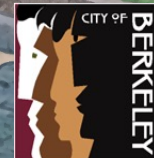


# Berkeley/WETA Pier & Ferry Feasibility Study

Community Workshop #3 – Wednesday, October 27th, 2021



CITY OF  
**BERKELEY**  
**Parks**  
**Make**  
**Life**  
**Better!**

**WATER EMERGENCY  
TRANSPORTATION AUTHORITY**

# Workshop Agenda

- 6:30 Agenda Overview – Facilitator
- 6:35 City & WETA Welcome – Scott Ferris, Berkeley & Kevin Connolly, WETA
- 6:40 Responding to Community Questions and Feedback
- Summary of Public Comment
  - WETA Business Plan and Ferry Viability
  - Linkage to BMASP and Economic Objectives
  - Questions on presentations? Enter in Zoom Chat following presentations.
- 7:00 Present Preferred Conceptual Alternative
- 7:20 Facilitated Discussion and Public Comments
- 8:20 Next Steps and Adjourn

# Public Engagement Steps

Workshop #1

- Introduce Pier/Ferry Study & Pier Samples

January 21, 2021

Planning

- City Council Work Session 2/16/21
- WETA Board Session 3/4/21
- Review workshop feedback
- Develop landside and waterside options

Feb - June

Questionnaire

- Questionnaire on ferry & pier preferences

March - June

Workshop #2

- Present/discuss Waterside & Landside Concepts

Aug 10

Planning

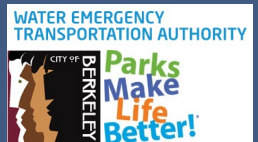
- Develop a preferred conceptual alternative

Aug - October

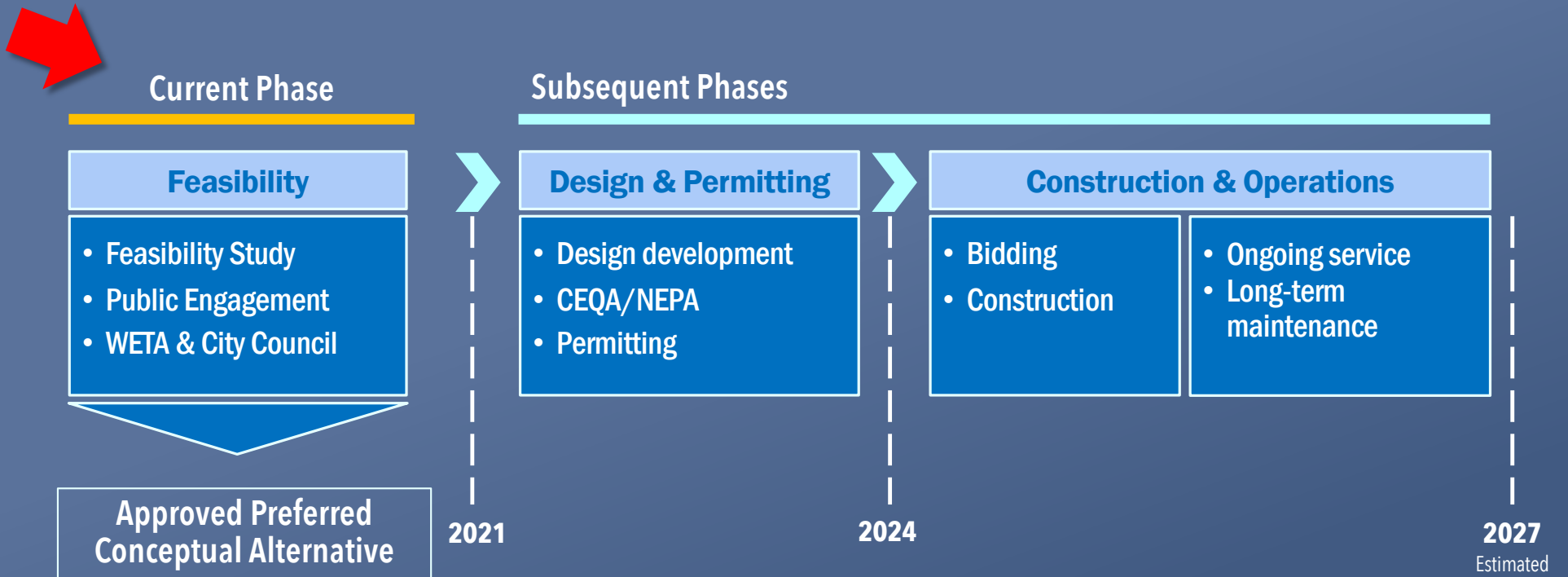
Workshop #3

- Present Preferred Conceptual Alternative

Oct 27, 2021



# Phases of MOU



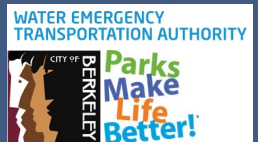
Note: MOU may be terminated at any phase upon mutual agreement.

# Summary of Public Comment

- 3 Focus Group Sessions – January
- Workshop #1 – January
- Online Questionnaire – March to June
- Workshop #2 – August

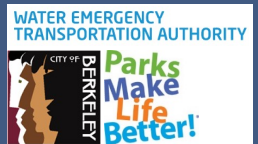
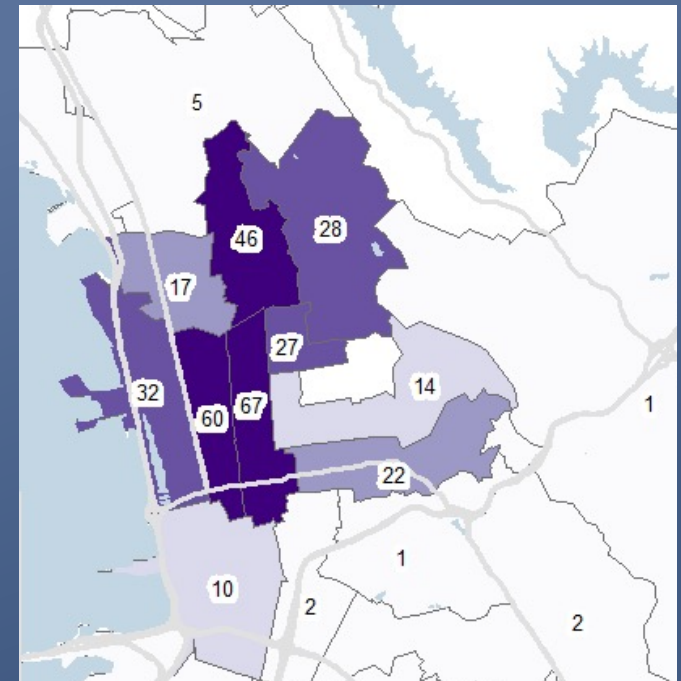
# Community Workshops – Key Themes

1. Provide more background on project viability – ridership, fiscal implications
2. Limit environmental impacts – design, construction, operations
3. Preserve existing character & uses – water, nature, social, park, recreation
4. Create a straight, wide pier – active and passive use, berthing on north side
5. Limit vehicle trips and cluster parking – transit/shuttle & bicycle



# Questionnaire Results

- Questions on preferences for ferry use, access, pier
- 377 responses, 85% Berkeley
- Support for commuting to SF
- Support for pleasure trips to SF & Marin



# Comments on Parking & Mobility

## Shuttle & Transit

- Provide shuttle service for neighborhoods and BART
- Increase AC Transit service

## Vehicle Parking

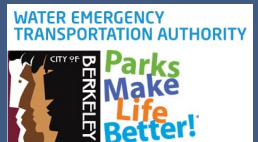
- Offer free/easy parking for ferry
- Provide disabled parking and access
- Don't displace Waterfront & César Chavez Park users

## Commuter Parking Fees or Free

- Discourage auto use with paid parking
- Encourage ferry use with free parking
- Be sensitive to economically challenged

## Biking & Mobility

- Provide (lots) of bike lockers.
- Develop safe bike routes over I-80 at Gilman & Powell.
- Walking route from pedestrian crossings.





# Comments on Pier Design & Programming

## Amenities

- Provide ample fishing locations and amenities
- Provide for walking & running
- Create a child-friendly environment

## Food/Drink & Retail

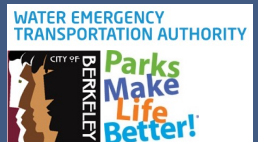
- Coffee, food carts, quick food
- Restaurants, bar, beer garden
- Art galleries, seafood, small stores

## Events & Education

- Music performances
- Fish/farmers market and food truck
- Environmental education/information

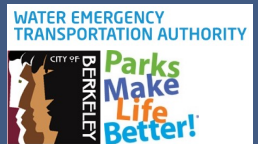
## Water Access

- Allow for swimming access
- Provide for small craft put-in
- Make it accessible to touch water



# Key Messages from the Community

- ✓ Community supports a ferry; parking needs to be managed.
- ✓ Community strongly supports a restored pier that serves all users.
- ✓ Protect character & environmental resources of the Waterfront.
- ✓ Protect existing user needs and recreational assets.

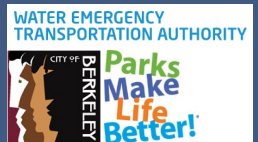


# WETA Berkeley Ferry Service Business Plan

Service Plan

Ridership & Market Demand

Equity Considerations

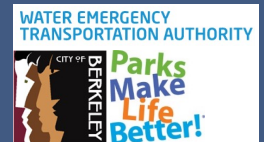


An aerial photograph of the San Francisco skyline, featuring the Bay Bridge and the Transamerica Pyramid. Three ferries are visible on the water in the foreground. The text 'Alternatives, Ridership & Operations Plan WETA' is overlaid in white on the image.

# Alternatives, Ridership & Operations Plan WETA

# Initial Screening of Route Options

		RIDERSHIP	MARKETS	EQUITY BENEFITS	RATING
Route Options	<u>San Francisco</u>	High	Commuter, Rec, Event	High	■ Recommended
	South San Francisco	Med-Low	Commuter	Medium	↔ Deferred
	Mission Bay (Direct)	Medium	Commuter, Rec, Event	Medium	↔ Deferred
	<u>Mission Bay (From SF)</u>	Medium	Commuter, Rec, Event	Med-Low	■ Recommended
	Larkspur (Weekday)	Low	Commuter	Med-Low	✗ Rejected
	<u>Larkspur (Weekend)</u>	Medium	Rec	Medium	■ Recommended
	Vallejo	Low	Commuter	Low	✗ Rejected



# Ridership Estimation Methodology

- Based on Alameda County Transportation Commission's regional model\*
- Forecasts are "unconstrained"
- Adjustments made to account for:
  - Headways
  - Capacity
  - Observed changes in peak versus all-day ridership
- Verified against actual ridership counts

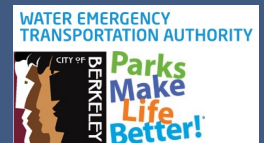
\*Source: Hovercraft Feasibility Study – 2019 & 2021 Update



# Ridership Forecast – Average Daily Boardings

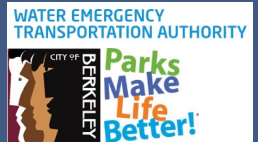
		Weekday Average	Weekend Day Average	Special Events (Average/day)
2020 Daily Boardings	1) Berkeley – SF	1,830	2,990	200
	2) Berkeley – SF – Mission Bay	2,020	3,300	200
	3) Berkeley – Larkspur (weekend service)	–	490	–
2040 Daily Boardings	1) Berkeley – SF	2,110	3,450	230
	2) Berkeley – SF – Mission Bay	2,320	3,800	230
	3) Berkeley – Larkspur (weekend service)	–	580	–

- Operations Assumptions:
- 2 vessels
  - 35-minute average peak headway
  - 250-passenger vessels



# Comparison with Existing Ridership (2019)

		Weekday	Weekend Day
Existing and Potential Berkeley Routes	Oakland/Alameda - SF	5,047	4,120
	Vallejo - SF	4,081	1,983
	Berkeley - SF - Mission Bay	2,020	3,300
	Berkeley - SF	1,830	2,990
	Harbor Bay - SF	1,417	—
	Richmond - SF	813	680
	Oakland/Alameda - SSF	601	—
	Berkeley - Larkspur (Weekend)	—	490





# Conceptual Service Schedule Weekday to SF

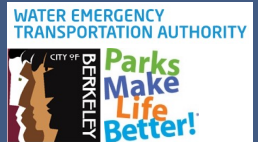
- (2) vessels & (4) crews
- (8) morning peak direction trips: 6:30 am – 12 pm
- (8) afternoon peak direction trips: 3:30 pm – 8:30 pm
- Timed-connections to Mission Bay
- Special event service scheduled as needed

Berkeley to  
San Francisco

Weekdays (Monday-Friday) Westbound: Berkeley to San Francisco	
Depart Berkeley	Arrive Downtown SF
6:30	6:55
7:05	7:30
7:40	8:05
8:15	8:40
8:50	9:15
9:25	9:50
10:40	11:05
11:15	11:40
16:05	16:30
16:40	17:05
17:15	17:40
17:50	18:15
19:05	19:30
19:40	20:05

Weekdays (Monday-Friday) Eastbound: San Francisco to Berkeley	
Depart Downtown SF	Arrive Berkeley
7:05	7:30
7:40	8:05
8:15	8:40
8:50	9:15
10:05	10:30
10:40	11:05
15:30	15:55
16:05	16:30
16:40	17:05
17:15	17:40
17:50	18:15
18:25	18:50
19:40	20:05
20:15	20:40

San Francisco  
to Berkeley



# Conceptual Weekend Schedule

Berkeley-SF: (7) departures 8:30 am to 5 pm; headways of 70 – 110 minutes

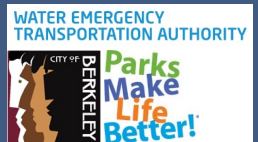
Berkeley to San Francisco	Weekend Westbound: Berkeley to San Francisco		Weekend Eastbound: San Francisco to Berkeley		San Francisco to Berkeley
	Depart Berkeley	Arrive Downtown SF	Depart Downtown SF	Arrive Berkeley	
	8:30	8:55	9:05	9:30	
	9:40	10:05	10:15	10:40	
	10:50	11:15	12:05	12:30	
	12:40	13:05	13:30	13:55	
	14:00	14:25	14:40	15:05	
	15:10	15:35	15:45	16:10	
	17:00	17:25	17:35	18:00	

(2) vessels running two services. Special event service scheduled as needed.

Berkeley-Larkspur: (6) departures 9 am to 5:30 pm; headways of 90 – 150 minutes

Berkeley to Larkspur	Weekend Westbound: Berkeley to Larkspur		Weekend Eastbound: Larkspur to Berkeley		Larkspur to Berkeley
	Depart Berkeley	Arrive Larkspur	Depart Larkspur	Arrive Berkeley	
	9:30	10:05	10:15	10:50	
	11:00	11:35	11:45	12:20	
	12:30	13:05	13:55	14:30	
	15:00	15:35	15:45	16:20	
	16:30	17:05	17:15	17:50	
	18:40	19:15	19:25	20:00	

(2) vessels running two services. Special event service scheduled as needed.

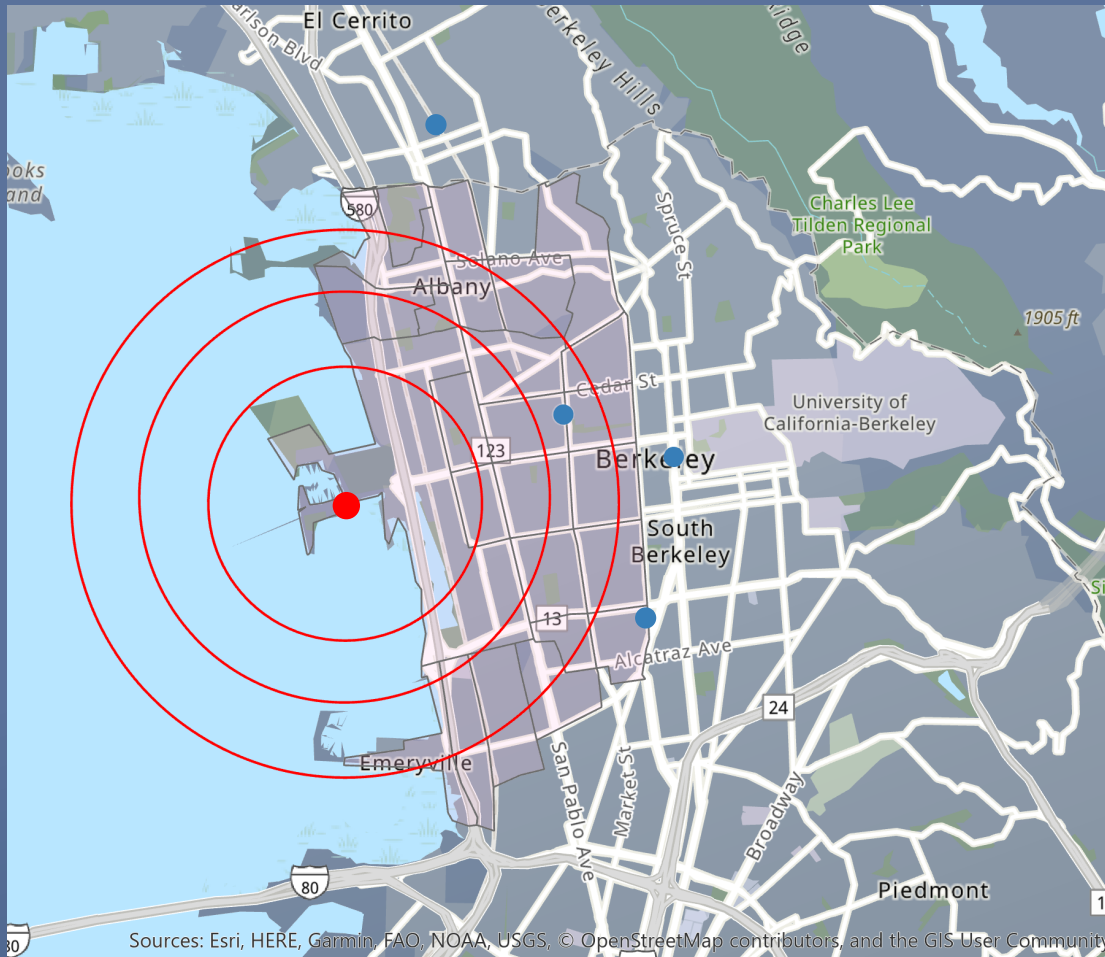


# Equity and Economic Development



# Points of Interest

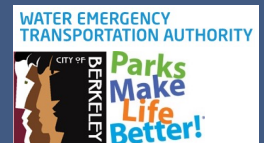
- 1 mile
  - Bayer
  - Fourth Street
- 1.5 mile
  - University Village
  - Kaiser Permanente
- 2 mile
  - North Berkeley BART station
- Bart stations (blue dots)



Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

## Legend

- BART stations and ferry terminal
- Radii (1, 1.5, 2 miles)
- Census Tracts (2 miles)

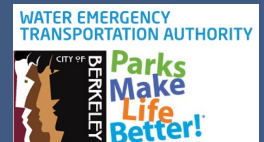


# U.S. Census Socio/Economic Demographics

Geography	Jobs	% Public transit commute <sup>1</sup>	Median HH income	UNEMP <sup>3</sup> rate	Race/ethnicity: % non-white <sup>2</sup>	Population
1-mile radius	8,980	20%	\$81,000	5.0%	57%	9,889
1.5-mile radius	18,163	26%	\$85,000	3.9%	54%	30,804
2-mile radius	31,487	28%	\$96,000	4.3%	57%	81,701
City of Berkeley	43,575	26%	\$85,500	5.3%	47%	124,321
Albany/Berkeley/Emeryville combined area	68,533	26%	\$88,600	4.8%	49%	157,497

Notes:

- 1 - Figures rounded to nearest whole number
- 2 - Calculated as 1 - (% white alone)
- 3 - UNEMP: Unemployment



# Opportunity for Job Access

## Average Salary and Number of Jobs — East Bay vs. San Francisco

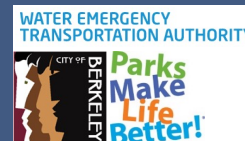
Occupation Category	Average Salary (2021 Q1)		SF/Peninsula Salary Premium
	Alameda/CCC	SF/ San Mateo	
Sales and Related	\$59,000	\$75,000	27%
Transportation and Material Moving	\$49,000	\$58,000	18%
Legal	\$146,000	\$170,000	16%
Arts/Design, Entertainment/Sports, Media	\$78,000	\$89,000	14%
Management	\$158,000	\$179,000	13%
<b>TOTAL (all categories)</b>	<b>\$76,000</b>	<b>\$93,000</b>	<b>21%</b>

**21% average salary premium**

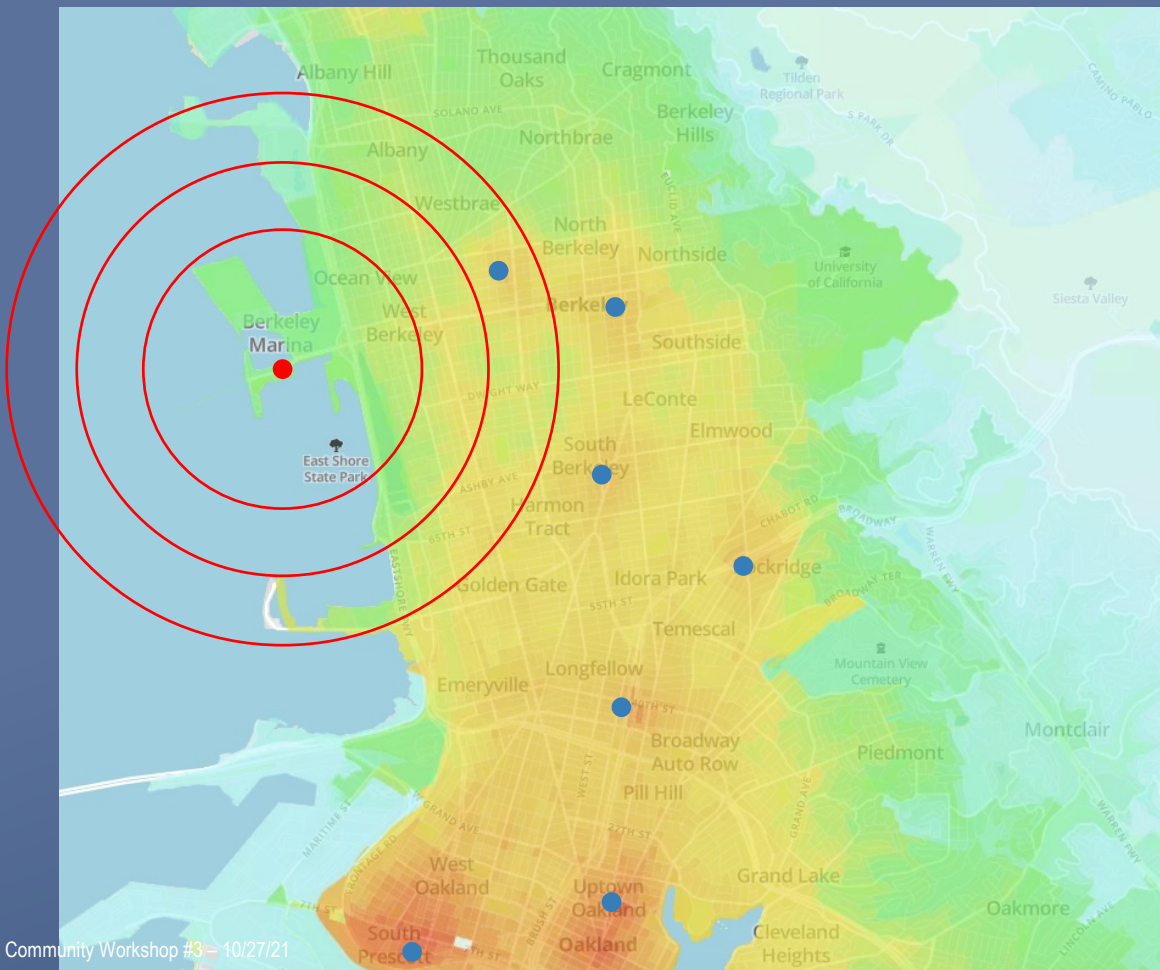


Top 5 categories ranked by salary premium

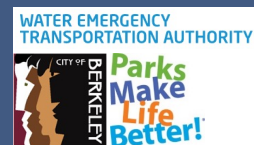
Source: California Employment Development Department



# Access to Jobs via Transit



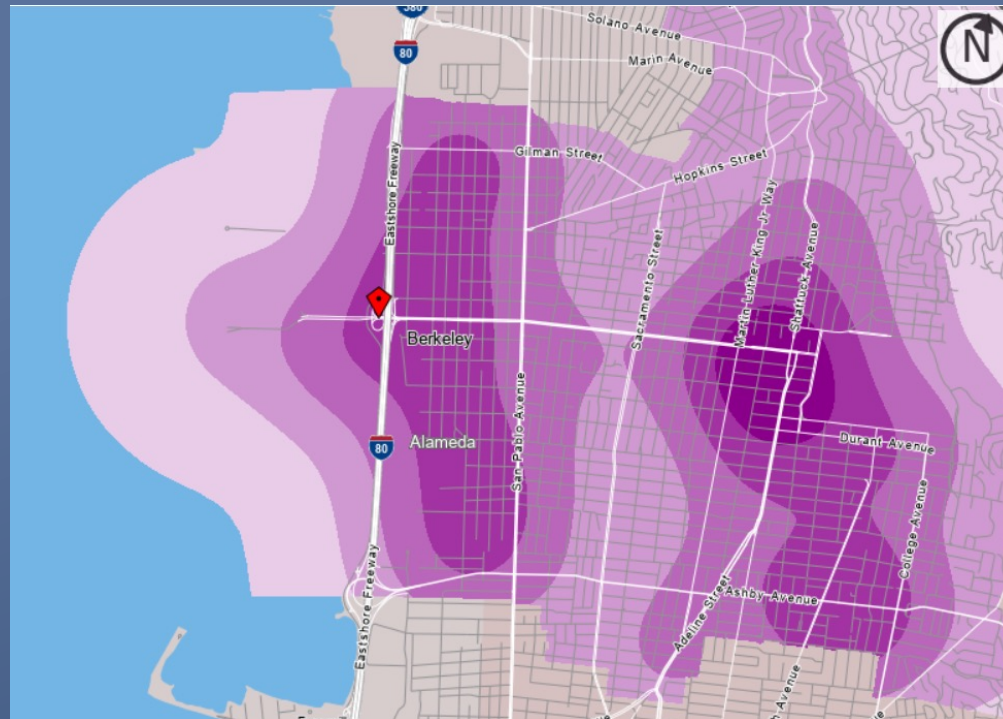
Source: Accessibility Observatory,  
University of Minnesota (2019)



# Job Opportunities in Berkeley

## Legends

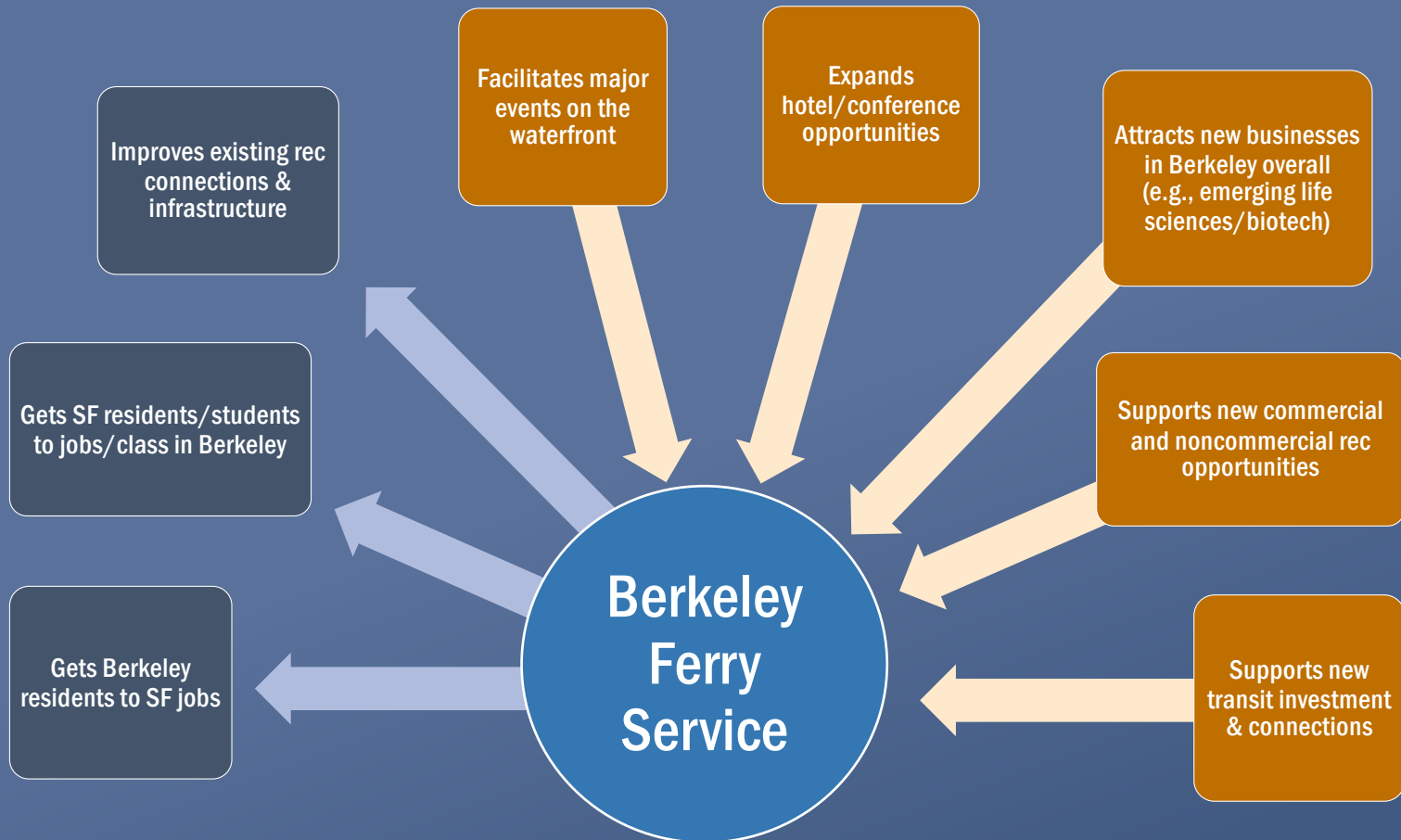
- 5 - 687 Jobs/Sq.Mile
- 688 - 2,733 Jobs/Sq.Mile
- 2,734 - 6,143 Jobs/Sq.Mile
- 6,144 - 10,917 Jobs/Sq.Mile
- 10,918 - 17,055 Jobs/Sq.Mile



WATER EMERGENCY  
TRANSPORTATION AUTHORITY







Ferry service can support both existing and attract new activities.



# Ferry and Foot Traffic Generate Revenue



## Policy Objectives

- Increase revenue to existing businesses
- Support job force & outbound commuters
- Synergy with Berkeley Businesses
- Attract new businesses in these industries



## Long term Benefits

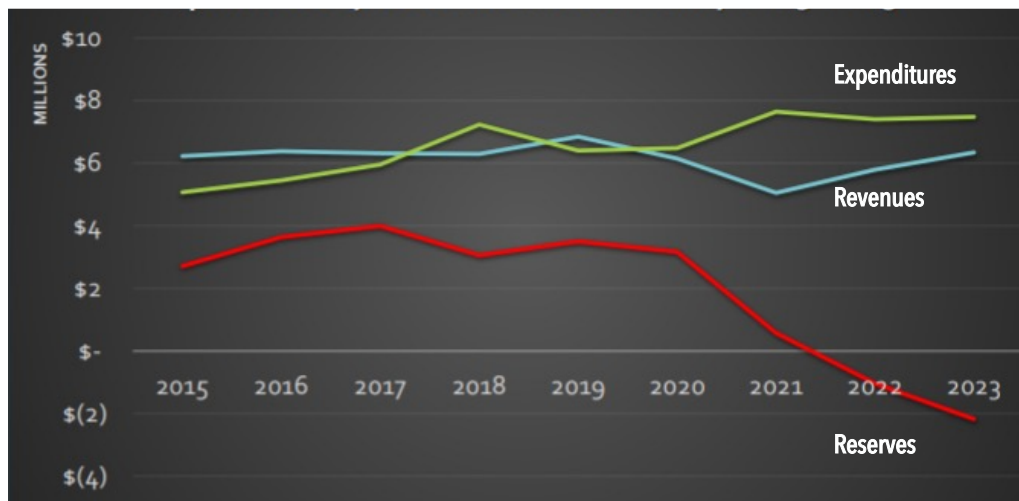
- Increased lease payments to Marina Fund
- Multiplier-effect with retail, food/beverage
- Increased tax revenue to City of Berkeley

# Fiscal Challenge & Opportunity

## Current Status

- Existing Marina Fund operations model is not viable
- Capital Waterfront expenditure needs exceed \$100M

Marina Fund - Expenditures, Revenues, Reserves FY15-23

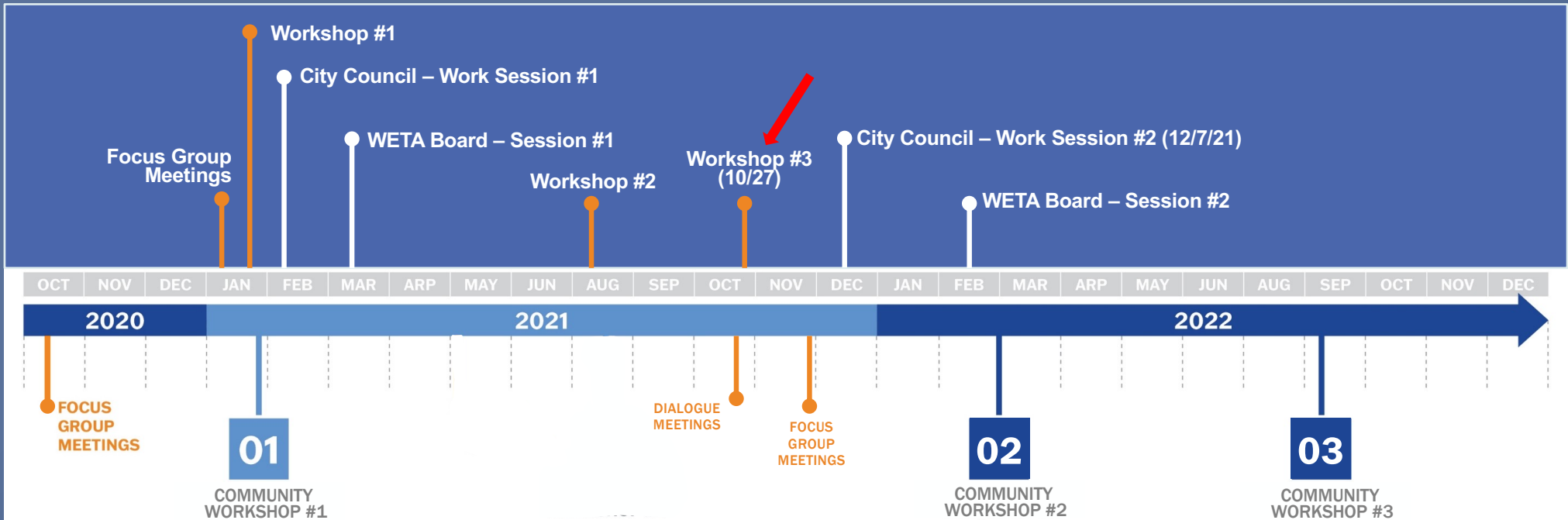


## Opportunity

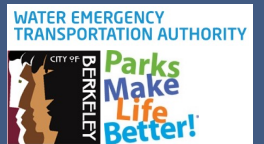
- ✓ Pier-Ferry project can support BMASP economic activit

# Pier/Ferry Study & BMASP Timelines

## Pier-Ferry Study



## Berkeley Marina Area Specific Plan

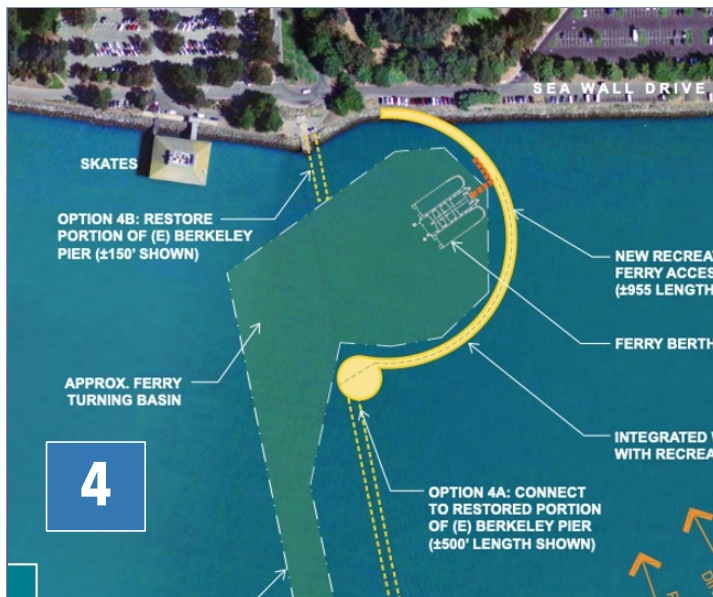
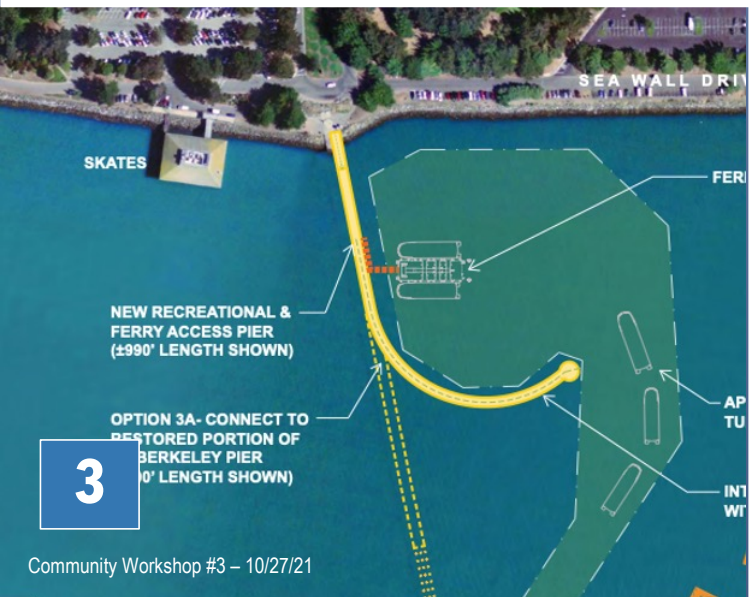
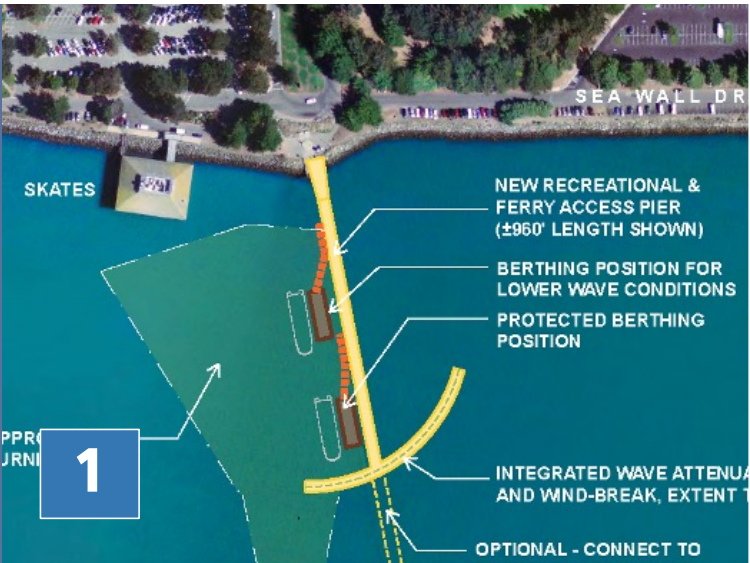


# Questions on information presented?

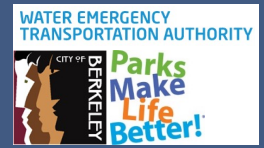
Enter in Zoom Chat. Thank you.

# Preferred Waterside Concept Plan

# Alternatives Evaluated



Community Workshop #3 - 10/27/21





**Preferred Conceptual Alternative**  
**Illustrative Rendering**





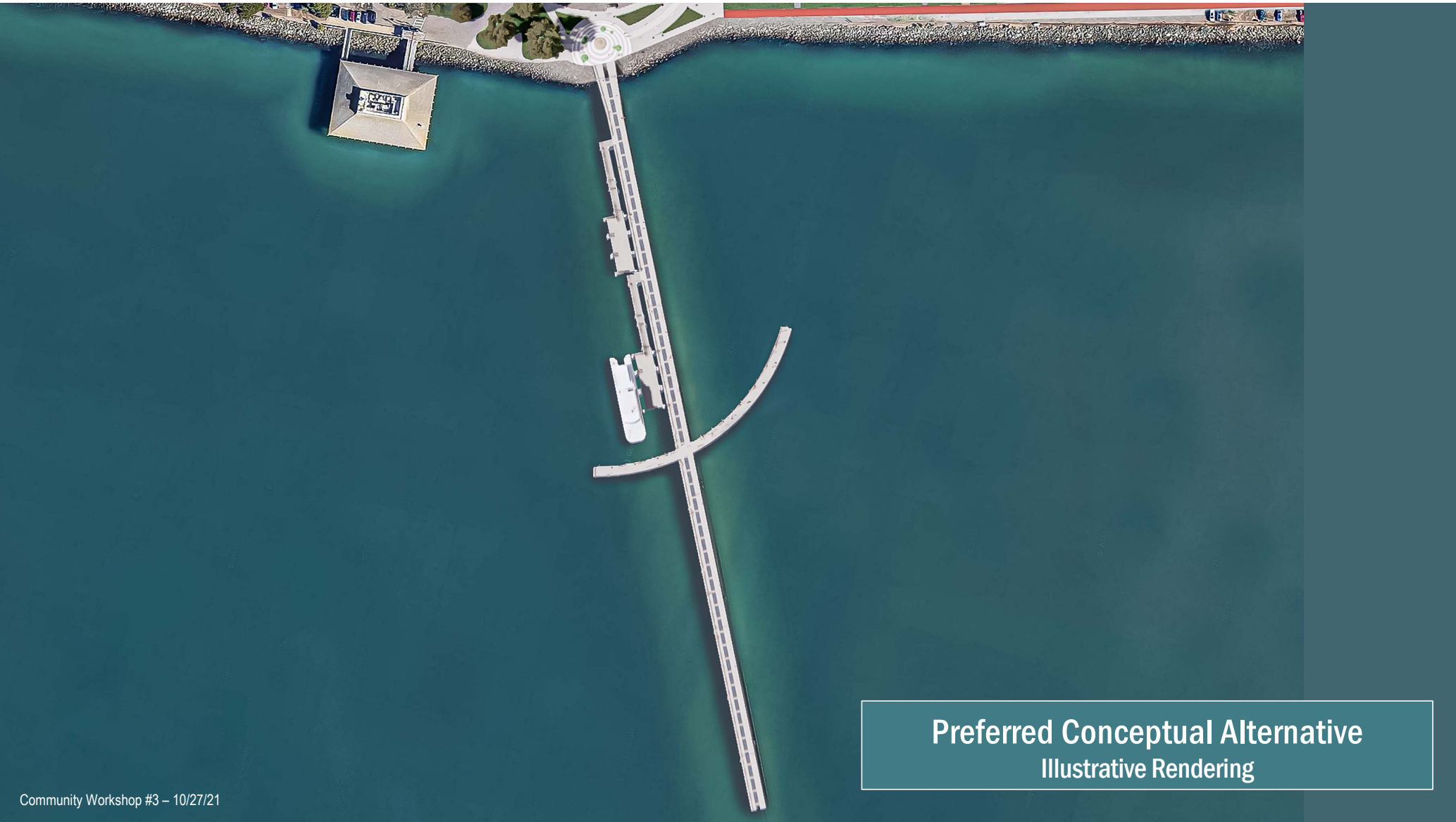
**Preferred Conceptual Alternative**  
**Illustrative Rendering**



**Preferred Conceptual Alternative**  
Illustrative Rendering



**Preferred Conceptual Alternative**  
Illustrative Rendering



**Preferred Conceptual Alternative**  
Illustrative Rendering

# Preferred Conceptual Alternative Illustrative Rendering





Preferred Conceptual Alternative  
Illustrative Rendering



Preferred Conceptual Alternative  
Illustrative Rendering



Preferred Conceptual Alternative  
Illustrative Rendering





**Preferred Conceptual Alternative**  
Illustrative Rendering

Preferred Conceptual Alternative  
Illustrative Rendering





**Preferred Conceptual Alternative**  
Illustrative Rendering

# Evaluation Results – Waterside Concepts

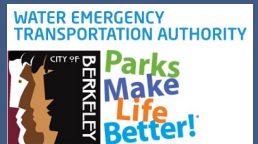
		1	2	3	4
		Sword	Dog Leg	Fish-Hook	Circle
<b>Implementation</b>	<ul style="list-style-type: none"> <li>• Amount of dredging</li> <li>• Constructability</li> <li>• Green infrastructure</li> </ul>	More Preferrable	Less Preferrable	Less Preferrable	Less Preferrable
<b>Ferry Operations</b>	<ul style="list-style-type: none"> <li>• Wind/Wave Protection</li> <li>• Vessel maneuverability</li> <li>• Avoid potential conflicts with recreation watercraft</li> </ul>	More Preferrable	Less Preferrable	Less Preferrable	Less Preferrable
<b>Visual &amp; Placemaking</b>	<ul style="list-style-type: none"> <li>• Overall pier experience</li> <li>• Harmony with former pier</li> <li>• Consistency with Waterfront culture/experience</li> </ul>	More Preferrable	Less Preferrable	Less Preferrable	Less Preferrable
<b>Recreation: On-Pier</b>	<ul style="list-style-type: none"> <li>• Unimpeded access for fishing, walking, recreation</li> <li>• Length of pier for fishing, walking, recreation</li> <li>• Bay views and experience</li> </ul>	More Preferrable	Less Preferrable	Less Preferrable	Less Preferrable
<b>Recreation: In-Water</b>	<ul style="list-style-type: none"> <li>• Reduced conflicts with marina boating</li> <li>• Reduced conflicts with watersports</li> <li>• Reduced pier and ferry operation footprint</li> </ul>	More Preferrable	Less Preferrable	Less Preferrable	Less Preferrable
<b>Highest Benefit at Lowest Cost</b>		More Preferrable \$69.3M	Less Preferrable \$81.7M	Less Preferrable \$88.9M	Less Preferrable \$90.4M



1	\$3.7	Demo Existing Pier
2	\$19.6	Dual-Purpose Pier
3	\$9.6	Integrated Breakwater
4	\$11.0	Ferry Berthing Facility
5	\$2.9	Berthing Facility – Guide/Dolphin Piles
6	\$4.6	Dredging
7	\$4.2	Ferry Facility Electrification
8	\$13.9	Recreational Pier Extension
<hr/>		
\$69.5 M		TOTAL ESTIMATED

**Preferred Alternative  
Waterside Estimated Costs**

# Preferred Landside Concept Plan



# Dispersed Parking Concept



NEW PARKING ALONG MARINA BLVD

MARINA BLVD

(E) SOUTH COVE EAST PARKING LOT

SOUTH COVE WEST PARKING LOT

SOUTH BASIN

NEW ON-STREET PARKING ALONG UNIVERSITY AVE

POTENTIAL HOTEL / RESTAURANT AREA

SHOREBIRD PARK

RESTAURANT/ EVENTS BUILDING

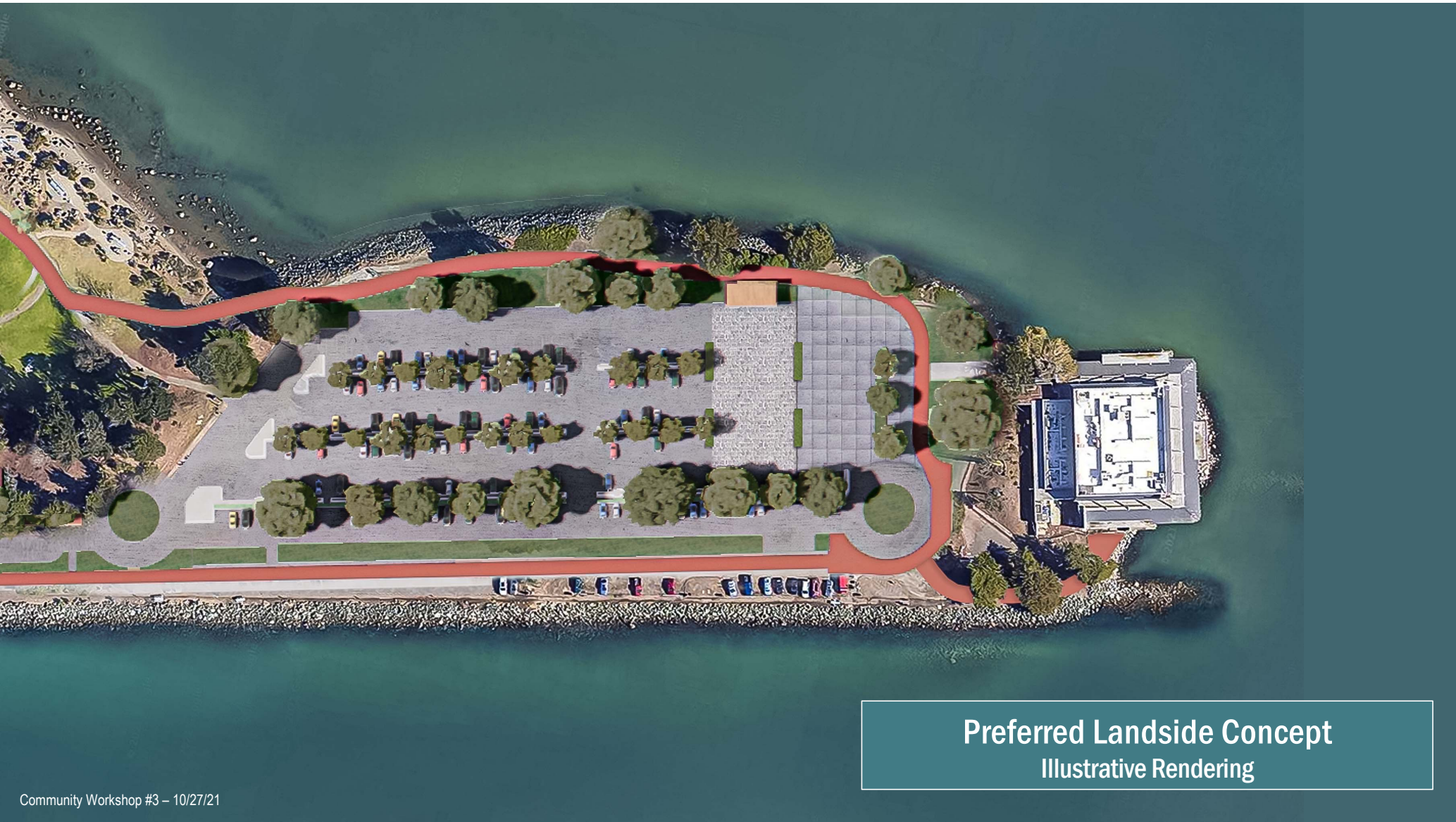
SEAWALL DRIVE

UNIVERSITY AVE

BERKELEY MARINA

SKATES ON THE BAY

NEW BUS TERMINUS AND RIDE SHARE DROP OFF

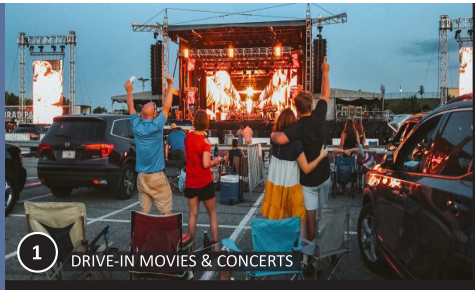


Preferred Landside Concept  
Illustrative Rendering





Preferred Landside Concept  
Illustrative Rendering



1 DRIVE-IN MOVIES & CONCERTS



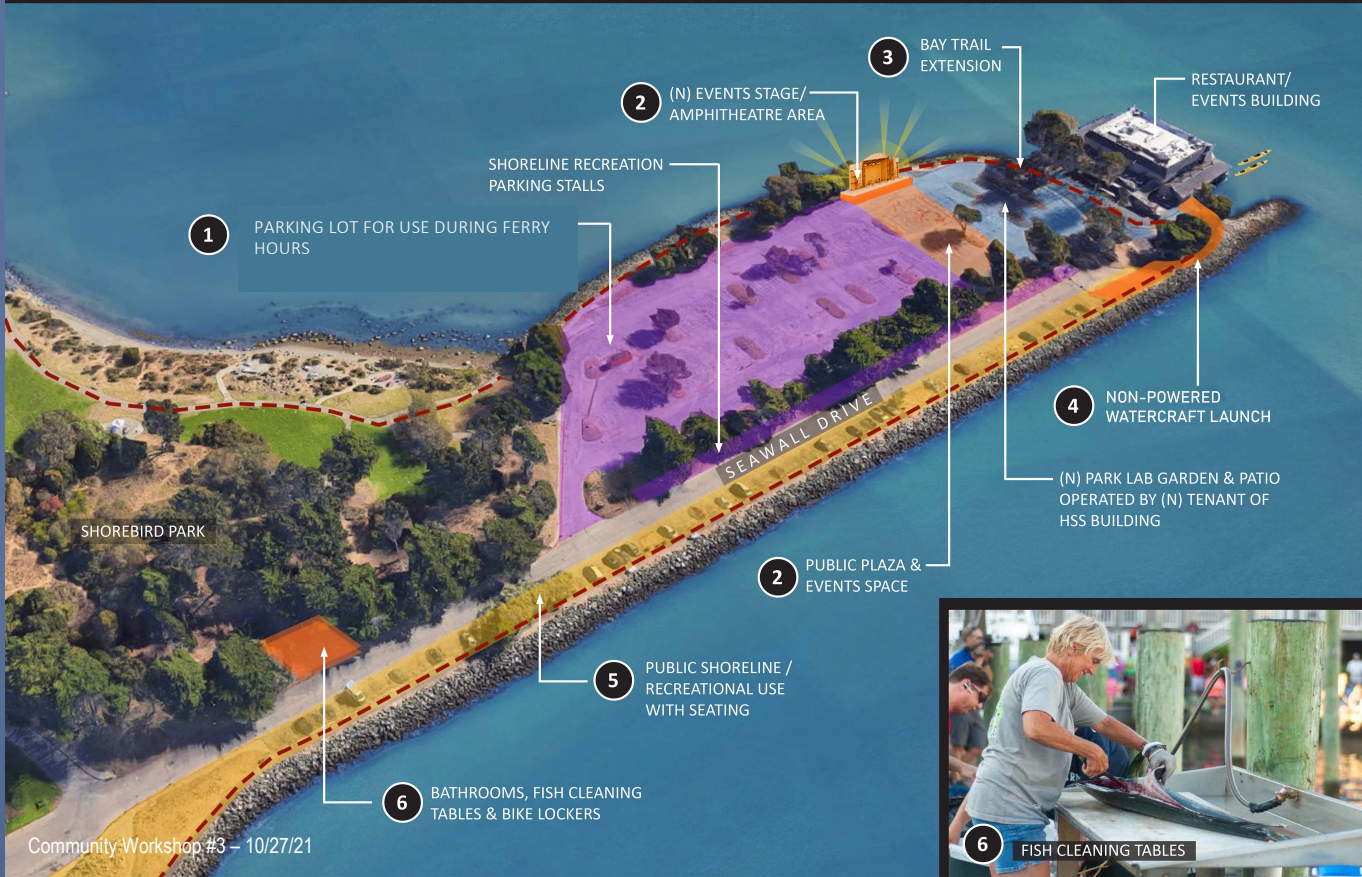
1 EVENTS, PARTIES, FOOD TRUCKS/FESTS



1 FARMER'S MARKET



2 PERFORMANCES/SHOWS



3 EXTENDED BAY TRAIL



4 KAYAK LAUNCH



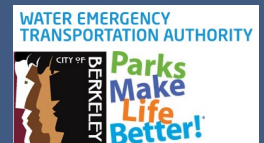
6 FISH CLEANING TABLES



5 PUBLIC SHORELINE

# Evaluation Results – Landside Concepts

		Concept A	Concept B
		Clustered	Dispersed
<b>Implementation</b>	<ul style="list-style-type: none"> <li>• Constructability</li> <li>• Centralized EV charging &amp; green infrastructure</li> <li>• Flexible configuration for future development</li> </ul>	More preferable	Less preferable
<b>Mobility</b>	<ul style="list-style-type: none"> <li>• Supports biking, walking, transit access</li> <li>• Supports convenient parking access and management</li> <li>• Effective wayfinding and user-friendly</li> </ul>	More preferable	Less preferable
<b>Visual &amp; Placemaking</b>	<ul style="list-style-type: none"> <li>• Harmony with and enhancement of the Waterfront</li> <li>• Enhances public safety</li> <li>• Minimizes parking footprint to allow for more greenspace</li> </ul>	More preferable	Less preferable
<b>Recreation</b>	<ul style="list-style-type: none"> <li>• Provides space for diverse recreation uses</li> <li>• Flexible space for recreation/events during low parking demand</li> <li>• Leverage existing parking supply to support waterfront uses</li> </ul>	More preferable	Less preferable
<b>Highest Benefit at Lowest Cost</b>		<b>\$14.0M</b>	<b>\$19.5M</b>





- 1 \$1.5\* Non-Motorized Watercraft Facility
- 2 \$1.2 Restroom Plaza & Pier Entrance Facility
- 3 \$1.8 Bay Trail (Adventure Playground Entrance to Pier Plaza)
- 4 \$3.4 Seawall Drive (199 Seawall Drive Terminus to University Avenue )
- 5 \$1.1 University Ave (South Cove West Lot West Driveway to Seawall Dr)
- 6 \$1.0 199 Seawall Drive - Amphitheater/Event Stage
- 7 \$4.0 199 Seawall Drive Ferry Parking Lot

\$14.0 M TOTAL ESTIMATED \*millions of \$

Preferred Alternative  
Landside Estimated Costs

Waterside Estimated \$69.5 M

Landside Estimated \$14.0 M

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Total Estimated \$83.5 M

Preferred Conceptual Alternative  
Illustrative Rendering

# Ferry Parking, Access, and Mobility



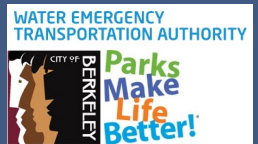
## Goals

- Avoid ferry parking impacts to other waterfront users
- Minimize need for new parking and preserve natural beauty of Waterfront
- Support non-driving travel modes



## Toolkit

- Limit/cap for ferry parking
- Active parking management: paid parking for ferry users, time limits, enforcement
- TDM programs: incentives for biking, walking, and transit



# Discussion & Public Comment

- Use “raise hand” Zoom function.
- Facilitator will call your name.
- Keep comments to 1 minutes or less.**
- Questions, comments, ideas welcome.

# Contact & Project Info

- ✓ **Inquiries to [bmasp@CityofBerkeley.info](mailto:bmasp@CityofBerkeley.info)**
  
- ✓ **Pier/Ferry Project webpage: [www.cityofberkeley.info/parks/pier/](http://www.cityofberkeley.info/parks/pier/)**
  - **Workshop presentations**
  - **Workshop results**
  - **Questionnaire Results**
  - **Updated FAQ (forthcoming)**
  
- ✓ **City Council, December 7<sup>th</sup>**
  
- ✓ **WETA Board, TBD March 2022**