Port of San Francisco

Contracting Opportunities

Small Business Summit

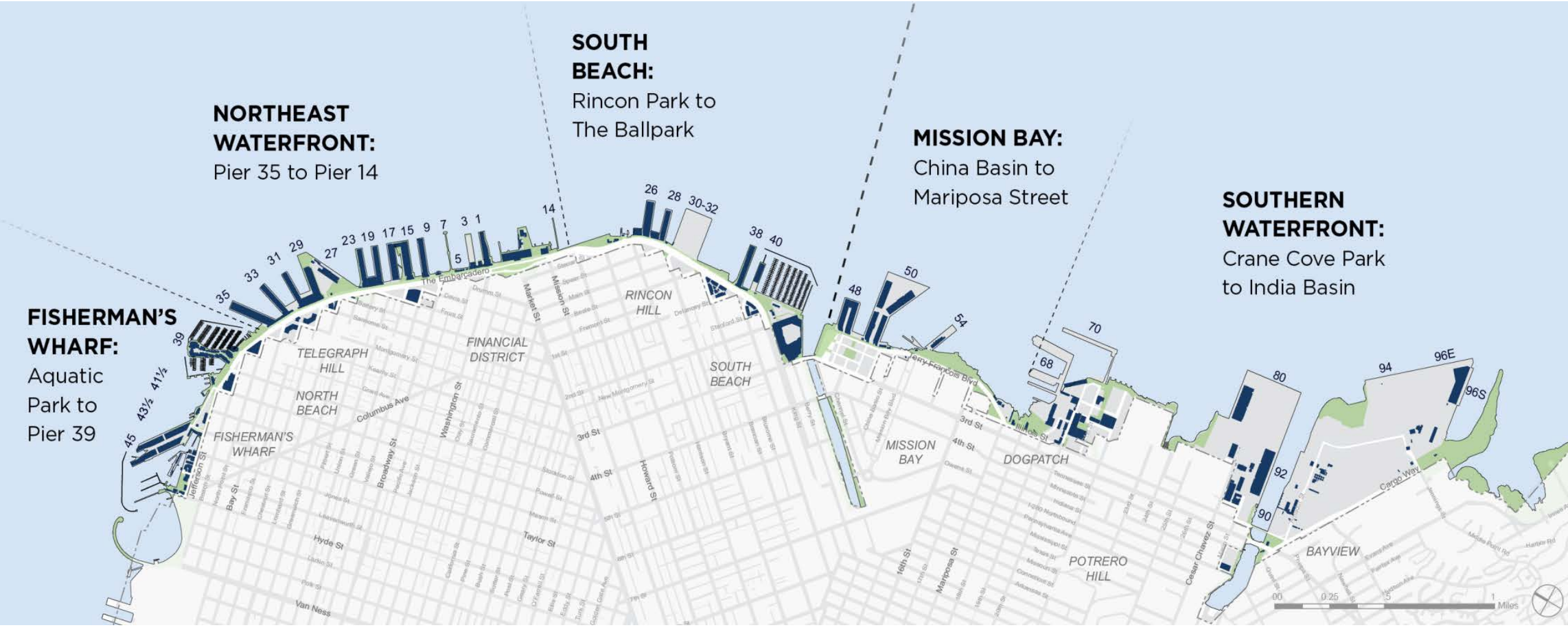
October 6, 2021

Our Mission

The Port of San Francisco manages the waterfront as the gateway to a world-class city, and advances environmentally and financially sustainable maritime, recreational and economic opportunities to serve the City, Bay Area region, and California

Our Vision

Deliver vibrant and diverse waterfront experiences that enrich the City and San Francisco Bay

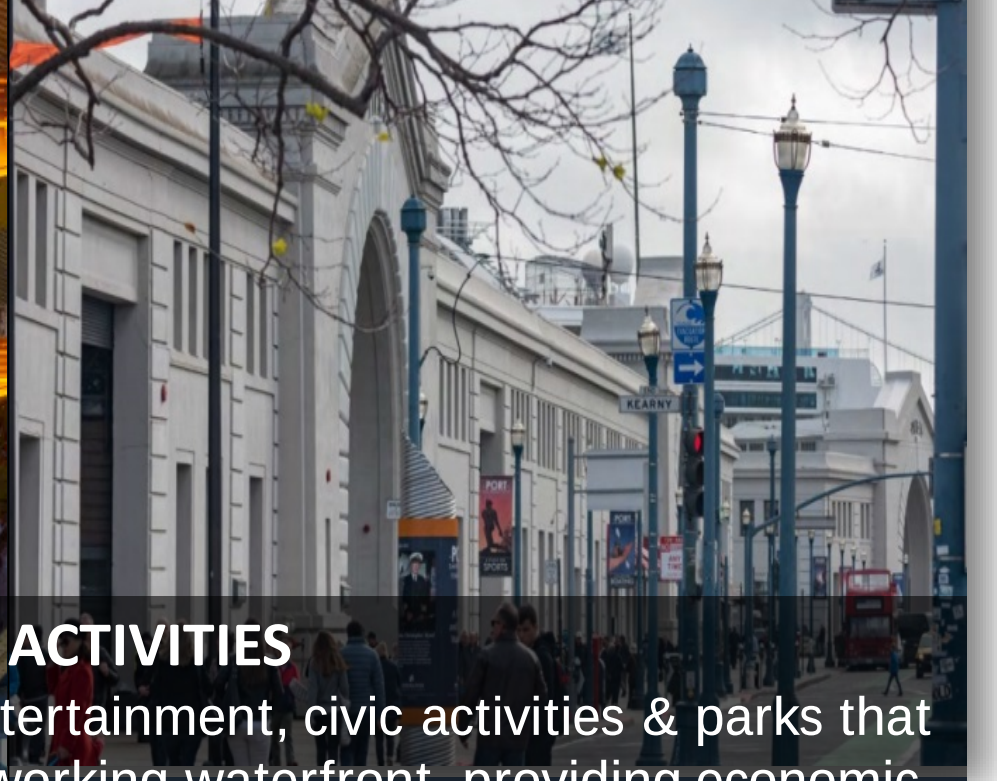


PORT OF SAN FRANCISCO

A WORKING MARITIME PORT

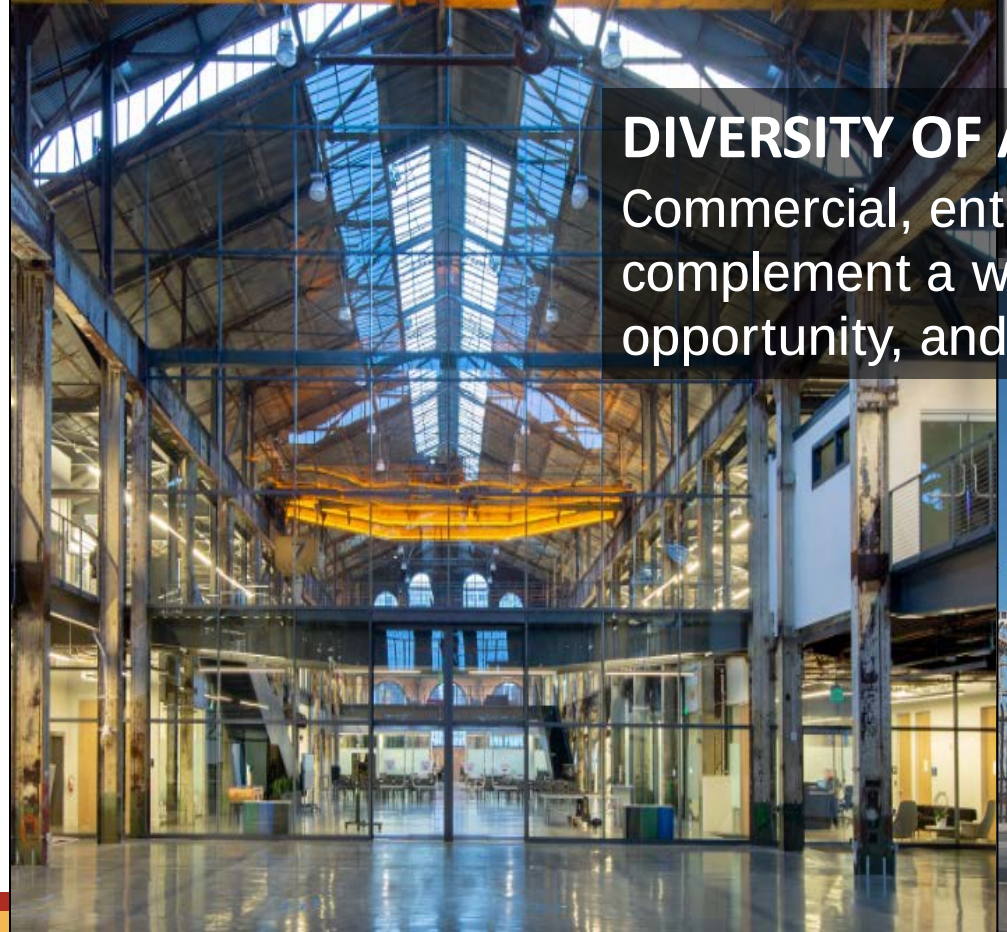
Preserve the Port's diverse maritime portfolio for the needs of cargo shipping, cruise shipping, ferry and excursion boats, water taxies, fishing industry, ship repair, recreational boating and water-dependent activities

PORT OF SAN FRANCISCO



DIVERSITY OF ACTIVITIES

Commercial, entertainment, civic activities & parks that complement a working waterfront, providing economic opportunity, and waterfront destinations for all



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WATERFRONT PARKS & OPEN SPACE

Complete, enhance, and enliven the network of parks, public access, and natural areas along the San Francisco waterfront and Bay shoreline for everyone to use and enjoy

How do I connect with the Port?

Join Opt-in Form

Attend Office Hours – 3rd Wed 4p-5p

Annual Open House

Advertisements

https://sfcitypartner.sfgov.org

https://sfport.com/contracting-opportunities

WATERFRONT RESILIENCE PROGRAM

March 24, 2022 | Contract Open House

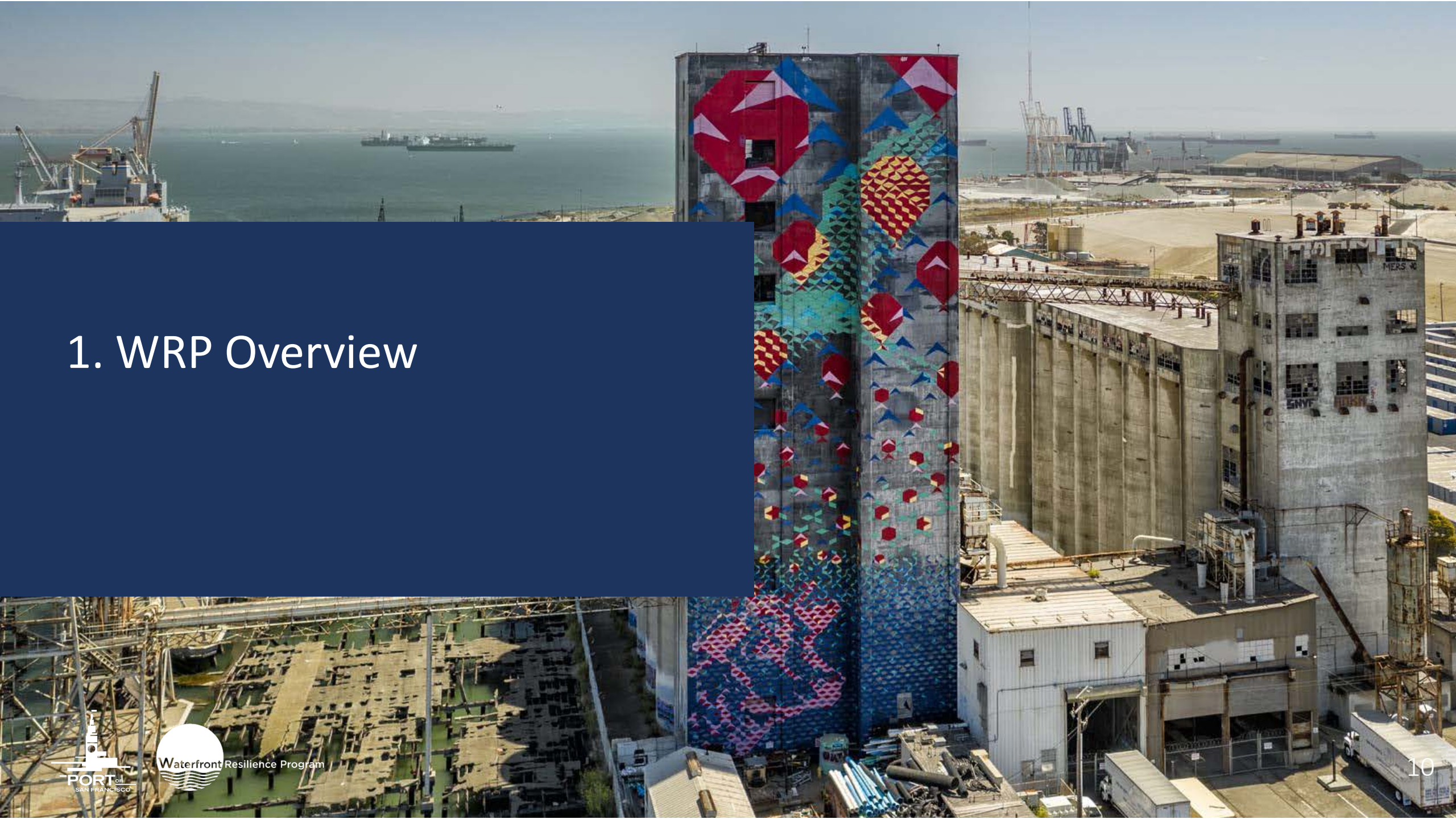
PORT OF SAN FRANCISCO

Waterfront Resilience Program

TODAY'S AGENDA

Overview

- Waterfront Resilience Program (WRP) Overview
- Work to Date
- On-Going and Upcoming Work
  - Embarcadero Early Projects
  - Waterfront Wide Adaptation Strategies
- Questions



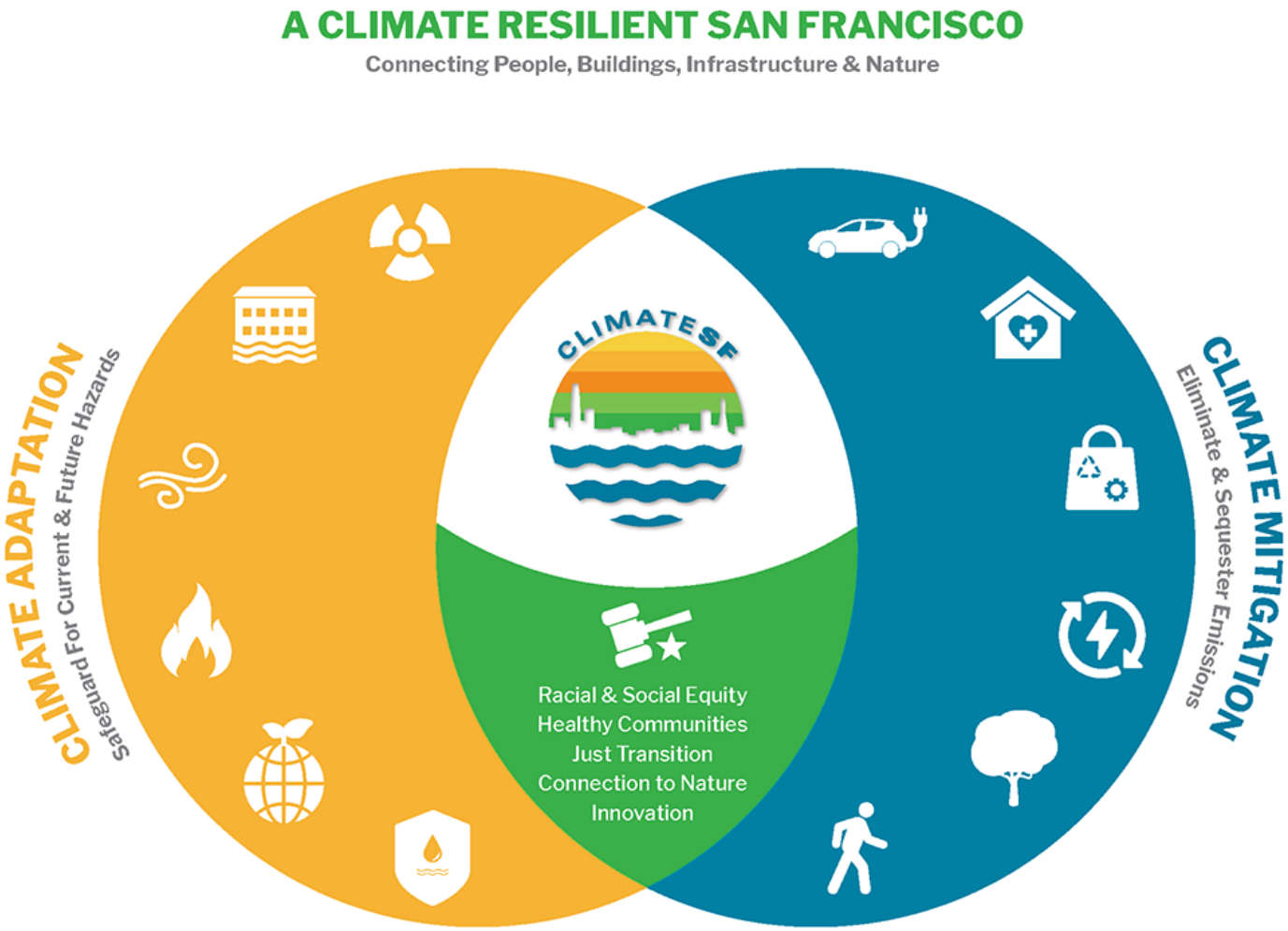
1. WRP Overview

WATERFRONT RESILIENCE PROGRAM

The Port's Waterfront Resilience Program efforts ensure the waterfront, and its important regional and citywide assets, are resilient in the face of hazards such as earthquakes, flooding, sea level rise due to climate change, shoreline erosion, and others.

Waterfront Resilience Program

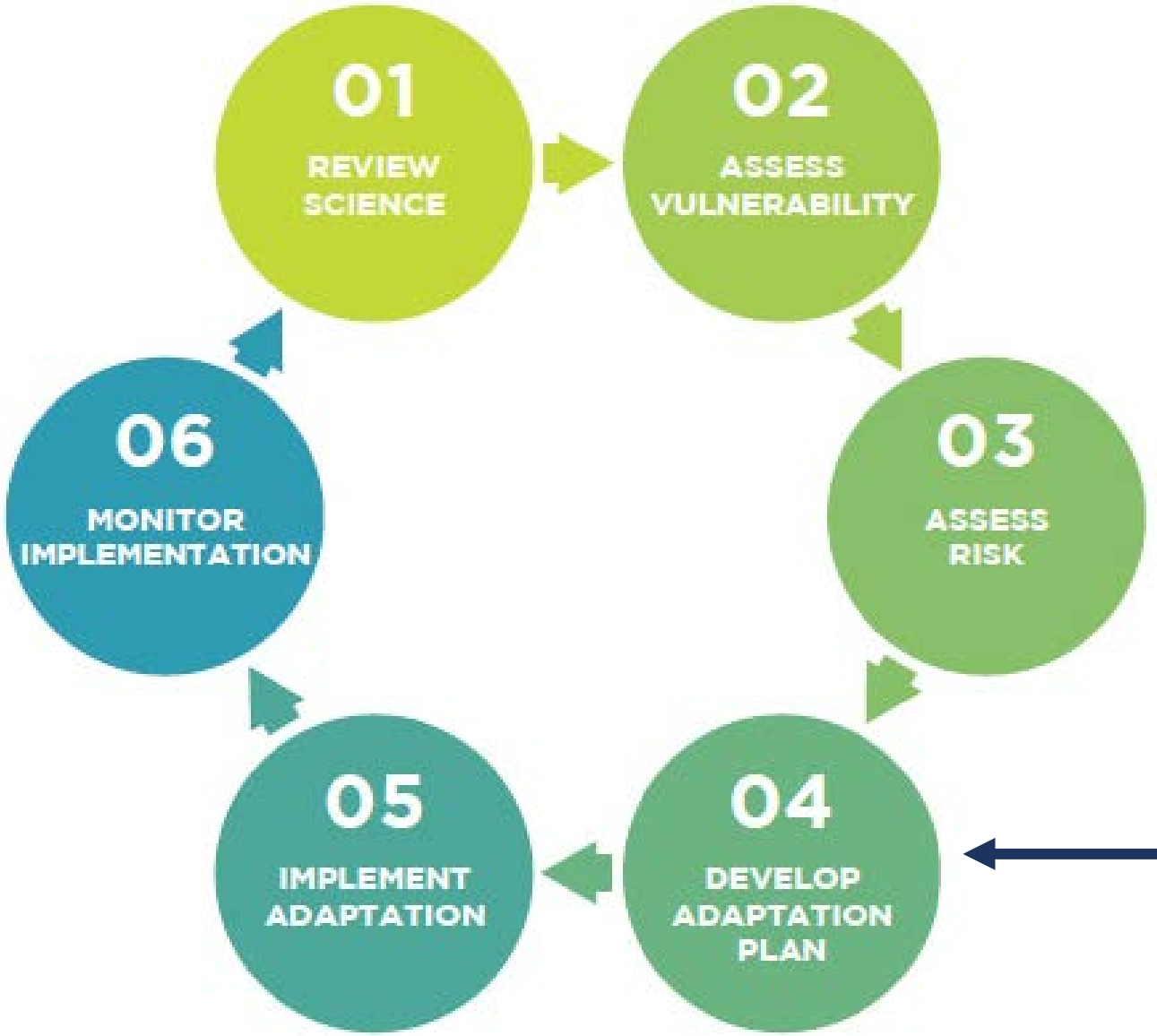
CLIMATE SF FRAMEWORK



WATERFRONT RESILIENCE PROGRAM EFFORTS

4. Work to Date

WRP WORK TO DATE

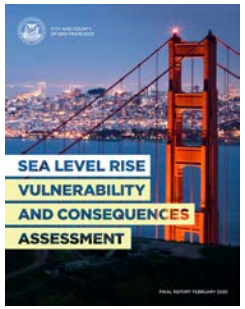


San Francisco Sea Level Rise Action Plan, 2016

Waterfront Resilience Program is here!

WRP WORK TO DATE

- Sea Level Rise Projections



- SLR Vulnerability and Consequences Assessment
- Multi-Hazard Risk Assessment (MHRA)

- Adaptation Measures Development

- Public Realm studies

- Northern Waterfront adaptation studies
- Islais Creek Adaptation Strategy

**Public stakeholder engagement conducted throughout*

WRP WORK TO DATE: COMMUNITY OUTREACH

Events and Details:

22 events throughout the city

4,000 people contacted

2,500 pieces of collateral distributed

2,000 engagement activity participants

1. **Focus on life safety & emergency response**

2. **Prioritize assets most loved by the community and most important to the city**

3. **Put people first**

Source: WRP Outreach Recap 2017-2020 Memo (Civic Edge)

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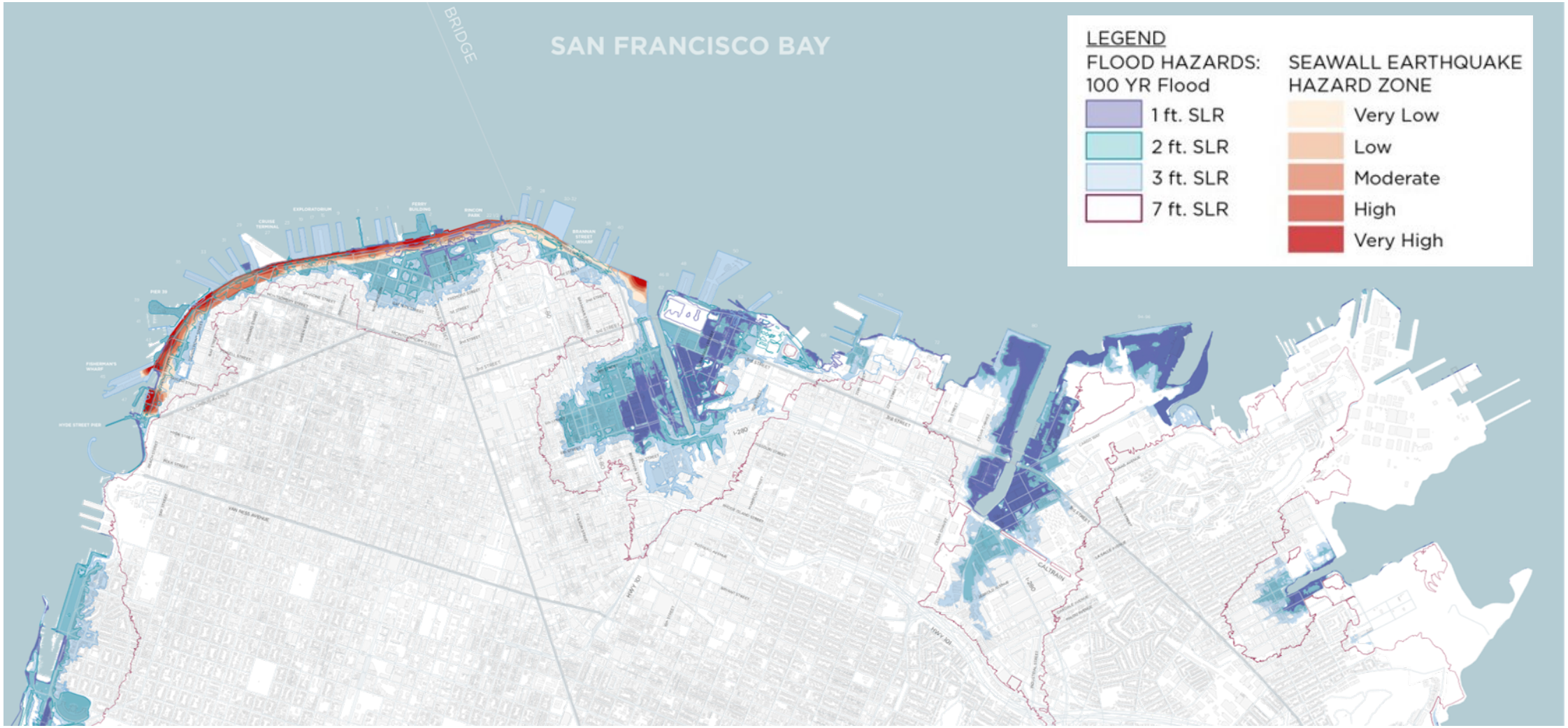
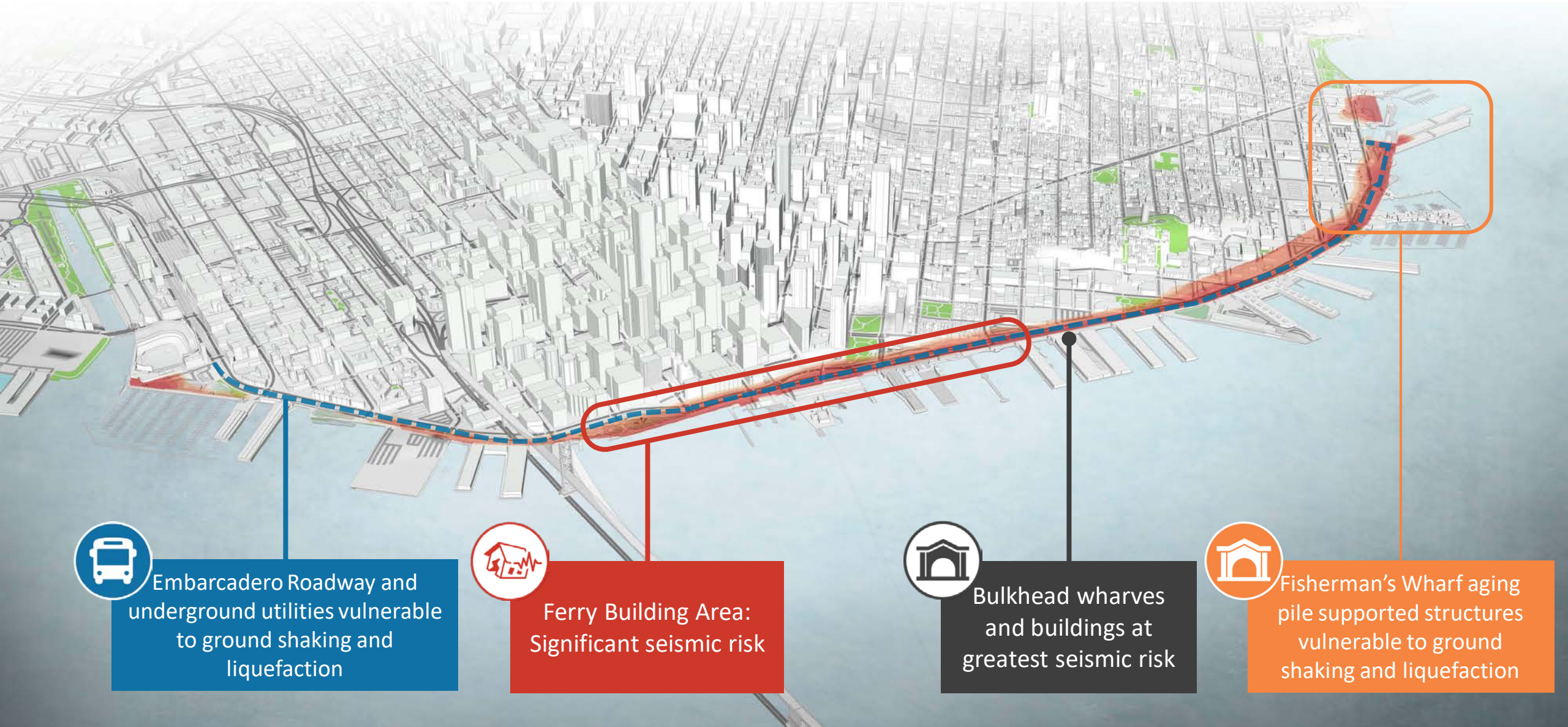
PORTWIDE RESILIENCE NEEDS

Flood and seismic risk along the waterfront



EARTHQUAKE RISKS FACING THE EMBARCADERO

Embarcadero Multi-Hazard Risk Analysis (MHRA) Findings



FLOOD HAZARDS FACING THE EMBARCADERO

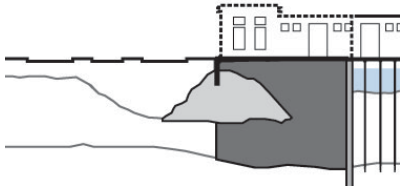
Embarcadero Multi-Hazard Risk Analysis (MHRA) Findings

MEASURES DEVELOPMENT - SEISMIC

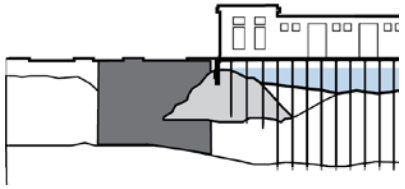
Draft seismic improvements under consideration by the Port

Seismic Measures

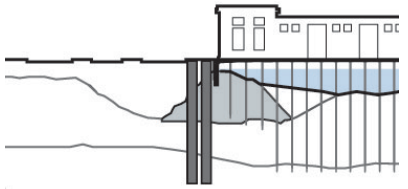
Shoreline Stabilization



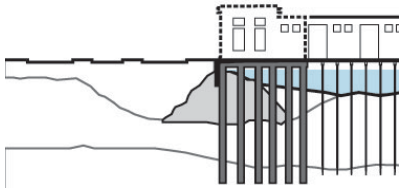
Nearshore Buttress



Landside Buttress

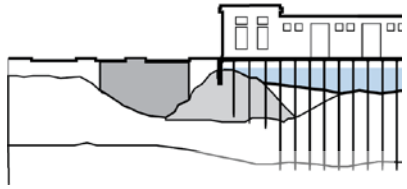


Drilled Shafts

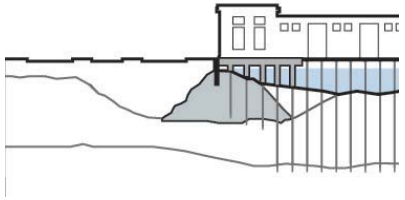


Super Bulkhead Wharf

Targeted Measures



Liquefaction Mitigation



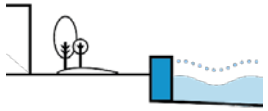
Bulkhead Wharf Retrofits

MEASURES DEVELOPMENT - FLOOD

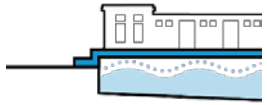
Draft flood improvements under consideration by the Port

Physical

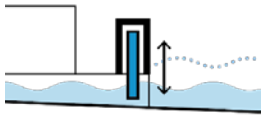
Levees



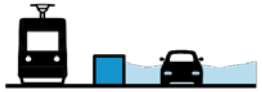
Seawalls



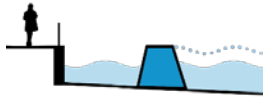
Raised Marine Structures



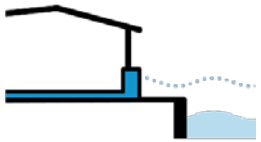
Tide Gates



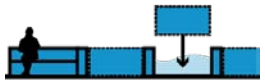
Floodwalls



Breakwaters



Building Adaptations



Deployables

Ecological

Ecological Marine Structures

Ecological Features

Aquatic Habitat

Ecological Shorelines

3. Embarcadero Early Projects

DEFINING EMBARCADERO EARLY PROJECTS

Examples of Project Types

Bulkhead
Wharf Retrofits

Seawall and
Shoreline
Strengthening

Disaster
Response
Improvements

EMBARCADERO EARLY PROJECTS LIST

- **11** advancing straight to pre-design (needs assessment) using Proposition A funding
- **5** advancing through a geographic strategy for the stretch between Piers 19 and 41
- **7** advancing through coordination with long-term Port tenants, capital programs, and City agency coordination

Proposition A Predesign

Advance through Geographic Strategy

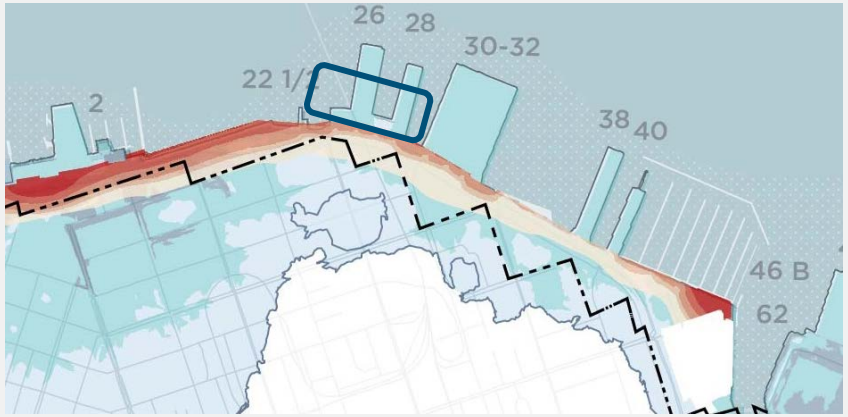
Coordination with Long-term Tenants, Capital Programs and City Agencies

PROJECT LIST:

1	Joint Operations Security Center and Fuel Dock Reliability Project
2	Wharf J9 Replacement and Resilient Shoreline Project
3	Taylor Street Seawall Earthquake Stabilization Project
4	Pier 45 Apron Earthquake Safety Retrofit and Flood Risk Reduction
5	Pier 43-1/2 Seawall and Wharf Earthquake Safety Project
6	Pier 41 Seawall Earthquake Stabilization and Wharf Retrofit
7	Pier 39 Seawall Earthquake Stabilization & Wharf Retrofit/Replacement
8	Pier 33 to 35 Seawall and Wharf Earthquake Reliability Project
9	Pier 31-1/2 Bulkhead Wall and Wharf Earthquake Safety Retrofit
10	Pier 27 Seawall and Wharf Earthquake Reliability Project
11	Pier 15 Bulkhead Wall and Wharf Earthquake Safety Retrofit
12	Pier 9 Bulkhead Wall and Wharf Earthquake Safety Retrofit
13	Pier 9 Historic Shed Building Earthquake Safety Retrofit Project
14	Pier 1 Bulkhead Wall and Wharf Earthquake Reliability Project
15	Ferry Building Seawall & Substructure Earthquake Reliability
16	Agriculture Building Bulkhead Wall and Wharf Earthquake Safety
17	Pier 5 to Pier 22-1/2 Near-Term Coastal Flood Risk Reduction Project
18	Pier 24 to Pier 28-1/2 Bulkhead Wall and Wharf Earthquake Safety
19	EFWS, Intake Tunnel #1 Earthquake Reliability Project
20	Seals Plaza / South Beach Harbor Seawall Earthquake Stabilization Project
21	Pier Fire Suppression & Waterside Evacuation Improvements
22	EFWS, Fireboat Manifold Earthquake Reliability Projects
23	Pier Utility Connection Earthquake Retrofits at Seawall

PIER 24 to PIER 28-1/2 BULKHEAD WALL AND WHARF STRUCTURE EARTHQUAKE SAFETY PROJECT

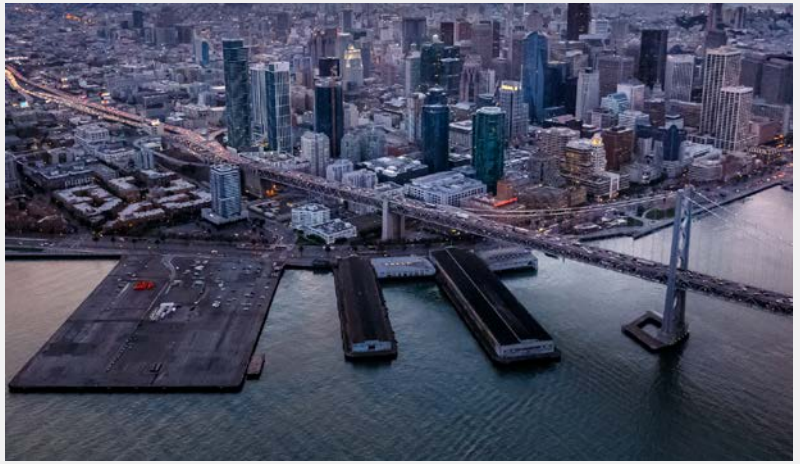
18



Cost Range: $5-25M

Project Duration: 2-4 Years

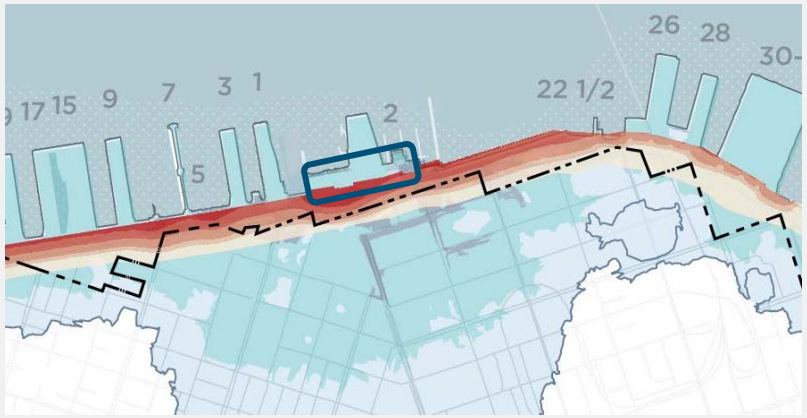
Complexity: Low



- The bulkheads located between Pier 24 and Pier 28 ½ are some of the oldest on the waterfront.
- This project focuses on improving earthquake safety by retrofitting the wall and wharf substructures to reduce damage.

FERRY BUILDING SEAWALL AND SUBSTRUCTURE EARTHQUAKE RELIABILITY PROJECT

15



Cost Range: $60-230M

Project Duration: 4-7 Years

Complexity: High

- This project will improve earthquake safety and disaster response capacity by strengthening the Seawall and substructure at the Ferry Building area
- The strengthening is also intended to support interim flood protection and later sea level rise adaptation
- Stakeholders consistently cited the Ferry Building as one of the most important structures to protect

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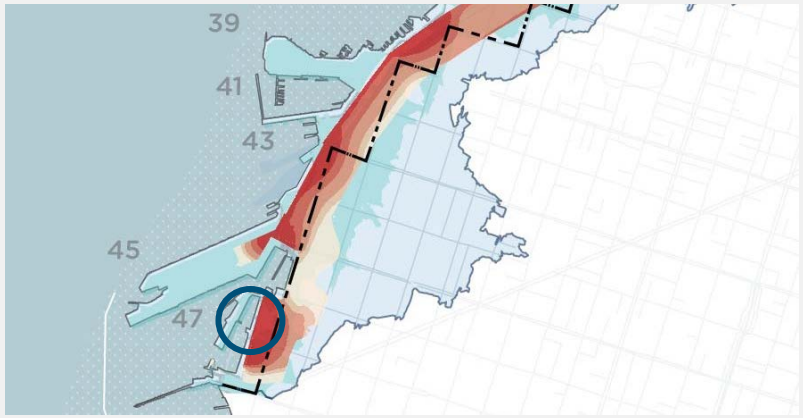
WHARF J9 REPLACEMENT AND RESILIENT SHORELINE PROJECT

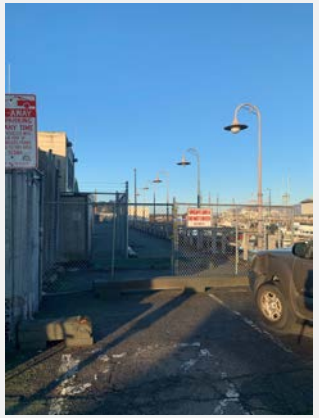
2



Cost Range: $15-60M

Project Duration: 3-5 Years

Complexity: Moderate



- Wharf J9 is a timber bulkhead and wharf with small-vessel berths for the fishing industry.
- This Project is an opportunity to revitalize and reopen this space with a new wharf and bulkhead that is stable in an earthquake.
- Ideas developed in this project can be used to inform other areas of the Fisherman's Wharf shoreline.

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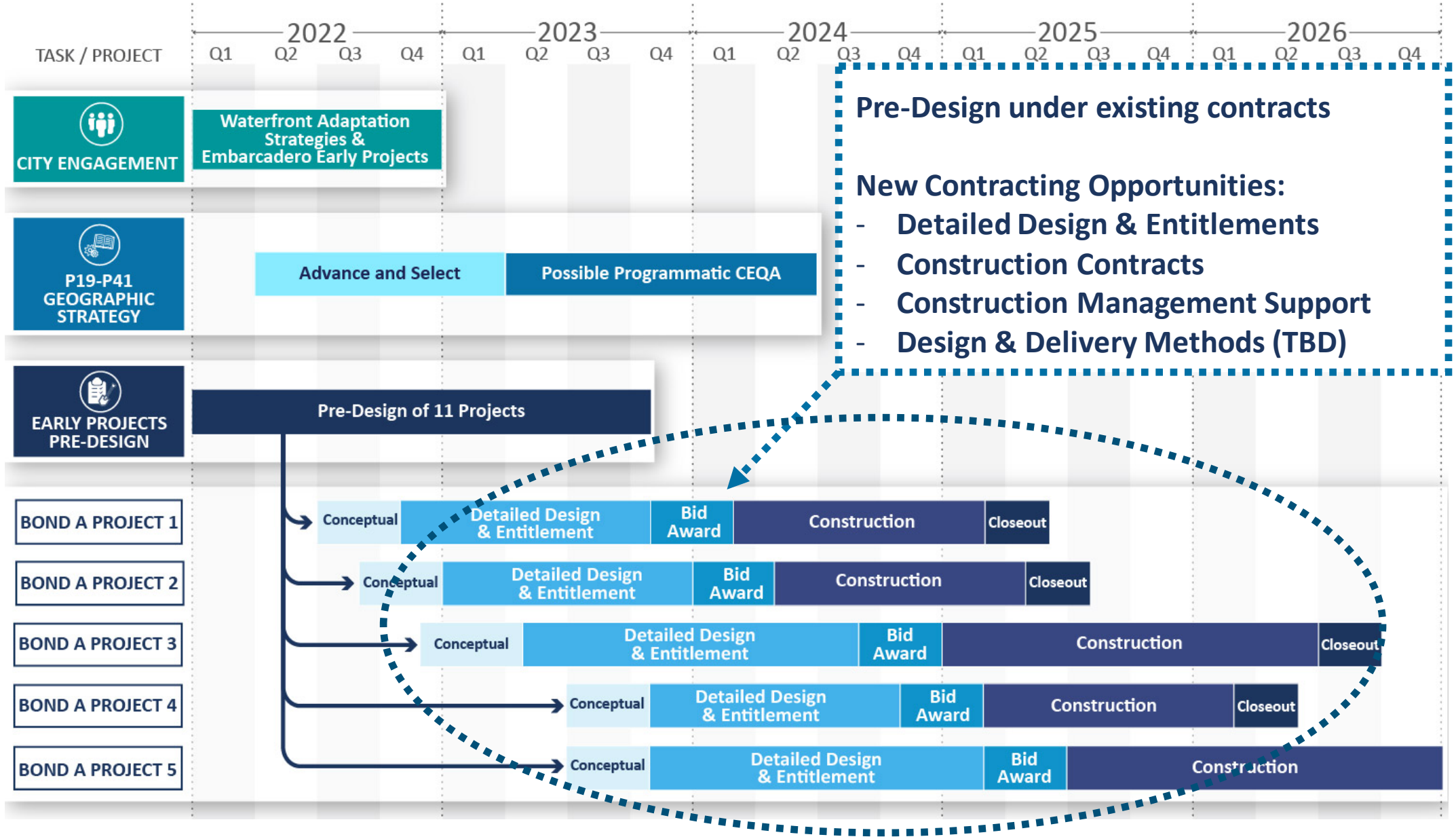
HIGH LEVEL SCHEDULE & UPCOMING CONTRACTS



4. Waterfront Wide Adaptation Strategies

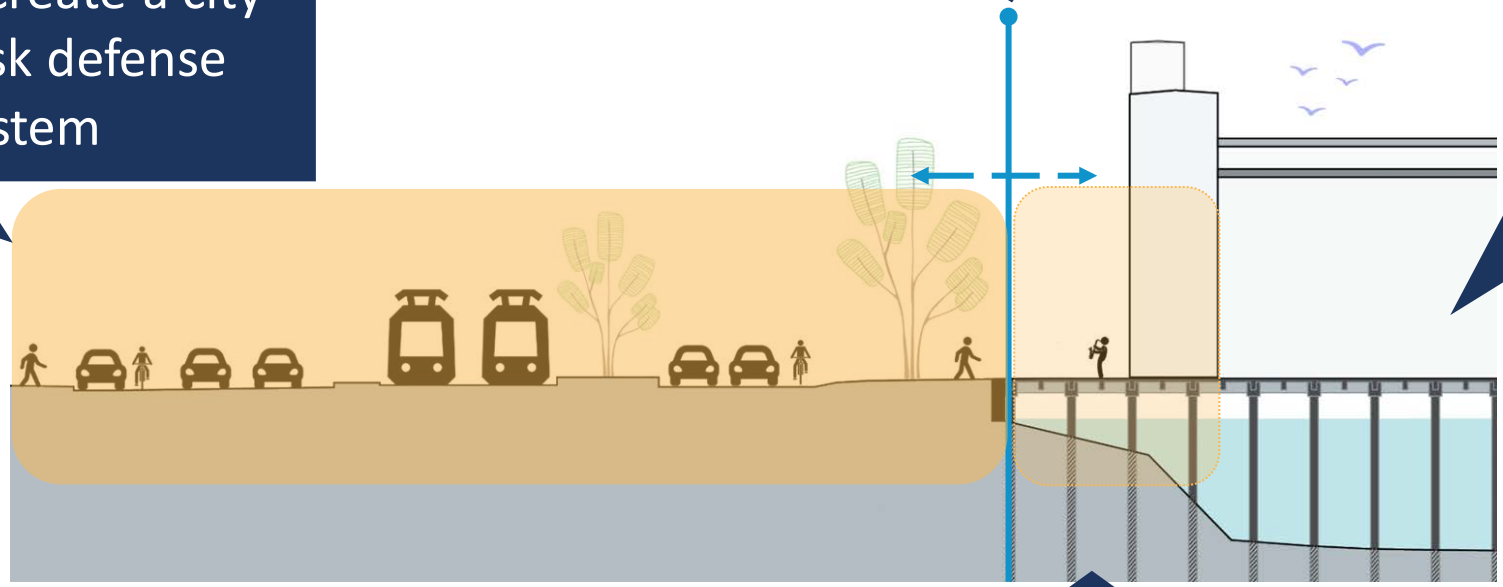
WATERFRONT RESILIENCE PROGRAM EFFORTS

AGENCY ENGAGEMENT PROCESS

TERMINOLOGY

ADAPTATION ZONE:
Space needed to raise or otherwise *substantially* alter in order to create a city flood risk defense system

LINE OF DEFENSE:
Highest point of the city flood risk defense system



PIERS:
Addressed through the Pier Adaptation Toolkit, Historic District Integrity Memo, and the Historic Piers Rehabilitation Program

WHARF:
Constructed surface over water, parallel to shore

BY END OF PHASE B: LEVEL OF DETAIL EXAMPLE

Charleston, SC

PORT-USACE COASTAL FLOOD STUDY (2018-2026)

Key Terms

USACE **National Economic Develop (NED) Plan** – the most economically efficient plan

Locally Preferred Plan (LPP) will be the City's preferred plan.

End of 2022

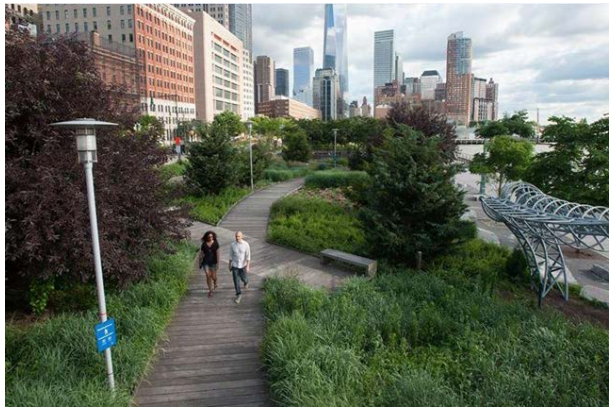
Ideally the NED and LPP will be closely aligned.

NEPA and CEQA are conducted for the **Tentatively Selected Plan (TSP)**

Mid 2023

ECOLOGICAL PRECEDENTS

From Around the World



Hudson River Park, NYC

Seattle, WA

Aker Brygge Beach, Oslo

Vancouver, B.C.

East Riverfront, NYC

Heron's Head Park, SF

California Coast

Brooklyn Bridge Park, NYC

QUESTIONS?

Thank You!

https://sfport.com/wrp

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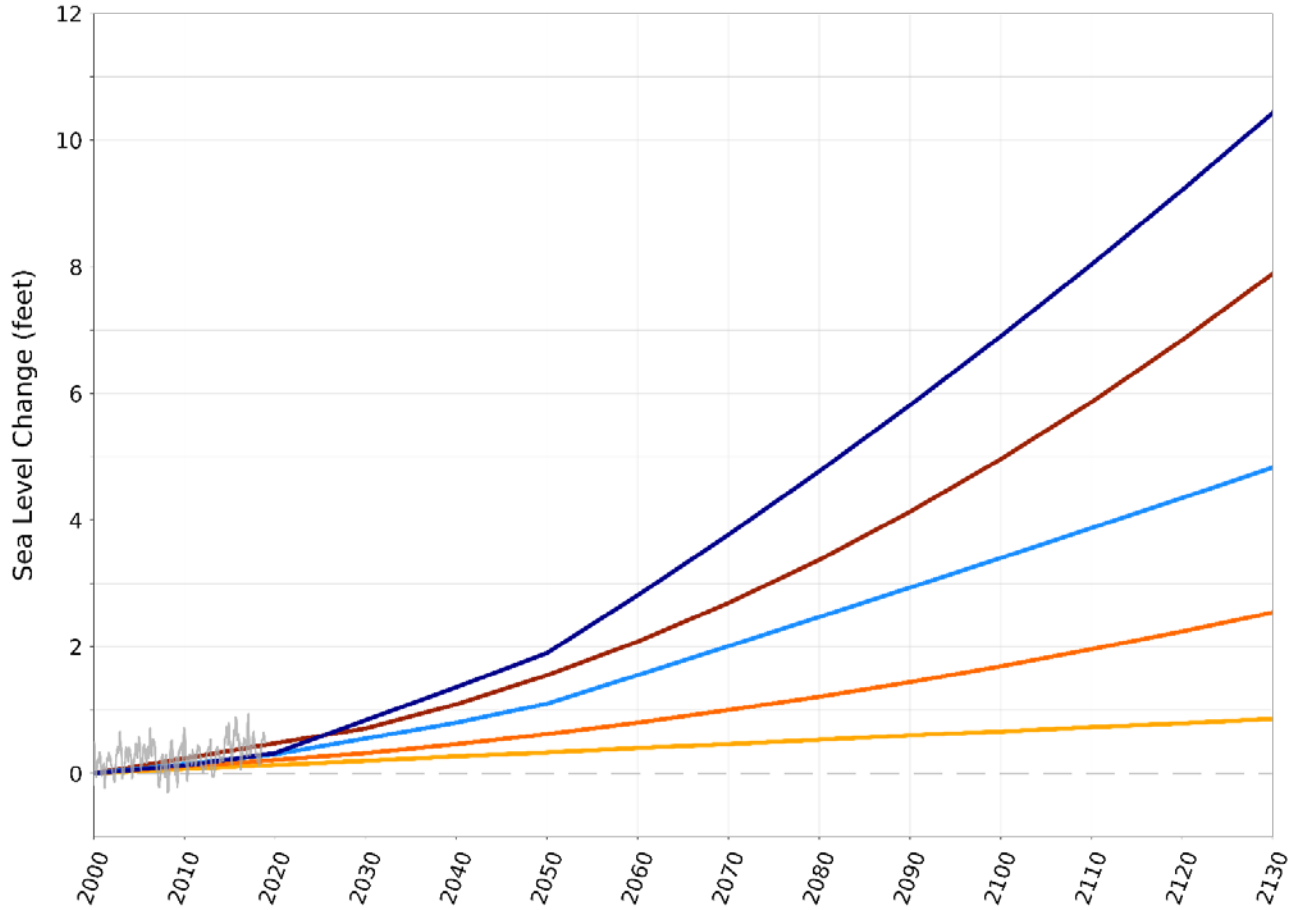
Waterfront Resilience Program

SEA LEVEL RISE PROJECTIONS

U.S. Army Corps of Engineers (USACE) and California Ocean Protection Council (OPC)



OPC 1:200 (Plausible, High Impact)

USACE High

OPC Likely

USACE Intermediate

USACE Low

Mean Sea Level

Our planning horizon: ~2140

**Note: Plan to update G2CRM to use the new Federal Sea Level Rise Curves after tentative February 2022 release*