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TECHNICAL MEMORANDUM

September 27, 2024 Project# 19867.006

To: Liza McNulty, PE, Capital Improvement Program Manager
City of Berkeley Parks, Recreation & Waterfront (PRW) Department
2180 Milvia Street, 3rd Floor.
Berkeley, CA 94704

From: Kittelson & Associates, Inc.

CC: Ali Endress and Roger Miller

RE: Berkeley WTPF Baseline Parking Conditions – FINAL DRAFT

1.0 Background

The City of Berkeley (City) completed the feasibility study for the ferry facility at Berkeley Municipal Pier (Feasibility Study) in December 2021 and is now beginning detailed engineering and environmental studies for the Water Transportation Pier-Ferry (WTPF) Project. Kittelson & Associates, Inc. (Kittelson) is working with the City to develop a Parking and Transportation Demand Management (TDM) Plan that will support the proposed ferry service and future development at the Waterfront ("Parking and TDM Plan").

The purpose of this technical memorandum is to establish a baseline condition for the Parking and TDM Plan. The memorandum is organized into the following sections:

- Study Area
- Review of Existing Documents
  - Parking Issues and Needs
  - Past and Current Parking Management Solutions
  - Historic Parking Utilization
  - Ridership and Mode Share Estimates
- Case Study Interviews
- Staff Working Group Sessions
- Review of Parking Counts
  - Parking Inventory
  - Historical Count Data
  - All Day Count Data
- Intercept Survey
  - Survey Response Summary

2.0 Study Area

The study area (Berkeley Waterfront or Waterfront) is the area west of the McLaughlin Eastshore State Park, bordered by Spinnaker Way to the north and South Sailing Basin to the south, see **Figure 1**. University Avenue provides vehicle connection between the Waterfront, Downtown Berkeley and Highway 80.

AC Transit Bus Route 51B connects the Waterfront and Rockridge BART via College Avenue, Downtown Berkeley BART, and University Avenue. Only one out of every three scheduled bus trips between 7 am and 9 pm serves the Marina; all other trips terminate at the Berkeley Amtrak station, resulting in a frequency of two (2) buses every hour.

The San Francisco Bay Trail Extension provides bicycle and pedestrian access to the Waterfront from the intersection of University Avenue and Frontage Road. The bicycle and pedestrian bridge across I-80 connects the Waterfront with the City of Berkeley. Additionally, the Virginia Street Right-of-Way (a dirt pathway) offers another bike and pedestrian connection.

The Study Area is entirely public tidelands held in trust by the City. There are over 100 acres of uplands and 5 miles of pedestrian trails within the Waterfront. Centered within this landscape is the Berkeley Marina, the largest public marina in the San Francisco Bay with 1,000 boat slips. The Berkeley Waterfront also includes three public access docks, a boat launch ramp, and 11 parking lots.

Current businesses and attractions include 1 hotel, 4 restaurants, 1 boatyard, a yacht club, two non-profit sailing clubs, a nature center, a two-story office building (commercially leased), and 9 restroom buildings, as shown in **Figure 2**.

LEGEND

- Study Boundary
- Road
- Dock
- Path/Trail
- Slipholder Permit Parking
- Public Parking
- Park

Source: City of Berkeley, MTC

Figure 1: Study Area

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Figure 2: Existing Businesses and Landmarks

Source: Draft Waterfront Specific Plan, 2023

The proposed ferry terminal at the Waterfront will be located at the Berkeley Pier, which will be reconstructed to provide dual ferry and recreation access. The study focuses on the following public parking lots and on-street parking facilities. Private, paid and slipholder only parking lots (Boat Launch Stalls – Paid, Doubletree Stalls – Private/Paid, and Berkeley Marine Center) were not included in the analysis, as it is assumed that ferry riders will not use these locations for parking.

- **Public parking lots**
  - Spinnaker Way Lot
  - J&K Lot
  - L&M Lot
  - South Cove East/West Lot
  - Seawall Drive Lot
  - Skates/N Lot
  - O Lot

- **On-street parking facilities**
  - Spinnaker Way
  - Marina Blvd
  - University Ave Shoulder (at West Frontage Rd)
  - Seawall Drive North/South

- **Slipholder Permit Lots**
  - D&E Lot
  - F&G Lot
  - H&I Lot

Potential future redevelopment is limited to the existing developed land at the Waterfront comprised of leased land and surface parking lots. Future redevelopment at the Waterfront over the next several decades may bring in more visitors and hence, an increase in the need for parking and TDM.

3.0 Review of Existing Documents

The following relevant documents and programs were reviewed for this task:

- Berkeley Marina Ferry Parking & Transportation Demand Management Strategy (Appendix D), Nelson Nygaard, October 2021
    - Appendix A: Revised Short-Term Recommendations for Parking Management, December 2018
- WETA Berkeley Ferry Service, Business Plan Version 1.0, March 2022
    - The Business Plan is intended to be a "living" document that will be updated as needed to respond to new information, new data, and emerging ideas.
- Parking and Mobility Framework, Draft, Berkeley Marina Area Specific Plan, January 2022
- Draft Waterfront Specific Plan, November 2, 2023
- Traffic Assessment of University Avenue Concept Study, December 2017

The following relevant topics were summarized for each document.

- Parking issues and needs
- Past and current parking management solutions
- Historic parking utilization
- Ridership and mode share estimates

3.1 PARKING ISSUES AND NEEDS

The 2021 Berkeley Marina Ferry Parking & TDM Strategy was developed as part of the Feasibility Study to support the needs of future ferry riders travelling to and from the Waterfront. The study analyzed existing conditions and transportation facilities near the proposed ferry terminal location, and was based largely on the 2018 Short-Term Recommendations for Waterfront Parking Management (Appendix of the Feasibility Study). The following parking issues were highlighted in the 2018 Report:

- **Small Scale Ferry Service:** Small scale ferry service was initiated in 2017 by two independent providers (Tideline and Prop SF). Small scale ferry service increased the demand for all-day parking at the Waterfront, particularly surrounding K-Dock, where ferries depart. It should be noted that both of these services were suspended in 2020 during the COVID pandemic.

- **Overcrowding at South Cove lots due to mixed uses/user groups.** The South Cove lots have multiple users that come to the Waterfront at similar or overlapping times, resulting in peak periods in which the lots are full. Users of South Cove include public access for water activities, Cal Sailing and Cal Adventures, Adventure Playground patrons, small scale ferry passengers, charter boat customers, Hana Japan and Bait Shop customers, and employees who work on the Waterfront.

- **All-day visitors (charter and ferry customers) occupy parking spaces for relatively long periods of time.** Ferry and charter boat customers tend to arrive early and utilize the highest demand spots closest to K-Dock. Their vehicles remain in the prime spots in excess of eight hours per day and leave no room for turnover. This creates an issue for those making shorter trips to the South Cove for sailing and boating (Cal Sailing/Cal Adventures), Adventure Playground, Nature Center, Summer Camp drop off, and customers of the marina office, Berkeley Sportsman's Center, and the 125-127 University Avenue office buildings. Many small-scale ferry and charter boat customers show a preference for the newly paved South Cove East Lot over the unpaved South Cove West Lot, in addition to J&K and M Lots. Ferry customers have not heeded recent [2018] City signage (placed on South Cove, J&K, and M Lots) to park on Marina Boulevard instead.

- **Locations needed for watersports community to park.** Many recreational watersports activities (such as windsurfing and winger watersports) require the use of the new green turf area on the northern edge of the South Cove East lot to prepare and rig their large equipment, the adjacent parking stalls (for convenient loading and unloading), and the adjacent wide path of travel (to access the launching docks in the South Sailing Basin). The parking spaces adjacent to the turf are also desirable for small scale ferry and charter customers because of their proximity to K-Dock and attractive appearance. Over the summer, some windsurfers reported that they were unable to find parking next to the turf on weekday afternoons. Several complaints by windsurfers seeking safe and convenient access to the rigging area from their vehicles were filed with PRW Staff in the months of June, July, and August of 2018. A-Frame signs placed in August 2018, were moderately effective at reserving the parking stalls adjacent to the turf for watersports users.

- **Importance of maintaining adequate slipholder parking close to docks.** Every dock at the Marina has a nearby shared parking lot. Some shared lots fill with the vehicles of other park users, limiting access for slipholders at peak times.

- **Importance of maintaining parking for Hana Japan customers in lot.** Hana Japan is only open for dinner when other Waterfront users tend to be leaving. However, in the summer, parking for Hana Japan customers often overflows to the unlit South Cove lots across University Avenue.

This 2024 Parking and TDM Plan will be reviewing and updating this information based on the changes that occurred during the past few years, in particular changes to parking management activities by the City and post COVID cuts to small scale ferry service.

3.2 PAST AND CURRENT PARKING MANAGEMENT SOLUTIONS

Since at least 2016, parking management at the Waterfront has been an evolving and dynamic effort, with the City implementing various lot-specific parking management strategies. This includes various pilot programs, some of which have been abandoned and others expanded based on their efficacy and public feedback. This section describes the parking management strategies that have previously been implemented or are currently in effect.

Slipholder Permit Program: This program became effective on June 4, 2018, for the three northern slipholder lots (D&E, F&G, H&I Lots).[1] The Program prohibits unpermitted overnight parking (12 am – 10 am). For slipholders at those locations, hangtag overnight permits are distributed by Marina staff, and guest permits are granted upon request. Waterfront staff have issued citations to vehicles parked overnight without a permit, or without payment in the Boat Launch Ramp lot. This Program was subsequently expanded to J&K lot and Skates/N Lot. A similar version of this program was implemented in L&M and O Lots, as a mix of public parking/slipholder only parking depending on time of day and day of week. Since the implementation of this permit program, vehicle counts in north facilities have indicated[2]:

- a 60% reduction of unpermitted parked vehicles.
- a reduction of total cars parked by up to 20%.

Time Limited Parking: In 2018, the City introduced time limited (i.e. maximum allowable parking duration) parking in J&K lot for 5 hours between 8 am and 8 pm. This was to ensure that the visitors to Hana Japan have spaces available and are not affected by all day parkers. This system was subsequently replaced with the Slipholder Permit Program described above. Throughout the Waterfront, virtually all public parking areas (streets and lots) have a maximum 72-hour parking limit (per Berkeley Municipal Code).

Gate Control: The Waterfront staff manage the opening and closing of gates at South Cove East and Seawall Drive as necessary, especially during peak summer months to prevent overnight parking.

Paid parking: There is a gate controlled paid parking at the Boat Launch ramp lot on the northern side of the Waterfront, charging $15 per entry for 76 paid stalls. On the northern side of this lot, referred to as the Spinnaker Way lot, there are 36 free public stalls used primarily by visitors to Cesar Chavez Park. DoubleTree Hotel provides parking for $8/hour or $40/day for its 408 spots.

A summary of the existing parking rules currently enforced at the Waterfront is provided in **Appendix A**.

3.3 HISTORIC PARKING UTILIZATION

The parking utilization summary below and in Figure 3 is based on analysis conducted during the Feasibility Study, which used aerial parking utilization counts taken on several days between 2014 and 2018. **Figure 3** shows the specific days on which car counts were conducted for this analysis. The lots were divided into three subareas based on the geographic location of each facility.

- **Central Facilities** consist of L&M lot, J&K lot, South Cove West, South Cove East, and the "Small Boat Launch". The 10 parking spaces in the small boat launch ramp area were permanently removed in 2020 to make way for improvements to the Bay Trail Extension and access road. During the peak parking demand periods, the J&K Lot and L&M Lot, experienced as much as 89% and 93%

[1] *The Parking Permit Program does not apply to the paid launch ramp lot.*

[2] *Nelson\Nygaard. Revised Short-Term Recommendations for Waterfront Parking Management, 2018*

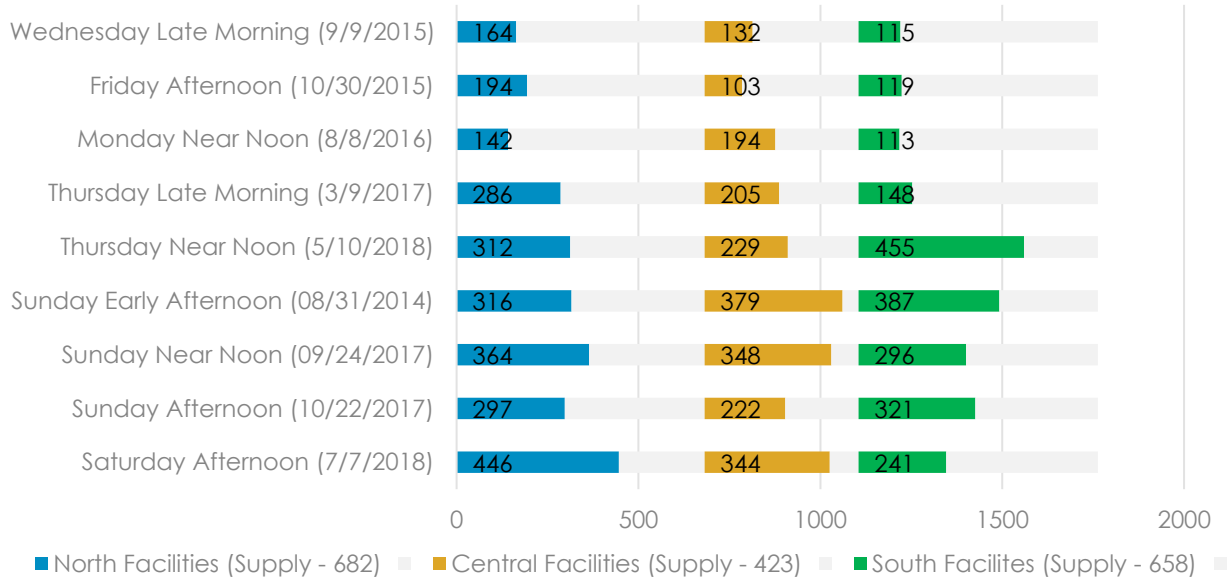
occupancy, respectively. Overall, the Central Facilities experienced 81% occupancy on Saturday afternoon and 90% occupancy on Sunday afternoon during the peak July-August parking periods.

- **South Facilities** consists of Skates/N Lot, O Lot, 199 Seawall Drive Lot, and Seawall Drive. The peak parking period for south facilities was Thursday afternoon with 69% occupancy.

- **North Facilities** consists of D&E Lot, F&G Lot, H&I Lot, Marina Blvd, the Boat Launch Ramp, Spinnaker Circle, and Spinnaker Way. Spinnaker Way had 97% occupancy during the Saturday afternoon surveyed. In aggregate, the parking lot facilities in the north observed the highest demand during Saturday afternoon with 65% occupancy.

Figure 3 shows parking utilization by facilities and time of day.

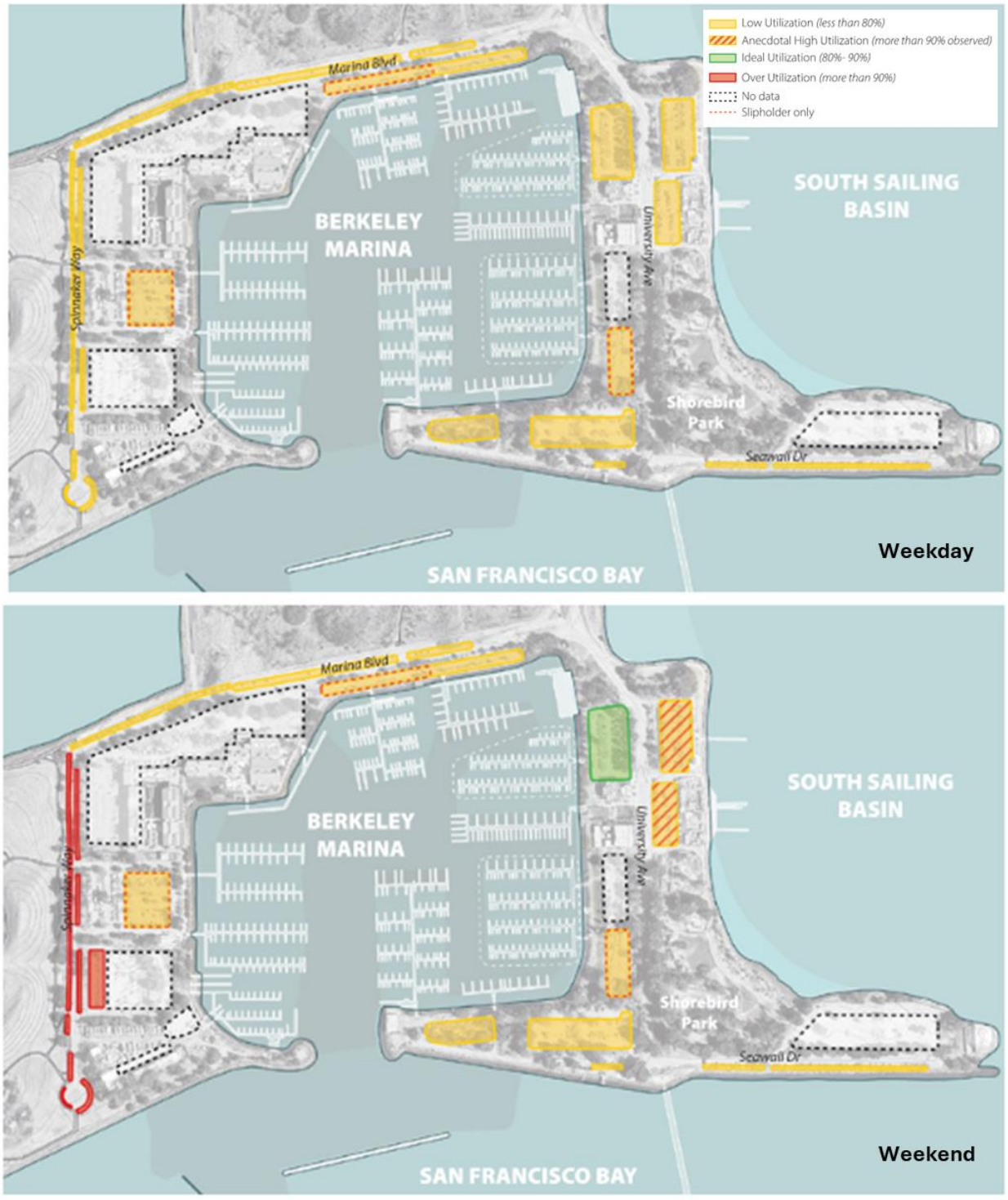
Figure 3: Parking Utilization by Facilities by Time of Day (2015 – 2018)



Source: Nelson\Nygaard. 2018. Berkeley Waterfront Parking Study. Appendix A

Figure 4 shows average weekday and weekend parking utilization based on the data collected for the Draft Waterfront Specific Plan in 2022-2023. During the weekend, the parking utilization was higher in the northern facilities – Spinnaker Way on-street parking and Spinnaker Way Lot. The figure also shows high utilization at South Cove lots during the weekend based on anecdotal information, including feedback provided from City staff and community members.

Figure 4: Average Weekday and Weekend Parking Demand (Draft Waterfront Specific Plan)



Source: Draft Waterfront Specific Plan, October 2023

3.4 RIDERSHIP AND MODE SHARE ESTIMATES

The proposed ferry terminal at the Waterfront will be located at the Berkeley Pier, which will be reconstructed to provide dual ferry and recreation access WETA estimates a total of 1,830 average weekday boardings. Conservatively, this would result in 915 riders boarding at the Berkeley Terminal, assuming all riders are round-trip traveling between Berkeley and San Francisco and originating in Berkeley. It is projected that the average weekday boardings would reach 2,110 by 2040, equivalent to an estimated 1,055 riders.

The Feasibility Study and WETA Business Service Plan separately estimated the travel mode share of future ferry riders, as shown in **Table 1**. The Feasibility Study estimated that 54% of the ferry riders will drive alone and 9% will carpool to the Ferry Terminal. The remaining ferry riders will arrive by bicycle, ride-share, public transit or other modes of transportation that would not require a vehicle parking space. WETA Berkeley Ferry Service Business Plan estimates that only 31% will be driving alone and 15% will be carpooling to the Ferry Terminal.

Kittelson reviewed updated on-board survey data from WETA, which included surveys conducted in 2022. Using the WETA Business Plan methodology, Kittelson estimated the mode share based on the new data. The results estimate that 44% of trips were drive-alone, which is higher than the WETA business plan estimate. The 2022 estimates also estimate lower shares for walking (4%) and biking (11%). Public transit mode share was estimated at 2%, which could be largely attributed to pandemic conditions, as people were avoiding public transportation.

Comparing the three sources of data, Kittelson has recommended a baseline (i.e. pre-TDM implementation) mode-share that reflects the local context and our understanding of the existing travel patterns at Berkeley Waterfront. The baseline mode share, shown in bold in Table 1 below, represents the assumed mode share before implementation of new TDM strategies at the Waterfront. TDM strategies that further reduce the parking demand for Ferry Riders are in development.

Source	Drive Alone	Carpool	Kiss-and-Ride	Public Transit	Bike	Walk Only	TNC/ Taxi	Other[1]
WETA Business Plan, 2017-2019	31%	15%	15%	5%	16%	8%	8%	2%
Feasibility Study Baseline (2021)	54%	9%	8%	4%	18%	3%	3%	1%
WETA Updated Survey - 2022	44%	8%	8%	2%	11%	4%	2%	21%
Recommended Baseline (no TDM) Kittelson (2024)	**40%**	**12%**	**8%**	**5%**	**16%**	**4%**	**5%**	**10%**

Source: WETA Business Plan, 2022; WETA On-board Surveys, 2022 and Feasibility Study, 2021
[1]Other includes multiple modes and private shuttle

4.0 Case Study Interviews

Kittelson conducted three case study interviews with agency staff who were either involved in implementing parking and transportation demand management strategies or are familiar with the parking management at the selected locations. The details of the interviews and key takeaways are presented in this section.

4.1 ALAMEDA HARBOR BAY FERRY PAID PARKING APPROACHES

- **Interview date**: August 8th, 2024
- **Participants**: Lisa Foster, Acting Transportation Planning Manager, City of Alameda

In an attempt to prevent spillover parking from the adjacent Harbor Bay Ferry Terminal, three home owners associations (HOAs) in the City of Alameda were given the authority to issue free residential parking permits to residents. The permits went into effect in 2017 with limited public oversight and subsequent turnover of City staff, and there is limited knowledge on the success of the program. As of now, the City of Alameda suspects that the HOAs are no longer issuing new permits for the permitted parking zones. Signs indicating the permit only parking restrictions are still present in the neighborhood, but it is unclear if enforcement is active.

In the meantime, the City moved forward with its own paid parking program to manage demand for parking at the Harbor Bay and Seaplane Lagoon ferry terminals. This plan was approved by the Alameda City Council prior to the pandemic, and was reauthorized in both 2022 and 2023.

The City of Alameda's ferry terminal management strategies offer important lessons for the parking management at the Berkeley Waterfront, including that:

- Paid parking may be most easily implemented at ferry terminals if introduced at the inception of a new service, or if there is regularly high occupancy at terminal parking lots.
    - The City of Alameda intended to introduce paid parking at the opening of the Seaplane Lagoon Ferry Terminal, but delayed due to the pandemic. The City is now in their third year of trying to implement paid parking at that location.
- The City of Alameda is partially reinvesting paid parking revenue to enhance security at parking lots. This serves to ease riders' concerns over theft and vandalism, as well as to ease public acceptance of new parking fees.
- Coordinating public bus or shuttle service can be difficult due to the relative infrequency of both ferry services and of bus routes that serve waterfront areas. AC Transit discontinued a shuttle service to the Seaplane Lagoon Ferry Terminal after low ridership and AC Transit Route 21 receives low ridership to the Harbor Bay Ferry Terminal.

4.2 BERRYESSA BART URBAN VILLAGE PLAN

- **Interview date**: August 16th, 2024
- **Participants**:
    - Jessie O'Malley Solis, Director of Real Estate and Transit Oriented Development, VTA
    - Charla Gomez, Planning Project Manager, City of San Jose
    - Wilson Tam, Transportation Planning Manager, City of San Jose

In 2021, the City of San Jose approved the Berryessa BART Urban Village Plan (UVP), which established guidance for mixed-use development around the newly opened Berryessa BART Station. One of the plan's main objectives is to enable high-density residential and commercial development around the station without overwhelming the project site with parking facilities which would diminish the urban character of the new development. The UVP's main goal is to plan for density around the BART station, and all of its parking recommendations are designed to support that goal.

The UVP's binding recommendations include the formation of a transportation management authority (TMA) to oversee parking and TDM policy in the new developments. The UVP also dovetails with a city-wide parking reform process that eliminated mandatory parking minimums[3] and established TDM incentives for new development.

Key takeaways for the Berkeley Waterfront include:

- The Berryessa BART UVP's progressive parking policy recommendations were supported by ongoing citywide planning initiatives.
    - If the UVP's parking recommendations had been a standalone deviation from San Jose's parking guidelines, they would have been more difficult to adopt.
    - The City of Berkeley should consider how the introduction of mass transit service to the Waterfront interacts with the city's recent and ongoing land use and TDM planning processes, including the city's VMT criteria and thresholds.[4]
- Publicly owned land can provide important opportunities for setting the tone for new development.
    - The UVP was developed for land owned by VTA, which enabled more restrictive criteria for developments than if the land had been privately owned.
    - The City of Berkeley can capitalize on its public property at the Waterfront to ensure that any new development or transportation investments meet rigorous standards for sustainability and equity goals.

[3] Since 1965, the City of San Jose's municipal zone code required new develops to build a minimum number of parking spaces based on size and land use type. With its 2022 parking reform, San Jose became the largest US city to eliminate parking minimums.
[4] City of Berkeley, *VMT Criteria and Thresholds*. 2020.

4.3 EMERY GO-ROUND

- **Interview date**: August 21st, 2024
- **Participants**:
    - Daniel Olver, Executive Director, AlTrans
    - Wendy Silvani, Principal, Silvani Transportation Consulting

The City of Emeryville has been running free public shuttle service since the 1990s to connect the city to MacArthur BART Station in Oakland. At first the service was funded by a few major employers, but eventually transitioned to a property-based improvement district (PBID) funding model, where all Emeryville residents contribute based on their property tax assessments. Today, 80% of Emery Go-Round's funding comes from the PBID, 11% from the City's budget, and the rest from state and federal grants.

Emery Go-Round consists of two routes that provide local service across Emeryville and provide more bus to rail transfers at MacArthur BART than AC Transit does. However, Emery Go-Round ridership is still recovering from the pandemic, when it lost 90% of its ridership in one year. As of May 2024, Emery Go-Round had recovered to just 40% of its 2019 weekday ridership, but was up to 80% of its weekend ridership.

Key takeaways for the Berkeley Waterfront include:

- Successful shuttle services tend to rely on robust private sector financing from major employers or commercial destinations. However, once established, funding for shuttles can be transitioned into public control using mechanisms like PBIDs.
    - Shuttle service to the Berkeley Waterfront would likely need to be subsidized by major private sector institutions in either Berkeley and/or in San Francisco. The current commercial activity at the Waterfront is not likely able to support a shuttle service on its own.
- Shuttle services tend to rely primarily on commute trips, which can be carefully coordinated around timetables at rail stations or ferry terminals, but are easily disrupted by changes to employment markets and commute travel patterns.

5.0 Staff Working Group Sessions

Kittelson met with the City and Waterfront staff on May 23, 2024, to discuss the vehicle parking issues and challenges at the Waterfront. Some of the key themes from this discussion are listed below:

Parking Management

- High tides and holidays affect parking lot usage as high tides attract regular sailors and holidays attract a surge of recreational users. Nature Center and Adventure Playground are closed on City holidays.
- Waterfront Monitors play a key role in managing parking and vehicle circulation during peak times.
- Slipholder lots (e.g., M) require overnight permits, but illegal parking is common during peak times.
- There is a need for wayfinding signage to help users access the lots that are underused. The University Roundabout was identified as a potential site for decision-making and parking.
- There is a need for designated passenger drop-off and pick-up and loading and unloading zones.
- Challenges with managing large groups and bus parking on weekends. Tour buses sometimes park without a permit at the Marina Boulevard lot.

Major Destinations

- Seawall Drive View, Restaurants (Hana Japan and Skates on the Bay), Cal Sailing Club and Cesar Chavez Park are major destinations.
- Adventure Playground is popular for birthday parties and there is a need for nearby parking and loading zones to accommodate pick-ups and drop-offs.
- Cal Sailing Open House introduces many new visitors, in particular UC Berkeley students, to the Berkeley Waterfront and generates a lot of visitors (many hundreds) on event days, which occur about 10 times per year.
- Roaming Bean Coffee primarily serves existing users.
- Fishing pier used to attract large number of visitors before it closed down.

Other Modes of Transportation

- There is a need for more bike parking spaces and enhanced wayfinding signage throughout the Waterfront and especially near recreational activities.
- Inner Harbor Walkway and other areas are used for biking.
- AC Transit Bus Route 51B is popular among the UC Berkeley Students and provides students and other visitors without cars a transportation option to the Waterfront.

Upcoming projects

- Projects include South Cove West Parking Lot, Cesar Chavez Perimeter Path and restroom, restrooms upgrades, replacing D&E dock and Harbor Entrance dredging.
- Identifying a new leaseholder for the former HS Lordship building at 199 Seawall Drive is a high priority.

Potential Solutions Brainstorm

- Charging for parking should be considered though it may not be a popular option for Waterfront visitors or businesses.

- Valet parking should only be considered if it is self-sustaining and does not require ongoing funding.
- Gated parking should be self-regulated, and the exit must be secured.
- Consider shuttle to offsite parking, e.g., at Golden Gate fields and other major destinations (Amtrak and Fourth Street).

Other Considerations

- Car break-ins have been an ongoing issue - the police department's presence has reduced criminal activity at the Waterfront.
- Camera surveillance and lift gates would enhance security.
- Integrate public art and placemaking along Seawall Drive promenade.
- Non-residents contribute significantly to the Waterfront revenue.
- Dry storage at D&E Lot generates revenue, however, there may be other uses that provide greater benefit.
- Install additional electric vehicle charging stalls.

6.0 Review of Parking Counts

The parking demand at the Waterfront is inherently variable and influenced by a range of environmental, seasonal, and human factors. For instance, on sunny days, the area is likely to experience a surge in visitors, including beachgoers, sailors, and recreational users, all of whom contribute to increased parking demand. Conversely, cloudy or rainy days can lead to a significant drop in visitors, reducing the need for parking.

Additionally, peak recreational use is closely linked to natural conditions such as tides, winds, and surfing seasons. For surfers, optimal conditions may not always align with predictable weather patterns or typical peak hours, leading to fluctuating demand that can be difficult to anticipate. Similarly, other water-based activities, like boating or fishing, can see spikes in participation based on favorable weather and tide conditions.

Given these dynamics, conducting a comprehensive parking study that accurately accounts for all these variables is challenging. Normal parking evaluation methodology relies on typical conditions and average usage rates, and will likely not completely capture the complexities introduced by fluctuating weather and seasonal recreational patterns. While this document can provide a baseline understanding, it has its limitation to predict demand with precision due to the highly variable nature of Waterfront use driven by weather and natural conditions.

Kittelson reviewed parking counts from two data sources — Historical Count Data from May 2021 to February 2024 and All-Day Counts collected for five days in 2024.

Historical Count Data: The City of Berkeley Waterfront Monitors have been consistently collecting daily parking counts at the Waterfront since May 2021. The data is collected by counting the number of occupied spaces at each lot at 10 am and 8 pm, with the results recorded on a paper survey form that is later entered into a spreadsheet maintained by Waterfront staff. The data collection methods have been refined over time to better support parking management objectives. Kittelson reviewed data from 2021 to

2024. During data processing, some lots had to be merged for various reasons, such as a lack of physical boundaries between them or combined data reporting for adjacent lots. The lots that were merged are:

- F&G and H&I Lots
- South Cove East and South Cove West Lots

Limitations: The data may not reflect peak utilization which could occur outside of the hours of 10 am and 8 pm. In Spring, 2024, staff began collecting data at additional time points (2 pm and 4 pm), which was not used for this study due to the comparatively limited number of data points,

All-Day Count Data: Kittelson in partnership with Quality Counts (QC) collected hourly parking counts between 5:30 am and 9:30 pm on Saturday, and 8 am to 10 pm on Thursdays on the following dates:

- Saturday, April 6
- Thursday, April 11
- Thursday, August 1
- Thursday, August 22
- Saturday, August 24

The counts were collected using go-pro dash cams while slowly driving through all parking lots once per hour during the count period. Post-processing involves reviewing the GoPro footage and recording each vehicle parked. QC recorded the partial license plate, make, model, and color to demarcate specific individual vehicles and the time a vehicle remained in parking stall.

Limitations: The data was collected on typical Thursdays and Saturdays with pleasant weather, chosen to reflect peak Waterfront activity while avoiding any events that might skew the results.

Additionally, Kittelson with the help of Waterfront monitors conducted parking intercept surveys to understand the trip purpose and travel behavior of the visitors. More information on Parking Intercept surveys is presented in the next section.

The following section summarizes key findings from the data analysis.

6.1 PARKING INVENTORY

Based on a field survey conducted in 2024 and validated by City staff, there are 1,566 public free vehicle parking spaces throughout the Waterfront. The survey was necessary due to the presence of unstriped parking lots, making it challenging to accurately determine the number of spaces. **Table 2** presents the parking inventory (number of vehicle spaces) by lot. The inventory does not include the paid parking spaces available at the Boat Launch or Double Tree Hotel. A summary of the parking counts by location is provided in **Appendix A**.

Table 2: Parking Inventory

Lot Location	Number of Spaces	Type	Surface Type
North Facilities			
Marina Blvd	150	Unstriped	Unpaved
Spinnaker Way	127	Striped	Paved
Spinnaker Way Lot	36	Striped	Paved
D & E Lot	129	Striped	Paved
F & G Lot	63	Unstriped	Paved
H & I Lot	52	Striped	Paved
Central Facilities			
J & K Lot	92	Striped	Paved
L Lot	14	Striped	Paved
M Lot	77	Striped	Paved
South Cove East Lot	96	Striped	Paved
South Cove West Lot	86	Unstriped	Unpaved
University Avenue	25	Unstriped	Paved
South Facilities			
Skates/N Lot	137	Striped	Paved
O Lot	72	Striped	Paved
Seawall Drive North	6	Unstriped	Paved
Seawall Drive South	84	Partially Striped	Paved
Seawall Lot	320	Striped	Paved
Total Public Parking Spaces	**1,566**		

Source: Kittelson & Associates, Inc.

6.1.1 Bicycle Parking Inventory

There are 149 short-term bicycle parking spaces located in racks across the site and 10 BikeLink lockers for secure bike storage located near the Bait Shop and Hana Japan. As shown in **Figure 5,** most of the bike parking is located near the major destinations near central and south vehicle parking facilities.

LEGEND

- Study Boundary
- Road
- Dock
- Path/Trail
- Bike Parking
- Slipholder Permit Parking
- Public Parking

Source: Quality Counts, 2024, Source: City of Berkeley, MTC

Figure 5: Bike Parking Locations

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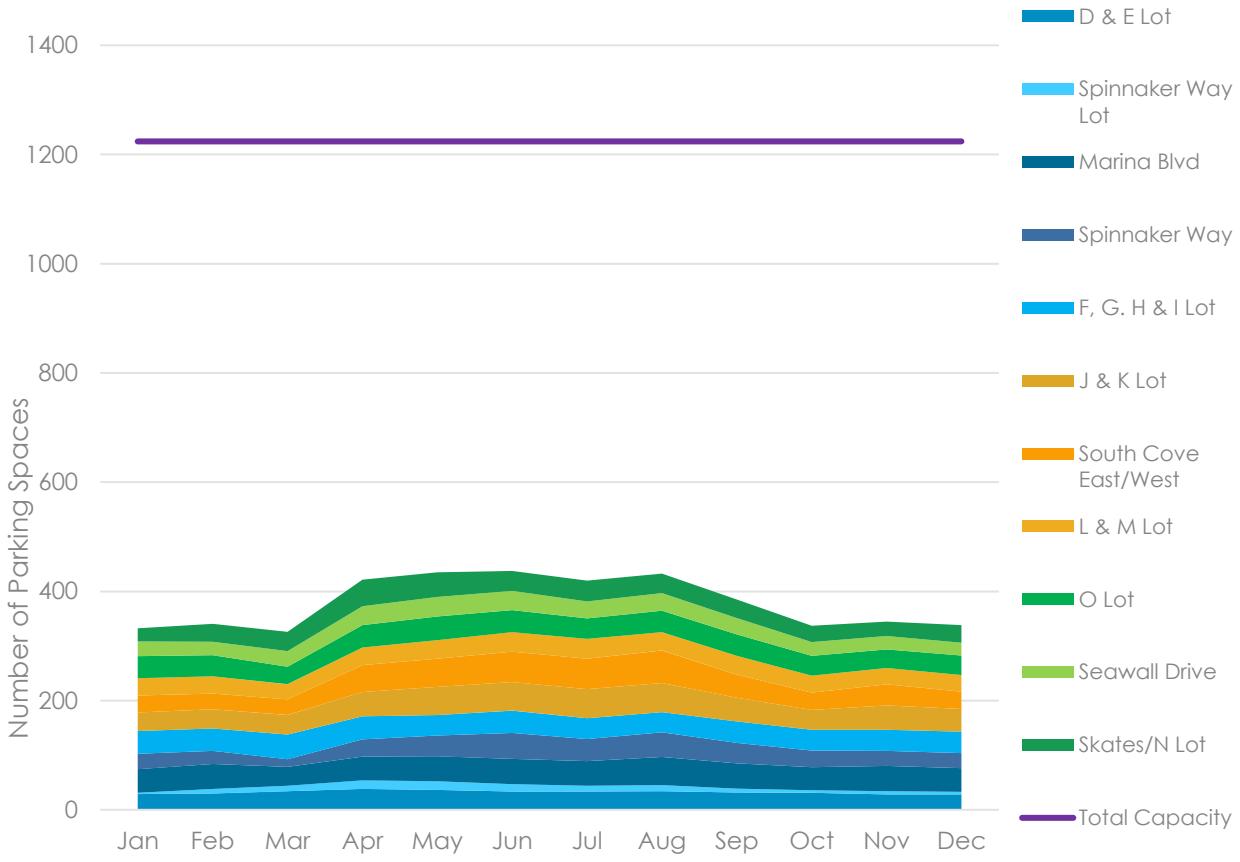
6.2 HISTORICAL COUNT DATA

6.2.1 Parking Utilization by Month

Figure 6 shows the average monthly parking utilization at the Waterfront. The highest utilization occurs during the late spring and summer seasons, with the peak occurring in June, where 36% (440) of the total public parking spaces were occupied. Overall, the total occupancy rate fluctuates between 26% (318) and 36% (440) over the two time periods of data collection.

Figure 6: Parking Utilization by Month (2021-2024)



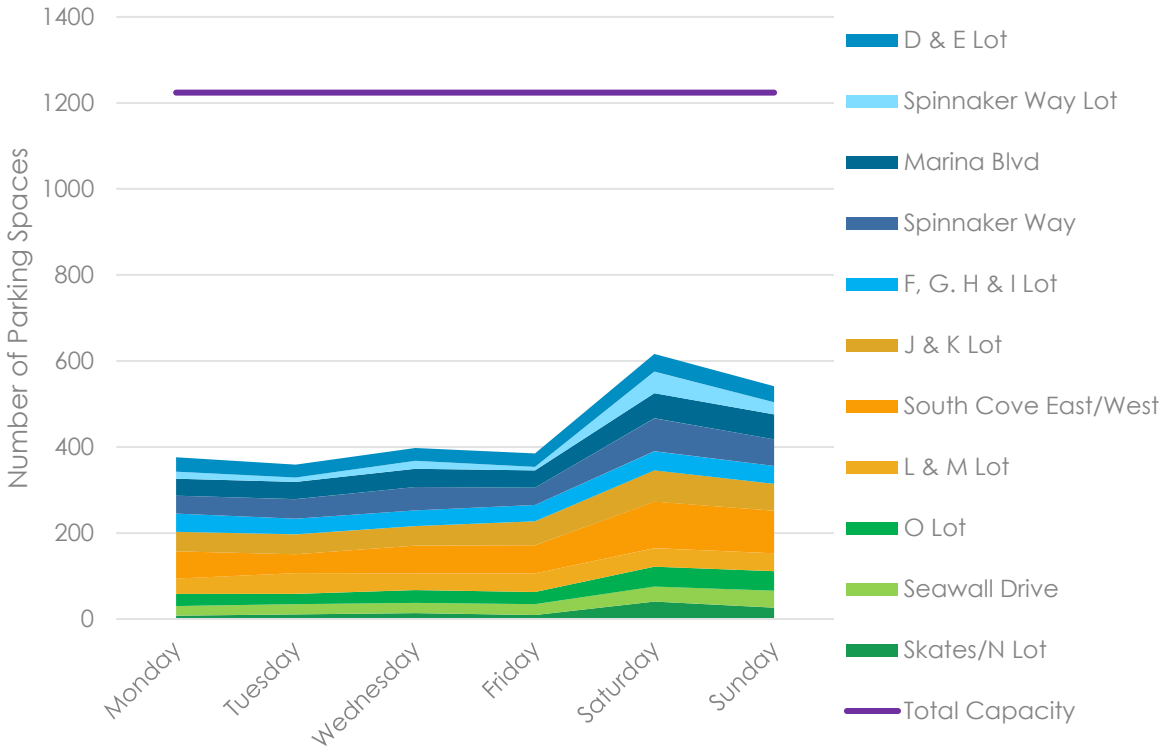
Source: Daily Parking Counts by Waterfront Staff 2021-2024, Data Compiled by Kittelson & Associates, Inc. 2024

Note: Data does not include Seawall Drive Lot and University Avenue (320 + 25 parking spaces) in counts or capacity.

6.2.2 Parking Utilization by Day

Figure 7 depicts daily parking utilization by day at the Waterfront for the peak month of June. Utilization peaks on weekends, with Saturday experiencing up to 50% occupancy across the entire waterfront. Significant increases in weekend usage are observed in the Launch Ramp-Public, J&K Lot, South Cove East and West, O Lot, and Skates/N Lot, likely due to the increase in the number of water-based recreational and restaurant visitors.

Figure 7: Parking Utilization by Day (June)



Source: Parking Counts by Waterfront Staff, Data Compiled by Kittelson & Associates, Inc. 2024

Note: Data does not include Seawall Drive Lot and University Avenue (320 + 25 parking spaces) in counts or capacity.

6.3.3 Parking Availability on Weekdays

Figure 8 shows the average parking occupancy by lots on weekdays. Only J & K Lot is more than 50% occupied during the peak month of June.

LEGEND

- Study Boundary
- Road
- Dock
- Path/Trail

Weekday Occupancy

- Less than 10%
- 10 - 50%
- More than 50%

Source: City of Berkeley, MTC

Figure 8: Average Weekday Occupancy

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6.3.4 Parking Availability on Weekends

As seen in **Figure 7**, the parking utilization during weekend is higher than weekdays. **Figure 9** shows the average parking occupancy on weekends during the month of June.

Figure 10 compares parking utilization on an average Saturday with that of the peak Saturday on April 1, 2023. The comparison reveals that certain lots had more than double the occupancy on the peak Saturday compared to an average Saturday. Nevertheless, even on the peak Saturday, overall Waterfront public parking was 75% occupied with 306 spaces remaining. During the peak Saturday, centrally located lots observed 82% occupancy, while South Cove East/West reached full occupancy at 100%.

LEGEND

- Study Boundary
- Road
- Dock
- Path/Trail

Weekend Occupancy

- Less than 40%
- 40 - 60%
- More than 60%

Source: City of Berkeley, MTC

Figure 9: Average Weekend Occupancy

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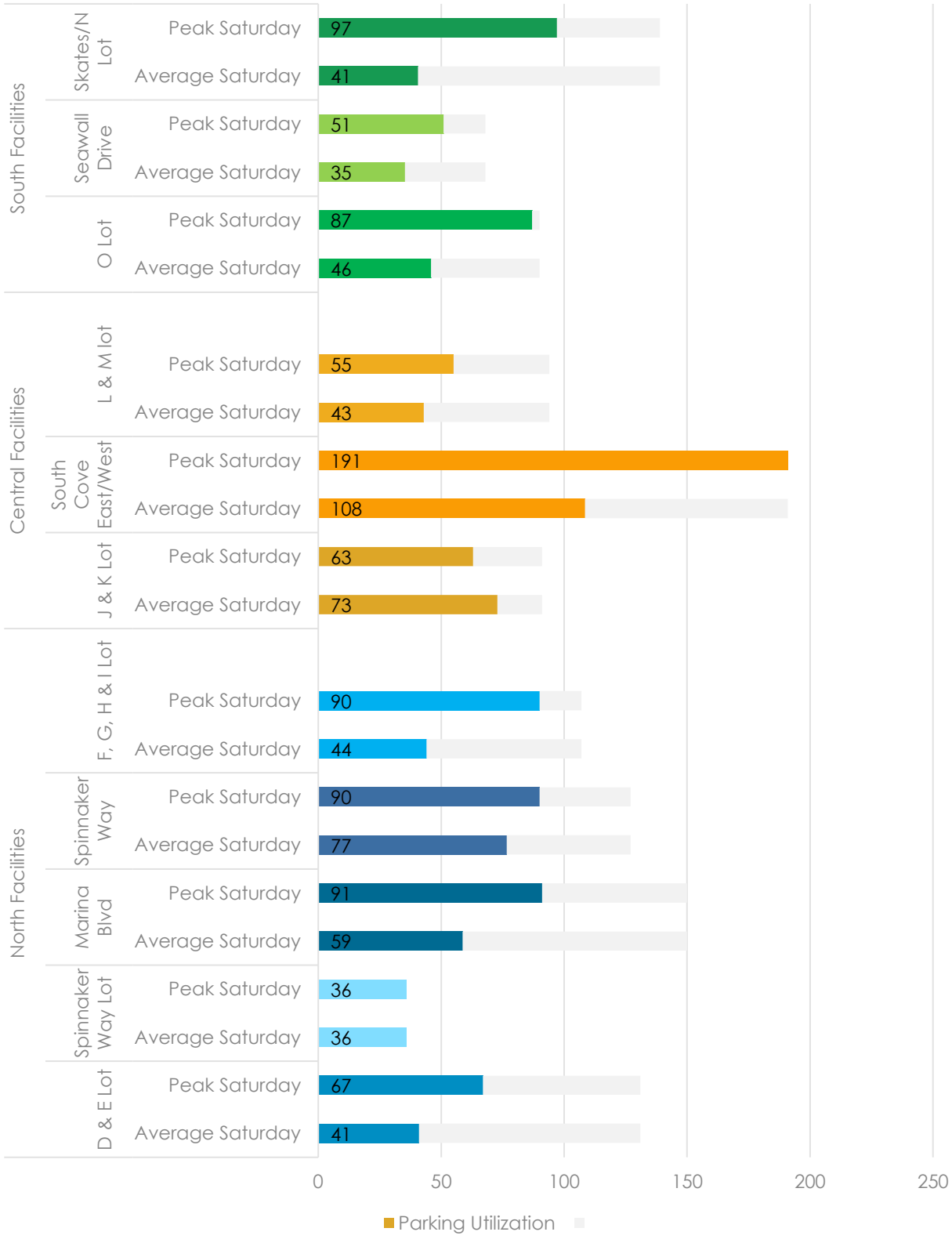
Figure 10: Parking Utilization on Weekends (Average Saturday vs Peak Saturday)



Source: Parking Counts by Waterfront Staff, Data Compiled by Kittelson & Associates, Inc. 2024
Note: Data does not include Seawall Drive/ Shorebird Lot.

6.3.5 Parking Utilization at Seawall Drive Lot

The Seawall Drive Lot (also commonly known as the HS Lordship Lot) was analyzed separately as the data collection was conducted on fewer days than other lots due to lot closures for public safety. The Waterfront staff will open the gates to the parking lot only as needed, for example, during peak summer months and during camp drop off times. Based on the available parking counts, the lot was 21% (67 spaces of 318 available) occupied on an average Saturday.

Figure 11: Gates at Seawall Drive Lot

Photo credit: Kittelson

6.4 ALL DAY COUNT DATA[5]

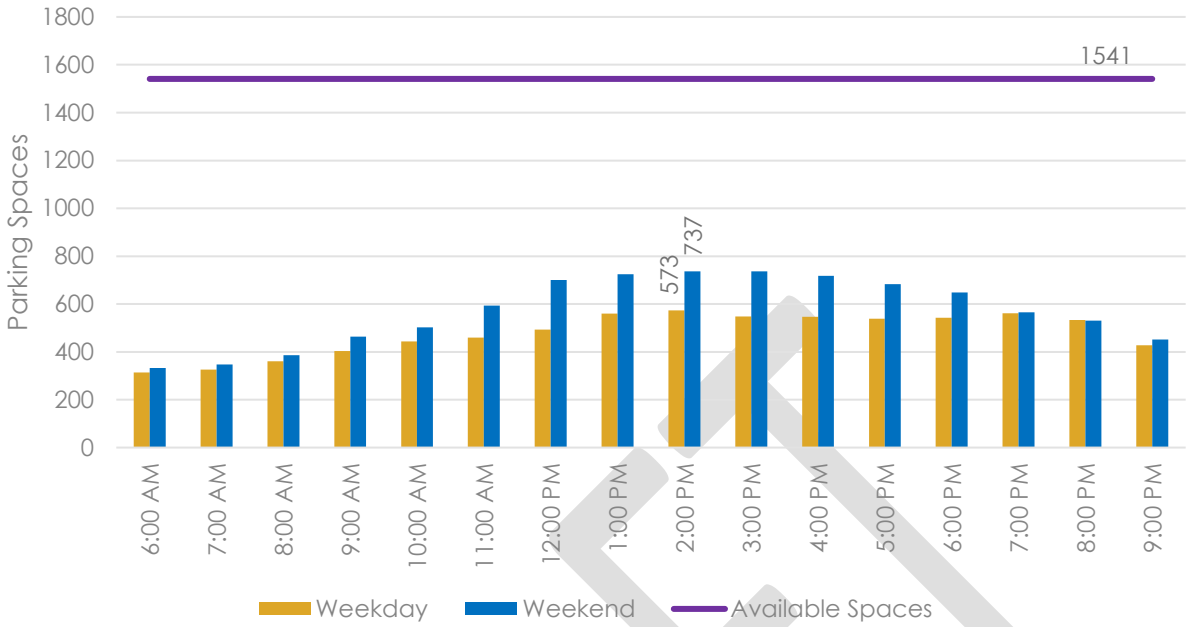
Quality Counts collected hourly parking counts on three weekdays and two weekends as mentioned in the introduction of this section. The hourly counts were collected to understand the parking turnover and duration at each public parking location.

6.4.1 Hourly Parking Demand

Figure 12 displays the number of parking spaces occupied at the Waterfront each day, The parking utilization is higher on weekends compared to weekdays, especially during midday hours (10 am – 2 pm). The peak usage occurred at 2 pm on weekends (48% occupied, 737 spaces) and weekdays (37% occupied, 573 spaces).

[5] Note: Out of the 6 days of data collection, only 2 days have been analyzed at the time of writing this document. The data from the remaining 4 days are still being processed and will be included in the next update of this document.

Figure 12: Parking Occupancy by Time of Day

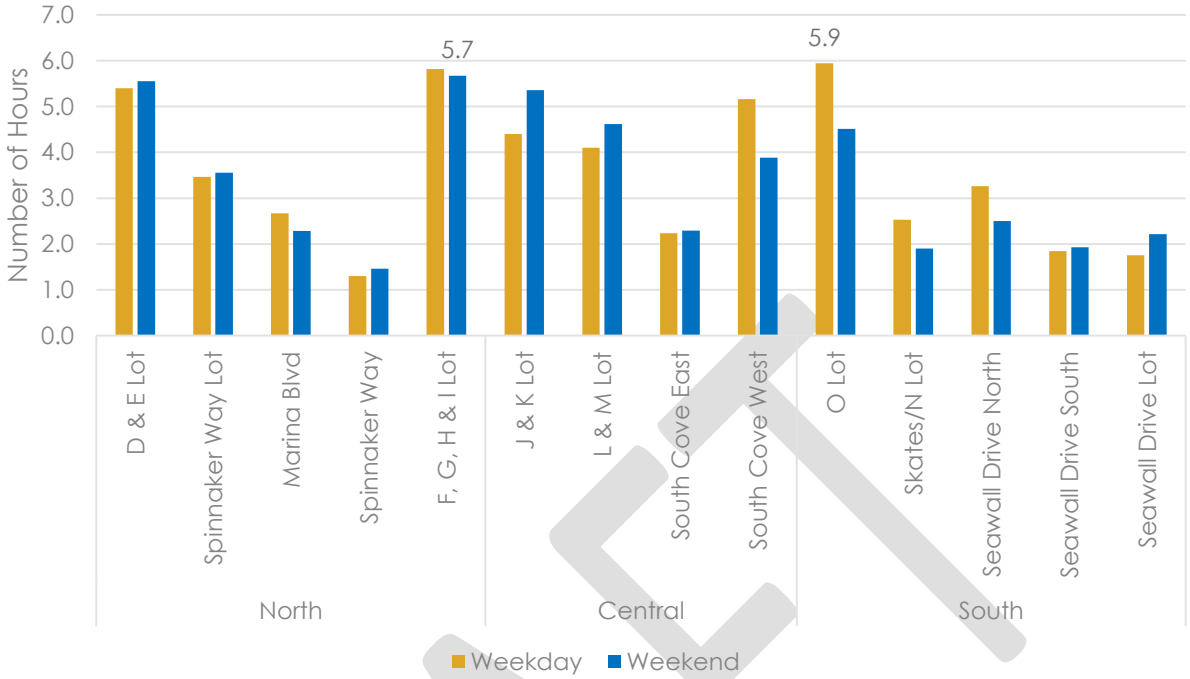


Source: Kittelson & Associates, Inc. 2024

6.4.2 Parking Duration

Parking duration indicates the average time a car remains parked in a space. **Figure 13**, **Figure 14** and **Figure 15** shows the parking duration by lot for both days. On Thursday, the O Lot had the highest average parking duration at approximately 6 hours. Additionally, the D&E Lot, F, G, H & I Lot, J & K Lot and L&M Lot all recorded vehicles being parked for over 4 hours on both days.

Figure 13: Parking Duration by Lot (Weekday vs Weekend)



Source: Kittelson & Associates, Inc. 2024

LEGEND

- Study Boundary
- Road
- Dock
- Path/Trail

Parking Duration (Hours)

- 0 - 2
- 3 - 4
- 5 - 6

Source: City of Berkeley, MTC

Figure 14: Parking Duration - Weekend

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LEGEND

- Study Boundary
- Road
- Dock
- Path/Trail

Parking Duration (Hours)

- 0 - 2
- 2 - 4
- 4 - 6

Source: City of Berkeley, MTC

Figure 15: Parking Duration - Weekday

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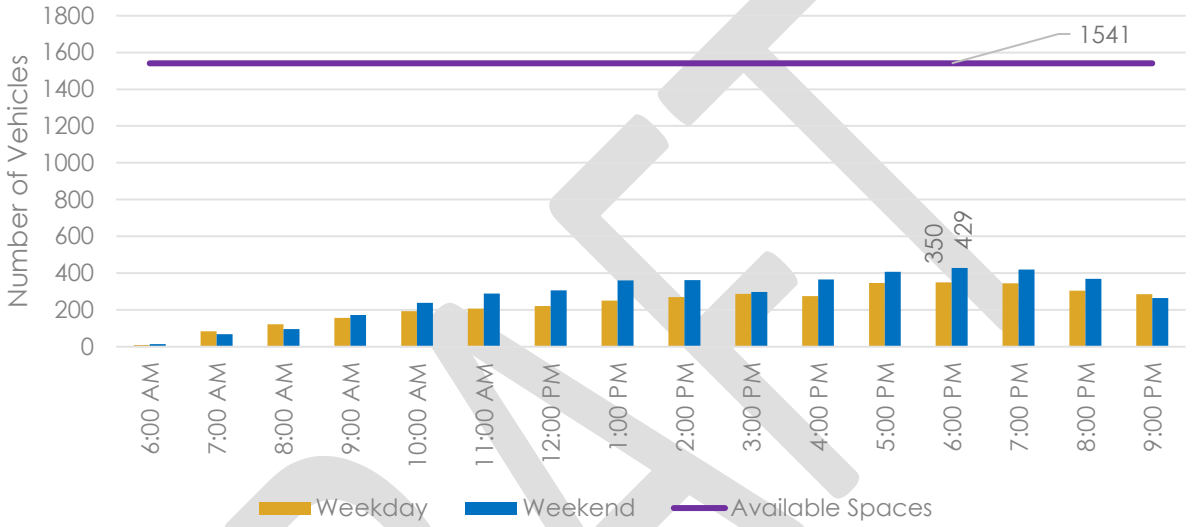
6.4.3 Parking Turnover

Parking turnover refers to the number of parking spaces that either become occupied or vacated within a given period, reflecting the rate of use of a facility. For example, if two cars leave a parking lot and two new cars park in the same lot, the turnover value for that lot would be 4. **Figure 16** shows the total waterfront public parking turnover by time of day. The turnover is higher on Saturday as compared to Thursday and between 4 pm and 7 pm. On weekends, the highest turnover occurred at 6 pm with 28% (429 turnovers) of the total available spaces.

Figure 16: Parking Turnover by Time of Day



Source: Kittelson & Associates, Inc. 2024

7.0 Intercept Survey

To understand the trip purpose and parking habits of Waterfront visitors, Kittelson, with the help of Waterfront monitors, conducted parking intercept surveys on seven days between April and August 2024. The dates and times of the completed surveys are listed in **Table 3**. The surveys were administered in-person to gather firsthand insights into participants' parking concerns. Respondents were given the option to skip questions if they felt uncomfortable answering them. This section presents summary of the findings from the analysis of 455 responses. The survey questionnaire is included in **Appendix B**.

Table 3: Parking intercept survey dates

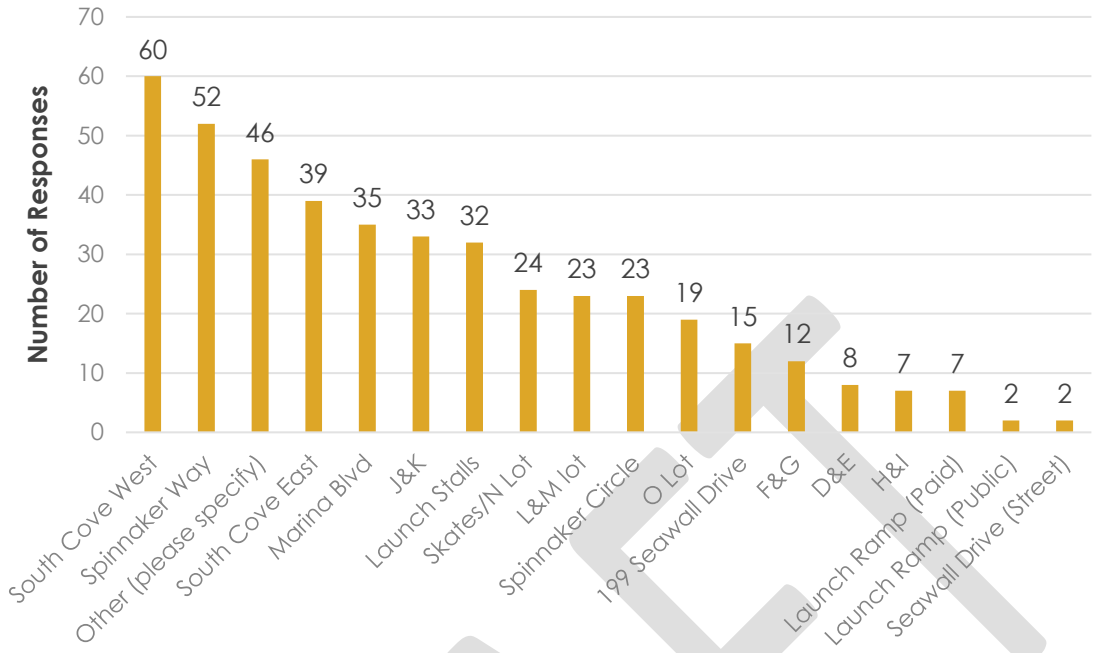
Survey No.	Survey Date	Survey Time
1	Saturday, April 6th	12:00 pm – 4:00 pm
2	Thursday, July 18th	3:30 pm – 7:30 pm
3	Thursday, August 1st	3:30 pm – 7:30 pm
4	Saturday, August 17th	12:00 pm – 4:00 pm
5	Thursday August 22nd	3:30pm – 7:30 pm
6	Saturday, August 22nd	12:00 pm – 4:00 pm
7	Tuesday, August 27th	3:30 pm – 7:30 pm

Source: Kittelson & Associates, Inc. 2024

7.1 SURVEY RESPONSE SUMMARY

Figure 17 shows the number of responses by lot names. The highest number of responses were received from the Northern facilities (41%), followed by Central facilities (35%).

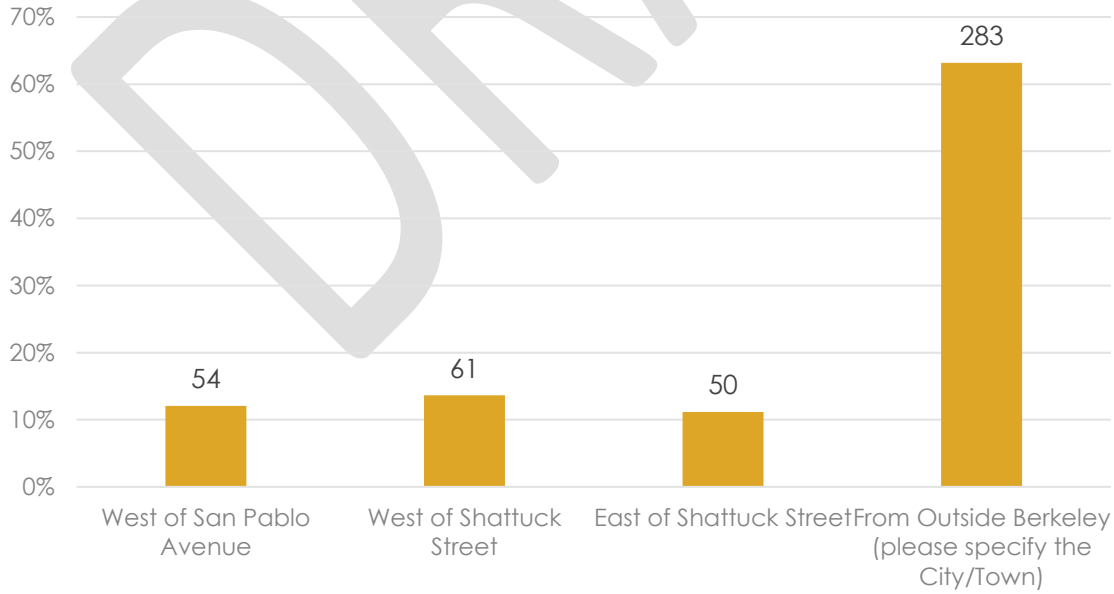
Figure 17: Parking lot location



Number of responses: 437
Source: Kittelson and Associates, Inc. 2024

Figure 18 shows the location of the respondent. Approximately 63% (283) of the respondents came from Outside of Berkeley which included visitors from Oakland, San Francisco, Emeryville and Walnut Creek.

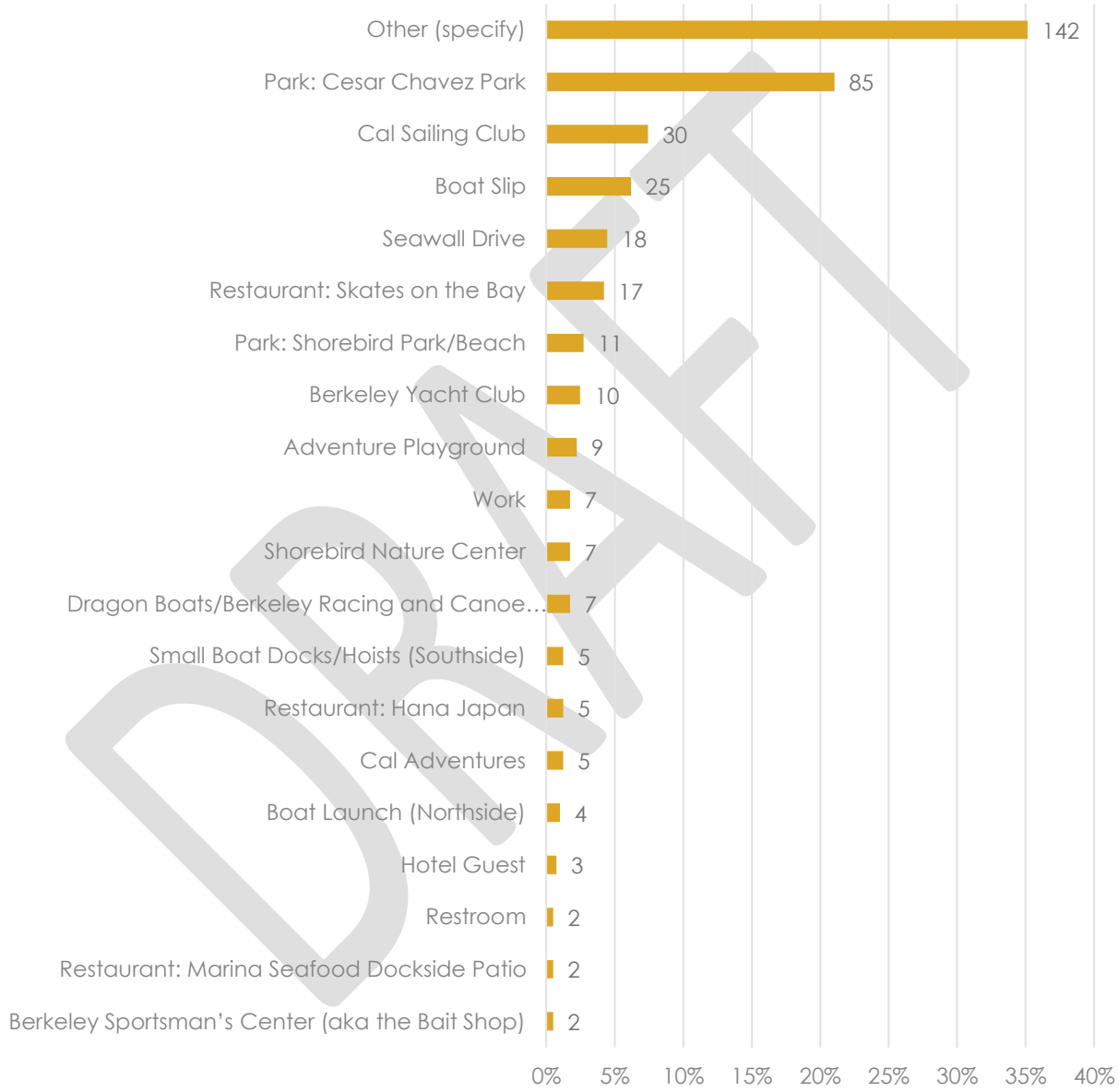
Figure 18: Where do you live?



Number of responses: 448
Source: Kittelson and Associates, Inc. 2024

The parking intercept survey reached a wide range of Berkeley Waterfront visitors, with the most popular visitor destinations including Cesar Chavez Park (21% of respondents), Cal Sailing Club (7%), and boat slips (6%), as shown in **Figure 19**. The rest of responses were scattered across a wide array of destinations, including specific institutions at the Waterfront.

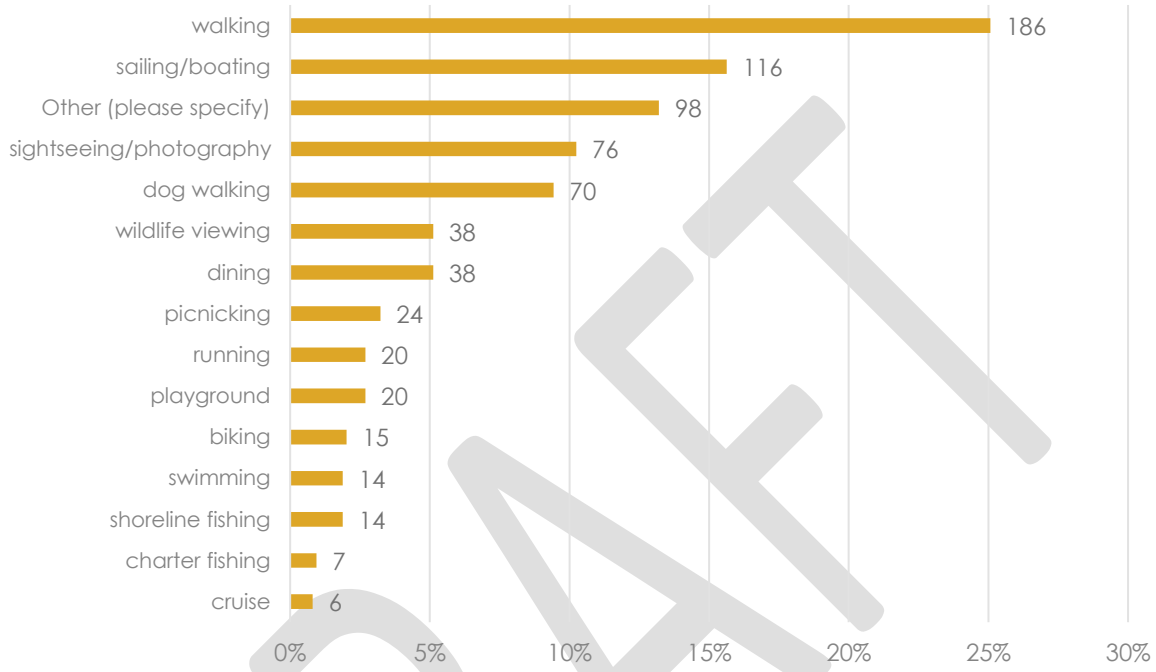
Figure 19: What is the name of the destination that you are visiting today?



Note: *38% of respondents listed a destination not included in the set list of options. Chart only includes destinations listed more than once. "Work" category includes: "deck hand, commercial fishing captain, hotel employee, etc."*
Number of responses: 404
Source: Kittelson and Associates, Inc. 2024

The most common activities were consolidated among outdoor recreation, including walking, sailing/boating, and sightseeing / photography, which together made up around 50% of responses, see **Figure 20**. However, respondents visited the Waterfront for a wide variety of reasons, with almost 100 noting that they made their trip for a reason other than options offered in the survey.

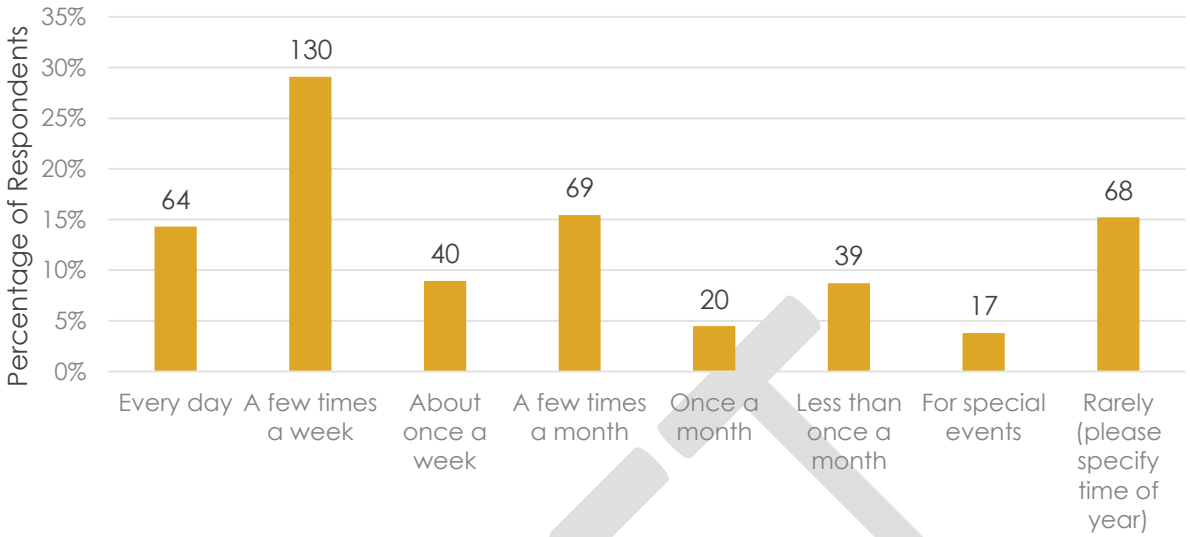
Figure 20: What brings you to the Waterfront?



Number of responses: 742 (Respondents were allowed to select multiple options)
Source: Kittelson and Associates, Inc. 2024

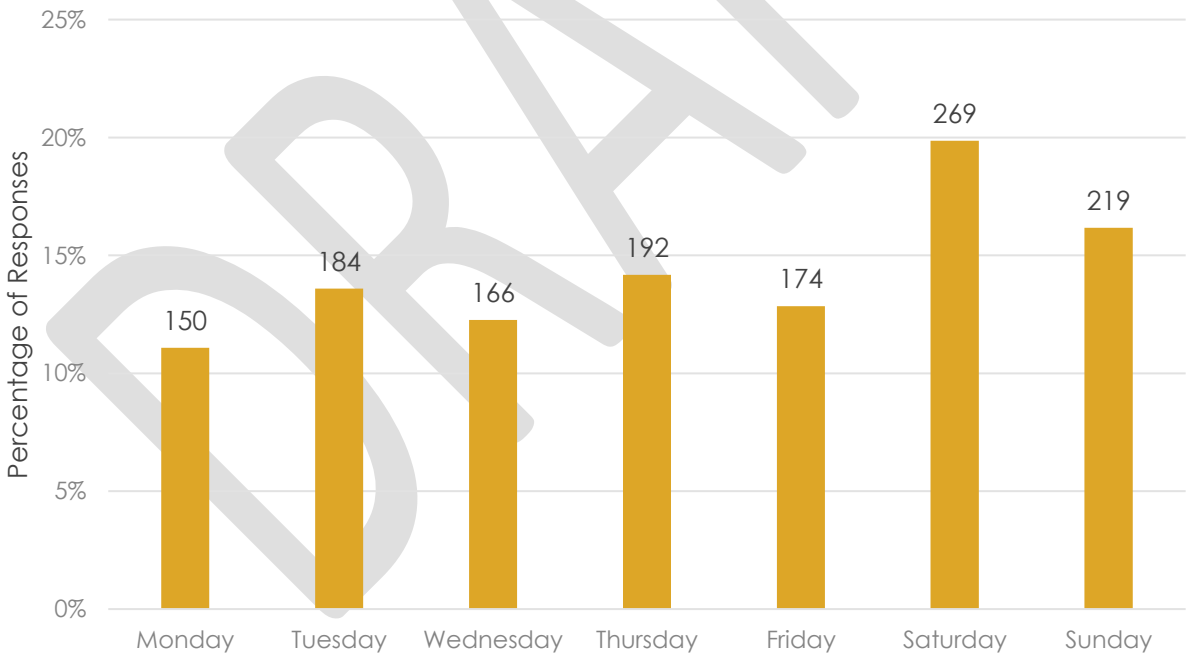
Respondents tended to visit the Waterfront often, with over 50% noting that they visited at least once a week or more (**Figure 21)**, and with Saturday (approximately 20%) being the most visited day by the respondents (**Figure 22**).

Figure 21: How frequently do you visit the Waterfront?



Number of responses: 447
Source: Kittelson and Associates, Inc. 2024

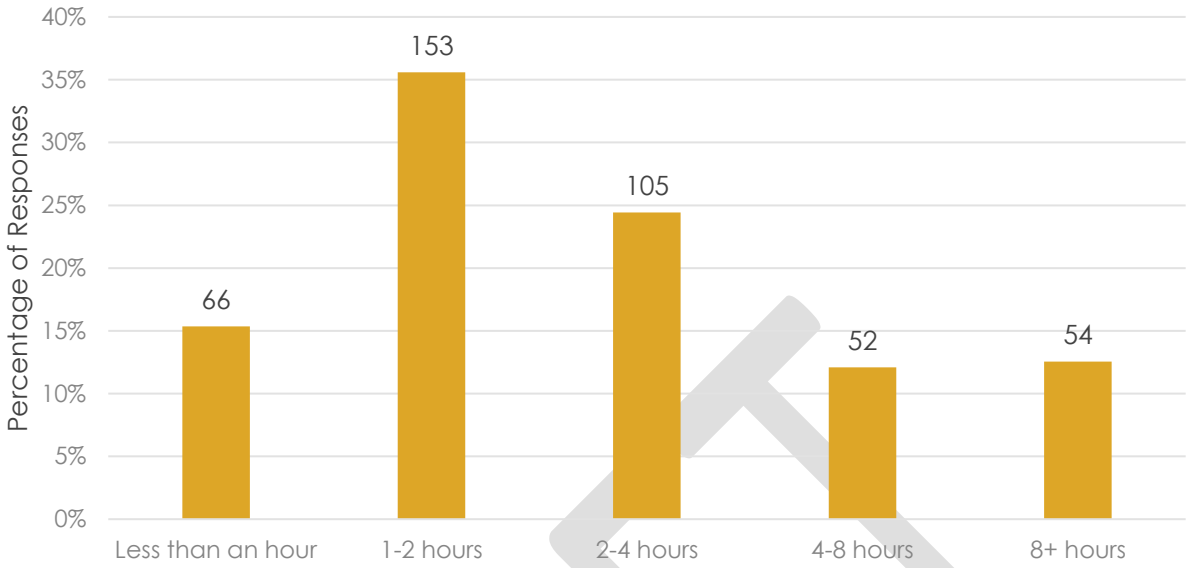
Figure 22: Typical days that you visit the Waterfront? (select all that apply)



Number of responses: 1,354 (Respondents were allowed to select multiple options).
Source: Kittelson and Associates, Inc. 2024

Figure 23 illustrates the duration of time respondents parked for their activities. The largest group (35%) parked for 1-2 hours, with 153 respondents. This is followed by 2-4 hours (24%), reported by 105 respondents.

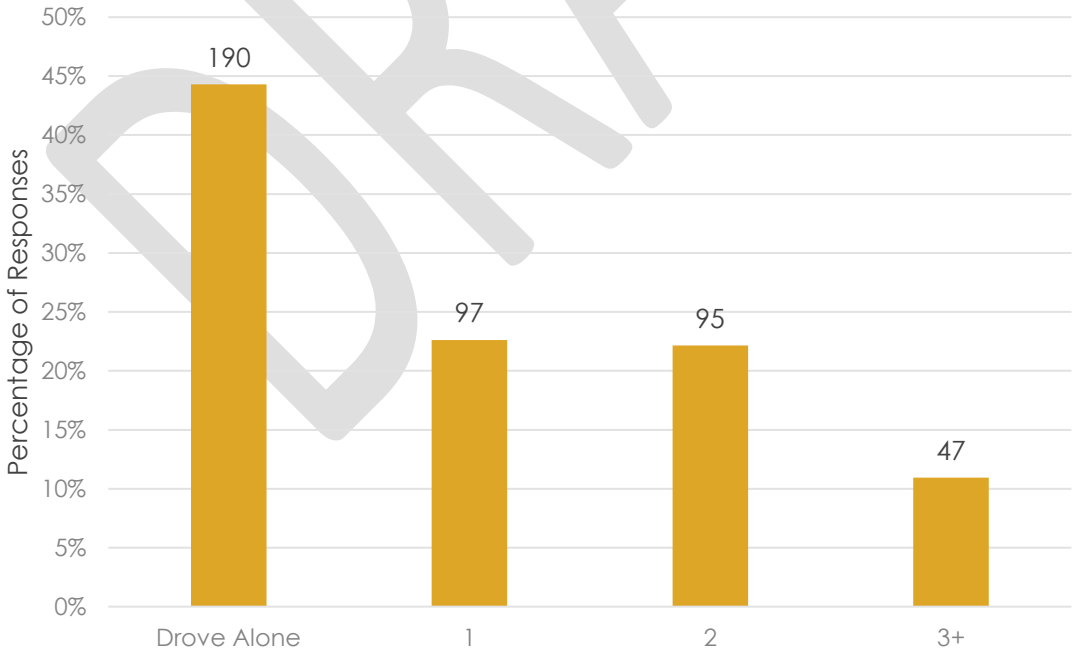
Figure 23: How long did you park for your activity today?



Number of responses: 430
Source: Kittelson and Associates, Inc. 2024

Respondents primarily drove alone to the Waterfront, with 44% stating that they had no other passengers in the vehicle, while 22% stated that they drove with one passenger (**Figure 24**).

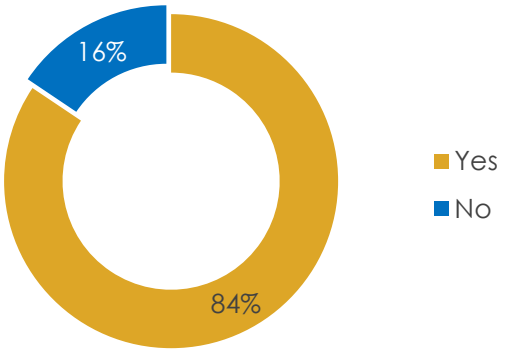
Figure 24: How many passengers other than you were there in your vehicle?



Number of responses: 429
Source: Kittelson and Associates, Inc. 2024

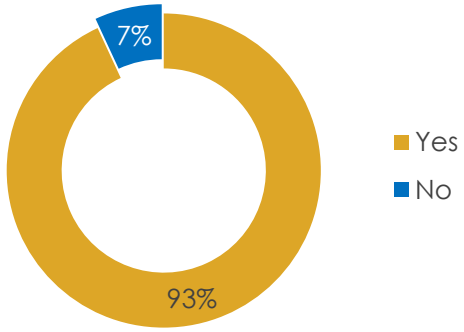
Waterfront visitors indicated that they have predictable and easy parking on their visits. 84% typically park in the same location, 93% said the parking is close to their destination, and 90% mentioned they were able to park quickly near their destination (**Figure 27)**.

Figure 26: Do you normally park at this location?



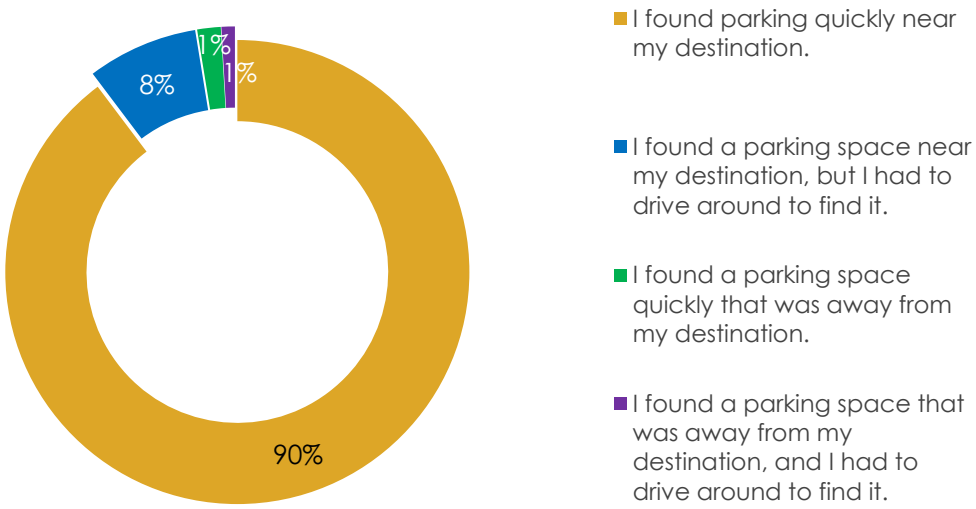
Number of responses: 417
Source: Kittelson and Associates, Inc. 2024

Figure 25: Did you park near your destination?



Number of responses: 419
Source: Kittelson and Associates, Inc. 2024

Figure 27: How was your experience of finding parking today?

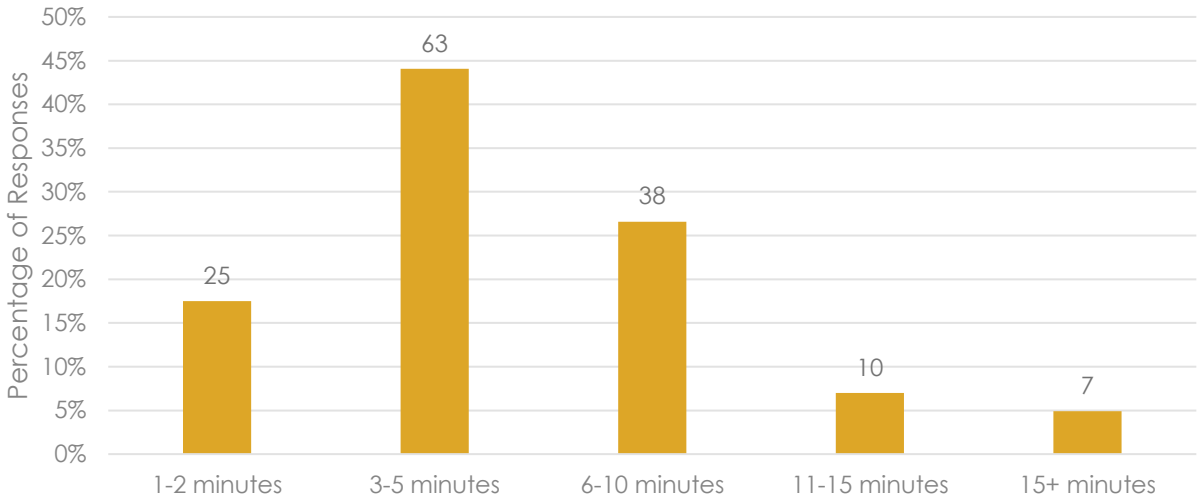


Number of responses: 428

Source: Kittelson and Associates, Inc. 2024

Figure 28 illustrates how far respondents are willing to walk from their parking spot to their destination, based on 143 responses. The majority (44%) are willing to walk 3-5 minutes, followed by 27% who are comfortable with a 6–10-minute walk. The average reported walking time is 7.3 minutes, and the median is 5 minutes.

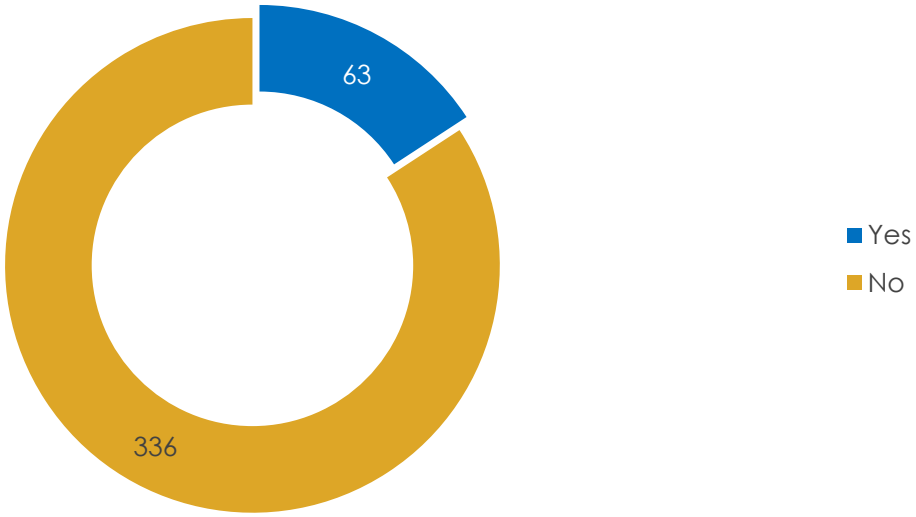
Figure 28: How far are you willing to walk from the parking spot to your destination?



Note: *Mean response = 7.3 minutes, median response = 5 minutes, responses answered in distance were converted to minutes based on an average walking pace of 3mph.*
Number of responses: 143
Source: Kittelson and Associates, Inc. 2024

84% of respondents said that they had never cancelled a trip to the Berkeley Marina out of concern that they would be unable to park (Figure 29).

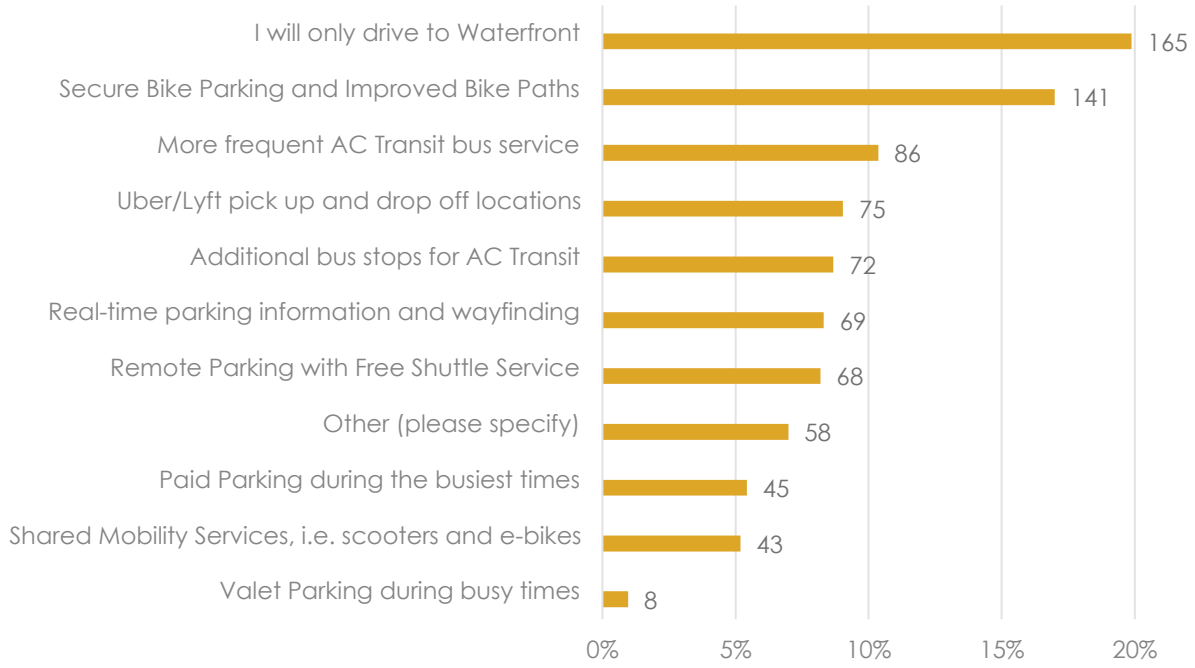
Figure 29: Have you ever cancelled your visit to the Waterfront because you could not park here?



Number of responses: 399
Source: Kittelson and Associates, Inc. 2024

When asked about future methods for accessing the Waterfront, respondents were open to a variety of methods, including secure bike parking and improve bike paths (17%), more frequent AC Transit bus service (10%), and Uber/Lyft pick up and drop off locations (9%). However, a sizeable portion of respondents (20%) indicated that they would only ever drive to the Waterfront (**Figure 30**).

Figure 30: What method would you likely use in the future to reduce cars at the Waterfront? (Select all that apply)



Number of responses: 830, (Respondents were allowed to select multiple options)
Source: Kittelson and Associates, Inc. 2024

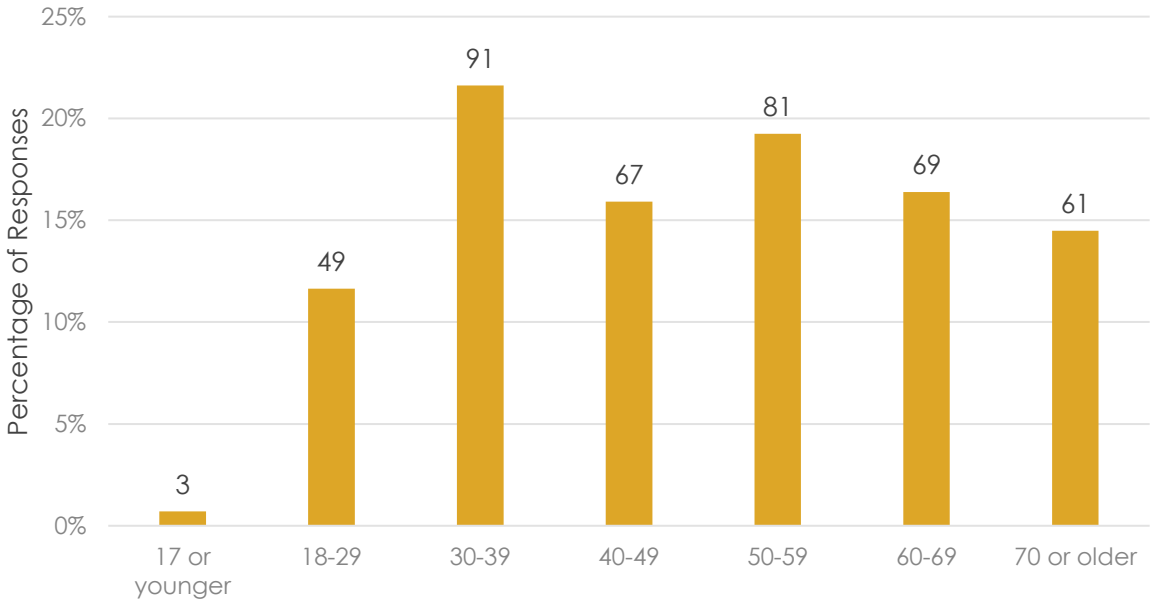
Along with the quantifiable responses to the parking intercept survey questions, respondents provided a plethora of written feedback and engaged in extensive conversation with surveyors about the Waterfront, the Pier Ferry Project, and their own travel patterns. Common responses include, "older people want to be able to drive, parking is usually plentiful," indicating a trepidation over future limitations on accessibility. Many responses also called out the needs of specific waterfront hobbyists who feel they will be impacted by a ferry: "Please keep waterfront available and FREE to the Berkeley Community and open for boating and sailing people." However, survey takers generally held the Berkeley Waterfront in high regard as a place where they could recreate peacefully and escape the bustle of their everyday lives, even if this often manifested in hostile attitudes towards the prospect of the Waterfront changing in any way. Many handwritten comments include frustration with the Pier Ferry Project and antagonism towards paid parking at the Waterfront, but very few cite parking occupancy as a problem. This dynamic is put simply but when respondent: "Parking isn't hard. Paid parking would be a deterrent."

Based on the other results of the parking intercept survey, it appears that high parking occupancy is rarely, if ever a barrier for visitor access to the Waterfront. It seems that the existing parking facilities at the Waterfront are able to accommodate the Marina's current recreational uses, and with tailored TDM strategies, could be minimally impacted by the introduction of ferry service to the Waterfront.

7.1.1 Demographics

Kittelson staff and Waterfront monitors were able to successfully reach a diverse set of respondents with the parking intercept survey. Each age bracket of driving age was represented by between 12% and 22% of respondents (**Figure 31**).

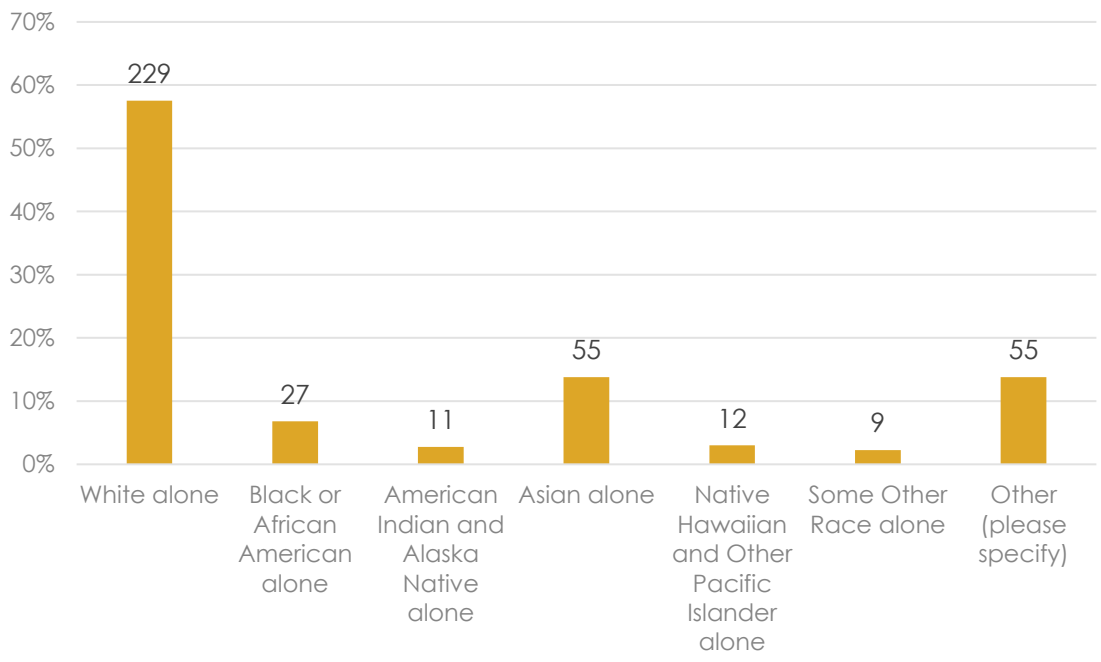
Figure 31: Which category below includes your age?



Number of responses: 421
Source: Kittelson and Associates, Inc. 2024

Figure 32 and **Table 4** show how, though respondents predominantly identified as White alone (58%), the general makeup of respondents roughly reflects that of the City of Berkeley. This is an important reference point, however visitation to the Waterfront does not necessarily reflect the demographics of the rest of the City. As shown in **Figure 18**, 63% of survey respondents noted that they lived outside of the City of Berkeley. Approximately 84% of respondents identified as non-Hispanic or non-Latino (**Figure 33**).

Figure 32: How do you identify your race/ethnicity?



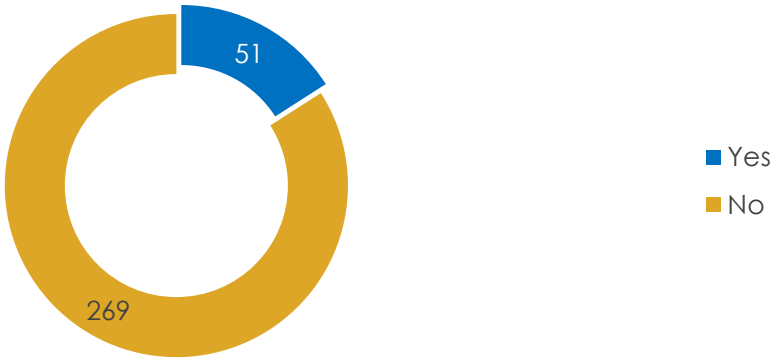
Number of responses: 398
Source: Kittelson and Associates, Inc. 2024

Table 4 Race and ethnicity of survey respondents, compared with City of Berkeley

Race / Ethnicity	Survey Responses	City of Berkeley
White alone	57.5%	55.5%
Black or African American alone	6.8%	7.8%
American Indian and Alaska Native alone	2.8%	0.7%
Asian alone	13.8%	20.8%
Native Hawaiian and Other Pacific Islander alone	3.0%	0.2%
Other (please specify)	16.08%	9.8%
Hispanic or Latino	15.9%	12.1%

Source: Kittelson and Associates, Inc. 2024, 2023 ACS 5-Year Estimates

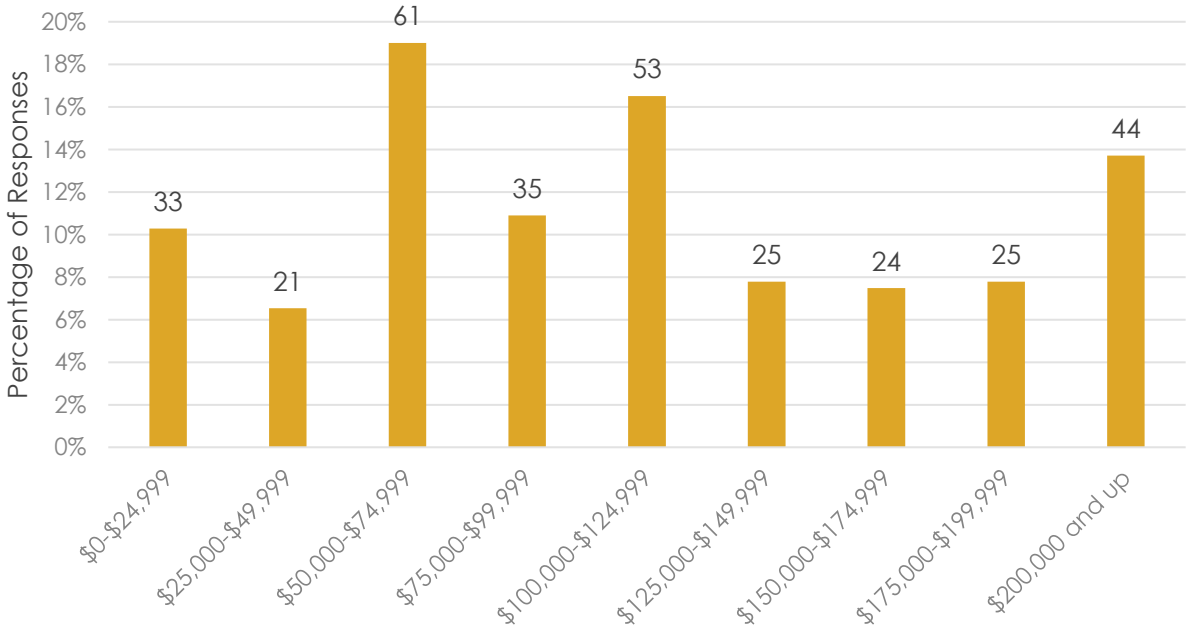
Figure 33: Are you of Hispanic or Latino origin or descent?



Number of responses: 320
Source: Kittelson and Associates, Inc. 2024

Figure 34 illustrates the average household income of the respondent. The largest group indicated that their household earned between $50,000 and $75,000, while the next two highest brackets were $100,000 - $125,000 and $200,000+. These figures compare to a Berkeley median household income of around $95,000 in 2023.[6]

Figure 34: What is your approximate average household income?



Number of responses: 321
Source: Kittelson and Associates, Inc. 2024

[6] 2023 ACS 5-Year Estimate

Appendix A : Waterfront Parking Counts and Rules

Berkeley Waterfront
Existing Parking Count & Rules | August 2024

Waterfront Parking Stalls	# Stalls	Percent of Total
Total Waterfront Parking Stalls	2219	100%

Public Street Name	# Stalls	Rules
Marina Blvd	150	No Parking 2am - 6am | Max 72 hour*
Seawall Drive North	6	No Parking 2am - 6am | Max 72 hour*
Seawall Drive South	84	No Parking 2am - 6am | Max 72 hour*
Spinnaker Way	127	No Parking 2am - 6am | Max 72 hour*
University Avenue	25	No Parking 2am - 6am | Max 72 hour*
Public Street Spaces	***392***	**18%**

Public Lot Name	# Stalls	Rules
J & K Lot	92	Max 72 hour* | Boater Permit required 12am to 10am
L Lot	14	Max 72 hour* | Boater Permit required 12am to 10am
Launch Ramp Paid	76	Paid Boat Launch Access/Trailer Lot: $17/day
M Lot	77	Max 72 hour* | Boater Permit required 12am to 10am
O Lot	72	Max 72 hour* | Boater Permit required 12am to 10am
Seawall Drive Lot	320	Open for periods of high demand
Skates/N Lot	137	Max 72 hour* | Boater Permit required 12am to 10am
South Cove East Lot	96	Open 9am - 11pm weekdays and 5am-11pm weekends
South Cove West Lot	86	Max 72 hour*
Spinnaker Way Lot	36	Max 72 hour*
Public Lot Spaces	***1006***	**45%**

Boater Lot	# Stalls	Rules
D & E Lot	129	Boater Permit required | Max 72 hour*
F & G Lot	63	Boater Permit required | Max 72 hour*
H & I Lot	52	Boater Permit required | Max 72 hour*
Dry Boat Storage Lot	73	No car parking/Boater Permit required
Boater Spaces	***317***	**14%**

Limited Parking Area	# Stalls	Rules
Berkeley City Vehicle Parking	10	No public parking
Berkeley PD Leased Lot	47	No public parking
Doubletree Leased Lot	408	Available to public | $8-$38/day | $40/overnight
Marine Center Leased Lot	39	No public parking
Limited Parking Spaces	***504***	**23%**

*Per Berkeley Municipal Code. All other parking rules are City policy.

Created August 12, 2024

Appendix B : Survey Questionnaire

General Questions

1. Date and Time of Parking

☐ Date: _____

☐ Time: _____ ☐ am ☐ pm

2. Parking Lot Location

_____

_____

3. Where do you live? (see map)

☐ West of San Pablo Avenue

☐ West of Shattuck Street

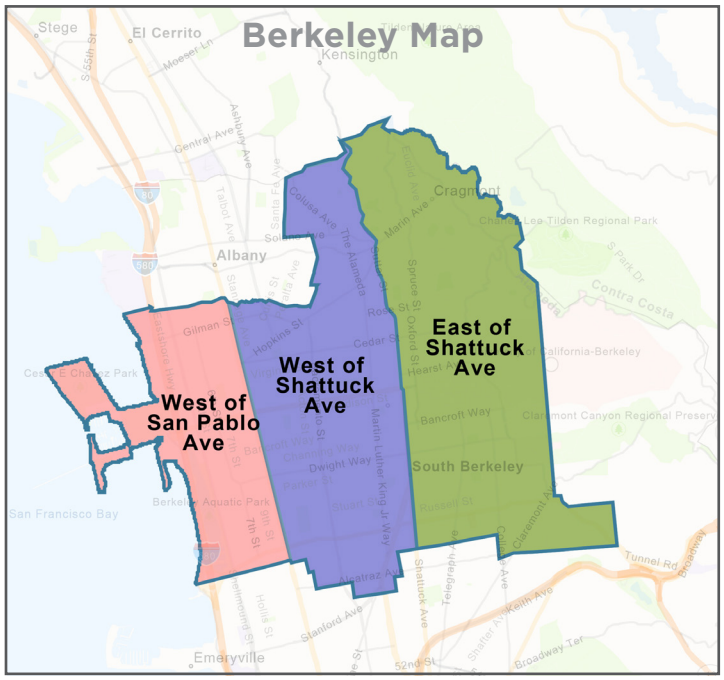
☐ East of Shattuck Street

☐ From Outside Berkeley
(please specify the City/Town)

_____

_____

_____



Destination and Duration

4. What is the name of the destination that you are visiting today?

_____

_____

_____

_____

_____

5. What brings you to the Waterfront? (Select all that apply)

☐ sailing/boating
☐ sightseeing/photography
☐ dog walking
☐ shoreline fishing
☐ picnicking
☐ biking
☐ wildlife viewing
☐ cruise
☐ swimming
☐ dining
☐ charter fishing
☐ running
☐ playground
☐ walking

Other (please specify)

_____

_____

_____

6. How frequently do you visit the Waterfront?

☐ Every day
☐ A few times a week
☐ A few times a month
☐ Less than once a month
☐ Rarely (please specify time of year)
☐ About once a week
☐ Once a month
☐ For special events

_____

_____

_____

7. Typical days that you visit the Waterfront? (Select all that apply).

☐ Monday ☐ Tuesday ☐ Wednesday
☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday

8. How long did you park for your activity today?

☐ Less than an hour
☐ 1-2 hours
☐ 2-4 hours
☐ 4-8 hours
☐ 8+ hours

9. How many passengers other than you were there in your vehicle?

☐ Drove Alone ☐ 1 ☐ 2 ☐ 3+

10. Do you normally park at this location?

☐ Yes ☐ No

11. Did you park near your destination?

☐ Yes ☐ No

Parking Experience and Recommended Strategies

12. How was your experience of finding parking today?

- ☐ I found parking quickly near my destination.
- ☐ I found a parking space near my destination, but I had to drive around to find it.
- ☐ I found a parking space quickly that was away from my destination.
- ☐ found a parking space that was away from my destination, and I had to drive around to find it.

13. How far are you willing to walk from the parking spot to your destination?

14. Have you ever cancelled your visit to the Waterfront because you could not park here?

☐ Yes ☐ No

15. What method would you likely use in the future to reduce cars at the Waterfront? (Select all that apply)

- ☐ Secure Bike Parking and Improved Bike Paths
- ☐ Uber/Lyft pick up and drop off locations
- ☐ Additional bus stops for AC Transit
- ☐ More frequent AC Transit bus service
- ☐ Real-time parking information and wayfinding
- ☐ Remote Parking with Free Shuttle Service
- ☐ Shared Mobility Services, i.e. scooters and e-bikes
- ☐ Paid Parking during the busiest times
- ☐ Valet Parking during busy times
- ☐ I will only drive to Waterfront
- ☐ Other (please specify)

16. Share additional thoughts related to access, parking, and circulation in the Waterfront.

Demographic Information

17. Which category below includes your age?

- ☐ 17 or younger
- ☐ 18-29
- ☐ 30-39
- ☐ 40-49
- ☐ 50-59
- ☐ 60-69
- ☐ 70 or older

18. How do you identify your race/ethnicity?

- ☐ White alone
- ☐ Black or African American alone
- ☐ American Indian and Alaska Native alone
- ☐ Asian alone
- ☐ Native Hawaiian and Other Pacific Islander alone
  Some Other Race alone
- ☐ Other (please specify)

19. Are you of Hispanic or Latino origin or descent?

☐ Yes ☐ No

20. What is your approximate average household income?

- ☐ $0-$24,999
- ☐ $25,000-$49,999
- ☐ $50,000-$74,999
- ☐ $75,000-$99,999
- ☐ $100,000-$124,999
- ☐ $125,000-$149,999
- ☐ $150,000-$174,999
- ☐ $175,000-$199,999
- ☐ $200,000 and up