PORT of SAN DIEGO
Waterfront of Opportunity

CEQA and COASTAL DETERMINATIONS
and
NOTICE OF APPROVAL

Project:	Tuna Harbor Parking Lot Restriping for Commercial Fishing Operations
Location:	G Street Mole, San Diego, CA 92132
Parcel No.:	018-039
Project No.:	2021-060
Applicant:	Dan Valentine, Maritime Department, 3165 Pacific Highway, San Diego, CA 92101
Date Approved:	May 24, 2021

PROJECT DESCRIPTION

The project would involve the restriping of a portion of the Tuna Harbor Parking Lot by the San Diego Unified Port District (District or Applicant) in the city of San Diego, California. To provide for operational efficiencies, the San Diego Fisherman's Working Group have requested improvements to provide for a more efficient use of the land side parking lot area. Specifically, improvements would include restriping of the existing parking lot within the Port Master Plan's Commercial Fishing land use designation to allow for 35 wider parking spaces, 2 crane parking spaces, an additional loading area, and a marked temporary storage area. In order to provide for the improvements, the total number of commercial fishing permit only parking spaces would be reduced from 72 spaces to 59 spaces. As analyzed in the 2019 Tuna Harbor Parking Demand Study (included as Attachment A), 59 spaces would still provide adequate parking capacity for commercial fishing operations. The six spaces in the Commercial Fishing designation that are current shared for use with the Fish Market Restaurant would remain as existing and are not intended to be restriped. The project would also include installation of additional signage, similar to what is existing, to depict the intended use of the spaces such as commercial fishing parking only, commercial fishing/restaurant shared spaces, crane truck parking only, and loading areas. Additionally, temporary fencing may be installed as needed to secure the commercial fishing storage area.

Construction of the project is anticipated to occur in summer 2021, would take approximately one week to complete, and would be done in a phased approach to limit interference with commercial fishing activities or commercial recreation uses on G Street Mole. Restriping would occur by blacking out the existing striped areas and using a paint gun to restripe with the new design. Due to its nature and limited scope, construction of the project would generate a minor amount of vehicle trips and would require limited use of equipment. Therefore, impacts related to air quality, greenhouse gas emissions, and transportation and traffic are not anticipated to occur. Furthermore, the District would be responsible for complying with all applicable federal, state, and local laws regarding construction demolition debris, hazards and hazardous materials, and stormwater.

The following categorical determinations are based on the project submittal and all project information known to the District as of the date of this determination.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

CATEGORICAL DETERMINATION

Based on the above description, the project is determined to be Categorically Exempt pursuant to California Environmental Quality Act (CEQA) Guidelines SG §15301, Class 1/Section 3.a: Existing Facilities and SG §15302, Class 2/Section 3.b: Replacement or Reconstruction.

3.a. Existing Facilities (SG § 15301) (Class 1): Includes operation, repair, maintenance, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that previously existing.

AND/OR

3.b. Replacement or Reconstruction (SG § 15302) (Class 2): Includes replacement or

reconstruction of existing structures and facilities where the new structure will be located on the same site and will have substantially the same purpose and capacity as the structure being replaced.

The project is determined to be Categorically Exempt pursuant to the CEQA Guidelines and the Sections of the District's Guidelines for Compliance with CEQA as identified above. These are appropriate for the project because it would involve no expansion of use beyond that previously existing and would not result in a significant cumulative impact due to the continuation of the existing use, and would consist of the replacement/reconstruction of an existing structure/facility, would be located on the same site as the structure replaced, and would have substantially the same purpose and capacity. The District has determined none of the six exceptions to the use of a categorical exemption apply to this project (CEQA Guidelines Section 15300.2).

Pursuant to CEQA Guidelines Section 15062, a 35-day statute of limitations for this CEQA exemption shall apply from the date a Notice of Exemption is posted with the San Diego County Clerk, or a 180-day statute of limitations for this CEQA exemption shall apply if no Notice of Exemption is filed.

CALIFORNIA COASTAL ACT

PORT MASTER PLAN CONSISTENCY

Planning District: 3 - Centre City Embarcadero (Precise Plan Figure 11)

Use Designation: Commercial Fishing

The project conforms to the certified Port Master Plan because it would involve restriping of a parking lot to provide efficiencies for commercial fishing operations consistent with the existing certified Land use designation. The project would not change the use of the site nor would it interrupt or expand the existing conforming uses of the site.

CATEGORICAL DETERMINATION

Categorical Exclusions: Section 8.a: Existing Facilities and Section 8.b: Replacement or Reconstruction

8.a. Existing Facilities: The operation, repair, maintenance, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that previously existing, including but not limited to:

AND/OR

8.b. Replacement or Reconstruction: Replacement or reconstruction of existing structures and facilities where the new structure will be located essentially on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced.

The project is determined to be Categorically Excluded pursuant to the Sections of the District's *Coastal Development Permit Regulations* as identified above. These are appropriate for the proposed project because it would involve negligible or no expansion of use beyond that previously existing and would be located essentially on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced.

Pursuant to California Coastal Act Section 30717, there is a 10-working-day period to appeal this "Coastal Act Categorical Determination of Exclusion" to the California Coastal Commission.

CALIFORNIA PUBLIC TRUST DOCTRINE

The proposed project complies with Section 87.(a)(1) of the Port Act, which allows for the establishment, improvement, and conduct of a harbor, and for the construction, reconstruction, repair, maintenance, and operation of wharves, docks, piers, slips, quays, and all other works, buildings, facilities, utilities, structures, and appliances incidental, necessary, or convenient, for the promotion and accommodation of commerce and navigation.

The Port Act was enacted by the California Legislature and is consistent with the Public Trust Doctrine. Consequently, the proposed project is consistent with the Public Trust Doctrine.

Joe Stuyvesant
President/CEO

Determination by:
Ashley Wright
Senior Planner
Planning Department

Signature: Ashley Wright
Date: May 24, 2021

Deputy General Counsel

Signature: Rebecca S. Harrington
Date: May 24, 2021

Tuna Harbor Parking Study

Parking Demand Summary Report

Final Report

June 2019

Prepared for:

PORT of SAN DIEGO

Prepared by:

CHEN RYAN

3900 Fifth Avenue, Suite 310
San Diego, CA 92103

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1.0 Overview

This document provides a summary of the parking demand within the Tuna Harbor Parking Lot. Tuna Harbor is located on the south side of the G Street Mole, which is located within Planning District 3 of the San Diego Unified Port District (District). The G Street Mole currently has two parking lots, the northern lot which provides metered public parking, and the southern lot (Tuna Harbor Parking Lot) which reserves parking spaces for several different users, including: permit required commercial fisherman parking (Commercial Fishermen Only), shared use fisherman/Fish Market Restaurant valet parking, ADA spaces, American Tunaboat Association-United States Tuna Foundation (ATA-USTF) spaces, and District spaces. This study focuses on the current parking demand within the Tuna Harbor Parking Lot, with an emphasis towards commercial fisherman parking demand and the spaces they utilize.

Figure 1-1 provides a map of the G Street Mole and identifies the Tuna Harbor Parking Lot. Due to daily, weekly, and seasonal changes in fishing operations at Tuna Harbor, it was determined that a full year of parking demand observations (24 hours a day) should be analyzed in the study. Therefore, the parking demand observation period analyzed in this report extended from April 9, 2018 through April 30, 2019.

Following this introductory chapter, this report is organized in the following chapters:

2.0 *Parking Supply and Methodology* - This chapter documents the current parking supply within the Tuna Harbor Parking Lot, and documents any changes that occurred during the observation period. This chapter also outlines the methodologies utilized to collect the existing parking demand data.

3.0 *Existing Parking Demand* - This section presents and analyzes the results of the data collection effort within the Tuna Harbor Parking Lot.

4.0 *Summary of Findings* - This section provides a summary of the key findings, including various patterns of commercial fishing parking demand throughout the day, week, and seasons observed within the Tuna Harbor Parking Lot.

Figure 1-1
Parking Study Area

2.0 Parking Supply and Methodology

This chapter documents the current parking supply within the study area, documents any changes that occurred during the observation period, and explains the methodology of data collection. This section also outlines the methodologies utilized to collect the parking demand and occupancy data within the Tuna Harbor Parking Lot.

2.1 Current Supply

The Tuna Harbor Parking Lot has a total of 93 parking spaces. The existing spaces within the Tuna Harbor Parking Lot are allocated as following among five different users:

- 79 Commercial Fishing Only spaces
- 6 Shared Spaces - Fish Market Restaurant/Commercial fishing only
- 3 ADA Parking spaces
- 3 American Tunaboat Association-United States Tuna Foundation spaces
- 2 District Reserved spaces

Commercial Fisherman Only – Spaces which require a District issued permit specifically for fisherman who are docked at Tuna Harbor. These permits are issued on a quarterly basis through the District and are valid for one year.

Shared Spaces - Fish Market Restaurant/Commercial Fisherman Only - Spaces which have a special shared-use agreement that allows for the restaurant valet service to utilize these parking spaces when not in use by a commercial fisherman. Per the Tidelands Use and Occupancy Permit (TUOP) (District Clerk Document No. 67855), prior to the Fish Market occupying any of the 6 shared-parking spaces, all 25 parking spaces solely granted to the Fish Market must be occupied. In the event that all of the commercial fishermen's permit spaces are occupied and one or more commercial fishermen using the Tuna Harbor Parking Lot approaches Fish Market's valet and requests use of one or more of the 6 shared spaces, the Fish Market valet must relocate the vehicles occupying the shared spaces and keep a written log of the event. Per communication with the Fish Market on June 11, 2019, since the commencement of the TUOP on February 21, 2018 no instances have occurred where Fish Market was asked to relocate vehicles from one or more of the shared spaces due to commercial fishing parking demand.

ADA Parking Only - Spaces which require an ADA placard to park in these designated spaces.

American Tunaboat Association – United States Tuna Foundation Permit (ATA-USTF) Parking Only - Spaces which require an official ATA-USTF permit.

District Reserved Spaces - Spaces reserved for District staff to park at the Tuna Harbor Parking Lot for official business.

Figure 2-1 displays parking signage images for each designation type. The location of each parking designation type is displayed in **Figure 2-2**.

Figure 2-1 Parking Designation Signs

Shared Spaces - Fish Market
Restaurant/Commercial fishing only

District Reserved

American Tunaboat Association
United States Tuna Foundation

ADA Only

Tuna Harbor Parking Study

Figure 2-2
Parking Supply Configuration

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2.2 Data Collection Method

Collection of the hourly parking occupancy data was initially conducted with four TLC200 Pro Brinno time lapse cameras placed in strategic locations within the Tuna Harbor Parking Lot, aimed to the capture parking demand for every hour of every day of the observation period. The time lapse cameras were programmed to take a picture of the parking lot every half-hour in case of visual obscurities such as inclement weather, perched birds, or other unusual circumstances blocked the camera's view. These cameras have the capability to capture different angles and focus for higher clarity.

Testing and Calibration Period

Four cameras were positioned for testing on February 12, 2018. Data was collected for four weeks to determine if the cameras captured the entire study area and to identify potential obscurities (night time darkness, fog, perched birds, etc.). After the first month, the camera footage was retrieved from the cameras on site and the offsite video processing team made some minor recommendations on camera placement. After the first month of video collection, it was determined that data collection efficiency could be increased by adding an additional viewpoint within the study area. On April 9, 2018, the video processing team set the final camera angles and added a fifth camera to capture the eastern parking area. With the fifth camera in place, it was determined that the entire Tuna Harbor Parking Lot could be seen and the observation period could begin. The data collected during the testing and calibration period (February 12, 2018 to April 9, 2018)[1], is provided in **Appendix A**.

Figure 2-3 displays a map of each camera's location within the Tuna Harbor Parking Lot[2], as well as the unique space ID assigned to each space within the Tuna Harbor Parking Lot to better organize the data collection process. **Figure 2-4** displays photos of each camera's mounted location. **Appendix B** provides the viewpoints of each camera with the respective Space IDs that it captured.

Data Collection Period

As noted previously, due to the daily, weekly, and seasonal changes in fishing operations at the G Street Mole, it was determined that a full year of observations (24 hours a day) should be analyzed in the study. Therefore, the data collection period for this effort lasted from April 9, 2018 to April 30, 2019. Parking occupancy counts were collected and recorded for every space within the Tuna Harbor Parking Lot, for every hour of the day during that time period.

To document and organize the parking occupancy within the study area, video footage was pulled from the in-field time lapse cameras on a monthly basis and reviewed off site. The image captures were then inputted into a formatted Excel database noting the occupancy of each individual parking space for each hour of the day. As noted previously, each parking space within the study area is assigned a unique space ID to maintain consistency in documenting the occupancy status. The entire dataset was compiled into a master file to analyze the data on a long-term scale. The data sheets are provided in each monthly report in **Appendix C.** Quarterly reports are provided in **Appendix D.**

[1] The data collected during the calibration period was to determine optimum camera placement and calibration; therefore, the data collected during this period is not as reliable as data collected during the observation period and was not / should not be relied upon when determining parking demand.

[2] It was found that the placement of an additional camera on the far west side of the study area would enhance the efficiency of breaking down the parking data. On August 2, 2018, a sixth camera was positioned. This can be seen in Figure 2-3 where Cameras C and D have similar viewing areas; however, Camera C is focused on the spaces south side of the parking lot, while Camera D focuses on the spaces on the northside of the parking lot. It should be noted that the entire parking lot could be seen from the original five cameras prior to August 2, 2018 and the sixth camera was only added for convenience. Therefore, all data collected between April 9 2018 and August 2, 2018 is still accurate and valid.

Tuna Harbor Parking Study

Figure 2-3
Camera Locations and Space IDs

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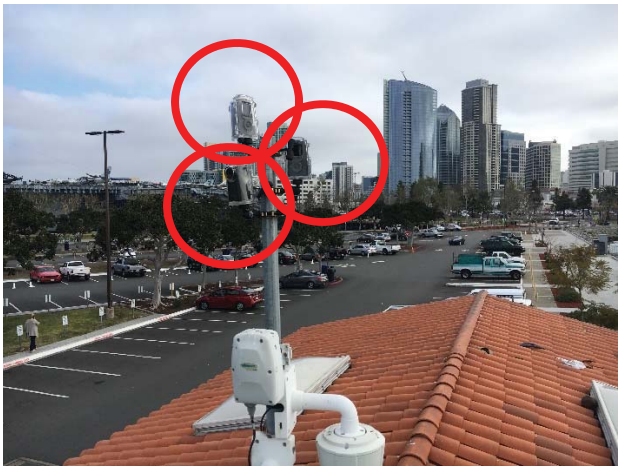
Figure 2-4 Photos of Cameras in the Field

Camera A



Camera B, C, E

Camera D

Camera F

2.3 Changes to Parking Supply

There were no changes to the parking supply during the observation period (April 9, 2018 to April 30, 2019). However, it should be noted that prior to the observation period, on February 21, 2018, 31 Fish Market restaurant valet spaces were converted to 25 commercial fishing only spaces and 6 shared commercial fishing/restaurant valet spaces. Additionally, 15 metered parking spaces on the eastern end of the parking lot were converted to commercial fishing only spaces. These changes occurred and were accounted for during the testing and calibration period, as documented in Section 2.2. The data collected during this period which documents the parking space designation change is provided in Appendix A.

Table 2.1 displays the changes that occurred on February 21, 2018 in vehicle supply for each parking space designation within the Tuna Harbor Parking Lot.

Table 2.1 Parking Supply Change

Parking Space Type	Before 2/21/18	After 2/21/18
Commercial Fishing Only	39	79
Fish Market Restaurant Valet	31	0*
Metered	15	0
Shared Use	0	6
ADA Only	3	3
ATA-USTF	3	3
Port District Reserved	2	2

Source: Chen Ryan Associates, June 2019

*After February 21, 2018, the Fish Market was still provided 25 spaces solely for their use (per their real estate agreement); however, these spaces were not located within the study area and therefore do not appear in this analysis.

2.4 Parking Permit Program

The District issues parking permits for the commercial fishing designated spaces. These permits are exclusive to fishermen docked in Tuna Harbor. Documented permit numbers represent the maximum number of actively valid parking permits during the respective quarter (Active Permits). **Table 2.2** identifies the maximum number of active parking permits for each full quarter of the study period.

Table 2.2 Quarterly Active Parking Permits

Season	Active Permits
Spring (April-June 2018)	63
Summer (July-September 2018)	84
Fall (October-December 2018)	69
Winter (January-March 2019)	110

Source: District, May 2019

As shown, the highest number of active permits during the observation period was during the 2019 winter quarter with 110 permits. As noted in Section 2.1, there are currently 79 spaces allocated to commercial fishermen within the Tuna Harbor Parking Lot. As noted in Table 2.2, in both the Spring 2018 (63) and Fall 2018 (69) quarters, there were fewer active permits than the number of spaces allocated to fishermen within the Tuna Harbor Lot. Therefore, the parking demand for these spaces would theoretically never be able to reach full occupancy during these time periods.

2.5 Analysis Methods

Several key analysis metrics were established to find trends in the data compiled from the Tuna Harbor Parking Lot demand analysis. These methods examined the temporal relationships within the Tuna Harbor Parking Lot to gain the best understanding of the parking lot's actual parking demand. The relationships examined throughout the year long observation period include the following:

- Hour of the Day – variations in parking demand throughout the day (hour to hour)
- Day of the Week – variations in parking demand throughout the week (Monday to Sunday)
- Month of the Year – variations in parking demand from month to month (January to December)
- Weekday vs. Weekend – differences in parking demand between weekdays and weekends

The temporal relationships established above, were then compared to one another to determine both the peak and average parking demand within their respective time periods. These comparisons help to identify the parking demand within the Tuna Harbor Parking Lot from multiple perspectives, thus taking into account the daily and seasonal variations associated with the fishing industry. The following analysis methods were utilized to identify the parking demand from multiple perspectives, and were used as the basis for the analysis performed in Chapter 3:

- *Average* – the average parking demand observed within a specified time period, including:
    - Daily Average – the average parking demand of every hour within a one-day period (i.e. the average parking demand over a 24-hour period)
    - Hourly Average – the parking demand for a specified hour of the day, averaged over the observation period
        - This metric is typically divided into weekday and weekend demand
    - Weekly Average – the parking demand for every hour of the day averaged over a week long period (168 hours)

  This metric is represented in Figures 3-1 through 3-3.

- *Peak* – the highest value observed during a specific time period, including:
    - Peak Hour – the hour of the day that exercised the highest parking demand during a specified time period
    - Peak Month – the month that experienced the highest overall parking demand within the observation period

  This analysis is represented in Table 3.1, Figures 3-4A-D and Figures 3-5A-D.

- *Average Peak* – the average daily peak hour value (time of day can vary), for every day, during the identified time period, including:
    - Average Peak Hour Demand by Month – the average of the peak hour demand for each day within the specified month
    - Average Peak Demand by Day of the Week - the average of the highest parking demand observed for the specific day of the week, averaged across the entire observation period.
    - Average Weekday Peak – The average of the highest observed peak demand for every weekday during the observation period.
    - Average Weekend Peak – The average of the highest observed peak demand for every weekend day during the observation period.

  This analysis is represented in Tables 3.2 through 3.5 and Figure 3-6.

3.0 Parking Demand Analysis

This chapter presents and analyzes the results of the year-long data collection effort within the Tuna Harbor Parking Lot.

3.1 Average Parking Demand

This section analyzes and displays the average parking demand within the Tuna Harbor Parking Lot throughout the observation period (April 9, 2018 through April 30, 2019).

Figure 3-1 and Table 3.1 display the average parking demand for commercial fishing only parking spaces on weekdays and on weekends. Each bar in the figure, and each row in the table, represent the average number of parked vehicles that were observed during the respective hour of the day. The observed parking demand for each hour of the day was averaged over the entire observation period. These data points provide an understanding of what the average parking demand is for commercial fishing over a typical weekday and weekend day.

Figure 3-1 Average Use of Commercial Fishing Only Spaces by Time of Day

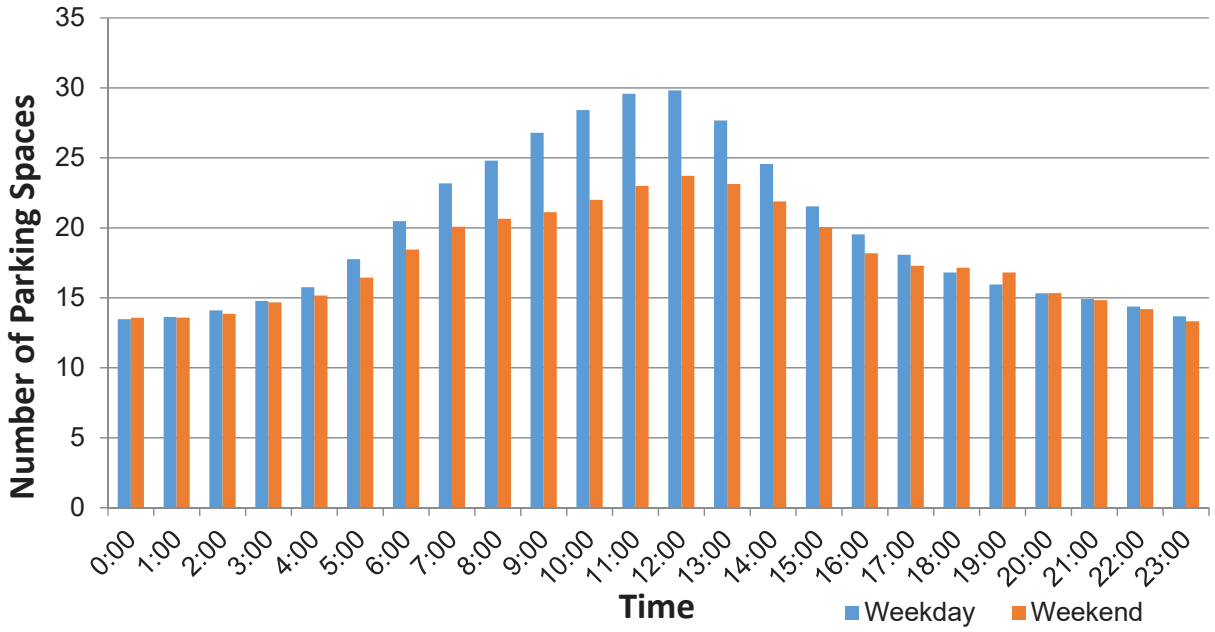


Table 3.1. Average Demand by Time of Day - Commercial Fishing Only Parking

Time of Day	Average Weekday Demand	Average Weekend Demand
0:00	13	14
1:00	14	14
2:00	14	14
3:00	15	15
4:00	16	15
5:00	18	16
6:00	20	18
7:00	23	20
8:00	25	21
9:00	27	21
10:00	28	22
11:00	30	23
12:00	30	24
13:00	28	23
14:00	25	22
15:00	22	20
16:00	20	18
17:00	18	17
18:00	17	17
19:00	16	17
20:00	15	15
21:00	15	15
22:00	14	14
23:00	14	13

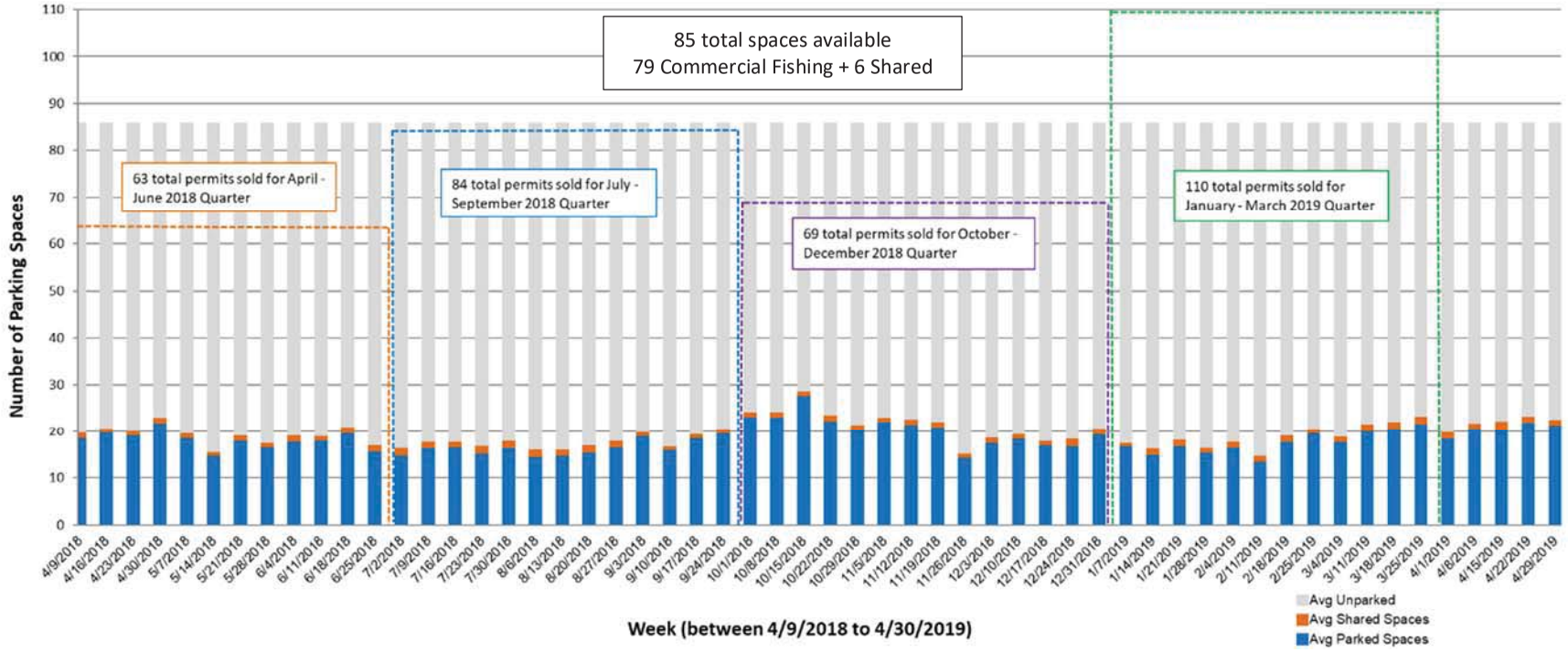
Source: Chen Ryan Associates, June 2019

As shown in Figure 3-1 and Table 3.1, the highest parking demand, on average, associated with commercial fisherman was observed during both the 11:00 and 12:00 hours on weekdays (30 spaces out of 79 spaces allocated) and during the 12:00 hour on weekends (24 spaces out of 79 spaces allocated). However, it should be noted that this represents the average demand on a day to day basis, across the yearlong observation period, and does not take into account seasonal variations. Therefore, this assessment represents the low end of the parking demand within the Tuna Harbor Parking Lot and would only accommodate the users 50% of the time.

Figure 3-2 displays the weekly average occupancy of the commercial fishing only parking over the observation period. Each bar represents the observed parking demand for each hour of the day averaged over the corresponding week (i.e. the average of the observed parking demand for the 168 individual hours in the respective week). This analysis provides an insight into how the parking demand within the Tuna Harbor Parking Lot varies throughout the year and helps to identify and account for weeks in which parking demand may spike.

The blue portion of the bars within the graph displays the average number of occupied designated commercial fishermen only spaces, the orange portion of the bar displays the average number of occupied shared spaces and the gray portion of the bar displays the number of unused parking spaces. The horizontal orange, blue, purple, and green dotted lines display the number of commercial fishing parking permits that were active during the Spring 2018, Summer 2018, Fall 2018 quarters, and Winter 2019, respectively (as noted in Table 2.2). These lines are implied as a relative maximum for each respective time period. The relative maximum is the number of spaces that could potentially be occupied. It is limited by the number of permits sold to commercial fisherman over the last 4 fiscal quarters.

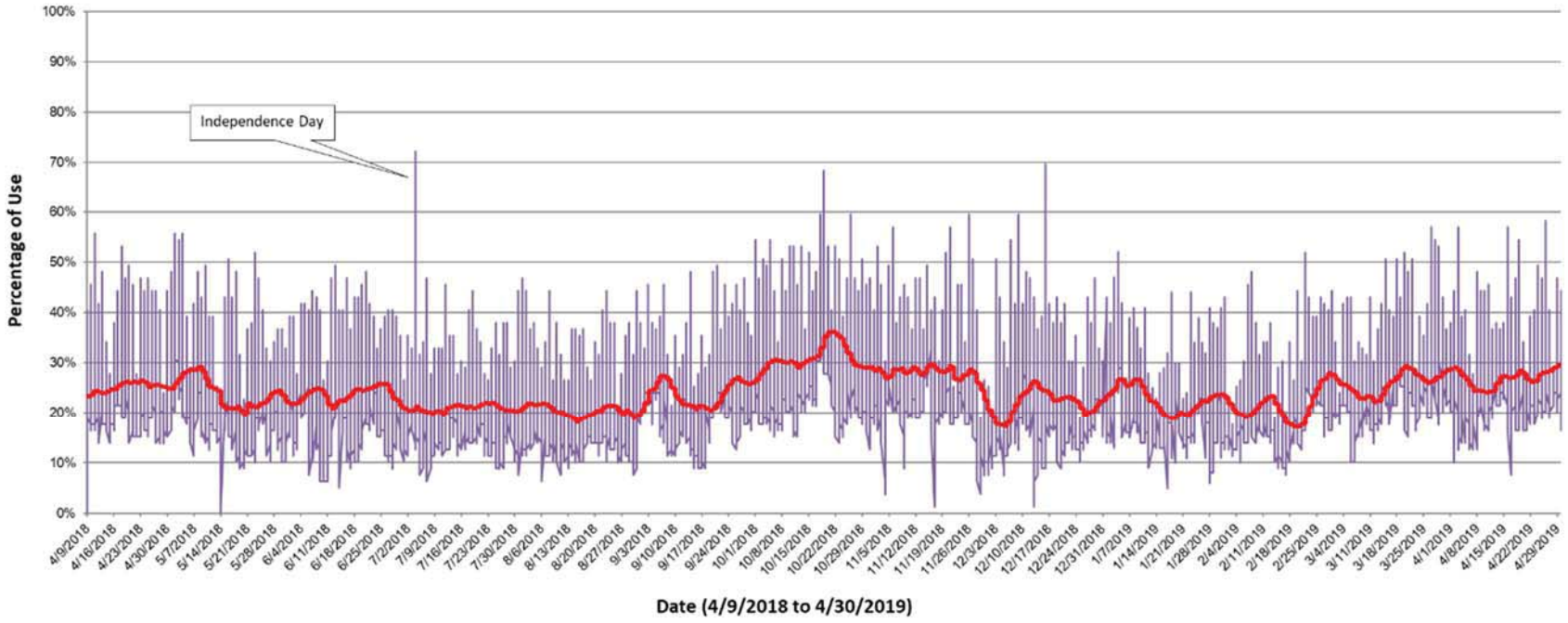
Figure 3-2 Weekly Average Parking Demand of the Commercial Fisherman Only Parking Spaces



As shown in Figure 3-2, the average weekly occupancy within the commercial fishermen spaces did not exceed 30 spaces (35% occupancy) throughout the year. Additionally, the average parking demand for these spaces did not exceed 50% of the total active permits within any given quarter. It should be noted that the highest average weekly parking demand is the exact same as the highest average hourly demand (30 spaces). This shows that even though the weekly parking demand does increase slightly during the fall months (particularly October), the demand does remain rather consistent throughout the year.

Figure 3-3 displays the hourly occupancy for the commercial fishermen only parking spaces within the Tuna Harbor Parking Lot during the observation period. Each day of the year is represented by two separate points within the graph, the high point represents the peak occupancy observed for the representative day, while the low point represents the lowest occupancy observed during the same day. The red line displays the average parking occupancy experienced within the commercial fishing only spaces, averaged over a one-week period (i.e. average occupancy over all 79 spaces for the 168 hours during the respective week). This assessment is meant to show the day to day variations for commercial fisherman over the observation period.

Figure 3-3 Use of Commercial Fishing Only Spaces Within the Tuna Harbor Parking Lot



As shown in Figure 3-3, the peak commercial fishing parking demand only exceeded 70% once during the year, during the Independence Day holiday. The Parade of Lights which occurred on December 16th also had unusually high parking demand. The Fall Season (particularly between October and November) generally had a higher level of parking demand, during both peak and low times, as compared to the rest of the year.

3.2 Peak Parking Demand

This section provides analyses and observations on the trends associated with the peak parking demand within the Tuna Harbor Lot over various time periods. This method displays the absolute maximum parking demand observed during the specified timeframe and is intended to help identify the total number of spaces needed within the Tuna Harbor Parking Lot.

Table 3.2 displays the peak parking demand observed within the commercial fishing only parking spaces during weekdays and on weekends for each month of the year. The numbers provided in the table represent the absolute highest number of cars that were observed to be parked in the commercial fishermen only parking spaces, for one hour, over the respective month.

Table 3.2 Peak Parking Demand for Commercial Fishing Only – By Month

Month	Peak Weekday Demand	Peak Weekend Demand	Active Permits
April 2018	44	36	63
May 2018	44	31	63
June 2018	39	37	63
July 2018	36[1]	37	84
August 2018	37	30	84
September 2018	39	36	84
October 2018	54	42	69
November 2018	47	36	69
December 2018	43	47[2]	69
January 2019	41	33	110
February 2019	41	34	110
March 2019	45	34	110
April 2019	46	32	N/A[3]
Maximum	54	47	

Source: Chen Ryan Associates, June 2019

[1]July experienced the 4th of July fireworks traffic anomaly, this day yielded a maximum value of 57 parked vehicles
[2]December experienced the Parade of Lights traffic anomaly, this day yielded a maximum value of 55 parked vehicles
[3] The active permit information for the spring quarter of 2019 was unavailable at the time the report was finalized.

As shown in Table 3.2, the months which experienced the highest commercial fisherman parking demand for a one-hour period were:

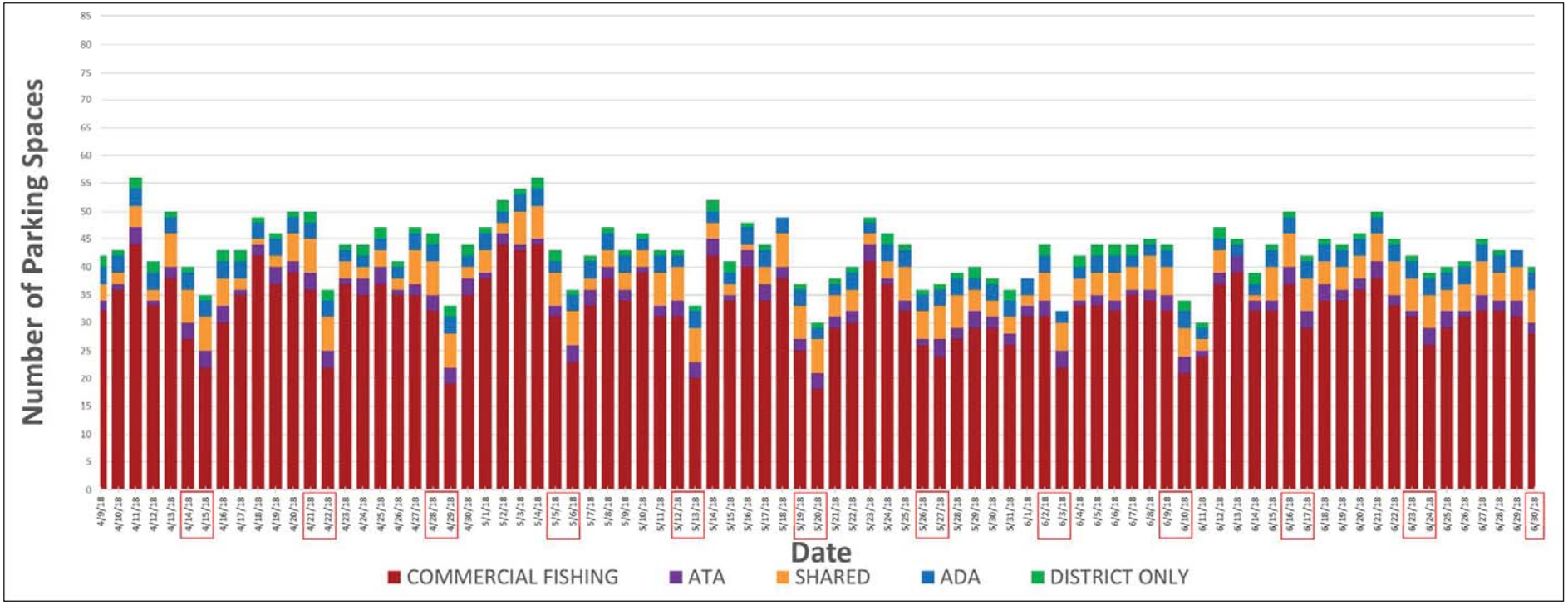
- October for weekdays (54 occupied spaces, 68% occupied).
- December for weekends (47 occupied spaces, 59% occupied).

The highest peak parking demand recorded, excluding anomalies, occurred on Friday, October 19th, 2019. This date had 54 vehicles parked at 11:00. Even though this was the highest observed parking demand, it was still well below the 79 available parking spaces, representing 68% of the total supply.

On Independence Day (July 4, 2018), which was considered an anomaly due to the Big Bay Boom fireworks show, the observed peak demand within the designated commercial fishing spaces reached 57 parking spaces, which still only represented 72% of the 79 available parking spaces.

Figures 3-4A – 3-4D display the daily peak hour parking demand within the Tuna Harbor Parking Lot over the observation period. Each bar within the graphs display the total number of parking spaces that were occupied during the observed peak hour for the respective day. The various colors in the bar represent the occupancy of different space types that are located within the parking lot, including: Commercial fishing only spaces (Red), Shared spaces (Orange), ATA spaces (Purple), ADA spaces (Blue), and District Only Spaces (Green). The red boxes on the X axis of the graphs indicate weekends.

Figure 3-4A Peak Hour Parking Demand by Space Type – Spring 2018



Figures 3-5A – 3-5D display the parking demand during the observed peak hour for the commercial fishing only parking spaces within the Tuna Harbor Parking Lot. Every bar in the graphs represent the highest parking demand that was observed for the commercial fisherman only spaces during the respective day. Additionally, the hour in which the peak demand occurred and the observed park demand are labeled on each bar. The red boxes on the X axis of the graphs indicate weekends.

Figure 3-5A Peak Hour & Parking Demand for Commercial Fishing Only – Spring 2018

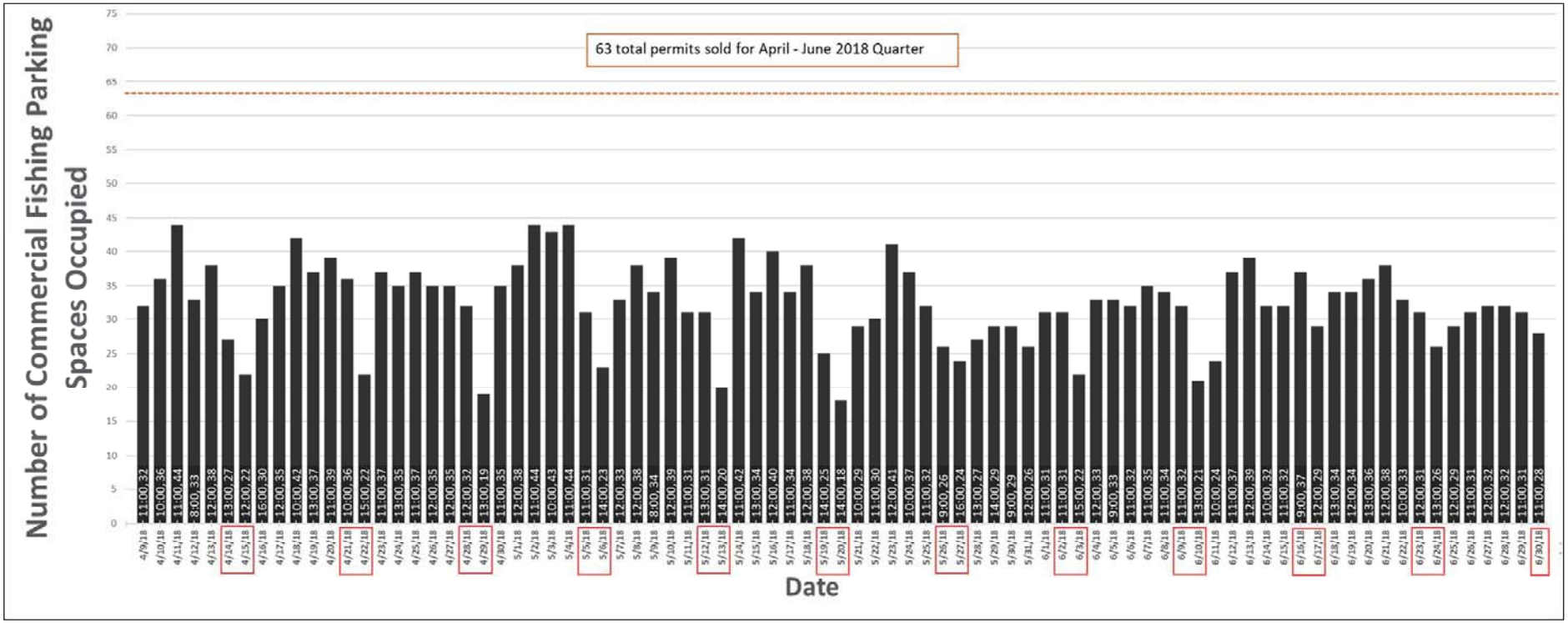


Figure 3-4B Peak Hour Parking Demand by Space Type – Summer 2018

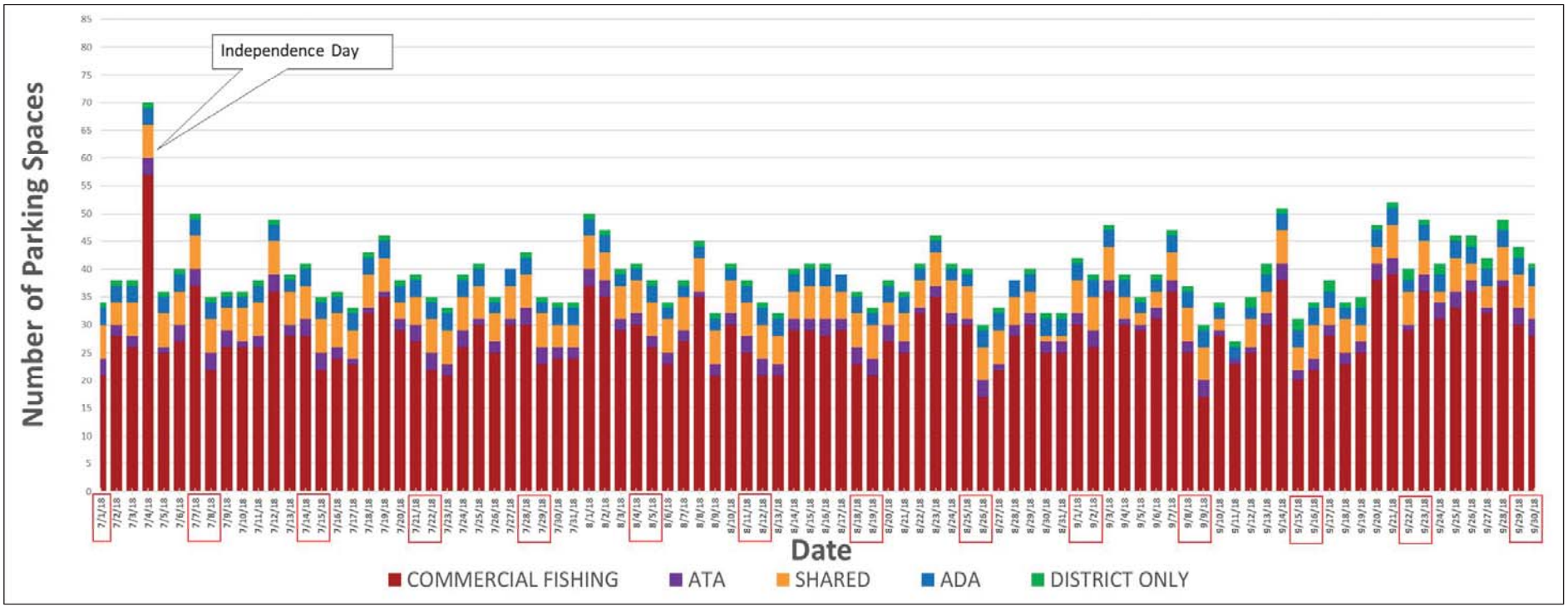


Figure 3-5B Peak Hour & Parking Demand for Commercial Fishing Only – Summer 2018

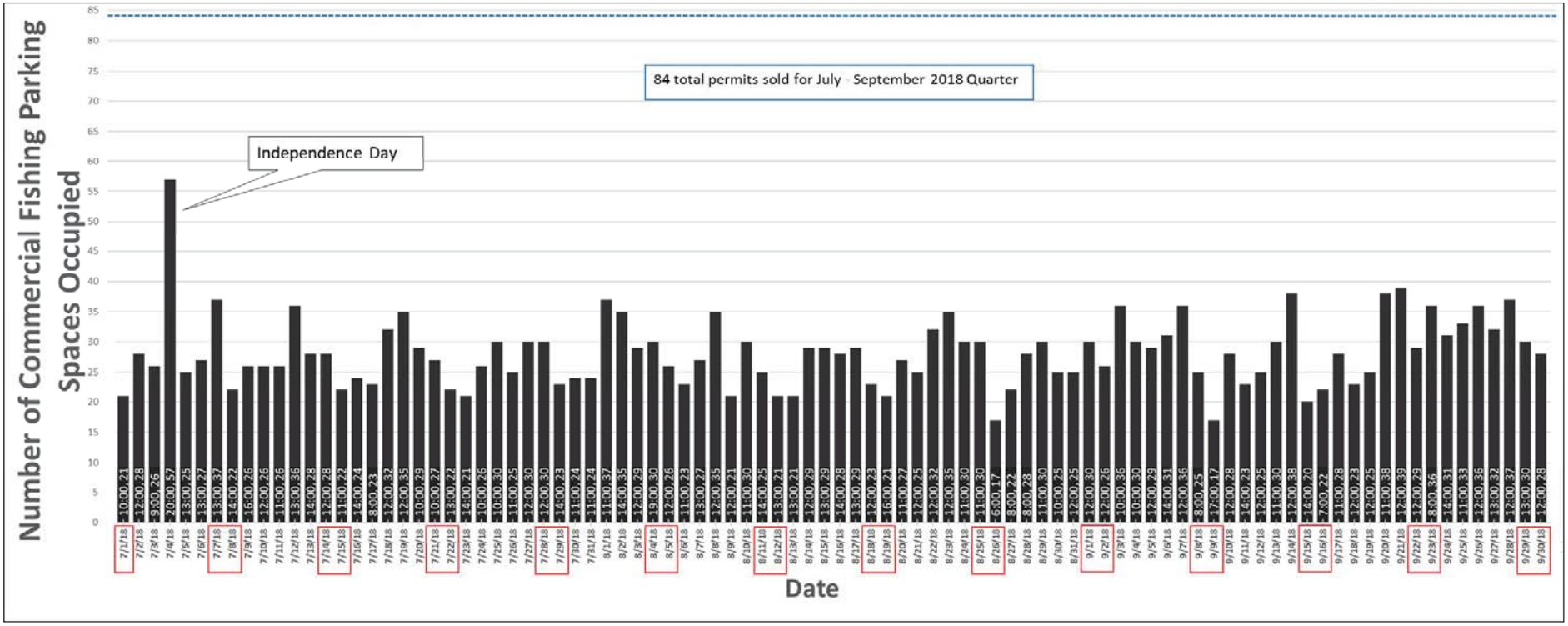


Figure 3-4C Peak Hour Parking Demand by Space Type – Fall 2018

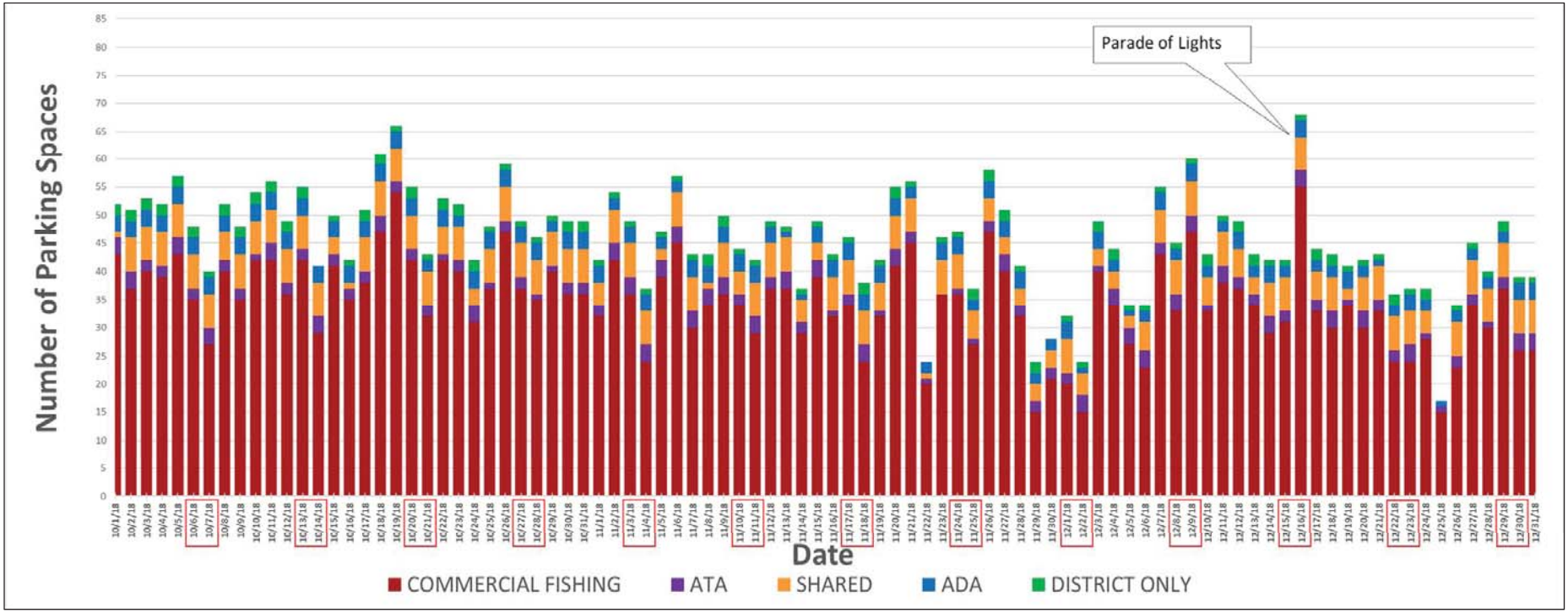


Figure 3-5C Peak Hour & Parking Demand for Commercial Fishing Only – Fall 2018

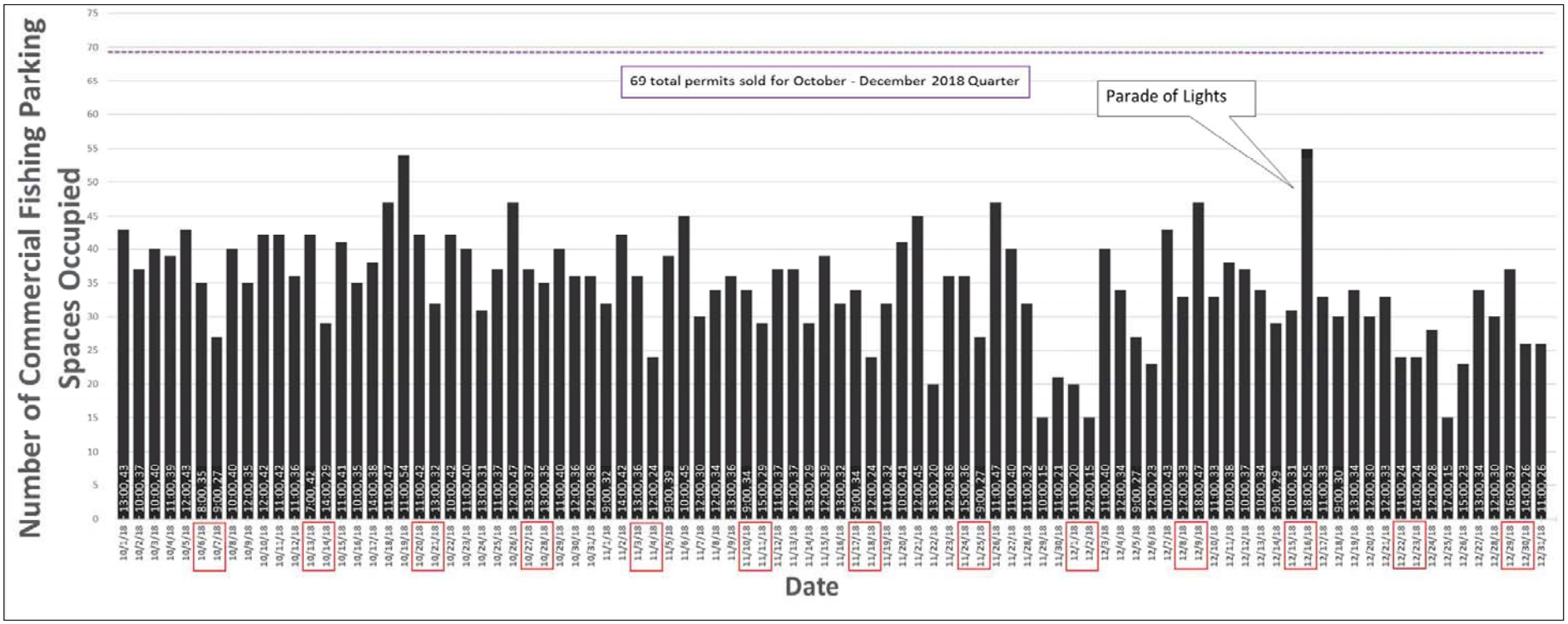


Figure 3-4D Peak Hour Parking Demand by Space Type – Winter 2019

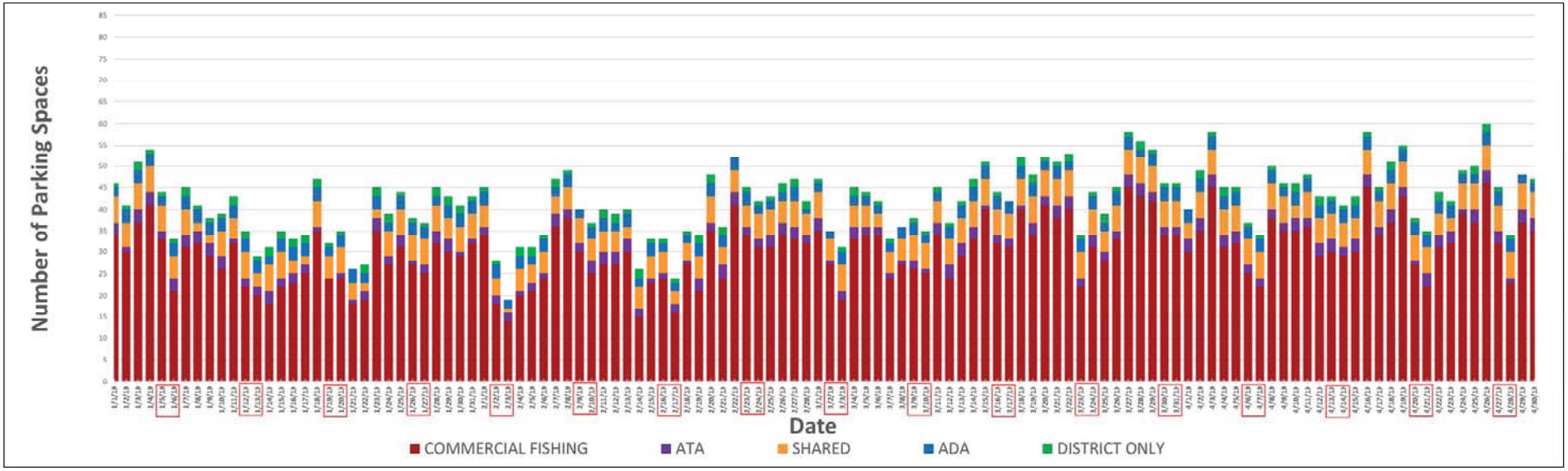
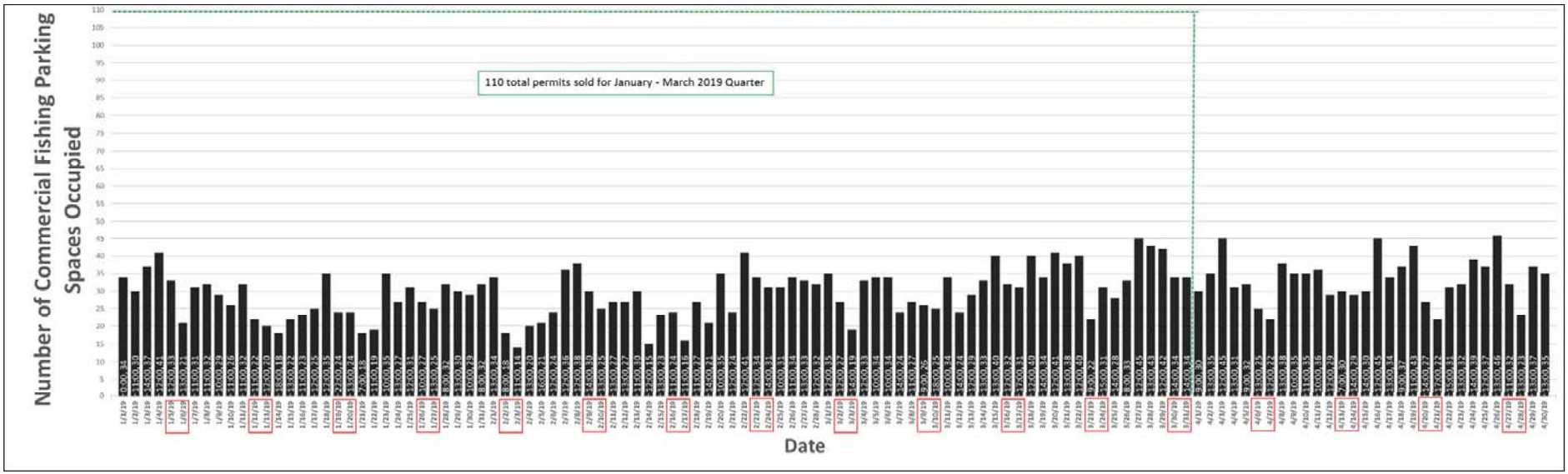


Figure 3-5D Peak Hour & Parking Demand for Commercial Fishing Only – Winter 2019



3.3 Average Peak Parking Demand

This section presents the observed parking data using an average peak demand analysis. This method averages observed demand for the peak hour of each day within the observation period. This method typically provides good metrics to help determine what the "design" parking demand should be (i.e. the most efficient number of parking spaces that can be provided). The average peak demand incorporates highest parking demand over several time periods and provides an average of what the parking demand is during these peak times. This is the most efficient way to design for parking needs because it accommodates for the typical peak demand periods/times that may occur monthly or seasonally, but does not provide excess parking for the few times a year in which demand spikes (i.e. the 4th of July and the Parade of Lights).

Table 3.3 displays the average peak parking demand for the five parking designations within the Tuna Harbor Parking Lot on both weekdays and weekends. The average peak parking demand was calculated by averaging the highest daily observed parking demand (i.e. peak hour) for each space type over the observation period. Therefore, this represents what the typical daily peak demand is for each space type on both weekday and weekends.

Table 3.3 Average Peak Parking Demand - By Parking Space Type

Parking Space Type	Peak Weekday Demand	Peak Weekend Demand	Spaces Allocated
Commercial Fishing Only	33	27	79
Shared Use	5	6	6
ADA Only	3	2	3
ATA-USTF	2	3	3
Port District Reserved	1	1	2

Source: Chen Ryan Associates, June 2019

As shown in Table 3.3, the peak demand for commercial fishing only spaces is 33 spaces during weekdays and 27 spaces during weekends. This is well below the 79 which are currently allocated. In contrast the average peak demand for all of the other space types is typically in line with the allocated number of spaces. It should be noted that due to seasonal variations the peak parking demand numbers averaged over a full year may not provide an accurate picture of that the true parking demand is within the Tuna Harbor Parking Lot; therefore, an average peak analysis was performed on a month to month basis.

Table 3.4 displays the average peak parking demand for commercial fishing only parking spaces, on both weekdays and weekends, for each month of the study period. The average peak was calculated by averaging the observed daily peak hour parking demand, for commercial fishing only parking spaces, over the representative month. This analysis is used to determine the average number of parking spaces needed to accommodate fishermen for each month of the year and to take into account the seasonal variations that occur with the fishing industry.

Table 3.4 Average Peak Commercial Fishing Only Parking Demand – By Month

Month	Average Peak Weekday Demand	Average Peak Weekend Demand
April 2018	36	25
May 2018	34	25
June 2018	33	29
July 2018	29	26
August 2018	28	24
September 2018	31	26
October 2018	40	35
November 2018	35	31
December 2018	31	31
January 2019	29	25
February 2019	29	24
March 2019	35	28
April 2019	36	26
Average	32	27

Source: Chen Ryan Associates, June 2019

As shown in Table 3.4, the highest month for commercial fisherman parking demand was October 2018 for both weekdays and weekend days, with a demand of 40 spaces and 35 spaces, respectively. It should be noted that even during the peak month there was a typical excess of 39 parking spaces (79 total spaces – 40 spaces occupied) during the times of highest use. Additionally, the average monthly peak demand did not exceed 60% of the total active permits (40 spaces in October / 69 active permits) at any time during the month.

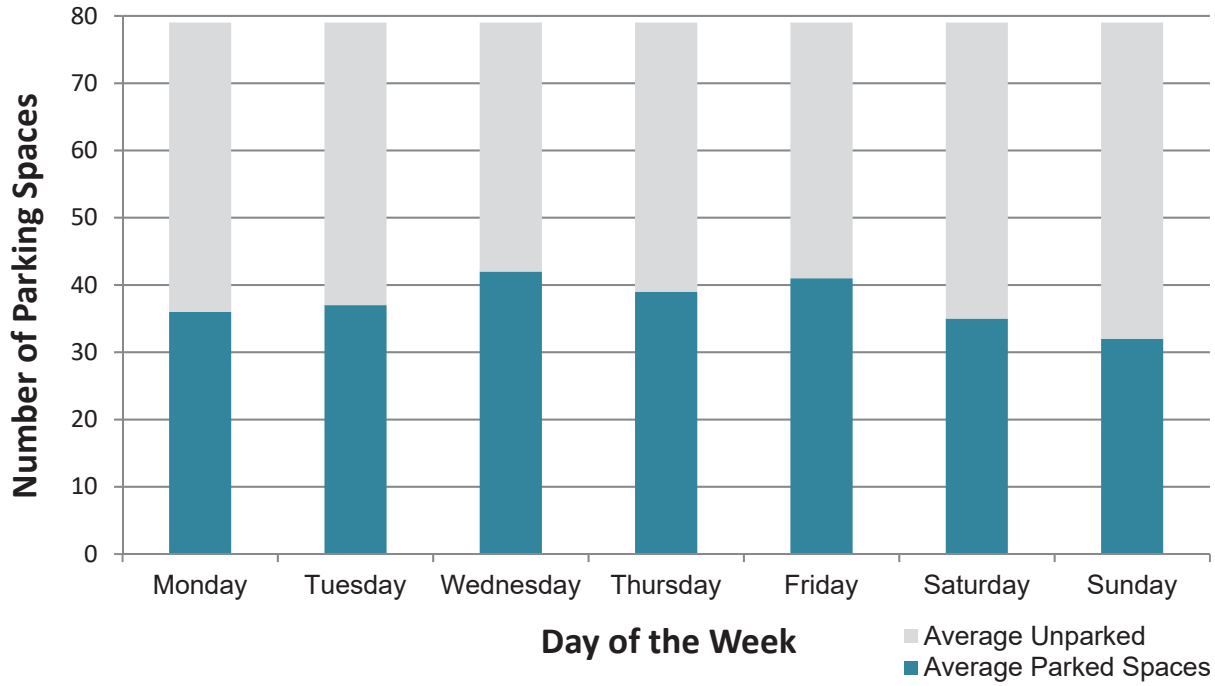
Table 3.5 and Figure 3-6 display the average peak parking demand for commercial fishing only parking spaces, for each day of the week. The peak parking demand for each day of the week is calculated by averaging the highest parking demand observed for each day and averaging that demand with the peak demand for the same days of the week (i.e. Monday, Tuesday, Wednesday, etc.) over the observation period. This analysis is used to determine the average number of parking spaces needed to accommodate fishermen for each day of the week.

Table 3.5 Average Peak Parking Demand for Commercial Fishing Only Parking Demand – By Day of the Week

Day of Week	Peak Demand
Monday	36
Tuesday	37
Wednesday	42
Thursday	39
Friday	41
Saturday	35
Sunday	32

Source: Chen Ryan Associates, June 2019

Figure 3-6 Average Peak Parking Demand for Commercial Fishing Only Spaces – By Day of the Week



As shown, the average peak commercial fishing only parking demand was observed to be at its highest on Wednesdays (42 spaces). Even during the highest day there was typically an excess of 37 parking spaces (79 total spaces – 42 spaces occupied) during the times of highest use. The lowest demand for commercial fisherman parking was observed to be on Sundays. The peak parking demand did not fluctuate much based on the day of the week, between 32 spaces and 41 spaces.

Table 3.6 displays the average peak parking demand for both commercial fishing only parking spaces and the shared use designated parking spaces for every hour of the day, on both weekdays and weekends, during the observation period. The average peak is calculated by taking the parking demand for each hour of the day and averaging it across the observation period. This analysis was conducted to determine if there was a relationship between the peak demand for the shared spaces and the peak demand for the commercial fishing only spaces.

Table 3.6 Commercial Fishing Only/Shared Use Parking Relationship

Time of Day	Weekdays		Weekends	
	Commercial fishing only	Shared Use Parking	Commercial fishing only	Shared Use Parking
0:00	13	1	14	1
1:00	14	0	14	1
2:00	14	0	14	0
3:00	15	0	15	0
4:00	16	0	15	0
5:00	18	0	16	0
6:00	20	1	18	1
7:00	23	2	20	1
8:00	25	1	21	1
9:00	27	1	21	1
10:00	28	1	22	1
11:00	30	2	23	2
12:00	30	3	24	4
13:00	28	3	23	5
14:00	25	2	22	4
15:00	22	2	20	4
16:00	20	1	18	3
17:00	18	1	17	3
18:00	17	1	17	3
19:00	16	1	17	2
20:00	15	1	15	1
21:00	15	1	15	1
22:00	14	1	14	1
23:00	14	1	13	1

Source: Chen Ryan Associates, June 2019

As shown in Table 3.6, the shared use parking area generally did not exceed 3 spaces during the weekdays and averaged 4-5 spaces during weekends. The weekend demand for shared parking spaces often peaked at the maximum 6 spaces. Pursuant to the Fish Market TUOP, if the commercial fisherman needed shared spaces occupied by Fish Market valet, Fish Market valet would vacate the spaces and record this requested event and provide the data to the District. Per communication with the Fish Market on June 11, 2019, since the commencement of the TUOP on February 21, 2018 no instances have occurred where the Fish Market was asked to relocate vehicles from one or more of the shared spaces due to commercial fishing parking demand.

It should be noted that the highest average peak demand based on time of day, 30 spaces for weekday (11:00 and 12:00) and 24 spaces for weekends (12:00) is somewhat lower than the average peak demand for both the average month 40 spaces (see Table 3.4) and average day of the week 42 spaces (see Table 3.5). This is mostly due to the hourly parking demand data being averaged across the entire observation period, which includes seasons in which the Tuna Harbor Parking Lot experiences less demand (Summer and Winter). Therefore, the peak demand of the Tuna Harbor Parking lot may be best represented by one or both of these metrics (average peak demand by month and average peak demand by day of the week).

4.0 Summary of Findings

This section provides a summary of the key findings, including various temporal and spatial relationships observed of the commercial fishing designated parking spaces within the study area.

4.1 Commercial Fishing Parking Demand

Average Demand

The highest parking demand, on average, associated with commercial fishermen was observed during both the 11:00 and 12:00 hours on weekdays (30 spaces out of 79 spaces allocated) and during the 12:00 hour on weekends (24 spaces out of 79 spaces allocated). However, it should be noted that this represents the average demand on a day to day basis, across the yearlong observation period, and does not take into account seasonal variations. Therefore, this assessment only represents what could be considered the lower end of the parking demand spectrum within the Tuna Harbor Parking Lot and does not account for spikes in parking demand or times in which fishing is more active (Spring and Fall).

Peak Demand

As shown in Table 3.2 the months with highest observed commercial fishing only parking demand at any point in time were:

- October for weekdays (54 occupied spaces, 68% occupied)
- December for weekends (47 occupied spaces, 59% occupied)

The highest peak parking demand recorded, excluding anomalies (4th of July and the Parade of lights), occurred on Friday, October 19th, 2019 with 54 vehicles parked at 11:00 AM. Even though this was the highest observed parking demand, it was below the 79 available parking spaces, at 68% of the total supply.

On Independence Day (July 4, 2018), which was considered an anomaly during the observation period because it was a holiday, the observed peak commercial fishing designated spaces reached 57 parking spaces, which was 72% of the 79 available parking spaces. The other parking demand anomaly, the Parade of Lights on December 16, 2018, observed peak commercial fishing designated spaces reached 55 parking spaces, which was 70% of the 79 available parking spaces.

Based on the observations outlined above, the peak parking demand within the Tuna Harbor Parking Lot was observed to be 57 spaces when anomalies are accounted for, and 54 spaces when they are not. However, as shown in Figures 3.4 and 3.5, these high demands of 50+ spaces were only experienced during very limited time periods (on less than 1% of the days). Therefore, this assessment provides the highest parking demand is within the Tuna Harbor Parking Lot.

Average Peak Demand

The highest month for commercial fisherman parking demand was October 2018 for both weekdays and weekend days, with a demand of 40 spaces and 35 spaces, respectively. It should be noted that even during the peak month there was a typical excess of 39 parking spaces (79 total spaces – 40 spaces occupied) during the times of highest use. Additionally, the average monthly peak demand did not exceed 60% of the total active permits (40 spaces in October / 69 active permits) at any time during the month.

The average peak commercial fishing only parking demand was observed to be at its highest on Wednesdays (42 spaces). Even during the highest day there was a typical an excess of 37 parking spaces

(79 total spaces – 42 spaces occupied) during the times of highest use. The lowest demand for commercial fisherman parking was observed to be on Sundays. The peak parking demand did not fluctuate much based on the day of the week, between 32 spaces and 41 spaces.

As noted in Section 3.3, the average peak demand method typically provides good metrics to help determine what the "design" parking demand should be (i.e. the most efficient number of parking spaces that can be provided). The average peak demand incorporates highest parking demand over several time periods and provides an average of what the parking demand is during these peak times. This is the most efficient way to design for parking needs because it accommodates for the typical peak demand periods/times that may occur monthly or seasonally, but does not provide excess parking for the few times a year in which demand spikes (i.e. the 4th of July and the Parade of Lights).

Therefore, based on the findings above, it can be concluded the parking demand associated with the commercial fishing uses within Tuna Harbor is between 40 and 42 spaces. Some additional parking may be required for peak times, but as shown in Figures 3.4 and 3.5 these times rarely occur and are typically associated with holidays.

Other Observations

As shown in Chapter 3, the following observations were made regarding commercial fishing designated parking demand at the Tuna Harbor Parking Lot:

- Peak Season: Fall
- Peak Month: October
- Peak Demand at any point 57 spaces
- Peak Day of Week: Wednesday (average peak = 42 spaces, 53% occupied)
- Peak Hour: 11:00-13:00 average 30 spaces (Weekdays), 12:00-13:00, average 24 spaces (Weekends) note: it was consistent for both the 11:00 and 12:00 hour
- Most Active Permits: 110
- Highest Use of the Permits at any Given Time: 54 used out of 69 active (78%), October 2018

4.2 Shared Parking Demand

The shared use parking area generally did not exceed 3 spaces during the weekdays and averaged 4-5 spaces during weekends. The weekend demand for shared parking spaces often peaked at the maximum 6 spaces. Pursuant to the Fish Market TUOP, if the commercial fisherman needed shared spaces occupied by Fish Market valet, Fish Market valet would vacate the spaces and record this requested event and provide the data to the District. Per communication with the Fish Market on June 11, 2019, since the commencement of the TUOP on February 21, 2018 no instances have occurred where the Fish Market was asked to relocate vehicles from one or more of the shared spaces due to commercial fishing parking demand.