyce Avenue	Medium-High	0.5 mile	• Flashing beacons • Median refuge • Ladder crossing	• Fremont has a pedestrian crossing improvement project under construction in 2019 at this intersection.
Fremont Boulevard/ Clough Avenue	Medium-High	0.6 mile	• Flashing beacons	• Fremont has identified the intersection for crossing improvements that will be in construction in 2020.
I-680/ Washington Boulevard	N/A	0.8 mile	• Sidewalks and crosswalks on the north side of Washington Boulevard	• Potential connection to the proposed Ridge Trail Path identified in the UPRR Trail Study.

Source: Fremont Pedestrian Master Plan, 2016

Figure 3-8 illustrates the network of streets that are within a 15-minute walking distance (about 0.75 miles) of Irvington BART Station. As shown in Figure 3-7a, improvement #3 (Washington Boulevard/Osgood Road and Alice Street path) and improvement #4 (Middlefield Reservoir path) provide additional pedestrian connections, but do not expand the 15-minute walk shed; however, they provide for more convenient routes, as they involve less distance along roads with high vehicle volumes.

BICYCLE ACCESS IMPROVEMENTS

Improvements to the Plan Area will provide comprehensive, safe, convenient bicycle access to encourage maximum bike ridership to the station. Bicyclists can be expected to use any automobile entrances in addition to any bicycle and pedestrian access points; thus, these locations should be designed with bicycle access in mind. As previously stated, the City of Fremont has considered various infrastructure improvements within the Plan Area, across

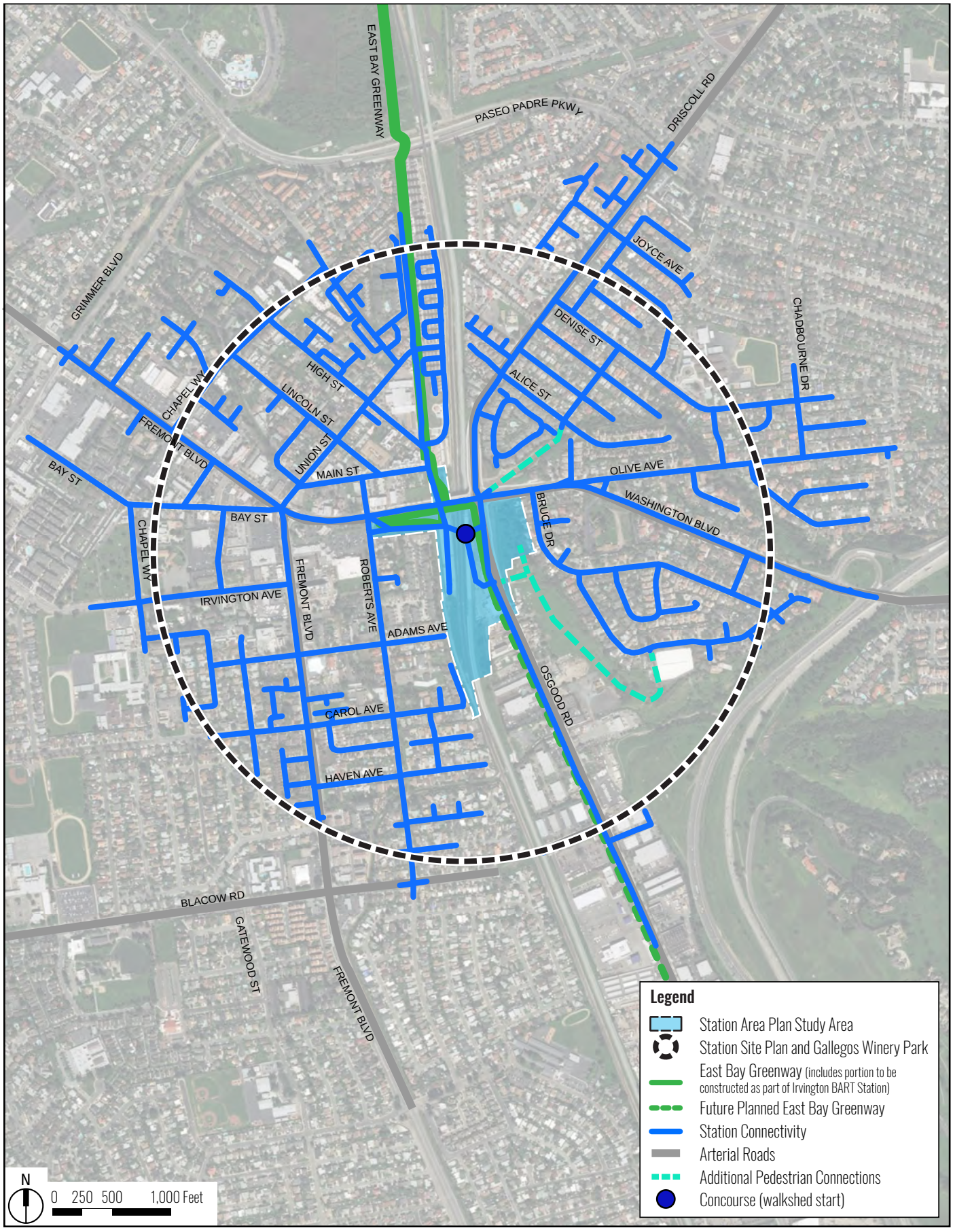


Figure 3-8 - 15-Minute Walkshed

several documents, all of which account for the Irvington BART Station. This section reviews specific projects and programmatic bicycle improvements from previous planning documents.

The Fremont BMP identifies the following types of bicycle facilities applicable to the Plan Area:

- Class I Bikeway (bicycle path): Completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flow minimized.
- Class II Buffered Bicycle Lanes: Modified on-street bike lane with vehicle and/or parking-side buffer for additional comfort and safety on high-speed or high-volume roadways.
- Class III Neighborhood Bikeways: Shared travel lane for bicyclists and drivers located on low-auto-volume and low-speed residential streets.
- Class IV Separated Bikeway/Cycle Track: Physically separated bicycle lane for increased comfort and protection of bicyclists. Can be physically separated by a barrier, such as planters or on-street parking, or grade separation from the roadway.

BICYCLE FACILITIES IN BICYCLE MASTER PLAN

In addition to the EBGW (discussed in the following section), the BMP includes specific bicycle improvements near the Irvington BART Station, which are considered in this Station Area Plan. These improvements are shown in Figure 3-9 and listed below.

- Upgrade existing Class II Bicycle Lanes to Class II Buffered Bicycle Lanes along Driscoll and Osgood Roads.
- Upgrade existing Class II Bicycle Lanes to Class II Buffered Bicycle Lanes along Washington Boulevard east of Olive Avenue (under design as part of project between Roberts Avenue and Meredith Avenue).
- Upgrade existing Class II Bicycle Lanes to Class II Buffered Bicycle Lanes along Washington Boulevard west of the station to Olive Avenue (under design as part of project between Roberts Avenue and Meredith Avenue). The BMP identifies the corridor as ultimately providing a Class IV Separated Bikeway.
- Upgrade existing Class II Bicycle Lanes/ Class III Neighborhood Bikeway to a Class IV Separated Bikeway along Fremont Boulevard/ Washington Boulevard between Eugene Street and Blacow Road.
- A Class I Bicycle Path between the EBGW and the Sabercat Creek Trail, including a bridge over I-680. The City has a scoping effort underway to evaluate the path across I-680.
- Class III Neighborhood Bikeways along Denise Street, Lockwood Avenue, and Chadbourne Drive.

The BMP details options for most of these proposed improvements. Where applicable, these projects are reflected in conceptual cross-sections presented in Section 3.3.

PROPOSED BICYCLE FACILITIES

The Station Area Plan proposes one additional bicycle facility beyond those adopted in the BMP (illustrated in Figure 3-9), as follows:

- *The Class I Bicycle Path between the EBGW and the Sabercat Creek Trail could be connected to the Middlefield Reservoir site to improve neighborhood access to the Sabercat Creek Trail.*

FREMONT BICYCLE MASTER PLAN RECOMMENDED PROGRAMMATIC BICYCLE IMPROVEMENTS

The BMP identifies several programmatic engineering improvements that apply to the Plan Area, as summarized in Table 3-3.

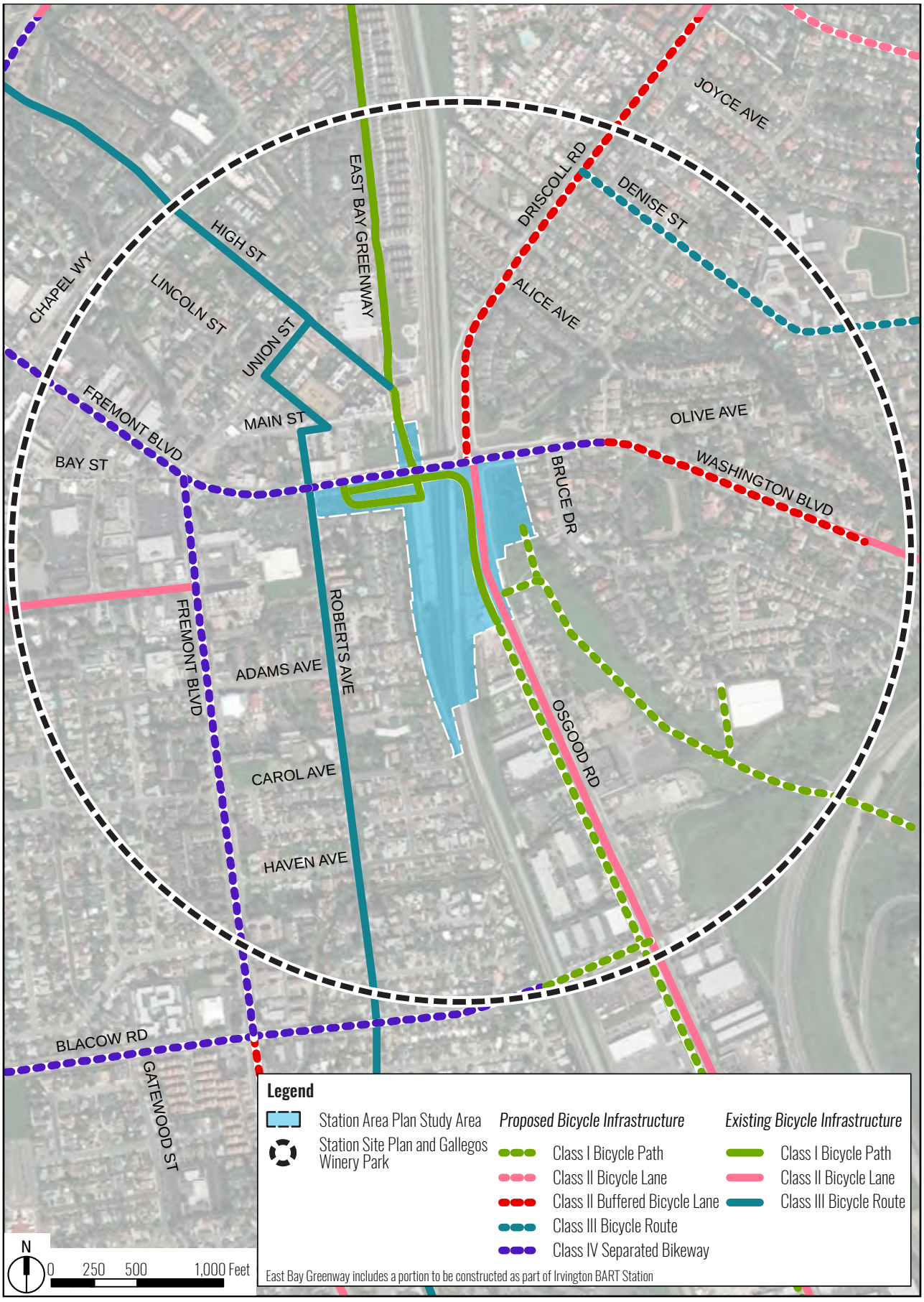


Figure 3-9 - Proposed Bicycle Conditions

Table 3-3 Bicycle Master Plan Improvements

Engineering Improvement	Description	Plan Area Location and Treatments	Status and Notes
Traffic Signals	• Install bicycle video detection at each signal citywide, including in left-turn pockets and on side streets. • To indicate where bicyclists will be detected and/or tell bicyclists that intersection detection is present at a given intersection, always stripe a bicycle detection marking to show bicyclists where to position themselves.	• Fremont Boulevard-Union Street/Washington Boulevard/Bay Street, Fremont Boulevard/ Irvington Avenue, Fremont Boulevard/Carol Avenue, Fremont Boulevard/ Blacow Road, Osgood Road/ Blacow Road intersections	• The through movements of these intersections have bicycle detection, but the left-turn pockets do not. • This also applies to intersections included in the Station Site Plan: the Washington Boulevard/Roberts Avenue intersection, the Osgood Road/ Driscoll Road/ Washington Boulevard intersection, and any new intersections.
Slip Lanes	• Remove slip lanes or modify slip lanes (e.g., through signal modifications or raised crosswalks) on the bicycle network to improve bicyclists' safety and allow for protected intersections.	• Osgood Road/Blacow Road intersection • Fremont Boulevard/Washington Boulevard/ Union Street/Bay Street intersection	• Programmatically identified in BMP; specific locations recommended as part of Station Area Plan.
Interchanges	• Improve existing freeway interchanges to enhance bicycle safety, such as by squaring off ramps and including green skip striping for bicycle facilities through conflict zones. • Include on-street and sidewalk-riding/off-street options for bicyclists through ramp areas.	• Square the exit ramp from northbound I-680 to Washington Boulevard, and from southbound I-680 to Auto Mall Parkway. • Install on-street and off-street options for bicyclists at the I-680/Washington Boulevard interchange.	• The City is undertaking a scoping effort for multimodal improvements at three I-680 interchanges, including Washington Boulevard, Auto Mall Parkway, and Mission Boulevard (north).
Wayfinding	• Install bicycle wayfinding, especially to direct bicyclists towards the Irvington BART Station.	• Throughout the Plan Area	
Maintenance	• Replace drain inlet grates parallel to the direction of bicycle travel with grates perpendicular to the direction of travel.	• Bike corridors throughout the Plan Area	• Prioritize replacing drain inlet grates on bicycle corridors.

Note: A slip lane is a road traffic lane provided at an intersection to allow vehicles to turn at the intersection without actually entering it and interfering with through traffic. It is therefore not controlled by any traffic signals at that intersection.

Source: Bicycle Master Plan, July 2018

EAST BAY GREENWAY ACCESS IMPROVEMENTS

The EBGW is a planned 37-mile regional pedestrian and bicycle trail through Alameda County that will connect Albany and Berkeley in the north to Fremont in the south. The planned EBGW through Fremont is shown in Figure 3-10. First conceived in 2007, stakeholders have come together to facilitate implementing the trail. Within Fremont, the segment between Central Park and the intersection of High and Main Streets, just north of the Irvington BART Station, a 1.25-mile segment, is completed. The current terminus of this segment is northwest of the Irvington BART Station just northeast of the High Street/Main Street intersection. The City is actively working to complete the EBGW within Fremont's city limits.

The Irvington BART Station Site Plan improvements will extend the existing EBGW terminus just north of the High Street/Main Street intersection to the southeast limits of the station at Osgood Road. The preferred route for this EBGW segment integrates with the existing Washington Boulevard overcrossing, as shown in Figure 3-10, rather than including a separate pedestrian/bicycle bridge, as was previously envisioned. The EBGW would extend under the Washington Boulevard overcrossing west of the tracks and continue to the Washington Boulevard/Roberts Avenue intersection at grade. A two-way Class IV Separated Bikeway (also known as a cycle track) on the south side of the Washington Boulevard would then connect to a two-way separated bikeway on the west side of Osgood Road. The separated bikeway would continue south on Osgood Road until the southern limits of the station. South of the station, the EBGW trail may continue south on Osgood Road as an elevated Class IV cycle track. The alignment and design of the EBGW south of the station will be the subject of further study. The separated bikeway can be accommodated on Washington Boulevard by eliminating the third eastbound through lane. Figure 3-11 illustrates the preferred design of the Class IV Separated Bikeway, which would be at sidewalk grade.

TRANSIT ACCESS IMPROVEMENTS

The Irvington BART Station and BART Silicon Valley Extension provide AC Transit with an opportunity to refine bus service in Fremont. AC Transit intends to restructure service in Fremont around the new demand patterns created by expanded BART service and continuing new development. Potential service options may include expanded fixed-route service on key corridors and Flex service, or on-demand service, to provide coverage in lower-density areas (see box below).

Flex

Flex is an on-demand service model in which transit users book trips ahead of time and can be picked up or dropped off at selected bus stops. The current Flex model includes scheduled departures from selected BART stations that do not require reservations. The Flex service model allows for higher levels of service along trunk lines for the same cost.

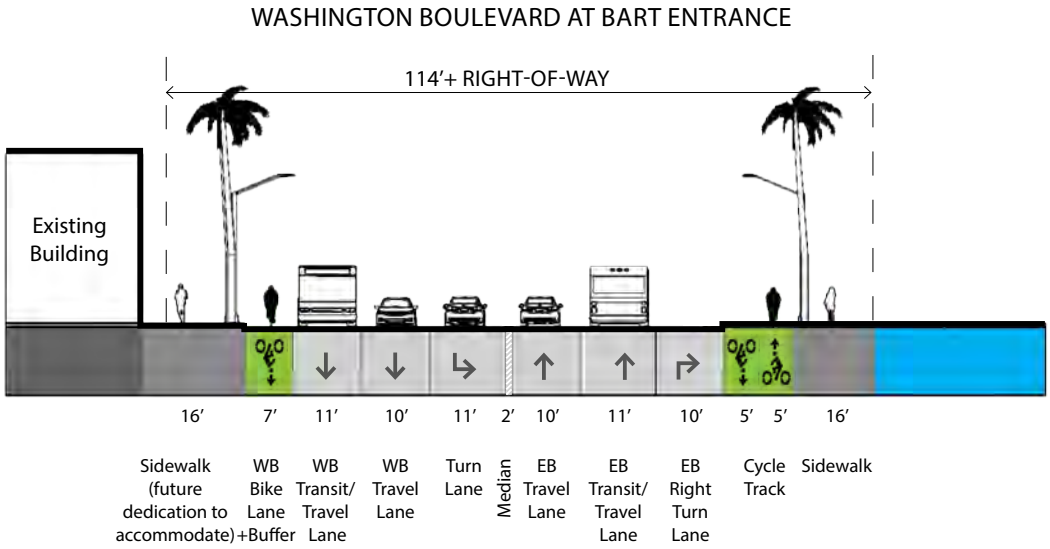
Urgo, John, "Flex V. Fixed: An Experiment in On-Demand Transit" (May 15, 2018). Transit Center. http://transitcenter.org/2018/05/15/adding-flexible-routes-improve-fixed-route-network/, accessed June 11, 2018

AC TRANSIT SERVICE AND INFRASTRUCTURE CHANGES

The Irvington BART Station is adjacent to the Fremont Boulevard and Washington Boulevard corridors, which are key spines of AC Transit's network. Flex service could directly serve the station, as depicted in Figure 3-12.

Figure 3-10 - East Bay Greenway Trail Map

Figure 3-11 Sample Cross-Section EBGW Sidewalk Grade



The following improvement is proposed as part of this Station Area Plan:

- *Upgrade the on-street bus stops along Washington Boulevard at Osgood Road and between Roberts Avenue and Fremont Boulevard to include bus shelters and other amenities.*

Additionally, the Station Site Plan includes an on-site bus transit area on the east side of the station. This area is designed to accommodate at least four buses on-site at the same time to support the possibility of expanded Flex service. The Station Site Plan bus stops could also accommodate private shuttles, although none are planned at this time.

Based on existing and expected future service, AC Transit has expressed an interest in moving the existing bus stops on Washington Boulevard near Osgood Road closer to the Irvington BART Station to promote intermodal connections. Pending further discussions between the City of Fremont and AC Transit, the bus stops could be moved closer to the Washington Boulevard/Osgood Road intersection with the following changes:

- *The westbound bus stop could be moved 100-150 feet to the west into the westbound right-turn lane at Osgood Road.*
- *The eastbound bus stop could be moved into the Washington Boulevard merging lane to the east of the intersection. Eastbound Washington Boulevard would be reduced to two through lanes, which would eliminate the need for the merging lane.*

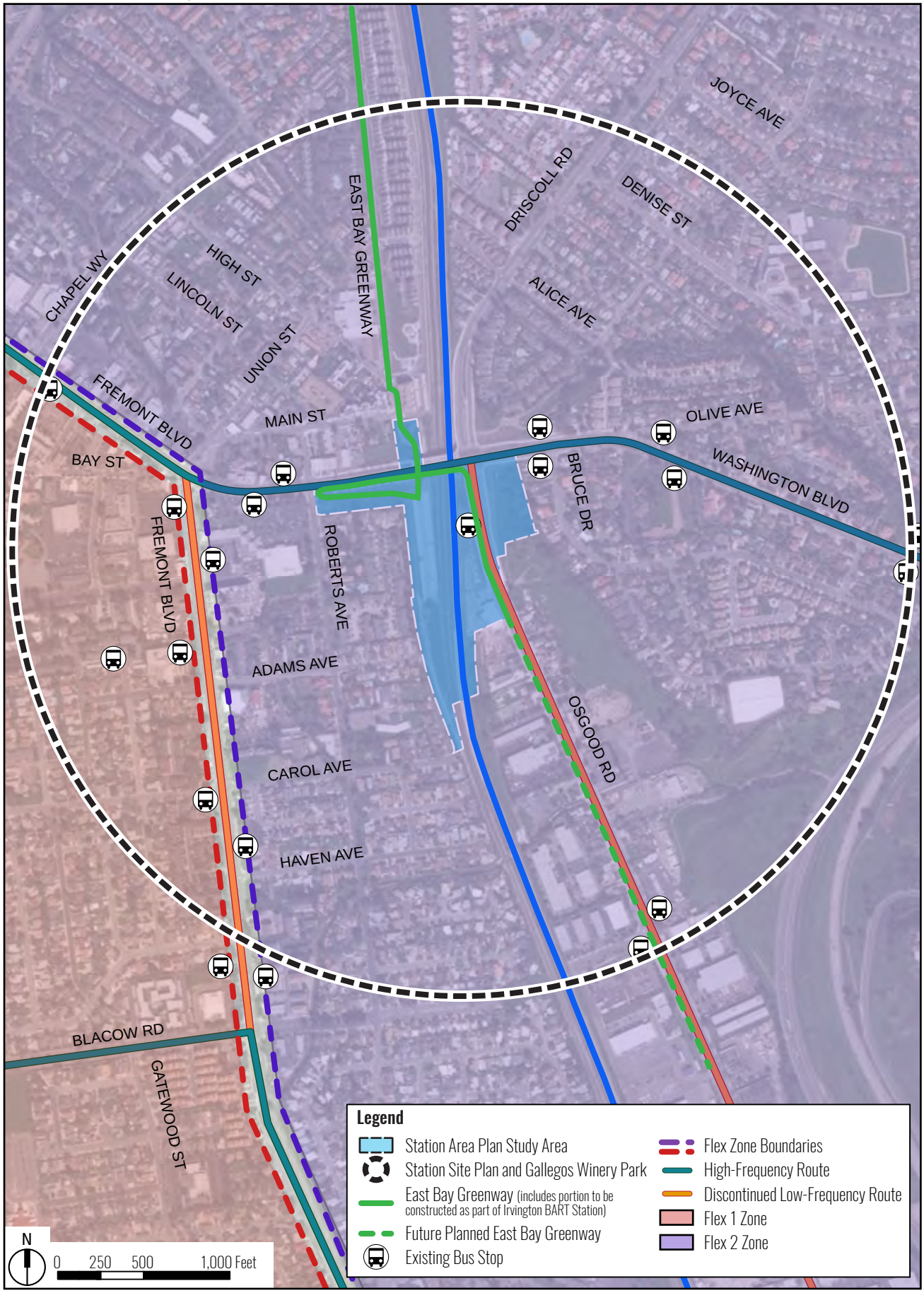


Figure 3 -12 - Conceptual Map of AC Transit Service near the Irvington BART Station

AUTOMOBILE CIRCULATION IMPROVEMENTS

Vehicle access points and pick-up/drop-off areas are planned on both sides of the BART tracks. The station will include approximately 320 parking spaces to the west of the BART tracks between general parking, motorcycle parking, and ADA parking. The station also includes 15–20 pick-up/drop-off spaces, including ADA pick-up/drop-off spaces, on each side of the tracks. No general or motorcycle parking spaces are planned on the east side of the station.

The ridership forecasting and traffic modeling results for the station indicate that with more parking spaces on-site, ridership would increase, but there would also be more automobiles driving to and from the station. The planned number of parking spaces was selected as a balance between maximizing BART ridership and minimizing traffic impacts in the Plan Area while increasing pedestrian, bicycle, and transit access.

An analysis of automobile traffic at 16 intersections in the Plan Area shows that congestion is expected to increase between existing conditions and 2040 conditions, and that the Irvington BART Station will have a relatively small effect on automobile congestion. Under existing conditions, automobile level of service (LOS) at two of 16 intersections is LOS E or F. In 2040, both with and without the Irvington BART Station, eight of 16 intersections are expected to operate at LOS E or F.

The following proposed roadway improvements will be a priority within the Plan Area to improve motor vehicle operations:

- *Fremont Boulevard-Union Street/Washington Boulevard/Bay Street intersection improvement:*
  - *Adjust signal timing parameters (i.e., adjust the allocation of green time for each intersection approach) and coordinate the signal timing changes with the adjacent intersections in the same signal coordination group.*
- *Fremont Boulevard/Blacow Road intersection improvement:*
  - *Adjust signal timing parameters (i.e., adjust the allocation of green time for each intersection approach) and coordinate the signal timing changes with the adjacent intersections in the same signal coordination group.*

The following roadway improvements are included as part of the Station Site Plan to improve motor vehicle operations:

- Washington Boulevard/Roberts Avenue intersection:
  - Stripe a left-turn lane on the southbound approach, which can be accommodated within the current right-of-way but would require prohibiting parking on both sides of the street.
  - Upgrade signal to provide protected north/south left-turn phasing.
  - Adjust signal timing parameters (i.e., adjust the allocation of green time for each intersection approach) and coordinate the signal timing changes with the adjacent intersections that are in the same signal coordination group.
- Osgood Road-Driscoll Road/Washington Boulevard intersection improvements:
  - Eliminate one eastbound through lane to accommodate a separated path as part of the EBGW on the south side of Washington Boulevard, and remove the corresponding receiving lane on the east side of the intersection.
  - Provide an overlap phase for the northbound Osgood Road right-turn movement.
  - Adjust signal timing parameters (i.e., adjust the allocation of green time for each intersection approach) and coordinate the signal timing changes with the adjacent intersections in the same signal coordination group.

Also see Figures 3-7a and 3-7b for pedestrian improvements planned/proposed to reduce conflicts for all road users.

PARKING STRATEGIES: RESIDENTIAL PARKING PERMIT (RPP) PROGRAM

Since BART will charge for parking at the station, it is anticipated that parking generated by the BART station would overflow into the adjacent neighborhoods without an RPP program, regardless of the parking supply provided at the station. The following improvement is proposed as part of this Station Area Plan:

- *Establish an RPP program prior to the opening of Irvington BART Station.*

The City is committed to establishing an effective RPP program that would be managed and enforced by the Public Works Department to prevent spillover parking in neighborhoods adjacent to the BART Station. Other jurisdictions—including Union City, Oakland, and Berkeley—have implemented parking management programs near BART stations to limit non-resident parking to two hours or less, thus, preventing BART commuters from using on-street parking. By reducing the effective on-street parking supply near the Irvington BART Station, the RPP will reduce the amount of drive-alone access to the station. The RPP program could also be expanded outside the Plan Area if non-local BART riders generate high on-street parking demand.

3.3 COMPLETE STREETS

In its Complete Streets policy, the City "recognizes the importance of Complete Streets infrastructure and modifications that enable the safe, convenient and comfortable travel for all categories of users." Based on this policy, the streets in the Plan Area are intended to serve everyone in all modes, consistent with the Complete Streets definition in the box below.

This section illustrates that many of the improvements identified throughout this chapter will support the development of Complete Streets. The streetscapes presented indicate the potential for future TOD within the Plan Area to enhance the experience for pedestrians and bicyclists.

Cross-sections are provided for the following three road segments (see Figures 3-13, 3-14, and 3-15):

- Osgood Road, south of the BART entrance
- Washington Boulevard, at the BART entrance
- Main Street/High Street, at the BART entrance

An evaluation of each cross-section for pedestrian and cyclist comfort is provided following the cross-sections.

What are Complete Streets?

According to Smart Growth America, "Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations."

Figure 3-13 Osgood Road Cross-Section, South of BART Entrance (Looking North)

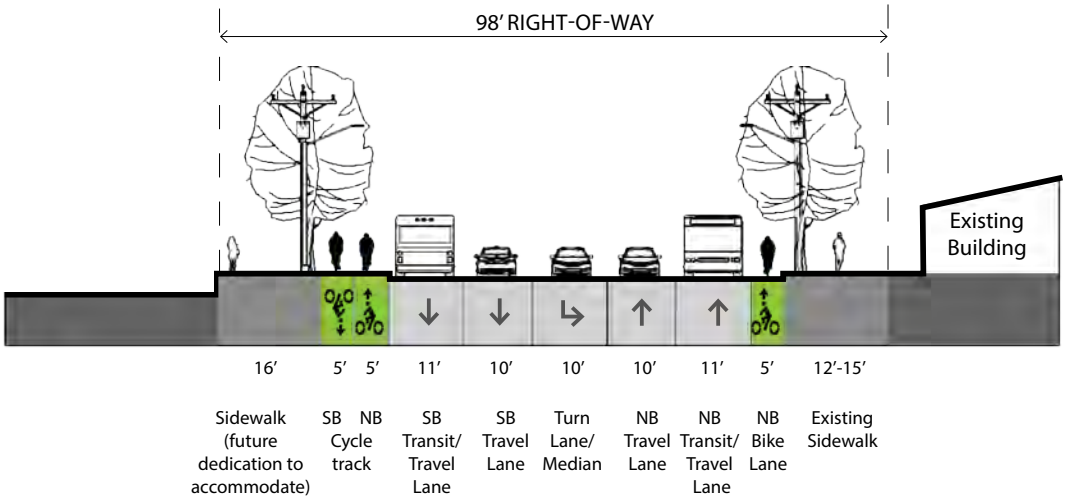


Figure 3-14 Washington Boulevard Cross-Section, at BART Entrance (Looking East)

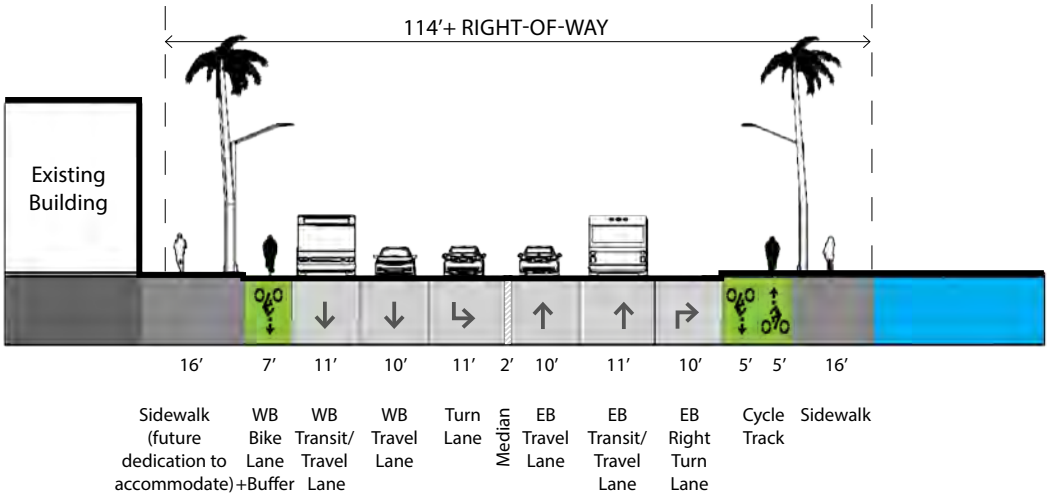
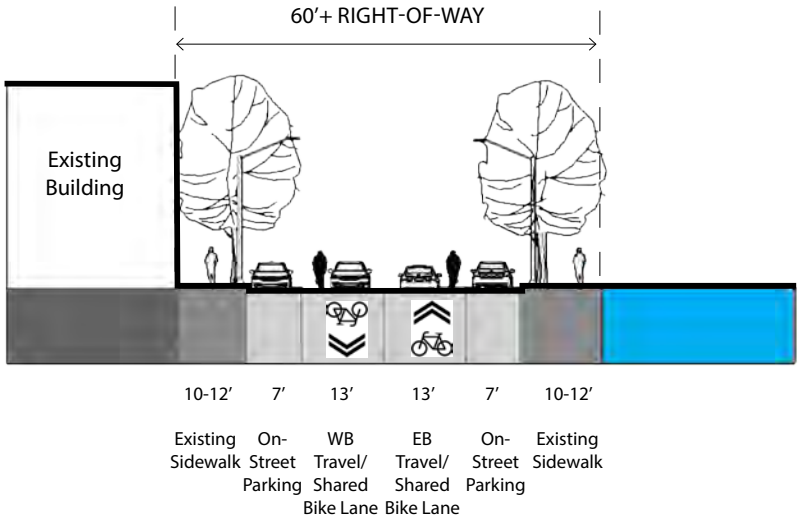


Figure 3-15 Main Street/High Street Cross-Section, at BART Entrance (Looking East)



COMPLETE STREETS CROSS-SECTIONS

OSGOOD ROAD, SOUTH OF THE BART ENTRANCE

On Osgood Road south of the BART entrance, as shown in Figure 3-13 looking north, the vehicle lanes would be narrowed to increase sidewalk width and accommodate the EBGW as a two-way Class IV Separated Bikeway on the west side of the street. Sidewalks would be maintained or widened to 12–16 feet. The street would continue to provide two vehicle lanes in each direction, as well as the existing median and turn lanes where appropriate. The outside lanes would be 11 feet wide to accommodate buses. This design is the long-term plan for the Osgood Road corridor as funding becomes available; the interim design would maintain the existing Class II Bicycle Lanes in each direction rather than a Class IV Separated Bikeway.

WASHINGTON BOULEVARD, AT THE BART ENTRANCE

On Washington Boulevard at the BART entrance, as shown in Figure 3-14 looking east, the vehicle lanes would be narrowed and one eastbound through lane would be removed to increase sidewalk width and provide space for both the EBGW on the south side and a wider westbound bicycle facility on the north side of the road. Sidewalks would be widened to 16 feet in each direction. There would be two through vehicle lanes in each direction with turning lanes at the intersections. The outside lanes would be 11 feet wide to accommodate buses. The existing median on Washington Boulevard may be extended west to Roberts Avenue to prevent left-turns in and out of the station driveway, roadway space permitting. This will be evaluated at a later design stage.

MAIN STREET/HIGH STREET, AT THE BART ENTRANCE

On Main and High Streets at the BART entrance, as shown in Figure 3-15 looking west, the existing cross-sections would generally be maintained, with one vehicle lane and a parking lane in each direction. Sidewalks would be maintained or widened to 10–12 feet in each direction, and sidewalk gaps would be filled as resources allow. The vehicle lane would be shared between bicycles and automobiles.

STREETSCORE+

These three cross-sections were evaluated using the Streetscore+ tool. Streetscore+ calculates the comfort of walking or biking on a street on a scale of 1 (best score) to 4 (worst score). More information on Streetscore+ is shown in the box to the right.

Table 3-4 summarizes the results of the Streetscore+ analysis. The results show pedestrian and bicycle Streetscore+ improvement for the two segments that are not already at the best score. One important finding of this analysis is that motor vehicle speed is a limiting factor for pedestrian and bicyclist comfort along the Washington Boulevard and Osgood Road segments.

Streetscore+

Streetscore+ calculates comfort-based indices for active transportation to more accurately understand the impacts of design decisions on stress tolerance for people who walk and bike. Comfort for both of these users is based on a variety of factors, including pedestrian and bicycling infrastructure and the characteristics of the adjacent street. The Streetscore+ methodology compiles those variables to provide a score on a scale of 1 (best score) to 4 (worst score) for each segment and intersection.

TABLE 3-4 PROPOSED CONDITIONS STREETSCORE+ SEGMENT SUMMARY

	Existing Conditions		Proposed Conditions	
Segment	**Pedestrian**	**Bicycle**	**Pedestrian**	**Bicycle**
Osgood Road, south of the BART Entrance	4	4	3	2*
Washington Boulevard, at the BART Entrance	4	3	4	2
Main Street/High Street, at the BART Entrance	4	1	2	1

*Assumes completion of East Bay Greenway south of the Station Site Plan.

Source: Fehr & Peers, 2019

4

SITE AND BUILDING DESIGN

This chapter provides guidance to encourage high-quality building and site design and cohesive Transit-Oriented Development (TOD) in the Plan Area that activates the street level, enhances the public realm, and encourages functional urban form while preserving the "distinct identity for Irvington that reflects its history and cultural diversity."

This photo shows existing buildings on Main and High Streets near a BART entrance. This is representative of the range and scale of future development that is anticipated in the Plan Area.

4.1 PURPOSE AND APPLICABILITY

Future TOD within the Plan Area will be concentrated in the Town Center and Osgood Subareas, and will consist primarily of vertical mixed-use, horizontal mixed-use, commercial, and urban density residential (30+ units per acre) buildings. The design rules and guidelines in this chapter have been developed to specifically address TOD within the Town Center and Osgood Subareas on properties designated Commercial-Town Center or Urban Density Residential in the General Plan, see Figure 4-1 for applicable areas. All other types of development (e.g., single-family homes, multifamily residential developments less than 30 units per acre, industrial buildings, and public facilities) are not subject to the design rules and guidelines in this chapter. They may, however, be subject to other adopted design guidelines, including the Multifamily Residential Design Guidelines, Citywide Design Guidelines, and Small-Lot Single-Family Residential Design Guidelines. The City's zoning regulations are applicable within the Plan Area. However, where there is a conflict between the zoning regulations and this chapter, this chapter shall prevail. The Irvington Design Guidelines (2012) will be replaced by the design rules and guidelines presented in this chapter. See Appendix A for more information on other relevant regulations.

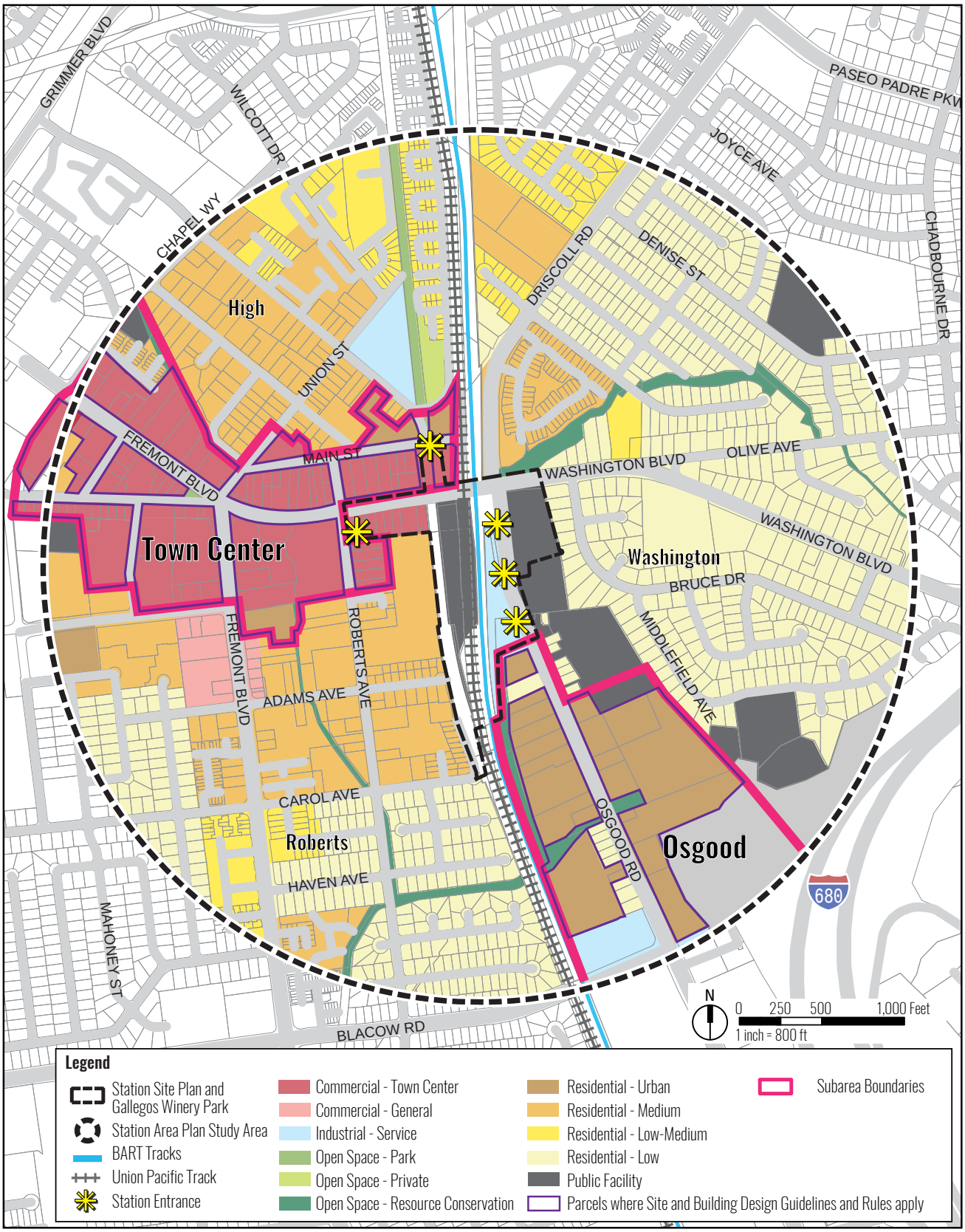


Figure 4-1 Applicable parcels for site and building design guidelines and rules in the Irvington Station Plan Area

4.2 TOD BUILDING TYPES

As mentioned above, future TOD within the Plan Area will consist primarily of vertical mixed-use and horizontal mixed-use development within the Town Center Subarea and Urban Density Residential development within the Osgood Subarea. This section discusses the characteristics of these types of development.

Example of an Urban Residential building.

URBAN RESIDENTIAL

Urban Residential development refers to multifamily residential developments greater than 30 dwelling units per acre, designed to support nearby transit use and pedestrian activity. Urban Residential developments typically consist of multi-story buildings that include podium parking (often wrapped with residential units) and a variety of shared amenities. The principal design challenge for Urban Residential buildings is determining how to fit the density of programming on the site in a way that is logical and efficient while also providing high-quality environments for prospective tenants, buyers, and residents. Access to parking, housing, and amenities all compete for space within the building. Urban Residential projects should be designed to balance all of these design elements while creating the best possible experience for residents and visitors.

Examples of Urban Residential housing between 30-70 units per net acre.

30 units per net acre
3-4 stories with a parking podium.

50 units per net acre
3-5 stories with a parking structure.

70 units per net acre
4-5 stories with a parking structure.

VERTICAL MIXED-USE

The predominant mixed-use building form is vertical mixed-use, which consists of ground floor storefronts with residential units or offices located above. Active ground floor uses should also be included where parking garages front a street. The ground floor of vertical mixed-use buildings in the Irvington Town Center will support a vibrant pedestrian-oriented commercial environment that connects the historic heart of Irvington (Five Corners) to the Irvington BART Station. Upper stories will provide housing or offices to support transit use and contribute to pedestrian activity in the area. Successful mixed-use projects must be retail-driven rather than residential-driven in design approach to ensure that commercial spaces will be successfully leased and occupied. Early consultation with retailers and leasing agents is recommended as part of the design process. The sensitive integration of old existing buildings is also important where applicable, in accordance with the City's Historic Resources Ordinance (FMC Chapter 18.275).

This vertical mixed-use residential building includes ground floor retail.The building corner is articulated with a lower, rounded volume and entrances that are easy to identify.

The massing of this vertical mixed-use building includes a tower feature on the corner. Its design distinguishes the ground floor of the building from the upper floors. Depth is added to the facade by setting back the top floor and recessing windows.

The ground floor of vertical mixed-use buildings can include retail or active use to support street life in the public realm. The retail shown here lines the base of a parking structure.

Taller buildings that form a street edge with active ground floor uses are envisioned along major streets, such as Washington Boulevard, Fremont Boulevard, and Osgood Road.

Vertical mixed-use buildings are often larger buildings. Careful building modulation and detailing can break down massing to an appropriate scale. Visual interest on facades typically utilizes three-dimensional detailing with cornices, window moldings, balconies, awnings, and reveals, to cast shadows and provide more articulation to the building mass.

The appearance of larger buildings can be modified by using different façade materials, window rhythm, and roof lines to divide the building into distinct segments as seen from the street.

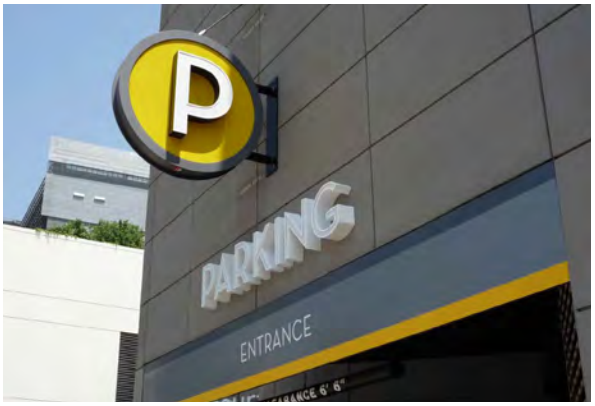
Office buildings with ground-floor retail are also allowed in the Town Center Subarea.

Irvington has a rich history, and the architectural transition between old and new buildings should be sensitively considered in design.

Breaks in the streetwall can be used for small plazas lined with ground-floor retail.

HORIZONTAL MIXED-USE

Mixed-use development can also be designed in a horizontal layout for larger parcels. Housing, retail, and office uses can be located on the same site or block, side-by-side in a mixed configuration. Some buildings can still include a mix of uses, such as ground floor retail, if the building is located along a street with pedestrian activity that can support retail. Horizontal mixed-use projects may take advantage of shared parking resources and a coordinated approach to the private streetscape and pedestrian connections in shaping the public realm. Horizontal mixed-use projects, like all projects, need to take into account the surrounding context, neighbors, and design to enhance the Plan Area as a whole.



Horizontal mixed-use projects can take advantage of shared parking resources because sites are typically larger and uses may have different parking needs at different times of the day.

Retail and housing are mixed on this large site in a horizontal configuration.

Example of a single-use retail building with a ground floor design that contributes to an active street edge.

Development of horizontally mixed uses on smaller sites requires creative use of shared parking resources. This example shows pedestrian connections to the retail street that integrates the mix of uses.

A horizontal mix of uses and buildings of different sizes and heights add variety to an area.

4.3 DESIGN RULES AND GUIDELINES

Section 4.3 is organized by the following spaces or building types:

1. **Plan Area Public Realm**
2. **Urban Residential**
3. **Mixed-Use**

This section consists of "design rules" and "design guidelines." "Design rules" are mandatory requirements that must be satisfied in new development unless the approving authority finds that the intent of the design rule is met by alternative means. "Design guidelines" are not mandatory requirements, but provide a defined framework of the design principles that supplement the mandatory design rules. The approving authority should evaluate overall consistency with design guidelines as well as strict compliance with design rules.

Design terminology utilized in this chapter is explained in the Glossary at the end of this chapter.

I. PLAN AREA PUBLIC REALM

The Station Area Plan envisions enhanced connections to the Irvington BART Station with safe, active, and attractive street edges. The public realm at the street level is the space that everyone experiences when walking through the area. The streets in the Plan Area are intended to have wide sidewalks, sidewalk amenities, public spaces, and on-street parking to maximize places for people to interact. The success of a pedestrian-friendly street is measured by how well it supports street life.

The public streetscape includes sidewalks, plazas, and entry thresholds that are publicly accessible. Both publicly and privately owned lands contribute to the public realm. The design of a property needs to be logically tied to its neighbors and to the public realm to improve the experience of walking.

Figure 4-2 shows potential elements of the public realm as part of new development along Osgood Road, on both publicly and privately owned lands.

Figure 4-2 Public Realm Elements on Osgood Road

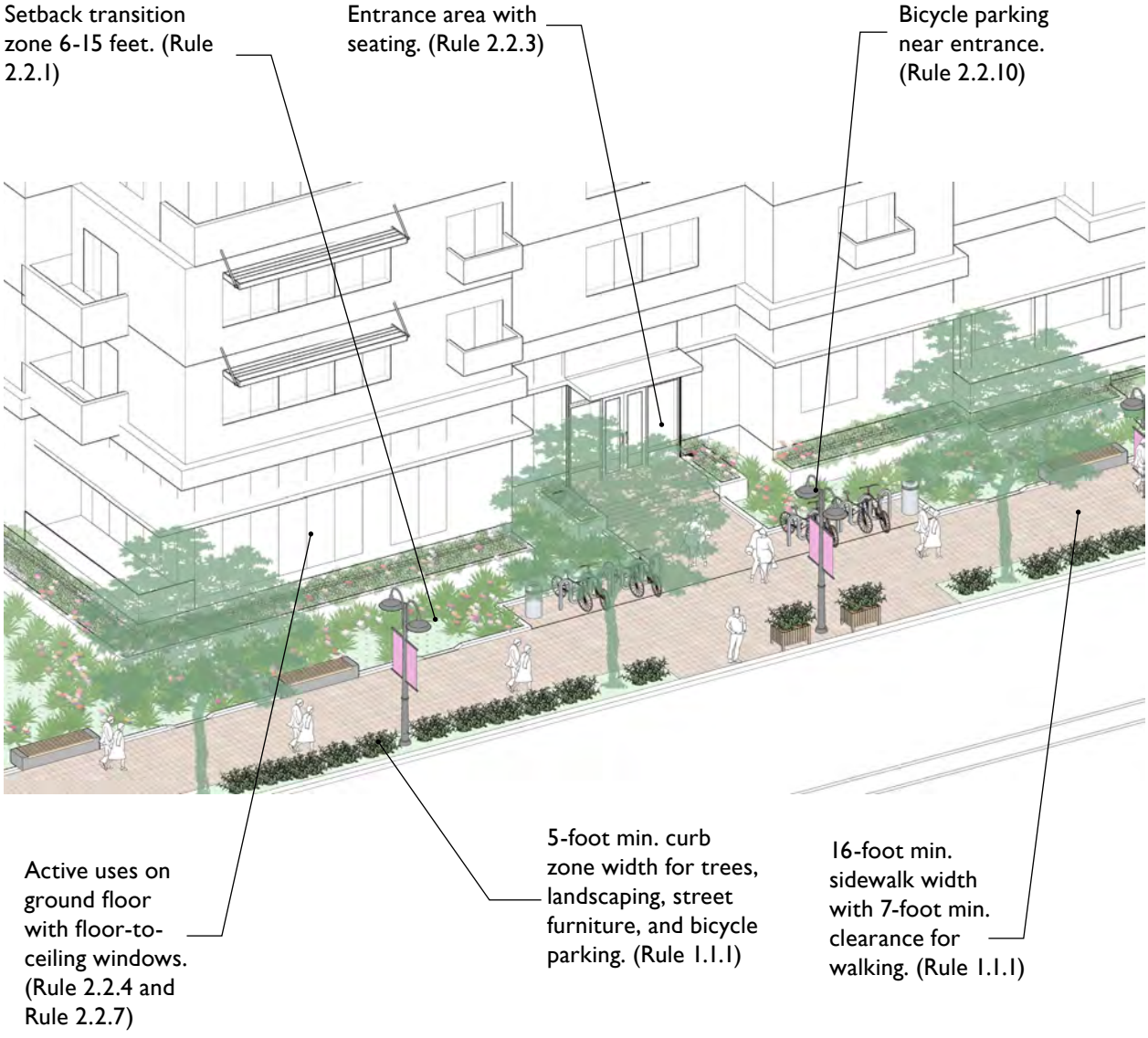


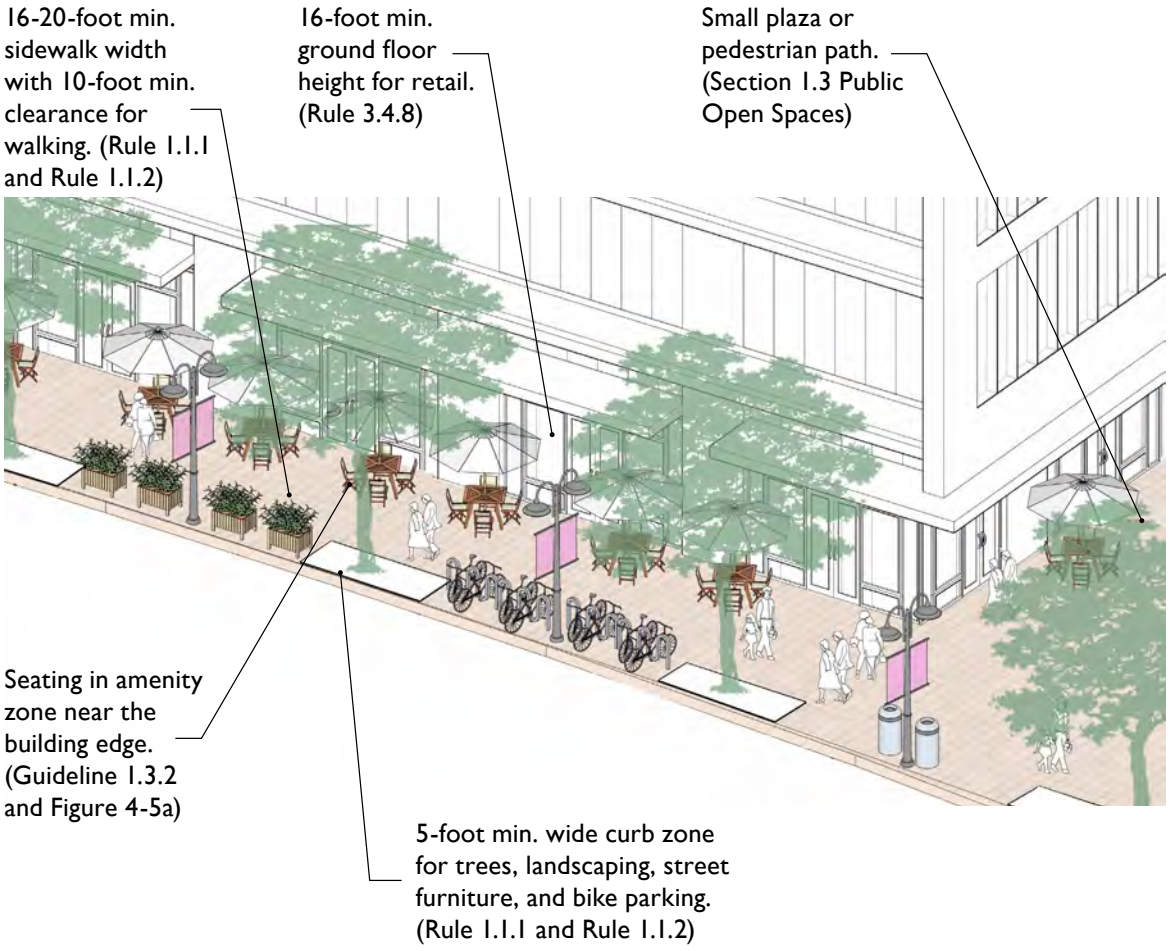
Figure 4-3 shows potential elements that can be added with new development along Washington Boulevard and calls out some of the rules and guidelines that apply. The public realm also includes the façades of buildings, but is addressed in greater detail in the Urban Residential and Mixed-Use sections of this chapter.

The Plan Area public realm includes rules and guidelines for:

- Sidewalks;
- Street Amenities;
- Public Open Spaces; and
- Utility Infrastructure Screening.

The streets in the Plan Area have different widths, functions, and character. For example, Washington Boulevard, Fremont Boulevard, and Osgood Road are major multi-lane roads, while other streets such as Main and Union Streets are narrower with only two lanes. All streets in the area are intended to become more pedestrian-friendly in the future.

Figure 4-3 Public Realm Elements along Washington Boulevard



I.1 SIDEWALKS

The design and width of sidewalks, as well as continuous building edges ("street walls") are important to ensure walkability. In some areas, the existing street right-of-way may not be wide enough to accommodate the required minimum sidewalk widths, in which case a street dedication would be required, or the sidewalk may need to extend onto private property with an easement. Buildings must be built to the inner sidewalk edge or to the inner edge of the setback transition zone for urban residential buildings (Figure 4-4a and 4-4b). From this edge inwards, the building façade can vary with recesses and bay windows within the build-to layer. Sidewalks are organized into different zones, as shown in Figure 4-5a and Figure 4-5b.

The entire sidewalk width includes:

- The **curb zone** is an area of the sidewalk adjacent to the street, reserved for street trees, with or without tree grates, landscaping, bike racks, pedestrian-scaled lights, signs, and street furniture.
- The **walking zone** is an area of the sidewalk reserved for unobstructed pedestrian travel.
- The **amenity zone** is the remainder of the sidewalk width, and may include outdoor seating, dining areas, street furniture, landscape planters, or other public amenities to enhance the pedestrian environment.

Figure 4-4a Sidewalks and Building Frontage for Commercial and Mixed-Use

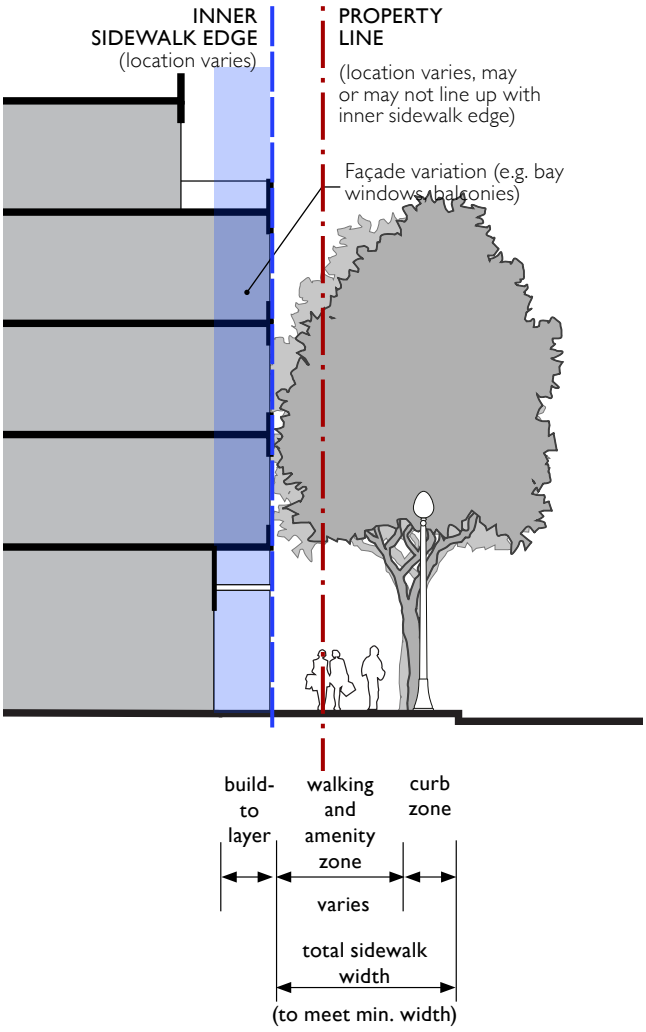
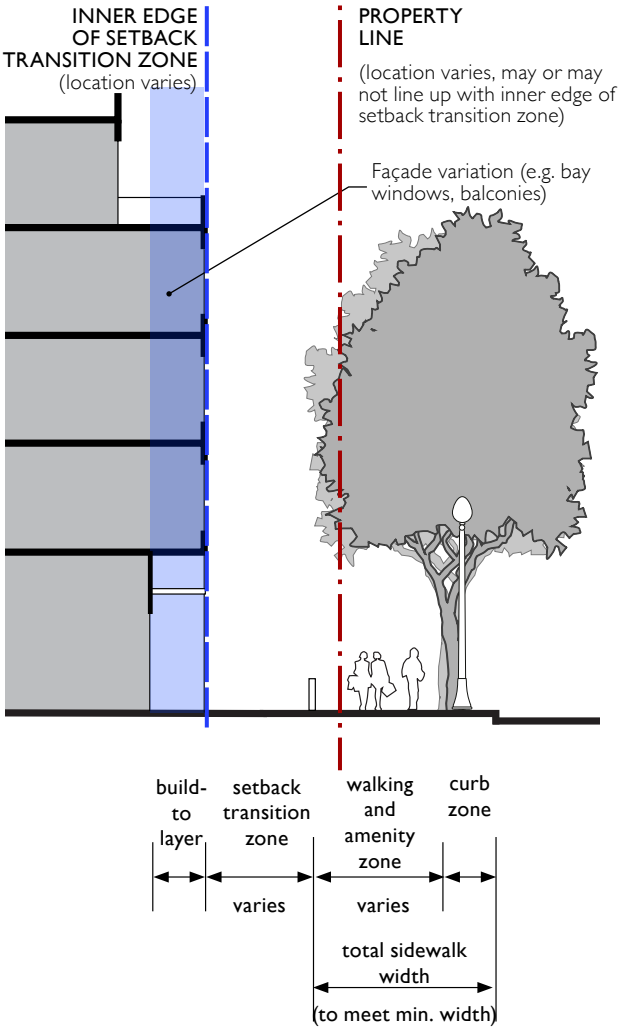


Figure 4-4b Sidewalks and Building Frontage for Urban Residential



Depending on conditions, the public sidewalk may extend to private property to meet the required minimum sidewalk width.

The setback transition zone is located on private property between the inside sidewalk edge and the building façade and is used for landscaping, stoops, seating, bicycle parking, and other features associated with the building. The purpose of the setback transition zone is to create more privacy for ground floor uses and more variety along the street frontage (also see Glossary).

- **Rule 1.1.1.** On Fremont Boulevard, Osgood Road, and the north side of Washington Boulevard, the sidewalk width shall be a minimum of 16 feet, including a minimum 5-foot wide curb zone. A minimum 10-foot wide walking zone shall be provided on Washington and Fremont Boulevards, and a minimum 7-foot-wide walking zone shall be provided on Osgood Road.
- **Rule 1.1.2.** On the south side of Washington Boulevard, the sidewalk width shall be a minimum of 20 feet, including a minimum 5-foot wide curb zone, and a minimum 10-foot wide walking zone.
- **Rule 1.1.3.** On Main Street, Union Street and Roberts Avenue, the sidewalk width shall be a minimum of 12 feet, including a minimum 5-foot wide curb zone, and a minimum 7-foot wide walking zone.
- **Rule 1.1.4.** The curb zone or the walking zone can be wider as long as the required minimum widths of curb zone, walking zone, and overall sidewalk widths are met.
- **Rule 1.1.5.** Overall sidewalk widths are allowed to be up to 10 feet wider than the required minimum widths in order to provide a more generous amenity zone.

Figure 4-5a Sidewalk Zones in the Town Center

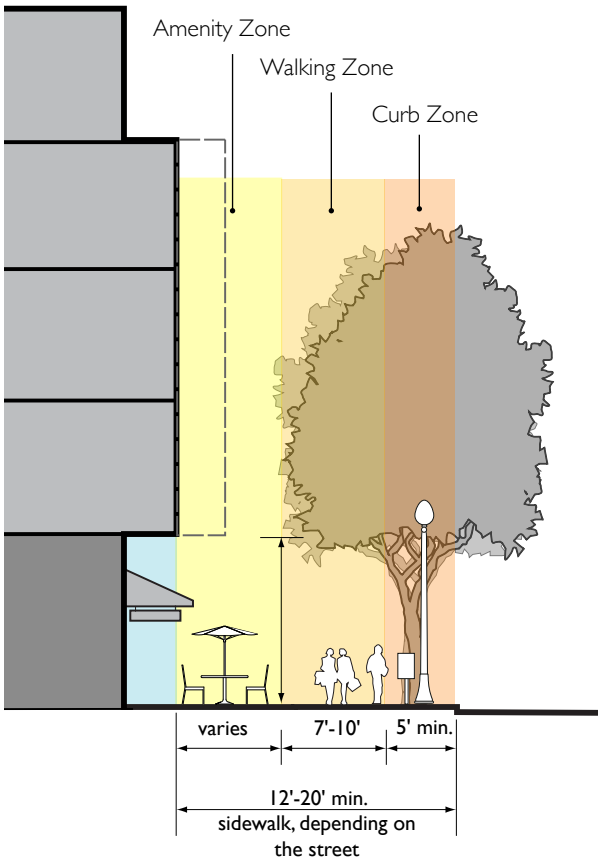
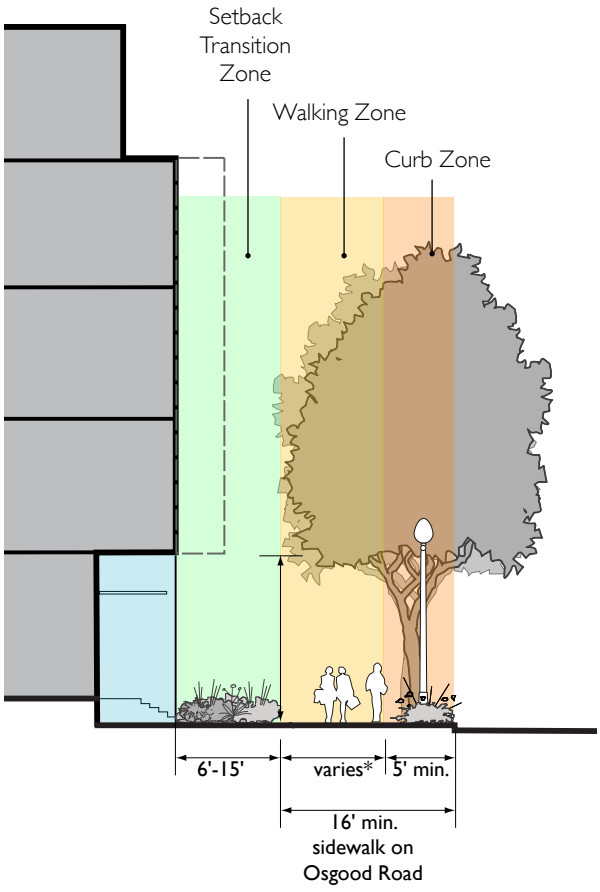


Figure 4-5b Sidewalk Zones on Osgood Road



* includes unobstructed walking zone of 7-foot minimum width

1.2 Street Amenities

Street amenities include bike parking, street trees, landscaping, street lighting, wayfinding, art, and interpretive landmarks.

There are also existing utility boxes, meters, garbage receptacles, fire hydrants, sign poles, and utility poles that need to be considered when placing street amenities.

- **Guideline 1.2.1.** Enliven the experience of walking along the street by providing enough space to accommodate street amenities at regular intervals.
- **Rule 1.2.2.** Street trees are required, and shall be installed in accordance with the planting, spacing and design requirements in the City's Landscape Development Requirements and Policies (LDRP) document.
- **Guideline 1.2.3.** Provide landscaping in the public realm wherever feasible. Planters, including planters integrated with seating, are encouraged to increase the amount of landscaping in the public realm.

Provide enough space to accommodate street amenities at regular intervals.

Provide landscaping in the public realm wherever feasible. Planters with integrated seating are encouraged.

- **Rule 1.2.4.** Stormwater management elements located in the public realm shall be consistent with City requirements and Green Infrastructure Plan goals. More information about the Green Infrastructure Plan can be found in Appendix A.
- **Rule 1.2.5.** Pedestrian-scale lighting that is less than 16 feet in height shall be provided at regular intervals along sidewalks and pedestrian paths of travel.
- **Guideline 1.2.6.** Bicycle parking should be provided in the public realm throughout the Plan Area. Bicycle parking may be located close to building entrances on the sidewalk or along pedestrian paths.
- **Rule 1.2.7.** Where bicycle racks are provided, they shall be designed and placed in accordance with the City's Bicycle Master Plan.
- **Rule 1.2.8.** Signage and wayfinding shall be provided throughout the Plan Area public realm and shall be consistent in design.
- **Guideline 1.2.9.** Art and interpretive landmarks should be provided in the public realm throughout the Plan Area.

Provide pedestrian-scale lighting that is less than 16 feet in height at regular intervals.

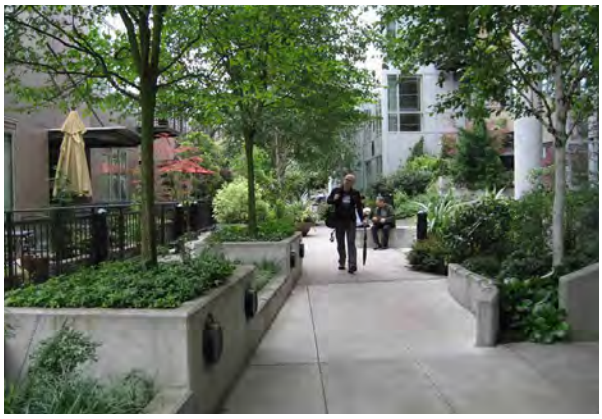
Bicycle parking can be accommodated between street parking or on the sidewalk.

Art and interpretive landmarks should be provided in the public realm.

1.3 Public Open Spaces

Creating and using public open spaces contributes to Irvington's vitality. Public open spaces include plazas, places to sit outdoors, and open spaces.

- **Guideline 1.3.1.** Contribute to a network of outdoor open spaces and plazas throughout the Plan Area, particularly along Washington Boulevard between Five Corners and the BART Station, with places for people to gather or rest by making spaces at the sidewalk edge available to the public realm. Design outdoor public spaces to complement buildings and encourage public gathering.
- **Guideline 1.3.2.** Outdoor seating and dining areas are encouraged in the Town Center. Public open spaces should be open and visible.
- **Guideline 1.3.3.** Pedestrian connections, paseos, and pathways should be provided in logical locations to provide more pedestrian circulation options and encourage walking.
- **Rule 1.3.4.** Semi-private courtyards and plazas are permitted along sidewalks.
- **Guideline 1.3.5.** Plazas and public open space areas should be designed to be flexible to accommodate a variety of uses and events.
- **Rule 1.3.6.** A small urban plaza or outdoor dining area shall be provided near the northwest corner of Union Street and Washington Boulevard, and integrated with new development.
- **Guideline 1.3.7.** Public spaces can be provided in the street right-of-way in place of existing parking spaces. These types of spaces are typically called "parklets." Seating and gathering spaces provided in parklets extends the visible pedestrian realm and establishes public space on both sides of the sidewalk. Seating areas need to be protected from traffic with highly visible barriers, and must be approved by the Public Works Department.



Pedestrian mid-block connections provide shortcuts on big blocks and can function as public spaces.

Small public spaces like this example can be accommodated in setbacks from the sidewalk. This example uses a 20-foot setback along several storefronts to create a small plaza.

Places for people to sit and gather, musicians to play, artists to sell their crafts, or for pet adoption fairs do not have to be big in order to be successful. In this example, the sidewalk is wide enough for temporary activities that enliven the district.

A small, publicly accessible plaza like this example shall be incorporated at the corner of Union Street and Washington Boulevard.

Public spaces can be provided in the street right-of-way in place of an existing parking space. These types of spaces are sometimes known as "parklets." The pedestrian realm is extended from the sidewalk and activity is located visibly within the streetscape.

1.4 Utility Infrastructure Screening

- **Rule 1.4.1.** Above-ground utility transformers, telecommunications equipment, and large utility devices shall not be located in front of buildings facing public streets. All equipment shall be located at the rear of buildings along service streets, and integrated architecturally, placed underground, or screened with landscaping.
- **Guideline 1.4.2.** Existing utilities with enclosures that cannot be moved should be screened from view or transformed into public art.
- **Guideline 1.4.3.** Structures for storage and trash enclosures should be placed away from building and site entrances along public streets and screened from view.

Locate utilities at the rear of building facades and behind fencing. Use vegetation and fencing to hide utilities.

Paint existing utilities that cannot be moved.

2. URBAN RESIDENTIAL

The design rules and guidelines in this section address new Urban Residential development within the Plan Area. The design rules and guidelines in this section also apply to new mixed-use developments when upper stories are utilized for residential purposes.

2.1 Site Layout

- **Guideline 2.1.1.** Parcel consolidation of smaller lots is highly recommended in order to support efficient use of land. To achieve urban residential densities of 30-70 dwelling units per acre, parking should be accommodated in a podium format or underground.
- **Rule 2.1.2**. Stormwater management elements shall be consistent with City requirements and Green Infrastructure Plan goals. More information about the Green Infrastructure Plan is located in Appendix A.
- **Rule 2.1.3.** Provide on-site driveways, paths, or shared streets that accommodate efficient access to parking structures for automobiles and pedestrians.
- **Guideline 2.1.4.** Orient main building entrances towards public streets and design main building entrances to be clearly visible and easily legible in the building form and design of the facade.
- **Rule 2.1.5.** Provide off-street loading spaces for moving trucks and deliveries near freight elevators. Off-street loading areas shall be designed to minimize the impact of moving activities on other residents.
- **Guideline 2.1.6.** Provide a convenient and separate bicycle entrance and pathway for bicycle storage at the ground floor.
- **Guideline 2.1.7.** Prioritize the placement of shared spaces such as lobbies, gymnasiums, community rooms over ground floor residential spaces along the street frontage at the ground floor. Provide publicly accessible restrooms near these activities.
- **Rule 2.1.8.** Provide a convenient place for trash to be collected that minimizes visibility at the street edge.
- **Rule 2.1.9.** Provide a convenient place for visitors to park near the lobby. Parking located within the parking structure is acceptable.
- **Rule 2.1.10.** Provide a safe and convenient ride-share pick up point on-site.
- **Rule 2.1.11.** Townhouse-style developments are prohibited within the Town Center and Osgood Subareas.

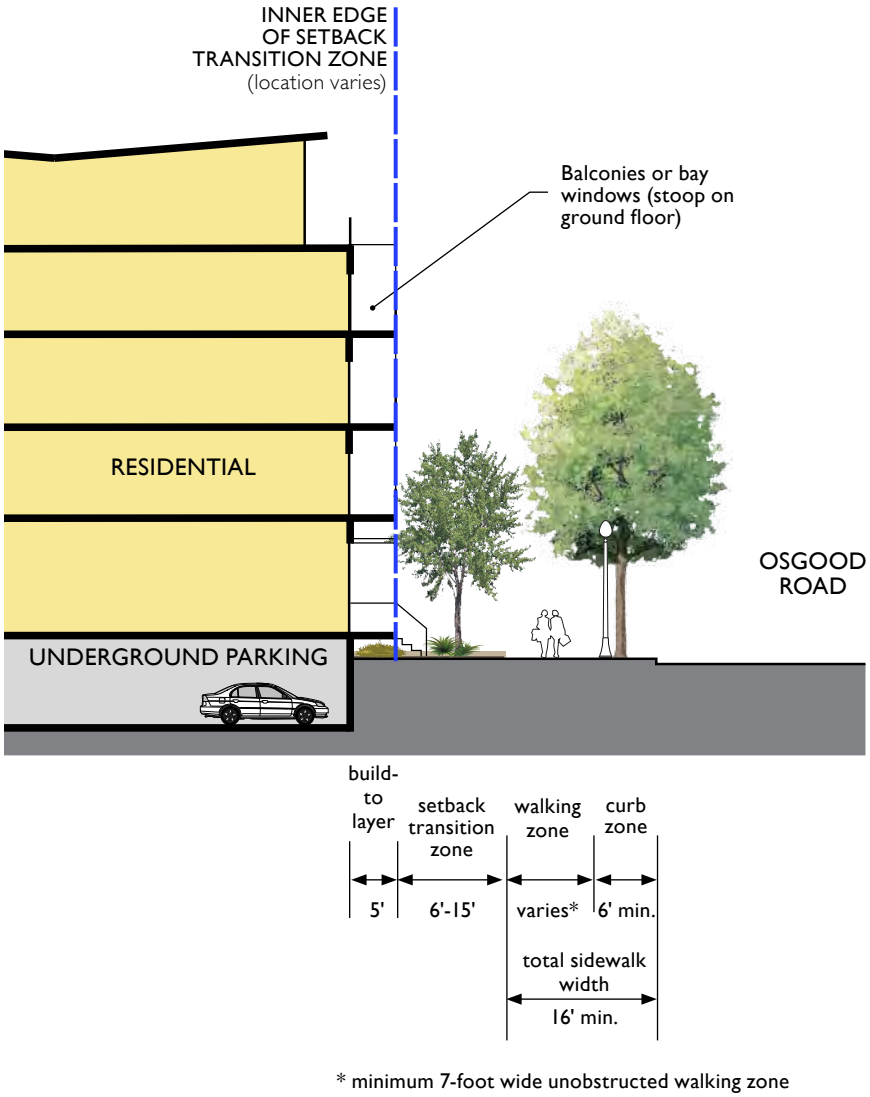
Figure 4-6 Urban Residential Ground Floor Organization

The ground floor is a highly sought after, public-facing space in Urban Residential buildings. It includes open space (in compliance with lot coverage requirements), the front entrance lobby, amenity spaces at the ground floor, and vehicle entrances, and is typically where the parking podium or multi-floor parking structure is located. The diagram above shows a conceptual layout for illustration purposes only; there are many other possible layouts.

2.2 Street Frontage

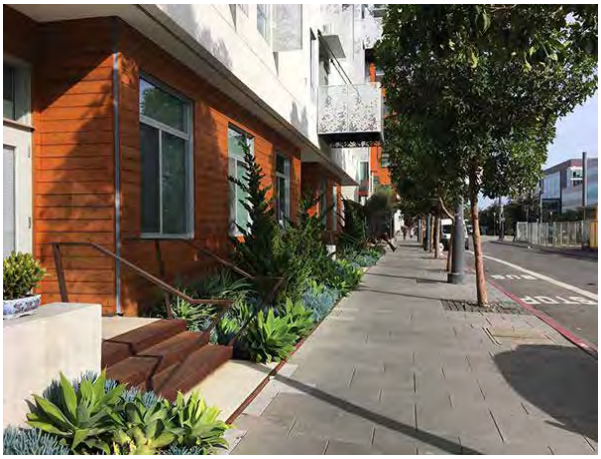
- **Rule 2.2.1.** The setback transition zone for Urban Residential buildings shall be between 6 to 15 feet wide, measured from the inside edge of the sidewalk. The width of the setback transition zone can be modified in areas to accommodate special features such as entrances, small plazas, seating feature, public art or similar special features (Figure 4-2 and Figure 4-7).
- **Rule 2.2.2.** The build-to layer for Urban Residential buildings starts at the inside edge of the setback transition zone. The build-to layer is a 5-foot wide zone within which front façade elements such as balconies and bay windows of the bottom four stories of a building shall be located (Figure 4-7). Entrance areas at the ground floor can be recessed more than 5 feet.

Figure 4-7 Urban Residential Street Frontage with Transition Zone on Osgood Road



* minimum 7-foot wide unobstructed walking zone

Setback transition zone with seating and bicycle racks near the building entrance.



Setback transition zone around a stoop to a residential unit.

- **Rule 2.2.3.** The setback transition zone between the public and private realm shall be activated with places for social interaction, such as building entrance areas, stoops, walkways, patios, low walls, and seating (Figure 4-2).
- **Rule 2.2.4.** Ground floor public street-facing residential units shall be avoided or raised half a level with stoops. Ground floor units along side streets shall either be raised or include an adequate transition zone in order to provide privacy. Other active uses, such as community rooms, gyms, and other shared amenities, shall be provided along public street frontages (Figure 4-2).
- **Rule 2.2.5.** Landscaping is required in the setback transition zone (Figure 4-2).
- **Rule 2.2.6.** A minimum of 50 percent of a building's street-facing façade must be built within the build-to layer.
- **Rule 2.2.7.** The ground floor shall be articulated with architectural detailing, such as transparent floor-to-ceiling windows, three-dimensional façade elements, awnings, recesses, accent walls, integrated seating, or different colors and materials, to enhance the pedestrian experience (Figure 4-2).
- **Guideline 2.2.8.** Avoid the creation of uniform planting strips along the entire frontage of a building.

Example of active building uses on the ground floor with lobby, community room and shared amenities.

Example of an entrance zone that includes features for social interaction, landscaping, art, and low walls for seating.

- **Rule 2.2.9.** Low wall, fences or plant materials, no taller than 42 inches, shall be used to provide separation between adjacent public and private open spaces.
- **Rule 2.2.10.** Bicycle parking shall be provided near building entrances, but not in a manner which obstructs entrances or pedestrian paths of travel. Where bicycle racks are provided, they shall be designed and placed in accordance with the City's Bicycle Master Plan (Figure 4-2).

Example of a transition zone between the sidewalk and a building with stoops and a small front yard.

Residential transition zones can include bioswales.

Indoor and outdoor bicycle parking near lobbies is convenient and encourages cycling.

2.3 Building Massing and Articulation

- **Guideline 2.3.1.** The massing of long buildings should be broken up by forming a variety of building volumes to read as smaller buildings. Three-dimensional façade elements and varying roof lines can be utilized to make a large building appear to be a collection of smaller buildings.
- **Rule 2.3.2.** Building portions from the third floor upwards shall not be longer than 200 feet without break or significant building articulation.
- **Guideline 2.3.3.** Insets and overhangs should be used to express the individual units and programming of buildings.
- **Guideline 2.3.4.** Entrances should be expressed with clear and distinct architectural massing for the pedestrian scale. Entrances should be demarcated with accent elements such as moldings, lighting, overhangs, or awnings. Building entries may be recessed into entry bays to create transitional spaces between the street and buildings.
- **Guideline 2.3.5.** Lobbies should be well lit and appear inviting.
- **Guideline 2.3.6.** Building façades facing BART tracks should receive a similar architectural treatment to street facing façades.
- **Guideline 2.3.7.** Side and rear façades should maintain massing and articulation that is consistent with front façade.
- **Guideline 2.3.8.** The articulation of each façade should follow a legible and logical pattern and reflect the program and uses in the building.
- **Guideline 2.3.9.** Emphasize three-dimensional detailing, such as cornices, window moldings, and reveals, to cast shadows and create visual interest and express different scales of detailing.
- **Rule 2.3.10.** A variety of high quality, durable materials and textures shall be used. Examples of high quality materials include wood, stucco, concrete, structural steel, corten steel, and other metals.
- **Rule 2.3.11.** Cement plaster at the ground level of a front façade is prohibited.

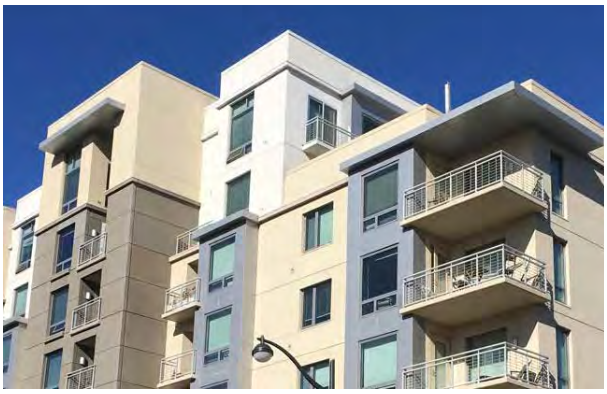
Example of well-articulated Urban Residential building along street frontage.

- **Guideline 2.3.12.** Variation should be incorporated into façades through the use of materials and colors, patterns of fenestration, and projected or recessed features such as overhangs, insets, canopies, louvers, balconies, and protruding window frames to add greater dimensional depth of façade elements.
- **Guideline 2.3.13.** Façade treatments should be articulated to break down the building mass. Ideally, treatments are scaled to human activity, expressing the individual unit and reflecting the pattern of use within the building. Use awnings, horizontal break bands, pier and column bases, roof terminations, sills, balconies, cornices, step backs, and/or overhangs to reduce the scale of buildings.
- **Guideline 2.3.14.** Massing elements and articulation should avoid top heavy proportions.
- **Guideline 2.3.15.** Top floor step-backs are encouraged but not required if a continuous building "envelope" is part of the façade design concept.
- **Guideline 2.3.16.** Include decorative elements such as tile artwork, plaques, decorative glass, and lighting fixtures to provide visual relief to façades.
- **Rule 2.3.17.** Residential floor heights shall be a minimum of 9 feet, floor-to-floor.
- **Rule 2.3.18.** All rooftop mechanical equipment shall be sufficiently set back from view from street vantage points or screened from view utilizing materials similar to the principal materials of the building façades (including the use of parapets).

Example of a building that includes different building volumes, higher and lower portions, an interesting facade rhythm, three-dimensional façade elements, color, and varying roof lines to break up massing.

Example of top floor step-back.

The expression of individual units using a pattern of overhanging and inset balconies makes the building function appear more "legible".

These Urban Residential buildings use articulation with window treatments, balconies, color, and patterns to break down the massing of the building.

AVOID these Design Mistakes for Massing and Articulation of Urban Residential Buildings

***DON'T** separate activity between the street and residential units with a full story feature. Stoops that transition half a level are acceptable.*

***DON'T** create flat façades. Provide depth between design elements. This façade looks flat with this composition. Awnings and paint do not create enough distinction between parts.*

***DON'T** crowd uses onto a site. Design the setback transition zone to be adequately sized for activities. This zone is too narrow and does not leave enough room for any significant activity to happen.*

2.4 Signage

- **Rule 2.4.1.** Street address identification and building signage shall be designed to complement the architecture of the building and be clearly legible from the street and sidewalk entry approach.
- **Rule 2.4.2.** Monument signage is prohibited, as it is not appropriate for the pedestrian scale.
- **Rule 2.4.3.** Signs shall not extend above the roof line of a building.

Building signage is integrated into the building design.

DON'T use monument signs.

Monument signs are not appropriate for the transit oriented character of the Plan Area.

2.5 Parking and Loading Areas

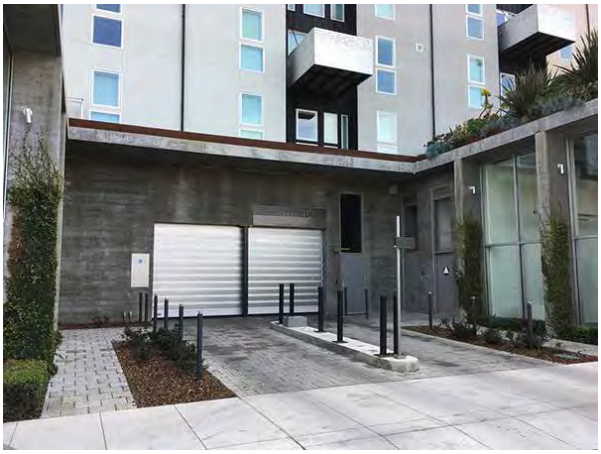
- **Guideline 2.5.1.** The creation of shared parking facilities serving multiple parcels or uses is highly encouraged.
- **Rule 2.5.2.** The visibility of parking structures from public streets shall be minimized.
- **Rule 2.5.3.** The number and width of curb cuts shall be minimized to the extent feasible to reduce pedestrian conflicts. Access to parking areas shall be located on side streets or driveways to the extent feasible.
- **Rule 2.5.4.** Parking podiums shall be designed to take advantage of a building's structural grid. Project plans submitted for review shall demonstrate consideration of the structural grid, with column widths drawn to dimension.

A minimally sized podium parking entrance located on a side driveway.The design of the parking podium is well integrated in the building with residential uses wrapped around it so that it cannot be seen.

- **Rule 2.5.5.** The top of parking podiums shall include usable open space if the podium roof is lower than surrounding residential buildings.
- **Rule 2.5.6.** Any parking structure façade facing an interior courtyard or pathway must be sufficiently screened so cars and garage lights are not directly visible.
- **Rule 2.5.7.** A parking structure wrapped with habitable spaces must be mechanically ventilated.
- **Rule 2.5.8.** The minimum distance between windows of dwelling units directly facing a freestanding parking structure or an exposed parking structure façade is 40 feet. Screening of the parking structure façade is required when the structure is visible from dwelling units.
- **Rule 2.5.9.** Parking structure roofs visible from dwelling units shall include canopy structures, green roofs, usable spaces, or high-quality roof materials. The top floor of the parking structure shall not be used for parking.
- **Rule 2.5.10.** Parking structure ramps shall include pedestrian pathways, or clearly provide a separate pedestrian pathway guided by adequate signage and lighting.
- **Guideline 2.5.11.** Integrate vehicular parking garage entrances and building design in a way that minimizes the visual impact on neighboring properties.
- **Rule 2.5.12.** An off-street loading area for

An off-street loading area for moving vans and deliveries is provided in this shared service area. The area is located near freight elevators to each building. The parking structure is completely hidden behind the lobby and storefronts.

The vehicular entrance for this mixed-use building is located on a side street to minimize curb-cuts on the front street with more pedestrian activity.



This parking entrance is set back on a short driveway that is integrated in the building design.

Services such as maintenance, trash, moving, and deliveries must all be accommodated on-site.

moving vans and deliveries shall be provided. Loading areas shall be conveniently located near a building entrance and a ground floor elevator.

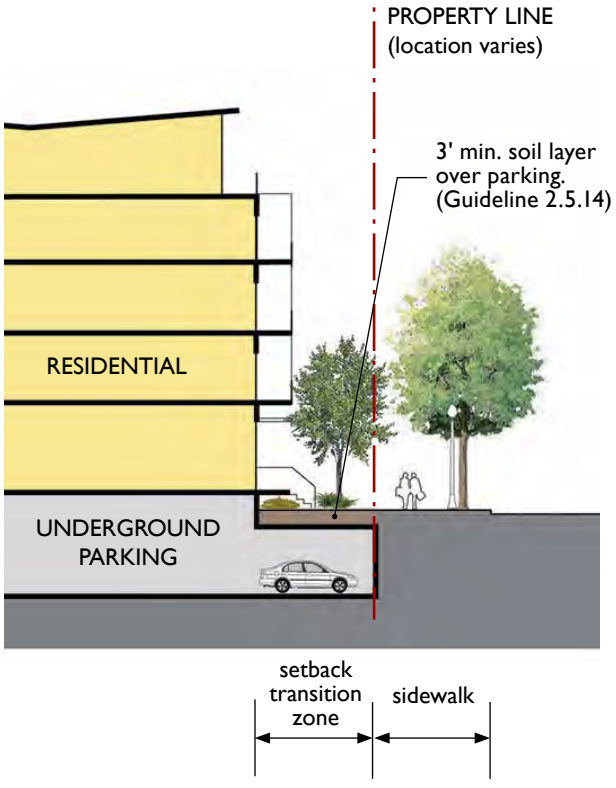
- **Rule 2.5.13.** Property owners shall unbundle the cost of parking from the cost of housing, consistent with applicable city parking standards.
- **Guideline 2.5.14.** Underground parking is encouraged and may be located under required setback areas. Soil substrate should be at least 3 feet deep to allow for landscaping (Figure 4-8).
- **Rule 2.5.15.** Vehicle drop-off areas for passenger loading must be designed to minimize conflicts with pedestrians, bicycles, and traffic.

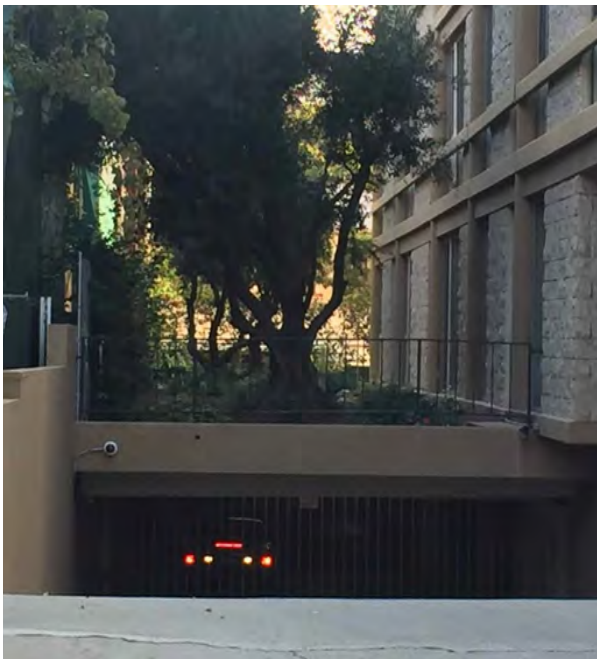
The top of the parking podium shall include usable open space.

DON'T leave parking structures exposed.

Open parking structure façades fronting common areas like one shown above are not allowed. Such façades must include screening elements.

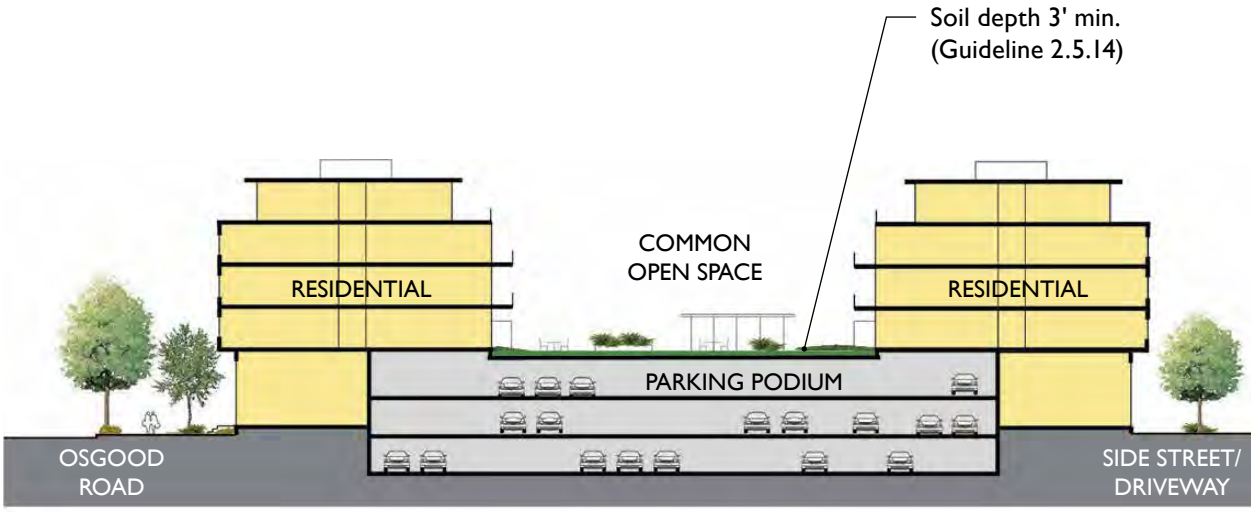
Figure 4-8 Underground Parking Extension to Property Line





The soil substrate should be at least 3 feet to allow for landscaping over underground parking. In order for trees and vegetation to meet their full mature size, there needs to be adequate soil depth.

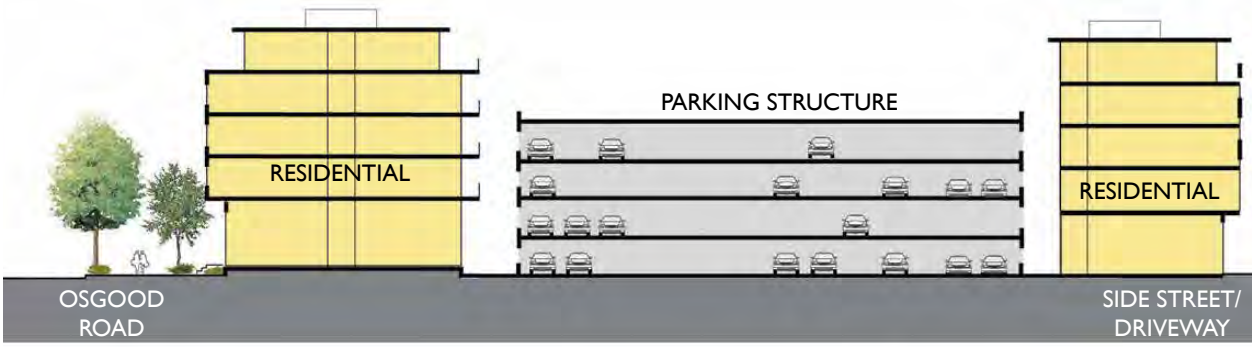
Figure 4-9 Preferred Configuration of Urban Residential Building with Parking Podium



The parking podium is wrapped with housing so that it can't be seen. At the primary street frontage, housing units are raised from the ground floor.The top of the podium can be used as common open space.

Figure 4-10 Avoid Freestanding Podium Parking Configurations

DON'T create shafts. Minimize the visible view of parking structures on site.



The configuration of parking podiums that are detached from residential buildings is not allowed in the Plan Area because it creates unpleasant spaces between the parking structure and dwelling units.

2.6 Internal Paths

- **Guideline 2.6.1.** The design of Urban Residential buildings should provide clear and convenient access to residents and visitors between the public realm, common space amenities, and private dwelling units. Signage and wayfinding should be provided for convenience.
- **Guideline 2.6.2.** Internal paths should be designed with consistent architectural clues, such as lighting, finishes, and landscaping. Landscaping, art, and integrated seating areas should be utilized to make internal paths more inviting.
- **Rule 2.6.3.** Internal paths shall have a minimum width of 10 feet.
- **Guideline 2.6.4.** The transition path between a parking garage and individual dwelling units should be minimized in length to the extent feasible.
- **Guideline 2.6.5.** On-site vehicular access can be designed as a shared driveway or path.
- **Guideline 2.6.6.** Internal paths can also serve as public pedestrian connections like paseos for better connectivity on large sites.

Example of a generous on-site paseo.

Example of an internal shared street that provides access to a parking structure and also serves as a pedestrian connection.

Example of narrow internal pedestrian path to residential units.

Example of an internal public pedestrian path.

2.7 Residential Amenities and Common Open Space

- **Rule 2.7.1.** A variety of residential amenities shall be incorporated into the program of Urban Residential buildings. These may include lobbies, fitness rooms, community rooms, laundry rooms, meeting rooms, public restrooms, bicycle storage, lounges, gardens, children's play areas, pet zones, and swimming pools.
- **Rule 2.7.2.** Podium tops and roof tops shall be enlivened with decks and private outdoor amenity areas. Amenities may include community dining areas, community event areas, public restrooms, outdoor lounges, gardens, children's play areas, pet zones, and swimming pools.
- **Rule 2.7.3.** Podium top and roof top open space areas shall provide soil substrate or planter boxes that are capable of supporting landscaping, including trees.
- **Guideline 2.7.4.** Kitchens, living rooms, family rooms, balconies, decks, porches, patios, and lobbies should be oriented to face common open space areas to provide informal surveillance and make these areas feel more secure.
- **Rule 2.7.5.** Active residential amenities, such as community and meeting rooms, gyms, lobbies, indoor play areas, and dining uses, shall be placed at the ground floor of buildings facing public streets.
- **Rule 2.7.6.** Reflection pools that are not swimmable do not count toward common open space requirements.
- **Rule 2.7.7.** Mechanical equipment shall not be placed within common open spaces areas.
- **Guideline 2.7.8.** Avoid placing private spaces, such as bedrooms, too closely together or directly adjacent to common open space areas and internal paths. If close placement cannot be avoided, provide adequate separation through screens, vegetation, or walls.
- **Guideline 2.7.9.** Natural features like creeks should be integrated into developments as an amenity.

An example of a common courtyard with BBQ, outdoor dining, and playground.

Swimming pools are a popular amenity for residents.

3. MIXED-USE

The design rules and guidelines in this section address both horizontal and vertical mixed-use development within the Plan Area. When upper stories are utilized for residential purposes, design rules and guidelines from the Urban Residential section also apply. This section was written primarily with mixed-use developments in mind, but the standards apply to standalone commercial developments within the Plan Area as well.

3.1 Site Layout

- **Guideline 3.1.1.** Parcel consolidation of smaller lots is highly recommended in order to support efficient transit-oriented development.
- **Guideline 3.1.2.** Larger blocks should be divided into a functional street grid of smaller, walkable blocks through the use of private streets, shared streets, driveways, and pedestrian pathways. The ideal walkable block length is between 200-400 feet long.
- **Guideline 3.1.3.** Natural features like creeks should be integrated into developments as an amenity.
- **Rule 3.1.4.** Stormwater management elements shall be consistent with City requirements and Green Infrastructure Plan goals. More information about the Green Infrastructure Plan is located in Appendix A.

The existing creek located between Fremont Boulevard and Roberts Avenue could become an amenity integrated into new developments.

3.2 Street Frontage

- **Rule 3.2.1.** At least 80 percent of a building's street-facing façade shall be built within the build-to layer along Washington and Fremont Boulevards, and Main Street. On all other streets, at least 50 percent of a building's street frontage shall be built to the build-to layer.
- **Rule 3.2.2.** An additional 30 percent of a building's street-facing façade may be set back from the build-to layer as a means to create plazas, pathways, and open spaces or to access parking facilities behind the building.
- **Rule 3.2.3.** Refer to the Urban Residential Section for setback requirements for residential-only buildings that are a component of a mixed-use project.
- **Rule 3.2.4.** The build-to layer for mixed-use and commercial buildings is located at the inside edge of the sidewalk. On the ground floor, building recesses are allowed to extend more than 5 feet to accommodate generous entrance zones or amenity spaces (Figure 4-4, Figure 4-11, and Figure 4-12).

Figure 4-11 Mixed-Use Residential Building Frontage Along Washington Street

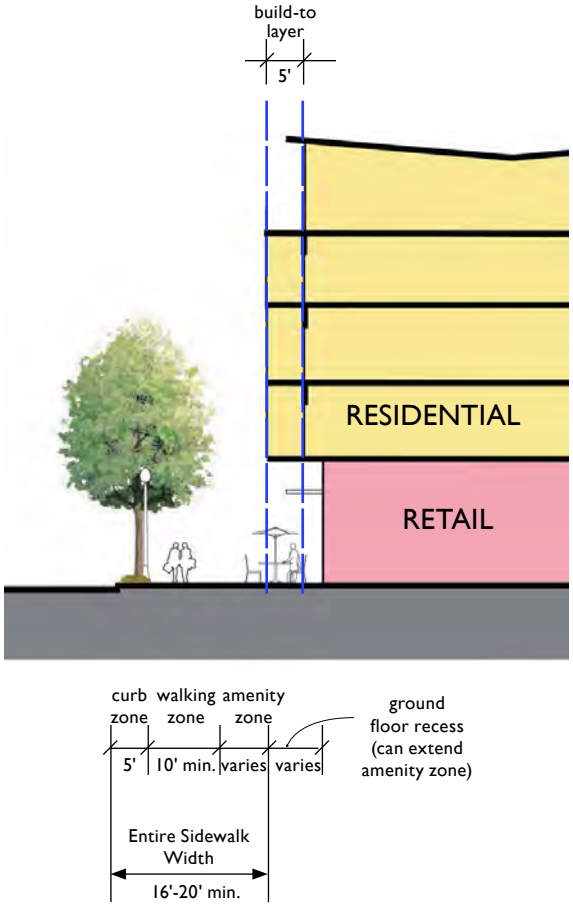
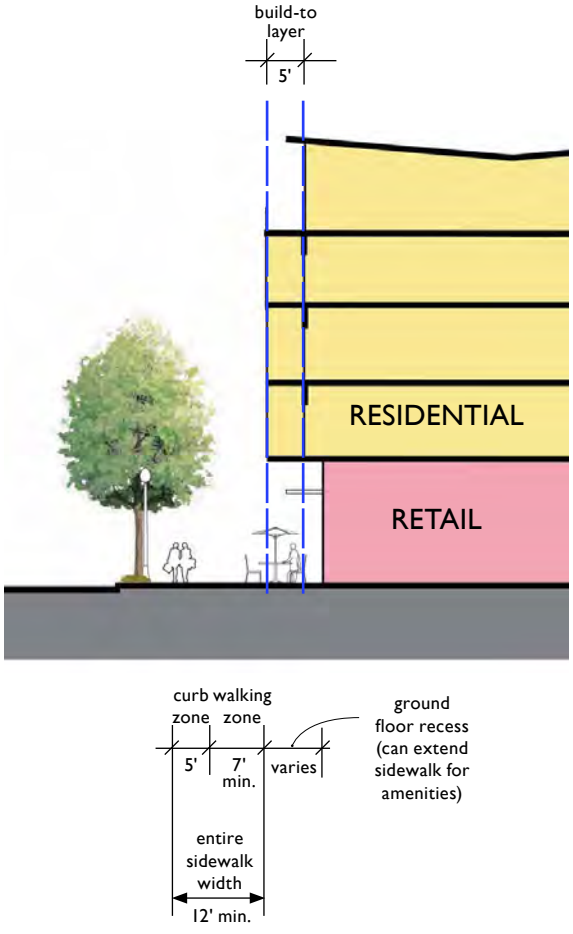


Figure 4-12 Mixed-Use Residential Building Frontage Along Main Street



3.3 Building Massing and Articulation

- **Rule 3.3.1.** When upper floors of a mixed-use building are utilized for a residential purpose, the design rules and guidelines pertaining to building massing and articulation in Urban Residential developments shall apply.
- **Guideline 3.3.2.** The street wall at the ground floor should provide variety along each block. Variety can be achieved through building elements such as recesses, awnings, change of materials, transparent glass, and careful detailing, as well as differently sized and designed transition zones between the building and the sidewalk.
- **Rule 3.3.3.** The appearance of the ground floor of buildings shall be differentiated from upper levels. The difference may be articulated using recessed or protruding entry forms, window elements, awnings, or different materials to contrast with upper floors.
- **Rule 3.3.4.** Clear glazing is required for a minimum of 75 percent of street-facing facades on Washington and Fremont Boulevards. Clear gazing is required on a minimum of 50 percent of street-facing façades on all other streets.
- **Rule 3.3.5.** For new development on the block of Washington-Union-Main-Roberts, building massing shall extend to the corner of Washington Boulevard and Union Street to better define the Five Corners intersection.
- **Guideline 3.3.6.** New development should locate the tallest massing along Washington and Fremont Boulevards, and scale down to lower massing on other streets, such as Main Street and Roberts Avenue.
- **Rule 3.3.7.** The first three levels of buildings fronting on Washington Boulevard and Fremont Boulevard shall meet the street wall. From the fourth floor upwards the building form shall step back a minimum of 6 feet.
- **Rule 3.3.8.** The minimum building height along Main Street shall be 25 feet and 35 feet along Washington Boulevard. Buildings shall be limited to three stories in height along Main Street for the first 50 feet of depth.
- **Guideline 3.3.9.** Entrances should be expressed with clear and distinct architectural massing for the pedestrian scale. Entrances should be demarcated with accent elements such as moldings, lighting, overhangs, or awnings. Building entries may be recessed into entry bays to create transitional spaces between the street and buildings.
- **Rule 3.3.10.** Entrances for retail and other uses shall be separated (Figure 4-14).
- **Guideline 3.3.11.** Office mixed-use buildings should include a distinguishable ground floor for retail uses. Refer to guidelines about ground floor treatment in this section.

Example of varied ground floor treatment and more unified design of upper floors.

Example of ground floor retail with high percentage of glazing and distinct corner treatment.

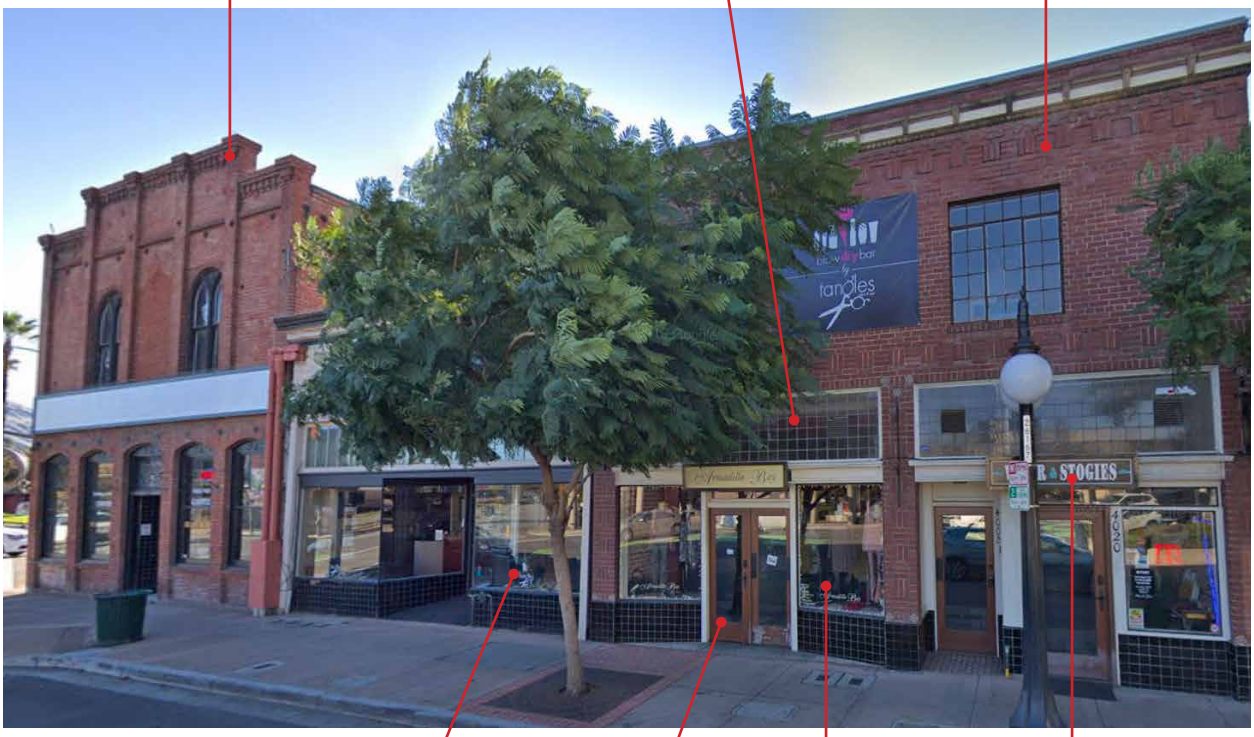
- **Guideline 3.3.12.** The upper floors of office buildings should include three-dimensional façade elements such as window recesses, exterior shading, and layered façade panels or systems.
- **Rule 3.3.13.** Stand-alone commercial buildings shall front on the street to form an edge. Surface parking lots shall not be located in front of retail along a street and are generally discouraged. Underground parking, shared parking agreements on existing parking lots, and parking structures are preferred over surface parking.
- **Rule 3.3.14.** Stand-alone commercial buildings shall include façade articulation such as arcades, recesses, awnings, and different materials. At least one entrance from the sidewalk is required and shall be designed as the main business entrance.
- **Guideline 3.3.15** A stand-alone grocery store should include additional retail spaces lining the street on building sides that would otherwise not have any window openings to activate the street level.
- **Rule 3.3.16.** Historic resources and potential historic resources, such as the Leal Theater building located on the block of Washington-Union-Main-Roberts are important in the Town Center because they serves as a connection to the history of the area. Preservation of historic resources is important to honor the character of Irvington while new development with compatible designs can continually refresh neighborhood character.

  - Historic resources and potential historic resources in the Plan Area shall be retained to the extent feasible.
  - Abrupt transitions in building height shall be avoided between a historic resource or potential historic resource and new development, and similar building proportions shall be utilized.
  - Design features of the Leal Theater building, such as cornice detailing, use of high quality materials, inset windows, closely spaced individual storefronts, canted storefront entries, gooseneck lighting, and a clearly distinguished base level shall be incorporated into the design of new buildings in the Town Center Subarea.
  - New buildings shall not replicate the exact architectural style of the Leal Theater building or other historic resources or potential historic resources in the Plan Area.
  - New buildings adjacent to the Leal Theater building are required to step back in order to accommodate sidewalk depth.

Articulated grocery entrance with double-height arcade, large windows, metal panels, and different materials.

The Leal Theater Building on Washington Boulevard.

- **Rule 3.3.17.** Development proposals involving or adjacent to a historic resource or a potential historic resource shall be evaluated for consistency with the Secretary of the Interior's Standards for the Treatment of Historic Properties, in accordance with the City's Historic Resources Ordinance.



The historic Clark Hall Building with adjacent buildings is a good example of a mixed-use building with ground floor retail that works well for pedestrians.

3.4 Ground Floor Commercial Spaces

- **Guideline 3.4.1.** The concentration of retail is a priority on Washington Boulevard between Five Corners and the Irvington BART Station and a secondary priority on all other streets, including Fremont Boulevard.
- **Guideline 3.4.2.** Mixed-use projects should be retail driven in design approach. Early consultation with retailers and leasing agents is recommended to ensure that commercial spaces are functional and will successfully attract tenants.
- **Rule 3.4.3.** Commercial buildings shall be designed and oriented to support an active streetscape. Active building uses shall be located at the ground floor. Ground floor activity shall be visible to people walking and driving by.
- **Guideline 3.4.4.**The ground floor of buildings should prioritize commercial space. Offices, conference rooms, meeting rooms, residential lobbies, cafeterias and other uses should be placed on upper levels when ground floor space is limited.
- **Rule 3.4.5.** Building storefronts shall not be separated by more than 50 feet along street frontages.
- **Rule 3.4.6.** Retail frontages shall be comprised of 50-75 percent clear glazing (Figure 4-14).
- **Rule 3.4.7.** Main building entrances shall incorporate clear glazing to be transparent and provide lighting that allows for informal surveillance at night.
- **Rule 3.4.8.** The ground floor height shall be a minimum of 16 feet floor-to-floor, measured from the street level.
- **Rule 3.4.9.** Commercial office or retail floor heights on upper floors shall be a minimum of 14 feet floor-to-floor.
- **Guideline 3.4.10.** Retail spaces should be designed to allow the flexibility to remove or relocate interior walls to combine or expand tenant spaces.
- **Guideline 3.4.11.** The design of commercial spaces should consider the need for service access, loading areas, and deliveries.
- **Guideline 3.4.12.** Mechanical equipment for restaurant spaces should be designed and located to minimize noise and odor impacts to occupants in mixed-use buildings, with venting, grease traps, and properly sized sewer and water lines.
- **Rule 3.4.13.** Locate loading areas away from streets and entrances but with easy access to commercial spaces whenever feasible.
- **Rule 3.4.14.** Ground floor commercial spaces shall have a minimum depth of 50 feet as measured from the storefront. This depth may be reduced for up to 20 percent of the linear frontage of the commercial space to accomomodate functional or structural elements of a building design (e.g., stairs, elevators, fire equipment, bearing walls.)

Example of ground floor commercial space in a smaller residential mixed-use building that is easily visible and connects to street with an open space used for seating.

Example of ground floor retail with transparent glazing, distinct architectural detailing, and integrated signage.

3.5 Signage

- **Rule 3.5.1.** Street address identification and building signage shall complement the architecture of the building and be clearly legible from the street and sidewalk entry approach.
- **Rule 3.5.2.** Monument signage is prohibited, as it is not appropriate for the pedestrian scale.
- **Rule 3.5.3.** Signs shall not extend above the roof line of a building.
- **Guideline 3.5.4.** Projecting signs should be located near the front entry of a commercial storefront. A separation should be provided between the building face and the sign. Signs can also be integrated into the architectural design.

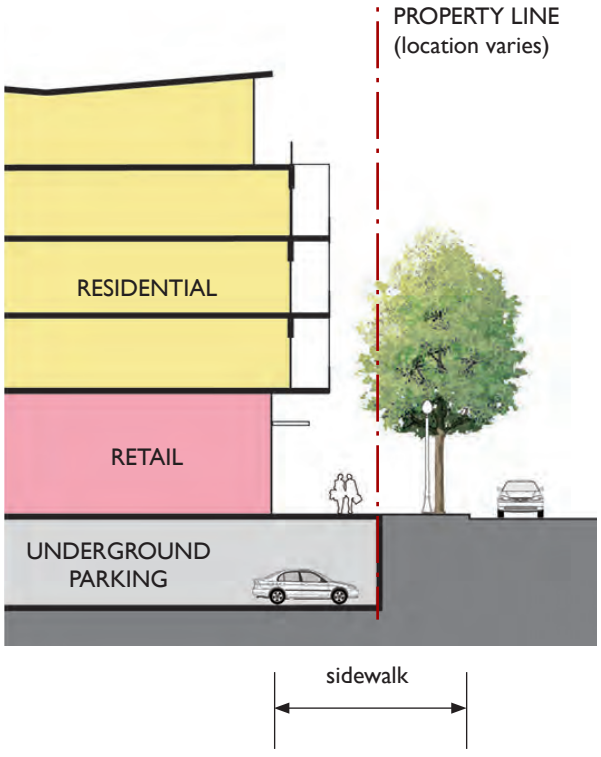
Example of well-designed, pedestrian-scale store sign that is separated from the building edge.

3.6 Parking and Loading

- **Guideline 3.6.1.** The creation of centralized, shared parking facilities serving multiple parcels or businesses is highly encouraged wherever feasible.
- **Guideline 3.6.2.** Parking facilities should be located to the rear of a building, below grade, or at the center of a block. Shared parking agreements are encouraged to meet parking needs with more efficiency and flexibility.
- **Rule 3.6.3.** Parking structure entrances shall not be located on Washington Boulevard between Union Street and Roberts Avenue.
- **Rule 3.6.4.** A parking structure shall be set back a minimum of 20 feet from the inside edge of the sidewalk, unless the structure includes ground floor uses.
- **Rule 3.6.5.** The visibility of parking structures from public streets shall be minimized.
- **Rule 3.6.6.** The number and width of curb cuts shall be minimized to the extent feasible to reduce pedestrian conflicts. Access to parking areas shall be located on side streets or driveways to the extent feasible.
- **Rule 3.6.7.** Parking podiums shall be designed to take advantage of a building's structural grid. Project plans submitted for review shall demonstrate consideration of the structural grid, with column widths drawn to dimension.
- **Rule 3.6.8.** The top of parking podiums shall include usable open space if the podium roof is lower than the buildings surrounding them and if the buildings have residential units.
- **Rule 3.6.9.** Any parking structure façade facing a usable interior courtyard or pedestrian pathway shall be sufficiently screened so that cars and garage lights are not directly visible.

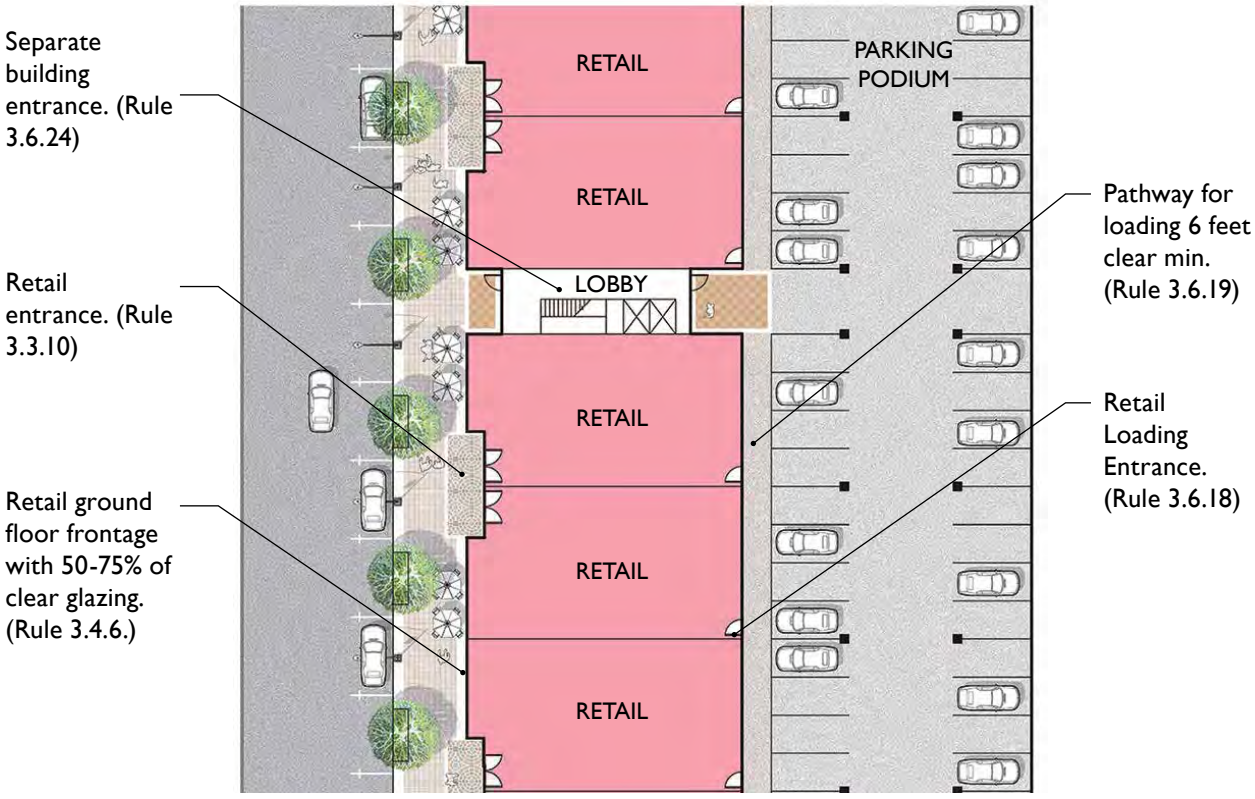
- **Rule 3.6.10.** Parking structures wrapped with habitable spaces shall be mechanically ventilated.
- **Rule 3.6.11.** The minimum distance between windows of dwelling units directly facing a freestanding parking structure or an exposed parking structure façade is 40 feet. Screening of the parking structure façade is required when the structure is visible from dwelling units.
- **Rule 3.6.12**. Parking structure roofs visible from dwelling units shall include canopy structures, green roofs, usable spaces, or high-quality roof materials. The top floor of the parking structure shall not be used for parking.
- **Guideline 3.6.13.** Underground parking is encouraged and may be located under required setback areas (Figure 4-13).

Figure 4-13 Underground Parking Extension to Property Line



- **Guideline 3.6.14.** Basement levels for parking may extend to the property line as long as they are completely underground and there is a minimum of 3 feet of planting depth between the parking and sidewalk level.
- **Guideline 3.6.15.** Integrate vehicular parking garage entrances and building design in a way that minimizes the visual impact on neighboring properties.
- **Guideline 3.6.16.** Surface parking lots should be avoided, except as an interim use.
- **Rule 3.6.17**. Parking structure ramps shall include lighted pedestrian pathways.
- **Rule 3.6.18.** An off-street loading area for moving vans and deliveries for residential uses shall be provided. Loading areas shall be conveniently located near a building entrance and a ground floor elevator (Figure 4-14).
- **Rule 3.6.19.** In parking podiums that abut ground floor commercial spaces, a clear pathway with a minimum width of 6 feet shall be provided between parking spaces and rear entrances to retail for loading and deliveries (Figure 4-14).
- **Rule 3.6.20.** Parking for different uses shall be separated unless it is shared.
- **Guideline 3.6.21.** Parking for retail is recommended for the ground-floor level. Parking for residential uses is recommended for underground or upper levels.
- **Rule 3.6.22**. Direct access from parking facilities to upper residential levels is required through vertical circulation.
- **Rule 3.6.23.** A well-lit pedestrian pathway shall be provided to connect people from parking areas to commercial spaces.
- **Rule 3.6.24**. A separate building entrance for pedestrian circulation from vehicular circulation and retail ground floor uses is required from all public sidewalks into parking garages (Figure 4-14).

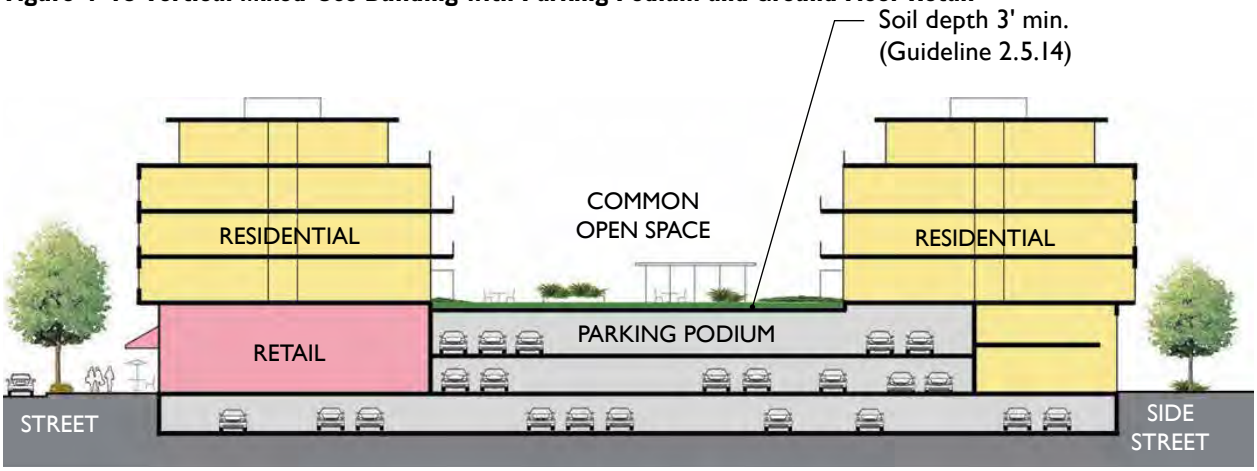
Figure 4-14 Typical Ground floor Retail with Parking Podium



- **Rule 3.6.25**. Multi-level parking structures shall have façade screening or be wrapped with habitable space. Parking garages may be wrapped with residential or other uses. Façade screenings shall reduce light emittance and shall consist of high quality building materials such as metal or wood. The use of vertical plant trellises is also recommended.
- **Rule 3.6.26.** Concrete panels on parking structures are prohibited.
- **Rule 3.6.27.** Property owners shall unbundle the cost of parking from the cost of housing, consistent with applicable city parking standards.

Retail servicing from the street is often disruptive. The ground floor in mixed-use buildings is a highly sought after place. Scheduling deliveries, creating underground access, or providing access via alleyways can make loading more compatible.

Figure 4-15 Vertical Mixed-Use Building with Parking Podium and Ground Floor Retail



The parking podium is wrapped with retail along the street frontage. Any side of the parking podium that is visible or is fronting a path should be wrapped with uses and carefully designed to avoid blank walls. Vehicular access sha be located on a side street or driveway. Parking podiums shall include usable rooftop space. The rooftop soil layer needs to have sufficient depth to allow for landscaping.

This screened facade helps to hide the openings of the parking structure with an articulated design and vegetation.

Common open spaces like this landscaped courtyard can utilize the top of parking podiums.

4.4 DEMONSTRATION BLOCKS

Development scenarios were tested on three important blocks near the Irvington BART Station on Washington Boulevard and Osgood Road. These critical blocks were illustrated in more detail to visualize potential development that is consistent with current zoning requirements and exemplifies successful application of the design rules and guidelines detailed in this chapter.

The scenarios for development shown are one of many possible scenarios that follow the design rules and guidelines for development. What is shown for the demonstration blocks are not proposals of future development. The scenarios are only illustrative and are provided to help visualize future redevelopment of these three sites, and provide guidance for future development.

BLOCK 1: URBAN RESIDENTIAL ON OSGOOD ROAD

Osgood Road is a major arterial street that will include an entrance to the Irvington BART Station. The existing land uses on Osgood Road are a mix of low-density residential and industrial. The area is currently zoned for Urban Residential with a TOD Overlay, which is a much higher density than what exists today. Multi-story buildings will provide housing for people who prefer being close to BART.

BLOCK 2: VERTICAL MIXED-USE ON MAIN STREET

Block 2 is an odd-shaped block sandwiched between Washington Boulevard and Main Street, from Union Street to Roberts Avenue. One corner of the block (at Union Street and Washington Boulevard) defines the Five Corners. It has a highly visible frontage on Washington Boulevard and quieter pedestrian-oriented frontage to the Irvington BART Station on Main Street. New storefronts in a vertical mixed-use format with residential on the upper levels would help make the area a more compact and neighborhood-serving place.

BLOCK 3: HORIZONTAL MIXED-USE AT THE SHOPPING CENTER

The existing shopping center at the southeast corner of Washington and Fremont Boulevards is auto-oriented, low-density, and aging. A station entrance is planned less than a block away just past the intersection of Washington Boulevard and Roberts Avenue. Over time, the site may transition to become transit-oriented. The site is large enough to accommodate horizontal mixed-use development.

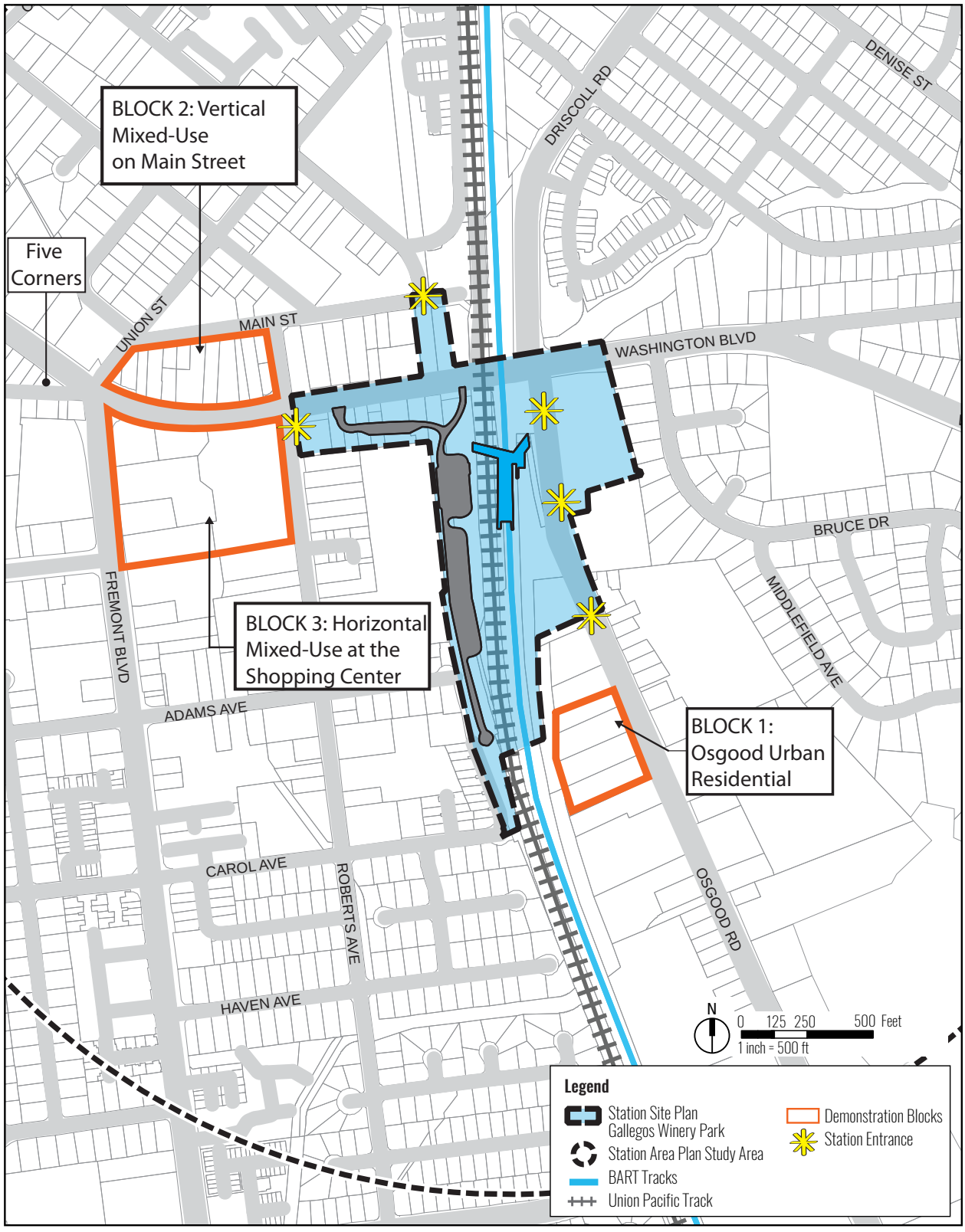


Figure 4-16 Station Area Plan Demonstration Blocks

BLOCK 1: URBAN RESIDENTIAL ON OSGOOD ROAD

This scenario shows four parcels consolidated to build a large Urban Residential project. The project in this scenario is supported by a two-story parking podium structure, and meets the maximum density of housing units allowed under current zoning. Consolidating parcels yields a more efficient use of land and allows for parking to be accommodated in a podium. The zoning for Urban Residential with a TOD Overlay permits buildings three to six stories tall with a density range of 50 to 70 units per net acre. A summary of applicable zoning regulations is provided in Appendix A.

View looking northwest with Osgood Road in the foreground. The dashed line shows the location of the Urban Residential demonstration block.

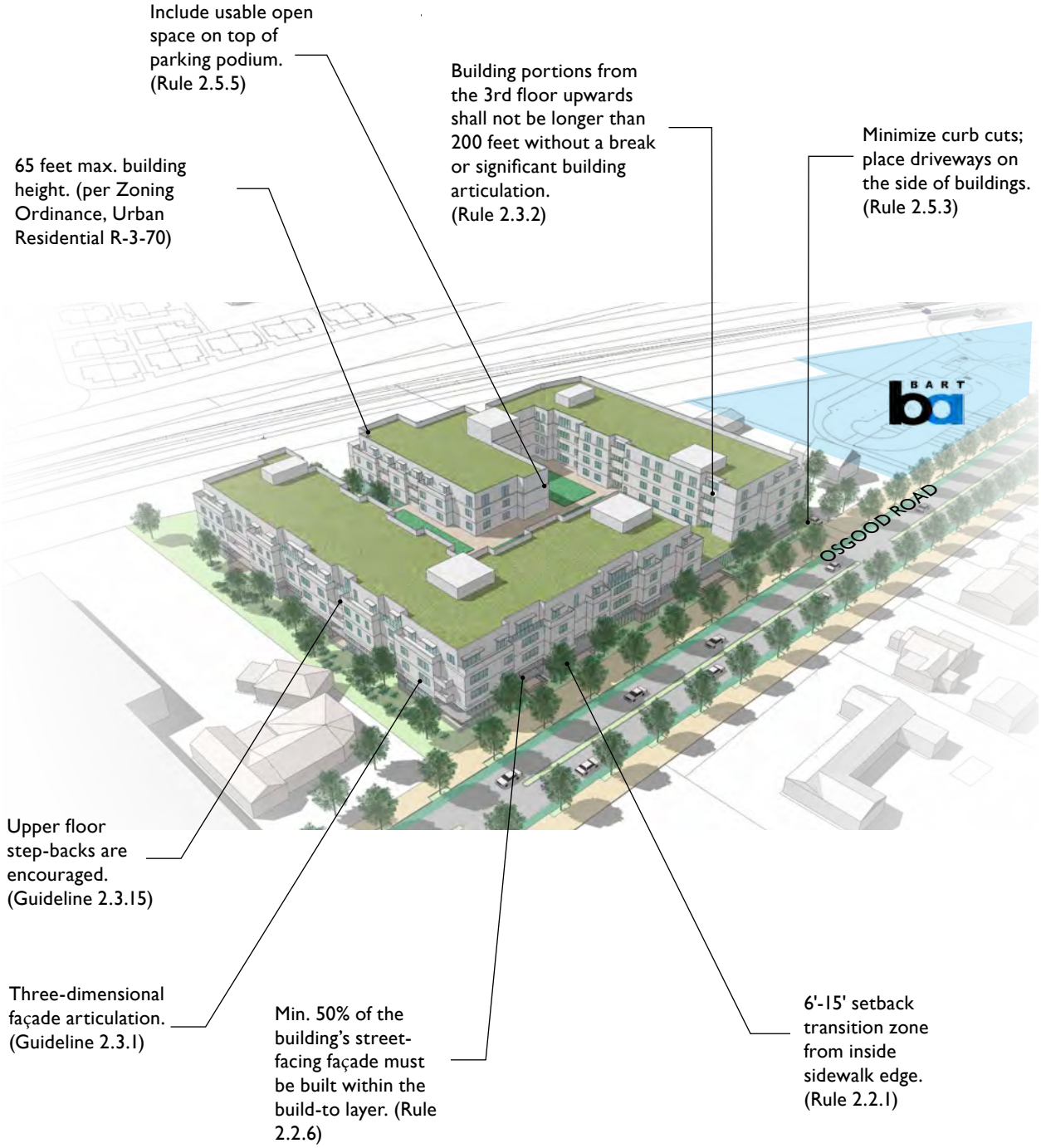
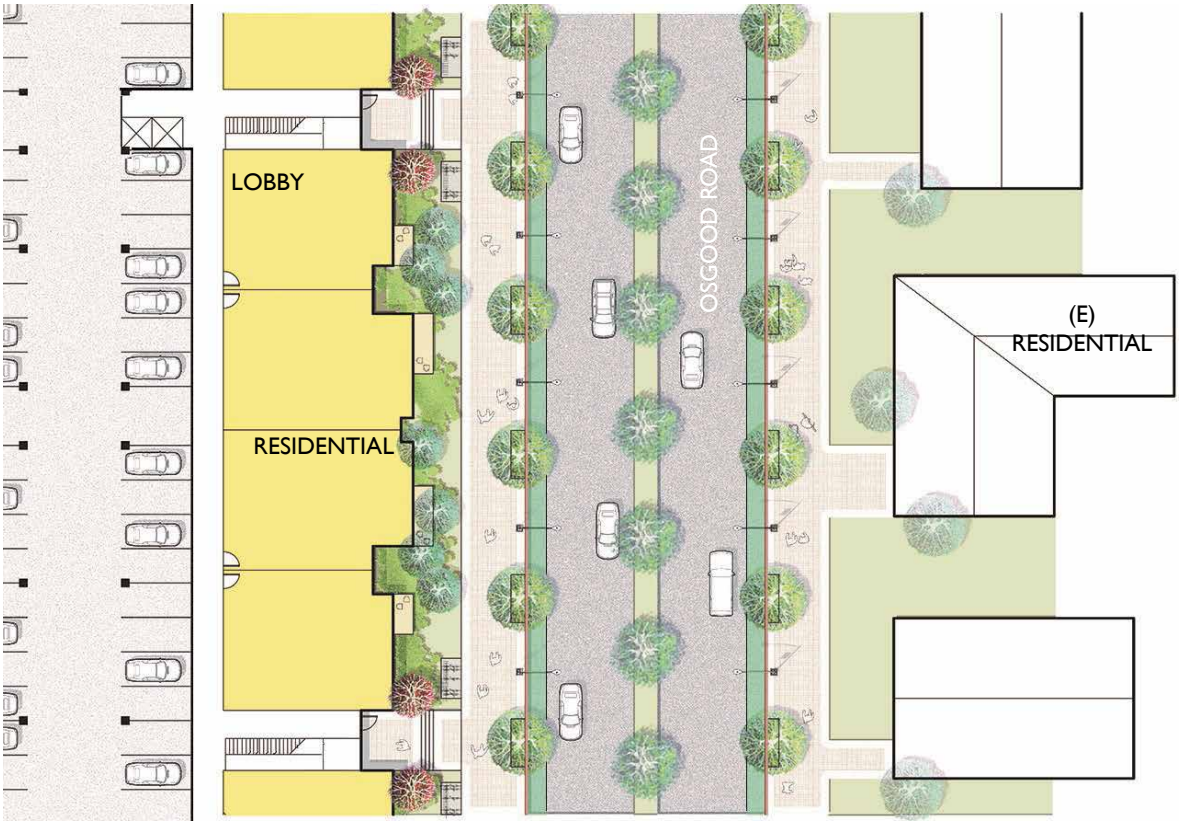


Figure 4-17 Urban Residential Demonstration Scenario

The scenario shown does not represent currently proposed projects. The intent of this demonstration is to show how Urban Residential development could look given land use regulations, rules, and guidelines that apply to the area.

Figure 4-18 Typical Street Plan of Osgood Road with Building Frontages

Figure 4-19 Typical Street Plan of Osgood Road



BLOCK 2 AND BLOCK 3: MIXED-USE

These scenarios show potential development for Town Center blocks north and south of the segment of Washington Boulevard between Union Street and Roberts Avenue.

The zoning for Town Center blocks with a TOD Overlay permits a floor area ratio (FAR) of up to 2.5 and requires a minimum net density of 30 units per acre when residential units are provided. A summary of applicable zoning regulations is provided in Appendix A.

Vertical Mixed-Use on Main Street (Block 2)

This scenario for Block 2 shows a vertical mixed-use configuration of buildings that depends on the cooperation of property owners to consolidate parcels. Parcel consolidation is essential for the development of more efficient buildings. The scenario shows ground-floor retail, shared parking in the middle of the blocks, and housing on upper levels.

Horizontal Mixed-Use at the Shopping Center (Block 3)

This scenario for Block 3 shows a horizontal mixed-use configuration on new private streets that divide the parcel into smaller more walkable blocks.

The programming for the site anticipates the grocery store operating continually through the construction phase and eventually moving to the corner of Washington and Fremont Boulevards to be more visible. Retail at the shopping center is replaced with a more compact, modernized, efficient format that meets the street edge and forms a "street wall." Housing, in a horizontal mixed-use format, is located at the edges of the site to blend in with the existing adjacent residential neighborhood. The potential for office with ground-floor retail is also shown to demonstrate the types of uses that might occur in a horizontal mixed-use program.

View looking southwest with Fremont Boulevard in the foreground. The dashed line shows the location of the Town Center demonstration blocks.

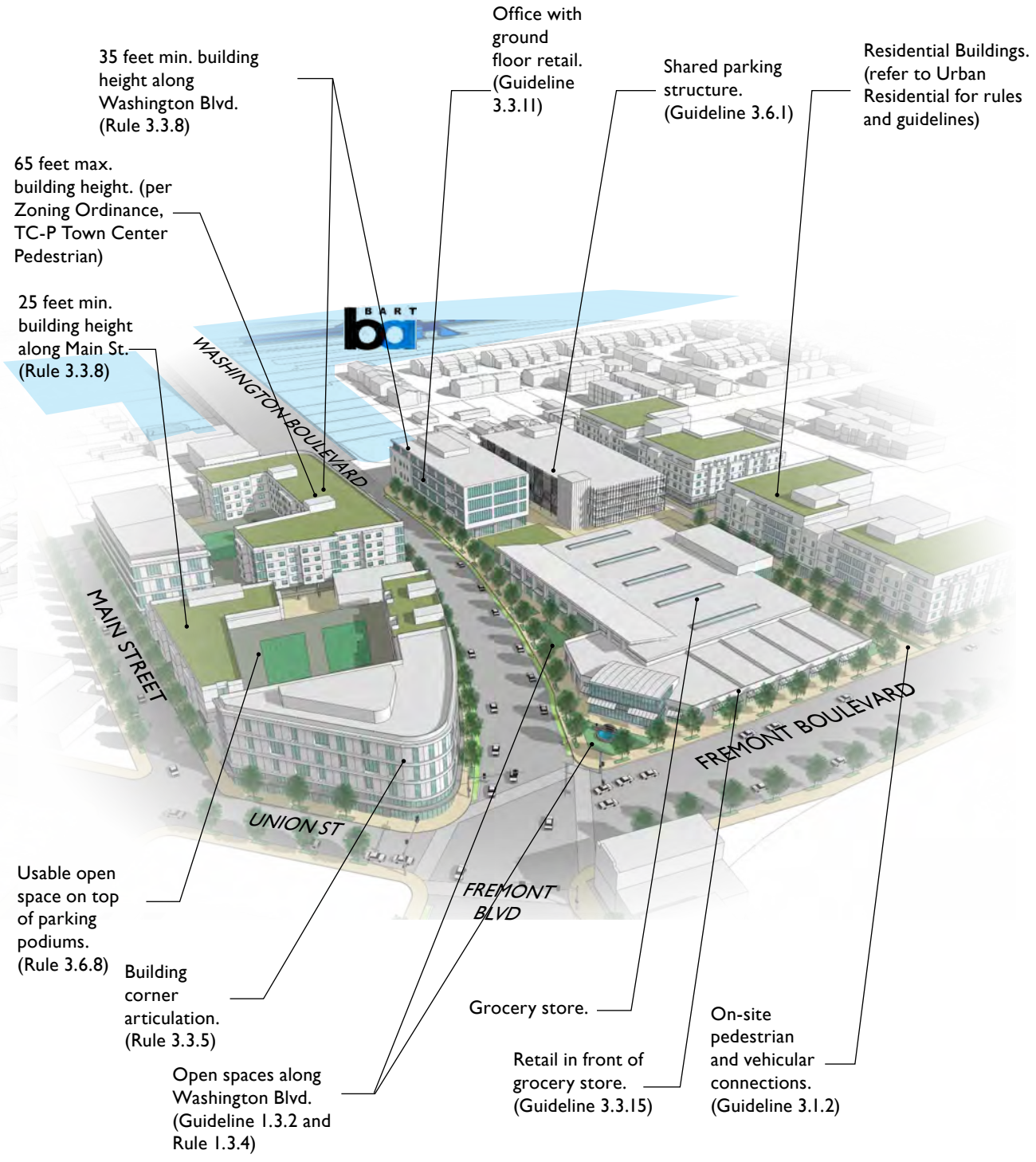


Figure 4-20 Town Center Mixed-Use Demonstration Scenario

The scenario shown does not represent currently proposed projects. The intent of this demonstration is to show how mixed-use development, in both vertical and horizontal configurations, could look given the land use regulations, rules, and guidelines that apply to the area.

Figure 4-21 Typical Street Section of Main Street

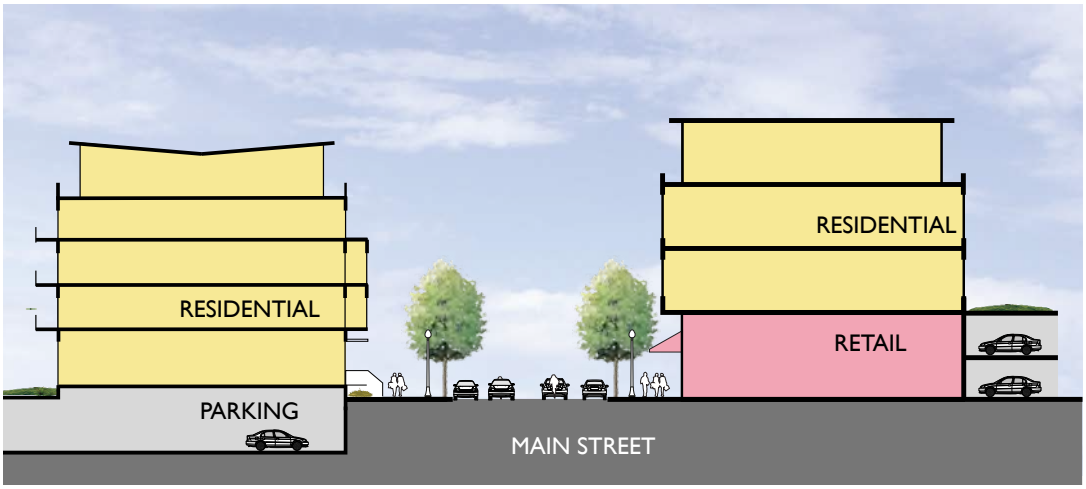


Figure 4-22 Typical Street Plan of Main Street

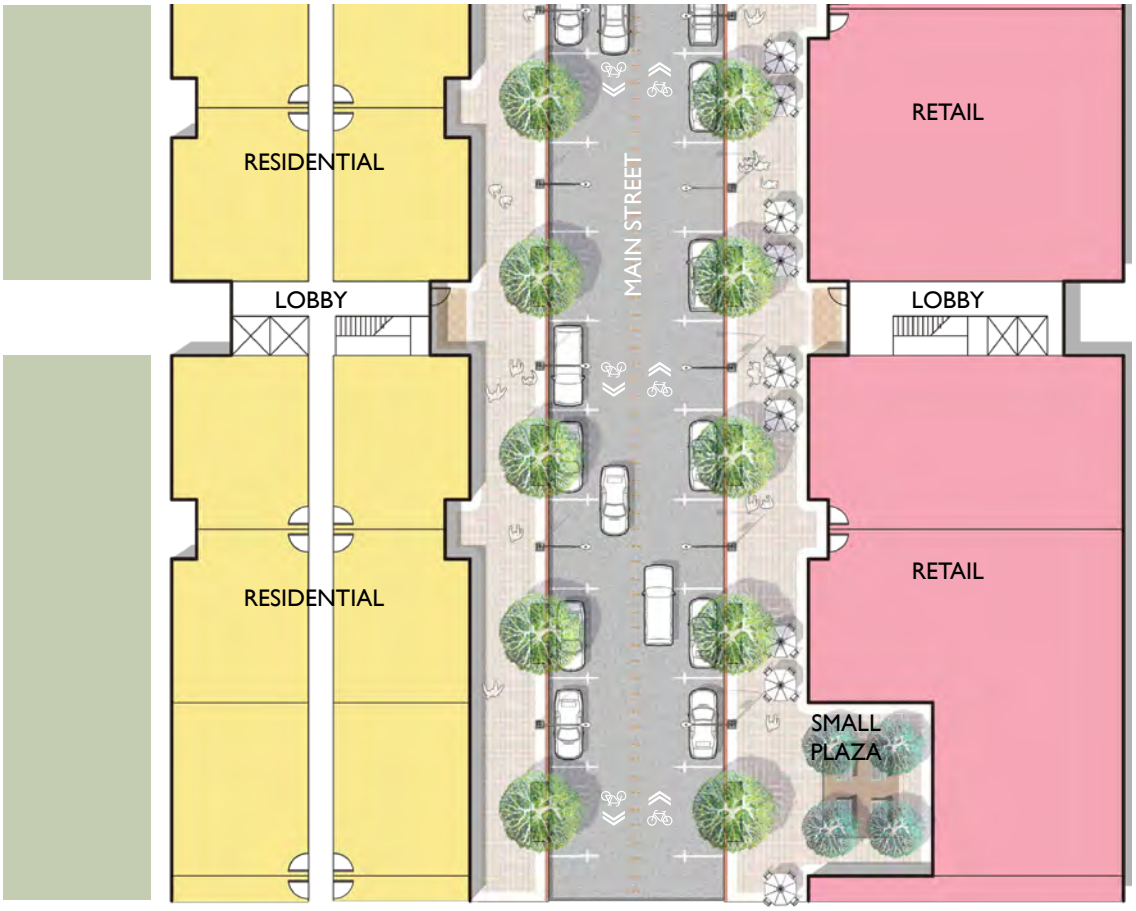


Figure 4-23 Typical Street Section of Washington Boulevard

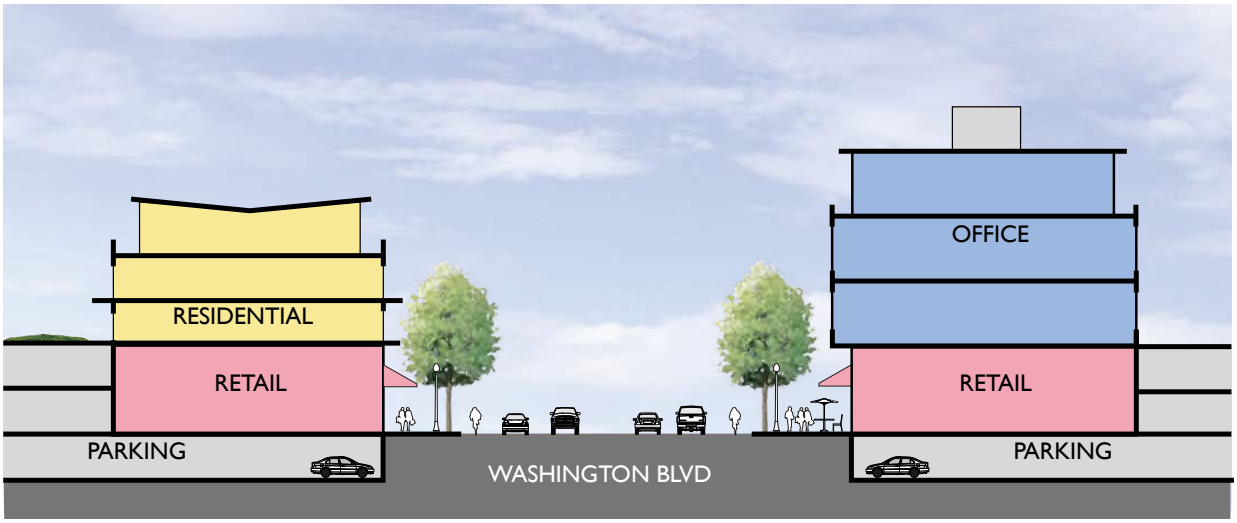
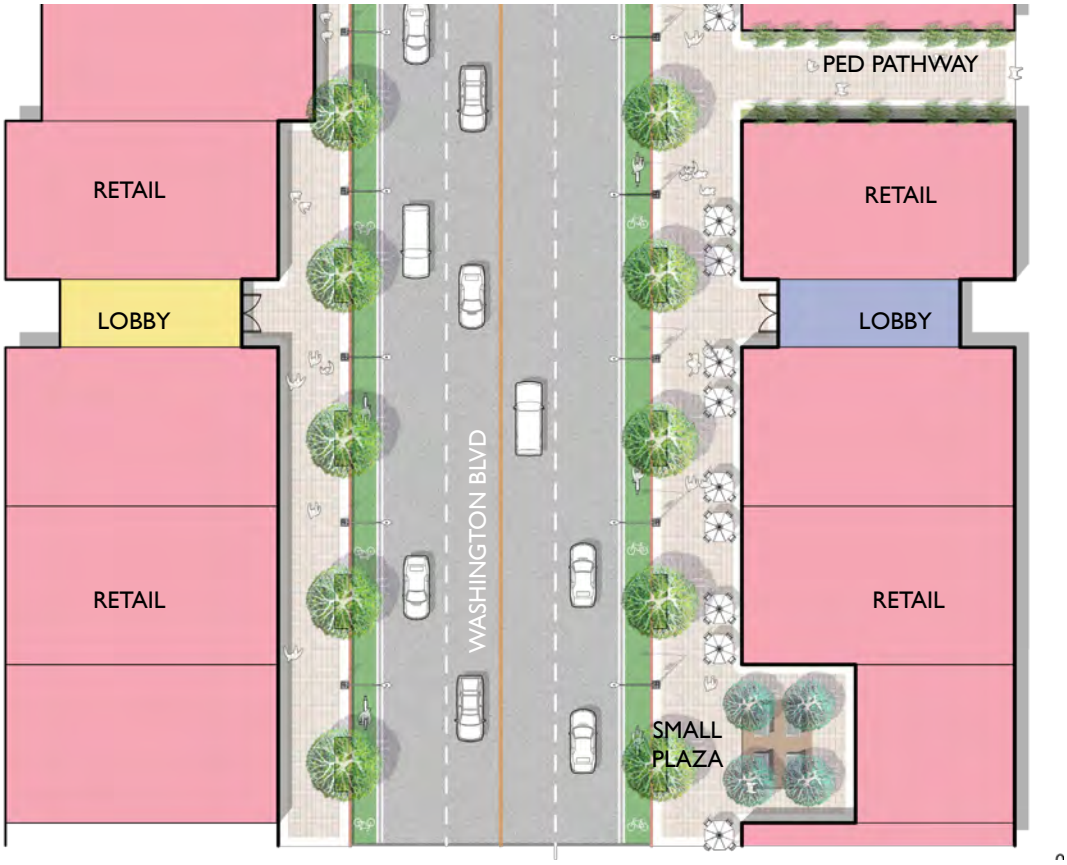


Figure 4-24 Typical Street Plan of Washington Boulevard



4.5 HISTORIC RESOURCES

The Plan Area, and particularly the Town Center Subarea, is rich in historic resources that contribute to the neighborhoods' character. The General Plan outlines the City's goals and policies for historic preservation, emphasizing protection, adaptive reuse, compatibility, and documentation of historic resources. These goals are further reinforced through the Irvington Community Plan, Policy 11-6.4: Historic Preservation in Irvington, which encourages "the preservation and adaptive reuse of Irvington's historic buildings. New development should respect the scale and context of historic structures."

The design rules and guidelines in this chapter have been crafted to generally reinforce compatibility with historic resources in the Plan Area. New development in the Plan Area which affects existing and potential historic resources would also be subject to the development review process required for proposed modifications or alterations (including demolition) outlined in the City's Historic Resources Ordinance (FMC Chapter 18.275) and summarized in Appendix A. The development review process would evaluate the treatment of the historic resource for consistency with the Secretary of the Interior's Standards for the Treatment of Historic Properties, and consider potential impacts to historic resources in accordance with the California Environmental Quality Act (CEQA).

New buildings can be integrated next to older buildings. The integration can be accomplished through the use of connecting elements along the streetscape.

New buildings can contrast or complement older buildings. The design of new buildings can play a supportive role to the historic character of adjacent buildings.

The sensitive integration of bigger buildings, behind and around older buildings can be accomplished by updating, refreshing, and adapting older buildings.

GLOSSARY

ACTIVE BUILDING USES

Active building uses refer to the programming in buildings, especially on the ground floor adjacent to the street edge. The programmed uses can include commercial uses like retail shops and offices, or residential amenities like gyms and community centers. It is important that activities are visible from the public realm.

BUILD-TO LAYER

Buildings define the space of the street with their front facades; they are typically built to the property lines of the streets or to a defined build-to line that can be set back from the property line. This line can be the inner sidewalk edge or the inner edge of the setback transition zone. A build-to layer is a 5-foot wide zone measured from the defined line on the private property side of street-facing facades.

HORIZONTAL MIXED-USE

Horizontal mixed-use is the horizontal layout of single-use buildings such as residential, office, or retail on a city block or large site. Some exceptions are also found with retail at the ground floor of residential, office, or parking garage buildings, but generally horizontal mixed use means that land uses are organized side-by-side rather than stacked within single buildings.

MONUMENT SIGNAGE

Monument signs are large signs placed along the street that are designed to be visible to drivers. Monument signs are not appropriate for TOD areas, where the environment prioritizes pedestrians and alternatives modes of transportation.

PUBLIC REALM

The public realm is the space that is publicly accessible to all. It includes public streets, plazas, parks, trails, publicly accessible private streets and paths, and other public spaces and amenities, as well as interior publicly accessible spaces like public libraries or museums. The public realm is an interwoven network of spaces and amenities.

SETBACK TRANSITION ZONE

A setback is the distance from the inside edge of the sidewalk to a building façade wall. The area within the setback is called a setback transition zone. The design goal for features within the setback transition zone is to provide variety along a street frontage.

SIDEWALKS

Sidewalks are organized in different zones:

- The curb zone is an area of the sidewalk adjacent to the street, reserved for street trees with or without tree grates, landscaping, bicycle racks, pedestrian-scaled lights, signs, and street furniture.
- The walking zone is an area of the sidewalk reserved for unobstructed pedestrian travel.
- The amenity zone is the remainder of the sidewalk width, and may include outdoor seating, dining areas, street furniture, landscape planters, and other public amenities to enhance the pedestrian environment.

STREETSCAPE

The streetscape includes all the physical elements that pedestrians see and experience when walking down the street. The streetscape includes what people see on building facades, privately owned yards, landscaping, fencing, pavement, street furniture, public street amenities, signage, utilities, curbs, street trees, lighting, planting strips, medians, bulb-outs, and small plazas. It is the part of the public realm that is associated with streets.

STREET WALL

The continuous or nearly continuous façades of buildings along the edge of a street right-of-way constitute a street wall.

TRANSIT-ORIENTED DEVELOPMENT (TOD) OVERLAY

The TOD Overlay is an area within ½ mile radius (10-minute walking distance) of the Irvington BART station. It defines the area where the design of streets and buildings are intended to support transit ridership.

TOWNHOUSE

"Townhouse" shall mean a dwelling unit which is a portion of a multiple dwelling and has one or more common walls with other dwelling units, where such unit is the sole dwelling unit on a separate lot, and where ownership of such dwelling unit includes an interest in common areas other than the lot upon which the dwelling unit is situated. "Detached townhouse" shall mean a dwelling unit in a complex of similar type units typically situated in rows separated by private open space between units where each unit is the sole dwelling unit on a separate lot and each dwelling unit also includes an interest in common areas other than the lot upon which the dwelling unit is situated.

VERTICAL MIXED-USE

Land uses that differ within a single building. For example, retail on the ground floor with residential uses on key streets.

WAYFINDING SIGNAGE

Signs that help direct people to places within the Plan Area. Signage can be accompanied by repeating elements to help establish an identity for the Neighborhoods.

5

IMPLEMENTATION AND FINANCING PLAN

This chapter provides technical guidance for implementing the Station Area Plan. It identifies potential sources of funds for proposed capital improvements to the public realm, considering both the volume and timing of funds from these sources in determining their suitability for funding specific public improvements. Additionally, the chapter describes mechanisms for generating sustainable funding for maintenance and operations of public infrastructure within the Plan Area.

Given the political hurdles and/or land owner voter requirements associated with many of the traditional funding sources identified in this chapter, it is the City's expectation that infill development and associated development standards will be the primary implementation tool. The City expects to make strategic use of development impact fee revenue and available grant funding as needed to ensure that the envisioned improvements are implemented in a timely manner.

What are Capital Improvements?

Capital improvements are new or significantly expanded physical facilities for the community that are relatively large and relatively permanent – such as parks, fire stations, and roads.

5.1 GENERAL PLAN

The Station Area Plan is consistent with the land use designations specified for the Plan Area in the City's General Plan. Therefore, no General Plan Amendments are needed. The Planning Commission will conduct an initial public hearing and consider recommending approval to the City Council. The City Council will conduct a public hearing to consider final approval and adoption of the Station Area Plan.

5.2 STATION AREA PLAN INFRA-STRUCTURE NEEDS

Implementation of the Station Area Plan will require near- and long-term public infrastructure improvements, including intersection-specific improvements as well as bicycle and pedestrian (including ADA) improvements to facilitate access to and from the station. Summaries of the improvements that may be completed to implement the Station Area Plan are provided below, while Appendix C provides the detailed improvement list.

ROADWAY/AUTOMOBILE IMPROVEMENTS

Several of the primary intersections within the Plan Area require comprehensive improvements and upgrades, which will benefit vehicular traffic as well as pedestrians and bicyclists. These include the following:

- Adjust and coordinate signal timing parameters.
- Improve roadway striping.
- Reduce curb radii.
- Extend curbs ("bulb outs").
- Implement traffic calming measures, such as speed humps and/or chicanes.

BICYCLE IMPROVEMENTS

Several bicycle-related improvements are needed in the Plan Area, many of which also indirectly affect pedestrian access to the station. These include the following:

- Install Class II (Buffered), Class III (Neighborhood), and Class IV (Separated) Bike Ways as appropriate.
- Install bicycle video detection for left-turn pockets.
- Stripe a bicycle detection marking to show bicyclists where to position themselves.
- Install bicycle wayfinding, especially to direct bicyclists toward the Irvington BART Station.
- Replace drain inlet grates parallel to the direction of bicycle travel with grates perpendicular to the direction of travel.

PEDESTRIAN IMPROVEMENTS

Improving pedestrian access to the station is a priority for the Plan Area. The list of pedestrian improvements is focused on pedestrian access and safety, including ADA improvements, as follows:

- Install rectangular rapid flashing beacons at key non-controlled street crossings.
- Add high-visibility crosswalk markings.
- Install median refuge areas where appropriate.
- Add truncated domes, tactile warnings that provide a cue to visually impaired pedestrians that they are entering a street or intersection.
- Install audible signals, which provide crossing information in non-visual formats, at all new and modified signalized intersections.
- Fill sidewalk gaps.

5.3 SOURCES OF FUNDS BY COST CATEGORY

The Plan Area will require new capital improvements in the coming years to support the increased activity generated by the Irvington BART Station and new development in the Plan Area.

Capital improvements proposed in this Station Area Plan include roadway and sidewalk improvements that will encourage biking and walking to and from the Irvington BART Station and the surrounding neighborhoods. In addition, this chapter evaluates funding sources for operations and maintenance, which is crucial to maximizing the public investment in infrastructure and extending the lifetime of these capital improvements.

A range of funding sources and financing mechanisms may be available to fund the roadway, traffic calming, bicycle, and pedestrian improvements within the Plan Area. Whether a particular funding source is appropriate for a given improvement or cost category depends on a number of factors, such as whether the funding is needed for one-time capital improvements or ongoing operations and maintenance, the type of improvement, the extent of the geographic area of benefit, the cost of the improvement, the number of competing projects, and the timing of funding sources versus the need for improvements.

Table 5-1 presents recommended funding options that can be used to address the costs associated with capital improvements, recognizing that the final approach to implementation will depend on when improvements are needed, the timing of private development in the Plan Area, the degree to which improvements are a part of required development standards, and other factors not fully known at this time. The City already makes use of some of these funding sources, while others are options for future consideration.

Each of these options is discussed in more detail in the following sections.

Table 5-1 Sample Funding Options for Irvington BART Station Area Plan Improvements

	Category of Improvement		
Recommended Funding Options	**Roadway/ Automobile**	**Bicycle**	**Pedestrian (including ADA)**
Development-Based Funding			
Development Standards	X	X	X
Transportation Development Impact Fees	X	X	X
Development Agreements	As opportunities become available		
Land-Secured Revenue			
Property Business Improvement Districts			X
Community Facility Districts	X	X	X
City-Based Funding			
Grants	X	X	X

Source: Economic & Planning Systems, Inc., 2018.

FUNDING SOURCES FOR CAPITAL IMPROVEMENTS

The following section identifies a range of traditional funding sources and financing mechanisms; however, it is the City's expectation that infill development and associated development standards will be the primary implementation tool to assure that the identified capital improvements are provided in a timely manner. The City is prepared to make strategic use of development impact fee revenue and available grant funding as needed to ensure this occurs.

DEVELOPMENT-BASED FUNDING

Development Exactions

Depending on the level of specificity provided in the Station Area Plan, developers may be required to dedicate rights-of-way to the City and/or build bike and pedestrian improvements in the City rights-of-way fronting private development projects. Policy documents can specify that the City requires right-of-way dedication, and that bike lanes or curb cuts be provided consistent with City specifications.

Implementation Considerations

It is the City's expectation that infill development will be the primary mechanism by which identified capital improvements are provided. However, the timing of private development is unpredictable, and the City is prepared to use grant revenue and impact fee revenue as needed to mitigate higher priority gaps when it appears that improvements by private development are unlikely in the foreseeable future.

Development Impact Fees

Development impact fees are charged to new private development to fund a range of public infrastructure improvements. A development impact fee is an ordinance-based, one-time charge on new development designed to cover a proportional share of the total capital cost of necessary public infrastructure and facilities. The creation and collection of impact fees is allowed under the Mitigation Fee Act, codified in California Government Code 66000.

To the extent that required improvements are needed to address both existing deficiencies as well as the projected impacts from growth, only the portion of costs attributable to new development can be included in the fee. Consequently, impact fees are commonly one of many sources used to finance a city's needed infrastructure improvements. Fees can be charged on a jurisdiction-wide basis or for a particular subarea of the jurisdiction.

The City of Fremont has an existing suite of development impact fees, which fund capital facilities, fire, traffic, park facilities, and affordable housing. The latest fee schedule was updated in January 2019. The current traffic impact fee funds intersections, street improvements, bicycle and pedestrian projects, and traffic signals related to new growth.

Implementation Considerations

Development impact fees require the City to conduct nexus studies, demonstrating that there is a rational nexus between new development and the improvement and that the fees are proportional to the impact caused by the development. The City has already completed such a study for the current Citywide development fee. Any future updates will require a new nexus study and may include eligible Plan Area capital improvements, as appropriate. Following preparation of the nexus study, the City Council accepts the nexus study and approves the fee schedule.

The key limitation of development impact fees (in addition to the nexus requirement) is the timing of funding. Infrastructure is often needed upfront while fees are paid over time as development occurs. This means that other funding or financing methods are needed to close the timing gap. Fees are also irregular, as they depend on development activity that varies with economic conditions.

Development Agreements and Partnerships

A development agreement is a legally binding agreement between a local government and developer authorized by State statute

(Government Code Section 65864 et seq.). A development agreement is a means for a developer to secure approval for a particular development project for an agreed-upon time period (often long-term approvals) in exchange for fulfilling requirements imposed by the City, such as infrastructure improvements, amenities, or other community benefits that cannot be obtained through the normal approval conditions applicable to the project. These arrangements tend to be available during times of strong market performance. In weaker markets, it can be difficult for developers to construct financially feasible projects while still constructing or funding the extensive public benefits that are often required under development agreements. The City could consider requesting in-kind improvements as part of development agreements, meaning the developer could build/provide identified improvements.

Implementation Considerations

Development agreements vary widely, and cities often establish their own policies and procedures for considering development agreements. Development agreements can specify consideration for either funding for capital improvements or funding for annual operations and maintenance. Development agreements are entirely discretionary on the part of local government (and developers) and must be individually adopted by local ordinance.

LAND-SECURED TAX REVENUE

Assessment districts charge special tax assessments on land owners, businesses, or residents within the district's boundaries to fund specific district-wide improvements. Commonly used assessment districts include Community Facilities Districts, Special Assessment Districts, Business Improvement Districts, and Landscape and Lighting Districts. Districts that could be used to fund improvements within the Plan Area are discussed below.

Mello-Roos Community Facilities Districts

California's Mello-Roos Community Facilities Act of 1982 allows for the creation of a special district authorized to levy a special tax and issue tax exempt bonds to finance public facilities and services. A community facilities district may be initiated by the legislative body or by property owner petition and must be approved by a two-thirds majority of either property owners or registered voters (if there are more than 12 registered voters living in the area).

Special taxes are collected annually with property taxes and may be prepaid if prepayment provisions are specified in the tax formula. The special tax amount is based upon a special tax lien against the property. There is no requirement that the tax be apportioned on the basis of direct benefit. Because there is no requirement to show direct benefit, Mello-Roos levies may be used to fund improvements of general benefit, such as schools, fire and police facilities, libraries, and parks, as well as improvements that benefit specific properties. The provision also allows for the allocation of cost burdens to alleviate burdens on specific classes of development.

Special Assessment Districts (1911, 1913, 1915 Acts)

California law provides procedures to levy assessments against benefiting properties and issue tax-exempt bonds to finance public facilities and infrastructure improvements. Assessment districts, also known as improvement districts, are initiated by the legislative body (e.g., city council), subject to majority protest of property owners. Assessments are distributed in proportion to the benefits received by each property as determined by engineering analysis and form a lien against property. Special assessments are fixed dollar amounts and may be prepaid, although they are typically paid back with interest over time by the assessed property owner. Only improvements with property-specific benefits (e.g., roads, sewer and water improvements) may be financed with assessments.

The City could initiate the establishment of such a district in the Plan Area. New development in the district around the BART station could

be charged a special assessment based on the benefit derived from the development of the new transit station and associated improvements. The special assessment revenues could be used to finance the partial funding of transit area improvements. A special assessment district also requires the voter approval of two-thirds of the owners of property within the district.

Property Business Improvement Districts

A type of special assessment district, Business Improvement Districts can generate revenue to fund or finance capital improvements, streetscape enhancements, ongoing maintenance, etc. Businesses located within a defined business improvement district are required to pay an additional tax to fund projects, improvements, or programming within the district's boundaries.

Landscape and Lighting Maintenance Districts

Landscaping and lighting maintenance districts may be used for installation, maintenance, and servicing of landscaping and lighting through annual assessments on benefiting properties. They may also provide for construction and maintenance of appurtenant features, including curbs, gutters, walls, sidewalks or paving, and irrigation or drainage facilities. Additionally, they may be used to fund and maintain parks above normal park standards maintained from General Fund revenues.

Implementation Considerations

District-based assessments require voter approval of two-thirds of the owners of property within the district. The City may find that existing property owners may be opposed to new taxes, even if there is clear benefit.

PARCEL TAX

Parcel taxes are excise taxes on real property based on either a flat per parcel rate or a varying rate depending on use, size, and/or number of units on each parcel, and they can be used for any municipal purpose. Parcel tax rates are normally weighted in some capacity, such as by size of parcel, density of parcel, or demographics of parcels. Rates also often vary by land use depending on the nature of the infrastructure or services to be funded.

Parcel taxes are often used to finance bonds that are sold to fund capital projects. The annual revenues are used to make annual debt service payments and cover administration costs and required reserves. Parcel tax revenue also can be used to fund annual operations and maintenance expenses.

Implementation Considerations

In California, increasing or extending a parcel tax, which is imposed for a special purpose, requires a two-thirds approval by voters, based on Proposition 218 passed by voters in 1996. Otherwise, only a simple majority vote is needed if the funds are to be used for general purposes. Communities are more likely to support parcel taxes for parks and schools and other highly visible community-serving facilities or services.

CITY-BASED FUNDING

Enhanced Infrastructure Financing Districts

Enhanced Infrastructure Financing Districts (EIFDs) are forms of tax increment financing available to local public entities in California. Local agencies may establish an EIFD for a given project or geographic area to capture incremental increases in property tax revenue from future development. In the absence of an EIFD, this revenue would accrue to the City's General Fund (or other property-taxing entity revenue fund). EIFD funds can be used for project-related infrastructure, including roads and utilities, as well as parks and housing. EIFDs cannot be used to finance operations and maintenance expenses. Unlike prior tax increment financing/redevelopment law in California, EIFDs do not provide access to property tax revenue beyond the local jurisdiction's share.

Senate Bill 628 established EIFDs as a similar, but more flexible version of Infrastructure Financing Districts, where the scope of eligible projects is more expansive and the voter/landowner threshold to pass a bond is 55 percent instead

of a two-thirds majority (as required for Infrastructure Financing Districts).

Implementation Considerations

While any tax increment, no matter how small, will generate revenue that can be reinvested in infrastructure, it is important to note that, in most cases, the percentage of the local property tax available to California cities is low (typically $0.10 to $0.20 of every property tax dollar). The Fremont General Fund currently receives approximately 15 percent of each property tax dollar, depending on the tax rate area. Moreover, the use of local property tax to support infrastructure financing has fiscal implications for California cities. Dedicating tax revenue to infrastructure limits funding for new public services costs associated with development.

General Obligation Bonds

A general obligation bond is a type of municipal bond that is secured by a state or local government's pledge to use legally available resources, most typically including property tax revenues, to repay bond holders. General obligation bonds are limited to capital improvement expenditures and are also limited in their use to the precise purposes outlined in the authorizing ballot measure. Commonly, general obligation bonds are restricted to specific capital uses like street improvements, drainage improvements, and parks and recreation.

General obligation bonds allow public entities to finance at a low fixed rate over the useful life of the asset. The incidence of burden of general obligation bonds is upon all property owners in the issuing jurisdiction proportional to the value of their property. It is this very broad base of funding that provides excellent security for general obligation bonds, thus typically garnering the lowest interest rate of any municipal debt instrument.

Implementation Considerations

For new general obligation bonds in the future, if the bond is being secured for unrestricted purposes through property taxes, a simple majority vote is needed to raise the property tax rate. Creation of general obligation bonds requires two-thirds voter approval if they are for specific purposes.

Grants

Investigation of potential grant funding for public facilities is appropriate for the Station Area Plan. Grants provide external funding from regional, state, and federal sources, but reflect local priorities. Many grants require local matches. Apart from local match requirements, there are significant staff costs associated with grant funding, including staff time during the application process and during the project. Grant funding is often limited to capital improvements, with maintenance responsibilities falling to the local jurisdiction.

While grant revenue is inherently unpredictable and highly competitive, the City of Fremont regularly applies for and receives grant funding. Throughout implementation of the Station Area Plan, it will be important to identify appropriate grant opportunities and to prioritize competitive infrastructure improvement projects. Several grants that may be worth considering are described below. Further analysis to align available grant resources with specific improvements is needed to determine which grants are worth pursuing.

Senate Bill 1 (SB 1) Road Repair and Accountability Act

The Road Repair and Accountability Act of 2017 invests $5.4 billion annually for ten years to fix roads, freeways, and bridges in California, while enhancing transit and safety. One-half of the funds will go towards the State highway system, and the other half will be allocated to local projects within cities/counties. Revenues are generated from an excise tax on gasoline ($0.12 per gallon) and diesel fuel ($0.20 per gallon), sales tax increases on diesel fuel, an annual Transportation Improvement Fee which is charged based on the market value of new vehicle purchases, and a Road Improvement Fee of $100 for Zero-Emission Vehicles (starting in 2020 for model year 2020 and later).

A portion of this revenue is deposited into the Road Maintenance and Rehabilitation Program to be spent on basic road maintenance, safety projects, and other transportation programs. At the local level, the State will annually set aside $200 million for city or county entities that have approved developer fees or sales/use taxes for transportation projects—the State's matching funds will support voter-approved transportation tax measures. Furthermore, $100 million will be spent on bicycle and pedestrian projects, and $1.5 billion will go towards repairing local streets and roads. Over 4,000 local projects are receiving SB 1 funds, and $5 billion has been allocated to improve local transportation infrastructure through competitive grants.

Measure BB

In 2014, Alameda County voters approved Measure BB, authorizing an extension and augmentation of the existing transportation sale tax, Measure B. Measure BB is projected to generate approximately $8 billion in revenues from April 2015 to March 2045 for transportation improvements within Alameda County.

The 2014 Transportation Expenditure Plan guides the investments of Measure BB revenues toward capital projects and programs that improve the county-wide transportation system. Priorities specifically include providing traffic relief by improving local streets and roads, improving air quality, and providing clean transportation by expanding bicycle and pedestrian paths.

As part of the 2014 Transportation Expenditure Plan, local agencies and transit jurisdictions receive direct local distributions from Measure BB funds to support these transportation investments, particularly bicycle and pedestrian improvements. County-wide, these direct local distributions amount to approximately $70 million annually and are prioritized for use locally by the recipient.

One Bay Area Grant Program

The One Bay Area Grant Program (OBAG), administered by the Metropolitan Transportation Commission, distributes federal funding to cities and counties to advance regional transportation priorities.

The OBAG program supports California's climate law, Senate Bill 375, which requires a Sustainable Communities Strategy to integrate land use and transportation to reduce greenhouse gas emissions. Per OBAG requirements, 70 percent of the funds must be used for transportation projects within priority development areas. The Alameda County Transportation Commission (Alameda CTC) is responsible for selecting and programming Alameda County's share of OBAG funds provided by the Metropolitan Transportation Commission.

The Alameda CTC supports the Association of Bay Area Government's (ABAG) Sustainable Communities Strategy by linking transportation dollars to land-use decisions and targeting transportation investments to support priority development areas, such as the Irvington Community Plan Area.

Transportation Fund for Clean Air

The Transportation Fund for Clean Air (TFCA) is a local fund source of the Bay Area Air Quality Management District. As the TFCA County Program Manager for Alameda County, Alameda CTC is responsible for programming 40 percent of the $4 vehicle registration fee collected in Alameda County for this program. Approximately $1.8 million in TFCA funding is programmed annually.

To be eligible for TFCA funding, projects are to result in the reduction of motor vehicle emissions. In general, eligible projects are those that conform to the provisions of the Alameda CTC Comprehensive Investment Plan (and the TFCA Program Guidelines contained within) and the Air District TFCA County Program Manager Fund policies.

Highway Safety Improvement Program

The Highway Safety Improvement Program is a federal grant program aimed at reducing traffic fatalities and serious injuries on all public roads. These funds can be used on any public road or pathway, including those owned by local governments. The City of Fremont envisions applying for Highway Safety Improvement Program funds to help improve the Five Corners intersection within the Plan Area.

Implementation Considerations

The unpredictability of grant funding and the timing of grant application cycles may affect project scheduling and delivery. However, because most state and regional funding is administered through the Alameda CTC, there are opportunities to mix and match funding sources to better align with City priorities. In all cases, grant funding requires administration and monitoring by City staff.

POTENTIAL FUNDING SOURCES FOR OPERATIONS AND MAINTENANCE

Following the one-time capital investment, public improvements, such as those described in Chapter 3, typically require annual funding for ongoing operations and maintenance. This section describes potential funding sources for operations and maintenance.

PARKING FEES

Parking fees represent a type of user fee, the revenue from which can be reinvested in the operations and maintenance of Plan Area improvements. Because local residents within walking or biking distance of the station may elect not to drive to the station, parking fees could be a way to spread the cost burden by having out-of-area BART users contribute financially to the Plan Area, thereby offsetting operations and maintenance costs.

Station Parking

BART charges a modest fee for parking at its stations (up to $3 per day, except at West Oakland where the daily fee is $10.50), and the parking is often in very high demand. The revenue goes to BART's General Fund to support systemwide operations and improvements. A Plan Area surcharge could be added to BART's base fee, and the incremental revenue could be collected and reinvested in the Plan Area.

On-Street Parking

So as not to burden local residents and businesses, on-street parking fees may need to be considered in the context of an overall parking management program, including the Residential Parking Permit (RPP) program identified in Chapter 3 of this Station Area Plan and short-term metered parking in front of businesses.

While this potential source of funding remains "on the table," preliminary research suggests significant unintended consequences. For example, charging for on-street parking requires infrastructure that adds to the capital costs and requires maintenance and, more importantly, enforcement, which adds to costs. In addition, under certain circumstances, the introduction of a parking fee should be coupled with on-street restrictions (time limits or outright restrictions) to reduce undesired spillover into surrounding neighborhoods.

Beyond revenue from an RPP program or on-street meters, additional revenue is generated through parking tickets if someone parks over the allowed time limit.

DEVELOPMENT AGREEMENTS AND PARTNERSHIPS

Development agreements can be used to extract funding for capital improvements or (less commonly) ongoing operations and maintenance. As future development agreements are negotiated, the City can target operations and maintenance within the Plan Area and weigh the relative need for capital versus annual funding.

GENERAL FUND

The General Fund, which is a governmental fund, is the City's main fund that accounts for the majority of City operations, including but not limited to police and fire services, recreation, planning, building inspection, library, engineering, parks maintenance, street maintenance, and

general administration. Use of the General Fund to support infrastructure investments, including repair and replacement of existing infrastructure as well infrastructure that serves new development, requires little additional administrative effort and is typically secure given the broad range of revenue sources pledged to the financing. However, the use of existing General Fund revenue is limited by current demands to support municipal operations.

Additional Special Tax Measures

Increases in local taxes can also be considered as a mechanism to bolster the General Fund. Subject to a vote, cities can use a variety of existing or new funding sources to fund infrastructure directly. For example, local sales and transient occupancy taxes can be created or increased for this purpose. By enhancing General Fund revenues, the City gains the ability to divert some funds to infrastructure projects. A commitment to fund specific types of projects can be made in the ordinances that create new taxes or can be made as a matter of city policy. City funding can be used on infrastructure with a "pay-as-you-go" approach, as a source of reimbursement, or to support a municipal bond issue (e.g., to fill an initial funding gap associated with development impact fee programs or land secured financing programs).

The incidence of burden falls to those paying the taxes or rates. For example, sales taxes are paid by residents, businesses, employees, and visitors, while transient occupancy taxes are paid by visitors. The rationale for this payer burden is that these residents, businesses, employees, and visitors will benefit from the investments made in infrastructure and development.

Implementation Considerations

Creation of new general or special taxes and any related issuance of bonds supported by such revenues are limited by California constitutional requirements and statutes that require voter approval of 50 percent for general taxes and two-thirds approval for special taxes (i.e., those earmarked for particular uses).

CORPORATE/ORGANIZATION PARTNERSHIPS AND VOLUNTEERS

City staff and other volunteer-based organizations should explore philanthropic and nonprofit opportunities for in-kind services and/or donations. The potential use of volunteers could help offset certain maintenance and/or operating expenses. Potential cost savings from these efforts are not certain enough to estimate but should be considered.

APPENDIX A PLANNING AND POLICY CONTEXT

This Planning and Policy Context appendix describes the geographic context of the Plan Area location, provides information on the current land use policies that govern Fremont and the Plan Area, and discusses the existing land uses (including historic resources) in the Plan Area.

A. STATION AREA PLAN CONTEXT

LOCATION

The Irvington BART Station will be located approximately halfway between the existing Fremont BART Station and Warm Springs/South Fremont BART Station in the Irvington District Priority Development Area (PDA), as shown in Figure A-1 and explained further in Section A-3, Local Geography, below.

REGIONAL GEOGRAPHY

Fremont is located in the southeastern region of the San Francisco Bay Area, approximately 27 miles southeast of downtown Oakland and 17 miles northwest of downtown San Jose. Fremont is bordered to the north by Union City, to the south by Milpitas, and to the west by Newark and San Francisco Bay. The cities of Fremont, Newark, and Union City comprise the "Tri-City" area. The Fremont hills to the east and baylands to the west provide Fremont with its defining open space frame.

LOCAL GEOGRAPHY

The area studied in the Station Area Plan is generally within a ½-mile radius (a 10- to 15-minute walk) of the Irvington BART Station. This area, referred to as the Plan Area, is generally divided from north to south by Osgood and Driscoll Roads and the Union Pacific Railroad (UPRR) and BART tracks. The Plan Area includes portions of two of Fremont's original five towns—Irvington and Mission San Jose—which are governed by their respective Community Plans. Figure A-2 shows how the Plan Area includes the Irvington and Mission San Jose Community Plan Areas.

Because the Plan Area includes distinct pockets of higher and lower intensities of existing land uses, it has been further divided into five geographic subareas: Washington Subarea, Osgood Subarea, Roberts Subarea, Town Center Subarea, and High Subarea. The growth and development anticipated for the Plan Area will primarily occur in the Town Center and Osgood Subareas.

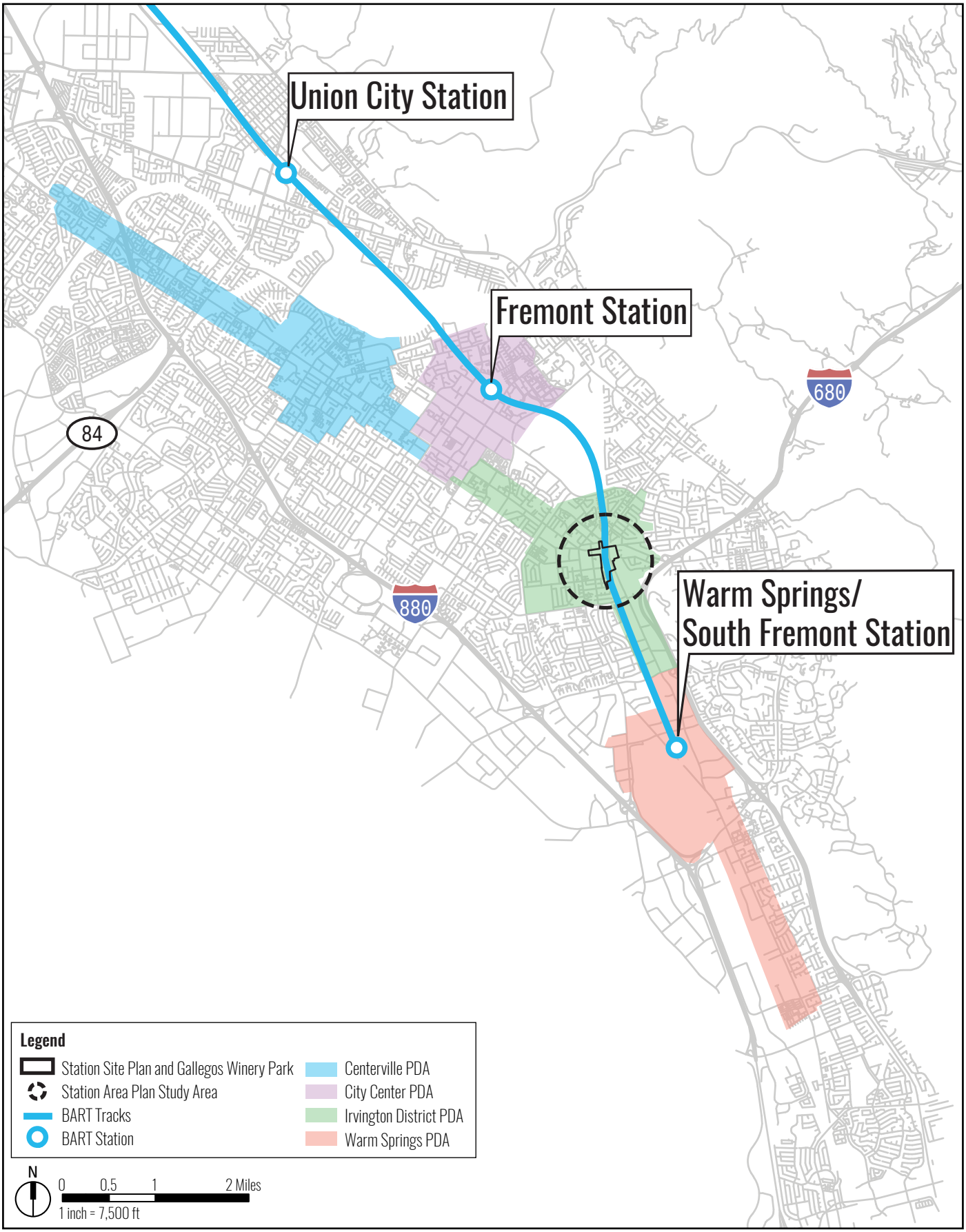


Figure A-1 - Regional Context

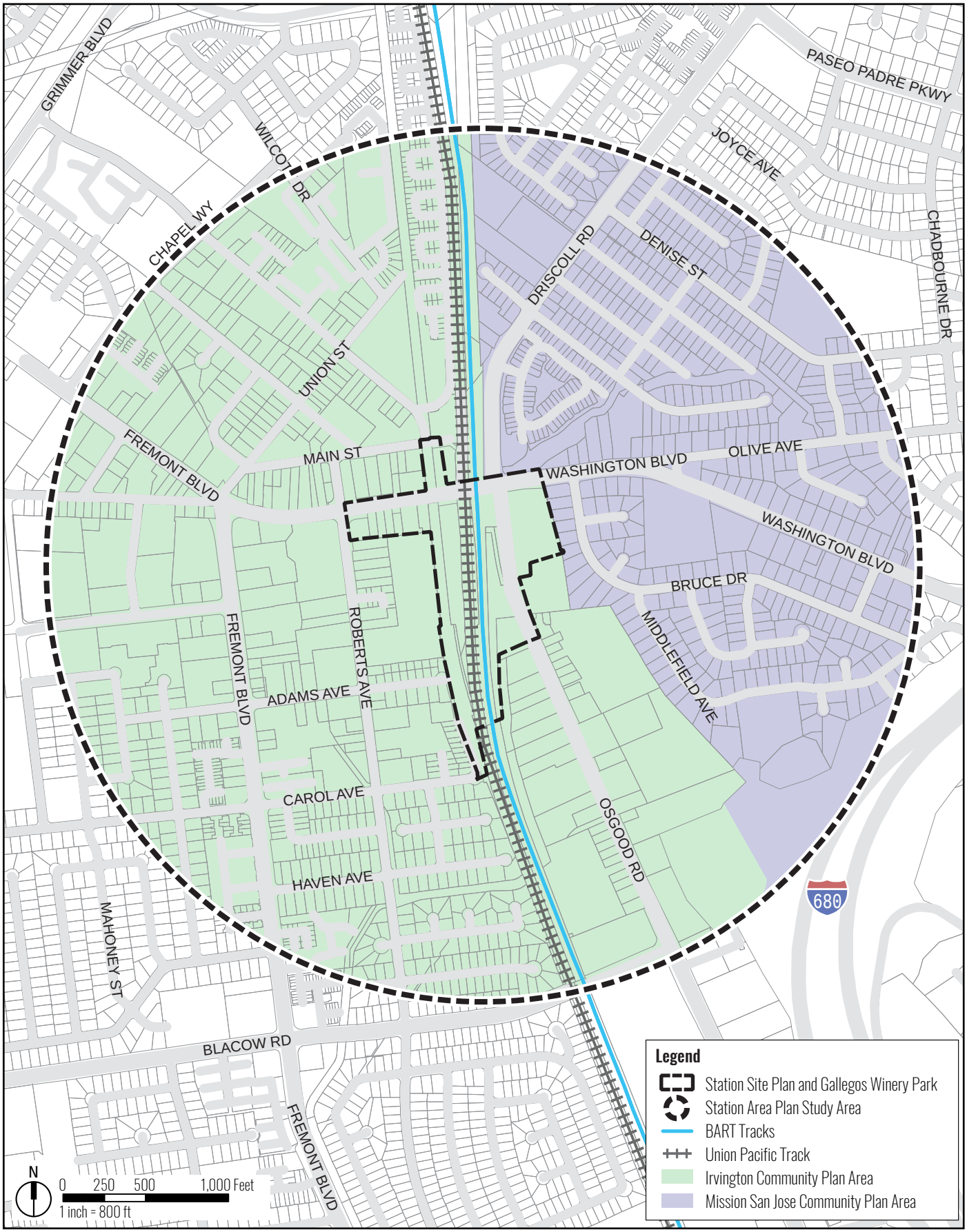
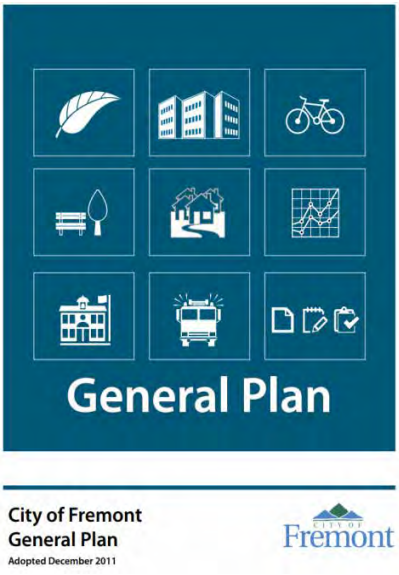


Figure A-2 - Community Plan Areas

OPPORTUNITIES AND CONSTRAINTS



Geological elements and the built environment have created both opportunities and constraints in the Plan Area. The access and mobility improvements of Chapter 3 and design rules and guidelines of Chapter 4 take these opportunities and constraints into consideration to facilitate development in the Plan Area that is safe, context-sensitive, and pedestrian-friendly.

As shown in Figure A-3, the Hayward Fault Line runs through the Plan Area east of Osgood Road. The Hayward Fault Zone is subject to the Alquist-Priolo Earthquake Fault Act, a state law that prohibits construction of most human-occupied structures across the traces of active faults. The location of the fault line limits the potential for transit-oriented development (TOD) in the Plan Area. Similarly, steep slopes and parcels in the 100-year floodplain in the Plan Area present obstacles to future development that would complement the station.

In December 2011, and the City of Fremont City Council adopted a comprehensive update to the General Plan, which included changes to the land use designations in the Plan Area to encourage TOD and other station-serving development that will add BART riders, local business patrons, and foot traffic in the Plan Area, thus, increasing vitality, economic opportunity, and a sense of place. Likewise, the existing active retail and historic, high-quality architecture in the Plan Area guide future, context-sensitive development that will serve and enhance the local community. Finally, the Plan Area's vacant and underutilized parcels provide opportunities for infill development that will add services and homes in this transit-rich, urbanized area.

B. EXISTING PLANNING DOCUMENTS

The Plan Area is under the scope of several City of Fremont and BART planning documents that govern land use and future development. The two principal planning documents are the City of Fremont General Plan (2011) and the Fremont Municipal Code (2017). These documents and other previous planning work are summarized in this section.

Local and regional plans have designated the Plan Area as a suitable place for growth and development. The Plan Area falls within the Irvington District PDA as a Transit Town Center. PDAs are areas identified by local and regional governments for investment, new homes, and job growth. Transit Town Centers are a specific type of PDA designed to be local-serving centers of community and economic activity with a focus on commuter service to jobs in the greater region. The intensity of planned development for the Plan Area is in the mid-range for Transit Town Center PDAs, with a greater focus on accommodating homes than jobs.

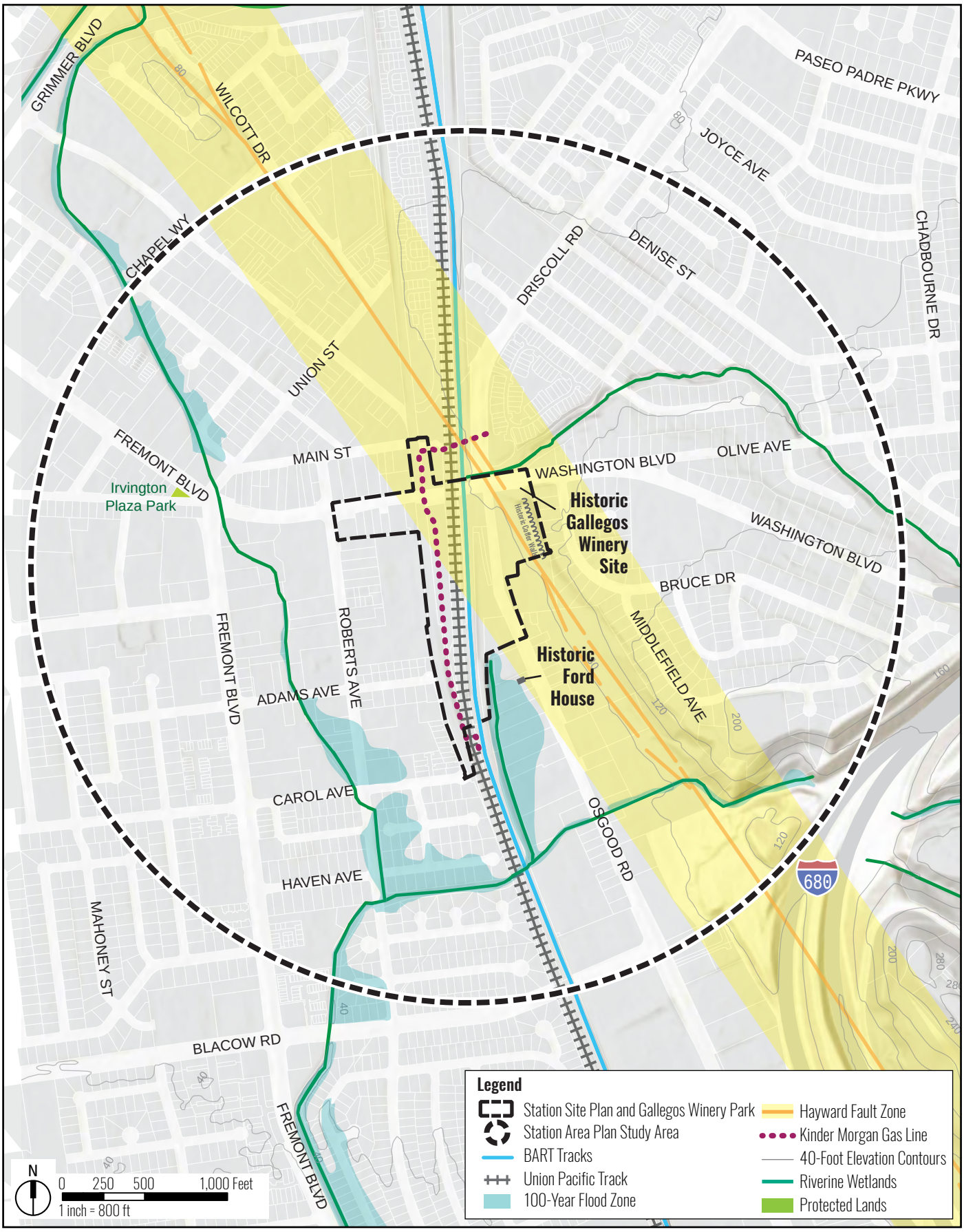


Figure A-3 - Environmental Constraints

CITY OF FREMONT GENERAL PLAN

The General Plan (2011) is a blueprint for Fremont's future growth through 2035. The General Plan designations, which establish the permitted land uses in the Plan Area, are shown in Figure A-4. The Plan Area is designated as a TOD Overlay in the General Plan because it is within a ½-mile radius of the Irvington BART Station. This designation only applies, however, to property with an underlying land use designation in one of the seven commercial and industrial classifications or the Urban Residential designation.

Several elements of the General Plan specifically mention Irvington and/or the Irvington BART Station:

- **Community Plans Element**. The Irvington Community Plan, found in this element, fits under the broad "umbrella" of the General Plan, but provides a more fine-grained vision for land use and development that is unique to the Irvington Community Plan Area. The Irvington Community Plan calls for well-designed bike and pedestrian connections to the Irvington BART Station, vibrant shopping and dining amenities, and TOD.

- **Community Character Element and Place Types Manual.** This element of the General Plan focuses on the ways in which Fremont's buildings, streets, and open spaces can work together to define the City's sense of place. It includes the Place Types Manual, which provides urban design principles for future development by "place type." The corridor and center place types included in the Plan Area are shown in Table A-1. Irvington is identified as a Town Center in the Place Types Manual. Town Centers are pedestrian-oriented, neighborhood-serving commercial centers associated with the early development of Fremont's five original towns. The Station Area Plan has been prepared to be consistent with the Community Character Element and Place Types Manual, and provides more specific guidance to further the urban design principles contained within the Community Character Element and Place Types Manual.

- **Mobility Element.** The Irvington BART Station is specifically mentioned as an Implementation Strategy under the Mobility Element's goal of "Reducing the number of VMT [vehicle miles traveled] by Fremont residents and workers by providing more non-automobile travel options and more compact land use patterns." This element specifies that the station should be designed to facilitate intermodal transfer from BART to buses and have convenient access for pedestrians and bicyclists.

- **Land Use Element.** The Land Use Element establishes established land use designations around the Irvington BART Station site to facilitate Transit-Oriented Development (TOD), which is development intended to increase transit use, vitality, and activity through land use, building form, and design.

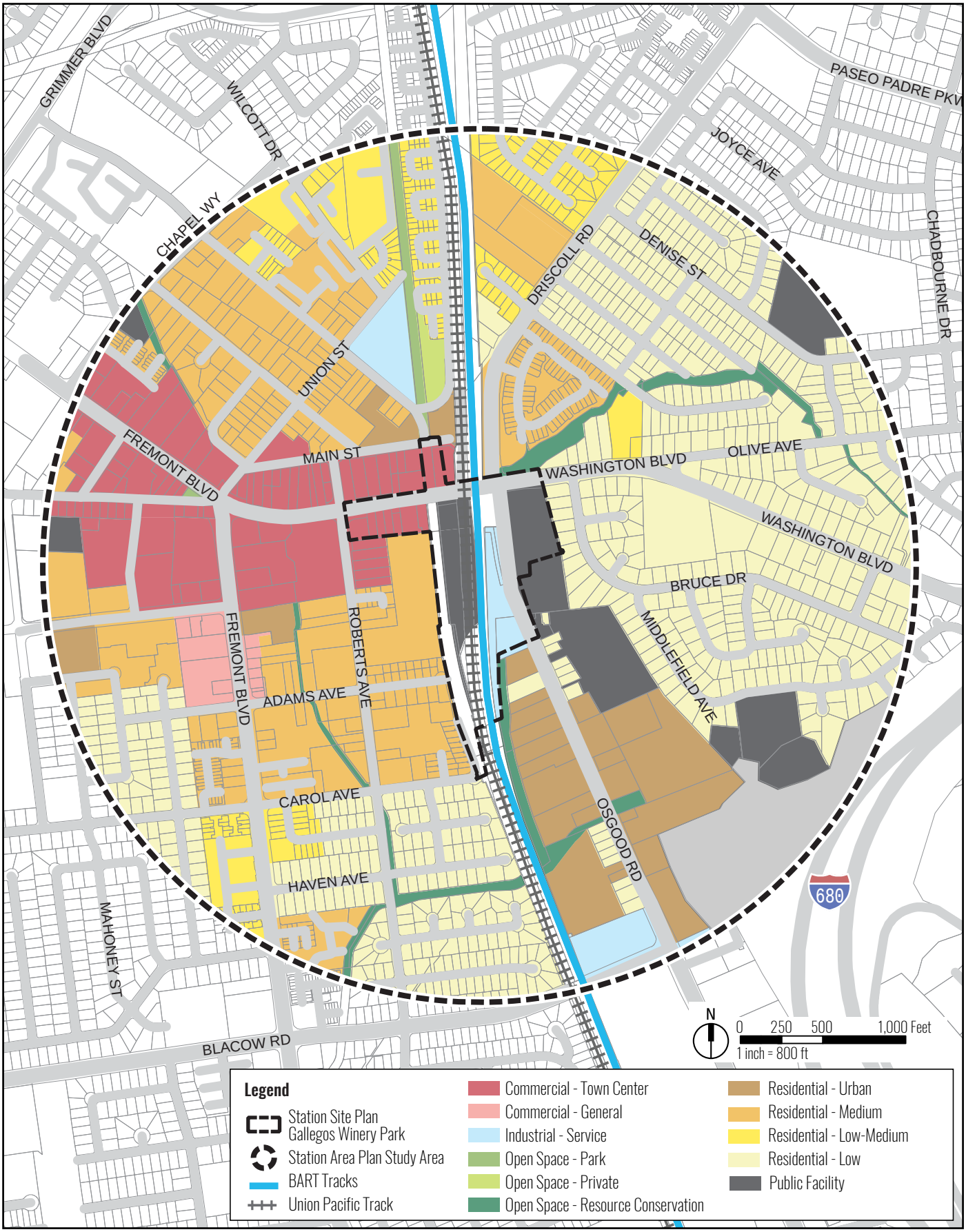


Figure A-4 - General Plan Land Use Designations

TABLE A-1 COMMUNITY CHARACTER PLACE TYPES

Place Type	Prescribed Development Character	Plan Area Application
Urban Corridors	High-density, pedestrian-oriented, mixed-use development and multimodal transportation	Fremont Boulevard, Washington Boulevard, Irvington Avenue, Osgood Road, Blacow Road
Main Street Corridors	Smaller-scale, fine-grained development pattern	Main Street, Bay Street
Landscape Corridors	Varied development pattern with building setbacks and abundant trees.	Portions of Washington Boulevard, Driscoll Road, Grimmer Boulevard
Town Center	Mix of retail, service, office, civic, and residential in mixed-use, pedestrian-oriented setting	All of the Town Center Subarea and part of the Roberts Subarea
Neighborhood Center	Neighborhood-serving retail and service uses. Potential for residential development if mixed-use	Along Fremont Boulevard in the southernmost portion of the Roberts Subarea

Source: General Plan, Community Character Element, 2011.

FREMONT MUNICIPAL CODE

Consistent with the General Plan, the Fremont Municipal Code establishes permitted land uses and development standards by zoning district. Future development in Irvington must conform to the regulations set forth in the Zoning Ordinance. As shown in Figure A-5, the TOD Overlay and Irvington Overlay Districts apply to certain parcels in the Plan Area, as outlined in Chapters 18.140 and 18.152 of the Fremont Municipal Code. The TOD Overlay District allows reduced parking, establishes parking maximums, restricts the establishment of land uses that are incompatible with TOD, and establishes other development standards that incentivize alternatives to vehicular travel and ensure compatibility with the future station. Figure A–5 illustrates the Plan Area's zoning districts and Table A-2 briefly describes them. A summary of development standards for the Multifamily R-3 and Commercial Town Center zoning districts are provided in Tables A-3 and A-4.

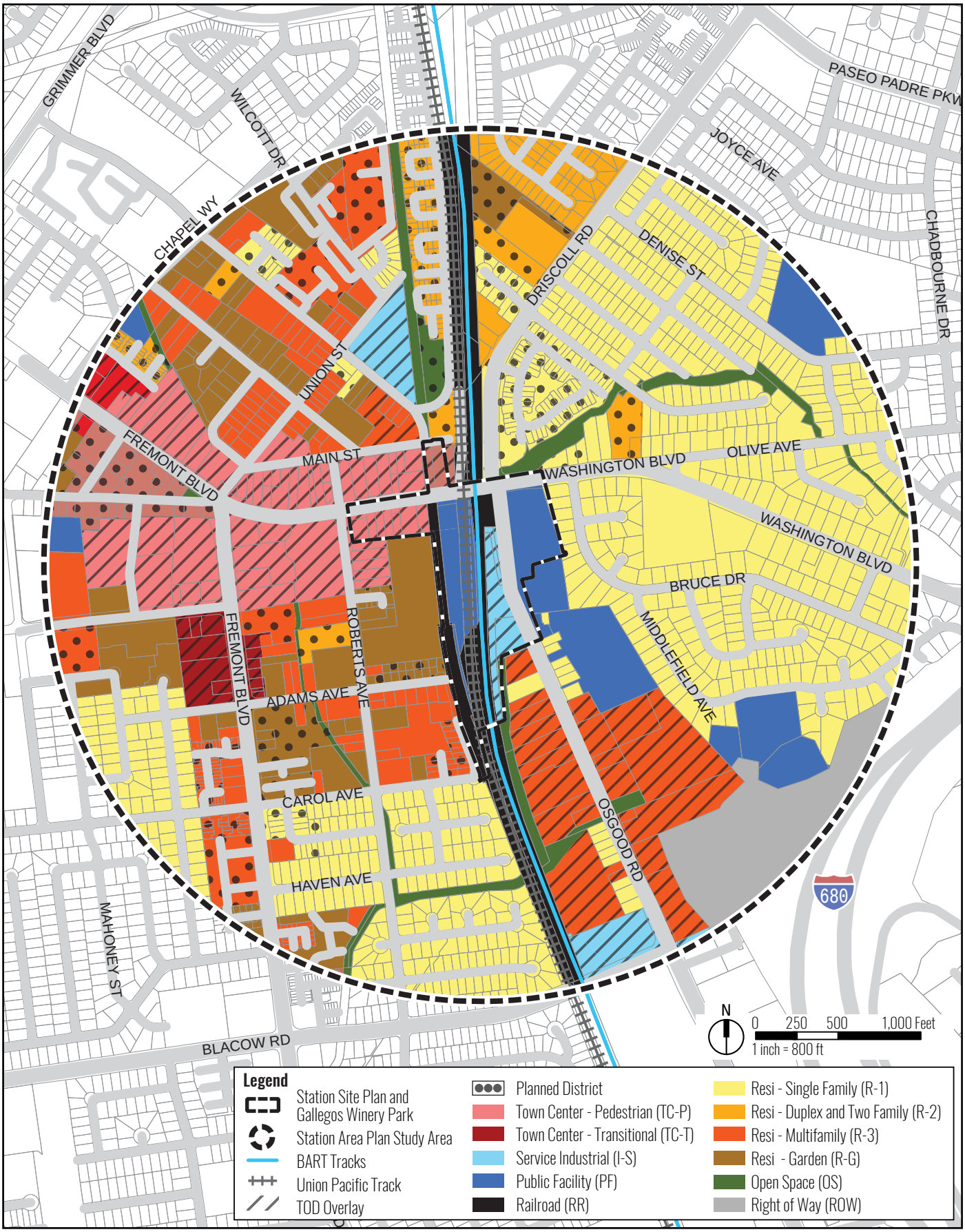


Figure A-5 - Zoning

TABLE A-2 ZONING DISTRICTS OF THE PLAN AREA

Zoning District	Purpose
Town Center – Pedestrian	Provide areas for mixed retail, service, office, and residential uses in a pedestrian-oriented setting. TC-P districts were developed before Fremont's incorporation and are characterized by small parcels, a mix of older and newer structures, and a mixed-use context.
Town Center – Transitional	Provide areas for mixed retail, service, office, and residential uses in a pedestrian-oriented setting. TC-T districts are still transitioning from a suburban character to a walkable, mixed-use character.
R-1 (Single-Family Residential)	Promote and maintain predominantly single-family home neighborhoods together with compatible accessory and supporting uses.
R-2 (Duplex and Two-family Residential)	Promote and maintain duplex/two-family home neighborhoods in order to increase housing opportunities for both ownership and rental homes.
R-3 (Multifamily Residential) District	Promote and encourage well planned, suitable, and appropriate multiple dwelling developments within low-medium and medium density land use designations compatible with the intensity of existing and future land use. The district also seeks to promote a full range of choices in housing types and sizes and to improve access to affordable housing.
I-S Service Industrial	Provide locations for industrial uses which are generally oriented toward serving local businesses and residents and can operate in proximity to commercial and residential uses with a minimum of adverse effects.
Public Facility	Foster the orderly development of large-scale educational and public service uses in the community and special approved uses on publicly owned land.
Open Space	Permit limited but reasonable use of open lands while protecting the public health, safety and welfare from the dangers of seismic hazards and unstable soils.
Planned (P) District (e.g. Bay Street Planned District)	Encourage and provide a means for effectuating desirable development, redevelopment, rehabilitation and conservation in the city, which features variations in siting, mix of land uses and/or varied dwelling types. The amenities and compatibility of a P district are to be ensured through adoption of a precise site plan, showing proper orientation, desirable design character and compatible land uses. Bay Street is a Planned District.
TOD Overlay (Applicable to commercial, industrial, or urban residential parcels General Plan designations)	Create a compact and high intensity mix of residential, office, retail, service and public uses to promote areas of the city that have a high potential for pedestrian activity, generally within one-half mile of existing and planned transit stations.

The R-G (Garden Residential) District has been excluded from this table because R-G is only being used to recognize existing development; no additional parcels may be zoned to the R-G District.

Source: City of Fremont and Urban Planning Partners, 2019.

TABLE A-3 R-3-70 DEVELOPMENT STANDARD SUMMARY

Zoning	Urban Residential R-3-70
Lot Size	Minimum 6,000 square feet
Lot Coverage	Maximum 75%
Density	Urban Residential Designation: 50.1 du/acre to 70 du/acre Densities above 70 du/acre may be permitted
Street Frontage	Minimum 35 feet
Lot Width	Minimum 80 feet
Lot Depth	Minimum 100 feet
Front yard and street side yard depth	Minimum 15 feet
Distance between parking or circulation areas and a public street right-of-way or private street easement	Minimum 15 feet
Side or Rear Setbacks	Minimum front and side yard 15 feet, interior side yard and rear yard 10 feet, minimum setback from principal structures of five or more stories 60 feet (assume this one).
Width of double-loaded paseo and pedestrian path circulation areas	One- and two-story buildings: minimum 15 feet Three-story buildings: minimum 20 feet
Building Height	Maximum 65 feet
FAR	Maximum 2.5 (with TOD Overlay) (gross floor area does not include areas devoted to parking, atriums).
Upper Floor Height Requirement	Minimum 10 feet
Building Frontage	No regulation, except along urban corridors, main streets, and in Town Center place types. At least 50% of the building's street-facing façade must be built within the build-to layer, defined as within 5 feet of the front property line for interior lots and 5 feet of the street-facing property lines for corner lots.
Common Open Space	500 square feet for developments up to five units, plus 50 square feet for each additional unit. The minimum dimension of any common open space counting toward this requirement shall be 15 feet. (For projects with 12 or less units, see subsection (g)(1)(A)(v) of this section.)
Private Open Space	Balconies above ground-floor level: Minimum 60 square feet, the least interior dimension of which is 6 feet. Patios or Private Yards: Minimum 100 square feet, the least interior dimension of which is 10 feet, or minimum of 200 square feet, with an interior dimension between 6 and 10 feet.
Landscaping	Landscape design shall include planter space for large canopy tree species of a minimum dimension of 10 feet at the ground level with additional space for canopy maturity at upper building levels. Tree planting shall be provided at a rate of one large tree for every five units, in addition to other landscape requirements for parking areas contained in Chapter 18.183. Additional accent trees and landscape elements shall be provided for every unit and should be integrated into each individual unit design and sized appropriately to the intended space. Landscape planting requirements may vary through design review permit approval in recognition of tree preservation efforts.

TABLE A-3 R-3-70 DEVELOPMENT STANDARD SUMMARY

Parking Ratio	See Municipal Code Section 18.183.040 Parking regulations for certain town centers. TOD Overlay (18.152.070 TOD), Mixed-Use (18.183.090 Mixed Use)
	Residential: Minimum 1 per unit covered, 0.25 per unit guest spaces.
	Mixed-use commercial component: Minimum 2 per 1,000 square feet; Maximum 3 per 1,000 square feet.
	Commercial: Minimum 3 per 1,000 square feet; Maximum 4 per 1,000 square feet
	Parking cannot be less than required for Residential in a mixed-use building.

This table is a summary only and does not list all applicable zoning regulations. Please refer to the Fremont Municipal Code for complete and updated information.

Source: Urban Field Studio, 2018.

TABLE A-4 COMMERCIAL TOWN CENTER IN TOD OVERLAY DEVELOPMENT STANDARD SUMMARY

Zoning	Commercial Town Center (18.183.040 Town Center) in a TOD Overlay (18.152.070 TOD), Mixed-Use (18.183.090 Mixed Use).
Lot Width	Minimum 100 feet in MX designation.
Lot Size	Minimum 20,000 square feet (see Table 18.45.020 for MX designation).
Lot Coverage	No restriction.
Density	Town Center Designation: Min. 30 du/acre and FAR 0.5-2.5. Mixed-use projects must comply with the allowed FAR range and are not subject to the density range.
Street Frontage	No lot shall have a street frontage less than 35 feet, except for lots within attached housing and detached townhome developments, subject to approval by the reviewing agency. No lot shall have a width less than 45 feet at the building setback line, except for lots within attached housing and detached townhome developments, subject to approval by the reviewing agency. Corner lots for residential use shall be platted a minimum of 10 feet wider than interior lots to permit conformance with the required street side yard requirements of the zoning ordinance. No lot shall have a depth of less than 100 feet, except for lots within attached housing and detached townhome developments, subject to approval by the reviewing agency.
Side or Rear Setbacks	None, except 10 feet when adjacent to any lot designated residential in the general plan or residentially developed.
Landscaping	(1) All yard areas shall be landscaped according to their purpose, such as ornamental landscaping, outdoor seating/dining, or storm water treatment. Landscape improvements may include trees, shrubs, flowers, groundcover, and hardscape as approved during the design review permit process. (2) Landscape design shall include planter space for large canopy tree species of a minimum dimension of 10 feet at the ground level with additional space for canopy maturity at upper building levels. (3) Bay-friendly and water-efficient landscapes meeting state rules are required. (4) Landscape requirements for parking areas are contained in Chapter 18.183. (5) Landscape planting requirements may vary through design review, permit approval in recognition of tree preservation efforts, and the overall landscape plan aesthetic.
Building Height	Maximum 65 feet
FAR	Minimum 0.5/ Maximum 2.5
Min. Ground Floor Height	16 feet
Mixed-Use Commercial Component	Commercial component shall least be 50% of the floor area on the portion of the ground floor within 50 feet of the street frontage. For structures on corner lots, this requirement may also apply as determined through a design review permit. Additionally, mixed-use developments shall maintain commercial and other active uses along all frontages designated as a main street or urban street corridor, as shown in the General Plan Community Character Element and Place Types Manual, and shall comply with the storefront review requirements in Section 18.45.035.

TABLE A-4 COMMERCIAL TOWN CENTER IN TOD OVERLAY DEVELOPMENT STANDARD SUMMARY

Depth of Commercial Space	The minimum depth of commercial space shall be 50 feet. Where other functional or structural elements of a building design (e.g., stairs, elevators, fire equipment, bearing walls) preclude a 50-foot uniform depth, the approval body may allow for an exception to lessen the depth along up to 20% of the linear frontage of total commercial space provided. Depths less than 30 feet shall be avoided or repurposed so as not to create undesirable commercial spaces. A discretionary design review permit pursuant to Section 18.45.035(d) shall be required in instances where the storefront will be less than 50 feet in depth.
Parking Ratio	See Municipal Code Section 18.183.040 Parking Regulations for certain Town centers. TOD Overlay (18.152.070 TOD), Mixed-Use (18.183.090 Mixed Use).
	Residential: Minimum 1 per unit covered, 0.25 guest.
	Mixed-Use commercial component: Minimum 2 per 1,000 sq. ft.; Maximum 3 per 1,000 sq. ft.
	Commercial: Minimum 3 per 1,000 sq. ft.; Maximum 4 per 1,000 sq. ft.
	Parking cannot be less than required for Residential in a mixed-use building.
Depth of Commercial Space	The minimum depth of commercial space shall be 50 feet. Where other functional or structural elements of a building design (e.g., stairs, elevators, fire equipment, bearing walls) preclude a 50-foot uniform depth, the approval body may allow for an exception to lessen the depth along up to 20 percent of the linear frontage of total commercial space provided. Depths less than 30 feet shall be avoided or repurposed so as not to create undesirable commercial spaces. A discretionary design review permit pursuant to Section 18.45.035(d) shall be required in instances where the storefront will be less than 50 feet in depth.

This table is a summary only and does not list all applicable zoning regulations. Please refer to the Fremont Municipal Code for complete and updated information.

Source: Urban Field Studio, 2018.

OTHER POLICY/PLANNING DOCUMENTS

Other planning documents that govern land use in the Plan Area are presented in Table A-5.

TABLE A-5 ADDITIONAL PLANNING AND POLICY BACKGROUND DOCUMENTS

Policy Document	Description	Plan Area Application
Irvington Design Guidelines (2012)	Provides mandatory and preferred standards for street design and development in Irvington. The guidelines outline the required design elements for development based on which street type the parcel faces,	The Irvington Design Guidelines will be repealed. Chapter 4 of the Station Area Plan will functionally replace the Irvington Design Guidelines.
Multifamily Residential Design Guidelines (Adopted 2013, Amended 2018)	Provides mandatory design rules and suggested guidelines to ensure that multifamily development exemplifies high-quality, context-sensitive architecture.	Multifamily development in the Plan Area is subject to these guidelines.

TABLE A-5 ADDITIONAL PLANNING AND POLICY BACKGROUND DOCUMENTS

Policy Document	Description	Plan Area Application
Citywide Design Guidelines (2017)	Provides guidance for site design, crime prevention design, landscape design, and building design for commercial and mixed-use buildings.	The Design Guidelines in Chapter 4 of this plan are consistent with and build off of the Citywide Design Guidelines.
BART TOD Policy (2016) and TOD Guidelines (2017)	Provides goals and policies to catalyze TOD on BART-owned land.	BART-owned land in the Plan Area will only be used for transit facilities, so these policy documents have only been consulted insofar as they provide guidance for station area planning.
Irvington Concept Plan (2005)	Included a 20-year vision for the heart of the Irvington District with land use, transportation, and urban design recommendations. The Irvington Concept Plan was repealed and replaced with the Irvington Community Plan with the adoption of the 2011 General Plan. The Irvington Design Guidelines (mentioned above) were originally part of the Irvington Concept Plan.	The Irvington Concept Plan was repealed and replaced with the adoption of the 2011 General Plan.
Green Infrastructure Plan (under development)	With the growing scarcity of water in the west, stormwater has become a critical environmental issue. This Station Area Plan is designed to meet ambitious new and pending sustainability goals from the state, county and city. At a minimum, development in the Plan Area will be required to provide stormwater treatment in conformance with the most current version of the San Francisco Bay Regional Water Quality Control Board's Municipal Regional Stormwater NPDES Permit (MRP) Section C.3 and other applicable regulations. In an effort to meet long-term stormwater Green Infrastructure (GI) plan goals for the City, projects that do not meet the MRP's "regulated project" definition requiring stormwater treatment shall strongly consider the installation of treatment measures or GI features in the design of the project. The City of Fremont will approve a GI Plan in compliance with Provision C.3.j of the MRP. Over the long term, the GI Plan is intended to describe how the City will shift its impervious surfaces and storm drain infrastructure from gray (traditional storm drain infrastructure where runoff flows directly into the storm drain and then to a receiving water body) to green (a more-resilient, sustainable system that slows runoff by dispersing it to vegetated areas, harvests and uses runoff, promotes infiltration and evapotranspiration, and uses bioretention and other green infrastructure practices to clean stormwater runoff). The design of GI features incorporated in any project in the Plan Area shall be in accordance with the GI guidelines, standard specifications, and typical designs included in the City of Fremont's GI Plan.	Stormwater from the public streets will be treated using City standard or green infrastructure adopted treatment measures (e.g., tree well filters) installed at the face of the curb and will be accommodated on the public frontage of developments. Alternatively designed treatment measures may be used pending approval from the City. Treatment measure size may be adjusted to accommodate tree spacing and the impervious area being treated based on providing a planter box area equivalent to at least 4 percent of the impervious runoff area. Individual parcels will be responsible for their own stormwater quality treatment. It is anticipated that standard Best Management Practices will be implemented to provide stormwater treatment. Low impact development and stormwater treatment measures are required as part of the San Francisco Bay Regional Water Quality Control Board's requirements. Low-impact development measures may include: • Reuse of water. • Bio-infiltration areas. • Bio-retention areas. • Rain gardens. • Above grade or podium-level flow-through planters. • Green roofs. • Landscaped areas and tree planting. • Other methods.

Source: Urban Planning Partners, 2018.

C. LAND USE CONTEXT

This section provides information on the current and planned land uses within the Plan Area.

EXISTING AND PLANNED LAND USE BY SUBAREA

Five subareas and the Station site, shown in Figure A-6, have been identified to differentiate established residential neighborhoods from areas where TOD is appropriate. Three of the five subareas are identified as Secondary Areas of Influence because they contain single-family neighborhoods that will experience little change. The sections below discuss the existing land uses for each subarea and the land uses allowed by the General Plan and Zoning Ordinance.

OSGOOD SUBAREA

The majority of the Osgood Subarea is currently developed with a mix of light industrial uses and some single-family homes, although the portion closest to the station has been zoned for high-density multi-family housing consistent with the General Plan. Several high-density residential projects have been approved to replace existing single-family homes and construction materials yards. The southernmost portion of the Osgood Subarea is zoned for light industrial land uses.

TOWN CENTER SUBAREA

This business district is centered around the "Five Corners," the intersection of Fremont Boulevard, Washington Boulevard, Bay Street, and Union Street that is considered the heart of Irvington. The Town Center Subarea currently includes shopping centers, banks, local businesses, and restaurants. This subarea also contains Irvington Plaza Park, the only public park in the Plan Area. The majority of the subarea is zoned Town Center-Pedestrian (TC-P), which provides areas for a mix of retail, service, office, and residential uses (as part of a mixed-use development) in a pedestrian-oriented setting.

SECONDARY AREAS OF INFLUENCE

The Station Area Plan does not focus on the Washington, High, or Roberts Subareas, which primarily consist of single-family homes and townhomes and some small-scale commercial uses. The character and development pattern of these subareas will remain the same.

HISTORIC RESOURCES

The Plan Area, and particularly the Town Center Subarea, is rich in historic resources, as seen in Figure A-7. The General Plan outlines the City's goals and policies for historic preservation, emphasizing protection, adaptive reuse, compatibility, and documentation of historic resources. These goals are further reinforced through the Irvington Community Plan, Policy 11-6.4: Historic Preservation in Irvington, which encourages "the preservation and adaptive reuse of Irvington's historic buildings. New development should respect the scale and context of historic structures."

The following section discusses existing historic resources in the Plan Area and the development review process required for proposed modifications or alterations (including demolition) of potential or identified historic resources, as outlined in the City's Historic Resources Ordinance (FMC Chapter 18.275).

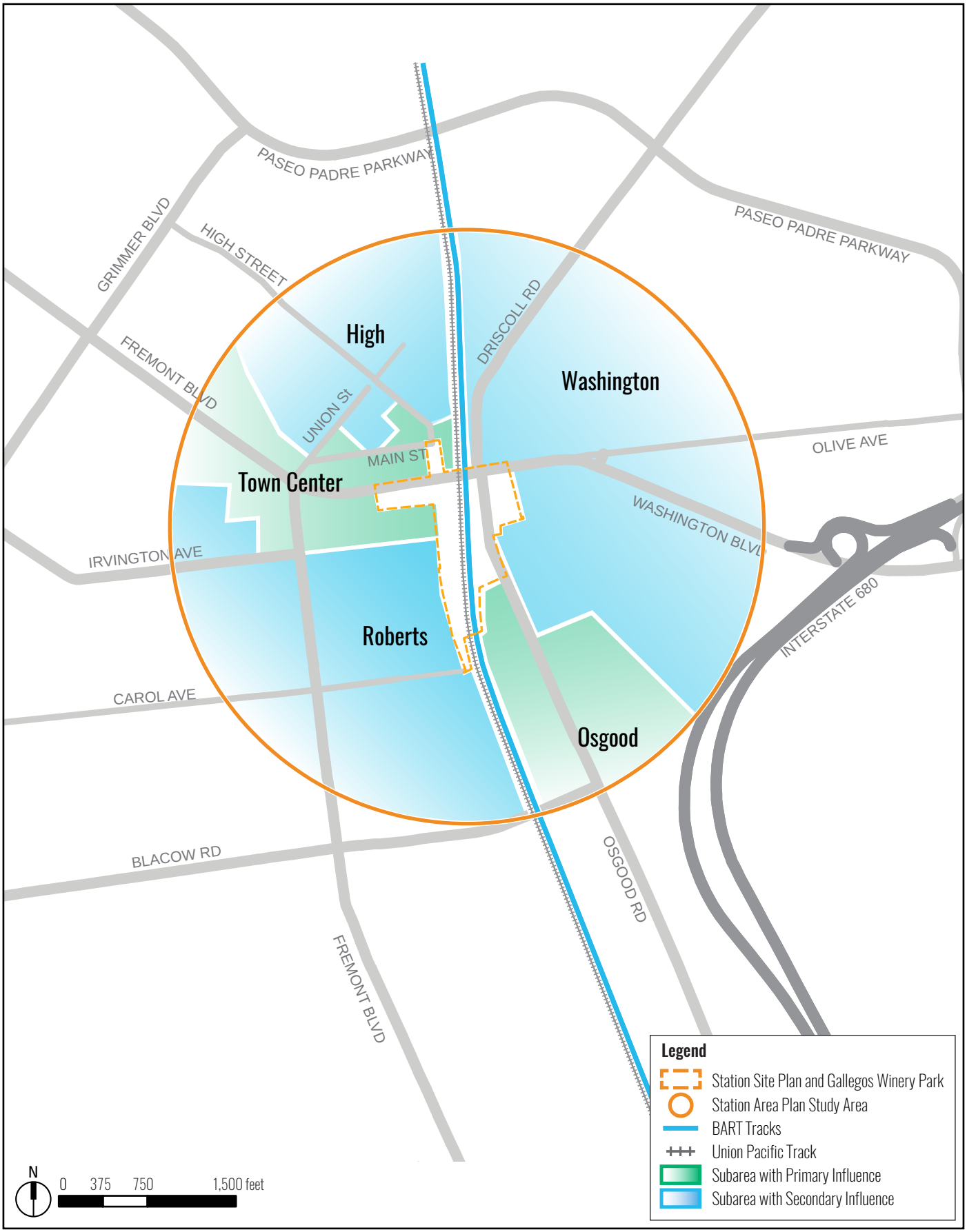


Figure A-6 - Area Plan Subareas

Figure A-7 - Key Fremont Register Resources/Potential Register Resources

Source: City of Fremont and Urban Planning Partners, 2019.

Under the Historic Resources Ordinance, any proposed modifications to historic or potentially historic resources require review (either by staff or the Historical Architectural Review Board) for compliance with the California Secretary of the Interior's Rules for the Treatment of Historic Resources and with the California Environmental Quality Act (CEQA).

EXISTING HISTORIC RESOURCES

The Fremont Register of Historic Resources is a local register of historic resources that was adopted by the City Council for the purpose of preservation planning. The following buildings/sites within the Plan Area are listed on the Fremont Register:

TABLE A-6 HISTORIC RESOURCES WITHIN THE PLAN AREA

Address/ Location	Common Name of Resource
Mission Creek	Laguna Creek; ACFC parcels
4000 Bay Street	WW Hirsch Building (Clark's Hall)
4032 Bay Street	Grimmer Residence
4071 Bay Street	Wright Home (A.O. Rix)
41004 Chapel Way	Odd Fellows Cemetery/Irvington Cemetery
40955-40961 Fremont Boulevard	Odd Fellows Hall
40979 Fremont Boulevard	O.N. Hirsch Building
40974-40986 Fremont Boulevard	Mack Grocery, Library, and Post Office site
40846 High Street	Hiram Davis home (Peixoto)
Lincoln and Union Street	Schoolhouse Site 1875
Lincoln and Union	Grammar School
3676 Union Street	Horner School Site (first Irvington school)
3400 Washington Blvd.	Gallegos Winery site and foundations
3996 Washington Blvd.	Old corners building site
Washington Corner	Early settlement site

Note: Property owners should consult with City staff for the most up-to-date list of Fremont Register Resources, as the City Council may designate additional buildings as Fremont Register Resources or remove buildings/sites from the list in the future.

Gallegos Winery

The historic Gallegos Winery was built in 1884 on a 600-acre site east of the UPRR track. At three-and-a-half stories and approximately 240 feet by 100 feet, the Gallegos Winery was considered the world's largest winery at the time of its construction. It also holds the distinction of being one of California's first wineries. The winery was condemned and demolished following the 1906 San Francisco earthquake. However, caves that were used to age the wine are still on site, as well as the original Canary Island date palm trees. Ruins from the winery wall and counterfort walls are also visible.

Photo 5. Gallegos Winery and grounds (Von Buskuh (?) pre-1906)

The impacts of the Irvington BART Station on the winery site were studied in the environmental review of the Warm Springs BART Extension. As part of that analysis, several conditions were established for the final design of the Irvington BART Station. These conditions ensure that the Gallegos Winery ruins and historic palm trees would be preserved, an appropriate barrier would protect the structural remains, an interpretive plaque would explain the history of the site, and any landscaping near the ruins would be compatible with the existing visual resources. Consistent with these requirements, the Gallegos Winery Site will be preserved, and the area surrounding the historic resource will be improved and opened to the public as a park. Site enhancements include interpretive signage, an observation area, uplighting to historic ruins and low-level pedestrian lighting along paths, landscaping consistent with the site's history, and a potential future connection to the Sabercat Interpretive Center.

As shown in Figure A-8, benches, picnicking, and other passive activities are envisioned near the historic palm trees. Curving pathways lined with interpretive panels and paving plaques will allow visitors to enter the site from Washington Boulevard, Osgood Road, and south of the winery and learn about the site's history. The signage and panels will describe the winery ruins, graded slope, palm trees, and Hayward Fault (which runs through the site).

To protect visitors from the fault line and to observe the Alquist-Priolo Earthquake Fault Zoning Act, a secure barrier will be erected to keep people away from the winery walls. An observation area near the winery wall will allow visitors to observe the architecture of the ruins from a safe vantage point. Overlooks are also proposed for the corner of Washington and Osgood Road and on Osgood Road near the new crossing to the Irvington BART Station.

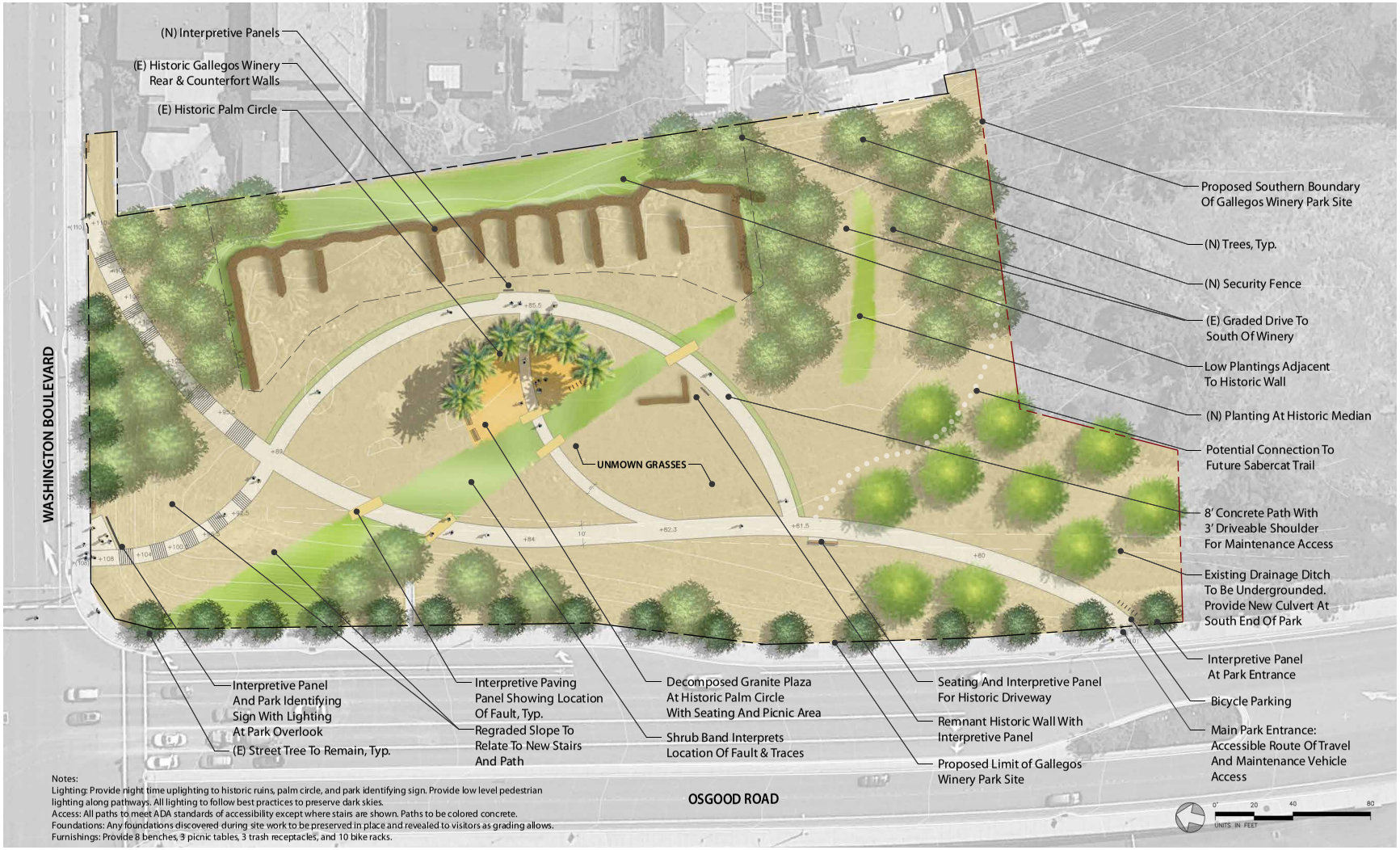
POTENTIAL HISTORIC RESOURCES

Potential historic resources are those not listed on any official register—e.g., the National Register of Historic Places (federal), the California Register of Historical Resources (state), or the Fremont Register of Historic Resources (local)—but that have been identified as "potentially eligible" for such listing through a historic evaluation or on a California Department of Parks and Recreation inventory form. Such potential resources are protected under the City's Historic Resources Ordinance, and alterations are evaluated in the same manner as register resources.

The City maintains a database of properties/buildings that have been identified as potential historic resources. Property owners, applicants, and developers should consult with City staff in advance to determine whether a property is potentially eligible for a historic register and how to comply with the Historic Resources Ordinance.

HISTORICAL SCREENING EVALUATION (FOR STRUCTURES OVER 50 YEARS OLD)

Some structures/buildings within the Plan Area may not yet have been identified or analyzed for historic significance. In an effort to identify such items, all development applications within the Plan Area that involve structures or buildings over 50 years old must also include a historic screening application (FMC Section 18.15.160(b)). The City reviews these applications to determine whether additional research is needed to establish historic significance.



PGAdesign
LANDSCAPE ARCHITECTS

IRVINGTON STATION / GALLEGOS WINERY SCHEMATIC SITE PLAN
6/3/2019

Figure A-8 Historic Gallegos Winery Schematic Site Plan

REVIEW PROCESS FOR ALTERATIONS, RELOCATION, AND DEMOLITION OF POTENTIAL HISTORIC RESOURCES

Under the requirements of the City's Historic Resources Ordinance, any alteration, relocation, or demolition of a historic or potentially historic resource within the Plan Area requires historical architectural review. Table A-7 provides a summary for the level of review (depending on the proposed action) and findings for approval. This information is provided so potential applicants can anticipate the review process; however, applicants should still consult with City staff regarding the appropriate/ applicable process for their project as well as specific submittal requirements.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Projects that propose minor alterations for maintenance, preservation, or restoration and that demonstrate compliance with the Secretary of Interior Rules for Treatment of Historic Buildings could be considered exempt from CEQA, contingent on the evaluation of potential impacts in other issue areas. Physical demolition or relocation of a historic resource are considered substantial adverse changes under CEQA and would require preparation of an Environmental Impact Report.

ELEMENTS OF REVIEW

Proposed alterations to historic or potentially historic resources shall be reviewed for compliance with applicable rules and guidelines as well as for consistency with the Secretary of the Interior's Rules. Elements to be considered in review include architectural design, colors/textures, materials, height, scale, landscape, and compatibility with surroundings.

Summarized below are some of the key provisions of the Secretary's Rules that property owners, applicants, and/or developers should be aware of as they design for new additions or alterations to historic resources:

- The size, scale, massing, and proportions of a new addition should be compatible with the historic building to ensure that the historic form is not expanded or changed to an unacceptable degree.
- The new addition should be located as inconspicuously as possible, to minimize change to the form and character of the building and to minimize loss of exterior building materials and exterior features.
- Whenever possible, an addition to a historic building should be set back from the wall plane of the building to preserve the building's proportions and profile to the maximum extent possible.
- Materials, color, and detailing for a new addition should be compatible with the materials of the existing building, but should not attempt to replicate the materials. A visual distinction between the historic building and new addition should be made overall design harmony is maintained for the project.
- Additional stories should be set back from the roof edge to ensure that the proportions and profile of the historic building are not radically changed.

COMPLIANCE WITH SECRETARY OF THE INTERIOR'S RULES

A compliance evaluation prepared by a qualified architectural historian is required as part of the review process for alterations to historic resources. For additions to buildings designated as Register or Potential Register Resources, the Secretary's Rules state:

"...a modern addition should be readily distinguishable from the older work; however, the new work should be harmonious with the old in scale, proportion, materials, and color. Such additions should be as inconspicuous as possible from the public view."

TABLE A-7: HISTORICAL REVIEW PROCESS (FMC SECTIONS 18.175.240–300)

LEVEL OF REVIEW	STAFF	HARB	CITY COUNCIL	FINDINGS FOR APPROVAL
ALTERATIONS				
In-kind replacement of historically appropriate architectural features that are deteriorated or damaged beyond repair/ preservation.	X			Consistency with Secretary of the Interior's Rules.
Replacement/repair of roof covering materials, fences, walls, paving for driveways, walkways, or patios.	X			Consistency with Secretary of the Interior's Rules.
Landscaping (where no other development is proposed and landscape features are not historic).	X			Consistency with Secretary of the Interior's Rules.
Signs in areas with adopted sign guidelines.	X			Consistency with applicable design guidelines and sign ordinance.
All other alterations that do not fit within categories listed above.		X	X	Consistency with Secretary of the Interior's Rules and other applicable rules/guidelines, compatibility with character-defining features, period of significance, and adjacent resources.
RELOCATION				
Potential Register Resource		X		No substantial damage or loss of integrity to resource.
Register Resource		X	X	
DEMOLITION				
Potential Register Resource		X		Retention of the resource would cause immediate and substantial hardship to owners because rehabilitation/restoration would:
Register Resource		X	X	a) Be technically infeasible; or b) Be disproportionately great relative to historic significance and functional value; or c) Leave property with no reasonable economic value; or d) Cause a hazard to other buildings.

APPENDIX B
COMMUNITY FEEDBACK

How the Station Area Plan Addresses Community Feedback

Community Feedback	Action	Where to Find in this Area Plan
Keep the station compact. The majority of community members favored a station site design that minimized the station footprint. A smaller land area was preferred because it would bring fewer vehicles and other disruptions to the Plan Area and maximized the number of people who would walk to the station. Some were also excited about the increased TOD opportunities that a smaller station footprint provided.	The Station Site Plan governs the footprint of the station, but the community reasons for wanting a compact station (less traffic and more pedestrians) are addressed through traffic calming interventions and pedestrian improvements.	Chapter 3, Section 3.2: Pedestrian Access Improvements
Address parking overflow from the station. Nearby residents worried that once parking lots filled up, their neighborhoods would become the replacement parking. A residential parking permit program was generally supported by community members at Community Meeting #2, although there were questions about enforcement and how to accommodate visitors.	A residential parking permit (RPP) program is recommended.	Chapter 3, Section 3.2: Automobile Circulation Improvements
Prioritize pedestrian and bike access. Neighborhood bicycle and pedestrian improvements were a project highlight for many. Residents stressed that access to the station concourse from the street should be quick and direct for pedestrian and cyclists. Survey respondents chose maximizing the number of access points for pedestrians and cyclists as the most important design element for the station and identified bike lanes and sidewalk improvements as the most influential infrastructure enhancements to get them to bike or walk to the station.	BART's Station Access Policy, which prioritizes active access, was used to develop the Station Site Plan and this Station Area Plan recommends a number of pedestrian and bicycle improvements in the Plan Area.	Chapter 3, Section 3.2: Pedestrian Access Improvement; and Bicycle Access Improvements

How the Station Area Plan Addresses Community Feedback

Community Feedback	Action	Where to Find in this Area Plan
Keep Irvington safe. Community members worried that crime could increase with the BART station. Residents were particularly concerned with how BART riders without any connection to Fremont might treat the Plan Area.	The Station Site Plan has required crime prevention measures through Environmental Design standards. This Station Area Plan includes crime preventative requirements for future development and proposes access improvements that enhance pedestrian and bicyclist safety.	Chapter 3, Section 3.2: Pedestrian Access Improvements; Bicycle Access Improvements; and Automobile Circulation Improvements; Chapter 4, Section 4.3: Design Rules and Guidelines
Create a strong connection between the Irvington Business District and the BART Station. The community recognized that it is important to make the area more vibrant so that the station can be a catalyst for greater community development. With the increased patronage that BART could bring, placemaking opportunities within the community are desired to establish a memorable identity for the area. Multicultural wayfinding signs and public plazas were cited as potential opportunities for placemaking.	Standards for future development ensure that streets in the Irvington Business District are active, pedestrian-oriented, and well-designed.	Chapter 4, Section 4.3: Design Rules and Guidelines
Plan for TOD. Future frequent Irvington BART riders (those who will take Irvington BART at least twice per week) cited TOD opportunities in the Plan Area as one of the top three most important elements of the station design. This was not a universal sentiment, however, as many residents opposed high-density housing in the Plan Area.	The existing TOD Overlay District anticipates and guides TOD in the Plan Area. The Area Plan's standards for future development and parking requirements help future development leverage its proximity to the station.	Chapter 4, Section 4.3: Design Rules and Guidelines.
Protect the historic Gallegos Winery site. The winery site is an important memorial to the role of the wine industry in Fremont's past. Community members expressed that the winery site should be protected and enhanced so that it can be used as a community asset.	This Station Area Plan suggests preserving and reusing the Gallegos Winery Site as a park.	Appendix A: Planning and Policy Context, Section C: Land Use Context

How the Station Area Plan Addresses Community Feedback

Community Feedback	Action	Where to Find in this Area Plan
Reduce traffic and noise impacts. Residents were concerned that cars trying to get to the s9107tation would clog streets and cut-through traffic will speed down the surrounding neighborhoods. Noise from the train was also cited as a concern.	The Station Site Plan considers noise mitigation techniques, but this Station Area Plan includes traffic analysis and recommends intersection improvements to improve automobile operations.	Chapter 3, Section 3.2: Automobile Circulation Improvements Noise reduction measures to be addressed during the design phase of the Station Site Plan
Enhance transit options. Community members expressed their preference for transit access to the station to be convenient and safe. Residents suggested working in partnership with AC Transit during the planning phase to encourage better routes and promote ridership within the Plan Area.	AC Transit was consulted during the planning phase and their projected changes to service were considered. The Station Area Plan provides recommendations to improve bus stations in Irvington.	Chapter 3, Section 3.2: Transit Access Improvements
Confirm demand for a third BART Station. The community sometimes doubted the need for another BART station in Fremont. Community members were aware that planning for the station had started a long time ago and wanted confirmation that the station was still necessary and had sufficient ridership numbers to warrant it.	This Station Area Plan is informed by technical analyses, including ridership projections that indicate the necessity for a third BART station in Fremont. The planning and policy support for the station is also described.	Appendix A: Planning and Policy Context, Section B: Existing Planning Documents

Source: Urban Planning Partners, 2019.

APPENDIX C
ACCESS AND MOBILITY IMPROVEMENT OPPORTUNITIES

The improvements in this appendix are differentiated between, 1) those that are identified in existing City policy, and 2) additional improvements proposed as part of this Station Area Plan that could be implemented by the City over time as resources permit. Improvement opportunities unique to this Station Area Plan are indicated in italics.

ACCESS AND MOBILITY IMPROVEMENT OPPORTUNITIES

Location	Improvement Descriptions	Notes	Primary Travel Mode Improved	Status
Between the station and the Middlefield Reservoir	▪ *Provide a path between the station and the Middlefield Reservoir, with a future connection to the Sabercat Creek Trail.*		Pedestrian, Bicycle	Proposed in Station Area Plan
Between the Washington Boulevard/Osgood Road/Driscoll Road Intersection and Alice Street	▪ *Provide a path between the Washington Boulevard/Osgood Road/Driscoll Road intersection and Alice Street along the existing emergency vehicle access.*		Pedestrian, Bicycle	Proposed in Station Area Plan
Blacow Road/Gatewood Street Intersection	▪ Install Rectangular Rapid Flashing Beacons (RRFBs). ▪ Add high-visibility crosswalk markings. ▪ Install median refuge.		Pedestrian	Project already underway through City of Fremont
Denise Street, Lockwood Avenue, and Chadbourne Drive	▪ Install a connected Class III Neighborhood Bikeway along these streets.		Bicycle	Previously adopted in Bicycle Master Plan
Driscoll Road	▪ Install Class II Buffered Bike Lanes.		Bicycle	Project already underway through City of Fremont
Driscoll Road/Joyce Avenue Intersection	▪ Add high-visibility crosswalk markings. ▪ Install Rectangular Rapid Flashing Beacons (RRFBs) ▪ Install median refuge.		Pedestrian	Project already underway through City of Fremont
Fremont Boulevard/Washington Boulevard between Eugene Street and Blacow Road	▪ Install Class IV Separated Bike Way.		Bicycle	Previously adopted in Bicycle Master Plan

ACCESS AND MOBILITY IMPROVEMENT OPPORTUNITIES

Location	Improvement Descriptions	Notes	Primary Travel Mode Improved	Status
Fremont Boulevard/Adams Avenue Intersection	▪ Add truncated domes.	The City is developing an ADA Transition Plan to identify citywide improvements, including truncated domes.	Pedestrian	Programmatically adopted in Pedestrian Master Plan; specific location identified in Station Area Plan
Fremont Boulevard/Blacow Road Intersection	▪ *Adjust signal timing parameters (i.e., adjust the allocation of green time for each intersection approach) and coordinate the signal timing changes with the adjacent intersections that are in the same signal coordination group.*		Bicycle, Automobile	Proposed in Station Area Plan
	▪ Install bicycle video detection for all left-turn pockets and stripe a bicycle detection marking to show bicyclists where to position themselves.		Bicycle	Programmatically adopted in Bicycle Master Plan; specific location identified in Station Area Plan
Fremont Boulevard/Carol Avenue Intersection	▪ Add truncated domes. ▪ Add audible signals.	The City is developing an ADA Transition Plan to identify citywide improvements, including truncated domes.	Pedestrian	Programmatically adopted in Pedestrian Master Plan; specific location identified in Station Area Plan
	▪ Install bicycle video detection for all left-turn pockets and stripe a bicycle detection marking to show bicyclists where to position themselves.		Bicycle	Programmatically adopted in Bicycle Master Plan; specific location identified in Station Area Plan
Fremont Boulevard/Clough Avenue Intersection	▪ Install Rectangular Rapid Flashing Beacons (RRFBs).	Fremont has identified this intersection for crossing improvements that will be in construction in 2020.	Pedestrian	Previously adopted in Pedestrian Master Plan
Fremont Boulevard/Irvington Avenue Intersection	▪ Install bicycle video detection for all left-turn pockets and stripe a bicycle detection marking to show bicyclists where to position themselves.		Bicycle	Programmatically adopted in Bicycle Master Plan; specific location identified in Station Area Plan

ACCESS AND MOBILITY IMPROVEMENT OPPORTUNITIES

Location	Improvement Descriptions	Notes	Primary Travel Mode Improved	Status
Fremont Boulevard/Michael Avenue Intersection	▪ Add high-visibility crosswalk markings. ▪ Install median refuge. ▪ Install Rectangular Rapid Flashing Beacons (RRFBs).		Pedestrian	Previously adopted in Pedestrian Master Plan
Fremont Boulevard/Papazian Way Intersection	▪ *Add a curb extension at the southeast corner of the intersection.*		Pedestrian	Proposed in Station Area Plan
Fremont Boulevard/Washington Boulevard/Union Street/Bay Street Intersection	▪ *Adjust signal timing parameters (i.e., adjust the allocation of green time for each intersection approach) and coordinate the signal timing changes with the adjacent intersections that are in the same signal coordination group.*		Automobile	Proposed in Station Area Plan
	▪ Add audible signals. ▪ Reduce the corner radius on the northeast and southeast corners of the intersection.		Pedestrian	Programmatically adopted in Pedestrian Master Plan; specific location identified in Station Area Plan
	▪ Install bicycle video detection for all left-turn pockets and stripe a bicycle detection marking to show bicyclists where to position themselves.		Bicycle	Programmatically adopted in Bicycle Master Plan; specific location identified in Station Area Plan
	▪ *Remove slip lanes or modify slip lanes (e.g. through signal modifications or raised crosswalks) on the bicycle network to improve bicyclists safety and allow for protected intersections.*		Pedestrian, Bicycle	Proposed in Station Area Plan
	▪ *Close Bay Street at the intersection. One option may be to convert Bay Street between Washington Boulevard/Fremont Boulevard and the traffic circle to a pedestrian plaza. This would simplify the intersection, and reduce the pedestrian/automobile conflict points at the intersection and reduce signal cycle length.*	Closing Bay Street is a major policy decision that will require further analysis and review.	Pedestrian, Bicycle, Automobile	Proposed in Station Area Plan

ACCESS AND MOBILITY IMPROVEMENT OPPORTUNITIES

Location	Improvement Descriptions	Notes	Primary Travel Mode Improved	Status
High Street	▪ *Implement traffic calming measures, such as speed humps and/or chicanes on this Class III bicycle routes identified as a residential street in the City's General Plan.*	This road is expected to experience additional automobile traffic as a result of the Irvington BART Station. Implementing traffic calming on this street would make it more attractive for pedestrians walking to and from the station.	Bicycle	Proposed in Station Area Plan
I-680 interchange at Auto Mall Parkway	▪ Square the exit ramp from southbound I-680 to Auto Mall Parkway. ▪ Fill sidewalk gaps.	The City has an ongoing study looking at improvements to the Washington, Mission and Auto Mall interchanges.	Pedestrian, Bicycle	Study already underway through City of Fremont
I-680 interchange at Washington Boulevard	▪ Square the exit ramp from northbound I-680 to Washington Boulevard. ▪ Install on-street and off-street options for bicyclists. ▪ Sidewalks and crosswalks on the north side of the interchange. ▪ Potential connection to the proposed Ridge Trail Path identified in the UPRR Trail Study.	The City has an ongoing study looking at improvements to the Washington, Mission and Auto Mall interchanges.	Pedestrian, Bicycle	Study already underway through City of Fremont
Main Street	▪ *Implement Complete Streets design recommended in Station Area Plan.*		Pedestrian, Bicycle	Proposed in Station Area Plan
Osgood Road, south of BART entrance	▪ *Implement Complete Streets design recommended in Station Area Plan.*	See also the item for the East Bay Greenway under the location "Through the station, along Washington Boulevard and Osgood Road"	Pedestrian, Bicycle	Proposed in Station Area Plan

ACCESS AND MOBILITY IMPROVEMENT OPPORTUNITIES

Location	Improvement Descriptions	Notes	Primary Travel Mode Improved	Status
Osgood Road/Blacow Road Intersection	▪ *Remove slip lanes for improved pedestrian and bicyclist safety.*		Pedestrian, Bicycle	Proposed in Station Area Plan
	▪ Remove the pork-chop islands ▪ Install bicycle video detection for all left-turn pockets and stripe a bicycle detection marking to show bicyclists where to position themselves.		Bicycle	Programmatically adopted in Bicycle Master Plan; specific location identified in Station Area Plan
Through the station, along Washington Boulevard and Osgood Road	▪ Connect the East Bay Greenway terminus to the north of the station to Osgood Road through the Station Area. The EBGW would extend under the Washington Boulevard overcrossing west of the tracks and continue to the Washington Boulevard/ Roberts Avenue intersection at grade. A two-way Class IV Separated Bikeway (also known as a cycle track) on the south side of the Washington Boulevard would then connect to a two-way separated bikeway on the west side of Osgood Road. The separated bikeway would continue south on Osgood Road until the southern limits of the station. South of the station, the EBGW trail may continue south on Osgood Road as an elevated Class IV cycle track. The alignment and design of the EBGW south of the station will be the subject of further study.	See also the item for Complete Streets design under the location "Osgood Road, south of BART entrance"	Pedestrian, Bicycle	Previously adopted in Bicycle Master Plan; specific route proposed in Station Site Plan and Station Area Plan
Throughout the Plan Area - bicycle routes and wayfinding	▪ Install bicycle wayfinding, especially to direct bicyclists towards the Irvington BART Station. ▪ Replace drain inlet grates parallel to the direction of bicycle travel with grates perpendicular to the direction of travel.	Prioritize replacing drain inlet grates on bicycle corridors.	Bicycle	Programmatically adopted in Bicycle Master Plan
Throughout the Plan Area – curb ramps	▪ Retrofit non-compliant curb ramps as part of roadway repaving per ADA requirements.		Pedestrian	Fremont's forthcoming ADA Transition Plan will identify citywide improvements, including curb ramps.

ACCESS AND MOBILITY IMPROVEMENT OPPORTUNITIES

Location	Improvement Descriptions	Notes	Primary Travel Mode Improved	Status
Throughout the Plan Area – parking program	▪ *Develop and implement a Residential Parking Permit (RPP) program prior to the opening of Irvington BART Station.*		Automobile	Proposed in Station Area Plan
Throughout the Plan Area - sidewalks	▪ Fill sidewalk gaps.		Pedestrian	Programmatically adopted in Pedestrian Master Plan; gaps specified in Station Area Plan
Union Street/Main Street/Lee Street Intersection	▪ Add truncated domes.	The City is developing an ADA Transition Plan to identify citywide improvements, including truncated domes.	Pedestrian	Programmatically adopted in Pedestrian Master Plan; specific location identified in Station Area Plan
	▪ *Square the intersection; provide traffic circle or some other traffic calming measure.*		Pedestrian, Bicycle	Proposed in Station Area Plan
Washington Boulevard at Osgood Road and between Roberts Avenue and Fremont Boulevard	▪ *Upgrade the on-street bus stops to include bus shelters and other amenities.*		Transit	Proposed in Station Area Plan
Washington Boulevard east of Olive Avenue	▪ Install Class II Buffered Bike Lanes.		Bicycle	Project already under design through City of Fremont as part of project between Roberts Avenue and Meredith Avenue
Washington Boulevard east of Roberts Avenue	▪ *Evaluate options to prevent left turns in and out of the station entrance/exit. This could include extending the existing median island on Washington Boulevard to the intersection with Roberts Avenue, roadway space permitting. This will be evaluated at a later design stage.*	An alternative design option would be to include an island at the new BART driveway to force vehicles right-in/right-out, which would be part of the Station Site Plan	Automobile	Proposed in Station Area Plan
	▪ *Implement Complete Streets design recommended in Station Area Plan.*		Pedestrian, Bicycle	Proposed in Station Area Plan

ACCESS AND MOBILITY IMPROVEMENT OPPORTUNITIES

Location	Improvement Descriptions	Notes	Primary Travel Mode Improved	Status
Washington Boulevard/Olive Avenue Intersection	▪ Add truncated domes. ▪ Add a curb extension on the northeast corner of the intersection. ▪ Install a Rectangular Rapid Flashing Beacon (RRFB). ▪ *Redesign intersection for a traditional T-intersection and restrict the westbound approach as exit only.* ▪ Shift the existing bus stop on the south side of Washington Boulevard away from the crosswalk. ▪ Install median refuge. ▪ Add high-visibility crosswalk markings.		Pedestrian	Fremont has a Highway Safety Improvement Program grant project currently under design to provide a flashing beacon, median refuge, curb extension, and ladder crossing at this intersection.
Washington Boulevard/Osgood Road/ Driscoll Road Intersection	▪ *Consider reducing the corner radius at all corners of the Osgood Road/Driscoll Road/ Washington Boulevard intersection, and/or reducing lane widths on Driscoll Road to reduce pedestrian crossing distances and vehicle speeds.*		Pedestrian	Proposed in Station Area Plan
	▪ Remove one eastbound lane on Washington Boulevard, and reduce lane and median widths on Osgood Road to provide space for the EBGW and reduce pedestrian crossing distances.		Pedestrian	This improvement to the Washington Boulevard/Osgood Road/Driscoll Road intersection to be part of the Irvington BART Station construction.
	▪ Install bicycle video detection for all left-turn pockets and stripe a bicycle detection marking to show bicyclists where to position themselves.		Bicycle	Programmatically adopted in Bicycle Master Plan; specific location identified in Station Area Plan. This improvement to the Washington Boulevard/Osgood Road/Driscoll Road intersection to be part of the Irvington BART Station construction.

ACCESS AND MOBILITY IMPROVEMENT OPPORTUNITIES

Location	Improvement Descriptions	Notes	Primary Travel Mode Improved	Status
Washington Boulevard/Osgood Road/ Driscoll Road Intersection	▪ *The westbound bus stop could be moved 100-150 feet to the west into the westbound right-turn lane at Osgood Road.* ▪ *The eastbound bus stop could be moved into the Washington Boulevard merging lane to the east of the intersection. Eastbound Washington Boulevard would be reduced to two through lanes, which would eliminate the need for the merging lane.*	These changes are pending further discussions between the City of Fremont and AC Transit	Transit	Proposed in Station Area Plan
	▪ Provide an overlap phase for the northbound Osgood Road right-turn movement. ▪ Adjust signal timing parameters (i.e., adjust the allocation of green time for each intersection approach) and coordinate the signal timing changes with the adjacent intersections that are in the same signal coordination group.		Automobile	Proposed in Station Area Plan. This improvement to the Washington Boulevard/Osgood Road/Driscoll Road intersection to be part of the Irvington BART Station construction.
Washington Boulevard/ Roberts Avenue Intersection	▪ Reduce curb radii on the south corners of the intersection. ▪ Add audible signals.		Pedestrian	Programmatically adopted in Pedestrian Master Plan; specific location identified in Station Area Plan. Reconstruction of the Washington Boulevard/Roberts Avenue intersection to be part of the Irvington BART Station construction.
	▪ Install bicycle video detection for all left-turn pockets and stripe a bicycle detection marking to show bicyclists where to position themselves.		Bicycle	Programmatically adopted in Bicycle Master Plan; specific location identified in Station Area Plan. Reconstruction of the Washington Boulevard/Roberts Avenue intersection to be part of the Irvington BART Station construction.

ACCESS AND MOBILITY IMPROVEMENT OPPORTUNITIES

Location	Improvement Descriptions	Notes	Primary Travel Mode Improved	Status
Washington Boulevard/ Roberts Avenue Intersection	▪ Stripe a left-turn lane on the southbound approach, which can be accommodated within the current right-of-way but would require prohibiting parking on both sides of the street. ▪ Upgrade signal to provide protected north/ south left-turn phasing. ▪ Adjust signal timing parameters (i.e., adjust the allocation of green time for each intersection approach) and coordinate the signal timing changes with the adjacent intersections that are in the same signal coordination group.		Automobile	Reconstruction of the Washington Boulevard/Roberts Avenue intersection to be part of the Irvington BART Station construction.


URBAN
PLANNING
PARTNERS
INC.