2020

HIGHWAY & TRANSPORTATION CONSULTANTS

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LICHFIELD CITY CENTRE CAR PARK STRATEGY

FOR LICHFIELD DISTRICT COUNCIL

Contents

EXECUTIVE SUMMARY

INTRODUCTION

2020 Consultancy has been commissioned by Lichfield District Council via Lot 5 of the ESPO framework to undertake a car park study and preparation of a parking strategy covering the off-street city centre car parks. The Council is seeking to develop a parking strategy that aligns with the new city centre Masterplan, which is designed to shape the future growth of the city centre, set out opportunities for enhancing the quality of the city centre environment and the range of different uses it offers, and provide a prospectus for investment in Lichfield.

CONTEXT

There are approximately 2,133 publicly available, off-street car-parking spaces (including 70 disabled spaces) situated in and around Lichfield city centre. At the time this strategy was commissioned, all these car park spaces were operated or managed by Lichfield District Council and there were no privately owned car parks within the city centre. However, during development of the strategy, Backcester Lane and Gresley Row car parks have become privately owned. For consistency, these car parks have been retained in the strategy. There is a large Tesco superstore that has approximately 620 off-street car parking spaces that is located towards the north-east of the city centre, which currently offers free parking for three hours. Due to the location of the superstore, it's highly likely that some visitors to the city centre will use the superstore car park to access the city centre.

EXISTING SITUATION

The largest car park within the city centre is The Friary Multi-Storey (389 spaces) which is located within the outer city centre zone. This is the only car park within the city centre that offers electric vehicle charging spaces.

1,006 (47%) of the total 2,133 spaces operated by the District Council in the city centre allow for long-stay, all day parking, most of which offer a minimum 4-hour tariff charged out at £2.10 and an all-day rate of £4.30. The long-stay car parks are located across the city centre, meaning there is a good choice of location regardless of intended destination. The remaining 1,127 spaces operated by the District Council in the city centre offer short term parking charges, with an hourly rate of £1.00 in operation in all car parks apart from Beacon Park car parks where a £0.50 tariff is in place (apart from Greenhough Road, which provides two hours of parking for £0.50.

Car Park	Term	Number of Parking Spaces	
		Standard	Disabled
Greenhough Road	Short-stay	79	2
Shaw Lane	Short-stay	41	2
Bunkers Hill	Short-stay	54	0
Sandford Street	Long-stay	56	2
Bird Street	Short-stay	187	8
Lombard Street Upper	Short-stay	142	0
Lombard Street Lower	Long-stay	134	0
The Friary Multi-Storey	Long-stay	389	21
Friary Inner	Short-stay	45	0
University West	Long-stay	116	0

University East	Long-stay	48	0
District Council (Weekend)	Short-stay	187	8
New Bus Station	Long-stay	57	4
Birmingham Road Multi-Storey	Short-stay	332	10
Backcester Lane Upper	Short-stay	52	8
Backcester Lane Lower	Long-stay	41	0
Redcourt	Long-stay	85	3
Gresley Row	Short-stay	38	2
Greenhill	Long-stay	13	0
Train Station	Long-stay	37	1
Total		2133	70

Details of the tariff structures applicable to both the long and short-stay car parks operated by Lichfield District Council in the city centre are summarised below.

Tariff (1 hour)	Tariff (4 hours)	Tariff Maximum	Maximum Stay	Applicable to	Total number of spaces
£0.50	£2.00	£10.00	All day	Shaw Lane	41
				Bunkers Hill	54
£0.50 for 2 hours	£1.00	£10.00	All day	Greenhough Road	79
£1.00	£4.00	£8.00	All day	Friary Inner	45
				Bird Street	187
				Lombard Street Upper	142
				Backcester Lane Upper	52
				Birmingham Road Multi-Storey	332
				Gresley Row	38
				District Council	187
				University West	116
£2.10 for 4 hours	£2.10	£4.30	All day	Sandford Street	56
				The Friary Multi-Storey	389
				University East	48
				Lombard Street Lower	134
				Backcester Lane Lower	41
				Redcourt	85
				Greenhill	13
				Train Station	37
				Bus Station	57

LICHFIELD CITY CENTRE MASTERPLAN

The Lichfield city centre Masterplan will be an important document that will shape the future growth of the city centre, set out opportunities for enhancing the quality of the city centre environment and the range of different uses it offers, and provide a prospectus for investment in Lichfield. The District Council consider the masterplan to be a key means of enhancing what is already a strong and vibrant city centre, and its preparation underscores the importance of the city centre as an asset for residents of Lichfield, visitors to the city, and those who work in Lichfield.

Within the Masterplan, there are four key development opportunities. These are:

- Birmingham Road Gateway;
- District Council House;
- Bird Street Courtyard;
- University West Car Park.

Within the Masterplan, indicative timescales have been provided, which acknowledge that project delivery will depend on a host of decisions and funding. It also adds that timescales are uncertain at this stage due to the complexity of the development process. The Masterplan does breakdown the development opportunities into short, medium, and long-term delivery timescales. The timescales that relate to the delivery of the development opportunities are as follows:

- Immediate: years 1-2;
- Short years: 2-7;
- Medium: years 8-15 years;
- Long: 15 + years.

BENCHMARKING WITH OTHER LOCAL AUTHORITIES

As part of the development of the car park strategy, a benchmarking exercise was undertaken to determine how the Lichfield city centre parking offer compares to neighbouring authorities and other cities that are similar to Lichfield. The locations near to Lichfield selected for the benchmarking exercise include:

- Stafford;

- Walsall;
- Burton upon Trent;
- Stoke on Trent.

The locations that share similar characteristics to Lichfield that were selected for the benchmarking exercise include:

- Lincoln;
- Worcester;
- Chichester;
- Salisbury;
- Winchester;
- Leamington Spa.

The population, number of car parking spaces, and percentage of spaces against the population for each location is shown below.

Location Centre	Population	All car parks	
		No. spaces	% of Spaces Population
Lichfield	32,219	2133	6.6%
Stafford	68,472	2898	4.2%
Walsall	67,594	4170	6.2%
Burton upon Trent	72,299	3329	4.6%
Lincoln	93,541	3804	4.1%
Worcester	102,791	3617	3.5%
Chichester	26,795	3796	14.2%
Salisbury	40,302	2858	7.1%
Winchester	55,240	2434	4.4%
Stoke on Trent	116,595	2832	2.4%
Leamington Spa	52,213	3290	6.3%

The results demonstrate that Lichfield has the third highest rate of car parking spaces within the city centre compared to neighbouring authorities and cities/towns that offer similar characteristics to Lichfield.

Although Lichfield doesn't offer as many car parking spaces as Chichester, it is clear that there is a good parking offer in place in the city centre. Compared to neighbouring

local authorities such as Stoke on Trent, Burton upon Trent, Stafford, and Walsall, there is substantially more parking spaces available compared to the population.

The current parking tariffs by Lichfield District Council have been benchmarked against comparable cities and authority areas as shown below. The red, amber and green coloured boxes show where parking charges are greater (green), the same (amber), or lower (red) than the current charges in Lichfield.

City / Town	City / Town Centre Weekday Parking Charge					
	1 Hour	2 Hours	3 Hours	4 Hours	All-day	Sunday (all-day)
Lichfield	**£1.00**	**£2.00**	**£2.10**	**£2.10**	**£4.30**	**£1.00**
Stafford	£1.10	£2.10	£3.10	£3.70	£8.50	£1.00
Walsall	£1.10	£1.10	£2.20	£2.20	£2.50	Free
Burton upon Trent	£1.40	£1.40	£2.40	£5.00	£5.00	£5.00
Lincoln	£1.60	£3.20	£4.80	£6.20	£8.50	£8.50
Worcester	£0.90	£1.80	£2.70	£3.60	£6.00	£6.00
Chichester	£1.40	£2.70	£4.40	£6.90	£13.80	£3.00
Salisbury	£1.60	£2.80	£4.50	£5.10	£8.90	Free
Winchester	£1.50	£2.90	£4.40	£5.80	£15.00	£2.00
Stoke on Trent	£1.00	£2.00	£3.40	£4.60	£4.60	Free
Leamington Spa	£1.50	£2.00	£3.00	£3.50	£8.00	£1.20

Lichfield compares favourably against neighbouring authorities and cities/towns with similar characteristics. No location chosen for the benchmarking exercise has a complete parking offer that is lower cost than Lichfield.

With an all-day parking tariff of £4.30 in long-stay car parks, Lichfield city centre car parks are significantly cheaper than some of the cities/towns that share similar characteristics, most notably Chichester, and Winchester.

ASSESSMENT OF LICHFIELD CITY CENTRE CAR PARKS

As part of the development of the Lichfield District Council parking strategy, an assessment of each city centre car park was undertaken to understand the current condition of the car park, which would inform recommendations within the strategy.

The assessment criteria included the following considerations:

- Accessibility;
- Surveillance and CCTV;
- Boundaries and perimeters;
- Road markings;
- Lighting;
- Pedestrian access and safety;
- Vehicular access;
- Directional signage on approach to the car park;
- Wayfinding to key destinations in or near the car park;
- Electric vehicle facilities;
- Priority spaces for disabled and children;
- 24-hour operation;
- Toilet facilities;
- Types of payment available;
- Overall condition of the car park.

For each of the above criteria, a score of 0-3 was provided. 0 was given to the car park if the criteria was fully met such or was considered excellent. Therefore, the lower the score the better rating for the car park.

The table below lists all the car parks from this assessment to compare how each car park scored across the city centre.

Name of Car Park	Scoring Criteria														
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets	TOTAL SCORE
Train station	3	0	2	2	2	3	3	3	3	3	3	3	0	3	35
Bunkers Hill	2	3	2	2	2	2	2	3	3	2	3	2	0	3	34
Greenhough Road	2	3	2	2	2	2	2	2	2	2	3	3	0	3	32
Greenhill	2	0	3	3	0	2	2	3	3	3	3	3	0	3	32
Birmingham Rd	3	0	0	2	2	2	3	3	1	3	3	2	0	3	29
Shaw Lane	3	3	0	1	1	3	2	3	1	1	3	2	0	3	28
Sandford Street	2	2	0	0	1	2	2	2	3	0	3	2	0	3	24
University West	1	0	1	2	0	1	1	3	3	1	3	3	0	3	24
District Council House	0	0	0	2	1	1	0	2	3	2	3	2	3	3	24
Lombard Street	1	0	0	1	1	1	0	3	3	1	3	2	1	3	22
University East	1	0	1	2	0	1	1	3	3	1	3	1	0	3	22
Gresley Row	2	0	0	0	0	2	2	2	3	0	3	2	0	3	21
Redcourt CP	1	0	0	0	0	2	1	2	2	1	3	2	0	3	19
Friary Inner	1	0	1	1	0	0	0	2	2	1	3	3	0	3	19
Bird Street	2	0	0	1	1	2	1	3	1	1	3	2	0	0	19
Backcester Lane	2	0	0	0	0	2	0	1	2	1	3	0	0	3	16
Bus Station CP	0	0	0	0	0	0	0	3	3	0	3	1	0	3	15
The Friary Multi-Storey	1	0	0	0	0	1	0	0	1	0	0	0	0	0	4

CAR PARK OCCUPANCY SURVEYS

Data provided by Lichfield District Council enabled car park occupancy surveys to be undertaken in each of the city centre car parks. The data was undertaken by CCTV surveys at 12noon between Monday and Saturday each week. The surveys were undertaken at 12noon as it's widely accepted that a car park will have the highest occupancy at this time. It should be noted that the Beacon Park car parks were not included within the CCTV surveys so they haven't been included within the analysis.

The table below provides the occupancy data for each of the car parks below.

Car Park	Capacity	2018		2019	
		Hourly Occupancy	% Occupied	Hourly Occupancy	% Occupied
Birmingham Road Multi-Storey	332	173	52	165	50
The Friary Multi-Storey	389	186	48	173	44
Friary Inner	45	47	104	49	109
Sandford Street	56	65	115	65	115
Bird Street	187	179	96	180	96
Lombard Upper & Lower	276	175	63	193	70
Redcourt	85	82	97	85	100
Greenhill	13	12	92	12	92
Gresley row	38	30	78	29	75
Backcester Middle & Upper	84	52	62	53	63
Backcester Lower	41	37	91	38	93
Bus Station	57	61	107	62	108
Train Station	37	20	54	20	54
Uni East	48	38	78	24	50
Uni West	116	110	94	108	93
Average	120	84	82	84	81

Comparing the data between 2018 and 2019, there is little difference, with an average across all car parks at 82% in 2018 and 81% in 2019. Whilst there is a slight reduction, it's not considered high enough to assume that parking demand has reduced in the city centre.

Whilst the average occupancy rate across the city centre car parks is high, it's worth noting that the two largest car parks are well below capacity. The Friary Multi-Storey car park is only at 48% capacity in 2018 and 44% capacity in 2019, and The Birmingham Road Multi-Storey car park is only at 52% capacity in 2018, and 50% capacity in 2019.

STAKEHOLDER ENGAGEMENT

It is fundamental for the study to garner a level of stakeholder and public engagement that would allow for opinions and possible concerns to be offered. It is from this engagement that data can be sourced and analysed to allow for a higher standard of subject understanding. The aim of the engagement is to give the public and

stakeholders an opportunity to express their views on the car parking provision within Lichfield, both the existing provision and the potential changes and improvements.

Public Engagement for the Lichfield Car Parking Study began on Monday 22nd February 2021 and lasted four weeks, ending on Monday 22nd of March 2021 and involved an online questionnaire (due to Covid-19 restrictions) as the main form of response for stakeholders to feedback views on car parks in Lichfield city centre.

The questionnaire was completed 1071 times and gave insight into a range of different car parking criteria and behaviours. It has highlighted that many car parks are under occupied compared to a select number that are more preferred. It links directly that most of the problems that are experience by the respondents of this questionnaire occur in the more popular car parks. On the whole, it is understood from this data that the majority of respondents will continue to use the car parks and the city centre at the same level for which they did before the national pandemic started.

FORECASTING FUTURE PARKING DEMAND

The car parking supply in Lichfield city centre overall is currently adequate for the demand. Although there are a number of car parks at or over capacity, there is sufficient parking spaces across the city, especially as the two largest car parks (Birmingham Road Multi-Storey, and The Friary Multi-Storey) are well below capacity.

TEMPro (Version 7.2) was used for estimating growth in traffic within Lichfield. It is based on predictions of future housing, population, car ownership, trip rates and jobs in and around the relevant area. It is a model that is based on origin and destinations, and therefore it also takes into account general growth from surrounding areas and then predicts how this growth will affect the relevant area.

The TEMPRO growth data has been applied to the surveyed data to project future parking demand within the city centre for a 20-year period up to 2041. The growth in car ownership within Lichfield has been applied, rather than trip end growth, as the projected growth is greater.

The TEMPro figures are broken down into five year periods; 2026, 2031, 2036, and 2041.

	Capacity	18/19 Ave	2026	% Occupied
Birmingham Road Multi-Storey	332	169	179	54
The Friary Multi-Storey	389	179	189	48
Friary Inner	45	48	51	113
Sandford st	56	65	69	123
Bird Street	187	180	190	102
Lombard Upper & Lower	276	184	194	70
Redcourt	85	84	89	104
Greenhill	13	12	13	98
Gresley row	38	30	32	83
Backcester Middle & Upper	84	53	56	67
Backcester Lower	41	38	40	98
Bus Station	57	62	65	115
Train Station	37	20	21	57
Uni East	48	31	33	68
Uni West	116	109	115	99
Total Across City Centre	1805	1264	1335	74

	Capacity	18/19 Ave	2031	% Occupied
Birmingham Road Multi-Storey	332	169	188	57
The Friary Multi-Storey	389	179	199	51
Friary Inner	45	48	53	119
Sandford st	56	65	72	129
Bird Street	187	180	200	107
Lombard Upper & Lower	276	184	205	74
Redcourt	85	84	93	110
Greenhill	13	12	13	103
Gresley row	38	30	33	88
Backcester Middle & Upper	84	53	59	70
Backcester Lower	41	38	42	103
Bus Station	57	62	69	121
Train Station	37	20	22	60
Uni East	48	31	34	72
Uni West	116	109	121	104
Total Across City Centre	1805	1264	1405	78

	Capacity	18/19 Ave	2036	% Occupied
Birmingham Road Multi-Storey	332	169	196	59
The Friary Multi-Storey	389	179	208	53
Friary Inner	45	48	56	124
Sandford st	56	65	76	135
Bird Street	187	180	209	112
Lombard Upper & Lower	276	184	214	78
Redcourt	85	84	98	115
Greenhill	13	12	14	107
Gresley row	38	30	35	92
Backcester Middle & Upper	84	53	62	73
Backcester Lower	41	38	44	108
Bus Station	57	62	72	126
Train Station	37	20	23	63
Uni East	48	31	36	75
Uni West	116	109	127	109
Total Across City Centre	1805	1264	1470	81

	Capacity	18/19 Ave	2041	% Occupied
Birmingham Road Multi-Storey	332	169	207	62
The Friary Multi-Storey	389	179	219	56
Friary Inner	45	48	59	131
Sandford st	56	65	80	142
Bird Street	187	180	220	118
Lombard Upper & Lower	276	184	225	82
Redcourt	85	84	103	121
Greenhill	13	12	15	113
Gresley row	38	30	37	97
Backcester Middle & Upper	84	53	65	77
Backcester Lower	41	38	47	114
Bus Station	57	62	76	133
Train Station	37	20	24	66
Uni East	48	31	38	79
Uni West	116	109	133	115
Total Across City Centre	1805	1264	1548	86

CAR PARK STRATEGY INTERVENTIONS

The potential interventions have been assessed on an independent basis without any preconceptions. An assessment of the impacts of these interventions in other places and their appropriateness to Lichfield is presented in the following section. The potential strategy intervention headers are presented below.

1	Parking Capacity
2	Quality of Car Parks
3	Parking Charges
4	Car Park Designation
5	Sustainable Transport
6	Car Park Technology
7	Car Parking Enforcement

The interventions have been assessed with reference to a series of indicators, including:

- Economic indicators (e.g. footfall, expenditure, vacancy rates);
- Consideration of the city centre Masterplan;
- Traffic movements;
- Conservation and environmental;
- Council parking operations.

The following table presents a summary of the recommended actions for Lichfield District Council.

1	Parking Capacity
1.1	Capacity shortfalls may need to be considered where demand for car parking in the city centre outweighs available supply. The provision of more parking spaces could be provided either through the expansion of existing car parks or the design of new car parks.
1.2	Consider utilising any areas of suitable on-street parking to provide a small amount of additional capacity, which can be achieved through free short-term parking such as 30 minutes.
1.3	Explore and consider the feasibility of a Park & Ride site near to the city (which could also potentially integrate coach parking) to reduce parking pressure and congestion in the city centre, which will result in air quality and environmental benefits and will assist in meeting sustainability targets.
1.4	Monitor car park usage to identify any increase in parking demand in city centre car parks once Tesco implements ANPR system that requires purchasing of goods to use car park.
1.5	Ensure any potential city centre development includes appropriate car parking for the proposed surrounding development uses and caters for the existing demand for spaces where car parking is being removed as part of the development scheme.

1.6	Identify likely locations lost car parking could relocate to (if demand requires) as part of the development of any existing car parks.
2	**Quality of Car Parks**
2.1	Consider developing a car park improvement regime with an aim to improve the condition of each city centre car park over the duration of the car park strategy.
2.2	Safeguard allocation of revenue funding each year to deliver the car park improvement regime that will not require parking charges to increase to fund the programme.
2.3	Consider undertaking a detailed car parking signage strategy to identify most suitable locations for parking signage throughout the city centre to provide guidance to visitors on each car park based on the intended use. This needs to include wayfinding for pedestrians to reach destinations.
2.4	Where possible increase safety within car parks including the aspiration to join the British Parking Association Safer Parking (car parks) scheme.
2.5	Consider improving the public realm within the city centre car parks to create a more welcoming environment that will provide a greater experience to visitors.
2.6	Explore the option of upgrading Pay & Display machines to facilitate payment by card in sites that may not be suitable for pay on exit systems.
3	**Parking Charges**
3.1	Consider implementing a flexible tariff structure that promotes an even spread of parking throughout the city, with more popular and central car parks being charged at a premium to those which are more peripheral and subject to lower demand.
3.2	Lichfield District Council parking tariffs and pricing policy should be set at a level where they are supporting city centre vibrancy and vitality whilst remaining competitive and encouraging the use of sustainable modes of transport.
3.3	Carry out a regular benchmarking exercise to determine how parking charges in Lichfield city centre compare to neighbouring cities and towns.
3.4	Programme a bi-annual parking tariff review to ensure parking charges reflect the current economic standing of the city centre and are comparable to neighbouring cities/towns to maximise tourism and visitors to Lichfield to enjoy the rich culture.
3.5	Explore the possibility of parking concessions in underutilised car parks such as business permits within the city centre to increase demand.
3.6	Consider free short-term parking in some roads within the city centre where demand applies additional pressure.
4	**Car Parking Designation**
4.1	Undertake a parking beat survey over a period of 11 hours to determine the amount of short stay and long stay parking in each car park post Covid-19 restrictions.
4.2	Ensure car parks closest to city centre such as Bird Street have the highest turnover of spaces to increase turnover, make more efficient use of valuable land and boost the city centre economy.
4.3	Identify the most likely destinations for each car park including the impacts of the city centre masterplan and development opportunities to ensure ratio of short/long stay parking is appropriate.
4.4	In conjunction with pedestrianisation feasibility study of city centre, consider reducing the amount of on-street parking for blue badge holders and increase the provision elsewhere.

5	Sustainable Transport
5.1	Consider implementing additional Electric Vehicle charge points in city centre car parks, at a rate proportionate to demand identified through regular parking surveys and stakeholder consultation.
5.2	Consider electric vehicle priority bays in city centre car parks if the rate of electric vehicle ownership increases, but the demand for charge points does not increase to give greater parking priority to those who drive electric vehicles.
5.3	Investigate the feasibility of installing safe secure bicycle parking facilities in car parks to encourage use of active travel for journeys made into Lichfield city centre if safe segregated facilities can be identified.
5.4	Work with partners to provide greater emphasis and promotion of active travel and public transport use for journeys into the city centre, to reduce the parking pressure in car parks, including investment in these sustainable modes of transport to improve facilities and make usage more attractive.
5.5	Consider the prioritisation of car parks that serve public transport nodes such as rail and bus station for improvement to encourage use of public transport for longer journeys, reducing long trips by Lichfield District Council residents.
5.6	Investigate the partnership of car clubs for Lichfield District Council with parking spaces provided in city centre car parks for these vehicles.
5.7	Consider the implementation of docked bikes and e-bikes within city centre car parks to provide the opportunity for visitors to Lichfield to use bikes to travel around city centre, reducing congestion and improving air quality.
6	Car Park Technology
6.1	Investigate the feasibility of installing Pay on Exit systems within suitable car parks.
6.2	Consider smart parking integration such as parking apps to facilitate contactless parking that may provide opportunities to pay for parking before journeys into the city centre.
6.3	Consider developing a strategy and investigate the delivery of Variable Message Signs, both free text signs and specific car parking signs located on the outskirts of the city centre and within the city centre.
6.4	Consider the installation of car park bay sensors to clearly indicate available parking spaces in car parks to reduce the circulating of traffic in congested car parks and improve the parking experience.
6.5	Improve the car park information on the Lichfield District Council website, with an aim to provide better integration with car parks including the possibility of pre-booking parking spaces.
6.6	Consider the migration to virtual permits only, with opportunities for permits to be purchased online such as season tickets for businesses.
7	Car Parking Enforcement
7.1	Increase efficiency of enforcement operation by virtualising permits and connecting P&D machines to back office systems to gather real time data.
7.2	Review enforcement management procedures to identify any improvements in service operation that may reduce revenue costs.

INTERVENTION COST SUMMARY

The table below provides a summary of the intervention costs as detailed within the strategy recommendations, which can be located in section 10 on page 146 onwards.

INTERVENTION	APPROXIMATE COST
Capacity shortfalls may need to be considered where demand for car parking in the city centre outweighs available supply. The provision of more parking spaces could be provided either through the expansion of existing car parks or the design of new car parks	For a new multi-storey £3 million - £8 million (depending on size of multi-storey)
Consider utilising any areas of suitable on-street parking to provide a small amount of additional capacity, which can be achieved through free short-term parking such as 30 minutes.	N/A
Explore and consider the feasibility of a Park & Ride site near to the city (which could also potentially integrate coach parking) to reduce parking pressure and congestion in the city centre, which will result in air quality and environmental benefits and will assist in meeting sustainability targets.	£3 million - £5 million for a one site Park & Ride facility
Monitor car park usage to identify any increase in parking demand in city centre car parks once Tesco implements ANPR system that requires purchasing of goods to use car park.	N/A
Ensure any potential city centre development includes appropriate car parking for the proposed surrounding development uses and caters for the existing demand for spaces where car parking is being removed as part of the development scheme.	N/A
Identify likely locations lost car parking could relocate to (if demand requires) as part of the development of any existing car parks.	N/A
Consider developing a car park improvement regime with an aim to improve the condition of each city centre car park over the duration of the car park strategy.	£127,144 if 10% allocation from revenue generated
Safeguard allocation of revenue funding each year to deliver the car park improvement regime that will not require parking charges to increase to fund the programme.	As above
Consider undertaking a detailed car parking signage strategy to identify most suitable locations for parking signage throughout the city centre to provide guidance to visitors on each car park based on the intended use. This needs to include wayfinding for pedestrians to reach destinations.	£125,000 - £140,000 for VMS. £15,000-£20,000 for signage strategy
Where possible increase safety within car parks including the aspiration to join the British Parking Association Safer Parking (car parks) scheme.	£10,000-£15,000 per year for regime

Consider improving the public realm within the city centre car parks to create a more welcoming environment that will provide a greater experience to visitors.	Unknown
Explore the option of upgrading Pay & Display machines to facilitate payment by card in sites that may not be suitable for pay on exit systems.	£150,000 - £200,000 depending on system
Consider implementing a flexible tariff structure that promotes an even spread of parking throughout the city, with more popular and central car parks being charged at a premium to those which are more peripheral and subject to lower demand.	N/A
Lichfield District Council parking tariffs and pricing policy should be set at a level where they are supporting city centre vibrancy and vitality whilst remaining competitive and encouraging the use of sustainable modes of transport.	N/A
Carry out a regular benchmarking exercise to determine how parking charges in Lichfield city centre compare to neighbouring cities and towns.	N/A
Programme a bi-annual parking tariff review to ensure parking charges reflect the current economic standing of the city centre and are comparable to neighbouring cities/towns to maximise tourism and visitors to Lichfield to enjoy the rich culture.	N/A
Explore the possibility of parking concessions in underutilised car parks such as business permits within the city centre to increase demand.	N/A
Consider free short-term parking in some roads within the city centre where demand applies additional pressure.	£20,000
Undertake a parking beat survey over a period of 11 hours to determine the amount of short stay and long stay parking in each car park post Covid-19 restrictions.	N/A
Ensure car parks closest to city centre such as Bird Street have the highest turnover of spaces to increase turnover, make more efficient use of valuable land and boost the city centre economy.	N/A
Identify the most likely destinations for each car park including the impacts of the city centre masterplan and development opportunities to ensure ratio of short/long stay parking is appropriate.	N/A
In conjunction with pedestrianisation feasibility study of city centre, consider reducing the amount of on-street parking for blue badge holders and increase the provision elsewhere.	N/A
Consider implementing additional Electric Vehicle charge points in city centre car parks, at a rate proportionate to demand identified through regular parking surveys and stakeholder consultation.	£25,000-£50,000 for approximately 5 EV charge points

Consider electric vehicle priority bays in city centre car parks if the rate of electric vehicle ownership increases, but the demand for charge points does not increase to give greater parking priority to those who drive electric vehicles.	N/A
Investigate the feasibility of installing safe secure bicycle parking facilities in car parks to encourage use of active travel for journeys made into Lichfield city centre if safe segregated facilities can be identified.	£1,000-£20,000 based on provision
Work with partners to provide greater emphasis and promotion of active travel and public transport use for journeys into the city centre, to reduce the parking pressure in car parks, including investment in these sustainable modes of transport to improve facilities and make usage more attractive.	£5,000-£20,000 per site
Consider the prioritisation of car parks that serve public transport nodes such as rail and bus station for improvement to encourage use of public transport for longer journeys, reducing long trips by Lichfield District Council residents.	N/A
Investigate the partnership of car clubs for Lichfield District Council with parking spaces provided in city centre car parks for these vehicles.	N/A
Consider the implementation of docked bikes and e-bikes within city centre car parks to provide the opportunity for visitors to Lichfield to use bikes to travel around city centre, reducing congestion and improving air quality.	£5,000-£20,000 per site
Investigate the feasibility of installing Pay on Exit systems within suitable car parks.	£150,000 - £200,000 depending on system
Consider smart parking integration such as parking apps to facilitate contactless parking that may provide opportunities to pay for parking before journeys into the city centre.	N/A
Consider developing a strategy and investigate the delivery of Variable Message Signs, both free text signs and specific car parking signs located on the outskirts of the city centre and within the city centre.	£125,000 - £140,000 for VMS
Improve the car park information on the Lichfield District Council website, with an aim to provide better integration with car parks including the possibility of pre-booking parking spaces.	N/A
Consider the migration to virtual permits only, with opportunities for permits to be purchased online such as season tickets for businesses.	N/A
Increase efficiency of enforcement operation by virtualising permits and connecting P&D machines to back office systems to gather real time data	N/A
Review enforcement management procedures to identify any improvements in service operation that may reduce revenue costs.	N/A

1.0 INTRODUCTION

2020 Consultancy has been commissioned by Lichfield District Council via Lot 5 of the ESPO framework to undertake a car park study and preparation of a parking strategy covering the off-street city centre car parks. The Council is seeking to develop a parking strategy that aligns with the new city centre Masterplan, which is designed to shape the future growth of the city centre, set out opportunities for enhancing the quality of the city centre environment and the range of different uses it offers, and provide a prospectus for investment in Lichfield. The District Council consider the masterplan to be a key means of enhancing what is already a strong and vibrant city centre, and its preparation underscores the importance of the city centre as an asset for residents of Lichfield, visitors to the city, and those who work in Lichfield.

The supply of parking spaces serves various functions; it is a service to the public, residents and visitors; it can support businesses to operate and expand; it can support (or undermine) efforts to improve the local environment. If a revenue surplus is generated by off-street parking, it can be used by local authorities to maintain parking facilities or provide funds for other schemes and services.

The population of Lichfield is around 32,219 (Census 2011). The Lichfield District is one of nine administrative boroughs within the county of Staffordshire, which has a population of 879,560 across the county, making it the 8th largest county in the country. This means that approximately 4% of the Staffordshire population live within Lichfield.

Figure 1 illustrates the location of Lichfield within the context of Staffordshire and the West Midlands region.

Figure 1 – Location of Lichfield District in relation to West Midlands region

There are many parks, gardens and open spaces in the city. The city centre park is Beacon Park, which hosts a range of community events and activities throughout the year. Also in the city centre are two lakes, Minster Pool and Stowe Pool. Lichfield is notable for its three-spired medieval cathedral, which is the only medieval cathedral in Europe with three spires.

1.1 PLANNING CONTEXT

Lichfield city centre is the principal retail, commercial and administrative centre within the District, although Stoke-on-Trent is the largest retail, commercial and administrative centre within the county of Staffordshire. Lichfield shares a role as a major settlement within the Staffordshire country along with Stafford, Burton upon Trent, Cannock, Newcastle-under-Lyme, Rugeley, Leek, and Tamworth.

Lichfield covers an area of approximately 5.41 sq mi. It is approximately 25 km north of Birmingham, which is the closest major city. The city is located between the high ground of Cannock Chase to the west and the valleys of the Rivers Trent and Tame to the east. The city retains its importance as an ecclesiastical centre, and its industrial

and commercial development has been limited. The centre of the city has over 230 listed buildings, and preserves much of its historic character.

Lichfield is centrally located on the UK road network. The nearest motorway junction is Junction T5 of the M6 Toll, located 3.2 km south of the city. Junction 9 of the M42 and Junction 4A of the M6 are 12 19 km and 24 km south respectively. More local strategic roads include the A5, A38, and A51. The A5 runs west towards Wales and south east towards Tamworth. The A38 runs south to Birmingham and north east to Derby. Running along the western perimeter of the city is the A51 road, which runs north to Chester and south-east to Tamworth.

The Lichfield District Local Plan Strategy 2008-2029 was formally adopted by the Council in February 2015. It describes the city as an important historic centre, with a major conservation area based around the Cathedral, a medieval street pattern and historic city centre buildings.

The Vision for the District takes account of existing plans and strategies, including the Staffordshire Sustainable Community Strategy (SCS) and the Plan for Lichfield District, along with an extensive evidence base and the views of stakeholders and our local communities to set out what Lichfield District should look like in 2029:

By 2029, residents of the District will continue to be proud of their community, experiencing a strong sense of local identity, of safety and of belonging. Everyone will take pride in the District's history, its culture, its well cared for built and natural environment, its commitment to addressing issues of climate change, and the range of facilities that it offers. Our residents will have opportunities to keep fit and healthy, and will not be socially isolated. People will be able to access quality homes, local employment, and provision for skills and training which suits their aspirations and personal circumstances. Those who visit the District will experience the range of opportunities and assets in which its residents take pride, will be encouraged to stay for longer and will wish to return and promote the area to others. The need to travel by car will be reduced through improvements to public transport, walkways, cycle routes and the canal network.

New sustainably located development, and improvements to existing communities will have a role in meeting the needs of Lichfield District and will have regard to the needs arising within Rugeley and Tamworth. Such development, coupled with associated

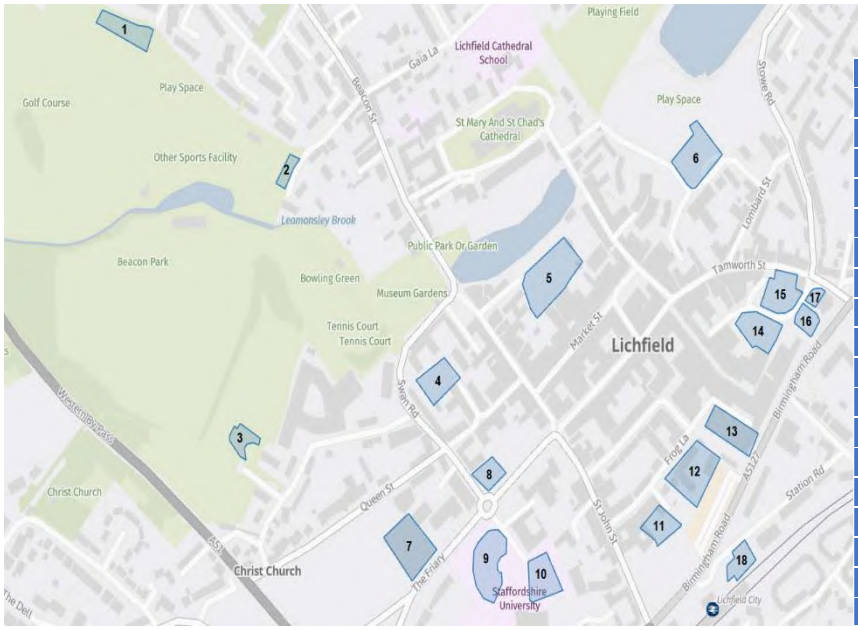
infrastructure provision will also address improvements to education, skills, training, health and incomes, leading to reduced levels of deprivation.

The natural environment within the urban and suburban areas and within the wider countryside and varied landscape areas will be conserved and enhanced, and locally important green spaces and corridors will be secured to meet recreational and health needs. Sustainable development will also help protect the biodiversity, cultural and amenity value of the countryside and will minimise use of scarce natural and historic resources, contributing to mitigating and adapting to the adverse effects of climate change.

1.2 LICHFIELD CITY CENTRE PARKING CAPACITY & CONDITION

There are approximately 2,133 publicly available, off-street car-parking spaces (including 70 disabled spaces) situated in and around Lichfield city centre and their locations are shown in Figure 2. At the time this strategy was commissioned, all these car park spaces were operated by Lichfield District Council and there were no privately owned car parks within the city centre. However, during development of the strategy Backcester Lane and Gresley Row car parks have become privately owned. For consistency, these car parks have been retained in the strategy. There is a large Tesco superstore that has approximately 620 off-street car parking spaces that is located towards the north-east of the city centre, which currently offers free parking for three hours. Due to the location of the superstore, it's highly likely that some visitors to the city centre will use the superstore car park to access the city centre.

There are also a number of locations within the city centre where it's possible to park on-street. Some of these locations have restrictions to allow short term parking whereas other locations have no parking controls, meaning vehicles can park all day. A number of roads with parking controls do not operate on a Sunday, meaning there is often heavier on-street parking visible.



Ref	Car Park Name
1	Greenhough Road
2	Shaw Lane
3	Bunkers Hill
4	Sandford Street
5	Bird Street
6	Lombard Street
7	The Friary Multi-Storey
8	Friary Inner
9	University West
10	University East
11	District Council
12	New Bus Station
13	Debenhams Multi-Storey
14	Backcester Lane
15	Redcourt
16	Gresley Row
17	Greenhill
18	Train Station

Figure 2 – Lichfield city centre car park locations

Although there are no formal car park zones within the city centre, there is a clear natural spatial zoning of car parks. They have distinctive parking and land use characteristics, but there is also a lot of interaction between these zones, i.e. people park in one zone and work or shop in another. There are five zones, which can be classified as the following:

- Beacon Park zone;
- University zone;
- Outer city centre zone;
- City centre zone;
- Train station zone.

Three car parks fall within the Beacon Park zone; Greenhough Road; Shaw Lane; and Bunkers Hill. These car parks are designed to serve Beacon Park and are located at different parts of the park (top, middle, and bottom of park). Two car parks fall within the University zone; University West; and University East. These car parks serve Staffordshire University. Five car parks fall within the Outer city centre zone; The Friary Multi-Storey; Friary Inner; Sandford Street; The District Council; and The New Bus station. These car parks serve multi-purposes as some visitors will use the car parks to access the city centre but will also use the car parks for other trip purposes.

The city centre zone includes seven car parks; Bird Street; Birmingham Road Multi-Storey; Backcester Lane; Redcourt; Gresley Row; Greenhill; and Lombard Street. The majority of visitors to these car parks will be accessing the city centre or will be visiting attractions that fall within the city centre such as the Lichfield Cathedral and Stowe Pool. It should be noted that some car parks are clearly in better locations than others within this zone such as Bird Street car park. The final zone is the train station, which includes only the train station car park. It's unlikely many visitors will use this car park other than to take onward journeys by train.

Figure 3 illustrates the informal spatial zoning that has been formed through the location of the car parks and land uses.

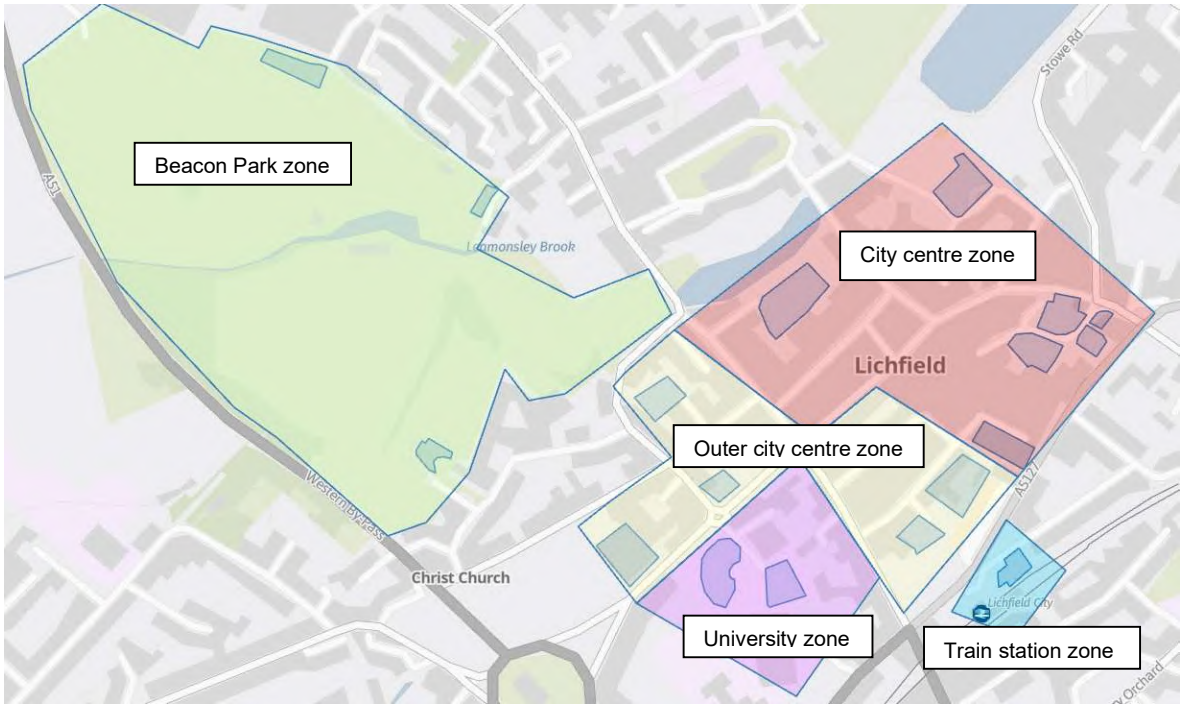


Figure 3 – Informal spatial zoning of Lichfield car parks

Nearly 40% of the city centre car parking spaces are located to the north-east of the city centre, which includes some of the largest car parks within Lichfield such as Birmingham Road Multi-Storey, and Lombard Street. These car parks located to the north-east fall within the city centre zone, which means they are well located for visitors to access the key attractions within Lichfield including the High Street and the Cathedral. The largest car park within the city centre is The Friary Multi-Storey (389 spaces) which is located within the outer city centre zone. This is the only car park within the city centre that offers electric vehicle charging spaces.

Although The Friary Multi-Storey car park is the largest car park in the city centre, it isn't as large as the Tesco superstore located on the outskirts of the city centre. With approximately 620 spaces, it is 37% larger than The Friary Multi-Storey car park.

1,006 (47%) of the total 2,133 spaces operated by the District Council in the city centre allow for long-stay, all day parking, most of which offer a minimum 4-hour tariff charged out at £2.10 and an all-day rate of £4.30. The long-stay car parks are located across the city centre, meaning there is a good choice of location regardless of intended destination. The remaining 1,127 spaces operated by the District Council in the city centre offer short term parking charges, with an hourly rate of £1.00 in operation in all car parks apart from Beacon Park car parks where a £0.50 tariff is in place (apart from Greenhough Road, which provides two hours of parking for £0.50.

These short stay car parks do allow all-day parking, although the cost is substantially higher than the long-stay car parks with an all-day tariff of £8.00 in all car parks apart from Beacon Park where the all-day tariff is £10.00. Therefore, to park all-day in a short-stay car park, it will cost £3.70 more than it would in a long-stay city car park.

Table 1 provides a breakdown of each car park designation within the city centre.

Car Park	Term	Number of Parking Spaces	
		Standard	Disabled
Greenhough Road	Short-stay	79	2
Shaw Lane	Short-stay	41	2
Bunkers Hill	Short-stay	54	0
Sandford Street	Long-stay	56	2
Bird Street	Short-stay	187	8
Lombard Street Upper	Short-stay	142	0
Lombard Street Lower	Long-stay	134	0
The Friary Multi-Storey	Long-stay	389	21
Friary Inner	Short-stay	45	0
University West	Long-stay	116	0
University East	Long-stay	48	0
District Council (Weekend)	Short-stay	187	8
New Bus Station	Long-stay	57	4
Birmingham Road Multi-Storey	Short-stay	332	10
Backcester Lane Upper	Short-stay	52	8
Backcester Lane Lower	Long-stay	41	0
Redcourt	Long-stay	85	3
Gresley Row	Short-stay	38	2
Greenhill	Long-stay	13	0
Train Station	Long-stay	37	1
Total		2133	70

Table 1 – Car park designation in Lichfield city centre

Details of the tariff structures applicable to both the long and short-stay car parks operated by Lichfield District Council in the city centre are summarised in Table 2 below.

Tariff (1 hour)	Tariff (4 hours)	Tariff Maximum	Maximum Stay	Applicable to	Total number of spaces
£0.50	£2.00	£10.00	All day	Shaw Lane	41
				Bunkers Hill	54
£0.50 for 2 hours	£1.00	£10.00	All day	Greenhough Road	79
£1.00	£4.00	£8.00	All day	Friary Inner	45
				Bird Street	187
				Lombard Street Upper	142
				Backcester Lane Upper	52
				Birmingham Road Multi-Storey	332
				Gresley Row	38
				District Council	187
				University West	116
£2.10 for 4 hours	£2.10	£4.30	All day	Sandford Street	56
				The Friary Multi-Storey	389
				University East	48
				Lombard Street Lower	134
				Backcester Lane Lower	41
				Redcourt	85
				Greenhill	13
				Train Station	37
				Bus Station	57

Table 2 - Long & short-stay parking tariffs

Within the city centre, there is a separate parking tariff in operation on a Sunday. A parking charge of £1.00 will provide parking all day and this is the only tariff in operation. The Beacon Park car parks are free to use on a Sunday.

1.3 CAR PARKING IN LICHFIELD CITY CENTRE SUMMARISED

A total of 2,133 car parking spaces are provided by Lichfield District Council in off-street car parks within the city centre. A further 620 spaces are available within the Tesco superstore on the outskirts to the city centre, which fall outside the scope of this commission as a privately owned car park.

All Lichfield District Council car parks operate a Pay & Display tariff system. All car parks also provide a facility to pay for parking using a mobile phone, with smart phone app connectivity. The Friary Multi-Storey car park and Bird Street are the only car parks in the city centre that enables the Pay & Display to be paid using a debit/credit card (albeit not all machines in the car park provide this facility).

Of the 2,133 parking spaces provided within public car parks within the city centre, 1,006 are operated as long-stay parking with the remaining 1,127 providing for short-stay parking. However, long-stay parking is permitted in these car parks, although there is a higher tariff in operation, which means it's unlikely visitors will use short-stay car parks for long-stay. Prices vary based on whether the car park is long-stay or short stay. 4 hours of parking in a long-stay car park will cost £2.10, whereas 4 hours parking in a short-stay car park will cost £4.00. Car parks designed to serve Beacon Park provide a different tariff structure with a £0.50 1-hour tariff in operation in two of the three car parks with Greenhough Road providing a £0.50 2-hour tariff.

There is a nominal parking tariff in operation in city centre car parks on a Sunday, with a £1.00 tariff providing parking for all day. Beacon Park car parks provide free parking on Sundays.

2.0 PARKING POLICY BACKGROUND

Parking plays an important role in providing for and facilitating the key economic and service functions of a city by allowing for access by car. Parking is particularly important for a city with important regional functions like Lichfield providing services for and reliant upon a population drawn from a wider catchment area than its immediate vicinity, many of whom may live in relatively dispersed / suburban locations, distant from key services and often difficult to connect by public transport.

Whilst under-provision of parking can be detrimental to the economic and social functions of a city centre, an over-supply can be similarly damaging. Parking is often space intensive, occupying land that could otherwise be put to an alternative, arguably more beneficial use. Areas of land set aside for parking and associated highway and access structures often sever important links for pedestrians and cyclists and increase the distances between facilities and amenities.

The increased requirement for car access associated with increased parking levels (often in constrained and environmentally sensitive central urban locations) implies increased congestion, delay and environmental degradation.

Such issues are specifically identified within the Lichfield Local Plan Strategy and the city centre Masterplan that highlight a lack of coherent pedestrian connectivity through the city, with an improvement required for pedestrian and cycle routes and cycle parking facilities, including along Birmingham Road, to help to encourage people to walk and cycle and utilise public transport services, rather than rely on the private car. The masterplan aims to improve safety for pedestrian users by providing clarity with respect to areas of the city centre with pedestrian-priority and those parts where streets accommodate both pedestrian and vehicle movements.

Where the parking provision does not take account of all the complex factors that influence economic activity it can become inconsistent with the needs of the city and its people.

The supply, location and cost of parking is inter-connected with and impacts upon initiatives and measures to encourage travel by sustainable modes and can conflict with wider, strategic measures to encourage economic growth. For example, reducing the marginal price of parking may act to reduce the cost of travel by car and therefore

make the city more accessible in one way. However, if the result of this policy were to lead to substantially more demand for parking and reliance on car travel to access the city centre, it may conversely increase delay, congestion and pollution thereby reducing the attractiveness of the city centre.

It should be noted that the revenue implications of parking provision are less straightforward than simple income versus operational costs. The devolution of funding responsibility that was contained in the Local Government Finance Act 2012, and which is forecast to increase in scale in the future, means that the economic health of a city centre will affect overall income to the local authority through the collection of business rates. Therefore, policy measures that might reduce revenue income from parking operations (e.g. reducing parking charges) may lead to a net increase in income to the authority if more business rates are collected from successful city centre businesses.

Parking standards for new development and policies for car parks are also key issues to be considered within the parking strategy. Local and national policy is in place that provides the framework for decisions about the levels of public and private parking to be provided by new developments.

This report has been prepared with reference to relevant planning and transport policy and reports. The following documents provide information relating the policy framework for the parking strategy and future growth within the District.

2.1 NATIONAL PLANNING POLICY FRAMEWORK (NPPF)

This Parking Strategy will be undertaken in accordance with paragraph 106 of the NPPF (2018) which states: *"In city centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists."*

2.2 PARKING STRATEGIES & MANAGEMENT (IHT)

A document was prepared by the Institution of Highways and Transportation (IHT) in 2005 to provide guidance on parking policy context; objectives and measures; and

implementation for the preparation of parking strategies. The guidance has been used to inform preparation of the Parking Strategy.

One of the key elements of this guidance is the recommended level of demand and supply of parking spaces. The guidance suggests that an appropriate target would be that peak demand should not exceed 85% of the supply of parking spaces. The aim of this is to limit the amount of searching for a space by drivers and the consequential environmental damage, congestion and frustration. Where demand exceeds this threshold then steps should be taken to either reduce demand (by increasing parking charges or improving non-car modes of travel, for instance) or by increasing the amount of available parking space.

2.3 LICHFIELD PLANNING POLICIES

The Lichfield District Local Plan Strategy was formally adopted in February 2015 and establishes a long-term strategy to manage development, provide services, deliver infrastructure and create sustainable communities. The Strategy consists of a vision and strategic objectives, a spatial development strategy, core policies and development management policies and sets out how the strategy will be implemented and monitored.

This is complemented by the Lichfield city centre Masterplan, which is not a policy document but seeks to shape the future growth of the city centre, set out opportunities for enhancing the quality of the city centre environment and the range of different uses it offers, and provide a prospectus for investment in Lichfield.

The Lichfield District Local Plan Strategy (2008-2029) identifies the city centre as the strategic centre in the District and will be will be protected and strengthened. As a result of this, it is proposed to be the focus for major growth in city centre uses, such as shopping, offices and leisure activities, as these serve a wider area than their own immediate population.

Within the Lichfield District Local Plan Strategy, the proposed housing distribution and delivery across the District demonstrates approximately 38% of the District's housing growth to 2029 (approx 3,900 dwellings) will take place in and around Lichfield City, with around 46% of this being located within the urban area (either completed or as

windfalls). This highlights the importance the role of the city centre plays within the District.

The Lichfield District Local Plan seeks to enhance the District's diverse local economy through the allocation of land for employment uses and providing support for the modernisation of existing employment sites as well as supporting new and more sustainable working practises. Core Policy 7: Employment & Economic Development set the strategic policy in relation to the creation of between 7,310 and 9,000 additional jobs within the District to achieve a job balance ratio of 85% by the end of the plan period (2029). This is to be achieved through a number of measures including the allocation of 79.1 hectares of land for employment uses drawn from the existing portfolio of employment land and the allocation of a further 10 hectares to ensure flexibility of provision.

2.4 LICHFIELD CITY CENTRE MASTERPLAN

The Lichfield city centre Masterplan will be an important document that will shape the future growth of the city centre, set out opportunities for enhancing the quality of the city centre environment and the range of different uses it offers, and provide a prospectus for investment in Lichfield. The District Council consider the masterplan to be a key means of enhancing what is already a strong and vibrant city centre, and its preparation underscores the importance of the city centre as an asset for residents of Lichfield, visitors to the city, and those who work in Lichfield.

The masterplan is being prepared in order to add detail to and help implement policies set out within the emerging Local Plan, the aspirations contained within the Lichfield City Centre Development Strategy and Action Plan and the objectives of the Lichfield City Neighbourhood Plan. The masterplan is supported by a Delivery Strategy, to help ensure that proposals in the masterplan are both achievable and deliverable. The masterplan will be considered as part of the Local Plan review process and any future Development Briefs for specific sites.

The District Councils' aspirations are to build upon the City of Lichfield's existing offer as a key location within the District and a focus for investment and growth:

Lichfield City Centre will be promoted as a strategic centre by improving its range of shopping, leisure, business, cultural, education and tourist facilities whilst sustaining and enhancing the significance of its historic environment and heritage assets and their setting. Preferred policy: Lichfield economy, Local Plan Review – Preferred Options and Policy Directions, 2019.

Within the Masterplan, there are four key development opportunities. These are:

Birmingham Road Gateway:

The Birmingham Road site is the most significant development opportunity in the city centre. It will be reconfigured to provide a new city centre quarter, one that enhances the experience of arrival into the city centre by all modes of transport, and introduces a new mix of leisure, residential, and commercial development opportunities to Lichfield. A new bus station, station forecourt, multi-storey parking will be provided alongside public realm enhancements to create a revitalised 'Southern Gateway' for Lichfield.

The Birmingham Road (Debenhams) multi storey currently allows provision for 322 short stay spaces and 22 additional spaces that offer either compact spaces or priority spaces. The proposed replacement multi-storey will provide around 480 spaces. Coach pick-up and drop off bays on Bird Street and Castle Dyke will be removed re-provided at the new bus station, to enhance pedestrian accessibility and safety on these roads.

District Council House:

The existing District Council House accommodates the offices of Lichfield District Council which are in part Grade II Listed. This includes the Council Chambers which occupies the former school building, to the south of the site. A terrace of former residential properties on St John Street also forms part of the office accommodation with No39 St John Street also being Grade II Listed. Car parking for Council staff is provided to the rear of the main building.

Vehicular and pedestrian access will be retained from Frog Lane. Parking and servicing will continue to be accessed from Frog Lane. In the evening and at weekends when the venue isn't in use, the District Council House car park could be used by

visitors, where practicable.

Bird Street Courtyard:

The Bird Street car park is located to the south of Minster Pool, to the west of Dam Street, to the north of Market Street and east of Bird Street. The existing vehicular access to the car park is provided from Bird Street. This doubles up as the servicing access for those commercial units which back on to the car park. There are also a number of pedestrian routes which connect the car park with the surrounding streets. The Bird Street car park provides 169 short-stay surface-level parking spaces with an additional 8 spaces for blue badge holders.

A new mixed-use development to the north of the site is planned. Development would decrease the number of parking spaces within Bird Street, but keep a number of parking spaces to the southern part of the plot. Bird Street car park has the highest occupancy rates of all car parks within the city and is often effectively full at peak periods. Development on this site will displace some of the existing car parking spaces to a new multi-storey car park to be provided as part of the Birmingham Road Gateway development. Parking would also be dispersed to other locations in the city centre, which are less well utilised.

University West Car Park:

The University West car park is located to the south of The Friary, to the west of Monks Close and north of South Staffordshire College. The existing vehicular and pedestrian accesses to the car park are provided from Monks Close. This car park provides a number of long-stay surface-level parking spaces.

Opportunities pursued to rationalise the area of parking at University West Car Park to make efficient use of this land for new uses, alongside the car parking areas. A proposal could be to utilise the under occupied University car parks as weekly market or craft pop up business opportunity, which in turn would increase occupancy of the car parks surrounding the location. There is also details within the masterplan that outline the university west car park as parking accommodation for coaches.

The development of the Masterplan sites and the impact on car parking during and

after the development needs to be carefully considered to ensure it has no adverse effects on the city centre economy.

Although it hasn't been included in the city centre Masterplan, there is scope for Sandford Street car park to be redeveloped as an additional site. Whilst the car park appears to be well used, the location of the car park isn't as ideal as other car parks in the city as it is located between Beacon Park and the city centre. The redevelopment of the car park would likely see additional usage of the Friary Multi-Storey car park, which should be seen as a positive due to the low existing usage.

2.5 STAFFORDSHIRE LOCAL TRANSPORT PLAN 2011

This is the Strategy Plan for Staffordshire's third Local Transport Plan (LTP). It sets out the County Council's proposals for transport provision in the county, including walking, cycling, public transport, car based travel and freight, together with the management and maintenance of local roads and footways.

Within the Local Transport Plan, there is ambitious plans for local transport provision and highway maintenance, including:

- Enabling economic growth without causing congestion;
- Helping businesses access suppliers, markets, and a workforce;
- Providing opportunities for residents and visitors to access jobs, training, and education;
- Maintaining the current condition of the highway network and its infrastructure;
- Keeping the highway safe and serviceable whilst achieving value for money;
- Reducing social exclusion faced by residents;
- Improving our excellent road safety record;
- Tackling crime, fear of crime and anti-social behaviour on the transport network;
- Responding to current and future climatic conditions;
- Encouraging and providing for active travel;
- Minimising the negative impacts of transport on the environment;
- Enhancing the environment through the management and maintenance of the highway network.

2.6 LICHFIELD ECONOMIC DEVELOPMENT STRATEGY 2016-2020

One of the Council's key objectives expressed in the Strategic Plan is to promote economic prosperity by supporting measures that enable the local economy in Lichfield District to adapt to changing economic circumstances and to make the most of newly arising economic opportunities. The Council wishes to see a vibrant and prosperous economy and all the benefits that this would bring to local residents and the area.

The Economic Development Strategy is intended to assist in delivering the strategic objectives set out in the Council's Strategic Plan and in particular direct available resources to ensure that the ambitions set out under the Vibrant and Prosperous Economy are achieved. In developing this document consideration has been given to a number of other existing strategies and plans such as:

The County, Our Vision: A Sustainable Community Strategy for Staffordshire 2008-2023 prepared by the Staffordshire Strategic Partnership, is a fifteen year vision to improve the quality of life for all our people, by increasing economic prosperity, improving local services, and developing partnership working.

To achieve this vision the following priorities have been identified:

- A vibrant, prosperous and sustainable economy;
- Strong, safe and cohesive communities;
- Improved health and sense of well-being; and
- A protected, enhanced and respected environment.

3.0 BENCHMARKING WITH OTHER LOCAL AUTHORITIES

3.1 INTRODUCTION

As part of the development of the car park strategy, a benchmarking exercise was undertaken to determine how the Lichfield city centre parking offer compares to neighbouring authorities and other cities that are similar to Lichfield. The cities / towns that are similar to Lichfield were selected as they have similar characteristics such as type of city/town offering, size, population, and provide tourist attractions i.e. Cathedrals or historic centres. The locations near to Lichfield selected for the benchmarking exercise include:

- Stafford;
- Walsall;
- Burton upon Trent;
- Stoke on Trent.

The locations that share similar characteristics to Lichfield that were selected for the benchmarking exercise include:

- Lincoln;
- Worcester;
- Chichester;
- Salisbury;
- Winchester;
- Leamington Spa.

The population, number of car parking spaces, and percentage of spaces against the population for each location is shown in Table 3.

Location Centre	Population	All car parks	
		No. spaces	% of Spaces Population
Lichfield	32,219	2133	6.6%
Stafford	68,472	2898	4.2%
Walsall	67,594	4170	6.2%
Burton upon Trent	72,299	3329	4.6%
Lincoln	93,541	3804	4.1%
Worcester	102,791	3617	3.5%
Chichester	26,795	3796	14.2%
Salisbury	40,302	2858	7.1%
Winchester	55,240	2434	4.4%
Stoke on Trent	116,595	2832	2.4%
Leamington Spa	52,213	3290	6.3%

Table 3 – Benchmarking site information

The results of table 3 demonstrate that Lichfield has the third highest rate of car parking spaces within the city centre compared to neighbouring authorities and cities/towns that offer similar characteristics to Lichfield. Chichester offers by far the highest percentage of car parking spaces at 14.2%, followed by Salisbury with 7.1% and then Lichfield with 6.6%. Chichester and Salisbury are likely to be two of the most popular tourist destinations from the sites included within the benchmarking exercise. Chichester has been voted as one of the best cities to visit in recent years, which reinforces this. The city offers many similar characteristics to Lichfield, such as a small city with a Cathedral that attracts significant interest and visitors each year.

Although Lichfield doesn't offer as many car parking spaces as Chichester, it is clear from table 3 that there is a good parking offer in place in the city centre. Compared to neighbouring local authorities such as Stoke on Trent, Burton upon Trent, Stafford, and Walsall, there is substantially more parking spaces available compared to the population. In particular compared to Stoke on Trent where Lichfield has over twice as many car parking spaces available compared to the population.

3.2 PARKING TARIFFS

Car park pricing policy can be very competitive between different local authorities and between public and private operators in the same location (if a city centre has both public and private operators). The current parking tariffs by Lichfield District Council have been benchmarked against comparable cities and authority areas as shown in Table 4. The red, amber and green coloured boxes show where parking charges are greater (green), the same (amber), or lower (red) than the current charges in Lichfield.

City / Town	City / Town Centre Weekday Parking Charge					
	1 Hour	2 Hours	3 Hours	4 Hours	All-day	Sunday (all-day)
Lichfield	**£1.00**	**£2.00**	**£2.10**	**£2.10**	**£4.30**	**£1.00**
Stafford	£1.10	£2.10	£3.10	£3.70	£8.50	£1.00
Walsall	£1.10	£1.10	£2.20	£2.20	£2.50	Free
Burton upon Trent	£1.40	£1.40	£2.40	£5.00	£5.00	£5.00
Lincoln	£1.60	£3.20	£4.80	£6.20	£8.50	£8.50
Worcester	£0.90	£1.80	£2.70	£3.60	£6.00	£6.00
Chichester	£1.40	£2.70	£4.40	£6.90	£13.80	£3.00
Salisbury	£1.60	£2.80	£4.50	£5.10	£8.90	Free
Winchester	£1.50	£2.90	£4.40	£5.80	£15.00	£2.00
Stoke on Trent	£1.00	£2.00	£3.40	£4.60	£4.60	Free
Leamington Spa	£1.50	£2.00	£3.00	£3.50	£8.00	£1.20

Table 4 – Benchmarking site parking tariffs

Table 4 clearly demonstrates that parking charges in Lichfield compare favourably against neighbouring authorities and cities/towns with similar characteristics to Lichfield. No location chosen for the benchmarking exercise has a complete parking offer that is lower cost than Lichfield. Only three locations offer a cheaper short-stay parking tariff with Walsall offering a better 2-hour tariff, Burton upon Trent offering a better 2-hour tariff, and Worcester offering a cheaper 1&2-hour tariff. Stoke on Trent and Leamington Spa offer a parking tariff that compares to Lichfield with Stoke on Trent offering a 1&2-hour tariff in line with Lichfield and Leamington Spa offering a 2-hour tariff in line with Lichfield.

Only one location chosen for the benchmarking exercise offer a cheaper all-day parking tariff with Walsall offering a £2.50 all day tariff. None of the locations chosen offer a comparable or cheaper 3 or 4-hour parking tariff. Three of the locations chosen for the benchmarking exercise offer free parking on a Sunday, which makes them cheaper than the £1.00 offer in place in Lichfield. Stafford also offer a £1.00 all day tariff on a Sunday. Three of the locations do not have any concessions in place for Sunday parking with an all-day tariff in line with a weekday all-day tariff.

With an all-day parking tariff of £4.30 in long-stay car parks, Lichfield city centre car parks are significantly cheaper than some of the cities/towns that share similar characteristics, most notably Chichester, and Winchester. These two cities offer all-day tariffs at £13.80 and £15.00. Salisbury is slightly more in line with Lichfield with an all-day tariff at £8.90. However, this is still over twice the price of an all-day ticket in Lichfield.

3.3 SUMMARY OF BENCHMARKING

The outcome of the benchmarking exercise illustrates the following key points in relation to the overall number of parking spaces available, and the parking charges within Lichfield city centre compared to neighbouring locations and cities/towns with similar characteristics to Lichfield:

- Lichfield has a low population compared to the locations chosen for the benchmarking, with only Chichester having a lower population;
- The number of parking spaces in Lichfield city centre are more comparable to locations with a far higher population. Only Chichester and Salisbury have a higher percentage of parking spaces compared to the population, making the parking offer in Lichfield city centre good, especially compared to neighbouring locations;
- Both short-stay and long-stay parking charges in Lichfield are favourable compared to the benchmarking locations with no location offering a complete parking offer that is lower cost than Lichfield;
- The long-stay parking offer in Lichfield appears to be slightly more cheaper than short-stay parking with only one location offering a cheaper all-day parking tariff compared to three locations that offer a cheaper 2-hour tariff, and two locations that offer a comparable 2-hour tariff;
- The all-day parking tariff in Lichfield is cheaper than six of the benchmarking locations, comparable to Stafford, and more expensive than three locations, although all three of these locations offer free parking on Sundays;
- The all-day parking tariff in Lichfield is considerably better value than cities/towns with similar characteristics, in particular Chichester, and Winchester.

4.0 ASSESSMENTS OF LICHFIELD CITY CENTRE CAR PARKS

As part of the development of the Lichfield District Council parking strategy, an assessment of each city centre car park was undertaken to understand the current condition of the car park, which would inform recommendations within the strategy. Site visits were undertaken during February 2021. This was during the Covid-19 restrictions so the majority of car parks had very little parking. This provided the opportunity to inspect the car parks in greater detail.

Each car park within the city centre is included below. The car park has been assessed against a set of criteria that was developed prior to the site visits to allow each car park to be scored, to provide a prioritisation list of sites that require attention before others. The assessment criteria included the following considerations:

- Accessibility;
- Surveillance and CCTV;
- Boundaries and perimeters;
- Road markings;
- Lighting;
- Pedestrian access and safety;
- Vehicular access;
- Directional signage on approach to the car park;
- Wayfinding to key destinations in or near the car park;
- Electric vehicle facilities;
- Priority spaces for disabled and children;
- 24-hour operation;
- Toilet facilities;
- Types of payment available;
- Overall condition of the car park.

For each of the above criteria, a score of 0-3 was provided. 0 was given to the car park if the criteria was fully met or was considered excellent. For instance, a car park that offers toilet facilities scored a 0 as would a car park that offers a variety of payment

options such as pay by card, pay by phone, smart phone integration etc. Therefore, the lower the score the better rating for the car park.

4.1 TRAIN STATION CAR PARK

The Trains station car park is a long-stay car park on weekdays and a short-stay car park on Saturdays and is located along Birmingham Road which is a designated A road, which experiences a large amount of vehicular traffic. The car park scores high for accessibility and Vehicular access due to the car park having no designated or obvious access and egress point. The exit and egress point is situated just off station road and requires the user to traverse adjacent to the entrance to the station. The car park was accessed and deemed to have poor lighting servicing the car park and no designated pedestrian access.

The payment on entrance to the car park is limited in options and on from that the signage to further destinations is poor. There is sufficient CCTV in operation to provide an element of security for users. The car park is operational 24 hours a day, which makes it a useful car park for longer journeys made by train.

The car park is limited in regard to signage into the area and the facilities within the car park are also poor. Overall the car park scores poorly and as such is the car park that is deemed the worst. The scores that were given to this car park are below and show that the car park scores highly for the large majority of the parameter.

Train Station Car Park overall score = 35 (18th Place)

	Monday - Friday	Saturday
Up to 1 hour	£2.10	£1.00
Up to 2 hours	£2.10	£2.00
Up to 3 hours	£2.10	£3.00
Up to 4 hours	£2.10	£4.00
Up to 6 hours	£3.20	£8.00
All-day	£4.30	£8.00

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Train station	3	0	2	2	2	3	3	3	3	3	3	3	0	3

4.2 BUNKERS HILL CAR PARK

The Bunkers Hill car park is a short-stay car park that is located in the southern extent of Beacon Park and is situated close to the A51. The car park services the users of Beacon Park and signage to the car park is deemed as poor. Equally, the signage within the car park is insufficient and scores poorly. The lighting and CCTV would need to be improved to ensure an increase in positive experience from people using the facilities, especially in times of poor lighting. The priority spacing allocation is below par along with the overall condition of the car park itself. The car park lacks toilet facilities for the user, although there are adequate toilet facilities present in the park itself. The boundaries and road markings are present yet lack distinction to improve both way finding and vehicle safety from damage.

Overall the car park scores poorly and has vast scope for improvement. The car park is situated in a residential area and the access road through to the car park could lead to congestion due to lack of width and on street parking opportunities. The road leading

into the car park is the access road used by delivery vehicles servicing the large care home just off Beacon Park, again this creates congestion and safety concerns regarding the safety of pedestrians navigating the car park itself.

It should be noted that as a car park serving Beacon Park, the layout and facilities are of a more rural environment, which impacts the overall score. This is a primary reason the car park scores poorly against other city centre car parks.

Bunkers Hill Car Park Overall score = 34 (17th Place)

	Monday – Sunday	Sunday
Up to 1 hour	£0.50	Free
Up to 2 hours	£1.00	
Up to 3 hours	£1.50	
Up to 4 hours	£2.00	
Up to 6 hours	£10.00	
All-day	£10.00	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Bunkers Hill	2	3	2	2	2	2	2	3	3	2	3	2	0	3

4.3 GREENHOUGH ROAD CAR PARK

Greenhough Road is a short-stay car park that is situated on the west side of Lichfield city is a car park that's serves Beacon Park. It is located through a residential area which presents limitations on the width of the access road leading into the car park. The car park is devoid of strict boundaries and adequate lighting for safety. Within the car park the road markings are fairly worn which means its scores a 2 out of 3 on this consideration. The signage to the car park and signage onto further destinations has been evaluated as poor with a score of 2 out of 3, this can be improved to offer a better experience of the car park by the user. Although there are no toilet facilities within the car park, there are toilets located within Beacon Park itself.

The car park the payment options are limited with payment only available using coins or pay by phone/smart phone integration. Overall the location of the car park services a need for people that wish to use Beacon Park. As a car park serving Beacon Park, the layout and facilities are of a more rural environment, which impacts the overall score. This is a primary reason the car park scores poorly against other city centre car parks.

The improvements on lighting and overall condition would improve the customer experience. The condition of the car park scored a 2, which means that considered improvements would be needed to make the car park more attractive for use. The overall score over the fifteen different parameters sits this car park within Lichfield as joint 16th with an overall score of 32.

Greenhough Road Car Park overall score = 32 (15TH Place)

	Monday – Saturday	Sunday
Up to 1 hour	£0.50	Free
Up to 2 hours	£0.50	
Up to 3 hours	£1.00	
Up to 4 hours	£1.00	
Up to 6 hours	£10.00	
All-day	£10.00	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Greenhough Road	2	3	2	2	2	2	2	2	2	2	3	3	0	3

4.4 GREENHILL CAR PARK

Greenhill car park is a long-stay car park that is situated near a busy crossroad junction of Gresley Row and Tamworth Street. The car park is the smallest within the city centre providing just 13 spaces. This car park is within the near vicinity of two other car parks, Redcourt, and Gresley Row, both of which appear to be far more well used and in far better condition.

The accessibility of the car park scores a 2 out of 3 as the entrance is located off a sharp turning and may provide issues for vehicles exiting the car park with normal

traffic flow restricting a swift egress. The location provides for adequate lighting to the car park with the boundaries and perimeters scoring poorly due to the openness of the boundary. There are minimal facilities within the car park and this is to be expected due to the size, this is why the score is poor for toilets and priority space provision.

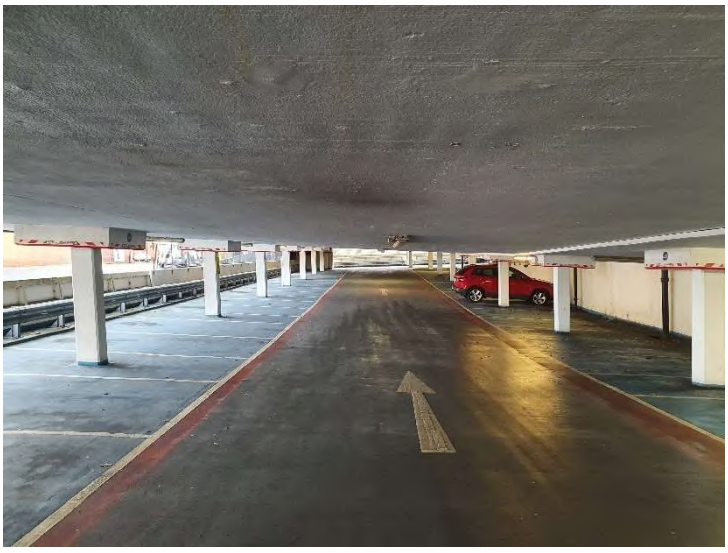
The car park scores poorly overall mainly due to the condition. The road markings within the car park are poor, with the lack of signage to and from the car park being a distinct disadvantage to the user. There is sufficient CCTV to provide security to users when accessing and leaving the car park. The street lighting will provide further security if using the car park at night.

Greenhill Car Park overall score = 32 (15TH place)

	Monday – Saturday	Sunday
Up to 1 hour	£2.10	£1.00 all-day
Up to 2 hours	£2.10	
Up to 3 hours	£2.10	
Up to 4 hours	£2.10	
Up to 6 hours	£3.20	
All-day	£4.30	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Greenhill	2	0	3	3	0	2	2	3	3	3	3	3	0	3

4.5 BIRMINGHAM ROAD MULTI-STOREY CAR PARK



The Birmingham Road Multi-Storey car park is a short-stay car park that is located on Birmingham Road, which is often referred to as the Debenhams car park, is a facility located to the south of Lichfield with close proximity to the town centre. The car park is very close to the bus station car park, and its entrance has height restrictions. This is set at 1.9m at points and creates an issue around the user having confidence in using the facility, especially if the vehicle is larger than average.

There is CCTV present at the car park which gives increased security to the user and the vehicles. The facilities once inside are less than adequate as the lighting at points is poor and the road markings are unclear in areas. The signage to get the car park is below par and could be improved. The pedestrian way-finding to further destinations is better, with various way finding boards present to increase user coherence.

It was noted that considering the size of the car park as well as being a Multi-Storey car park, there is a distinct lack of priority spacing such as parent parking spaces. There were also limited numbers of disabled spaces. As a Multi-Storey car park, there is a greater expectancy to see Electric Vehicle (EV) charging points. However, it is clear the car park is old and in poor condition, making the installation of EV charge points an ineffective solution, especially as the site is incorporated in the city centre Masterplan.

Overall, the car park scores poorly. The opportunity to offer a clean, coherent, and multi user facility is there to be utilised. With the current design limitations, the car park would benefit with significant investment (although it's acknowledged it may be subject to redevelopment). As similar to many of the other car parks in Lichfield the payment facility is below standard with various payment options not being offered. This limits specific cliental.

Birmingham Road Multi-Storey Car Park overall score = 29 (14th place)

	Monday – Saturday	Sunday
Up to 1 hour	£1.00	£1.00 all-day
Up to 2 hours	£2.00	
Up to 3 hours	£3.00	
Up to 4 hours	£4.00	
Up to 6 hours	£8.00	
All-day	£8.00	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Birmingham Rd	3	0	0	2	2	2	3	3	1	3	3	2	0	3

4.6 SHAW LANE CAR PARK

Shaw Lane car park is a small 41 space short-stay car park that is situated on the east side of Beacon Park. The main purpose for this facility is to offer parking for Beacon Park. The car park is accessed via a residential area, and the road leading to the car park is considered narrow. This could create access and congestion issues at peak periods. The lack of CCTV at the facility adds to the possible security issue. The boundaries of the car park are clearly defined with no possible conflict as to location or possible illegal car parking due to undefined boundaries.

There is some lighting present which is deemed adequate for the facility. The signage to the car park is almost non-existent and creates issues around certain users locating the car park, signage once at the car park is adequate to find further destinations. The car park offers some priority spacing for disabled users, yet no facility for offer priority needs groups including families and electrical vehicle owners.

The overall condition of the car park is good with certain improvements required to help the facility score better and offer an increased experience for the user. The payment options are in line with the majority of the car parks in Lichfield and could do with upgrading to include alternate payment options.

Shaw lane car park overall score = 28 (13TH Place)

	Monday – Saturday	Sunday
Up to 1 hour	£0.50	Free
Up to 2 hours	£1.00	
Up to 3 hours	£1.50	
Up to 4 hours	£2.00	
Up to 6 hours	£10.00	
All-day	£10.00	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Shaw Lane	3	3	0	1	1	3	2	3	1	1	3	2	0	3

4.7 SANDFORD STREET CAR PARK

Sandford Street is a long-stay car park that is located in the north-west of Lichfield City and has capacity for 56 vehicles. It is in close proximity to a residential area and is within walking distance of Beacon park and Lichfield city centre, making it the only car park that can be considered multi-purpose. The access for the car park is adequate yet could be more ideal with more defined vehicular access. The boundaries and perimeters are substantial and offer no confusion to the user as the fact there are designated car parking bays within the specified perimeter.

The pedestrian access is poor with only one point of exit and entrance and the safe outlined pedestrian facility within the car park is below par. The signage to the car park and to further destinations could do with improvement as this can offer the chance for the user to have a more pleasant experience. There are no extra facilities offered by the car park including parent parking and EV charging bays and there are also no on-

site toilet facilities. The payment methods could do with being more expansive to offer the user multiple ways of payment.

The car park overall is in a good condition with adequate road markings, which assists in creating a clean facility. The design of the car park could be improved for vehicles and pedestrians along with priority spaces that can service all users. There appears to be no CCTV in operation, which may discourage use for some users who may feel vulnerable.

Sandford Street car park overall score = 24 (10th place)

	Monday - Saturday	Sunday
Up to 1 hour	£2.10	£1.00 all-day
Up to 2 hours	£2.10	
Up to 3 hours	£2.10	
Up to 4 hours	£2.10	
Up to 6 hours	£3.20	
All-day	£4.30	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Sandford Street	2	2	0	0	1	2	2	2	3	0	3	2	0	3

4.8 UNIVERSITY WEST CAR PARK

The University West car park is a long-stay car park that is located in the south of Lichfield city, and has accommodation for 116 vehicles. The car park serves the university and the general public. The car park is open and located near other Lichfield car parks including Friary inner and the Friary Multi-storey. The overall condition of the car park is good along with CCTV for the site. The lighting is also very adequate for the area and offers an improved experience for the user.

The road markings for the car park need improvement, with many being worn and hard to see. The signage to the car park is below standard and also the signage for the users to guide to further destinations is also poor. If this was looked to be improved it would contribute to an increase in user satisfaction.

As with previous car parks more can be offered with regards to priority spaces, to increase the user spectrum. The payment options can be improved to offer a wider spectrum of payment options that could be utilised by the user.

University West Car Park overall score = 24 (10th place)

	Monday - Saturday	Sunday
Up to 1 hour	£2.10	£1.00 all-day
Up to 2 hours	£2.10	
Up to 3 hours	£2.10	
Up to 4 hours	£2.10	
Up to 6 hours	£3.20	
All-day	£4.30	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
University West	1	0	1	2	0	1	1	3	3	1	3	3	0	3

4.9 DISTRICT COUNCIL HOUSE CAR PARK

The District Council House car park is a short-stay car park located to the south of Lichfield City centre. It has a capacity for 58 vehicles and is used by Council employees and the general public (weekends only). There is gated access to and from the site and the boundaries to the site are clearly defined. The security of the car park is good with CCTV surveillance and sufficient lighting. The road markings for the car park can be improved to increase the look of the car park.

It was evaluated that there were no constraints to vehicular access and that pedestrian access is adequate but there could be improvement made to this also. As per previous car parks, the signage for getting to the car park and signage onto further destinations could be improved to increase the function of the car park. Priority spacing is an area for improvement yet the general public only have access at the weekends which means that occupancy levels through the week for priority users such as family spacing wouldn't need to be required.

The condition of the car park has been awarded a 2 out of 3 which scores poorly overall. This has generally been awarded due to the wear and tear that the car park displays and the need to refresh the road markings and improve the car park furniture.

District Council House Car Park overall score = 24 (10th place)

	Saturday	Sunday
Up to 1 hour	£1.00	£1.00 all-day
Up to 2 hours	£2.00	
Up to 3 hours	£3.00	
Up to 4 hours	£4.00	
Up to 6 hours	£8.00	
All-day	£8.00	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
District Council House	0	0	0	2	1	1	0	2	3	2	3	2	3	3

4.10 LOMBARD STREET CAR PARK

The Lombard Street car park is a decked car park that offers both long-stay (lower level) and short-stay (upper level) parking and is located in the eastern side of Lichfield city. There are 142 parking spaces on the upper level, and 134 spaces on the lower level. This makes Lombard Street one of the larger car parks within the city centre.

The accessibility to the car park is adequate for both vehicles and pedestrians, with the security of the site considered good with CCTV and adequate lighting (upper level) in place and operational. The lower level of the car park is not particularly well illuminated and improvements could be made.

The overall condition of the car park is good with room for some superficial improvements to be made with road markings re-established in certain areas and other minor improvements. This includes pedestrian and vehicular access points and greater designation to provide additional safety.

The dual platform offers multiple entrance and exits, and its location is beneficial in serving the shopping in the city centre, as well as serving key attractions including the Cathedral and Stowe Pool. Overall, the car park can be improved with minor superficial improvements, and improvements to road signage infrastructure.

Lombard Street Car Park overall score = 22 (8th Place)

	Monday – Saturday (Upper)	Monday – Saturday (Lower)	Sunday
Up to 1 hour	£1.00	£2.10	£1.00 all-day
Up to 2 hours	£2.00	£2.10	
Up to 3 hours	£3.00	£2.10	
Up to 4 hours	£4.00	£2.10	
Up to 6 hours	£8.00	£3.20	
All-day	£8.00	£4.30	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Lombard Street	1	0	0	1	1	1	0	3	3	1	3	2	1	3

4.11 UNIVERSITY EAST CAR PARK

The University East car park is a long-stay car park that is situated directly next to the University West car park and is accessed via the roundabout junction of The Friary and Swan Road. The car park has occupancy for 48 spaces and is utilised by students and the general public. The car park has good provision for security measure including CCTV surveillance and adequate lighting facilities. The access for both pedestrians and vehicles is sufficient and allows for a greater user experience.

As with many other Lichfield car parks, the signage to the car park and onto further destinations is insufficient and could do with major improvement and as such is reflected by the score given below. The provision of EV Spaces isn't afforded, yet the priority spaces for disabled spacing is of a good standard. There are no toilet facilities, although there are some located within the campus.

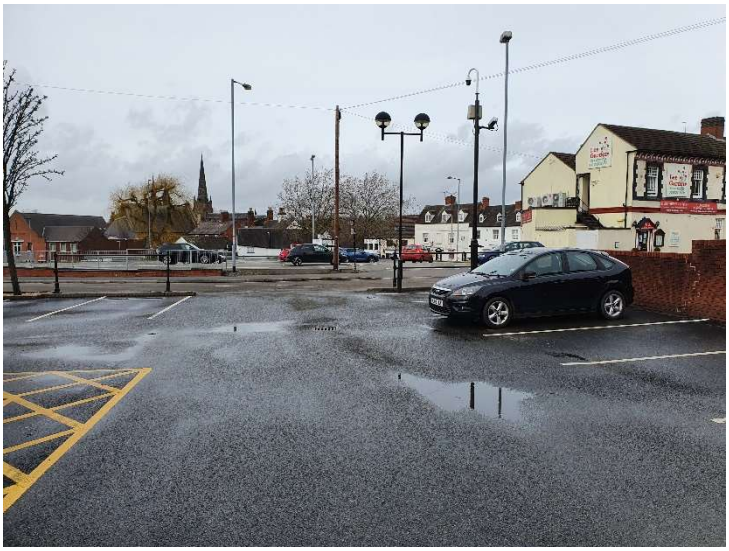
The overall condition of the car park is good, with a score of 1 out of 3. The car park is in a good condition and offers adequate facilities and is utilised by the general public. Both vehicular and pedestrian access is sufficient for use with clear designation on the approach to the car park. Improvements could be made within the car park, especially around the pay & display machines.

University East Car Park overall score = 22 (8th place)

	Monday - Saturday	Sunday
Up to 1 hour	£2.10	£1.00 all-day
Up to 2 hours	£2.10	
Up to 3 hours	£2.10	
Up to 4 hours	£2.10	
Up to 6 hours	£3.20	
All-day	£4.30	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
University East	1	0	1	2	0	1	1	3	3	1	3	1	0	3

4.12 GRESLEY ROW CAR PARK



Gresley Row car park is a short-stay car park that is located very close to the Three Spires shopping centre and is on the opposite side from Redcourt car park. The car park is smaller in size in comparison to the majority of other major car parks within Lichfield with just 38 spaces available. The car park mainly serves consumer retailers visiting the city, which what is imagined a proportion of tourist users visiting the city.

The car park has limitations regarding accessibility due to the built-up nature and singular exit and entrance facility. The car park has rigid boundaries and is positioned well in regard to safety in both aspects of CCTV and lighting. The car park itself has adequate road markings, yet no structured pedestrian safe walkway or facility to safe pedestrian navigation.

As previously noted on the majority of other car parks, the way-finding and signage providing direction to the car park for vehicular traffic and onto key destinations for pedestrians is very poor, hence why the score has been set below. Due to the car

parks size, the provision for priority spacing, toilet facilities and EV charge points is not supplied and this scores poorly for this reason.

As with all the car parks discussed to date, there are limitations with payment, with only payment by coins and pay by phone / smart phone integration available. These restrictions on payment will prevent car parks being fully utilised. The overall condition of the car park is good with the appearance contributing to a greater user experience.

Gresley Row Car Park overall score = 21 (7th place)

	Monday - Saturday	Sunday
Up to 1 hour	£1.00	£1.00 all-day
Up to 2 hours	£2.00	
Up to 3 hours	£3.00	
Up to 4 hours	£4.00	
Up to 6 hours	£8.00	
All-day	£8.00	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Gresley Row	2	0	0	0	0	2	2	2	3	0	3	2	0	3

4.13 REDCOURT CAR PARK

Redcourt car park is a long-stay car park that is situated close to Lichfield city centre and serves the general public. The car park is located closely to three other car parks Greenhill, Gresley Row, and Backcester. The car park can hold up to 85 vehicles at one time and has adequate safety provision for CCTV and Lighting. The car park has well established boundaries and access points from threes.

This offers various access points for pedestrians and one exit and entrance point for vehicles. There is some provision for signage both to and from the car park, yet this can be improved further, especially on the wider road network to assist visitors understand how to access the car park, which isn't clear from Church Street, Rotten Row direction. The facilities that are offered by the car park are basic, with no toilet facilities and very little priority spacing (disabled spaces only) and no EV charge points.

Overall, the car park offers an adequate experience for the user, yet there is scope to make improvements. The location of this car park, provides opportunity to maximise the potential with improvements to make the site attractive to further users such as improved payment options and additional priority spaces such as child spaces.

Redcourt Car Park overall score = 19 (4th Place)

	Monday - Saturday	Sunday
Up to 1 hour	£2.10	£1.00 all-day
Up to 2 hours	£2.10	
Up to 3 hours	£2.10	
Up to 4 hours	£2.10	
Up to 6 hours	£3.20	
All-day	£4.30	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Redcourt CP	1	0	0	0	0	2	1	2	2	1	3	2	0	3

4.14 FRIARY INNER CAR PARK

The Friary Inner car park is a short-stay car park that is located just off the roundabout junction of Friary Road and Swan Road situated along The Friary road. The car park offers 45 parking spaces, making it one of the smaller car parks within the city. It is well located on the road network, which act as a major entrance into the city. The car park itself has a good vehicle accessibility points due to the separate exit and entrance points. This car park has more than adequate safety provisions with a comprehensive CCTV facility and more than adequate lighting.

The Road markings, although established could be updated due to general wear and tear. The pedestrian access is well considered and there are many different access and exit points that can be utilised by the user, offering the chance to exit in different directions either into or away from the city centre. Pedestrian safety could be better defined to protect users, such as around payment machines. The Signage to further destinations is poor and the signage to the car park although present in places could be improved further.

The overall user offering of this car park is good, with a general condition level being adequate. Again, due to the size and proximity to the larger Friary multi-storey car park this car park has very little priority spacing and EV charge points which can be reasoned for, yet the score reflects this.

Friary Inner Car Park overall score = 19 (4th place)

	Monday - Saturday	Sunday
Up to 1 hour	£1.00	£1.00 all-day
Up to 2 hours	£2.00	
Up to 3 hours	£3.00	
Up to 4 hours	£4.00	
Up to 6 hours	£8.00	
All-day	£8.00	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Friary Inner	1	0	1	1	0	0	0	2	2	1	3	3	0	3

4.15 BIRD STREET CAR PARK

Bird Street car park is a short-stay car park that is centrally located and is used by many users requiring direct access to the city centre either for commercial reasons or for tourist reasons. The car park has facility for 187 vehicles and has one vehicle access road in and out. This can at time become congested due to the high occupancy levels of this particular car park. The car park is perhaps located in the best location within the city centre as its closest to the main centre and Cathedral, which are likely to be popular attractions.

The facility has an established boundary and good CCTV and lighting provision. The pedestrian access could be improved as there is no established pathway for pedestrians wishing to navigate through the car park itself. Pedestrians are close to the vehicular accesses near some pay & display machines, which may increase the potential for collisions to occur. The car park feels tight with limited space available, which may cause disruption during busier periods i.e. lead up to Christmas.

There is a range of signage that offer the user information of further destinations, yet the signage to the car park is poor. The priority spacing that is offered by the car park is below par and could be improved, along with installing EV charging points within the car park. As a main city centre car park, it's considered unacceptable to have no child priority spaces.

Bird Street car park overall is a more than adequate car parking facility. Its geographical position contributes to its high occupancy percentages. The car park offers toilet facilities, which support the location and high usage. The overall condition of the car park is good and once the scores are collated the car park comes out favourably. Due to the popularity of the car park, it is recommended to have greater payment facilities available such as pay by debit/credit card.

Bird Street Car Park overall score = 19 (4th place)

	Monday - Saturday	Sunday
Up to 1 hour	£1.00	£1.00 all-day
Up to 2 hours	£2.00	
Up to 3 hours	£3.00	
Up to 4 hours	£4.00	
Up to 6 hours	£8.00	
All-day	£8.00	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Bird Street	2	0	0	1	1	2	1	3	1	1	3	2	0	0

4.16 BACKCESTER LANE CAR PARK

Backcester Lane car park is a multi-level car park that offers both short-stay parking (upper and middle level) and long-stay parking (lower level), which is situated centrally within Lichfield. The car park serves the general public for this parking needs within the city centre in particular the Three Spires shopping complex.

The car park is located within a built-up area, and presents busy traffic flows at times upon the access points into the car park itself. The pedestrian access once inside the car park could be further established to enable safety and promote coherence. The

facility itself is secure with well-established boundaries and CCTV in operation. The site benefits from priority spaces, with some disabled spaces and child spaces, which is welcome as this is a consistently poor aspect in the majority of Lichfield city centre car parks. Further priority spaces should be provided.

There is limited signage provided for drivers looking to identify a car park and may be missed completely due to the poor position. Improvements on the wider road network and local road network should be prioritised due to the good location of the car park. The way-finding for pedestrians is good with several destinations marked. The upper and middle levels are in slightly better condition than the lower level that is covered resulting in less illumination.

The overall condition of the car park is good, with minor improvements likely to result in a better experience for users. Again, improving the payment options should be a priority action for this car park to maximise usage and the benefit this may have on the local economy.

Backcester Lane Car Park overall score = 16 (3rd place)

	Monday – Saturday (Upper & Middle)	Monday – Saturday (Lower)	Sunday
Up to 1 hour	£1.00	£2.10	£1.00 all-day
Up to 2 hours	£2.00	£2.10	
Up to 3 hours	£3.00	£2.10	
Up to 4 hours	£4.00	£2.10	
Up to 6 hours	£8.00	£3.20	
All-day	£8.00	£4.30	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Backcester Lane	2	0	0	0	0	2	0	1	2	1	3	0	0	3

4.17 BUS STATION CAR PARK

The Bus Station car park is a long-stay car park that is located off Birmingham road and is located very close to other Lichfield car parks, offering 57 parking spaces. Its proximity to the city centre is good, with shopping facilities just a short walk from the car park itself. The car parks location is within a good distance to major A roads which means it has scope to service many users that visit from a southern direction. The car park itself is fairly new and its overall condition is at a good level.

The accessibility is good as previously discussed with more than adequate pedestrian and vehicular access. The signage to the car park and to further destinations away from the car park is poor and both score a 3 out of 3. The car park has very good road markings having only been established for a short time and the priority spacing although could be improved is of a good standard. There is no provision for EV charging, which means the car park scores a 3 for this.

There are no customer toilets yet it is to be noted that the car parks proximity to toilet facilities within the city centre is good. Finally, the car park has good provision for lighting and CCTV, which contributes well to the overall score for this car park.

Bus Station Car Park overall score = 15 (2nd place)

	Monday - Saturday	Sunday
Up to 1 hour	£2.10	£1.00 all-day
Up to 2 hours	£2.10	
Up to 3 hours	£2.10	
Up to 4 hours	£2.10	
Up to 6 hours	£3.20	
All-day	£4.30	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
Bus Station CP	0	0	0	0	0	0	0	3	3	0	3	1	0	3

4.18 THE FRIARY MULTI-STOREY CAR PARK

The Friary Multi-Storey car park is a long-stay car park that is located in the south of Lichfield city. Its location is good with vehicular access points off major roads. The car parks overall condition is excellent, with very good lighting and CCTV facilities. The road markings are good and there are existing pedestrian walkways which allow for increased pedestrian safety. The car park has some signage giving users an indication as to where the car park is, and there is signage that allows the users to locate further destinations. However, these can be improved, especially as the car park location isn't as ideal as other city centre car parks.

The overall score for the assessment is 3, which is considerably lower than the second placed car park. This is due to the car park offering all necessary provisions expected for a Multi-Storey car park. This includes the ability for users to pay for parking using a debit/credit card, although not all machines within the car park provide this facility.

The car park offers two Electric Vehicle charge points, the only two within the city centre car parks.

The car park provides toilet facilities and various changing facilities, which will make the car park appealing to some users that require these facilities. There is also space for motorcycles and bicycles, which may encourage sustainable transport. The lower section of the car park is allocated for visitors staying at the Premier Inn hotel, that is integrated within the car park.

The only points that can be improved is the accessibility due to the location on the major road and the car park itself being on the outskirts of the city centre. The pedestrian access again scores points due to this having room for improvement also. The final score comes from the signage, which can be improved for drivers and for way-finding to further destination having room for improvement.

The Friary Multi-Storey Car Park overall score = 3 (1st Place)

	Monday - Saturday	Sunday
Up to 1 hour	£2.10	£1.00 all-day
Up to 2 hours	£2.10	
Up to 3 hours	£2.10	
Up to 4 hours	£2.10	
Up to 6 hours	£3.20	
All-day	£4.30	

Name of Car Park	Scoring Criteria													
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets
The Friary Multi-Storey	1	0	0	0	0	1	0	0	1	0	0	0	0	0

Table 5 lists all the car parks from above with the scores from this assessment to compare how each car park scored across the city centre.

Name of Car Park	Scoring Criteria														
	Accessibility	Surveillance and CCTV	Boundaries and Perimeters	Road Markings	Lighting	Pedestrian Access	Vehicular Access	Signage (Car Park)	Signage (To further destinations)	Overall Condition	Offering Electric Facilities	Priority Spaces	24hr Facility	Toilets	TOTAL SCORE
Train station	3	0	2	2	2	3	3	3	3	3	3	3	0	3	35
Bunkers Hill	2	3	2	2	2	2	2	3	3	2	3	2	0	3	34
Greenhough Road	2	3	2	2	2	2	2	2	2	2	3	3	0	3	32
Greenhill	2	0	3	3	0	2	2	3	3	3	3	3	0	3	32
Birmingham Rd	3	0	0	2	2	2	3	3	1	3	3	2	0	3	29
Shaw Lane	3	3	0	1	1	3	2	3	1	1	3	2	0	3	28
Sandford Street	2	2	0	0	1	2	2	2	3	0	3	2	0	3	24
University West	1	0	1	2	0	1	1	3	3	1	3	3	0	3	24
District Council House	0	0	0	2	1	1	0	2	3	2	3	2	3	3	24
Lombard Street	1	0	0	1	1	1	0	3	3	1	3	2	1	3	22
University East	1	0	1	2	0	1	1	3	3	1	3	1	0	3	22
Gresley Row	2	0	0	0	0	2	2	2	3	0	3	2	0	3	21
Redcourt CP	1	0	0	0	0	2	1	2	2	1	3	2	0	3	19
Friary Inner	1	0	1	1	0	0	0	2	2	1	3	3	0	3	19
Bird Street	2	0	0	1	1	2	1	3	1	1	3	2	0	0	19
Backcester Lane	2	0	0	0	0	2	0	1	2	1	3	0	0	3	16
Bus Station CP	0	0	0	0	0	0	0	3	3	0	3	1	0	3	15
The Friary Multi-Storey	1	0	0	0	0	1	0	0	1	0	0	0	0	0	4

Table 5 – Car park condition assessment scores

4.19 CAR PARK PERFORMANCE SUMMARY

To support the assessments of each city centre car park, a review has been carried out on the performance of each car park for the 2018/2019 financial year. Lichfield District Council provided the financial performance of car parks, which includes income, overheads, and income per space amongst other data, which has supported the development of the car park strategy.

Table 6 provides the statistics for each car park during this period.

2018/19 Actual Performance (excluding overheads)									
	Income	Direct Expenditure	Direct	Overheads	Net	Spaces	Income per Space	Net per Space	Net per Space
Multi Storey	(£359,557)	£136,694	(£222,863)	£8,515	(£214,348)	344	(£1,045)	(£648)	(£623)
Greenhough Road	(£15,756)	£2,431	(£13,325)	£151	(£13,173)	79	(£199)	(£169)	(£167)
Backcester Lane Car Park	(£140,353)	£59,448	(£80,905)	£3,703	(£77,202)	125	(£1,123)	(£647)	(£618)
Bird Street Car Park	(£439,017)	£161,628	(£277,389)	£10,068	(£267,321)	177	(£2,480)	(£1,567)	(£1,510)
Birmingham Road Car Park	(£35,926)	£17,827	(£18,099)	£1,110	(£16,989)	35	(£1,026)	(£517)	(£485)
Bunkers Hill Car Park	(£19,808)	£5,235	(£14,574)	£326	(£14,248)	62	(£319)	(£235)	(£230)
Bus Station Car Park	(£52,302)	£22,509	(£29,793)	£1,402	(£28,391)	63	(£830)	(£473)	(£451)
Friary Inner Car Park	(£107,922)	£22,514	(£85,408)	£1,402	(£84,005)	45	(£2,398)	(£1,898)	(£1,867)
Friary Outer Car Park	(£151,746)	£119,915	(£31,831)	£7,470	(£24,361)	388	(£391)	(£82)	(£63)
Greenhill Car Park	(£15,208)	£2,302	(£12,906)	£143	(£12,763)	13	(£1,170)	(£993)	(£982)
Gresley Row Car Park	(£69,256)	£2,295	(£66,961)	£143	(£66,818)	38	(£1,823)	(£1,762)	(£1,758)
Council House Car Park	(£9,573)	£3,035	(£6,538)	£189	(£6,349)	79	(£121)	(£83)	(£80)
Redcourt House Car Park	(£80,567)	£72,287	(£8,280)	£4,503	(£3,777)	83	(£971)	(£100)	(£46)
Sandford Street Car Park	(£39,120)	£34,964	(£4,156)	£2,178	(£1,978)	65	(£602)	(£64)	(£30)
Shaw Lane Car Park	(£15,663)	£2,918	(£12,745)	£182	(£12,563)	41	(£382)	(£311)	(£306)
University Car Park	(£101,895)	£45,178	(£56,717)	£2,814	(£53,902)	195	(£523)	(£291)	(£276)
Lombard st	(£191,176)	£111,571	(£79,605)	£6,950	(£72,655)	308	(£621)	(£258)	(£236)
Davidson Road Car Park	£0	£0	£0	£0	£0		£0	£0	£0
Netherstowe Lane Car Park	£0	£1,888	£1,888	£118	£2,005		£0	£0	£0
All Fee Paying Car Parks	£0	(£0)	(£0)	(£0)	(£0)		£0	£0	£0
All Permit Car Parks	(£264,006)	£0	(£264,006)	£0	(£264,006)		£0	£0	£0
All Car Parks	(£94,761)	(£0)	(£94,761)	(£0)	(£94,761)		£0	£0	£0
Staff	£0	£52,869	£52,869	£3,293	£56,162		£0	£0	£0
Total	**(£2,203,610)**	**£877,506**	**(£1,326,104)**	**£54,661**	**(£1,271,443)**	**2,140**			

Table 6 – Lichfield city centre car park performance 2018/2029

Table 6 demonstrates that Bird Street car park generated the most income over the year with a total figure of £439,017. This equals 20% of the total income, which highlights the importance the car park provides within the city centre. The car park with the second highest income is Birmingham Road Multi-Storey car park with a total figure of £359,557. The usage of this car park is relatively low compared to other car parks such as Bird Street. During the 2019 calendar year, the average occupancy of Birmingham Road Multi-Storey car park was only 50%. It can therefore be assumed that if the car park was operating to capacity, the car park could generate as much as £720,000.

A concerning statistic is the low income generated by The Friary Multi-Storey car park, with a total income of £151,746. In comparison, The Friary Inner car park generated £107,922 despite having 345 less spaces. This is due to the high occupancy rates of the inner car park (over capacitated based on average occupancy across the year) and the low rates of the Multi-Storey car park (48% in 2018 and 44% in 2019).

Taking into account all the columns shown in table 6, it is possible to calculate the income per space. In effect, this illustrates how successful each car park has been at generating income and the impact it has on the city centre. Bird Street generates the most income per space (£2,480), which isn't a surprise based on the level of turnover the car park generates. Friary Inner car park closely follows Bird Street with an income per space of £2,398. This is due to the high occupancy and small spaces.

Following the concerning statistic around the low income generated by The Friary Multi-Storey car park, the income per space is also concerning, with an income per space of just £391. It's vital that work is undertaken to increase the occupancy of this car park to provide justification for its use within the city centre. As stated above, this car park is by far the best condition with the inclusion of most facilities expected within a car park. Therefore, the low usage is likely due to location. Providing concessions to increase usage would result in better financial results.

5.0 PARKING SURVEYS

5.1 INTRODUCTION

The usual process of preparing a car park strategy would be to undertake parking occupancy surveys. These surveys involve visiting car parks at various times of the day on weekdays and a Saturday, to collect data on usage in each car park. Collating information of vehicles that are present over several survey times i.e. 8am, 10am, 12noon, 2pm, and 4pm, it's possible to determine the turnover of spaces in each car park and whether vehicles are undertaking short-stay or long-stay parking. This is important as the designation of car park spaces may need adjusting to cater for the demand i.e. more long-stay parking spaces or more short-stay parking spaces.

In line with the approach adopted elsewhere in this strategy, private car parks for the use of specific businesses (e.g. private staff car parks for offices) have not been surveyed or taken into account within the occupancy analysis. These car parks are outside of the scope of this strategy but nevertheless will still impact upon traffic flows, congestion, air quality, and, in many ways, demand at public car parks.

In an ideal situation, the parking survey results should demonstrate a higher turnover of spaces in short-stay car parks. Short-stay car parks should be located to the key attractions such as the city centre, Cathedral, and Stowe Pool as some examples in Lichfield. Bird Street, Lombard Street, and Backcester Lane are examples of car parks that should offer short-stay parking spaces based on location. All three of these car parks offer short-stay parking with Bird Street being an exclusive short-stay car park and Lombard Street and Backcester Lane providing short-stay parking spaces on specific levels within the car park.

As this car park strategy has been prepared during the Covid-19 pandemic and within a national lockdown, the parking occupancy surveys that would normally be undertaken haven't been. This is because the majority of city centre car parks have had little usage as the majority of the city centre offering is closed due to the pandemic and the data would not provide a true reflection of usual parking behaviour within Lichfield city centre.

5.2 CAR PARK OCCUPANCY SURVEYS

However, despite the parking surveys not being undertaken, parking occupancy data has been provided by Lichfield District Council for the previous three years, 2018, 2019, and 2020 for each car park. This has enabled analysis to be undertaken on car park usage.

The data provided by Lichfield District Council is occupancy data in each city centre car park undertaken by CCTV surveys at 12noon between Monday and Saturday each week. The surveys were undertaken at 12noon as it's widely accepted that a car park will have the highest occupancy at this time. Therefore, the results of the occupancy data should be considered the highest likely within these timeframes. In reality the car park usages are likely to be significantly under these figures between 08:00am and 10:00am and after 16:00pm. It should be noted that a car parks occupancy should be focused on the peak periods making this data useful for the exercise.

It should be noted that the Beacon Park car parks were not included within the CCTV surveys so they haven't been included within the analysis. However, these car parks were well used during the Covid-19 pandemic as Beacon Park was a popular destination for recreation and exercise. During the site visits undertaken during this commission, informal surveys were undertaken in these car parks, which demonstrated an occupancy rate of around 80-85%. This is likely due to the pandemic as open spaces are busier than usual.

Although three years of data was provided, the year 2020 hasn't been incorporated as large portions of this year were subject to restrictions due to Covid-19, in particular the lead up to Christmas, where car park usage in city centre car parks are expected to be at the highest point of the year.

Table 7 provides the occupancy data for each of the car parks below. Colours have been used to demonstrate the car parks that are at the highest occupancy rates. Car parks that are occupied between 75-84% are shown in yellow. At this level of occupancy, it should be possible to locate a parking space fairly easily but the car park will appear busy. Car parks that are occupied between 85-94% are shown in amber. At this level of occupancy, it may be difficult to locate a parking space, and it may be necessary to travel around the car park to identify a space. This level of occupancy can cause some frustration with drivers.

Car parks that are occupied at and above 95% are shown in red. At this level of occupancy, it will be very difficult to locate a parking space, especially in large car parks where it may require drivers to view every individual section to locate a space. With priority spaces such as disabled spaces, quite often there isn't any standard spaces available as it is only priority spaces available. If a car park is regularly reaching and exceeding 85% occupancy, it may be necessary to consider expansion of the car park, or to undertake work to encourage usage of car parks that have lower levels of usage.

Car Park	Capacity	2018		2019	
		Hourly Occupancy	% Occupied	Hourly Occupancy	% Occupied
Birmingham Road Multi-Storey	332	173	52	165	50
The Friary Multi-Storey	389	186	48	173	44
Friary Inner	45	47	104	49	109
Sandford Street	56	65	115	65	115
Bird Street	187	179	96	180	96
Lombard Upper & Lower	276	175	63	193	70
Redcourt	85	82	97	85	100
Greenhill	13	12	92	12	92
Gresley row	38	30	78	29	75
Backcester Middle & Upper	84	52	62	53	63
Backcester Lower	41	37	91	38	93
Bus Station	57	61	107	62	108
Train Station	37	20	54	20	54
Uni East	48	38	78	24	50
Uni West	116	110	94	108	93
Average	120	84	82	84	81

Table 7 – Occupancy data for Lichfield car parks 2018/2019

Table 7 highlights that the majority of the city centre car parks are at a point where occupancy levels are reaching intervention levels or are at intervention levels already. As stated above, these surveys were undertaken at 12noon, when occupancy levels are likely to be at the peak. However, it's worth noting that the data represents an average across the year. Therefore, at peak periods such as the lead up to Christmas, it's likely that the levels will be even higher.

5.3 2018 / 2019 COMPARISON

Comparing the data between 2018 and 2019, there is little difference, with an average across all car parks at 82% in 2018 and 81% in 2019. Whilst there is a slight reduction, it's not considered high enough to assume that parking demand has reduced in the city centre. The average figures highlight that parking demand at the peak period of the day is reaching intervention level. However, this is in part due to specific car parks being at or above capacity, such as Sandford Street at 115%. This means that when the survey was undertaken 15% of the traffic recorded entering the car park, wouldn't be able to locate a parking space.

Five car parks have an occupancy rate at or above 95%; Friary Inner (104%); Sandford Street (115%); Bird Street (96%); Redcourt (97%); and the Bus Station (107%). It should be noted that the bus station car park has recently been regenerated and as such may have changed capacity. It is unknown whether the spaces associated with the car park currently were relevant in 2018 and 2019. This would impact the occupancy rate. Friary Inner and Sandford Street are small car parks, which does impact the occupancy level. Both car parks are outer city centre car parks, which makes the occupancy rates surprising somewhat as the location isn't as ideal as other city centre car parks.

Bird Street and Redcourt car parks are two of the more well located car parks in the city centre, especially Bird Street. Therefore, it isn't a surprise to see the occupancy levels as high as this. Bird Street car park is a short-stay car park and Redcourt is a long-stay car park. This suggests that there is a consistent turnover of spaces in Bird Street, whereas in Redcourt there may be higher occupancy rates for longer periods of the day. For instance, businesses and employees working in the city centre may use Redcourt car park.

Whilst the average occupancy rate across the city centre car parks is high, it's worth noting that the two largest car parks are well below capacity. The Friary Multi-Storey car park is only at 48% capacity in 2018 and 44% capacity in 2019, and The Birmingham Road Multi-Storey car park is only at 52% capacity in 2018, and 50% capacity in 2019. Therefore, there is scope for these two car parks to be utilised to mitigate against any capacity issues in other car parks.

Both of these car parks have benefits and drawbacks on what may make them attractive to use by visitors entering the city centre. The Friary Multi-Storey is the best example of a car park in Lichfield by some distance, and offers virtually all required facilities. It is the only car park that offers payment by debit/credit card, and provides EV charge points, toilets, and changing facilities. However, the location isn't as ideal as many other city centre car parks as it's on the outskirts of the city centre. If the car park was located where Bird Street car park is located, it's likely that the car park would be much closer to capacity.

The Birmingham Road Multi-Storey car park is in a better location to serve the city centre. It's within close proximity to the main shopping areas including the Three Spires shopping centre, and High Street. It is also close enough to tourist attractions such as the Cathedral. However, the car park is in very poor condition and is not welcoming to visitors. It feels compact and worn. It also doesn't provide many of the facilities expected in a Multi-Storey car park, such as those listed for The Friary. If The Birmingham Road Multi-Storey was in the same condition as The Friary it would be subject to much greater usage.

Figure 4 provides a graph of the 2018 occupancy rates for the car parks detailed in table 7, and figure 5 provides a graph of the 2019 occupancy rates.

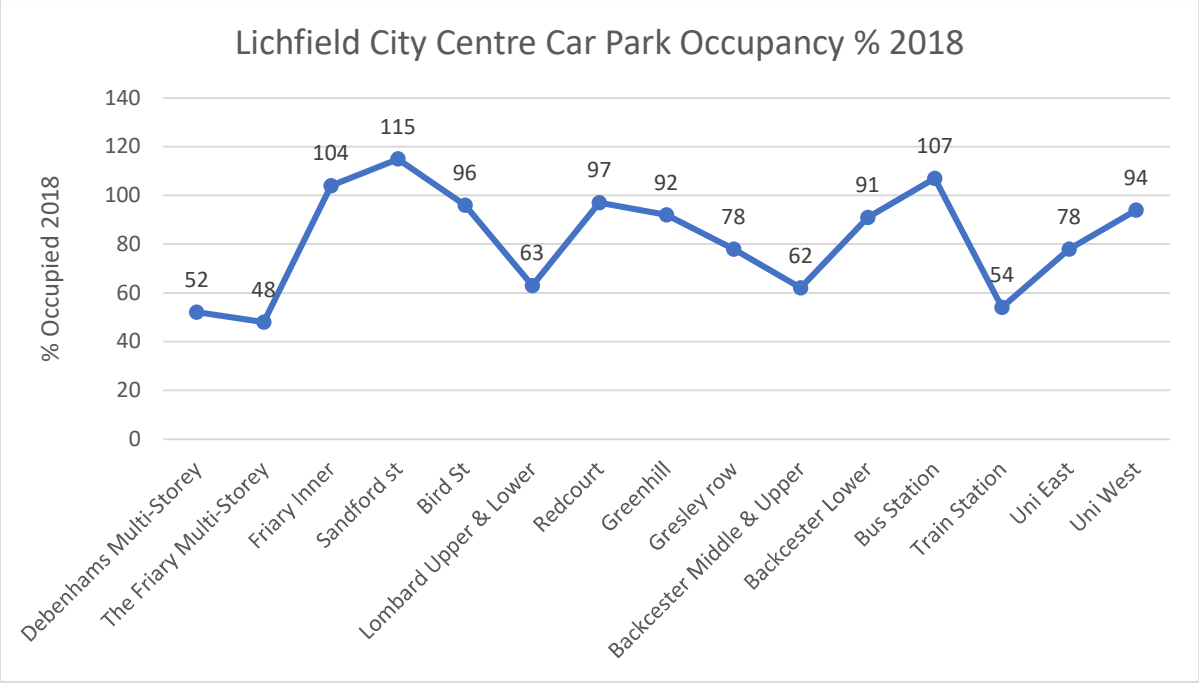


Figure 4 – Occupancy rates in city centre car parks in 2018

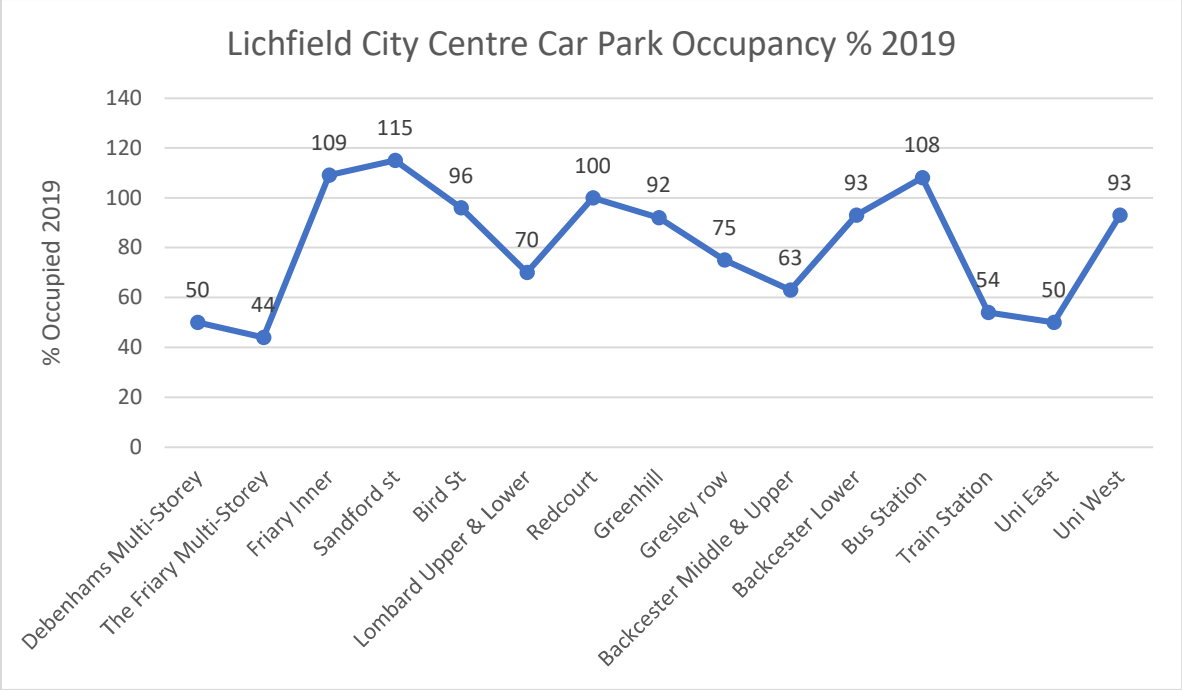


Figure 5 – Occupancy rates in city centre car parks in 2019

5.4 ZONAL ANALYSIS

Breaking down the data further into the informal zones discussed in section 1.2, interestingly, the car parks that are classified as outer city centre appear to be subject to greater occupancy than the car parks in the city centre. It should be noted that three of the four outer city centre car parks are small car parks with the Friary Multi-Storey the only large car park. This car park has the lowest occupancy compared to all outer city centre and city centre car parks. In comparison, only two of the city centre car parks are small, with one medium size, and four larger size car parks.

Figure 6 compares the occupancy percentages of city centre car parks in 2018 and 2019 and figure 7 compares the occupancy percentages of outer city centre car parks in 2018 and 2019. The results demonstrate the little difference between the data.

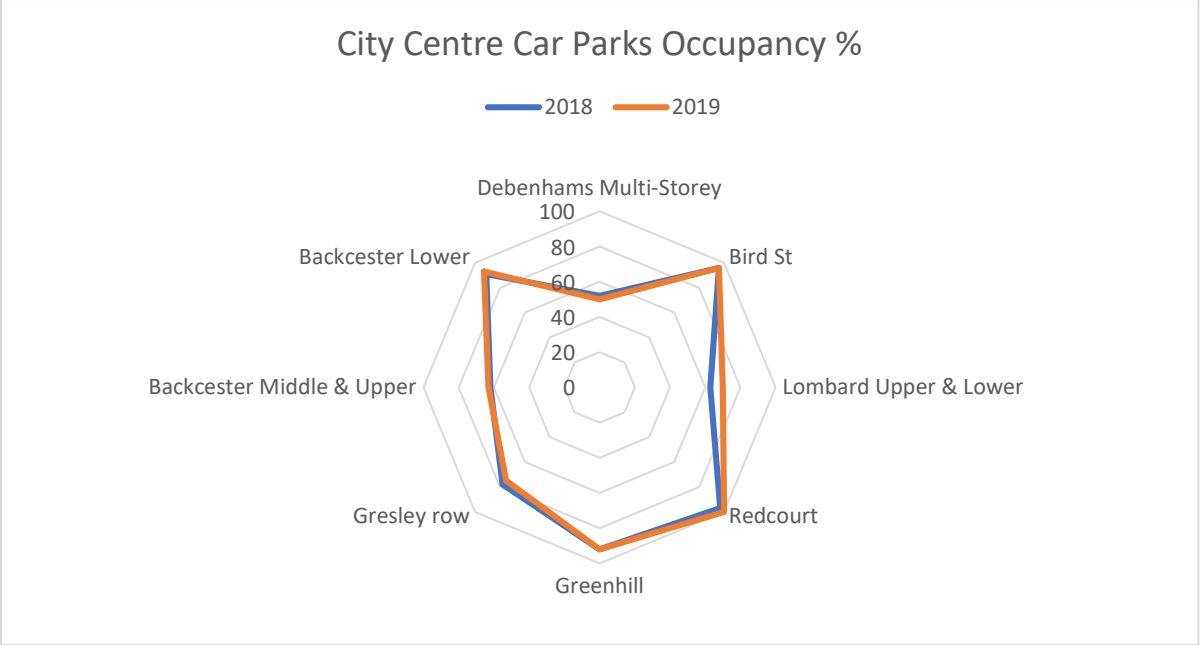


Figure 6 – Comparison of city centre car parks occupancy 2018/2019

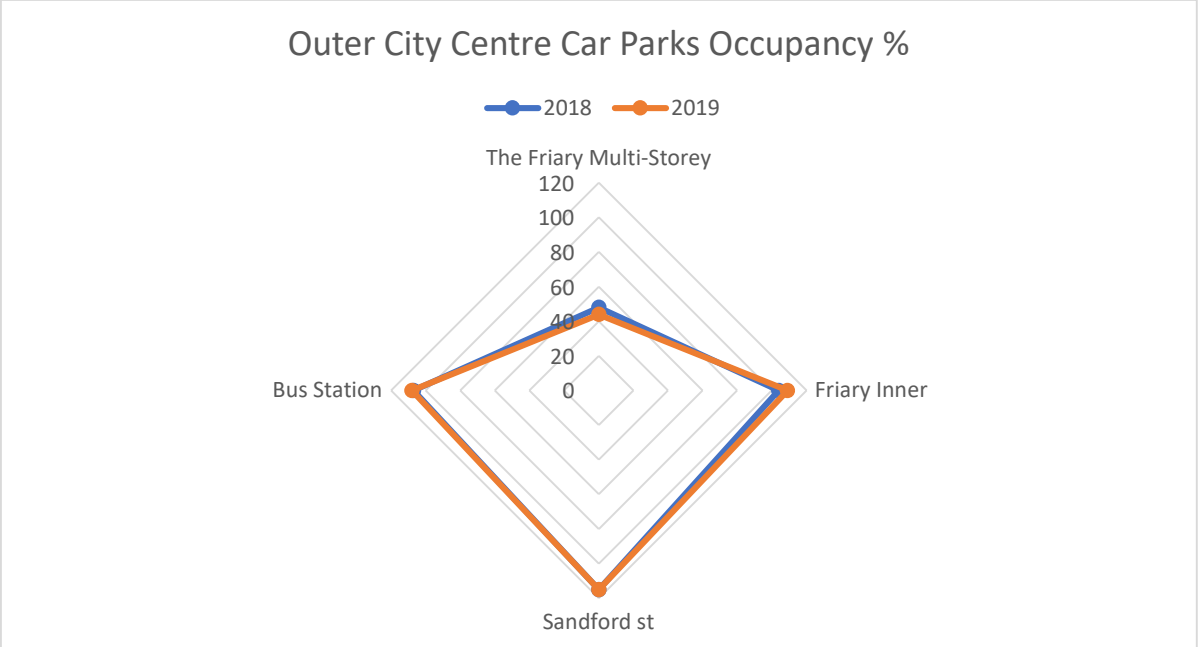


Figure 7 – Comparison of outer city centre car parks occupancy 2018/2019

5.5 SHORT-STAY / LONG-STAY COMPARISON

A comparison has also been carried out on the short-stay car parks and long-stay car parks. Figure 8 illustrates the occupancy rates of short-stay car parks for 2018 and 2019 and figure 9 illustrates the occupancy rates of long-stay car parks for 2018 and 2019. The results show that there is a slightly higher occupancy rate in long-stay car parks. Similarly to the breakdown of car park zones, there are more small car parks within the long-stay car parks. This suggests that smaller car parks are likely to be at higher occupancy rates.

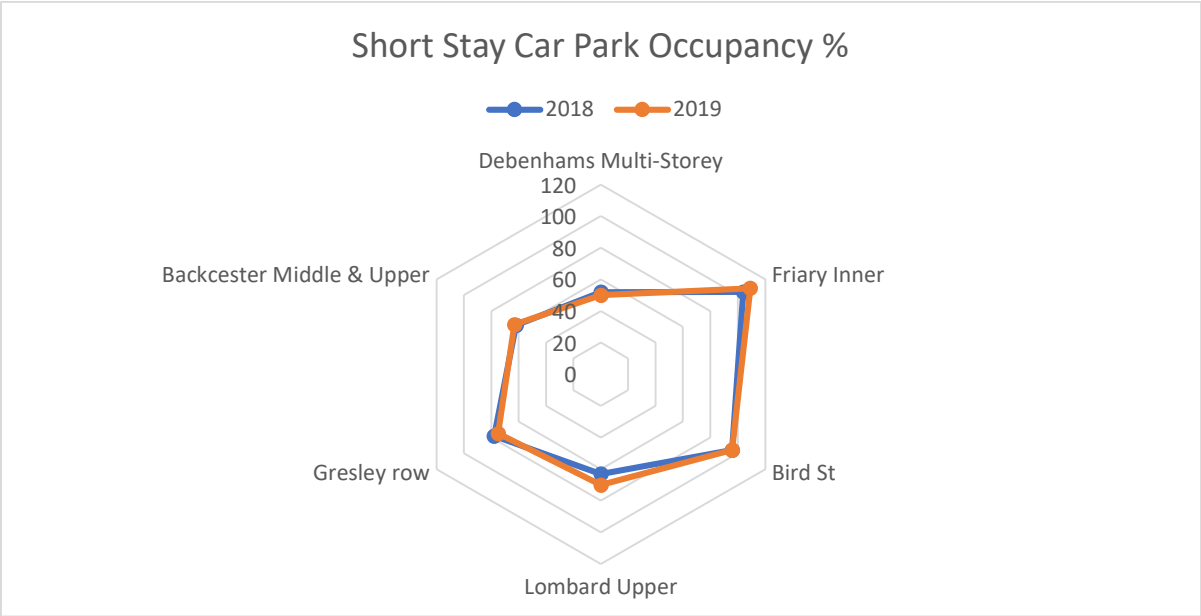


Figure 8 – Short-stay occupancy rates 2018/2019

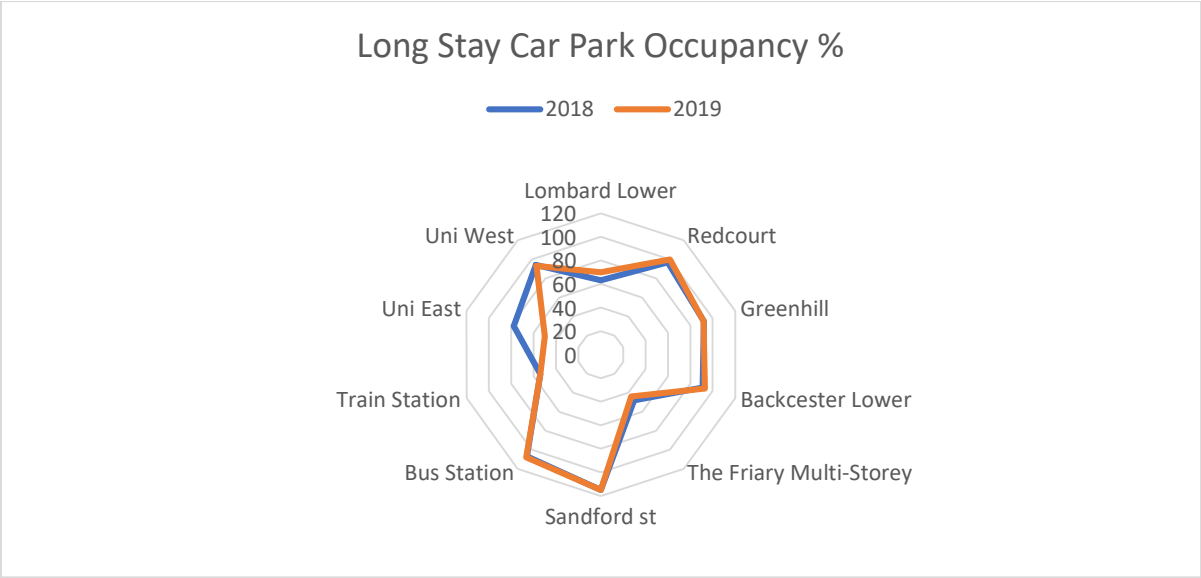


Figure 9 – Long-stay occupancy rates 2018/2019

This suggests that from a land use perspective, Lichfield District Council may benefit from the integrating of car parks to provide less car parks, but offer larger car parks. This wouldn't result in a loss of parking spaces, and in some cases it may be possible to increase the total number of spaces, through the development of additional decks or through expansion into neighbouring land, as there may be less need for access andegress points if car parks were combined.

The data in this section clearly highlights Bird Street car park as a well-used car park that appears to be crucial to the ongoing offering of the city centre. While this is the case, it should be noted that visitors to city centres are often creatures of habit and will simply use the most convenient car park. If Bird Street was redeveloped, this is unlikely to have a detrimental impact on the city centre. Instead, visitors will relocate to another convenient car park such as Lombard Street or Redcourt car park. Additionally, with better car parking directional signage, it's likely that visitors would utilise other car parks as they would be more aware of other parking choices. Based on this, it's not considered essential for Bird Street car park to be retained.

6.0 STAKEHOLDER ENGAGEMENT

6.1 INTRODUCTION

It is fundamental for the study to garner a level of stakeholder and public engagement that would allow for opinions and possible concerns to be offered. It is from this engagement that data can be sourced and analysed to allow for a higher standard of subject understanding. It is important to offer the platform for engagement to produce further understanding and possible mitigating actions that would have a higher adoption probability with thorough stakeholder involvement at this stage. It was highlighted by the high levels of engagement during the process and online survey that the subject of car parking in Lichfield city centre was an important issue. Lichfield city centre has many trip generators and attraction destinations that require parking facilities and this process allows for the parking provision to be looked at both for the short term and long term.

6.2 REQUIREMENT FOR ENGAGEMENT

The aim of the public engagement is to give the public and stakeholders an opportunityto express their views on the car parking provision within Lichfield, both the existingprovision and the potential changes and improvements. The results of the engagement will be used as part of identifying the possible changes needed to ensure that theparking provision is adequate. The car parks were individually identified and scoredagainst a range of different criteria to evaluate the current provision. This Data and the data obtained from the engagement will inform the overall recommendations.

Note on Covid-19

In March 2020, the UK Government issued guidelines in response to the COVID-19 pandemic. To reduce the spread of the COVID-19 virus, the general public were instructed to remain two meters away from anyone outside of their own household and unnecessary travel was not permitted. Public buildings were also closed, and large events banned. Whilst restrictions have been eased in the recent weeks, the planning

and delivery of stakeholder engagement and public engagement will continue to beimpacted for some time as public gatherings are not permitted.

The COVID-19 pandemic has ensured that the shops and hospitality sectors have had to close. In this period, the vast majority of shops and restaurants have had to close which has meant that the car park occupancy has severely decreased. It is important when engaging with the public on this subject to gauge how their travel and public habits could change to get an idea of how provision needs to be improved going forward.

To ensure that Government guidelines are adhered to, 2020 Consultancy considered the alternative arrangements for engagement including the undertaking of virtual engagement and public engagement. This allowed stakeholders the opportunity toprovide their comments and feedback on the scheme, whilst accommodating theneeds of the hard to reach groups, without impacting upon the project programme andmaintaining social distancing. The virtual process undertaken as part ofthis project was carried out in line with UK Government guidelines and advice provided by the UK Planning Inspectorate (PINS) and the Consultation Institute (Tci)

6.3 ENGAGEMENT APPROACH

Public Engagement for the Lichfield Car Parking Study began on Monday 22nd February 2021 and lasted four weeks, ending on Monday 22nd of March 2021.

As with the majority of public engagement exercises, it was agreed to include both targeted consultation and informative consultation. During the early stage of the project 2020 Consultancy worked with Lichfield District Council officers to identify stakeholders that would be directly contacted. These stakeholders include:

- Local councillors;
- Staffordshire County Council officers;
- Lichfield City Council;
- Public transport operators;
- Historic England;
- Business and attraction contacts;
- Civic Society.

These stakeholders were contacted approximately 10 days prior to the process commencing to introduce the project and provide key milestones within the engagement. This included the opportunity to attend a virtual stakeholder workshop,which involved a presentation from 2020 into the project, including findings to date,future changes that could happen, and how it could relate to the districts wider plan. Italso provided details on the online questionnaire.

The online questionnaire sought the stakeholder views on general parking questions such as generally how often do you travel into the city centre, there habits when deciding on what car parks to use and also if they assume their habits will change once the lockdown has ended. Respondents had the opportunity to outline why they preferred certain car parks over others and what they would perceive to be the best improvements that could be made to the existing provision.

It provided the respondent to register their reasons for trips into city and if they used car parks or on street car parking. It also gave them the opportunity to document if they had or have experienced any problems with car parking within the city. Within the questionnaire there was a large section on parking charges and asked for the respondent's views on parking charges and how they would prefer to be charged in the future. In the questionnaire, there were also questions around priority spaces and EV charging. Importantly at the end of the questionnaire there was a question which asked for any comments that the respondent had which allowed for the chance to express anything that the thirty questions previously hadn't touched upon.

6.4 STAKEHOLDER RESPONSES

Responses received from stakeholders were loggedand analysed. This included returned questionnaires, emails, and letters. Responseswere sent for all correspondence where an email address or full address was provided.

6.5 VIRTUAL STAKEHOLDER WORKSHOPS

6.5.1 ATTENDANCE AT THE EXHIBITIONS

The virtual workshops were well received and offered a safe and cohesive opportunity for the stakeholder to express their views. The attendance was adequate with 25 attendees over the two dates.

6.5.2 WORKSHOP FEEDBACK

The feedback that was supplied after the workshops both directly prior to the end of the meeting or from emails sent post workshop was positive. The feedback given highlighted that the opportunity to discuss personal views on parking within Lichfield was invaluable.

6.6 QUESTIONNAIRE ANALYSIS

As part of the engagement exercise, a questionnaire was included, which focused onidentifying the current car parking trends and levels of car parking satisfaction, purposefor travel into the city, improvements needed for payment options, on street parkinghabits and the importance of certain car park facility. This section reviews the 1071 completed questionnaires that were received during the engagement period.

Location

The questionnaire started with a request for the respondent to provide their post code. The information allowed the responses to be identified with a proximity to the city centre. Figure 10 provides a heat map of completed responses across the city and the surrounding areas. This demonstrates that the majority of responses came from the outskirts of the city which would align with the responders needing to travel via car into the city centre.

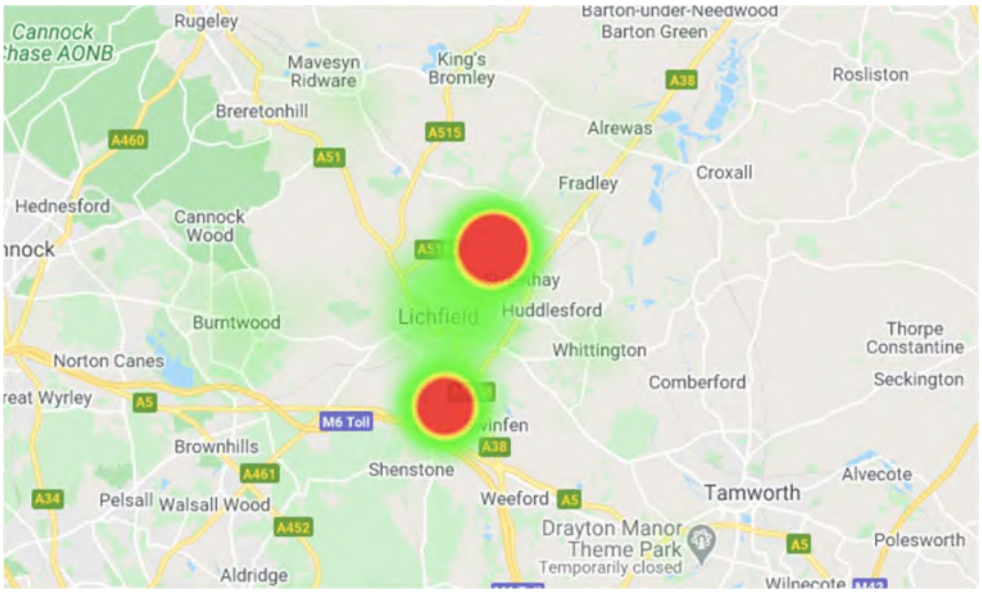


Figure 10 – Heatmap of completed questionnaire responses across the district.

The questionnaire contained a further 30 questions of both open and closed format and the data processed to access the responses and is summarised on the following pages. The following is a selection of questions from the questionnaire that give an indication of the key responses that were provided.

Question 2 asked Are you responding as?

This single selection question enabled a simple tabulation of responses. This question received 1070 answers.

Figure 11 below shows the breakdowns of respondents based on the criteria stated.

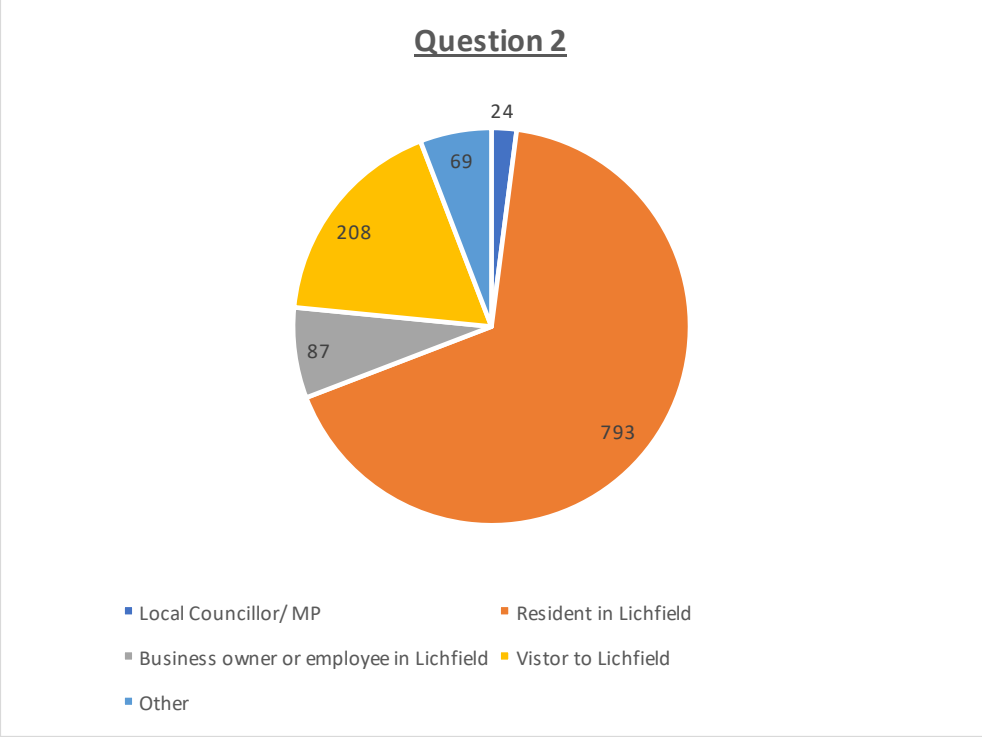


Figure 11

The purpose of this this question was to identify the breakdown of who was completing the questionnaire, which would allow data to be interpreted on who was responding. As shown above the vast majority of the respondents were residents from Lichfield 793 number in total. This shows that car parking in Lichfield is a subject with lots of public investment.

This question shows that there is a broad range of engagement from residents but also business owners local councillors and visitors to Lichfield.

Question 3 asked do you think the COVID-19 pandemic will change the way you travel into Lichfield city centre and how often you visit the city centre.

This single selection question enabled a simple tabulation of responses. This question received 1067 responses.

Figure 12

The purpose of this question was to try and identify the future habits of respondents after the COVID-19 pandemic. This was to give an idea as to how provision would need to change to incorporate what could be new shopping habits and social distancing measures. The results show that over half of the respondents confirmed that the pandemic will not change any of their habits.

They will continue to visit the city centre at the same frequency and also, they will use the same transport. The next largest selection was for the opposite which was to travel into the city less and use vehicle transport less. Although the pandemic will inform peoples choices on this question, existing public shift onto active travel and general well-being was apparent before the pandemic started. The use of other car parks could increase after the lockdown has eased as car parks that are located further away from the required destination could be perceived by the user to be safer that ones that are densely occupied and therefore create some challenges to social distancing.

Question 5 asks what are the main reasons for you visiting the city centre

This multi selection question enabled a simple tabulation of responses. This question received 1067 responses.

Figure 13 below shows the breakdown of respondents based on the specific trip generators.

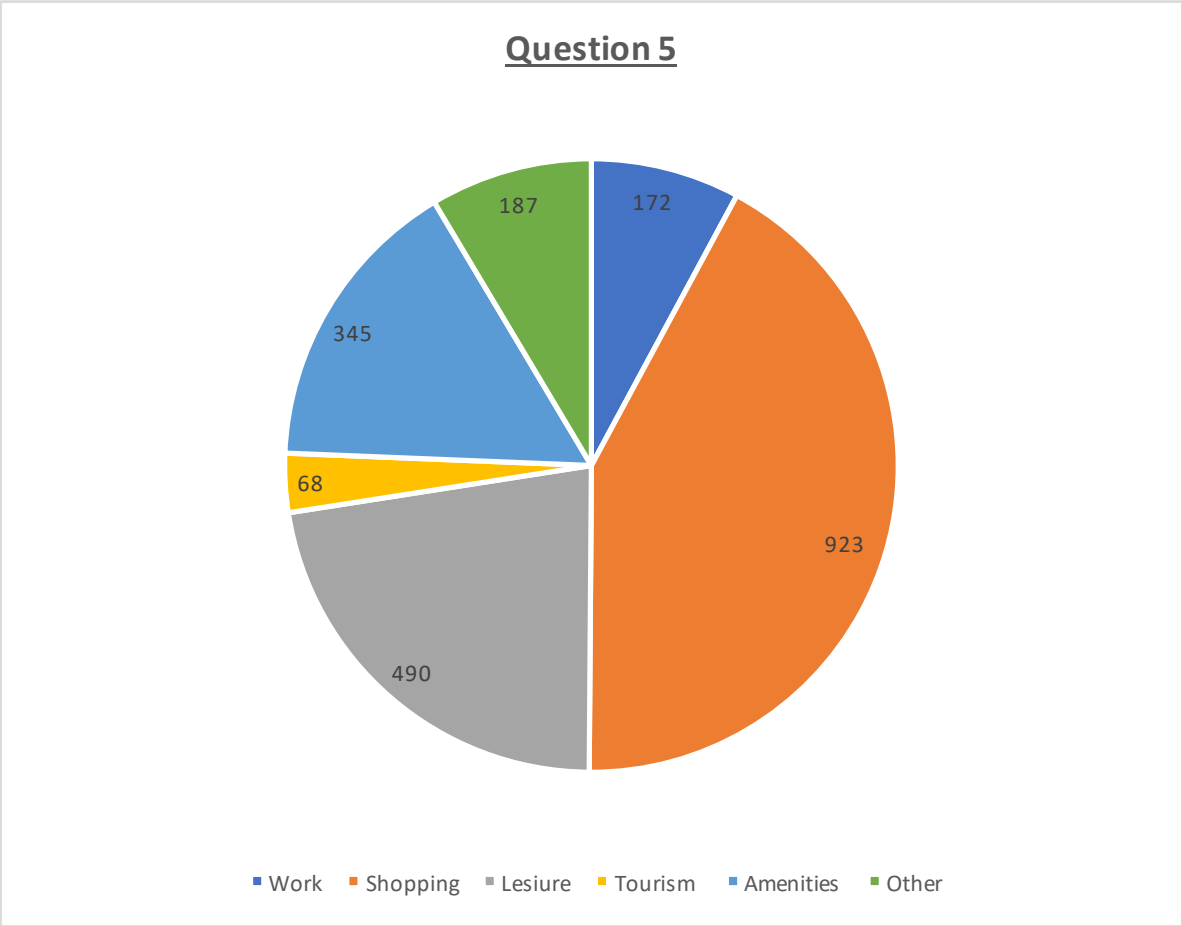


Figure 13

Figure 13 above shows the breakdown of respondents based on the following six options:

- Work
- Shopping
- Leisure
- Tourism
- Amenities
- Other

The purpose of this question was to identify what the key trip generators the respondents used. This would give an indicator as to why the majority of the respondents visited the city centre. This question allowed for multi selection which meant that the responder could select as many for which were appropriate. The question showed that shopping received the largest selection of 923. This shows that the trips into the city centre were for predominantly shopping or leisure purposes.

Question 6 asks what are the reasons why you drive into the city centre

This multi selection question enabled a simple tabulation of responses. The question received 1059 responses.

Figure 14 details the reasons for why the respondents drive into the city centre.

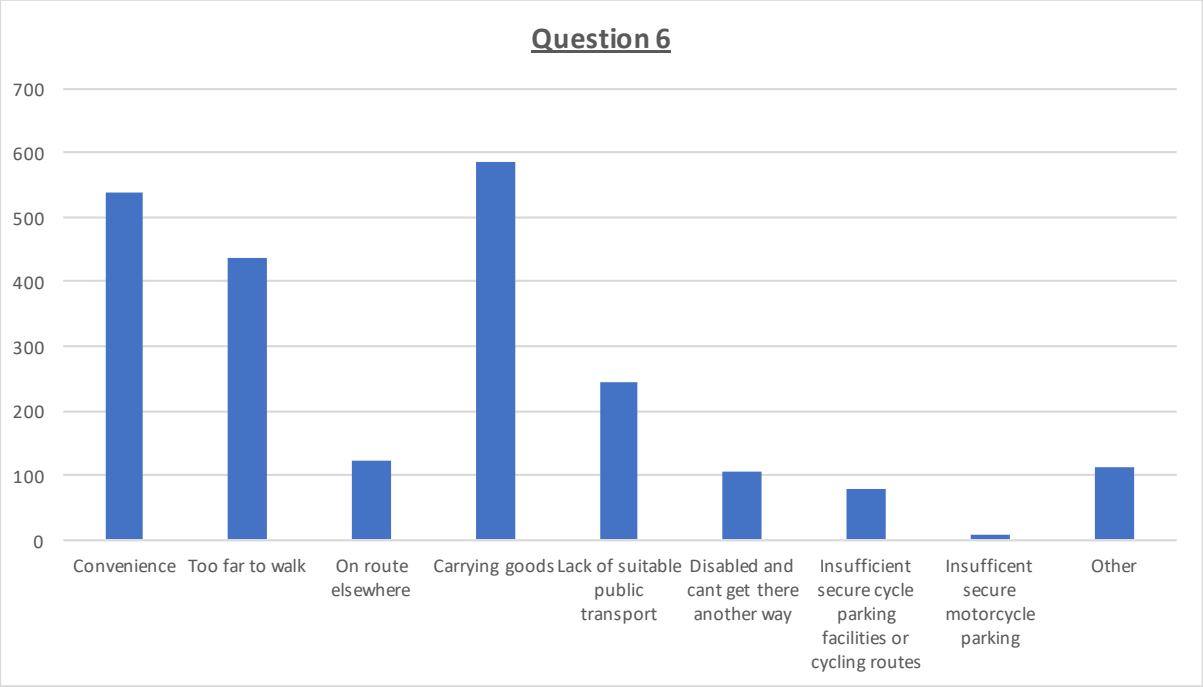


Figure 14

Figure 14 shows the breakdown of respondents based on the following nine responses:

- Convenience
- Too far to walk
- On route elsewhere

- Carrying goods
- Lack of suitable public transport
- Disabled and can't get there another way
- Insufficient secure cycle parking facilities or cycling routes
- Insufficient secure motorcycle parking
- Other

The purpose of this question was to identify the reasons as to why respondents used vehicular travel to enter into the city centre. The spread for reasons looks to be that there are three leading answers that were selected the most. Carrying goods, Convenience and too far to walk are the three that gained the most selections, this shows that the respondents require facilities to be well placed and within a certain proximity. The remaining selections received a good amount of selections and offer a broader view of certain reasons for travel which touch on public transport and priority provision.

Question 7 asks when you drive where do you normally park

This multi selection question enabled a simple tabulation of responses. This question received 1047 responses.

Figure 15 below shows the breakdown of respondents based on where the respondents normally park.

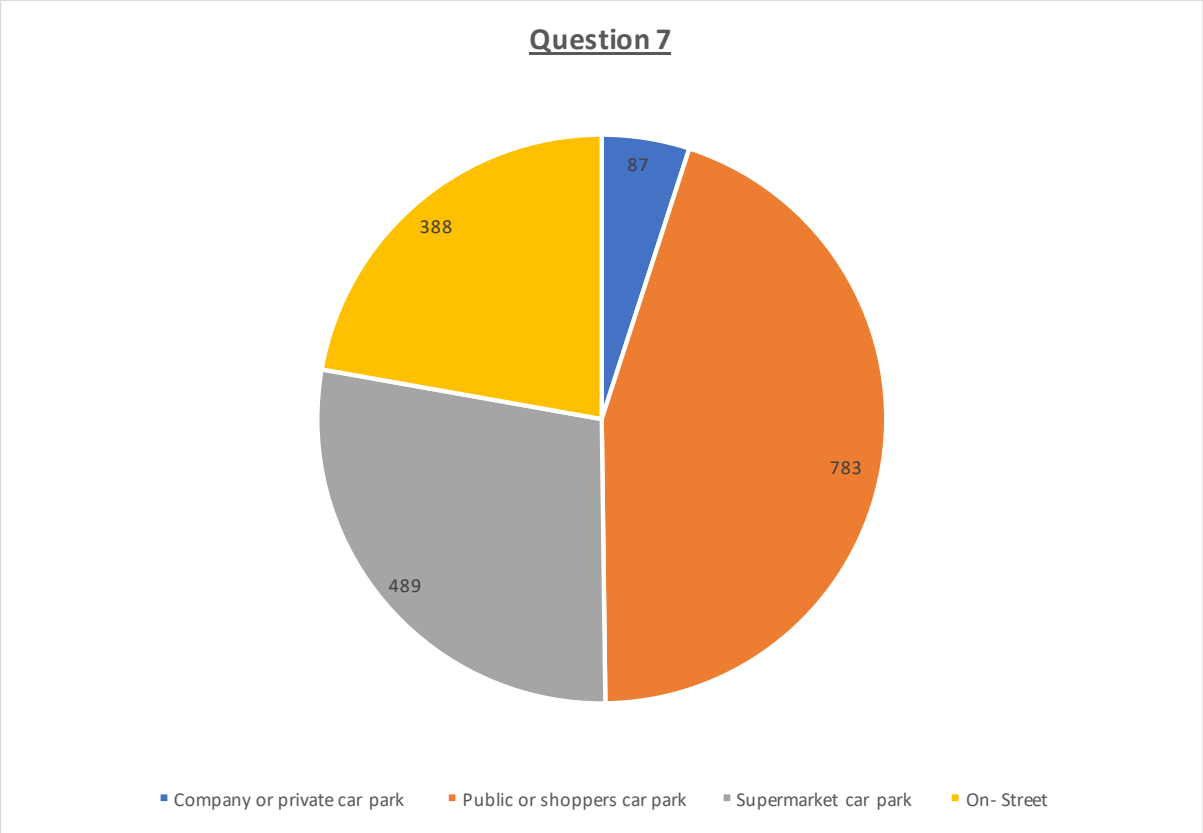


Figure 15

The purpose of this question is to identify where the respondents were parking when they entered into the city. The data shows that nearly half of the respondents use public or shoppers car park totalling 783 responses. In addition, the next most selected response was the super market car park at 489 responses. This shows that there are a vast majority of the respondents using the supermarket car park to park on their trips to the city centre.

Question 9 asks if you chose public or shoppers car park which one did you use

This multi selection question enabled a simple tabulation of responses. This question received 910 responses.

Figure 16 below shows the breakdown of respondents based on where the respondents normally park if they park in a public or shoppers car park.

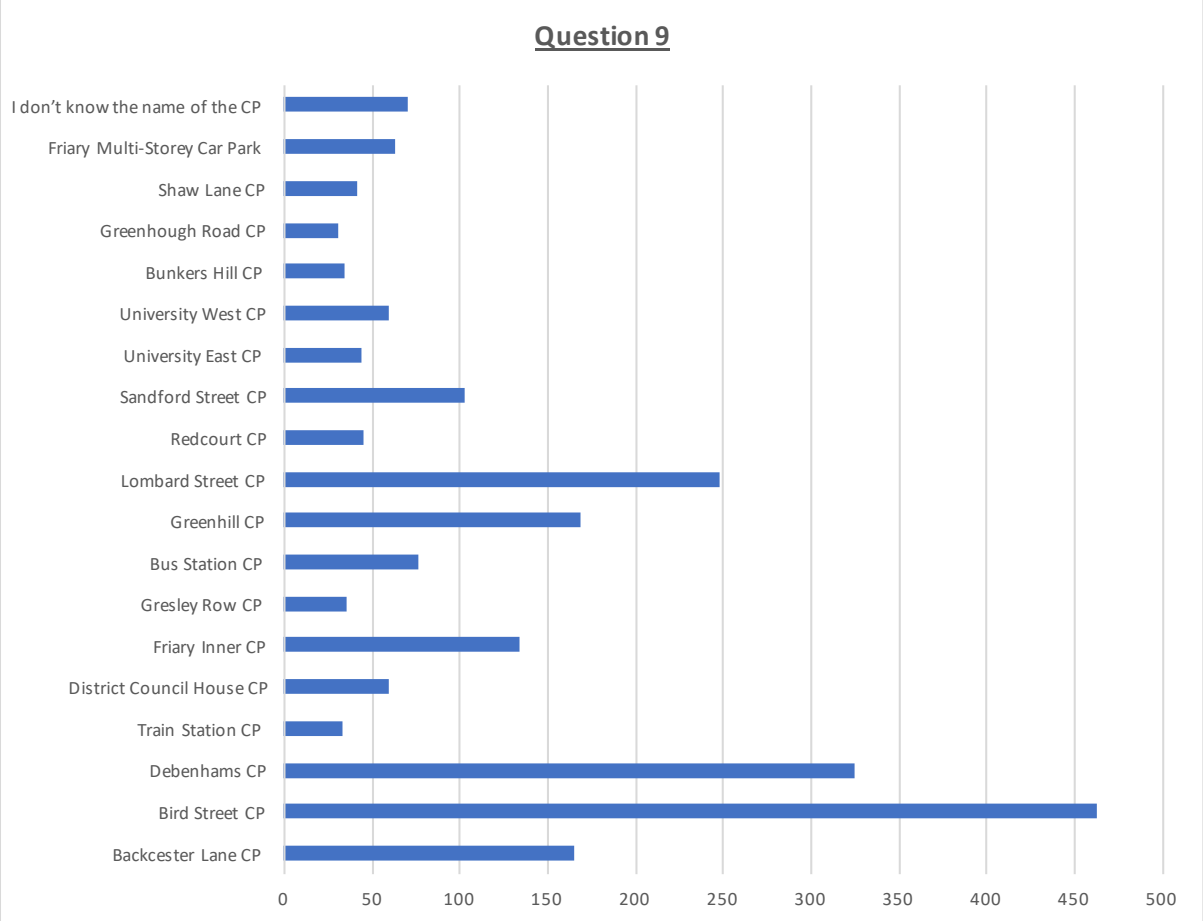


Figure 16

The purpose of the question is to detail where the respondents parked if they parked in a public or shoppers car park. The results show that there is a clear preferred favourite car park for a large percentage of the respondents to park, this being Bird Street car park. This shows that this car park meets most of the needs required by a large majority of respondents.

Question 11 asks If yes, which car park does this relate to

This multi selection question enabled a simple tabulation of responses. This question received 526 responses.

This question leads on from question 10 which asked if the respondents had experienced any problems at any car parks. Just over half of respondents 50.44% or 512 responses said yes, this then leads onto question 11 which asks what car park the problem relates to.

Figure 17 below shows the breakdown of respondents based on what car park the problem arose from.

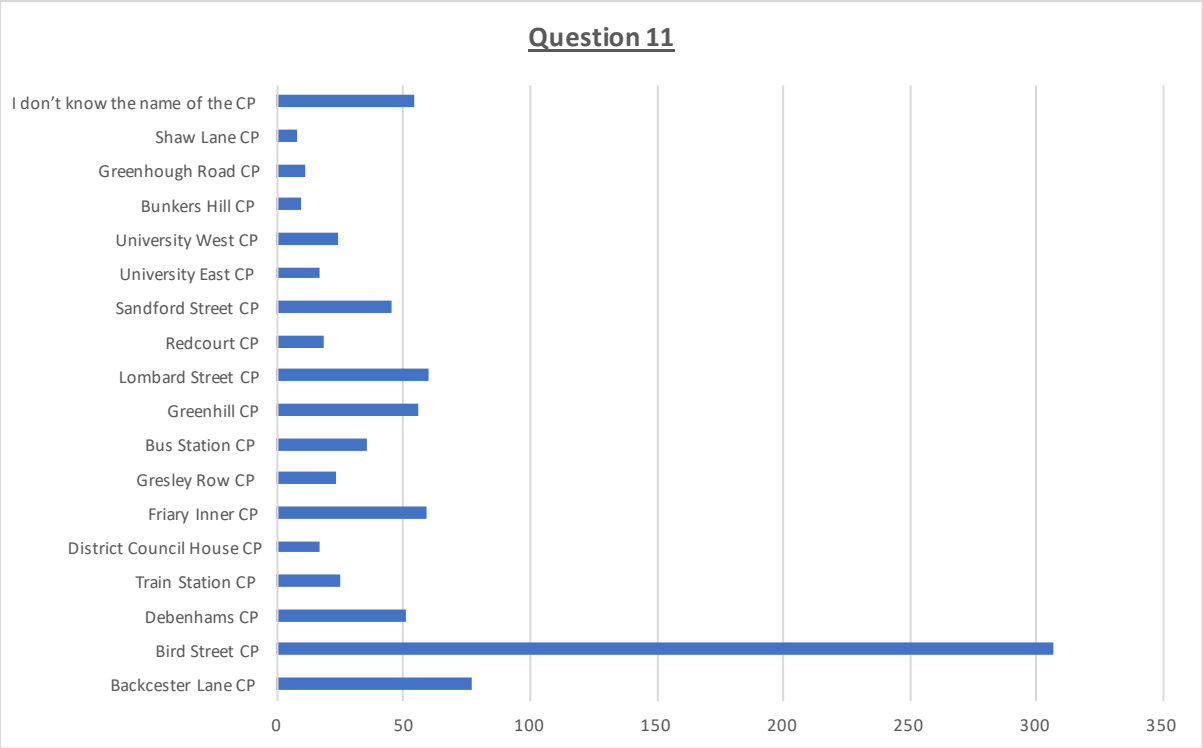


Figure 17

The purpose of this question is to highlight the car parks that suffer the most issues or problems. As previously stated 512 responses detailed that they had experienced problems at a car park in Lichfield of these the overall majority of issues were experienced at the Bird Street car park. This correlates with the fact that Bird street is the most popular car park.

Question 12 asks please select the issues that are related to your visit

This multi selection question enabled a simple tabulation of responses. This question received 639 responses.

Figure 18 below shows the breakdown of respondents based on the specific issues that was experienced by the user.

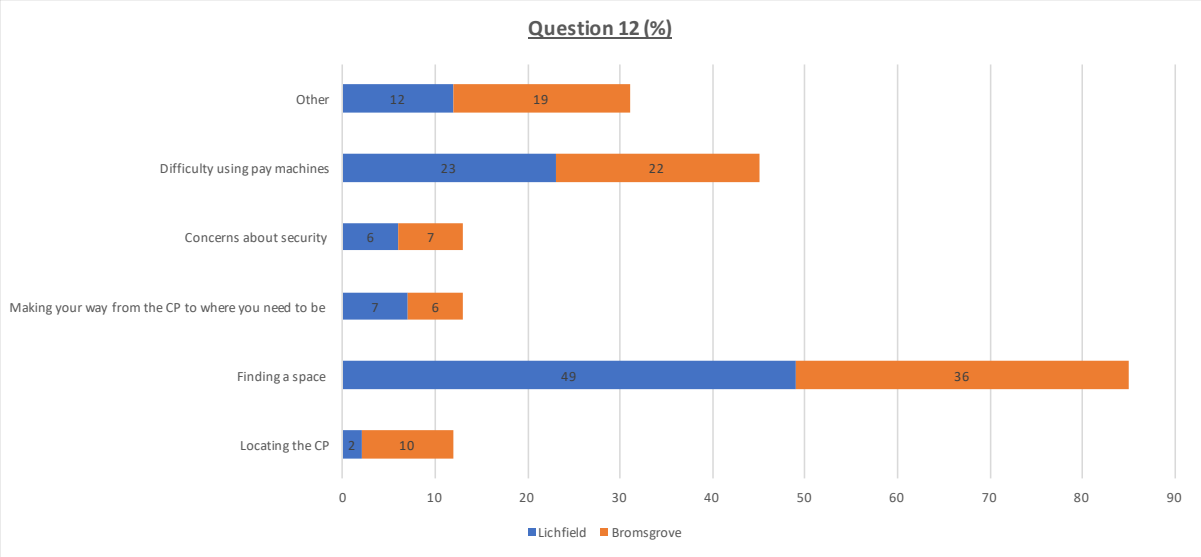


Figure 18

Figure 18 shows a breakdown of responses to the following issues:

- Difficulty using pay machines
- Concerns about security
- Making your way from the car park to where you need to be
- Finding a space
- Locating the car park
- Other

The purpose of this question is to identify the specific problems that are experienced when using the car parking provision within Lichfield. As above, the problem experienced most frequently by people entering Lichfield is a problem finding space. Nearly half or 49% of problems experienced is a problem finding a space. This issue is generally one that is experienced elsewhere also, by means of a benchmarking exercise a similar question asked of the residents of Bromsgrove is present to gauge a true reflection on the problems experienced. It highlights that although finding a space in Bromsgrove is a major issue it seems to be an issue experienced by a further 13% of people in Lichfield.

Question 13 asks how often do you experience problems

This single selection question enabled a simple tabulation of responses. This question received 640 responses.

Figure 19 below shows the breakdowns of respondents based on the criteria stated.

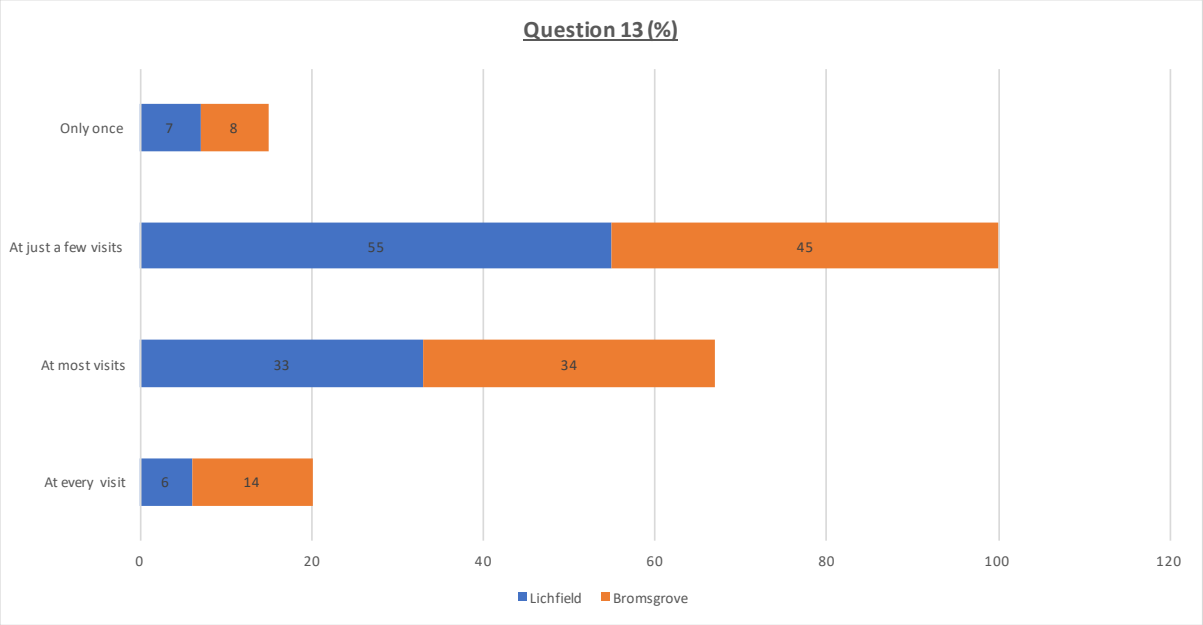


Figure 19

Figure 19 shows a breakdown of responses to the following selections:

- At just a few visits
- At most visits
- At every visit
- Only Once

The purpose of this question is to evaluate how often the problem is experienced by the respondent. As above shows, the problem that is experienced by the individual occurs most often on just a few visits with over half of the respondents claiming that they experience the problem at just a few visits (55%). A good proportion of people 33% experience their problem at most visits. This data along with the data supplied for the option only once equates to a majority of 94% of respondents experience problems on multiple visits, which suggests the issues are reoccurring.

Question 14 asks do you consider there to be enough overall parking in the city centre.

This single selection question enabled a simple tabulation of responses. This question received 823 responses.

Figure 20 below shows the breakdowns of respondents based on the criteria stated.

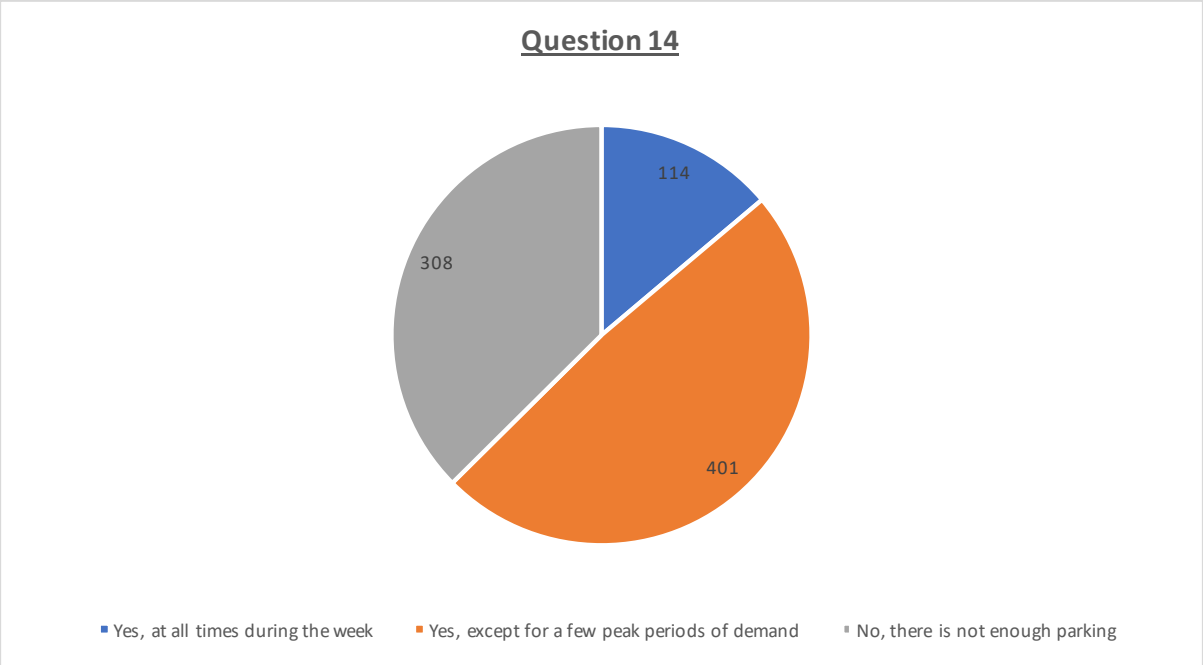


Figure 20

This question allows for the breakdown of data in relation to the overall satisfaction with space provision within the car parks in Lichfield. There were 401 responses to the selection yes except for a few peak periods. This shows that the perception of parking is very good in regard to the amount of spaces, yet it can get difficult at peak periods to find a space.

Question 16 asks what do you like most about the parking facilities you have in Lichfield

This single selection question enabled a simple tabulation of responses. This question received 1007 responses.

Figure 21 below shows the breakdowns of respondents based on the criteria stated.

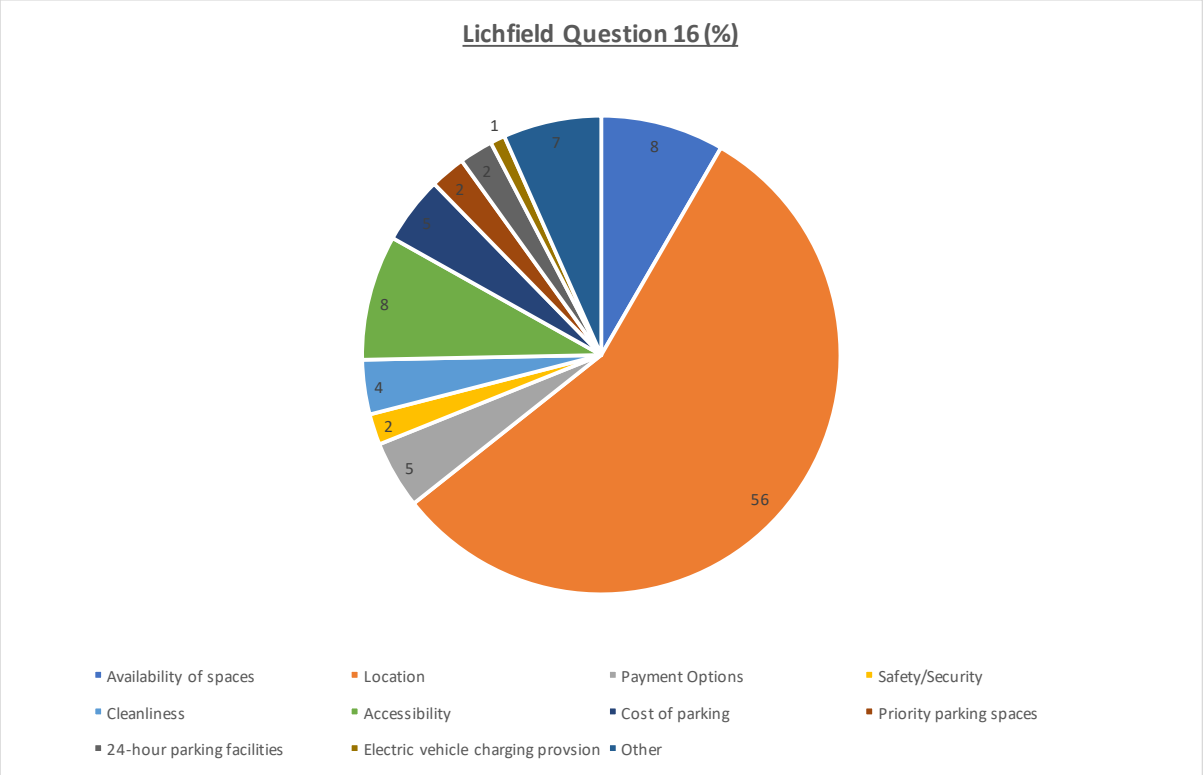


Figure 21

This question allows for data to be drawn from the choices selected. Over half of responses (56%) perceive the location of the car parks in Lichfield to be the best attribute attributed to car parks. This shows that the general though process when deciding on car parks in Lichfield are there location.

Question 17 asks what would you most like to see improved within Lichfield city centre car parks.

This single selection question enabled a simple tabulation of responses. This question received 1030 responses.

Figure 22 below shows the breakdowns of respondents based on the criteria stated.

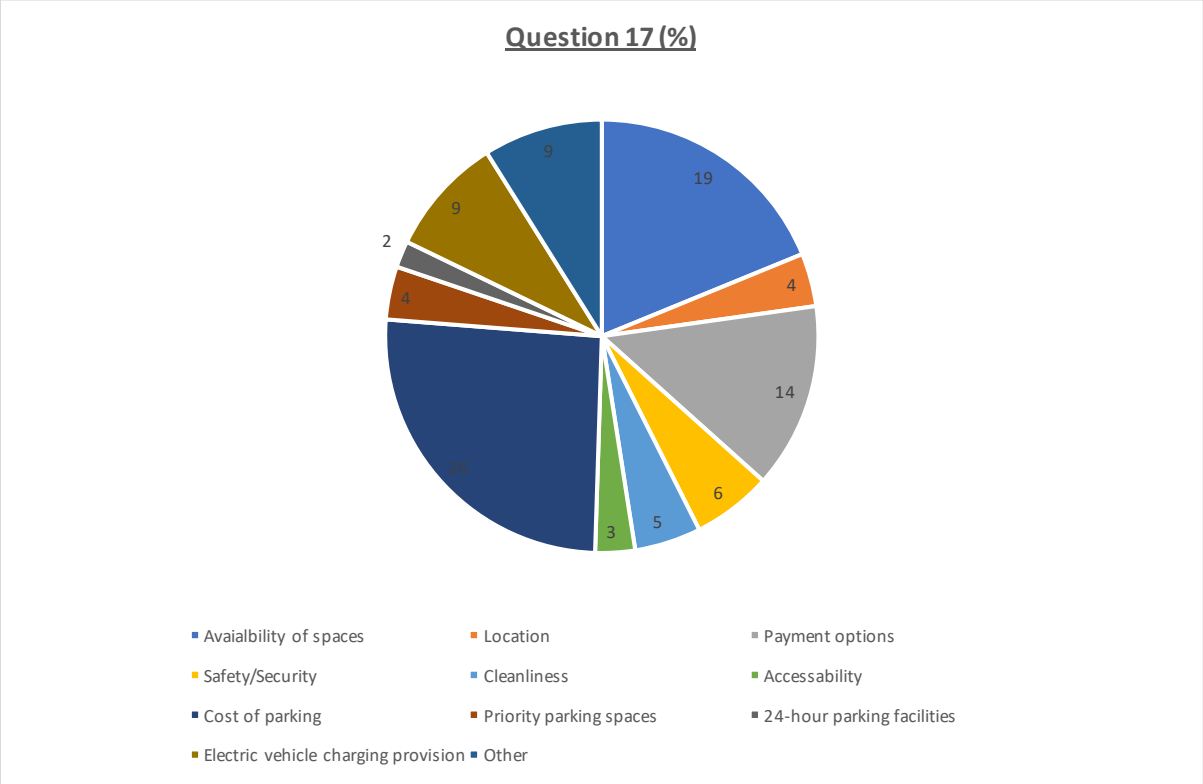


Figure 22

This question shows a general spread of responses as to what respondents would like to see improved within the car parks in Lichfield. The most selected at 26% of total responses was the cost of parking. The next largest selected response was for the availability of spaces to be improved at 19% of the total responses.

Question 18 asks how would you rate the following elements of the off street car parks in the city centre

This single selection question per choice enabled a simple tabulation of responses. Figure 23 below shows the breakdowns of respondents based on the criteria stated.

Answer Choices	Excellent	Good	Adequate	Below Standard	Awful	Response Total
Cleanliness	6.86% 70	40.49% 413	43.73% 446	6.96% 71	1.96% 20	1,020
Condition	5.11% 51	40.04% 400	47.85% 478	6.31% 63	0.70% 7	999
Clarity of parking signs	4.27% 43	34.62% 349	49.50% 499	9.92% 100	1.69% 17	1,008
Clarity of parking charges	4.08% 41	30.45% 306	50.15% 504	12.04% 121	3.28% 33	1,005
Convenience	12.62% 127	46.02% 463	35.69% 359	4.08% 41	1.59% 16	1,006
Number of spaces	4.17% 42	28.37% 286	41.67% 420	21.33% 215	4.46% 45	1,008
Number of disabled spaces	9.53% 85	20.52% 183	50.45% 450	13.00% 116	6.50% 58	892
Number of parent & child parking spaces	7.08% 62	14.38% 126	54.11% 474	18.84% 165	5.59% 49	876
Lighting	3.04% 30	29.18% 288	54.41% 537	11.55% 114	1.82% 18	987
Security & Safety	2.66% 26	27.43% 268	55.07% 538	12.69% 124	2.15% 21	977
Toilet Facilities within the car parks	2.13% 21	10.06% 99	30.89% 304	39.23% 386	17.68% 174	984

Figure 23

Figure 23 shows a breakdown of eleven different answer perimeters. Each separate answer required a rating by the responder. There were six different words that could give you a suitable rating for that answer. Overall the largest percentages for each answer was adequate.

Question 21 asks how do you feel about the amount charged for short stay parking

This single selection question enabled a simple tabulation of responses. This question received 1041 responses

Figure 24 below shows the breakdowns of respondents based on the criteria stated.

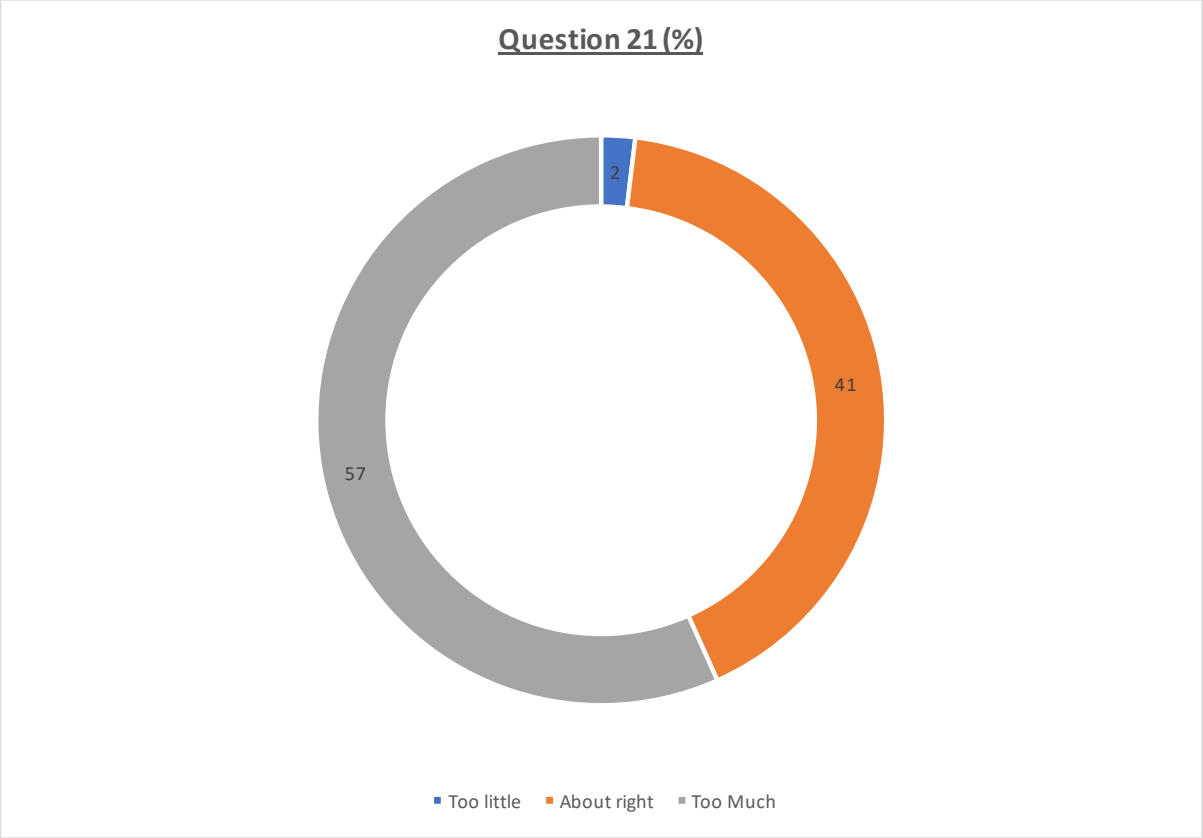


Figure 24

This question is useful to be able to obtain information against the existing pricing structure for short stay parking. The largest percentage of responses was attributed to the answer too much at 57% and the next largest being about right at 41%. There was a small amount of people (2%) that selected the answer too little.

Question 22 asks how do you feel about the amount charged for long stay parking

This single selection question enabled a simple tabulation of responses. This question received 1035 responses.

Figure 25 below shows the breakdowns of respondents based on the criteria stated.

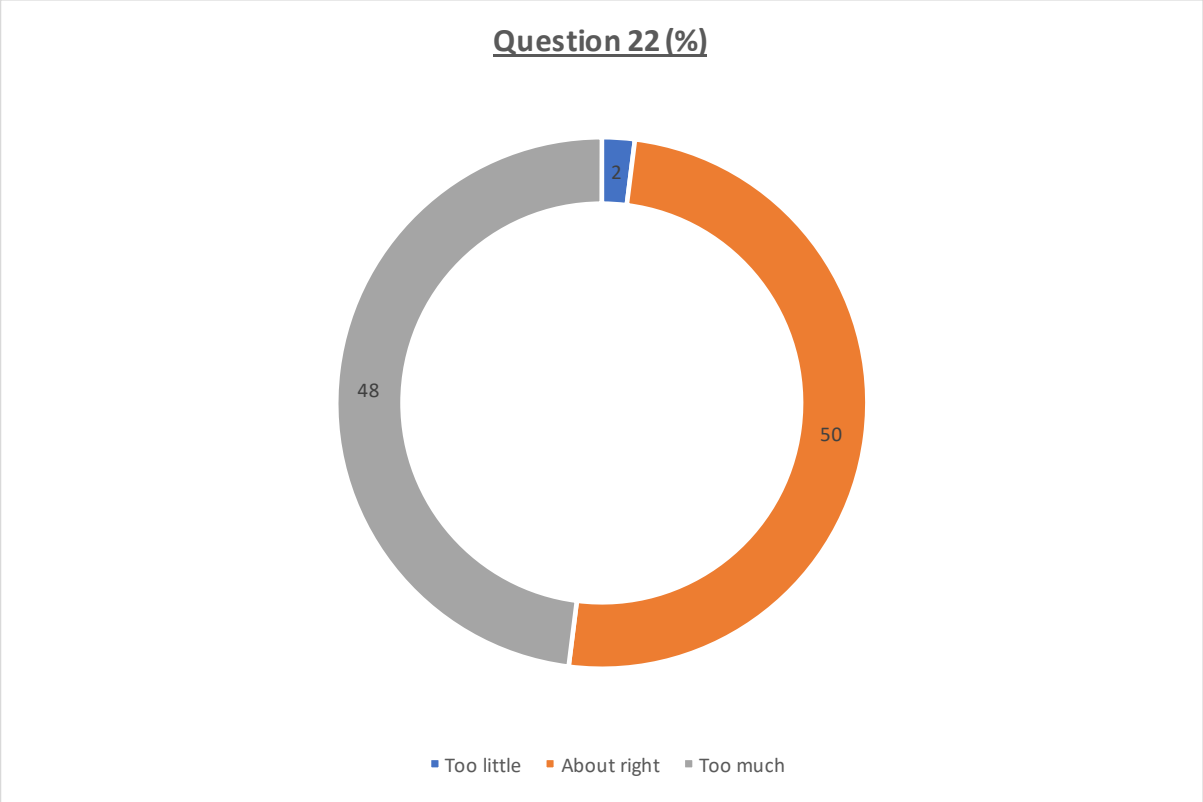


Figure 25

This question is useful to be able to obtain information against the existing pricing structure for long stay parking. The largest percentage of responses was attributed to the answer about right at 50% and the next largest being about right at 48%. There was a small amount of people (2%) that selected the answer too little.

Question 23 asks when would you prefer to pay for your parking

This single selection question enabled a simple tabulation of responses. This question received 1037 responses.

Figure 26 below shows the breakdowns of respondents based on the criteria stated.

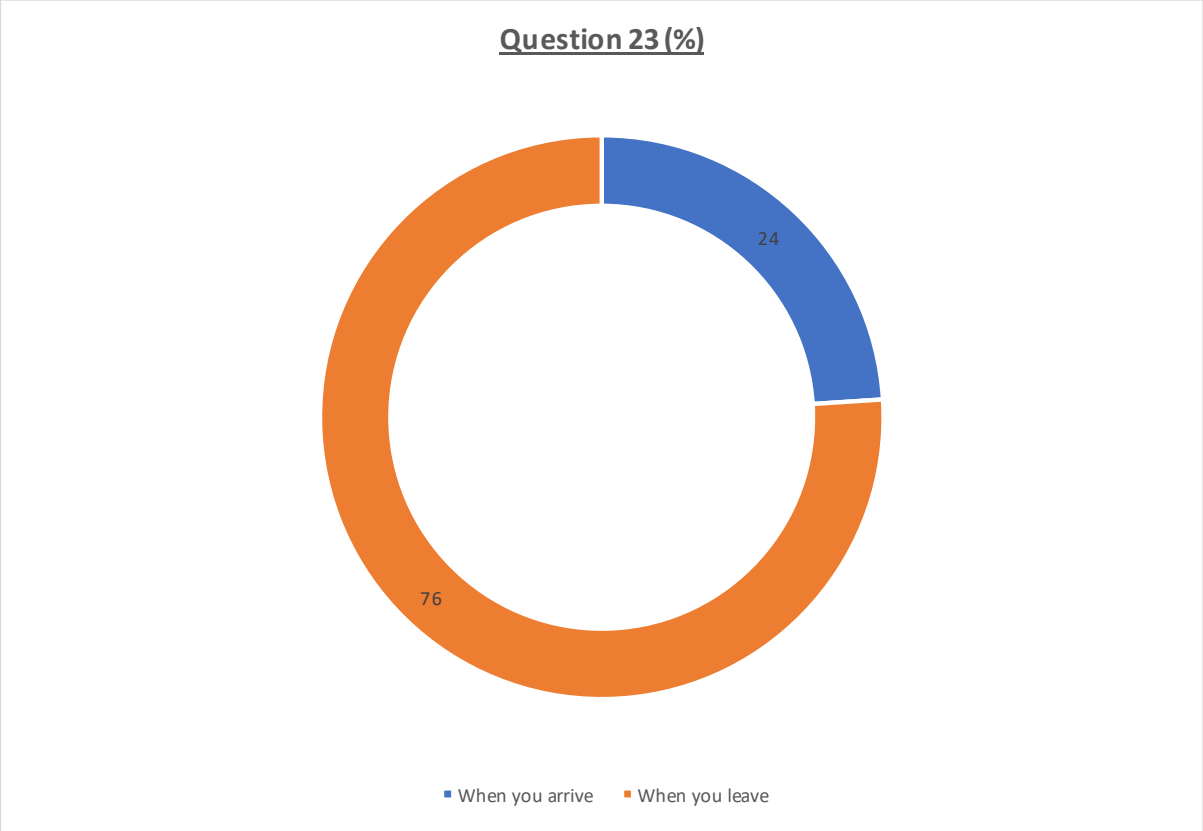


Figure 26

This question is useful to be able to obtain information from the respondents as to when they would like to pay for their parking. It shows that the vast majority of respondents would like to pay for their parking when they left the amount being 76%. This is in contrast to 24% of people wishing to pay for their parking when they arrived at the car park.

Question 24 asks How would you like to pay for your parking

This multi selection question enabled a simple tabulation of responses. This question received 1038 responses.

Figure 27 below shows the breakdowns of respondents based on the criteria stated.

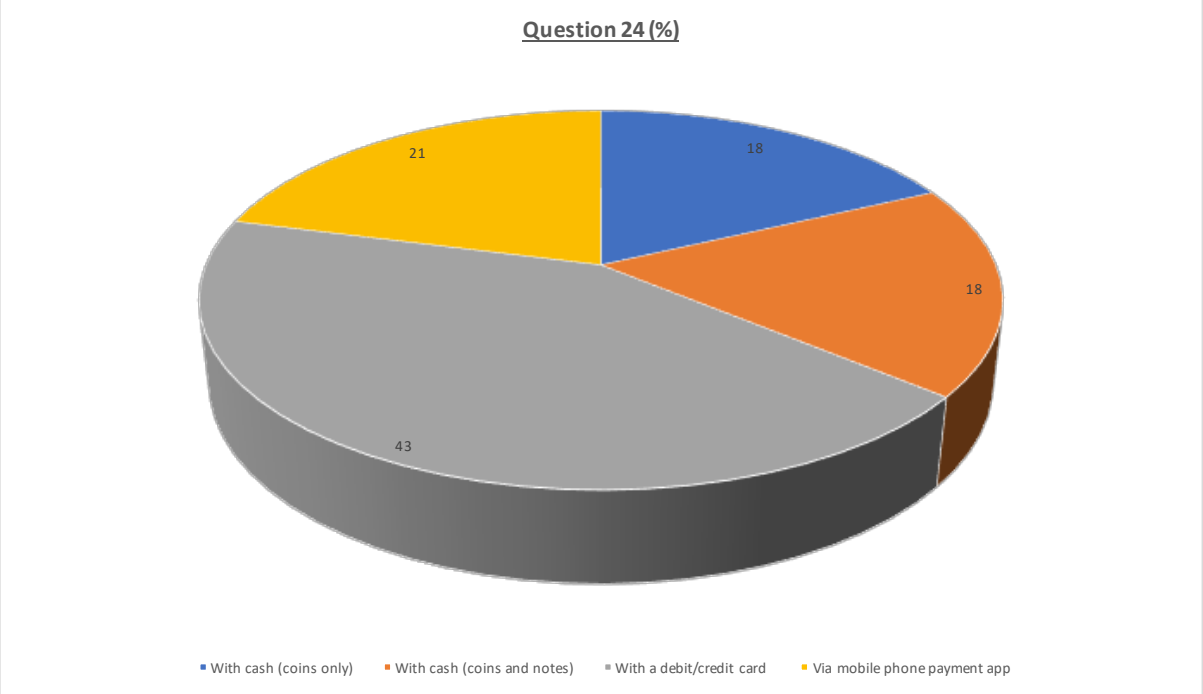


Figure 27

Figure 27 shows a breakdown of responses based on the following answers:

- With cash (coins only)
- With cash (coins and notes)
- With a debit/credit card
- Via a mobile phone payment app

This question shows that 43% of people would like to pay for parking charges with debit/credit card. The net largest option was with cash and coins at 21% of the total responses. The remaining option of with cash (coins only) totalled 18% of the responses. This shows that there is a need for various payment options to be supplied to allow for the opportunity for people to pay via a range of different means to cater for the majority.

Question 25 asks how do you think the car parking charges compare to neighbouring towns and cities

This single selection question enabled a simple tabulation of responses. This question received 1049 responses.

Figure 28 below shows the breakdowns of respondents based on the criteria stated.

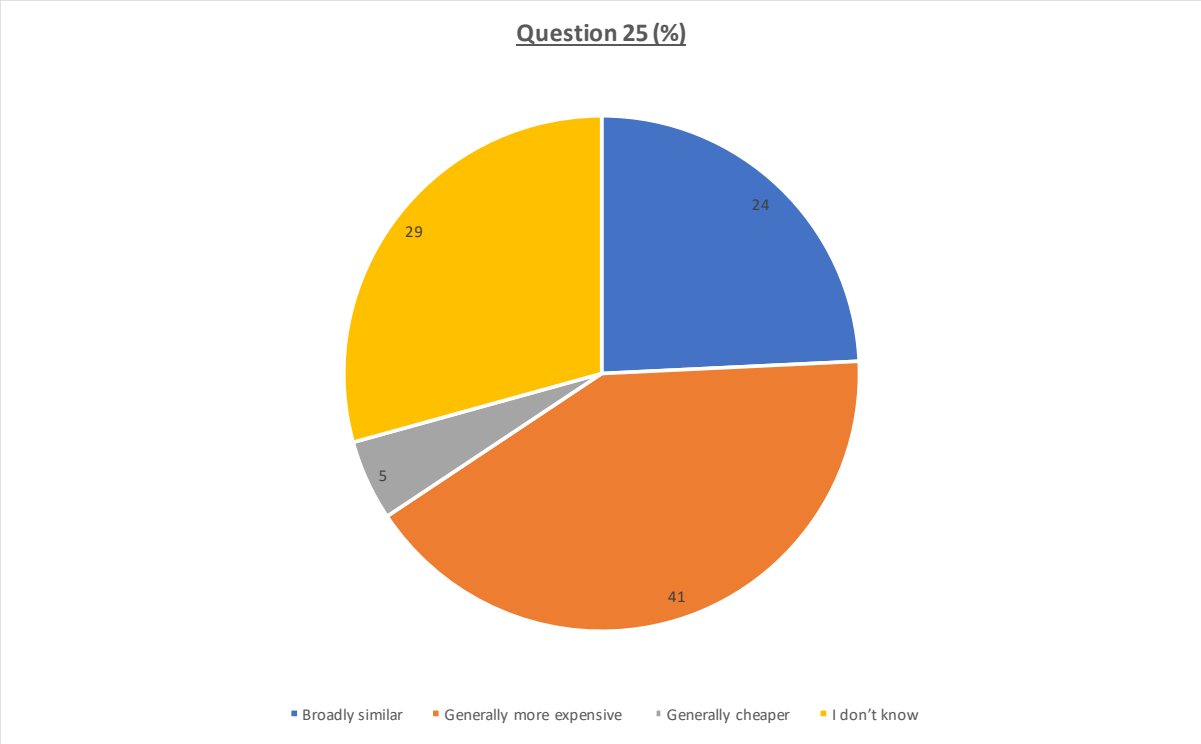


Figure 28

This question gives data that shows that 41% of respondents see the charges as generally more expensive than neighbouring towns and cities. 29% of respondents don't know how the Lichfield parking charges compare to neighbouring cities and towns. Then a further 24% of respondents deemed the charges to be broadly similar with lastly 5% of respondents deciding that the charges are generally cheaper than neighbouring towns and cities.

Question 27 asks how easy do you find it to locate an available blue badge parking space in any of the car parks in the city centre

This single selection question enabled a simple tabulation of responses. This question received 264 responses.

Figure 29 below shows the breakdowns of respondents based on the criteria stated.

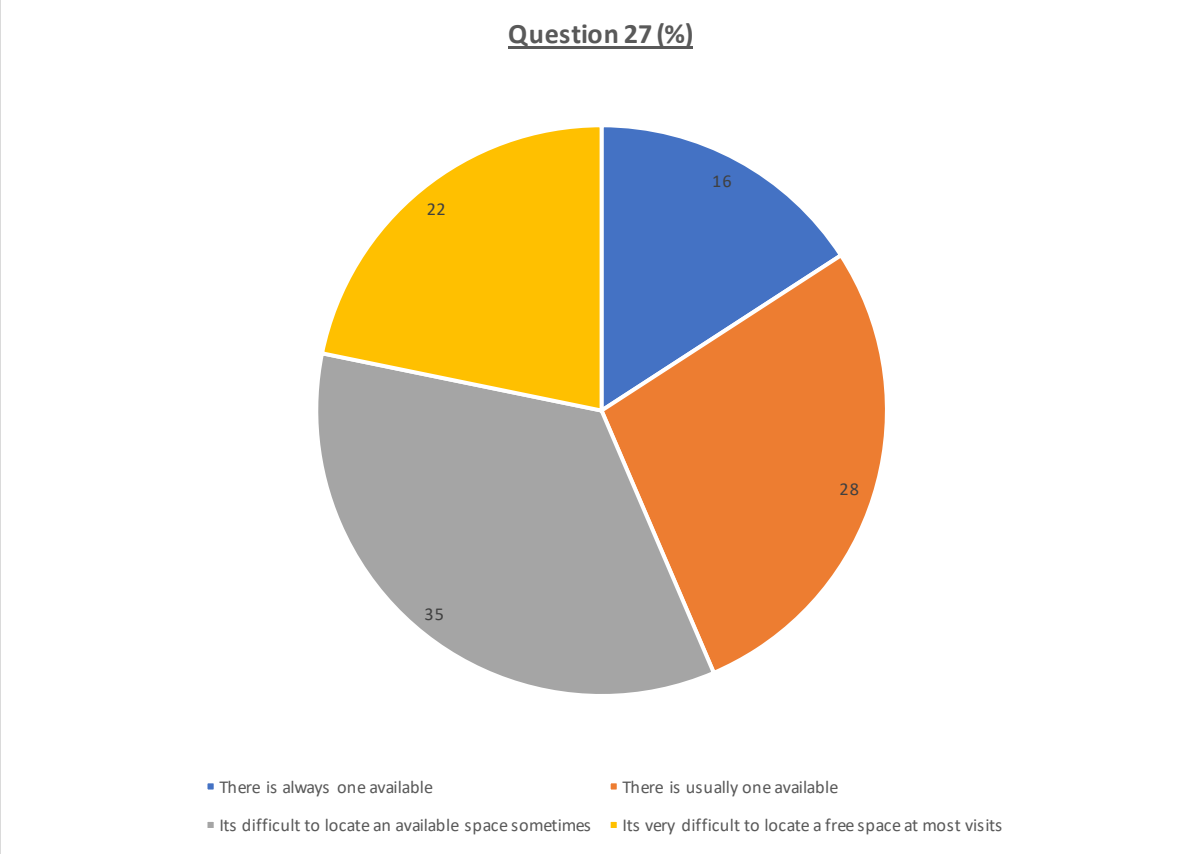


Figure 29

This question gives data that shows how easy it is to locate an available blue badge space in Lichfield car parks from the questionnaire 15% of respondents selected that they had a disability. The data from this question went on to show that 35% of respondents find it difficult to locate an available space sometimes with a further 28% of responses deciding that there is usually one available. 16% of respondents decided that there was always one available and finally 22% of respondents saying that it is very difficult to locate a free space on most visits.

Question 29 asks if so do you use the existing EV charge points in the Friary car park

This single selection question enabled a simple tabulation of responses. This question received 180 responses.

Figure 30 below shows the breakdowns of respondents based on the criteria stated.

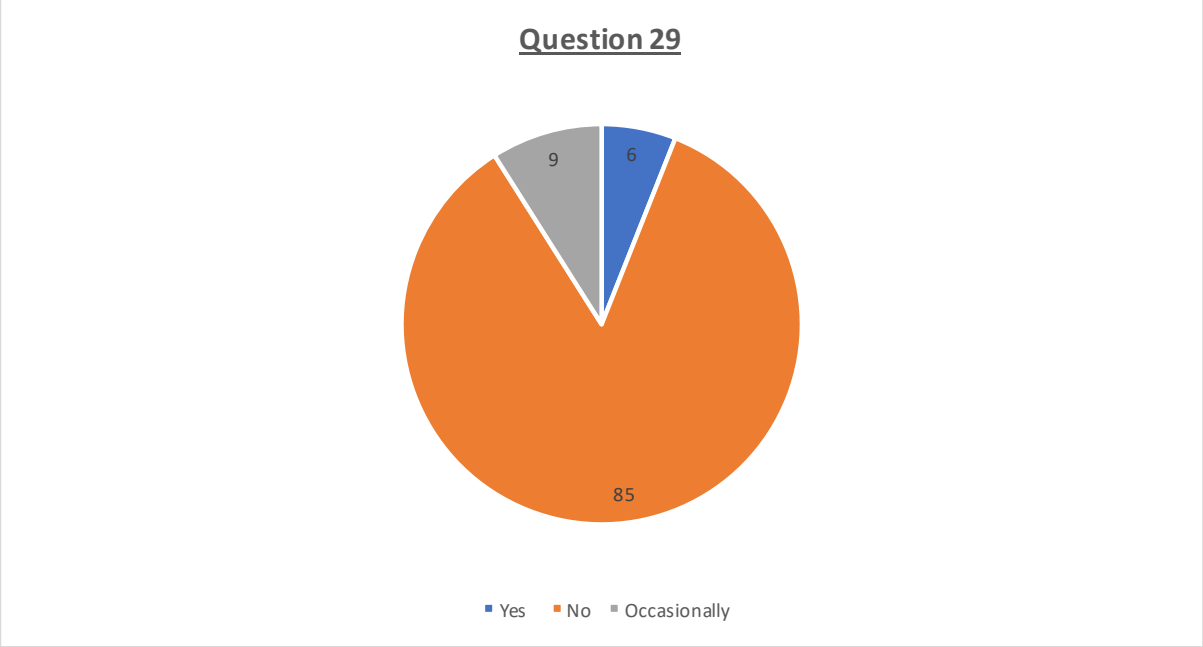


Figure 30

Previously in the questionnaire 6.6% of respondents declared that they drove an electric vehicle on a regular basis subsequently this lead to the above question which shows that the large majority of electric vehicle users didn't use the EV parking bays In the Friary car park. The next most selected option of occasionally was selected by 9% of the respondents with a further 6% of responses being for yes.

Question 30 asks would you like to see more EV charge points installed within Lichfield city centre car parks

This single selection question enabled a simple tabulation of responses. This question received 476 responses.

Figure 31 below shows the breakdowns of respondents based on the criteria stated.

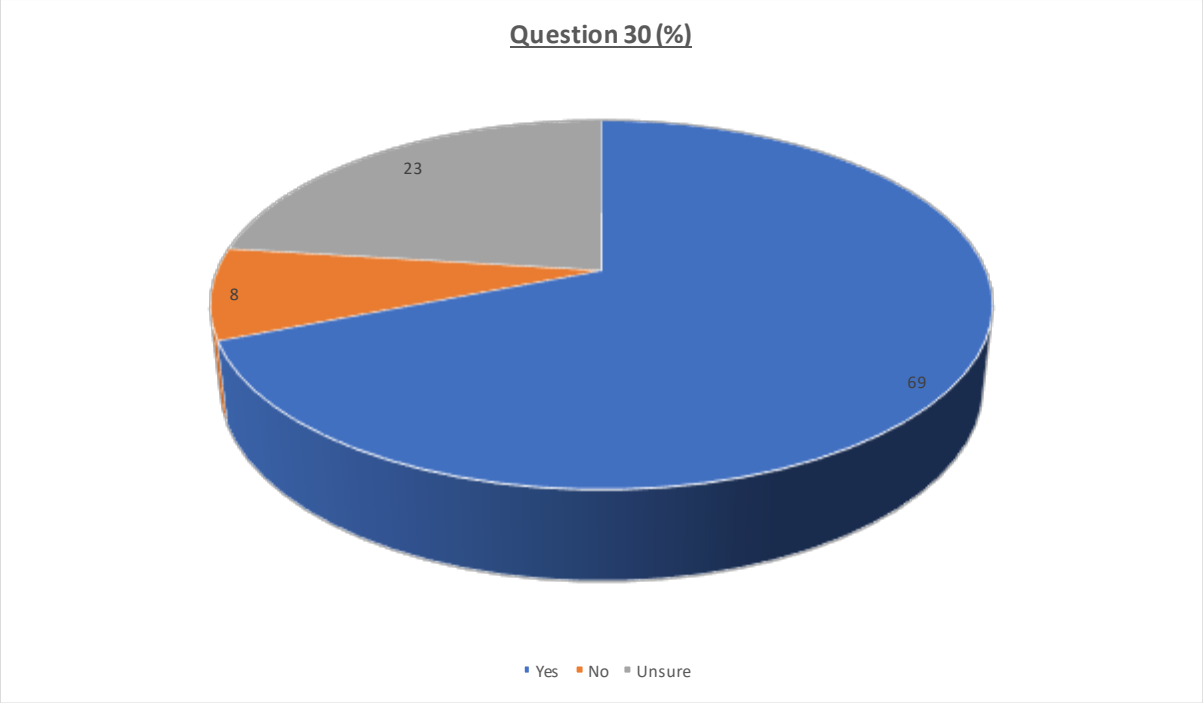


Figure 31

This question gives an understanding on if the users of the car parks would like to see more EV charge points installed at Lichfield car parks. The vast majority (69%) of responses declared that they would like to see more points installed. In turn 23% of responses said that they were unsure if they would like to see more points installed and 8% of people wouldn't like to see more points installed. A large percent of people would like to see more provision for EV charging within the car parks in Lichfield.

6.7 ENGAGEMENT CONCLUSION

The questionnaire was completed 1071 times and gave insight into a range of different car parking criteria and behaviours. It has highlighted that many car parks are under occupied compared to a select number that are more preferred. It links directly that most of the problems that are experience by the respondents of this questionnaire occur in the more popular car parks. On the whole, it is understood from this data that the majority of respondents will continue to use the car parks and the city centre at the same level for which they did before the national pandemic started. This is surprising because of the risk that can come from gathering in large numbers and not adhering to social distancing rules. In this there is a shared responsibility to ensure that all car parking provision is safe to use post lockdown from both providers and users alike.

The choice of driving into the city centre was largely attributed to convenience, although there is an increase in well-being awareness generally I see this continuing in the future. It has been shown that 489 responses were from people that use the supermarket car parks. It has been made apparent that Tesco in the near future have decided to charge for parking in the car park if you choose not to shop in the store. With this change, there will be a deflection of numbers between the supermarket car parks and the public car parks. This is likely to cause a certain amount of unrest within the city and provisions including clear signage and improved payment options are required to try to help alleviate this.

The respondents do seem acutely aware of the balance between provision and cost. This is also the case with investment into future more sustainable parking provision in regard to EV charge points and payment options. From the feedback received during the engagement process it is felt that it was useful and informative for those who attended, with the majority thankful that they had attended. Taking into account the purpose of the engagement and the development of the scheme to date combined with the efforts to publicise the public engagement, participation is considered to havebeen well above average.

The number of completed questionnaires is considered to be excellent. The target engagement for the questionnaire was 300completed responses and this was exceeded by 771 responses.

7.0 FORECASTING FUTURE PARKING DEMAND

7.1 INTRODUCTION

The car parking supply in Lichfield city centre overall is currently adequate for the demand using the baseline data analysed within section 5. Although there are a number of car parks at or over capacity, there is sufficient parking spaces across the city, especially as the two largest car parks (Birmingham Road Multi-Storey, and The Friary Multi-Storey) are well below capacity. Work should be done to increase the occupancy rates in these car parks rather than exploring additional parking within the city centre.

The baseline data only incorporates surveys undertaken at 12noon, which means the data can be classified as peak. If Covid-19 restrictions were not in place, surveys would have been undertaken across the day, which would have resulted in the figures shown in table 6 being lower. This reiterates the need to not increase parking supply based on the occupancy rates that highlighted several car parks at a point where it can be considered difficult to locate a parking space due to demand.

Whilst there isn't a need to increase parking supply within Lichfield city centre based on the current demand, it may be necessary to increase the supply in the future based on increased vehicles entering Lichfield city centre. With the city centre Masterplan identifying development opportunities along with the scope for car ownership to increase, it's likely that the demand on parking is likely to increase in the future.

7.2 METHODOLGY

To assist the development of car park strategies and transport planning projects that consider the impact of traffic in the future, the Department for Transport have developed a tool that assists in the forecasting of traffic growth. TEMPro (Version 7.2) is a software programme designed for estimating growth in traffic. It is based on predictions of future housing, population, car ownership, trip rates and jobs in and around the relevant area. It is a model that is based on origin and destinations, and therefore it also takes into account general growth from surrounding areas and then predicts how this growth will affect the relevant area. The software produces growth factors for a relevant area based on specified baseline and future years.

Any forecasts about future travel behaviour are subject to levels of uncertainty because of the sheer numbers of contributory factors and unforeseen circumstances, but the use of the DfT's traffic growth forecasts is considered to be the best available tool to make these predictions. It may be advisable to have contingencies in place that reduce the risk of future forecasts being higher or lower than forecast and regular reviews of city centre parking would help to steer the strategy in the right direction.

Estimating future parking demand is not a straightforward exercise as it is influenced by factors including:

- The availability of parking – plentiful supply means the attractiveness of driving to a location increases whereas, conversely, if parking is in short supply, drivers may travel by an alternative mode or may even be discouraged from visiting an area altogether. Furthermore, the more plentiful the parking supply, the cheaper the charges levied are likely to be thereby increasing demand further. It is therefore difficult to determine whether any latent demand exists in such circumstances;
- Sustainable travel options – if attractive alternatives to the private car are available, people are more likely to use them and be less reliant upon car use thereby reducing demand for parking. However, it is noted that the travel requirements of some people mean that they cannot use sustainable transport options and this can limit the effectiveness of this factor. It should also be noted that city centre trips often result in the purchasing of goods that may be difficult to transport using sustainable transport;
- Parking charges – if parking charges are too high, people may be put off from driving to an area. They may choose to travel by an alternative mode, go elsewhere or may be discouraged from visiting an area altogether. Conversely, charges that are too low may result in an overreliance upon car use to access the city that may result in detrimental environmental and social impacts;
- Growth of the internet – an increasing number of everyday tasks can now be undertaken without having to travel. Additionally, the internet provides information on the location and price of parking spaces, their availability, if the appropriate technology has been implemented and it enables the development of new initiatives such as driveway rental, car sharing and bike hire. As the

internet continues to evolve this will impact upon travel patterns and parking demand;

- Population growth and relocation – as population increases and moves, demand for goods and services will increase and change. These people will be free to travel where they like and will not necessarily choose their closest destination.

In addition to factors likely to influence demand, several issues are likely to influence the supply of parking spaces. Foremost amongst them is the need to consider how and where potential development proposals might reduce the supply or alter the location of public parking.

It is often the case that car parks are identified as potential locations for redevelopment, especially if the car parks are underutilised. As discussed within section 2.4, a handful of car park sites around Lichfield city centre have been identified as redevelopment sites within the city centre Masterplan, including Birmingham Road Multi-Storey, Bird Street, The District House, and University West car parks.

The TEMPRO growth data has been applied to the surveyed data to project future parking demand within the city centre for a 20-year period up to 2041. The growth in car ownership within Lichfield has been applied, rather than trip end growth, as the projected growth is greater. The predicted growth in parking demand is shown in table 8 and table 9. The figures shown in the tables are base level figures based on growth of the existing situation. Further improvements to Lichfield city centre will result in an increase in numbers.

From…	To…	Origin Trip Growth	Destination Trip Growth	Average Trip Growth
2021	2026	1.0424	1.0423	1.0424
2021	2031	1.0825	1.0823	1.0824
2021	2036	1.1198	1.1193	1.1196
2021	2041	1.1608	1.1604	1.1606

Table 8 - Predicted growth TEMPRO Version 7.2

From…	To…	Don't own a Car	own 1 Car	Owns 2 Cars	Owns 3+ cars	All Cars
2021	2026	0.9983	1.0389	1.065	1.0579	1.0563
2021	2031	0.9965	1.0714	1.1219	1.1307	1.1118
2021	2036	0.9838	1.0944	1.1825	1.1903	1.1626
2021	2041	0.9817	1.1274	1.2591	1.2551	1.2247

Table 9 - Car Ownership TEMPRO Version 7.2

7.3 IMPACT ON PARKING IN LICHFIELD CITY CENTRE

It is acknowledged that whilst TEMPro provides a good basis for estimating background growth across the District in overall terms, it may not necessarily be reflective of the specific locations of growth and consequently parking demand within specific car parks in the city centre.

It is important that the parking strategy fits as one element of a coherent overarching Masterplan that covers Lichfield city centre, which is the driving force behind the parking strategy. Care should be taken to ensure that the proposed level of parking is not set too high as to inadvertently encourage car use to access the city centre to the detriment of more sustainable modes, particularly if doing so would be likely to undermine the viability of such services and supporting infrastructure (e.g. congestion increasing delay for public transport vehicles or severance of key links for pedestrians and cyclists by major traffic corridors). This said, the future prosperity and economic success of the city centre will be reliant upon reasonable access by car.

The TEMPro figures are broken down into five year periods. As this car park strategy has been created in 2021, the 20-year period covers the years 2026, 2031, 2036, and 2041. Tables 10 – 13 provide the forecasted growth in the city centre car parks for each of the five-year periods. As previously discussed, this is based on many variables and should be taken as a guide only.

	Capacity	18/19 Ave	2026	% Occupied
Birmingham Road Multi-Storey	332	169	179	54
The Friary Multi-Storey	389	179	189	48
Friary Inner	45	48	51	113
Sandford st	56	65	69	123
Bird Street	187	180	190	102
Lombard Upper & Lower	276	184	194	70
Redcourt	85	84	89	104
Greenhill	13	12	13	98
Gresley row	38	30	32	83
Backcester Middle & Upper	84	53	56	67
Backcester Lower	41	38	40	98
Bus Station	57	62	65	115
Train Station	37	20	21	57
Uni East	48	31	33	68
Uni West	116	109	115	99
Total Across City Centre	1805	1264	1335	74

Table 10 – TEMPro forecasting in city centre car parks for 2026

	Capacity	18/19 Ave	2031	% Occupied
Birmingham Road Multi-Storey	332	169	188	57
The Friary Multi-Storey	389	179	199	51
Friary Inner	45	48	53	119
Sandford st	56	65	72	129
Bird Street	187	180	200	107
Lombard Upper & Lower	276	184	205	74
Redcourt	85	84	93	110
Greenhill	13	12	13	103
Gresley row	38	30	33	88
Backcester Middle & Upper	84	53	59	70
Backcester Lower	41	38	42	103
Bus Station	57	62	69	121
Train Station	37	20	22	60
Uni East	48	31	34	72
Uni West	116	109	121	104
Total Across City Centre	1805	1264	1405	78

Table 11 – TEMPro forecasting in city centre car parks for 2031

	Capacity	18/19 Ave	2036	% Occupied
Birmingham Road Multi-Storey	332	169	196	59
The Friary Multi-Storey	389	179	208	53
Friary Inner	45	48	56	124
Sandford st	56	65	76	135
Bird Street	187	180	209	112
Lombard Upper & Lower	276	184	214	78
Redcourt	85	84	98	115
Greenhill	13	12	14	107
Gresley row	38	30	35	92
Backcester Middle & Upper	84	53	62	73
Backcester Lower	41	38	44	108
Bus Station	57	62	72	126
Train Station	37	20	23	63
Uni East	48	31	36	75
Uni West	116	109	127	109
Total Across City Centre	1805	1264	1470	81

Table 12 – TEMPro forecasting in city centre car parks for 2036

	Capacity	18/19 Ave	2041	% Occupied
Birmingham Road Multi-Storey	332	169	207	62
The Friary Multi-Storey	389	179	219	56
Friary Inner	45	48	59	131
Sandford st	56	65	80	142
Bird Street	187	180	220	118
Lombard Upper & Lower	276	184	225	82
Redcourt	85	84	103	121
Greenhill	13	12	15	113
Gresley row	38	30	37	97
Backcester Middle & Upper	84	53	65	77
Backcester Lower	41	38	47	114
Bus Station	57	62	76	133
Train Station	37	20	24	66
Uni East	48	31	38	79
Uni West	116	109	133	115
Total Across City Centre	1805	1264	1548	86

Table 13 – TEMPro forecasting in city centre car parks for 2041

The results show that there is a 3-5% increase in overall parking demand over each five year period. Based on this data, the initial recommendation would that additional parking supply would be needed within Lichfield city centre no later than the year 2041 as this is the first time the overall occupancy rate reaches and exceeds the 85% figure where locating a parking space can impact the local economy. In reality to avoid the parking demand becoming problematic, additional parking should be targeted by 2036 to avoid the 85% being reached.

As shown in tables 10-13, there are a number of car parks that exceed the available capacity based on the continuation of demand through the forecasting. It is to be assumed that these vehicles would relocate to another car park that had sufficient occupancy. In the majority of cases, Birmingham Road Multi-Storey and The Friary Multi-Storey would be the most obvious car parks vehicles would relocate to, based on the available supply.

It is possible to reallocate the excessive parking demand from the car parks that are over capacitated into the two Multi-Storey car parks to gain a better interpretation of what parking would look like in Lichfield in the future years. Table 14 illustrates the data from tables 10-13 with adjusted levels in each car park to avoid any excessive demand.

	18/19 Occupancy	2026 Occupancy	2031 Occupancy	2036 Occupancy	2041 Occupancy
Birmingham Road Multi-Storey	52	58	70	84	93
The Friary Multi-Storey	49	57	63	73	83
Friary Inner	100	100	100	100	100
Sandford St	100	100	100	100	100
Bird Street	96	100	100	100	100
Lombard Upper & Lower	66	70	74	78	82
Redcourt	99	100	100	100	100
Greenhill	92	100	100	100	100
Gresley row	77	83	88	92	97
Backcester Middle & Upper	63	67	70	73	77
Backcester Lower	92	98	100	100	100

Bus Station	100	100	100	100	100
Train Station	54	57	60	63	66
Uni East	64	68	72	75	79
Uni West	94	99	100	100	100

Table 14 – Adjusted car park forecasting to reallocate overspill

Table 14 demonstrates that with the excessive parking from all car parks where demand outweighs supply, there is a significant impact on the two Multi-Storey car parks. Birmingham Road Multi-Storey will reach 93% occupancy by the year 2041, and The Friary Multi-Storey will reach 83% occupancy by 2041. Only five car parks would not exceed the 85% figure where parking demand outweighs supply.

7.4 IMPACT OF TESCO SUPERSTORE ON CITY CENTRE CAR PARKS

A recent planning application made on behalf of Tesco to implement ANPR within the superstore car park has been successful, which will have a potential significant impact on city centre car parks. The Tesco superstore is located north-east of the city centre and is located within close proximity to the Backcester Lane, Redcourt, Gresley Row, and Greenhill car parks. The Tesco superstore currently offers free parking for a period of 3 hours to customers shopping in-store. In reality, as the car park offers free parking, it's highly likely that some users will park in the Tesco car park to access the city centre.

Figure 32 demonstrates the location of the Tesco superstore in relation to the city centre.

Figure 32 – Location of Tesco superstore in Lichfield city centre

By introducing ANPR, it will be necessary for any vehicles entering Tesco to purchase goods to the value of at least £5.00 in the superstore to be provided with free parking. Without purchasing any goods, the driver will be subject to a Parking Charge Notice of £70.00. This means that any drivers using the Tesco car park for free parking will no longer be able to do so (unless they purchase goods).

The Tesco car park provides approximately 600 car parking spaces. As a conservative estimate, it is assumed that as much as 25% of the parking occupancy could be accessing the city centre, due to the location. If the car park was at capacity, this would mean there is a possibility that as many as 150 vehicles could be displaced from Tesco car park into city centre car parks. These are likely to be Backcester Lane, Redcourt, Gresley Row, and Greenhill car parks based on location. In reality, it's unlikely to be as many as 150 as it's unlikely Tesco car park will reach maximum occupancy on a regular basis, but for the worst case scenario this figure should be assumed. It's also likely that some displaced traffic will look to locate free parking elsewhere i.e. on-street.

Allocating up to 150 additional vehicles across the city centre car parks has an overall impact of approximately 9% on the parking demand. For instance using the 2018/2019 baseline data, the overall occupancy of city centre car parks is 70%. Reallocating the 150 vehicles increases this to 79%. Table 15 illustrates the increase in parking demand across the city over the 20-year period in five year increments.

Capacity	% Occupied	2026	% Occupied	2031	% Occupied	2036	% Occupied	2041	% Occupied
1805	70	1335	74	1405	78	1470	81	1548	86
1805	79	1490	83	1560	86	1625	90	1703	94

Table 15 – Impact on city centre parking based on displacement of Tesco parking

Table 15 highlights that the point parking demand would begin to outweigh supply without consideration of Tesco's displacement (2036) would come forward by approximately 10 years and would need addressing by 2026 where demand would reach 83%. Based on the many likely scenarios such as some drivers remaining in Tesco car park and purchasing goods, some drivers parking on-street, some drivers travelling elsewhere, and the occupancy rates unlikely to reach 600 often, table 15 should be considered an unlikely scenario.

It is recommended to monitor the impact of the ANPR system in Tesco car park on the city centre car parks. Once Covid-19 restrictions are eased and normality returns, parking surveys should be undertaken to collect new baseline data to compare against the 2018/2019 data, both for post Covid-19 data and the impact of displacement from Tesco.

7.5 IMPACT OF CITY CENTRE MASTERPLAN

Within the city centre Masterplan, there are four development sites that impact car parking provision within the city centre. Consideration should be given to the impact these sites may have on the overall parking provision. The Masterplan provides specific detail on the proposed new Multi-Storey car park within the Birmingham Road Gateway that will create around 480 parking spaces but doesn't provide as much detail on the three other development sites; The District Council House, Bird Street Courtyard, and University West.

What is known is that the Birmingham Road Multi-Storey, which provides 332 will be demolished as part of the development. The new Multi-Storey car park will provide an additional 148 parking spaces in the city centre. However, these would offset the loss of parking as part of the Bird Street Courtyard development as the Masterplan states

that some of the car park will be removed, with the loss of parking being relocated to the Birmingham Road Gateway site.

There is no stipulation on any gained or lost parking spaces for the District Council House development site. Therefore, it can be assumed the site will retain the vast majority of spaces as part of the development. Whilst the University West development site doesn't speculate on numbers, it's clear from the Masterplan that there will be a loss of parking to facilitate coach parking, which is proposed within the site. This could reduce the capacity by as much as half based on the indicative plan.

As the only confirmation on parking spaces is linked to another site where the loss of parking spaces isn't detailed, it isn't possible to factor in the impact the Masterplan will have on future parking within Lichfield city centre. Once this information is known, scenarios can be assessed to determine the potential impacts on parking in the city centre over the next 20 years i.e. loss or increase in parking.

7.6 FORECASTING FUTURE PARKING DEMAND CONCLUSIONS

Having utilised the 2018/2019 parking survey data as baseline data, it has been possible to forecast future parking demand within Lichfield city centre using TEMPRO, the Trip End Model Presentation Program, is designed to allow detailed analysis of pre-processed trip-end, journey mileage, car ownership and population/workforce planning data from the National Trip End Model (NTEM).TEMPRO is the industry standard tool for estimating traffic growth, which is required when assessing the traffic impact of a development on the local highway network (including car parking demand).

The results have highlighted the potential to consider increasing the parking provision within the city centre by the year 2036 to avoid any excessive demand impacting the local economy, where locating a parking space could become challenging, which may result in visitors travelling elsewhere. While parking demand may become an issue, the two Multi-Storey car parks have sufficient capacity to deal with the excessive demand in smaller and more popular car parks.

Considering the likely displacement of vehicles from the Tesco superstore with new ANPR technology coming into force, which will make it a requirement for users to purchase at least £5.00 of goods to receive 3 hours of free parking, it may become

necessary to consider increasing the parking provision earlier within the city centre. This could be as early as 2026 although this is based on the worst case scenario. The initial impact is likely to fall on the closest city centre car parks, which includes Backcester Lane, Redcourt, Gresley Row, and Greenhill.

It is unknown what impact the city centre Masterplan will have on the future parking demand as there is insufficient data contained within the Masterplan to run scenarios based on the potential impacts. What is known is the proposed 480 space Multi-Storey car park that will replace the Birmingham Road Multi-Storey and will take additional traffic lost from the Bird Street Courtyard site. It should be noted is as the forecasting of future demand is based on peak car park occupancy levels, along with the potential impact of Covid-19, the proposed Multi-Storey car park that will replace the Birmingham Road Multi-Storey car park may not be required if future forecasting is lower.

As such, whilst the overall estimated future parking demand is broadly considered appropriate to meet the needs of the alternative development proposals, the proposed location and distribution needs to be considered in greater detail as each development site comes forward.

With only limited details available concerning the precise make up of potential developments across the city centre at the current time, it is difficult to estimate the localised parking need that each development might generate in its own right. Furthermore, it is not known how the potential delivery of one development in one area of the city might impact on deliverability of another similar potential development in another. The impact of this is that whilst the overall requirement for additional parking spaces might be expected to remain similar, their potential distribution across different car parks might be expected to change and sufficient flexibility to accommodate such change should be acknowledged as more details are presented to the District Council.

To assist the forecasting of future parking within the city centre, and the supply and demand of parking spaces, Lichfield District Council should set a target of reducing the parking demand by at least 10% through the lifespan of the car park strategy, as a result of promoting sustainable transport. This would have a considerable impact in the overall parking demand and at what point (if any) additional parking may need to be considered.

8.0 LICHFIELD CITY CENTRE PARKING SERVICE

8.1 INTRODUCTION

With 18 car parks located across the city centre that provide different functions i.e. city centre parking, University parking, and Beacon Park parking, it's vital that Lichfield District Council provide adequate service provision to ensure the parking experience isn't compromised. For instance, if a visitor that has never been to Lichfield would like to visit Beacon Park, they will expect to see and have specific information relating to Beacon Park, rather than just the city centre as an all-encompassing collation.

This service consideration should take into account all aspects of the parking service to provide the level of service that will provide a good first impression for visitors and will likely result in visitors returning. Examples of the service provision required include:

- Car parking signage & way-finding;
- Payment options including when parking is paid for;
- Electric Vehicle charge points;
- Disabled and child priority spaces;
- Enforcement of the car parks;
- Parking information available on the Lichfield District Council website.

Each of the separate service provisions shown above, within Lichfield city centre car parks are discussed in greater detail, based on the results of the parking assessments carried out during the development of the car park strategy.

8.2 CAR PARKING SIGNAGE & WAY-FINDING

2020 Consultancy have carried out a high-level review of car park signage across the city to identify where improvements can be made. This includes the introduction of Variable Message Signs (VMS). There is a direct link between a city centre economy and how easy the city centre is to access for all modes of transport. Ideally a city centre should be walking distance to all major transport hubs such as car parks, bus stations, and rail stations.

The city centre car parks are located across Lichfield, which is useful as visitors can choose the most appropriate car park depending on their intended destination. The only reliable method of allowing visitors to make this decision is through signage. There is currently only a handful of car parking signs within the city centre, and these are generally located at car park entrances. An example of the type of car parking signage currently in Lichfield city centre is shown in figure 33.

Figure 33 – Example of existing car parking signage in Lichfield

This isn't sufficient to create an efficient city centre parking experience and is likely to result in certain car parks being used regardless of the intended location. The location of the signage in relation to the car park makes the signs somewhat redundant (although in figure 33 it's acknowledged there is a benefit in highlighting short and long stay locations). As the signs are located by car park entrances, the visitor has already located the car park. Whilst there is benefit in providing signs close to car park entrances, it's more appropriate and needed to have signs on the local road network and if possible, on the strategic road network to provide early direction.

Another key feature for accessing the city centre is how straight forward and clear signage is for visitors from their transport mode to the destination. The success of good car park directional signage for vehicles will be completely undone if the subsequent signage directing visitors from the car park to their destination is poor.

Therefore way-finding is used to support directional signage. This is most commonly done as finger posts with key destinations such as city centre, toilets, bus/rail station,

and others being signed in the direction of travel. These can be supported through simple and complex monolith signs that can include maps and key information. These can be modern day tourist information systems.

The location and number of way-finding signs is as important as vehicular signs. It should be possible for a visitor to have no understanding of a city centre, to make their way from a car park to their destination without any confusion.

For a city centre economy to be maximised, visitors should spend as little time travelling from the car park to their destination as possible. This results in a greater turnover of spaces, greater economy, and a better city centre experience. Therefore, considerable improvements to the city centre parking signage and way-finding is possible.

There are four types of car parking signage that have been considered as part of this high-level assessment. These are:

- Strategic car parking signage that provides car parking directional information for a number of car parks or parking locations in the city centre;
- Car park advanced directional signage that provides directional information for a few car parks in an area such as Backcester Lane, Redcourt, and Greenhill;
- Car park Variable Message Signs that provide car parking directional information across the city centre;
- Specific car park sign that can be static or Variable Message Sign for individual car parks.

Figure 34 provides examples of these signs.

Figure 34 – Examples of car park signage

8.2.1 STRATEGIC CAR PARK SIGNS

Strategic car park directional signs are designed to advise drivers a certain direction to travel before entering the city centre. The wording on these signs should be fairly generic such as long and short stay or city centre north and city centre south.

8.2.2 ADVANCED DIRECTIONAL CAR PARK SIGNS

Advanced directional car park signs are designed to provide direction to a few car park locations within an area. These signs can introduce specific car parks or still provide generic information. It allows destinations to be included within the text. For instance, the Cathedral, or Council offices can be listed.

8.2.3 CAR PARK VARIABLE MESSAGE SIGNS

A Variable Message Sign is classified as “a device capable of displaying, at different times, two or more aspects”. These aspects may take the form of a sign prescribed by the TSRGD 2016, a legend in accordance with Schedule 16 to the TSRGD 2016 which remains unchanged from the 2002 regulations, a non-prescribed temporary sign or a blank grey or blank black face. Variable Message Signs encompasses all types of variable sign from simple flap-type fixed signs to complex light-emitting panels. New LED Variable Message Signs allow additional messages to be displayed, which would benefit the city centre if car parks are full as further information i.e. alternative car parks can be provided.

A Variable Message Sign is one of the most effective methods of providing key clear concise information to drivers as they travel to their destination. Variable Message

Signs are usually classified as either “free text Variable Message Signs” or “car park guidance Variable Message Signs”. Free text signs provide useful information related to a motorists destination such as “congestion ahead” whereas car park guidance signs provide car park information such as the number of spaces available within a car park. Variable Message Signs can use both forms such as a free text sign displaying “car park A full please use car park B”.

The effectiveness of the Variable Message Sign is related to the location of the sign. The location of the sign is the single most important aspect of delivering an effective sign. If the sign isn’t located in the most appropriate position it will not serve the purpose it was intended for. Due to the cost of Variable Message Signs, this makes identifying the location critical. Motorists have little time to take note of the sign, which means it needs to be located within close proximity, although it’s vital the sign doesn’t create any visibility issues as the signs can be large in size. All the information on the sign should be clear and visible, which means setting the sign at the correct height is important as well as ensuring no obstacles will obscure the sign such as overgrown vegetation.

Due to the cost of Variable Message Signs, consideration should be given to number of motorists that will view the sign on their journey to the end destination. A sign should be located where the majority of motorists will view the sign. This means signs should be located where routes meet to avoid needing to repeat signs with the same message that could be avoided. In reality this isn’t always possible due to the layout of the road network, but it is recommended to allocate time considering the road network to identify the most suitable locations that maximise exposure of each sign under consideration. The exception to this is on roads where the 85th percentile traffic speeds are over 40mph as the Department for Transport states that two Variable Message Signs displaying the same message is provided.

There may be a number of local influences that are likely to have an impact on the location of Variable Message Signs within an authority. The installation of signs on a local level will need to consider the local issues and understand the main traffic flows within the city.

Car park guidance Variable Message Signs are a lot more restricted over the legends that can be displayed on the sign. Generally, the names given for the car parks or locations will be static with the Variable Message aspect restricted for the following:

- Number of spaces within the car park;
- Simply the word “SPACES”
- Simply the word “FULL”
- Simply the word “CLOSED”

Whilst the preference on car park guidance signs is to display the number of spaces within the car park, this approach relies upon the infrastructure in the car parks being sufficient quality to ensure accuracy is maintained. If a car park states 50 spaces are available when in reality the car park is full, this will likely result in the car park occupancy levels reducing as motorists will not trust the signs. The other issue with displaying the number of spaces is the issue with allocation. If the car park states 50 spaces, there is no way of knowing what percentage of these are blue badge or parents with children spaces.

Regardless of the legend displayed on the car park guidance, it’s considered crucial to ensure the infrastructure is fully working to ensure accuracy is maintained. There is a direct link between car park occupancy levels and the accuracy of car park guidance signs. The more accurate the car park sign is, the less congested the car park will be. It is common in virtually all cities and towns for certain car parks to be favoured. This results in those car parks reaching capacity fast. Utilising successful accurate car park Variable Message Signs will significantly reduce the likelihood of vehicles queuing to access these car parks.

Lichfield city centre is fairly compact which makes locating Variable Message Signs more straight forward. Due to the cost it is recommended to restrict the number of signs providing information on a number of car parks to no more than two signs.

Variable Message Signs can work well with static car parking signs. This reduces the cost associated with signage. Our recommendation is to install three strategic level Variable Message Signs, which will be focused on the strategic road network. The possible sites for these signs include Stafford Road approaching Lichfield from the north after the A51 and A515 combine, the A5127 soon after the junction with the A38

from the east, and the A51 in proximity to the Shell petrol garage from the south. This will capture the traffic approaching Lichfield from the main points of origin.

Figure 35 provides a map demonstrating suggested locations for the strategic level Variable Message Signs. These are typical locations for this type of signage.

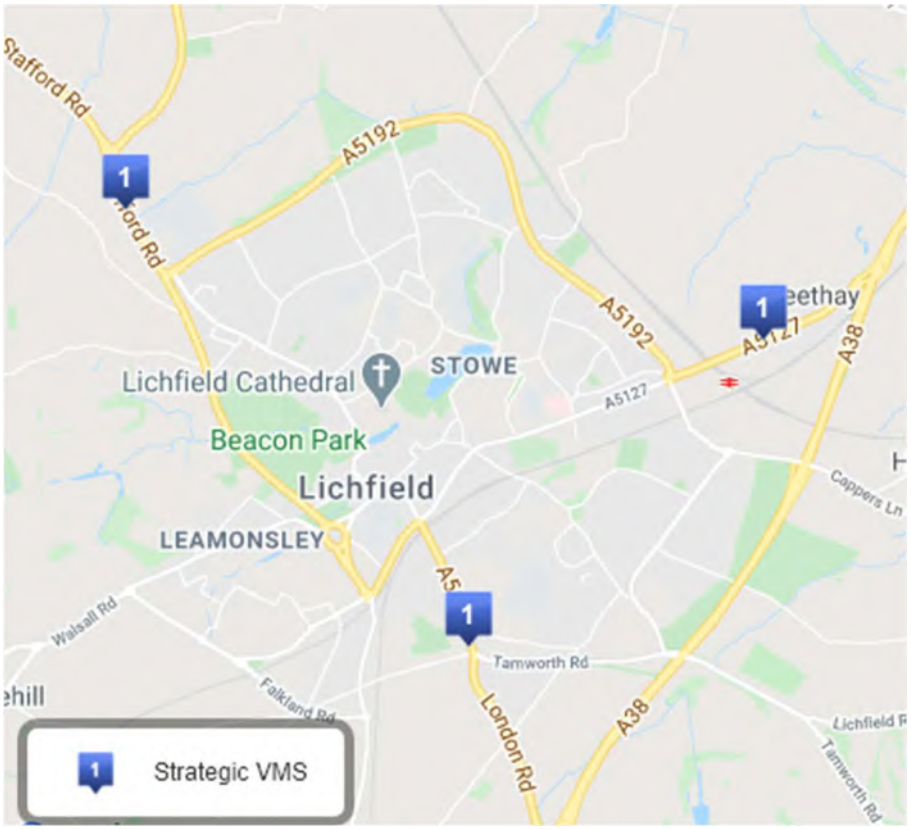


Figure 35 – Potential strategic VMS locations

8.2.4 SPECIFIC CAR PARKING SIGNS (STATIC OR VMS)

Once the signs described above have directed drivers to areas within the city centre, the final task is to provide specific car park direction. The purpose of these signs is to tell drivers where to turn to enter car parks. For instance, to access The Friary Multi-Storey car park the sign should be located near the junction of the Western bypass and The Friary. Individual car parks should be named on these signs. The public engagement task undertaken demonstrates that users know car park names. The signs should be located where they are visible and not obstructed by other infrastructure or vegetation.

Each of the main car parks should have at least one of these signs to ensure occupancy rates are even across the city centre. These signs can be either static signs or Variable Message Signs. The benefit of using Variable Message Signs is the ability

to display the number of spaces available in the car park. However, if the car park infrastructure doesn't allow this information to be displayed, static signs would work out to be better value for money.

Figure 36 provides a map demonstrating suggested locations for these specific signs. There are eight signs in total, which will enable each of the city centre car parks to be incorporated into a sign. It may be possible for some car parks to be included on more than one sign. An example where this may be beneficial could be The Friary Multi-Storey due to the lack of occupancy. These are typical locations for this type of signage.

Figure 36 – Potential specific car park VMS locations

8.2.6 WAY-FINDING SIGNAGE

There is limited way-finding signage in Lichfield city centre and it appears to be focused in the vicinity of the High Street and key attractions i.e. the Cathedral. Whilst this is likely to be the heaviest footfall area, there is limited signage from car parks.

To improve access in the city centre, it is recommended to implement new way-finding signage and monolith signs throughout the city centre including to and from transport

hubs and car parks. As described above, way-finding should be consistent and frequent enough to ensure easy to follow directions are visible for visitors to follow. Therefore, as a minimum way-finding should be located at each junction or point where more than one direction is available.

It is recommended to implement way-finding at each car park and include the majority of car parks on way-finding in the city centre. Using monolith signs is a useful way of including car park locations as well as key city centre features. Implementing a point of interest system will also enable visitors to keep track of where they are and their transport destination.

To safeguard future developments and adjustments to the city centre, it is recommended to create a signage and way-finding plan. This document will outline the procedures and requirements for signage and way-finding for the city centre including design, usage, and location. This document will ensure consistency is maintained in the city centre for the long term and short term.

8.3 PAYMENT OPTIONS

Currently, there is only two methods available to pay for parking in Lichfield city centre car parks with the exception of The Friary Multi-Storey and Bird Street. All car parks are pay & display with payment made by coins only apart from those two car parks where some of the machines enable payment by debit/credit card. All car parks allow payment to be made by phone. This can be achieved by either ringing a number and inputting vehicle details through an automated service, or using the smart phone functionality to make payment through the parking app.

With limited payment options available, it's likely that this will discourage some visitors from parking in city centre car parks and will seek alternative locations. As we move out of Covid-19 restrictions, it's considered essential for local authorities to offer contactless payment where feasibly possible. As there are a number of solutions to pay for parking on the market, this should be considered an area that Lichfield District Council target.

There are broadly three payment options that are available to car park users within pay & display car parks. These include payment by coins, payment by debit/credit

card, and payment by phone. Some local authorities now offer additional contactless payment that can be incorporated within an ANPR system. This works in a similar fashion to the congestion charge and the Dartford tunnel charge where drivers can register their vehicle on local authority website and whenever they visit a car park, the ANPR system calculates the time spent and deducts money from an account. This is the most effective, contactless system available as we move out of Covid-19 restrictions.

None of the car parks in Lichfield city centre offer pay on exit parking. Pay on exit is widely considered to be the most preferred method of parking as there are no time constraints that need to be thought of during time spent in the city centre. Pay & display relies upon the driver to determine how much time to pay for. If this time expires and the driver doesn't leave the car park, they will receive a Penalty Charge Notice when enforcement occurs. Pay on exit allows users to stay in the city centre for as long as required. It's common to see a greater local economy in city centres with pay on exit parking based on this.

To offer a better parking experience, Lichfield District Council could consider the feasibility of implementing pay on exit systems in car parks where the technology can be introduced. Due to the costs associated with the equipment and infrastructure required to enable pay on exit systems to be implemented, not all car parks work as pay on exit. Generally, small car parks are those most likely to be unsuitable for the system. A feasibility study would need to be undertaken to consider the most suitable car parks, and it would be sensible to run a pilot scheme in one car park where the new payment process can be introduced and trialled to ensure it is a viable payment option that can then be implemented in other car parks. There is potential for the additional revenue generated as a result of the pay on exit systems to offset the cost of implementing the system. However, it is worth bearing in mind that car parks might need to be reconfigured to accommodate the pay on exit infrastructure, which may result in a loss of parking bays and could result in a slight loss of revenue.

Both Birmingham Road Multi-Storey and Bird Street, are car parks that have been identified within the city centre Masterplan for redevelopment. Therefore, there is a case that these car parks shouldn't have pay on exit systems installed

8.4 ELECTRIC VEHICLE CHARGE POINTS

There are currently only two Electric Vehicle (EV) charge points within Lichfield city centre car parks. These are both located within The Friary Multi-Storey car park and provide drivers of EVs the opportunity to charge their vehicles whilst visiting the city centre. Figure 37 provides an image of the EV facilities within the car park.

Figure 37 – Example of EV charge point within The Friary Multi-Storey car park

Based on the responses to the stakeholder engagement exercise carried out as part of the development of the strategy, the EV charge point spaces are not well used.

Currently, users that wish to charge their vehicles are required to pay for the charge point as well as pay for the parking space. This makes the appeal of charging vehicles far less appealing in comparison to not needing to pay for parking if payment is made to charge an electric vehicle. EV charge points are less common in city centres compared to other locations such as motorway service stations. This is because a high proportion of visitors within the city centre are likely to be local, meaning the vehicles will not require charging.

If visitors are travelling into Lichfield city centre from further distances and would benefit / need to charge their vehicles, there is very little information available to visitors to understand that The Friary Multi-Storey car park offers EV charge point facilities. Due to the location of the car park, visitors from further afield are more likely to park closer to intended destinations. This makes car parks such as Bird Street, Lombard Street, and Backcester Lane more likely to be used.

It's vital that Lichfield District Council promote the EV charge point facilities within the Multi-Storey car park to increase the likelihood of usage. Based on speculation, it's likely that the sales of electric vehicles are likely to increase significantly over the next 10 years. Some high-profile car manufacturers such as Volvo have already pledged to stop producing diesel and petrol vehicles within the next 10 years and move towards electric vehicles only. As more car manufactures make this pledge, the sales of electric vehicles will rapidly increase. This will place more pressure on car parks incorporating EV charge points.

It isn't sufficient for Lichfield city centre to offer as little as two EV charge points. The provision in car parks will need to increase as short, medium, and long term actions. The scaling of EV charge points needs to be in line with sales of electric vehicles to avoid a negative impact on city centre car parks. Due to the infrastructure required, an EV charge point takes up more room than one standard parking space. Therefore, introducing several EV charge points will create a noticeable impact on the occupancy levels within a car park.

Not all car parks will be suitable for EV charge points. Small car parks will unlikely be effective as it will reduce occupancy levels, creating an issue with demand. This is clear looking at the occupancy data in table 6, which demonstrates that the smaller car parks within Lichfield are subject to excessive demand, especially moving in the

future years. Therefore, it's important to consider the most effective car parks for EV charge points, although all car parks provide opportunity for charge points.

It's also considered ideal to expand the existing provision within The Friary Multi-Storey car park. This is most likely the best location for EV charge points based on its current usage, existing facilities, and condition. Birmingham Road Multi-Storey, University West, and The District Council car parks would also have scope for inclusion for EV charge points. However, as these car parks are included within the city centre Masterplan for redevelopment, it may be worth incorporating EV charge points within these car parks as the development occurs. This is especially the case for the Birmingham Road Multi-Storey site as the development includes a new 480 space Multi-Storey car park. This site will provide an ideal opportunity to include EV charge points.

8.5 DISABLED AND CHILD PRIORITY SPACES

There is a clear need to consider priority spaces in car parks to protect specific groups such as those with a disability and those with young children. Visitors with a blue badge may have mobility difficulties, which means it's vital they have the opportunity to park as close as possible to the intended destination such as the High Street. There are a number of disabled visitors that require walking aids that need to be setup prior to use. Without the additional space a disabled bay provides, this might be extremely challenging, especially in busy car parks with little areas for pedestrians.

Similarly with visitors with small children, it can be extremely difficult to safely extract children from vehicles into pushchairs without the additional space priority parking spaces can provide. They should also be located near intended destinations to provide additional safety, and reduce the time spent travelling within the car park environment where there is little segregation between traffic and pedestrians.

Within the Lichfield city centre car parks, there appears to be a shortage of priority spaces, in particular child priority spaces. There are 70 disabled parking spaces across the Lichfield city centre car parks. This means the city centre provides 3.3% disabled bays out of its total offering. Although there isn't a specific threshold, 4% is an approximate average level of disabled spaces based on work with previous local

authorities. For Lichfield city centre to achieve a 4% provision of disabled bays, there needs to be an increase of approximately 15-18 parking bays.

It should be noted that there are opportunities for disabled users to park on-street in several locations across the city centre. This is often appealing as it can provide better access to the intended destination. Due to the Covid-19 pandemic, it has been necessary to restrict some of the on-street provision. To compensate for this reduction in on-street provision, Lichfield District Council provided some additional temporary disabled parking bays within city centre car parks. Figure 38 provides examples of this temporary provision.

Figure 38 – Example of temporary disabled parking bays in Lombard Street car park

There is an ambition to pedestrianise parts of the city centre. This will naturally have an impact on disabled users being able to park on-street in some locations. Therefore, it is recommended to implement the 15-18 additional parking spaces required to achieve a 4% offering before any construction work begins on the pedestrianisation of the city centre to avoid negatively impacting disabled users. The distribution of these spaces should be across all car parks. However, priority should be given to the sites that have the temporary spaces as they are likely to be known to visitors. This includes Lombard Street and Bird Street car park. Additional spaces should be allocated as part of any development project, such as the new Multi-Storey car park for Birmingham Road Gateway.

There are very few child priority spaces across the city centre car parks. Based on the site visits, Backcester Lane car park was one of the only sites that provided this facility. The need to provide these spaces for parents and carers is critical to protect the service offering within Lichfield. The demand for child spaces will be largely impacted on intended destination. Therefore, car parks closest to key attractions, such as Bird Street, Lombard Street, and Birmingham Road Multi-Storey should be focused on for the inclusion of child priority spaces.

The Beacon Park car parks should also be included within the scope for priority spaces. The three Beacon Park car parks offer minimal disabled parking bays and no child priority spaces. These car parks are subject to high usage by visitors that wish to enjoy the park and it would improve the parking offer to incorporate priority spaces in these car parks.

8.6 PARKING ENFORCEMENT

The management of parking in the city centre car parks falls into two broad areas. Firstly, enforcement and secondly, the back office management.

It is important for the Council to consider and investigate the best and most cost-effective way of delivering the service whilst acknowledging that this important, customer facing service does still require dedicated resource.

Enforcement of on-street parking restrictions in Lichfield city centre is undertaken by Staffordshire County Council as the highway authority. Lichfield District Council take ownership of off-street car parks.

As all the car parks within the city centre are pay and display, there is a requirement for Civil Enforcement Officers to carry out patrols and issue Penalty Charge Notices where vehicles are not displaying a ticket, or the ticket has expired. The number of Civil Enforcement Officers needs to be appropriate for the size of the city centre and the number of car parks that require enforcement. If the Civil Enforcement Officers are required to visit locations outside the city centre, this is likely to impact the ability to enforce city centre car parks on a regular basis.

The revenue generated by the additional enforcement locations may not be sufficient to pay for additional patrols as there will be less parking outside the city centre. Given

the Council has a finite resource available it should be seeking to operate the car park service as efficiently and effectively as possible, including taking advantage of back office software management systems which in essence can provide a system to:

- Monitor Pay & Display machines to identify faults, check battery status and ticket stock.
- Provide financial information
- Provide a statistical report on usage and income

The staff resource required to carry out enforcement of car parks would be reduced with pay on exit systems. Vehicles would not be permitted to leave the car park until payment has been made. Therefore, if three car parks within the city centre had pay on exit facilities incorporated, there would be an over 15% reduction in locations to enforce. This is another benefit to the pay on exit systems. It should be noted, that if ANPR systems are considered for pay on exit systems, it's vital that this is incorporated with barrier control as local authorities shouldn't use ANPR systems without barrier control due to the enforcement difficulties currently in place.

8.6.1 MANAGEMENT OF CAR PARKS

While Lichfield District Council currently manage and enforce the off-street city centre car parks in partnership with Stoke-on-Trent City Council, consideration could be given to alternative approaches to determine whether a different management operation may be more cost effective to the Council. For instance, the enforcement and management of car parks could be outsourced to an external provider. Whilst this is already occurring within the Lichfield District, it will be worthwhile monitoring and reviewing the contracts to ensure value for money is always being achieved.

The benefits of this approach is the opportunity for an external provider to provide the resource, training, and management of the enforcement operation, which will significantly reduce the overheads of Lichfield District Council and enable income to be distributed across the service, which will improve the overall parking service.

An alternative approach would be to form an agreement with other neighbouring local authorities to either have the enforcement undertaken by another local authority or to take on the enforcement in other local authorities. This approach enables the parking

service to be streamlined with either the removal of enforcement and management responsibility, which provides the same efficiency improvements as outlined above, or to increase income coming into the parking service through the expansion of enforcement into other neighbouring local authorities.

It is recommended to carry out a more detailed study into these parking management opportunities with a view to consider the most effective model for Lichfield District Council as either a short-term or medium-term action.

8.7 PARKING INFORMATION ON LICHFIELD DISTRICT COUNCIL WEBSITE

For some visitors, especially those that haven't been to Lichfield before, the District Councils website may be the first location visited prior to the trip to understand parking arrangements and locations of car parks in relation to intended destinations. Therefore, it is important the parking information on the website is easy to interpretate, up to date, and contains the key information to inform journeys into the city centre.

The Lichfield District Council website has detailed information about the location, type, costs and availability of parking space within the city centre. The website doesn't includes live space availability data for any of the car parks, which is often a welcome inclusion for visitors attempting to understand locations to park. The website is more user friendly and accessible compared to neighbouring authorities with all key information located in one place.

However further improvement is possible to ensure visitors can gain as much information as possible prior to their journey. There are no interactive features to allow visitors the opportunity to view the same level of information that private companies can offer such as current occupancy rates, and estimated usage at specific times of day and day of week. This should be linked with any technology transformation undertaken by the council in the coming years.

9.0 PREPARING THE CAR PARK STRATEGY FOR LICHFIELD CITY CENTRE

9.1 INTRODUCTION

A successful parking strategy is one that supports other initiatives to achieve the objectives of a local authority, stakeholders and the public. Parking strategies can have an impact in isolation, but they are far more effective when used in parallel with other interventions. Free parking may seem like an effective way to increase use and boost the local economy, but there are many other factors to consider.

The British Parking Association carried out a user survey and ranked the top 10 factors that dictate a driver's choice of car park:

- Location;
- Personal safety;
- Safe environment;
- Tariffs;
- Ease of access;
- Congestion / queues;
- Number of spaces;
- Effective surveillance;
- Size of parking spaces;
- Appropriate lighting.

All factors have been considered as part of a parking strategy for Lichfield city centre car parks, with a focus on those factors that are related to supporting the new city centre Masterplan. The factors related to safety and security need to be as high quality as possible, but they have a limited impact on decisions about location, size and cost of parking which have a closer relationship with the city centre economy.

The provision of parking has an opportunity cost, i.e. the cost of the alternative land use that has been foregone in favour of parking. Unused car parking spaces do not just have a zero or maintenance cost, it also includes the opportunity cost of what could be built or provided on that site.

9.2 RELATIONSHIPS BETWEEN PARKING AND THE CITY CENTRE ECONOMY

City centre economic prosperity is driven by a wide range of factors that are interlinked in many complex ways. Population and demographics, the health of the local and regional economies, the size of the centre and its retail and leisure offer and the proximity of competing centres are just a few of the many important factors.

City centres can be considered as an ecosystem where retail is an important element, but it may not be the most important. Many city centres have seen a reduction in the number of shopping outlets, but the most successful city centres have found a way to respond to this change by tapping into new sources of income from leisure, food and drink uses and residential development.

Accessibility and transport options to a city centre are just one factor that users consider in their decision making about where to shop and the price and availability of parking is just one element of the whole travel experience. The link between parking and prosperity is difficult to isolate from amongst all these other factors and there is not much quantitative evidence beyond the anecdotal.

The Association of Town and City Management and the British Parking Association produced guidance on parking provision called “Re-Think! Parking on the High Street”. This showed that there is a clear link between the number of parking spaces and city centre footfall but the report warns against the conclusion that the provision of more spaces causes increased footfall. The report shows the link between the cost of parking and city centre footfall is less obvious and linear, suggesting that other factors are at work.

A major study was produced for the Welsh Government in 2015 titled “Assessing the Impact of Car Parking Charges on Town Centre Footfall”. Although most of the examples in the study are from Wales, the results and principles are still applicable to England and the West Midlands. The key findings of the study were:

- There is a lack of robust evidence to link car park strategies with city centre footfall. It is difficult to separate the impacts of parking charges from all the other factors in a robust and convincing way;

- Businesses and workers are convinced that parking charges have an impact on the number of people coming to city centres, but there is little published evidence to support this assertion beyond the anecdotal. There is a relationship, but it may be weaker than expected;
- City centre visitors do take account of parking charges and the availability of spaces, but they are just two of many other transport and non-transport factors;
- Free parking was often found to not benefit target visitors but was used by city centre workers rather than shoppers and it had little impact on footfall;
- City centre economies are highly localised and very specific to local conditions and town centre strategies should be tailored to local areas to maximise footfall.

Studies and reports by business organisations such as the Federation of Small Businesses often link city centre vitality with parking charges but provide little hard evidence to prove the link. Sustrans research found that traders over estimate the amount of income from car users and under estimate the importance of pedestrians.

In 2016 a major study investigating the links between parking and economic performance was undertaken on behalf of London Councils to research questions relating to the correlation between the amount of free / cheap parking and commercial activity (if any), how people travel to town centres and what they spend. The key findings drawn from the study that could equally apply to Lichfield were that:

• More parking does not necessarily mean greater commercial success;

• There is no such thing as free parking: Councils must pay for developing, maintaining and enforcing parking;

• Shopkeepers consistently overestimate the share of their customers arriving by car;

• Car drivers spend more during a single trip whilst walkers and bus users spend more during the course of a week or month (due to the fact that they visit more frequently).

10.0 CAR PARK STRATEGY OPTIONS

10.1 INTRODUCTION

A wide range of parking interventions exist to enable the Parking Strategy to support other policies and key documents within Lichfield such as the city centre Masterplan achieve their objectives. Engagement with stakeholders plus research and experience from other parking strategies and measures implemented in the UK has been used to develop a list of possible changes to the provision of parking within Lichfield city centre car parks.

The potential interventions have been assessed on an independent basis without any preconceptions. An assessment of the impacts of these interventions in other places and their appropriateness to Lichfield is presented in the following section. The potential strategy intervention headers are presented in Table 16.

1	Parking Capacity
2	Quality of Car Parks
3	Parking Charges
4	Car Park Designation
5	Sustainable Transport
6	Car Park Technology
7	Car Parking Enforcement

Table 16 – Potential parking strategy intervention headers

10.2 PARKING STRATEGY ASSESSMENT

Each of the potential interventions has been assessed in the following section to demonstrate their likely effects in the context of the city centre and the District Council parking operations. Many of the potential parking interventions are related to each other, for instance the parking charges have a direct relationship with demand and many other factors affect demand as well so these factors have to be considered together.

The interventions have been assessed with reference to a series of indicators, including:

- Economic indicators (e.g. footfall, expenditure, vacancy rates);
- Consideration of the city centre Masterplan;
- Traffic movements;

- Conservation and environmental;
- Council parking operations.

10.3 PARKING INTERVENTION 1: PARKING CAPACITY

The previous sections set out the forecast requirements for potential new parking capacity in the future. The key conclusions are that growth of parking demand in the city centre allied with the potential displacement of parking as a result of Tesco superstore introducing ANPR with a need to purchase at least £5.00 of goods may create a parking capacity shortfall. It is therefore essential that prior to the removal of any parking spaces through the city centre Masterplan, parking occupancy surveys are carried out and forecasting is updated to determine if any lost parking spaces are replaced in order to maintain an acceptable level of occupancy across the city centre.

10.3.1 INCREASE PARKING PROVISION IN CITY CENTRE

Based on future demand forecasting with the potential displacement of parking as a result of Tesco introducing ANPR, an increase in parking supply may be needed by the year 2026. This is based on a series of assumptions and a scenario that the Tesco car park is at capacity, which is unlikely. Therefore, this can be considered the earliest point additional parking may be required.

Whilst the results of the TEMPro forecasting suggests that Lichfield city centre will require additional parking capacity in the future, the model has not taken into account any scenarios around strategy interventions that may reduce the impact of parking in the city centre. Examples of these interventions include improvements to the sustainable transport provision, which will reduce the dependency on vehicles, and consideration of a Park & Ride transport hub that could provide parking out the city centre. This is discussed in more detail in section 10.3.3. Therefore, it may be possible to implement the city centre Masterplan without the need in provide any additional city centre parking spaces.

10.3.11 COSTS INVOLVED IN INTERVENTION

At this stage, it is difficult to estimate potential costs in the provision of additional car parking spaces in the city centre as it may not be required at all, and if it is, it's unknown how many spaces will be required. The costs involved are also dependent on the approach taken by Lichfield District Council. Increasing the occupancy of car parks can be achieved through the expansion of existing car parks or the implementation of new car parks. Obviously, the costs will be higher for the implementation of a new car park compared to the expansion of an existing car park.

When considering the cost of a Multi-Storey car park, the general approach is to estimate the cost per space, as a 400 capacity car park will cost substantially more than a 200 capacity car park. The average Multi-Storey car park is likely to cost between £15,000 and £20,000 per bay to build. Therefore, a 200 capacity Multi-Storey car park is likely to cost in the region of **£3 million - £4 million** whereas a 400 capacity car park is likely to cost in the region of **£6 million - £8 million**.

These costs only represent an average construction cost and many circumstances can impact the cost of a Multi-Storey car park such as location, cost of land, nature of the ground and buried utilities, type of material used for construction, and access and egress design. A further **£200,000-£250,000** is likely to be required for the pre-construction works including feasibility and design works, project management fees, and costs involved in the planning application. It is possible to implement car parks that are lower cost than Multi-Storey car parks, achieving similar capacities.

A common example of this is decked car parks that are designed using steel frame structures. These types of car park can save up to 25% of the cost of a traditional Multi-Storey car park. However, the appearance isn't as aesthetically pleasing and are more commonly found in locations such as train stations where public realm isn't as important factor as city centres. In a location with the historic nature and characteristics such as Lichfield, it's highly unlikely there would be an appetite from stakeholders for a decked car park.

Figure 39 provides examples of a traditional Multi-Storey car park and figure 40 provides examples of a decked car park.


Figure 39 – Examples of traditional Multi-Storey car parks


Figure 40 – Examples of decked car parks

A surface level car park will be substantially lower cost to deliver as there will be no (or very little) structural requirements and ground stabilisation works that can be high cost on Multi-Storey car parks. They also generally provide lower capacities unless a large parcel of land can be located. In a city centre environment, this is highly unlikely.

The cost of a surface level car park will be dependent on the level of infrastructure included. For instance having pay on exit systems with barrier control will result in higher costs than Pay & Display. As outlined in this strategy, the aim should be to move towards pay on exit. As the main cost for a surface car park will be the land acquisition, it's not considered feasible to provide a cost estimate, as there is so many variables involved.

10.3.2 RESTRICT TRAFFIC WITHIN CITY CENTRE TO REDUCE DEMAND ON PARKING

Alternatively, Lichfield District Council can investigate solutions that may restrict traffic entering or parking within the city centre such as Clean Air Zones, congestion charges, and parking levy's. These solutions are designed to discourage traffic in the main centre where the car parks are located.

A Clean Air Zone (CAZ) is defined an area where targeted action is taken to improve air quality. It can be confined to a single road or a part of a city. Birmingham City Council are in the process of implementing a CAZ, which will go live in June 2021. The Birmingham CAZ will be classified as a class D CAZ, which provides restrictions to Buses, coaches, taxis, PHVs, HGVs LGVs and cars.

Birmingham's Class D CAZ will cover an area of the city inside the inner ring road (A4540 Middleway) and once live will mean that all non-compliant vehicles, which account for around 25% of the vehicles on Birmingham's roads, will need to pay a daily charge to drive into or through the CAZ. Cars, taxis and vans will pay £8 per day to drive into the CAZ in Birmingham, while HGVs, coaches and buses will be charged £50 per day.

It's likely that the Birmingham CAZ will see a noticeable impact on the city centre car parks as vehicles that do not meet the criteria will be required to pay a daily charge. If Lichfield District Council was to consider a Clean Air Zone, it would be unlikely that any increase in parking spaces will be required within the next 20 years.

A Workplace Parking Levy (WPL) is a charge on employers who provide workplace parking, a type of congestion charging scheme that has been introduced in Nottingham. To date, Nottingham is the only UK city to have introduced a WPL. Nottingham's rate is £415 per parking space per year, which has generated around £64m since 2012.

10.3.21 COSTS INVOLVED IN INTERVENTION

Implementing schemes that will restrict traffic entering the city centre, or require to pay a charge for entering the city centre, will require initial costs to get to a point where a scheme can be launched. However, this cost outlay will quickly be repaid through charges associated with the scheme. The time it will take for the scheme to break-even will be influenced by the threshold of the scheme, such as the vehicles impacted and the boundary of the restrictions. It is recommended to use income generated by the scheme to fund future city centre interventions covered within this parking strategy as well as other strategies designed to enhance Lichfield city centre.

As outlined in section 10.3.2, a number of cities have or are in the process of implementing schemes of this nature. It is recommended to use these schemes as benchmarking opportunities to gain a better understanding of costs involved in the implementation and the charges in place for traffic that fall within the threshold.

A feasibility study will be required to determine the exact scope, location, and threshold of a scheme in Lichfield. This could be carried out by Council officers, although it may need external consultancy support. A study of this nature is likely to cost in the region of **£30,000 - £50,000**. Further design / implementation work will be required to progress the findings of the study along with public consultation across the city centre. Therefore, a budget of approximately **£100,000** would be required to get to a position to implement a scheme to restrict traffic movement in the city centre.

10.3.3 DEVELOPMENT OF A PARK & RIDE HUB OUTSIDE CITY CENTRE

The most effective method to increase parking provision within Lichfield, without compromising the city centre Masterplan and offering is to investigate the delivery of a Park & Ride hub outside the city centre. A Park & Ride hub will provide a location for visitors entering the city centre to park on the outskirts of the city and use public transport to complete the final part of the journey to the city centre.

The main benefit of a Park & Ride hub is the reduction in traffic in the city centre. There will be improvements to the air quality as there will be less congestion. Utilising public transport is a sustainable transport provision, which are usually well received by

stakeholders. A Park & Ride hub should provide opportunity to incorporate further sustainability improvements such as the integration with docked bike schemes to provide an alternative mode of transport for visitors to use and coach parking, which will negate the need for coaches to enter the city centre.

A successful Park & Ride hub will be located close to the Strategic Road Network (SRN). In this instance, the SRN will include roads such as the A5, A38, A51, and M6 toll. The justification for being close to the SRN is that visitors will want the journey to be as straight forward as possible. A driver will be a lot more reluctant to use a Park & Ride hub if they are required to undertake the majority of the local roads journey. Easy access and egress off the SRN will make the site more appealing.

Another key consideration to the success of a Park & Ride hub is the cost of parking. There is a convenience to parking in a city centre that cannot be replicated by a Park & Ride hub. Therefore, the cost of parking will need to be advantageous i.e. less than parking in the city centre.

Although a Park & Ride hub can be utilised by all visitors to Lichfield city centre, there is an argument that it would be more beneficial for long-stay parking such as for businesses and employees. A short-stay visitor may not want the additional journey time if they are staying for short periods of time. A visitor needing to park all day will not mind the journey time as much and can use the time to be productive as they are not driving. For instance, checking emails.

To maximise the effectiveness of a Park & Ride hub, it would be beneficial to target more than one site as a long-term objective. Whilst a hub can work well as one site, it potentially requires users to circumnavigate across the city centre to access the site. For instance, if the Park & Ride hub was located to the south of Lichfield, visitors from the north would need to travel around the city to access the car park. Implementing the Park & Ride hub initially as one site is recommended, with the inclusion of a second site at a later date, subject to the success of the intervention.

Figure 41 illustrates some examples of where a Park & Ride hub could be located to the north and south of Lichfield city centre. These are based on the proximity to the SRN rather than the identification of specific land parcels that may be viable.

Figure 41 – Potential locations for Park & Ride hub for Lichfield

Site 1 and 2 are located in the southern area of Lichfield city centre. They are located with a good proximity to London Road and Birmingham Road which are two major roads which enter into and exit the city.

Site 3 is located on the northern extent of Lichfield, and is located near the SRN (A5192). This position offers a good access point from the SRN and also services users approaching the city from the North. The land appears to be agricultural land which means that valuable greenspace isn't affected by the acquisition and delivery of this space into a Park and Ride hub.

Sites 4, 5 and 6 are located on the east and west side of Lichfield, this offers options in positional location for the Park and Ride hub. The ideal requirement would be for the sites to be located on the north and south of Lichfield, allowing for a high level of user uptake. The north and south locations could hold constraints that may not be able to be mitigated. The east and west locations offer an alternative to this in delivering a space that can meet all the required parameters apart from ideal location.

As part of the development of this intervention, a case study has been identified to demonstrate the effectiveness of a Park & Ride hub. Winchester is a city located in Hampshire, which is subject to high-volumes of tourists as the original capital city of England as well as the Cathedral and other landmarks.

There are limited car parks in Winchester city centre and with high employment rates and visitors throughout the year, there was considerable parking demand, especially during peak periods. A Park & Ride hub was implemented, which involved the creation of two car parks; an east site; and a west site. The two car park locations were located just off the M3, and close to the A38 as part of the SRN.

Since implementation a further two car parks have been incorporated into the Park & Ride offering. The car parks are open 7 days a week, although the bus service only operates between Monday and Saturday. The car parks all have adequate CCTV provision for security purposes. There is currently 1861 P&R spaces available across all sites.

The cost of the Park & Ride is £3.00 per day (with concessions available for season tickets), which provides all-day parking and the bus journey into the city centre and back to the car park. The ticket will permit as many as 8 passengers, which works out at less than 38p per passenger.

Whilst the Park & Ride is popular with tourists and visitors undertaking short-stay parking, there is far greater usage from businesses and employees who park all-day. In comparison to the £3.00 daily charge in the Park & Ride hub, city centre car parks have an all-day tariff of £15.00. Therefore, if a business or employee needs to park five days a week, using the Park & Ride will save £60.00 per week. For this reason, the Park & Ride car parks are extremely popular and daily occupancy rates fall within the 80-85% rate, and close to 100% at peak periods i.e. run up to Christmas.

Figure 42 provides a map that demonstrates the Park & Ride route operation for Winchester city centre.

Figure 42 – Park & Ride plan for Winchester city centre

10.3.31 COSTS INVOLVED IN INTERVENTION

A Park & Ride scheme is likely to be one of the highest, if not the highest intervention within a car park strategy. Similarly to cost estimates for Multi-Storey car parks, the cost for a Park & Ride site will be dependent on the size, location, and type of design. A Park & Ride scheme could be as simplistic as an area of tarmac with parking bays and payment facilities. A far more comprehensive scheme can act as an integrated transport hub with amenities such as shops and cafes, active travel provision, coach parking and public realm.

It is recommended to utilise the opportunity of a Park & Ride scheme to integrate active travel facilities that will have a positive impact on Lichfield from a sustainability perspective. It will also reduce the traffic demand in the city centre. Whilst it isn't necessary to incorporate amenities that will likely be high-cost measures, the better the provision the more well-used it is likely to be. Therefore, the higher the cost, the greater the usage will be.

As discussed above, locating a suitable site for the Park & Ride will be challenging and this will influence the cost estimate. Due to the variables involved in this, it isn't possible to calculate a cost estimate for this. The construction works will be more effective when considering previous schemes that have been implemented. Portsmouth City Council implemented an integrated Park & Ride interchange that

provided over 600 parking spaces, with active travel facilities, and amenities at a cost of £21 million.

This is far more substantial that what is required for Lichfield. Using this scheme as an example, it's likely that half this provision would still provide a suitable, effective provision for Lichfield. It may even be possible to achieve the desired outcome for a third of this. As outlined above, a Park & Ride scheme in Lichfield would be most effective with a north and south site, although this should be done in two phases.

Based on this, the cost of a phase 1 Park & Ride scheme is likely to cost in the region of **£3 million - £5 million**, with a similar cost for a phase 2 scheme. Without the active travel, coach parking, and some amenities the cost would more likely be in the region of **£1 million - £2 million**. However, usage would likely be lower, which would impact the Benefit Cost Ratio. These costs involve the pre-construction works such as feasibility, design, and planning tasks (not land acquisition) as well as construction.
As well as the capital outlay costs to deliver the infrastructure, there will also be the site operating costs. Some typical costs are summarised in table 17 below.

Item	Cost
Site supervision and security	£5,000
Cleaning and maintenance	£6,000
Marketing	£2,000
Publicity materials	£5,000
Utilities	£12,000
CCTV maintenance contract	£10,000
Total	**£40,000**
Contingencies (20%)	£8,000

Table 17 – Typical site operating costs for Park & Ride

10.3.4 UTILISE ON-STREET PARKING FOR SHORT-STAY PARKING ACTS

On-street parking is recognised as providing an essential service in enabling short-stay visits to take place close to many city centre destinations, which is provided free of charge through limited waiting. Most of these on-street spaces in the city centre are likely to be very well used. It is not envisaged that on-street parking is likely to change significantly enough to reduce capacity in the future, so that on-street parking has not

been included in the calculations of future demand and capacity. However, minor changes may be necessary for traffic management or public realm reasons and consideration should be given to increasing the provision where possible to encourage short-stay visits without impacting key car parks.

On-street parking restrictions do not incorporate Sunday within the Traffic Regulation Orders (TRO), meaning there is likely to be substantially more on-street parking occurring on Sundays. This may impact the local road network and consideration should be given to incorporating Sunday into the TRO to avoid this situation worsening. With a nominal £1.00 all-day tariff in operation in city centre car parks on Sundays, this isn't likely to create a significant issue.

10.3.41 COSTS INVOLVED IN INTERVENTION

This will be one of the lowest cost interventions included within the parking strategy. As the intervention is looking at providing free short-term parking bays, there is no associated infrastructure required such as payment machines. Therefore, the only cost is officer time to produce designs, the legal costs for advertising Traffic Regulation Orders, consultation with stakeholders, and minimal implementation costs.

The implementation costs will involve signage and road markings only. The overall cost will be dependent on the number of locations that are included within the Traffic Regulation Order. The signage cost per site is likely to be no more than **£1,000**. This will likely enable two signs and posts to be installed. The road marking cost per site is likely to be **£500.00**. For illustration purposes, four sites within the city centre would cost approximately **£6,000** to implement.

The higher cost will be the non-implementation costs for this intervention. Although the design, consultation, and legal costs can be incorporated together, it will still cost more than the delivery costs. Working on the assumption that the work will be carried out by the local highway authority (Staffordshire County Council), the design cost will be in the region of **£5,000**. Carrying out consultation with stakeholders will cost in the region of **£2,500**. Carrying out the legal work, which includes advertising the Traffic Regulation Order will cost in the region of **£5,000**.

Therefore, the non-implementation costs are likely to cost approximately **£12,500**. Working on this basis, along with the illustration of four sites across the city centre, funding of approximately **£18,500** will be required. Less sites will reduce this fee slightly and more sites will increase the fee slightly. If a decision was made to use an external consultant to carry out the work as oppose to the local highway authority, this may increase the cost slightly. However, **£20,000** should be sufficient for the work.

10.4 PARKING INTERVENTION 2: QUALITY OF CAR PARKS

As discussed in section 4, the quality of the existing car parks is generally below the required standard to maximise the visitor experience. Perhaps apart from The Friary Multi-Storey, each car park has the scope for improvements to be made, which may make certain car parks more appealing. For instance, Birmingham Road Multi-Storey is located in a good position. However, the condition of the car park is poor. Improving this is likely to result in greater usage.

10.4.1 CAR PARK IMPROVEMENT REGIME

Based on the financial data shown in table 5, each car park is generating income as a result of ticket sales, and usage. Allocating a proportion of this income to create an improvement regime will result in each car park improving over the coming years. Utilising the income generated by the car parks will mean no capital funding will be required to address the issues.

The British Parking Association offer Life Care Plans, which use investment to prolong life span of car parks. This leads to a better customer experience and provides a more sustained investment than an ad-hoc approach to maintenance.

Using the information contained in section 4, Lichfield District Council will be able to build up an inventory of required improvements for each car park. These can be filtered into short-term and medium term actions based on the severity of the car park and required intervention. The inventory should prioritise both car parks and interventions. For instance, Lombard Street would benefit from improvements to the illumination for the lower level of the decked car park. The car park would also benefit from pay on exit. An immediate action could be to increase illumination and a short-term measure could be to install a pay on exit system.

Building an inventory for each car park with costed interventions will enable planning at the start of each financial year. The number of improvements delivered would be largely based on the income generated from car parks, especially if the allocation for the improvement regime was a percentage of turnover. For example, if the turnover for car parks was £2.5 million one year and £3 million the following year, more interventions would be delivered the second year.

10.4.11 COSTS INVOLVED IN INTERVENTION

It isn't possible to provide a realistic cost estimate for this intervention as there are too many variables involved. For instance, it would be for Lichfield District Council to identify the improvements for each car park as well as which car park is addressed each year. The cost is likely to vary significantly for each car park. For instance, the improvements for the train station car park will be a lot different to the improvements required for The Friary Inner car park.

As a guide, it is recommended to consider a fixed percentage of turnover as the budget to address car park improvements. A percentage in the region of **5%** should be sufficient to achieve improvements across all car parks within a five-year period, assuming turnover remained fairly consistent across car parks and taking income before Covid-19.

Taking the 2018/2019 income figures generated by Lichfield District Council as shown in table 6, this would provide a budget of **£127,144** each year for a improvements programme. This should provide sufficient funding for approximately 4-6 car parks to be improved.

10.4.2 CAR PARK SIGNAGE STRATEGY

As outlined in section 8.2, there is a clear need for improvements to be made for signage relating to city centre car parks. Section 8.2 provides sufficient detail to understand the most effective approach to improving the car park experience by delivering various levels of car park signage, both static signs, and Variable Message Signs.

To provide a structure around this, and ensure a consistent approach is taken with signage to and from car parks, it is recommended to produce a separate car park signage strategy. This document will outline the required parking signage for each level i.e. strategic, specific car park etc, and can provide sign face designs that can be used to create schedules for delivery. Specific locations can be determined to allow quick installation. Erecting signage (most notably static signs) is a low cost item and may be subject to quick wins either at the start or end of financial years if funding requires spending. Therefore, the aim of the car park signage strategy should be to provide Lichfield District Council with a catalogue of signs that can be delivered in a short timeframe.

Costs should be allocated to each type of sign as the number of signs required make it unlikely this intervention can be delivered across one year. A delivery programme should be developed to prioritise the signs that are delivered first. Based on the high-level work done as part of the car park strategy, it's recommended to focus on strategic level parking signs initially to assist direct traffic onto the local roads. As an interim measure, static signs can then provide further direction, with an aim to replace some of these with VMS.

10.4.21 COSTS INVOLVED IN INTERVENTION

The cost for the signage improvements within the city centre will be dependent on the signage strategy. If the signage strategy outlines 10 Variable Message Signs and 10 standard signs this will have a much higher implementation cost compared to an alternative recommendation, which could be five Variable Message Signs and 15 standard signs. Therefore, it isn't feasible at this stage to provide an overall cost estimate.

It is possible to provide a cost estimate for individual signs, which can provide an indication on likely funding required. A standard static parking sign will cost in the region of **£500-£2,000** depending on the size and the information contained. Some parking signs can be large junction style signs that are located on the strategic road network and require two reinforced posts whereas other parking signs can be small directional signs that can be located on existing posts.

Similarly with Variable Message Signs, the cost will be dependent on the type of sign with large and small sign options available. A large Variable Message Sign is likely to cost in the region of **£15,000-£20,000** depending on the detail and location. A medium size sign is likely to cost in the region of **£10,000-£15,000**, and a small size sign is likely to cost in the region of **£5,000-£10,000**. These costs include the work required to link the signs to central Intelligent Transport Systems that can control the signs.

Based on the initial work undertaken as part of this car park strategy, three strategic Variable Message Signs and eight specific car park Variable Message Signs have been recommended. Working the assumption the strategic VMS would be large signs this would require **£45,000-£60,000** of funding. Assuming the eight specific VMS may be small or medium an approximate budget of **£80,000** would be required. This means in total in the region of **£125,000-£140,000** would be required for a city wide Variable Message Sign system.

It's unlikely that this level of funding will be immediately available. Therefore, it's likely that the VMS will need prioritising based on what is considered the most critical sites to deliver in year 1. The signage strategy will likely demonstrate that static signage can be used in conjunction with the VMS. The cost of static signage will be minimal in comparison to the VMS. A budget of approximately **£10,000-£20,000** will be sufficient to provide accompanying signage to the VMS.

As outlined above, it is recommended to develop a car park signage strategy, which will provide more detail and context around what is required for car parking signage in the city centre. A signage strategy can be carried out internally, although it may be more effective to use external consultants who will consider sites based on driver needs rather than any local knowledge that may impact the effectiveness of the signage. A budget of **£15,000-£20,000** would be sufficient for a signage strategy.

10.4.3 INCREASE SAFETY PROVISION IN CAR PARKS

Although there is no major concerns with pedestrian safety within the city centre car parks, it's felt that increasing the safety provision for Non-Motorised Users (NMUs) should be taken forward as part of the car park improvement regime. The level of safety provision will need to be taken on a car park by car park basis as the size and location of car parks will be an important consideration. For instance, the safety

provision for a large car park such as Birmingham Road Multi-Storey will be considerably different to the safety provision in Greenhill car park.

In the larger car parks, the aim, where possible should be to incorporate pedestrian walkways that are coloured or segregated (i.e. kerb) from the main traffic flow. The Friary Multi-Storey has this provision in place already and provides a good example of the safety provision that can be achieved. Figure 43 provides an example of the pedestrian provision in place within the car park.

Figure 43 – Example of pedestrian provision in The Friary Multi-Storey

A list of potential safety improvements should be developed for each car park, with costings for delivery. These will fall into short and medium term actions based on potential funding that may be available. The safety interventions should be prioritised based on what is required first. Bird Street is a site that would benefit from additional safety provision for pedestrians and as the most popular car park within the city centre, this would make the site a high priority.

10.4.31 COSTS INVOLVED IN INTERVENTION

The costs involved in this intervention would need to be decided on a car park need by car park need basis. For instance, what would be effective in Redcourt car park may not be effective in Lombard Street. It isn't envisaged that high levels of funding will be required and it's likely that this would be carried out over a multi-year funding programme similar to the car park improvements programme. A budget of **£10,000-**

£15,000 per year would be sufficient enough to allow pedestrian safety improvements to be made to at least three or four car parks.

10.4.4 PUBLIC REALM IMPROVEMENTS IN CAR PARKS

Alongside the safety improvements, it is recommended to consider public realm improvements within the city centre car parks to improve the appearance and create a more welcoming environment for visitors. It's acknowledged that Lichfield District Council have commissioned a separate piece of work on the creation of a public realm strategy, and it's expected this will be incorporated into that document.

The public realm improvements and safety improvements are directly linked, and there is opportunity to integrate these as one deliverable if required. Figure 44 provides an example of public realm improvements within a city centre car park in the North-West. The work was a result of a need to resurface the car park. It provided an opportunity to install greenery such as trees and vegetation alongside new pedestrian walkways and crossing points that achieved a far better environment for NMUs alongside a better parking experience. This is an example of what can be achieved within a surface car park such as Bird Street or Redcourt.

Figure 44 – Example of public realm improvements in surface car park

There are various types of public realm improvements that can be considered as part of improvements to Lichfield city centre. These can include:

- Improved surface and use of different materials;
- Coloured surfacing within car parks to provide greater distinction of spaces;
- Incorporation of greenery such as trees and vegetation;
- Bespoke way-finding that has linkages to the historic nature of the city;
- Lighting improvements;
- The creation of additional facilities such as open spaces, and active travel hubs.

As part of the public realm improvements, consideration should be given to the upgrading of street lighting. LED lighting offers sustainability improvements as it is more energy efficient compared to older style lighting and generally provides greater illumination, which will likely result in a better experience for users, especially during hours of darkness. There will also be a cost saving due to the efficiency.

10.4.41 COSTS INVOLVED IN INTERVENTION

Providing a cost estimate for this intervention isn't considered viable as further work would be required to develop potential improvements to each car park. It's also one of the lower priorities included within the car park strategy. It is recommended to develop a list of public realm improvements that are costed over the short-term action plan before determining which sites should be delivered.

10.4.5 UPGRADE PAY & DISPLAY TO PAY ON EXIT IN SUITABLE CAR PARKS

Pay on exit is widely regarded as the preferred method of paying for parking. It's likely to be a positive inclusion for the city centre as research shows that visitors spend longer in locations when pay on exit systems are in place as there is no concern on the expiry of tickets that may lead to the issuing of Penalty Charge Notices.

Drivers take a ticket (or token/chip coin) on entry at a barrier system before locating a space. The ticket or token is then kept in their possession for the duration over which the vehicle is parked. On returning to the car park, the driver pays for their parking stay at a centrally located payment machine before returning to their car and exiting via a barrier system within a grace period (e.g. 10-15 minutes) using their validated ticket or token. A flat rate can apply, therefore eliminating the need to take a ticket on entry or to have an entry barrier.

Advantages

- the system is considered effective in that payment is made for actual parking stay, rather than based on a predicted stay as with Pay & Display;
- the system can be fully automated and dispenses with the need for manned booths at entry/exit points;
- duplicating machines (in parallel or series) can provide backup in the case of mechanical failure;
- a charging system can be used to designate the length of stay;
- the system is seen as a deterrent to thieves as a ticket is required for exit.

Disadvantages

- Equipment and maintenance costs are relatively high and technical support is required;
- It is essential that prior to arriving at the exit point drivers have made the payment or they will not be able to get through the barrier and will cause delay;
- A contingency plan is necessary in the event of equipment malfunction. Mechanical failure to barriers and payment machines can cause delay and congestion and loss of revenue is a problem if barrier or ticketing machines are out of order.

Pay & Display will be appropriate in smaller car parks or where parking charges are low. Typically one P&D unit might serve 30 – 70 car park spaces and collect several hundred pounds of revenue per week.

Pay & Display requires the driver to initially locate a space and then purchase a ticket from a machine within the car park. The ticket is displayed in the vehicle. It is a tried and tested system which the public understand and are familiar with.

Advantages

- The system eliminates the requirement for entry/exit barriers and so eliminates delays at entrances and exits to the car park. A single entry lane can admit up to 15 vehicles per minute;
- In the terms of the equipment that is required, there are no barriers needed, but at least one Pay & Display machine is required on each floor;

- The use of enforcement to ensure short stay can increase turnover, as users are wary of receiving a penalty charge notice;
- The presence of Civil Enforcement Officers can act as a deterrent to crime.

Disadvantages

- The system requires regular monitoring or enforcement by staff to ensure that users firstly have a ticket and secondly do not exceed their length of stay;
- In cases where parking is permitted for more than one fixed period, the driver must decide how much time to purchase before leaving the vehicle;
- With the risk of a penalty charge most users will tend to err on the side of caution and pay to stay for longer than they actually need to, which can increase revenue and so is perceived as unfair;
- There are safety concerns, as display of ticket indicates the length of time the owner is likely to be away from the vehicle.

User's Value for Money

Pay on exit is often perceived as a fairer system, charging for the actual time of stay. In reality the tariff is often broken down into time bands (as they would be in a Pay & Display system). The user has to pay for the entirety of the band, even if they only stayed for a minute within that band (e.g. the user pays for two hours if the system is set in hourly bands even if he or she only stayed for one hour and one minute). Also the user starts to pay for 'parked' time as soon as they have taken a ticket on entry, even whilst searching for and occupying a space which is not the case with Pay & Display. On the other hand, users do not face a steep penalty charge if they misjudge how long they will be away for their vehicle, as they do in a Pay and Display system.

Enforcement

Pay and Display does have higher enforcement costs, but all systems still require some enforcement of contraventions such as parking in a disabled bay without a Blue Badge or parking outside the marked bays in the car park. In terms of enforcing length of stay in a Pay on exit car park, this is usually built into the charging system so that for example, those who stay over 4 hours in a short stay car park might be charged £10 or £20 at the machines when they go to validate their tickets. Without a validated

ticket or token, they will not be able to exit the car park. Therefore, the charges can be used to enforce a length of stay designation. Although the majority of revenue from penalty charges would be lost in a Pay on exit car park, this is balanced by the reduced enforcement needs, and therefore the systems have relatively neutral enforcement cost/revenue implications.

Revenue

With comparable maintenance /operational costs it is difficult to say which system will collect higher revenue and this would vary depending on a number of conditions (e.g. size, complexity, level of use) from one car park to the next and depending whether there were economies of scale. Although many users over pay in a Pay and Display system because they have overestimated their length of stay, this often only offsets those who under pay or do not pay at all and manage to escape a penalty charge. A Pay on exit system means users always pay the correct amount for their parking.

10.4.51 COSTS INVOLVED IN INTERVENTION

There are numerous suppliers of parking management systems and equipment on the market, responsible for sales, project management and installation. The type of service and quality of equipment available can vary considerably between suppliers and the level of parking system required. A parking system can be tailored to suit the individual car park and its needs, from the very basic to a high-tech, state of the art system.

Table 18 provides a breakdown of the key equipment and general costings associated with a Pay on exit system. The range of costs detailed below depends on the manufacturer and the complexity of the equipment. For example, the machinery that uses tokens rather than tickets tends to be at the higher end of the cost range, although it can be more reliable and cost less in operation.

MACHINE / EQUIPMENT	PURCHASE COST
Entry / Exit Barrier	£1,000 - £3,000 (per barrier)
Entry Ticket Dispenser	£3,000 - £6,000 (per dispenser)
Exit Ticket Reader	£3,000 - £5,000 (per reader)
Pay on Foot Machine	£10,000 - £20,000 (per machine)
Operating/Control System & Connection	£75,000 - £150,000

Table 18 – Typical costs for a pay on exit system

10.5 PARKING INTERVENTION 3: PARKING CHARGES

10.5.1 ADJUSTING THE PARKING TARIFF

An effective way to manage the use of car parks is to change the cost of parking by adjusting the tariff. The effectiveness of alterations to the Lichfield city centre car park tariffs will be constrained by the cost of parking in nearby cities and centres that may provide competition to Lichfield for visitors. If Lichfield city centre charges are changed too much it could just cause people to transfer to neighbouring areas as the cost of parking is cheaper.

However, as outlined in section 3.2, the cost of parking in Lichfield city centre is generally cheaper than all neighbouring areas and cities/towns that have similar characteristics to Lichfield. Therefore, it's unlikely the increasing of parking charges would result in a significant reduction in city centre footfall as there will not be cheaper alternatives.

Another important consideration when adjusting the car parking tariff is to ensure there are no alternative parking operators that would benefit from parking tariffs increasing.An example of this would be a private operator within the city centre who have separate parking tariffs. Increasing the charges may cause displacement to this car park as visitors seek better value for money. Lichfield District Council are one of only two parking operators within the city centre (Three spires shopping centre) apart from the Tesco superstore, which is currently introducing ANPR within the car park, which will restrict visitors using this car park.

Based on the above, there is scope for the parking charges to potentially be increased within Lichfield city centre. Informed by research by TRL for the Department for Transport, Table 19 summarises the key advantages and disadvantages of increasing or reducing parking tariffs.

Increasing Charges	
Advantages	**Disadvantages**
Increases turnover of the most convenient parking spaces, improving consumer convenience, facilitating deliveries, and reducing cruising for parking (searching for an unoccupied space)	May discourage people from visiting the area and reduce economic viability

Reduces the number of spaces needed to meet demand, reducing the total parking costs and allowing more compact development	May reduce accessibility for less well-off users and prove politically and socially unpopular
Encourages long-stay parkers to use less convenient spaces, and encourages travellers (particularly commuters) to use alternative modes when possible	May not provide sufficient funds to facilitate delivery of viable alternative forms of travel
May reduce total vehicle traffic and therefore problems such as traffic congestion, accidents, energy consumption and pollution emissions	If poorly managed and implemented congestion, accidents, energy consumption and emissions could increase as a result of redirection of traffic into inappropriate alternative areas
Generates revenue; ensuring that users pay a greater share of municipal road and parking costs	Only if overall demand for parking is maintained and policy does not divert users to alternative locations
	May discourage people from visiting or returning to the city centre
	May shorten stays in the city centre
	May encourage 'searching' traffic which would increase congestion and air pollution, and possibly illegal or inappropriate parking
	May reduce the image of the city as a retail and leisure destination
Decreasing Charges	
Advantages	**Disadvantages**
Cheaper parking may boost demand for travel into the city centre, supporting economic activity	Cheaper parking may contribute to an overreliance upon car-based travel into the city centre and undermine efforts to support adoption of sustainable travel patterns
Decreased charges would likely be a popular move and would be socially easy to implement	Reduced tariffs may lead to reduced income to the Council to invest in wider transport infrastructure
	Reduced tariffs may boost demand for parking leading to issues with supply of parking spaces

Table 19 - Altering Parking Tariffs Key Advantages / Disadvantages

Although the following section should not be considered a detailed evaluation of the likely impact of increasing or reducing charges in Lichfield city centre, an outline consideration of the broad merits of each has been undertaken.

Operational Impacts of Different Tariffs

The advantages of increasing or reducing parking tariffs in Lichfield city centre car parks can be summarised as follows:

- Increasing parking tariffs is most effective as a policy to manage demand in locations where demand is high, capacity is limited and where specific location

and environmental constraints / sensitivities require careful consideration. Where it is anticipated that overall demand for access by car will remain high, it might be concluded that increased charges would increase the overall parking income received. In such circumstances it would be reasonable to conclude that increasing parking charges would support the economic performance of the city centre businesses by increasing the turnover of parking spaces, helping to ensure a healthy amount of parking remains freely available at any given time for visitors arriving, and reducing unnecessary vehicle circulation and associated congestion and delay.

- A policy to decrease parking tariffs might best be employed to boost low demand and make use of existing spare capacity and is popularly considered to be the most effective means of stimulating local economic activity by increasing the attractiveness of the area to "new" visitors and increasing the dwell time of existing car borne visitors to the city centre. In general terms it might be considered unusual for such a policy to be specifically selected as a mechanism to boost associated income. However, if the effect of lowering tariffs were to boost demand, it may be the case that growth in demand might be sufficient to boost overall income and offset losses implied as a result of reducing individual tariffs.

Existing tariffs in Lichfield city centre car parks are relatively low when compared to many nearby local authorities and cities/towns with similar characteristics to Lichfield. This includes both short-stay and long-stay, all-day parking as highlighted within the benchmarking exercise. None of the locations chosen for the benchmarking exercise provided a complete lower parking tariff across the day or even within a period i.e. up to 4 hours (short-stay) or 4 hours and above (long-stay).

On the basis of the available evidence that existing parking demand remains broadly within existing capacity, there is no immediate justification for raising charges across the board. There may however be some limited justification for amendment of tariffs in individual car parks to encourage the relocation of longer-stay parking activity towards more peripheral car parks thereby freeing up space in more central car parks for shorter-stay parking activity (this is assessed in detail in the following section).

It may also be the case that charges for short-stay and long-stay, all-day parking could be increased to a rate more in line with nearby competitor cities as set out within table 6, although the implications of doing so would need to be considered closely to ensure that an appropriate balance is struck between the associated costs and benefits.

If the parking demand increases in the future in line with the forecasting shown in tables 10-13, one response would be to increase the charges in the city centre car parks. This could help to manage the demand and possibly generate more income, but the risks of this policy are that people could reduce their length of stay or not visit Lichfield at all. One positive impact would be if more people chose to use sustainable travel in response to higher charges.

These are complex travel decisions that people make that take many variables into account, with the cost of parking being just one of them. For some people it could be the deciding factor that triggers a significant change in behaviour while others would not place much importance on it.

Adjusting Hours of Charging

Parking charges applicable in Lichfield city centre car parks could be changed to stimulate activity at the times of the day or week that are considered to be a priority. This can include evening tariffs, which is currently not charged to manage parking for the night time economy. Car parks that operate an evening tariff, usually provide a level of incentives to generate demand by refunding parking charges for customers and reducing their rates if criteria is met.

More Flexible Parking Tariffs

The use of flexible parking tariffs is an option that could be considered as a short-term or medium term action, particularly given the relatively recent emergence of new technologies allowing potential implementation of relatively easy and transparent adjustment mechanisms. This approach could involve adjusting tariffs more frequently by location, over time or for specific events to achieve desirable changes in travel behaviour.

Where car parks are under or over-used, incremental changes in tariff could be used to attract more users or to reduce demand where car parks are at capacity. Increases

should be largely balanced by decreases in charge, so the scheme is not seen as a mechanism for increasing charges. New technology may help to communicate changes in tariff and the ability to make short term changes. Variable signs, improved pay station equipment and increased use of online and mobile technology can be used to enable more flexibility in adjusting tariffs to match demand.

Examples of car parks where this may be applicable include The Friary Multi-Storey car park, which is severely underused and Bird Street, which is subject to high demand on a frequent basis.

An alternative to physically adjusting parking tariffs could be to offer concessions within identified car parks. For example, due to the low usage of The Friary Multi-Storey car park, this car park could be subject to business permit parking, where concessions are offered to increase usage. If a business permit cost £400 a year in a long-stay car park with high usage, Lichfield District Council could promote a business permit costing £300 a year within The Friary Multi-Storey car park.

10.5.2 BENCHMARKING WITH NEIGHBOURING AUTHORITIES

As Lichfield doesn't have any private parking operators, any impact of adjusting parking charges within the city centre will likely result in visitors relocating to other locations as there isn't an alternative parking solution (unless on-street spaces are located). Therefore, one of the greatest barriers to increasing parking charges would be if neighbouring local authorities were providing a better parking offer.

Currently, this isn't the case, as Lichfield city centre parking tariffs are the most value for money across all sites included within the benchmarking exercise. Whilst it's unlikely local authorities will reduce their parking tariffs, it's important that their parking tariffs are monitored to ensure there isn't a point where neighbouring authorities provide a better value for money parking offer as this will have a detrimental impact on the city centre economy.

Therefore, it is recommended to carry out a regular benchmarking exercise with neighbouring local authorities and cities/towns with similar characteristics to Lichfield to monitor parking tariffs to avoid a situation where visitors may be attracted to other locations based on a better parking offer.

Recommendations – Parking Charges

Where existing parking demand is comfortably met by supply, existing tariffs should be retained in the short term. However, some city centre car parks are overcapacity now or in the future and an increase in charges is a viable option to help manage this demand and make more use of quieter car parks. Any targeted increase would need to be limited to ensure that parking remains affordable for all people and to prevent a major transfer to other locations.

Regular monitoring of parking occupancy within the city centre car parks should be undertaken to ensure the overall parking provision across all car parks doesn't reach 85%, which is a point where parking demand may compromise the city centre economy as locating a parking space can be challenging.

A review of existing tariffs in neighbouring local authorities and cities/towns with similar characteristics to Lichfield suggest parking charges are higher, and in some cases substantially more than the equivalent rates in Lichfield city centre car parks. This suggests that there may be scope for Lichfield District Council to increase charges within its own car parks without necessarily significantly reducing demand, particularly where the location and quality of parking supply is appropriate.

Although altering (increasing) parking charges could be justified in the simplest economic terms, the impact of doing so needs to be understood and assessed in the wider context of how the parking strategy fits with wider transport and movement and economic policy objectives for the city centre. Measures to increase parking charges should only be undertaken as part of a wider city centre strategy to manage parking resources, deliver environmental and operational improvements to the city and deliver sustainable travel objectives. It would be helpful to the overall narrative and politically more expedient if it were possible to ring-fence income derived from parking for specific investment in transport and movement infrastructure.

Reducing the demand for parking in central areas by increasing the charges could be helpful in releasing land for development identified within the city centre Masterplan and could reduce the requirement for additional parking capacity to serve new land use development.

Lichfield District Council should engage with stakeholders to investigate the scope for reviewing parking charges in off-street city centre car parks. This would provide an initial understanding for the appetite and briefing stakeholders will provide the opportunity to outline the benefits and drawbacks for doing so. Increasing parking tariffs should be tied into an increase in parking demand, most notably in the future. The increase in charges shouldn't be excessive to avoid a significant impact on the city centre economy. An increase of approximately 10-20% should be sufficient, with scope for a slightly higher increase for short-stay tariffs based on the smaller increase i.e. a £1.00 tariff would only increase by £0.10 with a 10% increase.

To support the monitoring of car park occupancy to identify if and when the overall parking demand reaches or exceeds 85%, it is recommended to programme a bi-annual (once every two years) tariff review to determine whether an increase or decrease in parking charges may be necessary. This review will ensure parking charges reflect the current economic standing of the city centre and are comparable to neighbouring cities/towns to maximise tourism and visitors to Lichfield to enjoy the rich culture.

10.6 PARKING INTERVENTION 4: CAR PARK DESIGNATION

10.6.1 SHORT / LONG-STAY PROVISION

Full or partial conversion of some long-stay car parking to provide additional short-stay capacity might be considered in areas around the city centre where existing parking supply is limited. Currently there is a good spatial zoning of car parks across the city centre for both long-stay and short stay car parks, meaning any conversion would be fairly easy to achieve.

This intervention could promote more efficient use of car parks by relocating long-stay commuter parking towards those in more peripheral locations and allowing shorter-stay parking and a greater turnover of parking activity, closer to key retail and trip generators. This links to intervention 3 where concessions can be offered to long-stay users to encourage underutilised car parks to be subject to higher usage, such as The Friary Multi-Storey car park.

Increasing the provision of short-stay provision in the core city centre area, will increase the turnover of spaces of spaces as there will be more opportunity to park. Having more short-stay car parking spaces in the core city centre area will likely reduce the burdon on Bird Street, which is the most popular city centre car park based on location.

Understanding the primary usage of each car park will also support the car park designation and will link into other interventions such as improvements to signage. It should be possible to determine likely destinations based on the car park location. For instance, Bird Street will primarily be used by visitors that wish to travel to the High Street or the Cathedral. Lombard Street will likely be used for Stowe Pool and the large open space. Backcester Lane will likely be used for the Three Spires shopping centre.

Understanding the primary usage will allow consideration of the number of long-stay, short-stay spaces and will support the introduction of signage and Variable Message Signs. Based on occupancy, the VMS can be utilised to encourage usage to alternative car parks. If Bird Street car park is full and the Cathedral has an event that is likely to attract high-volumes of visitors, the VMS could be used to direct drivers to other car parks. For instance a VMS could state “Bird Street car park full, use Lombard Street for Cathedral”.

Operational Impacts

Successfully converting parking spaces from long-stay to short-stay tariffs could generate additional revenue income by increasing the turnover of spaces and their yield per day, however only if there is sufficient latent demand that does not currently use paid car parks.

Understanding the car park designation is not as straight forward as considering the car park individually as there is no restriction to prevent short-stay in long stay and vice-versa. The parking tariffs are setup to make this less appealing as all-day parking is nearly twice the value in short-stay car parks, and long-stay car parks have a minimum 4-hour tariff.

The use of new ticket machine and other operational technology will help to provide better information about ticket sales and car park occupancy in the future and this will

help to achieve the right balance between short and long-stay parking in different locations.

To support the understanding of the car park designation, it will be useful to carry out parking beat surveys in all city centre car parks once Covid-19 restrictions have been fully lifted and the city centre is fully operational. Although the results of the stakeholder engagement exercise suggest that the majority of city centre visitors will not change their travelling habits as a result of Covid-19, the severity of the pandemic means pre-covid-19 data cannot be considered robust enough to serve as baseline data. Therefore, the data collected during these surveys can be compared to 2018 and 2019 data but can be set as a post Covid-19 baseline.

10.6.2 DISABLED PARKING

Lichfield District Council have ambition for the pedestrianisation of the city centre, which will have an impact on the amount of on-street parking for blue badge holders. Due to Covid-19 restrictions, it was necessary to remove some on-street blue badge parking within the city centre. This was offset by the provision of temporary disabled bays in some city centre car parks such as Bird Street and Lombard Street. The pedestrianisation would permanently remove some on-street provision for blue badge holders.

To mitigate against this, it is recommended to reallocate the lost spaces into city centre car parks. The most suitable car parks will be those that were closest to the on-street provision. As Bird Street and Lombard Street have temporary disabled parking bays, there is justification for converting these into permanent spaces as part of the car park designation. This would also support the discovery that the number of disabled bays within the city centre is under 4.0%.

Careful consideration of this would be needed as disabled users are not required to pay for parking within off-street car parks. Introducing additional disabled bays will reduce the potential income that can be generated by the car park as there will be fewer spaces where payment is required. Increasing the parking tariffs would offset this increase in provision, and would provide justification for a slight increase in parking charges to ensure the parking service can remain unaffected with this reduction in income.

Recommendations – Car Park Designation

Assess scope to further increase the proportion of spaces made available to for short-stay parking and relocate longer-stay parking towards more peripheral locations to increase the turnover of spaces in car parks located close to the city centre. Introducing a Park & Ride hub (see intervention 1) will likely reduce the demand on long-stay parking, which would increase scope for more short-stay car parking spaces in a better location.

Undertake a parking beat survey over a period of 11 hours (hours parking charges are in operation) to determine the amount of short stay and long stay parking in each car park post Covid-19 restrictions to set new baseline data due to the potential robustness of 2018/2019 data due the length of the pandemic and potential impacts.

Identify the most likely destinations based on the location of each car park to understand the most desirable location for long-stay and short-stay spaces. This can be supported through Variable Message Signs to direct visitors to specific car parks based on the destination, which will avoid visitors using incorrect car parks for their journeys.

Consider reducing the amount of on-street parking for blue badge holders and increase the provision within the most appropriate city centre car parks to compensate for the likely loss due to the proposed pedestrianisation of the city centre. This will also support the aim of achieving a 4% target of disabled spaces across the city centre car parks.

10.7 PARKING INTERVENTION 5: SUSTAINABLE TRANSPORT

The provision of a sustainable travel strategy is clearly a much wider issue than parking but there is a relationship between the volume and cost of parking and successful adoption and promotion of measures to support sustainable travel (i.e. walking, cycling, public transport and Park and Ride). Greater sustainable transport will support the objectives to improve air quality and tackle congestion.

An over-provision or poor management of parking can damage efforts to encourage the use of sustainable modes by increasing reliance on car use in preference to other forms of travel and in operational terms by increasing congestion, delay and severance of sustainable routes and services. Conversely, the provision of good quality sustainable travel options can reduce the need for additional parking spaces and help reduce congestion and the associated detrimental environmental impacts of excessive car use.

Park and Ride services are the most obvious link between parking and sustainable transport. The viability of a Park & Ride hub that services Lichfield city centre is discussed within intervention 1. This parking strategy does not include a business case for the creation of Park and Ride services, but it is clear that a service could provide many benefits in respect of reducing parking demand and traffic in the city centre. However, the promotion of a scheme is subject to caveats about the viability of potential land parcels for the site and this requires much more appraisal before it can form a key element of the parking strategy.

Whilst the increased use of sustainable modes can be expected to offset and reduce the need to build additional parking capacity there are clearly limitations on the effectiveness of such a strategy. This is particularly true in the case of a city such as Lichfield that serves a relatively wide and dispersed catchment area and where its size restricts the effective market supporting public transport services. In such circumstances, convenient accessibility by car (part of which is a suitable supply of car parking) will continue to provide vital support to the city centre economic and social prosperity for the foreseeable future.

Car parks can have a role to play in the improvement of sustainable transport by providing a secure location for cycle parking and motorcycle parking. These are already provided in a limited number of the car parks such as The Friary Multi-Storey

and Lombard Street, but this could be expanded, that may help to reduce demand for the conventional parking spaces.

10.7.1 ELECTRIC VEHICLE CHARGE POINTS

Electric vehicle (EV) charging points are already provided in The Friary Multi-Storey car park, although usage appears to be low. This is likely due to the need to pay for charging and parking, which will not be a popular option for those driving an EV. There also seems to be little information available that the car park has EV charging points. Promoting this facility is likely to be increase usage. The car park is also not ideally located within the extents of the city centre.

EV charging points help to promote sustainable transport modes and improve air quality. Expansion of the number of charging spaces will almost certainly be required as EVs become more popular and the technology develops further. Increasing the number of EV charging spaces would have cost impacts in terms of the cost of delivering the infrastructure and the loss of income associated with a the loss of a standard parking space. In time, it is anticipated that the use of these bays will increase, and they would be used as intensively as standard spaces. An EV policy will need to be developed for the charging of fees. Consideration should be given to free parking if vehicles are using the charging points to encourage usage.

As there are currently only two EV charging points within city centre car parks, it's likely that additional spaces will be required as short, medium, and long-term measures to increase supply at a steady rate to avoid a situation where there is insufficient charge points within the city centre car parks to service the demand. The focus initially should be on delivering charging points in more central city centre locations. Consideration will be required to avoid the impact of a loss of spaces.

As a short-term measure it is recommended to implement a combination of fast and rapid charging points to take into account the likely demand and technology. In the medium and longer term it may be necessary to concentrate more on rapid charging points only. These are more expensive to implement and have some integration issues, which is why they should be limited initially until technology improves and there is a greater demand.

There are several frameworks for vehicle charging infrastructure currently in place across the country, which provide a straightforward route for local authorities to procure charge points for EVs. These frameworks mean that a lengthy and complicated tender process doesn't need to be undertaken by each individual council. Using the frameworks currently in place, suppliers and installers that are already approved by each scheme can be contacted directly and the evaluation and implementation process commenced quickly. The framework that is most appropriate for a public sector body will depend on a number of factors that can be identified through market engagement.

Depending on the framework used and the type of EV charge points required, there may be some government funding available for EV charge point installation by local authorities.

10.7.11 COSTS INVOLVED IN INTERVENTION

EV charge points have had technological enhancements over the last 12-24 months that has enabled the implementation to be more straight forward, resulting in lower delivery costs. There are a variety of companies that offer different types of EV charge points. Some have standalone large units whereas others can provide units that are attached to walls and barriers that take up less room and are lower cost to implement.

The cost to deliver EV charge points will be dependent on the number implemented. Installing one EV charge point will not be as cost effective as installing 10. However, it's important that the installation of EV charge points is split over the short, medium, and long term action plan as the demand for these spaces increases.

Installing one EV charge point in a car park that has the infrastructure in place to facilitate this intervention is likely to cost in the region of **£5,000-£10,000** depending on the type of charge point purchased and the facilities it offers i.e. fast charging, rapid charging etc. If the identified car park does not have the infrastructure in place to enable a EV charge point to be installed without additional civils work, there is likely to be a further cost, potentially up to **£10,000** depending on the type of procurement.

As Lichfield District Council only currently offers two EV charge points, it is recommended to extend this provision as part of the short-term action plan. Providing an additional five EV charge points wouldn't be considered excessive at this stage.

This would result in a required budget of **£25,000-£50,000** if the sites had the correct infrastructure or a further **£10,000-£50,000** if the sites didn't have the appropriate infrastructure. This cost would be related to the number of car parks EV charge points are installed in i.e. one car park would be £10,000 whereas five would be £50,000.

EV charge points is a specialist field and there may be benefit in Lichfield District Council employing a Project/Programme Manager who will have responsibility for the programme, which could be a five year programme or as much as 20 year programme based on the action plan of the car park strategy. The cost of this employment will be dependent on the type of contract on offer. A fixed term contract would probably require a budget of **£35,000-£40,000** to attract the right candidate. A more flexible contract would require an hourly rate in the region of **£40.00 per hour**. Alternatively, the Council could sub-contract this requirement out to an external provider, although this would still cost similar rates depending on the type of contract in place.

10.7.2 ELECTRIC VEHICLE PRIORITY SPACES

As a longer-term measure, it may be necessary to investigate priority spaces for EVs as and when the demand increases to a point EVs are as common as standard vehicles. EVs may not need to utilise the charging facilities but would still expect priority over standard vehicles due to the benefits EVs bring city centres such as no air pollution.

If city centre car parks at near or at capacity, having locations where only EV vehicles can park will make them a more attractive investment and will encourage usage. This will have a positive impact on Lichfield city centre including an improvement in air quality. EV charging points will need to be available for vehicles that need charging only so these cannot be utilised.

This will be a long-term action as the demand for EVs is insufficient at this stage and will result in priority spaces being left empty for the vast majority of time. This will not be welcome, especially if parking demand in standard parking bays is excessive / overcapacity. As the popularity of EVs isn't at a level where these bays are needed, there aren't any known examples of this being implemented in city centre car parks. However, this is common in privately owned / office car parks where parking demand often outweighs the available supply.

10.7.3 INTEGRATING CAR PARKS AND SUSTAINABLE TRANSPORT

Lichfield city centre currently has a car park that serves the train station and bus station. This provides an opportunity to integrate car parks and sustainable transport. These car parks can be utilised by users that need to make longer journeys that may not be achievable using active travel. Currently, the train station car park is in poor condition and is subject to low usage. This may discourage users from using the train for longer journeys due to concerns with the car park i.e. safety and security.

The bus station car park is in far better condition, which is expected as this has recently been redeveloped. However, generally bus journeys are across shorter distances than train journeys, which is likely to restrict users from using a bus for onward journeys. More likely is the car park being used as parking charges are lower than neighbouring areas so it is cost effective to use the car park and purchase a bus ticket than travel direct to the required destination. The bus station car park is also located close to the city centre, meaning some users will be using the car park as a traditional car park with no onward journey.

Improving the train station car park should be considered a priority for Lichfield District Council to encourage users to use public transport for onward journeys. The improvements to the train station car park should include the following:

- Public realm improvements;
- Safety improvements for NMUs;
- Access improvements onto Birmingham Road;
- Additional payment facilities to make the car park more attractive including contactless payment;
- Additional signage on the local road network to direct drivers to the car park;
- Secure bicycle parking facilities to encourage active travel.

10.7.31 COSTS INVOLVED IN INTERVENTION

The cost involved for this intervention is dependent on the type of improvements progressed by Lichfield District Council. For instance, integrating secure bicycle parking in car parks is likely to cost in the region of **£5,00-£20,000** per site, depending

on the type of provision purchased. The cost is related to the size and offering of the provision. Alternatively, this intervention could involve the provision of some segregated NMU facilities that could cost no more than **£1,000-£2,000** per site.

Therefore, providing a cost estimate isn't considered feasible for this intervention due to the number of variables and options in place to achieve the required improvements expected from the intervention.

10.7.4 PROMOTING ACTIVE TRAVEL TO REDUCE DEMAND ON PARKING

Staffordshire County Council is the local highway authority and will take ownership of active travel infrastructure across the county including Lichfield. However, Lichfield District Council should be working with the County Council to identify active travel improvements that can be made within the city centre, which will reduce the demand on parking. This includes infrastructure such as walking and cycling routes as well as secure bicycle parking facilities in key locations within the city centre.

It is recommended to develop an active travel strategy that focuses specifically on Lichfield city centre. Staffordshire County Council will need consulting as a key stakeholder but shouldn't need to authorise the work as the local highway authority. Within the active travel strategy, it should outline the most suitable locations for bicycle parking. Car parks provide an opportunity to supply bicycle parking that avoids facilities within key areas such as the High Street, where space can be limited.

Car parks where secure bicycle parking can be implemented include:

- The Friary Multi-Storey;
- Backcester Lane;
- Lombard Street;
- Birmingham Road Multi-Storey;
- University East or West;
- Train station.

Along with secure bicycle parking, city centre car parks will also provide opportunity for a Docked bike or E-Scooter scheme, with the car park providing the storage facilities. This will be draw for car parks that are located further away from the city centre as visitors may welcome the opportunity to use the active travel journey into the

core city centre and will encounter less congestion. Beacon Park car parks would provide this facility although these are at high usage already and may cause difficulties. The Friary Multi-Storey car park would be an ideal location for these schemes as it would result in greater usage of the car park.

The benefit of these schemes would be the reduction in congestion within the core city centre area, and improvements to air quality. It would also support the healthy lifestyle choice that is crucial to promote for all residents, businesses, and visitors to Lichfield.

10.7.41 COSTS INVOLVED IN INTERVENTION

Similarly to the intervention for integrating car parks and sustainable transport, the costs involved in this intervention is largely related to work that will fall outside of this strategy, making cost estimates difficult to provide, due to the potential variables. It is recommended to use the Staffordshire Local Cycling and Walking Infrastructure Plan (LCWIP) report as a starting point for potential investment in active travel.

Figure 45 illustrates the prioritised cycle network for Lichfield, which demonstrates some routes in the city centre near car parks. Incorporating works in car parks that may compliment the work involved on the LCWIP is likely to be more attractive and funding will be easier to acquire. Secure bicycle parking is one element that will compliment the work included in the LCWIP. As outlined in section 10.7.31 integrating secure bicycle parking in car parks is likely to cost in the region of **£5,00-£20,000** per site, depending on the type of provision purchased.

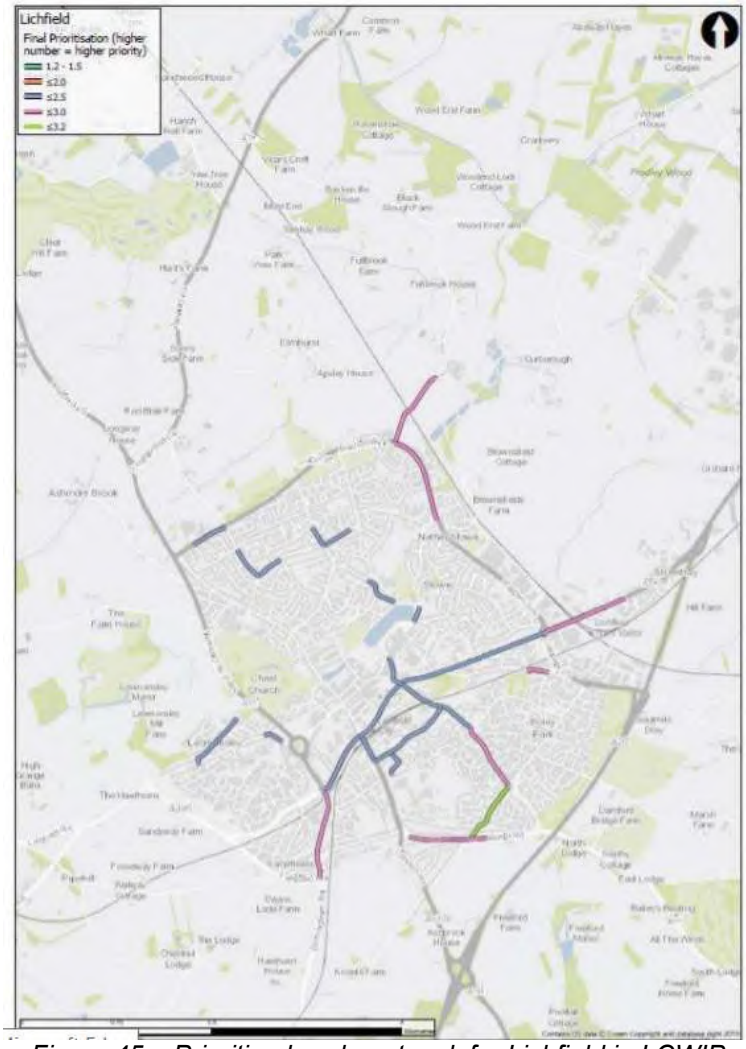


Figure 45 – Prioritised cycle network for Lichfield in LCWIP

10.7.5 CAR CLUB PARKING BAYS

With traffic volumes reaching all-time highs prior to Covid-19, there has been a significant increase in memberships to car clubs. A car club enables users to create a membership with a car club provider and book a vehicle that is located in a convenient place for a period of time such as 1 hour or 1 day. If a member has made a booking they will be able to access the vehicle, usually by a card that is placed on the windscreen that opens the vehicle. The user is only charged for the time using the car so it can work out much more efficient for drivers who do not need to travel much.

Car club vehicles are usually located on-street or within car parks. With the ambition to deliver a pedestrianisation scheme within Lichfield city centre, car club vehicles would need to be located in off-street car parks. Lichfield District Council should consider partnering with a car club provider to allocate car club bays in some of its

lower occupancy car parks. A car club bay doesn't need any supporting infrastructure, so any car park can be suitable. Often surface car parks work better as they are easier to access.

Examples of car parks in Lichfield city centre that would be ideal for car club bays include Redcourt, Bacester Lane, Train station, Bus station, The District Council, Sandford Street, and Friary Inner. These are all car parks that can be easily located and provide access to onward journeys. Sandford Street and Friary Inner are subject to greater occupancy so the other car parks may be more suitable.

Recommendations – Sustainable Transport

Seek to manage parking supply as a resource through appropriate pricing and as a policy tool to deliver transition towards use of more sustainable modes of travel behaviour both by encouraging use of walking, cycling and public transport and by supporting a transition towards new propulsion technologies (e.g. implementing electric vehicle charging points, supporting emerging policy measures to restrict access for polluting vehicles).

Investigate proposals for a Park & Ride hub on the outskirts of the city centre, to reduce the demand of long-stay parking within the city centre. This will reduce congestion in the centre, and improve air quality. A Park & Ride will support several of the interventions outlined in this strategy.

Consider electric vehicle priority bays in city centre car parks if the rate of electric vehicle ownership increases, but the requirement for charge points does not to give greater parking priority to those who drive electric vehicles.

Provide greater emphasis and promotion of active travel and public transport use for journeys into the city centre, to reduce the parking pressure in car parks, including investment in these sustainable modes of transport to improve facilities and make usage more attractive.

Consider the prioritisation of car parks that serve public transport nodes such as rail and bus station for improvement to encourage use of public transport for longer journeys, reducing long trips by Lichfield District Council residents.

Consider the implementation of docked bikes and e-bikes within city centre car parks to provide the opportunity for visitors to Lichfield to use bikes to travel around city centre, reducing congestion and improving air quality.

Investigate the partnership of car clubs for Lichfield District Council with parking spaces provided in city centre car parks for these vehicles.

10.8 PARKING INTERVENTION 6: CAR PARK TECHNOLOGY

A significant number of local authorities have employed existing technologies to help manage parking activity, overcome various operational problems and use capacity more efficiently. As more advanced telecommunications and software systems become more commonplace, flexible and affordable it is anticipated that their application will become increasingly feasible. There are two key areas where technology might be expected to play an emerging role over the course of the forthcoming strategy period, namely:

- Systems that improve flexible management of car parking spaces through managing / directing demand, pricing / payment mechanisms and disseminating real-time information concerning travel opportunities;
- Vehicle propulsion technology that is likely to see the phased implementation of vehicles powered by alternative fuel systems, including EV charging points and may see the advent of some form of driverless technology.

10.8.1 TECHNOLOGY TO MANAGE DEMAND

Mobile and digital technology is increasingly important in the operation and use of car parking systems. New pay machines have the ability to accept card and contactless payments and a pay by phone facility is commonplace in many cities including Lichfield. Improving mobile payment methods can help to reduce the need for users to return to a vehicle parked in a Pay and Display car park to extend the length of stay and this could lead to increased dwell times and expenditure in the city centre. New payment methods reduce the need for users to carry cash and for operators to collect cash from the machines.

The existing pay station equipment in the majority of the city centre car parks is relatively old and provides basic facilities. If these machines are approaching the end of their operational life, it may be a good time to invest in new machines with technology that allows more flexible payment options, even if the Pay and Display operation is retained. Technology is increasing the flexibility of systems for customers and operators and is providing more information for management to keep improving the service. It should be noted the use of card payment methods could incur a small bank charge for the authority per transaction but there would also be a saving on the cash collection costs.

Pay on exit is a key technological aspect within car parks, with more city centres moving towards where the car parks are suitable for the system. The benefits and drawbacks for this are outlined within intervention 2.

New technology may also help back office operations, particularly in relation to the use of intelligent, targeted tariffs and the co-ordination of different car parks and variable message signs. This could be significant in Lichfield with the number of car parks, different routes into the city centre, and the number of improvements needed as outlined within this document.

Variable message signs (VMS) are used in many city centres to provide drivers with information about the location of spare parking capacity. Procurement of a new VMS system for Lichfield is recommended to start immediately as one of the most important short-term actions. This will provide information relating to the availability of car park spaces, which will help to save time, reduce congestion and use the parking assets more efficiently. The scheme will need to be monitored and improved if necessary.

Consideration should be given to how technology can impact the Lichfield District Council car parking webpages. Although the webpages are fairly intuitive, there is scope for improvement such as live car parking information contained, the ability to setup parking accounts that can automatically pay for parking when visiting a car park, and more detail on electric vehicle charging points including registering for an account.

10.8.2 VEHICLE PROPULSION TECHNOLOGY

Over recent years, the profile of electric vehicles has increased markedly with the launch of various hybrid and electric vehicles and expansion of the charging and refuelling networks. This, coupled with various policy announcements concerning plans to phase out sales of petrol and diesel-powered vehicles in the foreseeable future, indicates the EV market may be approaching the point where large-scale sales become more likely.

Whilst the EV market remains in its infancy it is difficult to predict the precise operational and system requirements that should be planned and provided for however, in developing the parking strategy further, care should be taken to ensure significant flexibility is in-built within infrastructural design to allow for pro-active installation and / or reactive, retro-fitting of electric vehicle charging points. Such measures should be considered both as a practical requirement supporting the switchover to EV technology, as and when it occurs but it should also be employed to encourage and support transition and switchover where appropriate and feasible.

Longer-term, the emergence of new driverless technology has the potential to have a transformational effect on the scale and location of both short and long-stay parking activity. Whilst the advent of fully automated, driverless cars remains some time away, some driverless functions are likely to be fitted as standard to the next generation of vehicles and well within the medium-term planning horizon.

10.8.3 OPERATIONAL IMPACTS OF NEW TECHNOLOGY

New technology has the potential to improve the management of car parks by automating various operations and by providing more information to the back office. However, there would need to be initial capital outlay and an expectation that costs would be recovered in the long term. The back office function should also incorporate virtual permits, as this will make the management of permits more succinct and easier to manage. This will reduce the staff resource required to manage the process. With ambitions to increase usage in underutilised car parks, permits could become a key driver for the District Council where concessions are offered.

Investing in the existing car parks to improve their use is a valid policy option however it is recommended that this would be best undertaken at the time when considering

possible replacement and renewal of existing car park management technologies. Many local authorities and private operators invest in their car parks in the expectation that better facilities will encourage more use.

However, there is a limit to the impact that physical improvements to car parks will have in the absence of other changes. Safety and security are important features that often appear as a high priority for users, linked to the provision of CCTV and lighting but the majority of the city centre car parks already have these features.

Equipment will need to be replaced at regular intervals so that would be the appropriate time to consider the merits of different technologies and new methods of payment. These can create savings in some cases; mobile phone payment can reduce cash collection costs and generate more income and durations of stay, for instance.

Recommendations – Car Park Technology

Consider the costs and benefits of employing new technology and equipment for mobile payment, ticket machines, security and barrier control when procurement decisions are being made. New technology has the potential to reduce costs as well as improving the user experience.

Provide facilities for new vehicle technologies and management (e.g. EV charging, priority parking spaces for car clubs and car share schemes).

Assess options for improving information about parking for the public through the increased use of online and mobile information and monitoring and development of the variable message sign network.

Improve the car park information on the Lichfield District Council website, with an aim to provide better integration with car parks including the possibility of automatically paying for parking based on accounts setup with vehicle registration plate included.

Migrate to virtual permits only, with opportunities for permits to be purchased online such as season tickets for businesses.

10.9 PARKING INTERVENTION 7: CAR PARKING ENFORCEMENT

As outlined in intervention 6, there should be the aim to transfer all car parking permits into a virtual system to assist in the management and back office function. This will make the enforcement operation much more straight forward and will remove the issues around lost/damaged permits or how the permits are displayed.

With the replacement of Pay & Display machines, it will be possible to provide connectivity to the back office systems, which will provide real-time information to the parking service team. This will support the enforcement operation and will reduce staff resource as the information will be available 24-7.

With the aim to implement pay on exit systems in suitable car parks along with the technology improvements including virtual permits, it will be possible to review enforcement management procedures to identify any improvements in service operation that may reduce revenue costs. This should be considered a medium-term action to provide sufficient time for work to be undertaken before commencing the review. Based on the outcome of the review, it should be possible to develop a new parking enforcement policy that outlines procedures and processes that are designed to reduce staff resource, which will reduce revenue costs.

It is recommended to carry out a more detailed assessment into the existing car park enforcement and management arrangements along with consideration of alterative models such as alternative outsourcing of the enforcement or to carry out enforcement on-behalf of other local authorities compared to the existing outsourcing arrangements, to determine the most cost effective approach for the Council. This assessment should consider the financial implications of each potential model to determine what savings can be made to re-distribute into the parking service.

Outsourcing the parking service can provide savings due to the reduction in staff resource with usually minimal impact in the number of Penalty Charge Notices issued. It is unknown what cost savings can be made by increasing the enforcement of car parks into neighbouring local authorities with agreements in place as this would involve knowledge of each parking operation. The detailed assessment should present each cost implication and provide an overall recommendation based on the best approach for Lichfield District Council.

10.10 INTERVENTION COST SUMMARY

Table 20 provides a summary of the intervention costs as detailed within the above sections.

INTERVENTION	APPROXIMATE COST
Capacity shortfalls may need to be considered where demand for car parking in the city centre outweighs available supply. The provision of more parking spaces will be required either through the expansion of existing car parks or the design of new car parks.	For a new multi-storey £3 million - £8 million (depending on size of multi-storey)
Consider utilising any areas of suitable on-street parking to provide a small amount of additional capacity, which can be achieved through free short-term parking such as 30 minutes.	N/A
Explore and consider the feasibility of a Park & Ride site near to the city (which could also potentially integrate coach parking) to reduce parking pressure and congestion in the city centre, which will result in air quality and environmental benefits and will assist in meeting sustainability targets.	£3 million - £5 million for a one site Park & Ride facility
Monitor car park usage to identify any increase in parking demand in city centre car parks once Tesco implements ANPR system that requires purchasing of goods to use car park.	N/A
Ensure any potential city centre development includes appropriate car parking for the proposed surrounding development uses and caters for the existing demand for spaces where car parking is being removed as part of the development scheme.	N/A
Identify likely locations lost car parking could relocate to (if demand requires) as part of the development of any existing car parks.	N/A
Consider developing a car park improvement regime with an aim to improve the condition of each city centre car park over the duration of the car park strategy.	£127,144 if 10% allocation from revenue generated
Safeguard allocation of revenue funding each year to deliver the car park improvement regime that will not require parking charges to increase to fund the programme.	As above
Consider undertaking a detailed car parking signage strategy to identify most suitable locations for parking signage throughout the city centre to provide guidance to visitors on each car park based on the intended use. This needs to include wayfinding for pedestrians to reach destinations.	£125,000 - £140,000 for VMS. £15,000-£20,000 for signage strategy
Where possible increase safety within car parks including the aspiration to join the British Parking Association Safer Parking (car parks) scheme.	£10,000-£15,000 per year for regime
Consider improving the public realm within the city centre car parks to create a more welcoming environment that will provide a greater experience to visitors.	Unknown

Explore the option of upgrading Pay & Display machines to facilitate payment by card in sites that may not be suitable for pay on exit systems.	£150,000 - £200,000 depending on system
Consider implementing a flexible tariff structure that promotes an even spread of parking throughout the city, with more popular and central car parks being charged at a premium to those which are more peripheral and subject to lower demand.	N/A
Lichfield District Council parking tariffs and pricing policy should be set at a level where they are supporting city centre vibrancy and vitality whilst remaining competitive and encouraging the use of sustainable modes of transport.	N/A
Carry out a regular benchmarking exercise to determine how parking charges in Lichfield city centre compare to neighbouring cities and towns.	N/A
Programme a bi-annual parking tariff review to ensure parking charges reflect the current economic standing of the city centre and are comparable to neighbouring cities/towns to maximise tourism and visitors to Lichfield to enjoy the rich culture.	N/A
Explore the possibility of parking concessions in underutilised car parks such as business permits within the city centre to increase demand.	N/A
Consider free short-term parking in some roads within the city centre where demand applies additional pressure.	£20,000
Undertake a parking beat survey over a period of 11 hours to determine the amount of short stay and long stay parking in each car park post Covid-19 restrictions.	N/A
Ensure car parks closest to city centre such as Bird Street have the highest turnover of spaces to increase turnover, make more efficient use of valuable land and boost the city centre economy.	N/A
Identify the most likely destinations for each car park including the impacts of the city centre masterplan and development opportunities to ensure ratio of short/long stay parking is appropriate.	N/A
In conjunction with pedestrianisation feasibility study of city centre, consider reducing the amount of on-street parking for blue badge holders and increase the provision elsewhere.	N/A
Consider implementing additional Electric Vehicle charge points in city centre car parks, at a rate proportionate to demand identified through regular parking surveys and stakeholder consultation.	£25,000-£50,000 for approximately 5 EV charge points
Consider electric vehicle priority bays in city centre car parks if the rate of electric vehicle ownership increases, but the demand for charge points does not increase to give greater parking priority to those who drive electric vehicles.	N/A
Investigate the feasibility of installing safe secure bicycle parking facilities in car parks to encourage use of active travel for journeys made into Lichfield city centre if safe segregated facilities can be identified.	£1,000-£20,000 based on provision
Work with partners to provide greater emphasis and promotion of active travel and public transport use for journeys into the city centre, to reduce the parking pressure in car parks, including investment in these sustainable modes of transport to improve facilities and make usage more attractive.	£5,000-£20,000 per site

Consider the prioritisation of car parks that serve public transport nodes such as rail and bus station for improvement to encourage use of public transport for longer journeys, reducing long trips by Lichfield District Council residents.	N/A
Investigate the partnership of car clubs for Lichfield District Council with parking spaces provided in city centre car parks for these vehicles.	N/A
Consider the implementation of docked bikes and e-bikes within city centre car parks to provide the opportunity for visitors to Lichfield to use bikes to travel around city centre, reducing congestion and improving air quality.	£5,000-£20,000 per site
Investigate the feasibility of installing Pay on Exit systems within suitable car parks.	£150,000 - £200,000 depending on system
Consider smart parking integration such as parking apps to facilitate contactless parking that may provide opportunities to pay for parking before journeys into the city centre.	N/A
Consider developing a strategy and investigate the delivery of Variable Message Signs, both free text signs and specific car parking signs located on the outskirts of the city centre and within the city centre.	£125,000 - £140,000 for VMS
Improve the car park information on the Lichfield District Council website, with an aim to provide better integration with car parks including the possibility of pre-booking parking spaces.	N/A
Consider the migration to virtual permits only, with opportunities for permits to be purchased online such as season tickets for businesses.	N/A
Increase efficiency of enforcement operation by virtualising permits and connecting P&D machines to back office systems to gather real time data.	N/A
Review enforcement management procedures to identify any improvements in service operation that may reduce revenue costs.	N/A

Table 20 – Intervention costs and timescales

10.11 PARKING STRATEGY RECOMMENDATIONS

The following table presents a summary of the recommended actions for Lichfield District Council. The text in the preceding section provides more context and detail relating to these recommendations:

1	Parking Capacity
1.1	Capacity shortfalls may need to be considered where demand for car parking in the city centre outweighs available supply. The provision of more parking spaces will be required either through the expansion of existing car parks or the design of new car parks.
1.2	Consider utilising any areas of suitable on-street parking to provide a small amount of additional capacity, which can be achieved through free short-term parking such as 30 minutes.
1.3	Explore and consider the feasibility of a Park & Ride site near to the city (which could also potentially integrate coach parking) to reduce parking pressure and

	congestion in the city centre, which will result in air quality and environmental benefits and will assist in meeting sustainability targets.
1.4	Monitor car park usage to identify any increase in parking demand in city centre car parks once Tesco implements ANPR system that requires purchasing of goods to use car park.
1.5	Ensure any potential city centre development includes appropriate car parking for the proposed surrounding development uses and caters for the existing demand for spaces where car parking is being removed as part of the development scheme.
1.6	Identify likely locations lost car parking could relocate to (if demand requires) as part of the development of any existing car parks.
2	**Quality of Car Parks**
2.1	Consider developing a car park improvement regime with an aim to improve the condition of each city centre car park over the duration of the car park strategy.
2.2	Safeguard allocation of revenue funding each year to deliver the car park improvement regime that will not require parking charges to increase to fund the programme.
2.3	Consider undertaking a detailed car parking signage strategy to identify most suitable locations for parking signage throughout the city centre to provide guidance to visitors on each car park based on the intended use. This needs to include wayfinding for pedestrians to reach destinations.
2.4	Where possible increase safety within car parks including the aspiration to join the British Parking Association Safer Parking (car parks) scheme.
2.5	Consider improving the public realm within the city centre car parks to create a more welcoming environment that will provide a greater experience to visitors.
2.6	Upgrade Pay & Display machines to facilitate payment by card in sites that may not be suitable for pay on exit systems.
3	**Parking Charges**
3.1	Create a flexible tariff structure that promotes an even spread of parking throughout the city, with more popular and central car parks being charged at a premium to those which are more peripheral and subject to lower demand.
3.2	Lichfield District Council parking tariffs and pricing policy should be set at a level where they are supporting city centre vibrancy and vitality whilst remaining competitive and encouraging the use of sustainable modes of transport.
3.3	Carry out a regular benchmarking exercise to determine how parking charges in Lichfield city centre compare to neighbouring cities and towns.
3.4	Programme a bi-annual parking tariff review to ensure parking charges reflect the current economic standing of the city centre and are comparable to neighbouring cities/towns to maximise tourism and visitors to Lichfield to enjoy the rich culture.
3.5	Explore the possibility of parking concessions in underutilised car parks such as business permits within the city centre to increase demand.
4	**Car Parking Designation**
4.1	Undertake a parking beat survey over a period of 11 hours to determine the amount of short stay and long stay parking in each car park post Covid-19 restrictions.
4.2	Ensure car parks closest to city centre such as Bird Street have the highest turnover of spaces to increase turnover, make more efficient use of valuable land and boost the city centre economy.
4.3	Identify the most likely destinations for each car park including the impacts of the city centre masterplan and development opportunities to ensure ratio of short/long stay parking is appropriate.
4.4	In conjunction with pedestrianisation feasibility study of city centre, consider reducing the amount of on-street parking for blue badge holders and increase the provision elsewhere.

5	Sustainable Transport
5.1	Consider implementing additional Electric Vehicle charge points in city centre car parks, at a rate proportionate to demand identified through regular parking surveys and stakeholder consultation.
5.2	Consider electric vehicle priority bays in city centre car parks if the rate of electric vehicle ownership increases, but the demand for charge points does not increase to give greater parking priority to those who drive electric vehicles.
5.3	Investigate the feasibility of installing safe secure bicycle parking facilities in car parks to encourage use of active travel for journeys made into Lichfield city centre if safe segregated facilities can be identified
5.4	Work with partners to provide greater emphasis and promotion of active travel and public transport use for journeys into the city centre, to reduce the parking pressure in car parks, including investment in these sustainable modes of transport to improve facilities and make usage more attractive.
5.5	Consider the prioritisation of car parks that serve public transport nodes such as rail and bus station for improvement to encourage use of public transport for longer journeys, reducing long trips by Lichfield District Council residents.
5.6	Investigate the partnership of car clubs for Lichfield District Council with parking spaces provided in city centre car parks for these vehicles.
5.7	Consider the implementation of docked bikes and e-bikes within city centre car parks to provide the opportunity for visitors to Lichfield to use bikes to travel around city centre, reducing congestion and improving air quality.
6	Car Park Technology
6.1	Investigate the feasibility of installing Pay on Exit systems within suitable car parks.
6.2	Consider smart parking integration such as parking apps to facilitate contactless parking that may provide opportunities to pay for parking before journeys into the city centre.
6.3	Consider developing a strategy and investigate the delivery of Variable Message Signs, both free text signs and specific car parking signs located on the outskirts of the city centre and within the city centre.
6.4	Consider the installation of car park bay sensors to clearly indicate available parking spaces in car parks to reduce the circulating of traffic in congested car parks and improve the parking experience.
6.5	Improve the car park information on the Lichfield District Council website, with an aim to provide better integration with car parks including the possibility of pre-booking parking spaces.
6.6	Consider the migration to virtual permits only, with opportunities for permits to be purchased onlinesuch as season tickets for businesses.
7	Car Parking Enforcement
7.1	Increase efficiency of enforcement operation by virtualising permits and connecting P&D machines to back office systems to gather real time data.
7.2	Review enforcement management procedures to identify any improvements in service operation that may reduce revenue costs.

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