Pakington Street Parking Survey

Car Parking Assessment

City of Greater Geelong

14 May 2021

→ The Power of Commitment

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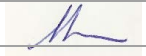
Printed date	26/05/2021 9:41:00 AM
Last saved date	26 May 2021 9:41 AM
File name	12550276 – Pakington Street Parking Survey Report
Author	Callum Waddington
Project manager	Toby Cooper
Client name	City of Greater Geelong
Project name	Pakington Street Parking Survey
Document title	Pakington Street Parking Survey | Car Parking Assessment
Revision version	Rev o
Project number	12550276

Document status

Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
Final	0	C.Waddington	T.Cooper		A.Wescombe		26/05/2021

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1. Introduction

GHD has been engaged by the City of Greater Geelong Council (CoGG) to undertake an on-street car parking assessment for Pakington Street between Preston Street and Autumn Street.

This part of Pakington Street contains retail and commercial venues. Recently ten “parklets” have been installed to add seating capacity to venues adjacent to Pakington Street. GHD understands that Council is interested in assessing the utilisation of the remaining car parking spaces and as such this report has sought to investigate the occupation rates and durations of the remaining car parking spaces.

This report is being delivered in tandem with another report – the Pakington Street Parking Survey: Parklet Assessment – which will assess how the parklets are being utilised.

1.1 Purpose of this report

The purpose of this is report is to document the following observations recorded over the period of Thursday 29 April to Saturday 1 May:

– Parking occupation rates – this is to understand how many car parking spaces are utilised across the day. This helps to identify whether there is sufficient supply of car parking;
– Parking occupation times – this is to understand how long people park for and whether there are any issues with enforcement of car parking restrictions;
– Particular car parking ‘hotspots’ where there may be a high occupancy rate; and
– Trends of occupation over varying days.

1.2 Scope and limitations

This report has been prepared by GHD for City of Greater Geelong and may only be used and relied on by City of Greater Geelong for the purpose agreed between GHD and City of Greater Geelong as set out in section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than City of Greater Geelong arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section(s) 1.3 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report based on information provided by AusTraffic to GHD, which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

1.3 Assumptions

This report has been developed based on the following assumptions:

– The data collected by AusTraffic over the three days the survey was conducted is representative of typical weekday and weekend activity.
– GHD has only considered on-street car parking between on Pakington Street Autumn Street and Preston Street.

2. Study Area

Pakington Street is located in Geelong West, an inner suburb of Geelong in Victoria. Pakington Street between Preston Street and Autumn Street is largely a retail and restaurant precinct. Within the study area, the road is configured as a two-lane two-way road. There are signalised intersections at Pakington Street / Autumn Street and Pakington Street / Albert Street, Specific pedestrian crossing provisions along this segment of Pakington street are a signalised pedestrian crossing between Hope Street and Autumn Road and two zebra crossings.

Parallel on-street parking is provided on both sides of the road, with a total existing capacity of 47 spaces. Of these spaces. 37 are 1P parking, with restrictions applicable between 9:00 am and 5:30 pm Monday to Friday and 9 am to 12:00 pm on Saturday. The remaining spaces are loading zones (six), bus parking (three) and mail zones (one). An additional 10 parking spaces have been converted to temporary parklets to expand al fresco dining activation.

Pakington Street has a posted street of 40 km/h between 7 am and 7 pm applicable every day and 50 km/h outside of these times. Bus route (Route 22) travels along Pakington Street, and there are two stops (one for each direction) within the study area.

The study area for this car parking assessment is shown in Figure 1.

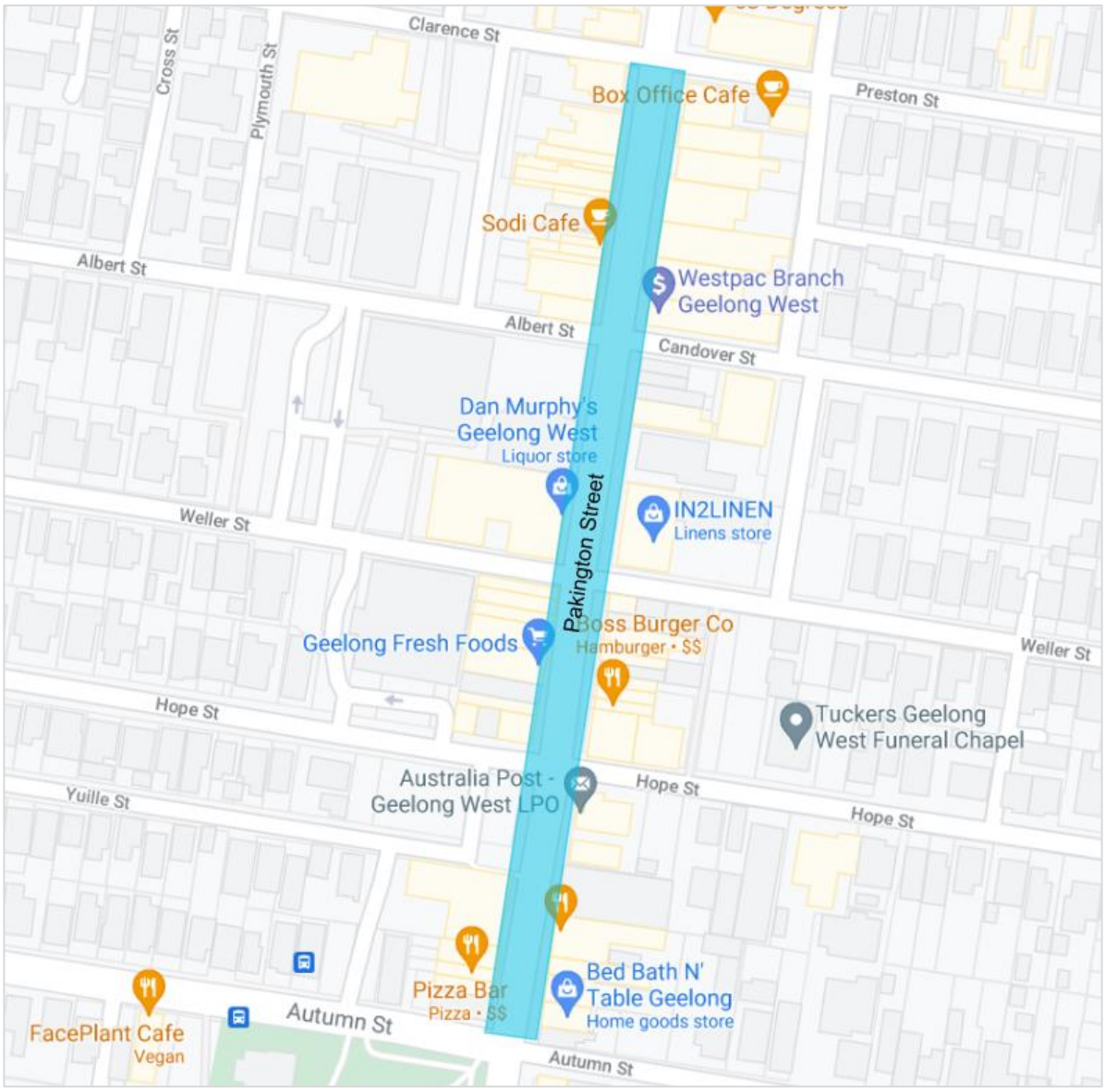

Figure 1 Pakington Street Study Area (Source: Google Maps)

3. Survey Summary

3.1 Overview

For CoGG to make an informed decision about the need for additional parking, the following key aspects should be understood:

– What are the car parking occupancy rates for the on-street parking?
– Are there particular 'hot-spots' where areas parking spaces have high occupancy?
– Does the car parking occupation exceed 85% at any points and if so when?
– What are the typical duration that car parking spaces are being occupied for?

This section of the report discusses the methodology of obtaining the data, data analysis, and findings of these key aspects.

3.2 Survey methodology

To understand the car parking behaviour within the study area, GHD engaged Austraffic, who are specialist survey contractors, to undertake car parking surveys between 8:00 am and 7:30 pm from Thursday 29 April to Saturday 1 May inclusive. Austraffic collected data during these days by noting:

– Occupancies of each parking bay; and
– Turnover of car parking spaces.

3.3 Weather

As strip shopping, trade activities on Pakington Street are affected by weather conditions. Most premises have awnings which provides some shelter for against some of the prevailing weather. As shown in Figure 2, weather varied over the period of the survey. Thursday's maximum of 19 degrees is lower than Friday's and Saturday's respective maximums of 24 and 26 degrees. The minimum temperatures were similar between the three days.

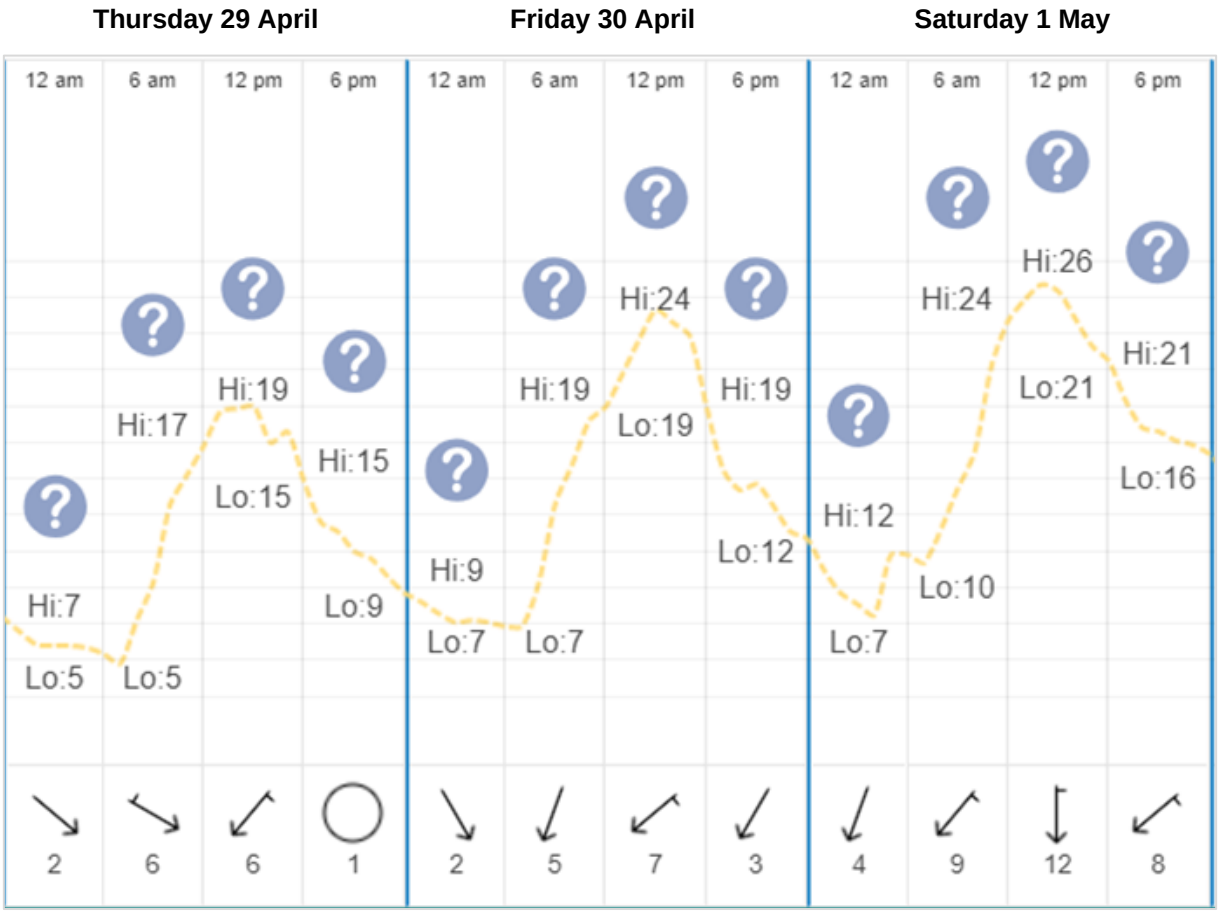

Figure 2 *Geelong weather over the duration of survey (source: www.timeanddate.com)*

4. Car Parking Survey Results

4.1 Introduction

This section provides a summary of the results from the car parking surveys. Please note that in GHD's analysis we have considered a ceiling of 85% as being a desirable occupancy rate across the corridor. This is considered a "rule of thumb" for parking management to allow enough turnover of car parking spaces and provides a balance of managing demand for parking while maintaining the function of the road network.

4.2 Overall Car Parking Supply

Overall car parking supply along the corridor is provided by a number of different parking types:

– Car parking supply is mainly 1P restrictions between 09am to 05.30pm Monday to Friday and 09am to 12 noon Saturdays.
– Loading and mail zone bays that are restricted to these activities only during certain time periods. Outside of these time periods then these spaces can be used for general parking. Loading bay usage during times for this activity have been excluded from GHD's general car parking assessment.
– Bus zones, which are for the exclusive use of buses. These are excluded from GHD's analysis.

The parking occupancy analysis is based on the supply of general parking provisions. The parking supply during parking restriction time is the provision of the 1P parking spaces. Outside of parking restriction times (early morning, evening and Saturday afternoons) is the provision of the 1P parking spaces as well as the loading and mail zones. Therefore, the total supply of parking for customers changes across the day. Maximum parking supply for general use is 44 spaces in this study area. Minimum parking supply for general use is 37 spaces and this occurs when all loading bays are being used for that purpose.

4.3 Overall Car Parking Occupancy

Table 1 presents average and maximum car parking occupancy for each of the three surveys days. Figure 3 shows the parking occupancy across the survey period. The red line shows capacity across the day, the dashed red line shows 85% capacity and the blue line shows occupancy. The 85% line is a benchmark for parking supply, balancing the needs of traffic circulation and parking turnover.

Analysing Table 1 and Figure 3, the following observations can be made:

– There is generally sufficient car parking supply along the corridor.
– The lowest car parking occupancy typically occurred on Thursday 29 April.
– The highest car parking occupancy typically occurred on Friday 30 April.
– Friday 30 April and Saturday 1 May occupancies have peaks in the early afternoon and evening.
– On Friday 30 April, the car parking occupancy rate reaches or exceeds 85 percent occupancy at multiple points during the day. On Saturday 1 May the parking occupancy rate is exceeded at noon. However, during most other periods there is sufficient car parking supply on the corridor overall.
– At no time across the study period did the maximum parking occupancy exceed the overall parking supply, suggesting the parking supply is sufficient.

Table 1 Occupancy statistics

Day	Average occupancy	Maximum occupancy
Thursday, 29 April 2021	59%	84%
Friday, 30 April 2021	81%	95%
Saturday, 1 May 2021	71%	86%

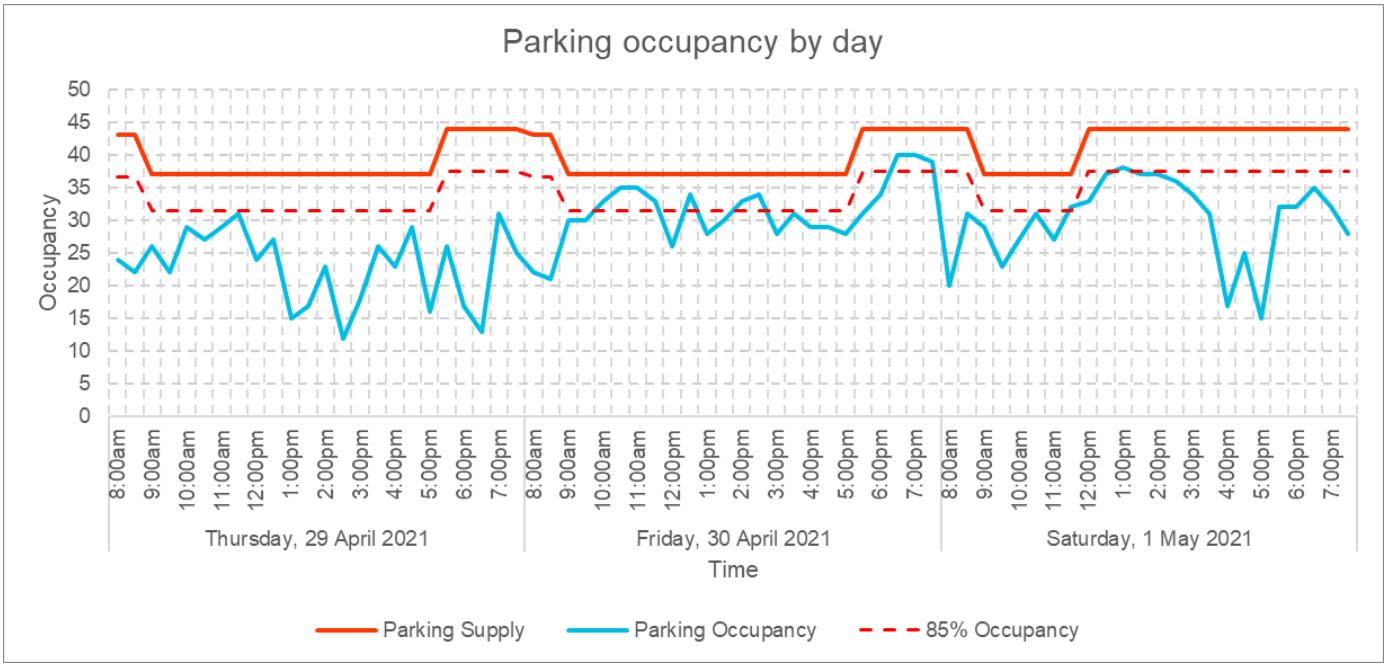

Figure 3 ***Parking occupancy by day***

4.3.1 Occupancy by block

The study area has been divided into individual blocks to analyse if particular areas are experiencing greater rates of occupation than others. The blocks can be seen in Figure 4, and each block has been numbered, which corresponds to the chart showing the occupation rates for that block.

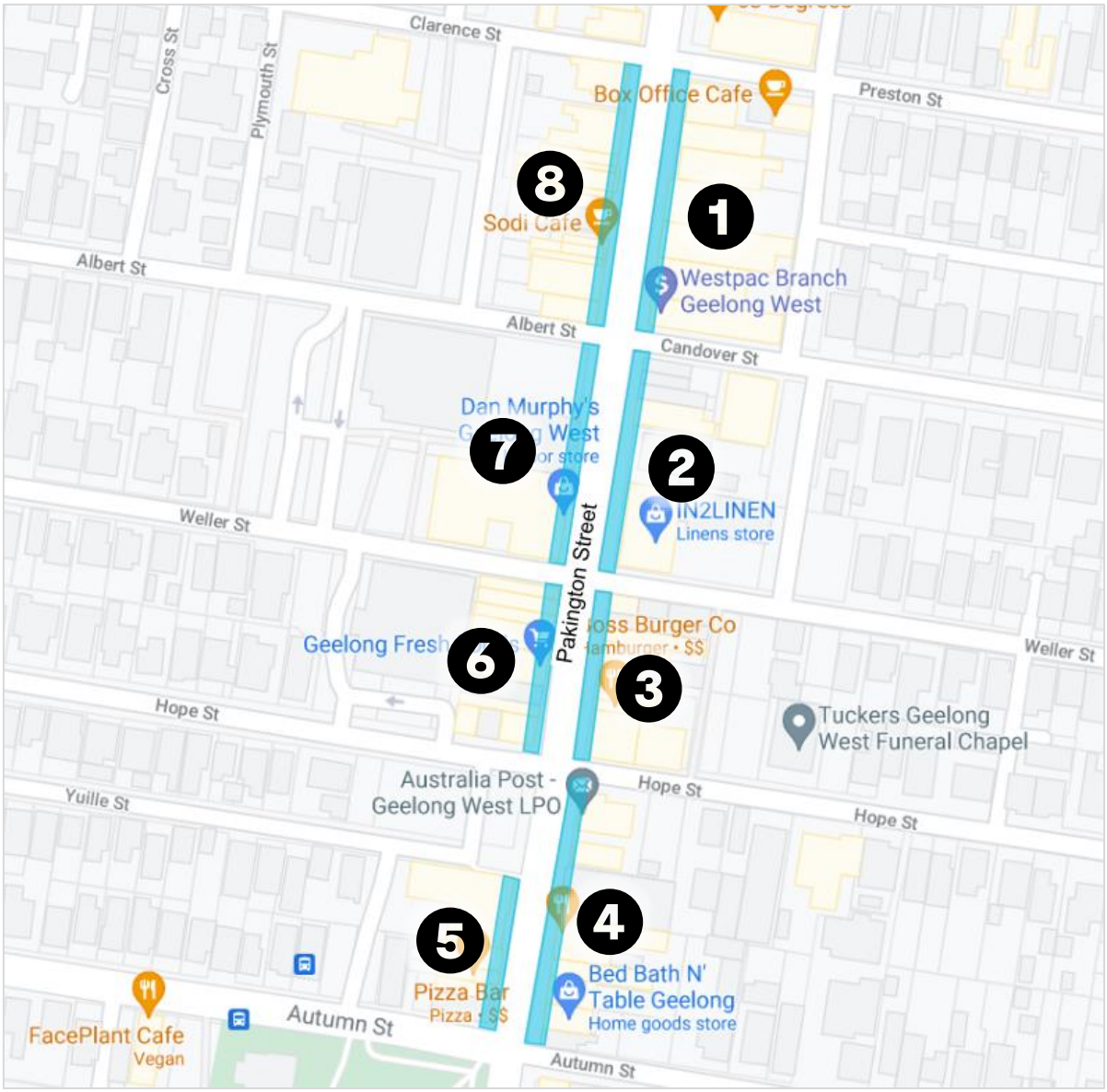

Figure 4 *Study area divided by block and numbered (source: Google Maps)*

Table 2 provides an overall summary of average car parking occupancy for each of the three survey days. Figure 5 to Figure 12 presents the car parking occupancy rate for each section of Pakington Street across each of the three survey days. Care should be taken when interpreting these results since the number of spaces in each section can be relatively low given the short distances along each section.

The key findings from Table 2 are that:

– Average parking occupancy was lowest on Thursday 29 April in Sections 2, 4 and 7 with average occupancies of approximately 50%.
– Average parking occupancy is highest in Section 6 on Friday 30 April with an average occupancy of 91%.
– Average daily car parking occupancy exceeds the 85% occupancy rate (identified as the maximum for efficient car parking management) in two locations – Section 6 and Section 7 on Friday 30 April.

Table 2 Average car parking occupancy rate by block

Section		Thursday 29 April	Friday 30 April	Saturday 1 May
1	Pakington St east side, between Preston St & Candover St	69%	82%	80%
2	Pakington St east side, between Candover St & Weller St	50%	79%	61%
3	Pakington St east side, between Weller St & Hope St	59%	81%	77%
4	Pakington St east side, between Hope St & Autumn St	51%	78%	57%
5	Pakington St west side, between Autumn St & Yuille St	73%	81%	79%
6	Pakington St west side, between Hope St & Weller St	61%	91%	76%
7	Pakington St west side, between Weller St & Albert St	49%	85%	69%
8	Pakington St west side, between Albert St & Clarence St	58%	74%	73%

Figure 5 to Figure 12 below show the parking occupancy for each parking section. The following can be determined from these figures:

– Figure 5 shows that in Section 1 there were periods over the three days of survey where car parking occupancy reaches the capacity of this section.
– Figure 6 shows variable car parking occupancy across each of the three days in Section 2. Generally, there is more than sufficient supply in this Section.
– Figure 7 shows that in Section 3 that there were periods when car parking occupancy was close to, or at the maximum supply available in this Section. However, on the Thursday and Saturday surveys there were notable periods in the early afternoon with lower car parking occupancy.
– Figure 8 shows in Section 4 that typically car parking occupancy was lowest during the Thursday surveys,. Parking occupancy tended to increase in the evening on Friday and Saturday but generally there was sufficient supply relevant to the car parking usage. It is noted that occupancy exceeded the maximum of six car parking spaces during the Friday survey and this is due to a car parked in a No Standing zone.
– Figure 9 shows in Section 5 car parking occupancy reaching the maximum available supply at several times over the three days of survey.
– Figure 10 shows in Section 6 that the Friday and Saturday periods were generally much busier than the Thursday periods, reaching 100% capacity at several periods during these survey days.
– Figure 11 shows in Section 7 car parking occupancy was generally much higher during the Friday and Saturday morning surveys than in the Thursday surveys.
– Figure 12 shows in Section 8 that generally there was some spare capacity in this section across each of the three days.

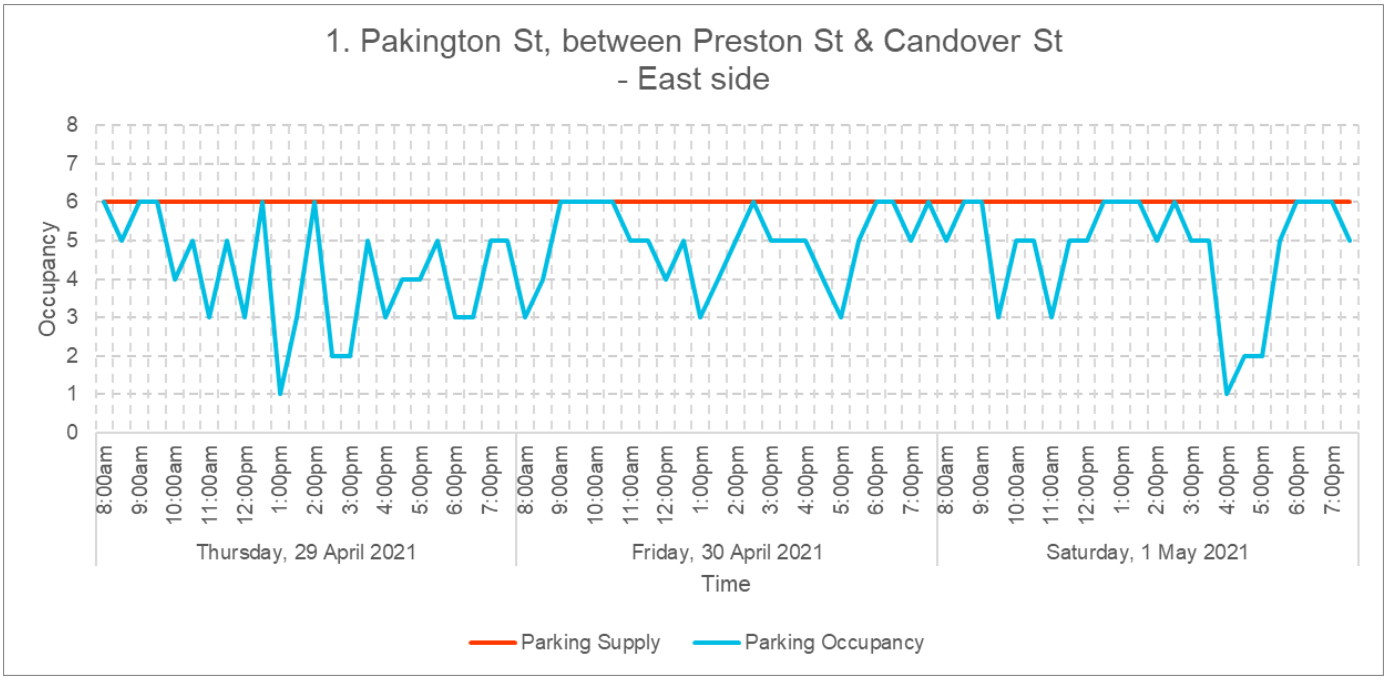

Figure 5 ***Parking occupancy - East side of Pakington St between Preston and Candover St***

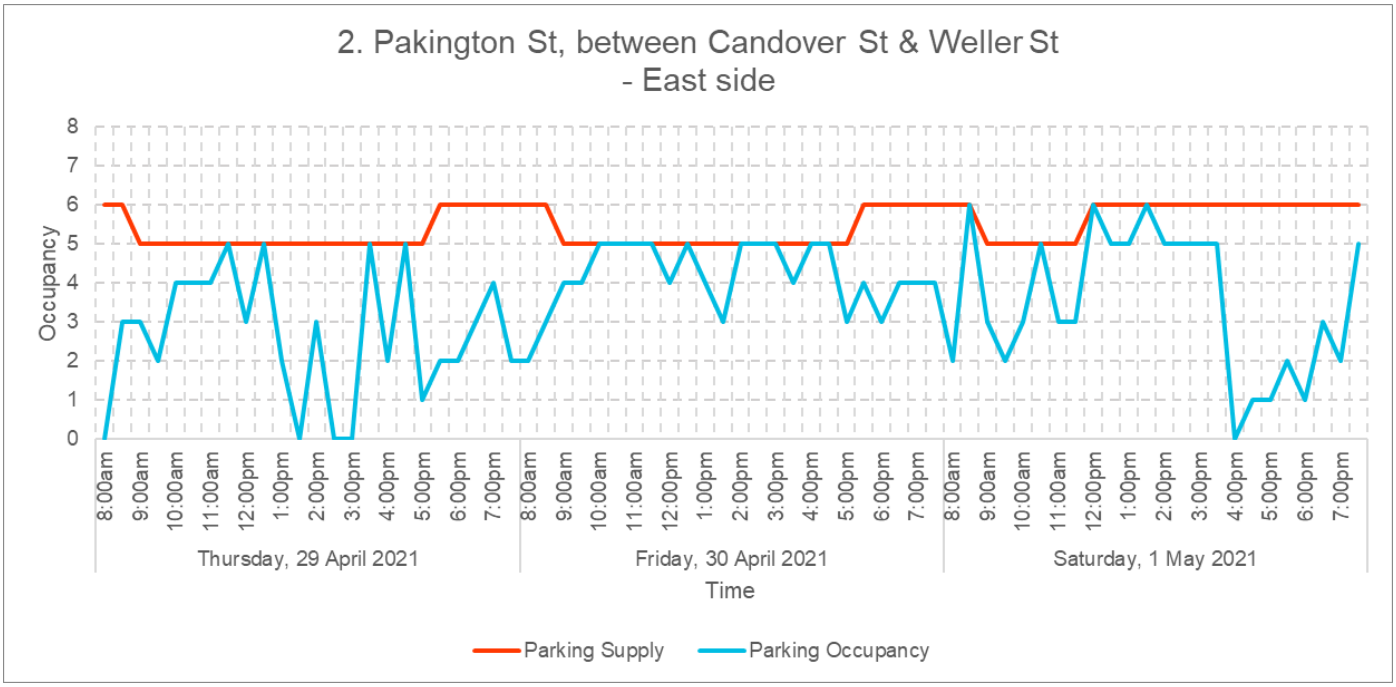

Figure 6 ***Parking occupancy - East side of Pakington St between Candover St & Weller St***

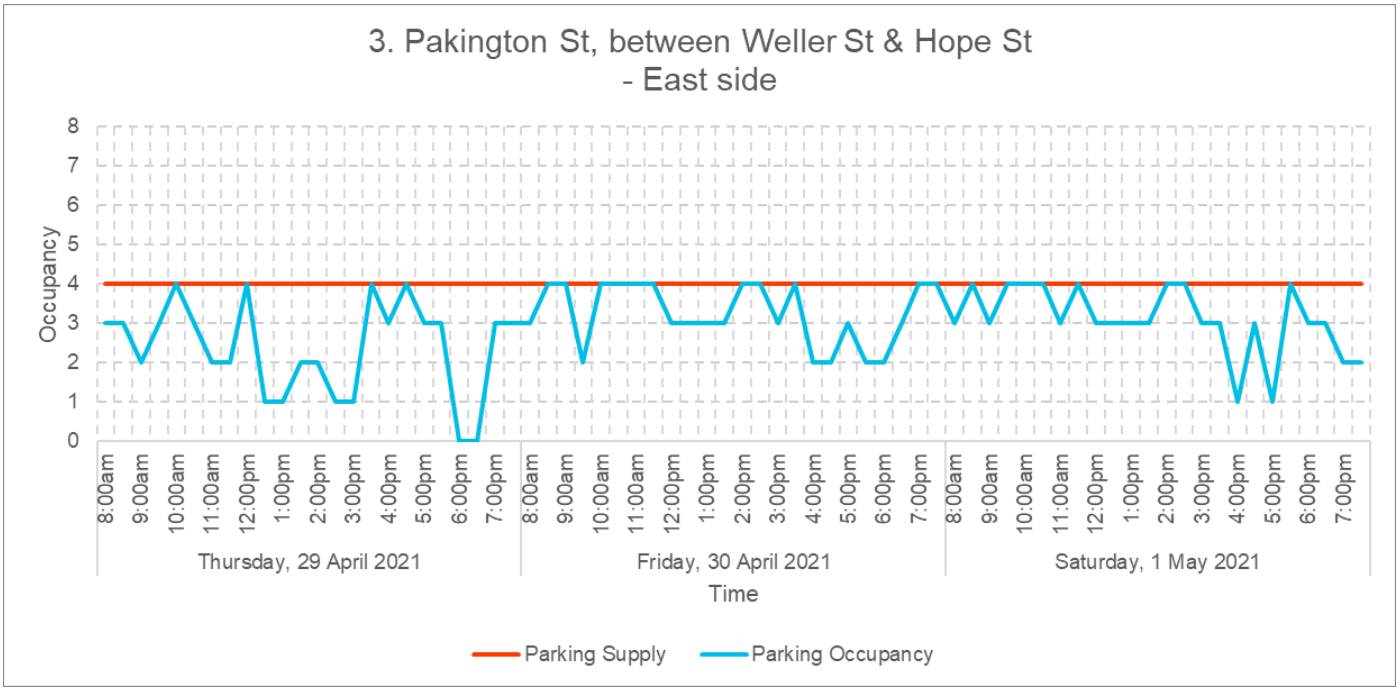

Figure 7 ***Parking occupancy - East side of Pakington St between Weller St & Hope St***

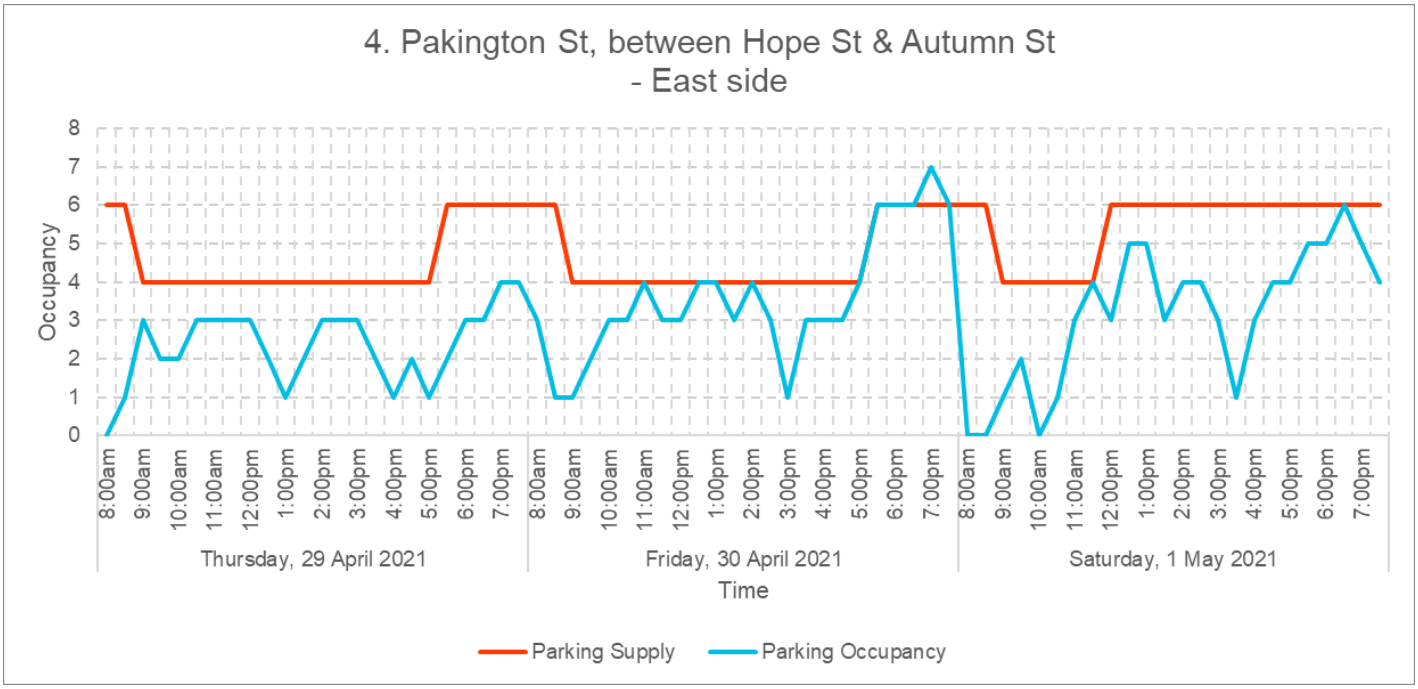

Figure 8 ***Parking occupancy - East side of Pakington St between Hope St & Autumn St***

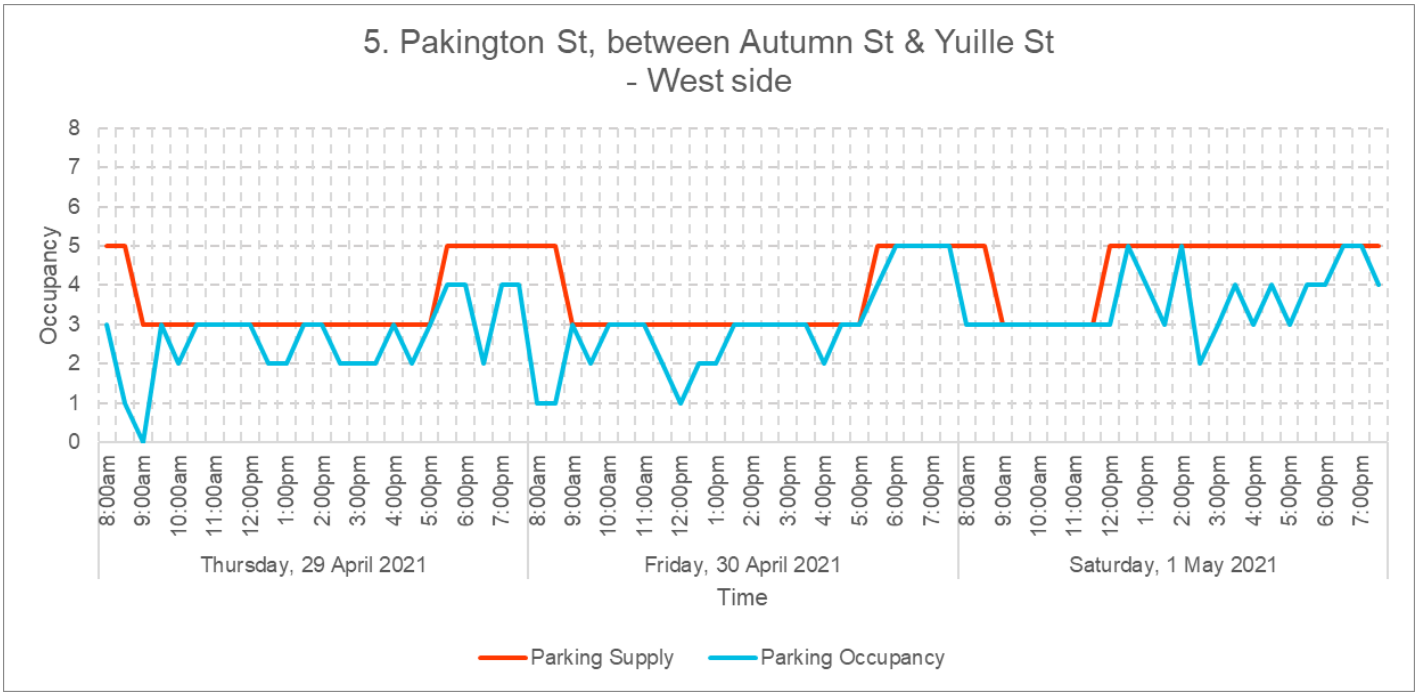

Figure 9 ***Parking occupancy - West side of Pakington St between Autumn St & Yuille St***

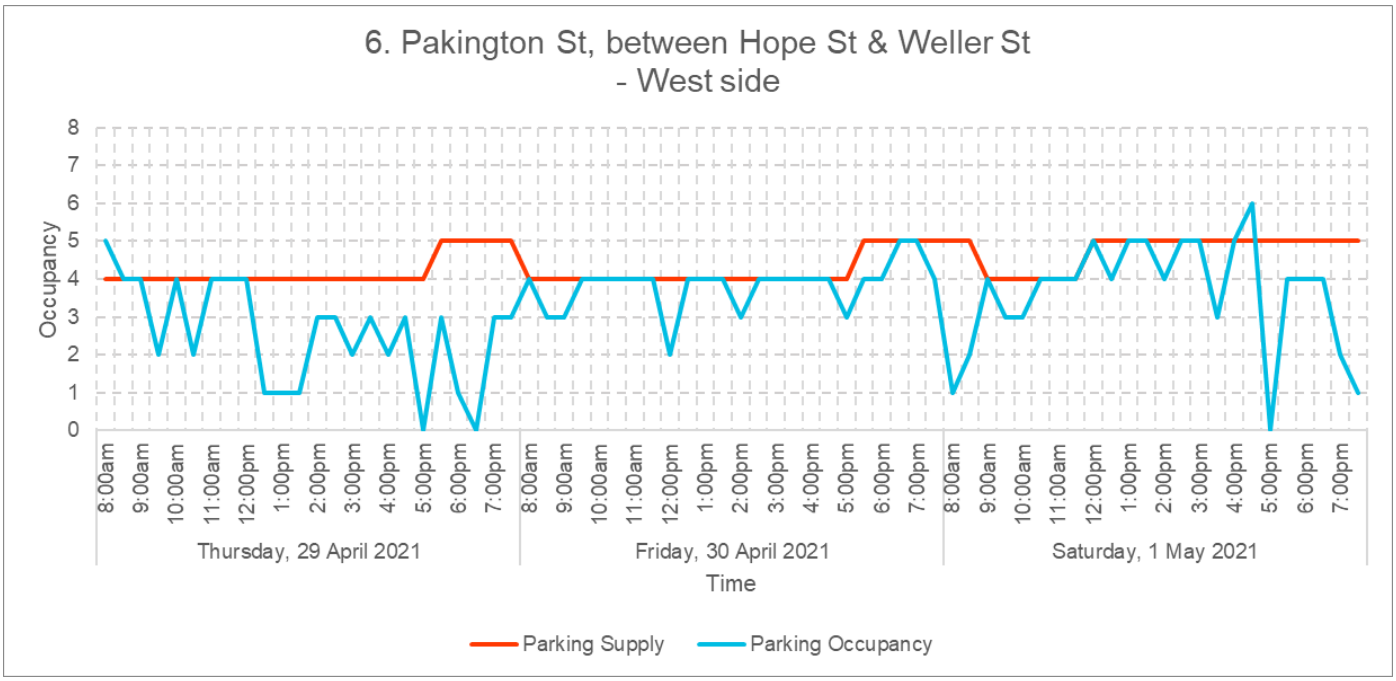

Figure 10 ***Parking occupancy - West side of Pakington St between Hope St & Weller St***

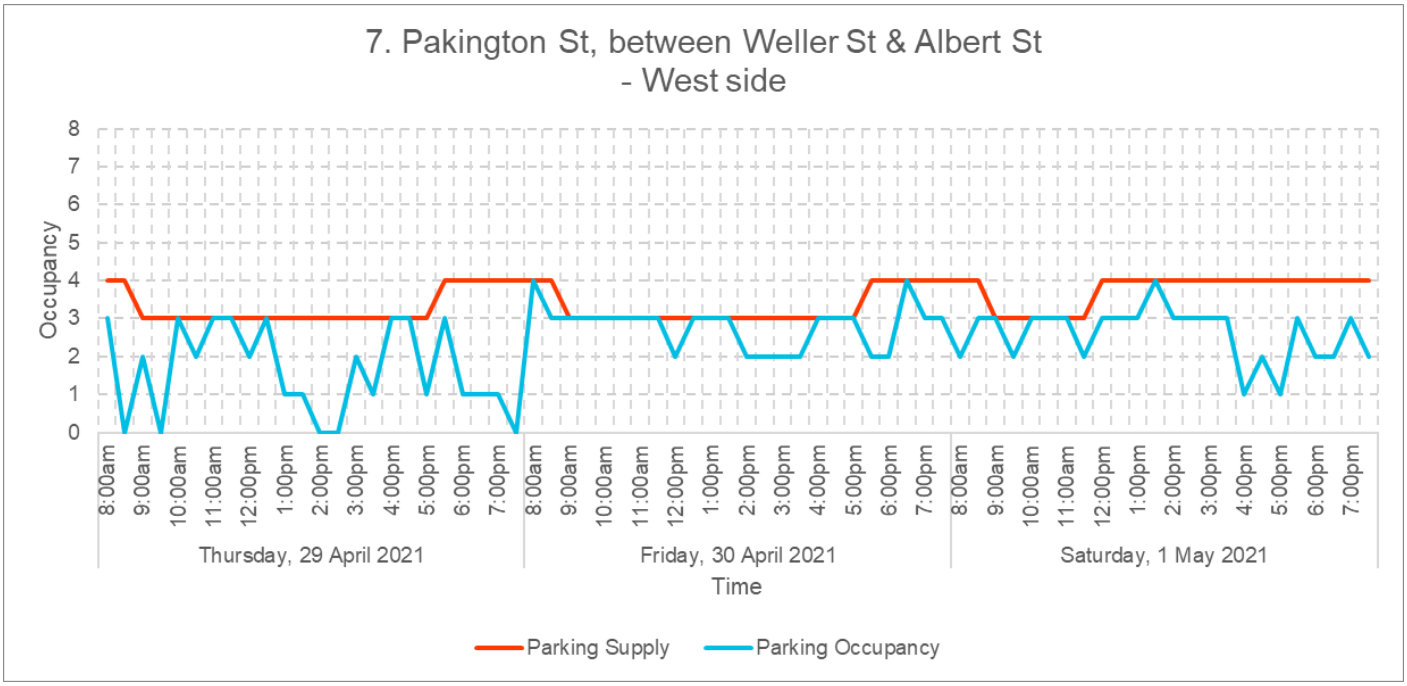

Figure 11 ***Parking occupancy - West side of Pakington St between Weller St & Albert St***

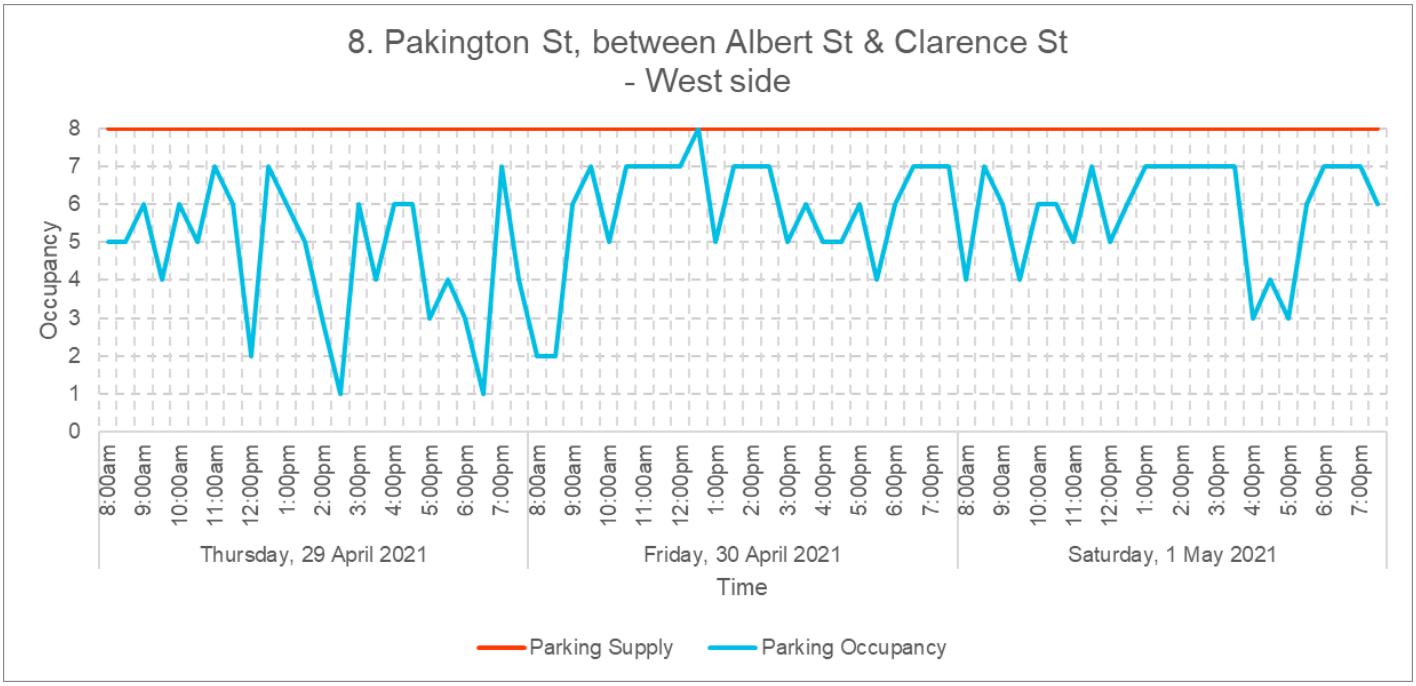

Figure 12 ***Parking occupancy - West side of Pakington St between Albert St & Clarence St***

4.3.2 Parking duration

Figure 13 presents parking duration for each of the three days. As discussed above parking time limits on Pakington Street for general parking are 1P. Table 3 presents driver compliance with parking restrictions overall.

Examining Figure 13 and Table 3, the following comments can be made:

– Occupation time over the three days of the survey is quite consistent.
– Over the three days, approximately;
  - 60% of vehicles were parked for 30 minutes or less.
  - 20% of vehicles were parked for between 30 minutes to one hour.
  - 10% of vehicles were parked for between one hour to one hour and 30 minutes.
  - 10% of vehicles were parked for two hours or longer.
– In regard to parking restrictions, approximately;
  - 90% of vehicles on Thursday 29 April complied with parking restrictions.
  - 89% of vehicles on Friday 30 April complied with parking restrictions.
  - 96% of vehicles on Saturday 1 May complied with parking restrictions.

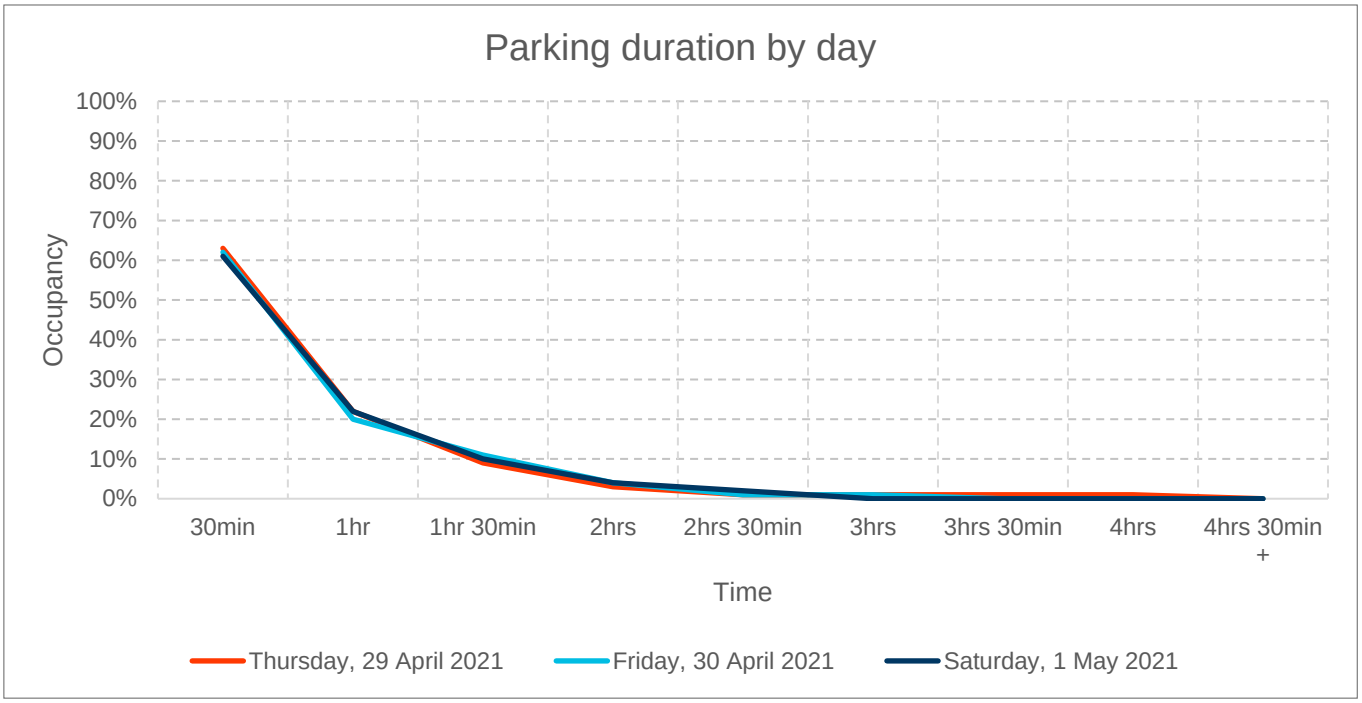

Figure 13 Parking duration by day

Table 3 Parking Restrictions Compliance

Date	Total number of drivers utilising car parks	Drivers complying to parking restrictions	Compliance rate
Thursday 29 April	352	318	90%
Friday 30 April	456	407	89%
Saturday 1 May	429	410	96%
Total	**1,237**	**1,135**	**92%**

5. Conclusions

GHD has undertaken on-street car parking surveys on Pakington Street between Preston Street and Autumn Street in Geelong West. The current car parking supply is 44 spaces, including seven loading bays. Of these spaces, 37 are for general parking during the day.

Car parking surveys were conducted on Thursday 29 April to Saturday 1 May 2021 between 8:00am and 07:30pm. The findings of our analysis have shown that:

- Car parking occupancy across the study area was higher on Friday 30 April and Saturday 1 May than on Thursday 29 April.
- On average, car parking occupancy across the study area does not exceed 85%, which is a rule of thumb for parking management to ensure sufficient supply and turnover.
- When assessed by individual sections, it can be observed that there are varying degrees of utilisation across each of the days and time periods.. This occurs regardless of whether there were parklet/s occupying spaces on that section or not.
- There were occasions when car parking occupancy exceeded or reached maximum supply on some sections of Pakington Street. However, given supply availability in other sections, and indeed the likely availability of off-street car parking in the study area, then overall car parking appears to be managed appropriately.
- Occupancy durations were largely consistent across all three days of the survey. Overall, around 92% of cars were compliant with the current parking restrictions. It should be noted that if compliance were improved then this would likely lead to an improvement in turnover and parking supply.

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