



**Geelong City Council**  
**Pakington Street (Geelong West) Car Parking and Traffic**  
**Study**  
**Car Parking and Traffic Assessment**

September 2018

## 5. Car Parking

### 5.1 Supply, types and restrictions

The car parking surveys assessed the supply of car parking spaces provided on Pakington Street between immediately north of Church Street and Spring Street, and Gordon Avenue, and in the 15 off-street car parks within the study area. The summary results of the parking supply audit are summarised in Table 5 . Further detailed statistics are provided in Appendix F.

The survey indicated that there are 179 on-street car parking spaces on Pakington Street and 72 on-street spaces provided on Gordon Avenue, with 1,631 spaces across the 65 off-street car parks. This means that approximately 13% of the total car parking supply in the study area is provided on-street on Pakington Street and Gordon Avenue. This on-street car parking supply is predominately classed as 1P restrictions, with 173 (69%) 1P parking spaces in total. This is reflective of the need to maintain turnover of car parking supply for adjacent land uses.

On-street parking in the study area can be summarised as express and short term parking, with a predominate supply of 1P parking, some 15 minute and 30 minute parking, and the provision of loading zones.

Off-street parking is a mixture of medium and long-term parking. The majority of 2P parking and unrestricted parking in the study area are provided in off-street car parks. All of the people with disabilities ('disabled') parking spaces are also provided in off-street car parks. This is to allow Disability Discrimination Act (DDA) compliant spaces and allows users time and space for parking activities without pressure of through traffic.

Table 5 Car parking types and restrictions within study area

	Supply of spaces	Percentage
30 mins or less	17	1%
1P	226	12%
2P	490	26%
Unrestricted	995	53%
Disabled	39	2%
Other	115	6%
<b>Total</b>	<b>1,882</b>	<b>100%</b>

A map showing the on-street and off-street parking restrictions in the study area has been prepared and is shown in Appendix A.

The study area is cordoned into three precincts: the northern precinct (from Church Street to Waratah / Wellington Street), the retail core precinct (from Waratah / Wellington Street to Autumn Street), and the Gordon Avenue precinct (the extent of Gordon Avenue from Pakington Street to Latrobe Terrace). Table 6 categorises the types and supply of parking spaces within each of these precincts.

It shows that the northern precinct has mainly 1P restricted or unrestricted parking, and 10% of the parking is on-street parking. The retail core precinct has the largest supply of car parking with majority being either 2P restricted or unrestricted parking and 13% of the parking is on-street parking. Gordon Avenue has the lowest supply of parking of the three precincts, but has the highest proportion of on-street parking (15%).

Table 6 Car parking supply and restriction types within each precinct

Car parking type	P 5 min	¼ P	½ P	1P	2P	2P Reserved	Reserved	Unrestricted	2P Disabled	Disabled	Private parking	Loading zone	Clearway	Other	Total
<b>Northern precinct</b>															
On-street	1	5	10	33	5	0	0	21	0	0	0	4	6	0	85
Off-street	0	0	0	39	0	0	5	502	0	19	0	0	0	4	569
<b>Total</b>	<b>1</b>	<b>5</b>	<b>10</b>	<b>72</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>523</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>4</b>	<b>6</b>	<b>4</b>	<b>654</b>
<b>Retail core precinct</b>															
On-street	1	0	0	73	8	0	0	0	0	0	0	10	2	0	94
Off-street	0	0	0	0	370	0	0	241	0	16	13	0	0	0	640
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>73</b>	<b>378</b>	<b>0</b>	<b>0</b>	<b>241</b>	<b>0</b>	<b>16</b>	<b>13</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>734</b>
<b>Gordon Avenue precinct</b>															
On-street	0	0	0	67	0	0	0	0	0	0	0	5	0	0	72
Off-street	0	0	0	14	82	25	3	231	1	3	60	0	0	3	422
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>81</b>	<b>82</b>	<b>25</b>	<b>3</b>	<b>231</b>	<b>1</b>	<b>3</b>	<b>60</b>	<b>5</b>	<b>0</b>	<b>3</b>	<b>494</b>

## 5.2 Car parking occupancy

The average on-street car parking occupancy is summarised for each of the precincts in Figure 34, Figure 35 and Figure 36. Off-street car parking spaces that are classified as 'private' 'reserved or 'visitor parking' have been excluded from this analysis as they are not available to the general public. On Saturday, heavy rain occurred between 9:00 am and 10:00 am, which is likely to have reduced the number of people entering the precincts during the morning.

Hourly captures of car parking occupancy for the study area are provided in for the Appendix B for the weekday and weekend results.

To further understand parking demand in relation to business activity in the corridor, a compilation of maps has been prepared. These have been generated with parking survey data for the study area, with detailed parking duration surveys for Pakington Street on-street parking.

Using the duration survey data for Pakington Street, the number of visits have been plotted on a map in Appendix C. Both Thursday and Saturday have moderate visits to the northern precinct, and high number of visits in the retail core precinct. This suggests that there is a high demand for short-term parking for people visiting shops and services in the retail core precinct.

Following the number of visit maps, a Total Occupation Map in Appendix D for Pakington Street on-street parking was prepared, showing the total utilisation of parking spaces. On both weekdays and weekends, along the whole length of the corridor, parking utilisation is high with on-street parking spaces generally occupied for a minimum of seven hours per day. On-street parking along Pakington Street has a high occupancy rate, with longer stays in the northern precinct and high turnover parking in the retail core precinct

The average stay of parked vehicles on Pakington Street is similar on Thursdays and Saturdays as shown in Appendix E. The retail core precinct has a consistently high turnover of parking, with a higher rate on Thursday, with average stays 15-30 minutes and 30-60 minutes. The northern precinct has a lower parking turnover, with stays for Thursdays generally 30-60 minutes in the 1P parking spaces, and long-term stay parking spaces. Saturday parking has a lower turnover in the northern precinct, which is reflective of the parking restrictions for Saturday afternoon in this area.

### ***Northern Precinct Parking***

On-street car parking spaces are provided on both sides of Pakington Street. Figure 34 shows that the average level of occupancy is relatively similar across a weekday and weekend, with the weekend profile offset by an hour. The peak occupancy at 10 am and 12 am on Thursday, (approximately 79% and 74%) is likely to be visitors during mid-morning and lunchtime work breaks, with an evening spike, which may be by commuters stopping to visit retail premises on their return journey after work or the school pick-up. The weekend profile peaks at 1 pm at approximately 87% occupancy with people likely to visit the retail premises during lunchtime. There is a drop in occupancy for the late afternoon before another increase for the evening. The late increase is reflective of evening dining activity in this precinct.

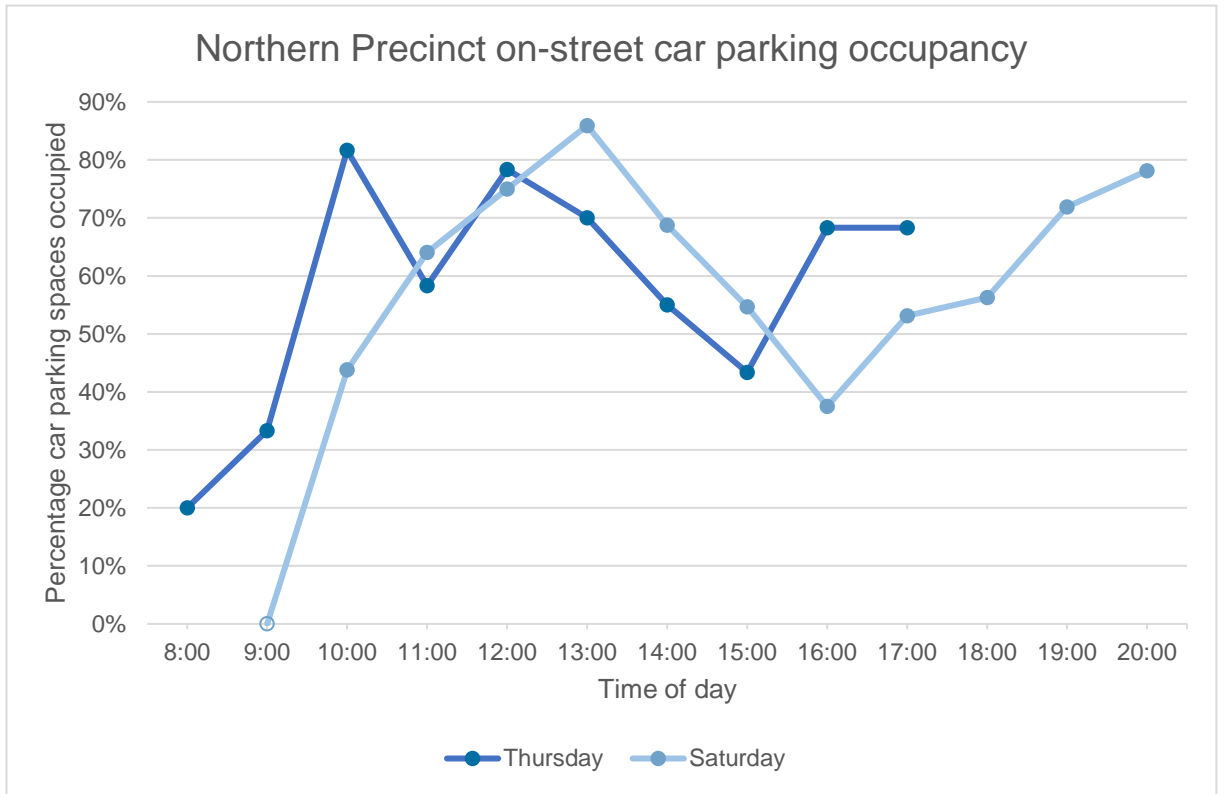


Figure 34 Average occupancy of Northern Precinct on-street car parking

### Retail Core Precinct

On-street car parking spaces are provided on both sides of Pakington Street. Figure 35 shows that the average level of occupancy on the weekday is consistently high throughout the day (averaging around 75% between 10 am and 1 pm), while across the weekend the average level of occupancy is variable. The peak between 11 am and 1 pm on the weekend may be visitors during lunchtime, with the evening spike for visitors to the restaurants at dinnertime.

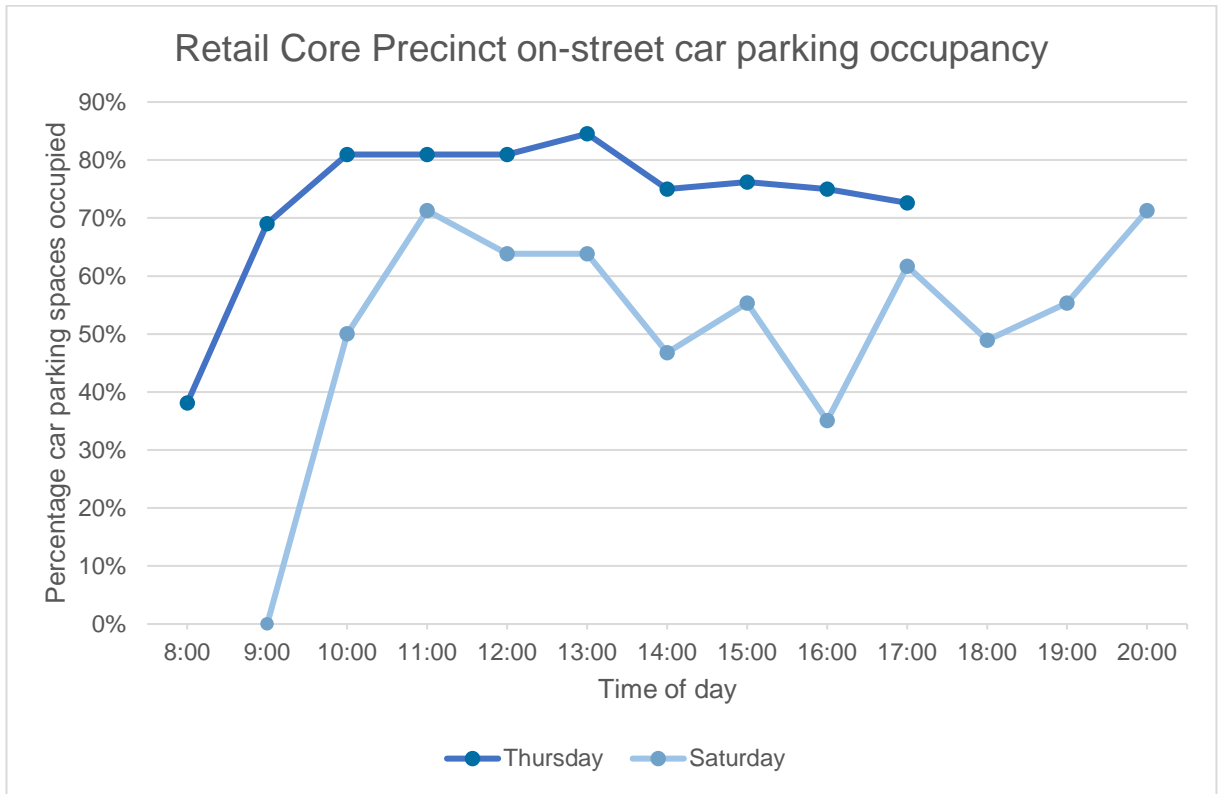


Figure 35 Average occupancy of Retail Core Precinct on-street car parking

### Gordon Avenue Precinct

On-street car parking spaces are provided on both sides of Gordon Avenue. Figure 36 shows that the occupancy trends are relatively similar across a weekday and weekend, although the level of occupancy is approximately 20% lower on the weekend. The lower level of occupancy on the weekend is likely to be due to several of the shops not opening to trade, or closing trade mid-afternoon on Saturday. The spike in occupancy at 12 pm on the weekday and 1 pm and weekend may be shoppers visiting the precinct during a lunchbreak.

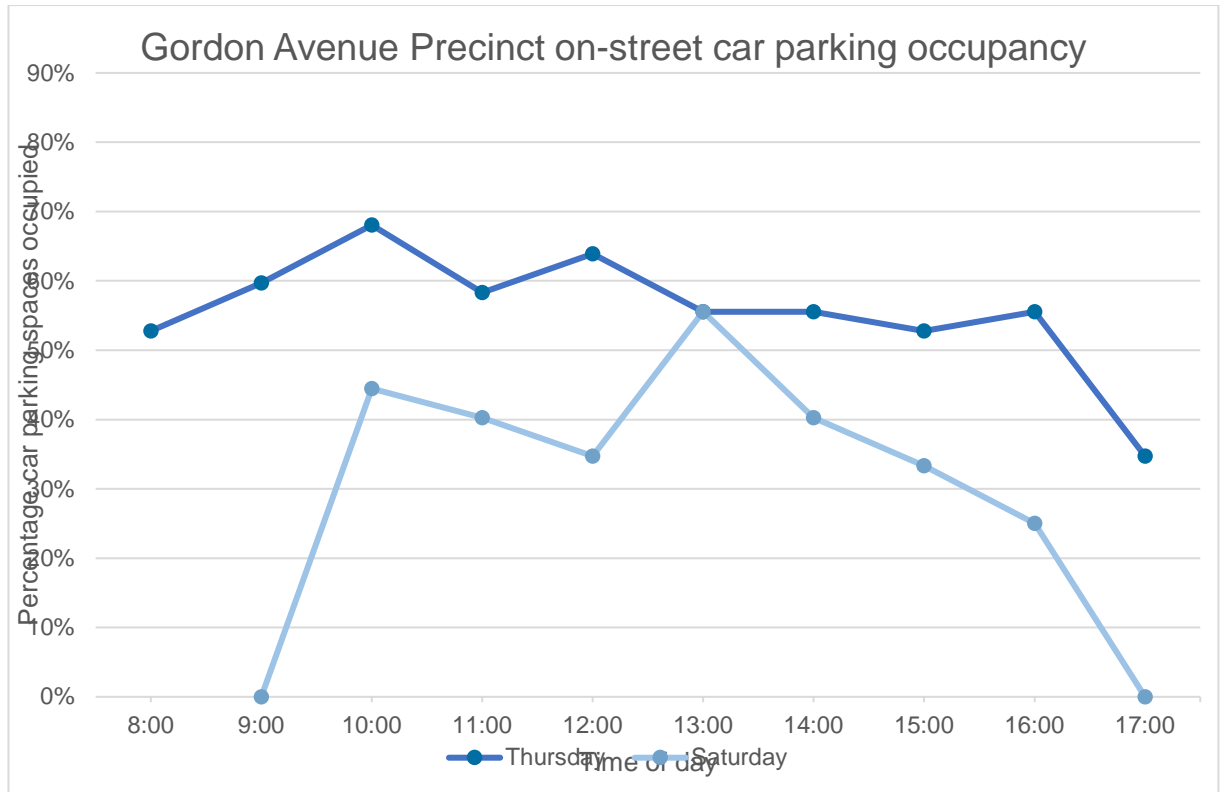


Figure 36 Average occupancy of Gordon Avenue Precinct on-street car parking

### Off Street Parking

The average occupancy of parking spaces in off-street car parks shown in Figure 38 to Figure 39 is different to the on-street car parking within each precinct. On Saturday, heavy rain occurred between 9:00 am and 10:00 am, which is likely to have reduced the number of people entering the precincts during the early morning.

Parking occupancy peaks in the northern precinct on both days at 12 noon, when visitors access the retail precincts during their lunchbreak. On Thursday, the occupancy and remains relatively constant across the afternoon, whereas on Saturday, the peak is higher and the peak period is more defined.

In the retail core precinct the profile for Saturday and Thursday are similar. Thursday shows a steady increase in occupancy throughout the morning, reaching a peak of 87% at 12 noon, and decreasing steadily throughout the afternoon. The profile for Saturday also shows a broad peak, however the chart depicts a sharp increase in occupancy between 10 and 11 am and relatively stable plateau between 11 am and 2 pm. The steep increase in the morning is likely to be due to people delaying visiting the precinct until after the rain finished. Both Thursday and Saturday show a reduction in occupancy after 4 pm, around when trading finishes.

The occupancy trends are similar and the across a weekday and weekend for the Gordon Avenue precinct, although the level of occupancy for Gordon Avenue is 50% lower on the weekend.

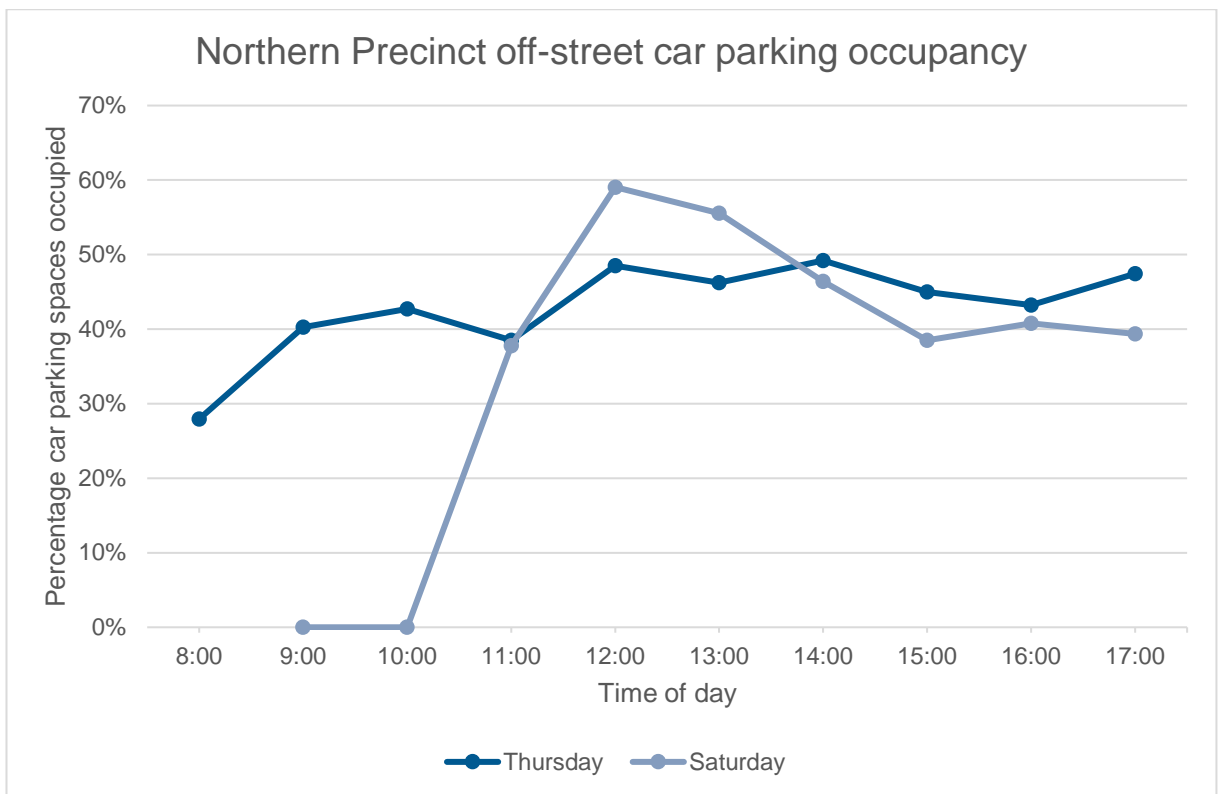


Figure 37 Average occupancy of Northern Precinct off-street car parking

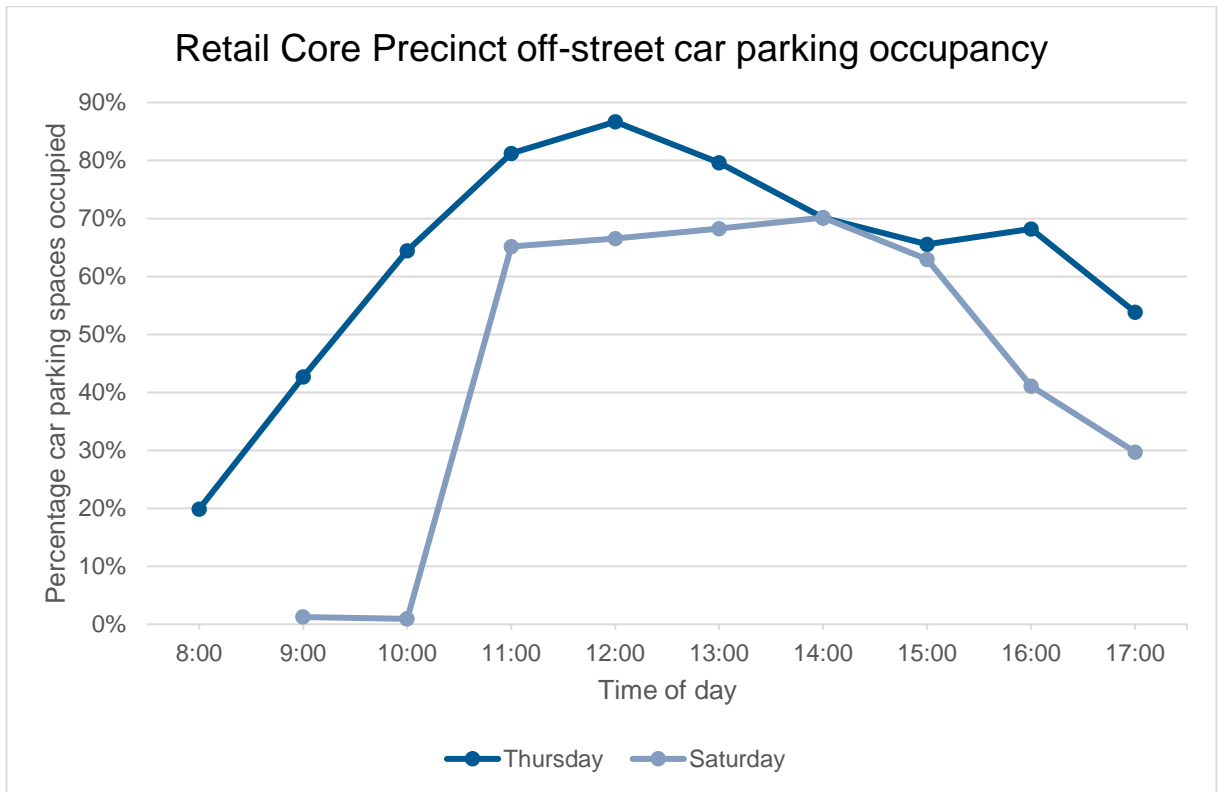


Figure 38 Average occupancy of Retail Core Precinct off-street car parking

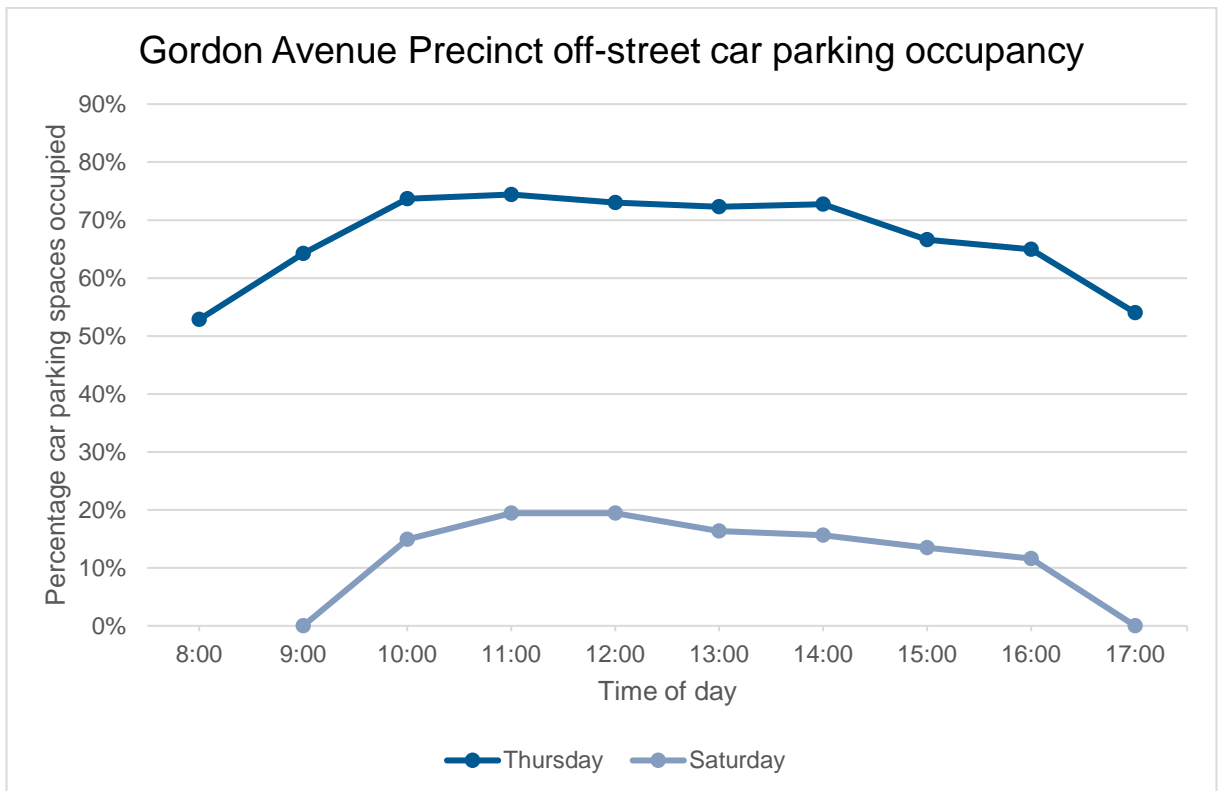


Figure 39 Average occupancy of Gordon Avenue Precinct off-street car parking

### 5.3 Loading zones

There are currently three loading zones on in the northern precinct, both on the eastern side of Pakington Street. The loading zones have a combined capacity of four spaces and an average occupancy rate of 19% during the week and 23% on weekends. These loading zones are likely to be accessed by businesses within immediate walking distance of the loading zones.

There are nine loading zones on Pakington Street in the retail core precinct, operating as 15-minute loading zones or 30-minute loading zones. The loading zones have a combined capacity of 10 spaces and an average occupancy rate of 24% during the week and 21% on weekends. The loading zones are used evenly throughout the day, without any apparent peak demand period.

There are two loading zones on the northern side of Gordon Avenue, operating as a 15-minute loading zone and a 30-minute loading zone and one loading zone on the southern side operating as a loading zone and 1P restriction. The loading zones have a combined capacity of five spaces, and an average occupancy rate of 46% during the week and 33% on weekends. The loading zones have a higher occupancy rate in the morning.

## 5.4 User activity

A user activity survey was conducted for people parking in the on-street car parking spaces on Pakington Street and Gordon Avenue. These surveys were undertaken on Thursday 8 am to 6 pm and Saturday 9 am to 5 pm. These survey periods are reflective of trade hours along the corridor. The Thursday survey achieved feedback from 570 individuals and the Saturday survey achieved feedback from 489 individuals. The results of the six questions are summarised for the weekday and weekend in Figure 40 to Figure 44.

### **Question 1 – Where are you going within the study area?**

Question 1 sought to understand the reasons for travelling to the precincts. Seven multiple-choice answers were offered for the likely reasons, the results of which are summarised in Figure 40 at a study area level and Table 7 for the individual precincts.

Figure 40 shows that the most common reason for visiting the study area on both the weekday and weekend was for visiting cafés and restaurants (average 40%). The second-most popular answer (average 29%) was for work. Other places included going to the bus stop, home, school, visiting and going for a walk. On a weekend, people are more likely to visit the study area to go to a café / restaurant or to go to work, whereas on a weekday people are more likely to go retail / shopping, to the ATM or to the library.

Table 7 shows the responses to question one for each of the three precincts. In the Gordon Avenue precinct the most common reason for visiting the precinct on a weekend was to go to a Café / Restaurant (58%) or the ATM (26%). On a weekday, the most common reason for visiting the precinct on a weekend was to go to the ATM (36%) or retail / shopping (30%). The change in purpose for visiting Gordon Avenue precinct between weekday and weekend is likely to be due to the reduced Saturday trading hours of several of the shops and services.

In the retail core precinct the most common reason for visiting the precinct on both a weekday and weekend was to go to a café / Restaurant (36% weekday, 41% weekend) or work (27% weekday, 40% weekend). Visitors to the precinct for retail / shopping (12% weekday, 2% weekend) and the library (16% weekday, 10% weekend) were higher on the weekday whereas visitors accessing a service were higher on the weekend (6% weekend, 3% weekday).

Visitors to the northern precinct showed a similar pattern to the core precinct; however, people were more likely to visit a service (4% weekday, 1% weekend) and the ATM (11% weekday, 1% weekend,) on a weekday rather than a weekend.

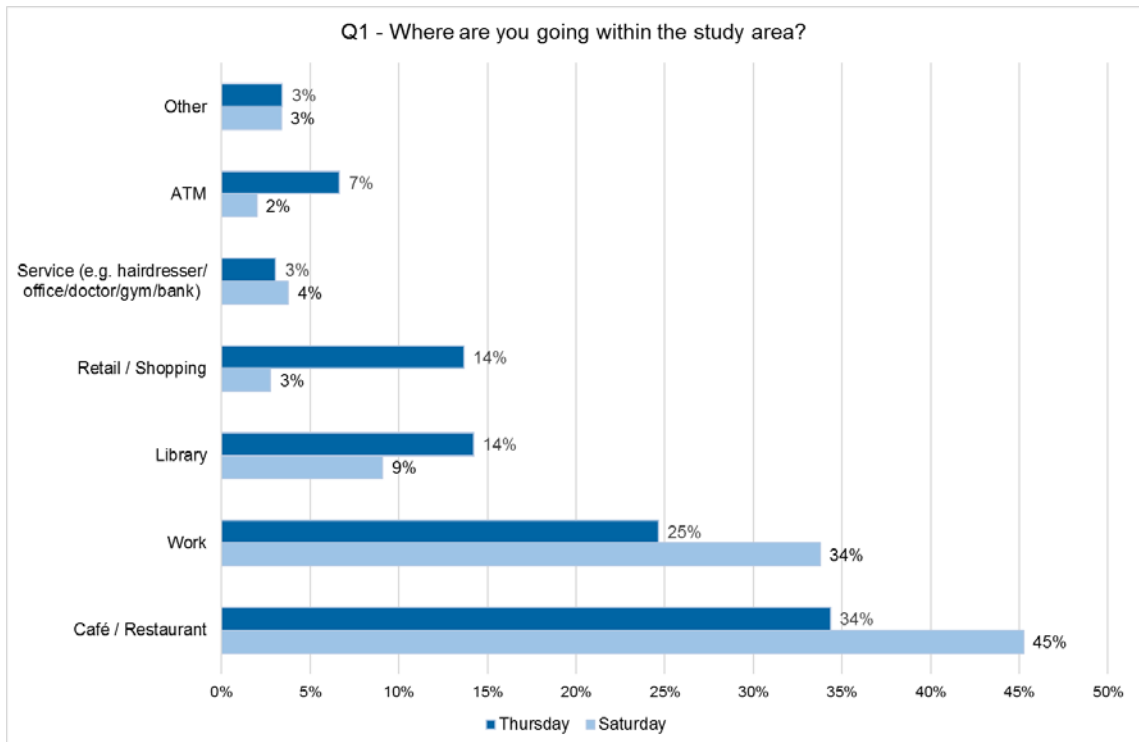


Figure 40 Results for where people are going within the study area

Table 7 Results for where people are going within the study area per precinct

Q1 - Where are you going within the study area?								
Precinct	Day	Café / Restaurant	Work	Library	Retail / Shopping	Service (e.g. hairdresser/office/doctor/gym/bank)	ATM	Other
Northern Precinct	Weekday	36%	23%	13%	13%	4%	11%	0%
	Weekend	52%	26%	9%	5%	1%	1%	8%
Retail Core	Weekday	36%	27%	16%	12%	3%	2%	5%
	Weekend	41%	40%	10%	2%	6%	1%	1%
Gordon Avenue	Weekday	19%	9%	6%	30%	0%	36%	0%
	Weekend	58%	16%	0%	0%	0%	26%	0%
Overall Average	Weekday	34%	25%	14%	14%	3%	7%	3%
	Weekend	45%	34%	9%	3%	4%	2%	3%

### ***Question 2 – How did you arrive at your destination?***

Question 2 sought to understand the mode split of visitors to the precincts. Six multiple-choice answers were offered for the likely locations, the results of which are summarised in Figure 41.

Figure 41 shows that an average of 61% people drove to the precincts. Of the people surveyed, an average of 39% arrived at the precincts using active transport, with higher rates during the week. On the weekend 9% more people drove to the precincts than on a weekday, whereas on the weekday 9% more people used public transport compared to the weekend.

Table 8 shows the responses to question two within each of the three precincts. On the weekend, both the Gordon Avenue precinct and the retail core precinct had high proportions of people walking (39% retail core precinct, 37% Gordon Avenue precinct), whereas the northern precinct had lower proportions of people walking (17%) and higher proportions driving compared to the other two precincts (northern precinct 78%, 58% retail core precinct, 47% Gordon Avenue precinct).

The retail core precinct had the highest proportion of people accessing the precinct using public transport on a weekday (northern precinct 9%, 13% retail core precinct, 9% Gordon Avenue precinct), but the lowest proportion on a weekend (northern precinct 3%, 1% retail core precinct, 5% Gordon Avenue precinct).

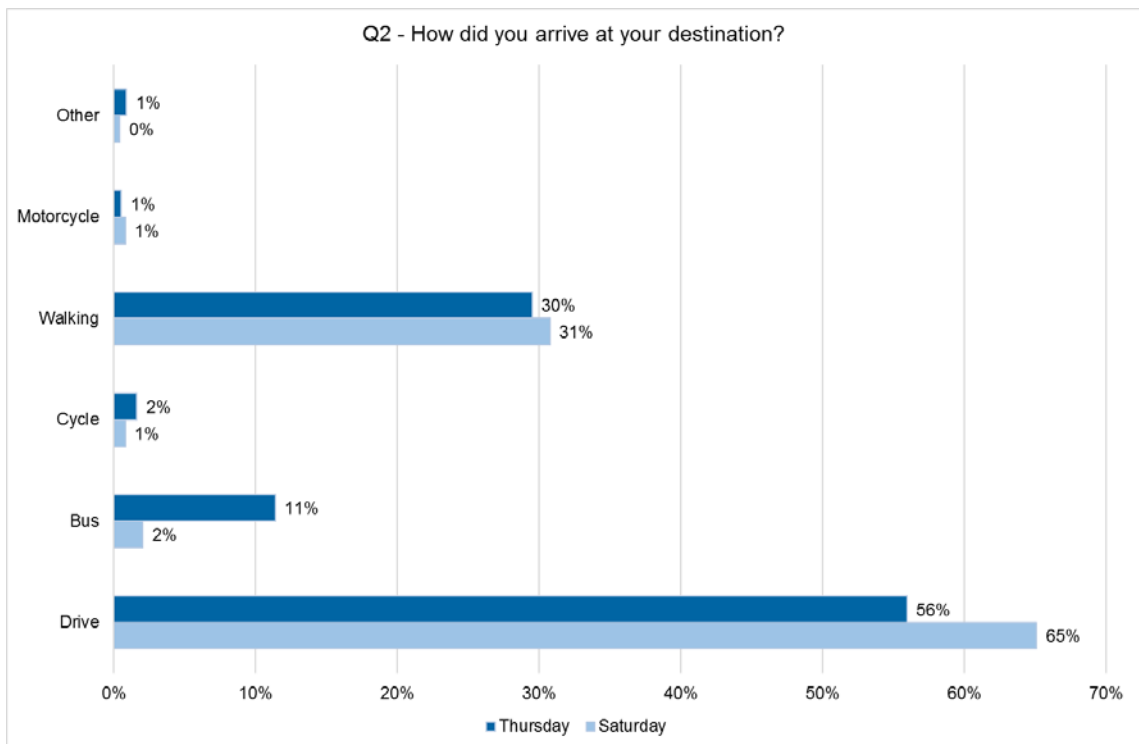


Figure 41 Results for how people arrived at their destination

Table 8 Results for how people arrived at their destination per precinct

Q2 - How did you arrive at your destination?							
Precinct	Day	Drive	Bus	Cycle	Walking	Motorcycle	Other
Northern Precinct	Weekday	60%	9%	1%	31%	0%	0%
	Weekend	78%	3%	2%	17%	0%	0%
Retail Core	Weekday	54%	13%	2%	30%	1%	0%
	Weekend	58%	1%	0%	39%	1%	0%
Gordon Avenue	Weekday	59%	9%	0%	24%	0%	9%
	Weekend	47%	5%	0%	37%	0%	11%
Overall Average	Weekday	56%	11%	2%	30%	1%	1%
	Weekend	65%	2%	1%	31%	1%	0%

### **Question 3 – Where did you park your car?**

Question 3 sought to understand the location chosen for parking. Six multiple-choice answers were offered, however those who answered “other” or “did not drive / other” have been excluded from the analysis in order to focus on the parking location of car drivers. The results of which are summarised in Figure 42.

On both a weekday and weekend, the majority of drivers chose to park on-street on Pakington Street (average 44%). On a weekend 8% more drivers chose an off-street car park than on a weekday.

Table 9 shows the responses to question three within each of the three precincts.

Gordon Avenue precinct had the highest proportion of people parking on-street on both the weekday and the weekend (100% weekend, 72% weekday) and the lowest proportion of people parking off street and on side streets.

On both days, approximately half of people surveyed in the retail core precinct parked on-street on Pakington Street, and approximately one third of people parked off-street with the remaining people parking on side streets.

The northern precinct had the highest proportion of people parking off-street on the weekend (63%).

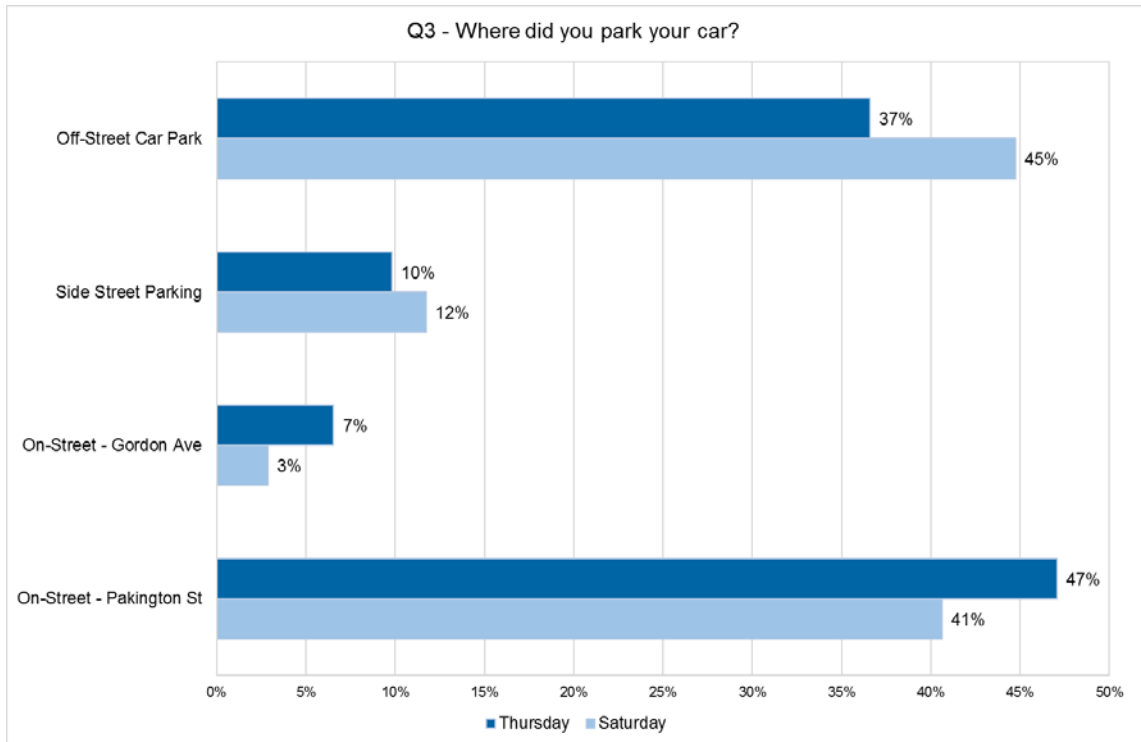


Figure 42 Results for where people parked their car

Table 9 Results for where people parked their car per precinct

Q3 - Where did you park your car?					
Precinct	Day	On-Street - Pakington St	On-Street - Gordon Ave	Side Street Parking	Off-Street Car Park
Northern Precinct	Weekday	49%	1%	13%	37%
	Weekend	37%	0%	0%	63%
Retail Core	Weekday	51%	0%	10%	39%
	Weekend	46%	0%	23%	31%
Gordon Avenue	Weekday	12%	72%	0%	16%
	Weekend	0%	100%	0%	0%
Overall Average	Weekday	47%	7%	10%	37%
	Weekend	41%	3%	12%	45%

#### **Question 4 – Why did you choose on-street car parking?**

Question 4 sought to understand the reason for choosing their on-street parking space as opposed to parking in an off-street car park. Five multiple-choice answers were offered, the results of which are summarised in Figure 43.

Figure 43 shows that on both a weekday and weekend, the majority of drivers chose to park on-street since there was a space available (average 36%) or for other reasons including a preference for 5 min parking, quicker, and parking space visibility. The third most-common reason was due to the convenience of the on-street parking space being in their direction of travel (average 20%).

Table 10 shows the responses to question three within each of the three precincts.

On the weekend, all the precincts had a high proportion of people choose on-street parking because a parking space was available (47% northern precinct, 31% retail core precinct, 56% Gordon Avenue precinct). On a weekday, the northern precinct and the retail core precinct also had a high proportion of people choose on-street parking because a parking space was available, but the Gordon Avenue precinct had a much lower proportion of people choose this response (36% northern precinct, 40% retail core precinct, 13% Gordon Avenue precinct). Rather on a weekday, the most-common reason for people parking on-street, chosen by people surveyed on Gordon Avenue, was due to the convenience of the on-street parking space being in their direction of travel (42%).

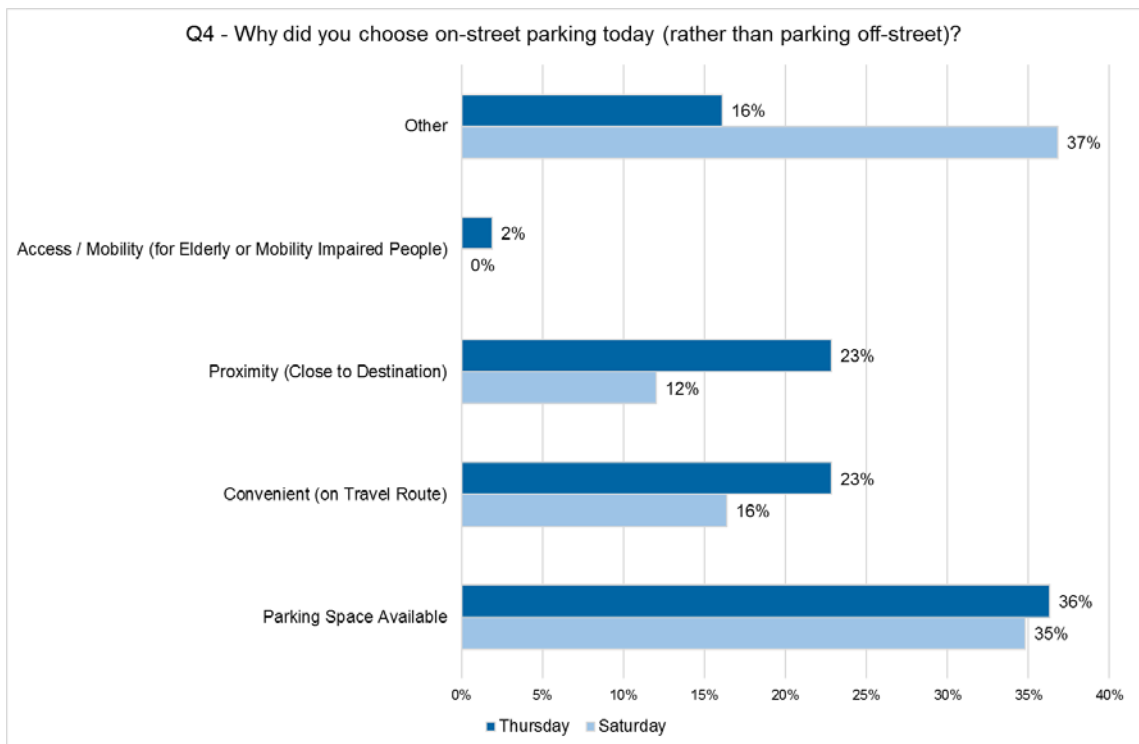


Figure 43 Results for the reason for choice of parking space location

Table 10 Results for the reason for choice of parking space location per precinct

Q4 - Why did you choose on-street parking today (rather than parking off-street)?						
Precinct	Day	Parking Space Available	Convenient (on Travel Route)	Proximity (Close to Destination)	Access / Mobility (for Elderly or Mobility Impaired People)	Other
Northern Precinct	Weekday	36%	13%	19%	3%	29%
	Weekend	47%	29%	21%	0%	4%
Retail Core	Weekday	40%	25%	23%	2%	11%
	Weekend	31%	13%	10%	0%	45%
Gordon Avenue	Weekday	13%	42%	33%	0%	13%
	Weekend	56%	22%	11%	0%	11%
Overall Average	Weekday	36%	23%	23%	2%	16%
	Weekend	35%	16%	12%	0%	37%

### Question 5 – Would you have used off-street parking if on-street car parking was not available?

Question 5 sought to understand whether drivers would choose to park in off-street car parks if there was no on-street parking available. The results to Question 5 are summarised in Figure 44. It shows that on both a weekday and weekend an average of 95% of drivers would seek to park in an off-street car park if on-street parking were not available. The resulting 5% were more inclined to find on-street parking in the adjacent precincts or not stop in the precinct.

To further understand the desire to park in Pakington Street, a cross reference to all the questions was undertaken on the participants who answered 'No' to Question 5. The combined weekday and weekend response for people who answered 'No' to question 5 was 17 participants. Of these:

- Seven participants (41%) in the precincts were visiting a café / restaurant.
- Eleven participants (65%) parked on-street on Gordon Avenue and three participants (18%) parked on-street on Pakington Street.
- Five participants choose on-street car parking due to the convenience of being along their travel route, four participants (24%) choose on-street car parking due to proximity and four participants (24%) choose on-street car parking due to a parking space available.

From the results, there is a higher tolerance for people to choose parking options other than along Pakington Street in both the northern and core precinct, with an average of 1.5% of respondents in these precincts answering 'No'.

In the Gordon Avenue precinct, there is a low acceptance of finding a parking space not on Gordon Avenue with 23% and 56% answering 'No' on weekday and weekend respectively. This is reflective in the low off-street parking occupancy for the Gordon Avenue.

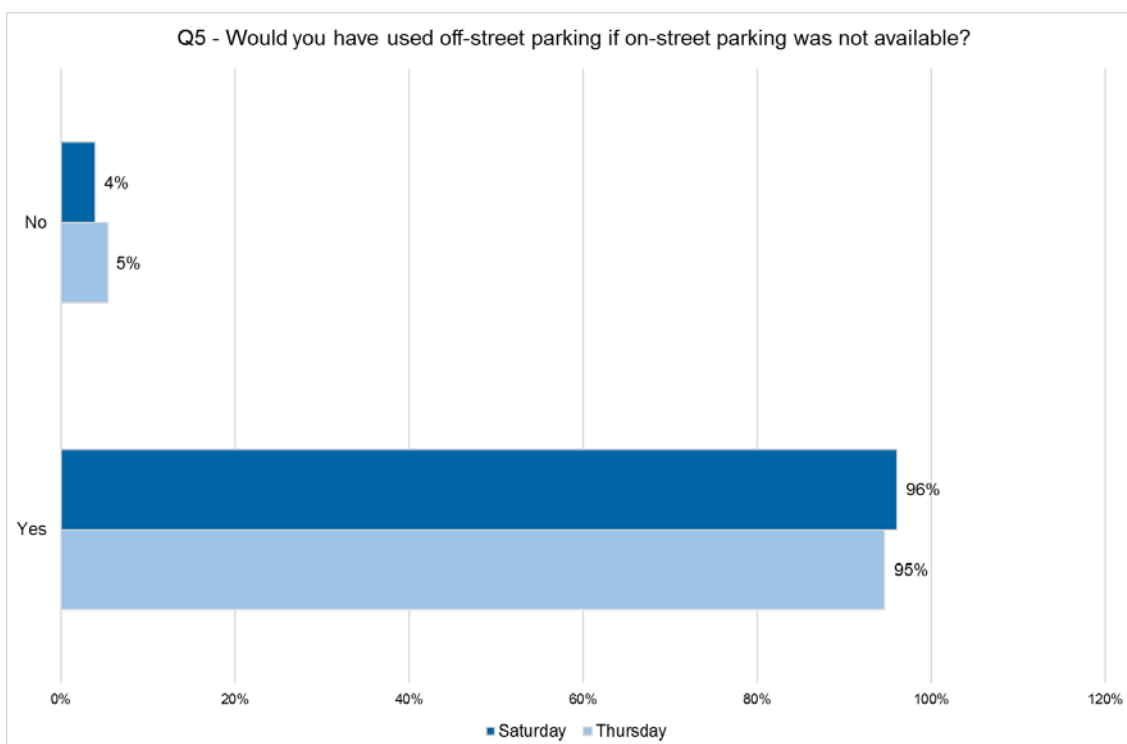


Figure 44 Results for the preference of parking space location

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Document Status

Revision	Author	Reviewer		Approved for Issue		
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