

#### Document control sheet

**Issued by:** Hydrock Consultants Limited

Over Court Barns

Over Lane Almondsbury

Bristol BS32 4DF

Tel: 01454 619533 Fax: 01454 614125 hydrock.com

Client: North Devon Council

**Project:** Barnstaple Car Parking

**Document Title:** Results and Recommendations

Date: December 2017

Copy No.: P5

#### **Document Production Record**

Issue	Status	Author	Checked	Approved	Date
P1	Draft for review	D Atkin	E King R McHugh	J McKechnie	5 July 2017
P2	Final for Issue to JLL	D Atkin	E King	J McKechnie	6 September 2017
Р3	Minor amendments	R McHugh	J McKechnie	J McKechnie	21 November 2017
P4	Minor amendments	J McKechnie	R McHugh	R McHugh	15 December 2017
P5	Minor amendments	R McHugh	J McKechnie	J McKechnie	20 December 2017
P6	Formatting adjustment	R McHugh	J McKechnie	J McKechnie	20 December 2017

Hydrock has prepared this report in accordance with the instructions of the above-named client for their sole and specific use.

Any other persons who may use the information contained herein do so at their own risk.

CONTENTS			LIST OF TABLES				
2.0 E	Barnsta	aple2	Table 2.1: Surveyed car parks, ownership and capacity Table 4.1: Car par capacities per day	4			
3.0 N	METHO	DDOLOGY5	Table 6.1: Town Centre Car Parks - April 2017 price structure	19			
4.0 F	RESULT	TS OVERVIEW 6	Table 6.2: 'Out of Town' car parks - April 2017 price structure	19			
5.0 L	OCAT	ION 15	Table 6.3: Barnstaple parking permits – prices as of July 2017 Table 8.1: Car park capacities Friday April 21st 2017	20 30			
6.0 P	PAYME	NT & PRICING19	LIST OF FIGURES				
7.0	GROW	TH & DEVELOPMENT23					
8.0 F	RECON	MMENDATIONS & OPPORTUNITIES 25	Figure 2.1: Car park location plan  Figure 5.1: Breakdown of routes into town and proportions of car park	4			
	SUMM	ARY AND CONCLUSIONS 33	destinations	16			
			Figure 5.2: Highlighted streets (in red) where visual on-street surveys have been undertaken	/e 18			
APPEND	DICES		Figure 8.1: Location of Existing Variable Message Signs in Barnstaple	27			
APPEND	IX A	FULL LIST OF CAR PARKS & PRICES	LIST OF CHARTS				
APPEND	IX B	COPY OF PUBLIC SURVEY	Chart 4.1: Respondents postcode locations by day	7			
APPEND	IX C	COPY OF BUSINESS SURVEY	Chart 4.2: Respondents ages by day	7			
			Chart 4.3: Results of Survey Question 1	8			
APPEND	IX D	RESULTS OUTPUTS PER CAR PARK	Chart 4.4: Results of Survey Question 2	9			
APPEND	IX E	CAPACITY COUNTS	Chart 4.5: Results of Survey Question 3 Chart 4.6: Results of Survey Question 4	10			
			Chart 4.6: Results of Survey Question 4  Chart 4.7: Results of Survey Question 5	11 12			
			Chart 4.7: Results of Survey Question 6	13			
			Chart 4.9: Results of Survey Question 7	14			
			Chart 4.10: Respondents who are blue badge holders	14			
			Chart 5.1: Commuter reasons for using long stay car parks	15			
			Chart 5.2: Short stay town centre car parks ranked by trip purpose	17			
			Chart 5.3: Number of respondents parking in time limited car parks, split	by			
			length of time parked	19			
			Chart 6.1: Preferred payment method by Trip Purpose	21			
			Chart 6.2: Preferred payment method by Parking frequency	21			

#### **INTRODUCTION**

## 1.1 Background

Hydrock Consultants and JLL were commissioned by North Devon Council (NDC) in partnership with Devon County Council (DCC) to undertake a study and review of current car parking in Barnstaple. This document sets out the scope, methodology and results, along with recommendations and options for the parking strategy within the town.

## 1.2 Objectives

The overall aim of the review is to inform the Council's strategy:

"To provide a sufficient number of suitably located and priced car parking spaces that will sustain the long term economic, social and environmental wellbeing of Barnstaple, whilst releasing sites for redevelopment to facilitate the regeneration and sustainable growth of the town centre in line with the Local Plan period."

The individual objectives set out by NDC are:

- Undertake a survey of existing users to establish demand/need for car parking
- Option analysis of optimum locations of car parks and numbers of spaces
- Assess the impact of free parking and on-street provision

- Review and provide recommendations for 'Smart Solutions'
- Recommendations for the rationalisation of car parking within Barnstaple town centre; with particular focus on minimising traffic movement whilst providing sufficient spaces for current users and flexibility for future growth
- Recommendations relating to the charging regime
- Assess re-provision of spaces lost as a result of the Seven Brethren development
- Recommendations for repositioning/removal of Variable Message Signs (VMS signage)
- Identify opportunities for future development and indicative values for surplus sites<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> This document provides advice for JLL to identify any sites for future development, rather than specifying the sites themselves.



# 2.0 Barnstaple

#### 2.1 Overview

Barnstaple is the main town serving the North Devon district. The town provides the majority of shopping, leisure, transport and health facilities for the region, and is a hub for people arriving in North Devon; particularly for tourists and holidaymakers who regularly visit the area during the summer months.

Barnstaple sits at the north-western end of the A361 North Devon Link Road, which links the M5 (Junction 27) and Tiverton with Barnstaple and North Devon. In addition, the town's railway station is the terminus for the Tarka Line, which links Barnstaple with Crediton and Exeter, via a number of smaller settlements. Travel time to Exeter is approximately 1 hour 10 minutes both via road and rail.

#### 2.2 Town Centre Profile

In 2016, Spirul Intelligent Research was commissioned by NDC to conduct a study $^2$  of Barnstaple town centre and its users. From this study, a profile of visitors to the town centre has been established, which is useful when considering parking demand and use.

The study found that 58% of visitors were car drivers, with 18% car passengers.

The study showed that on the whole, visitors to the town centre were satisfied with car park locations and safety, however less so with the cost of car parking. The study also showed that there was a small preference for pay on exit charging systems over pay and display.

<sup>&</sup>lt;sup>2</sup> Barnstaple Town Centre Perception Study, Spirul IR (2016).

The information received from the 2016 town centre study has been taken into account when developing the recommendations and opportunities for the future parking strategy.

## 2.3 Parking overview

Barnstaple has 38 car parks / parking areas, of which:

- 23 are owned and operated by NDC
- 8 are privately owned and operated
- 4 are free of charge, but time limited parking (not owned by NDC)
- 1 is a dedicated section of on-street parking, operated by Devon County Council
- 15 are located within 500m of the town centre

## 2.4 Short stay car parks

The NDC car parks operate either on a long stay or short stay basis, with a flat pricing structure for long stay, and an incremental structure for short stay applied. The pricing structure of the short stay parking reflects its purpose as a limited time car park, to encourage shorter stays and a higher turnover rate. The short stay car parks are predominantly found within the town centre and are aimed at shoppers and visitors who spend up to 4hrs in the town.

There are some exceptions; namely those car parks found further afield such as the Seven Brethren short stay car park adjacent to the leisure centre.

## 2.5 Long stay car parks

In contrast to the short stay car parks, the long stay parking areas are found on the periphery of the town centre and

primarily serve people spending longer than 3hrs in the town – such as commuters.

# 2.6 Privately owned/operated car parks

There are a number of privately owned and operated car parks which have individual pricing structures. These car parks provide a range of long and short stay options.

A number of privately owned car parks are free, but timelimited. These are predominantly retail car parks, found at the larger supermarkets and retail parks.

A full list of car parks and prices can be found in Appendix A.

# 2.7 Paid on-street parking

There are two areas of paid on-street parking, both of which are operated by Devon County Council (DCC). These are at Seventh Street and Boutport Street. These spaces provide a limited amount of time to park.

## 2.8 Permit Parking

Four pay and display car parks have reserved permit parking spaces for local residents. In order to qualify, residents must live within ¼ of a mile of the car park.

In addition to residents' parking permits, annual and quarterly permits are available for six pay and display car parks across Barnstaple. These are £200 for an annual permit or £61.25 for a quarterly permit.

The locations of the surveyed car parks are shown in Figure 2.1. Table 2.1 sets out a list of surveyed car parks, their ownership, and capacities.

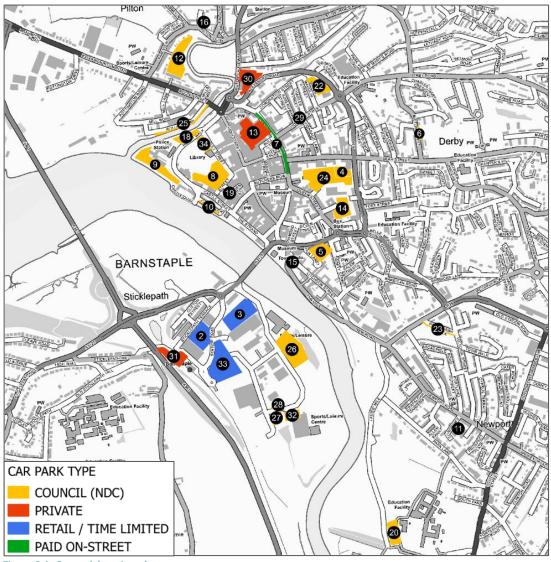


Figure 2.1: Car park location plan

Table 2.1: Surveyed car parks, ownership and capacity

ID	Car Park Name	Number	Ownership	Capacity	Notes**
BEA	Bear Street	4	NDC	173	SS
BEL	Belle Meadow	5	NDC	125	SS
BIC	Bicton Street	6	NDC	14	SS/RP
BOU	Boutport St	7	DCC	19	SS
CAT	Cattle Market	8	NDC	308	SS
CIV	Civic Centre	9	DCC	273	SS
COM	Commercial Road	10	NDC	32	SS
CON	Congrams Close	11	NDC	42	LS/RP
FAV	Fair View	12	NDC	248	LS
GRE	Green Lanes	13	Private	402	SS
HAR	Hardaway Head	14	NDC	182	SS
LIT	Litchdon Street	15	NDC	7	LS
LPN	Lower Pilton	16	NDC	12	LS/RP/PP
NWK	North Walk	18	NDC	79	SS
PAL	Paiges Lane	19	NDC	11	SS
PAR	Park School	20	DCC	240	LS
PML	Portmarsh Lane	23	NDC	37	LS/PP/RP
POR	Portland Buildings	22	NDC	63	LS/PP
QUE	Queen Street	24	NDC	232	SS
RPW/ RPE	Seven Brethren Retail Park 1 & 2	2 & 3	Private	520	SS
RQY	Rolle Quay	25	NDC	71	SS/PP
SBL	Seven Brethren Lorry Park	27	NDC	16	LS
SBR	Seven Brethren Long & Short Stay	26	NDC	336 + 72*	LS/SS
SBS	Seventh Street	29	DCC	11	SS
SBV	Seven Brethren Van Park	28	NDC	14	LS
SHE	Sheepskin/Pilton Causeway	30	Private	189	LS
STA	Barnstaple Station	31	Private	127	LS/SS
TAR	Tarka Tennis Centre	32	NDC	65	LS
TES	Tesco Taw View	33	Private	440	SS
TUL	Tuly Street	34	NDC	49	SS

<sup>\*</sup>Seven Brethren has 336 long-stay and 72 short-stay spaces

<sup>\*\*</sup>LS = Long Stay

SS = Short Stay

PP = Public Permit

RP = Residents Permit

#### 3.0 METHODOLOGY

#### 3.1 Introduction

To obtain the data required, surveys were undertaken across four days in April 2017. A similar survey was issued for businesses across Barnstaple town centre to complete.

The car parks included within the survey were informed by discussions with NDC and DCC. It was agreed that all car parks operated by NDC and DCC would be captured, as well as the privately owned and operated Green Lanes, Sheepskin (Pilton Causeway), Iceland (Tuly St), Barnstaple Retail Park, Barnstaple train station, Asda (Anchorwood Bank) and Tesco Taw View.

Permission was obtained to survey all private car parks with the exception of Iceland (Tuly St) and Asda (Anchorwood Bank). Green Lanes was unable to be surveyed on two of the survey days due to miscommunication between centre management and security staff.

It is appreciated that the surveys are necessarily a 'snapshot', and that Barnstaple's car parks can be busier in summer holiday and pre-Christmas periods.

## 3.2 Public surveys

The public surveys were conducted across four days in April 2017.

The month and days were chosen to reflect:

- 07/04 (1x weekday in Easter holiday period)
- **15/04** (1x Easter weekend)
- 21/04 (1x weekday outside of Easter holiday)
- 22/04 (1x weekend outside of Easter holiday)

Discussions took place with NDC and DCC to determine the best days to survey the public parking in order to seek to maximise the response rate. It was agreed to undertake the weekday surveys on Fridays, which is traditionally market day for Barnstaple.

Easter 2017 fell on the 16<sup>th</sup> of April, with school holidays in North Devon and the majority of the United Kingdom covering the preceding two weeks. In accordance with this, the decision was made to capture Friday 7<sup>th</sup> April as the weekday in the Easter Holiday period rather than Friday April 14<sup>th</sup> (therefore avoiding the bank holiday and representing the typical holiday period).

The weekend days were chosen as a Saturday to reflect the traditionally busiest day with regards to shopping in town centres, with Saturday 15<sup>th</sup> April capturing the Easter weekend, and Saturday 22<sup>nd</sup> April chosen to capture a 'neutral' Saturday.

The weather was fine and dry for all four survey days. Saturday 22<sup>nd</sup> April was the warmest day surveyed, which coincided with this day receiving the fewest responses and having the lowest capacity counts overall.

#### Format

The surveys were provided in A5 format, which was then folded and perforated along the centre so respondents could tear off to give a 'postcard' style A6 card, and post their responses. Each survey was placed under the windscreen wipers of cars parked within the car parks.

Each car park was visited twice a day in the morning and afternoon on each survey day.

The public surveys all contained the same questions, and were coded so the date could be identified on each response. Respondents had the option of either posting the survey back using the postcard provided and a freepost

address, or responding online. Incentives were offered to encourage responses.

A total of 9,290 surveys were issued, with an overall response rate of 14.68% achieved.

A proof of the public survey can be found in **Appendix B**.

#### 3.3 Business surveys

In conjunction with Barnstaple Town Centre Management (BTCM), surveys were distributed to as many businesses as possible across Barnstaple which fell within the catchment of the town centre and the car parks surveyed in the public surveys. The business surveys focussed particularly on the parking needs of both employees and customers, and an open comment section was included to gain qualitative feedback from local businesses.

A copy of the business survey can be found in Appendix C.

# 3.4 On-Street Parking

There are distinct areas of on-street paid parking at Boutport Street and Seventh Street, and this has been captured in the surveys.

On-street (free) parking is also available in residential streets, with the streets near to the town centre restricted to residents' permit parking. It was agreed that visual surveys of key streets surrounding the town centre would be undertaken, in order to assess the demand for free parking around the town centre.

# 4.0 RESULTS OVERVIEW

#### 4.1 Introduction

This section provides a summary of the headline findings from the study. Full outputs for each individual car park can be found in **Appendix D**.

It should be noted that smaller car parks (<20 spaces) will return a smaller sample to analyse than the larger car parks, and should be treated with caution when comparing to larger sample sizes with a greater representation.

### 4.2 Capacity Counts

Capacity counts were undertaken at each car park, at least once per day and time period (AM and PM). Where possible, a second count was undertaken in the time periods to capture a wider sample. **Table 4.1** shows the percentage occupancy for each car park per day and time period. Full capacity counts can be found in **Appendix E**.

#### **Explanatory Notes**

- Green Lanes was unable to be surveyed on two of the survey days due to miscommunication between centre management and security staff
- Civic Centre has been omitted from counts as it was only surveyed on weekends. During the week the car park is solely used by DCC employees and not representative of a typical pay and display car park in Barnstaple.

Table 4.1: Car par capacities per day

Can David		07-Apr		15-Apr		21-Apr		22-Apr		Can Bank Time
	Car Park	AM	PM	AM	PM	AM1	PM	AM	PM	Car Park Type
BEA	Bear Street	24%	30%	28%	34%	29%	20%	22%	31%	SHORT
BEL	Belle Meadow	62%	31%	42%	46%	56%	35%	38%	30%	SHORT
BIC	Bicton Street	71%	36%	50%	43%	29%	29%	50%	43%	SHORT
BOU	Boutport St	100%	84%	71%	66%	100%	68%	53%	47%	SHORT
CAT	Cattle Market	76%	56%	83%	63%	90%	77%	75%	64%	SHORT
CIV	Civic Centre	0%	8%	18%	10%	0%	0%	12%	3%	SHORT
COM	Commercial Road	69%	58%	59%	50%	88%	56%	50%	34%	SHORT
CON	Congrams Close	83%	83%	95%	79%	69%	55%	76%	52%	LONG
FAV	Fair View	75%	77%	65%	81%	95%	92%	61%	77%	LONG
GRE	Green Lanes	76%	0%	0%	0%	24%	41%	21%	32%	SHORT
HAR	Hardaway Head	7%	9%	2%	23%	7%	10%	6%	8%	SHORT
LIT	Litchdon Street	71%	43%	86%	86%	79%	71%	57%	57%	LONG
LPN	Lower Pilton	100%	67%	75%	92%	100%	83%	42%	38%	LONG
NWK	North Walk	35%	32%	35%	23%	42%	47%	47%	32%	SHORT
PAL	Paiges Lane	45%	82%	73%	64%	73%	68%	73%	36%	SHORT
PAR	Park School	16%	8%	12%	9%	30%	23%	37%	36%	LONG
PML	Portmarsh Lane	62%	59%	38%	38%	65%	51%	46%	43%	LONG
POR	Portland Buildings	16%	14%	12%	17%	11%	17%	10%	11%	LONG
QUE	Queen Street	83%	67%	82%	53%	75%	52%	79%	62%	SHORT
RPW/R PE	Seven Brethren Retail Park 1 & 2	45%	23%	44%	46%	43%	32%	52%	42%	SHORT
RQY	Rolle Quay	23%	15%	11%	25%	23%	25%	32%	18%	SHORT
SBL	Seven Brethren Lorry Park	0%	0%	0%	0%	0%	6%	7%	0%	LONG
SBR	Seven Brethren Long & Short Stay	30%	51%	20%	21%	57%	14%	23%	31%	SHORT + LONG
SBS	Seventh Street	25%	25%	33%	33%	25%	33%	21%	42%	SHORT
SBV	Seven Brethren Van Park	14%	0%	0%	0%	7%	7%	0%	7%	LONG
SHE	Sheepskin/Pilton Causeway	73%	72%	51%	76%	93%	79%	49%	67%	LONG
STA	Barnstaple Station	28%	43%	37%	0%	28%	38%	32%	53%	SHORT + LONG
TAR	Tarka Tennis Centre	8%	31%	12%	38%	17%	48%	60%	60%	LONG
TES	Tesco Taw View	56%	53%	58%	75%	58%	44%	43%	69%	SHORT
TUL	Tuly Street	80%	69%	63%	88%	88%	73%	80%	65%	SHORT

# 4.3 Age and Location of Respondents

The survey asked respondents to provide their age and their home and work postcodes. This data gives a good insight into the demographic of users parking in the respective car parks, both in terms of age groups and whether they are local to the area or not.

For the purposes of this exercise, 'local' is considered to have a home postcode within areas EX31 and EX32 which cover the wider Barnstaple area.

Chart 4.1 shows the number of respondents who are classified as 'local' or not, grouped by survey day, and Chart 4.2 shows the age categories of respondents grouped by survey day.

The charts show that the most common age group for respondents is 56-65, with 66-75-year-olds closely following. Whilst this group is possibly more likely to respond to a survey on car parking, this is nevertheless a key target group to consider when developing the future parking strategy based on the forecast increase in the number of users within the 75+ age category in future years.

With regard to postcode location, the split of respondents between those 'local' to Barnstaple and those from further afield was fairly even across the survey days, although slightly in favour of those from outside the EX31 and EX32 postcodes with the exception of 22<sup>nd</sup> April.

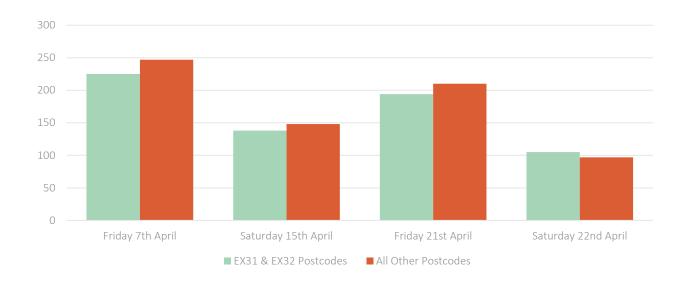


Chart 4.1: Respondents postcode locations by day

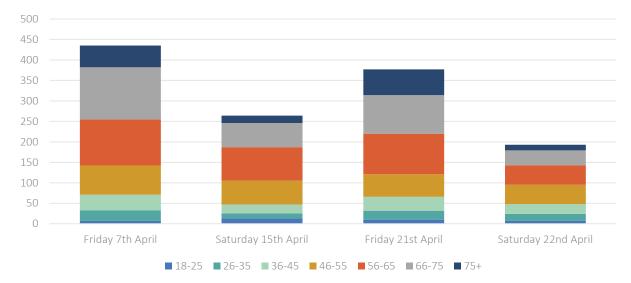


Chart 4.2: Respondents ages by day

## 4.4 Trip Purpose

Respondents were asked 'What is the purpose of your trip today?', and were able to choose as many of the options as they liked. The results by car park are set out in Chart 4.3.

## **Results Summary**

The results show that the majority of respondents use the car parks for shopping (food and non-food), leisure and commuting. The long-stay car parks (e.g. Fair View, Portland Buildings, Seven Brethren) have the highest proportions of commuters, whilst the short-stay car parks (e.g. Cattle Market, Green Lanes, Queen Street) are dominated by shoppers. This is an expected pattern given the car park locations and type of car parks (ie. Long vs short stay).

Belle Meadow has the highest proportion of 'health' respondents, corresponding to its location adjacent to Brannam Medical Centre.

Congrams Close is used primarily by residents for parking – many of the 'other' responses indicated that that respondent was a resident in the area.

Question 1: What is the purpose of your trip today?

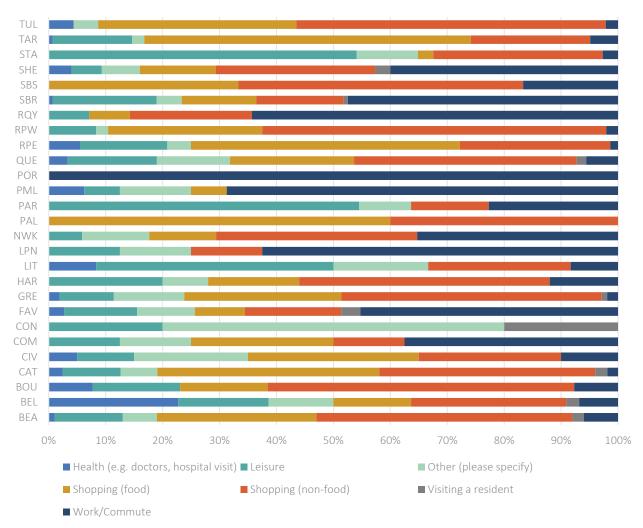


Chart 4.3: Results of Survey Question 1

# 4.5 Frequency of Use

Respondents were asked 'How often do you use this car park?', and were able to choose one answer. The results are set out in Chart 4.4.

## Results Summary

The results indicate that the long stay car parks like Fair View and Portland Buildings are used the most frequently – i.e. more than 3 times per week by the same person. In contrast, the least frequently used car parks by the same person are Barnstaple train station, Hardaway Head and Belle Meadow. Hardaway Head and Belle Meadow also had the fewest respondents who use them 3 or more times per week.

Question 2: How often do you use this car park?

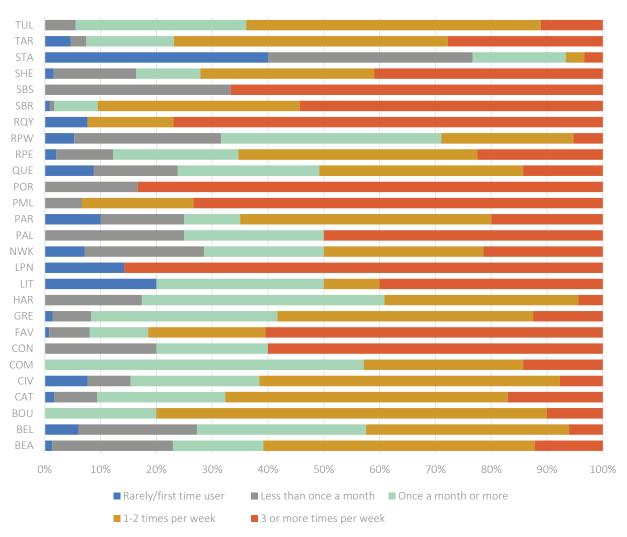


Chart 4.4: Results of Survey Question 2

## 4.6 Finding a Space to Park

Respondents were asked 'Did you struggle to find a space to park in this car park today?', and were able select a 'yes' or 'no' option. The results are set out in Chart 4.5.

## Results Summary

The results of the survey show that Lower Pilton, Tuly Street, Litchdon Street and Fair View had the highest proportion of people who found it difficult to park.

As previously stated, smaller car parks such as Lower Pilton and Litchdon Street may, due to their size (<12 spaces) be more likely to be at capacity than a larger car park. In addition, Lower Pilton and Litchdon Street are largely residential in nature and therefore will have people using them the majority of the time. Tuly Street is relatively small (49 spaces) for its busy town centre location and is nearing capacity.

The results also show however, that the majority of the car parks in Barnstaple are not at capacity and have room to cope with future traffic growth.

Question 3: Did you struggle to find a space to park in this car park today?

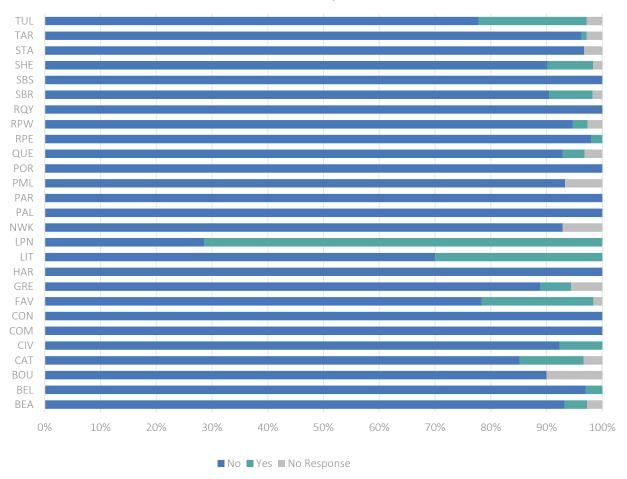


Chart 4.5: Results of Survey Question 3

#### 4.7 Choice of Car Park

Respondents were asked 'Why did you choose to park in this car park today?', and were able to choose multiple answers. The results are set out in Chart 4.6.

#### **Results Summary**

The results show that the main reason for people parking in a given location is the ease of access that car park provides to the respondent's destination. This is particularly true for Boutport Street and Paiges Lane, which are time-limited (one-hour) short stay car parks in the heart of the town centre and generally used by people wanting to spend less than 30 minutes parking. Equally, the predominantly residential car parks of Congrams Close and Portmarsh Lane have high levels of convenience for residents using them to park at home.

The cost factor appears influential in a number of car parks, with a trend towards the long stay car parks. Therefore, cost is clearly an important factor to retain the high customer base of these car parks.

A number of car parks, most noticeably Bear Street, Hardaway Head, Tuly Street and Belle Meadow, have high proportions of respondents using them because of the ease of access from their route into Barnstaple. Many of the car parks indicated as being easy to access from the route into Barnstaple are also the car parks indicated on both fixed and Variable Message Signs (VMS Signage) on routes into town. This suggests that the signage on the primary routes into the town centre may have an impact on car park choice and how 'easy' the signs make it to find the car parks. This is discussed further in **Section 8.0** of this report.

Question 4: Why did you choose to park in this car park today?

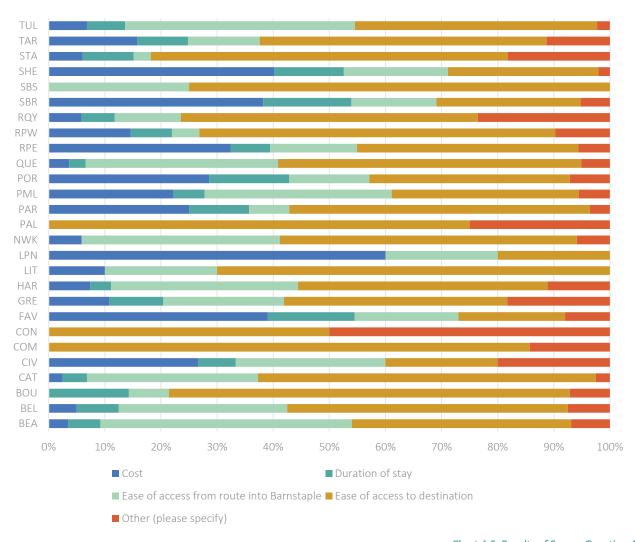


Chart 4.6: Results of Survey Question 4

# 4.8 Length of Stay

Respondents were asked 'How long did you park for today?', and were able to choose one answer. The results are set out in Chart 4.7.

## **Results Summary**

The results indicate that there are a number of car parks which are used for very short (<30 minutes) stays, including Boutport Street, North Walk and Belle Meadow. The majority of the short stay car parks are used for between 30 minutes and 2 hours, with the 'shopping' car parks (Cattle Market, Green Lanes, Queen Street as identified by the responses to question 1) being utilised the most for between 1 and 2 hours.

As is expected, the long stay and predominantly residential car parks have higher levels of people parking for over two hours, and the highest levels of people parking for over 8 hours, indicating that these are used by commuters and others who leave their cars for the day and/or night.

Question 5: How long did you park for today?

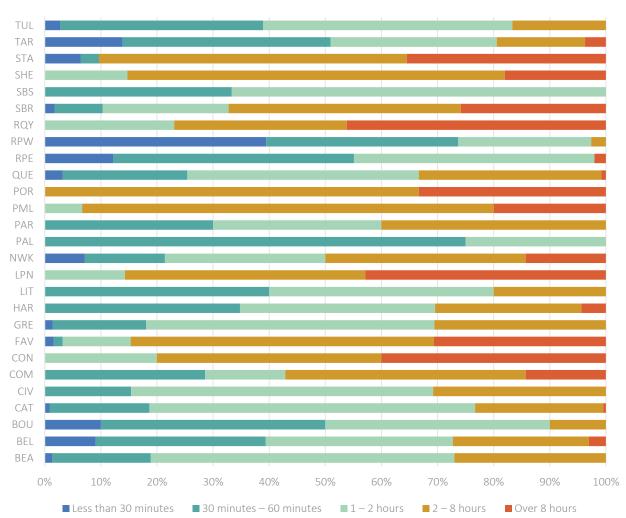


Chart 4.7: Results of Survey Question 5

# 4.9 Time of Parking

Respondents were asked 'What time did you park today?', and were able to choose one answer. The results are set out in Chart 4.8.

## **Results Summary**

The results show that the majority of respondents parked between 09:00 and 12:00. This is particularly true for the main short stay car parks. For the long stay car parks, the majority of users parked between 06:00 and 09:00, which is consistent with commuter travel patterns.

Commercial Road, Lower Pilton and Portmarsh Lane show the highest number of respondents parking after 12:00, with Lower Pilton and Tarka Tennis being used predominantly in the evenings. This is expected as Lower Pilton is predominantly residential, and Tarka Tennis being used after work hours for leisure.

Fair View has the highest number of respondents parking before 06:00; which ties in with its use as a commuter car park and also suggests use by local residents.

Question 6: What time did you park today?

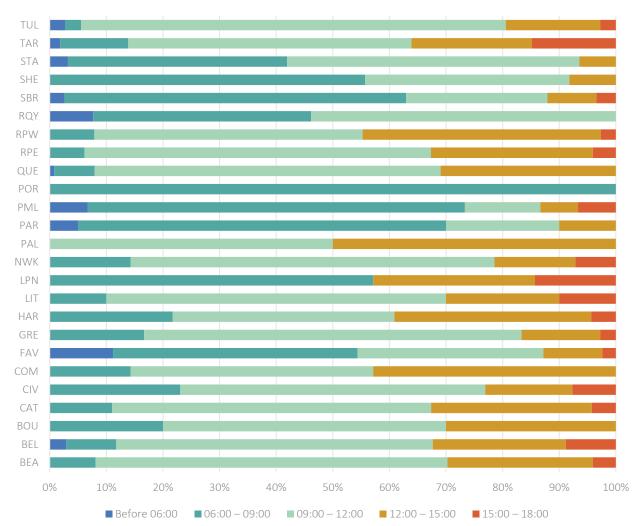
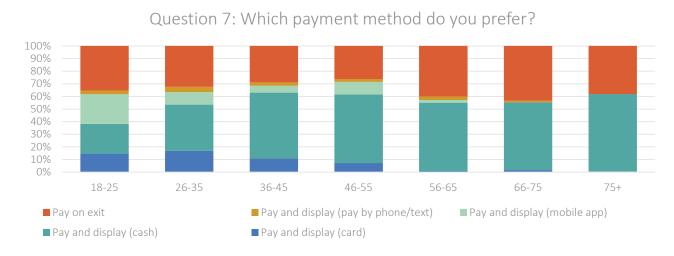


Chart 4.8: Results of Survey Question 6



#### Chart 4.9: Results of Survey Question 7

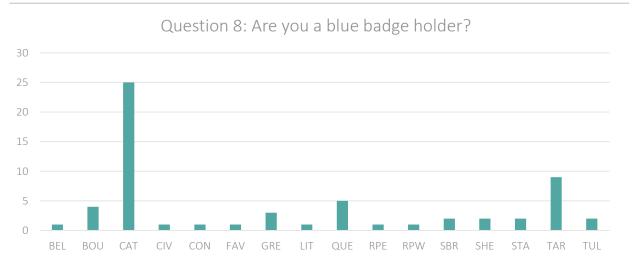


Chart 4.10: Respondents who are blue badge holders

# 4.10 Preferred Payment Method

Respondents were asked 'What is your preferred payment method?', and were able to choose one answer. The results are set out in Chart 4.9, grouped by age band.

#### Results Summary

There is a clear trend towards a preference for cash Pay and Display (P&D), as well as for Pay on Exit (PoE).

The results largely show that the current system of cash P&D is preferable for people using the car parks. Comments made on the surveys however suggest that whilst P&D is preferred, PoE systems are useful as people felt they have to worry less about how much time they spend in the town. Amongst the younger respondents, more technological solutions were popular such as mobile apps and pay by phone/text.

## 4.11 Blue Badge Holders

Respondents had the option to tick whether they are blue badge holders. The number of respondents who indicated they are blue badge holders, by car park, are shown in **Chart 4.10**.

## **Results Summary**

The majority of respondents who were blue badge holders parked in Cattle Market, which has the largest provision of disabled spaces in any of the surveyed car parks. A number of respondents also utilised Boutport Street, Tarka Tennis and Queen Street for blue badge parking. The results show that the car parks which are centrally located (aside from Tarka) are well used by blue badge holders.

## 5.0 LOCATION

#### 5.1 Introduction

This section presents the findings and analysis specifically related to the locations of car parks. This includes the routes which are taken into Barnstaple and which car parks are used for certain trip purposes.

## 5.2 Accessing Car Parks

The headline results show that one of the significant influences on car park choice is ease of access from the primary routes into Barnstaple. By combining this data with the home postcode of respondents, it is possible to provide an overview of which car parks are preferable to access from different routes into the town. This data can then be used to better understand traffic flows around the town, as well as influencing a future signage strategy.

Figure 5.1 overleaf has been prepared for the eight car parks where 'ease of access from route into Barnstaple' was selected as the most popular reason for respondents choosing to park there. The figure illustrates the proportion of respondents arriving from the different primary routes into Barnstaple according their destination car parks.

The results show that generally, car park users are choosing to park in locations which are near to their main routes in to town; thus keeping traffic flows relatively localised.

However, there are some car parks, for example Fair View, Cattle Market and Green Lanes, which attract users from all directions. This is likely to be due to these car parks being centrally located, and in the

case of Fair View, long stay whilst within easy walking distance to the town centre.

Out of the car parks which are approached from all directions, it should be noted that all three (Fair View, Cattle Market and Green Lanes) are signposted either using fixed signage, or VMS signage which shows the real-time capacity of the car parks. The signing of the car parks makes them attractive for those who are unfamiliar with the layout of the town, and suitable signage can be an important catalyst towards guiding drivers to use particular car parks.

### 5.3 Commuter Car Park Locations

The type of car parks typically used by commuters are long stay car parks – with lower charging tariffs, and typically in close proximity to a nearby bus service or within walking or cycling distance to employment locations.

Whilst the business parks generally have the space to provide parking for staff, the majority of town centre businesses do not, as evidenced by the responses received to the business surveys which are discussed in **Section 8.0**. This leaves staff with the option of either travelling by a mode other than car, or finding a long stay car park within walking or cycling distance of their place of work. In the case of Barnstaple, these commuters are predominantly provided for by Seven Brethren and Fair View car parks.

The survey data has been analysed to filter results for all the long stay car parks in Barnstaple, where respondents classify themselves as 'commuters', and have chosen either 'ease of access from route into Barnstaple' or 'ease of access to destination' as their reason for parking at that location. The results are shown in Chart 5.1.

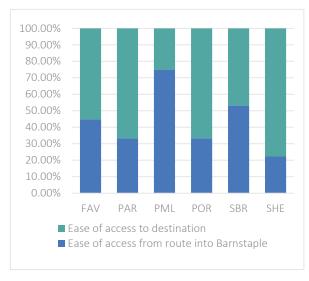


Chart 5.1: Commuter reasons for using long stay car parks

Chart 5.1 shows that there is a relatively equal balance between commuters choosing Seven Brethren and Fair View due to access from routes in to Barnstaple, and ease of access to their journey destination. This suggests that the long stay car park location is a consideration in providing for commuters; and indeed, the two most used car parks of Fair View and Seven Brethren are located on opposite sides of town, thus careful consideration must be given to reprovision of the Seven Brethren car park spaces to the west of the town, should the Seven Brethren development be realised.

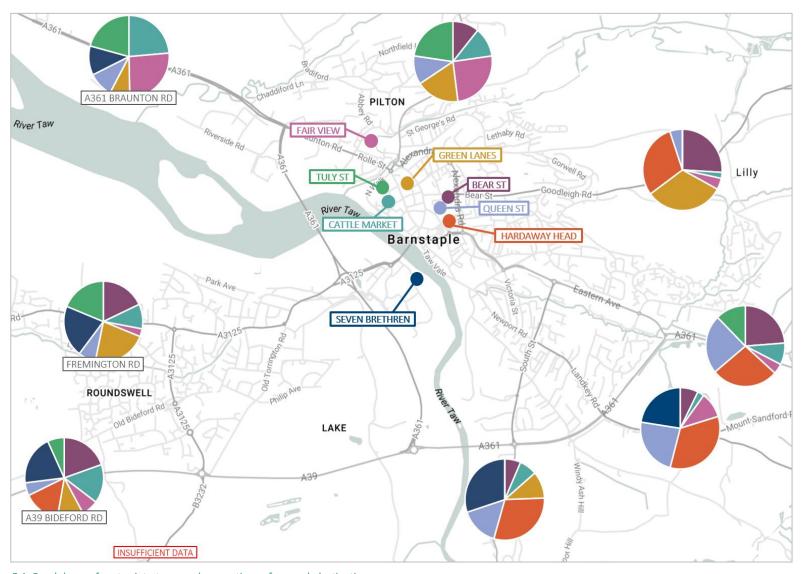


Figure 5.1: Breakdown of routes into town and proportions of car park destinations



Chart 5.2: Short stay town centre car parks ranked by trip purpose

## 5.4 Locations by Trip Purpose

Commuters play an important role in understanding the parking patterns associated with long stay car parks, but it is important to understand which car parks are most associated with other trip types, especially when giving consideration to the economic prosperity in the town centre, and encouraging visitors to use the town centre facilities.

**Chart 5.2** shows the short stay car parks which are within comfortable walking distance (800m) of the town centre, and the proportion of responses by trip purpose.

#### Leisure

Hardaway Head, Commercial Road and Rolle Quay have the highest proportion of respondents using these car parks for leisure purposes. Leisure is an extremely broad term, however noting comments made on some of the survey responses, respondents were using the above car parks to access beauty appointments (e.g. haircuts) and restaurants / cafés.

#### Shopping

The results show that the town centre car parks, as expected, are dominated by shoppers, with 15% more shoppers purchasing non-food items over food items. A higher proportion of shoppers shopping for food items can be seen at Paiges Lane and Cattle Market, reflecting their location adjacent to the Marks and Spencer Food Hall.

#### Health

Belle Meadow has the highest proportion of respondents using health facilities, reflecting its location adjacent to Brannam Medical Centre. This is particularly relevant when considering that the surgery provides very limited free car parking, and patients can be required to use either Belle Meadow or another nearby car park if no space is available on site. Given the nature of those attending for health appointments, it is important that some form of parking is retained at Belle Meadow to allow for its use as an overflow car park for the medical centre.

## Trip Purpose Summary

The short stay town centre car parks are predominantly used by shoppers, as would be expected given their location. However, it is clear that car some parks (such as Belle Meadow) serve a specific purpose (Health).

## 5.5 On-Street Parking

There are approximately 36 pay-and-display on-street spaces on Boutport Street, which are managed by Devon County Council. The survey results showed that the majority of users (90%) parked for less than two hours, with 50% parking for less than an hour, implying that the spaces are used for quick errands/visits only. The spaces are conveniently located close to the town centre, making them attractive to people who want to get in and out as quickly as possible.

Unlike many of the other town centre car parks, there are no signs indicating that parking is available on Boutport Street. Therefore, it is considered likely that the spaces will be mostly used by frequent visitors to the town centre, as those who are unfamiliar to the local area are unlikely to know to park there.

#### 5.6 Free On-Street Parking

A number of streets surrounding the town centre are covered by a Residents' Parking Zone (RPZ) which requires residents to have permits to park on their street. The permits are issued at two per household, however the limit does not apply to houses of multiple occupation (HMOs), where each tenant may apply for two parking permits, as well as the landlord of the property. The number of permits therefore potentially allocated to an HMO can exceed the physical space available for on-street parking immediately adjacent to the dwelling.

There is concern from NDC that the high level of HMO accommodation in streets near to the town centre is placing a strain on the free on-street parking, due to the potential for abuse of permits, for example by landlords who do not live in the property but use their permit to park close to the town centre for employment or leisure.

A visual drive-by survey was undertaken on each survey day between 12:00 and 12:30. The drive-by surveys were undertaken in the streets shown in **Figure 5.2**, as advised by NDC as being known problematic areas.

The surveys indicate that the streets were busy resulting in cars struggling to pass each other and the parked cars. This was particularly visible on Fort

Street, where the street is a dead-end and narrow, leaving room for only one car to navigate the length of the road at any one time.



Figure 5.2: Highlighted streets (in red) where visual on-street surveys have been undertaken

The concerns raised by NDC about on-street parking appear to be valid. The demand for on-street parking in residential areas is a delicate issue to address, however there are measures which can be implemented to limit this.

It may be feasible to limit the number of parking permits available to HMOs to the same number as non-HMO properties going forward – i.e. two per property – and not granting landlords permanent permits. Visitor permits are available which have a limited number of days on them for use by casual visitors: these could be extended to include landlords.

Whilst retrospective withdrawal of parking permits would prove difficult, there may be potential for a review of RPZ areas in Barnstaple, and consequently

the associated permits. This would create the opportunity to rethink the issuing of permits to HMOs and landlords, thereby restricting the number of cars parked on-street in permitted areas.

## 5.7 Time Limited Free Parking

Barnstaple Retail Park at Seven Brethren and Tesco Taw View are all 'time limited' free parking. There are Automatic Number Plate Recognition (ANPR) cameras installed at the car park entrances and exits, which capture cars entering/exiting the car park and can monitor their length of stay on site.

Typically, time limited car parks offer free parking for 2-3hrs, and have a policy of no returning within 1-3hrs afterwards.

The free parking at the retail parks and Tesco is potentially attractive to those looking to park somewhere, leave the site to go in to town, and come back within the free timeframe. It is difficult to estimate how many people use the car parks in this way, however a simple analysis has been undertaken to see the length of time people have parked in the car parks for.

.

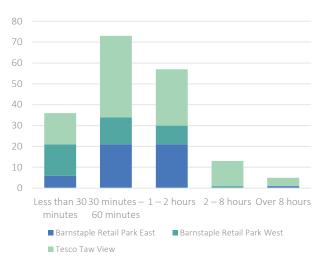


Chart 5.3: Number of respondents parking in time limited car parks, split by length of time parked

**Chart 5.3** shows the length of time parked in each of the time limited car parks

The majority of users are utilising the car parks for between 30 minutes and 1hr. It is noted that a small number of users remained in the Tesco Taw View car park for over 2hrs; with some staying over 8hrs. It can be assumed that those parked for the longer time durations are likely to be employees of the stores, and not the general public.

Further analysis reveals that those who did not select 'shopping' (both food and non-food) or 'work/commute' as a reason for using the free car parks, did not stay longer than 2hrs at most.

# 5.8 Location Summary

The location of car parks plays an important role both in encouraging their use and influencing traffic

movements around Barnstaple. There is a clear need for future plans to take trip purposes into account when examining future parking provision, as well as maintaining long stay hub car parks for commuters at strategic locations around the town periphery.

It is appreciated that, whilst it could not form part of these surveys, the Asda car park adds parking capacity within the town.

The free and time limited car parks are not seen to be used as a means of avoiding paid parking elsewhere in the town, however this is not to say that this does not occur. When considering future development opportunities, it would be prudent to consider the effect of providing free (time limited) parking near to a town centre, as these would be an attractive alternative to pay and display parking if located too close to major destinations.

## 6.0 PAYMENT & PRICING

#### 6.1 Introduction

As of April 2017, there are three distinct pricing structures across Barnstaple's car parks. The structures for pricing are based on whether a car park is long stay or short stay, and the location of the car park (e.g. Seven Brethren short stay does not have the same structure as Cattle Market). Privately owned car parks are able to set their own structure; however, these are generally in line with the prices set by NDC to ensure customers will use the private car parks too.

## 6.2 Short Stay Parking

The majority of town centre car parks are short stay, with some (e.g. Paiges Lane) being limited to a 1hr

maximum stay.

**Table 6.1** shows the structure for the town centre short stay car parks.

Table 6.1: Town Centre Car Parks - April 2017 price structure

1 hour	£1.10
2 hours	£2.20
3 hours	£3.30
4 hours	£4.40
5 hours	£5.60
6 hours	£6.80
7 hours	£8.00
8 hours	£9.20
All Day	£11.60

**Table 6.2** shows the structure for the 'out of town' short stay car parks.

Table 6.2: 'Out of Town' car parks - April 2017 price structure

1 hour	£0.40
2 hours	£0.80
3 hours+	£1.20

The results from the 'length of time' question in the survey (analysed in Section 4.8) show that the majority of short stay car park users are parking for between 30 minutes and 2hrs. This is in line with research undertaken in 2016 by Spirul IR, which interviewed a large sample of people using Barnstaple town centre.

The Spirul research also found that 33% of respondents cited 'parking charges' as the main factor determining their length of stay in the town centre. Therefore, there is clearly a delicate balance to be struck between encouraging shoppers to spend time in the town centre, whilst maintaining profitable parking.

# 6.3 Long Stay Parking

The long stay car parks have a flat charge of £1.70 all day as of April 2017. The results analysis has already shown that the majority of long stay parking users are commuters and park more than 3 times per week in a long stay car park. If we assume that most commuters work a 5-day week, then this results in a weekly cost of £8.50 to park.

## 6.4 Permit Parking

Barnstaple has a number of parking permit types, including residents' evening permits, seasonal permits and quarterly/annual permits. An overview of permit types is shown in **Table 6.3**.

Table 6.3: Barnstaple parking permits - prices as of July 2017

Residents' evening permit (annual)	£21
Seasonal 7-day rover permit	£42
Seasonal permit (4 days)	£12.10
Seasonal permit (weekly)	£20.80
Quarterly permit (Barnstaple area)	£61.25
Annual permit (Barnstaple area)	£200

- Quarterly and annual permits are for use in all long stay car parks around Barnstaple
- Seasonal 7-day rover permits cover all NDC car parks except Cattle Market (Barnstaple) and the Pier (Ilfracombe)
- Seasonal permits are aimed at visitors and cover all long stay car parks
- Local residents' permits are available for residents who live within ¼ mile radius of specific car parks – e.g. Congrams Close and Portmarsh Lane

 Residents' evening permits are valid between 16:45 and midnight for the closest nominated car park to a resident's home

There are no weekly or monthly permits available to users of the long stay car parks at present.

# 6.5 Preferred Payment Method

Respondents to the surveys were asked which payment method they preferred, and were able to choose one answer. As shown in **Chart 4.9**, there is a preference for pay on exit (PoE) and cash pay and display (P&D). The results from the survey can be further broken down to reflect the preferred payment methods by respondents' trip purpose, and by frequency of car park use, as shown in **Chart 6.1** and **Chart 6.2**.

## Preferred Payment Method by Trip Purpose

There is a clear preference for cash P&D for shoppers, closely followed by PoE. Amongst commuters, there is a higher preference for card payment facilities than for any other trip purpose. This group also has the highest proportion of preference for a P&D mobile app. This points towards commuters wanting quick and easy payment methods to 'park and go'; whilst shoppers and leisure users tend to be less concerned about this.

## Preferred Payment Method by Parking Frequency

Tying in with the trip purpose payment preference, users who park more than 3 times per week have the highest preference for card and mobile app facilities. More infrequent users have a preference for cash P&D and PoE, with little preference for mobile app or card payments.

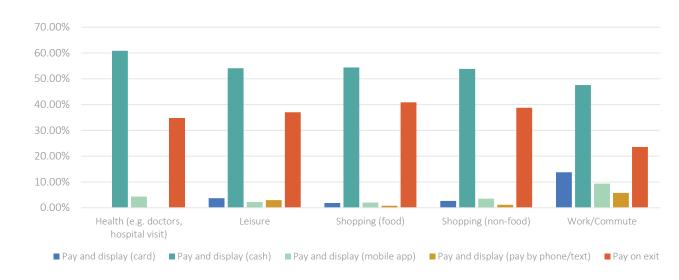


Chart 6.1: Preferred payment method by Trip Purpose

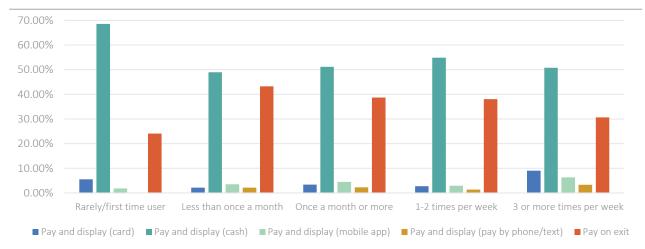


Chart 6.2: Preferred payment method by Parking frequency

## Preferred Payment Method by Age Group

As shown in **Chart 4.9**, there is a clear segregation of preferred payment types by age group. The younger respondents (18 – 55) indicate a willingness to pay by mobile app or over the phone / by text, whilst this is absent from the older demographic. This is a key indicator as the younger respondents will move up through the demographic range and will be the ones to drive a move towards more technological parking solutions. Future-proofing is important, and recognising a shift towards technological change will aid in future-proofing the car parking in Barnstaple.

# 6.6 Pricing & Payment Summary

There is a clear overall trend for cash pay and display parking amongst all surveyed users. This is also in line with what is currently offered across the NDC and most of the private car parks in Barnstaple. This is closely followed by pay on exit as a preferred payment method.

In 2015, two car parks in Barnstaple (Bear St and Hardaway Head) were equipped with pay on exit systems. Despite hoping that this would encourage longer stays in the town centre, this did not materialise and the machines were not considered profitable. However, there was a noticeable increase in use of these car parks as a result of implementing the pay on exit system.

Although the trial of pay on exit systems did not work at Bear Street and Hardaway Head, given the strong preference shown by users for a pay on exit system, this should not be completely dismissed as a viable alternative to (cash) pay and display systems.



## 7.0 GROWTH & DEVELOPMENT

#### 7.1 Introduction

Barnstaple and North Devon is projected to see a considerable amount of economic growth and development in the coming Local Plan period (to 2031), and this will undoubtedly have an impact on traffic levels and numbers of car drivers in the town. In addition to this growth, the population of North Devon is projected to grow by 12.5% in the plan period to 2031.

A recent study by Serio and Ekosgen showed that North Devon had a relatively small working age population, with a high proportion of residents aged 65 and over<sup>3</sup>. This follows county-wide trends of an aging demographic profile, with the 'Affluent Greys' making up 29% of households in the Barnstaple area<sup>4</sup>.

This aging demographic is important to note when developing a parking strategy; aging populations may require higher levels of disabled parking spaces, and provision of parking facilities close to every day facilities to provide ease of access.

## 7.2 Seven Brethren Redevelopment

The Seven Brethren area of Barnstaple was historically part of the large industrial and maritime heritage associated with the town. It has been developed in modern times to provide a leisure centre, tennis centre, modern industrial estate, retail park and Tesco supermarket. Barnstaple Station is also situated in the Seven Brethren area.

A large area of Seven Brethren Bank is given over to a large long stay car park which once a year is occupied by the Barnstaple Fair; a historically significant annual event in the town.

In January 2017, plans were unveiled by North Devon Council for the redevelopment of the Seven Brethren Bank area. The plans include a hotel, cinema, restaurants and new leisure centre. The development would provide a significant boost for the local economy and provide an additional set of leisure facilities for both locals and tourists.

The redevelopment of Seven Brethren Bank would result in the loss of the areas currently used for car parking adjacent to the leisure centre and Tarka Tennis Centre. Capacity counts and responses received to the surveys indicate that the Seven Brethren Bank long stay car park is heavily used by commuters, and was often seen to be well utilised both on weekdays and weekends, suggesting that it is a desirable location for people to park and walk in to town. The short stay car park has a higher turnover rate and is likely to be almost solely used by those using the adjacent leisure centre.

Given the fact that the car park is clearly well-used, the strategy must take into account the re-provision of spaces potentially lost by the redevelopment of the area. As the car park is primarily used by commuters arriving from the southwest / Bideford direction, consideration must be given to the re-provision of a similar long-stay site in the west of the town. This would not only serve the existing user population, but would also mitigate the need for the existing and future users to travel through the town to reach car

parks with similar long stay characteristics. This is discussed further in **Section 8.0**.

## 7.3 Meeting Future Parking Demand

In order to investigate potential future growth and predict future travel demand, traffic growth factors have been reviewed.

TEMPro 7 has been used to investigate traffic growth within the North Devon and Barnstaple mid-layer super output areas over the period of the emerging North Devon and Torridge District Local Plan (2017-2031). TEMPro models the impact of demographic factors upon behaviour change (changes to the number of jobs and households) however, it does not account for generalised costs or value of time and therefore TEMPro growth factors should be considered as providing a reference case.

If applied directly, the TEMPro growth over the Local Plan period forecasts traffic growth of around 21% for both Saturdays and average weekdays across both the North Devon and Barnstaple geographical areas. An increase in parking demand of this magnitude would see a number of car parks being oversubscribed which could result in displacement to other car parks. Based upon the survey data, those car parks affected would variously include:

- Lower Pilton NDC
- Tuly Street NDC
- Cattle Market NDC
- Fairview NDC
- Pilton Causeway / Sheepskin

<sup>&</sup>lt;sup>3</sup> North Devon Area Profile, Serio/Ekosgen (2014)

<sup>&</sup>lt;sup>4</sup> Barnstaple Market Summary, CACI (2011)

- Paiges Lane NDC
- Queen Street NDC

The survey results indicate that some respondents already experience difficulty in finding spaces in some of the car parks suggesting that displacement is already taking place (Section 4.6).

This displacement is more likely to occur in car parks such as Lower Pilton as these are smaller car parks which are primarily residential in nature and occupied the majority of the time.

The use of TEMPro data to 'predict and provide' future car parking provision needs to be considered in light of policy aims and the assumptions made within the forecast. Whilst this growth relates to typical traffic conditions and not the peak periods that may be associated with car parking such as Christmas or school holiday periods, there are a number of reasons why this is considered a robust forecast. The TEMPro forecasts are informed by Local Plan allocations and the delivery of some sites allowed for within the forecasts may be delayed beyond the plan period. Over recent years, the level of traffic growth stalled and even reduced in some areas as a result of the economic climate. Growth has now restored however this has taken place over a longer time period than previously forecast.

Due to the length of time covered by the emerging plan, looking forward over the plan period, a significant factor in the rate of growth that transpires will be the pace of technological and societal change experienced in respect of car ownership and travel demand more generally. The utilisation of vehicles is undergoing change associated with new autonomous vehicle technology and attitudes towards car

ownership are changing. These factors would both affect the level of growth in parking demand, and also the levels of existing demand captured by the surveys.

Due to this complex mix of factors, it is difficult to determine the extent to which the TEMPro growth rate of 21% may, or may not transpire over the plan period however in the short to medium term it is likely that the trends identified within the survey results for parking demand will continue to grow.



# 8.0 RECOMMENDATIONS & OPPORTUNITIES

#### 8.1 Introduction

The recommendations provided in this section are based on evidence accumulated from surveys and studies undertaken around car parking in Barnstaple.

#### 8.2 Recommendations

#### Charging Regime - Payment Method

The results of the surveys show two dominant preferences in payment methods and car parking charges. Cash pay and display and pay on exit systems were consistently rated as the preferred payment methods across all car parks, with long stay car parks attracting an additional preference towards quick and easy payment methods, such as card facilities and mobile (app) payment.

Pay on exit has not been shown to be financially viable in Barnstaple in the two locations (Bear St and Hardaway Head) where it was previously trialled. However, the implementation of the pay on exit system did significantly increase patronage of these two car parks.

A clear desire for a pay on exit system is apparent, and it is considered that such a system could potentially operate in an existing busy parking location such as the Cattle Market car park and Queen Street car park. Provision of a pay on exit system can encourage shoppers to spend a longer time in the town centre, rather than being concerned about having to pay for an allotted time and running over the time limit. However, it is recognised that a pay on

exit system may decrease the turnover rate of busy car parks like Cattle Market if shoppers choose to spend longer in town, which could be financially detrimental.

#### Recommendation 1: Provision of a Pay on Exit System

Pay on Exit systems should be reconsidered for the busiest town centre car parks, namely Cattle Market and Queen Street.

The long stay car parks which attract commuters, such as Seven Brethren and Fair View, showed the highest mix of payment preferences. Amongst these were also the highest preference for quick and smart payment solutions, such as card payments, contactless and mobile app payments. Commuters are typically in a hurry, can be running late and do not want to have to worry about having the correct change to park. Recent developments in the parking payment industry have catered to this growing trend, and the growing smartphone / wearable technology market, and many places now offer quick and simple parking solutions to encourage patronage.

#### Recommendation 2: Smart Payments

In accordance with a growing up take in technology and payment options, all long stay commuter car parks, should be equipped with (contactless) card payment machines.

# Charging Regime - Pricing

At present, all NDC car parks are subject to specific tariff structures based on their designation as long or short stay car parks, and whether or not they are subject to specific time limits or not.

When comparing the long stay NDC owned car parks to the long stay privately owned car park at

Sheepskin, the NDC car park is 50p cheaper, but both car parks tended to be equally full, suggesting that users are willing to pay the higher prices to be able to park all day.

Another notable point is the lack of a weekday parking permit for commuters or other long stay car park users. There are many other types of parking permits available, but these are either aimed at tourists, residents, or are only available quarterly or annually.

There are incentives which can be used to encourage users to take advantage of long stay car parks..

Amongst these are options like offering cheaper parking for those arriving prior to 08:00 hours, and discounted permits as listed above. By encouraging long stay car park use, traffic is kept typically to the periphery of the town centre, and users are encouraged to 'park and walk' or 'park and cycle' from the car park to their destination.

# Recommendation 3: Review of long stay parking charges and permits

A review of long stay parking charges could be undertaken, to determine whether or not these could potentially be increased.

Consideration could be given to providing a cheaper all-day rate for those arriving prior to 08:00, both to encourage uptake of the car park, and to encourage longer stays in the town centre. This type of measure could be especially beneficial at weekends.

In addition to the above, consideration could be given to providing more short-term parking permits such as weekday and monthly, specifically aimed at the commuting population who make up a large proportion of the long stay car park users.

### VMS Signage

There is a good network of existing VMS signage around Barnstaple, and these are typically placed on the primary routes into town to indicate the capacity of the main car parks. The location of existing VMS signs, including their list of car parks, is shown in **Figure 8.1** overleaf.

VMS signs are a powerful tool in guiding car park users towards using a particular car park, or for informing people who are unfamiliar with the town with a better idea of where they can park. When considering the traffic flow through the town, VMS signs, along with their fixed counterparts, can be used to influence the movement of traffic and be a tool in limiting unnecessary cross-town movements which contribute to congestion.

There are a number of VMS sign aspects which could be reviewed and may assist with the flow of traffic around the town.

Noticeably, Belle Meadow is signed on all VMS and fixed signs as a long stay car park, when in reality this is a short stay car park.

One possibility for rationalising the VMS signage would be to group or sign car parks by purpose rather than by destination. This is seen in other towns across the UK, where signs read "for town centre use [car park]", or, "for [attraction] use [car park]". The car park name is the variable on the sign, so when a certain car park is at capacity, the name can be changed to an alternative.

The advantage of this signage is that drivers from out of town are likely to be aware of their destination or journey purpose more than the specific car park they are looking for.

#### Recommendation 4: Review of VMS Signage

Review and revise a number of VMS signs around Barnstaple. These include:

#### Sticklepath Roundabout / Seven Brethren

The Sticklepath Roundabout VMS sign is located very near to a busy junction, which means that it can be overlooked by drivers upon approach, especially those unfamiliar with Barnstaple. It is potentially more confusing as approximately 100m further back along the A3125 is a fixed sign which indicates where short and long stay parking is located. It is recommended that the fixed sign remains in situ, and has the existing VMS sign integrated with it. The sign could be revised to state the options for a long stay at Seven Brethren, and a short stay at Belle Meadow and / or Queen Street, which are the nearest short stay car parks.

#### Belle Meadow Road

The existing VMS sign needs updating to state that Belle Meadow is a short stay car park and not a long stay. In addition, it is recommended that Green Lanes is replaced by Hardaway Head as a destination car park, again limiting traffic movements through the town centre. It is also recommended to move the sign approximately 50m south to be in a better line of sight for drivers, and to mitigate the effects of foliage covering the sign in summer.

#### Alexandra Road

It is recommended that the Alexandra Road VMS sign, which is on the southbound carriageway, is moved to be more visible to drivers. At present the sign is partially obscured by a large hedge, and would be better placed closer to the Vicarage Street junction. In addition, it is recommended that either (a) Belle Meadow is replaced by Portland Buildings long stay

(which is within 100m of the sign), or (b) that Belle Meadow is relabelled as a short stay car park. **Tuly Street Junction** 

At present, the VMS sign at the Tuly St junction serves the Cattle Market and Civic Centre. The Civic Centre car park is only used at weekends, rendering this aspect of the VMS sign redundant during the week. It is also a fairly small, hidden sign, which realistically would only serve those hoping to use the Cattle Market car park. It is recommended to move this sign to before the Packfield Court / Pilton Causeway roundabout, and to replace the Civic Centre long stay car park with Fair View long stay, whilst retaining the Cattle Market aspect of the sign.

#### **Braunton Road**

The existing VMS sign on Braunton Road is well located, and indicates capacities at Fair View, Cattle Market and Green Lanes. It is recommended that Green Lanes is replaced with either Bear Street or Queen Street, to minimise traffic using the Vicarage Street one-way system to access Green Lanes. The key principle underpinning the locations and use of VMS signage is that it must be located in a natural eyeline for drivers, be clear as to which direction drivers are expected to go, and to offer both short and long stay options on each sign.

## Introduction of Destination-Specific VMS Signs

Consideration could be given to providing a number of destination-specific VMS signs on the three principal routes into town — Braunton Road, A39 Eastern Avenue and A361 leading up to the Sticklepath 'square-about'. These signs could cover destinations such as 'shopping' or 'town centre', 'Quayside' and 'Seven Brethren' — particularly when the new Seven Brethren development is realised.

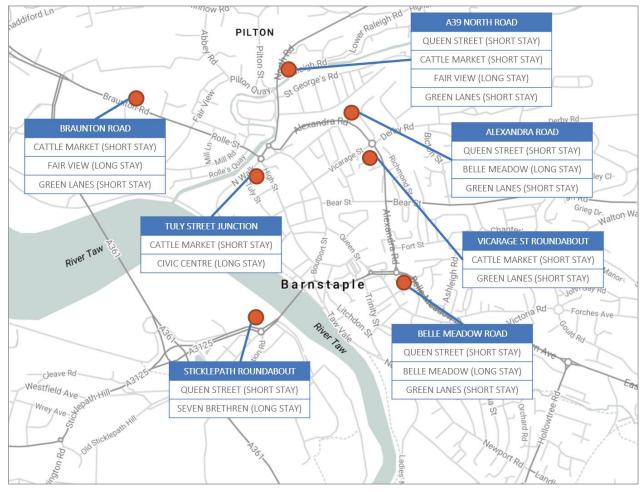


Figure 8.1: Location of Existing Variable Message Signs in Barnstaple

## Fixed Signage

By contrast to the VMS signs, fixed signage tends to be somewhat sporadic around Barnstaple, with fewer large 'overview' signs, and more individual 'P' signs, which can be harder for drivers to spot; especially those unfamiliar with the town.

It is also noted that the signs do not always follow through continuously, occasionally leaving the driver with a seemingly 'dead end' as they are unable to navigate using signs.

#### Recommendation 5: Review of Fixed Signage

It is recommended to review the location of all fixed parking signs around Barnstaple. These will act in addition to the VMS signs, and should provide a seamless navigation experience for the driver. It is suggested that an overview sign is situated on all principal routes into Barnstaple, within half a mile of the VMS signs. This would work particularly well for example on the northbound A361 approach to the Taw Bridge 'square-about' junction.

It is also recommended to group car parks together on signs to assist in traffic flows around the town centre. For example, Hardaway Head, Queen Street and Bear Street could all be grouped together on one sign, encouraging traffic to move in a one-way direction north along Queen Street then east along Bear Street. This would also work for Cattle Market and its associated town centre car parks.

Furthermore, it is recommended to review which car parks are signed on the fixed signs. Results from the survey showed that the least-used car parks also tended to be the ones with little or no obvious signage, such as Portland Buildings and Hardaway Head.

#### Disabled Space Provision

The results from the survey show that Cattle Market is the most used car park for blue badge holders. This is logical given its proximity to the town centre. The Tarka tennis centre and Queen Street showed the second highest levels of blue badge users, suggesting the need for provision of these spaces at these locations.

Comments from members of the public received whilst undertaking the surveys included inadequate provision of disabled spaces at Cattle Market; this is further evidenced by the capacity counts undertaken on the survey days, which indicate that the lowest number of occupied spaces at Cattle Market was 66% on Saturday 22<sup>nd</sup> April in the morning, with all other days having between 80-100% of spaces occupied both in the AM and PM capacity counts.

Queen Street was not found to be as full, with between 50% - 85% of disabled space occupied during the capacity counts.

#### Recommendation 6: Disabled Space Provision

It is recommended to review the provision of disabled spaces at Cattle Market and Queen Street car parks. In the case of Cattle Market, it is recommended to provide additional spaces, especially considering the aging demographic of North Devon and Barnstaple. The spaces should be easily identifiable and accessible; at present, this is not necessarily the case at Cattle Market. Some of the spaces at Cattle Market can be hard to find and awkward to park in, especially when the car park begins to reach its capacity.

## Re-provision of Lost Spaces

The redevelopment of Seven Brethren will result in the loss of spaces for the long and short stay car parks. It is anticipated that the short stay car park shortfall will be met by parking provision for the new leisure centre, however this leaves a significant number of long stay car parking spaces to be accommodated elsewhere.

The results of the surveys undertaken show that the Seven Brethren long stay car park is used predominantly by commuters at present; and largely by those arriving from the west / Bideford direction. The car park has a fairly equal split between the reasons users choose the car park, with cost, ease of access from route into Barnstaple, and ease of access to destination being the three main reasons. Bearing this in mind, there is a need for the re-provided spaces to capture these user preferences.

At present, Park School car park, which is another long stay car park to the south of Barnstaple, is between 5% and 45% full, indicating spare capacity — at 55% spare, this equates to 132 unused spaces — or 40% of the current space provision at Seven Brethren.

It is feasible that Park School could therefore capture some of the loss as a result of the Seven Brethren redevelopment; particularly those users who use Seven Brethren at present due to ease of access into Barnstaple. Park School car park is located to the south of Barnstaple, and is easily accessible from the A39 route from the west, where the majority of current Seven Brethren users are arriving from. The availability of Park School would be subject to discussion with Devon County Council, as landowners and operators of the car park.

It is also important to capture the current Seven Brethren users who utilise the car park because of its ease of access to their destination. Bearing this aspect in mind, it is important to consider that any new reprovision of the long stay spaces is made to the west of Barnstaple, to capture those using Seven Brethren at present to access their destination. This need not be within the immediate area, but should provide users with a safe and viable solution to park and reach their destination by other means (on foot, cycle) within a reasonable distance and time.

#### Recommendation 7: Re-provision of Lost Spaces

It is considered that the re-provision of spaces lost as a result of the Seven Brethren development would be best situated on the western side of the town.

Consideration should be given to providing a long stay car park to the west of Barnstaple to capture the existing users of Seven Brethren. The car park would be best located within suitable walking and cycling distance of the town centre (within 2km as per recommended guidance<sup>5</sup>), and served by a good bus connection providing regular services into the town. The survey results suggest that the car park should provide at least the equivalent number of spaces currently at Seven Brethren (336) with an opportunity to accommodate future growth.

## 8.3 Opportunities

Barnstaple is the principal town for North Devon, and as stated, is projected to undergo significant growth and development over the next 10-15 years. This growth will contribute to a vibrant and thriving market town, benefitting the local economy as well as

the wider North Devon region.

Alongside this development would be the opportunity to implement new technologies. This section presents opportunities for consideration with regards to parking in Barnstaple.

#### Smart Solutions

New technologies in parking have proven to be extremely successful across the UK. These technologies exist in many forms, from mobile parking payments to lights guiding users to empty parking spaces. Whilst not all of these will be suitable for Barnstaple, those which could be implemented are as follows:

- RFID-tag solutions
- Mobile parking apps
- Empty space indicators in car parks
- Electric Vehicle Charging (EVC) Points

#### Opportunity 1: Smart Solutions

#### RFID Tags

RFID (Radio-Frequency Identification) tags are commonly used in payment collection at tolls, to speed up the process and allow for frequent users to benefit from a lower toll rate than infrequent users. The tags typically sit on a car dashboard, and are picked up by a receiver when a car passes by. RFID tags are becoming more popular in smart parking solutions, allowing for regular users to take advantage of a contactless, quick payment system on a daily basis.

There is scope to consider providing an RFID solution in the long stay car parks popular with regular users, such as commuters. This would allow for a seamless transaction between user and NDC, and could provide scope for introducing weekly/monthly discounts, as well as specific discounts for RFID tag users.

#### Mobile Phone Apps

Dedicated mobile parking apps are abundant, with the North Devon area having three predominant ones — RingGo, Phone & Pay and PayByPhone. The benefits of parking apps are that they provide an easy, cashless solution for users, as well as providing the car park owner with real-time user information.

At present, the majority of car parks in Barnstaple operate on the RingGo system. This is useful as the RingGo app also provides a real-time overview of the car park capacity, so users can see how full a car park is going to be before parking there.

In addition to this, there could be scope for implementing a Barnstaple-specific app, run by the council, for use in their car parks. In addition to purchasing parking time, the app could be tailored to provide options to purchase permits, or manage an RFID tag account.

#### **Empty Space Indicators**

Empty space indicators have been installed in multistorey car parks across the globe, and have proven to be successful. The idea is that each parking space has a small LED light above it, which glows green if the space is empty, or red if the space is occupied. In addition, arrows at the start of each parking row indicate how many available spaces there are in each

<sup>&</sup>lt;sup>5</sup> The now expired PPG13 – Transport (paragraph 74) stated that walking offers the greatest potential to replace short car trips, particularly for journeys under 2km

row, enabling drivers to easily find their way to an empty space.

Whilst the indicators are only used in multi-storey car parks, any future development opportunities in Barnstaple where multi-storey car parks are considered could consider implementing such a system.

#### **EVC (Electric Vehicle Charging) Points**

With the ownership of electric vehicles on the rise, drivers are looking for places they can park and charge their vehicles once they reach their destination. Many places recognise the importance of this, and offer free parking and a charging facility as an incentive to use carbon-neutral vehicles.

Barnstaple is a rural settlement, and attracts a wide number of people from a predominantly rural area. The nature of Barnstaple and North Devon means that electric vehicle ownership is relatively low – only 100 electric vehicles were registered at the end of March 2017 in North Devon, compared to a city like Exeter, which had 261 registered<sup>6</sup>. The provision of EVC points is also sparse, reflecting the low number of electric vehicle users. Despite this, ownership is on the rise, increasing 35% since March 2016.

Given the increase in ownership levels, and the rise of hybrid electric vehicles, the need for further EVC points should be considered. There is an opportunity to trial a free charging point in a town centre car park such as Cattle Market, and a long stay car park such as Fair View, and to monitor use going forward to determine the need for other ECV points in

#### Barnstaple

Barnstaple has over 35 different car parks, with 15 located within 500m of the town centre. These car parks range in size from 7 spaces to over 300.

It was noticeable in the capacity counts that whilst certain car parks were within easy distance of town centre facilities, some were drastically under-utilised when compared to their counterparts. North Walk for example, rarely had more than a 50% occupancy rate, whilst Tuly Street which is a mere 50m away, was consistently near or at capacity. Similarly, Bear Street was on average 27% full, whilst Queen Street, immediately adjacent, was on average 65% full.

The peak day for occupancy of car parks during the surveys was Friday 21<sup>st</sup> April. **Table 8.1** provides an overview of parking capacities on that day, sorted largest to smallest, AM and PM peaks.

The capacity counts show that the 'top 10' car parks for occupancy are fairly consistent in the AM and PM peaks. The same principle applies to the 'bottom 10' car parks, which are also fairly similar across the two peaks.

Fair View, Cattle Market and Tuly Street are consistent in being some of the most occupied NDC car parks. Fair View is clearly a popular car park for long stay users, whilst Cattle Market is extremely popular – even by comparison to Green Lanes, which is a similarly central shopping car park.

Amongst the least occupied NDC car parks are Portland Buildings, Hardaway Head and the Seven Brethren Van and Lorry parks. It should be noted that the Civic Centre was not surveyed on the Friday, but had consistently low numbers (approximately 10% full).

Table 8.1: Car park capacities Friday April 21st 2017

Car Park	AM Ave	Car park	PM Ave
BOU	100%	FAV	92%
LPN	100%	LPN	83%
FAV	95%	SHE	79%
SHE	93%	CAT	77%
CAT	90%	TUL	73%
TUL	88%	LIT	71%
COM	88%	BOU	68%
LIT	79%	PAL	68%
QUE	75%	COM	56%
PAL	73%	CON	55%
CON	69%	QUE	52%
PML	65%	PML	51%
TES	58%	TAR	48%
SBR	57%	NWK	47%
BEL	56%	TES	44%
RPW/RPE	43%	GRE	41%
NWK	42%	STA	38%
PAR	30%	BEL	35%
BEA	29%	SBS	33%
BIC	29%	RPW/RPE	32%
STA	28%	BIC	29%
SBS	25%	RQY	25%
GRE	24%	PAR	23%
RQY	23%	BEA	20%
TAR	17%	POR	17%
POR	11%	SBR	14%
SBV	7%	HAR	10%
HAR	7%	SBV	7%
SBL	0%	SBL	6%

<sup>&</sup>lt;sup>6</sup> DfT Statistics Table VEH0131: Plug-in cars, vans and quadricycles licensed at the end of quarter, UK, by local authority of registered keeper from 2011 Q4

## Opportunity 2: Improvement of existing car parks

It is suggested that the following car parks would benefit from improvement, to increase the number of spaces and effectively accommodate future growth:

- Cattle Market
- Tuly Street
- Fair View
- Queen Street / Bear Street
- Rolle Quay

In the case of Queen Street / Bear Street, it is considered that the car parks would benefit from being linked and treated as one car park. This would encourage the use of spaces in Bear Street which were under-utilised, and would mitigate the need for people to move between car parks on the road if they were to enter one to find it was full.

It should be noted that Cattle Market in particular could benefit from a complete redesign. There would be a potential benefit from changing the access from Tuly Street to Castle Street, and creating a barrier just after Paiges Lane. Tuly Street is noticeably busy and has numerous pinch points where the road narrows, or delivery vehicles park. By accessing Cattle Market from Castle Street into Holland Street, this would eliminate many of the issues caused by traffic around Tuly Street.

A further opportunity would be to create a one-way system within Cattle Market for entering and exiting. There is the opportunity to redesign the entrance of the car park to be accessed off North Walk, adjacent to 'The Watering Hole' pub, where there is currently a secondary access to the car park. The exit could be

retained as is existing, with traffic exiting on to Castle Street rather than on to Tuly Street.

The survey results and comments from users suggest that Rolle Quay has seen a significant loss in patronage since its shift from a long stay to a short stay car park. This is further evidenced by the capacity counts, which show the car park to be at most 25% full. Consideration could be given to re-designating Rolle Quay as a long stay car park to encourage its use and alleviate some of the pressure on the nearby Fair View car park.

#### Providing for Employment and Businesses

In addition to the public surveys which were undertaken, surveys were handed out to local businesses to gauge their views on parking in Barnstaple.

One thread which emerged from the business surveys was the change from long stay to short stay parking at Rolle Quay. Many businesses commented that since the parking had changed to short stay, most spaces were frequently empty, and their trade had suffered.

Another emerging thread was the lack of permits available to businesses, or the cost of parking to come in to work.

#### Opportunity 3: Providing for Businesses

There is the opportunity to provide a business owners' permit to cover the car park closest to the business. This could be charged on an annual basis and be made available to business owners and a set number of employees.

#### Park and Ride Solutions

Park and Ride (P&R) facilities have previously been provided in Barnstaple, namely with a dedicated bus service running between the Park School car park and the town centre. Declining patronage and funding meant the removal of the service in Spring 2016. Since then, no dedicated P&R facilities have been available to residents and visitors. However, the emerging North Devon & Torridge Local Plan provides for Park & Change sites at Roundswell, Westacott and Braunton Road.

The success of P&R services has been researched thoroughly, most noticeably by the Transport Research Laboratory (TRL). TRL concluded that:

"It is important for park and ride to be part of an overall parking strategy. It should not provide additional long—stay car parking, or lead to increased car mileage. Preferably, it should either supply additional short—stay car parking or release existing long—stay parking in the town centre, for re—development or conversion to short stay parking."

Park and ride schemes should be accessible, comfortable and cost-effective in order to encourage their uptake. Taunton Deane Borough Council, who run a successful P&R scheme, noted in their 2004 Transport Strategy Review that the success of the park and ride is fundamentally linked to the cost of town centre parking, which therefore should form a key part of the overall parking strategy in Barnstaple.

Another noticeable part of Taunton's strategy is the placing of the P&R sites. At present, Taunton has two sites, on the west and east sides of the town; one just off junction 25 of the M5 and one close to where the A38 comes into the west of Taunton from Wellington.

These locations suit a cross-town link services, which shuttles between the two park and ride sites throughout the day, incorporating key destinations such as Musgrove Park Hospital, University Centre Somerset and the town centre. Critically, it also serves the Blackbrook business park to the east of the town.

The operation of the park and ride service across town means that there is no dwell time in the town centre for buses, and buses have a relatively quick turnaround time at both the P&R sites. Each site is equipped with a staffed information centre, modern and comfortable indoor and outdoor waiting facilities, and plenty of car parking, including ample disabled parking provision and electric vehicle charging points.

With the cross-town link a success, further P&R sites have been explored with the expansion of Taunton. Another site has been considered to the northeast of the town where the A38 enters from Bridgwater, which is recognised as another key commuter route into the town.

Taunton's P&R costs £2.40 return for an adult, or £10 for a weekly ticket. A monthly ticket is £33. Compared to town centre parking prices, which start at £1.20 for an hour, up to £9.60 all day, this represents a costeffective way of commuting. Moreover, the frequent (15-minute) peak service and accessible locations on the edge of town provide comfortable and reliable services for users.

Subject to economic assessment, a similar model could be implemented in Barnstaple, with the focus on removing commuter parking from the town centre and Seven Brethren sites. A P&R service in Barnstaple would need to ensure it linked key sites, such as the hospital, commercial and employment areas, and potentially the further education centres at Petroc.

There could be scope for the initial provision of one park and ride site which operates between the southwest and A39/A361 interchange area and the hospital as a cross-town link. If this proved to be successful, further sites at key locations such as on the A361 Braunton Road should be considered.

# 8.4 Recommendations and Opportunities Summary

The results of the car parking surveys have identified a number of recommendations and opportunities for the future development of a strategy for Barnstaple's car parking.

It is important to note that technology continues to evolve at a rapid rate. Consideration should be given to monitoring the progress of evolving parking and vehicle technologies, as well as reviewing the physical size of parking spaces and uptake of electric and autonomous vehicles in the future.

A summary of Recommendations and Opportunities is states as follows;

#### Recommendations

- i. Provision of a Pay on Exit system
- i. Review and provide smart payments
- iii. Review of long stay car park charges and parking permits
- iv. Review of VMS signage
- v. Review of fixed signage
- vi. Review of disabled space provision
- vii. Re-provision of lost spaces

#### **Opportunities**

- i. Implementing smart solutions
- ii. Improvement of existing car parks
- iii. Providing for businesses
- iv. Park and ride solutions

#### 9.0 SUMMARY AND CONCLUSIONS

#### 9.1 Introduction

Hydrock Consultants and JLL have been commissioned by North Devon Council, in conjunction with Devon County Council, to undertake a review of car parking in Barnstaple.

The overarching aim of the commission was to provide North Devon Council with the means of providing "a sufficient number of suitably located and priced car parking spaces that will sustain the long term economic, social and environmental wellbeing of Barnstaple, whilst releasing sites for redevelopment to facilitate the regeneration and sustainable growth of the town centre in line with the Local Plan period."

## 9.2 Summary

Hydrock has undertaken capacity counts and user surveys for car parks in Barnstaple, across four days in April 2017. The survey days captured the busy Easter period, as well as the days outside the holiday period.

The survey responses have been analysed to provide an overview of who uses the car parks, which car parks are used, why they are used and when/for how long amongst others.

The results of the surveys have been used to provide a series of recommendations and opportunities to enable North Devon Council to developing an improved car parking strategy for Barnstaple.

#### 9.3 Conclusions

Barnstaple is a vibrant market town, attracting an audience from a wide area, as well as being popular with tourists. The town and population is projected to grow significantly over the next 10-15 years, which will see new development and economic growth alongside.

To both facilitate this growth and maintain the town centre economy, a number of recommendations and opportunities have been put forward. These include the provision of new parking systems, provision of smart payment systems in strategic locations, reviews of signage around the town and a review of charging.

In addition to the above, recommendations have been made for improving existing car parks to provide flexibility and scope for future growth.



