



Baw Baw Shire Council

Trafalgar CBD Parking Study

September 2022

Draft Final Report

1.0 Executive Summary

Baw Baw Shire Council engaged HDS Australia in March 2022 to undertake a parking study for the township of Trafalgar.

The objectives of the parking study are to:

- Review the existing parking arrangements to identify deficiencies and areas needing improvement;
- Understand the current and future parking needs of the community; and,
- Provide an effective parking regime to suit the needs of all users, including residents, commuters, business owners, visitors and tourists.

Based on the study findings and feedback received from the wider community the following recommendations proposed include;

- Increase parking enforcement, as well as develop new initiatives and community education to ensure best parking practices.
- Improve parking turnover in Depot Lane carparks.
- Formalise the unrestricted parking spaces along both sides of Kitchener Street by installing line markings.
- Convert unrestricted spaces on the western side of McCrorey Street to long vehicle overnight stay.
- Rectify all signage deficiencies.
- Improve parking wayfinding signage.

These recommendations are discussed further in detail as per section 7.0 of the report.

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2.0 Background

2.1 Introduction

Baw Baw Shire Council is at an annual population growth rate of 2.94% and the population of Baw Baw Shire is expected to grow to 71,683 by 2036¹. 2021 Census data reveals a population of 4,349 within the locality of Trafalgar. New residential developments are growing within Baw Baw Shire, including Trafalgar to accommodate the expected population growth. As such, parking demand will grow with the population, signifying the importance of the parking study. Council has consequently engaged HDS Australia to undertake a parking study for the townships of Drouin, Trafalgar and Yarragon. This report presents the findings of the parking study for Trafalgar.

The objectives of the parking study are to:

- Review the existing parking arrangements to identify deficiencies and areas needing improvement.
- Understand the current and future parking needs of the community.
- Provide an effective parking regime to suit the needs of all users, including residents, commuters, business owners, visitors and tourists.

2.2 Policy documents

Several relevant documents were reviewed prior to the completion of this report, ensuring all recommendations align with the Council's Plan. The documents listed below have been reviewed:

- Baw Baw Shire Council Integrated Transport Plan (2011)
- Baw Baw 2050
- Council Plan 2021-2025
- Path and Trials Strategy 2019
- Baw Baw Planning Scheme
- Settlement Management Plan (August 2013)
- VicRoads Rest Area Strategy
- Trafalgar Urban Design Framework June 2018

¹ Baw Baw Shire Council Settlement Plan, August 2013, Page 4

2.3 Study Area

The Trafalgar CBD Parking Study area includes all the major business areas located in the town, with some residential areas included too. The boundary of the Trafalgar CBD parking study area starts at Lady Hamilton Lane to the west, Waterloo Road to the north including the industrial area, Anzac Road to the East and Kitchener and the Trafalgar public Hall on Contingent Street to the south. This area was chosen to account for the highest traffic density areas within Trafalgar, this being predominately around the local businesses, attracting both employees and customers. Additionally, these areas attract a high number of visitors requiring parking. Trafalgar CBD's main employment industries include hospitals, primary education, supermarket and grocery stores, secondary education, aged care residential services (2016, Census).

The parking spaces within the Trafalgar CBD Parking Study area includes a combination of on-street and off-street parking. On-street parking can be seen around the entire study area, while many of the off-street parking zones are located around shopping areas. Some parking spaces are not for public use, such as the Trafalgar Technology Centre which is for tenants only. As such, this carpark was omitted from the parking study when considering recommendations.

Figure 1 below displays the parking study area for Trafalgar.



Figure 1 – Trafalgar Parking Study Area

3.0 Existing Conditions

3.1 Current Parking Restrictions

The current parking restrictions within the Trafalgar Study Area are as shown in Figure 2 below.



Figure 2 – Current Parking Restrictions in Trafalgar

3.2 Off-Street Parking Access and Wayfinding

There are two major Council-owned off-street parking areas near the Trafalgar town centre, as shown in Figure 3 below. Motorists entering the town from either direction of Princes Highway may access these carparks via McCoy Street or Contingent Street. Westbound traffic may also access the eastern carpark via a narrow laneway directly off of Princes Highway. Dedicated parking facilities for long vehicles are available in the eastern carpark, however they should be directed to access the facilities via Kitchener Street due to their poor manoeuvrability.



Figure 3 – Off-street carpark access for general traffic and long vehicles

Parking wayfinding signage is important to allow motorists to easily find and access these off-street parking facilities. Wayfinding signage for the Trafalgar study area is somewhat adequate, as shown in Figure 4 below, however several improvements are needed to effectively direct motorists into the off-street carparks. The proposed changes to improve parking wayfinding are illustrated in Figure 5.

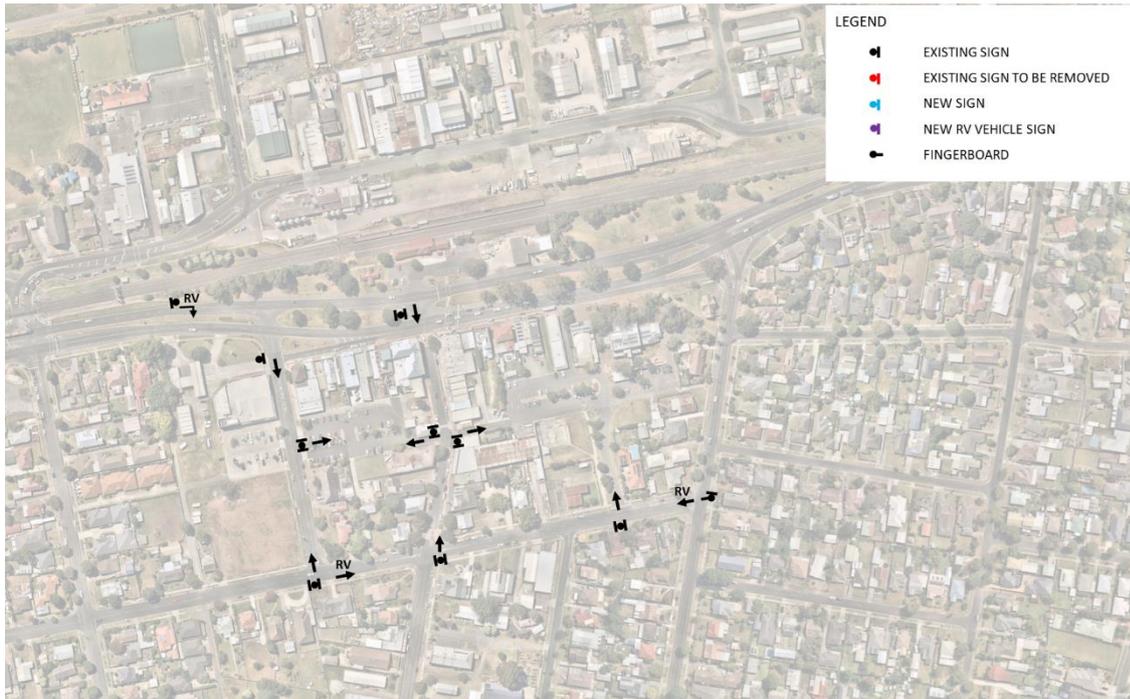


Figure 4 – Existing parking wayfinding signage

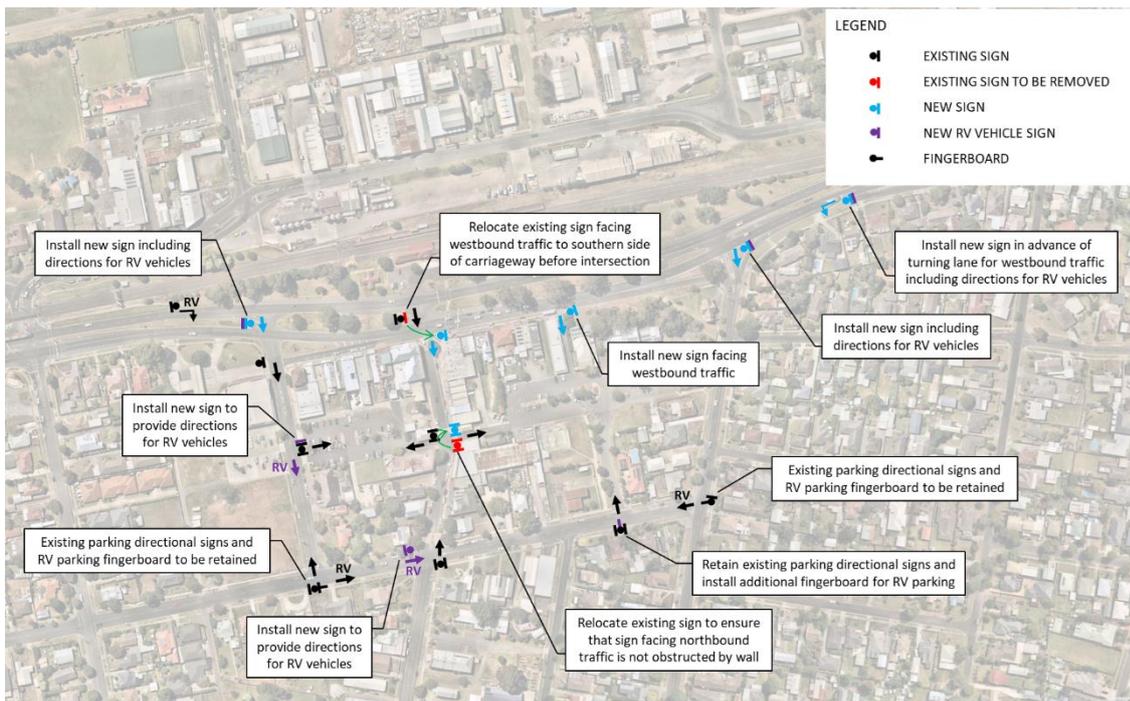


Figure 5 – Proposed parking wayfinding signage improvements

3.3 Disability Parking

The locations of existing disabled spaces within the Trafalgar study area are listed in Table 1 below.

Table 1 – Location of disability parking bays

Location	No. of spaces	Comments
Trafalgar Railway Station	1	
Princes Highway westbound carriageway, south side, east of POS near Contingent Street	1	
Contingent Street, east side, north of Kitchener Street	1	
IGA carpark	2	No signs, disabled parking pavement marking severely worn
McCrorey Street carpark	3	
Depot Lane carpark	2	
107 Princes Highway rear carpark	2	TBC Council's Property Team are investigating the sale of this land, which may change the status of this carpark in the future.
TOTAL	12	

It is assumed that these disabled bays provide a suitable spatial separation as to allow access to nearby facilities without restricting the efficient use of available spaces by other users.

3.4 Parking Signage

As part of the 2022 Parking Study, incorrect or non-standard parking signs within the study area have been identified. These deficiencies are detailed in Table 2 below.

Table 2 – Schedule of incorrect signage

Location	Deficiency
Princes Highway, southern side, bus stop west of Contingent Street	<p>The 1P sign adjacent to the bus zone sign should be relocated to the other side of the kerb outstand. It is noted that there is already a signpost at the proposed location with no signs attached.</p> 
Contingent Street, western side, between Princes Highway and Depot Lane	<p>The 1P zones on the western side does not have a sign with right arrow at the southern end of the zone. It is also recommended to install additional signs in the middle as shown in the schematic sketch below.</p> 

4.0 Community Input

4.1 Introduction

Public consultation is key in determining both users' expectations and developing measures to create an effective parking regime.

Prior to the commencement of the parking survey data collection in May 2022, Council undertook initial public surveys in April 2022 through Council's 'Have Your Say' process and a community pop-up session was held at Trafalgar Community Centre on 28 April 2022. Further, public exhibition of the draft report was undertaken from 13 October 2022 to 11 November 2022 (to be updated).

This consultation served as an open forum for wider community and key stakeholders to express their concerns regarding parking within Trafalgar CBD.

4.2 Key Community Comments

The community pop-up session was held in Trafalgar Community Centre between 16:00 to 18:00 on 28 April 2022. The general theme of comments provided to Council are summarised below:

- Currently mixed all day and 2 hours parking at the carpark behind shops which cause confusions.
- Narrow parking bays at the carpark.
- Parking consideration for recreational vehicles (caravan) and heavy vehicles.
- Potential line marking on Kitchener St.
- Relocate mobile library to free more parking spaces.

The 'Have Your Say' public consultation period for the Trafalgar CBD Parking study was conducted from Monday 11 April to Sunday 1 May 2022. In total, 19 responses were received during the public consultation period. Concerns were raised by participants on several issues, namely inadequate parking restriction, request to investigate additional areas for different type of vehicle parking for the future, and lack of parking signage within the township.

Each of the responses received from the public made at least one comment regarding the parking study, with some having multiple comments. The comments have been categorised into the prominent concerns as most of the responses fell under these categories.

Figure 6 below shows a compilation of the community comments in a graph.

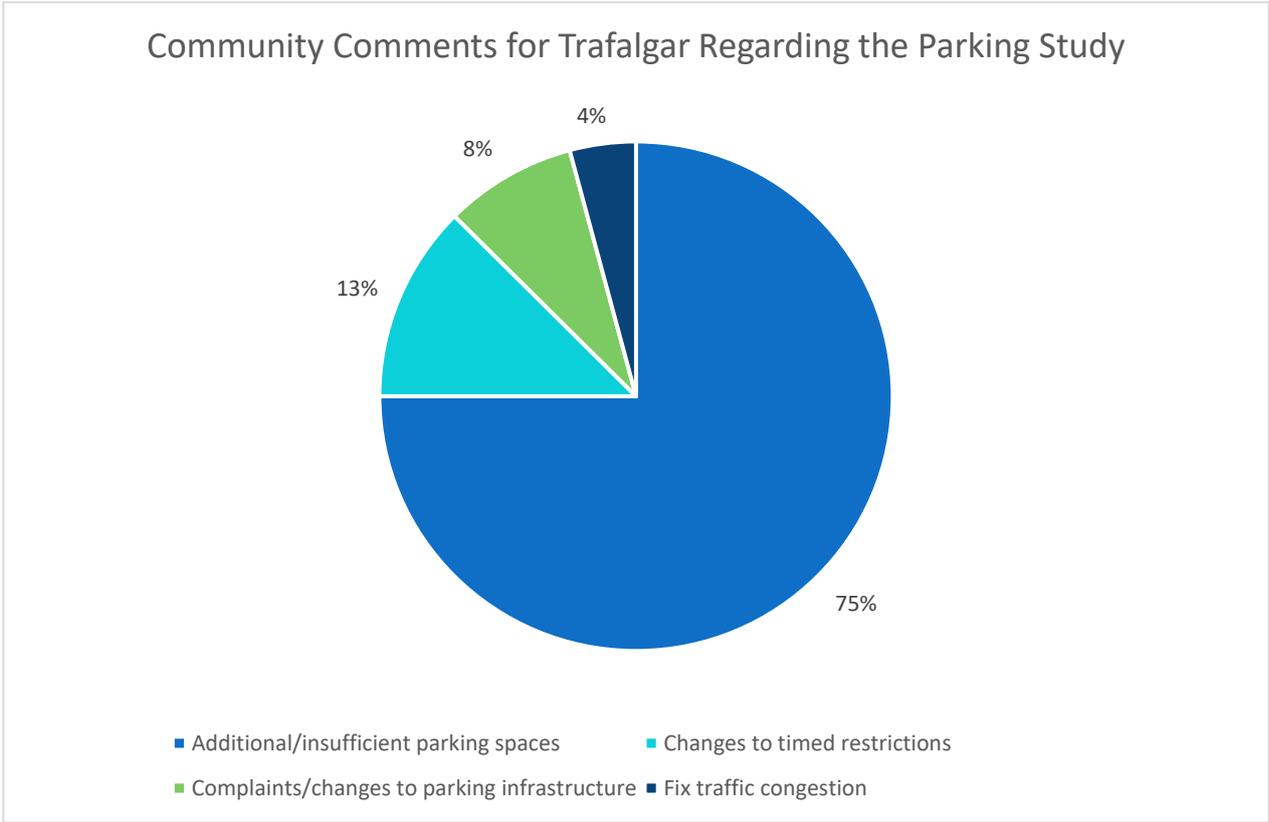


Figure 6 – Community Comments for Parking Study Graph

XXX comments were received during the public exhibition period for the draft Trafalgar CBD Parking Study report (to be updated).

5.0 Parking Surveys

5.1 Introduction

The demand for parking within the study area of Trafalgar is driven by several user types and factors relating to a range of land use types, such as business proprietors, goods deliveries, employees, customers, visitors, and transient tourists. The CBD hosts different types of business with workers and customers seeking parking close to their desired destination. These include restaurants, cafes, supermarkets, local businesses, museums, medical centres, and a public town hall.

The boundary of the Trafalgar CBD parking study area starts at Lady Hamilton Lane to the west, Waterloo Road to the north including the industrial area, Anzac Road to the East and Kitchener and the Trafalgar public Hall on Contingent Street to the south.

Within the study area, a total of 591 parking spaces were found. These included a range of different parking restrictions and a combination of publicly and privately owned parking. Some of the private parking spaces include the IGA supermarket carpark and the HAZCON Technology Centre carpark. The existing parking restrictions for the study area can be seen in Figure 2 in section 3.1 of the report.

5.2 Car Parking Surveys

Parking surveys were performed within the study area of Trafalgar to get an understanding of the current parking habits and to develop a strategy to meet current and future user requirements. These surveys were completed and collected data over a 5-day period at hourly intervals, during the week starting on Monday 2nd May 2022, from 8:00AM– 6:00PM. This was done for all 591 parking spaces.

5.3 Existing Parking Supply

5.3.1 Overview

Private vehicles are the main choice of transport to and from Trafalgar CBD, hence the importance on available and convenient parking. Many nearby residents choose to walk or cycle as their preferred transport choice due to their proximity to the CBD. These sustainable forms of transport are not only welcomed but should be encouraged to help reduce the demand on parking and to promote a healthy lifestyle. Additionally, public transport remains another transport mode that should be encouraged to help reduce the demand on parking for private vehicles.

It is noted that public transport and active transport options are limited within the Baw Baw Shire council area due to many of the towns' peri-urban nature. As such, there will continue to be high dependency on private vehicles users in need of convenient parking which needs to be managed to meet the needs of the community and local business operators.

5.3.2 Review of Parking Restrictions

The supply distribution for the various parking categories is shown in Table 3 below for the study area. Unrestricted parking makes up most of the supply, representing 68.4% of all available car parking. Evidently, this is significantly greater than the next biggest parking supply category, with 2P making up 9.8% of all available parking. This report will also cover the parking study analysis for greatest demand for parking by restriction type and the duration of stay of most patrons to the CBD area.

Table 3 – Supply of Parking by Restriction Type

Parking Restriction	TRAFALGAR CBD AREA	
	Supply	% of Total Supply
Unrestricted	404	68.4%
2P	58	9.8%
1P	53	9.0%
1/2P	5	0.8%
Disabled	16	2.7%
Loading Zone	3	0.5%
Long Vehicle	3	0.5%
No Stopping (Part Time)	10	1.7%
Bus Only	1	0.2%
Tenants/Visitors to Tech Centre Only	38	6.4%
Total	591	100%

5.3.3 Total Study Area Occupancy Rates

Figure 7 below displays the parking occupancy rates across each day and hour for all parking spaces within the study area.

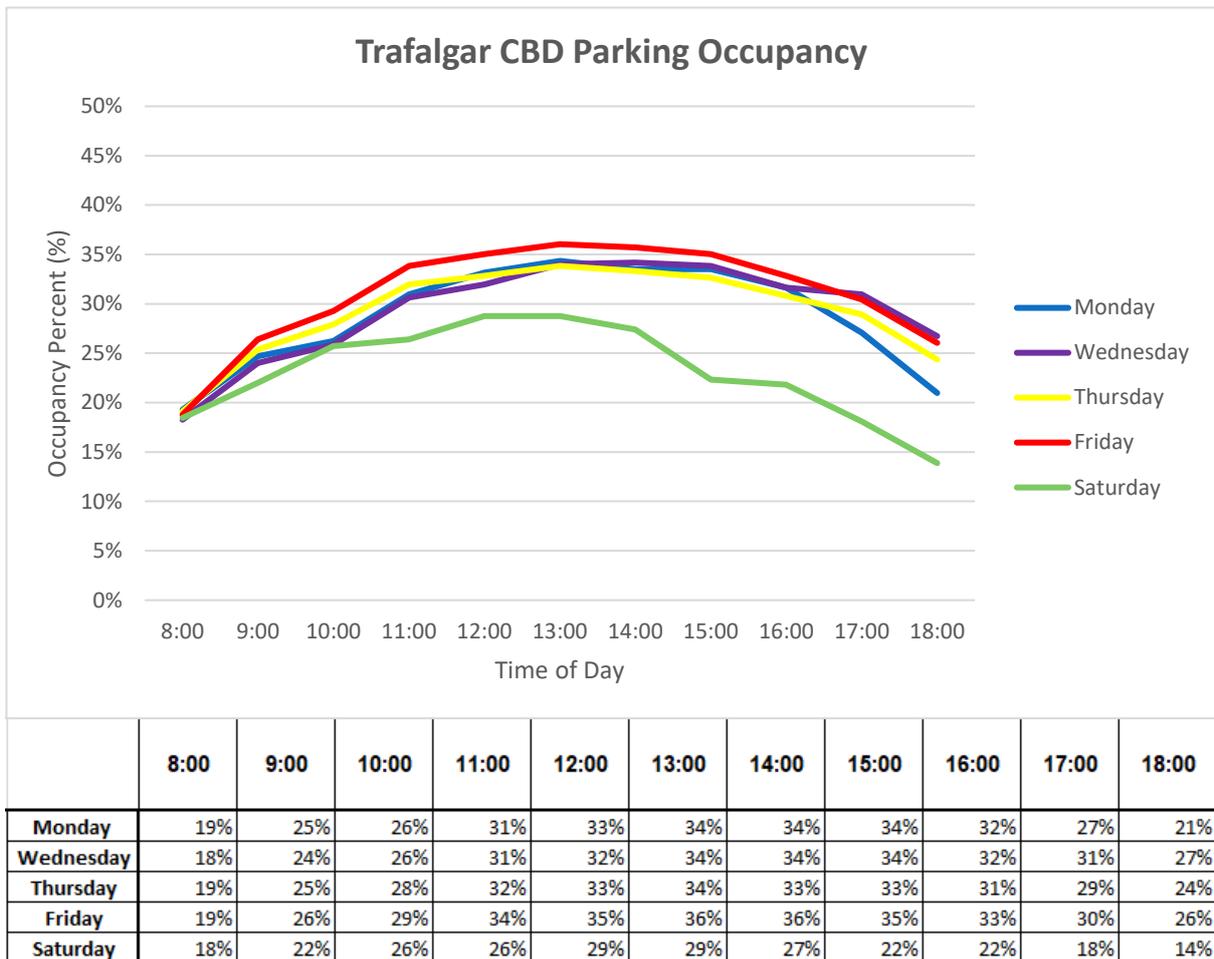


Figure 7 – Parking Occupancy Graph for each day in the study area

As can be seen in Figure 7, the highest occupancy rate was recorded at 36% around midday (13:00pm – 14:00pm) on the Friday within the Trafalgar CBD parking study area. It was observed that peak occupancy rates were recorded around midday on each day, with occupancy rates around the mid 30%.

Please refer to Appendix A for detailed occupancy rates per day by hourly intervals for the entire study as a whole.

5.4 Parking Supply and Demand Analysis

Table 4 below displays each parking restriction and their respective supply, average occupancy rate over the 5-day period, and the highest daily occupancy rate at any given time for the study area.

Table 4 – Peak Parking Demand and Supply in Trafalgar CBD

Parking Restriction	Trafalgar Study Area		
	Supply	Average Occupancy (over 5 days)	Daily Highest Occupancy
Unrestricted	404	22%	27%
2P	58	53%	57%
1P	53	33%	35%
1/2P	5	45%	58%
Disabled Bays	16	32%	47%
Loading Zones	3	30%	55%
Long Vehicle Parking	3	0%	0%
No Stopping (Part Time)	10	5%	9%
Bus Only	1	0%	0%
Tenants/Visitors to Tech Centre Only	38	26%	35%
TOTAL	591		

Key observations from Table 4 include:

- Unrestricted parking makes up the vast majority of all parking in the study area (404 spaces, including most of the on-street parking, as well as the Depot Lane, Contingent Street, McCrorey Street and Princes Highway off-street parking spaces.
- 68% of all parking supply in the study area is unrestricted parking and has an average occupancy of 22%.
- All 1P restricted parking is on-street parking and is found along Contingent Street and Princes Highway. A total of 53 spaces are found with an average occupancy of 33%.
- All 2P restricted parking is located in the off-street carpark between McCrorey Street and Contingent Street with a total of 58 spaces and an average occupancy of 53%.
- The peak periods in Trafalgar occur around between 13:00pm-14:00pm which sees approximately 33 of the 58 available 2P spaces occupied, and 19 of the 53 available 1P spaces.
- During peak periods in the study area, approximately 109 of the 404 unrestricted parking spaces are occupied.
- During peak periods in the study area, approximately 8 of the 16 disability parking spaces are occupied.

- During peak periods in the study area, approximately 13 of the 38 parking spaces at the HAZCON Technology Centre are occupied.

Please refer to Appendix B for spatial representations of average occupancy rates for each study date

5.5 Observed Parking Trends

5.5.1 Duration of Stay

The duration of stay data shows current parking habits being practiced by the community. This is important information for creating an efficient parking management plan as it displays whether current parking restrictions meet the needs of the community. The following tables and figures show the duration of stay over the study area across the 5-day period between the hours of 8am to 6pm.

5.5.1.1 Monday 2nd May 2022

A total turnover of 760 vehicles over the course of the day was seen on the Monday. About 64% of all vehicles parked for 1 hour or less, 15% staying 2 hours or less and 8% staying 3 hours or less. There was a total of 9 cars that stayed for 10 hours or more in the same car parking spot over the course of the day.

Table 5 – Observed Duration of Stay (Hours) – Monday 2nd May 2022

Hours	<= 1h	1-2h	2-3h	3-4h	4-5h	5-6h	6-7h	7-8h	8-9h	>= 10h
Total Turn Over	760	760	760	760	760	760	760	760	760	760
Vehicles @ DOS	487	117	62	45	24	8	3	4	1	9
Percentage	64%	15%	8%	6%	3%	1%	0%	1%	0%	1%

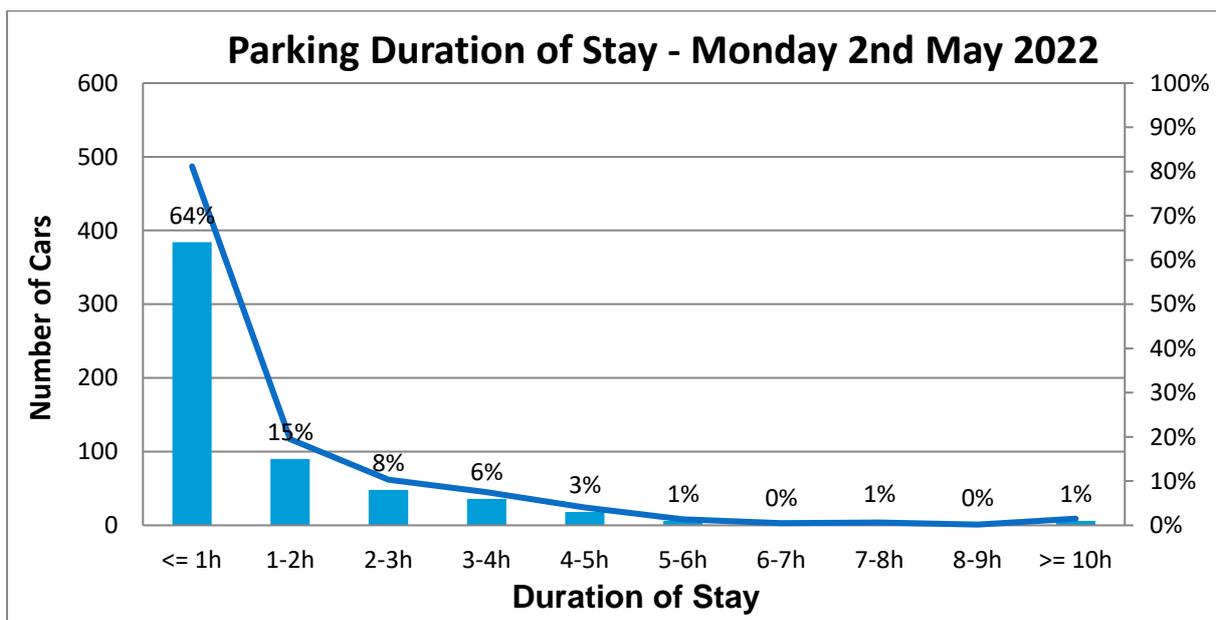


Figure 8 – Observed Duration of Stay (hours) – Monday 2nd May 2022

5.5.1.2 Wednesday 4th May 2022

There was a total turnover of 767 vehicles over the course of the day. Similarly to Monday, on the Wednesday about 63% of all vehicles parked for 1 hour or less, 17% staying 2 hours or less and 9% staying 3 hours or less. There was a total of 5 cars that stayed for 10 hours or more in the same car parking spot over the course of the day.

Table 6 – Observed Duration of Stay (Hours) – Wednesday 4th May 2022

Hours	<= 1h	1-2h	2-3h	3-4h	4-5h	5-6h	6-7h	7-8h	8-9h	>= 10h
Total Turn Over	767	767	767	767	767	767	767	767	767	767
Vehicles @ DOS	487	130	67	38	18	11	4	4	3	5
Percentage	63%	17%	9%	5%	2%	1%	1%	1%	0%	1%

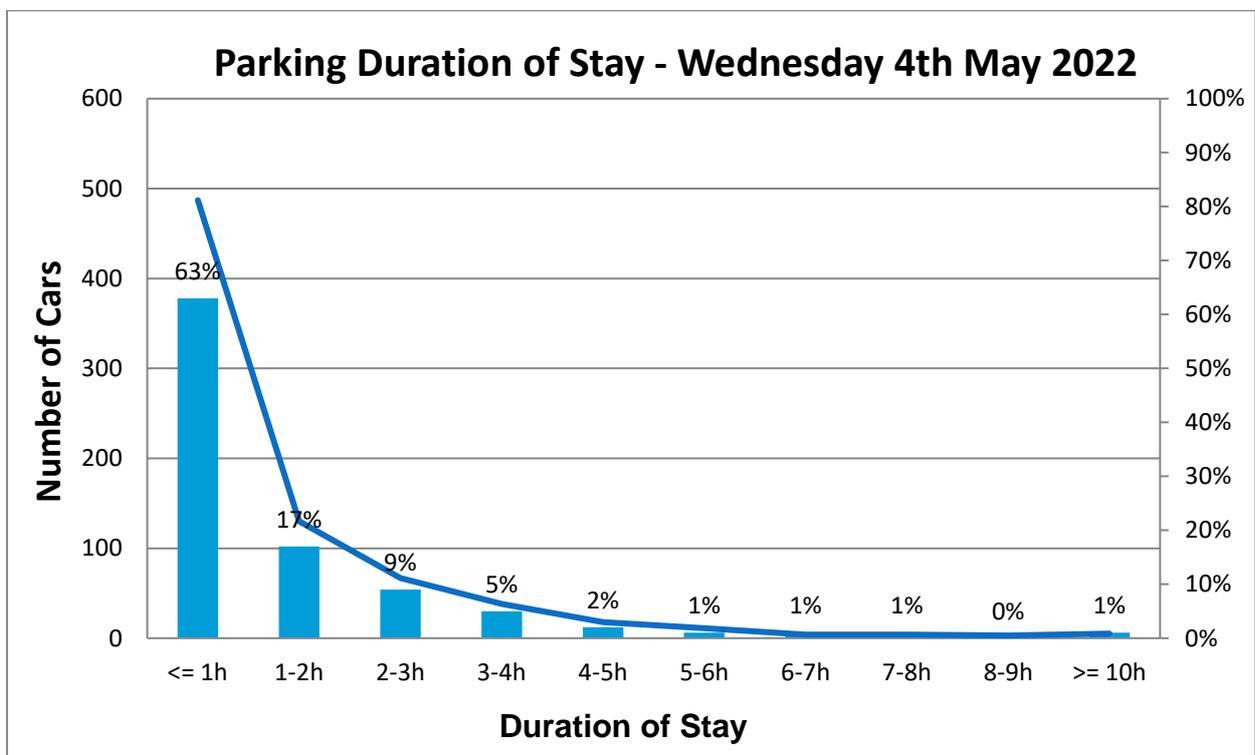


Figure 9 – Observed Duration of Stay (hours) – Wednesday 4th May 2022

5.5.1.3 Thursday 5th May 2022

There was a total turnover of 770 vehicles over the course of the day. Similarly to Monday and Wednesday on the Thursday about 65% of all vehicles parked for 1 hour or less, 14% staying 2 hours or less and 10% staying 3 hours or less. There was a total of 6 cars that stayed for 10 hours or more in the same car parking spot over the course of the day.

Table 7 – Observed Duration of Stay (Hours) – Thursday 5th May 2022

Hours	<= 1h	1-2h	2-3h	3-4h	4-5h	5-6h	6-7h	7-8h	8-9h	>= 10h
Total Turn Over	770	770	770	770	770	770	770	770	770	770
Vehicles @ DOS	498	110	75	39	21	10	5	3	3	6
Percentage	65%	14%	10%	5%	3%	1%	1%	0%	0%	1%

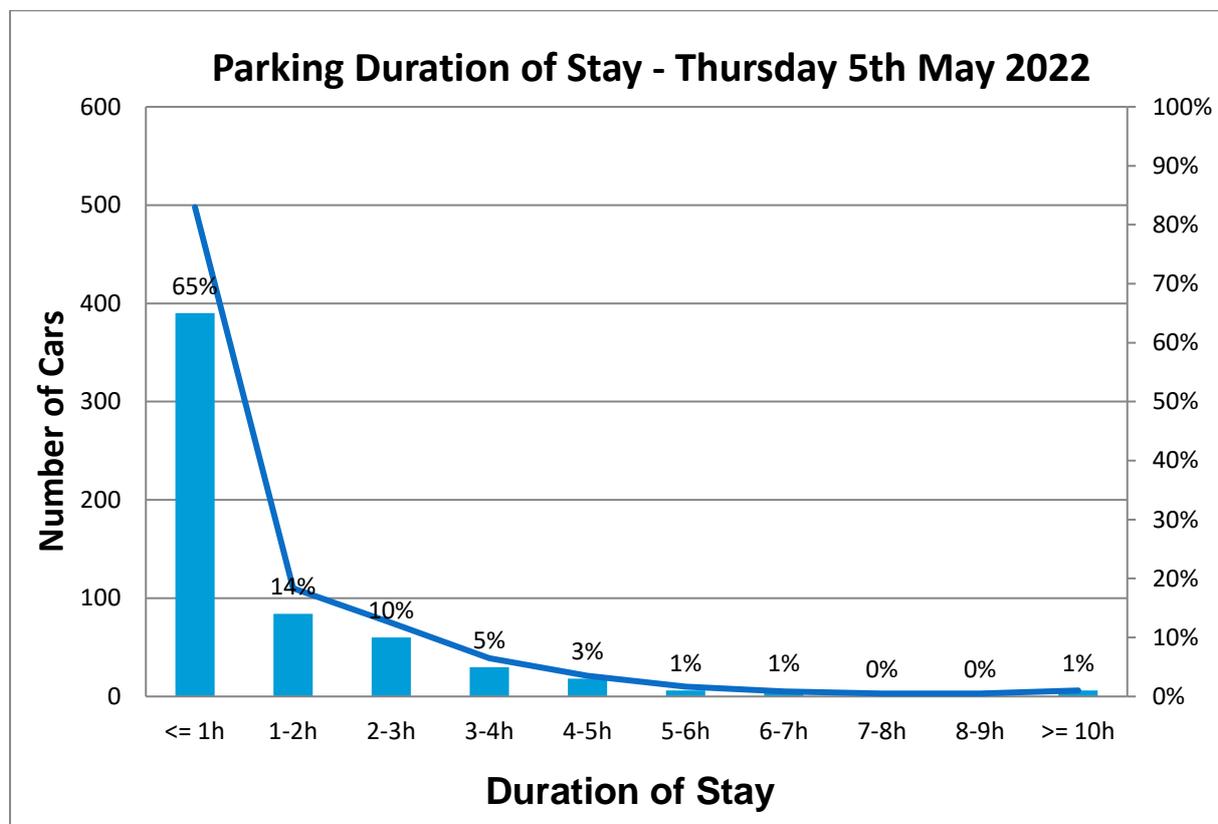


Figure 10 – Observed Duration of Stay (hours) – Thursday 5th May 2022

5.5.1.4 Friday 6th May 2022

There was a total turnover of 822 vehicles over the course of the day. Similarly to Monday, Wednesday and Thursday on the Friday about 65% of all vehicles parked for 1 hour or less, 16% staying 2 hours or less and 8% staying 3 hours or less. There was a total of 6 cars that stayed for 10 hours or more in the same car parking spot over the course of the day.

Table 8 – Observed Duration of Stay (Hours) – Friday 6th May 2022

Hours	<= 1h	1-2h	2-3h	3-4h	4-5h	5-6h	6-7h	7-8h	8-9h	>= 10h
Total Turn Over	822	822	822	822	822	822	822	822	822	822
Vehicles @ DOS	528	130	65	46	20	11	7	5	4	6
Percentage	65%	16%	8%	6%	2%	1%	1%	1%	0%	1%

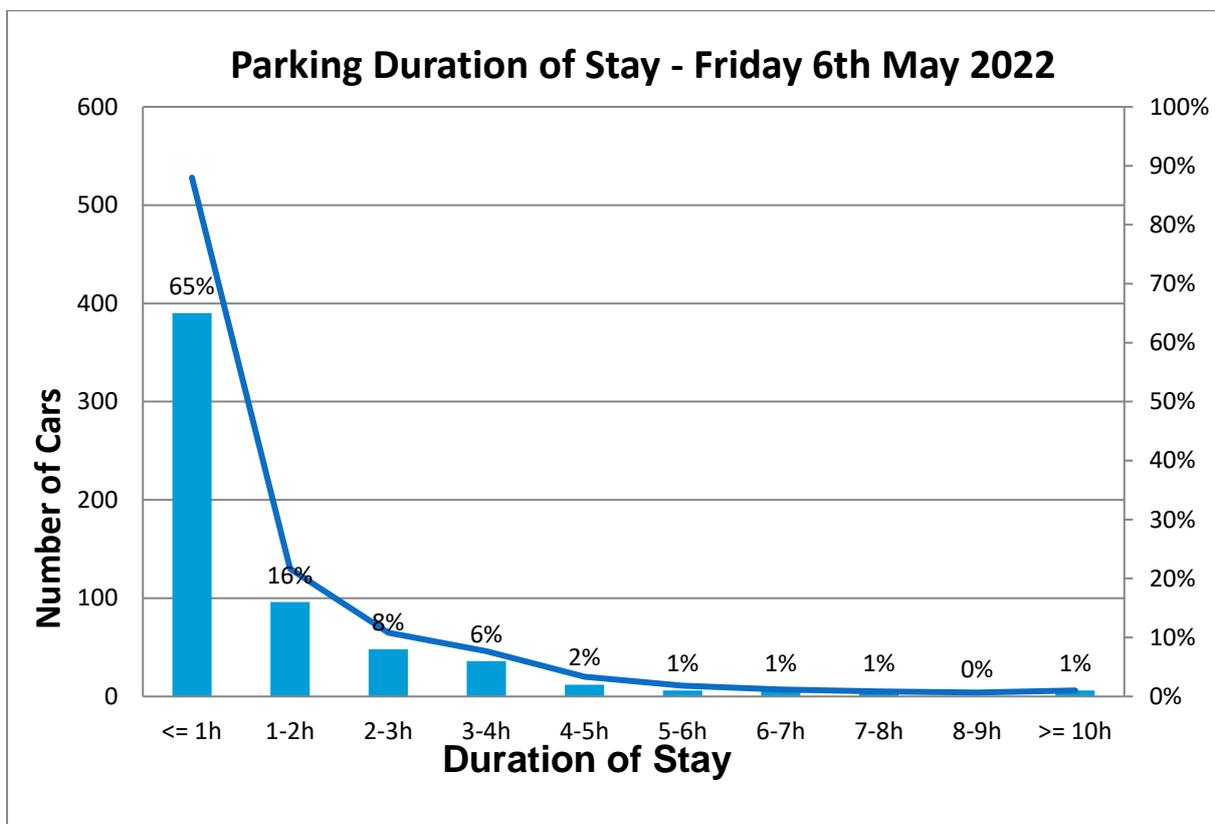


Figure 11 – Observed Duration of Stay (hours) – Friday 6th May 2022

5.5.1.5 Saturday 7th May 2022

There was a total turnover of 617 vehicles over the course of the day. About 61% of all vehicles parked for 1 hour or less, 19% staying 2 hours or less and 11% staying 3 hours or less. There was a total of 1 car that stayed for 10 hours or more in the same car parking spot over the course of the day.

Table 9 – Observed Duration of Stay (Hours) – Saturday 7th May 2022

Hours	<= 1h	1-2h	2-3h	3-4h	4-5h	5-6h	6-7h	7-8h	8-9h	>= 10h
Total Turn Over	617	617	617	617	617	617	617	617	617	617
Vehicles @ DOS	377	120	69	25	13	7	4	0	1	1
Percentage	61%	19%	11%	4%	2%	1%	1%	0%	0%	0%

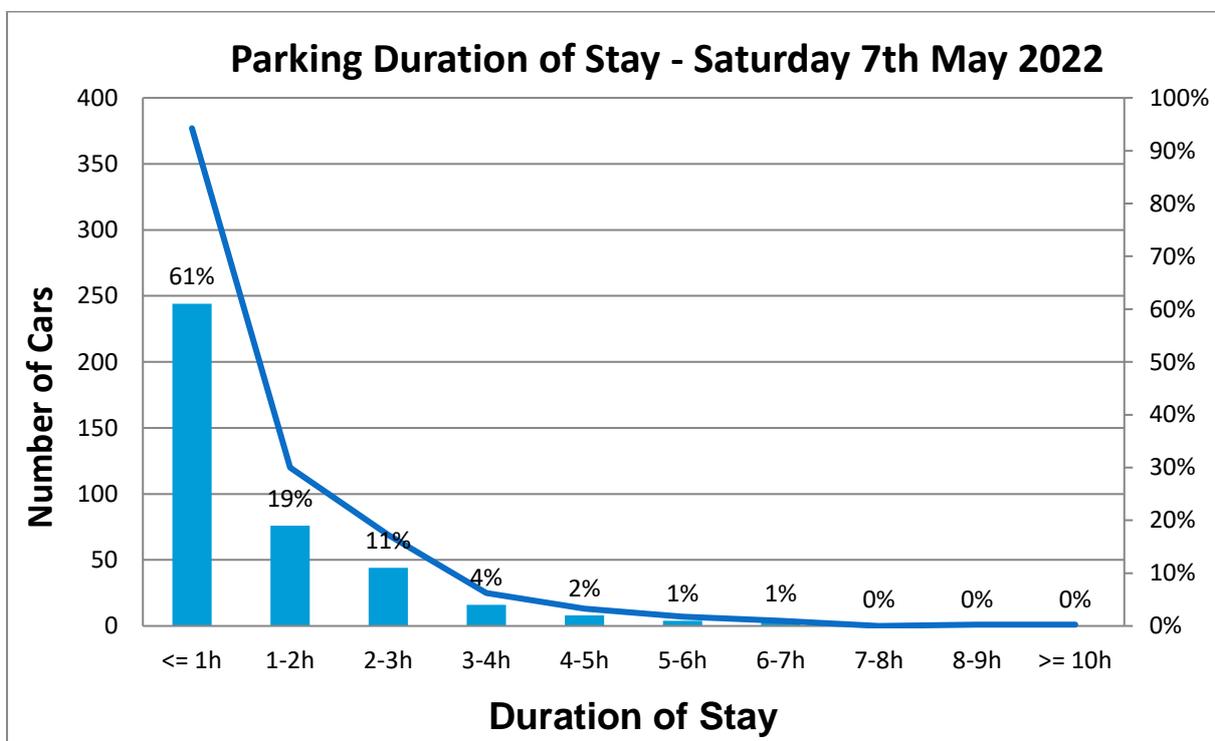


Figure 12 – Observed Duration of Stay (hours) – Saturday 7th May 2022

Table 10 below displays the occupancy rates for each parking restriction across each day, as well as the average rate. Table 11 shows the duration of stay that occurred at each parking restriction type for each day, including the average duration of stay and the average overstay. Table 12 displays the observed number of overstays for different parking restriction types across each day.

Table 10 – Observed Occupancy Rate per Parking Restriction Type

Parking Restriction	No. Spaces	Occupancy Rates / Day %					
		Monday	Wednesday	Thursday	Friday	Saturday	Average Occupancy Rate
Unrestricted	404	20%	23%	23%	27%	18%	22%
2P	58	52%	56%	49%	50%	57%	53%
1P	53	34%	33%	33%	32%	35%	33%
1/2P	5	45%	58%	53%	53%	15%	45%
Disabled Bays	16	21%	22%	47%	41%	29%	32%
Loading Zones	3	36%	9%	21%	55%	27%	30%
Long Vehicle	3	0%	0%	0%	0%	0%	0%
No Stopping (part time)	10	9%	7%	9%	0%	1%	5%
Bus Only	1	0%	0%	0%	0%	0%	0%
Tenants/Visitors to Tech Centre Only	38	35%	30%	31%	34%	1%	26%
Total	591						

Table 11 – Observed Duration of Stay per Restriction type (mins)

General Restriction	Trafalgar Study Area Average DoS* (mins)						
	Monday	Wednesday	Thursday	Friday	Saturday	Average DoS over survey period	Average Overstay
Unrestricted	66	0	30	60	48	NA	NA
2P	72	30	30	30	66	46	NA
1P	30	84	72	72	102	72	12
1/2P	48	66	66	78	54	62	32
Disabled Bays	72	48	48	42	24	NA	NA
Loading Zones	54	90	114	150	96	NA	NA
Long Vehicle	0	0	0	0	0	NA	NA
No Stopping (part time)	18	18	24	0	6	NA	NA
Bus Only	0	0	0	0	0	NA	NA
Tech Centre Tenants	96	60	66	78	0	NA	NA

*DoS refers to Duration of Stay

Table 12 – Observed Number of Overstays

General Restriction	Trafalgar Study Area Overstays					Total
	Monday	Wednesday	Thursday	Friday	Saturday	
1/2P	4	4	5	2	0	15
1P	35	45	34	30	0	144
2P	36	40	32	43	0	151

Note: Disabled Bays, Loading Zones and unrestricted areas were not included for analysis of overstays

Overstay Areas

As seen in Table 12, overstay data was collected for the restricted parking zones. For the 1/2P, data was unable to be obtained due to hourly data collection. 1P saw an average overstay of 12 minutes, while 2P areas average duration of stay was less than the time restriction by approximately an hour.

5.5.2 Compliance with Parking Restrictions

Section 5.5.1 above illustrated the duration of stay information. Below is a summary of the observations that were made:

Unrestricted Parking Areas

- Unrestricted parking areas within the study area are not being effectively used, with occupants utilising the spaces for an average of just under an hour, with the longest period being just over an hour.
- Shorter time restricted parking spaces saw the most overstay, while the longest time restricted parks saw the most under stay.
- The data indicates there is a greater demand for 1-2P parking within the study area.

½ P Parking Areas

- The data indicates that time restrictions for these parks are not being met, with the average duration of stay being approximately an hour (double the permitted time for these spaces). The lowest average stay was over the allocated time for the spaces at 48 minutes.
- The data may indicate that there is a need for extended time restricted parking in the 1/2P area due to the average duration of stay. This could be due to the businesses located in this area. Despite this, the shorter time restricted parks are necessary for shorter trips such as drop off/pickups.

- The average duration of stay being higher than the allocated time for these parks may also be due to a lack of enforcement of the restrictions in the area. This could potentially be contributing to unwanted overstay parking practices.
- There are 5 - 1/2P parking spaces in the study area, each of them is on the southern side of Princes Highway. Across the 5-day period, 15 overstays were recorded in these spaces. Occupancy rates for the 1/2P spaces were between 45-60% across the study period, other than Friday which had an occupancy rate of 15%.

1P Parking Areas

- The 1P parking spaces are located on each side of Contingent Street and contained an average duration of stay of 72 minutes. The shortest duration of stay was 30 minutes on Monday, while the longest was 102 minutes on Saturday. From analysing the data, it can be concluded that 1P may not be enough time for the area. It should be noted that additional time in this area would see a reduction in parking turnover and a decrease of the number of short-term parking.
- Similarly, to the 1/2P parking, the lack of enforcement may be the reason behind overstay behaviour occurring.
- A total of 144 overstays were recorded across the study period for 1P parking spaces. The occupancy rates for 1P spaces ranged from 30-35%, with Saturday having the highest occupancy rate of 35%.

2P Parking Areas

- All the 2P parking spaces are located to the west of Contingent Street and contained an average duration of stay of 42 minutes. The data indicates there is little demand for long term parking within this area. Changing some of the 2P parking to 1P parking may assist in balancing the overstay numbers for 1P parking without hindering the long-term parking options. A total of 151 overstays were recorded in the 2P parking spaces. The occupancy rates for 2P spaces ranged from 49% to 57%.

5.6 Contingent Street – Key Observations

Contingent Street is one of the busiest roads in Trafalgar and as seen in the data, has the highest occupancy rates for parking. The data analysis undertaken has displayed parking trends for the entire study area, however this does not accurately represent certain parts of Trafalgar as the parking occupancy and duration of stay rates can vary across the town due to various factors. As such, the data has been broken down into areas to better show the parking usage patterns.

Contingent street is one of the main connectors through the town, hosting many local businesses and essential services for the community. Additionally, it is the main connector for residents to the Trafalgar train station. Contingent Street acts as the main access route to the Depot Lane carpark and the off-street carpark between Contingent Street and McCrorey Street.

Contingent Street has 11 unrestricted parking spaces, with an additional 2 being disabled parking spaces. These are located on the southern side on Kitchener Street towards the public hall. The remainder of the parking is 1P parking spaces located between Princes Highway and Kitchener Street, with 28 spaces, and 1 disabled parking space. A summary of the key observations can be seen below.

- Peak occupancy rate aligned with the entire study area, with the highest rates occurring between 13:00pm – 14:00pm. Saturday recorded the highest occupancy rate of 50%.
- Across the 5-day period, most patrons stayed for an hour, with an average of 82% of vehicles staying an hour or less.
- Weekdays saw an average of 89% of patrons staying for an hour or less, and 8% for up to 2 hours. An average under stay of 36 minutes was seen on the weekdays.
- Saturday saw 56% of patrons staying for an hour or less, with 22% staying for up to 2 hours. An overstay of 24 minutes was seen on Saturday.
- With the highest occupancy rate at 50%, and 89% of patrons staying the one hour or less, it can be concluded that 1P is adequate for the area. However, some 1P spaces could be converted to 2P spaces to account for the overstay seen on Saturday. It is also recommended that enforcement of parking restrictions is increased to discourage unwanted overstay behaviour.

Please refer to Appendix C for occupancy rates and duration of stays in Contingent Street

5.7 Depot Lane and McCrorey Street off-street carparks – Key Observations

Depot Lane travels from east to west through Trafalgar and is home to 2 major carparks. The north-eastern carpark contains 37 unrestricted parking spaces, 2 disabled spaces, 3 for long vehicles, and ten spaces designated to the mobile library. This space is for the mobile library between 8:00am – 1:30pm on Tuesdays and 8:00am – 6:30pm on Fridays. The north-western carpark (referred to as the McCrorey Street off-street carpark) holds 18 unrestricted parking spaces, 3 disabled spaces, 3 loading zones, and 58 2P parking spaces. Both carparks have many local businesses surrounding them, including restaurants, cafes, banks, post office, and medical centres. Key observations for these carparks are listed below:

North-eastern carpark (Depot Lane off-street carpark):

- The average occupancy rate across weekdays for unrestricted spaces was 61%, and 28% on Saturday.
- The average duration of stay across weekdays was 42% for one hour or less, and 22% for up to 2 hours.
- With occupancy rates at an average of 61% on weekdays, it can be concluded that there is adequate parking currently. As the town grows, it is recommended that some of the parks be converted into shorter term parking to increase the parking turnover.

North-western carpark (McCrorey Street off-street carpark):

- The average occupancy rate across weekdays for unrestricted spaces was 53%, and 76% on Saturday.
- The average occupancy rate across weekdays for 2P spaces was 52%, and 57% on Saturday.
- The average duration of stay across weekdays was 73% for one hour or less, and 16% for up to 2 hours.
- The duration of stay on Saturday was 56% for one hour or less, and 21% for up to 2 hours.
- With occupancy rates at an average of just over 50% on weekdays for unrestricted spaces, it can be concluded that there is adequate parking currently. However, the occupancy rate of 76% seen on Saturday is significant and could be addressed. With average duration of stay being predominately less than hour, it is recommended that some of the parks be converted into shorter term parking to increase the parking turnover.

Please refer to Appendix D for occupancy rates and duration of stays in Depot Lane

5.8 Parking Analysis by Restriction Type

Figure 13 below displays the supply of parking broken down by the restriction types.

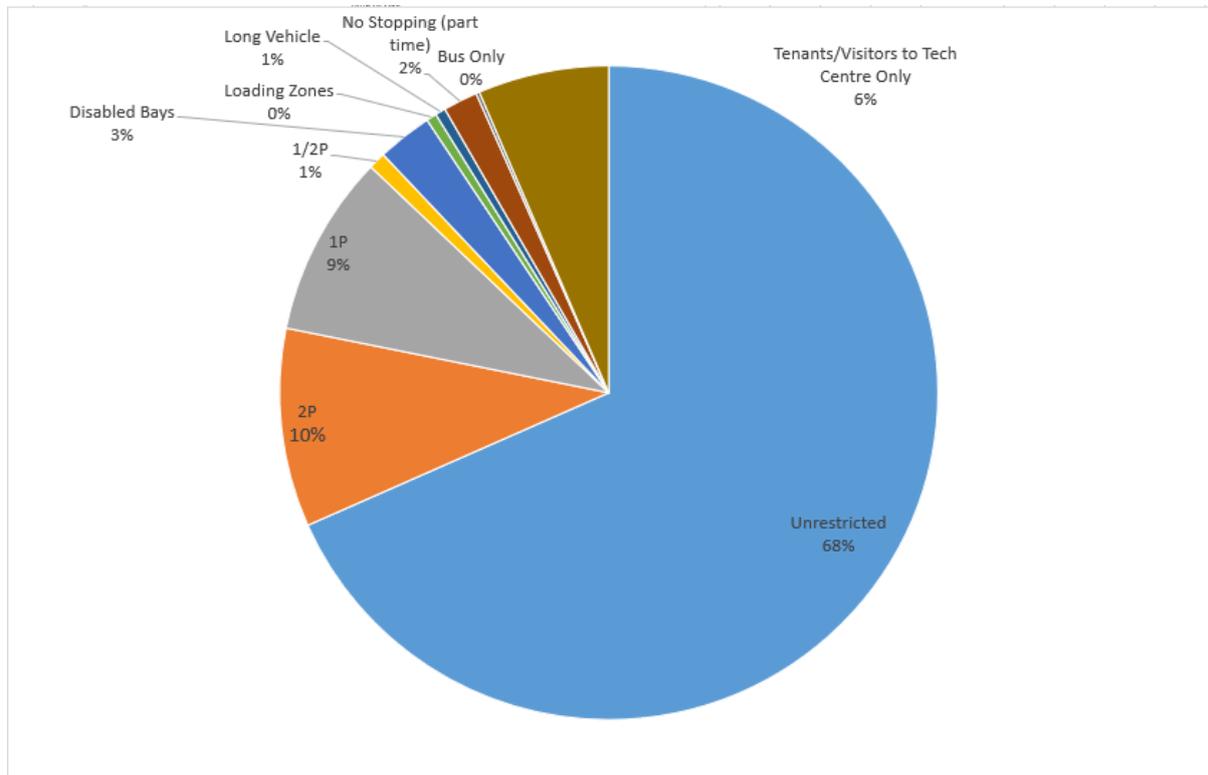


Figure 13 – Supply of Parking by Restriction Type

- The duration of stay data showed that most patrons stay for one hour or less, however 1P spaces only made up 9% of the total supply. Additionally, between 1 to 2 hours was the next the most common duration of stay, however 2P parking only makes up 10% of the total supply. As analysed in sections 4.6 and 4.7, patrons' occupancy rates for the main CBD area were around the 50-60% range, with a majority stay of one hour or less, even in unrestricted parking spaces. This shows there is a greater demand for shorter term parking, despite unrestricted parking holding a majority of the supply (68% of the total supply).
- The supply for unrestricted parking is 68%, however the demand is for shorter term parking. With 404 unrestricted spaces, it is recommended that some of the unrestricted parking around the CBD (close to local businesses) be converted into short term parking.

5.8.1 On-street Parking Areas

On-street and off-street parking have their own benefits. On-street parking is required in CBD areas hosting local businesses to ensure an ease of access to these services, especially to smaller/family-owned businesses. Keeping on-street parking to shorter time restrictions is common and generally encouraged to create a higher turn-around of vehicles throughout the day. Longer term parking (anything over 2P) is often discouraged as it slows parking turnover around the business area. Short term on-street parking generally contains a mix of 1/4P, 1/2P and 1P parking spaces to create a high parking turnover, ensuring high occupancy rates, and discouraging long duration of stay. Trafalgar currently has 5 - 1/2P parking spaces and no 1/4P spaces.

Additionally, 1P parking makes up about 9% of the total supply in Trafalgar, with all 53 spaces being on-street parking. The duration of stay data indicated that most patrons stay for one hour or less (over 50%), showing a high demand for short term parking across the CBD area and suggesting a need to convert some unrestricted parking for shorter-term parking.

With only an average occupancy rate of 22%, patrons looking for short term parking are unlikely to have compete with long term parking patrons. However, most of the unrestricted parking spaces are in designated parking lots around businesses. Section 4.7 demonstrated that the 2 carparks close to all the local businesses maintain an average occupancy rate around 50-60%, with most patrons saying for an hour or less, further indicating the demand for short term parking and lack of competition with long term parking patrons.

5.8.2 Off-street Parking Areas

Table 13 below displays the parking supply by restriction type for off-street parking areas.

Table 13 – Off-street Parking Supply via Restriction Type

Parking Restriction	Off-Street Parking
	Supply
Unrestricted	191
2P	58
1P	0
1/2P	0
Disabled Bays	10
Loading Zones	3
Long Vehicle	3
No Stopping	10
Bus Only	1
Tenants/Visitors to Tech Centre Only	38

As observed from the data, Trafalgar has many unrestricted parking spaces, both off-street and on-street. Much of the off-street parking is located around the CBD and within walking distance of local businesses. The off-street parking spaces should be safe and accessible to patrons and ideally, potential to expand for future population growth. Notable off-street council parking include:

- Depot Lane – Northeast carpark (Council) – 37 unrestricted spaces + 2 disabled bays.
- Depot Lane – Northwest carpark (Council) – 18 unrestricted spaces + 58 2P spaces + 3 disabled bays.
- McCrorey Street Western carpark (Owned by IGA) – 50 unrestricted spaces.
- Public Hall on Contingent Street carpark (Council) – 27 unrestricted spaces + 2 disabled bays.
- Railway Station carpark – 27 unrestricted spaces + 1 disabled bay.

The accessibility to these carparks is adequate and they are located appropriately relative to local businesses. Additionally, as seen in Section 4.7, the carparks have sufficient occupancy rates, however the demand for shorter term parking is apparent.

The Trafalgar Technology Centre carpark has been omitted from the analysis due to it being privately owned.

6.0 Summary

Listed below are the major findings from the Trafalgar CBD Parking Study:

1. The total of 591 parking spaces within the Trafalgar CBD study area included 277 on-street spaces and 314 off-street spaces.
2. The highest occupancy rates were detected midday between 12pm – 2pm generally with the peak occupancy rate occurring at midday on Friday at 36%.
3. Contingent Street experienced the highest occupancy rate at 65% peaking at 1pm on the Wednesday.
4. For the time restricted spaces, 1/2P parking areas (5 available spaces) contained the highest occupancy rates with 58%. The next highest was in the 2P areas (58 available spaces) with 57% followed by 1P (53 available spaces) with 35%.
5. For the 404 unrestricted parking spaces available, the highest occupancy rate was 27% and the average occupancy was 22%.
6. There are 16 disabled parking bays available of which the highest daily occupancy was 47%.
7. The average duration of stay across each of the days was approximately 64% for patrons parking one hour or less and approximately 16% stayed between 1 to 2 hours. Demand for short term parking is higher than long term parking, however there is a much greater supply of unrestricted areas to accommodate this demand.
8. A lot of overstay were detected within short term parking areas (1/2P – 15, 1P – 144 and 2P – 151), a total of 310 overstay vehicles were detected during the entire study period of five days in short-term parking bays.
9. Census data revealed a growth rate of up to 2.3% for the Trafalgar region, suggesting the population could grow to 4,875 by 2031. Utilising today's highest parking occupancy rate of 36%, the expected average parking occupancy rate within Trafalgar in 2031 is 40%.

7.0 Recommendations

Based on the parking study, the following recommendations are presented to improve parking within the study area. These recommendations are illustrated in **Appendix E** and described in more detail below.

Recommendation 1: Increase parking enforcement, as well as develop new initiatives and community education to ensure best parking practices

More enforcement and on a regular basis to assist with increasing parking turnover in the 1/2P, 1P and 2P restricted areas. An increase in parking enforcement will help develop better parking practices and create a high turnover of short-term parking. As such, underutilised long-term parking spaces will be utilised more. Additionally, educating the community via VMS boards or social media would help improve parking practices and increase parking turnover.

Recommendation 2: Improve parking turnover in Depot Lane and McCrorey Street carparks

The survey data displayed a high demand for short-term parking with 73% staying an hour or less. Converting the 2P spaces to 1P in the McCrorey Street carpark and the unrestricted to 2P in the Depot Lane carpark and part of the McCrorey Street carpark will increase parking turnover and better meet the community demand. The northern three rows of parking to be converted to 1P and the most southern row to be 2P only in the north-western carpark at McCrorey Street, while the north-eastern carpark should reduce all parking from current unrestricted to 2P in the Depot Lane carpark. It is noted that changes to parking restrictions will only work well in conjunction with increased parking enforcement. As such, increased enforcement is required if timing restrictions are to change.

Recommendation 3: Formalise the unrestricted parking spaces along both sides of Kitchener Street by installing line markings

There are currently no line markings along Kitchener Street, however parking on the side of the road is permitted along most of the road. Line marking should be implemented to improve parking and to narrow the road which will help prevent speeding. However, these works need to be scheduled in conjunction with the reconstruction of Kitchener Street, therefore the formalisation of these unrestricted parking spaces is proposed to occur within the next 5 years once Kitchener Street has been reconstructed.

Recommendation 4: Convert unrestricted spaces on the western side of McCrorey Street to long vehicle overnight stay

There are currently 19 unrestricted parking spaces along McCrorey Street with 9 on the western side that have an average occupancy rate between 30-60% on any given day. Given the lack of long vehicle spaces, these spaces should be converted into overnight long vehicle

parking spaces due to its proximity to the highway and local hotel, and the currently low occupancy rates. This is supported by the community survey that indicated they would like to see more long vehicles/caravan parking spaces.

Recommendation 5: Rectify all signage deficiencies

There are a few missing parking signs within the Trafalgar study area. These deficiencies should be rectified to remove confusion and allow enforcement. Refer to section 0 for further details.

Recommendation 6: Improve parking wayfinding signage

Access to off-street parking areas should be clear to motorists to allow them to easily access and utilise these facilities. There is a general lack of wayfinding signage to direct motorists to off-street carparks. Improvements to parking wayfinding signage should be considered as per Figure 5 in section 3.2.

7.1 Implementation plan and costing

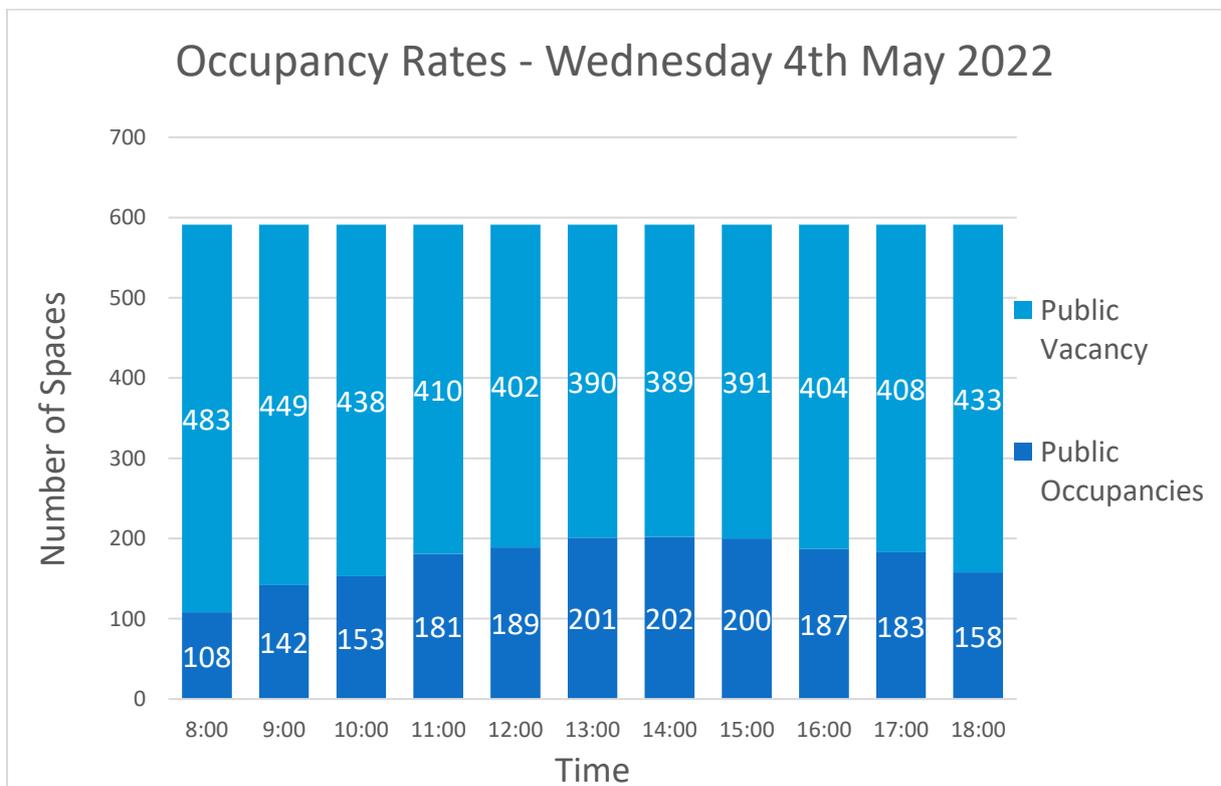
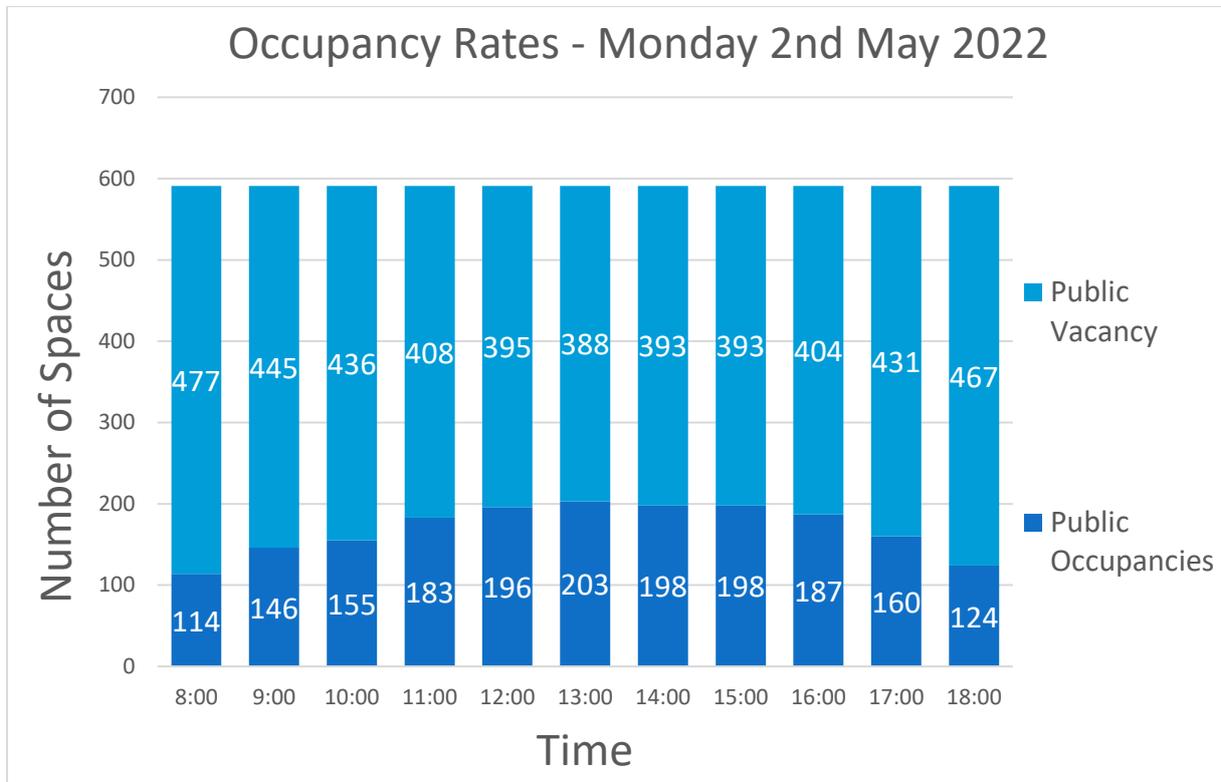
Table 14 – Trafalgar CBD Parking Study Action Plan

Recommendation		Responsible	Timing	Cost Estimate
1	Increase parking enforcement in the Trafalgar town centre area	Council's Compliance Team	Subject to success of new initiative for additional Parking Enforcement Officer, considered from 23/24 FY.	\$80,000- \$100,000
2	Improve parking turnover in Depot Lane and McCrorey Street carparks	Council's Civil Asset Planning Team	Consider in 24/25 FY pending success of new initiative for Parking Enforcement Officer in 22/23 FY	\$4,000
3	Formalise the unrestricted parking spaces along both sides of Kitchener Street by installing line markings	Council's Civil Asset Planning Team	Consider from 25/26 FY onwards pending detailed design and	\$5,000

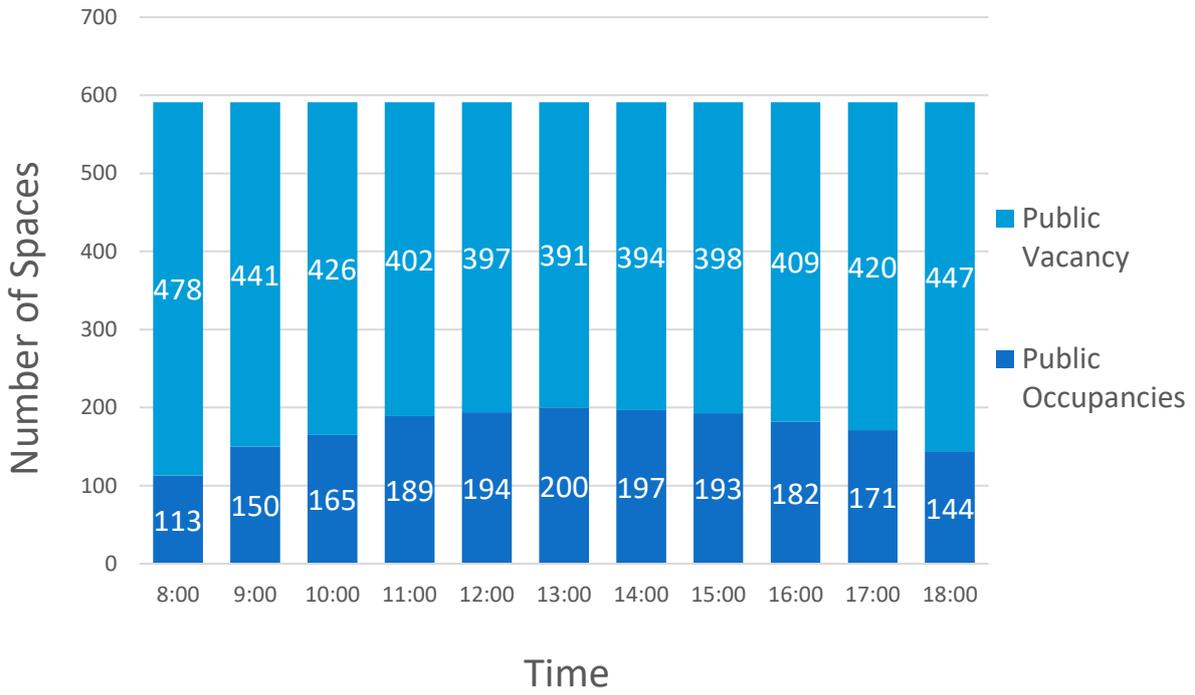
			reconstruction of Kitchener Street from 23/24 FY onwards	
4	Convert unrestricted spaces on the western side of McCrorey Street to long vehicle overnight stay	Council's Civil Asset Planning Team	FY 23/24	\$3000
5	Rectify all signage deficiencies	Council's Civil Asset Planning Team	FY 23/24	\$2,000
6	Improve parking wayfinding signage	Council's Civil Asset Planning Team	FY 23/24	\$2,000

Appendix A

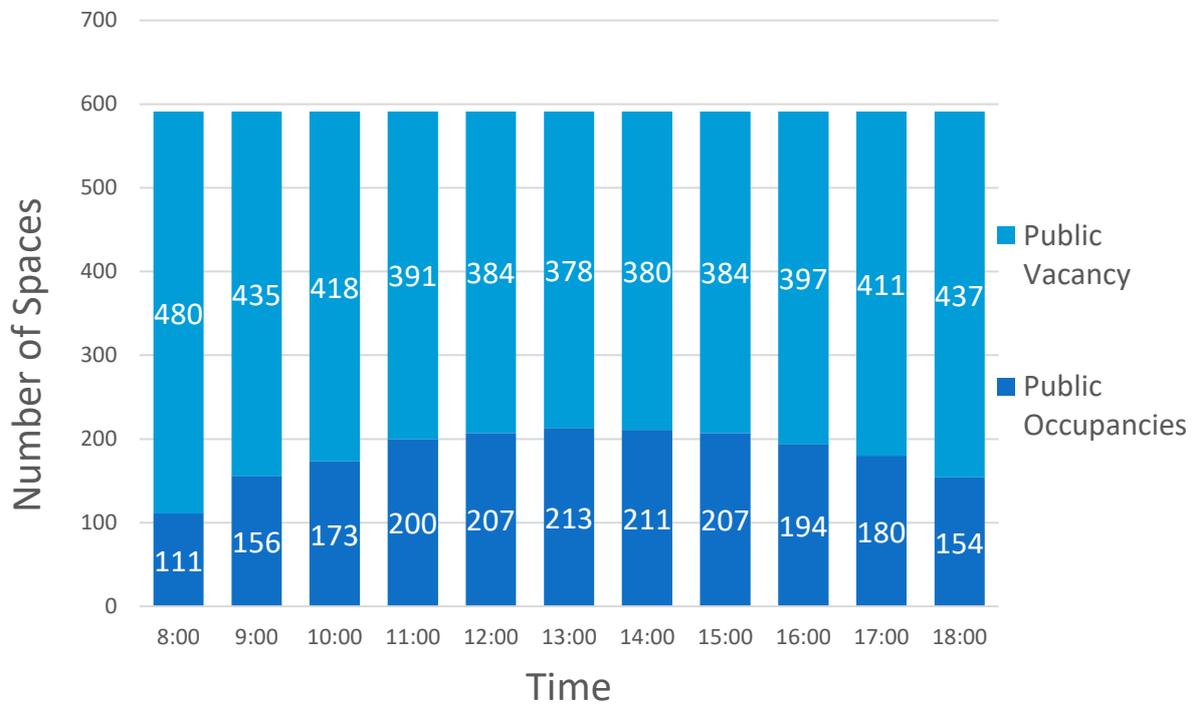
Trafalgar CBD Parking Occupancy Rates



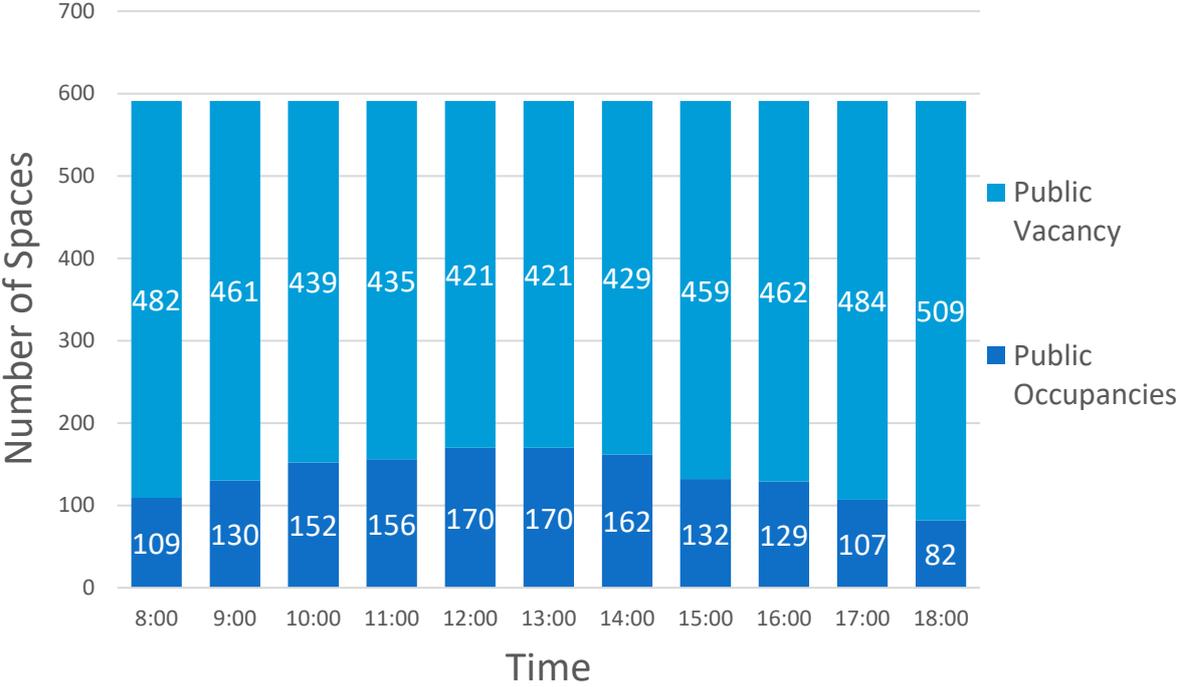
Occupancy Rates - Thursday 5th May 2022



Occupancy Rates - Friday 6th May 2022

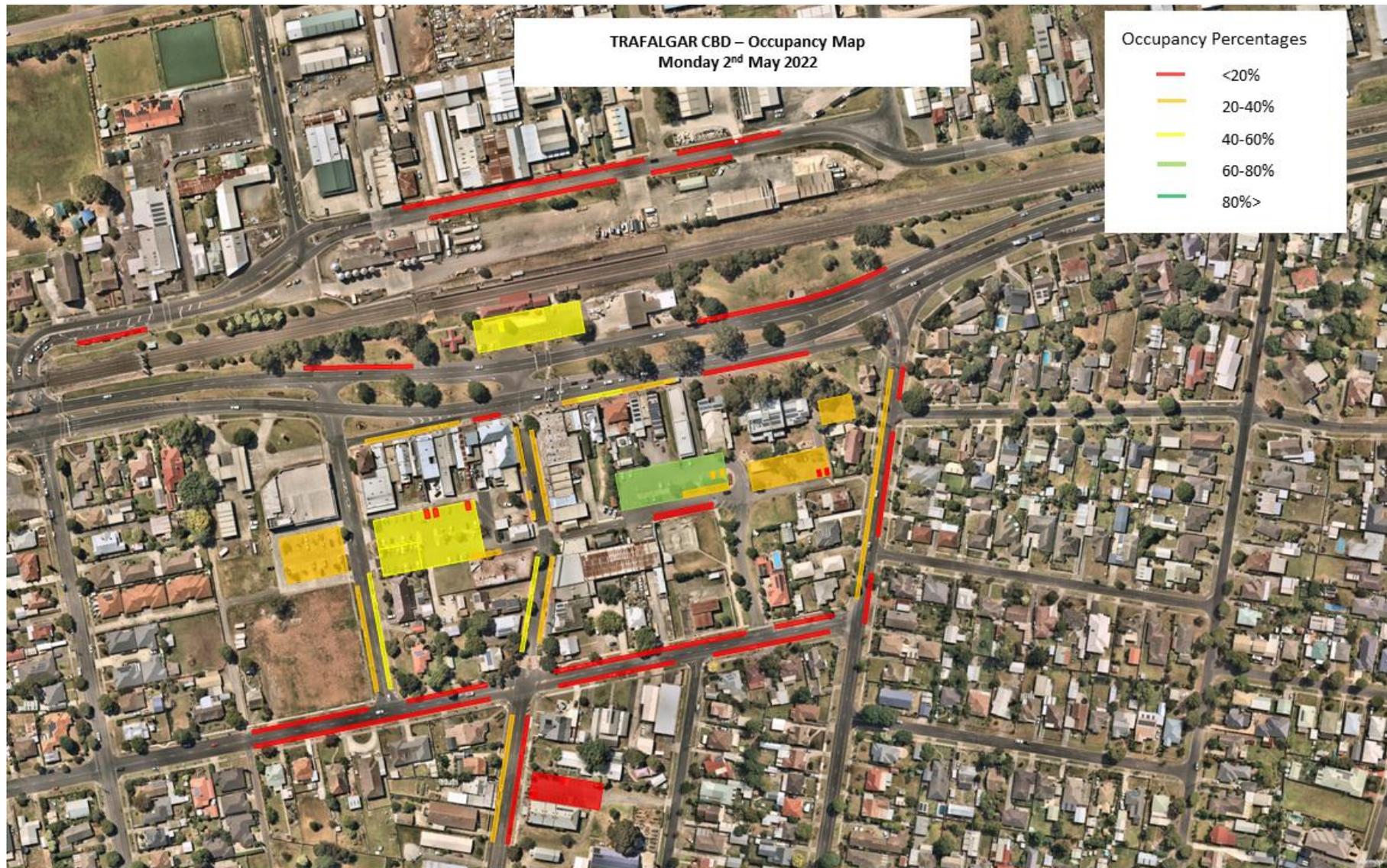


Occupancy Rates - Saturday 7th May 2022



Appendix B

Trafalgar CBD Parking Occupancy







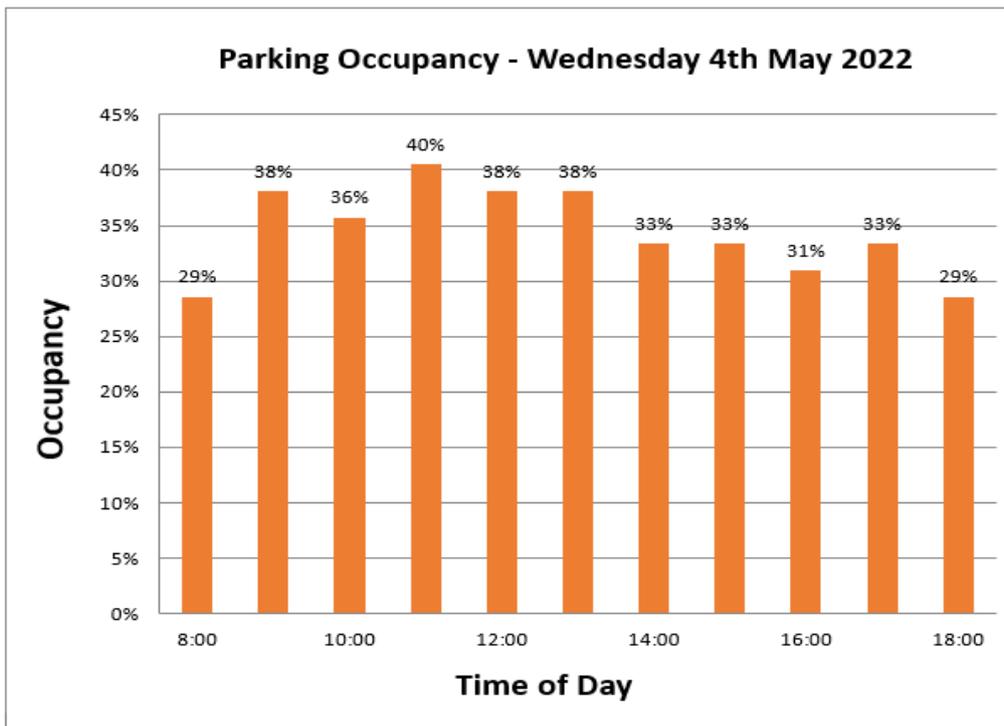
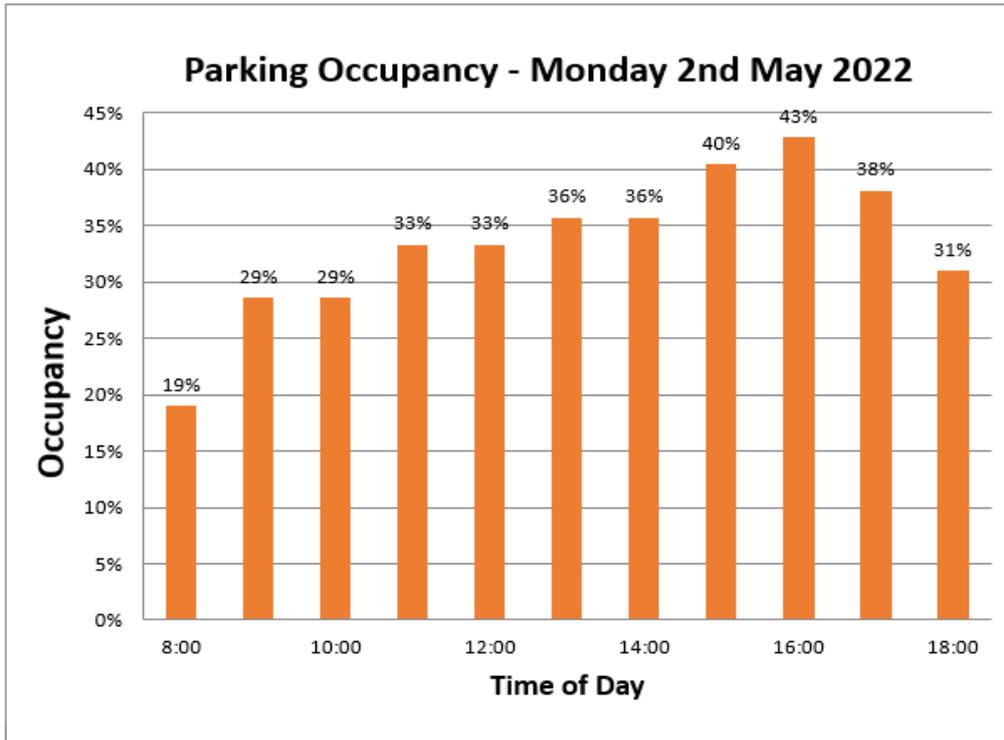




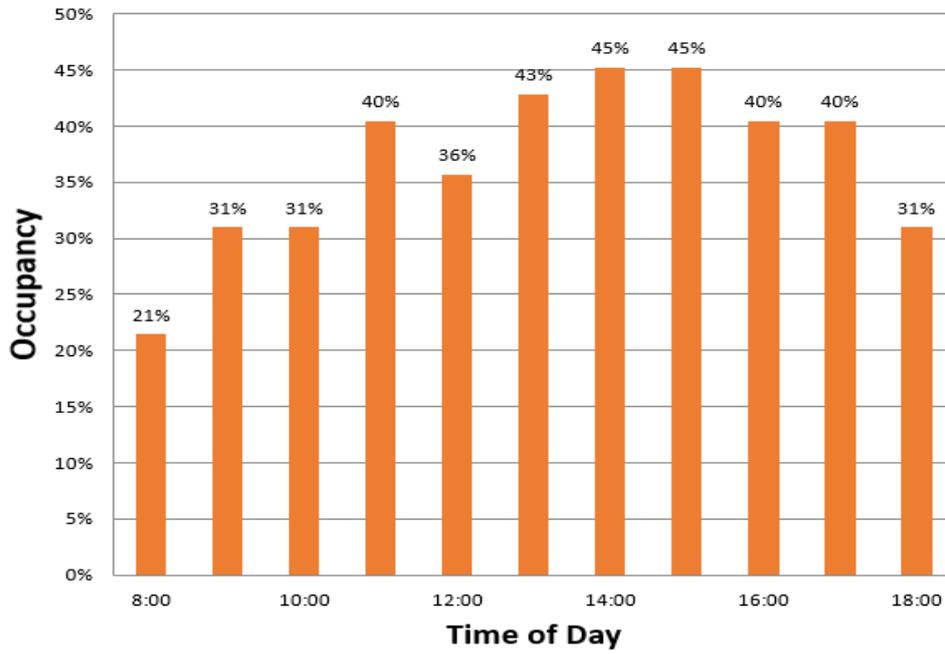
Appendix C

Contingent Street, Trafalgar – Carpark Occupancy Rates & Duration of Stay

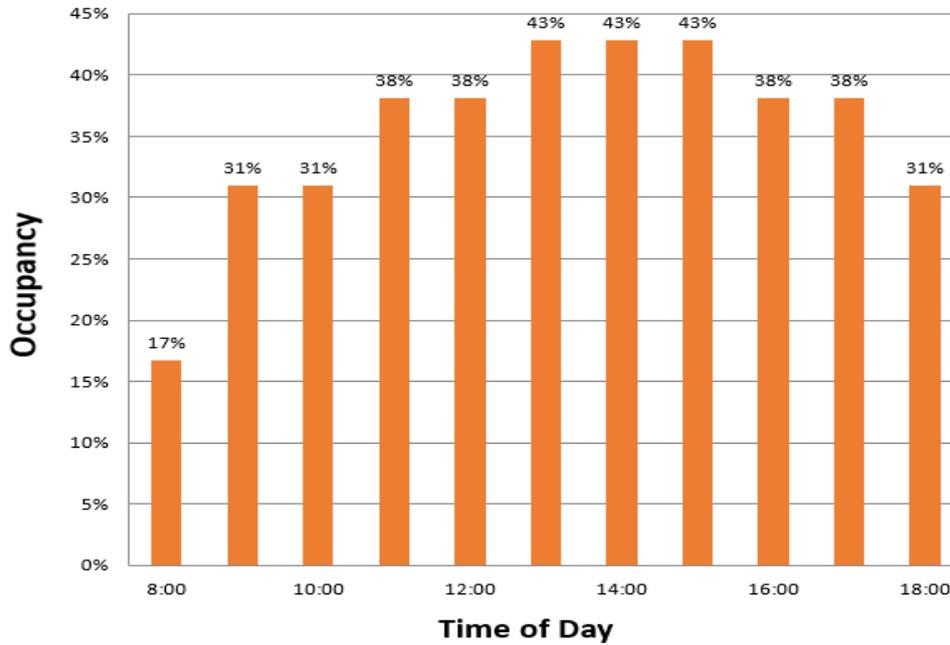
Parking Occupancy

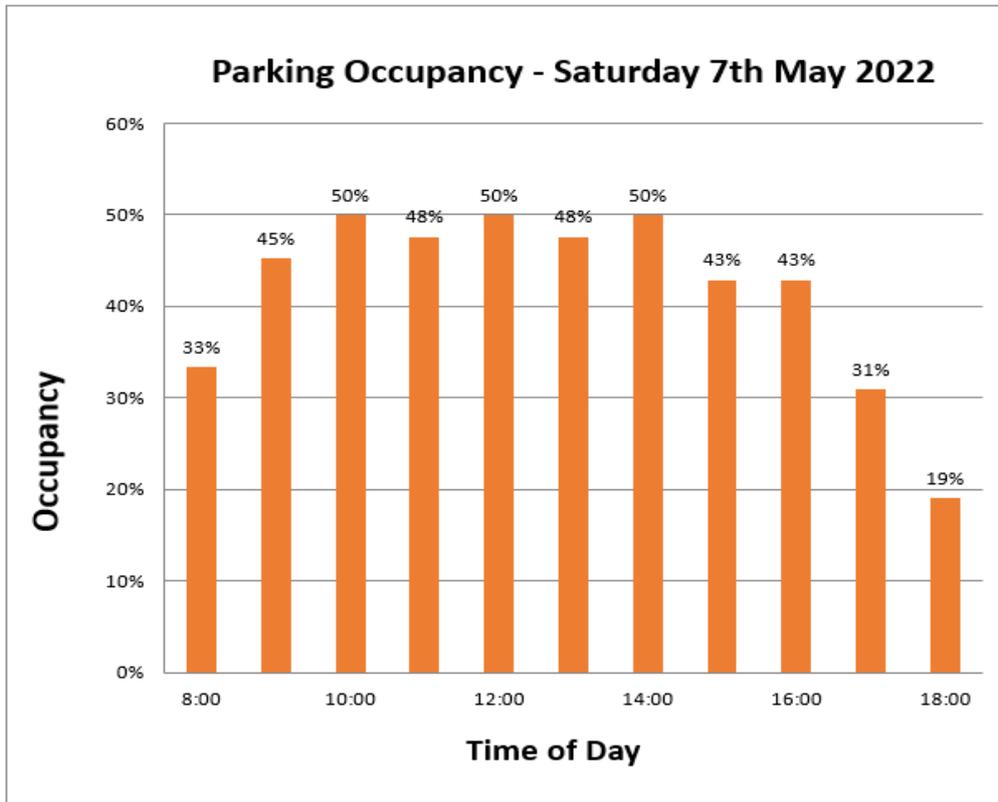


Parking Occupancy - Thursday 5th May 2022

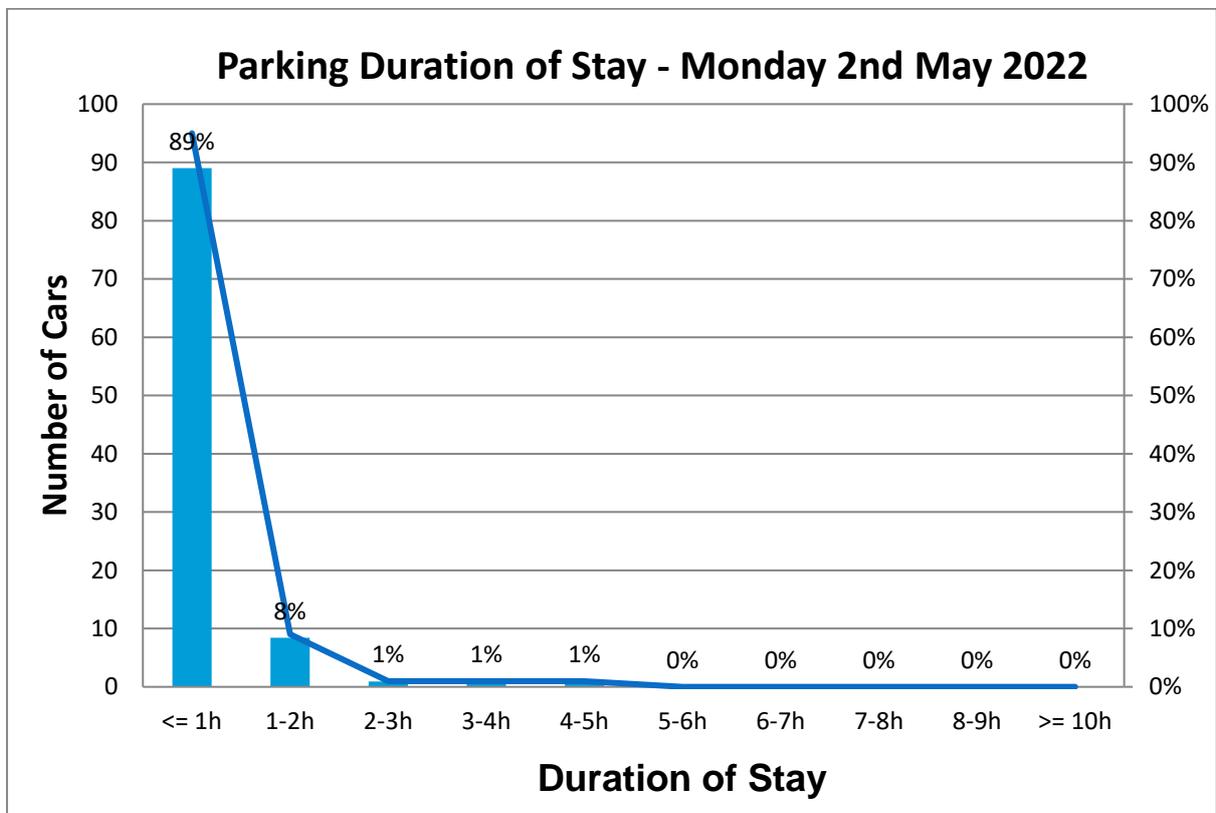


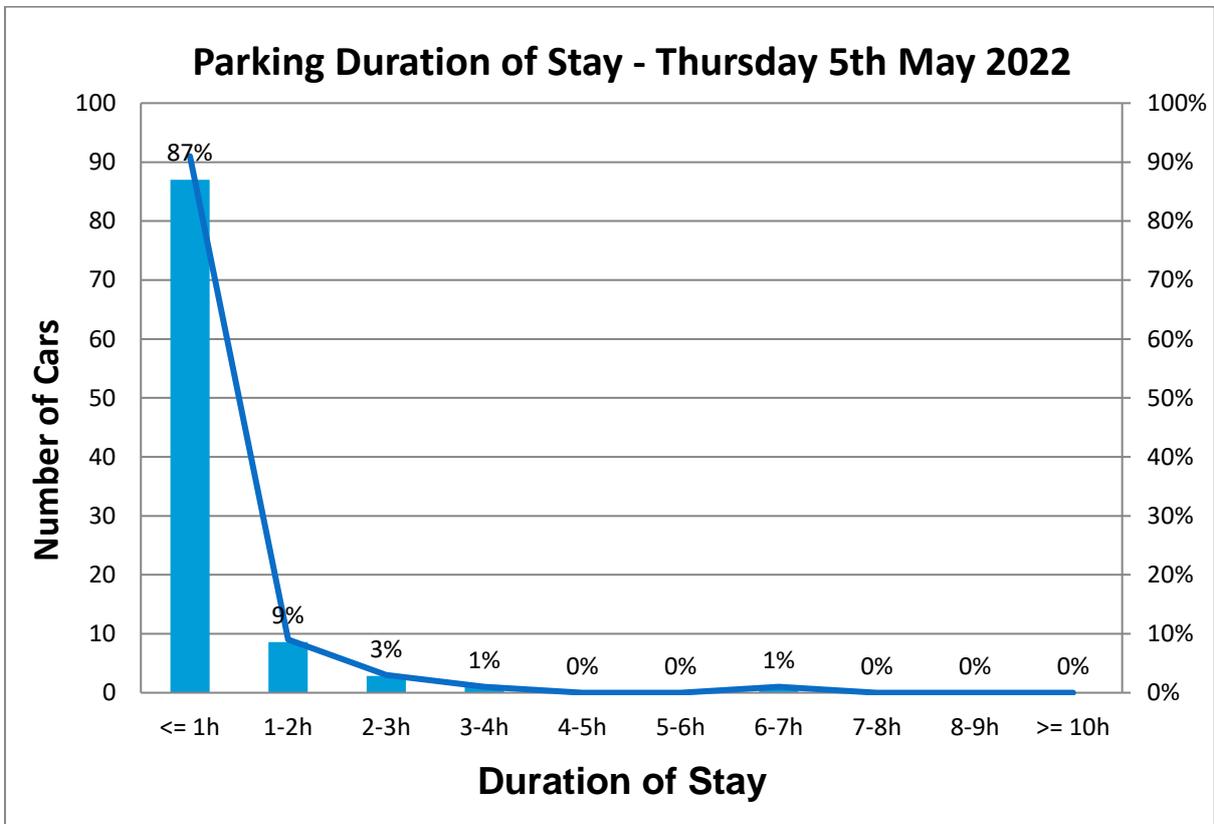
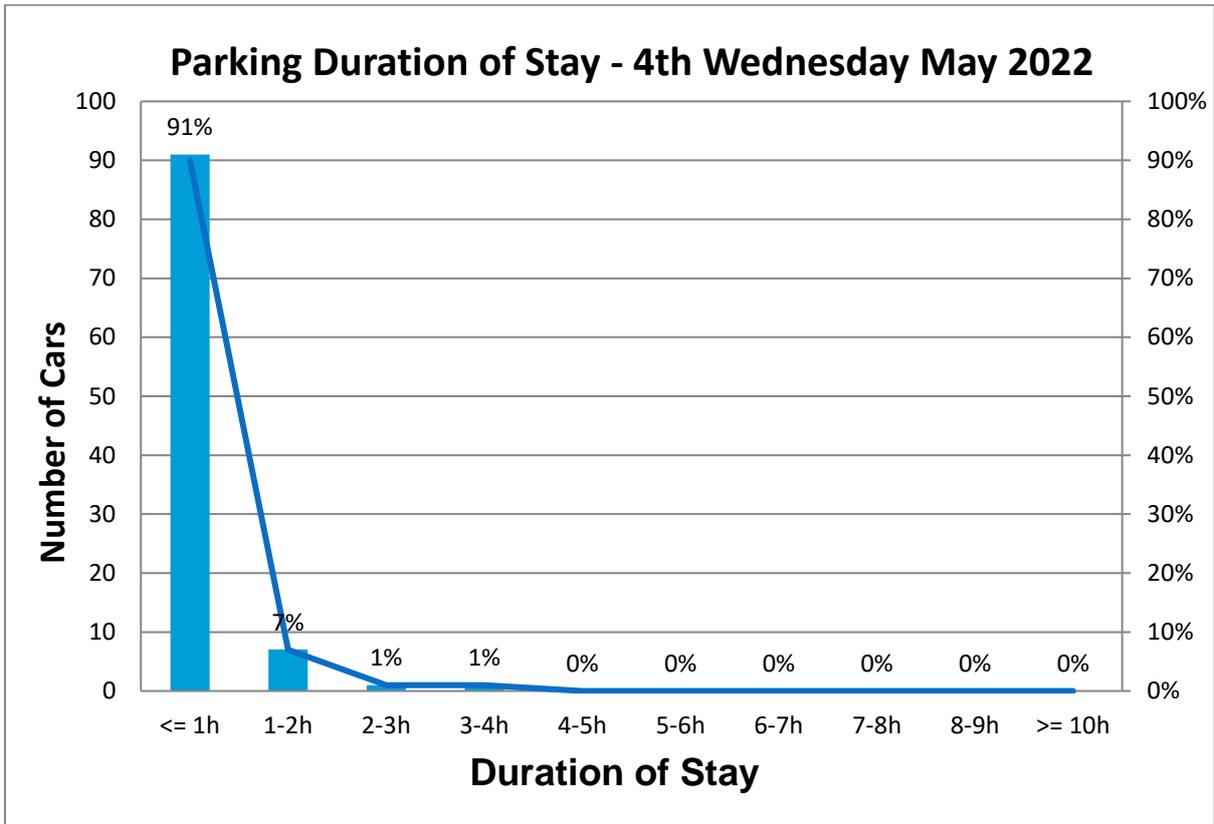
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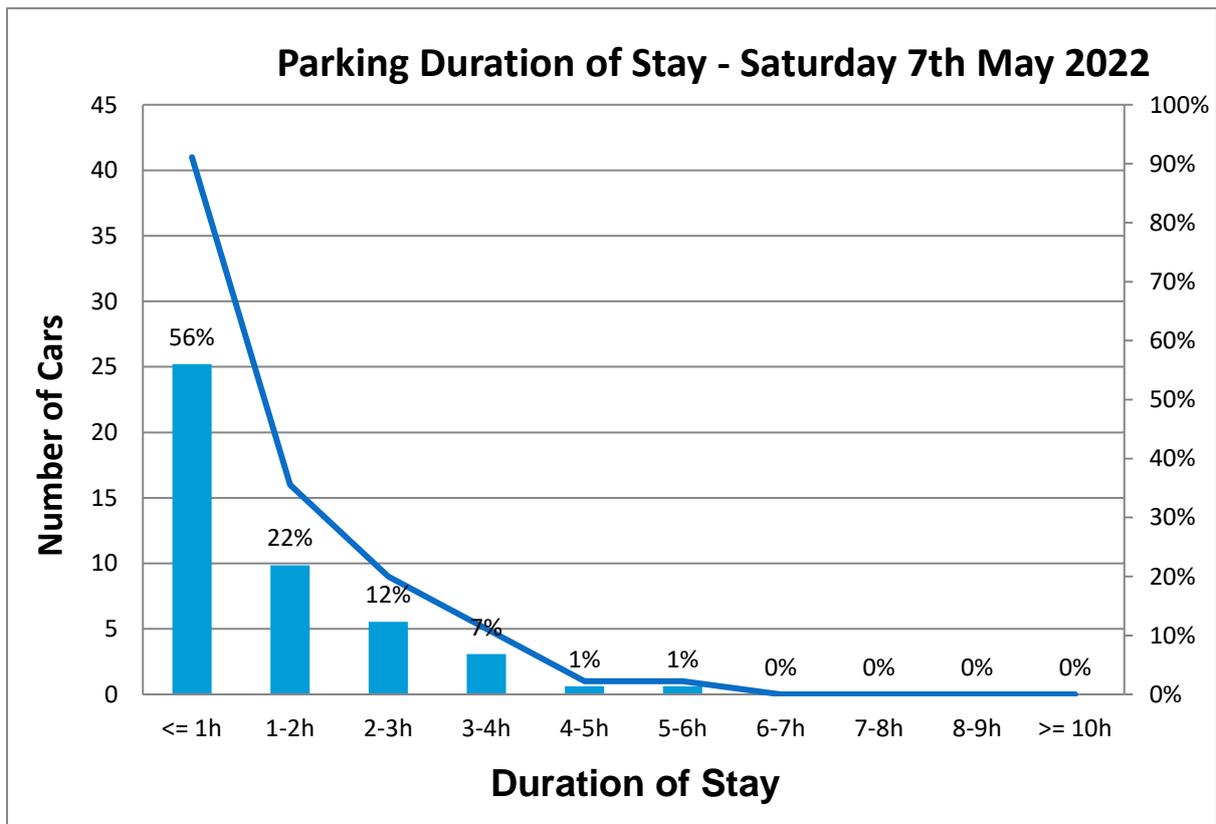
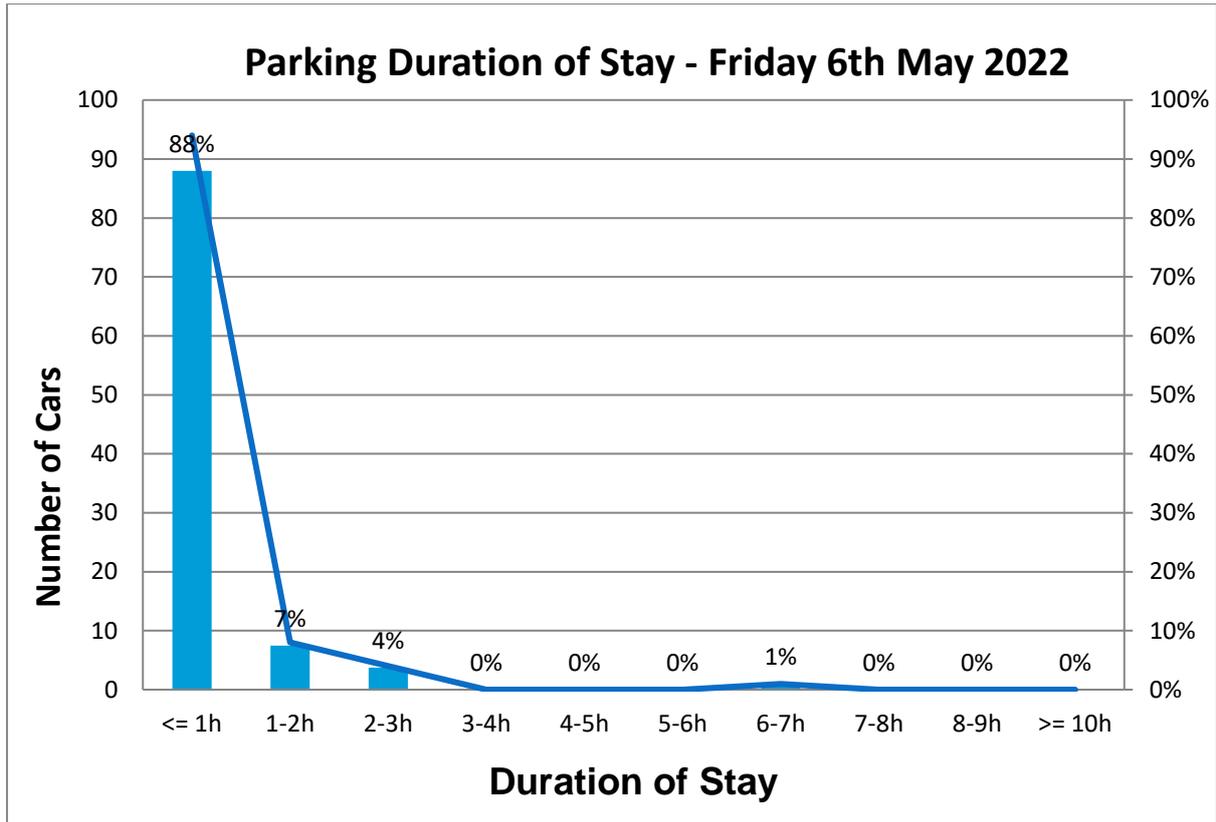




Parking Duration of Stay



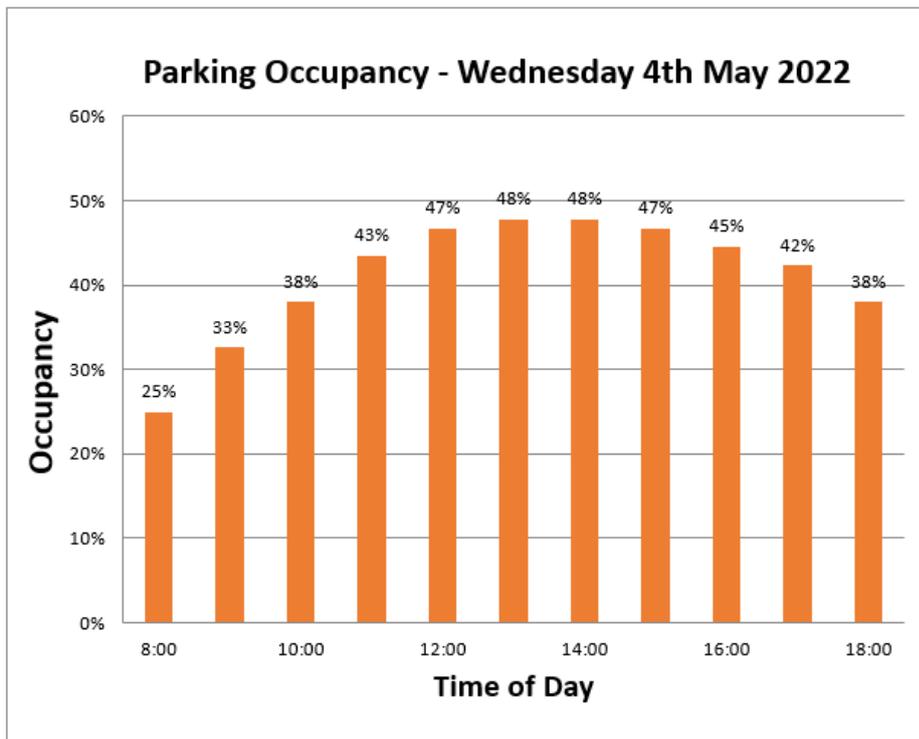
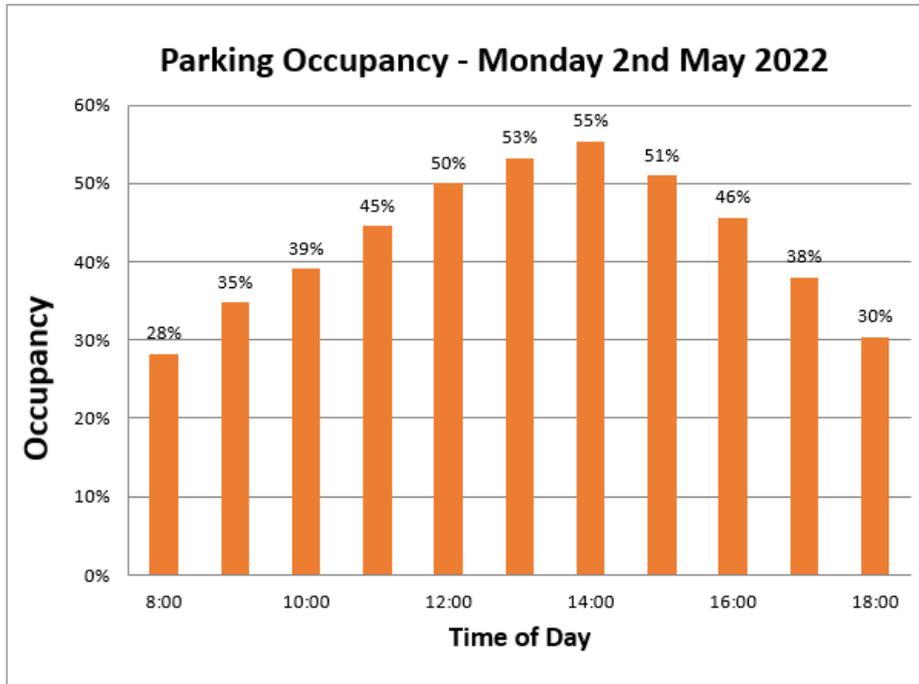


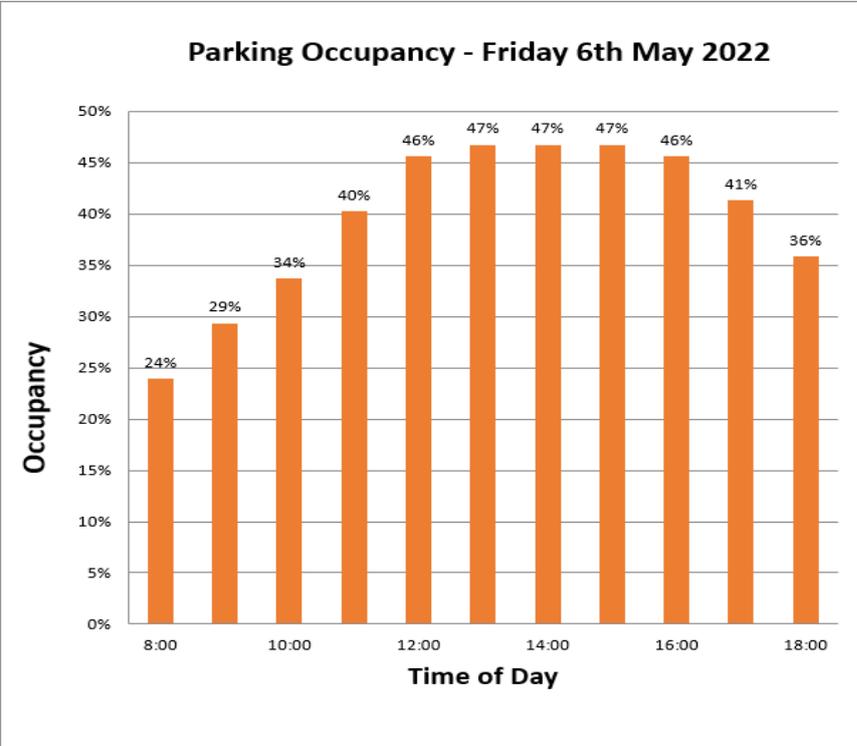


Appendix D

Depot Lane, Trafalgar – Carpark Occupancy Rates & Duration of Stay

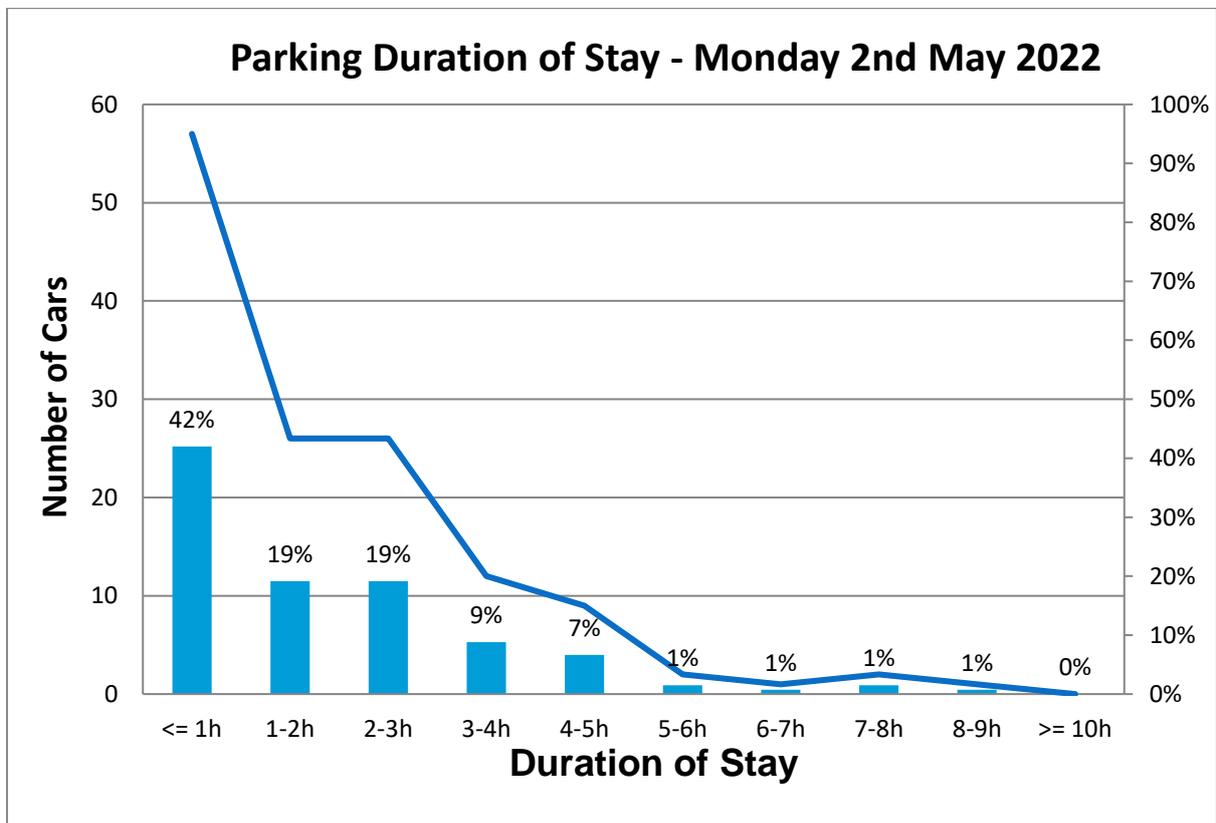
Parking Occupancy – Depot Lane North-Eastern Carpark

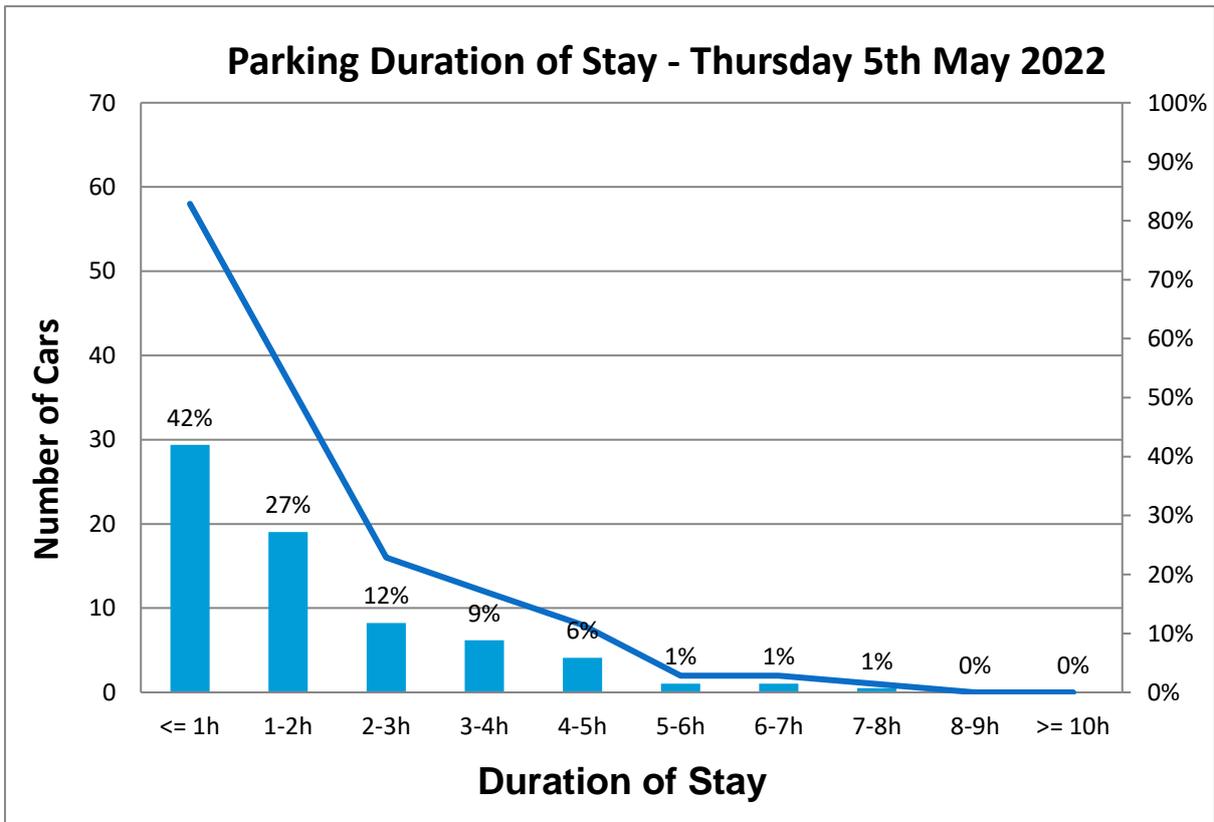
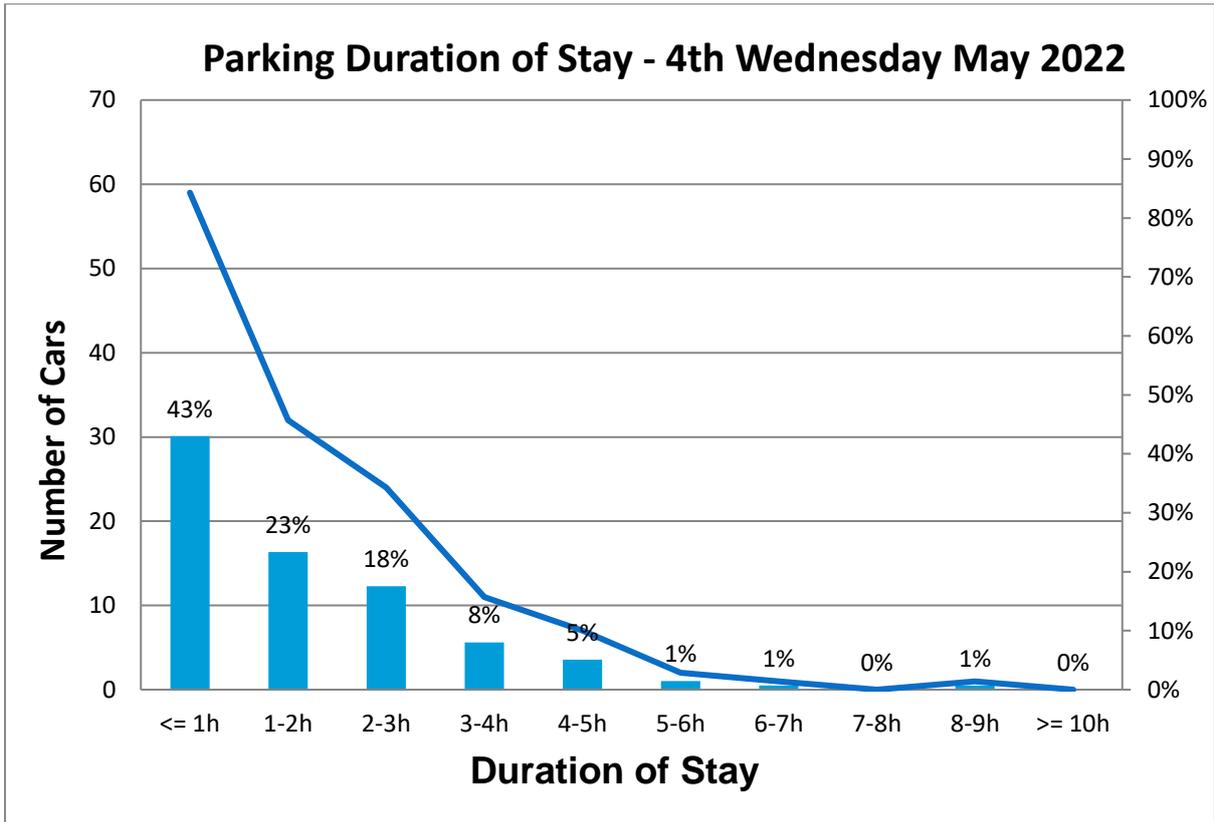


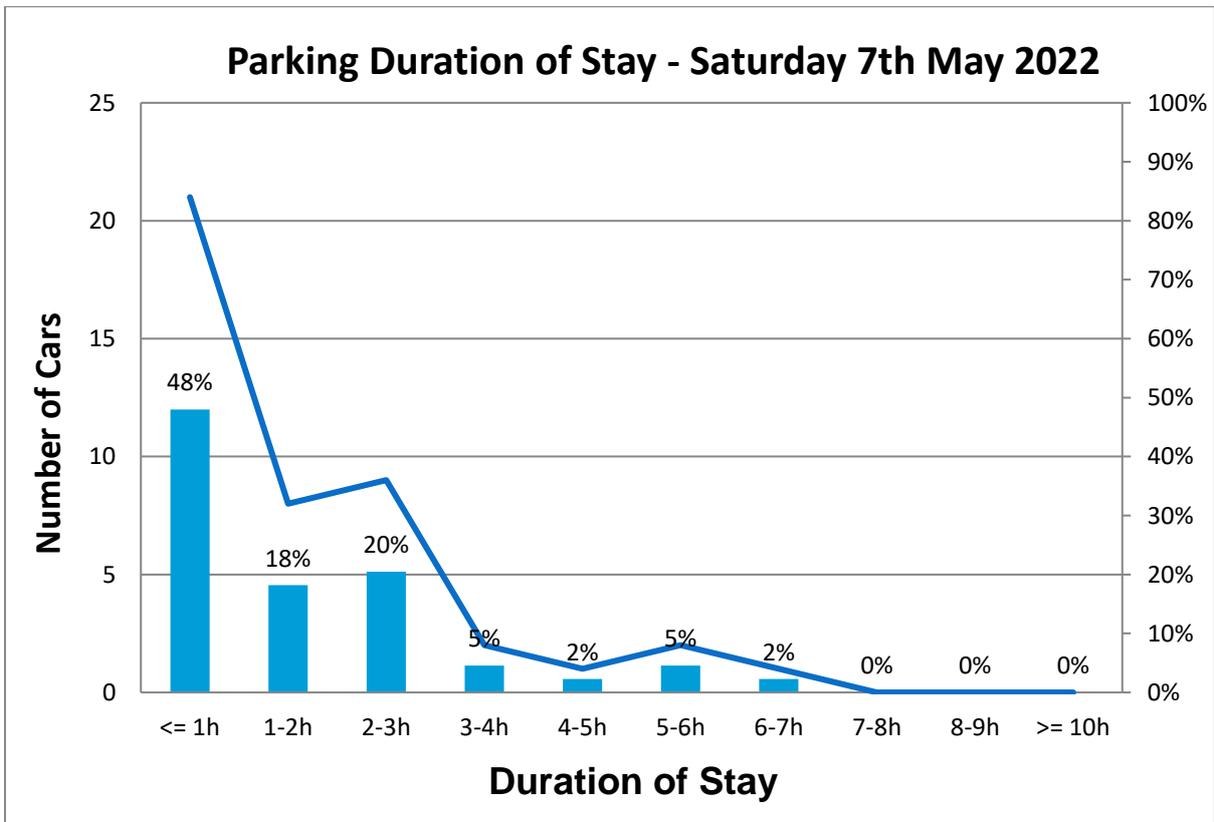
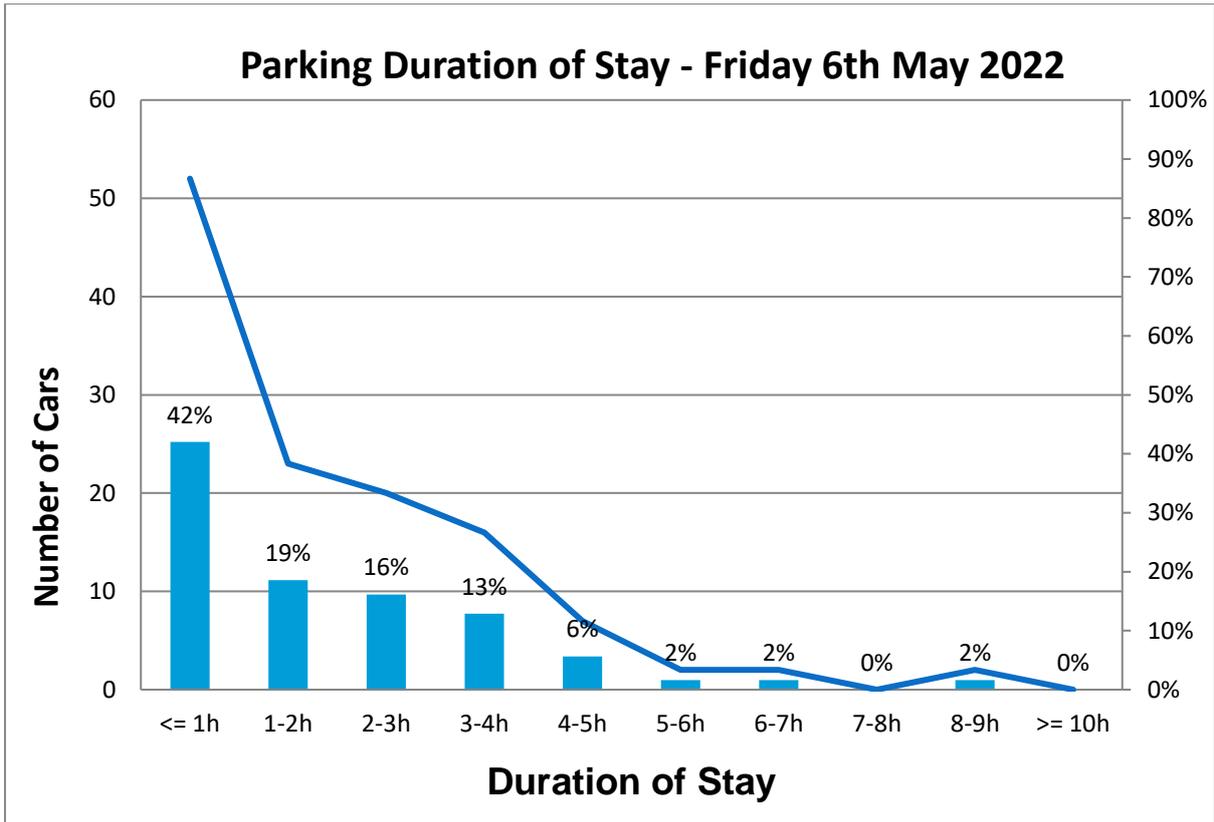




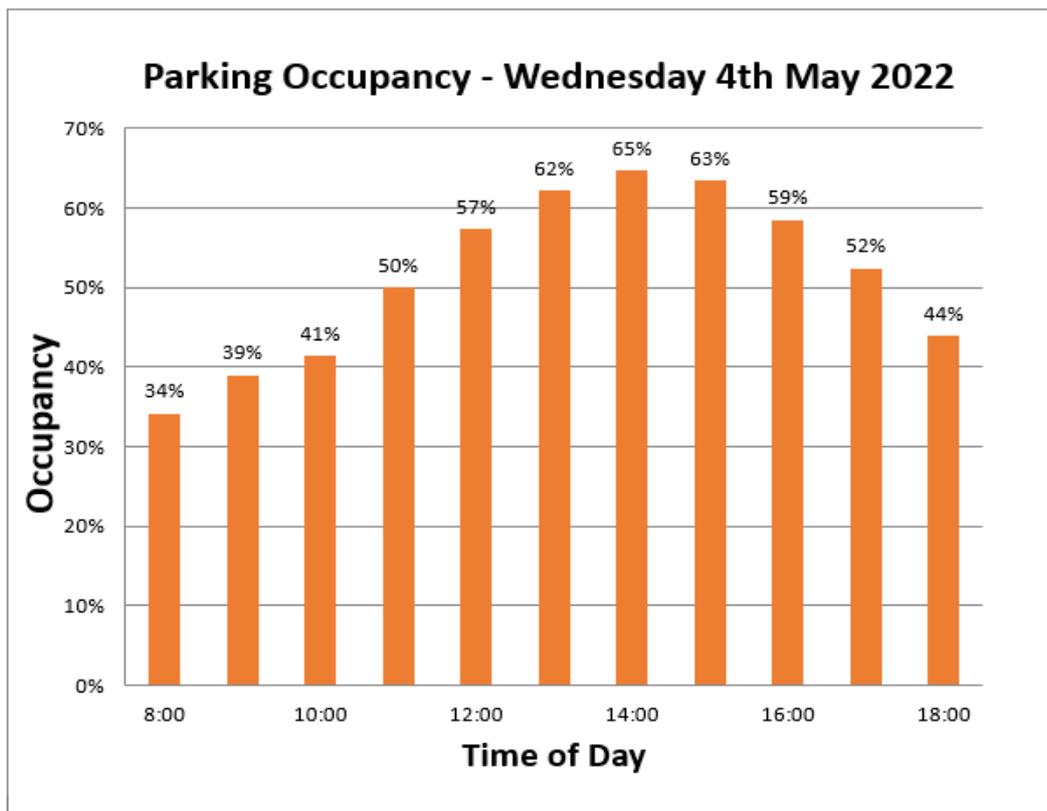
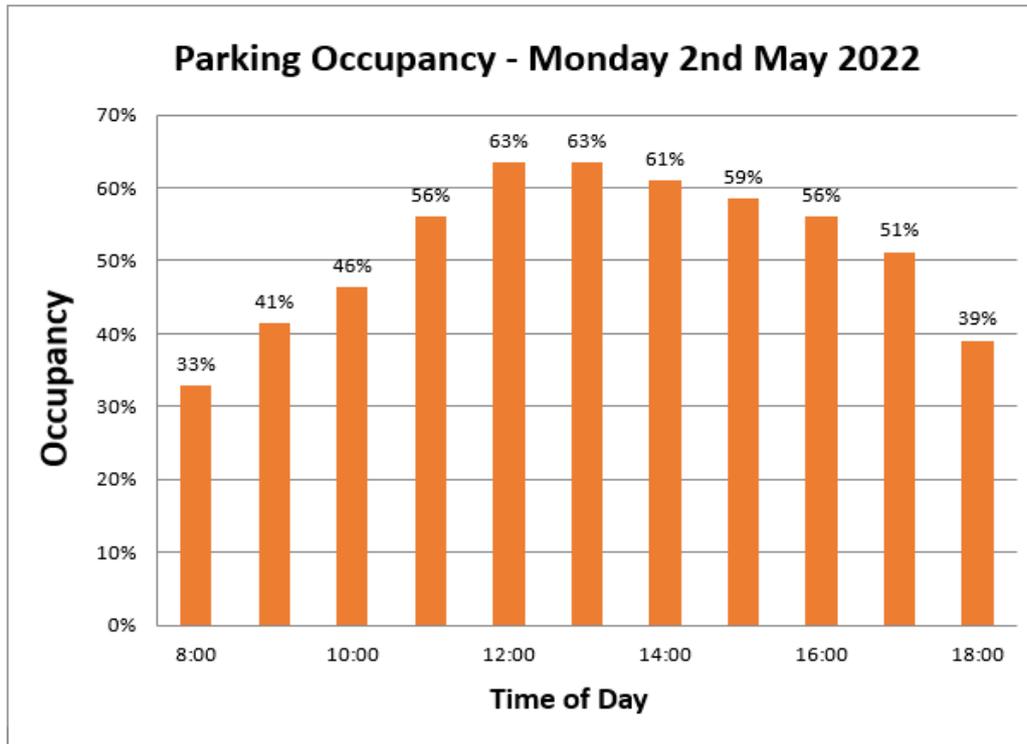
Parking Duration of Stay – Depot Lane North-Eastern Carpark



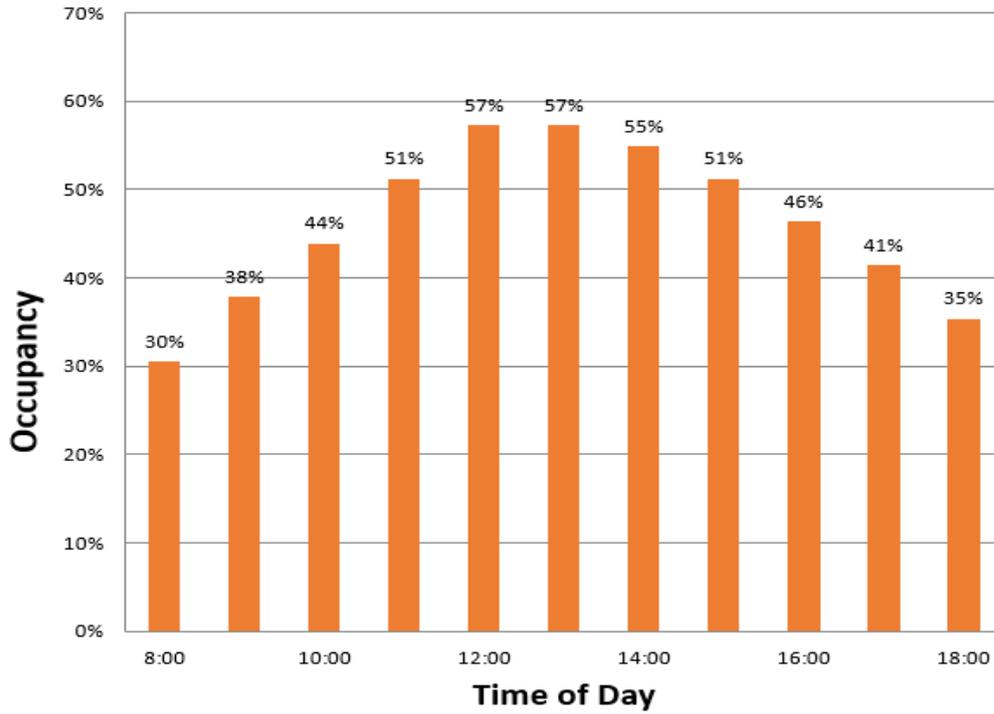




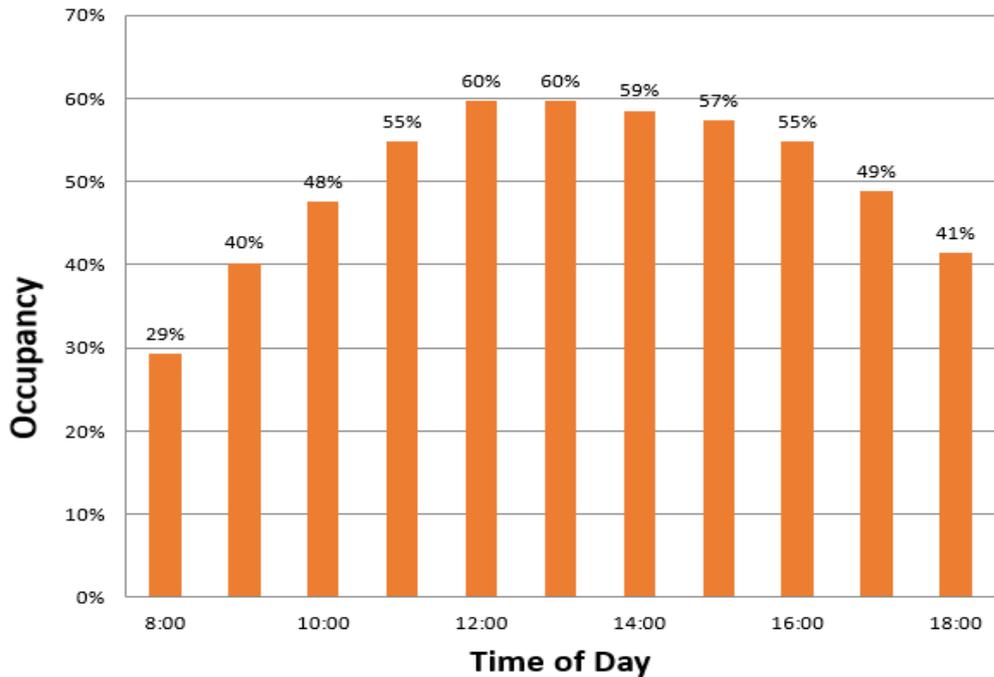
Parking Occupancy – Depot Lane North-Western Carpark

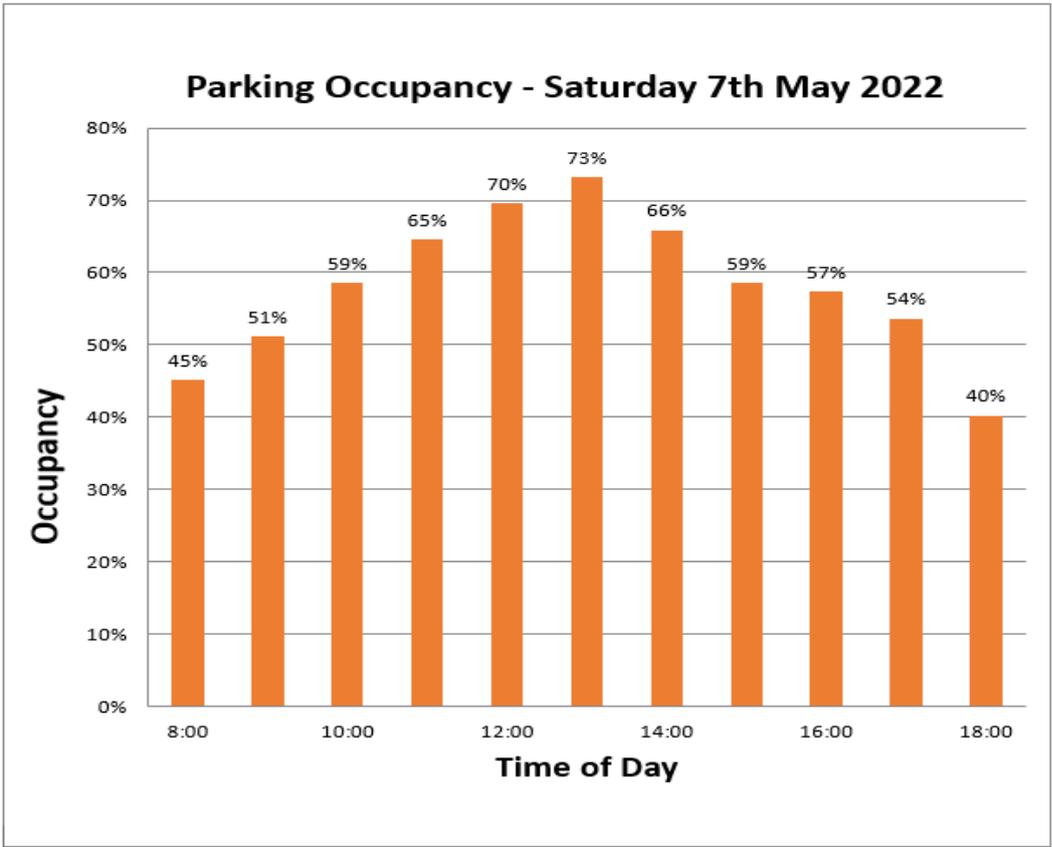


Parking Occupancy - Thursday 5th May 2022

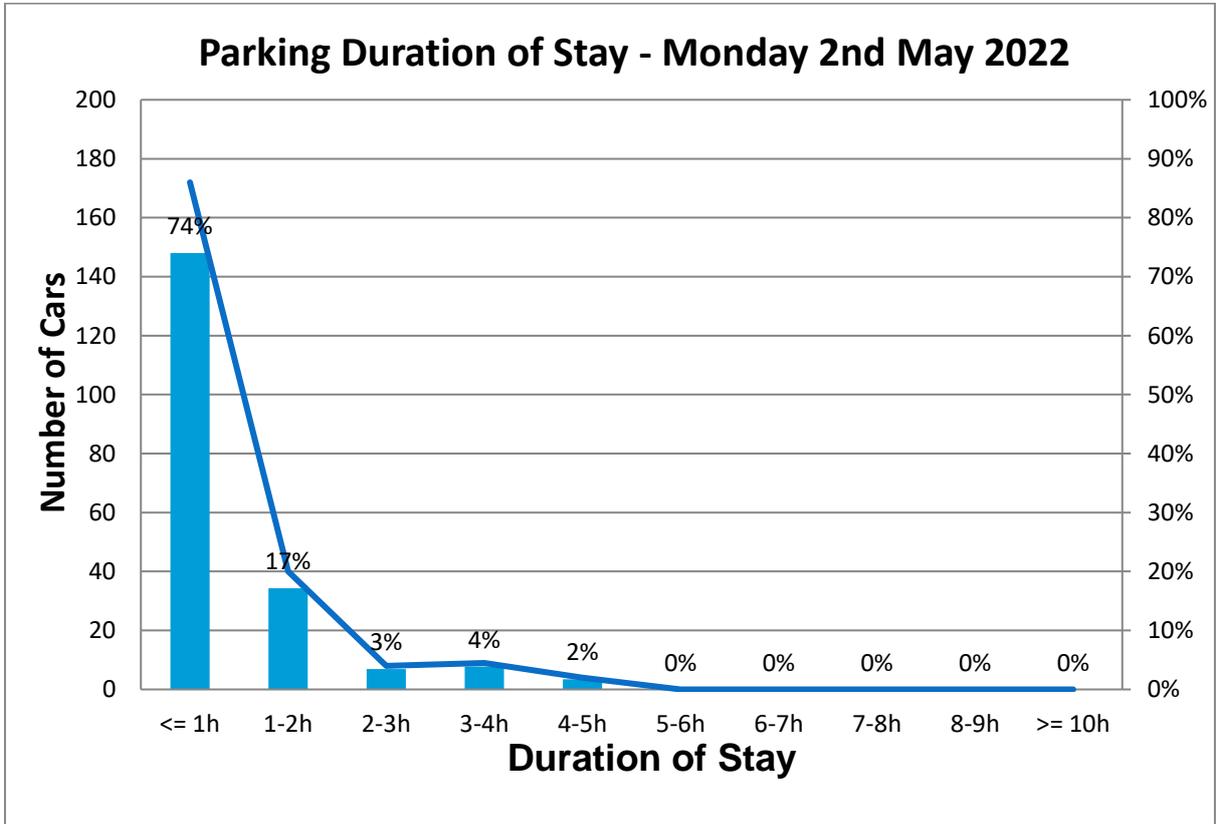


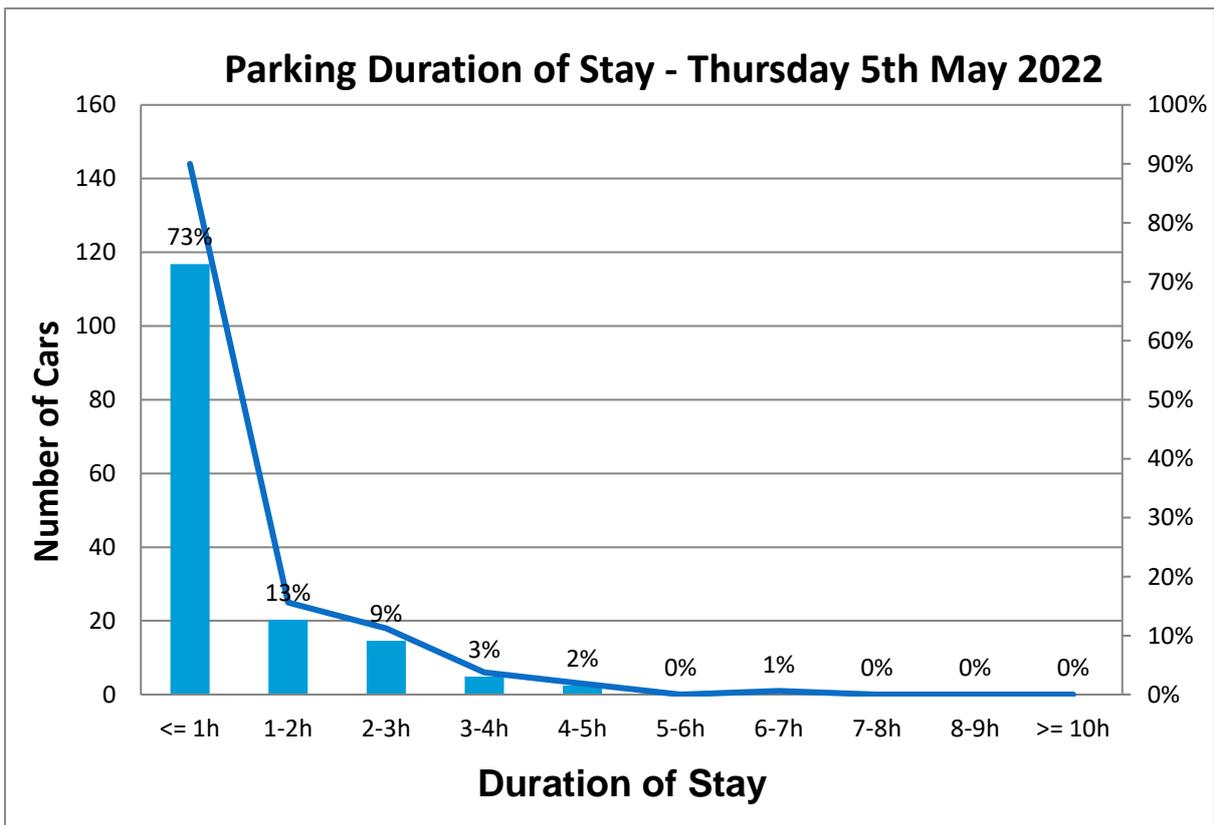
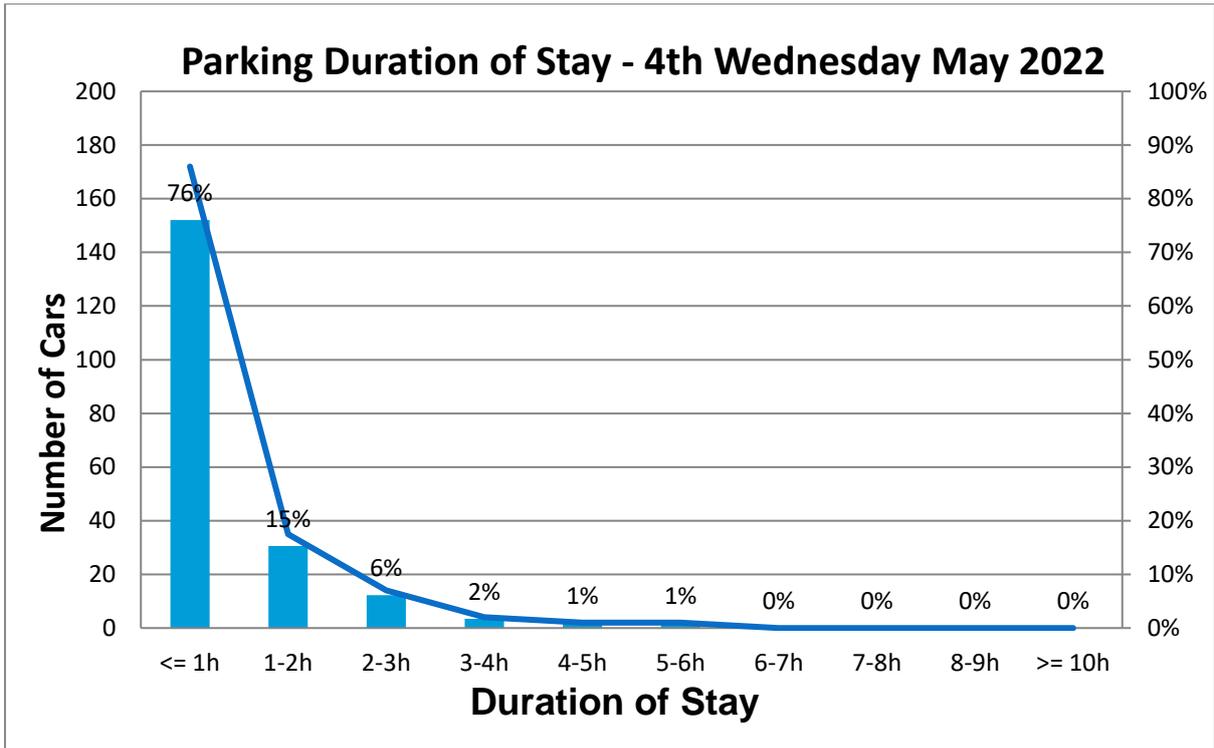
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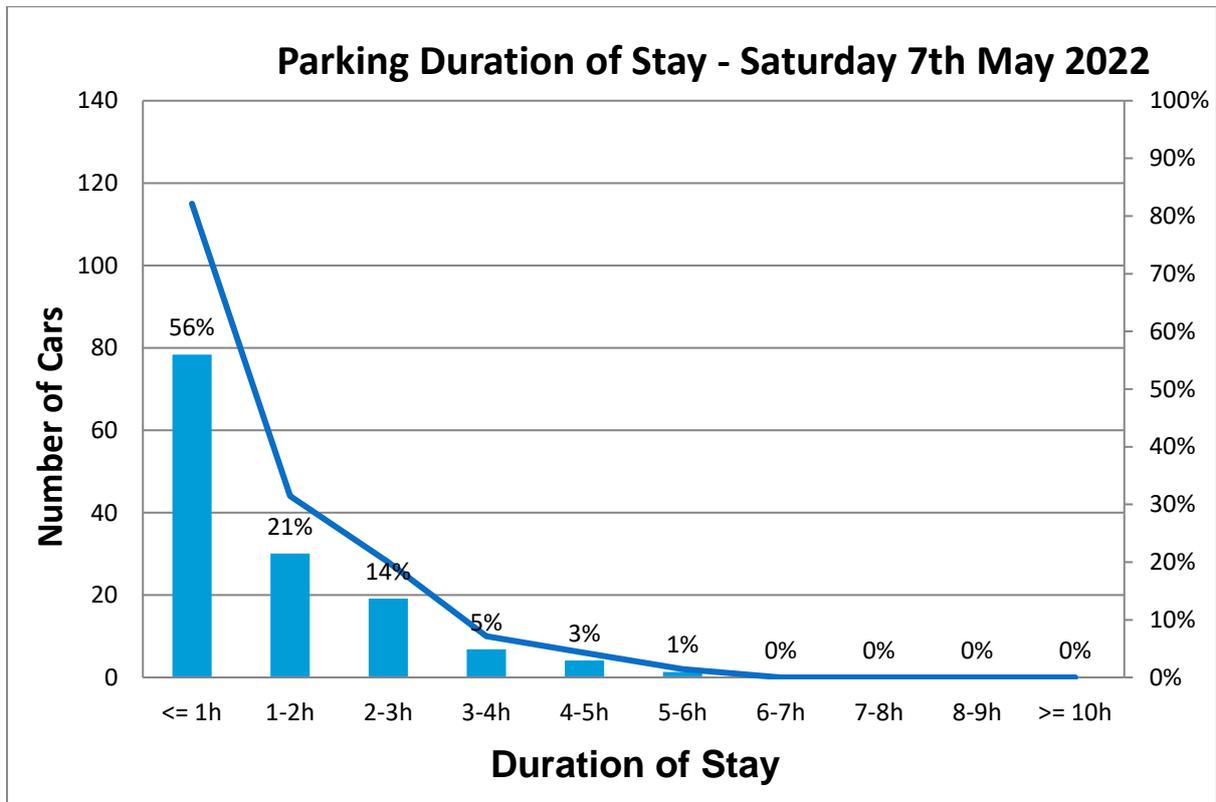
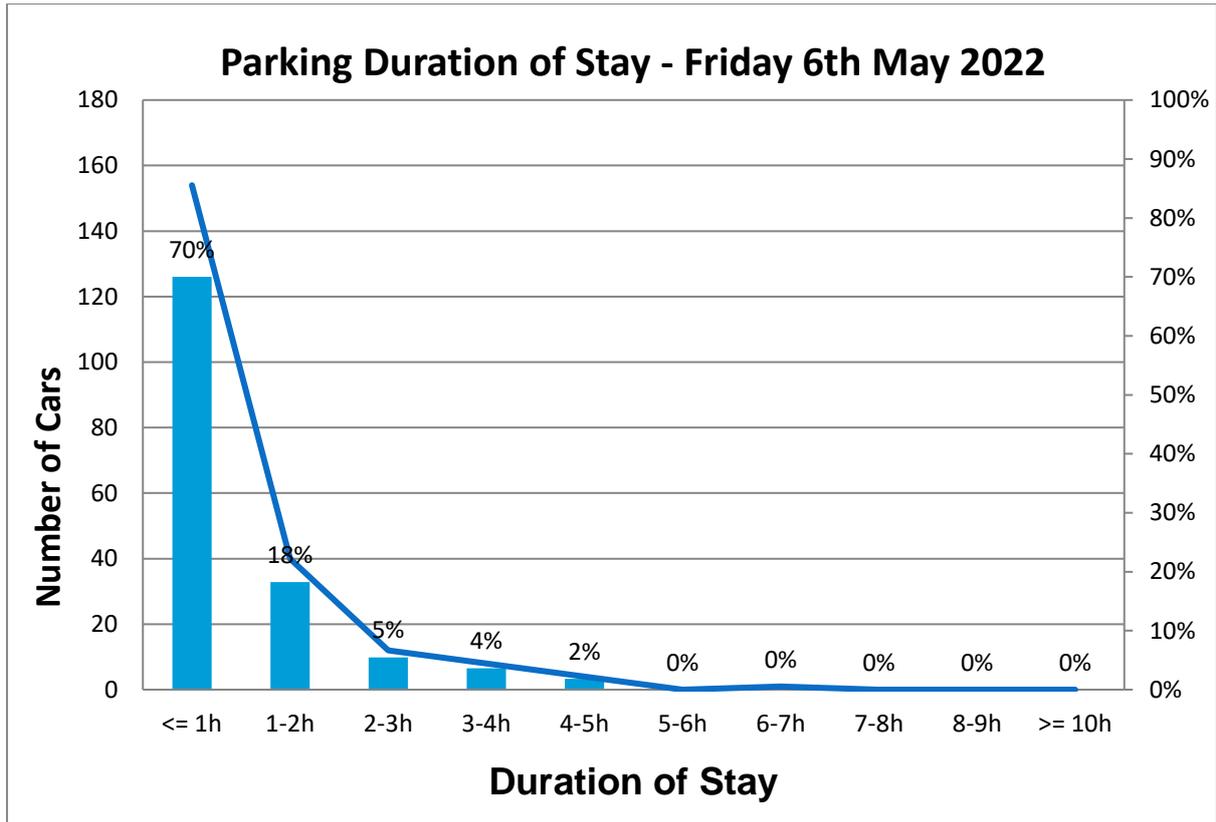




Parking Duration of Stay – Depot Lane North-Western Carpark







Appendix E

Proposed Parking Restrictions (Recommendation)

