6. Off-street Parking Demand

6.1 Parking demand is a function of the number of journeys made using the private car. It is also affected by a number of other variables, significantly:

- trip purpose;
- availability and appropriateness of alternative forms of transport;
- location of parking areas in relation to attractors;
- ease of finding a space; and
- cost of parking relative to other forms of transport.

6.2 In this study, analysis of parking data is used to determine the current parking demand. This evidence base is then used as a foundation to forecast the changing profile of parking demand as the above factors are varied.

6.3 Off-street car park occupancy surveys were undertaken in all of the public off-street car parks throughout the City. Privately operated publicly available car parks were surveyed, as were the park & ride sites. This chapter presents the results of the surveys and describes conclusions drawn from analysis of this data.

6.4 Later chapters consider future demand and describe strategies for managing the forecast growth. Any conclusions drawn from the analysis of off or on-street data should however not be made in isolation since it is important to consider how the demand and supply of each interrelate.

Public Off-street Parking Demand

6.5 City Council staff surveyed off-street car parks during March 2005. Every public off-street car park within the City was surveyed once on a neutral weekday and once on a Saturday between the hours of 10:00 and 15:00. The car park locations can be seen in Figure 5.1 and Figure 5.2.

6.6 Car parks in the City Centre core were surveyed twice between these times: once in the morning and again in the afternoon. Each survey recorded the total number of vehicles parked within each car park.

6.7 The survey times were chosen on the basis of a survey, conducted in January 2004[28], which showed that between 10:00 and 15:00 was the most popular time to shop. Vehicles owned by commuters would also be parked at this time on weekdays. The surveys are designed to record maximum daytime demand in a neutral month without being affected by additional demand for parking spaces generated by visitors to the City.

Central Area – Limited Waiting

6.8 Figure 6.1 and Figure 6.2 show occupancy of limited waiting public off-street car parks in the central area recorded during surveys undertaken in early March 2005. Car parks shown in Figure 6.1 were surveyed twice on a neutral weekday. Those in Figure 6.2 were surveyed only once on a weekday.

[28] Plymouth Points of View Survey, Jan 2004

Figure 6.1 – Central Area Car Park Occupancy: Limited Waiting Public Off-street (1)

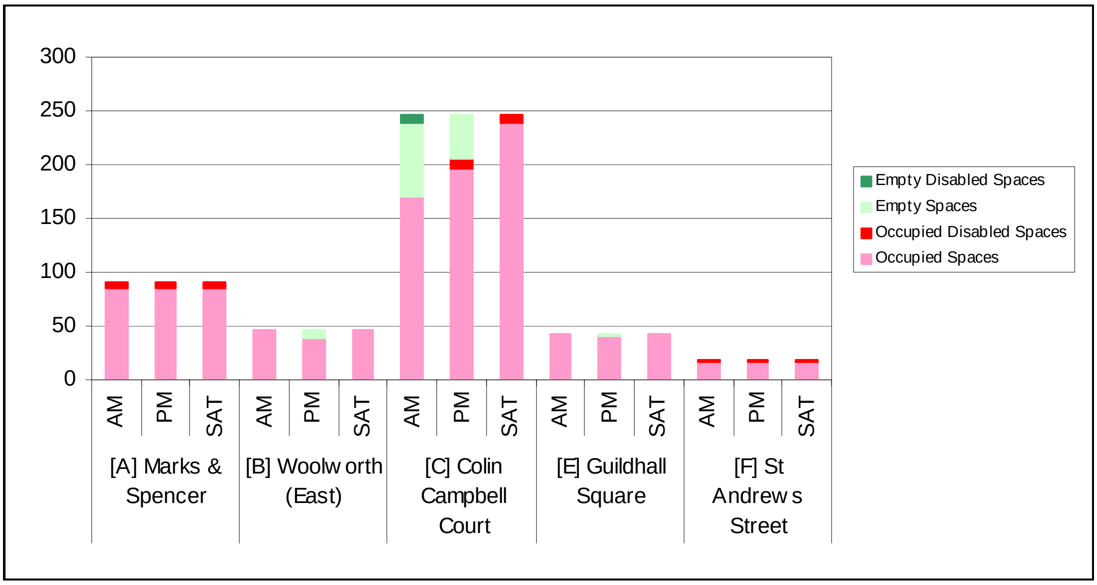
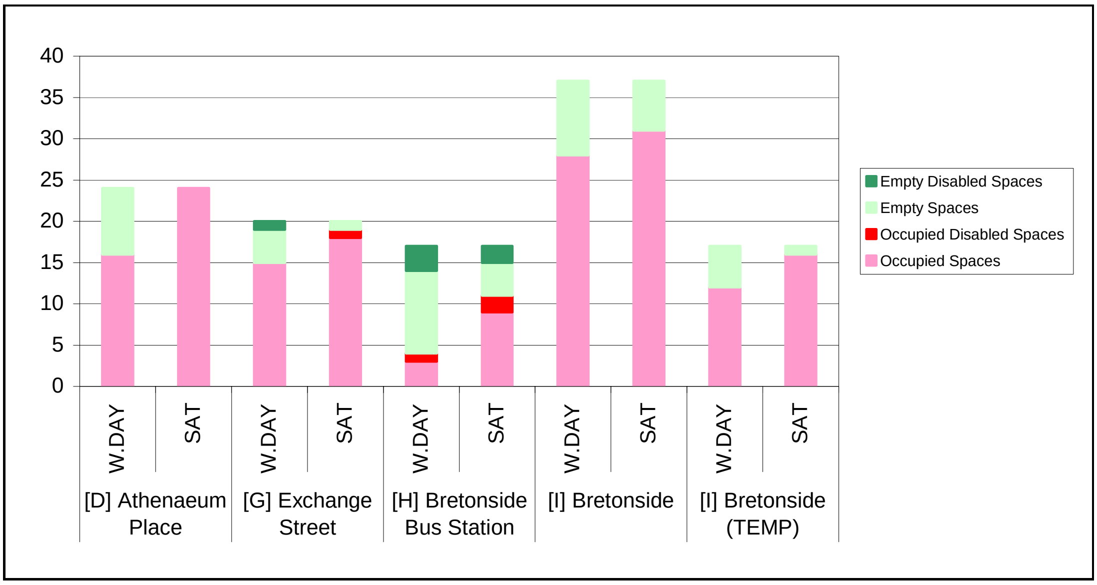


Figure 6.2 – Central Area Car Park Occupancy: Limited Waiting Public Off-street (2)



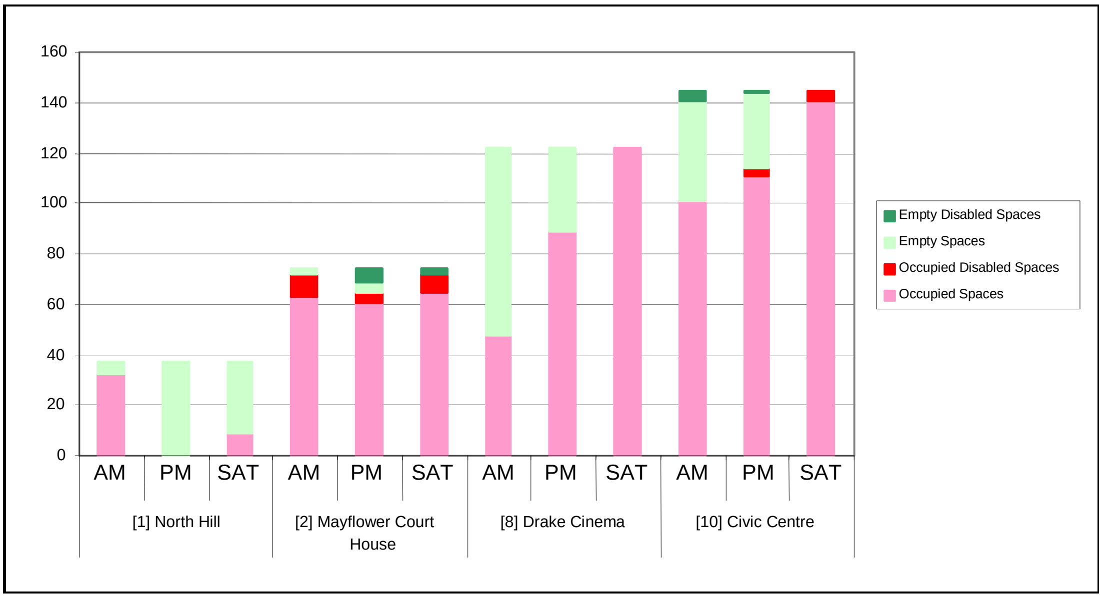
6.9 Parking charges are levied in all of the central area limited waiting car parks and all are at surface level. Figure 6.1 shows that all the limited waiting car parks within the City centre core, except Colin Campbell Court, were at or close to capacity on the days of the survey. Seven empty spaces were recorded in Woolworth's (East) and one in Guildhall Square, both on the neutral weekday afternoon. Colin Campbell Court was 69% and 83% full in the morning and afternoon surveys on the neutral weekday. No spaces were recorded during the Saturday survey.

6.10 The results shown in Figure 6.2 indicate that there is less demand for parking spaces in the edge of centre car parks on weekdays than in the City centre core (see Figure 6.1). Between 24% and 33% of spaces were recorded as being empty during the weekday surveys except in the Bretonside Bus Station car park that was 76% empty. During the Saturday survey, demand was higher in the edge of centre car parks than had been recorded in the weekdays with occupancy being 84% or greater in all except the Bus Station car park. Nevertheless there remained more unused capacity than in the City centre core car parks.

Central Area – Unlimited Waiting

6.11 Figure 6.3 shows the occupancy survey results from central area unlimited waiting car parks in the central area of Plymouth that provide fewer than 150 spaces. Figure 6.4 shows the results of occupancy surveys of unlimited waiting car parks that provide between 250 and 400 spaces each. Figure 6.5 shows the results of occupancy surveys from the two unlimited waiting car parks that provide more than 600 spaces.

Figure 6.3 – Central Area Car Park Occupancy: Unlimited Waiting Public Off-street (1)



6.12 All of the results shown in Figure 6.3 – Central area for surface level car parks. Of the four, Mayflower Court House car park is the only one within the City Centre core. Drake Cinema and Civic Centre car parks are both south of the City Centre core within ten minutes walk of the main shopping area. North Hill is further from the centre, approximately half way to Mutley Plain (see Figure 5.1).

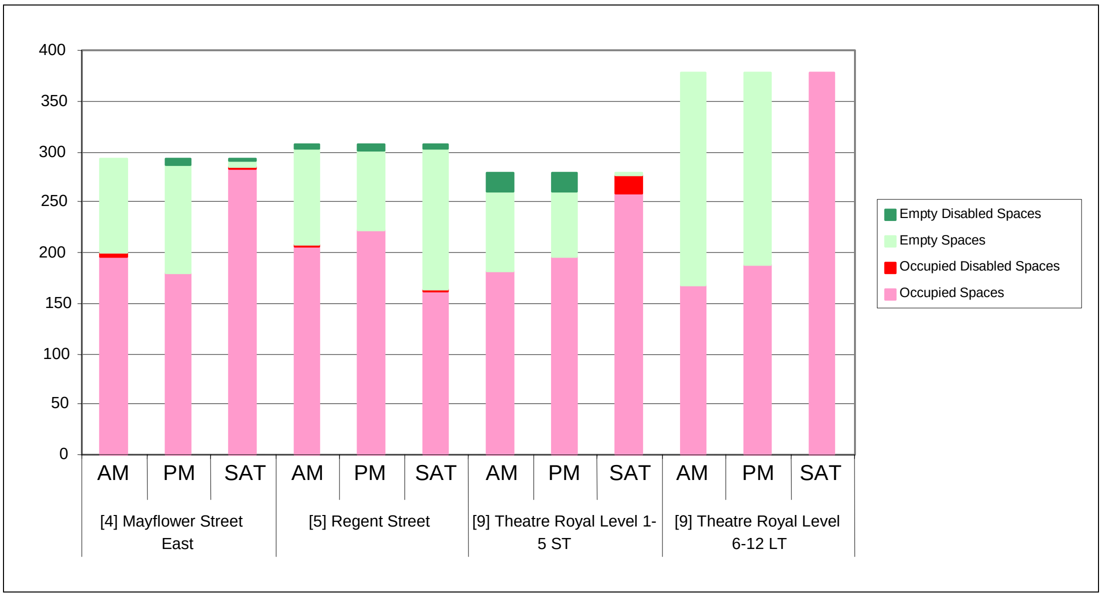
6.13 The figure shows that Mayflower Court House car park was close to capacity each time it was surveyed. It also shows that both Drakes Cinema and the Civic Centre car parks were approximately three quarters full during the weekday surveys and at capacity during the Saturday survey. There was much less demand for the North Hill car park.

6.14 Figure 6.4 shows the results of occupancy surveys for Mayflower Street (East), Regent Street and the Theatre Royal multi-storey car parks. The Theatre Royal car park is operated such that permit holders may park on levels 6 and above as well those parking on a pay and display basis.

6.15 Figure 6.4 shows that approximately a third of the spaces in Mayflower Street (East), Regent Street and the lower levels of the Theatre Royal car parks were unoccupied during the weekday surveys. More than 50% of the spaces on the upper levels of the Theatre Royal car parks were unoccupied during the weekday surveys.

6.16 Like most of the smaller unlimited waiting car parks, occupancy was far higher during the Saturday survey with each car park at capacity except for Regent Street where fewer vehicles were recorded. Regent Street car park is further from the City Centre.

Figure 6.4 – Central Area Car Park Occupancy: Unlimited Waiting Public Off-street (2)



6.17 Figure 6.5 shows the results of occupancy surveys for Mayflower Street (West), Western Approach multi-storey car parks. Recorded occupancy was higher during the Saturday survey than during the weekday survey. The figure also shows that the Western Approach car park did not approach capacity during any of the surveys.

6.18 Figure 6.6 shows the results of the occupancy surveys for four edge of centre unlimited waiting car parks. Each of the car parks is at surface level. It can be seen that at the times of the surveys, both the Pier Street and Elphinstone car parks were virtually unoccupied. Regent Street / Lipson Road surface level car park was virtually at capacity when surveyed. Relatively low occupancy levels were recorded in the Lambhay Hill car park on the days of the surveys; however occupancy patterns were similar to other central area car parks in that there was greater usage on Saturdays.

Figure 6.5 – Central Area Car Park Occupancy: Unlimited Waiting Public Off-street (3)

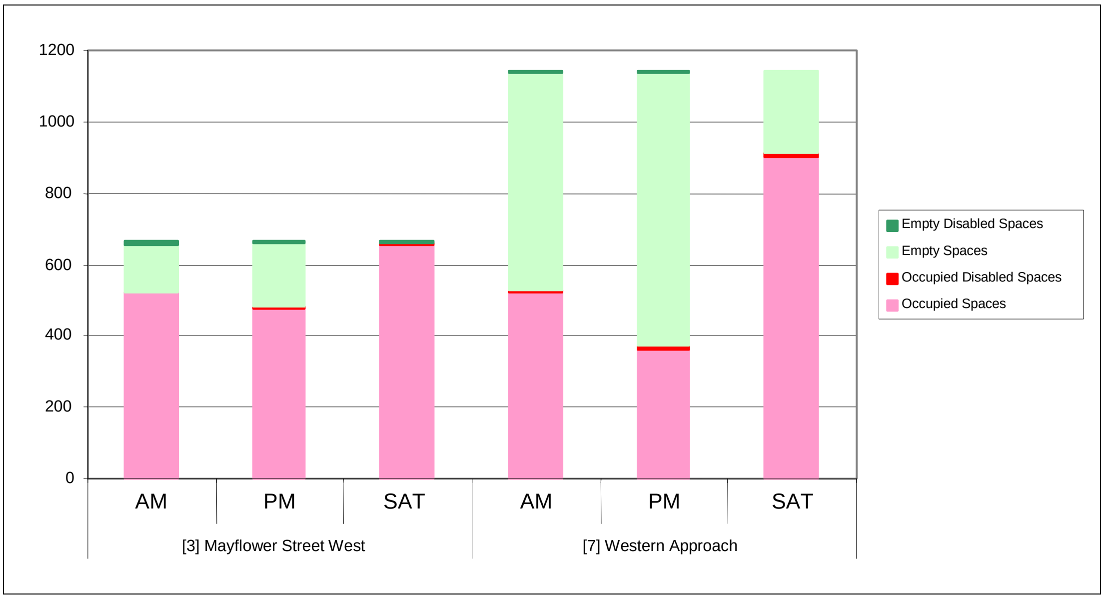
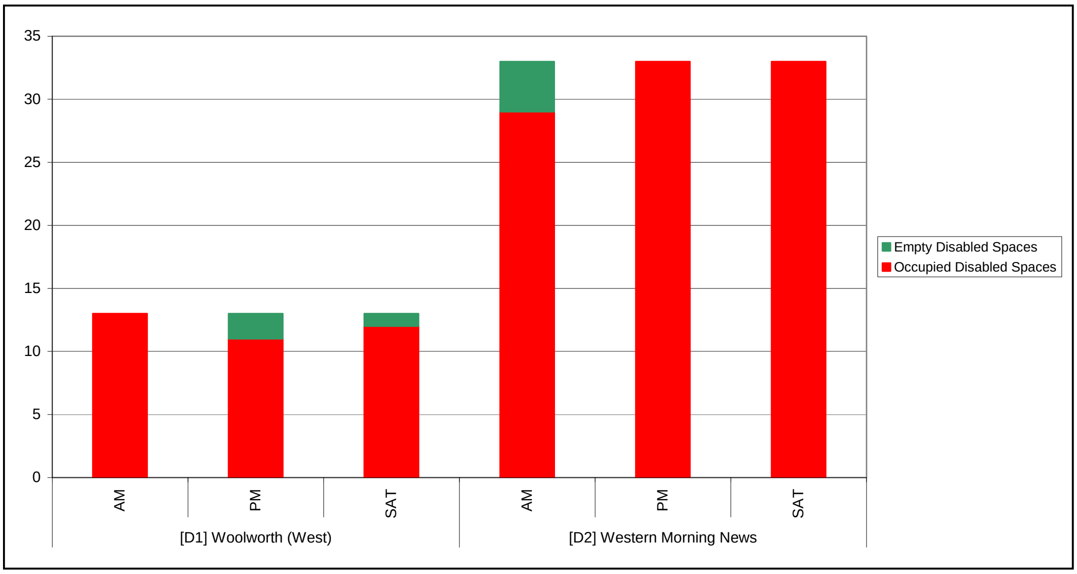


Figure 6.6 – Central Area Car Park Occupancy: Unlimited Waiting Public Off-street (4)

Central Area – Disabled Only

6.19 Figure 6.7 shows the occupancy of the disabled only car parks within the City Centre core. It shows that Woolworths (West) car park was almost at capacity each time it was surveyed. The Western Morning News car park was close to capacity in the morning and at capacity in the afternoon. It was also at capacity on the Saturday.

Figure 6.7 – Central Area Car Park Occupancy: Disabled Only Public Off-street



Central Area Multi-storey Parking Demand – Daily and Monthly Variation

6.20 Numbers of parked vehicles were continuously monitored in six of the central area multi-storey car parks using automatic traffic counting (ATC) loops. The car parks monitored are as follows:

- Western Approach – 1142 spaces.
- Mayflower (East) – 292 spaces.
- Mayflower (West) – 473 spaces.
- Armada Centre – 436 spaces.
- Theatre Royal – 650 spaces.
- Regent Street – 303 spaces.

6.21 Data for all of 2004 is available for each of these car parks except Mayflower (West), which was closed for repairs for much of the summer. The five cars parks for which continuous data is available provide a total of 2834 spaces and account for approximately 63% of the unlimited off-street parking supply. The ATC data can be used to:

a) determine whether the City centre spot survey (March 2005) is representative of typical conditions;

b) understand the daily parking demand profiles within the City centre; and

c) understand seasonal variation in parking demand.

6.22 Table 6.1 shows the average total number of vehicles parked in the five off-street car parks as recorded by the ATC on neutral weekdays during March 2004 and also shows the total number of vehicles recorded parked in the same five car parks during manual surveys undertaken in March 2005. There is very little difference between the two surveys indicating that, for the multi-storey car parks at least, the manual surveys provide a reasonable indication of parking demand in March 2005.

Table 6.1 – Neutral Weekday Multi-story Car Park Occupancy[29]

Time of Day	Manual Count: March 2005	ATC Data: Average Occupancy March 2004
Morning	1289	1216
Afternoon	1157	1150

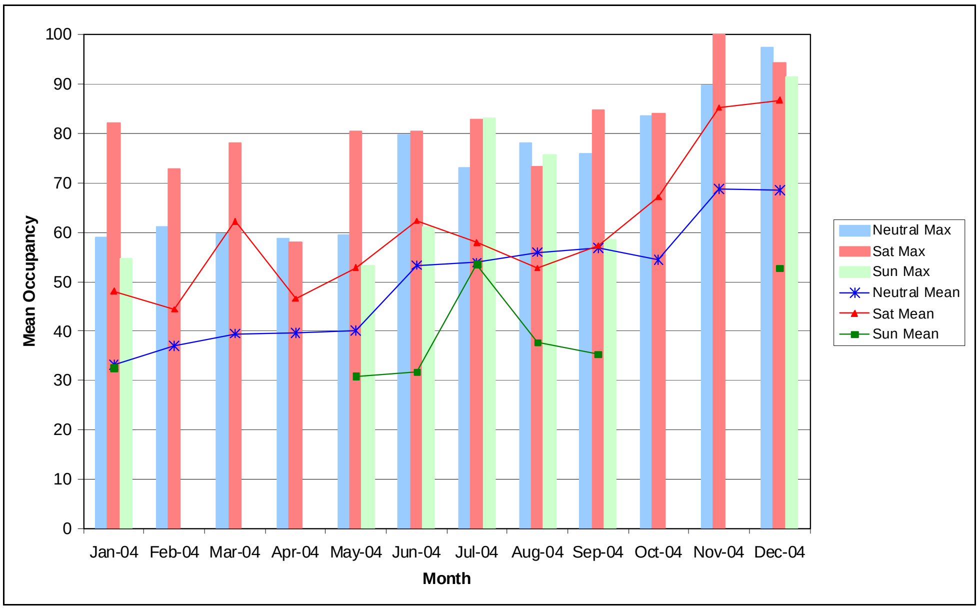
6.23 The ATC data provides the best indication of seasonal variation in the demand for parking in City centre multi-storey car parks. Figure 6.8 shows this seasonal variation. The chart shows two data sets for neutral weekdays, Saturdays and for Sundays:

(i) Mean maximum occupancy – the mean average of the maximum number of vehicles recorded in the car parks on each day (i.e. average peak demand);

(ii) Mean occupancies – the mean number of vehicles parked throughout each day (i.e. an average that takes account of the times when car parks are not very full).

6.24 Due to technical faults insufficient data was collected on Sundays during February, March, April, October and November for mean values to be statistically significant.

Figure 6.8 – Monthly Occupancy Profile: City Centre Multi-storey Car Parks



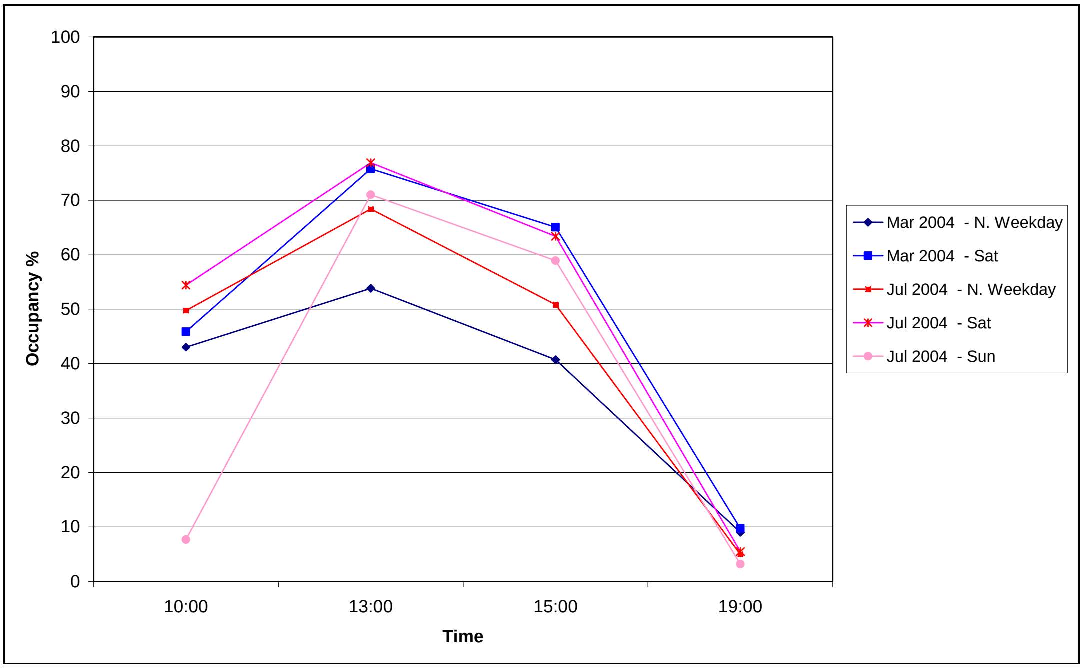
[29] Western Approach, Mayflower (East), Armada Centre, Theatre Royal, Regent Street

6.25 Figure 6.8 illustrates the following points:

- multi-storey car parks are less than 85% full on Saturdays, Sundays and neutral weekdays in every month except November and December 2004 when occupancy is 90% and 97% respectively;
- from January to May 2004 there were fewer vehicles parked in the multi-storey car parks on neutral weekdays than there were on Saturdays;
- from June to October 2004 there was an increase in both the mean (53% - 57%) and the mean maximum (73% – 83%) number of vehicles parked in the multi-storey car parks on neutral weekdays so that there was little difference between weekday occupancy and Saturday occupancy;
- mean occupancy of multi-storey car parks is between 32% and 35% on Sundays in January, May, June and September with a peak in Sunday demand apparent in the months of July (mean occupancy 54%) and August respectively; and
- demand for parking spaces in the multi-storey car parks is greatest in November and December with both mean and mean maximum occupancy levels higher than on Saturdays, Sundays and Neutral Weekdays than at any other time in the year.

6.26 It is also possible to use the ATC data to show how parking demand varies throughout the day. Figure 6.9 is a chart showing the average proportion of City centre multi-storey parking spaces occupied at different times of the day for days in March 2004 and in July 2004.

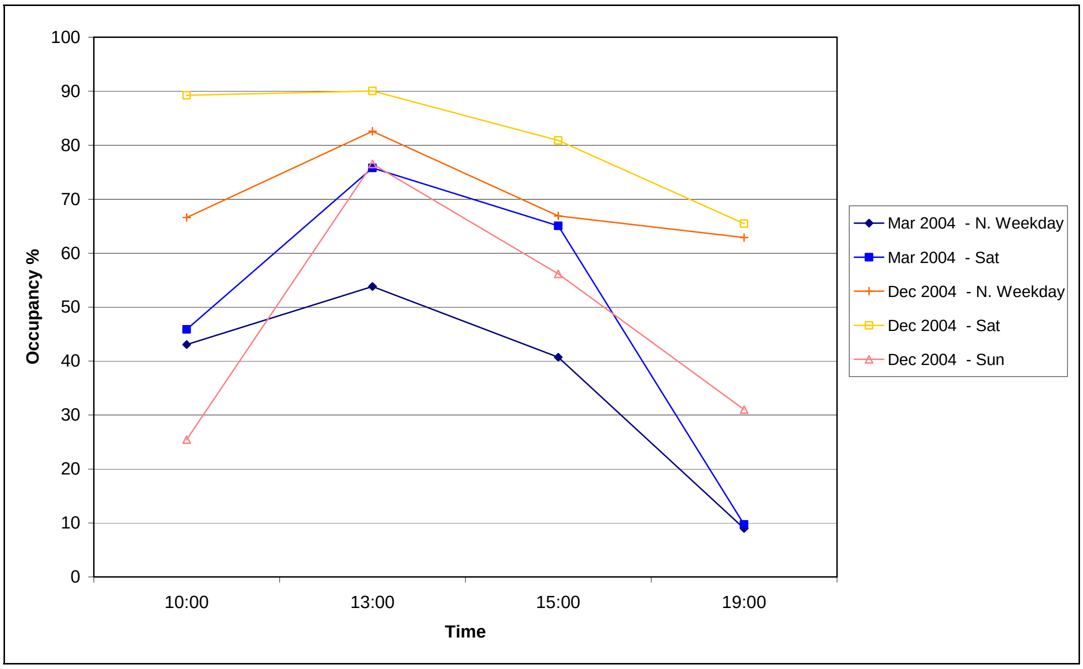
Figure 6.9 – Daily Occupancy Profile: City Centre Multi-storey Car Parks (March & July 2004)



6.27 The chart shows that the Saturday occupancy profiles for March and July 2004 were virtually identical and that in both months there were fewer vehicles parked on weekdays than on Saturdays. The chart also shows that in March and July 2004, occupancy on Sunday afternoons was close to that on Saturdays. There were, however, far fewer vehicles parked in multi-storey car parks on Sunday mornings than on Saturdays.

6.28 Figure 6.10 is a chart that highlights the differences between March and December occupancy profiles. It shows that in December there is far less variation in car park occupancy across the day making the profile appear relatively flat. Saturday occupancy in December 2004 was 89% and 90% at 10:00 and 13:00hrs respectively before falling to 81% at 15:00hrs. The neutral weekday occupancy profile was similarly consistent throughout the day with occupancy always between 63% and 83%.

Figure 6.10 – Daily Occupancy Profile: City Centre Multi-storey Car Parks (March & December 2004)



Public Off-street Car Park Ticket Sales

6.29 Weekly ticket sales data from the financial year 2004 / 05 was available for several of Plymouth's off-street car parks in which charges are applied. The data analysed related to tickets sold from Mondays to Saturdays between 08:00 and 18:00hrs.

City Centre Core

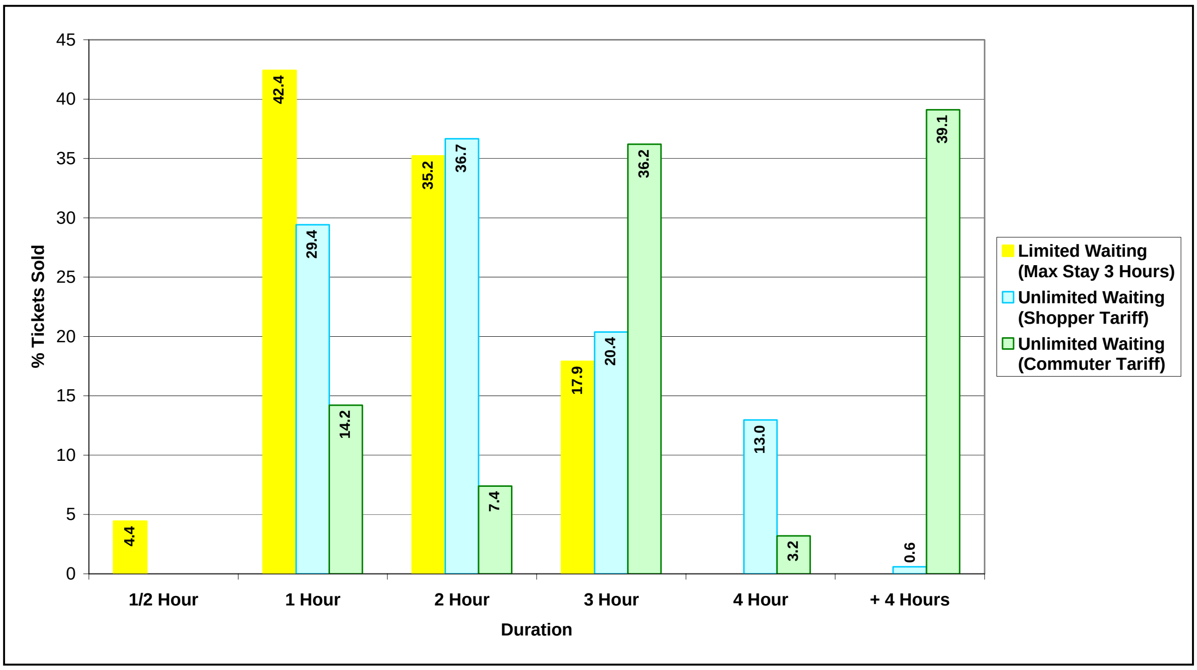
6.30 The car parks for which ticket sales data was analysed are listed in Table 6.2. 2004 / 05 tickets sales data was available for car parks which contained 80% of the off-street limited waiting spaces in the central area. Data was also available for 48% of the unlimited shopper and 80% of the commuter parking spaces in the central area.

Table 6.2 – Car Parks with Available Weekly Ticket Sales Data for 2004

Type of Car Park	Car Park Name
Limited Waiting (Max Stay 3 Hours)	Marks & Spencers Court Colin Campbell Court Woolworths (East) Guildhall Square St Andrews Street
Unlimited Waiting (Shopper Tariff)	Mayflower Street (West) Mayflower Street (East) Mayflower House Court
Unlimited Waiting (Commuter Tariff)	Drake Cinema Regent Street Western Approach

6.31 Figure 6.11 shows the proportion of tickets sold for parking for particular durations in each type of car park throughout the financial year 2004 / 05. It shows that in limited waiting car parks most tickets sold were for parking for up to one hour and that in unlimited waiting car parks the proportion of two and three hour tickets was very similar. Less than 1% of the tickets sold in the unlimited car parks operating shopper tariffs were for parking for more than four hours.

Figure 6.11 – City Centre Off-street Car Park Ticket Sales 2004/05



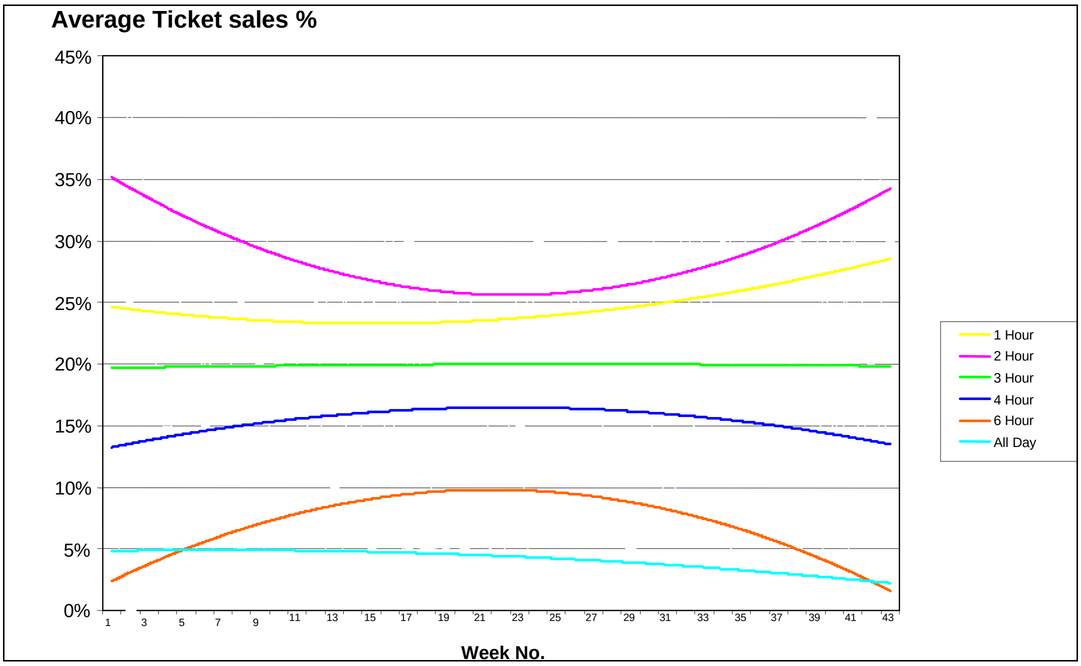
6.32 Figure 6.11 shows that sales of tickets for up to one hour were significantly lower in commuter car parks than in the unlimited shopper car parks. This may be because the commuter car parks are located further from the City Centre core and shopping areas. It may also be because in the commuter car parks, a greater number of spaces were filled with vehicles parked all day, reducing the availability of spaces for short stay parking acts.

6.33 Detailed analysis of weekly ticket sales shows that in the limited waiting car parks and unlimited waiting shopper car parks, the proportion of tickets of each type sold remains constant for most of the year. Only towards the end of November through to early January do the proportions vary significantly. At this time the proportion of tickets sold for one hour parking decreases by approximately 5% and the proportion of tickets sold for three hours increases correspondingly. In the unlimited commuter car parks weekly ticket sales patterns vary significantly and seem to be governed by the number of all day tickets sold.

Edge of Centre Ticket Sales

6.34 Ticket sales in the edge of centre car parks were also analysed for the financial year 2004/2005. Figure 6.12 shows the trend in the sale of each type of ticket for Lambhay Hill and Barbican Coxside car parks (Refs. 12 & 14) in the historical Barbican area of the City. The Barbican is one of the main tourist destinations within the City and has, within the last decade, been regenerated. The short stay shopper tariff is applied in both car parks.

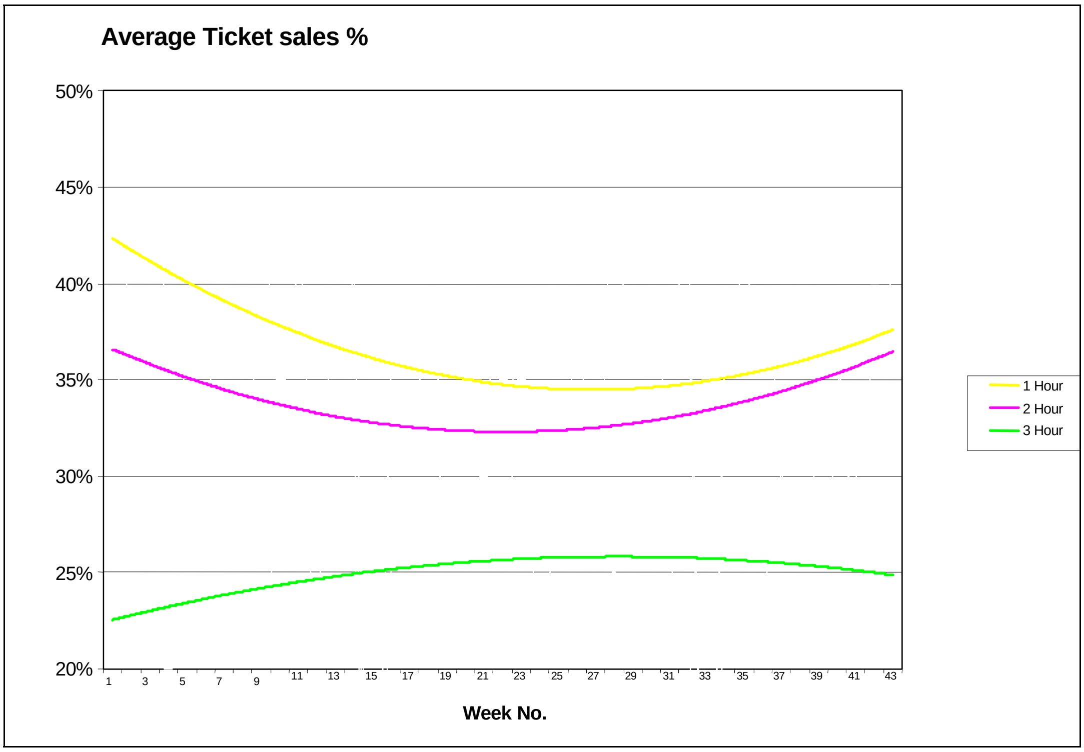
Figure 6.12 – Edge of Centre Off-street Car Park Ticket Sales 2004 / 05: Lambhay Hill and Barbican Coxside



6.35 The chart shows that sales of tickets for parking for longer than four hours peak in week 23 which, in the financial year 2004/2005 was the last in August. Sales of tickets for parking for shorter durations are, correspondingly, at their lowest around the same time. Like sales of tickets in the City CSentre car parks, parking tickets valid for less than three hours were most popular with very few motorists purchasing all day tickets reflecting their relatively high cost.

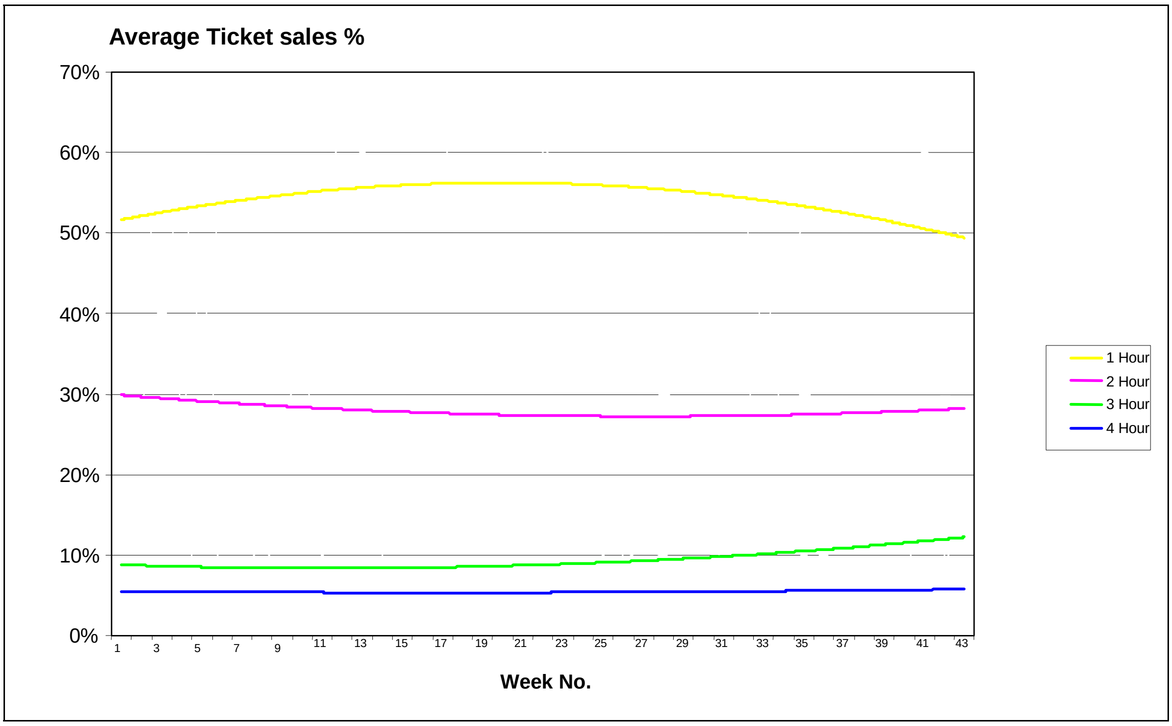
6.36 Figure 6.13 shows the trends in tickets sales in Exchange Street (Ref. G) car park in which a limited waiting restriction applies. Exchange Street car park is the off-street car park, which is most central to the Barbican. The trend in tickets sales is very similar to that of the Lambhay Hill and Barbican Coxside except that sales of three-hour tickets peak, rather than remaining constant throughout the year. Another difference is that the peak occurs later in the year, towards the end of September.

Figure 6.13 – Edge of Centre Off-street Car Park Ticket Sales 2004 / 05: Exchange Street



6.37 The pattern of ticket sales in Mutley Barracks and North Hill car parks (Refs. 29 & 1, shown in Figure 6.14) is the opposite to that in the Barbican car parks with sales of one hour tickets peaking in the summer and sales of two hour tickets falling. The chart also shows that sales of tickets for three or four hour parking are relatively constant throughout the year, perhaps reflecting the district centre function of Mutley Plain.

Figure 6.14 - Edge of Centre Off-street Car Park Ticket Sales 2004 / 05 : Mutley Barracks and North Hill



Problems and Issues: Central Area Off-street Demand

- Surface level limited waiting car parks in the City centre core are at capacity most of the time.
- Edge of centre car parks are at capacity on Saturdays.
- There is inefficient use of off-street parking supply: some car parks are consistently full, whilst others consistently have spaces available.
- Disabled off-street car parks are consistently at capacity.
- There is insufficient parking supply within the City centre to cater for demand in November and December.
- Edge of centre car parks around the Barbican and along the waterfront experience pressure in the summer months

Recommendations

Improve Parking Information Available to Motorists

6.38 Some of the central area car parks are consistently full whilst others often have a significant number of un-occupied spaces. Whilst this may in part be due to car park locations and driver preferences. Improved information will ensure that more efficient use is made of the central area parking spaces and that visitors to the City are not given the impression that there is a deficiency in the number of parking spaces provided. Improving the provision of information should include:

a) Enhanced car park directional signing, which links car parks to particular attractors.

b) Pre-travel information including more comprehensive parking website and tourist information leaflets.

Increase the Provision of Disabled Parking Spaces in Off-Street Car Parks

6.39 Many disabled people are more reliant in travel by car than the rest of the community. It is important that sufficient parking spaces are provided for them in appropriate locations. Off-street car park surveys show that demand for off and on-street parking spaces exceeds the current supply.

Introduce Limited Waiting Restrictions in Regent Street / Lipson Road, Mayflower Court House and Civic Centre Car Parks

6.40 Each of these car parks experiences significant parking pressure most of the time. Ensuring a high turnover of vehicles will ensure that more motorists are given the opportunity to park close to the City centre shops.

Outer Area – Limited Waiting

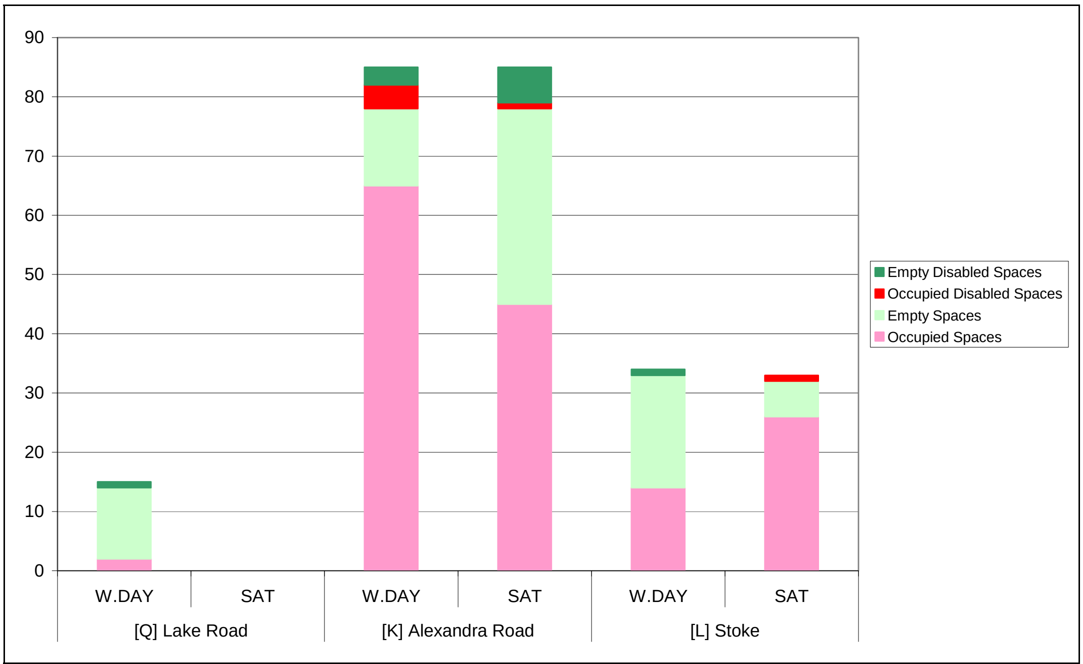
6.41 There are 28 public off-street car parks outside the central area. In seven of these the length of time that vehicles may be parked is limited. These limited waiting car parks provide 207 outer area parking spaces, which are less than three per cent of the total public off-street parking stock. Parking tariffs do not apply in these car parks.

6.42 The locations of the outer area limited waiting off-street car parks are shown in Figure 5.2. The car park occupancy survey results for three of the limited waiting car parks in Devonport are shown in Figure 6.15. The chart shows that there were empty spaces in each of the car parks on the days of the survey.

Figure 6.15 – Outer Area Car Park Occupancy: Limited Waiting Public Off-street (1)

6.43 Figure 6.16 shows the results of occupancy surveys in other outer area car parks. Like the Devonport limited waiting car parks, empty spaces were recorded in each of the surveys. Occupancy of Alexandra Road car park was higher on the weekday survey than on the Saturday survey; however the reverse was true in Stoke car park.

Figure 6.16 – Outer Area Car Park Occupancy: Limited Waiting Public Off-street (2)



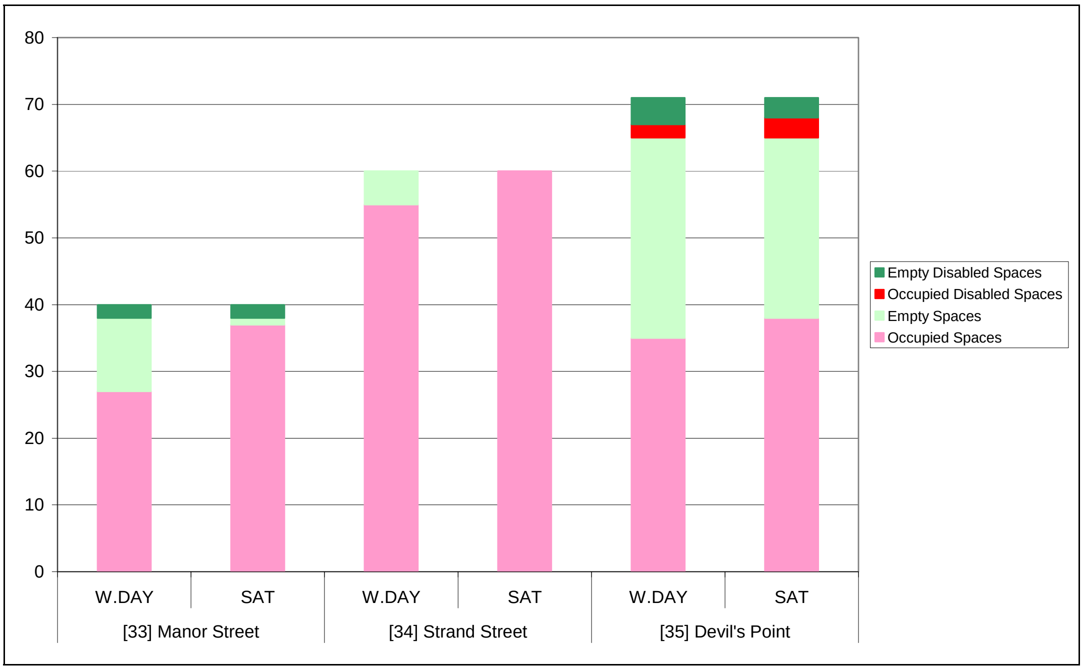
Outer Area – Unlimited Waiting

6.44 The majority of off-street parking places outside the central area are not subject to limited waiting restrictions. The 21 car parks without waiting restrictions provide 1869 spaces. Analysis of the results of occupancy surveys for these car parks was undertaken on a geographical basis.

Stonehouse

6.45 There are three public off-street car parks in Stonehouse, to the west of the City centre. Each of the car parks is free to use and provides fewer than 75 spaces. Higher occupancy levels were recorded during the Saturday survey than on the weekday survey. Strand Street car park, close to the Cremyll foot ferry terminus, was at, or close to capacity on both the occasions when it was surveyed. 33% and 8% of the spaces in Manor Street car park were unoccupied during the weekday and Saturday surveys respectively. (Note: Manor Street car park is now closed)

Figure 6.17 – Stonehouse Car Park Occupancy: Unlimited Waiting Public Off-street



Mutley

6.46 There are two car parks in Mutley, an area of Plymouth approximately 30 minutes walk from the City centre. Both are pay and display car parks. Mutley Plain is the primary shopping street in the area and acts as a district centre. Mutley Barracks car park (Ref. 29) provides 32 spaces and is located at the northern end of Mutley Plain. Mutley Plain car park (Ref. 30) provides significantly more parking spaces (287) and is located at the southern end of Mutley Plain, nearest to the City centre. Waiting is limited to two hours in 70 of the spaces within Mutley Plain car park.

6.47 In both of the car parks more than 80% of the spaces were occupied during the weekday survey. During the Saturday survey, occupancy was at a similar level in Mutley Plain car park however 75% of the spaces in Mutley Barracks were empty.

Devonport

6.48 There are two unlimited waiting car parks in the Devonport area of Plymouth. Morice Street car park (Ref. 31) is located close to the limited waiting car parks discussed in paragraph 6.42 (Refs. M, N, O and P) and provides 25 free unlimited parking spaces and 28 in which parking is free but limited to two hours. More than 25% of the spaces were free on both the weekday and Saturday survey.

6.49 James Street car park (Ref. 32) is close to the waterside area of Mutton Cove and provides 17 free, unlimited parking spaces. The area is popular with people who like to walk along the redeveloped waterfront promenade. Surveys recorded one vehicle parked on the weekday and 17 vehicles parked on the Saturday.

Plympton

6.50 In comparison to other outlying areas of Plymouth, significant parking pressure was observed in the car parks in the Plympton area. There are three unlimited car parks close to the Plympton District Centre: Mudge Way North (193 spaces) and South (66 spaces) and Plympton Ridgeway (166 spaces). Colebrook car park is further from the shopping area to the north of the railway line. Charges are not applied at any of the Plympton car parks.

6.51 Occupancy levels of greater than 95% were recorded in both the Mudge Way car parks during the weekday surveys. 93% and 83% of the spaces in the Mudge Way North and South car parks respectively were occupied at the time of the Saturday survey. Parking in some of the spaces in Mudge Way (North) is restricted to two hours. High occupancy levels were also recorded at the Plympton Ridgeway car park with 90% and 85% of spaces occupied on the weekday and Saturday survey respectively.

6.52 Different parking characteristics were observed at the smaller (14 spaces), Colebrook car park. The surveys recorded three parked vehicles during the weekday survey. On the Saturday however only one space was unoccupied.

Plymstock

6.53 The largest car park in Plymstock is the Broadway with 369 spaces. Charges are applied in Plymstock Broadway. Dean Cross[30] car park (64 spaces) principally serves the sports centre but is still close to the district centre of Plymstock Broadway. During the weekday survey 90% of the spaces in Dean Cross were occupied. In comparison there were 90 unoccupied spaces (or 25%) in Plymstock Broadway.

6.54 A higher occupancy was recorded in Plymstock Broadway during the Saturday survey although 19% of the spaces remained un-used. 36% of the spaces in Dean Cross were un-occupied on the Saturday.

[30] Since the first edition of the Parking Strategy in July 2005 all spaces at Dean Cross have been converted to limited waiting.

Other Local Centres

6.55 Occupancy surveys were undertaken at other car parks serving local centres within the City. Surveys were undertaken on a Saturday and on a weekday at Leigham and Meavy Way (Crownhill) car parks. Surveys were only undertaken on weekdays at Whitleigh Green, West Park and St Budeaux car parks. Waiting is unlimited at each of the car parks and charges are only levied at Meavy Way car park in Crown Hill. Low occupancy was recorded on each of the survey days in both the Leigham and Meavy Way car parks as Figure 6.18 shows.

6.56 Occupancy was higher in the three other local centres; however unused spaces were recorded on each of the survey days. Of the three, the highest weekday occupancies were recorded in the St Budeaux car park, which is located close to a local centre but also close to the Ferry Road railway station. Figure 6.19 shows the results of the weekday occupancy survey for these car parks.

Figure 6.18 – Leigham and Meavy Way Car Park Occupancy: Unlimited Waiting Public Off-street

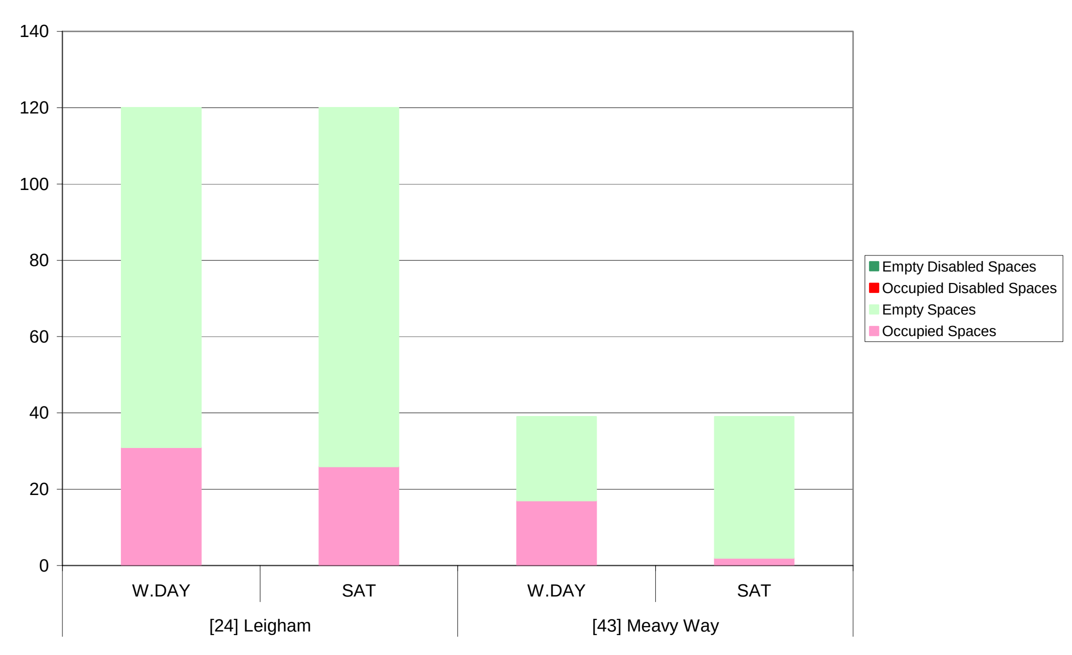
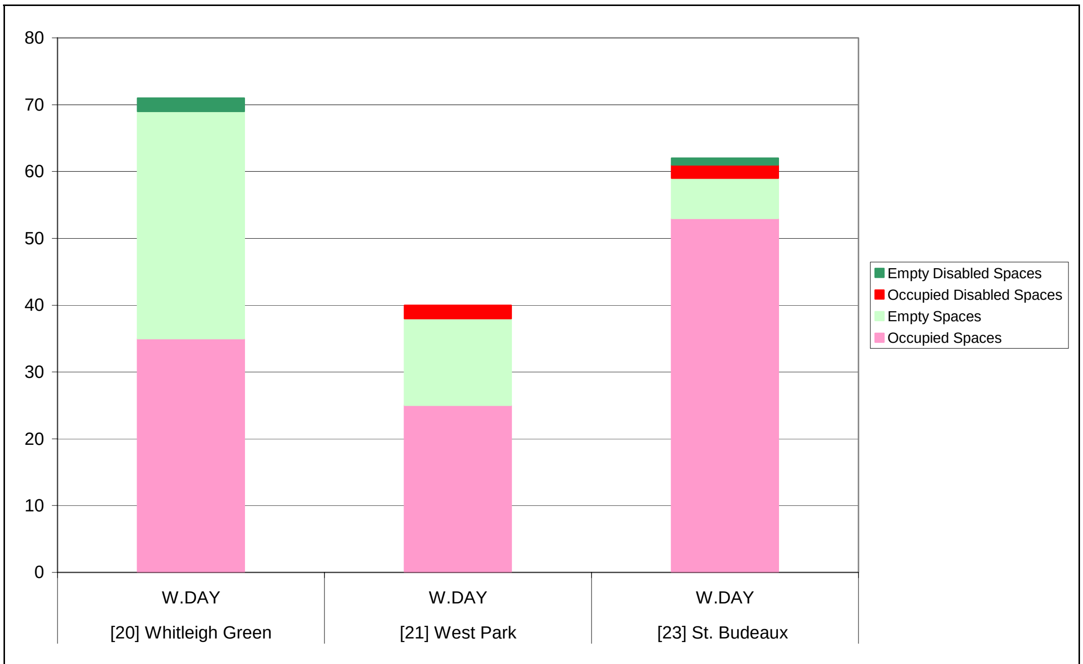


Figure 6.19 – Whitleigh Green, West Park and St Budeaux Car Park Occupancy: Unlimited Waiting Public Off-street



Problems and Issues: Outer Area Demand

- Car parks in Plympton and Plymstock are oversubscribed particularly on Saturdays.
- Strand Street and Manor Street car parks are over subscribed on weekdays.

Recommendations

Introduce Limited Waiting Restrictions at Strand Street, Manor Street and Dean Cross Car parks

Over time increase the number of Limited Waiting parking Bays provided in Plympton and Plymstock

6.57 Ensuring a high turnover of vehicles will ensure that more motorists are given the opportunity to park close to the local shops and tourist attractions. They will also prevent spaces being occupied all day by commuters.

Private Publicly Available Off-street Parking Demand

6.58 It was not possible to survey all of the private publicly available car parks in order to record occupancy. The following four car parks were surveyed[31] in February 2005:

- Derriford Hospital (A – F)
- ASDA (Derriford)
- Southway Shopping Centre
- Railway Station

6.59 Each car park was surveyed between the hours of 10:00 and 15:00hrs. The surveys aim to record maximum daytime demand in a neutral month without being affected by additional demand for parking spaces generated by visitors to the City.

6.60 Table 6.3 shows the occupancy levels recorded in each.

6.61 The table shows, in corroboration with the monitoring undertaken by the hospital trust that each of the hospital car parks were at or close to capacity. It also shows that the nearby Asda supermarket was also at capacity on both the weekday and Saturday survey. It is unusual that a super market should be so busy in a weekday.

[31] The following four car parks were not surveyed: Sainsbury's Armada Centre, Pavilions, Stonehouse Bridge and Tamar Bridge

Table 6.3 – Occupancy of Private Publicly Available Car Parks

Car Park	Day	Occupied Spaces	Empty Spaces	Occupied Disabled Spaces	Empty Disabled Spaces	TOTAL OCCUPANCY
Railway Station	W.Day	57	233	0	0	**20%**
Southway Shopping Centre	W.Day	79	10	2	5	**84%**
	Sat	64	20	4	3	**75%**
ASDA Front & Rear	W.Day	308	86	19	1	**79%**
	Sat	321	72	17	3	**82%**
Derriford Hospital A	W.Day	164	4	19	0	**98%**
Derriford Hospital B	W.Day	215	3	7	1	**98%**
Derriford Hospital C	W.Day	77	22	4	0	**79%**
Derriford Hospital E	W.Day	87	39	0	0	**69%**
Derriford Hospital F	W.Day	29	4	0	0	**88%**

Private Residential Parking Demand

6.62 No record was made of private residential parking supply or demand. The numbers of vehicles parked on private driveways in residential areas was not recorded. Car parks designated for the use of residents (i.e. attached to a block of flats etc) were not counted.

Private Non-residential (PNR) Parking Demand

6.63 No quantitative surveys of private non-residential surveys were undertaken since access to these parking facilities is often difficult and usually would require trespass. A qualitative assessment of demand for parking in such facilities was however undertaken by observing the occupancy of car parks that could be seen from the public highway.

6.64 The PNR car parks in the City Centre and Bretonside that could be seen were all observed to be at capacity and very few spaces were observed. From these, limited observations it is estimated that between 95% and 100% of the PNR spaces in the central area of Plymouth are occupied every weekday.

Problems and Issues: Private Off-street Parking

- Car parks at Derriford Hospital are consistently at capacity and there is some anecdotal evidence of overspill into nearby private, publicly available car parks. On-street surveys revealed some localised on-street parking pressure in the areas surrounding the hospital.
- Private non-residential parking spaces account for a high proportion of the City centre commuter parking supply.

Recommendations

Continue To Work With the Hospital and Other Major Employers on Green Travel Plans and Personalised Travel Plans for Their Employees

6.65 Other than limiting the number of spaces provided at new developments the City council has little control over how private organisations manage their parking facilities. Working with employers on travel planning can be an effective way in which to influence the way in which people travel.

Work with Other Local Authorities to Identify Ways in Which Workplace Parking Charges May Be Introduced

6.66 In the longer term parking standards can be used to reduce the number of private non-residential spaces that are provided within the City. This may, however, take many years. Workplace parking charges could be used to influence travel behaviour over a much shorter timescale if practical way of applying them were found.