WYG Transport Planning

Ipswich Borough Council

Parking Strategy

Final

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EXECUTIVE SUMMARY

Introduction

WYG has been commissioned by Ipswich Borough Council to provide support in the preparation of a Parking Strategy covering Ipswich town centre. The Council is seeking to develop a parking strategy that aligns with initiatives to promote the use and growth of the town centre and supports delivery of growth and improvements as set out within the Ipswich Local Plan and other closely aligned policies such as the Site Allocations and Policies Development Plan Document.

Context

Ipswich town centre is the principal retail and service centre of both the Borough and the wider County. The town is described within the Ipswich Local Plan as an engine of growth for the East of England with particular strengths in commercial, ICT, business finance and port / shipping sectors.

Ipswich Vision is a partnership of key public and private sector stakeholders that has been formed to guide development of the town centre by identifying existing issues impacting on performance and improvement opportunities.

Key themes emerging from Ipswich Vision includes a desire to encourage and promote reorientation of the town centre along a north – south rather than east – west trajectory, improving the pedestrian environment including delivering proposals to better connect the town centre and Waterfront / Riverside, improved car parking and reducing the impact of traffic within the town centre.

Methodology

The study has gone through a logical process to devise a parking strategy that can be supported by as many people and organisations as possible. To achieve this the following objectives of the parking strategy have been defined (in no particular order):

- Ensure that the town centre economy functions smoothly
- Enable good accessibility to town centre services
- Generate income for the local authority and private operators
- Provide parking spaces for the different needs of residents, shoppers, commuters and employees
- Provide safe and convenient facilities for all circumstances (e.g. night-time, evenings, bad weather, very short trips, etc.)

- Enable linked trips to different locations, because some journeys are very difficult without a car and convenient parking
- Support initiatives to promote sustainable modes of travel

The development of the strategy involved the creation of an evidence base by gathering information about the existing parking behaviour and consulting with stakeholders. Forecasts were then made about how future land use and transport will affect parking and how, in turn, car park locations, pricing and policy could be used to influence travel behaviour. Finally, the potential parking policy options were considered, and recommendations were made on how the local authority could develop a local parking strategy.

Existing Situation

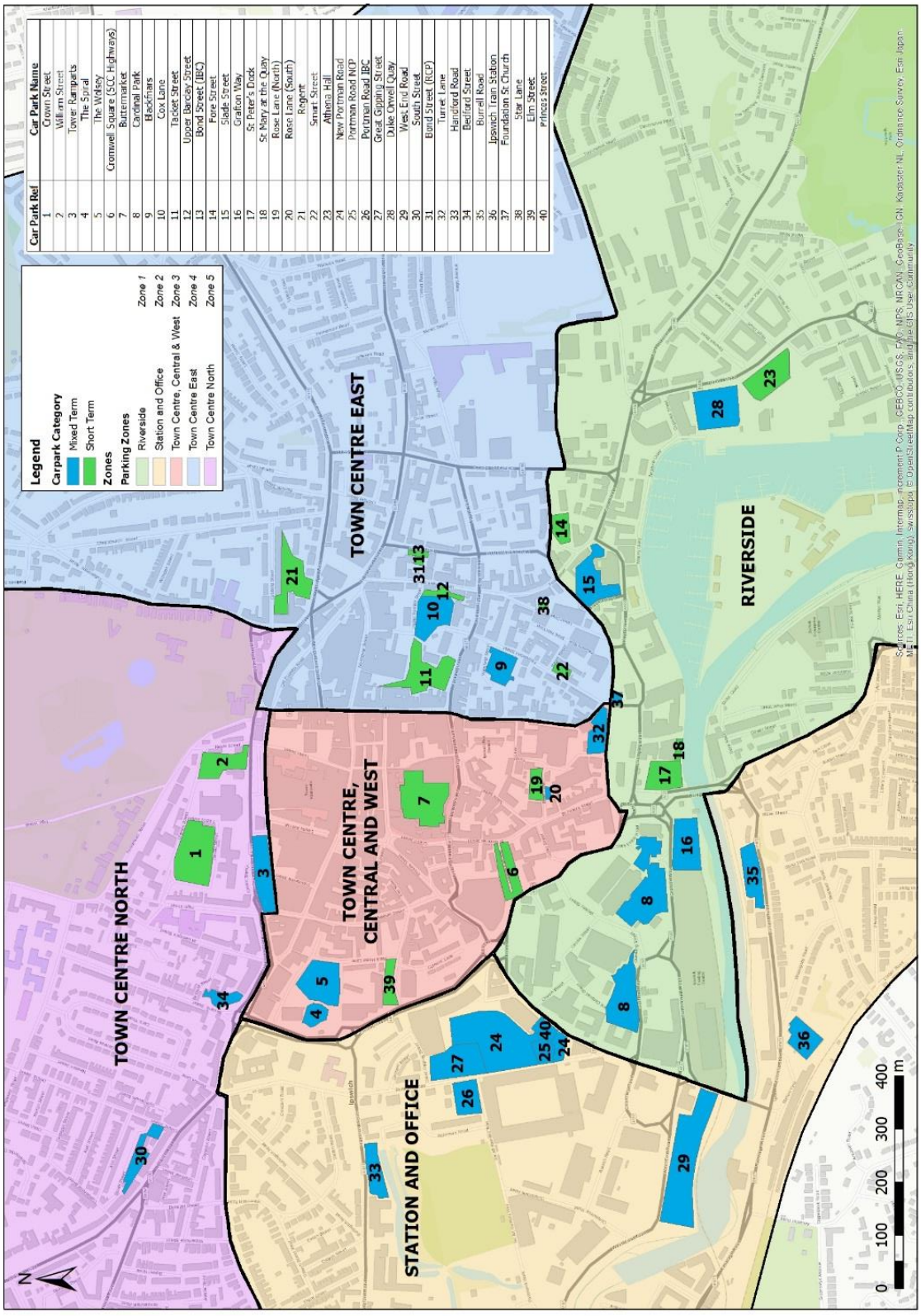
There are currently approximately 6,817 public, off-street car parking spaces in and around the town centre[1] (including 147 disabled spaces) of which 2,406 (circa 35%) are operated by the Borough Council. Another 4,411 are operated privately, of which circa 1,800 are under the control of a single operator, NCP.

Approximately 4,885 spaces within the study area provide the option for long-stay parking (where all-day parking is permitted and is not prohibitively expensive) with the remaining 1,932 providing for short-stay parking only (5 hours or less). However, short-stay parking is allowed in long-stay car parks so there is not a clear distinction between the two types of car park and their use.

Five zones were identified to assist the analysis of parking in the town centre. 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. The zones are; Town Centre Central & West, Town Centre East, Town Centre North, Riverside and Station & Office. The zones are shown in the figure on the next page and the car parks within each zone are summarised in the table on the following page.

[1] Details of parking spaces are presented in Section 1.4

Ipswich Town Centre Car Park Locations and Parking Zones



Town Centre Car Park Capacities

Zone	Car Park	Term	Operator	Number of Parking Spaces	
				Standard	Disabled
1 Riverside	Duke Orwell Quay	Long-stay	RCP	284	0
	Athena Hall	Short-stay	IBC	94	4
	Grafton Way West	Long-stay	Green Parking	160	0
	Grafton Way East	Long-stay	Green Parking	200	0
	Slade Street	Long-stay	Total	133	0
	Cardinal Park	Long-stay	UKPC	612	16
	Fore Street	Short-stay	IBC	30	1
	St. Peter's Dock	Short-stay	IBC	121	7
	St. Mary at the Quay	Short-stay	LPS	20	0
			Total	1654	28
2 Station and Office	New Portman Road	Long-stay	IBC	563	17
	Portman Road (NCP)	Long-stay	NCP	65	2
	Portman Road (IBC)	Long-stay	IBC	55	0
	Great Gipping Street	Long-stay	IBC	132	6
	West End Road	Long-stay	IBC	385	0
	Handford Road	Long-stay	RCP	90	0
	Burrell Road	Long-stay	NCP	154	0
	Train Station	Long-stay	NCP	452	10
	Princes Street	Long-stay	IBC	21	0
			Total	1917	35
3 Town Centre, Central and West	The Spiral	Long-stay	Britannia	350	10
	The Wolsey	Long-stay	Napier	160	5
	Cromwell Square (SCC Highways)	Short-stay	IBC	64	3
	Buttermarket	Short-stay	Buttermarket	420	10
	Rose Lane Covered (North)	Short-stay	SPS	36	0
	Rose Lane (South)	Long-stay	RCP	21	0
	Turret Lane	Long-stay	NCP	51	1
	Elm Street	Short-stay	IBC	68	4
			Total	1170	33
4 Town Centre East	Blackfriars MSCP	Long-stay	NCP	513	5
	Cox Lane	Long-stay	NCP	182	2
	Tacket Street	Short-stay	NCP	260	2
	Upper Barclay Street	Short-stay	IBC	30	0
	Bond Street (IBC)	Short-stay	IBC	14	0
	Bond Street (RCP)	Short-stay	RCP	8	0
	Regent	Short-stay	IBC	62	3
	Smart Street	Short-stay	IBC	21	1
	Star Lane	Short-stay	Zak	30	0
			Total	1120	13
5 Town Centre North	Crown	Short-stay	IBC	513	28
	William Street	Short-stay	IBC	77	1
	Tower Ramparts	Long-stay	NCP	103	3
	South Street	Long-stay	IBC	76	5
	Bedford Street	Long-stay	RCP	40	1
			Total	809	38
			Total (All Zones)	6670	147

Local Planning Policies

The Ipswich Vision has been developed by key partners who have a stake in ensuring that the town achieves its full potential. The Vision statement and action plan support delivery of the Local Plan to create a Waterfront Town Centre, with stated priorities of homes, workplaces, parking, transport, streetscape and visitors.

The adopted Ipswich Local Plan (2017) sets out proposals for delivery of growth within the Borough in the period to 2031 including a requirement for delivery of circa 9,780 new dwellings in the town and major retail and commercial developments focussed in the town centre, including:

- **Waterfront**: Currently one of the largest regeneration projects in the East of England including commercial, cultural and institutional investment, key features of which include significant delivery of new homes, employment opportunities and the completed DanceHouse, the regional home of Dance East. The Quarter also includes the proposed Upper Orwell Crossings that are planned to improve the movement of traffic in the town centre;
- **Ipswich Village**: Delivery of purpose-built modern office spaces and new residential units towards the western side of the town centre, now designated as the Princes Street Enterprise Zone which incorporates the headquarters for Ipswich Borough and Suffolk County Councils, Suffolk Life, Birketts, Archant and the Crown Court;
- **Town Centre BID**: Establishment in 2007 of a town centre Business Improvement District (BID) called Ipswich Central to help manage the town centre and attract investment; and,
- **Education Quarter**: Successful establishment of a new education quarter for the town with more than £150m of investment around the Waterfront including the development of a new university campus and a £59m investment in the adjacent Suffolk New College campus, plus several student accommodation blocks.

Since adoption of the 2017 Local Plan, IBC and Suffolk Coastal District Council have consulted on a review of their Local Plan in line with their commitments to continually ensuring they are meeting local housing and employment needs. Consultation on the Local Plan review ran between August and October 2017 and the revised target is for 8,840 new dwellings by 2036. Whilst the Local Plan Review is not yet adopted, this strategy has been prepared on the basis of the revised housing need and future parking demand / capacity assessments are undertaken for a 2036 future year.

The Site Allocations and Policies (incorporating the IP-One Area Action Plan) Development Plan Document gives effect to several strategic policies as set out within the Local Plan documents and includes proposals for a new highway crossing of the Wet Dock to open access to the Island site and

relieve traffic on the central area network by providing a new through route to the south of the town centre. It also includes outline details of suitable locations for new permanent car parks and states that proposals for new temporary car parks will not be granted and that renewals of consents for existing temporary car parks will not be granted following delivery of new permanent car parks.

Car Park Audit and Current Demand Assessment

An audit of public car parks in and around the town centre was undertaken in November 2016 and March 2017, the detailed results of which are presented within **Chapter 4** of the main report. These were identified as months being representative of 'typical' conditions rather than the busiest times of the year such as Christmas or summer holidays. The results indicate that the quality, popularity and price of different car parks varies considerably, however, overall demand is high.

Occupancy surveys were undertaken to establish the existing scale and pattern of demand on typical weekdays and market days. The results show that typical peak occupancy of all car parks combined remains reasonably consistent throughout the daytime period at just over 70%. Occupancy in both IBC and NCP operated car parks remains between 80% and 90% throughout the daytime period before falling into the evening. Occupancy rates in car parks managed by other operators is generally lower at around 60% throughout the daytime period.

Consultation revealed that the on-street parking in the central areas is in high demand and spaces are used intensively. The impact of new residential development in the centre (circa 2500 new homes) could have a significant impact on the demand for on-street and off-street parking and will need to be managed proactively.

Survey results indicate that demand for parking is consistently high in the Station/Office Zone to the south and west of the town centre. This zone has the largest amount of public parking but also the highest car park occupancy figures. This zone experiences high demand for long-stay parking associated with onward travel by rail via Ipswich Station and staff parking for the large employers to the west of the town centre. The other zones appear to have adequate capacity for existing levels of demand.

Stakeholder Engagement

A stakeholder engagement workshop was held on the 11th of November 2016 at Ipswich Town Hall[2]:. Representatives of several public and private bodies operating within the town were invited to attend the workshop. The purpose was to investigate the opinions of the existing parking facilities in the

[2] Details of the workshop and stakeholder consultation are presented in Chapter 6

town, identify issues requiring attention and gather opinions concerning its role in the wider transport strategy.

The following issues were considered key priorities for the emerging parking and wider transport strategies

- Retention and enhancement of existing Park & Ride services operating out of Martlesham and London Road sites including a review of pricing in relation to town centre parking;
- Improvements to the quality of the car parks and signage for drivers and pedestrians using car parks; and,
- Integration of travel options between different areas of the town centre including better connections between the rail station, town centre and university / college quarters, including the extension of the existing town centre shuttle bus to serve the station.

Forecasting Future Parking Demand

Forecasts of future parking demand in the Local Plan period to 2036 were derived by applying a growth factor to the existing parking demand, based on the traffic growth forecasts for Ipswich produced by the Department for Transport (known as TEMPro growth factors). The TEMPro factor takes account of traffic growth in Ipswich as well as growth in surrounding areas such as Suffolk Coastal District, Babergh District and Mid Suffolk. This approach assumes that overall parking demand will increase in proportion to predicted population and traffic growth in the town and the surrounding areas.

Existing occupancy levels in each of the car parks were calculated. TEMPro growth rates were applied to the existing occupancy of each car park to estimate the 2036 demand. The supply of parking spaces was also adjusted, to take account of the potential loss of spaces due to the redevelopment of temporary car parks. In most zones, the predicted occupancy is likely to exceed the available capacity.

The following table shows the levels of parking in each zone if the extra demand in 2036 were to use the existing car parks. This table has been used as the base against which future scenarios have been compared.

2036 Parking Occupancy in Existing Parking Spaces

Zone	Mid-morning	Lunchtime	Mid-afternoon	Early evening
Zone 1 Riverside	45%	59%	65%	56%
Zone 2 Station & Office	112%	116%	104%	66%
Zone 3 Town Centre Central & West	70%	83%	77%	33%
Zone 4 Town Centre East	99%	84%	105%	57%
Zone 5 Town Centre North	108%	97%	83%	35%
TOTAL	**85%**	**88%**	**88%**	**55%**

Two alternative scenarios were developed as the basis for the future assessment:

Scenario 1 - 2036 capacity that would result from the loss of existing temporary car parks following expiry of current consents and / or any predicted loss of parking anticipated due to redevelopment of existing car parks.

Scenario 2 - 2036 capacity that assumed delivery of additional / replacement parking in areas of the town identified as being suitable within the Local Plan policy documents. As the policy documents provide no indication of replacement parking numbers, an estimate has been made in each case using input from IBC officers.

Both scenarios included a further assessment of the impact of assuming a 10% reduction in parking demand that could be delivered by the successful implementation of wider sustainable transport and travel measures by 2036.

To understand the point at which existing capacity is exceeded by demand, interim future capacities were modelled under Scenario 1. The 2021, 2026 and 2031 demands were calculated assuming no replacement of temporary car parks. All interim capacities assume that the temporary car parks are already lost (rather than proportioning this out over the years up to 2036), given that all current planning permissions for temporary car parks expire in or before 2021.

Scenario One Results – Local Plan Development and Temporary Car Parks Removed

Assuming the loss of all temporary car parks resulting from consents expiring and no replacement / mitigation, then parking demand throughout the town would be expected to significantly exceed available capacity by 2036. Analysis indicates that 2036 demand would exceed the expected capacity with overall occupancy levels of up to 131%. Occupancy levels are higher than this in some zones and lower in others. Taking account of some car parks which were not surveyed as part of this

Strategy, it is predicted that an additional 1,820 spaces would be required to achieve 100% occupancy and an additional 2,530 spaces to bring the occupancy down to the recommended 85% level.

The zones with the highest levels of occupancy would be the Riverside (142%), Station & Office (147%) and the Town Centre East (151%). These are also the zones where most spaces are lost due to redevelopment.

If a blanket 10% reduction is applied to the future parking demand to reflect a reduction in car use and modal shift towards sustainable modes of travel, demand would still exceed capacity with overall demand levels of up to 118%. Taking account of some car parks which were not surveyed as part of this Strategy, approximately 1,880 spaces would be required to achieve the preferred level of 85% occupancy.

Scenario Two Results – Temporary Capacity Replaced as part of Local Plan Redevelopment

Scenario Two assumes that the parking losses resulting from temporary car park consents expiring would be mitigated through delivery of some replacement parking in the five zones. This being said, taking account of the temporary car parks being lost the net change in parking capacity in 2036 would still be -200.

Assuming that 2036 demand grows in line with the predicted TEMPro factors, analysis indicates that the overall supply of parking would be adequate to meet demand across the town centre as a whole, however overall occupancy would be above 85% in three time periods. Zone 1 Riverside, Zone 2 Station & Office and Zone 5 Town Centre North would all experience occupancy above 100% in at least one time period. Zone 3 Town Centre Central & West and Zone 4 Town Centre East would remain within the recommended 85% capacity across all time periods. In this scenario, taking account of demand in car parks which were not surveyed, a total of 880 additional spaces would be required to achieve 85% occupancy. These spaces would be required in addition to those spaces already planned as replacements to temporary car parks being lost.

If a blanket 10% reduction is applied to the future parking demand to reflect the assumed reduction in car use and modal shift towards sustainable modes of travel, demand would remain within 100% capacity in all zones and time periods. However, demand would be very close to exceeding capacity in Zone 2 Riverside and Zone 5 Town Centre North in particular. To achieve 85% occupancy in all zones, circa 460 additional spaces would be required in Scenario 2A. This takes account of predicted demand in car parks which were not surveyed as part of this Strategy. No additional spaces would be required to reach 100% occupancy in all zones.

In Scenario 2A, to reach 85% occupancy, there would be a surplus of spaces in Zones 3 and 4 of circa 115 and 160 spaces, respectively. The net increase in spaces required would therefore only be

185. Therefore, it may be that transferring some surplus spaces to zones with higher demand could help to achieve overall occupancy around 85% across the town centre.

Interim Scenarios

The assessment of three interim scenarios in 2021, 2026 and 2031 indicates that if the existing town centre parking capacity is retained, by 2021 Zone 2 Station & Office would be above 100% capacity. By 2026, Zone 2 Station & Office would be above 100% occupancy in two time periods, and Zone 4 Town Centre East and Zone 5 Town Centre North would be close to 100% occupancy. By 2031, all three of these zones would reach 100% occupancy during at least one time period. Zone 1 Riverside and Zone 3 Town Centre Central & West would remain within 85% occupancy during all time periods.

If the predicted loss of capacity resulting from anticipated closures of temporary car parks is not offset through reasonable replacement, in 2021 predicted demand will exceed available supply across the town as a whole. This situation gradually worsens through each interim scenario up to 2036, when demand would significantly exceed capacity.

Localised Issues

Despite the generally positive conclusions presented above, there are expected to be localised areas within the town centre where predicted demand would approach or even slightly exceed the anticipated capacity at certain times of the day. This is particularly the case in Zone 1 Riverside and Zone 2 Station & Office due to demand for all-day parking generated by rail commuters travelling out of the Train Station and in-commuters for the large offices in this area, and in areas around the University and New College campus sites.

Whilst the overall estimated future parking capacity is broadly considered appropriate to meet the needs of the alternative development proposals, the proposed location and distribution of parking needs to be considered in greater detail as each development site comes forward for delivery in the context of an overarching strategy.

With limited details available concerning the precise make up of potential developments on sites across the town centre, it is difficult to estimate the localised parking need that each area may generate. Furthermore, it is not known how the potential delivery of a development in one area of the town might impact on the deliverability of another similar potential development in another. If all potential developments were to be included there would be a risk of double counting demand when in reality, only a lower level of development is viable.

It is therefore recommended that the precise requirements for each individual zone be considered in more detail as and when individual development sites are brought forward for delivery. This implies that whilst the overall requirement for additional parking spaces might be expected to remain similar,

their potential distribution across different zones of the town might be expected to change. Sufficient flexibility to provide more parking spaces where they are necessary would need to be built into the strategy.

Identifying Potential Policy Measures

The role of parking within a town centre is complex; there are many variables that affect how users perceive their parking experience and they affect several different outputs. The diagram on the following page shows the key inputs (blue) and outputs (green) related to parking. There is also interaction between these factors and conflicting effects, so a policy that encourages people to visit the town by car may have a positive impact on the economy and user satisfaction but could also increase traffic congestion and air pollution which could damage town centre user satisfaction.

Different people and organisations place different weight on these inputs and outputs but what the parking strategy is seeking to achieve is an optimum balance between all these factors.

Several alternative policy options were identified, the merits of which were considered in relation to their potential application in Ipswich. Key conclusions drawn include:

- Whilst overall demand may remain within supply (in Scenarios 2 and 2A), some individual zones and car parks are over capacity. IBC only has control over the charges at car parks they operate and some of these car parks are over capacity. The Authority could amend current parking charges at their car parks to match the tariffs of other private operators and rebalance demand during busier periods. Equally, as demand is comfortably accommodated during the later afternoon / evening, IBC could expand on existing initiatives to boost demand and support the economy by reducing parking charges at those times;
- It is recommended that the Authority implements more flexible and responsive payment mechanisms as and when replacement of the existing pay & display machines is required, to enable people to stay for longer with ease;
- Assessment of likely future parking requirements indicates that the proposed location of replacement facilities for existing temporary car parks that will be lost due to site redevelopment and expiry of existing consents is broadly appropriate. It is noted however that this will be dependent upon the final decisions concerning the number of spaces to be provided in each instance. The assessment indicates that over the medium to longer-term within the lifetime of the Local Plan there may be an emerging issue with localised parking supply shortfalls towards the south of the town centre around the station / Riverside and the Waterfront / university area. Whilst no immediate action is required, to address this shortfall IBC have decided, in principle, to construct a new multi-storey car park at West End Road in Zone 2 Station & Office. Additional mitigation options that could / should be considered include:
    - Seeking to boost the role of sustainable transport alternatives to provide access to facilities bordering the southern side of the town centre, notably the station and University / Suffolk New College. This could be achieved by a bike hire scheme or by amending the route of Park & Ride services to include stops at facilities en-route;
    - Implementing new (potentially driverless) shuttle bus services between key transport interchange facilities located within the central area of the town and areas to the south to extend the effective catchment of existing public transport services without disrupting existing established operations, and to connect an area with potentially insufficient parking capacity (the south) with areas with more capacity (north and east);

- Seek to influence work patterns and investigate how alterations to shopping habits and access to services could reduce the demand for parking (e.g. increasing home/ flexible working, incentivising use of public transport / Park & Ride);
- Investigating how the emergence of driverless vehicles and alternative propulsion technology might be harnessed to reduce parking demand in sensitive areas of the town (e.g. by allowing automated, off-site parking); and,
- Exploring options to provide a greater level of conventional parking capacity in areas predicted to have shortages by 2036. This could involve a rebalancing of spaces across the five zones, rather than necessarily an increase in overall capacity.

- The Authority could explore use of technology to manage and direct demand towards spare capacity including use of VMS and flexible tariffs. Whilst it is not yet a live, day to day operational concern, the Authority should be mindful of the likely impact of vehicle propulsion technology including the need and potential opportunity to provide electric charging points within its car parks and how emerging technologies fit as part of a wider, overarching transport strategy for the town and borough.

Recommendations

The following table presents a summary of the recommended actions for IBC and partners:

1	**Parking Capacity**
1.1	The capacity provided by the temporary car parks and development sites must be replaced and additional spaces would be required if acceptable levels of occupancy (85%) are to be retained. By 2036, this would require approximately 1,880 additional spaces to replace the 1,874 expected to be lost (as a 10% reduction in car trips is achieved through sustainable transport schemes).
1.2	Specific shortfalls in capacity would need to be addressed in the Riverside, Station & Office and Town Centre North Zones where capacity is not expected to meet predicted demand. The design of new or expanded car parks would need to take account of the quality of urban design in these locations. Spaces proposed in other zones that have a surplus could be transferred to those zones with a shortfall.
1.3	On-street parking may be able to provide a small amount of additional capacity through the introduction of shorter time limits and new on-street Pay and Display.
1.4	When details of the proposed developments are more certain it will be necessary to assess the impacts of each compared with the assumptions made in this strategy.
1.5	Additional capacity could be provided with an expanded Park and Ride service.
2	**Parking Charges**
2.1	IBC tariffs and pricing policy should be set at a level where they are supporting town centre vibrancy and vitality whilst remaining competitive and encouraging the use of sustainable modes of transport.
2.2	Consider increases in parking charges where nearby private car parks are charging significantly more while retaining a high occupancy.
2.3	Review the scope for changing tariffs in response to changes in supply as temporary car parks are redeveloped and new demand is generated by new land uses.
2.4	Explore the possibility of ring fencing some parking income to re-invest in sustainable transport infrastructure.
2.5	Apply charges and restrictions to on-street parking where demand applies additional pressure.
3	**Long Stay / Short Stay**
3.1	Consider the pros and cons of further replacement of long stay parking with short stay to increase turnover, more efficient use of valuable land and boost the town centre economy.
3.2	Use new technology to analyse ticket sales and occupancy data to better understand the location and quantity of long and short stay parking and the turnover of spaces.
3.3	Assess the impact of new town centre residents and businesses on the demand for long stay, short stay and on-street parking, particularly in areas where there is already an undersupply.

4	**Wider Sustainable Transport Issues**
4.1	Successful implementation of sustainable transport is required to achieve a reduction in parking demand. If this does not take place more parking capacity will be required.
4.2	Ensure consistency between this parking strategy and other strategies, including the SCC Local Transport Plan in order to improve air quality and tackle congestion.
4.3	Use parking supply and price to influence modal choice, recognising that most parking is controlled by private operators.
4.4	Enable the use of sustainable transport modes by improving facilities for cyclists, pedestrians, electric and hybrid vehicles and public transport.
4.5	Encourage the expansion of Park and Ride where appropriate and viable, to provide additional parking capacity, to reduce vehicle movements in the town centre and to provide added benefits such as improvements to air quality.
4.6	Incentivise the adoption of sustainable vehicle use by providing reserved parking in premium locations for electric vehicles and, where commercially viable and appropriate, car clubs.
5	**New Land Use Development**
5.1	Monitor parking standards to ensure they are not resulting in a gross under or over-provision of parking and they support the overall parking and transport strategies.
5.2	Secure contributions from developers in Ipswich and in neighbouring local authority areas towards provide public car parking, public transport and Park and Ride schemes, where these are relevant to the developments and contributions are justified in planning terms.
5.3	Ensure the parking strategy is coordinated with other strategies relating to retail, leisure and public realm.
5.4	Set standards and policies relating to surfacing, security, lighting and EV spaces in new car parks.
6	**Quality and New Technology**
6.1	Implement cost effective improvements and maintenance to raise the quality standard and security of the car parks and encourage private operators to raise the quality standard.
6.2	Carry out a review of direction signing for drivers and pedestrians to identify necessary improvements.
6.3	Implement new technology where it is cost-effective, to influence travel behaviour and support sustainable transport, including online/mobile information and Variable Message Signs.
6.4	Improved payment options to encourage visitors to extend their stay, including Pay on Foot, Post-payment, card and contactless, online and mobile payment options.

1 INTRODUCTION

1.1 PREAMBLE

1.1.1 WYG has been commissioned by Ipswich Borough Council to provide support in the preparation of a Parking Strategy covering the town centre. The Council is seeking to develop a parking strategy that aligns with other initiatives to promote the use and growth of the town centre as set out within the Ipswich Local Plan and Ipswich Vision.

1.1.2 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.

1.2 CONTEXT

1.2.1 The built-up area of Ipswich (i.e. the town plus the surrounding built-up area) has a population of around 180,000 (Census 2011) . It is the largest town and administrative centre in the county of Suffolk and the fourth largest built-up area in the East of England region. Approximately 75% of the population live within the boundaries of Ipswich Borough with the remaining 25% residing in areas immediately outside but still within the wider urban area.

1.2.2 According to the Office for National Statistics mid-year population estimates (2016), the wider population of Suffolk was circa 751,200. Other towns of notable size include Lowestoft (c. 71,000), Bury St. Edmunds (c. 41,000) and Haverhill, Felixstowe and Newmarket (each between c. 16,000 and 27,000). This somewhat dispersed settlement pattern means that many residents of the county are reliant upon continued car access into centres like Ipswich to fulfil day to day service and employment requirements.

1.3 PLANNING CONTEXT

1.3.1 Ipswich town centre is the principal retail, commercial and administrative centre in both the Ipswich Borough and for the county although it does experience competition from other nearby centres including Bury St. Edmunds and outside the county from Norwich, Cambridge and Colchester. Ipswich lies approximately 100 km to the north-east of London and is well connected by road and rail via the A12 and Greater Anglia line respectively. To the north-east of the town the A12 continues onwards providing a link to Lowestoft approximately 70 km distance. The A14

provides good quality highway connections to Bury St. Edmunds, the west of the county and major national highway links beyond and to Felixstowe in the east.

1.3.2 The Ipswich Local Plan 2011-2031 was formally adopted by the Council in February 2017. It describes the town as an engine of growth for the East of England and identifies its thriving commercial, ICT, business and financial sectors and significant port as key assets.

1.3.3 The Local Plan identifies Ipswich as developing dynamically and having strong prospects for growth in the areas of finance, IT, business and leisure / tourism. The town benefits from many fine buildings of historic significance and established landscaped areas that generate a sense of place.

1.3.4 In 2017 the Strategic Economic Plan quoted in the Local Plan was replaced by the Norfolk and Suffolk Economic Strategy produced by the New Anglia Local Enterprise Partnership (NALEP). NALEP is building on the success of the first Plan to further develop business sectors, increase jobs in the region and remove barriers to business growth.

1.3.5 The Economic Strategy identifies national and global clusters of business with excellent access to markets and each of these has substantial growth potential and supports high value jobs. Ipswich is highlighted as one of the fastest growing urban areas in the UK with a strong role in the financial services and insurance, ICT, tech and digital creative clusters. The strategy focusses on regenerating the town centre and waterfront and improving road and rail links to the town.

1.3.6 The town is an established and growing educational centre with both the University of Suffolk and Suffolk New College located close to the Waterfront. The town is one of the fastest growing urban centres in the UK.

1.3.7 Ipswich Vision is a partnership of key Ipswich stakeholders including Ipswich Borough and Suffolk County Councils, the Ipswich and Suffolk Chambers of Commerce, New Anglia LEP, Ipswich Central, the MP and University of Suffolk who have agreed a single Vision to guide development of the town centre and waterfront.

1.3.8 The Vision identifies several issues impacting on existing performance of the town centre and opportunities for improvement including:

- improving pedestrian connectivity and accessibility throughout the core areas of the town, better connecting key amenities and facilities, particularly the main retail core to the north, emerging office core and rail station to the south-west and education / waterfront areas to the south-east;

- unifying a collection of different elements to form a coherent town centre "experience" for visitors; and,

- enhancing the role and setting of historic buildings and high-quality areas of open space and cultural assets within the town.

1.3.9 To guide the development of the town centre as an integrated, coherent whole, the Ipswich Vision assigns a key role to each area of the town centre and explains how these areas can be improved and can then work together as one, thereby sustaining a single, integrated experience.

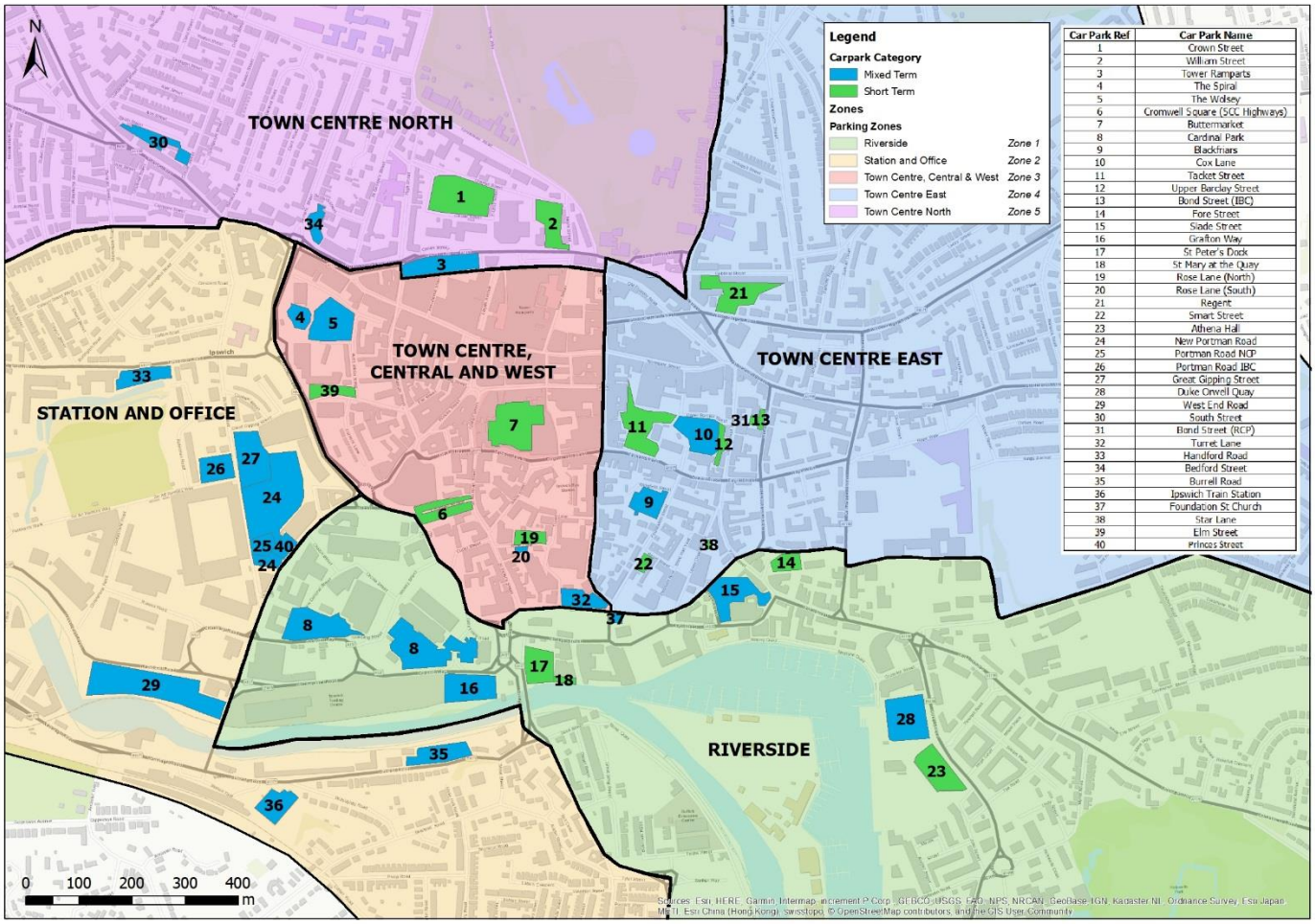
1.4 IPSWICH TOWN CENTRE PARKING CAPACITY & CONDITION

1.4.1 There are approximately 6,817 publicly available, off-street car-parking spaces (including 147 disabled spaces) situated in and around Ipswich town centre and their locations are shown in **Figure 1**. A review of online information combined with on-site observations indicates that circa 2,406 (c.35%) of spaces are under the control of the Borough Council and around 4,411 are operated by a variety of private operators (including just over 1,800 under the control of a single operator, NCP).

1.4.2 There are also approximately 100 Pay and Display on-street parking bays in the town centre and a large number of time-restricted on-street spaces. This study acknowledges the role that on-street parking spaces plays in providing essential short-stay spaces in some locations, but it is not the main focus of the study which deals much more with the off-street parking capacity and strategy.

Five zones were identified to assist the analysis of parking in the town centre. 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. The zones are; Town Centre Central and West, Town Centre East, Town Centre North, Riverside and Station/Office. The zones are also shown in **Figure 1**.

Figure 1: Ipswich Town Centre Car Park Locations and Parking Zones



1.4.3 Nearly 50% of the spaces operated by the Borough Council are located to the south-west of the town centre in several large, surface-level car parks around the Ipswich Town Football Ground and IBC and Suffolk County Council (SCC) offices. Another concentration of spaces operated by the Borough Council is located to the north of the town centre where the Crown and William Street car parks combined provided 619 spaces (including disabled spaces). The Crown car park formerly provided 236 spaces but has recently been replaced by a new 541 space short-stay Multi-Storey Car Park (MSCP), including 28 disabled spaces and 28 electric vehicle charging spaces.

1.4.4 By contrast there are few IBC operated car parks located to the east or south of the town centre where total IBC spaces number only 266, 12% of total IBC operated off-street parking supply.

1.4.5 1,260 (52%) of the total 2,406 spaces operated by the Borough Council allow for long-stay, all day parking, most of which are charged out at £1.20 per hour up to a maximum of £6.00 for the

day (with season tickets available reducing the daily charge to around £4.00 for regular users). All the Borough Council's long-stay car parking is located to the west of the town centre, most of which is near the Ipswich Town football ground.

1.4.6 The remaining 1,146 spaces operated by IBC permit short-stay use only. Details of the tariff structures applicable to both the long and short-stay car parks operated by IBC are summarised in **Table 1**:

Table 1: IBC Long & Short-stay Parking Tariffs

Tariff (1 hour)	Tariff (Maximum)	Maximum Stay	Applicable to:	No. of Spaces (+ disabled)
£1.00	£5.00 All day	All day	South Street	76+5
			Great Gipping Street	132+6
			New Portman Road	563+17
			Portman Road	55+0
			West End Road	385+0
£0.70	£3.50 (weekday) £2.50 (weekend)	All day	Athena Hall	94+4
£0.90	£3.60 for up to four hours	4 hours	Fore Street	30+1
			Smart Street	21+1
£1.20	£6.00 for up to five hours	5 hours	Upper Barclay Street	30+0
			Regent	62+3
			Elm Street	68+4
			William Street	77+1
			Bond Street	14+0
£1.00	£6.00 for up to five hours	5 hours	St Peter's Dock	121+7
£1.00	£5.00 for up to five hours	5 hours	Crown Street	513+28
£1.80	£4.50 for up to three hours	3 hours	Cromwell Square	64+3
£1.00	£5.00 for over five hours	All day	Princes Street	21+0
Total Spaces				**2,326+80**

1.4.7 Around 1,805 of the 4,345 privately operated parking spaces within the town centre are under the control of NCP, of which just below 1,000 are accommodated in a combination of two multi-storey car parks, the Blackfriars car park on Foundation Street adjacent to the south-eastern side of the town centre that has capacity for 513 vehicles and the rail station multi-storey with capacity for 452. Other car parks of a notable size operated by NCP include the 260 space long-stay car park at Tacket Street, the 182-space short-stay car park on Cox Lane and 154 space long-stay car park on Burrell Road.

Details of the tariff structures applicable in each case are summarised in **Table 2**:

Table 2: NCP Long & Short-stay Parking Tariffs

Tariff (1 hour)	Tariff (Maximum)	Maximum Stay	Applicable to:	No. of Spaces (+ disabled)
£2.80	£9.00 all day	All day	Blackfriars Multi-storey	513+5
£2.10	£8.60 all day	All day	Cox Lane	182+2
£4.30 all day	£4.30 all day	All day	Portman Road	65+2
£10.70 all day	£10.70 all day	All day	Train Station	452+10
£2.10	£6.60 for up to four hours	4 hours	Tacket Street	260+2
£3.50	£16.00 for up to five hours – £25.00 for up to 24 hours	24 hours	Tower Ramparts	103+3
£4.20 for 24 hours	£4.20 for 24 hours	24 hours	Turret Lane	51+1
£4.50 all day	£4.50 all day (08:01 to 23:59)	All day	Burrell Road	154+0
Total Spaces				**1,780+25**

1.4.8 Other private operators of note within the town include RCP Parking who operate five car parks accommodating a total of 444 spaces and Green Parking who operate c. 360 spaces. Details of the tariff structures applicable in each case are summarised in **Table 3**:

Table 3: Other Private Operators Long & Short-stay Parking Tariffs

Tariff	Maximum Stay	Applicable to:	Operator	No. of Spaces (+ disabled)
£0.80 for one hour – £4.50 all day	All day	Bond Street	RCP	8+0
£1.70 for one hour – £5.50 all day	All day	Duke Orwell Quay	RCP	284+0
£0.80 for one hour – £9.00 all day	All day	Handford Road	RCP	90+0
£1.20 hourly	4 hours	Rose Lane covered (North)	SPS	36+0
£1.50 for one hour – £6.20 all day	All day	Rose Lane (South)	RCP	21+0
£1.80 for one hour – £5.50 all day	All day	Bedford Street	RCP	40+1
£1.20 per hour or £1.10 paying online	4 hours Monday to Friday, all day at weekends	Slade Street	Total	133+0
£2.40 for four hours	All day	St. Mary at the Quay	LPS	20+0
£1.50 for one hour – £12.00 over four hours	All day	Grafton Way East	Green	200+0

Tariff	Maximum Stay	Applicable to:	Operator	No. of Spaces (+ disabled)
£1.50 for one hour – £12.00 over four hours	All day	Grafton Way West	Green	160+0
£1.20 for one hour – £10.00 for 10 hours	10 hour max.	Cardinal Park	UKPC	612+16
£1.60 for one hour – £12.50 for 24 hours	24 hours	The Wolsey	Napier	160+5
£1.50 for one hour – £9.00 all day	All day to 20:00	Spiral car park	Britannia / Napier	350+10
£2.00 for one hour – £15.00 all day	All day	Buttermarket	Buttermarket	420+10
£1.00 per hour all day	All day	Star Lane	Zak	30+0
Total Spaces				**2,503+47**

1.5 PUBLIC CAR PARKING IN IPSWICH TOWN CENTRE SUMMARISED

1.5.1 A total of 6,817 car parking spaces are provided by a combination of IBC and privately-operated off-street car parks within the town centre study area.

1.5.2 Most IBC car parks operate a pay & display tariff system, with Elm Street offering either pay & display or pay on exit, and the Crown car park offering pay on exit. Five of the eight NCP car parks do likewise with the remaining three (including both the Blackfriars and Station multi-storeys) operating a pay on foot / at barrier system. The 350 space Spiral car park located on Civic Drive and the 420 space Buttermarket car parks use a pay on foot / at barrier system, all other privately-operated car parks employ a pay & display system.

1.5.3 Of the 6,817 parking spaces provided within public car parks within the study area, 4,885 are operated as long-stay parking with the remaining 1,932 providing for short-stay parking only. Prices vary significantly across different car parks and operators with tariffs for an hour's worth of parking as low as 70 pence at Athena Hall and as high as £3.50 in NCP's Tower Ramparts car park. The price of all-day parking is similarly disparate between operators and across different areas of the town starting at around £2.50 Athena Hall for weekends and set as high as £25.00 for 24 hours in the Tower Ramparts car park.

2 POLICY REVIEW

2.1 PARKING POLICY BACKGROUND

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

2.1.2 Whilst under-provision of parking can be detrimental to the economic and social functions of a town 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.

2.1.3 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.

2.1.4 Such issues are specifically identified within the Ipswich Local Plan and Ipswich Vision documents that highlight a lack of coherent pedestrian connectivity throughout the town, particularly along north / south routes between the town centre and Waterfront and station and along an east / west axis connecting the station to the education quarter and Waterfront.

2.1.5 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 town and its people.

2.1.6 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 town 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 town centre, it may conversely increase delay, congestion and pollution thereby reducing the attractiveness of the town centre.

2.1.7 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 town 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 town centre businesses.

2.1.8 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.

2.1.9 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 Borough.

2.2 NATIONAL PLANNING POLICY FRAMEWORK (NPPF)

2.2.1 This Parking Strategy will be undertaken in accordance with paragraph 106 of the NPPF (2018) which states:

"*In town centres, local authorities should seek to improve the quality of parking so that it is convenience, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists.*"

2.3 PARKING STRATEGIES & MANAGEMENT (IHT)

2.3.1 The above 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 been used to inform preparation of the Parking Strategy.

2.3.2 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.

2.4 IPSWICH PLANNING POLICIES

2.4.1 The **Ipswich Borough Local Plan** was formally adopted in February 2017 and establishes a vision for the future development of the district together with key objectives and policies to support their achievement. This is complemented by the **Ipswich Vision: Turning Our Town Around** which is not a policy document but seeks to guide investment into, and widen the appeal of, the town.

2.4.2 The **Ipswich Local Plan (2011 – 2031)** identifies the town centre as the principal focal point to accommodate development including retail, employment and leisure service provision and a substantial proportion of housing growth planned within the borough.

2.4.3 Recent and planned development in the town has been focused around four key central areas:

- **Waterfront**: Currently one of the largest regeneration projects in the East of England including commercial, cultural and institutional investment, key features of which include significant delivery of new homes, employment opportunities and the completed DanceHouse, the regional home of Dance East. The Quarter also includes the proposed Upper Orwell Crossings that are planned to improve the movement of traffic in the town centre;

- **Ipswich Village**: Delivery of purpose-built modern office spaces and new residential units towards the western side of the town centre, now designated as the Princes Street Enterprise Zone which incorporates the headquarters for Ipswich Borough and Suffolk County Councils, Suffolk Life, Birketts, Archant and the Crown Court;

- **Town Centre BID**: Establishment in 2007 of a town centre Business Improvement District (BID) called Ipswich Central to help manage the town centre and attract investment; and,

- **Education Quarter**: Successful establishment of a new education quarter for the town with more than £150m of investment around the Waterfront including the development of a new university campus and a £59m investment in the adjacent Suffolk New College campus, plus several student accommodation blocks.

2.4.4 Since adoption of the 2017 Local Plan, IBC and Suffolk Coastal District Council have consulted on a review of their Local Plan in line with their commitments to continually ensuring they are meeting local housing and employment needs. Consultation on the Local Plan review ran between August and October 2017 and the revised target for growth is for 8,840 new dwellings

by 2036. Whilst the Local Plan Review is not yet adopted, this strategy has been prepared on the basis of the revised housing need.

2.4.5 The 2017 Housing Annual Monitoring Report (AMR) clearly identifies sites within the Borough with sufficient capacity to accommodate just over 8,900 dwellings, of which an estimated 1,870 (c.21%) lie within or directly adjacent to the town centre study area. Thus, the number of potential residential sites within and around the town centre represents c. 19% of the total allocation located within the Borough boundary and around 12% of the total requirements within the HMA.

2.4.6 Additionally, the Plan sets out a requirement for delivery of approximately 12,500 additional jobs in Ipswich to support growth between 2011 and 2031, identifying a need for at least 35 hectares of development land for a mix of B1, B2 and B8 employment purposes that, except for offices, should to be directed towards the outer parts of the Borough.

2.4.7 The Local Plan stipulates that the regeneration and growth of the town will be achieved by:

i. focussing major new retail development in the central shopping area;

ii. focussing new office, hotel, cultural and leisure development into the town centre; and,

iii. focussing new residential development and community facilities around the town centre, Waterfront, Ipswich Village (as well as Ipswich Garden Suburb and within walking distance of existing district centres).

2.4.8 One of the key visions of the Local Plan is that:

"Pedestrians, cyclists and public transport users will come first in Ipswich town centre. Traffic management measures in conjunction with improvements for pedestrians, cyclists and buses will ensure effective links between the wider Ipswich area and the town centre, and help keep congestion down and accessibility easy in the centre. Additional short stay parking and enhanced park and ride will provide for car-borne shoppers, visitors and the workforce."

2.4.9 Policy DM18 'Car and Cycle Parking' relates to how new development will be expected to provide parking in accordance with the Council's adopted standards. In terms of the town centre, it states that:

"A central car parking core will be defined in the town centre, through the Site Allocations and Policies (incorporating IP-One Area Action Plan) Development Plan Document. Within the central car parking core, only operational car parking will be permitted in connection with non-residential development, so that the stock of long-stay parking is not increased. New, non-residential long-stay car parks will not be permitted….

In order to reduce congestion, manage air quality and encourage a modal shift away from the private car, particularly amongst the commuting public, it is important to limit long-stay parking within the central car parking core and for organisations to encourage employees to travel to work by more sustainable means through travel planning. Therefore, only necessary operational parking will be allowed for new non-residential development within the central car parking core. This excludes staff parking but would include access which is considered essential."

2.4.10 Adopted in February 2017, the **Site Allocations & Policies Development Plan** (SAPP) Document (incorporating the IP-One Area Action Plan) provides detailed policies which give effect to certain strategic policies of the Core Strategy, including policies CS7 (housing), CS13 (employment) and DM18 (Car and Cycle Parking). The SAPP forms part of the Borough's statutory development plan alongside the Core Strategy and as such carries significant weight in planning terms. It acts to provide details of strategic policies as set out within the Core Strategy.

2.4.11 The IP-One area relates to an area defined by IBC which covers all of Ipswich town centre and some of the surrounding areas such as the Waterfront, Ipswich Village and the education quarter. The SAPP defines the Central Car Parking Core as an area within IP-One area, covering central Ipswich between Crown Street and the River Orwell, and Civic Drive and the University Students' Union. The SAPP states that within the Central Parking Core, Policy DM18 of the Local Plan will apply.

2.4.12 Key transport and movement policies within the IP-One area considered relevant include:

i. Delivery of a new Wet Dock Crossing, linking Toller Road in the east with Mather Way in the west to facilitate access to the Island Site and provide for through traffic. It is possible that the Star Lane Gyratory will be reduced to one lane in each direction to facilitate improved pedestrian access between the Waterfront and Central Shopping Area and mitigate existing air quality and congestion issues in the area;

ii. Development of a town centre car parking policy with the twin aims of supporting the economy of the town centre and limiting congestion, through supporting the Travel

Ipswich measures and encouraging the use of sustainable modes of transport. Key developments identified include:

- Sites allocated for medium sized multi storey car parks on the existing Crown car park site and around Mint Quarter; [the Crown car park MSCP is now open]
- Potential redevelopment of the Orwell Quay site to include public car parking and possible development along the eastern side of Turret Lane to include a short stay multi-storey car park for public use;
- Allocation of land along West End Road to provide for long-stay commuter car parking with potential for it to accommodate overspill resulting from redevelopment proposals reducing capacity along Portman Road if this transpires;
- The SAPP makes explicit that proposals for additional temporary car parks within the town centre will not be permitted and that renewal of existing planning consents for temporary short stay public parking within the town centre will not be permitted when the permanent provision allocated above has been delivered.

iii. Development should be located and designed to minimise the need to travel and to enable access safely and conveniently on foot, by bicycle and by public transport (bus and rail). This will encourage greater use of these modes. The Council will support the implementation of the Travel Ipswich scheme and will work with the Highway Authority to manage travel demand in Ipswich and in doing so will prioritise the introduction of an integrated cycle network.

2.5 DEVELOPMENT IMPACT ON EXISTING CAR PARKS

The local planning authority has been contacted to provide further details of the planned scale, location of and timetable for development of different types in and around the town centre with specific reference to the potential impact on existing car parks. A summary of the key findings assuming there is no further delivery of additional parking capacity is presented within **Table 4**.

Table 4: Anticipated Impact of Redevelopment on Town Centre Parking Capacity

Existing	Years 1 – 5		Years 6 – 10	
6,730 spaces	Redevelopment of the West End Road car park for dwellings and office space plus replacement car parking for capacity lost	Loss of 329 spaces from existing car parks but some opportunity to construct replacement	Redevelopment of the Old Cattle Market on Portman Road South for mixed office & residential uses plus replacement car parking for capacity lost as a result of closure of Great Gipping Street and New Portman Road car parks	Loss of 695 spaces from existing car parks but some opportunity to construct replacement
	Redevelopment of land to the south of Commercial Road for mixed residential, hotel, leisure and employment use	Loss of 360 spaces from Grafton Way East & West car parks	Redevelopment of Site IP011b Smart Street / Foundation Street corner for mixed residential / B1 office	Loss of 21 spaces from Smart Street car park
	Redevelopment of the former St. Peter's Warehouse for mixed residential, hotel, leisure and employment use	Loss of 128 spaces from St. Peter's Warehouse car park	Redevelopment of the Burrell Road car park adjacent to the southern side of the River Orwell for residential purposes.	Loss of 154 spaces from Burrell Road car park
	Redevelopment of land between Old Cattle Market and Star Lane as office / leisure, housing, small-scale retail and potentially car parking	Loss of 51 spaces from within the Turret Lane car park but possible replacement to offset		
	Redevelopment of the Commercial Building and Jewish Burial Ground on Star Lane as mixed residential and B1 employment	Loss of 140 spaces but possible replacement to offset		
	Redevelopment of Orwell Quay site to accommodate educational uses and ancillary services plus replacement car parking	Loss of 300 spaces but possible replacement to offset		
	Redevelopment of the Civic Centre area (Wolsey and Elm Street car parks) as primary retail and residential	Loss of c. 99 spaces from Wolsey A & B and c. 68 spaces from Elm Street car parks		

Existing	Years 1 – 5		Years 6 – 10	
		Implies loss of 1,475 spaces Residual parking capacity: 5,286 spaces		Implies loss of 870 spaces net during the 6 – 10 year development plan period Residual parking capacity: 4,416 spaces

2.5.1 **Table 5** provides details of the current planning status of existing temporary car parks within the town including expiry dates of consents under which they operate. This information has subsequently been used to inform understanding of the anticipated change in parking supply that will result from expiry of temporary consents over the medium-term planning period. This issue is further discussed in **Chapter 7**.

Table 5: Details of Temporary Car Park Planning Consents

Name	Operator	Capacity	Planning permission expiry date
Wolsey A & B	Napier Parking	160+5	31/03/2021
Tacket Street	NCP	260+2	29/06/2018 (renewal pending)
Bond Street	IBC	14+0	31/12/2019
Slade Street	Total Car Parks	133+0	25/07/2019
Grafton Way	Green Parking Ltd	360+0	29/09/2018
St. Peter's Dock	IBC	121+7	30/05/2020
Rose Lane	Mr Nelson	36+0	09/03/2019
Smart Street	IBC	21+1	25/04/2020
Great Gipping Street	IBC	132+6	13/12/2019
Duke Orwell Quay	RCP	284+0	31/08/2021
Handford Road	RCP	90+0	23/12/2018
Burrell Road	NCP	154+0	21/03/2020
Star Lane	Zak	30+0	21/10/2018
Princes Street	IBC	21+0	25/04/2020
Elm Street	IBC	68+4	31/03/2021
West End Road [overflow]	IBC	56 cars or 25 coaches	08/03/2019

2.6 IPSWICH TOWN CENTRE MASTERPLAN 2012

2.6.1 The Town Centre Master Plan provides a view of what Ipswich Borough Council and stakeholders agree is the way forward to achieve an enhanced town centre in Ipswich. The 15-year plan has an end date of 2027 and complements the adopted Core Strategy and Policies Development Plan Document and other relevant policy documents.

2.6.2 Selected priorities identified within the town centre masterplan include:

- Encouraging and promoting reorientation of the town centre to run along more of a north – south trajectory rather than east – west;
- Delivery of an additional 40,000m^2 shopping floor space between (1) the Waterfront and the town centre (Merchant Quarter) (2) northwards extension of Tower Ramparts and (3) Tacket Street car park west of Cox Lane;
- Creating street networks that promote leisure shopping and are attractive and convenient for all pedestrians;
- Concentrating large scale office development in the Ipswich Village/ Portman Road areas;
- Promoting residential development, particularly family units, throughout the town centre to include residential-led mixed-use development on the Cox Lane car park east of Cox Lane (formerly known as the "Mint Quarter"); and,
- Potential redevelopment of the Orwell Quay site to include public car parking and possible development along the eastern side of Turret Lane to include a short stay multi-storey car park for public use.

2.7 SUFFOLK LOCAL TRANSPORT PLAN 3 (LTP3) 2011 - 2031

2.7.1 The local transport plan sets out Suffolk County Council's long-term transport strategy for the next 20 years. The key focus of the plan is to support Suffolk's economy as it recovers from the recession and to support future sustainable economic growth.

2.7.2 Four strategic priorities are identified including the need to maintain and improve transport networks, tackle congestion, improve access to jobs and markets and encourage a shift to more sustainable travel patterns.

2.8 IPSWICH ECONOMIC DEVELOPMENT STRATEGY

2.8.1 The Ipswich Economic Development Strategy (2018) sets out the approach taken by Ipswich Borough Council and its partners to support sustainable economic growth in Ipswich. The priorities of the strategy are to:

- Promote Ipswich as a place to invest and grow business;
- Stimulate a successful town centre and retail experience;
- Inspire Ipswich to be the best place to live, work, learn and visit; and,

- Prioritise Ipswich's strategic infrastructure.

2.8.2 Parking is specifically included within the prioritisation of strategic infrastructure, with a commitment to implement the Ipswich Parking Strategy through high quality, multi-storey and surface car parks.

2.9 TRAVEL IPSWICH

2.9.1 The Travel Ipswich scheme involved delivery of a £21 million package of traffic management and promotion of smarter travel choices to address the main transport issues facing Ipswich and relieve transport pressures on the town brought about by significant future development anticipated, particularly in central areas.

2.9.2 The programme specifically focused on the following key areas:

- Upgrading the urban traffic management and control (UTMC) system;
- Integrating real-time passenger information for users of public transport; and,
- Removing pedestrian guardrail and implementing measures to prioritise cyclists.

2.10 SUFFOLK GROWTH STRATEGY

2.10.1 The Suffolk Growth Strategy sets out the County Council's vision to strengthen the Suffolk economy: to create more, higher value, better-paying jobs, and more wealth by building on distinctive competitive economic and environmental advantages.

2.10.2 The Strategy identifies nine key sectors offering potential to deliver growth, namely: Advanced manufacturing and technology (AMT); Energy; Information and communication technology (ICT); Finance and insurance; Food, drink and agriculture; Ports and logistics; Biotechnology and bloodstock; Tourism; Creative and cultural industries.

2.11 NORFOLK AND SUFFOLK ECONOMIC STRATEGY

2.11.1 The New Anglia Local Enterprise Partnership (NALEP) has published their Economic Strategy that builds on the successes of the previous plan and aims to generate growth across all the sectors, focusing on creating high value, highly skilled jobs and industries, training and support for the workforce and businesses. It recognises the need to expand the competitive clusters that exist in the area, including Ipswich, and the role of the high-quality connections to national and international markets that exist. The objectives include the creation of 88,000 new jobs, 30,000 new businesses and 140,000 new homes by 2036.

3 COMPARISONS WITH OTHER LOCAL AUTHORITIES

3.1 PARKING TARIFFS

3.1.1 Car park pricing policy can be very competitive between different local authorities and between public and private operators in the same location. The current parking tariffs by IBC have been benchmarked against comparable towns and authority areas as shown in **Table 6**. The red, amber and green coloured boxes show where parking charges are greater (green), the same or lower (red) than the current charges in Ipswich.

Table 6: Benchmarking of Typical Local Authority Parking Tariffs

Local Authority	Town Centre Weekday Parking Charge					
	<1 hr	<2 hrs	<3 hrs	<4 hrs	<5 hrs	Long stay
Ipswich	£1.20	£2.40	£3.60	£4.80	£6.00	£5.00
Bury St. Edmunds	£1.10	£2.00	£2.50	£3.00	-	£2.70
Norwich	£1.80	£3.60	£5.40	£6.00	£6.00	£6.00
Cambridge	£2.20	£3.70	£5.80	£9.50	£17.50	£24.80
Colchester	£1.70	£2.90	£3.30	£4.10	£6.00	£3.50

3.1.2 **Table 6** shows that IBC parking charges are at the lower end of the range of parking tariffs in comparison to neighbouring local authority areas. There are many different tariff structures in place, so a direct comparison is not always possible, but the charges for <1 hour and <2 hours are in the order of £1.20 and £2.40 respectively in IBC car parks while in other authorities they range from £1.10 to £2.20 for <1 hour and most are between £2.00 and £3.70 for <2 hours. In summary:

- Car parks operated by Norwich City and Cambridge City Councils have consistently higher tariffs for all stay periods; and
- Car parks operated by St. Edmundsbury Council (in Bury St. Edmunds) and Colchester Borough Council charge lower tariffs for most time periods.

3.2 PARKING STUDIES

3.2.1 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.

3.2.2 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

3.2.3 All factors have been considered as part of a revised parking strategy but at this stage the study has focussed on those factors that are most directly related to supporting the regeneration efforts in the Borough. 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 town centre economy.

3.2.4 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.

3.3 RELATIONSHIPS BETWEEN PARKING AND THE TOWN CENTRE ECONOMY

3.3.1 Town 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.

3.3.2 Town centres can be considered as an ecosystem where retail is an important element, but it may not be the most important. Many town centres have seen a reduction in the number of shopping outlets, but the most successful town 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.

3.3.3 Accessibility and transport options to a town 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.

3.3.4 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 town 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 town centre footfall is less obvious and linear, suggesting that other factors are at work.

3.3.5 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 East Anglia. The key findings of the study were:

- There is a lack of robust evidence to link car park strategies with town 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 town 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;
- Town 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 town centre workers rather than shoppers and it had little impact on footfall; and
- Town centre economies are highly localised and very specific to local conditions and town centre strategies should be tailored to local areas to maximise footfall.

3.3.6 Studies and reports by business organisations such as the Federation of Small Businesses often link town centre vitality with parking charges but provide little hard evidence to prove the link. Sustrans research[3] found that traders over estimate the amount of income from car users and under estimate the importance of pedestrians.

3.3.7 In 2012 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 Ipswich 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; and,
- 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).

[3] https://www.polisnetwork.eu/uploads/Modules/PublicDocuments/sustrans_ff39.pdf

4 PARKING AUDIT

4.1.1 An audit of all public car parks in Ipswich was undertaken during site visits in November 2016 and March 2017. Occupancy surveys were carried out at each car park at four different times during a typical weekday.

4.1.2 The car parks have been grouped into one of five town centre based zones. This approach has been adopted to establish and maintain the legibility of the analysis and because the assessment of existing and future demand / capacity can be directly linked to the specific emerging requirements of each zone as it is anticipated to develop over time. The town centre zones and car parks are shown in **Figure 1**.

4.2 ZONE 1 - RIVERSIDE

4.2.1 The Riverside Zone lies along the north side of the River Orwell and Neptune Quay between the river and the town centre. It is a mixed-use area that includes significant recent redevelopment for large-scale residential, leisure / restaurant and educational uses and significant areas of parking. Cardinal Park takes up a large area to the west of this zone, the quayside runs through the centre and the University and College are to the east.

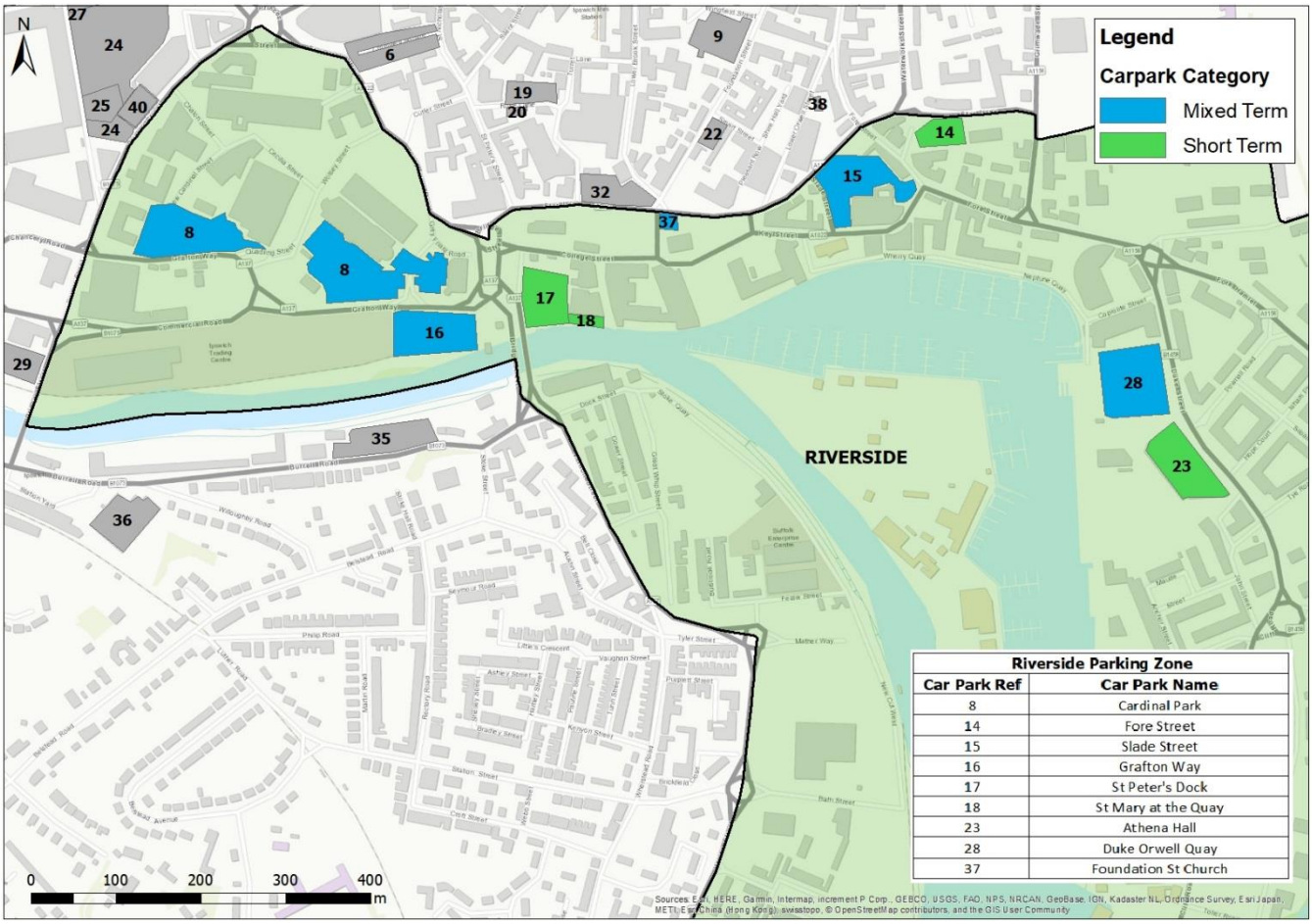
4.2.2 There are currently **1,682** parking spaces located in the Riverside Zone (including 28 disabled spaces), with the largest car park at Cardinal Park (612 plus 16 disabled). A summary of the existing supply is provided within **Table 7**:

Table 7: Existing Parking Capacity in Zone 1 - Riverside

Car Park	Owner	Number of Parking Spaces		Length of Permitted Stay (hours)
		Standard	Disabled	
Duke Orwell Quay	RCP	284	0	24
Athena Hall	IBC	94	4	16
Grafton Way West	Green Parking	160	0	24
Grafton Way East	Green Parking	200	0	24
Slade Street	Total	133	0	24
Cardinal Park	UKPC	612	16	24
Fore Street	IBC	30	1	4
St. Peter's Dock	IBC	121	7	5
St. Mary at the Quay	LPS	20	0	24

4.2.3 The Zone 1 car park locations are shown in **Figure 2**:

Figure 2: Parking in Zone 1 - Riverside



Riverside Parking Zone	
Car Park Ref	Car Park Name
8	Cardinal Park
14	Fore Street
15	Slade Street
16	Grafton Way
17	St Peter's Dock
18	St Mary at the Quay
23	Athena Hall
28	Duke Orwell Quay
37	Foundation St Church

Duke Orwell Quay Car Park

4.2.4 The Duke Orwell Quay car park lies adjacent to Ipswich Quayside is operated by RCP Parking Ltd and has 284 spaces and operates both short and long-term parking tariffs. Its surface is formed of the concrete slab floor of the former warehouse. Parking bays are demarcated although existing line markings are quite worn and need of maintenance. Access for vehicles is provided via simple priority connection into University Avenue that runs adjacent to its southern side. A wire mesh fence separates the car park from the adjacent footway. The car park is well lit and there is some evidence of it being staffed for at least some of the daytime period.

Athena Hall car park

4.2.5 The Athena Hall car park has 98 spaces (including 4 disabled spaces) and is operated by Ipswich Borough Council with parking permitted for a maximum stay of 16 hours for £3.50 and hourly parking at 70 pence per hour. The car park lies in the under croft of the hall of residence building

that is located between Duke Street and the Quay. Access for vehicles is provided via a simple priority connection from Wykes Bishop Street. The car park is covered by CCTV. It is surface-dressed in concrete that is well maintained with spaces clearly demarcated.

Grafton Way Car parks

4.2.6 The car parks on Grafton Way (East and West) are operated by private operators and operate on short and long-stay parking tariffs. They are located at the western side of Bridge Street and accommodate a total of 360 spaces, with the East car park accommodating 200 and the West car park accommodating 160. The condition of both car parks is variable with the western car park in better condition than the eastern. The west car park (Green Car park) is surface-dressed in asphalt, with spaces clearly demarcated. Access for vehicles is provided via an appropriate connection into Grafton Way that runs adjacent to its eastern side. The car park is well lit and reasonably well overlooked from the adjacent road providing a general sense of security. The east car park is surface-dressed in gravel without demarcated parking bays. The lighting is poor and the car park lacks surveillance.

Slade Street Total Car Park

4.2.7 The car park in Slade Street is operated by Total Car Parks Ltd. and the parking tariff is £1.20 per hour (or £1.10 if booked online). The condition of the 133-space car park is variable with approximately half surfaced in concrete much of it surface dressed in concrete where the parking spaces are demarcated and other part is dressed in gravel without demarcated parking spaces. There is no evidence of CCTV coverage and lighting internally within the site.

Cardinal Park

4.2.8 The Cardinal car park is operated by UKPC and operates in short and long-term tariffs, accommodating a total of 612 spaces including 16 disabled spaces. The Cardinal Park car park is located within Cardinal Retail and Leisure Park that principally provides for visitors to the park itself.

4.2.9 There are two separate parking areas and they are open fronted and access remains open at all times. The condition of the car park is reasonably good, surface-dressed in asphalt, with spaces clearly demarcated. Access for vehicles are provided via appropriate connections into Grafton Way and Quadling Street. The car park benefits from security staff, a good standard of lighting and safe pedestrian access improving the sense of security.

Fore Street

4.2.10 The Fore Street car park is operated by IBC and has a short-stay tariff of 90p per hour. It has 30 marked bays and 1 disabled bay and is located adjacent to the swimming pool off Star Lane to the east of the zone. The condition of the car park is reasonably good, it is surface-dressed in asphalt, with spaces clearly demarcated. The access point for vehicles is from one-way Star Lane and there is a second access off Fore Street for buses only, providing access to the pool. The car park has its own street lighting, cycle parking and safe pedestrian access points.

St. Peter's Dock

4.2.11 The St. Peter's Dock car park is operated by IBC with parking permitted for a maximum stay of four hours for £3.80. It is situated on an area of land that is part occupied by a disused warehouse adjacent to Neptune Marina. The major part of the existing car park (approximately 70 spaces) lies adjacent to the west side of the warehouse and are accessed via St Peter's Dock that connects into Bridge Street to the south-west of the car park. Further areas lie to the front of the warehouse building and front directly onto the adjacent roadway across an existing footway area. A limited number of spaces lie within the warehouse complex itself. The bulk of the spaces are owned and managed by IBC and it is intended that this will include a smaller area of parking previously operated by Total to provide the total of 121 spaces (plus 7 disabled and 6 motorcycle spaces).

4.2.12 The existing car park is open fronted and access remains open at all times. The condition of the car park is poor. Much of it is surface dressed in gravel and observations indicate that potholes have formed in several places. Other areas of the car park are surfaced in concrete that appears to be the former footplate of part of the building complex on the site.

St. Mary at the Quay

4.2.13 The 20 spaces adjacent to St. Mary at the Quay are operated by LPS. The car park is surface-dressed in asphalt, with spaces clearly demarcated. Access for vehicles is provided via an appropriate connection into Star Lane that runs adjacent to its northern side. The car park is well lit and reasonably well overlooked from the adjacent highway providing a general sense of security. Pedestrian routes into and through the car park connect into footways that run alongside Star Lane and to a signalised pedestrian crossing facility that lies nearby.

4.3 ZONE 2 – STATION AND OFFICE DISTRICT

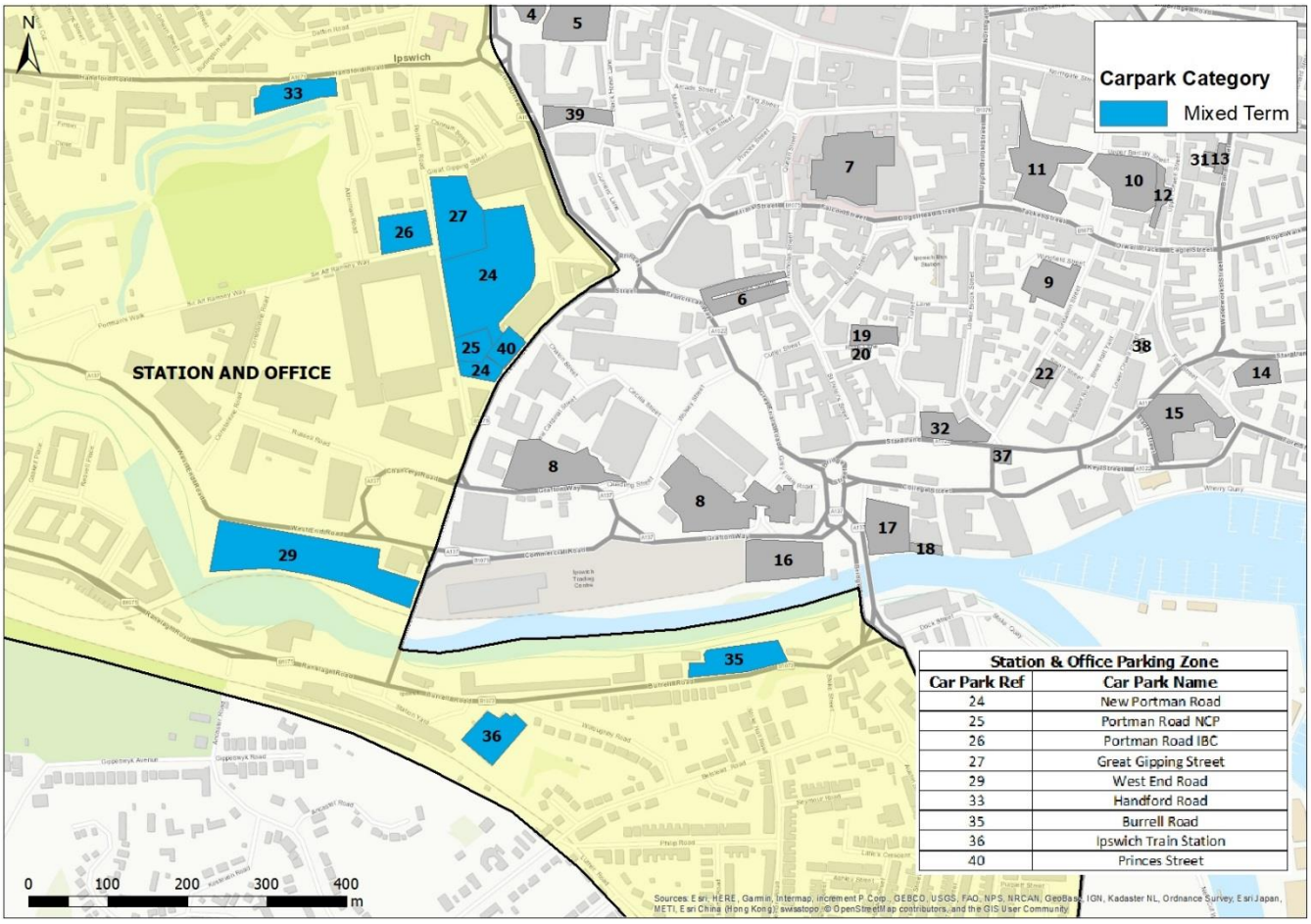
4.3.1 The Station and Office Zone includes the redevelopment areas to the west and south of the town centre that includes the Portman Road and Railway Station areas. It includes public authorities, sporting / leisure and employment uses. The zone contains more parking spaces than any other zone with **1,952** spaces (including 35 disabled spaces), including three large car parks at New Portman Road, West End Road and the Railway Station. A summary of the existing supply is provided within **Table 8**:

Table 8: Existing Parking Capacity in Zone 2 – Station and Office

Car Park	Owner	Number of Parking Spaces		Length of Permitted Stay
		Standard	Disabled	
New Portman Road	IBC	563	17	24
Portman Road (NCP)	NCP	65	2	24
Portman Road (IBC)	IBC	55	0	24
Great Gipping Street	IBC	132	6	24
West End Road	IBC	385	0	24
Handford Road	RCP	90	0	24
Burrell Road	NCP	154	0	24
Railway Station	NCP	452	10	24
Princes Street	IBC	21	0	24

4.3.2 The Zone 2 car park locations are shown in **Figure 3**:

Figure 3: Parking in Zone 2 – Station and Office



New Portman Road Car park (IBC)

4.3.3 The New Portman Road car park has 580 spaces (including 17 disabled spaces), is operated by IBC and accommodates both long and short-term parking activity. The car park is surface-dressed in asphalt, with spaces clearly demarcated. Access for vehicles is provided via an appropriate connection into Portman Road that runs adjacent to its western side and a secondary access is provided via Friars Bridge Road. The car park is well lit and reasonably well overlooked from the adjacent road providing a general sense of security despite. It is not clear whether there is any CCTV monitoring of the site.

Great Gipping Street Car Park (IBC)

4.3.4 The Great Gipping Street car park is operated by Ipswich Borough Council and accommodates both long and short-term parking activity. The 138-space car park (including 6 disabled spaces) is located north-west of the New Portman Road Car Park. The condition of the car park is reasonably good. It is surface-dressed in asphalt, with spaces clearly demarcated. Access for

vehicles is provided via an appropriate connection into Portman Road that runs adjacent to its western side. The car park is well lit and reasonably well overlooked from the adjacent road providing a general sense of security. CCTV appears to cover the vehicular access but is not clear if more cameras cover the whole site.

Portman Road Car Park (NCP)

4.3.5 The 67-space car park (including 2 disabled spaces) is located on the southern side of the New Portman Road car park. It is operated by NCP and there is a flat rate of £4.30 irrespective of the length of stay. The condition of the car park is reasonable, surface-dressed in asphalt, with spaces clearly demarcated. Access for vehicles is provided via an appropriate connection into Portman Road that runs adjacent to its western side. There is no clear evidence about the surveillance of the car park and it is poorly lit, reducing the general sense of security.

Handford Road Car Park

4.3.6 The Handford Road car park is operated by RCP Parking Ltd and the parking tariff is £0.80 per hour. It accommodates 90 spaces. The condition of the car park is good, surface dressed in asphalt with spaces clearly demarcated. Access for vehicles is provided via a simple priority connection into Handford Road that runs adjacent to its northern side. There is no evidence of CCTV or security staff and the lighting is poor, reducing the sense of security.

Portman Road Car Park (IBC)

4.3.7 The Portman Road car park is operated by IBC and operates both short and long-term parking tariffs with 55 spaces. The condition of IBC's Portman Road car park is reasonably good, surface dressed in asphalt with spaces clearly demarcated. Access for vehicles is provided via a simple priority connection into Portman Road that runs adjacent to its western side. The car park is lit internally and benefits from adjacent street lighting although there is no evidence of CCTV coverage.

West End Road Car Park (IBC)

4.3.8 The West End Road car park is operated by IBC and operates both short and long-stay tariffs. The condition of the 385-space car park adjacent to the river is reasonably good. It is surface-dressed in asphalt although the quality of the surface is lower in one part of the car park. The parking bays are demarcated although the existing line markings are quite worn and need of maintenance. Access for vehicles is provided via a priority connection into West End Road that runs adjacent to its western side. The car park is well lit and reasonably well overlooked from

the adjacent road and benefits from CCTV coverage providing a general sense of security. Disabled and coach parking bays are provided.

Railway Station Car Park

4.3.9 The Railway Station car park contains 462 spaces (including 10 disabled spaces) that are operated by NCP and it operates both short and long-stay tariffs. It is situated on an area adjoining the station. The condition of the car park is excellent. As a multi-storey structure, it is surface dressed in concrete, with spaces clearly demarcated. Access for vehicles is provided via a priority connection into Burrell Road. The car park benefits from CCTV, sufficient lighting and safe pedestrian access points.

Burrell Road Car Park

4.3.10 The Burrell Road car park is operated by NCP and operates a flat rate of £5.50 irrespective of the length of stay. The 154-space car park is located on a site on Burrell Road on the south side of the river. The condition of the car park is relatively poor, surface-dressed in gravel and lacking demarcated spaces. Access for vehicles is provided via an appropriate connection into B1075 that runs adjacent to its southern side. The car park lacks CCTV although it is reasonably well overlooked from the adjacent street. There is no internal lighting within the site.

Princes Street Car Park (IBC)

4.3.11 The Princes Street car park is operated by IBC as a long-stay car park with 21 spaces. It was permitted in 2018 under IBC's Off-Street Parking Places Order. It is a long-stay car park with an hourly rate of £1.00 up to four hours. For five hours, the tariff is £4.50 and for over five hours there is a flat rate of £5.00. Season ticket, early bird entry and Carnet card discounts are available. Access for vehicles is provided via Princes Street. Surveys were not carried out at the site so the car park has been excluded from the calculations of zonal occupancy. It is however taken into account when discussing future capacity of town centre car parks to accommodate future parking demand.

4.4 ZONE 3 – TOWN CENTRE CENTRAL AND WEST

4.4.1 The Town Centre Central and West Zone includes the core of the town with a distinctive retail and leisure offer and some recent residential developments. There are currently **1,203** public parking spaces within Zone 3 (including 33 disabled spaces), although not all were included in the surveys. The private car park at the Buttermarket was not included in the surveys and it has therefore been excluded from the calculations of occupancy in the Zone later in this Strategy.

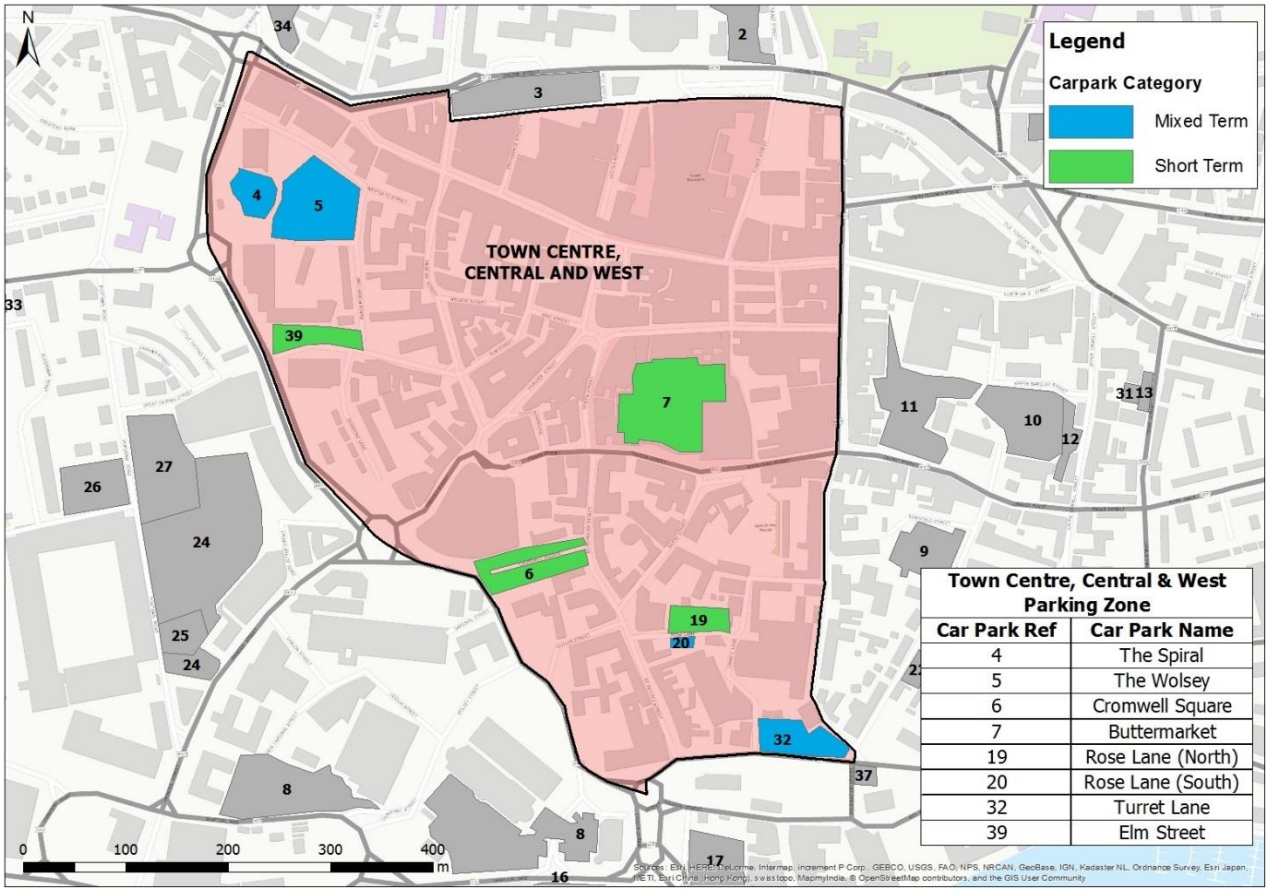
4.4.2 A summary of the existing supply is provided within **Table 9**:

Table 9: Existing Parking Capacity in Zone 3 – Town Centre Central and West

Car Park	Owner	Number of Parking Spaces		Length of Permitted Stay
		Standard	Disabled	
The Spiral	Britannia	350	10	24
The Wolsey	Napier	99	10	24
Cromwell Square	IBC	64	3	3
Buttermarket	Buttermarket	420	10	24
Rose Lane Covered	SPS	36	0	24
Rose Lane	RCP	21	0	24
Turret Lane	NCP	51	1	24
Elm Street	IBC	68	4	5

4.4.3 The Zone 3 car park locations are shown in **Figure 4**:

Figure 4: Parking in Zone 3 – Town Centre Central and West



Buttermarket

4.4.4 The Buttermarket is the main indoor shopping centre in Ipswich and it has a 430-space underground car park (including approximately 10 disabled spaces) operated by the centre owners. It is a short stay, pay on foot car park charging £2.00 for the first hour and high charges for over 5 hours. It is free after 8pm and free for the customers of the cinema after 4pm. The condition of the car park is very good and it benefits from CCTV and private security patrols. Access to the car park is via a signed route through the heart of the town centre and anecdotal evidence suggests that the entrance is congested at busy times of the year.

4.4.5 The Buttermarket car park has not been included in the results of the occupancy surveys as it was not surveyed as part of this Strategy. It is however taken into account when discussing future capacity of town centre car parks to accommodate future parking demand.

Cromwell Square Car Park

4.4.6 The Cromwell Square Car Park is operated by Ipswich Borough Council on behalf of SCC with parking permitted for a maximum stay of 3 hours at a cost of £4.50. The condition of the 67-space car park (including 3 disabled spaces) is good, surface dressed in asphalt with spaces clearly demarcated. The car park benefits from CCTV coverage and internal lighting within the site increases the general sense of safety.

Turret Lane Car Park

4.4.7 The Turret Lane car park is operated by NCP with flat rate of £4.20 irrespective of the stay period. It accommodates 52 spaces including 1 disabled space. It is in reasonable condition, surface dressed in asphalt with spaces demarcated with a wire fence providing a clear boundary between the site and adjacent footway. There is no evidence of CCTV coverage and internal lighting within the site although the site is reasonably well overlooked from the adjacent highway.

Wolsey Car Parks

4.4.8 The Wolsey Car Parks had 78 and 21 spaces at the time of the surveys and are operated by Napier Parking and provide for both short and long-stay parking. (The car park has been increased in size to circa. 165 spaces since the surveys). Both Wolsey A and B car parks are in good (recently refurbished) condition, surface dressed in asphalt, well-lit and benefiting from CCTV coverage. Access for vehicles is provided via two points, one on Blackhorse Lane, the second on Civic Drive.

Elm Street Car Park

4.4.9 The Elm Street Car Park contains 72 spaces (including 4 disabled spaces) and is operated by Ipswich Borough Council with parking permitted for a maximum stay of five hours for £6.00. It is in good condition, recently surface dressed in asphalt, well-lit and benefiting from CCTV coverage. Access for vehicles is provided off Elm Street and there is a one-way system in place.

Spiral Car Park

4.4.10 Spiral car park is an underground parking structure operated on a barrier-controlled, pay on foot basis by Britannia parking. It accommodates 360 spaces including 10 disabled spaces. All day parking in the Spiral Car Park is available for £9.00. Although in good condition generally, the structure is somewhat dated and the low roof (1.93m) and spiral layout cause the resulting environment to feel slightly claustrophobic. As many of the spaces are located quite some distance underground, it is necessary for pedestrians to gain access to and from their cars via a central stairwell. There are no lifts available. Lighting within the car park including stairwells is of a good standard however, due to the layout, the environment can feel quite isolated and forbidding, even during the daytime period. The car park benefits from CCTV coverage.

Rose Lane Car Parks

4.4.11 There are two small car parks on Rose Lane to the south of the Zone, one indoor car park and one uncovered. The indoor (North) car park accommodates 36 spaces and the South car park accommodates 21 spaces. These are operated by private companies SPS and RCP with short stay tariffs of £1.20 per hour, but all-day parking is also permitted. The covered Rose Lane car park has 'Park Mark' accreditation. Surveys were not carried out at the sites so the car parks have been excluded from the calculations of zonal occupancy. They are however taken into account when discussing future capacity of town centre car parks to accommodate future parking demand.

4.5 ZONE 4 – TOWN CENTRE EAST

4.5.1 The Town Centre East Zone includes the east side of the retail core and a mixed area with housing, leisure and entertainment uses alongside car parking. It also includes part of the University of Suffolk campus and Suffolk New College.

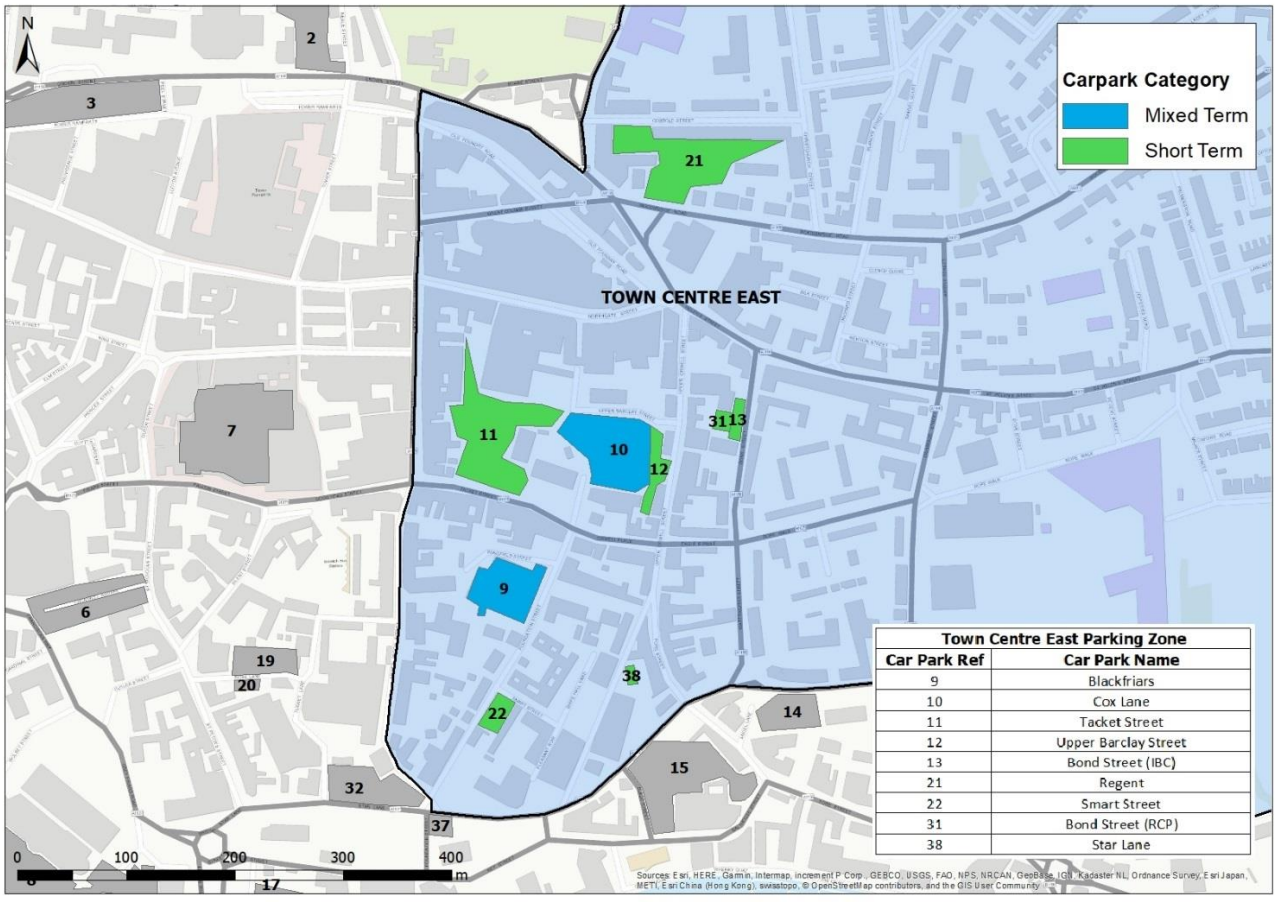
4.5.2 There are currently **1,133** parking spaces located in this zone (including 13 disabled spaces), with almost half of these in the Blackfriars MSCP (513 spaces). A summary of the existing supply is provided within **Table 10**:

Table 10: Existing Parking Capacity in Zone 4 – Town Centre East

Car Park	Owner	Number of Parking Spaces		Length of Permitted Stay
		Standard	Disabled	
Blackfriars MSCP	NCP	513	5	24
Cox Lane	NCP	182	2	24
Tacket Street	NCP	260	2	4
Upper Barclay Street	IBC	30	0	5
Bond Street (IBC)	IBC	14	0	5
Bond Street (RCP)	RCP	8	0	24
Regent	IBC	62	3	5
Smart Street	IBC	21	1	4
Star Lane	Zak	30	0	24

4.5.3 The Zone 4 car park locations are shown in **Figure 5**:

Figure 5: Parking in Zone 4 – Town Centre East



Regent Car Park

4.5.4 The Regent car park is operated by IBC with parking permitted for a maximum stay of five hours for £6.00. It accommodates 65 spaces including 3 disabled spaces. The car park is in reasonable condition, surface dressed in asphalt with spaces clearly demarcated. Vehicular access is provided on the southern side of the car park via a simple priority connection into the A1156 Woodbridge Road. Existing pedestrian facilities are good providing direct connections. CCTV cameras are positioned at the two pedestrian accesses, however is not clear if they cover the whole site. The car park is well-lit and disabled parking and bicycle parking stands are provided.

Tacket Street Car Park

4.5.5 The Tacket Street car park is operated by NCP with parking permitted for a maximum stay of four hours for £6.60. It accommodates 262 spaces including 2 disabled spaces. The car park is open fronted and access remains open at all times. The condition of the car park is reasonable, surface dressed in asphalt with parking spaces clearly demarcated and disabled parking spaces are provided. Lighting coverage is poor, particularly towards the centre of the site although some lighting columns are in place around the periphery. It is not clear whether or not there is any CCTV monitoring of the site. A low fence and planted verge provides an appropriate boundary treatment separating the car park from the adjacent footway running alongside Tacket Street. The main vehicular access into the site is provided via Tacket Street however access can also be gained via Cox Lane to the east.

Cox Lane Car Park

4.5.6 The Cox Lane car park is operated by NCP where the maximum stay is 24 hours for a fee of £8.60. The 184-space car park (including 2 disabled spaces) adjacent to the Tacket Street Car Park is in reasonable condition, surface-dressed in asphalt with spaces clearly demarcated. There is one vehicular access into the car park located on Cox lane at its southern extent that allows for pedestrian access. The car park is generally open in character, well-lit and covered by CCTV.

Upper Barclay Street Car Park

4.5.7 The Upper Barclay Street car park is operated by IBC with parking permitted for a maximum stay of five hours for £6.00. It accommodates 30 spaces. It is surface-dressed in asphalt with spaces clearly demarcated and is in reasonable condition. Access for vehicles is provided via an appropriate connection into Upper Orwell Street. The car park lacks lighting and it is not clear whether there is any CCTV monitoring of the site.

Bond Street Car parks

4.5.8 The Bond Street car park is operated by IBC where the maximum stay permitted is five hours for a fee of £6.00. The car park has 14 spaces but there is also a small, adjacent area of 8 spaces operated by RCP. It is surface-dressed in gravel that is in poor condition. Although overlooked by nearby properties, the car park is not well lit and does not appear to be covered by CCTV. It is in a relatively peripheral area of the town centre and consequently lacks incidental surveillance. Access for vehicles is provided via poor quality entrance link into Bond Street. A low rail fence separates the car park from the adjacent footway.

Blackfriars Multi-Storey Car Park

4.5.9 The Blackfriars MSCP is operated by NCP and provides for both short and long-stay parking. It located on Foundation Street and the 518 available parking spaces (including 5 disabled spaces) lie on five different levels of the car park. The car park is accessed via Foundation Street and the condition of the car park is excellent, with CCTV, good quality lighting and surface dressed in concrete with spaces clearly demarcated.

Smart Street Car Park

4.5.10 The Smart Street car park is operated by IBC where the maximum stay permitted is four hours for a fee of £3.60. It accommodates 22 spaces including 1 disabled space. The car park is in good condition, lit, surface dressed in asphalt and has spaces demarcated with a wire fence providing a clear boundary between the site and adjacent footway. There is no evidence of CCTV coverage within the site although it is reasonably well overlooked from the adjacent highway.

Star Lane Car Park

4.5.11 The Star Lane car park has approximately 30 spaces on land between Star Lane and Lower Orwell Street and is operated by Zak parking as a pay and display car park. It has a mixed stay tariff of £1 per hour, all day. Many of the spaces are also used by customers of the adjacent businesses so it is not clear what proportion of the use is for public parking. The condition of the car park is reasonably good, it is surface dressed in asphalt with spaces demarcated, streetlighting and overlooked by several properties. Surveys were not carried out at the site so the car park has been excluded from the calculations of zonal occupancy. It is however taken into account when discussing future capacity of town centre car parks to accommodate future parking demand

4.6 ZONE 5 – TOWN CENTRE NORTH

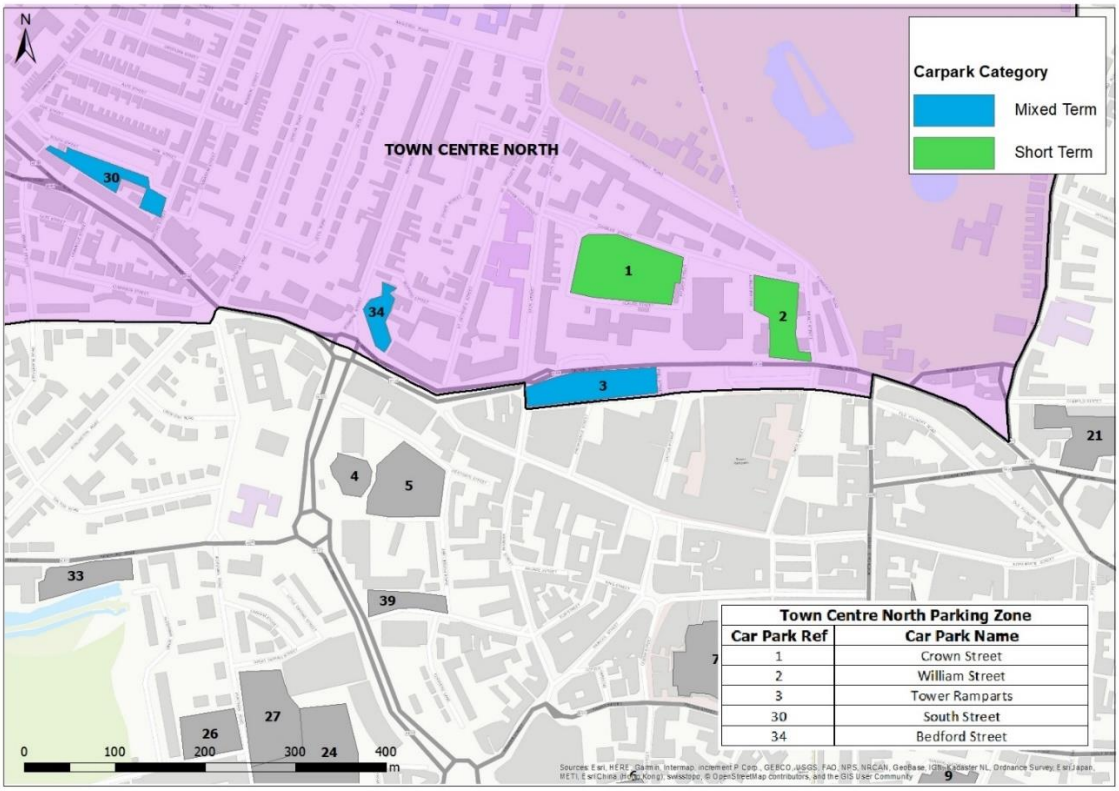
4.6.1 The Town Centre North Zone includes the north side of the central core. It includes a total of **847** long and short-stay spaces including 38 disabled spaces. A summary of the existing supply is provided within Table 11:

Table 11: Existing Parking Capacity in Zone 5 – Town Centre North

Car Park	Owner	Number of Parking Spaces		Length of Permitted Stay
		Standard	Disabled	
Crown	IBC	513	28	5
William Street	IBC	77	1	5
Tower Ramparts	NCP	103	3	24
South Street	IBC	76	5	24
Bedford Street	RCP	40	1	24

4.6.2 Zone 5 – Town Centre North includes part of the retail core and a mixed area with housing, employment and leisure uses. The Zone 5 car park locations are shown in **Figure 6**:

Figure 6: Parking in Zone 5 – Town Centre North



Crown Car Park

4.6.3 The Crown Car Park is operated by IBC and it permits a maximum stay period of five hours for a tariff of £5.00. It is a new MSCP (opened in July 2018) and accommodates 541 spaces including 28 disabled spaces and 28 electric vehicle charging spaces. Electric vehicle charging is free but normal parking tariffs apply. The car park is accessed from Claude Street and operates a pay-on-foot system. It has been designed to provide a pleasant environment, with wider than standard bays, no columns, and colour coded areas. It is covered by CCTV and is lit.

4.6.4 When the parking surveys were undertaken to inform this Strategy, the Crown car park was a surface level car park with 236 spaces. As such the occupancy calculations are presented on this basis. The new 541 space car park is, however, taken into account in the discussion of future car park capacity to accommodate future parking demand.

Tower Ramparts

4.6.5 The Tower Ramparts Car park is operated by NCP and both short and long-term parking tariffs are in operation. It permits a maximum stay period of 24 hours for a tariff of £15.00. The 106-space car park (including 3 disabled spaces) is located adjacent to the northern side of Crown Street and southern side of Tower Ramparts, between Peel Street and High Street. The car park has a sealed surface that is in reasonable condition with clearly demarcated bays. Vehicular access into the car park located on Tower Ramparts Road at its southern extent. A medium-height rail-fence runs around the car park perimeter providing an appropriate boundary treatment however, accessibility for pedestrians remains reasonable as there are three access points at Peel Street, Tower Ramparts and in the corner between the High Street and Crown Street. Although, there are lighting columns covering the roads around the site, there is only one lighting column within the car park placed at the vehicular access. CCTV cameras cover the vehicular access to the car park although there is no evidence of any additional coverage.

William Street

4.6.6 The William Street car park is operated by IBC and it permits a maximum stay of five hours for a tariff of £5.00. It accommodates 78 spaces including 1 disabled space. The car park is located between Charles Street, Neale Street and Crown Street. The condition of the car park is very good, surface dressed in asphalt with spaces clearly demarcated. Access for vehicles is provided via an appropriate connection into William Street. The car park is lit; however, it is not clear whether there is any CCTV monitoring of the site.

Bedford Street Car Park

4.6.7 The Bedford street car park is operated by RCP, providing for both short and long-stay parking. It permits a maximum stay period of 24 hours for a tariff of £6.00. The 41-space car park (including 1 disabled space) is located within a site between Berners Street, Bedford Street and A1156. Spaces are located within a deck structure with access provided via a ramp connecting to Bedford Street on its northern side. The condition of the car park is reasonable with the integrity of the surface good and spaces clearly demarcated however, as the car park lies within a deck structure, the room to manoeuvre vehicles is quite restricted. There is no evidence of CCTV or security staff and the lighting is poor reducing the sense of security.

South Street

4.6.8 The South Street car park is operated by IBC and provides for both short and long-stay parking. It accommodates 81 spaces including 5 disabled spaces. It permits a maximum stay period of 24 hours £5.00. It is surface dressed in asphalt with spaces clearly demarcated and it appears well maintained. There is one signed access into the car park via Orford Street although vehicles can gain access via a second, unsuitable access from Cumberland Street to the north-west. The car park is well lit however it is not clear if there is any CCTV coverage of the site.

5 PARKING SURVEY RESULTS

5.1 INTRODUCTION

5.1.1 Parking occupancy surveys were undertaken between 0900 and 1800 hrs during Wednesday 2nd and Thursday 3rd of November 2016 to gain an initial understanding of how the public car parks in Ipswich are used over the course of a "typical" weekday. Follow-up surveys were undertaken on Monday 27th and Tuesday 28th of March 2017 to gain further information and fill in data gaps where required.

5.1.2 Throughout both the November 2016 and March 2017 survey days, a total of four sweeps were undertaken that provided a snapshot of occupancy in all IBC, NCP and other privately operated public car parks within the study area during the morning, around lunchtime, in the early to mid-afternoon and towards the late afternoon.

5.1.3 As the focus of the strategy is on the busiest day-to-day conditions rather than the absolute maximum times of use, the survey dates were selected to be consistent with and therefore representative of "normal" operational conditions within the town (i.e. not to coincide with bank holidays, Christmas etc). The surveys also did not take account of evenings or weekends and therefore do not capture usage during special events such as Ipswich Town Football Club home games. This being said, the market days of Tuesday and Thursday were surveyed as the markets are held four times a week, every week, and therefore contribute to the typical parking demand within the town centre.

5.1.4 It should be noted that, for various reasons, not all existing car parks or parking spaces were taken into account during the November 2016 and March 2017 surveys. For example, whilst the former Crown surface level car park comprising 236 spaces was surveyed, it has since been redeveloped to provide 513 spaces (not including disabled spaces) and therefore 277 spaces were effectively not included in the survey. Due to these factors, a total of 5,796 out of the total 6,670 public car parking spaces in the town centre (excluding disabled spaces) were surveyed.

5.1.5 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 and demand calculations. 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.

5.1.6 To manage the presentation of data, the following analysis summarises the observed occupancy results across the town and within individual operators' car parks before analysing occupancy in each of the five town centre zones. Disabled parking spaces have not been included in the capacity or occupancy calculations in this section as they would potentially skew the results to suggest that additional capacity is available when in fact only disabled users would be able to make use of these spaces.

5.2 IBC OPERATED CAR PARKS: SPOT SURVEY RESULTS

5.2.1 **Figure 7** presents a summary of the observed parking demand in all surveyed car parks operated by IBC located within the study area whilst **Figure 8** shows the overall percentage occupancy.

Figure 7: Parking Survey Results, IBC Car Park Usage

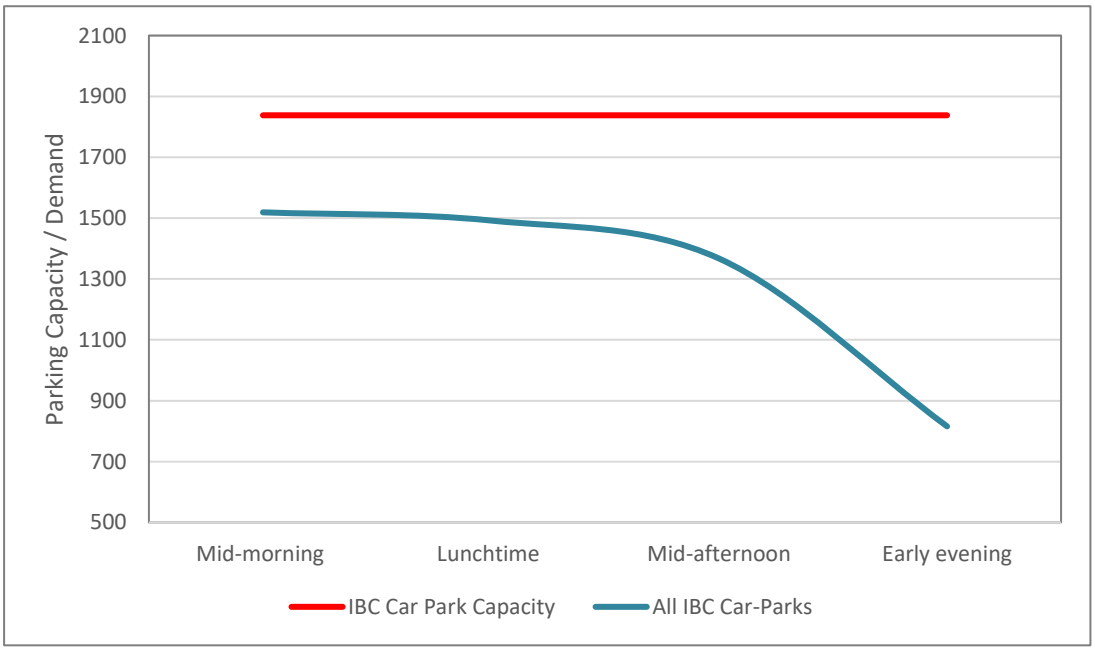
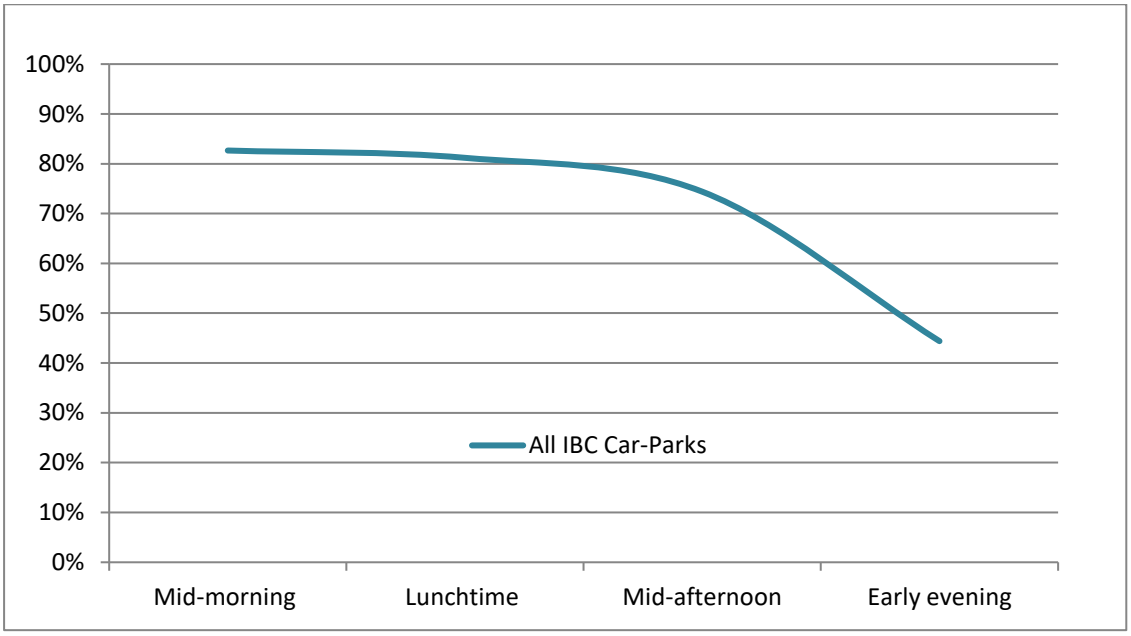


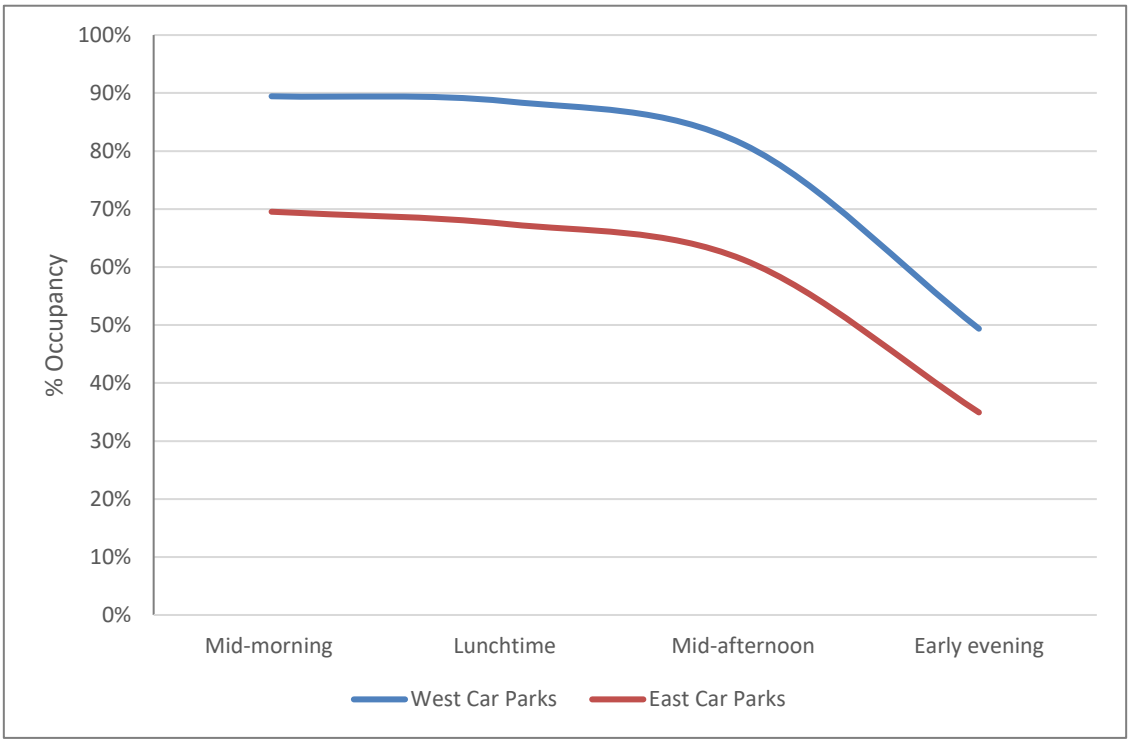
Figure 8: IBC Car Parks Existing % Occupancy



5.2.2 Observations indicate that of the c. 1,950 IBC parking spaces surveyed, occupancy peaks at just over 1,500 spaces throughout the morning period. In most IBC operated car parks, demand typically builds quickly during the morning period and remains high throughout the early to mid-part of the afternoon before falling back towards late afternoon.

5.2.3 As illustrated by **Figure 9**, surveyed IBC operated car parks located towards the western side of the town centre appear particularly popular with facilities around Portman Road operating at around 90% occupancy during the early part of the day. This probably reflects the tariff and permitted stay structure in these locations that is predominantly geared towards providing for long-term commuter parking whereas IBC car parks in other locations are geared more to providing for short-stay parking activity. Car parks on the western side of town serve inbound commuters and outbound railway passengers.

Figure 9: IBC Car Park Occupancy, East / West Split



5.3 NCP OPERATED PUBLIC CAR PARKS: OCCUPANCY SURVEY RESULTS

5.3.1 As the largest single operator of private car parks within Ipswich, **Figure 10** presents a summary of the observed parking demand in all surveyed NCP operated public car parks located in the study area whilst **Figure 11** shows the overall percentage occupancy.

Figure 10: Parking Survey Results, NCP Car Park Capacity and Usage

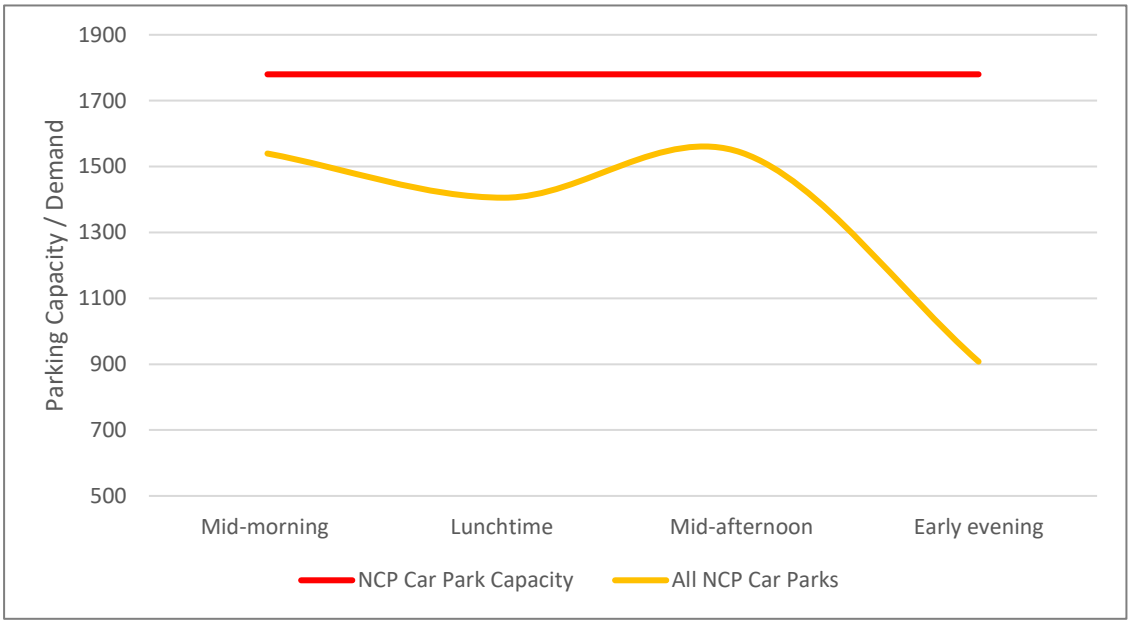
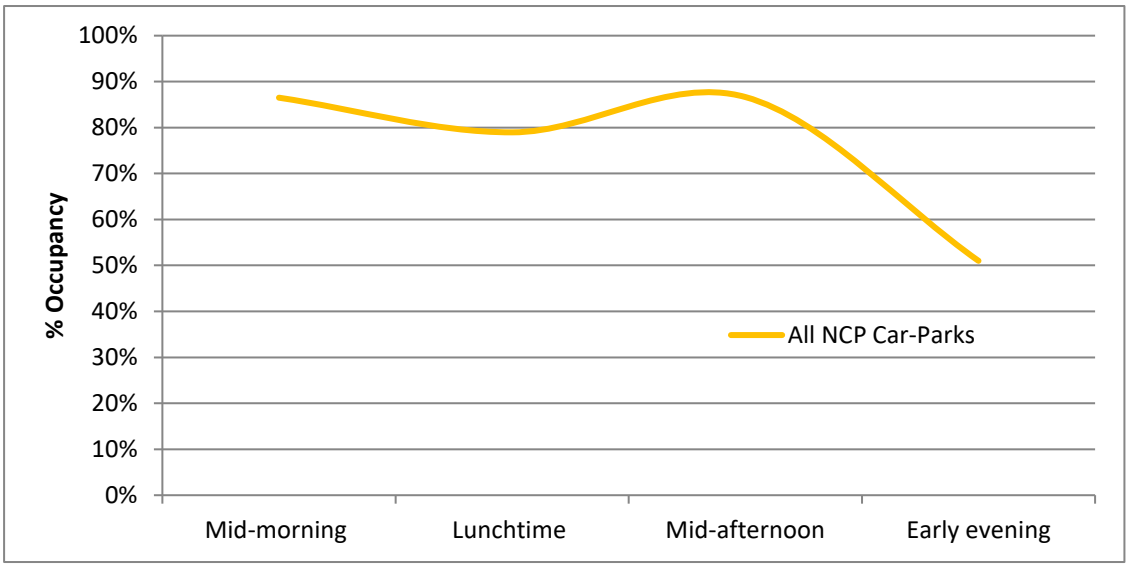


Figure 11: Parking Survey % Occupancy, NCP Car Parks



5.3.2 NCP operates just over 1,800 parking spaces within the study area and 1,780 were surveyed. As with IBC operated car parks, demand in most NCP operated car parks typically builds quickly during the morning period and remains high (around 80% or above) throughout the early to mid-part of the afternoon before falling back towards late afternoon.

5.4 OTHER PRIVATELY-OPERATED PUBLIC CAR PARKS: OCCUPANCY SURVEY RESULTS

5.4.1 **Figure 12** presents a summary of the observed parking demand in all other surveyed privately-operated public car parks located in the study area whilst **Figure 13** shows the overall percentage occupancy.

Figure 12: Parking Survey Results, "Other" Car Parks Capacity and Usage

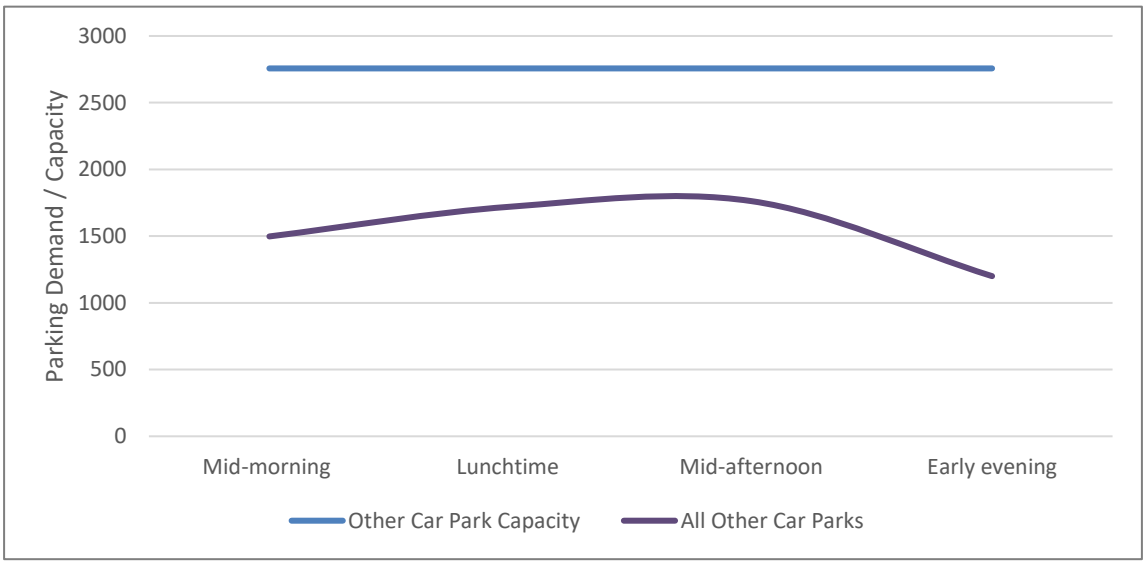
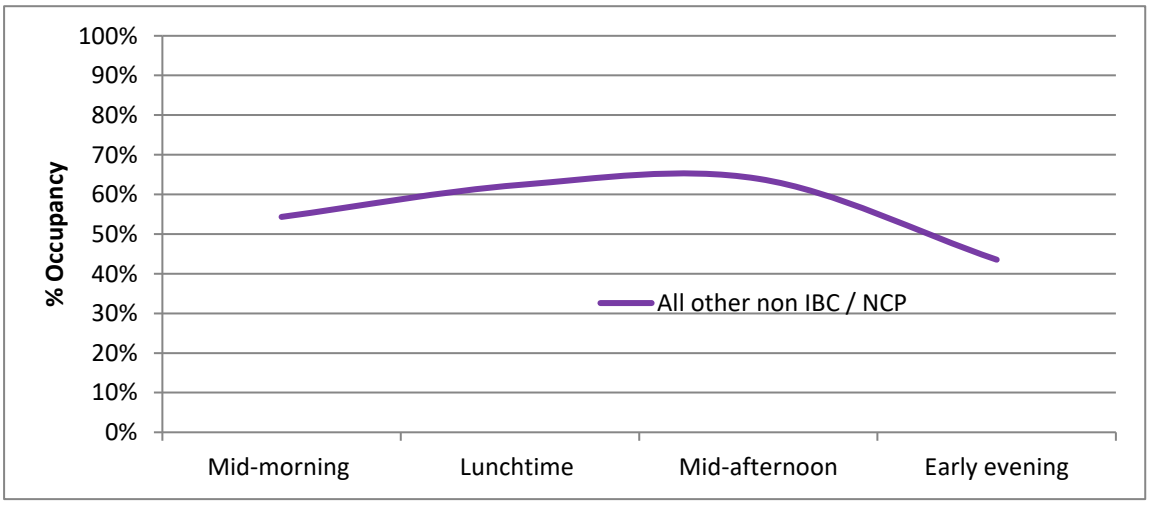


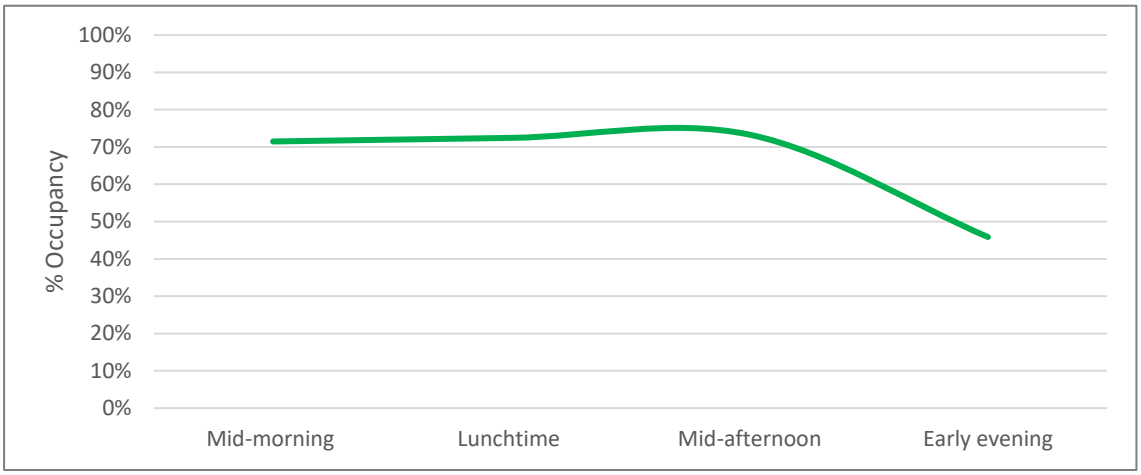
Figure 13: Parking Survey % Occupancy, "Other" Car Parks



5.4.2 In contrast to both the IBC and NCP operated car parks, demand in "other" privately operated car parks is markedly lower at between c. 55% and 60% of available capacity for the major part of the morning into the afternoon, peaking at around 65% in the mid-afternoon period before declining into the late afternoon and evening.

5.4.3 **Figure 14** shows the total combined IBC, NCP and "Other" privately operated public car park demand across the town centre. Occupancy peaks and remains at between 70% and 80% of capacity throughout the major part of the daytime period before falling away into the late afternoon / early evening.

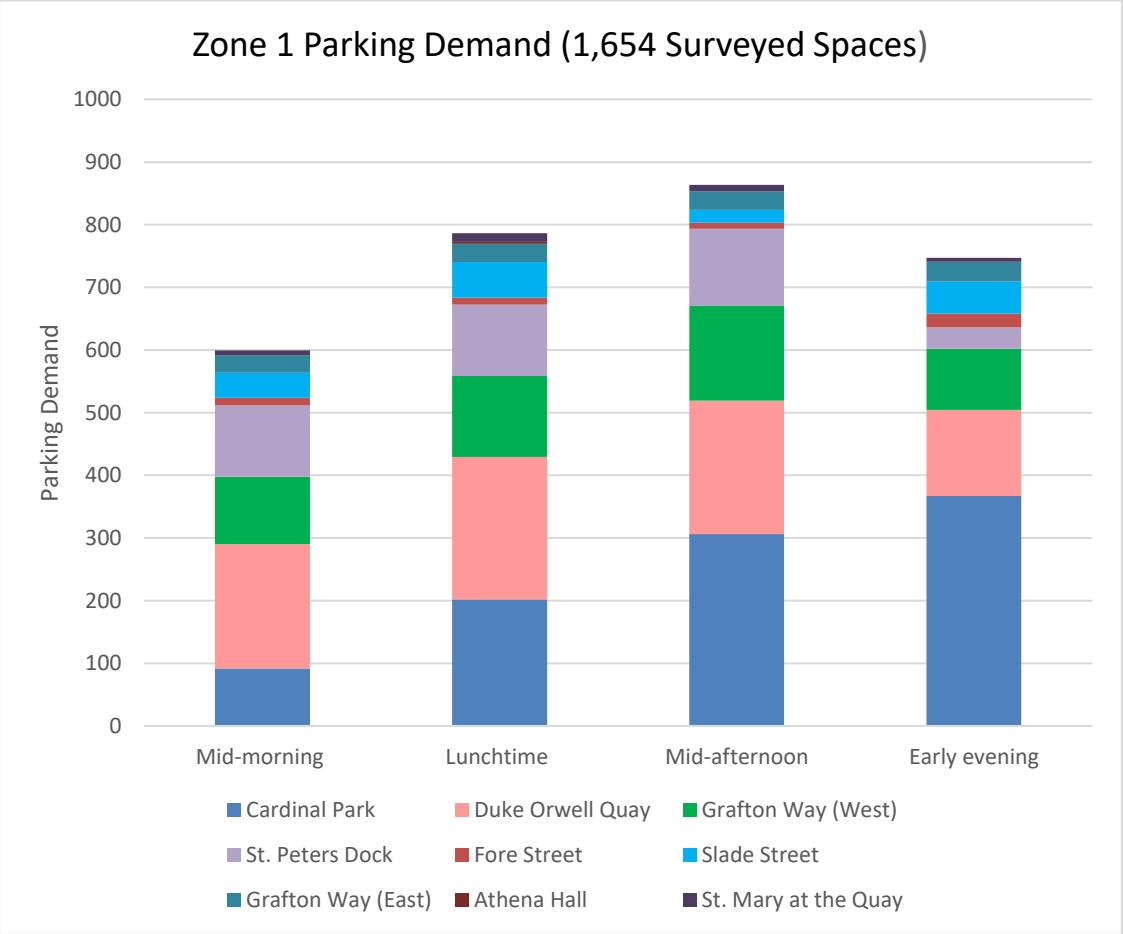
Figure 14: Parking Survey % Occupancy, All Car Parks Combined



5.5 PARKING OCCUPANCY OBSERVATIONS BY ZONE: ZONE 1 - RIVERSIDE

5.5.1 **Figures 15 and 16** present a summary of the absolute and percentage occupancy of surveyed parking spaces of all operators within Zone 1. **Table 12** shows the actual and percentage occupancy of each car park in Zone 1.

Figure 15: Car Park Usage: Zone 1 – Riverside



5.5.2 A total of 1,654 parking spaces were surveyed in Zone 1 (excluding disabled spaces) with the largest being at Cardinal Park, Grafton Way and Duke Orwell Quay. The chart shows that overall demand peaked at 864 vehicles in mid-afternoon when Cardinal Park is starting to fill up and the other car parks are still busy.

Figure 16: Zone 1 Car Park % Occupancy

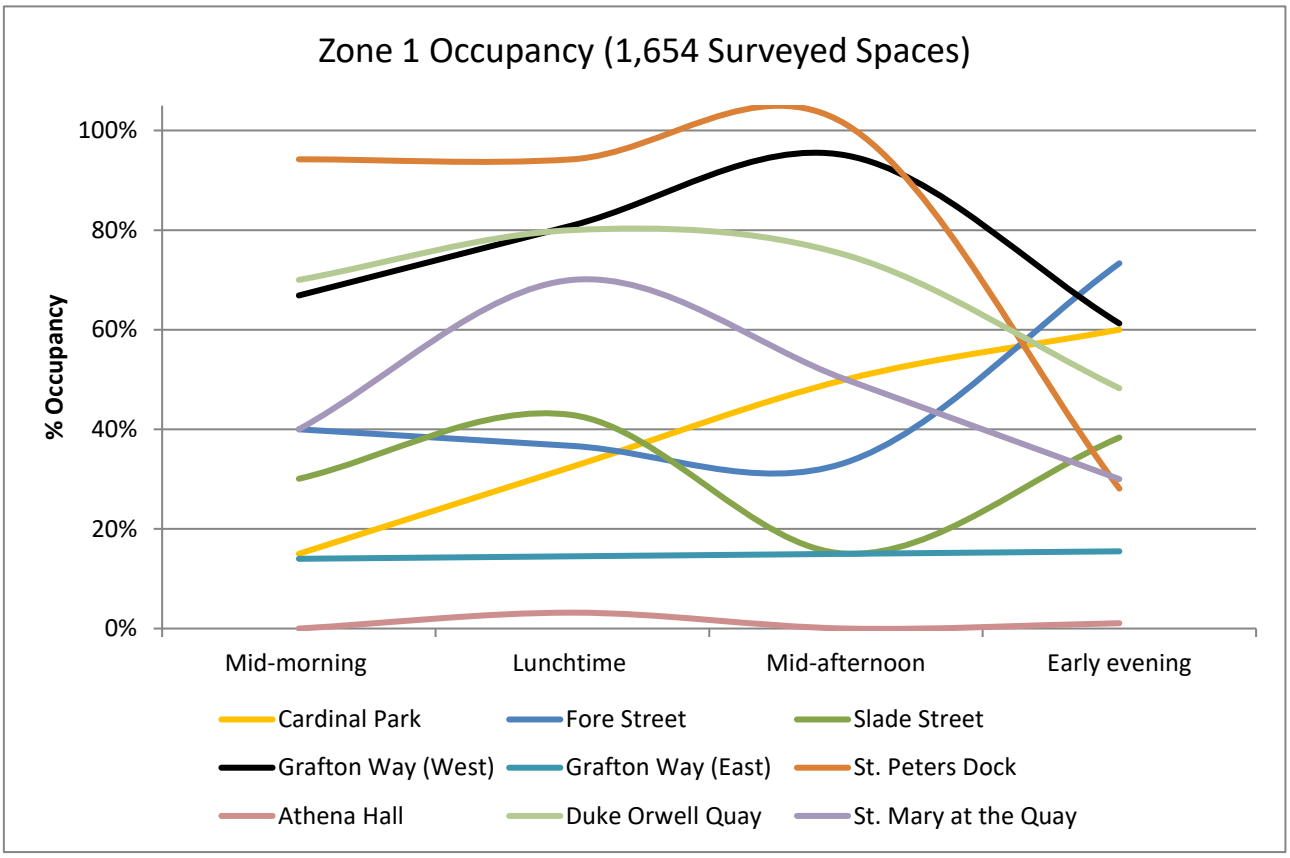


Table 12: Zone 1 Surveyed Car Park Capacity and Demand (Excluding Disabled Spaces)

Car Park	Capacity	Mid-morning		Lunchtime		Mid-afternoon		Early evening	
		Occupancy		Occupancy		Occupancy		Occupancy	
Cardinal Park	612	92	15%	202	33%	306	50%	367	60%
Fore Street	30	12	40%	11	37%	10	33%	22	73%
Slade Street	133	40	30%	57	43%	20	15%	51	38%
Grafton Way (West)	160	107	67%	130	81%	152	95%	98	61%
Grafton Way (East)	200	28	14%	29	15%	30	15%	31	16%
St. Peters Dock	121	87	94%	87	94%	94	101%	20	28%
Athena Hall	94	0	0%	3	3%	0	0%	1	1%
Duke Orwell Quay	284	199	70%	227	80%	213	75%	137	48%
St. Mary at the Quay	20	8	40%	14	70%	10	50%	6	30%
Total / Average	**1,654**	**600**	**36%**	**787**	**48%**	**864**	**52%**	**747**	**45%**

5.5.3 Overall occupancy across the whole Zone is quite low with a maximum occupancy of just 52% in mid-afternoon. Parking capacity is not very well utilised in the zone with several car parks

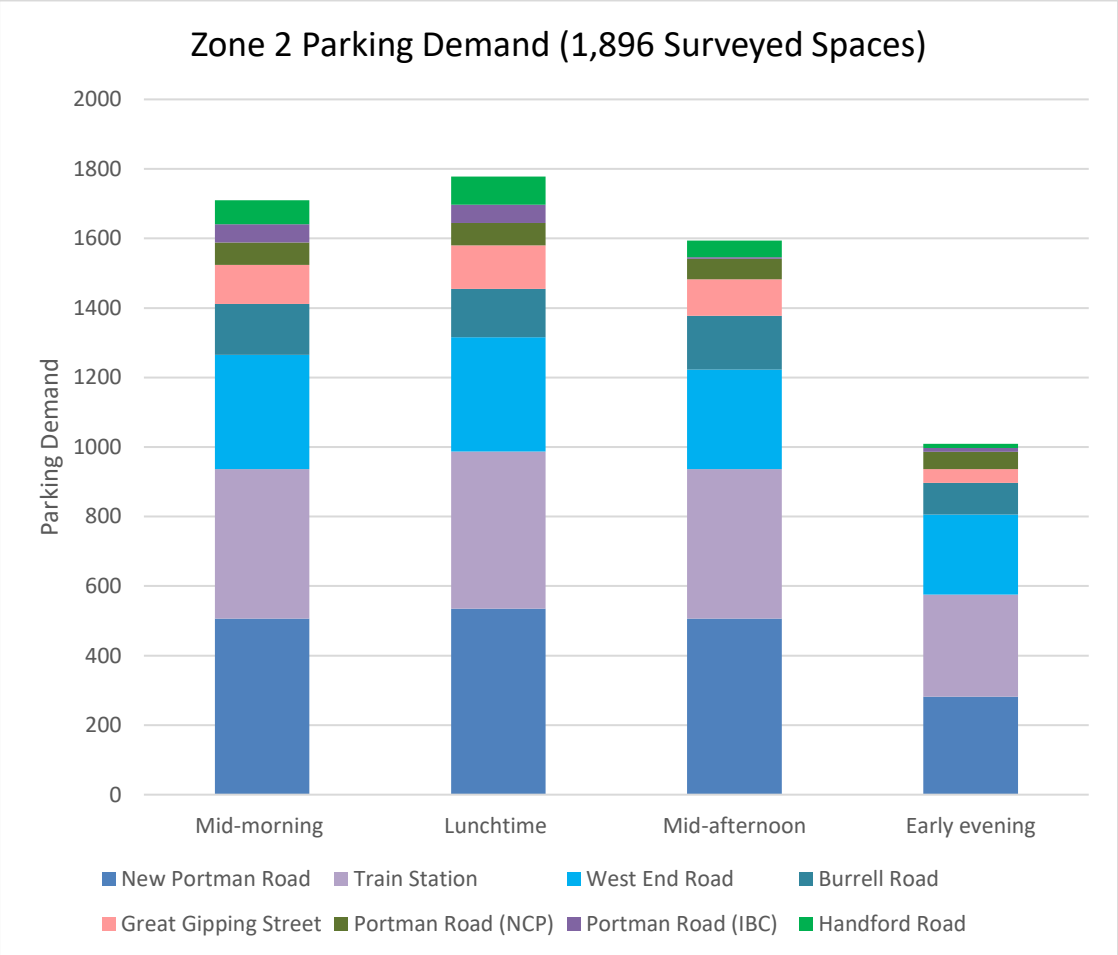
having low occupancy all day or at certain times of the day. Cardinal Park has a low occupancy until mid-afternoon and Athena Hall, Fore Street, Grafton Way (East) and Slade Street have plenty of spare capacity. It is however noted that at the time of surveying, Athena Hall was newly opened and was not well used by the public. The waterfront car parks such as Cardinal Park and St Mary at the Quay are also likely to experience an increase in demand later in the evening (after the survey period) when visitors come to the nearby restaurants and cinema.

5.5.4 In terms of car park type, the zone contains a fairly equal mixture of long and short stay car parks. All the car parks allow short stay but some have a tariff designed to attract long stay users. There does not seem to be any obvious trend between the short and long stay car parks in this zone, some short stay are full while others are empty and the same applies to the long stay.

5.6 PARKING OCCUPANCY OBSERVATIONS BY ZONE: ZONE 2 – STATION AND OFFICE

5.6.1 **Figure 17 and Figure 18** present a summary of the absolute and percentage occupancy of surveyed parking spaces of all operators within Zone 2. **Table 13** shows the actual and percentage occupancy of each car park in Zone 2.

Figure 17: Car Park Usage: Zone 2 - Station and Office



5.6.2 A total of 1,896 parking spaces were surveyed in Zone 2 (excluding disabled spaces) with the largest being at New Portman Road, the Railway Station and West End Road. The chart shows that across the Zone overall demand peaked at 1,778 vehicles at lunchtime when those three car parks are almost full. This includes the IBC and NCP car parks in the area.

Figure 18: Zone 2 Car Park % Occupancy

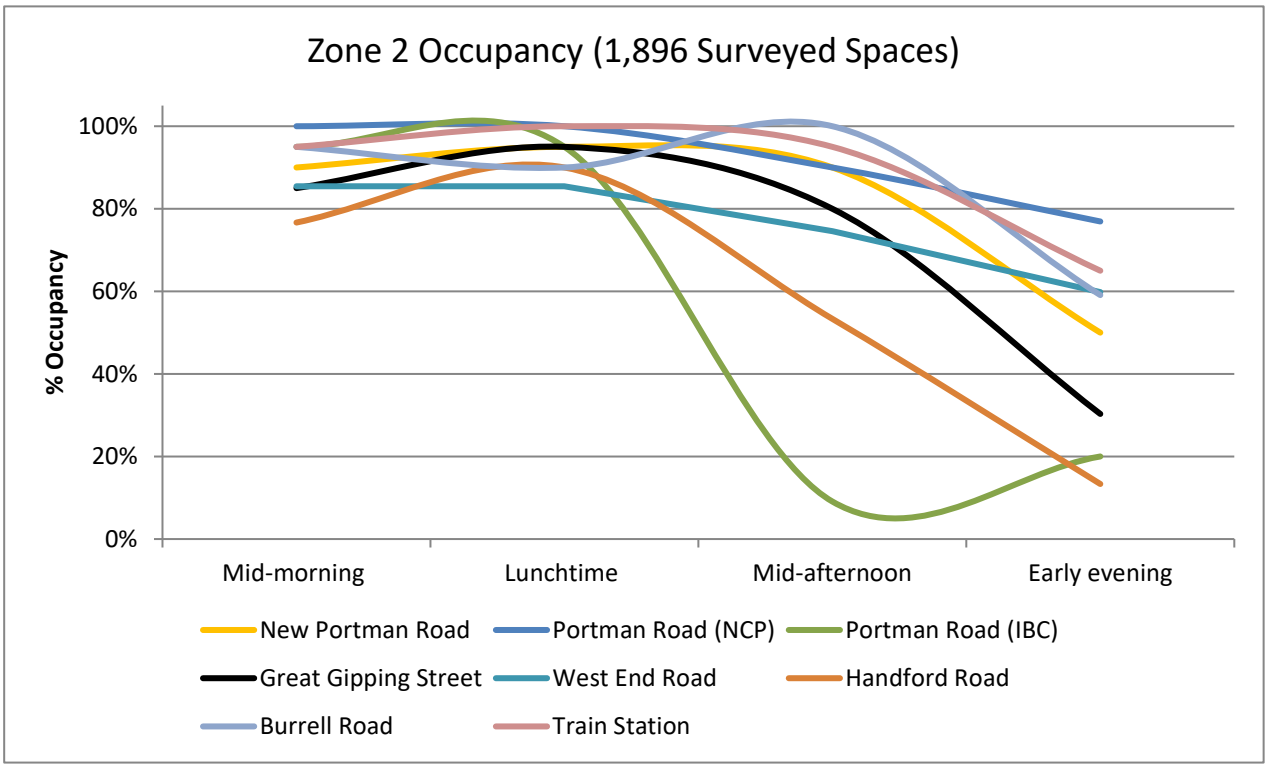


Table 13: Zone 2 Surveyed Car Park Capacity and Demand (Excluding Disabled Spaces)

Car Park	Capacity	Mid-morning		Lunchtime		Mid-afternoon		Early evening	
		Occupancy		Occupancy		Occupancy		Occupancy	
New Portman Road	563	507	90%	535	95%	507	90%	282	50%
Portman Road (NCP)	65	65	100%	65	100%	59	90%	50	77%
Portman (IBC)	55	52	95%	52	95%	5	9%	11	20%
Great Gipping Street	132	112	85%	125	9%	106	80%	40	30%
West End Road	385	329	85%	329	85%	287	75%	230	60%
Handford Road	90	69	77%	81	90%	48	53%	12	13%
Burrell Road	154	146	95%	139	90%	154	100%	91	59%
Train Station	452	429	95%	452	100%	429	95%	294	65%
Total / Average	**1,896**	**1,710**	**90%**	**1,778**	**94%**	**1,594**	**84%**	**1,010**	**53%**

5.6.3 Overall car park occupancy across the whole Zone is very high with a maximum occupancy of 94% at lunchtime. This means that people will find it difficult to find a space and will 'overspill' into other zones of the town centre. All the car parks within this zone have occupancy levels of

90% or more during the busiest part of the day. Occupancy then drops significantly by early evening when the car parks are just over half full.

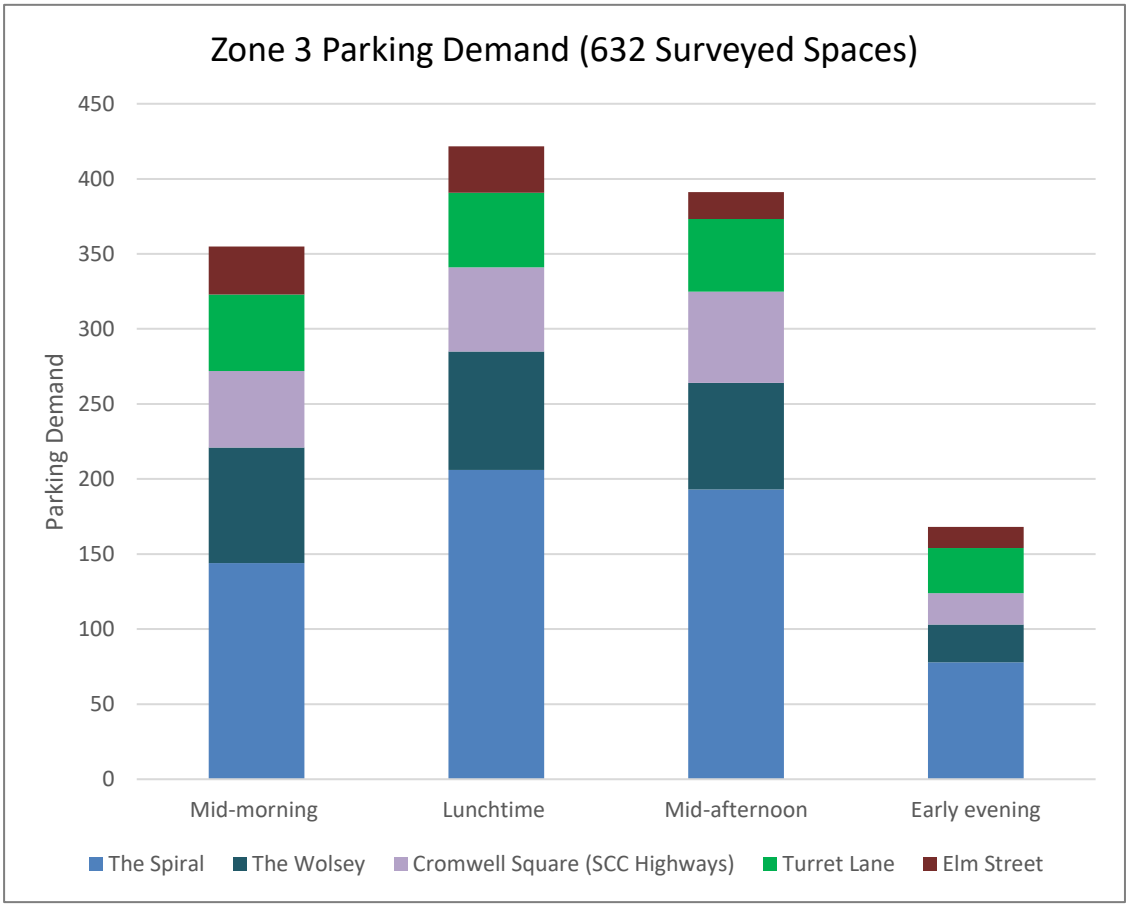
5.6.4 In terms of car park type, all the car parks in the zone allow and encourage long stay parking. All the car parks also allow short stay but they have a tariff designed to attract long stay users with reasonable charges for all-day parking. This allows the car parks to be used by inbound commuters working in the nearby offices and outbound commuters using the nearby train station.

5.7 PARKING OCCUPANCY OBSERVATIONS BY ZONE: ZONE 3 – TOWN CENTRE, CENTRAL AND WEST

5.7.1 **Figures 19 and 20** present a summary of the absolute and percentage occupancy of surveyed parking spaces of all operators within Zone 3. **Table 14** shows the actual and percentage occupancy of each car park in Zone 3.

5.7.2 There is a total of 1,170 parking spaces in Zone 3 (excluding disabled spaces) with the largest being at the Buttermarket and the Spiral car parks. However, occupancy data from the Buttermarket, Rose Lane and part of the Wolsey car parks is not available, so the demand and occupancy figures exclude these car parks. A total of 632 spaces were surveyed.

Figure 19: Car Park Usage: Zone 3 – Town Centre, Central and West



5.7.3 The chart above shows that overall demand in the other car parks peaked at 422 vehicles at lunchtime with the Spiral accommodating the largest number of vehicles (206).

Figure 20: Zone 3 Car Park % Occupancy

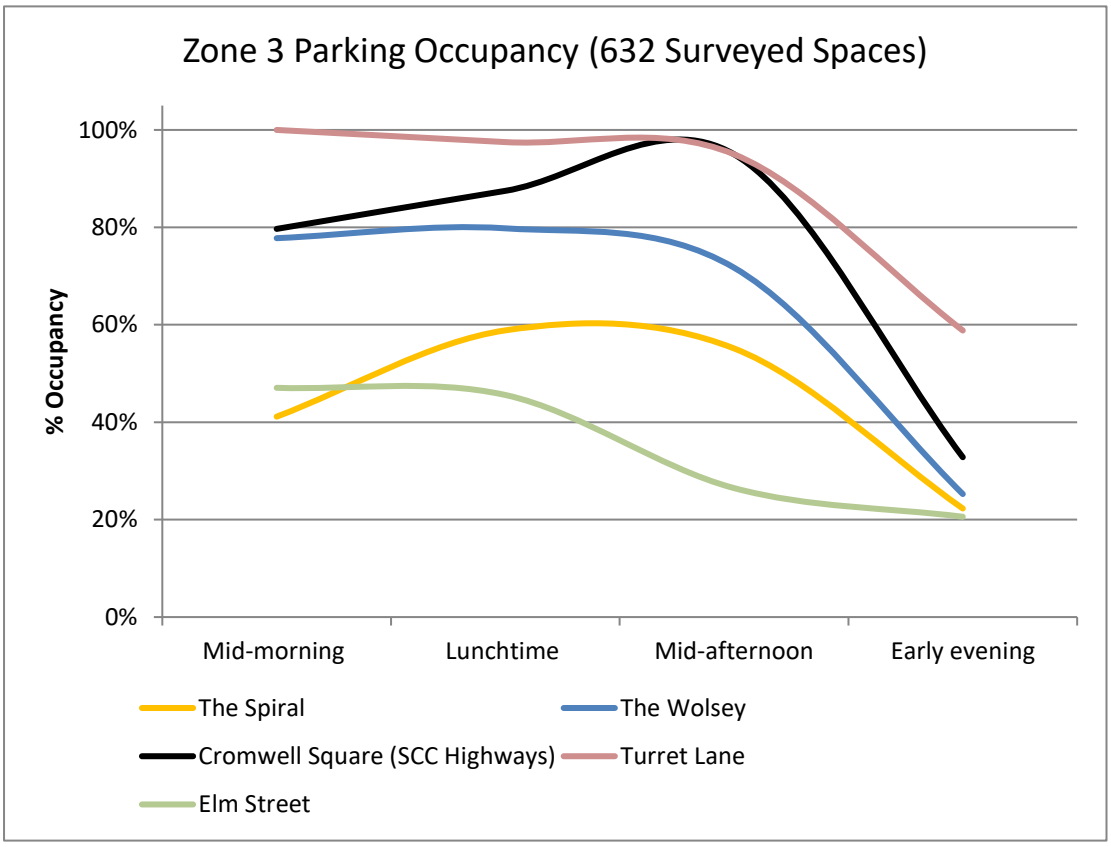


Table 14: Zone 3 Surveyed Car Park Capacity and Demand (Excluding Disabled Spaces)

Car Park	Capacity	Mid-morning		Lunchtime		Mid-afternoon		Early evening	
		Occupancy		Occupancy		Occupancy		Occupancy	
The Spiral	350	144	41%	206	59%	139	55%	78	22%
The Wolsey	99	77	78%	79	80%	71	72%	25	25%
Cromwell Square (SCC Highways)	64	51	80%	56	88%	61	95%	21	33%
Turret Lane	51	51	100%	50	98%	48	95%	30	59%
Elm Street	68	32	47%	31	46%	18	26%	14	21%
Total / Average	**632**	**355**	**56%**	**422**	**67%**	**391**	**62%**	**168**	**27%**

5.7.4 Overall car park occupancy across the whole Zone is quite low with an average of 67% across all car parks at the busiest time. However, there was some variation within this average with Turret Lane and Cromwell Square being virtually full at times while the other car parks were half full or less. The Elm Street car park is relatively new, which may explain the low occupancy at this location.

5.7.5 Occupancy then drops significantly by early evening when the car parks in this zone are only 27% occupied. This being said, demand may increase again later into the evening when people are visiting bars, restaurants and the cinema.

5.7.6 In terms of car park type, most of the car parks surveyed in the zone are long stay, where the tariff enables users to park all day for a reasonable price. All the car parks allow short stay but most have a tariff designed to attract long stay users. There does not seem to be any obvious trend between the short and long stay car parks in this zone, some short stay are full (Cromwell Square) while others are empty (Elm Street) and the same applies to the long stay.

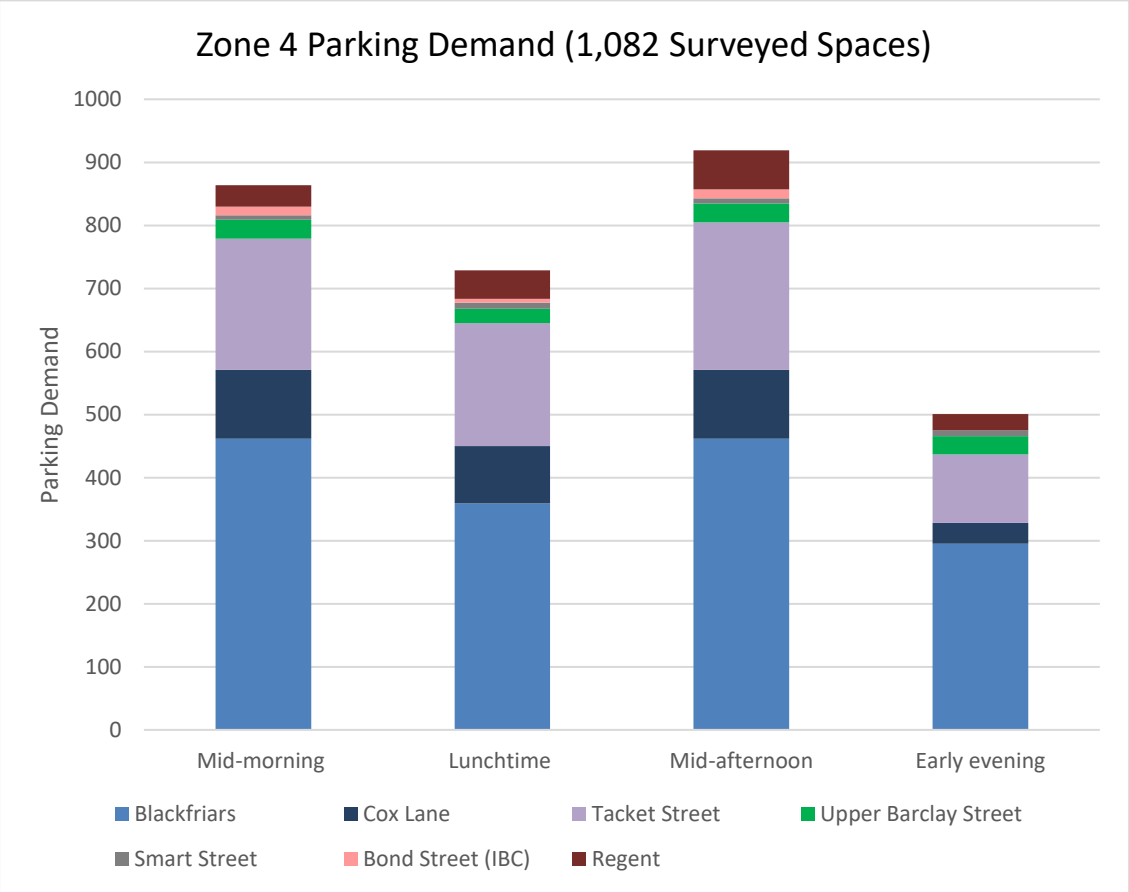
5.7.7 Whilst the Rose Lane and Buttermarket car parks were not surveyed, based on these results it is reasonable to conclude that there is some spare capacity across Zone 3 as a whole, such that any surplus demand in the Rose Lane and Buttermarket car parks would be accommodated by the other car parks in the zone if necessary.

5.8 PARKING OCCUPANCY OBSERVATIONS BY ZONE: ZONE 4 – TOWN CENTRE EAST

5.8.1 **Figure 21 and Figure 22** present a summary of the absolute and percentage occupancy of surveyed parking spaces of all operators within Zone 4. **Table 15** shows the actual and percentage occupancy of each car park in Zone 4.

5.8.2 There is a total of 1,120 parking spaces in Zone 4, however, occupancy data from the Star Lane and Bond Street RCP car parks is not available so the demand and occupancy figures exclude these car parks.

Figure 21: Car Park Usage: Zone 4 – Town Centre East



5.8.3 The chart above shows that overall demand peaked at 919 vehicles at lunchtime in the mid-afternoon with Blackfriars holding the largest number of vehicles (462).

Figure 22: Zone 4 Car Park % Occupancy

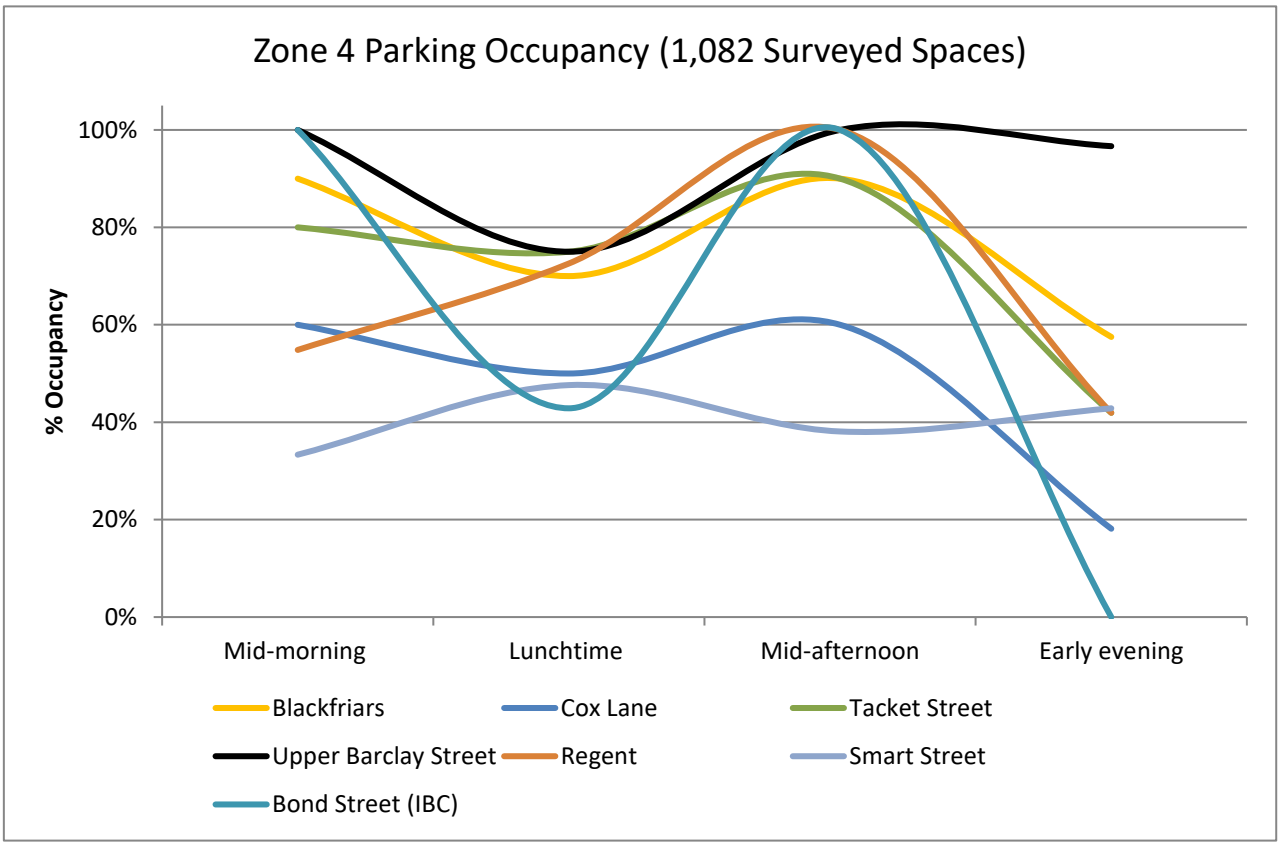


Table 15: Zone 4 Surveyed Car Park Capacity and Demand (Excluding Disabled Spaces)

Car Park	Capacity	Mid-morning		Lunchtime		Mid-afternoon		Early evening	
		Occupancy		Occupancy		Occupancy		Occupancy	
Blackfriars	513	462	90%	359	70%	462	90%	295	58%
Cox Lane	182	109	60%	91	50%	109	60%	33	18%
Tacket Street	260	208	80%	195	75%	234	90%	109	42%
Upper Barclay Street	30	30	100%	26	75%	30	100%	29	97%
Bond Street (IBC)	14	14	100%	6	43%	14	100%	0	0%
Regent	62	34	55%	45	73%	62	100%	26	42%
Smart Street	21	7	33%	10	48%	8	38%	9	43%
Total / Average	**1082**	**864**	**80%**	**729**	**67%**	**919**	**85%**	**501**	**46%**

5.8.4 Overall car park occupancy across the whole Zone is reasonably high with an average of 85% across all car parks at the busiest time. The main car parks were virtually full by mid-afternoon and the only significant spare capacity was in Smart Street and Cox Lane. Occupancy then dropped to approximately half-full by early evening except for Upper Barclay Street which was

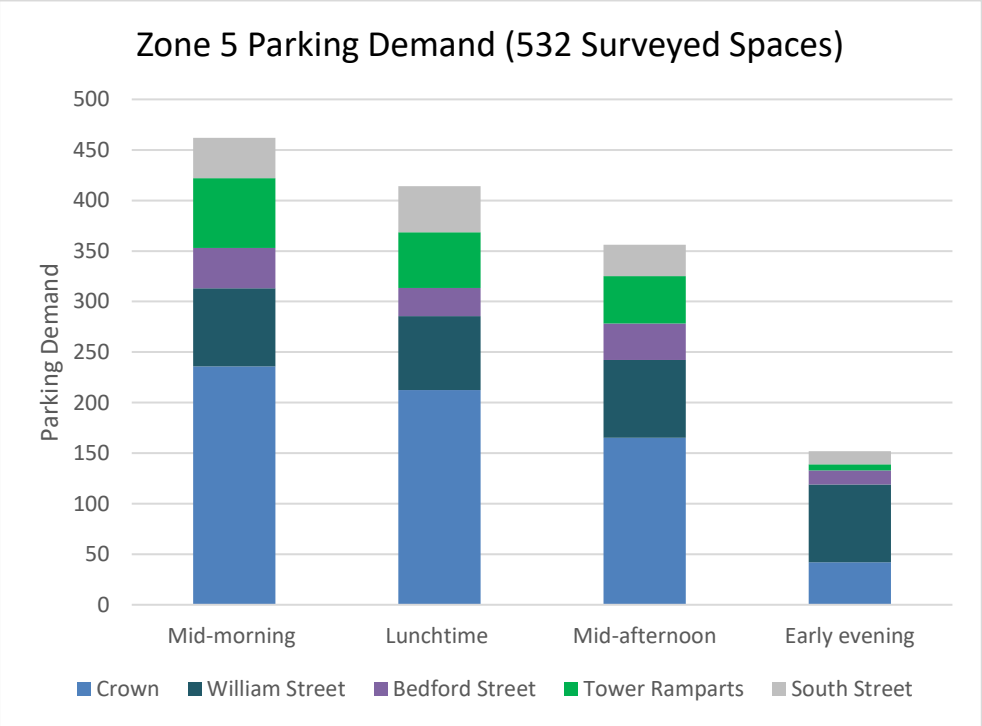
full all day. In terms of car park type, most of the car park spaces surveyed in the zone are short stay, but many have a tariff designed to attract long stay users. Both types of car park are quite well used.

5.9 PARKING OCCUPANCY OBSERVATIONS BY ZONE: ZONE 5 – TOWN CENTRE NORTH

5.9.1 **Figures 23 and 24** present a summary of the absolute and percentage occupancy of surveyed parking spaces of all operators within Zone 5. **Table 16** shows the actual and percentage occupancy of each car park in Zone 5.

5.9.2 There is now a total of 809 parking spaces in Zone 5 (excluding disabled spaces) with the largest being the Crown car park. However, at the time of surveying, the Crown car park was a surface level car park with 236 spaces. Therefore, the total number of spaces surveyed was 532.

Figure 23: Car Park Usage: Zone 5 – Town Centre North



5.9.3 The chart above shows that overall demand peaked at 462 vehicles in mid-morning when the Crown car park and Tower Ramparts were at their busiest. By evening the demand had dropped to a third of its morning level.

Figure 24: Zone 5 Car Park % Occupancy

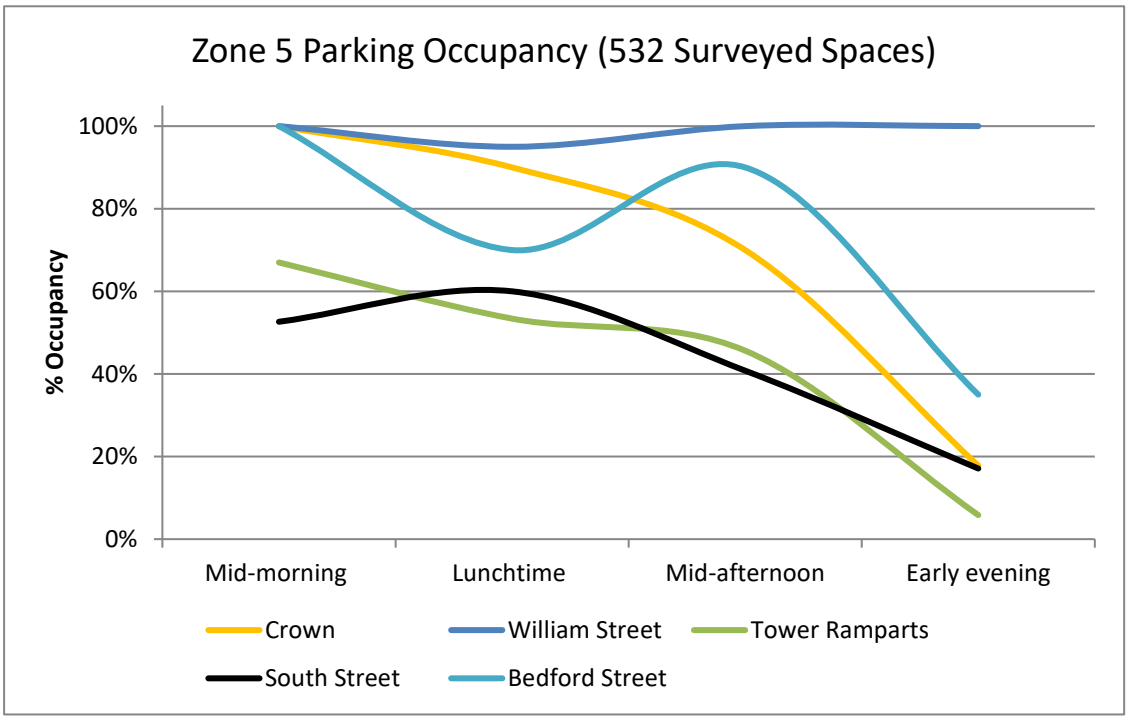


Table 16: Zone 5 Surveyed Car Park Capacity and Demand (Excluding Disabled Spaces)

Car Park	Capacity	Mid-morning		Lunchtime		Mid-afternoon		Early evening	
		Occupancy		Occupancy		Occupancy		Occupancy	
Crown	236	236	100%	212	90%	165	70%	42	18%
William Street	77	77	100%	73	95%	77	100%	77	100%
Tower Ramparts	103	69	67%	55	53%	47	46%	6	6%
South Street	76	40	53%	46	60%	31	41%	13	17%
Bedford Street	40	40	100%	28	70%	36	90%	14	35%
Total / Average	**532**	**462**	**87%**	**414**	**78%**	**356**	**67%**	**152**	**29%**

5.9.4 Overall car park occupancy across the whole Zone is reasonably high with an average of 87% across all car parks during the mid-morning. The main car parks were virtually full at this time and then occupancy dropped throughout the rest of the day. There was some spare capacity in the South Street and Tower Ramparts car parks. By evening the occupancy across the zone was very low at 29% and some were virtually empty.

5.9.5 In terms of car park type, most of the car park spaces surveyed in the zone are short stay only (416 [78%] of the spaces) and long stay parking is discouraged. The Crown and William Street short stay car parks are popular during the middle of the day but Tower Ramparts was less busy. There is a small amount of long stay parking in the zone.

6 STAKEHOLDER ENGAGEMENT

6.1 INTRODUCTION

6.1.1 The following chapter provides details of a stakeholder engagement workshop held on the 11th of November 2016 at Ipswich Town Hall. The purpose of the workshop was to investigate opinions of existing parking facilities around the town, issues requiring attention and to gather opinion concerning how parking fits as part of a wider transport strategy for the town.

6.1.2 Representatives of several public and private bodies operating within the town were invited to attend and the following organisations accepted:

Stakeholder Engagement Workshop Attendees

- Ipswich Town Football Club
- Local MP
- Vertas
- Suffolk New College
- Enterprise Rent-a-Car
- Planning Policy Officer, Suffolk County Council & Ipswich Vision Coordinator
- Transport Policy Manager, Suffolk County Council
- Integrated Transport Officer, Ipswich Borough Council
- First Eastern Counties Buses
- Head of Development, Ipswich Borough Council

6.1.3 The session was facilitated and chaired by Martin Blackwell and Joe Clarbour of WYG's project team.

6.2 SESSION STRUCTURE

6.2.1 The session commenced with a general question posed to all attendees to identify the biggest challenge facing Ipswich town centre. The responses from each of the attendees were summarised and presented in the following table:

Challenge	No. of respondents
Attracting visitors from other towns and cities, within the region and beyond	1
Access, traffic problems and issues associated with through traffic (including negative impact on public transport)	3
Council is not car friendly	1
Too many roadworks	1
Challenging poor perceptions of the town	3
Retaining graduates	1
Quality / underperformance of the retail offer	3
Competition from out of town retailing	1
Car parks too expensive	1

6.2.2 From the responses received, it is notable that three broadly defined areas of common ground emerge that might loosely be summarised as:

- Issues associated with perceptions of the town including difficulties attracting visitors from other towns, cities and regions, difficulties retaining graduates and perceptions of "unfriendliness" towards car drivers that were raised seven times;
- Issues associated with access and traffic including congestion, through-traffic, negative impacts on public transport, roadworks and parking that were raised six times; and,
- Issues associated with the quality / underperformance of the retail offer and the challenge of out of town retailing that were raised four times.

6.2.3 Each of the above categories is can only be loosely defined, and indeed specific issues raised have been included in more than one of the three broad summaries presented above. For example, voicing an opinion that car parks are too expensive might identify a genuine issue or problem with the price of car parks. Alternatively, it may simply be an expression of a personal frustration with car parking or access to the town in general. Or it may be the case that the underlying frustration results from a perception (justified or otherwise) that car parking is too expensive in relation to the wider benefit of visiting the town centre in the context of its wider retail and service offer.

6.2.4 The second stage of the workshop event saw the attendees split into five groups, each of which was asked to consider parking issues in relation to the following contexts:

- Group One was required to consider parking issues in relation to development of an integrated transport strategy for the Borough;

- Group Two was asked to consider parking in relation to understanding the customer / users of car parks;
- Group Three considered parking in relation to management of traffic in the core areas of the town;
- Group Four was asked to consider parking payment methods and technology; and,
- Group Five was asked to consider wayfinding and signage.

6.2.5 A summary of the key feedback gleaned from each group is presented below:

Group One: Parking as part of an Integrated Transport Strategy

- Control and management of the quantum, location and price of parking needs to be integrated within any transport strategy for the town;
- Parking needs to be considered in the round – cheap and plentiful parking creates demand for car access to the town centre to the detriment of other users. There is little bus priority for example and buses often sit in congestion;
- There are a multitude of different car park operators across the town and this makes an effective management strategy difficult to implement;
- There is a concern that the existing Park & Ride service is under pressure with recent changes made to introduce on-route pick-up / drop-off. There is an overall desire to retain the service but a recognition that to do so it will need to be made more attractive.

Group Two: Understanding the Customer

- Poor on-road signage for car parks was identified as an issue. Is there a role for directional signage technology?
- There are issues with the quality of many of the car parks within the town that are often poorly surfaced, badly lit and not easily accessible on foot. They don't present a welcoming aspect to the town;
- Existing payment options were raised as an issue and potential barrier to convenient use by existing customers. Many car parks operate a pay and display system only that imposes inflexibility on car park users by requiring them to return to their vehicle ahead of their ticket expiring. Alternative systems including pay on foot and or more flexible "smart" ways to pay would be better suited to user requirements.

Group Three: Traffic at the Core

- There is a feeling that there is a lack of integration between road, rail and bus;
- Issues raised concerning how people get to / from the rail station and university. There is an anecdotal belief that this encourages unnecessary driving. The free shuttle bus doesn't go as far as the rail station currently – could its route be extended?
- Related to the above point, to get around the town centre, people often have to cross one or more busy road corridors and walk relatively long distances through a poor quality built environment;
- There is a perception issue with Bury St. Edmunds that is a more compact centre with more prominent and visible car parks.

Group Four: Payment Methods & Technology

- Current payment methods overly reliant upon outdated pay & display mechanisms. The system needs to be more flexible to allow people to pay to stay longer without needing to return to their cars;
- Simple pay on foot systems would be an improvement but it would be better to have smart ways to pay using mobile phone technology;
- Many car parks do not take card payment;
- There is little real-time information concerning parking available pre or mid-journey via signage. There is little marketing or incentivisation of efficient use of car parks (although some were aware of several car parks in which "early bird" tariffs are available).

Group Five: Wayfinding

- Existing directional signage for drivers coming into town looking for car parking is variable in quality

6.2.6 The final session of the workshop asked attendees to give their thoughts to identifying potential solutions to some of the issues and problems raised as part of the group work and previous discussion. The session was run as a single, open discussion in which attendees were invited to give their feedback to the chair.

6.2.7 A summary of the potential solutions identified is provided below:

Park & Ride: It is understood that the existing park and ride services operating out of the Martlesham and Copdock Mill sites are under pressure due to budgetary pressure on the local authority reducing subsidies. Discussions are ongoing concerning future viability and it is likely that services will be restructured and integrated with standard services operated by First Bus. At the moment the priority is to ensure the service survives. In the medium-term, the relative price of the service in comparison to town centre parking is one area to look at. Attendees questioned what detailed studies have been undertaken to investigate the impact of congestion on bus services?

Signage: Improvements to signage for drivers and pedestrians using car parks were considered relatively easy to implement and it was considered would have positive impact on user behaviour. Some caution expressed that the potential implementation of technological solutions (e.g. variable message signage) would be expensive.

Integration: The need to link the station to cross-town destinations was highlighted. It was felt that linkages to the University and Suffolk New College were particularly important and that this would have the effect of strengthening the emerging Waterfront development area and development proposals along the Riverside. It was felt that better promotion of Plus Bus integrated rail / bus ticketing, improved information and extension of the town centre shuttle bus services to include the rail station would be appropriate.

Car Club / Car Share: It was considered that implementation of a scheme would be easy and have few cost implications. HD of Enterprise Rent-a-Car advised that establishing a scheme is about building critical mass and that one way to achieve rapid growth / uptake was to condition establishment of car club / share schemes through planning consents granted to significant new residential development planned within the Borough, particularly in relatively high-density developments in the core central areas of the town.

Quality and Management: IBC is constructing a new car park on the foundations of the former Crown multi-storey but this is essentially considered to be by way of partial replacement of spaces lost due to demolition of former car park on the site. IBC has

adopted a policy of only granting permission for short-stay parking in the Central Parking Core of the town centre although it should be recognised that a significant number of existing privately-operated car parks operate under consents that pre-date the adoption of this policy therefore the ability of IBC to intervene and manage is limited.

6.3 CONSIDERING PARK & RIDE SERVICES

6.3.1 To gain further insight into the existing operation of Park & Ride services within Ipswich, discussions were held with Belinda Godbold, Programme & Business Relationship Manager of Suffolk County Council. It is understood that the future of the service has recently been settled following First East Anglia's decision to operate a continual loop service between the two sites at Martlesham approximately 8.0km to the north-east of the town centre and at London Road approximately 6.0 km to the south-west.

6.3.2 The recently reorganised services operate on a 15-minute frequency between both sites, calling at key destinations including the town centre and at Ipswich Hospital. This means that staff and visitors to the hospital site coming towards the town from the west can park at the London Road site and use the service to travel cross town rather than driving into the town and on the central area network.

6.3.3 Services operate between 0700 and 1900 hrs on weekdays and Saturdays. During the evening period service 66 is redirected to provide an hourly return connection to both sites with the last bus leaving for London Road at 2232 hrs and for Martlesham at 2325 hrs. This outbound evening service allows people the flexibility to remain in the town into the early evening period perhaps following work to socialise without needing to take their car into the centre.

6.3.4 One of the four services per hour extends further past the Martlesham site to the east of the town as far as Aldburgh via Woodbridge and Rendlesham.

6.3.5 The existing London Road site has approximately 550 parking spaces on-site with around 500 serving the Martlesham site. Both sites are served by a terminal building housing passenger waiting and toilet / changing facilities plus information points. Cycle parking is provided on both sites. Tickets can be purchased from the driver at each site.

6.3.6 The County Council has recently invited expressions of interest for one acre of the London Road site, looking at proposals for disposal of redundant land. In broad terms it is anticipated that this

would result in a reduction in capacity to approximately 400 spaces although the Council is looking at ways to ensure retention of public toilets and waiting facilities.

6.3.7 Following its recent reorganisation, the future of Ipswich's Park & Ride service now appears to be on a secure footing with the Council investigating options to dispose of unused or underused parking assets at the London Road site. A review of the revised Park and Ride service was carried out by IBC in October 2017 and an increase in passenger numbers was evident, attributed to an initiative to encourage SCC staff to use the service. New ticket pricing options and mobile payment options have been introduced and the overall branding of the service has been improved. Physical measures on the highway have also been implemented to improve journey times and provide better access on to the buses.

6.3.8 Comparisons with the previous service are not simple because of the extra services, additional bus stops and differences in the way that ticket sales are recorded but Suffolk County Council was pleased with the investment and it remains confident that even with the rationalised parking capacity available, the existing services offer scope for expansion and growth over the medium-term.

6.3.9 If the Park and Ride service attracts new passengers it has some potential to reduce the demand for town centre parking, but it has to be recognised that this effect is likely to be relatively small unless major changes are also made to the number of spaces and cost of town centre parking.

7 FUTURE PARKING DEMAND FORECASTS

7.1 INTRODUCTION

7.1.1 An assessment of future parking demand has been undertaken up to 2036 to take into consideration the future growth in Ipswich and surrounding districts, as set out in **Chapter 2**.

7.1.2 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;

- 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 town 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; and,

- 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.

7.1.3 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.

7.1.4 It is often the case that car parks are identified as potential locations for redevelopment. As discussed within **Chapter 2**, several car park sites around Ipswich have been identified as redevelopment sites, including:

- Sites to the west of the town centre including the West End Road, New Portman Road and Great Gipping Street car parks that are identified within the Local Plan as being suitable for redevelopment as mixed residential / employment uses. In both cases, potential redevelopment might include replacement / additional car parking capacity;

- Sites to the south of the town centre including the Grafton Way (East & West), Turret Lane, Smart Street, St. Peter's Dock and Slade Street car parks that are identified within the Local Plan as being suitable for redevelopment as mixed residential / employment uses. Potential redevelopment of the Turret Lane area might include replacement / additional car parking capacity;

- Sites to the south-east of the town centre including the Duke Orwell Quay car park that is allocated for redevelopment to accommodate expanded educational facilities, part of which might include replacement / additional parking capacity;

- Sites adjacent to the town centre, including the Tacket Street, Cox Lane and Upper Barclay Street car parks to the east have been identified as being suitable to accommodate an expansion of the town centre retail core and to provide areas of open space. The sites of the Wolsey and Elm Street car parks to the west have also been identified as being suitable to accommodate expansion of the retail core. Potential redevelopment of the Tacket Street / Cox Lane area might include replacement / additional car parking capacity; and,

- The site of the Burrell Road car park adjacent to the south of the River Orwell has been identified as being suitable for redevelopment as residential land.

7.2 METHODOLOGY

7.2.1 Forecasts of future parking demand in the Local Plan period to 2036 were derived by applying a growth factor to the existing parking demand, based on the traffic growth forecasts for Ipswich produced by the Department for Transport (DfT). These factors have been used as the starting

point to estimate the future parking demand predicted to materialise in Ipswich town centre due to the predicted land use development.

7.2.2 TEMPro (Version 7.2) is a software programme approved by the DfT as being suitable 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 which 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.

7.2.3 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 town centre parking would help to steer the strategy in the right direction.

7.2.4 The growth factors which have been obtained from TEMPro for use in this Strategy are shown in **Table 17**. The time periods adopted relate to the baseline year in which most of the parking surveys were undertaken (2016), and the future years in which parking demand assessment have been based, i.e. 2021, 2026, 2031 and the end of the new Local Plan period, 2036. The TEMPro software provides growth factors for morning and evening periods and these have been averaged to give an overall growth factor for each future year.

Table 17: TEMPro Growth Factors

Growth Period	Growth Factor
2016 – 2021	1.0745
2016 – 2026	1.1509
2016 – 2031	1.1943
2016 – 2036	1.2411

7.2.5 The growth factors have been applied to the parking occupancy data presented earlier in this report as the basis for estimating parking demand. This approach assumes that parking demand in the study area will be in proportion to population and traffic growth in the Borough.

7.2.6 For example, multiplying the 2016 parking demand of 40 vehicles in the mid-morning at South Street by a the TEMPRo growth factor of 1.2411 would give a predicted future demand of 50 vehicles parking at that location in 2036.

7.2.7 It is acknowledged that whilst TEMPro provides a good basis for estimating background growth across the Borough in overall terms, it may not necessarily be reflective of the specific locations of growth and consequently parking demand within localised zones within the study area. Further consideration of this issue is presented later in this chapter.

7.2.8 It is important that the parking strategy fits as one element of a coherent overarching transport and access strategy for the town. 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 town 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 town centre will be reliant upon reasonable access by car.

7.2.9 For this reason, whilst the TEMPro based assessment is considered a useful starting point for assessment, a further sensitivity analysis has been undertaken to assess the demand for parking that might be anticipated due to specific development and access scenarios that may be proposed in and around the town. The operational implications of these scenarios have been considered, as set out below. The two scenarios assessed are:

> **Scenario 1** - 2036 capacity that would result from the loss of existing temporary car parks following expiry of current consents and / or any predicted loss of parking anticipated due to redevelopment of existing car parks;
>
> **Scenario 2** - 2036 capacity that assumed that temporary car parks would be lost but additional / replacement parking would be provided in areas of the town identified within the Local Plan policy documents. As the policy documents provide no indication of replacement parking numbers, an estimate has been made in each case using input from IBC officers as identified within **Table 5**.

7.2.10 In each case a sensitivity test has been carried out that assumes a 10% reduction in predicted future parking demand due to the successful implementation of additional measures to reduce car use and promote modal shift. These are referred to as Scenarios 1A and 2A.

7.2.11 In addition, to better understand the point at which existing capacity is exceeded by demand, interim future capacities were modelled under Scenario 1. The 2021, 2026 and 2031 demands

were calculated assuming no replacement of temporary car parks. All interim capacities assume that the temporary car parks are already lost (rather than proportioning this out over the years up to 2036), given that all current planning permissions for temporary car parks expire in or before 2021.

7.2.12 It is also important to ensure that an appropriate balance between demand and supply is maintained throughout different stages of the future development period to ensure adequacy of supply but also that there is no opportunity for an inappropriate over-supply of parking capacity to develop within the town at any stage.

7.2.13 The parking strategy considers the following issues:

- The parking supply appropriately and efficiently meets the realistic needs and requirements of the proposed land uses around the town centre at different times of the day and evening;
- The parking strategy and proposed pricing and tariff structures encourage use of alternative means of access into the town centre for those who can use them, notably public transport (including park & ride), walking and cycling;
- An appropriate spatial and pricing distribution of parking supply throughout the town centre is needed to minimise unnecessary cross-town movements of traffic on sensitive areas of the highway network, particularly during peak periods and where such movements have a detrimental impact on pedestrians, cyclists and public transport.

7.2.14 It is important to recognise that the calculations in this section show some parking locations to be over 100% occupied. In practice, if a car park or street is fully occupied, it is reasonable to assume that vehicles will most likely displace into another car park or will park on-street (perhaps in an area where on-street parking may not be desirable). It is therefore useful to consider the total car park capacity across the whole study area, which shows the overall likelihood of users to transfer to a different car park.

7.2.15 Care should be taken not to conclude that such a displacement would be automatic or necessarily even feasible. For example, at face value it is perhaps surprising that the popularity of some car parks is so high when demand in nearby car parks remains low, particularly in instances where tariff rates are broadly similar. This suggests that local factors including condition, ease of use, signing and information or whether a structure is easily accessible on foot may be important

considerations governing people's choices concerning where to park as well as simply location, availability and price.

7.2.16 The methodology adopted to estimate future parking demand is based on considering 'typical' periods of the year rather than peak periods (e.g. Christmas or during special events). It would be inappropriate to assess demand and present recommendations for peak periods of the year because this is likely to result in a gross over-provision of parking space availability that would in turn undermine adopted transport policy that is aimed at encouraging sustainable travel.

7.2.17 In most circumstances the weekday lunchtime period has the largest parking demand but there are individual locations where demand is highest at the weekend or in the evening. The location and type of proposed development could change this situation for the better or for the worse. For example, additional office development in the town centre would likely increase demand during the weekday but additional retail development would increase Saturday demand.

7.3 CALCULATING EXISTING AND PREDICTED FUTURE PARKING DEMAND (2036)

7.3.1 An estimate of future demand for parking that might be anticipated as a direct result of planned growth and development within and around the town and wider Borough has been undertaken by applying TEMPro growth rates. Future occupancy levels have been estimated by applying the TEMPro growth rates presented in **Table 17** to the observed occupancy levels recorded in each car park during the November 2016 and March 2017 surveys.

7.3.2 A series of growth scenarios were developed to represent the end of the Local Plan period (2036) plus three mid-Plan scenarios representative of five, ten and fifteen-year future forecasts. To present results in an easy to digest format, the predicted occupancy rates are summarised by Zone as per the occupancy survey results in **Chapter 5**.

7.3.3 In each case the occupancies have been colour-coded with a Red-Amber-Green rating to indicate where car parks are at or approaching full capacity. A threshold of 85% occupancy has been adopted, as this is the figure recommended by IHT in their 'Parking Strategies & Management' document. The IHT recommend this figure when formulating parking policy as it allows for variation in parking (e.g. during special events or Christmas), but also aims to avoid a situation where undersupply causes frustration and "searching traffic", which is inefficient and environmentally damaging.

7.3.4 In each table below, green numbers indicate that occupancy is below the threshold of 85% occupancy, amber numbers indicate occupancies between 85% and 100% where users are likely

to find it increasingly difficult to find a parking space and red numbers indicate where a car park is likely to be full.

7.3.5 A summary of the existing occupancy by zone is presented in **Table 18**. It should be noted that the occupancy calculations presented in this chapter are based on the surveyed car parks only, and therefore do not take account of the capacity of car parks which were not surveyed. This is discussed further in the text accompanying the calculations and tables.

Table 18: Existing Parking Occupancy by Zone (November 2016 and March 2017)

Zone	Mid-morning	Lunchtime	Mid-afternoon	Early evening
Zone 1 Riverside	36%	48%	52%	45%
Zone 2 Station & Office	90%	94%	84%	53%
Zone 3 Town Centre Central & West	56%	67%	62%	27%
Zone 4 Town Centre East	80%	67%	85%	46%
Zone 5 Town Centre North	87%	78%	67%	29%
TOTAL	**69%**	**71%**	**71%**	**44%**

7.3.6 **Table 18** illustrates that existing observed parking demand is broadly accommodated by existing capacity across all zones of the town centre during all periods of the day. Town-wide occupancy peaks at 71% of supply between around lunchtime and mid-afternoon before falling away sharply into the early evening.

7.3.7 Observed occupancy exceeded 85% in two of the five zones and one of those (Town Centre North) only just exceeded capacity in one time-period. The Station and Office zone approached full capacity during most of the daytime with up to 94% occupancy. This is due to the busy car parks serving the employment area to the west of the town centre and the railway commuters parking around the station. The remaining zones have plenty of spare capacity as a whole, although individual car parks do reach capacity, as shown in **Chapter 5**.

7.3.8 **Table 19** shows how demand is expected to increase if the number of parking spaces were to remain the same as existing. The TEMPro 2017 to 2036 growth factor has been applied to the existing demand to produce these forecasts. This is unlikely to be a realistic scenario, given that the supply of parking spaces is expected to change in the future, but it does provide a 2036 benchmark to compare the following scenarios against.

Table 19: 2036 Parking Occupancy in Existing Parking Spaces

Zone	Mid-morning	Lunchtime	Mid-afternoon	Early evening
Zone 1 Riverside	45%	59%	65%	56%
Zone 2 Station & Office	112%	116%	104%	66%
Zone 3 Town Centre Central & West	70%	83%	77%	33%
Zone 4 Town Centre East	99%	84%	105%	57%
Zone 5 Town Centre North	108%	97%	83%	35%
TOTAL	**85%**	**88%**	**88%**	**55%**

7.3.9 The table shows that in 2036 overall occupancy generally exceeds 85%, and in the Riverside, Town Centre East and Town Centre North Zones, demand for parking would sometimes exceed supply. This would be likely to lead to an overspill of parking into the remaining zones, if the type of parking required (long or short stay) is available. It is possible that this could also lead to people not coming into the town centre at all if they cannot park at their preferred location.

7.4 ASSESSING DEMAND CAPACITY IMPLICATIONS OF SCENARIO ONE

7.4.1 As the basis to consider future parking requirements, an assessment of the predicted 2036 parking demand has been undertaken using the TEMPro rates presented in **Table 17**.

7.4.2 This baseline assessment assumes that existing parking capacity is reduced wherever redevelopment of existing car park sites is anticipated and that any car parks currently operating under temporary permits that expire before the assessment year are removed from the capacity calculation. It also includes the new multi-storey car park under construction at Crown Street. This baseline approach provides an assessment of the additional capacity that might subsequently be required.

7.4.3 Parking spaces would be lost in the locations presented in **Table 20**. These losses are not evenly distributed across the town centre, with the Riverside Zone (Zone 1) losing the most spaces (almost 900) while Town Centre North Zone (Zone 5) would not lose any spaces.

Table 20: Scenario 1 – Assumed Parking Spaces Lost/Gained by 2036

Zone	Parking Spaces Lost
Zone 1 Riverside	- 898
Zone 2 Station & Office	- 397
Zone 3 Town Centre Central & West	- 254
Zone 4 Town Centre East	- 325
Zone 5 Town Centre North	0
TOTAL	**- 1,874**

7.4.4 **Table 21** shows the 2036 occupancy as a result of the loss of the car parks outlined in **Table 20**.

Table 21: Scenario 1 – 2036 Parking Occupancy with Loss of Temporary Car Parks

Zone	Mid-morning	Lunchtime	Mid-afternoon	Early evening
Zone 1 Riverside	98%	129%	142%	123%
Zone 2 Station & Office	142%	147%	132%	84%
Zone 3 Town Centre Central & West	117%	138%	128%	55%
Zone 4 Town Centre East	142%	119%	151%	82%
Zone 5 Town Centre North	108%	97%	83%	35%
TOTAL	**126%**	**131%**	**131%**	**82%**

7.4.5 It should be noted that the above calculations are based on the occupancy of the car parks which were surveyed in 2016 and 2017. Therefore, some car parks are not included in the calculations. These include Rose Lane (North and South), Star Lane, Buttermarket, Princes Street and the additional spaces delivered through redevelopment of the Crown car park. This makes relatively little difference to the Riverside, Station & Office and Town Centre East Zones (1, 2 and 4), where the number of spaces surveyed was within +/- 40 spaces of the actual total in that zone.

7.4.6 The car parks which were not surveyed would still have been occupied and experienced demand. It can reasonably be assumed that they would have a level of occupancy consistent with the relevant zone as a whole, acknowledging the localised variances which have been observed within each zone. In other words, the car parks do not effectively represent 'spare' capacity and including them would not likely add significant spare capacity across the town.

7.4.7 The 2036 Baseline assessment results indicate that with the addition of TEMPro based growth in demand and the accompanying loss in capacity due to closure of temporary car parks combined with proposed developments on several existing car parks by this time (assuming no replacement / mitigation), overall demand for parking would significantly exceed the residual capacity available.

7.4.8 Across the whole town centre area predicted occupancy would be over 120% of capacity throughout most of the day. Even though overall capacity is significantly exceeded across the whole town, a small amount of parking capacity remains available in the Town Centre North.

7.4.9 To bring the overall occupancy down to a recommended level of 85% for **Scenario 1** would require the additional parking spaces outlined in **Table 22**.

Table 22: Scenario 1 Additional Spaces to Reach 85% Occupancy

Zone	Additional Spaces Required
Zone 1 Riverside	429
Zone 2 Station & Office	933
Zone 3 Town Centre Central & West	202
Zone 4 Town Centre East	497
Zone 5 Town Centre North	121
Total	2,182

7.4.10 The 'total' figure should be treated with caution as it is the sum of the maximum requirement in each zone in that specific zone's busiest time period. For example, Zone 1 experiences the highest demand in the mid-afternoon and Zone 5 is busiest in the mid-morning. The additional spaces above reflect these time periods. To bring the overall occupancy down to 100% would require the additional parking spaces outlined in **Table 23**.

Table 23: Scenario 1 Additional Spaces to Reach 100% Occupancy

Zone	Additional Spaces Required
Zone 1 Riverside	316
Zone 2 Station & Office	708
Zone 3 Town Centre Central & West	145
Zone 4 Town Centre East	383
Zone 5 Town Centre North	41
Total	1,594

7.4.11 To take account of the car parks which were not surveyed (predominantly in Zones 3 and 5), this number has been factored up based on the demand within those zones. For example, in the Town Centre Central & West Zone, the average occupancy has been applied to the total number of 916 spaces (excluding disabled), which would be provided in that zone in 2036 if temporary car parks were lost.

7.4.12 The resulting requirements for additional spaces in each Zone are outlined in **Table 24**. This calculation should be treated as a guide only as it is not based on survey data.

Table 24: Scenario 1 Additional Spaces (Including Car Parks not Surveyed)

Zone	Additional Spaces Required (85%)	Additional Spaces Required (100%)
Zone 1 Riverside	429	316
Zone 2 Station & Office	933	708
Zone 3 Town Centre Central & West	490	352
Zone 4 Town Centre East	497	383
Zone 5 Town Centre North	184	63
Total	2,533	1,822

7.5 SCENARIO 1A

7.5.1 A further sensitivity assessment (1A) was undertaken to test the operational implications of assuming the future parking demand is reduced by 10% to reflect the potential for successful implementation of sustainable travel and travel demand mitigation measures. The results of the sensitivity test are presented in **Table 25**.

Table 25: 2036 Parking Occupancy with Loss of Temporary Car Parks Incorporating -10% Adjustment

Zone	Mid-morning	Lunchtime	Mid-afternoon	Early evening
Zone 1 Riverside	89%	116%	128%	110%
Zone 2 Station & Office	127%	132%	119%	75%
Zone 3 Town Centre Central & West	105%	125%	116%	50%
Zone 4 Town Centre East	127%	108%	136%	74%
Zone 5 Town Centre North	97%	87%	75%	32%
TOTAL	**114%**	**118%**	**117%**	**73%**

7.5.2 The results of the sensitivity test indicate that even assuming a blanket 10% reduction in demand resulting from the assumed successful implementation of travel planning / traffic management

measures, the predicted increase in parking demand coupled with the expiry of temporary permissions under which several existing car parks operate would result in a lack of capacity across the town, that would affect three zones in particular.

7.5.3 To bring the overall occupancy down to a recommended level of 85% for **Scenario 1A** would require the additional parking spaces outlined in **Table 26**.

Table 26: Scenario 1A Additional Spaces to Reach 85% Occupancy

Zone	Additional Spaces Required
Zone 1 Riverside	322
Zone 2 Station & Office	712
Zone 3 Town Centre Central & West	150
Zone 4 Town Centre East	383
Zone 5 Town Centre North	64
Total	1,630

7.5.4 To bring the overall occupancy down to 100% would require the additional parking spaces outlined in **Table 27**.

Table 27: Scenario 1A Additional Spaces to Reach 100% Occupancy

Zone	Additional Spaces Required
Zone 1 Riverside	209
Zone 2 Station & Office	487
Zone 3 Town Centre Central & West	93
Zone 4 Town Centre East	269
Zone 5 Town Centre North	0
Total	1,058

7.5.5 With regard to Zone 5 Town Centre North, there would actually be a surplus of 16 spaces in Scenario 1A. The net requirement for additional spaces would therefore be 1,042.

7.5.6 **Table 28** shows the requirement for additional spaces taking into account the car parks which were not surveyed. This calculation should be treated as a guide only as it is not based on survey data.

Table 28: Scenario 1A Additional Spaces (Including Car Parks not Surveyed)

Zone	Additional Spaces Required (85%)	Additional Spaces Required (100%)
Zone 1 Riverside	322	209
Zone 2 Station & Office	712	487
Zone 3 Town Centre Central & West	363	226
Zone 4 Town Centre East	383	269
Zone 5 Town Centre North	97	0
Total	1,877	1,191

7.5.7 With regard to Zone 5 Town Centre North, there would actually be a surplus of 24 spaces in Scenario 1A. The net requirement for additional spaces would therefore be 1,166.

7.6 SCENARIO ONE: CONCLUSIONS

7.6.1 The assessment undertaken allows the following conclusions to be drawn in relation to patterns of use and demand throughout different periods of the day and in different areas of the town centre assuming delivery of Scenario One:

- Throughout the daytime period analysis shows that the reduced capacity and additional parking demand by 2036 would result in overcapacity across the town centre and even worse within individual zones. Approximately **2,182** additional spaces would be required in the town to bring the car park occupancy down to the recommended level of 85%.
- Zone 1 (Riverside) would lose the most temporary car park spaces. Six of the ten car parks are earmarked for redevelopment, leaving just one large short stay, customer car park at Cardinal Park and one large long stay car park at Athena Hall. An additional 429 spaces would be required in Zone 1 to reach 85% capacity.
- Zone 2 Station & Office is expected to lose up to 400 spaces, all long stay, and would require the largest number of additional spaces to reach 85% occupancy. Zone 2 would require 933 spaces.
- Zone 3 Town Centre Central & West is expected to lose 254 spaces and Zone 4 Town Centre East is expected to lose 325, mainly in the Tacket Street car park, and this would make the existing lack of capacity even worse.
- There is not expected to be any loss in spaces in Zone 5 Town Centre North.
- Towards the early evening period, overall parking demand reduces markedly, however analysis indicates a lack of capacity in the Riverside area as Cardinal Park fills up and the

other nearby car parks are lost. It may be possible for people to use vacant spaces in the adjacent zones in the evening, although this may require a longer walk to their destinations which will discourage users particularly if it is dark.

- If a blanket 10% reduction is applied to predicted parking demand to reflect the success of measures to reduce car use and prompt modal shift towards sustainable modes of travel, town centre-wide demand would still be expected to exceed capacity but to a lesser extent; **1,630** additional spaces would be required to bring down the car park occupancy to the recommended level of 85%.
- Taking into account the car parks which were not surveyed, a potential figure of 2,533 additional spaces would be required to reach 85% occupancy in Scenario 1. In Scenario 1A, 1,877 additional spaces would be required.

7.7 ASSESSING DEMAND CAPACITY IMPLICATIONS OF SCENARIO TWO

7.7.1 Using the same TEMPro methodology to predict future parking demand across the town centre by 2036, an assessment of the parking demand / capacity implications of development Scenario 2 has been undertaken. As with scenario one, it is assumed that any temporary car park permits expiring will not be renewed and therefore capacity will be reduced accordingly. However, where redevelopment of existing car parks is anticipated, an allowance has been made to include replacement / additional car parking in locations identified as being suitable. Further details of the assumed change to parking capacity in each zone by 2036 is presented within **Table 29**.

Table 29: 2036 Assumed Additional / Replacement Car Parking by Zone

Zone	Existing parking capacity (excl. disabled)	Parking capacity following loss of temporary car parks	Assumed additional parking capacity following / as part of redevelopment	Total parking capacity following re-development
Zone 1 Riverside	1,654	756	287	1,043
Zone 2 Station & Office	1,917	1,520	500	2,020
Zone 3 Town Centre Central & West	1,170	916	250	1,166
Zone 4 Town Centre East	1,120	795	638	1,433
Zone 5 Town Centre North	809	809	0	809
TOTAL	**6,670**	**4,796**	**1,675**	**6,471**

7.7.2 Analysis of the predicted 2036 demand / capacity balance incorporating the indicative additional / replacement parking supply as set out within **Table 29** has been undertaken, the results of which are presented within **Table 30**.

Table 30: 2036 Parking Occupancy Inclusive of Additional / Replacement Parking Supply

Zone	Mid-morning	Lunchtime	Mid-afternoon	Early evening
Zone 1 Riverside	71%	94%	103%	89%
Zone 2 Station & Office	106%	110%	99%	63%
Zone 3 Town Centre Central & West	70%	83%	77%	33%
Zone 4 Town Centre East	77%	65%	82%	45%
Zone 5 Town Centre North	108%	97%	83%	35%
TOTAL	**88%**	**92%**	**91%**	**57%**

7.7.3 Assuming the 2036 predicted demand growth increases in line with TEMPro rates, delivery of 1,675 spaces to offset predicted losses of 1,874 anticipated as a result of development proposals across the town centre the resultant capacity would meet demand throughout all periods of the day in Zone 3 Town Centre Central & West and Zone 4 Town Centre East. However, demand in Zone 1 Riverside, Zone 2 Station & Office and Zone 5 Town Centre North would exceed maximum capacity with occupancies above 100%.

7.7.4 There may be some scope for the additional demand in Zones 1, 2 and 5 to be met by the spare capacity in the adjacent zones although the walk distances between these areas would be a limiting factor.

7.7.5 To bring the overall occupancy down to a recommended level of 85% for **Scenario 2** would require the additional parking spaces outlined in **Table 31**.

Table 31: Scenario 2 Additional Spaces to Reach 85% Occupancy

Zone	Additional Spaces Required
Zone 1 Riverside	185
Zone 2 Station & Office	508
Zone 3 Town Centre Central & West	0
Zone 4 Town Centre East	0
Zone 5 Town Centre North	121
Total	814

7.7.6 With regard to Zone 3 Town Centre Central & West and Zone 4 Town Centre East, there would be a surplus of 10 and 45 spaces, respectively, in Scenario 2. The net requirement for additional spaces would therefore be 758.

7.7.7 To bring the overall occupancy down to 100% would require the additional parking spaces outlined in **Table 32**.

Table 32: Scenario 2 Additional Spaces to Reach 100% Occupancy

Zone	Additional Spaces Required
Zone 1 Riverside	29
Zone 2 Station & Office	208
Zone 3 Town Centre Central & West	0
Zone 4 Town Centre East	0
Zone 5 Town Centre North	41
Total	278

7.7.8 With regard to Zone 3 Town Centre Central & West and Zone 4 Town Centre East, there would be a surplus of 105 and 255 spaces, respectively, in Scenario 2. The net requirement would therefore be -81.

7.7.9 To take account of the car parks which were not surveyed (predominantly in Zones 3 and 5), this number has been factored up based on the demand within those zones. For example, in the Town Centre Central & West Zone, the average occupancy has been applied to the total number of 916 spaces (excluding disabled), which would be provided in that zone in 2036 if temporary car parks were lost.

7.7.10 **Table 33** shows the requirement for additional spaces taking into account the car parks that were not surveyed. This should be treated as a guide as it is not based on survey data.

Table 33: Scenario 2 Additional Spaces (Including Car Parks not Surveyed)

Zone	Additional Spaces Required (85%)	Additional Spaces Required (100%)
Zone 1 Riverside	185	29
Zone 2 Station & Office	508	208
Zone 3 Town Centre Central & West	0	0
Zone 4 Town Centre East	0	0
Zone 5 Town Centre North	184	63
Total	877	299

7.7.11 With regard to Zone 3 Town Centre Central & West and Zone 4 Town Centre East, there would be a surplus of 19 and 45 spaces, respectively, to achieve 85% occupancy. The net requirement for additional spaces would therefore be 812. For 100% occupancy, there would be a surplus of 194 and 255 spaces, respectively, and therefore the net requirement would be -149.

7.8 SCENARIO 2A

7.8.1 A further sensitivity assessment (2A) was undertaken to test the implications of assuming future parking demand is reduced by 10% to reflect the potential for successful implementation of sustainable travel and travel demand mitigation measures. The results of the assessment are presented in **Table 34**.

Table 34: 2036 Parking Occupancy Inclusive of Replacement Parking Supply, Incorporating -10% Adjustment

Zone	Mid-morning	Lunchtime	Mid-afternoon	Early evening
Zone 1 Riverside	64%	84%	92%	80%
Zone 2 Station & Office	96%	99%	89%	56%
Zone 3 Town Centre Central & West	63%	75%	70%	30%
Zone 4 Town Centre East	69%	58%	74%	40%
Zone 5 Town Centre North	97%	87%	75%	32%
TOTAL	**80%**	**82%**	**82%**	**51%**

7.8.2 The results of the Scenario 2A sensitivity test indicate that the assumed blanket 10% reduction in demand resulting from successful implementation of travel planning / traffic management measures coupled with delivery of replacement / additional parking capacity alongside anticipated development in several zones would be expected to result in predicted demand remaining just within available capacity across the town centre. In Zone 2 Station & Office and Zone 5 Town Centre North, demand would only be marginally within capacity, and in Zone 1 Riverside, demand would be close to capacity during the mid-afternoon time period.

7.8.3 To bring the overall occupancy down to a recommended level of 85% for **Scenario 2A** would require the additional parking spaces outlined in **Figure 35**.

Table 35: Scenario 2A Additional Spaces to Reach 85% Occupancy

Zone	Additional Spaces Required
Zone 1 Riverside	78
Zone 2 Station & Office	287
Zone 3 Town Centre Central & West	0
Zone 4 Town Centre East	0
Zone 5 Town Centre North	64
Total	429

7.8.4 With regard to Zone 3 Town Centre Central & West and Zone 4 Town Centre East, there would actually be a surplus of 63 and 159 spaces, respectively, in Scenario 2A. The net requirement for additional spaces would therefore be 207.

7.8.5 It may be preferable to construct the additional spaces that are likely to be required in Zones 1, 2 and 5 rather than in the zones that do not need so much extra capacity. Alternatively, additional investment could be made to achieve a greater percentage reduction in car travellers in these zones (i.e. a greater than 10% reduction) such that parking demand is further reduced.

7.8.6 To bring the overall occupancy down to 100%, no additional spaces would be required. There would be a surplus of 633 spaces across all zones.

7.8.7 **Table 36** shows the requirement for additional spaces taking into account the car parks which were not surveyed. This calculation should be treated as a guide only as it is not based on survey data. To bring capacity down to 100%, no additional spaces would be required.

Table 36: Scenario 2A Additional Spaces (Including Car Parks not Surveyed)

Zone	Additional Spaces Required
Zone 1 Riverside	78
Zone 2 Station & Office	287
Zone 3 Town Centre Central & West	0
Zone 4 Town Centre East	0
Zone 5 Town Centre North	97
Total	462

7.8.8 With regard to Zone 3 Town Centre Central & West and Zone 4 Town Centre East, there would actually be a surplus of 116 and 159 spaces, respectively, in Scenario 2A. The net requirement for additional spaces would therefore be 186.

7.9 SCENARIO TWO: CONCLUSIONS

7.9.1 The assessment that has been undertaken allows the following conclusions to be drawn in relation to patterns of use and demand throughout different periods of the day and in different areas of the town centre, assuming delivery of Scenario Two:

- The 2036 percentage occupancy would be reduced by the proposed replacement of 1,675 parking spaces. The highest level of overall occupancy across all zones would be 92% (at lunchtime).

- Zones 1, 2 and 5 (Riverside, Town Station & Office and Town Centre North) would reach 100% occupancy at some point during the day, whilst Zones 3 and 4 (Town Centre Central & West and Town Centre East) would remain just below 85% occupied.

- The proposed volume of new spaces in Zone 1 Riverside (287) is significantly lower than the number that are expected to be lost in this zone (611) leading to the capacity problem. The other zones would end up with similar or more spaces than existing. This is adequate for Zones 3 Town Centre Central & West and Zone 4 Town Centre East, but is not sufficient to overcome the capacity problem in Zone 2 Station & Office and Zone 5 Town Centre North.

- It will be necessary to provide more than the proposed spaces in Zones 1, 2 and 5 to meet the forecast demand. In total, **814** additional spaces would be required to reach the recommended 85% occupancy. Due to a surplus in capacity in some zones this translates to a net requirement for 758 spaces across all zones.

- If a blanket 10% reduction is applied to predicted future parking demand to reflect the success of measures to reduce car use and prompt modal shift towards sustainable modes of travel, town centre-wide parking demand would just be within 100% capacity. However, Zones 1, 2 and 5 would still be above 85% occupancy at one or more points during the day. A total of **429** additional spaces would be required to reach 85% occupancy, although due to a surplus in some zones this translates to a net increase of 207 additional spaces.

- Taking into account the car parks which were not surveyed, a potential figure of 877 additional spaces would be required to reach 85% occupancy in Scenario 2. In Scenario 2A, 462 additional spaces would be required. Taking account of surpluses in some zones, this translates to a net requirement for 812 and 186 spaces, in Scenarios 2 and 2A, respectively.

7.10 INTERIM SCENARIOS

7.10.1 Three interim scenarios have been modelled to establish the point at which demand for parking in the town centre would exceed capacity. Interim scenarios in 2021, 2026 and 2031 have been modelled.

7.10.2 To provide a baseline, the interim scenarios are firstly modelled assuming all existing parking spaces in each zone remain. They are then modelled using the same assumptions regarding temporary car parks as those made in Scenario 1, i.e. that all temporary car parks are lost in or before 2021.

7.11 2021 INTERIM SCENARIO

7.11.1 The results of the 2021 Interim Scenario based on existing spaces are presented in **Table 37**.

Table 37: 2021 Parking Occupancy in Existing Parking Spaces

Zone	Mid-morning	Lunchtime	Mid-afternoon	Early evening
Zone 1 Riverside	39%	51%	56%	49%
Zone 2 Station & Office	97%	101%	90%	57%
Zone 3 Town Centre Central & West	60%	72%	67%	29%
Zone 4 Town Centre East	86%	72%	91%	50%
Zone 5 Town Centre North	93%	84%	72%	31%
TOTAL	**74%**	**77%**	**76%**	**48%**

7.11.2 **Table 37** shows that in 2021, if parking capacity were to remain as existing, demand would exceed capacity in Zone 2 Station & Office and would be close to capacity in Zone 4 Town Centre East and Zone 5 Town Centre North. Zone 1 Riverside has significant spare capacity and Zone 3 Town Centre Central & West has spare capacity.

7.11.3 The results of the 2021 Interim Scenario based on the loss of existing temporary car parks is presented in **Table 38**.

Table 38: 2021 Parking Occupancy with Loss of Temporary Car Parks

Zone	Mid-morning	Lunchtime	Mid-afternoon	Early evening
Zone 1 Riverside	85%	112%	123%	106%
Zone 2 Station & Office	123%	127%	114%	72%
Zone 3 Town Centre Central & West	101%	120%	111%	48%
Zone 4 Town Centre East	123%	103%	130%	71%
Zone 5 Town Centre North	93%	84%	72%	31%
TOTAL	**109%**	**113%**	**113%**	**71%**

7.11.4 **Table 38** shows that removal of existing temporary car parks (all of which have consents which expire in or before 2021) would result in Zones 1 to 4 being over capacity for the majority of the day, with Zone 5 almost reaching capacity in the mid-morning.

7.12 2026 INTERIM SCENARIO

7.12.1 The results of the 2026 Interim Scenario based on existing spaces are presented in **Table 39**.

Table 39: 2026 Parking Occupancy in Existing Parking Spaces

Zone	Mid-morning	Lunchtime	Mid-afternoon	Early evening
Zone 1 Riverside	42%	55%	60%	52%
Zone 2 Station & Office	104%	108%	97%	61%
Zone 3 Town Centre Central & West	65%	77%	71%	31%
Zone 4 Town Centre East	92%	77%	98%	53%
Zone 5 Town Centre North	100%	90%	77%	33%
TOTAL	**79%**	**82%**	**82%**	**51%**

7.12.2 **Table 39** shows that in similarly to the 2021 Interim Scenario, in 2026 if parking capacity were to remain as existing, demand would exceed capacity in Zone 2 Station & Office and Zone 5 Town Centre North. Demand would be close to capacity in Zone 4 Town Centre East. Zone 1 Riverside still has significant spare capacity and Zone 3 Town Centre Central & West has spare capacity.

7.12.3 The results of the 2026 Interim Scenario based on the loss of existing temporary car parks is presented in **Table 40**.

Table 40: 2026 Parking Occupancy with Loss of Temporary Car Parks

Zone	Mid-morning	Lunchtime	Mid-afternoon	Early evening
Zone 1 Riverside	91%	120%	131%	114%
Zone 2 Station & Office	131%	137%	122%	78%
Zone 3 Town Centre Central & West	108%	128%	119%	51%
Zone 4 Town Centre East	131%	111%	140%	76%
Zone 5 Town Centre North	100%	90%	77%	33%
TOTAL	**117%**	**121%**	**121%**	**76%**

7.12.4 **Table 40** shows a similar situation to 2021, albeit that the occupancy of Zone 4 Town Centre North increases in the mid-morning to the extent that demand exceeds capacity. There remains spare capacity in the early evening across most zones apart from Zone 1 Riverside.

7.13 2031 INTERIM SCENARIO

7.13.1 The results of the 2031 Interim Scenario based on existing spaces are presented in **Table 41**.

Table 41: 2031 Parking Occupancy in Existing Parking Spaces

Zone	Mid-morning	Lunchtime	Mid-afternoon	Early evening
Zone 1 Riverside	43%	57%	62%	54%
Zone 2 Station & Office	108%	112%	100%	64%
Zone 3 Town Centre Central & West	67%	80%	74%	32%
Zone 4 Town Centre East	95%	80%	101%	55%
Zone 5 Town Centre North	104%	93%	80%	34%
TOTAL	**82%**	**85%**	**85%**	**53%**

7.13.2 **Table 41** shows that in 2031, if parking capacity were to remain as existing, demand would exceed capacity in three zones: Zone 2 Station & Office, Zone 4 Town Centre East and Zone 5 Town Centre North. Demand would be close to capacity in Zone 5 Town Centre North. Zone 1 Riverside and Zone 3 Town Centre Central & West still have spare capacity.

7.13.3 The results of the 2031 Interim Scenario based on the loss of existing temporary car parks is presented in **Table 42**.

Table 42: 2031 Parking Occupancy with Loss of Temporary Car Parks

Zone	Mid-morning	Lunchtime	Mid-afternoon	Early evening
Zone 1 Riverside	95%	124%	136%	118%
Zone 2 Station & Office	136%	142%	127%	80%
Zone 3 Town Centre Central & West	112%	133%	124%	53%
Zone 4 Town Centre East	136%	115%	145%	79%
Zone 5 Town Centre North	104%	93%	80%	34%
TOTAL	**122%**	**126%**	**126%**	**78%**

7.13.4 **Table 42** shows a similar situation to 2026 but with greater levels of occupancy. There remains spare capacity in the early evening across most zones apart from Zone 1 Riverside.

7.14 INTERIM SCENARIOS: CONCLUSIONS

7.14.1 The assessment of three interim scenarios in 2021, 2026 and 2031 allows for the following conclusions to be drawn in relations to patterns of parking demand:

- In the baseline situation where all existing parking spaces are retained in all future year scenarios, Zone 2 Station & Office would exceed capacity in 2021. Zone 4 Town Centre East and Zone 5 Town Centre North would exceed capacity in 2026 and 2031, respectively.

- If existing parking spaces are retained, Zone 1 Riverside and Zone 3 Town Centre Central & West would not exceed capacity in any interim scenario.

- If all temporary car parks are lost, the point at which demand would exceed capacity is by 2021 in all zones apart from Zone 5 Town Centre North. Demand in Zone 5 would begin to exceed capacity in 2026.

8 FUTURE DEMAND CONCLUSIONS

8.1 INTRODUCTION

8.1.1 Analysis set out within **Chapter 8** provides an illustration of the predicted parking demand / capacity balance across the town centre study area based on a number of assumptions concerning the number of spaces likely to be lost as a result of redevelopment in each zone and potential for replacement by way of mitigation as indicated within the Local Plan. The scenarios tested can be summarised as:

1. Existing demand and existing parking spaces
2. 2036 demand and existing parking spaces
3. 2036 demand and reduced parking from temporary car park closures
4. 2036 demand and replacement parking
5. Sensitivity tests for increased use of sustainable transport
6. 2021, 2026 and 2031 demand and existing parking spaces
7. 2021, 2026 and 2031 demand and reduced parking from temporary car park closures

8.1.2 In general terms, the assessments undertaken for 2036 indicate that predicted parking capacity across the town would largely be appropriate to meet the demand in Zone 3 Town Centre Central & West and Zone 4 Town Centre East, but this relies on the creation of new car parks. This cannot yet be guaranteed to take place as assumed, so there is a risk in this conclusion.

8.1.3 However, capacity would not be sufficient to meet demand in the remaining zones (Zone 1 Riverside, Zone 2 Station & Office and Zone 5 Town Centre North). This is particularly the case in Zone 2 Station & Office even though this zone benefits from an increase in spaces.

8.1.4 Taking account of a 10% reduction in parking as a result of promoting sustainable transport, occupancy in all zones would just be within capacity. Zone 2 Station & Office and Zone 5 Town Centre North would be very close to 100% capacity despite the 10% reduction.

8.1.5 Additionally, new development within a given Zone of the town centre has the potential to locally increase parking demand in and around that particular area. It should be noted that the methodology employed to generate predictions of future parking demand across the town centre overall has been based on the use of TEMPro growth rates to grow existing observed demand.

8.1.6 TEMPro applies an area-wide growth rate for the Borough and the surrounding areas. It takes account of population growth, housing and employment projections in each area and predicts how vehicle trips will increase as a result of this growth, as well as how trips will distribute

between different areas across the country. Whilst information feeding into the TEMPro model is sourced from policy documents such as Local Plans, the model does not take account of development sites at an individual level. Therefore the level of detail which can be gained from TEMPro does not allow interrogation of trips between specific sites or zones within the town.

8.1.7 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.

8.1.8 With only limited details available concerning the precise make up of potential developments across the town 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 town might impact on deliverability of another similar potential development in another. It is therefore recommended that the precise requirements for each individual zone (and potentially its neighbouring zones) are considered in more detail as and when individual development sites are brought forward for delivery. This implies that whilst the overall requirement for additional parking spaces might be expected to remain similar, their potential distribution across different zones might be expected to change and sufficient flexibility to accommodate such change should be built into the strategy.

Recommendations

8.1.9 The assessment of the future parking demand / capacity balance indicates that if the loss of capacity from anticipated closures of temporary car parks is not offset, in 2021 predicted demand will exceed available supply across the town as a whole. This situation gradually worsens through each interim scenario up to 2036, when demand would significantly exceed capacity.

8.1.10 In 2036, even if overall parking demand is reduced by 10% to reflect the potential beneficial impact of policy measures to increase the proportion of travel by sustainable modes, overall predicted demand would still exceed supply in all but one zone (Zone 5 Town Centre North).

8.1.11 The Local Planning Authority has provided indicative details concerning how proposed parking losses might be offset through delivery of additional parking capacity by way of replacement, including outline details of locations and anticipated timescales. An estimate of the scale of parking required and potentially deliverable in each location was made in each case.

8.1.12 The results of the assessment indicate that the broad quantum of spaces that might be feasible for delivery is generally appropriate to meet demand in Zone 3 Town Centre Central & West and Zone 4 Town Centre East by 2036 but the remaining three zones continue to have potential

overcapacity problems. The capacity problem is worst in Zone 2 Station & Office, which is above capacity during two time periods and very close to capacity in another time period.

8.1.13 It is considered that delivery of a robust sustainable travel strategy, targeted at reducing long-stay parking activity in Zone 2 to the south-west of the town centre might be effective in reducing future demand for parking within this area.

8.1.14 However, it is difficult to quantify the likely impact of factors such as changes to working patterns and associated travel behaviour, how and when people choose to shop, socialise and use town centre services and how emerging car ownership and vehicle propulsion technology might manifest in parking habits which would affect (although not necessarily reduce) demand for parking. It is also difficult to quantify the specific localised level of parking that might be required as a result of individual developments that may or may not come forward for delivery.

8.1.15 Initiatives such as offering employee incentives to use Park & Ride services and improving bus service connections to the rail station may be options that should be explored to encourage those travelling onwards by rail to access the station by non-car modes. One way this might be achieved is to consider localised re-routing of the Park & Ride services via the station to allow inter-modal transfer (although to be viable this might require extension of the service hours).

8.1.16 Another (potentially complementary) approach might be to consider scope for implementation of localised, cross-town centre shuttle services connecting more outlying car parks to each other, to major amenities within the core central area and to more peripheral key locations including Zone 1 Riverside and Zone 2 Office & Station. Public transport options should seek to recognise the potential scope for the employment of automated vehicles to deliver cost-effective services using clean vehicles. Particular attention should be paid to the potential for emerging technologies to provide viable access alternatives towards the middle and end point of the Local Plan period thus allowing for development of a strategic, policy led and incremental approach to delivery of additional / renewal of existing parking resources.

9 PARKING POLICY AND STRATEGY OPTIONS

9.1 INTRODUCTION

9.1.1 A wide range of policy tools exist to enable the Parking Strategy to support other policies in the Borough and achieve their objectives. Consultation 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.

9.1.2 Changes in policy are likely to have a feedback effect on the demand for parking assessed in the previous chapters. A separate recalculation of demand in the town and individual zones has not been carried out for each potential policy change because of the large number of combinations of variables it would involve, but the following assessment provides an indication of the direction and scale of impacts that would be expected if each policy change were made.

9.1.3 The potential interventions have been assessed on an independent basis without any pre-conceptions. An assessment of the impacts of these policies in other places and their appropriateness to Ipswich is presented in the following section. The potential strategy tools are presented in **Table 43.**

Table 43: Potential Parking Policy Changes

1.	Car park capacity
2.	Adjust the cost and times of parking charges
3.	Long-stay and short-stay parking
4.	Sustainable transport options
5.	Parking for land use developments
6.	Quality standards
7.	Impacts of technology

9.2 PARKING STRATEGY ASSESSMENT

9.2.1 Each of the potential interventions has been assessed in the following section to demonstrate their likely effects in the context of the Borough and IBC 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.

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

- Economic indicators (e.g. footfall, expenditure, vacancy rates);
- Regeneration efforts / land availability;
- Traffic movements;
- Conservation and environmental; and
- Council parking operations

9.3 POLICY OPTION ONE: CAR PARK CAPACITY

9.3.1 The previous chapters set out the forecast requirements for new parking capacity in the future. The key conclusions are that growth of parking demand in the town allied with the removal of the temporary car parks that exist across the town would create a significant parking capacity shortfall. It is therefore essential that the parking spaces which are lost through redevelopment are replaced through the planning process in order to maintain an acceptable level of occupancy across the town.

9.3.2 On-street parking is recognised as providing an essential service in enabling short-stay visits to take place close to many town centre destinations, either free of charge or Pay and Display. Most of these on-street spaces in the town centre are considered to be very well used. It is not envisaged that on-street parking is likely to change significantly enough to provide additional or reduced 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 amending the time restrictions or introducing new on-street charges could help to increase the turnover of spaces and reduce vehicle mileage searching for spaces.

9.3.3 Within this study it has been assumed that the replacement of all temporary car park spaces and plus an additional 815 to 880 spaces would be required to achieve the target level of occupancy (85%). The higher figure takes account of the likely demand in the car parks which were not surveyed as part of this Strategy.

9.3.4 Within this overall figure there are variations between the different zones in the town centre. Zone 1 Riverside, Zone 2 Station & Office and Zone 5 Town Centre North are expected to have an under-provision of parking whilst Zone 3 Town Centre Central & West and Zone 4 Town Centre East would have more spaces than they are forecast to require.

9.3.5 The Zone 1 Riverside is expected to have an undersupply of spaces because of the large amount of temporary spaces that are due to be lost from Grafton Way, Slade Street, St. Peters Dock and Duke Orwell Quay, leaving less than half the existing number of spaces remaining. Only a small

amount of replacement parking is expected to be provided in the Riverside Zone and the effect of this is to create a high occupancy in that zone.

9.3.6 Zone 2 Station & Office is expected to lose fewer temporary spaces than Zone 1 Riverside but the level of demand and occupancy is already high in this zone, resulting in high levels of occupancy.

9.3.7 In summary the level of proposed replacement parking spaces in Zones 3 and 4 is of the right order but it is recommended that additional spaces over and above the planned additional spaces are located Zones 1, 2 and 5.

9.4 POLICY OPTION TWO: ADJUST THE COST OF PARKING

9.4.1 An effective way to manage the use of car parks is to change the cost of parking by adjusting the tariff. It is recognised that IBC only has the power to control the tariff in its own car parks and that the majority of spaces in the town are operated by private companies who apply their own charges. The effectiveness of alterations to the IBC tariff is therefore constrained by the number of spaces that it would affect and the effect of competition with other operators. If IBC charges are changed too much it could just cause people to transfer to a private car park or even stop visiting the town centre altogether.

9.4.2 Informed by research by TRL for the Department for Transport, **Table 44** summarises the key advantages and disadvantages of increasing or reducing parking tariffs.

Table 44: Altering Parking Tariffs Key Advantages / Disadvantages

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 (such as off-street or urban fringe), and encourages travellers	May not provide sufficient funds to facilitate delivery of viable alternative forms of travel

(particularly commuters) to use alternative modes when possible	
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 town centre
	May shorten stays in the town centre
	May encourage 'searching' traffic which would increase congestion and air pollution, and possibly illegal or inappropriate parking
	May reduce the image of the town as a retail and leisure destination
Decreasing Charges	
Advantages	**Disadvantages**
Cheaper parking may boost demand for travel into the town centre, supporting economic activity	Cheaper parking may contribute to an over-reliance upon car-based travel into the town 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

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

Operational Impacts of Different Tariffs

9.4.4 The advantages of increasing or reducing parking tariffs in IBC 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 town 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 town. 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.

9.4.5 Existing tariffs in IBC car parks are relatively low when compared to many nearby local authorities. Long-stay, all-day parking is particularly inexpensive in comparison to nearby comparatively-sized authorities and early-bird tickets and season tickets are available in the four main long stay car parks in Zone 2 Station & Office that reduce the price further. Within the town the IBC charges are generally lower than the main competitor car parks.

9.4.6 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).

9.4.7 It may also be the case that charges for longer-stay, all-day parking could be increased to a rate more in line with nearby competitor towns 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.

9.4.8 If more of the car parks begin to reach capacity in the future as a result of growth or the removal of temporary car parks, one response would be to increase the charges in IBC car parks. This

could help to manage the demand and possibly generate more income, but the risks of this policy are that people would transfer to private car parks, they could reduce their length of stay or not visit Ipswich at all. One positive impact would be if more people chose to use sustainable travel in response to higher charges.

9.4.9 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

9.4.10 Parking charges applicable in IBC car parks could be changed to stimulate activity at the times of the day or week that are considered to be a priority. Early bird tariffs are operated in a number of IBC's long-stay car parks that acts to encourage users to travel into the town centre before the AM peak hour period. Private operators also provide incentives to generate demand by refunding parking charges for customers and reducing their rates at certain times of day.

9.4.11 The options to consider are whether the weekday charging hours could be reduced or if different charging hours should apply on Saturday and Sunday.

9.4.12 Reduced hours of charging could lead to an increase in demand during that time or even across the whole day. One time-period where such an approach might be particularly beneficial is from the mid-afternoon period onwards to support the emerging evening economy. Steps have already been taken in this direction and IBC already operates a policy of charging a flat rate of £2.00 after 2pm on weekdays in the majority of its car parks.

9.4.13 Other authorities have introduced initiatives such as 'Free After Three' as an alternative. The idea is to increase footfall for the late afternoon retail economy and the evening leisure economy. Other local authorities in the area have free parking for the first hour to stimulate demand for short visits.

More Flexible Parking Tariffs

9.4.14 The use of flexible parking tariffs is an option that could be considered in the long term, 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.

9.4.15 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.

Recommendations – Parking Charges

Where existing parking demand is comfortably met by supply, existing tariffs should be retained in the short to medium term. However, some zones of the town centre 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 private car parks.

As temporary car park consents expire, tariffs in IBC car parks should be reviewed with the objective of maintaining effective management of supply aiming for the efficient use of spaces (c. 85%).

A review of existing tariffs indicates some of the larger private operators (notably NCP) already charge substantially more than the equivalent rates in IBC car parks yet demand remains high. This suggests that there may be scope for IBC to increase charges within its own car parks without necessarily significantly reducing demand, particularly where the location and quality of parking supply is appropriate. It is recommended that tariff alterations should be considered as existing temporary car parks are taken off-line following expiry of their operational consents.

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 town. Measures to increase parking charges should only be undertaken as part of a wider town centre strategy to manage scarce parking resources, deliver environmental and operational improvements to the town 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.

Alternatively, increasing charges in IBC car parks might have the effect of reducing demand and associated income. This may have the undesirable impact of reducing funding for reinvestment in specific transport and infrastructure and could undermine the economic performance of the town if the impact on accessibility is negative.

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

IBC should engage with partner organisations / parking providers to investigate the scope for reviewing parking charges in non-authority operated, off-street car parks to maintain effective management. Whilst the Authority has no direct control over privately operated car parks operating under existing consents, most commercial operators will automatically adjust their pricing strategies to appropriately manage supply in any case.

9.5 POLICY OPTION THREE: CONVERT LONG STAY TO SHORT STAY PARKING

9.5.1 Full or partial conversion of some long-stay car parking to provide additional short-stay capacity might be considered in areas around the town where existing parking supply is limited. All the IBC car parks in the central area are already short-stay only but those in other zones could benefit from a different split between long and short stay.

9.5.2 This policy 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 service amenities. This would be a continuation of the existing policy of restricting long stay parking in the central area.

9.5.3 Observations of existing parking activity in and around the town indicate that most car parks are already organised in this way with shorter-stay parking located in the central car parks and longer-stay towards more peripheral locations. Many of the long stay IBC car parks are well used (e.g. in the Station and Office Zone) so care would need to be taken not to create a localised shortfall in long stay parking where the short stay demand does not justify it.

Operational Impacts

9.5.4 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.

9.5.5 The car parks are not conveniently divided between long and short stay because short stay is allowed in long stay car parks at a reasonable price and many car parks cater for both. All we can say is that long stay is prevented or discouraged from some short stay car parks but there is less information about short stay parking in long stay car parks. Without ticket data to assess the typical stay period of individual vehicles, it is not possible to assess the impacts of changes

to the split of long and short-stay parking. It is recommended that further assessment work be undertaken using detailed ticket sales data.

9.5.6 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.

Recommendations – Long / Short Stay Parking

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, based on analysis of ticket sales data. This is consistent with the Suffolk County Council Local Transport Plan.

Increased use of sustainable transport and Park and Ride (see Policy Four) could free up some long stay spaces that could then be converted to short stay only.

9.6 POLICY OPTION FOUR: SUSTAINABLE TRANSPORT (BUS, CYCLE & WALK)

9.6.1 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.

9.6.2 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.

9.6.3 The Suffolk County Council Local Transport Plan 2011-2031 states that in Ipswich the availability and price of parking is an important factor in travel choice and congestion in the town. Various sustainable transport measures have been proposed in the strategy and constraining the amount of long stay parking is a key element in the promotion of sustainable modes. The parking strategy needs to be consistent with the Local Transport Plan if steps to tackle congestion and air quality problems are to be successful.

9.6.4 Park and Ride services are the most obvious link between parking and sustainable transport. The existing services were assessed in Chapter 6 and it appears that, while the service is evolving, the outlook for its long-term viability has improved. This parking strategy does not include a business case for the expansion of Park and Ride services, but it is clear that an expansion of the service could provide many benefits in respect of reducing parking demand and traffic in the town centre. However, the promotion of a scheme is subject to caveats about the viability of new or expanded Park and Ride schemes and this requires much more appraisal before it can form a key element of the parking strategy.

9.6.5 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 town such as Ipswich 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 town's economic and social prosperity for the foreseeable future.

9.6.6 With limited scope to prompt substantial modal shift away from use of the car and the need to accommodate further population growth in the Borough, many of whom will be reliant upon accessing services and amenities within Ipswich, it is crucial to ensure that the impact of continued and increased car trips and associated car parking is managed to provide mitigation of negative impacts. Key considerations include:

- The need to ensure parking capacity is of an appropriate scale to satisfactorily meet demand and effective management strategies are in place to ensure their efficient use. The adopted strategy should seek to avoid inefficiencies associated with under-supply such as wasted mileage, delay and congestion associated with searching for parking spaces in short supply without resorting to an inefficient over-supply of parking within the town that would itself encourage inappropriate and unsustainable car use, reduce revenue streams and undermine the functioning of sustainable transport;

- The need to ensure that car parks with appropriate tariffs are located on all approaches to the town centre to reduce unnecessary "cross-town" vehicle movements searching for parking;

- The need to ensure effective dissemination of pre-journey and in-journey information to drivers concerning parking availability to reduce wasted mileage and time. Better

information could also influence modal choice decisions and reduce the impact of car travel to the town centre; and,

- The need to ensure that the impact of parking facilities and associated access arrangements on sustainable travel services and infrastructure is managed. Measures to promote walking and cycling more widely within the town should be integrated with efforts to improve specific walking and cycling links and the general environment between more outlying car-parks and key services and the town centre in order to maximise the convenience and quality of experience for users, promote efficient use of car parking capacity and better link up different areas of the town centre.

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

9.6.8 Electric vehicle (EV) charging points are already provided in premium locations within the busiest car parks, which helps to promote sustainable transport modes and improve air quality. Expansion of the number of charging spaces is likely to 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 recharging 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.

Recommendations – Sustainable Transport

Ensure consistency between this parking strategy and other strategies including the SCC Local Transport Plan in order to improve air quality and tackle congestion.

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).

Continue to monitor the success and viability of the Park and Ride service and develop a business case for improving and expanding the service if appropriate. Quantify the pros and cons of this solution compared with the creation of more parking capacity in the town centre.

9.7 POLICY OPTION FIVE: PARKING AND LAND USE DEVELOPMENT

9.7.1 The implementation of the Parking Strategy will need to be supported by a complementary approach to new development in the Borough. Pre-application advice and decisions about planning applications through the development control process can contribute to the aims of the Parking Strategy through town centre regeneration and the strategy will need to be consistent and complementary with other policies and strategies.

9.7.2 The review of the appropriateness of overall parking quantum serving developments should not take place in isolation and should be conducted within the wider context of considering overall quality of parking provision and wider design issues likely to impact on the overall level of car ownership, dominance and propensity of car use (especially for short trips). Wider design issues that are valid for consideration include:

- The specific location and layout of proposed parking provision paying particular attention to the efficient and appropriate use of land to provide for parking needs avoiding 'land-hungry' approaches to parking, such as rear courtyards and supporting the creation of street environments suited to facilitating and encouraging walking and cycling as preferred modes for local trip making by all;

- Ensuring that high quality and convenient walking, cycling and (where appropriate) public transport routes provide suitable connections between proposed new developments and adjacent areas of settlement (on all sides), existing sustainable travel networks and to key local services and amenities; and,

- Ensuring that adopted parking standards set clear and enforceable guidelines concerning the implementation of facilities to provide secure and conveniently accessible cycle storage facilities together with other amenities supporting both cycling and walking (e.g. appropriate storage for outdoor / wet clothing, showers and changing facilities etc). This should apply to both origin and destination points.

9.7.3 New developments have often not been required to provide a contribution towards town centre facilities, including parking, even though the new residents or employees will be making use of this public service. A contribution towards improving such facilities through a Community Infrastructure Levy or Section 106 contributions should be sought from local developers where it can be shown that they have a material impact and where there is an existing or forecast lack of available parking spaces.

9.7.4 Chapters 7 and 8 of this strategy made forecasts about the likely need for new parking capacity in the town centre as a whole and within each zone of the town centre. These forecasts can be used to help guide discussions with developers about their land use proposals. The forecasts show that Zones 1 and 2 (Riverside and Station & Office) are expected to suffer from a shortfall in parking in the future, based on expected growth, the removal of the existing temporary car parks and the potential replacement car parks. The remaining zones are expected to have an excess of parking space, so some redistribution of parking between zones should be considered.

9.7.5 The impact of new residential development in the town centre could be significant. It is assumed that new dwellings will be provided with some dedicated parking, but this may not meet all of the needs of new residents and visitors. There are 2,500 new homes proposed in the town centre that will bring additional pressures on public car parks and on-street parking. The same is true for commercial development in that not all will necessarily have the available land to fully meet demand from staff.

9.7.6 Town centre development should be encouraged to constrain the amount of parking that is provided, but there is a limit to this policy to avoid off-site problems being created. The scale of this issue will depend on the amount of parking that is provided with each site and the surrounding car parks and streets. This will need to be assessed case-by-case as developments come forward. If too much pressure is placed on the on-street parking spaces it may be necessary to start charging on streets that are currently uncontrolled to increase their turnover. This may however result in displacement of parking demand to other locations. Overall, if pressure is placed on both on and off-street parking locations, additional capacity in the form of new car parks would be necessary.

9.7.7 Where developments outside the Ipswich Borough boundary are expected to have a significant impact on town centre parking and traffic, a S106 contribution towards mitigation measures to reduce this impact should be sought. This would include contributions towards the expansion of the Park and Ride scheme.

Recommendations – Parking Standards in New Development

Review the application of proposed parking standards to ensure there is neither a gross under nor oversupply of parking spaces associated with individual and collective developments. Ensure provision is included to explore options for collective supply wherever appropriate (e.g. using the same facilities to provide for different daytime and evening users).

Ensure contributions are sought from developers in Ipswich and in neighbouring local authority areas towards providing facilities supporting accessibility to the town centre where there is a demonstrable impact. This should extend to providing contributions towards public transport, P&R and alternative forms of travel and not simply parking supply. Travel Plans will be required for some developments that will help to reduce traffic and parking.

Provide for or incentivise the uptake of alternative vehicle ownership models (car clubs / car share / rental) and electric vehicles by providing priority parking and charging points.

Consider the impacts of redistributing car parks across the town centre to better meet demand in the future. It may be necessary to create more spaces in the Riverside, Station & Office and Town Centre North zones and reduce the future number of spaces in the remaining zones.

9.8 POLICY OPTION SIX: QUALITY STANDARDS

9.8.1 One of the key factors in parking user satisfaction is the quality of the car park and facilities. People are often willing to pay a premium if they perceive the quality and design of the parking facilities is high and it provides a good first impression for many visitors to the town. Particular groups of users also require special facilities to enable them to use a car park and to ensure their trip is as convenient as possible.

9.8.2 The facilities and condition of the car parks in the town centre have been audited and results were summarised in Chapter 4. Points to note relating to IBC operated car parks are:

- The standard of the permanent car parks is generally good, with asphalt surfaces and demarcated spaces. Two of the temporary car parks have gravel surfaces;
- Few car parks have cycle and motorcycle parking spaces;
- Most car parks have disabled spaces but two IBC car parks do not.
- Illumination is provided within every car park or by adjacent streetlights, although the coverage is variable;
- CCTV is present in approximately half of the IBC car parks;
- Direction signs for drivers and pedestrians are not always present; and
- Car parks have variable facilities. Equipment like waste bins, recycling facilities, toilets and information boards are present in some car parks but not all.

9.8.3 The private car parks have very variable quality, ranging from a unsurfaced, vacant plots of land up to a high-quality standard.

IBC should seek to maintain and if possible improve the condition of its car parks and take steps to ensure that private car parks also meet high quality standards, recognising that the powers

to achieve this are sometimes restricted. Where planning permission is sought for a public car park, either standalone or as part of a development, temporary or permanent, the Local Planning Authority should seek to ensure high quality facilities in accordance with the Park Mark standards, e.g. vehicle and pedestrian access, security, signing, lighting and adequate spaces for specialist vehicles (disabled, EV, bicycle, motorcycle, coaches). Where possible Park Mark accreditation should be sought.

Recommendations – Quality Standards

Continue to maintain and upgrade the IBC car parks to enhance the quality of facilities for vehicles, pedestrians and disabled users. Provide facilities for specialist vehicles where appropriate (e.g. disabled vehicles, EV, bicycle, motorcycle and coaches).

Poor quality direction signage for drivers and pedestrians has been raised as an issue and a detailed review of the existing signs and a programme of improvements is needed that will provide information to the public and minimise the amount of time searching for car parks and pedestrian destinations. This also applies to signing for drivers leaving the town centre destinations outside of Ipswich.

Encourage private operators and land use developers to create high quality car parks that meet criteria for the facilities provided, including temporary and permanent car parks. Devise a minimum quality standard that car parks should achieve before planning permissions are granted or renewed and use short time increments until the required standard is achieved.

9.9 POLICY OPTION SEVEN: INCREASED USE OF TECHNOLOGY

9.9.1 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 Plan 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; and,

- 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

Technology to Manage Demand

9.9.2 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 towns. 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 town centre. New payment methods reduce the need for users to carry cash and for operators to collect cash from the machines.

9.9.3 The existing pay station equipment in many IBC and privately-operated 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.

9.9.4 Pay on Foot is a barrier-controlled system that is used in many large town centre car parks instead of Pay and Display, the key features of which include:

- Issuing of a time coded ticket at an entry barrier;
- Customer enters the car park and finds a space;
- Customer returns to the car park and pays for parking at a pay station machine
- Customer has a grace period within which they must vacate the car park
- Ticket is inserted at the barrier which is then raised and customer exits
- Permit holders can use a pre-paid pass to enter and exit the car park without visiting the pay stations

9.9.5 The key advantages and disadvantages of Pay on Foot systems are as follows:

Advantages	Disadvantages
Fully automated, flexible operating hours	Can be difficult for Blue Badge holders to use because the barrier cannot recognise the badge
Users pay more accurately for time actually used, best value for money for users	Need second exit lane when assistance is required
No pressure to leave town centre because of ticket time limit	Barriers may cause queues on entry and exit
Low enforcement costs because it is impossible to leave without payment (grace period and disabled space enforcement only)	Need control room presence to deal with queries and monitor and repair the barrier
Adaptable for permits, different tariffs and temporary promotions	Capital cost of installation
	Maintenance liability of barrier equipment

9.9.6 The 'Post Payment' system is a development of the standard Pay and Display operation which has been used in Scandinavia for some time and has recently been introduced into the UK. It is understood that this technology is now being used in the Elm Street car park. Users have the option to register a debit or credit card when they park instead of buying a ticket for a fixed length of time, but payment is only made when they return to the car park. This allows people to stay as long as they need without having to return to the car by a certain time. Resistance to the introduction of new technology may be an issue, although the system can include the facility for standard P&D from the same machine.

9.9.7 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 Ipswich with the number of car parks and different routes into the town.

9.9.8 The alternative to a barrier-controlled Pay on Foot system is the use of ANPR to monitor the entry and exit of vehicles. Cameras identify each vehicle on entry and exit and automatically

calculate the length of stay. If the customer has not paid the correct fee at the pay station a Penalty Charge Notice is automatically generated and sent by post.

9.9.9 The ANPR systems can also provide a link to DVLA data for the enforcement of a contravention but the use of ANPR is not permitted for contraventions under the Traffic Management Act 2004. The use of ANPR technology is currently uncertain because it is not supported by the Government for use by local authorities, but it does have potential and the opportunity to use it may develop further over time, so potential operators need to keep up to date with current thinking when investment decisions are being made.

9.9.10 Variable message signs (VMS) are used in many town and city centres to provide drivers with information about the location of spare parking capacity. Procurement of a new VMS system for Ipswich is planned to start imminently. This will provide information relating to the availability of car park spaces, including some permanent private car parks of appropriate size. This will help to save time, reduce congestion and use the parking assets more efficiently. The upgraded scheme will need to be monitored and improved if necessary.

9.9.11 It may be feasible to utilise emerging technologies to provide a more flexible approach to parking management and the establishment of appropriate tariffs. Such an innovative system would simultaneously make most efficient use of the available parking resource at any given time and maximise income whilst ensuring that pricing is fair, and a suitable level of available capacity is maintained. It would allow the local authority to respond to changes in the market more quickly by adjusting the price in response to actual levels of supply and demand.

9.9.12 This could be achieved through the implementation of a flexible and "live" part-automated management system capable of monitoring parking demand over time and adjusting tariffs if and as required. The idea behind the system is that tariffs would be adjusted up and / or down in order to achieve a maximum 85% utilisation of spaces during periods where demand is high. This would ensure that pricing was appropriately related to the prevailing market conditions and, as it would be related to usage, consequently never "too high" or "too low". The drawback of such systems is that they can cause confusion and uncertainty for some users.

9.9.13 Visitors to the town could be confident that parking would be available in their preferred destination car park thereby reducing inefficiencies caused by unnecessary circulation whilst searching for parking. Income would be appropriately maximised without being too expensive and the pricing structure would encourage better utilisation of more peripheral parking resources (particularly to accommodate longer-stay parking).

9.9.14 A potential disbenefit of a flexible tariff would be the variability in pricing that would be even more obvious to the occasional visitor, however, this is not a mechanism for implementing ever higher charges but rather balancing demand, so in theory a visitor should be equally likely to see a reduction in the price as an increase.

9.9.15 The parameters of such a system can be as restrictive or lenient as necessary and ensuring that the system is acceptable to the public is a top priority. To ensure clarity and maintain confidence in the system, upward adjustments to tariffs in the event of a given area of parking operating over capacity (to reduce demand and increase availability) would be made gradually. This would be achieved through implementation of an automated system capable of monitoring of real-time parking demand. The system would be set up to operate a target driven management regime that would seek to adjust pricing over time to achieve optimum utilisation of spaces in each individual area / zone and at each specific time of day / evening.

9.9.16 To inspire confidence in the system, only gradual incremental upward adjustments to parking charges would be made where required in order to reduce demand in a given area. Conversely, charges might be allowed to fall more rapidly as it is less likely to be controversial (although the financial implications would require some consideration).

Vehicle Propulsion Technology

9.9.17 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.

9.9.18 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.

9.9.19 Providing the right number of EV charging points to match demand is important because they replace standard parking spaces and non-EV drivers are likely to avoid those bays so they need to be fairly well used to justify the cost and reduced capacity. This is assuming that the EV

spaces are reserved for EV users only and that normal vehicles are not permitted to park in them. IBC does not currently have a policy which explicitly prohibits standard vehicles from parking in EV charging spaces. Monitoring of existing usage would provide the information to support the installation of new EV charging spaces.

9.9.20 Similarly, the parking strategy has to be mindful of the emerging policy measures concerning restrictions on vehicles powered by fossil fuels (notably diesel). London Borough of Westminster has already implemented a successful trial parking surcharge of 50% on diesel cars over two years old, which has led to a 16% drop in the number of diesel cars using these spaces without any obvious displacement to neighbouring zones. The Council is now consulting whether to extend the scheme to all 284 streets in the Borough. Other policies could be implemented that offer positive discounts for EV and low-emission vehicles.

9.9.21 Although this is an issue for the wider strategic transport policy, it may be possible to adjust the parking strategy to restrict access to certain car parks for selected vehicles either comprehensively or at selected times of day or use alternative pricing mechanisms for specific vehicle types. Such measures could be linked to specific geographical areas, e.g. the town centre or Air Quality Management Areas.

9.9.22 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.

9.9.23 Further clarity concerning the application of driverless technology has recently been provided following publication of the DfT's Pathway to Driverless Cars that would appear to indicate a clear expectation that trials of remote parking will occur within a reasonably short timeframe and furthermore that they will include evaluation of "out of sight" systems as a fairly rapid follow on, stating:

"Subsequent iterations of this regulatory programme will likely take into account future remote control systems, where it is expected that the vehicle could be out of the driver's sight while the parking manoeuvre is completed. This will dovetail with international type approval regulations, which are currently being amended to ensure remote parking systems are safe."

9.9.24 This strategy does not propose any policies that address the opportunities provided by driverless technology, but it is worth acknowledging that a rapid uptake of this technology would have

significant implications for transport systems in the future, including the demand for parking and methods of providing for it.

Operational Impacts of New Technology

9.9.25 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.

9.9.26 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.

9.9.27 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 many of the Council's car parks already have these features.

9.9.28 New facilities will need to take into account future climate change, e.g. the use of porous surfacing of car parks will help to reduce the impact of the car park on drainage and flooding.

9.9.29 Car parks that are generating large amounts of income can justify expenditure to maintain that position, but it is more difficult to justify significant expenditure on under-used car parks in times of financial restraint in the expectation that it will increase revenue income. Minimum levels of car park condition need to be maintained, to ensure that people are safe and secure. Where the condition of the surface is bad enough to dissuade people from using the car park or damage their vehicles, then investment is required.

9.9.30 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.

9.9.31 Additional expenditure would need to come out of the Council's budget which is likely to come under increasing pressure. If the investment is expected to generate additional income a detailed business case will be required to justify the use of limited resources for this investment.

Recommendations – 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.

Consider the potential for adopting more flexible tariffs that makes use of new technology to adjust tariffs over a shorter timescale, to better respond to the peaks and troughs of demand and use the Council's assets more efficiently.

Take account of the implications of climate change on the construction and management of car parks in terms of the resilience of their surfacing and drainage.

Recommendations

9.9.32 The following table presents a summary of the recommended actions for IBC and partners. The text in the preceding section provides more context and detail relating to these recommendations:

1	**Parking Capacity**
1.1	The capacity provided by the temporary car parks and development sites should be replaced and additional spaces would be required if acceptable levels of occupancy (85%) are to be retained. By 2036, this would require approximately 1,880 additional spaces to replace the 1,874 expected to be lost (as a 10% reduction in car trips is achieved through sustainable transport schemes).
1.2	Specific shortfalls in capacity would need to be addressed in the Riverside, Station & Office and Town Centre North Zones where capacity is not expected to meet predicted demand. The design of new or expanded car parks would need to take account of the quality of urban design in these locations. Spaces proposed in other zones that have a surplus could be transferred to those zones with a shortfall.
1.3	On-street parking may be able to provide a small amount of additional capacity through the introduction of shorter time limits and new on-street Pay and Display.
1.4	When details of the proposed developments are more certain it will be necessary to assess the impacts of each compared with the assumptions made in this strategy.
1.5	Additional capacity could be provided with an expanded Park and Ride service.
2	**Parking Charges**
2.1	IBC tariffs and pricing policy should be set at a level where they are supporting town centre vibrancy and vitality whilst remaining competitive and encouraging the use of sustainable modes of transport.
2.2	Consider increases in parking charges where nearby private car parks are charging significantly more while retaining a high occupancy.
2.3	Review the scope for changing tariffs in response to changes in supply as temporary car parks are redeveloped and new demand is generated by new land uses.
2.4	Explore the possibility of ring fencing some parking income to re-invest in sustainable transport infrastructure.
2.5	Apply charges and restrictions to on-street parking where demand applies additional pressure.
3	**Long Stay / Short Stay**
3.1	Consider the pros and cons of further replacement of long stay parking with short stay to increase turnover, more efficient use of valuable land and boost the town centre economy.
3.2	Use new technology to analyse ticket sales and occupancy data to better understand the location and quantity of long and short stay parking and the turnover of spaces.
3.3	Assess the impact of new town centre residents and businesses on demand for long stay, short stay and on-street parking, particularly in areas where there is an undersupply.

4	**Wider Sustainable Transport Issues**
4.1	Successful implementation of sustainable transport is required to achieve a reduction in parking demand. If this does not take place more parking capacity will be required.
4.2	Ensure consistency between this parking strategy and other strategies, including the SCC Local Transport Plan in order to improve air quality and tackle congestion.
4.3	Use parking supply and price to influence modal choice, recognising that most parking is controlled by private operators.
4.4	Enable the use of sustainable transport modes by improving facilities for cyclists, pedestrians, electric and hybrid vehicles and public transport.
4.5	Encourage the expansion of Park and Ride where appropriate and viable, to provide additional parking capacity, to reduce vehicle movements in the town centre and to provide added benefits such as improvements to air quality.
4.6	Incentivise the adoption of sustainable vehicle use by providing reserved parking in premium locations for electric vehicles and, where commercially viable and appropriate, car clubs.
5	**New Land Use Development**
5.1	Monitor parking standards to ensure they are not resulting in a gross under or over-provision of parking and they support the overall parking and transport strategies.
5.2	Secure contributions from developers in Ipswich and in neighbouring local authority areas towards provide public car parking, public transport and Park and Ride schemes, where these are relevant to the developments and contributions are justified in planning terms.
5.3	Ensure the parking strategy is coordinated with other strategies relating to retail, leisure and public realm.
5.4	Set standards and policies relating to surfacing, security, lighting and EV spaces in new car parks.
6	**Quality and New Technology**
6.1	Implement cost effective improvements and maintenance to raise the quality standard and security of the car parks and encourage private operators to raise the quality standard.
6.2	Carry out a review of direction signing for drivers and pedestrians to identify necessary improvements.
6.3	Implement new technology where it is cost-effective, to influence travel behaviour and support sustainable transport, including online/mobile information and Variable Message Signs.
6.4	Improved payment options to encourage visitors to extend their stay, including Pay on Foot, Post-payment, card and contactless, online and mobile payment options.