

North Concord to Antioch BART Access Study

Existing Conditions and Preliminary Project Identification

DRAFT February 2017



North Concord Station

Concord, California

The North Concord BART Station is currently the penultimate station on the Pittsburg/Bay Point line, also referred to as the C-Line. It is a suburban station near the State Route 4 interchange with State Route 242. It is adjacent to low density residential land uses to the west and a large planned mixed-use development project on land previously part of the Concord Naval Weapons Station to the east.

Characteristics

Weekday Span of Service: 4:08 a.m. to 1:13 a.m.

Frequency: 15 minutes (6 minutes during peak hour)

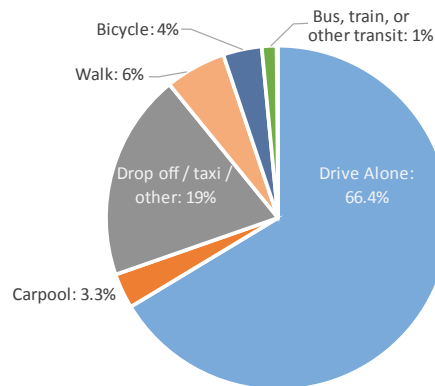
Average Daily Ridership (Entries): 2,813

Peak Usage Times: 6:45 a.m. to 7:45 a.m., 6 p.m. to 7 p.m.

Parking spaces (on-site) : 1,977 Total spaces, full by 8 a.m.

- 1,774 Daily spaces
- 203 Reserved and Long-term

Existing Access Mode Split



Source: 2015 Station Profile Survey (Home Origin)

Demographics

Table 1.1: Demographics (within 1/2 mile)

| | |
|---------------------------------------|-------|
| Population | 2,505 |
| Jobs | 226 |
| Low income (under 200% poverty level) | 9.9% |
| Minority (non white populations) | 42% |
| Households with no vehicles | 2.9% |
| Households with limited english | 0.7% |
| Senior population | 12.1% |
| Youth population | 17.5% |
| With disabilities | 11.6% |

Source: 2015 US Census, 5-Year American Community Survey

There are an additional 8,000 jobs in the industrial area north of the station. About 2,000 of these jobs are within a 1-mile road distance of the station.

Local and Regional Plans

Concord Reuse Project Area Plan

City of Concord, 2012

This long-range plan to redevelop the Concord Naval Weapons Station includes transit oriented development directly east of the North Concord station. The City of Concord recently selected the Master Developer for Phase 1 of this project.

Bicycle, Pedestrian & Safe Routes to Transit Plan

City of Concord, 2016

This plan identifies potential improvements for walking and biking throughout Concord. The short term improvements, within a 5-year horizon, include installing additional sidewalks on Port Chicago Highway near the station. Long term improvements near the station include crosswalk improvements on Olivera Road and Floyd Lane, installation of sidewalks on Port Chicago Highway, Ranchito Drive, and Sanford Street, and designating class III bike routes on multiple streets in the surrounding neighborhood.



East Bay Regional Parks Master Plan

East Bay Regional Parks District, 2013

The long-range EBRP plan includes the extension of the Delta de Anza trail from Willow Pass/Evora Road in Bay Point to the Walnut Creek Channel would pass north of station along the Highway 4 alignment.

Coast Guard Site Planned Development



The Coast Guard Site directly south of the North Concord BART parking lot is being considered for redevelopment. This long-term plan may include transit-oriented development adjacent to the station area with new multimodal connections to the station.

Local Connections

County Connection

North Concord station's primary transit connections are County Connection buses. Routes 17 and 28/627 serve the station on the weekdays. Buses stop at the station in a dedicated loading area with 8 bus bays. County Connection also runs a shuttle for bus drivers to the BART station from the bus depot in the industrial area north of the station. North Concord is a common location for paratransit transfers.

Figure 1.1a: North Concord Station Existing Conditions (Pedestrian Safety and ADA Accessibility; Bicycle Safety and Access)

| Pedestrian Safety and ADA Accessibility  | |
|---|--|
| 1 | There is no crosswalk at the north side of the Port Chicago Hwy and Panoramic intersection. |
| 2 | The main BART entrance is auto-centric, with narrow sidewalks, a lack of landscaping, and no pedestrian-scale signage. |
| 3 | There is no sidewalk directly adjacent to the road along the eastern side of Port Chicago Hwy. Pedestrians must use the trail to the linear park, which is separated from Port Chicago Hwy by the BART tracks. |
| 4 | The BART linear park and trail has few entrances/exits and the trail lacks a visual connection to either side, hampering the pedestrian experience and security. |
| 5 | The stairs and sidewalk leading to the lower parking lot are not accessible to people with limited mobility. |
| 6 | The shared-use path north of the station is not continuously paved. Highway ramp crossings are uncontrolled and there are no crosswalks, creating safety concerns for bicyclists and pedestrians along the route. It is common for BART passengers to walk along this route to employers north of Route 4. |
| Bicycle Safety and Access  | |
| 7 | The only access to the linear park and trail from the west is at Olivera Road, 1/2 mile south of the station. |
| 8 | Bicycle and pedestrian access to the station from the neighborhood south of the station is limited to one trail access point at Esperanza Drive. |
| 9 | There are bike lockers outside of the station on either side of the entrance, and bike racks inside the fare gates. |

Legend





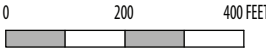







 Pedestrian access routes  Station Entrance
 Bike lanes and paths  Quarter-mile Radius
 0 200 400 FEET 



Figure 1.1b: North Concord Station Existing Conditions (Transit Connections; Parking, Traffic and Passenger Loading)

| Transit Connections  | |
|---|---|
| 1 | Paratransit transfers occur in the eastern bus bays. Transfers are very common, and there is usually at least one paratransit vehicle waiting at the station. There is no shelter at this location for waiting paratransit passengers. |
| 2 | County Connection operates a shuttle for their drivers between the BART station and the bus depot on Arnold Industrial Way. |
| Parking, Traffic, and Passenger Loading  | |
| 3 | The neighborhoods northwest of the station have a residential parking permit district in place, but the neighborhoods south of the station do not. |
| 4 | Some BART passengers who wish to park for free or cannot find a space in the lot park on the side of the road near the freeway ramp, sometimes parking on the ramp itself. Caltrans has recently started issuing citations for this, but it still occurs when the station is very full. |
| 5 | When Pittsburg/Bay Point station parking is full, BART patrons will drive to North Concord to park instead, filling up the lot by 8 AM. After the opening of eBART, the parking lot will likely fill up later as drivers coming from the east will be able to stop at Antioch first. |
| 6 | The north lot is very busy between 9:30 a.m. and 10 a.m. as drivers wait for reserved spaces to be released. Enforcement reports that a line at the driveway into the parking lot often forms at this time. |
| 7 | The lower parking lot is not well lit. There are safety and security concerns for passengers returning to their vehicles at night. |
| 8 | Approximately 65 additional parking spaces are planned on Panoramic Drive adjacent to the existing parking lot. |

Legend

-  Auto access and circulation
-  Transit access and circulation
-  Station Entrance
-  Quarter-mile Radius

0 200 400 FEET








Figure 1.2 North Concord Station Recommended Improvements

| Pedestrian Safety and ADA Accessibility  | |
|---|--|
| 1 | Study feasibility of improving access from station or linear park across BART tracks. Possible pedestrian bridge across tracks to Port Chicago Highway. |
| 2 | Improve pedestrian amenities at the Panoramic Drive/Port Chicago Highway intersection, including adding missing crosswalk, ADA accessibility features, and pedestrian-scale signage. |
| 3 | Add wayfinding and signage outside of station directing passengers to bus stops, passenger pick-up areas, and bicycle and pedestrian routes. |
| 4 | Open entryway south of station to Coast Guard site and southern neighborhoods (dependent on future development on the site). |
| 5 | Add ADA-accessible ramp to lower parking lot and curb cuts on the sidewalk through lower parking lot. |
| 6 | Work with the community to determine the feasibility of providing a new, secure pedestrian and bike only connection between Dormer Avenue and the station parking lot. This improvement could be coordinated with recommendation #1. |
| Bicycle Safety and Access  | |
| 7 | Improve shared-use path north of the station to the industrial park with continuous pavement, high-visibility crossings, lighting and amenities. |
| 8 | Add bicycle wayfinding signage at linear park and at main entrance with distances to connection bicycle routes and destinations. |
| Transit Connections  | |
| 9 | Construct a shelter at the paratransit stop |
| 10 | Study feasibility of formalizing the shuttle to the County Connection bus depot, to provide a "last-mile" connection for industrial park employees. |
| Parking, Traffic, and Passenger Loading  | |
| 11 | Manage on-street parking on Port Chicago Highway adjacent to the Highway 4 on-ramp, and in the neighborhood south of the station (dependent on future connections). |
| 12 | Consider expanding the reserved parking area to provide midday parking for off-peak BART activity. |
| 13 | Install lighting in the lower parking lot. |



Pittsburg / Bay Point Station

Pittsburg, California

The Pittsburg/Bay Point BART Station is an end of the line station for the Pittsburg/Bay Point Line. It is a suburban station situated along Highway 4, surrounded by low-density residential and strip commercial development. This terminus station has a large catchment area extending to Brentwood and Antioch. With the opening of the East Contra Costa BART Extension (eBART) to Antioch in winter of 2017, the catchment area will become smaller, ridership will decrease and the mode split for accessing the station will likely shift.

Characteristics

Span: 4:02 AM - 12:32 AM, weekdays

Frequency: 15 minutes

Average Daily Ridership (Entries): 6,515

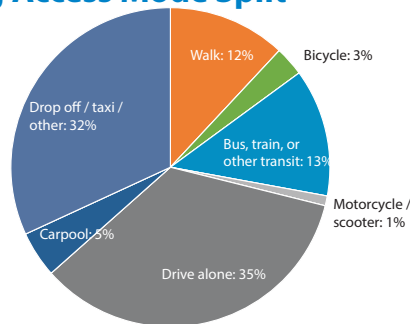
Peak Usage Times: 6 a.m. to 7 a.m. and 6:15 p.m. to 7:15 p.m.

Parking spaces (on-site): 2,016 Total spaces, full by 6:20 a.m.

- 1,696 Daily spaces
- 320 Reserved

Bicycle Parking: Bike racks inside the faregates; bike racks and lockers outside west of the station entrance.

Existing Access Mode Split



Source: 2015 Station Profile Survey (Home Origin)

Demographics

Table 2.1: Demographics (within 1/2 mile)

| | |
|--|--------|
| Population | 4,415 |
| Jobs | 540 |
| Low income (under 200 percent poverty level) | 26.5% |
| Minority (non white populations) | 81.50% |
| Households with no vehicles | 6.30% |
| Households with limited english | 11.10% |
| Senior population | 6.40% |
| Youth population | 28.60% |
| With disabilities | 13.70% |

Source: 2015 US Census, 5-Year American Community Survey

Local and Regional Plans

Pittsburg/Bay Point Station Area Master Plan

City of Pittsburg, 2011

This plan proposes a mixed-use development to replace the existing parking lot with retail and multi-family housing, with new parking garages to replace the parking.

Bailey Road/State Route 4 Interchange Improvement Project

Contra Costa County

Scheduled to be completed in late 2018, this project will improve the bicycle and pedestrian safety and access at the Bailey Road/Highway 4 interchange. Improvements include:

- Remove westbound loop off-ramp and pedestrian tunnel;
- Install continuous sidewalk and class II bike lanes; and



- At Bailey Road and BART access road intersection, modify signal and remove free-flow right turn movements on and off the freeway.

Local Connections



Delta de Anza Trail

The Delta de Anza Trail generally follows the Contra Costa Canal, connecting the station area to communities to the east. The trail can be accessed from Ambros park, east of Bailey Road, and from Bailey Road north of Route 4.

Tri Delta Transit

Pittsburg/Bay Point station's primary transit connections are Tri Delta Transit buses. Twelve Tri Delta Transit routes serve the station, connecting primarily to communities further east beyond the end of the BART system. Tri Delta Transit plans to shift some of this service to Antioch eBART station after it opens.

Figure 2.1a: Pittsburg/Bay Point Station Existing Conditions (Pedestrian Safety and ADA Accessibility; Bicycle Safety and Access)

| Pedestrian Safety and ADA Accessibility  | |
|---|---|
| 1 | Street-level elevator is often inoperable and ADA access is limited. |
| 2 | No curb ramps or crosswalk at pedestrian crossing. |
| 3 | No curb ramps or crosswalk at pedestrian crossing. |
| 4 | No direct pedestrian connection to station from north. |
| 5 | Path along canal is not publicly accessible. |
| 6 | Improvements currently under construction on Bailey Road will enhance pedestrian access and safety. Pedestrian tunnel will be closed and sidewalk will be improved. |
| 7 | No sidewalk on south side of access road to Bailey Road |
| 8 | Poor connection between West Leland Road and parking lot. Pedestrians often jump the retaining wall to enter the parking lot. |
| 9 | A new signal has been installed at the intersection of West Leland Road and Oak Hills Drive. |
| 10 | There are no direct connections between the shopping center and the station. However, direct access may encourage BART riders to park in the shopping center. |
| Bicycle Safety and Access  | |
| 11 | Bicycle parking within paid area is well used (80% full at 5:30 p.m.). |
| 12 | Bicycles use bus-only lane on BART access road. |
| 13 | Poor bicycle connection to DeAnza Regional Trail across Bailey Road. Bailey Road planned improvements will improve bicycle connection. |
| 14 | No on-street bicycle facilities on access roads from Leland Road. |

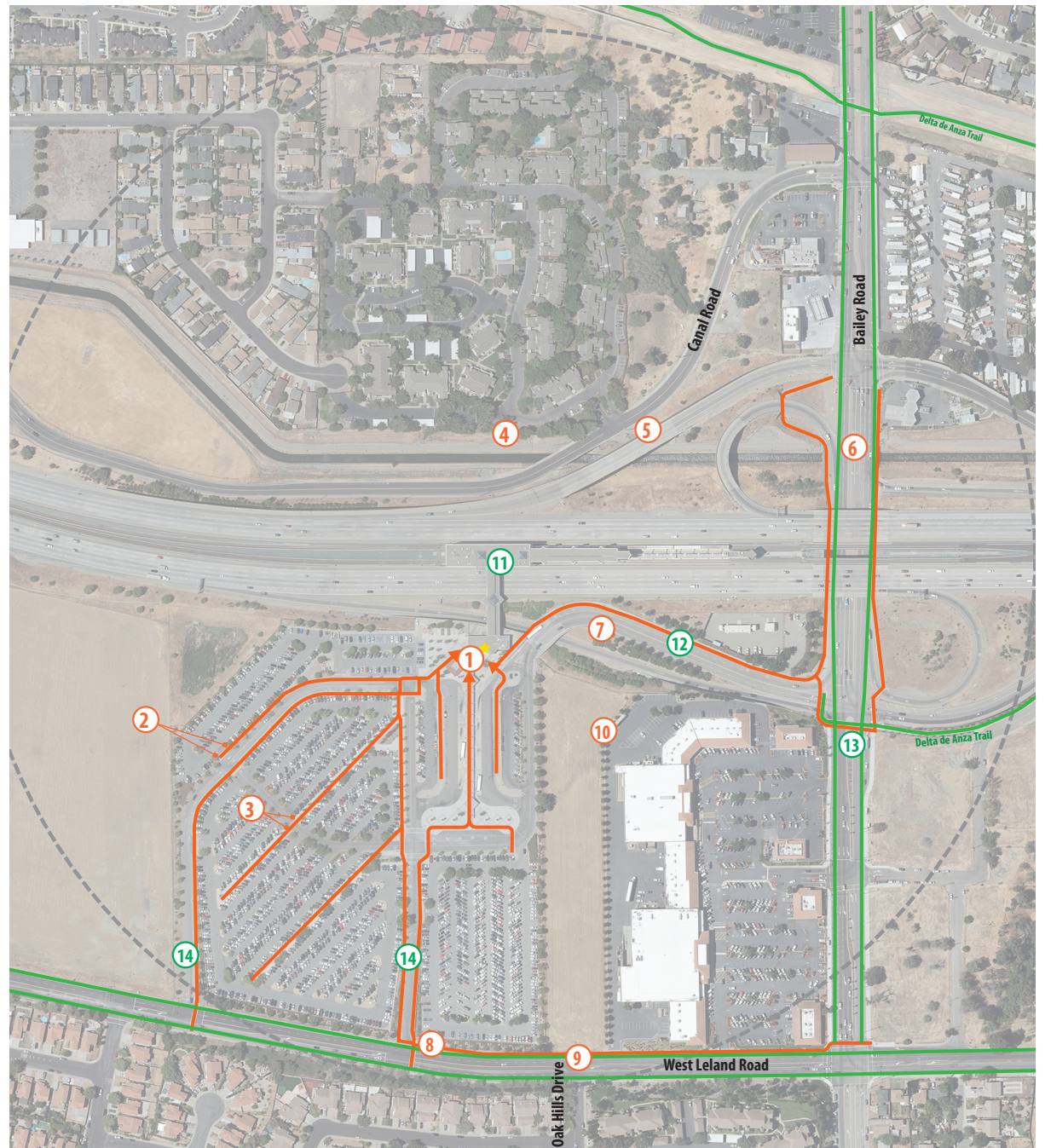
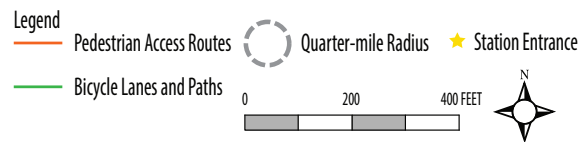





Figure 2.1b: Pittsburg/Bay Point Station Existing Conditions (Transit Connections; Parking, Traffic and Passenger Loading)

| Transit Connections  | |
|--|---|
| 1 | The paratransit pick up location makes it difficult for buses to enter bus bay area and blocks the pedestrian crossing. After eBART opens, paratransit drop-offs will move to the western bus bay closest to the station. |
| 2 | The Bailey access bus lane will no longer be used by Tri Delta buses after the opening of eBART. All buses will enter the station via West Leland Road. |
| Parking, Traffic and Passenger Loading   | |
| 3 | Accessible vehicle parking lot is typically full. |
| 4 | Motorcycle parking is overflowing. |
| 5 | Carpool parking, when separate from permit parking, is difficult to enforce. |
| 6 | Pick up and drop off often occurs at corner because it is closer to the station entrance and cars avoid entering park and ride area. This causes congestion and delay for cars along BART access road. |
| 7 | East Pick-Up/Drop-Off (20-minute attended vehicle parking): - 100%+ occupancy in PM peak - People do not walk within the crosswalk to get from island to station - No curb ramps at pedestrian crossing |
| 8 | West Pick-Up/Drop-Off (20-minute parking after 4 p.m.): - Cars parked all day after 4 p.m. - 80% occupancy at PM peak |
| 9 | Drop off often occurs at stop sign in through lane blocking through traffic. |
| 10 | Planned parking lot for 451 parking spaces, includes pedestrian sidewalk along western edge of lot. |
| 11 | Overflow parking occurs along streets west of Bailey Road. |

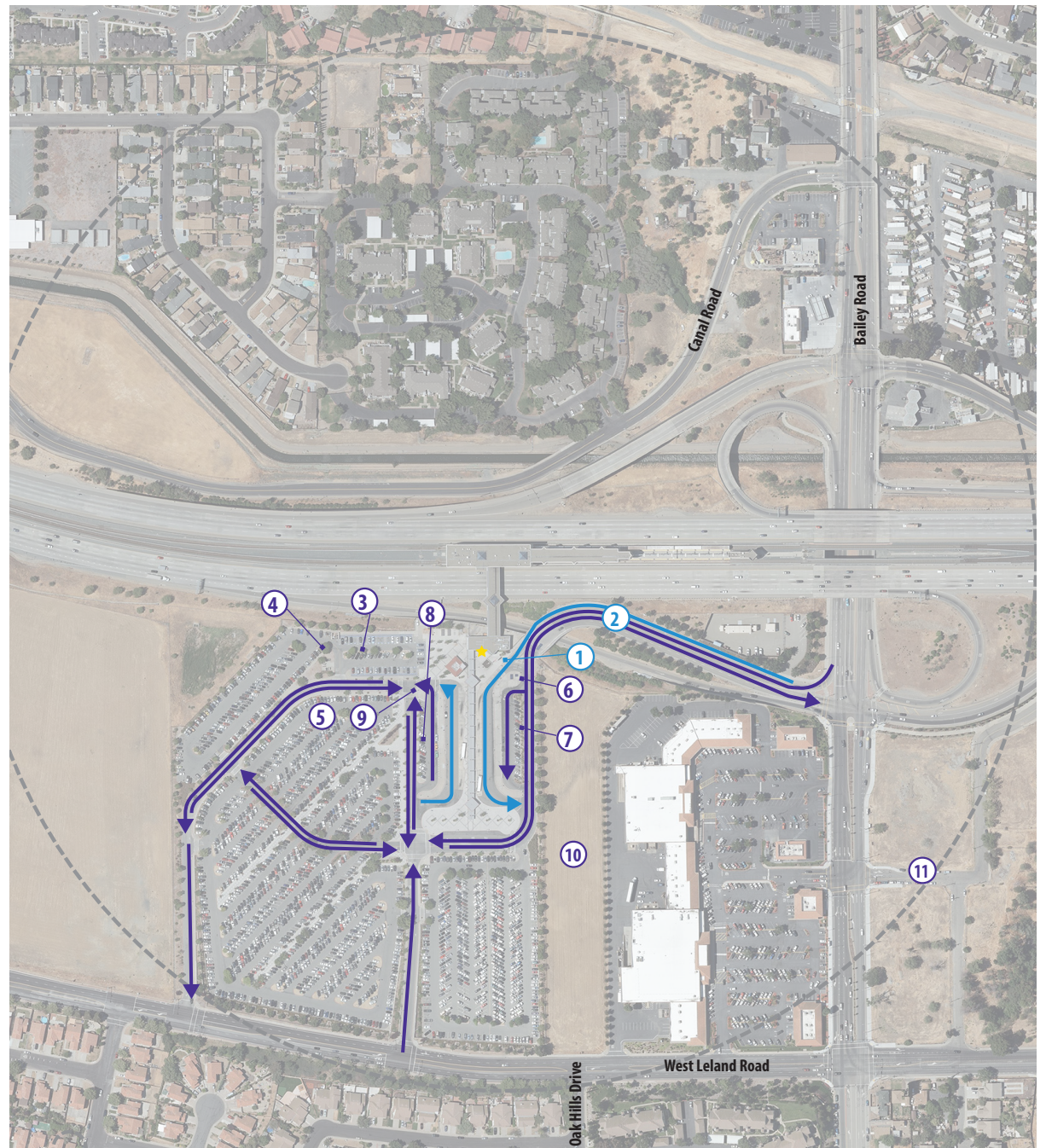
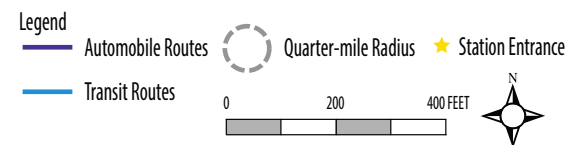
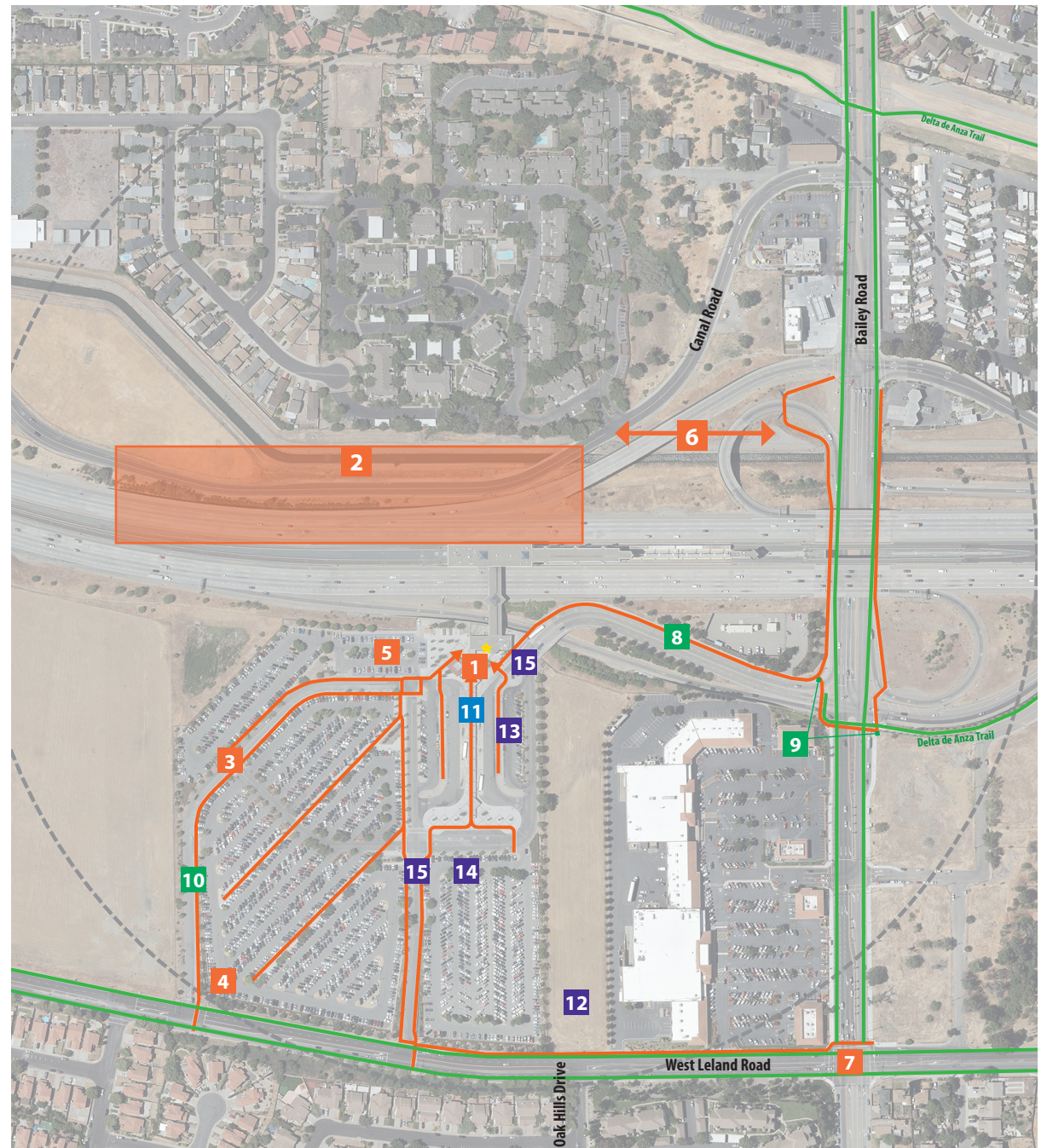


Figure 2.2: Pittsburg/Bay Point Station Recommended Improvements

| Pedestrian Safety and ADA Accessibility  | |
|---|---|
| 1 | Install new ramp for ADA and bicycle access at BART station entrance. |
| 2 | Install Pedestrian/multi-use bridge across freeway to the north. |
| 3 | Add crosswalks and curb ramps along western parking access road. |
| 4 | Add pedestrian access stairway and ramp from West Leland Road to the southwestern parking lot corner. |
| 5 | Improve curb ramps in disabled parking area. |
| 6 | Open canal access path to public between Canal Road and Bailey Road. |
| 7 | Improve Leland and Bailey Road intersections for better pedestrian safety. |
| Bicycle Safety and Access  | |
| 8 | Install bicycle lanes or a buffered cycletrack on BART access road. |
| 9 | Improve bicycle and pedestrian oriented wayfinding and signage on Bailey Road to connecting routes and destinations. |
| 10 | Install bicycle facilities on access roads to/from Leland Road. |
| Transit Connections  | |
| 11 | Relocate paratransit stop to a bus bay. |
| Parking, Traffic and Passenger Loading  | |
| 12 | Modify design of planned parking lot: add pedestrian and bicycle access from W. Leland Road, and explore pedestrian access to shopping center in north eastern area of new parking lot. |
| 13 | Reconfigure eastern drop-off area to improve flow and reduce congestion. |
| 14 | Move carpool parking next to permit parking for ease of enforcement. |
| 15 | Improve signage and wayfinding within station to direct drivers to parking and drop-off locations. |

| | | |
|--|---|--|
|  Pedestrian Access Routes |  Quarter-mile Radius |  Station Entrance |
|  Bicycle Lanes and Paths |   | |



Pittsburg Center Station

Pittsburg, California

The Pittsburg Center Station is currently under construction and is planned to be open in winter 2017/2018. It will be an intermediate stop on the East Contra Costa BART Extension (eBART) to Antioch. The station will be situated in the median of Highway 4 with access from the Railroad Avenue overpass, adjacent to low-density commercial development to the south, City Hall and other government buildings to the north, and low-density residential neighborhoods.

Characteristics

Weekday Span of Service: 4 a.m. to 12 a.m.

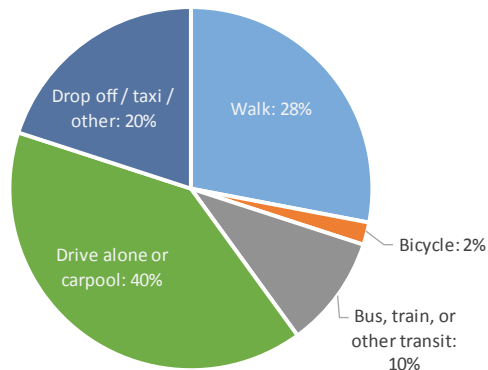
Frequency: 15 minutes

Projected 2018 Daily Entries: 525

Projected Peak Usage: 6 a.m. to 7 a.m., 5:45 p.m. to 6:45 p.m.

Parking spaces: No spaces on-site, 270 spaces available at nearby Bliss Avenue Lot

Projected Access Mode Split



(Source: eBART EIR, 2008)

Demographics

Table 3.1: Demographics (within 1/2 mile)

| | |
|--|-------|
| Population | 6,382 |
| Jobs | 2,699 |
| Low income (under 200 percent poverty level) | 27.8% |
| Minority (non white populations) | 91.1% |
| Households with no vehicles | 8.1% |
| Households with limited english | 19.6% |
| Senior population | 9% |
| Youth population | 26.6% |
| With disabilities | 12.1% |

Source: 2015 US Census, 5-Year American Community Survey

Local and Regional Plans

Multi-Modal Transfer Facility

City of Pittsburg, 2016

Located at the corner of Railroad Avenue and California Avenue, this facility has been developed in coordination with the eBART station to serve transit transfers and kiss-and-ride passengers, and provide ADA accessible parking. The plans for this project also include improved crosswalks at Railroad Avenue/California Avenue and Railroad Avenue/Center Drive.

Railroad Avenue Specific Plan

City of Pittsburg, 2009

The Specific Plan covers the area within approximately 1/2 mile of the station, and includes developing the Bliss Avenue area into a transit village, including replacing the Bliss Avenue parking lot with mixed use development or structured parking, a Gateway feature along Railroad Avenue north of Highway 4, roadway improvements for pedestrian, bicycle, and transit connectivity.



Local Connections

Tri Delta Transit

Currently, five weekday bus routes serve the station area; three routes serve the Bliss Avenue Park and Ride and two additional routes serve stops on Railroad Avenue. Tri Delta Transit is planning service changes to coincide with the opening of the new eBART stations. Based on the new service plan, six bus routes will serve the station; four will serve the Bliss Avenue parking lot and two additional routes will serve stops on Railroad Avenue.

Delta de Anza Trail

The Delta de Anza Trail generally follows the Contra Costa Canal, connecting the station area to communities to the east and west. The trail can be accessed south of West Leland Road, one-half mile from the station.

Figure 3.1a: Pittsburg Center Station Area Existing Conditions (Pedestrian Safety and ADA Accessibility; Bicycle Safety and Access)

| Pedestrian Safety and ADA Accessibility  | |
|---|---|
| 1 | Signal timing causes long wait times to cross Railroad Avenue. Improvements to signal timing on Railroad Avenue are currently being studied. |
| 2 | The pedestrian experience at the station entry is affected by heavy traffic and limited sidewalk space. |
| 3 | Bliss Avenue lacks continuous sidewalks. A new sidewalk is planned for the north side of the street. |
| 4 | There is no crosswalk at the northern side of the Railroad Avenue and Bliss Avenue intersection. |
| 5 | There are no pedestrian crossings across Railroad Avenue between Bliss Avenue and East Leland Road. |
| 6 | There are no crosswalks at multiple Railroad Avenue intersections will be added with planned station and multi-modal facility improvements. |
| 7 | Pedestrian crossings at the highway ramps are unsafe due to wide turning radii and low visibility. |
| 8 | California Avenue, Power Avenue, Center Drive, and Frontage Road have sidewalks on only one side of the street. |
| Bicycle Safety and Access  | |
| 9 | Bike racks and lockers will be located at the multi-modal transfer facility, requiring bicyclists to cross California Avenue after parking to access the station. |
| 10 | The frontage road connects to Railroad Avenue via a dedicated bike and pedestrian path. Additional Class I facilities are planned to extend to the east. |
| 11 | Bicycle facilities will be added on Railroad Avenue across the Highway 4 overpass, but facilities are not continuous to the north or south. |
| 12 | A new shared use path is planned to directly connect Railroad Avenue to Power Avenue. |

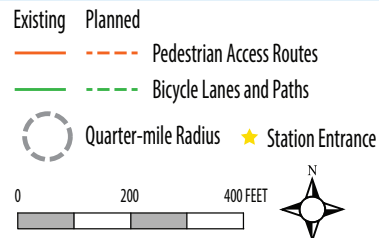




Figure 3.1b: Pittsburg Center Station Area Existing Conditions (Transit Connections; Parking, Traffic and Passenger Loading)

| Transit Connections  | |
|---|---|
| 1 | Buses serving the station will stop on Railroad Avenue north and south of Highway 4. New bus stops will be added on Railroad Avenue at Center Drive. All bus stops have limited amenities and lack shelters for waiting passengers. |
| Parking, Traffic, and Passenger Loading  | |
| 2 | If unregulated, parking lots for the Pittsburg City offices, courthouse, Police Department, and shopping centers south of the station, will be attractive to eBART riders and may fill up early in the morning. |
| 3 | A new off-street intermodal facility will provide paratransit facilities, drop-off/pick-up areas, and bicycle parking. It will be separated from the station by California Avenue. |
| 4 | Residents have expressed concern about the impacts to on-street parking and congestion on California Avenue. |
| 5 | There is no space for passenger drop-offs or pick-ups at the station itself, and no designated drop-off location south of the station. |
| 6 | Future development on the lot at the corner of Power Avenue and Center Drive could provide opportunities for shared parking. |
| 7 | The Bliss Avenue Park-and-Ride will continue to be served by two Tri Delta transit routes, in addition to eBART parkers. BART will likely charge for parking starting on eBART opening day. |

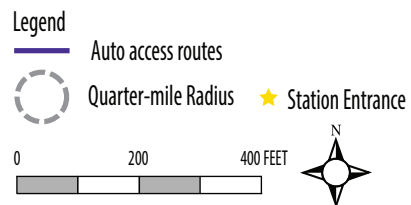
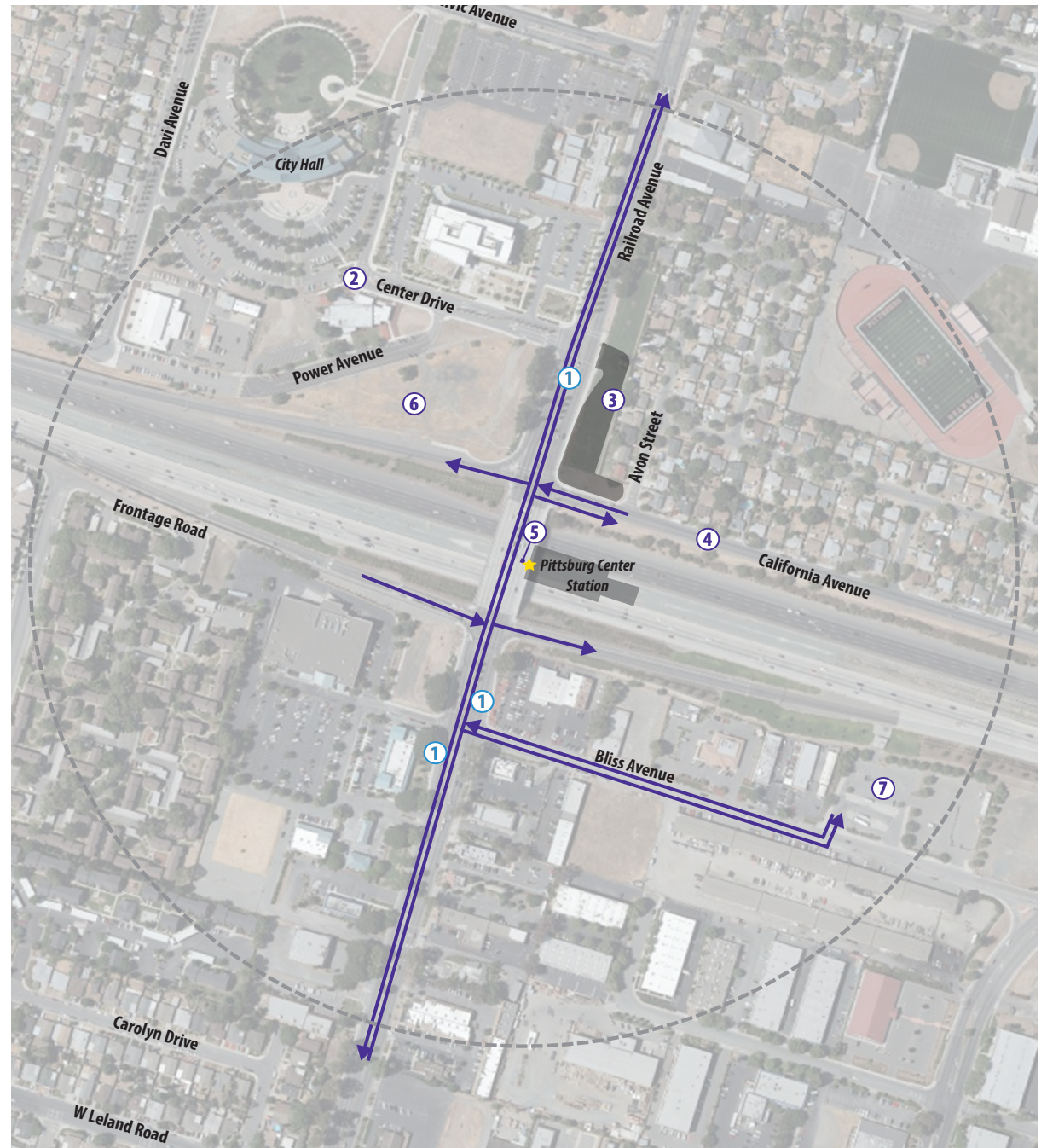




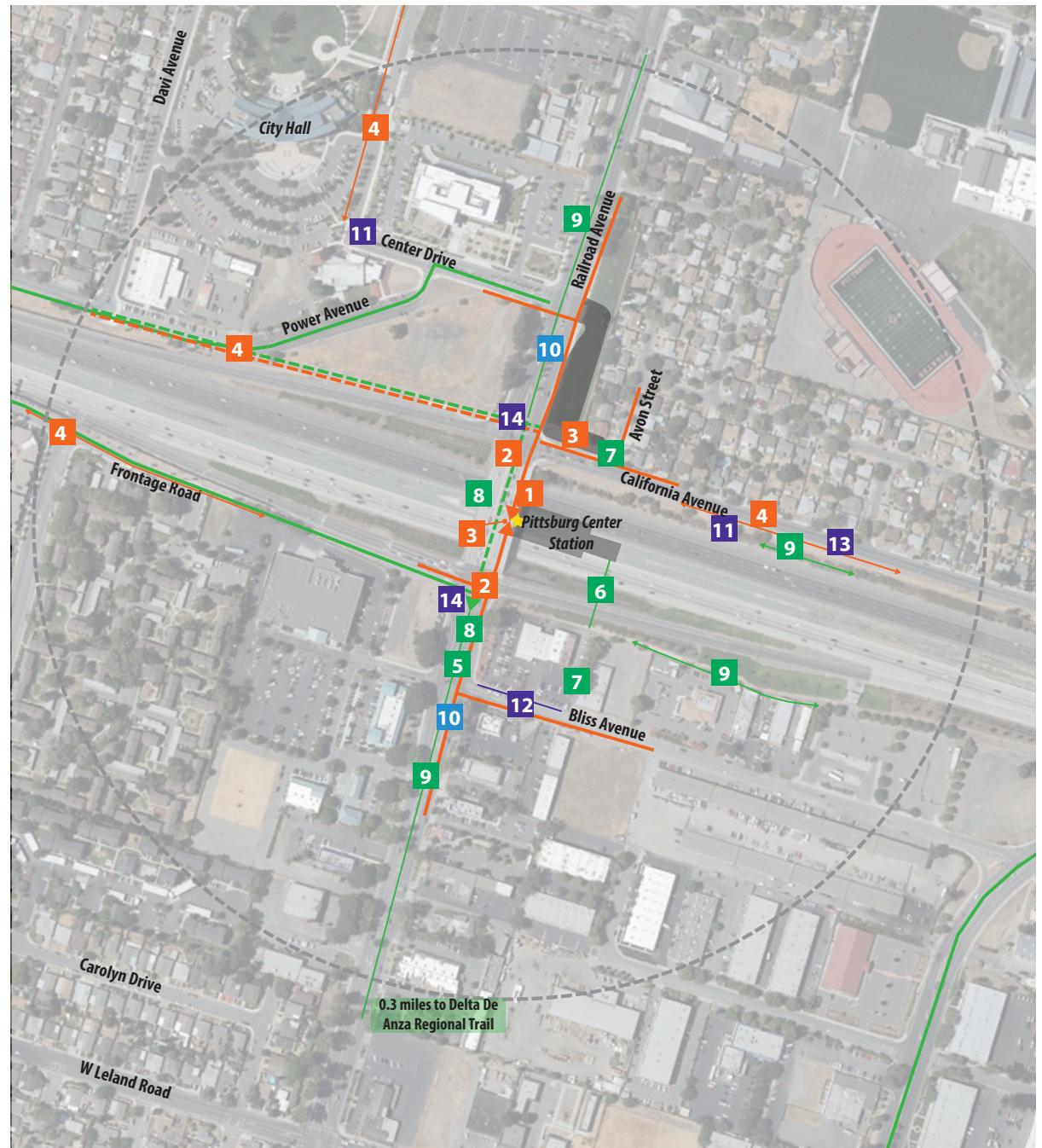
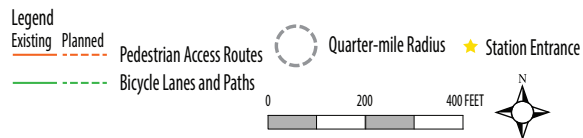


Figure 3.2: Pittsburg Center Station Recommended Improvements

| Pedestrian Safety and ADA Accessibility  | |
|---|--|
| 1 | Improve Railroad Avenue sidewalk with attractive traffic barrier, lighting, and pedestrian amenities. |
| 2 | Improve Railroad Avenue intersections at California Avenue and the Route 4 eastbound off-ramp intersection for pedestrian safety, including reducing turning radii to lower intersection travel speed. |
| 3 | Add wayfinding signage outside of station and at the Multimodal Transfer Facility. |
| 4 | Complete sidewalks on California Avenue, Power Avenue, Center Drive, and Frontage Road. |
| Bicycle Safety and Access  | |
| 5 | Improve bicycle lanes south of station and add signage directing cyclists to bike parking facilities. |
| 6 | Provide direct bicycle/pedestrian bridge from the Bliss Avenue parking lot. |
| 7 | Construct bike station with controlled-access bike parking (possible locations on California Avenue or with new development south of station). |
| 8 | Install bike racks on Railroad Avenue south of station or on Highway 4 overpass. |
| 9 | Install a bicycle trail parallel to Highway 4 east of the station and bicycle lanes on Railroad Avenue. |
| Transit Connections  | |
| 10 | Upgrade bus stops in the quarter-mile station area with shelters and seating. |
| Parking and Traffic  | |
| 11 | Manage on-street parking on surrounding streets and in the City Hall parking area. |
| 12 | Designate a pick-up/drop-off area on Bliss Avenue for those accessing the station from the south. |
| 13 | Add additional parking along California Avenue east of Avon Street. |
| 14 | Add wayfinding on Railroad Avenue for parking and drop-off facilities. |



Antioch Station

Antioch, California

The Antioch Station is currently under construction and is planned to be open winter of 2017/2018. It will be the final stop on the BART C-line and Eastern Contra Costa BART Extension (eBART). The station will be situated along Highway 4 at Hillcrest Avenue, with entrances on Sunset Drive. As the new terminus for BART, the catchment area is expected to be large and to attract many drivers to the station. As such, a large parking facility is planned.

Characteristics

Weekday Span of Service: 4 a.m. to 12 a.m.

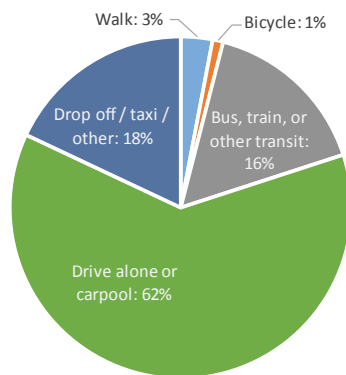
Frequency: 15 minutes

Projected 2018 Daily Entries: 2,270

Projected Peak Usage: 6 a.m. to 7 a.m., 5:45 p.m. to 6:45 p.m.

Parking spaces: 1,000 spaces by 2018, when eBART opens, and an additional 1,600 by 2030.

Projected Access Mode Split



(Source: eBART EIR, 2008)

Demographics

Table 4.1: Demographics (within 1/2 mile)

| | |
|--|-------|
| Population | 3,794 |
| Jobs | 360 |
| Low income (under 200 percent poverty level) | 13.9% |
| Minority (non white populations) | 57.7% |
| Households with no vehicles | 6% |
| Households with limited english | 3.3% |
| Senior population | 11.2% |
| Youth population | 25.1% |
| With disabilities | 12.9% |

Source: 2015 US Census, 5-Year American Community Survey

Local and Regional Plans

Hillcrest Station Area Specific Plan

City of Antioch, 2009

This plan guides future growth around Antioch Station, called the Hillcrest Station Area, including a transit village residential neighborhood and new retail uses.

Slatten Ranch Road and Connections

City of Antioch

The Slatten Ranch Road project will connect the roadway in from the of eBART station to Slatten Ranch Road in Brentwood. This is partially funded. A connection north from Slatten Ranch Road to Viera Avenue is also positioned for grant funding in the near future.

Hillcrest at Wildflower

DeNova Homes

This commercial development south of Antioch Station will include commercial, multi-family, and single family uses across 23 acres. Commercial development will line Hillcrest and Deer Valley, but will front primarily inward toward the parking lot.



Local Connections

Delta de Anza Trail

The Delta de Anza Trail generally follows the Contra Costa Canal, connecting the station area to communities to the east and west. The trail can be accessed south of Wildflower Drive, just over one mile from the station.



Tri Delta Transit Bus Service

Currently, eight Tri Delta routes serve the Hillcrest Park-and-Ride station, primarily picking up passengers travelling to BART. After the opening of eBART, the Antioch station will become a major transfer point for Tri Delta Transit and BART connections. Up to 10 Tri Delta bus routes would serve the station during the weekday peak period. The station is also served by paratransit.

Other Transit

In addition to the Tri Delta service, the Hillcrest Park-and-Ride is served by County Connection route 93x and Rio Vista Breeze route 52, both of which are expected to continue serving the station after eBART opens. The park-and-ride is also currently used by carpoolers and a Genentech employee shuttle.

Figure 4.1a: Antioch Station Existing Conditions (Pedestrian Safety and ADA Accessibility; Bicycle Safety and Access)

| Pedestrian Safety and ADA Accessibility  | |
|---|---|
| 1 | No direct access to station from the south. |
| 2 | New roads to the north and east have the potential to improve pedestrian and bicycle connections in these directions. |
| 3 | Intersections at the parking lot entrances have curb cuts and crosswalks along pedestrian access routes. Future development north of the station is expected to increase the pedestrian traffic and alter pedestrian access routes, which may require future intersection upgrades. |
| 4 | The design of the parking lot allows space for a pedestrian and bicycle bridge across the new highway ramps. |
| Bicycle Safety and Access  | |
| 5 | New bike lanes on Hillcrest Avenue have been completed for continuous connections to the station from the north and the south. |
| 6 | The station design includes one row of bike racks and six bike lockers outside. |
| 7 | Sidewalks and bike lanes on Larkspur Drive are not continuous. |
| 8 | At the Route 4 on-ramp, northbound bicyclists must cross two lanes of traffic to continue straight, creating a safety concern. |

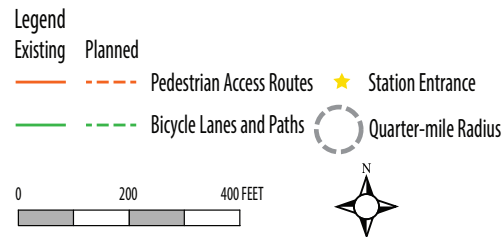




Figure 4.1b: Antioch Station Existing Conditions (Transit Connections; Parking, Traffic and Passenger Loading)

| Transit Connections  | |
|---|--|
| 1 | Eleven bus bays were installed in front of the station. |
| 2 | Bus shelters at the station provide minimal overhead covering and lack side panels for rain or wind protection. |
| Parking, Traffic, and Passenger Loading  | |
| 3 | The existing park-and-ride facility is already well-used. Any users who do not switch to eBART may no longer have access to the park-and-ride. |
| 4 | Slatten Ranch Road outside the station (previously named Sunset Drive) is planned to connect to the eastern portion of Slatten Ranch Road, creating a direct connection for travelers from Brentwood and Oakley. |
| 5 | A connection is planned to Viera Road to the north. |
| 6 | New highway ramps connecting Slatten Ranch Road to Route 4 have been completed. |
| 7 | The EIR for Antioch Station requires that 1,600 additional spaces be added by 2030. |
| 8 | Ten Kiss and Ride spaces are available just east and west of the station entrance. Roadway width and design should minimize congestion in this area. |
| 9 | ADA parking will be just east of the station entrance. |

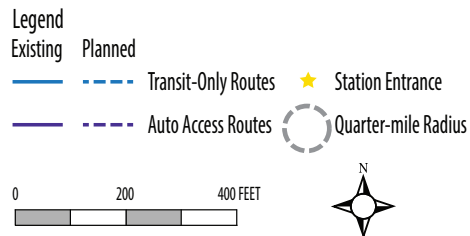
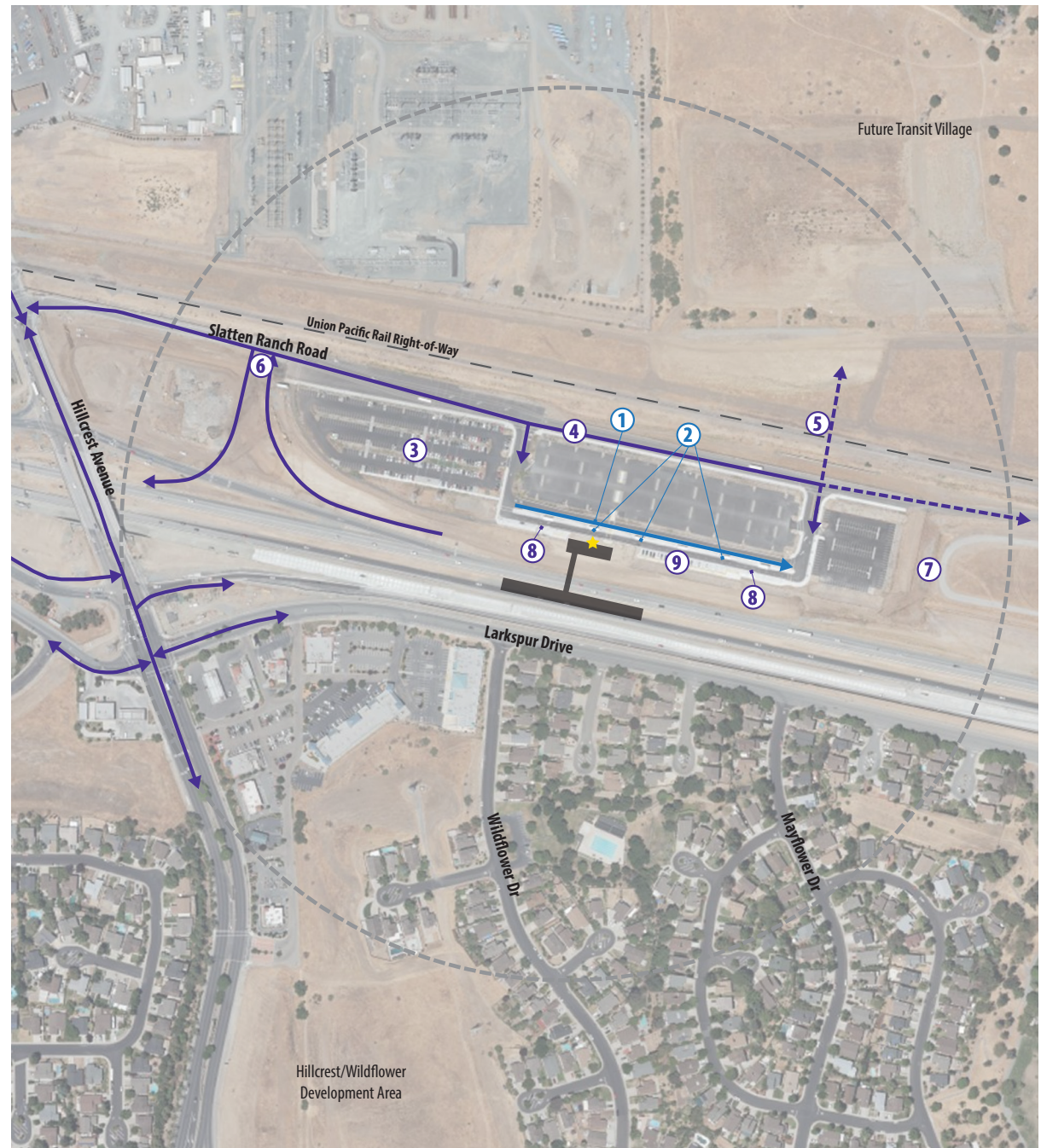






Figure 4.2: Antioch Station Recommended Improvements

| Pedestrian Safety and ADA Accessibility  | |
|---|---|
| 1 | Install wayfinding and signage outside of station. |
| 2 | Create pedestrian and bike connection across the freeway to the south. |
| 3 | Widen sidewalks along Hillcrest Avenue to reduce travel speeds and improve pedestrian and bicyclist safety. |
| 4 | Add sidewalks to Viera and Slatten Ranch Road extensions to the station area. |
| 5 | Construct bicycle and pedestrian bridge along Slatten Ranch Road across the new highway ramps. |
| Bicycle Safety and Access  | |
| 6 | Install bike station with access-controlled bike parking and repair facilities (potential locations in the station parking lot or across Slatten Ranch Road). |
| 7 | Improve bike lane continuity on Larkspur Drive. |
| 8 | Construct separated bike path along Union Pacific right-of-way or Slatten Ranch Road. |
| 9 | Add bike lanes to Viera and Slatten Ranch Road extensions to the station area. |
| Transit Connections  | |
| 10 | Construct improved bus shelters at station with better weather protection for bus passengers. |
| Parking, Traffic, and Passenger Loading  | |
| 11 | Install wayfinding to direct drivers to the parking lot and passenger drop-off locations. |
| 12 | Construct an additional parking lot on the empty lot east of the parking lot for projected future demand. |
| 13 | Designate reserved parking spaces for carpoolers and for off-peak riders, consistent with BART parking policies and practices at other stations. |

