To: Honorable Mayor and Members of the City Council
From: Dee Williams-Ridley, City Manager
Submitted by: Scott Ferris, Director, Parks Recreation and Waterfront Department
Subject: Large Scale Ferry Feasibility Study– A Preferred Concept

SUMMARY
This report describes the development of a preferred concept for a dual-purpose recreation and ferry pier in the Berkeley Waterfront. Included in this report is a brief history of the pier and ferry service in Berkeley; an overview of the project, technical studies, community process; and discussion of the preferred concept, including the waterside improvements (the new recreation and ferry pier), and the landside improvements (parking and circulation, trails, amenities, and modes of transportation to the pier).

PIER HISTORY
The current Berkeley Municipal Pier was originally constructed by the Golden Gate Ferry Company in 1926 as an over-water automobile causeway for autos to access a ferry terminal in the Bay just north of Treasure Island for trips to San Francisco. In 1937, ferry service was discontinued and the Pier was acquired by the City of Berkeley and operated as a recreational pier. In 1959-61, the first three thousand feet of the Pier was renovated and operated for public recreation, and the remainder of the pier heading westward into the Bay was abandoned. In 1984, the existing Pier received a layer of shotcrete on the underside to prevent corrosion.

In July of 2015, the Pier was closed to the public indefinitely due to structural safety issues. On June 21, 2017, after conducting a competitive RFP process, the City contracted with GHD, Inc. to perform a structural engineering assessment to identify feasible options and costs for fixing the Pier (Contract No. 10632, Resolution No. 67,856). The draft study identified 11 options ranging in cost from $20 million to $62 million. A second component of the study looked at the feasibility of small-scale ferry service at the potentially renovated pier.

FERRY HISTORY AT THE BERKELEY WATERFRONT

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1 See https://www.cityofberkeley.info/uploadedFiles/Parks_Rec_Waterfront/Level_3__-General/ Berkeley%20Pier%20Structural%20Assessment%20DRAFT.pdf; and https://www.cityofberkeley.info/uploadedFiles/Parks_Rec_Waterfront/Level_3__-General/COB%20-%20Alternative%20Summary%20Table_edits.pdf
2 See https://www.cityofberkeley.info/uploadedFiles/Parks_Rec_Waterfront/Level_3__- General/Small%20Scale%20Ferry%20Terminal%20FS%20Berkeley%20Municipal%20Pier%20DRAFT.pdf
Ferries have been used to reach Berkeley from Bay waters ever since the mid-1800’s. In 1926, the Golden Gate Ferry Company operated a ferry service from the terminus of the Golden Gate causeway to San Francisco. This service was discontinued in 1937. In 1989, just after the Loma Prieta earthquake, FEMA operated ferry service from Berkeley to San Francisco for a little less than two years. In 2017, two private small-scale ferry operators began commuter service from the inner harbor of the Berkeley Marina (Tideline and Prop SF), transporting approximately 110 passengers per day during the work week; currently service is on-hold due to the Covid pandemic.

WATER EMERGENCY TRANSPORATION AUTHORITY (WETA)
In the early 1930s, a fleet of 50 ferries shuttled 50-60 million passengers across the Bay each year. With the construction of the Bay Bridge that same decade, ferry service saw a steep decline in interest and ridership, with just four public ferry boats serving the entire Bay Area in the late 1980s. That all changed in 1989 when the Loma Prieta earthquake struck, damaging the Bay Bridge and resulting in its closure for more than a month. During that time, traveling by ferry was the only way to cross the Bay.3

The Loma Prieta earthquake is credited with renewing interest in water transit, and with gridlock on local freeways and bridges increasing in recent years, many Bay Area residents are looking for an alternative to crowded bridges, train cars and buses. For more than 20 years, the San Francisco Bay Area Water Emergency Transportation Authority (WETA) has been working to expand Bay Area public ferry service, while also preparing to respond to a major disaster that affects transbay transportation.

Approximately ten years ago (2008 through 2011), as part of their regionwide effort, WETA did a conceptual ferry terminal study and draft environmental impact report (DEIR) at the Berkeley Marina at Seawall Drive for potential commuter ferry service to San Francisco. The project was discontinued at that time due to the lack of funding and other project complexities (e.g., dredging costs).

In 2016, WETA adopted a Strategic Plan that envisioned an expansion of the ferry network throughout the Bay Area, including Berkeley Ferry Service. In 2017, the Berkeley project was also endorsed by the multiagency Core Capacity Transit Study led by the Metropolitan Transportation Commission (MTC) as a key medium-term regional project for enhancing transit capacity in the Bay Bridge corridor. In 2021, the final Plan Bay Area 2050 (approved by MTC) included Berkeley Ferry Service as part of its financially-constrained long-range Regional Transportation Plan.

On June 5, 2018, Bay Area voters approved Regional Measure 3 (RM3), a bridge toll increase, to finance $4.5 billion in highway and transit projects, and to provide $60 million each year to operate new bus and ferry services in congested bridge corridors.4 WETA is expected to receive up to $300 million for one-time capital construction projects and up to $35 million per year to operate an expanded region-wide ferry system.

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3 WETA Timeline | Water Emergency Transportation Authority (sanfranciscobayferry.com)
4 See https://sanfranciscobayferry.com/news/voters-approve-regional-measure-3
Over the past 10 years, WETA has successfully constructed 5 new ferry terminal projects (South San Francisco, North Bay Operations & Maintenance Facility, Central Bay Operations & Maintenance Facility, Richmond, Downtown San Francisco Ferry Terminal Expansion). Each of these projects has involved a comprehensive environmental review and permitting process.

LARGE SCALE FERRY FEASIBILITY STUDY
In 2018, WETA staff met with City staff to begin a dialogue about potential new ferry service in Berkeley. In early 2019, WETA and the City allocated funding and entered into a Memorandum of Understanding (MOU) for the conceptual planning phase of the project to conduct engineering feasibility studies and a community process to develop a preferred concept for a dual-use pier for ferry service and recreation (Resolution 68,782, Approved 3-12-2019). The project assessed waterside project elements such as fixing the existing or building a new pier, wind and wave analysis and new breakwaters, dredging, sea level rise analyses, and ferry electrification analyses. The project assessed landside project elements such as potential renovations to existing parking lots, public access paths, and public amenities (e.g., restrooms), as well as alternative transportation modes to reach the ferry. The total cost of this study – the Large-Scale Ferry Feasibility Study – was $360,000, comprised of $250,000 from WETA and $110,000 from the City.

The goal of the year-long study was to identify the most feasible concept for a dual-use recreational pier and large-scale ferry terminal and accompanying landside improvements. The preferred concept incorporated the following studies to ensure the elements identified are feasible for the next phase (note that these studies are being compiled into a single document – the Large-Scale Ferry Feasibility Study – which will be published on the City’s website in January 2022):

- Wind and Wave Analysis to ensure safe and energy-efficient ferry berthing.
- Analysis of dredging locations and depths to minimize constraints related permitting requirements, and reduce environmental impact.
- Transportation Demand Management (TDM) review to identify measures to reduce the use of single occupancy vehicle at the Marina for ferry passengers, and to enhance public transit bus/shuttles and bike/pedestrian amenities for all users at the Marina.
- Sea Level Rise Adaptation to ensure long term sustainability of the new pier against rising sea.
- A ferry terminal electrification feasibility study to understand and incorporate electrical infrastructure needs to support electric ferry vessels.

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Community Process
The goal of the community process was to receive community feedback on possible concepts throughout the project to better understand community needs and to reduce any impacts on current activities at the Berkeley Waterfront.

In January of 2021, using the online Zoom format, the City conducted three small focus groups with highly active community users of the Berkeley Waterfront (both water and land users) to hear about key user concerns and interests. In January, August, and October of 2021 (see www.cityofberkeley.info/parks/pier for presentations), the City held three large community meetings whereby the project team presented the concepts developed to-date and received extensive community feedback. Several presentations and public comments were heard at public meetings of the City Council, the WETA Board, and the City’s Parks and Waterfront Commission. The project team also collected community feedback regarding ferry service through a BMASP on-line Questionnaire in March of 2021, with 377 respondents.

A summary of comments from each community workshop is included in Attachment 1. Each community workshop was advertised in the Berkeleyside, the City’s project website, and the City’s Community Events webpage, and via email announcements to the Marina stakeholders, recreation groups, and Measure T1 mailing lists. Community meeting poster boards and flyers were posted at several locations at the Marina and the City’s community centers. WETA staff posted the community meeting announcements in their newsletter and their social media channels.

According to the Zoom attendance reports, 194 unduplicated people participated in these community meetings and focus groups, and the City received 44 written comments, (see www.cityofberkeley.info/parks/pier). On the City’s project website, City staff published the presentations for each community meeting and summaries of the comments and discussions, as well as a Frequently Asked Questions (FAQs) document to answer the many questions that came up during the community discussions as well as historical documents about the Pier (see www.cityofberkeley.info/parks/pier).

The technical design process to develop a preferred concept was structured around the three large community meetings held in January, August, and October of 2021 whereby various concepts for the potential new pier were developed and refined based on community feedback and additional engineering study. To prepare for the first community meeting in January 2021, the project team reviewed the community feedback from the 2010 WETA Ferry Terminal Study of the Berkeley Marina to identify the key variables in siting the location and shape of the potential new pier. The team then looked at a variety of shapes and locations for the potential new pier. After sifting through over 30 potential concepts, the project team identified 5 of the most feasible examples for a community discussion at Community Workshop #1, as shown in figure 1 below.
Community feedback from Workshop #1 was then used to develop the following set of evaluation criteria to compare preliminary waterside concepts:

A. Visual & Placemaking
   • Provides for a positive overall pier experience
   • Relates to and is reminiscent of the former pier
   • Harmonizes with the existing Waterfront aesthetic and experience

B. Recreation
   • Allows for unimpeded access for pier recreational users
   • Offers sufficient space of active/passive recreations uses
   • Limits ferry conflicts with marina boating
   • Limits ferry conflicts with watersport activities

C. Ferry Operations
   • Allows for efficient electric vessel operation
   • Maximizes vessel maneuverability
   • Maximizes protection from wind and waves

D. Implementation
   • Limits dredging requirements
   • Allows for cost-effective, time-efficient construction
   • Incorporates green infrastructure technology

The project design engineers used the evaluation criteria and wind and wave analysis, along with feedback from WETA ferry operators, to refine the four best preliminary
options for a more in-depth discussion at Community Workshop #2 as shown in figure 2 below.

Figure 2: The four most feasible options of Dual-Use Pier Examples for Community Meeting #2

The project team also produced 2 landside concepts for community discussion at Community Workshop #2 – (1) the dispersed parking concept and (2) the clustered parking concept described as follows:

- The “dispersed” parking concept involved the allocation of 250 parking spaces throughout the existing parking areas at the Marina as follows: 82 new spaces along University Ave between Seawall Drive and South Cove West Lot, 10 spaces at the 100-car South Cove West Lot, and 158 spaces on both side of the realigned Marina Blvd, (see Figure 3).
- The “clustered” parking concept involved an allocation of 250 parking spaces for ferry passenger parking during ferry-hours at the existing 320-car lot at 199 Seawall Drive. This concept also reconfigured the lot for more parking and better circulation for improved safety and access for all users, (see Figure 4).
Figure 3: Dispersed parking concept would disperse ferry parking throughout the Waterfront, as illustrated in purple shading here.

Figure 4. Clustered parking concept would concentrate ferry parking in the 199 Seawall lot, as illustrated in purple shading here.

Both concepts involved the development of an improved area along the southern side of University Ave for bus stops, shuttle stops, a drop-off zone for rideshare and family vehicles, a restroom, fish cleaning stations and trash cans, improved pedestrian trails and lighting, public plaza and events space, a new access point for non-motorized.
Preferred Concept
Given the feedback at Community Workshop #2, a more detailed version of Waterside Option 1 (the Sword) and the Landside Option 1 (“clustered parking”) were presented as the preferred concept at Community Workshop #3. At the meeting, we heard general support for the preferred concept. We also heard feedback urging the City to work hard to mitigate potential impacts related to parking and traffic, environmental impacts, and preserving the existing beauty and recreational activities at the Marina.

Preferred Waterside Concept
The ‘Sword” details are as follows (note that approximate dimensions were used to produce a program-level cost estimate. These dimensions may be modified during the formal design phase as more specific engineering information is developed):

- A ferry boarding pier from the shoreline at Seawall Drive westward to a new breakwater (580 ft long);
- A new breakwater to create a safe harbor from the predominant southwesterly wind and waves for ferry boarding on the north side of the new pier (400 ft long). The breakwater will have surface decking to allow public access for recreation;
- An extension of the new pier westward into the Bay for recreational use (500 ft long). All together, these elements would provide approximately 1,480 feet of pier available for public access.
- The new pier will be 22 feet wide to accommodate both ferry foot traffic, recreational activities, and emergency and maintenance vehicles. (Note the current Berkeley Municipal Pier is 22 feet wide).
- The ferry terminal components include ferry berthing floats, float piles, ADA gangways, and security gates.

Additionally, the Sword has four key attributes that are superior to the 3 other options:

1. Using the same location as the currently Municipal Pier resulted in a greatly minimized impact to existing water-based recreation users to the south (windsurfers, kayakers, and swimmers to the south, and to the north (sailboats using the main harbor channel). This concept also eliminates the need to construct a second structure (e.g., a new pier) adjacent to the existing pier, which would represent unnecessary additional Bay Fill.
2. A linear design, much like the existing Municipal Pier, has a lower construction cost than a curved pier.
3. The proposed north-south breakwater that is necessary to create a safe harbor for ferry boarding on the north side of the new pier can provide additional pedestrian surface for public recreation.
4. The recreation pier extension to the west of the breakwater provides unimpeded recreation use.

**Preferred Landside Concept**

The preferred landside concept, the clustered parking option, allocates 250 parking spots in the 199 Seawall lot for ferry users, along with multiple other supportive elements and amenities, as illustrated in Figure 6.

![Preferred Conceptual Design Landside Elements](image)
Features of the preferred landside concept include:

- The entire 320-car parking lot at 199 Seawall Drive will be renovated with new pavement surfacing, new striping, and new stormwater bioswales to treat stormwater;
- An improved area along the southwestern side of University Ave will be implemented for public buses, shuttles, and a drop-off zone for rideshare and family vehicles;
- Renovated pedestrian pathways and safety lighting, a new restroom, a new fish cleaning area, trash cans, a public plaza and events space, and other amenities (e.g., drinking fountain, area for potential food trucks);
- The shift of the Seawall Drive vista parking zone from the west side to the east side of the road; and
- A new water access point at the small peninsula at the southwest corner of Seawall Drive.

The City plans to use Transportation Demand Management (TDM) methods to improve circulation at the Berkeley Waterfront for pedestrians, bicycles, cars, mass transit, service and delivery vehicles and emergency vehicles in ways that minimize impacts to existing uses and the environment.

Preferred Concept Cost Estimates
The preferred waterside concept (Option 1 – the “Sword”) has an estimated program-level cost of $69.5M. The preferred landside concept (Option 1 – the “Clustered Parking” option) has an estimated program-level cost of $14M. The cost for 2 electric ferry vessels is $38.2M. for a total capital project cost of $121.7M. WETA and the City will collaborate to secure funding for subsequent phases of the project.

Prefered Concept – Option 1
- Waterside Concept (“Sword”) $69.5M*
- Landside Concept (“Clustered Parking”) $14.0M*
- Two Electric Ferry Vessels: $38.2M*
- Total: $121.7M*

*Includes a cost escalation for five-year to start of construction in 2025.

BERKELEY FERRY SERVICE BUSINESS PLAN (WETA)
On October 27, 2021, at the third Community Meeting, WETA presented initial results of its Berkeley Ferry Service Business Plan (“Business Plan”) that described a service concept for the project, comprised of projections for ridership, an illustrative schedule of ferry service, equity considerations regarding fares, and economic development opportunities.

The Business Plan updated the ridership projections from the 2016 WETA Strategic Plan using a combination of 2019 Alameda CTC Travel Demand Model results and observed changes in travel patterns influenced by COVID-19 to develop a new ridership forecast of a weekday average of 2,110 boardings by the year 2040, or approximately
1,000 unduplicated persons per day. (For further details, see page 15 in the Presentation Slides for Community Meeting #3.)

An illustrative ferry schedule shows fourteen roundtrip ferries per day to San Francisco during the week, departing Berkeley starting at 6:30am with a final departure at 7:40pm. (For further details, see page 17 in the Presentation Slides for Community Meeting #3.)

The assumed one-way Adult Clipper fare from Berkeley to San Francisco is approximately $5.15 (FY 22$). The Berkeley Ferry Service Business Plan will also consider an alternate one-way Adult fare of $4.50 (FY 22$) to enable a wider array of customers for equity considerations.

The current MOU between the City and WETA calls for WETA to cover all annual operating expenses of ferry service as well as maintenance costs for all aspects of the project solely related to the new ferry pier and breakwater.

POTENTIAL BENEFITS OF DUAL USE PIER
The Preferred Concept has the capacity to provide a dual-purpose public pier at the Berkeley Waterfront that would restore public recreation on a public pier, enhance transportation opportunities for Berkeley residents and businesses, and help improve the economic vitality of the Berkeley Waterfront.

On the waterside, the Sword concept is the most advantageous design in that it:

- **Leverages a multi-use breakwater:** The Sword design incorporates a 400 ft breakwater required to protect the ferry terminal from wind and waves, and will have surface decking for public access.

- **Leverages access to existing channel:** The Sword design positions the ferry float adjacent to the existing federal channel, which is a corridor along the sea floor that has already been designated for dredging by the U.S. Army Corps of Engineers. This can help the permitting process for dredging, if it is found necessary during the design phase.

- **Considers marina customer/boater access:** The Sword design positions the ferry boarding float up against the north side of the pier, and west of the harbor entrance. This results in plenty of available space for recreational vessels to travel into and out of the Berkeley Marina harbor.

- **Considers watersports users:** The Sword design positions the ferry boarding float against the north side of the pier, away from the southern area that is by windsurfers, swimmers, and other watersports users.

- **Considers the environment:** By re-using the space currently occupied by the existing Berkeley Pier, the concept does not involve additional filling of the Bay.

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7 See link above.
Respects History: The Sword design follows the existing alignment of the pier, in the same footprint as the existing Berkeley Pier.

On the landside, the clustered parking concept addresses the concerns we heard about potential impacts of ferry parking on the character of the Marina. The preferred landside concept offers the following benefits:

- **Concentrates parking impacts**: The clustered parking concept concentrates ferry parking impacts to one location. It also positions parking close to the ferry.

- **Enables flexibility**: This plan relies on the use of Transportation Demand Management (TDM) methods to reduce the number of vehicles driving to and parking in the Waterfront specifically for ferry access. An estimated 250 spaces will be needed for ferry users. With over 1,500 total parking spaces at the waterfront, appropriate programming and management of parking and transportation can meaningfully reduce the number of vehicles on site. These strategies have already proven effective on a smaller scale at the southern waterfront to alleviate parking issues after the small-scale ferry operations began in 2017.

- **Preserves prime seawall parking for the public**: The public enjoy the views from Seawall Drive and ease of access to the shoreline. This concept would preserve that, and enhance the experience through the inclusion of the Bay Trail extension and public amenities like permanent restrooms.

- **Preserves parking for existing users**: Parking for existing Marina Users, including Cal Sailing, Cal Adventures, and slip holders, can continue to be preserved via parking management strategies. These could be as simple as the parking regulations already in use in various parking lots at the Marina, or newer methods such as the use of parking fees.

- **Re-uses the existing surface parking lot at 199 Seawall Drive**: This is not only cost effective, but also prevents impacts to existing recreational and green space at the waterfront.

- **Incorporates new recreational facilities**: The clustered parking concept includes the extension of the San Francisco Bay Trail from Adventure playground to the Berkeley Pier and a new public plaza and event space. It also includes a new water access point at the small peninsula at the southwest corner of Seawall Drive frequented by advanced windsurfers during certain wind conditions.

More broadly, a multi-use pier for recreation and ferry users could provide multiple benefits to the City:

- **The restoration of the pier itself is of inherent value**: This was affirmed repeatedly during numerous community meetings, not just for the
Pier/Ferry and BMASP projects, but also during the Measure T1 bond program public process.

- **Access to jobs and economic development support:** The addition of ferry service would create transportation linkages for Berkeley residents in West Berkeley traveling to San Francisco for higher paying jobs, and easier access for employees for businesses, particularly those in the West Berkeley light industrial area. It is widely anticipated that the biotech sector will grow in the Bay Area and will need improved transportation linkages between Berkeley and South San Francisco.

- **Supports waterfront businesses and the Marina Fund:** The regular presence of new ferry users could enlarge the customer base at the existing restaurants, businesses, and the hotel, leading to higher revenue for the Marina Fund via higher percentage rent revenue, (the City receives a percentage of gross revenues from the hotel and other commercial tenants).

- **Opens doors for additional revenue generation:** The increased customer foot traffic could complement and incentivize new revenue-generating opportunities that otherwise might not be viable, (e.g., food and coffee trucks, other food services, and bike rentals).

- **Community benefits:** Ferry service is likely to spark additional improvements at the Berkeley Waterfront for shuttles and bicycles that could benefit a wide range of Berkeley residents, visitors, and employees to and from the Waterfront.

- **Safety:** The increased foot traffic could bring more positive energy to the Marina and more "eyes" to the area, thereby increasing "natural surveillance" that can help reduce crime. Many members of the community have expressed a desire for improvements that make the waterfront safer and more accessible to enable their enjoyment of this waterfront resource.

- **Local Hazard Mitigation Plan of 2019 (LHMP) compliance:** The City’s LHMP has identified developing a partnership with ferry service as a High Priority Action that would play an important role in the City’s emergency response and recovery after a major disaster.

- **Climate Action Plan consistency:** The City’s Climate Action Plan identifies public transit as a more sustainable form of transportation (Chapter 3), and sets a goal to expand under-used modes of transportation, such as ferry service at the Berkeley Marina that would connect to San Francisco and other locations.

**ADDITIONAL FEEDBACK ON DUAL USE PIER**

While 88% of respondents in the BMASP questionnaire liked the idea of restoring the Berkeley Pier and adding ferry service, there were many concerns raised during the community process. They ranged from comments on specific aspects of the project, such as parking, boater access, environmental concerns, and recreation impacts, to concerns about impacts on the Marina Fund and BMASP, to broader concerns about the viability of public investment in ferry development.

These concerns and brief responses are summarized below.

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8 See [https://www.cityofberkeley.info/uploadedFiles/Parks_Rec_Waterfront/Level_3___-General/BMASP_CW1 Questionnaire Results.pdf](https://www.cityofberkeley.info/uploadedFiles/Parks_Rec_Waterfront/Level_3___-General/BMASP_CW1 Questionnaire Results.pdf).
Comment 1. There is not enough parking at the Berkeley Waterfront to meet the needs of both the existing recreation users and the new ferry users.
Response 1. WETA and the City have agreed to a limit of 250 parking spaces allocated to ferry users at the Berkeley Waterfront for weekday service. The existing 320-car parking lot at 199 Seawall Drive can accommodate this need, while still leaving space for recreational users and a future tenant. The Waterfront has more than 1,500 total parking spaces, many of which are underutilized at various parts of the day and week. In the next phase of preliminary design and permitting, plans will be developed for managing parking, which could include parking fees and time restrictions that place a premium on parking next to the ferry terminal, while still providing access for recreational users. Implementation of these measures would be 5 to 6 years out, based on timing of potential ferry service.

Comment 2. Ferries are much less efficient than the BART train system in terms of energy used per-passenger.
Response 2. In the Bay Area, ferry transportation is one method among several and can access under-served communities currently not well-served by BART or bus service. WETA's current plan is to use an all-electric fleet in Berkeley.

Comment 3. What if the Ferry does not draw enough people and service is discontinued?
Response 3. If ferry service were to be discontinued, the new pier and improvements would remain in-place and would be operated by the City for recreation purposes.

Comment 4. The decision to bring ferry service to the Berkeley Waterfront was pre-determined and the community process was a false exercise and community feedback had no impact.
Response 4. The decision to bring WETA ferry service to Berkeley has not been made. The Berkeley City Council and the WETA Board are mutually exploring the potential for a dual-use pier. This includes engineering feasibility studies and public engagement to identify this preferred conceptual design. One challenge during the public process was that some participants were not interested in discussing a preferred alternative, because they didn’t think the City should be considering a dual-use pier. The premise of this project has always been to identify a preferred option, cost it, and then return to both the Council and the WETA Board to determine whether to move to the next step of design and permitting. Community feedback has informed every aspect of the preferred concept, and will continue to inform the process moving forward.

Comment 5. The proposed ferry will create impossible conflicts with current recreation users.
Response 5. Based directly on community feedback from recreation users, such as windsurfers, kayakers, and swimmers, the location of the new ferry pier was moved northward to the existing pier location in order to minimize impacts on
water-based recreation activities. Through transportation demand management methods, ferry parking will be managed to both incentivize ferry users to use alternate ways to access the ferry (non-auto), and to prevent ferry users from using adjacent recreational area parking lots.

Comment 6. The BMASP planning project should be completed before any ferry project is done because allocating the current parking lot for ferry users will preclude the future development of a new hotel or restaurant at that area.

Response 6. The Berkeley Marina Area Specific Plan (BMASP) project is a 3-year programmatic effort to envision potential new projects and programs at the Berkeley Waterfront that can help make the area become financially self-sustaining while preserving current uses. The Pier Ferry project is symbiotic in that it provides a path to restoring the Berkeley Pier, opens up potential for a new amenity with WETA ferry service, and provides a path to bringing more of the public, more of the time, down to the Waterfront. In all of the BMASP deliberations, attracting more community members to the Waterfront is fundamental to increasing revenue, improving safety and security, and setting the Waterfront on a more sustainable path. On concerns that this project is precluding development of the parking lot, 1) the preferred concept envisions much more than a parking lot, and reflects community interest in a multi-use area with parking, event space and recreation elements; 2) there are multiple locations being explored in the BMASP process for hotel and restaurant, and all of them would be more feasible than the 199 Seawall parking lot, which has the most restrictive permitting in the Waterfront.

Comment 7. The City has not provided a comprehensive explanation of the existing regulatory frameworks that govern the land and water at the Berkeley Waterfront. Many of these regulations make any ferry project at the Berkeley Waterfront extremely difficult to obtain permits.

Response 7. As a matter of practice, any Waterfront-related Council report includes descriptions of the regulatory agencies involved. These were included in the February 16, 2021 worksession report, and a description and current status of regulatory agencies on this project is provided as follows:

State Tidelands
The Berkeley Marina and Waterfront Area are part of a grant of tidelands to Berkeley from the State of California⁹, and are limited to uses such as water-based and water-associated uses, such as boating, commerce, tourism, hotels, restaurants recreation, and water-related education. No residential development is permitted. Similarly, no municipal use is permitted (e.g., a non-water-based use that benefits only the City and not all people of the State, e.g., a City library). New uses are subject to approval by the California State Lands Commission to ensure they comply with the grant of tidelands restrictions.

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⁹ Chapter 347 of the California Statutes of 1913 through 1962.
As water-dependent uses, ferry service and a recreational pier are consistent with the grant of tidelands restrictions.

City staff is in regular contact with State Lands Commission staff and will continue to coordinate with them as the project progresses.

The Bay Conservation and Development Commission (BCDC)

BCDC is the regulatory agency with authority over the conservation and development of the San Francisco Bay and shoreline band (the band is defined as 100 feet inland of the high tide line). At the Berkeley Waterfront, BCDC has jurisdiction over the 100-foot shoreline band around the entire perimeter of the uplands, as well as the 4.6 acre peninsula of land south of Shorebird Park, from the 199 Seawall Drive Parking Lot to the Building.

BCDC’s Bay Plan, the framework for BCDC permitting decisions, designates the Berkeley Waterfront as a “waterfront park”. Rather than prohibiting ferry development, the Bay Plan specifically envisions the potential of ferry terminals in areas like Berkeley, provided that it meets the following conditions:

Ferry terminals may be allowed in waterfront park priority use areas and marinas and near fishing piers and launching lanes, provided the development and operations of the ferry facilities do not interfere with current or future park and recreational uses, and navigational safety can be assured. Terminal configuration and operation should not disrupt continuous shoreline access. Facilities provided for park and marina patrons, such as parking, should not be usurped by ferry patrons. Shared parking arrangements should be provided to minimize the amount of shoreline area needed for parking, ([https://bcdc.ca.gov/plans/sfbay_plan; Recreation, Policies, #9](https://bcdc.ca.gov/plans/sfbay_plan)).

It should be noted that these conditions are values shared by the City, and have been incorporated into this conceptual planning phase, and will continue to be a major focus of any future phases. City staff is in regular contact with BCDC staff and will continue to coordinate with them as the project progresses to ensure that the City understands BCDC development guidelines, restrictions and the permitting process.

Measure L – the City of Berkeley Open Space Ordinance

Adopted in 1986, the Public Parks and Open Space Preservation Ordinance No. 5,785-N.S. is intended to preserve open space in Berkeley. It stipulates that any change of public parks and open space to other uses would require voter approval in a General Election. Designated parks at the Waterfront include the following: Cesar Chavez Park, Shorebird Park, and Horseshoe Park. Because the landside and waterside elements of the preferred concept would retain open space/recreation, the project is likely consistent with Measure L pending

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10 See [https://bcdc.ca.gov/plans/sfbay_plan](https://bcdc.ca.gov/plans/sfbay_plan)
additional analysis. Staff will continue to review project elements with the City Attorney as the project progresses.

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE CHANGE
Prior to the implementation of any construction project, the proposed dual-use pier for ferry service and recreation must undergo a comprehensive environmental review as required by the California Environmental Quality Act (CEQA), as well as the National Environmental Protection Act (NEPA) if federal funding is used. This review process will involve technical studies to assess the level of impact the project may have on the environment. It should be noted that such an environmental review cannot be undertaken without an actual project concept and description. As a result, the formal CEQA (and potential NEPA) environmental review will be undertaken only if the City Council and WETA Board deem the project feasible and allocate funding for the next phase of the project – the design and environmental review phase. The environmental review will include a comprehensive study of parking and traffic associated with the project. That being said, the project team has developed an initial understanding of potential environmental issues of the project, as discussed below.

For example, in 2021, WETA initiated a study to determine the shoreside requirements to deploy new electric ferry vessels at current and potential future WETA terminal sites, including the Berkeley Marina. In addition, electric vehicle charging stations can be added to the improved parking area(s). The rapid growth of e-bikes and rideshare transportation in the foreseeable future also can help reduce the use of private vehicles at the Marina that could impact current recreation users, which helps alleviate traffic congestion, parking overload, vehicle miles traveled and associated air pollution, and overall carbon footprint of the project.

This project also offers a unique opportunity to implement innovative green infrastructure elements such as solar panel sidewalk and pier decking, and cool pavement surfacing at the viewing area in front of the proposed event stage/amphitheater. If the parking area improvements are funded, stormwater runoff will be treated at new bio-treatment area before discharging into the Bay.

The project will also account for Sea Level-rise, as required by a BCDC permit.

NEXT STEPS
If approved by both City Council and the WETA Board, there are several options for next steps to move forward with a version of the preferred plan:

1) Fund a partial (30-40%) Design Development (DD) phase that includes preliminary design, permitting and all necessary Environmental Review. The anticipated cost is $4-5 million*. The remaining cost of DD can be funded in a future step.
2) Fund a full DD phase that includes complete design, permitting and Environmental Review. Anticipated cost is approximately $6-8 million*.
3) Fund 100% Design Development and Construction of the preferred concept plan is anticipated to cost approximately $83.5 million.
*Costs will vary depending on required Environmental Review process.

Any of the above options will require an updated MOU or an amendment to the existing MOU between WETA and the City.

In terms of cost-sharing between WETA and the City, the current MOU states that,

“…WETA will pay all costs associated with Project elements associated with public ferry service, including CEQA (and, if applicable, NEPA) compliance, resource agency permitting, and design costs, City will pay all costs associated with public access aspects of the Project. For aspects of the Project that are required for both types of elements, WETA and City will implement a reasonable cost-sharing method. The City and WETA will each contribute staff resources to support the Design Phase.”

City and WETA staff are having detailed conversations about cost sharing and will come to Council in the next 60 days to discuss. Additionally, both entities will collaborate to identify potential regional, State, and Federal funding. Applicable sources of funds may include:

- Regional Measure 3 (RM3), a 2018 bridge toll increase to finance $4.5 billion in highway and transit projects, and provide $60 million each year to operate new bus and ferry services in congested bridge corridors. WETA is expected to receive up to $300 million for one-time capital construction projects and up to $35 million per year to operate an expanded region-wide ferry system.
- Alameda County Transportation Commission’s Measure BB.
- California Department of Transportation’s Ferry Boat and Terminal Facilities Construction Program funded by Federal Highway Administration.
- Infrastructure Investment and Jobs Act’s Passenger Ferry Grant Program.
- City of Berkeley funds

Goals for Design Development Phase include the following:

1. Collaboration with AC Transit on more frequent and timed bus services
2. Work with major companies in West Berkeley, and UC Berkeley’s Transportation Department, and existing shuttle services to extend service to the Berkeley Marina.
3. Use a guideline of 250 parking space at the parking lot at 199 Seawall Drive for ferry parking, and use parking management and parking fees to encourage the use of non-auto travel to the Marina for ferry access. Ferry parking fees will be used to implement active parking enforcement, to improve operations of other parking lots to preserve parking for recreation uses, and to enhance recreation assets.
4. Conduct thorough environmental compliance review on factors such as, but not limited to, air quality, biological resources, greenhouse gas emissions, transportation/traffic, land use planning, and recreation.
5. Conduct a robust and transparent public engagement process.
6. Continue to integrate the ferry terminal elements with the Berkeley Marina Specific Plan (BMASP) to provide a sustainable Marina Area to serve the future of the Berkeley Community.

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ATTACHMENTS:
1 – Summary of Community Workshops
2 – Map of Land-Use Regulators and Ordinances
Workshops and Questionnaire

Focus Group Meetings – on January 5, 6, and 7, 2021

About seven to ten watersport enthusiasts — each with a deep knowledge of the Marina — participated in one of three small group meetings. Each meeting consisted of a technical presentation from City and WETA staff followed by a facilitated discussion.

Key topics discussed:

- defining areas where watersports and boating occur currently;
- listing potential new recreation uses on/around a potential new pier;
- ways to limit impacts to existing recreational programs/uses;
- ideas for circulation and parking; and,
- ideas for amenities, programming, and commercial activity

Community Workshop #1 – January 21, 2021

About 68 people participated in Workshop #1. The project team first introduced the feasibility study scope, objectives, existing conditions, potential ferry routes, and five pier schemes. After the presentation, attendees broke into small groups to discuss the schemes. After breakout sessions, participants reconvened to hear the highlights from each group.

Key topics discussed:

- how and where commuters may use the ferry;
- qualities of the existing Waterfront to preserve;
- parking, transit, and bicycle access ideas;
- environmental considerations; and,
- the merits/disadvantages of the each of the five pier configurations.
Community Workshop #2 — August 10, 2021

About 83 people participated in Workshop #2. The project team presented two land use concept plans — one with clustered and one dispersed parking — and five new pier schemes that had evolved based on comments from Workshop #1. After the presentation, the attendees broke into small groups to discuss the merits of the schemes.

Key outcomes from the small groups:

- participants requested more data on ridership projections, viability of a new ferry service for long term operations, and
- information on the financial implications of a ferry on the Marina Fund;
- there was stronger support for clustered over dispersed parking; and,
- most participants supported a straight pier with berthing on the north side.

Community Workshop #3 — October 27, 2021

Approximately 85 people attended this workshop. During the first segment City staff and project consultants responded to community requests from Workshop #2. Following a brief Q&A on the presentations, the Preferred Concept was presented and consisted of renderings and a site plan of the pier, parking, and terminal. In a full group format, the workshop facilitator guided questions and open discussion on the plan.

Key responses included:

- concern that parking demand may be greater than available capacity at the former HS Lordships site;
- concern that ferry parking could negatively impact the existing character of the Marina; and
- general support for the pier scheme presented (over prior configurations).