



**WATERFRONT RESILIENCE PROGRAM  
USACE/SAN FRANCISCO WATERFRONT  
COASTAL FLOOD STUDY UPDATE**

Port Commission Agenda Item xx

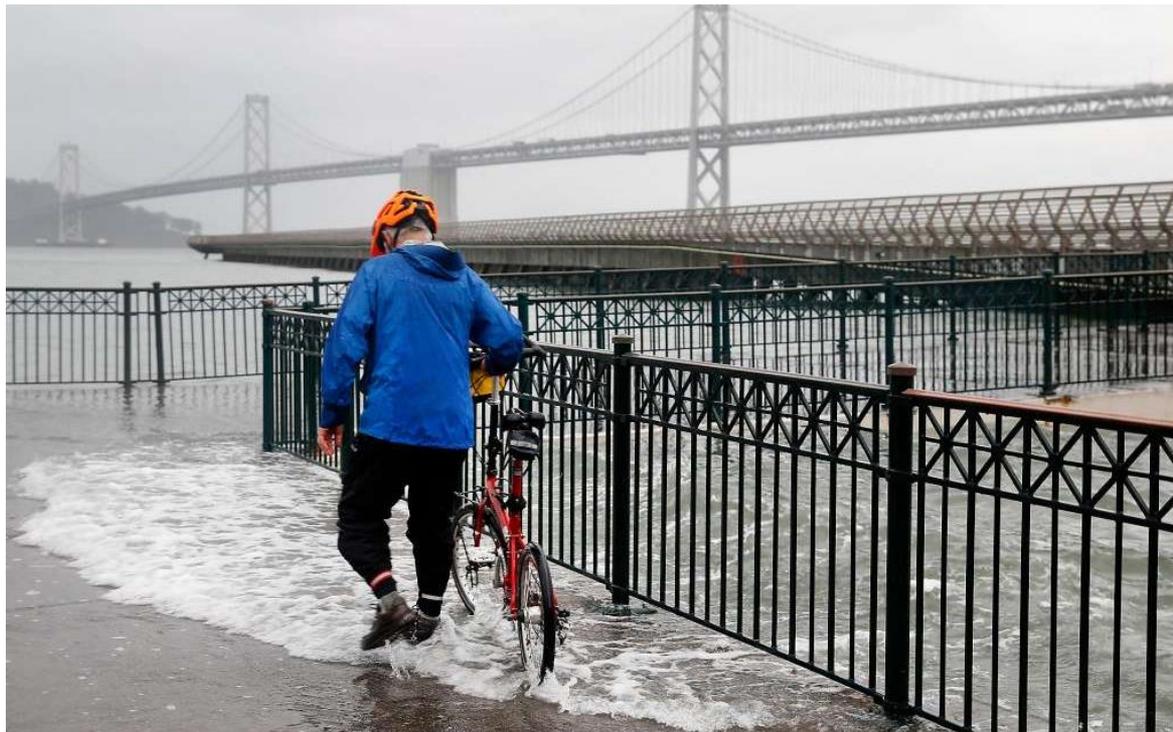
October 12, 2021



Waterfront Resilience Program

# U.S. ARMY CORPS OF ENGINEERS (USACE) FLOOD RESILIENCY STUDY

Partnership to analyze current and future flood risk, determine federal interest in a project



- Study began in 2018
- Port is local sponsor
- Includes entire Port jurisdiction + Aquatic Park
- Ongoing robust community and stakeholder input
- Study at 50/50 cost share
- If the Federal government partners with the Port on a project, they will contribute 65% of its cost

# FEASIBILITY COST SHARING AGREEMENT (FCSA1)

Expired feasibility cost sharing agreement approved by Port Commission last year



# USACE FLOOD RESILIENCY STUDY ACCOMPLISHMENTS

High level overview of work accomplished to date

## **A** PLAN FORMULATION

e.g., Conceptual measures

## **B** HYDRAULICS/COASTAL ENGINEERING

e.g., Coastal storm database

## **C** ECONOMICS

e.g., National Economic  
Development inventory

## **D** ENVIRONMENTAL PLANNING

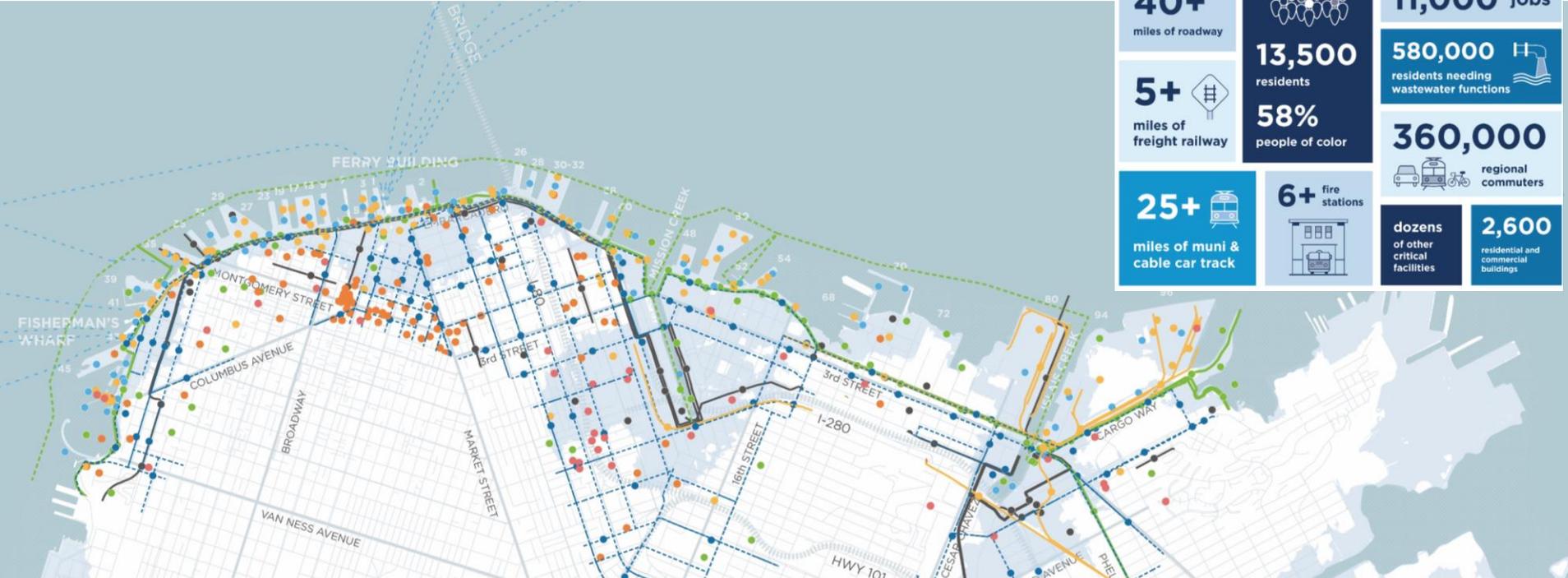
e.g., NEPA existing conditions

## **E** STAKEHOLDER ENGAGEMENT

e.g., Community meetings  
and digital measures explorer

# USACE FLOOD RESILIENCY STUDY ACCOMPLISHMENTS

## Port-wide Flood Risk Assessment



**ASSETS AT RISK**

<b>40+</b> miles of roadway	 <b>13,500</b> residents	<b>11,000</b> jobs
<b>5+</b> miles of freight railway	<b>58%</b> people of color	<b>580,000</b> residents needing wastewater functions
<b>25+</b> miles of muni & cable car track	<b>6+</b> fire stations	<b>360,000</b> regional commuters
	 dozens of other critical facilities	<b>2,600</b> residential and commercial buildings

Revised USACE Flood modeling – which still must be validated – is showing significant coastal flood risk and damages in the 2030-2040 time period.

# USACE FLOOD RESILIENCY STUDY NEXT STEPS

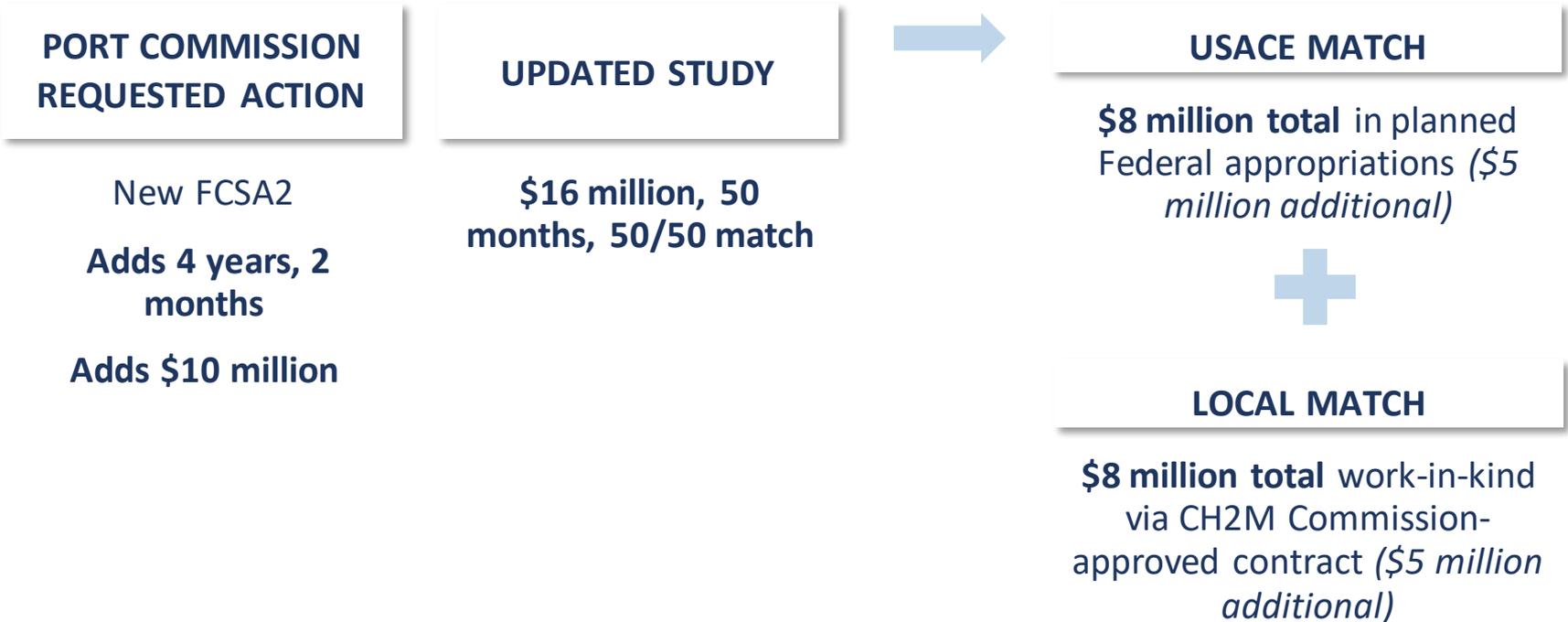
Developing innovative adaptation strategies for the entire 7.5 miles of waterfront



- National USACE team brings experience with mega flood study projects across the country
- Multi-hazard approach – first of its kind for USACE to address both flood and earthquake risk
- Multi-agency approach, including working with FEMA, NOAA, HUD, DOT

# NEW FEASIBILITY COST SHARING AGREEMENT (FCSA2)

Will support restarting the Flood Resiliency Study in January 2022



# FCSA2 FUNDING NUANCES

## Accelerated funds clause and timing of federal funding



- Similar accelerated funds clause in new FCSA2 to allow Study to move forward in case of federal funding delays
- Even with the accelerated funds clause there is potential for funding delays, as Port contributions start after USACE funding begins
- Best-case timing scenario: funding received from USACE in January 2022

# NEXT STEPS

Following Port Commission resolution approval today

1

**PORT COMMISSION  
REQUESTED ACTION**

Authorize study  
increase up to  
**\$16 million / 86  
months**

2

**USACE  
REQUESTED ACTION**

Assistant Secretary of  
the Army to approve  
waiver up to increase  
study to **\$16 million /  
86 months**

3

**BOARD OF  
SUPERVISORS  
REQUESTED ACTION**

Authorize study  
increase up to  
**\$16 million / 86  
months**



**SWD Engineer and  
Port Director will sign  
amended FCSA2**

# THANK YOU

Kelley Capone

Flood Study Project Manager, Waterfront Resilience Program  
Port of San Francisco

[kelly.capone@sfport.com](mailto:kelly.capone@sfport.com)

