Subarea 2-2



Subarea Description



Subarea 2-2: Ferry Building

Ferry Building (Subarea 2-2) includes the iconic Ferry Building, important piers, the city's downtown ferry terminals, and portions of San Francisco's Financial District. It also contains significant city and regional transportation infrastructure and connection points, including ferry terminals, underground Embarcadero and Montgomery and BART/Muni stations, multiple Muni bus lines, historic streetcars, and cable cars. The Bay Trail, a 500-mile long regional pedestrian and bicycle path around the Bay, runs along the Embarcadero and the Financial District shoreline.¹

The Transbay Transit Center is also located in this subarea, connecting Golden Gate Transit from Marin County, Alameda County Transit buses from the East Bay, and SamTrans buses from San Mateo County. Long-distance buses from beyond the Bay Area, such as Greyhound and Amtrak, as well as the San Francisco Municipal Railway, also connect to the Transbay Transit Center.

The many transportation hubs, historic waterfront, and vibrant businesses of the Financial District make this subarea critical to San Francisco and the regional economy. Significant disruption to this area could lead

to loss of jobs, tourism, and tax revenues, causing significant economic disruption to the entire Bay Area. Service workers and those who cannot work remotely would be most impacted. This subarea has already experienced economic disruption due to COVID-19.

The subarea's one-mile shoreline is entirely engineered and includes a series of aging seawalls referred to as the Embarcadero Seawall and historic piers.

Landmarks of this subarea include the Central Embarcadero Historic District (Piers 1-5), which has been listed on the National Register. In 2016, it was named one of America's 11 most endangered historic places by the National Trust for Historic Preservation. This annual list identifies the nation's architectural and cultural heritage sites at risk of destruction or irreparable damage. Loss or damage of the Ferry Building, the adjacent Agriculture Building, its piers and/or terminals would impact the area's historic district, affecting tourism and potentially leading to the loss of tax credits.

Pier 1 was rehabilitated and serves as the Port of San Francisco headquarters, with offices, a café, and public access including a Bayside History interpretive walk through the bulkhead building and conference rooms with stunning bay views that may be used for public functions. The bulkheads of Piers 1.5, 3, and 5 have been rehabilitated for restaurants, public access, a Bayside History interpretive walk, and office space. Pier 3 is an open-deck pier used for a bay excursion terminal and bayside public access. The Pier 24 Annex houses the Pier 24 Photography art museum.

Across from the Ferry Building, Embarcadero Plaza, with its Vaillancourt Fountain and palm trees, serves as a gateway between the City and the Bay. It connects the Embarcadero and Market Street as a thoroughfare for commuters and tourists

¹ The San Francisco Bay Trail. Available at http://baytrail.org/.





Problems, Opportunities, Objectives, Constraints, and Considerations

Ferry Building

Subarea 2-2



and hosts local vendors and weekly farmers markets. Permanent inundation would make this site and surrounding infrastructure unusable.

Additional outdoor space includes Sue Bierman Park, 4.4 acres of land that previously served as on- and off-ramps for the elevated Embarcadero Freeway and was demolished and converted into open space after being damaged by the 1989 Loma Prieta earthquake. The park features a children's playground and lawn areas with trees and walking paths throughout the park. The San Francisco Recreation and Parks Department (RPD) uses a small Public Utilities Commission building and lot for fuel storage, power equipment, and vehicle parking. Damage to the building during a flood would affect RPD maintenance activities.

Located to the north of the Ferry Building, Pier 1.5 includes a water taxi landing and public boat dock. Pier 7, located on the northernmost end of this subarea's shoreline, is a long, thin pier, lined with benches and panoramic views of both the Bay and the City. It is also popular for crab fishing, mainly at night, and for shark and perch fishing.

At the southern end of this subarea, Pier 14 serves as a breakwater that extends over 600 feet into the Bay, protecting the Downtown Ferry Terminal from wave and tidal forces. Pier 14 also includes several educational markers to help the public imagine future sea level rise protections.

Adjacent to Pier 14, the Downtown San Francisco Ferry Terminal Expansion Project is expanding and enhancing the ferry landing area. The project includes the construction of new ferry gates that will be able to accommodate roughly three to four feet of anticipated sea level rise above a 100-year extreme tide event.

Several areas along the Financial District shoreline play critical roles in emergency response and disaster recovery. Fire Station 13, Fire Station 35 (and Fireboats), the Embarcadero Promenade, various recreational plazas, Piers 1 and 3, and the ferry terminals all serve critical disaster response functions, including staging areas, emergency operation centers and evacuation points. In addition to evacuating people from San Francisco to other parts of the Bay Area, the ferry terminals can also transport supplies and personnel to assist with disaster response and recovery within San Francisco. The loss of access to the fire stations, piers, ferry terminals, or the inundation of staging areas would delay evacuation and increase emergency response times following a disaster, such as a large earthquake.

The new Fireboat Station 35 being built at Pier 22.5 will be a two-story, 15,000+ square foot fireboat station behind the existing fireboat house. The fireboat house is a San Francisco Landmark and will continue to function as Engine Company 35. Existing dilapidated Piers 22.5 and 24 will be demolished as part of construction.

The new structure will be built on top of a steel float and anchored by four guide piles, allowing the fireboat station to rise and fall with the bay's tides and accommodate fluctuations due to El Niño winters, coastal storm surge, and sea level rise. It will moor the San Francisco Fire Department's rescue watercraft and three fireboats, which can connect directly to the Emergency Firefighting Water System (EFWS, also known as the auxiliary water supply system, or AWSS) via a series of Fireboat manifolds along the shoreline and pump saltwater from the bay into the system for fire suppression.

Since 2017, the Port has connected with tens of thousands of community members through the Waterfront Resilience Program. Public feedback collected about the Ferry Building and the Financial District underscores the importance of getting people where they need to go through different types of transportation, protecting historic buildings, keeping businesses up and running, protecting key utilities, and being prepared for emergencies by maintaining staging areas.

Further feedback highlights additional community priorities, including opportunities to improve walkability and bike paths and enhance and expand green space. Community feedback related to this subarea is included in the Community-Identified section as part of the Review of Landmarks, Assets, and Services listed below and incorporated in the overall POOCC analysis.





Subarea 2-2



Landmarks, Assets, and Services

Land Use

The piers and Ferry Building are zoned as Community Business Commercial District. The gateway area between the ferry building and Downtown Office Commercial District is zoned Public. The area also includes some Downtown Residential and more Public zoned areas around the Transbay Terminal. The piers here are for fishing, ferry and water taxi, excursion, harbor services, water recreation, and temporary or ceremonial berthing. There are four public access locations.

Commercial and maritime uses on Port property (piers and inland lots) generate revenues for capital repair and maintenance of Port marine infrastructure, buildings and public realm assets that support maritime use, visitor attractions and public enjoyment of the shoreline.

Community-Identified



- Ferry Building
- Public space
- Farmer's Market
- BART and Muni access
- Improved walkability
- Improved bicycle infrastructure
- More green space

Historic and Cultural

- Central Embarcadero Historic District (Piers 1-5)
- Seawall and Bulkhead Wharf
- Ferry Building
- Agriculture Building
- Fire Station 35 and Fireboat house (Pier 22.5)
- Pier 1 and Pier 1 Bulkhead and Shed
- Pier 1.5 and Pier 1.5 Bulkhead and Shed
- Pier 3 and Pier 3 Bulkhead
- Pier 5 Bulkhead
- Pier 24 Annex
- Pacific Gas and Electric Company General Office Building and Annex
- Folger Coffee Company
- Audiffred Building
- Ferry Station Post Office Building
- Matson Building Annex
- United States Custom House
- Federal Reserve Bank
- Rincon Annex Post Office

Maritime



- Ferry Building Terminals (commuter ferries run between this part of the San Francisco waterfront and Alameda, Oakland, Vallejo, Larkspur, Sausalito, and Tiburon)
- Ferry Building (includes the Port Commission Hearing Room, supports the regional ferry terminal, and its Marketplace and Farmer's Markets are major visitor attractions along the shoreline





Subarea 2-2



- Agriculture Building (offices)
- Embarcadero Promenade
- Fireboat House (Pier 22.5, floating dock and building)
- Hornblower Ferry Terminal (Pier 3)
- Landing (Pier 1.5, for water recreation)
- Small boat launch (Pier 1.5)
- Water Taxi (Pier 1.5)
- Port of San Francisco Headquarters (Pier 1)
- Pier 7 (fishing, public access to the waterfront)
- Pier 3 (restaurants, offices, parking, public waterfront shoreline access)
- Piers 1.5, 3, and 5 bulkhead buildings (restaurants, Bayside History walk, offices, shoreline access)
- Pier 14 (public access, fishing)
- Fire Station 35, Fireboat house, and Fireboat berths (Pier 22.5)
- Pier 24 Annex (art museum)
- Seawall Lot 327
- Seawall Lot 347N (public waterfront access)
- Seawall Lot 347S (industrial)
- Seawall Lot 351 (parking)
- Seawall Lot 361 (parking)
- Underground storage tank

Disaster Response

- Fireboat Headquarters, Fire Station 35 (Pier 22.5)
- Fire Station 13
- Assembly Area (Rincon Park)
- Assembly Area (Embarcadero Plaza)
- Assembly Area (Sue Bierman Park)
- Assembly Area (Embarcadero Bocce Ball Courts)
- Downtown Ferry Terminal (Gates B, C, D, E, F, and G)
- Port of San Francisco Headquarters (Pier 1)
- Primary Port Emergency Operations Center, also has backup generator (Pier 1)
- Water Taxi (Pier 1.5)
- Hornblower Ferry Terminal (Pier 3)
- Emergency Firefighting Water System fireboat manifold (Pier 22.5)
- Emergency Firefighting Water System cisterns (4)
- Emergency Firefighting Water System suction connections (4)
- Staging Area (Seawall Lot 347 South, empty lot)
- Staging Area (Seawall Lot 351, parking lot)
- The Embarcadero





Subarea 2-2



Utilities

Water

• Buried water supply pipes

Wastewater

- Buried wastewater and stormwater sewer pipes
- Jackson Transport / Storage Box
- Channel Transport / Storage Box
- North Shore Force Main
- North Point Force Main Sansome Tunnel
- Combined sewage discharge outfalls (2)



Power

- Back-up diesel generator (Pier 1)
- Embarcadero PG&E Substation
- Transbay tube underwater cable
- Overhead and buried electric power infrastructure
- PG&E major downtown substation and redundant ZX-1 Transbay cable

Communications

- Verizon telecommunication central distribution center
- Department of Technology public radio station connecting the city with Treasure Island
- Several telecommunication cell sites (e.g. cells on top of buildings or small cell towers on streetlights) are likely distributed throughout the subarea, but specific locations are unknown

Natural Gas

Buried natural gas supply line infrastructure

Transportation

- The Embarcadero roadway
- Muni E-Line (historic streetcar)
- Muni F-Line (historic streetcar)
- Embarcadero BART / Muni Station
- Montgomery BART / Muni Station
- Downtown Ferry Terminal (Gates B, C, D, E, F, and G)
- Cable Car
- Regional bus routes (Transbay Terminal)
- Muni bus stops (116)
- BART Tube (bay crossing)

Open Space and Ecology

Open Space

- Embarcadero Plaza
- Ferry Park
- Ferry Plaza
- Harry Bridges Plaza
- Maritime Plaza
- Sue Biermann Park





Subarea 2-2



- Bay Trail
- Embarcadero Promenade
- Bay Water Trail
- Bay Water Trail Access (Pier 1.5 landing site)
- Pier 3 perimeter
- Pier 1 perimeter and Bayside History interpretive walk through bulkhead building
- Pier 1.5, 3, 5 bulkhead perimeter and Bayside History interpretive walk through bulkhead buildings
- Ferry Building perimeter and Bayside History interpretive walk
- Ferry Platform
- Pier 14 public pier
- Rincon Park

Ecology

- San Francisco Bay
- Bay habitat

Problems, Opportunities, Objectives, Constraints, and Considerations

Problems

- The shoreline in this subarea is constructed on a series of aging seawalls referred to as the Embarcadero Seawall. Rising sea levels, wave hazards, and the continuing possibility of an earthquake put the integrity of the shoreline at risk.
- This subarea is important for maritime functions, including the Bay Area regional hub for water transportation, Bay excursions, fireboats and water taxi/recreational boat access with potential impacts on the regional transportation system jobs, tourism and the state and regional economy in the event of a major seismic or flood event.
- This subarea provides important maritime and disaster response services that are vulnerable flood hazards, yet vital to efficient disaster response after hazard event occurs.
- This subarea's assets are entirely located on Bay fill making them vulnerable to strong seismic activity.

- Flooding of the Embarcadero could impede emergency response and cause major disruption.
 Prolonged construction activities could impact roadway use by public transit, resident, tourist and commuter traffic, pedestrians, and bicyclists.
- Flooding, wave, and/or earthquake damage could lead to significant disruption to this area, leading to loss of jobs, tourism, and tax revenues and causing significant economic disruption to the entire Bay Area.
- The subarea includes multiple regional transit assets and connection locations; impacts to these assets could cause regional disruptions to residents, commuters, and tourists throughout the Bay Area.
- Impact or loss of historic piers could jeopardize National Register of Historic Places designation and loss of use of piers.





Subarea 2-2



Opportunities

- Strengthening the Seawall to reduce the potential for damage for after an earthquake and increase flood protection.
- Rehabilitation and preservation of historic and iconic assets for commercial uses and public amenities.
- Enhancement and increased public access and connections to the Bay shoreline.
- Improved linkage between the Embarcadero/Bay Trail and Market Street bike routes.
- Improvement or enhancement of maritime uses along the shoreline.
- Increased ecological connections to the Bay and new habitat by integrating nature-based features.
- Partnerships with multiple transit agencies to secure and improve critical regional transportation networks and connections.
- Create visitor attractions and people gathering places that enliven and enhance the vitality of the shoreline and generate revenue for continued repair and maintenance of assets.
- The collection of public spaces clustered around the Ferry Building amount to ~25 acres of public open space. These spaces were designed one-by-one over many decades, and are under a few different agency's jurisdictions (Port, Public Works, Rec & Park) and as such, are disjointed and do not currently equal the sum of their parts. Construction of near-term adaptation measures here could set the stage for a substantial redesign of these individual spaces into a better, more unified open space. The design and siting of long-term adaptation measures here should be made with an eye toward how they might help unify and improve the function of these spaces as one of the region's premier public gathering destinations.

Objectives

- Strengthen the Seawall for public safety.
- Immediately implement highest priority disaster response and life safety projects along the Embarcadero Seawall (2018-2026).
- Protect and improve maritime functions, to maintain the historic character of waterfront, provide water transportation and harbor services to the region, prevent loss of maritime functions that are not replicated elsewhere in the region, and maintain Port revenue used to sustain public assets that support maritime use and public enjoyment of the shoreline.
- Adapt to mid-century seismic and future flood risk.
- Envision the waterfront in 2100 and beyond.
- Protect or improve industrial, cultural, and commercial uses (including visitor attractions) to maintain Port revenue used sustain public assets that support maritime use and public enjoyment of the shoreline.

Constraints

- Avoid and minimize impacts to local and regional transit stations, routes, and connections.
- Must not increase the unmitigated risk of flooding from any source (bay, creek, or surface waters) outside of the subarea.
- Must protect maritime and disaster response functionality.
- Must not adversely impact the Bay ecosystem.





Problems, Opportunities, Objectives, Constraints, and Considerations

Ferry Building

Subarea 2-2



Considerations:

- Population density: This is a highly concentrated urban area with numerous businesses and a high demand for economic activity, tourism, and public use.
- Flooding or seismic events: These events could potentially impact maritime and industrial uses that generate Port revenues used for capital repair and maintenance of Port assets and services, including piers, historic buildings and districts, shoreline flood and seismic risk reduction, open space, public assets, parks, maritime berths and other maritime infrastructure, the Embarcadero Promenade and other utilities and infrastructure.
- Tenants: The Port leases land to tenants including private companies, City agencies, and the U.S. military. Coordination with all tenants will be important. While the Port owns these lands, many are operated by tenants that invest private capital for infrastructure improvements to the facilities. Management decisions related to addressing the consequences of flooding and planning for future sea level rise adaptation could complicate lease terms and will require additional coordination with tenants.
- Stakeholder engagement: Ongoing public outreach by the Port and additional efforts have generated many location specific comments from the community. The Ferry Building is consistently identified as a highly significant asset along the waterfront. There is high public interest in this area, including maintaining the existing character and qualities that are iconic to the City and preserving and restoring historic piers and buildings in this subarea.



