Draft Aylesbury Town Centre Parking Strategy

August 20

ARUP   parking matters

Contents

1. Introduction

Aylesbury Vale District Council (AVDC) has developed this strategy to guide parking management, policy and investment decisions in Aylesbury town centre between 2018 and 2033. The strategy is underpinned by a robust technical evidence base (Please refer to the Aylesbury Town Centre Parking Strategy technical report).

The strategy recognises the role of parking with a wide lens and considers regeneration, place making and transport aspects and impacts. It responds to challenges presented by the current model of public sector financing, new technology and the evolving function of the town centre.

Consideration has been given to the context in which parking is managed and delivered in the district, particularly the role and responsibilities of key partners, including Buckinghamshire County Council (BCC).

The geographic scope of the strategy focuses on the town centre of Aylesbury. Coach parking and cycle parking are considered, in addition to off-street car parks owned and controlled by AVDC, BCC, Network Rail and private operators. The role of on-street parking is also considered.

The strategy includes a vision and objectives that details what 'good' looks like when the strategy is delivered. It also provides an assessment of the current parking context, including parking provision, opportunities and constraints.

The document specifies the strategic approach in response to each of the objectives, supported by clear priorities. Case studies are provided in this section to provide further clarity regarding the proposed approach and examples of where positive impacts have been achieved.

Finally, there is a summary of our delivery plan that will be used to drive forward actions and provide a framework to monitor progress against strategy objectives.

Context

2. Context

2.1 Town Profile

Aylesbury is a historic market town located in central Buckinghamshire and within the district of Aylesbury Vale. It is the County town and has a population of 71,500, which is just over 41% of the district's population.

It is a vibrant market town with a growing economy and population and was awarded Garden Town status in January 2017.

Three roads converge in the town, the A41, the A413 and A418. The M40 motorway is approximately 15 miles to the west and the M25 motorway is 21 miles to the south east.

The town is served by two railway stations, Aylesbury station on the southern edge of the town centre and Aylesbury Parkway approximately 2.5 miles north west of the town. Further rail improvements are planned to the north as part of East West rail development. There is a well serviced combined bus station in the town centre.

The current housing stock (31,690 dwellings) is forecast to increase by 50% by 2033, with over 15,000 new homes proposed. Many of these are already under construction or have planning approval. The major housing sites are located to the east and north of Aylesbury within 2 miles of the town centre.

Aylesbury Town - Key Facts	
Population 71,500	**New homes by 2033** 15,000 (50% increase)
Status Garden Town & Purple Flag	**Economically Active** Supports 100,000 pax.
Travel to Work (in town) **51% by car**	**Travel to Work (to town)** 84% by car
Cost of Congestion £110m	**Off Street Car Parking** Approx. 4,700 bays in centre
Customer Catchment 259,000 (25mins drive)	**Air Quality** 3 AQMAs
Cycle Parking 250 spaces	**Coach Parking** 1 bay

2. Context

2.2 Challenges and Opportunities

At a strategic level, there are number of challenges and opportunities that have a bearing on how parking is managed in Aylesbury.

Journey delays - congestion is a challenge in the town centre with journey delays evident on main roads and junctions, particularly during the morning and evening rush hour. Policies that encourage car use will further exacerbate congestion.

Air quality – there are areas of poor air quality in the town with pollution levels harmful to human health. The main source of pollution is fossil fuel burning vehicles.

Sustainable travel – such as walking, cycling and public transport are low emission and can assist with tackling congestion and promoting health. Improvements to viable travel choice in Aylesbury is a significant opportunity.

Technology – new technology offers a wealth of opportunities to improve the experience of visitors and residents in the town centre. New advances in vehicle technology, such as automation, zero emission cars and electric bikes must also be considered.

New public sector finance model – increasingly, local authorities are required to develop locally sustainable financial models. Part of running an efficient organisation is the effective use of assets and management of services, including car parking.

Aylesbury as a destination – with the new Garden Town status and the need to respond to the evolving function of town centres parking policy must be developed in line with the wider outcome focused aspirations for the town as a high quality destination.

Partnerships – effective partnerships provide the opportunity for a consolidated and joined up to parking provision in the town.

Growth – as the town continues grows it must accommodate more people and journeys but growth also presents the opportunity to further stimulate the local economy and attract investment in the built environment.
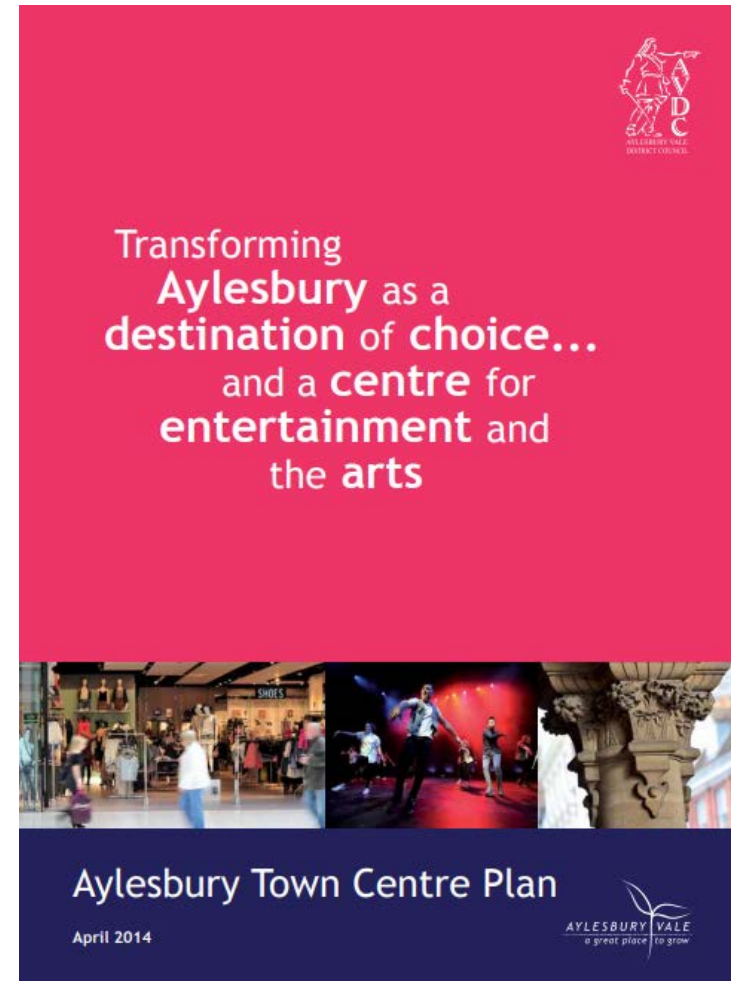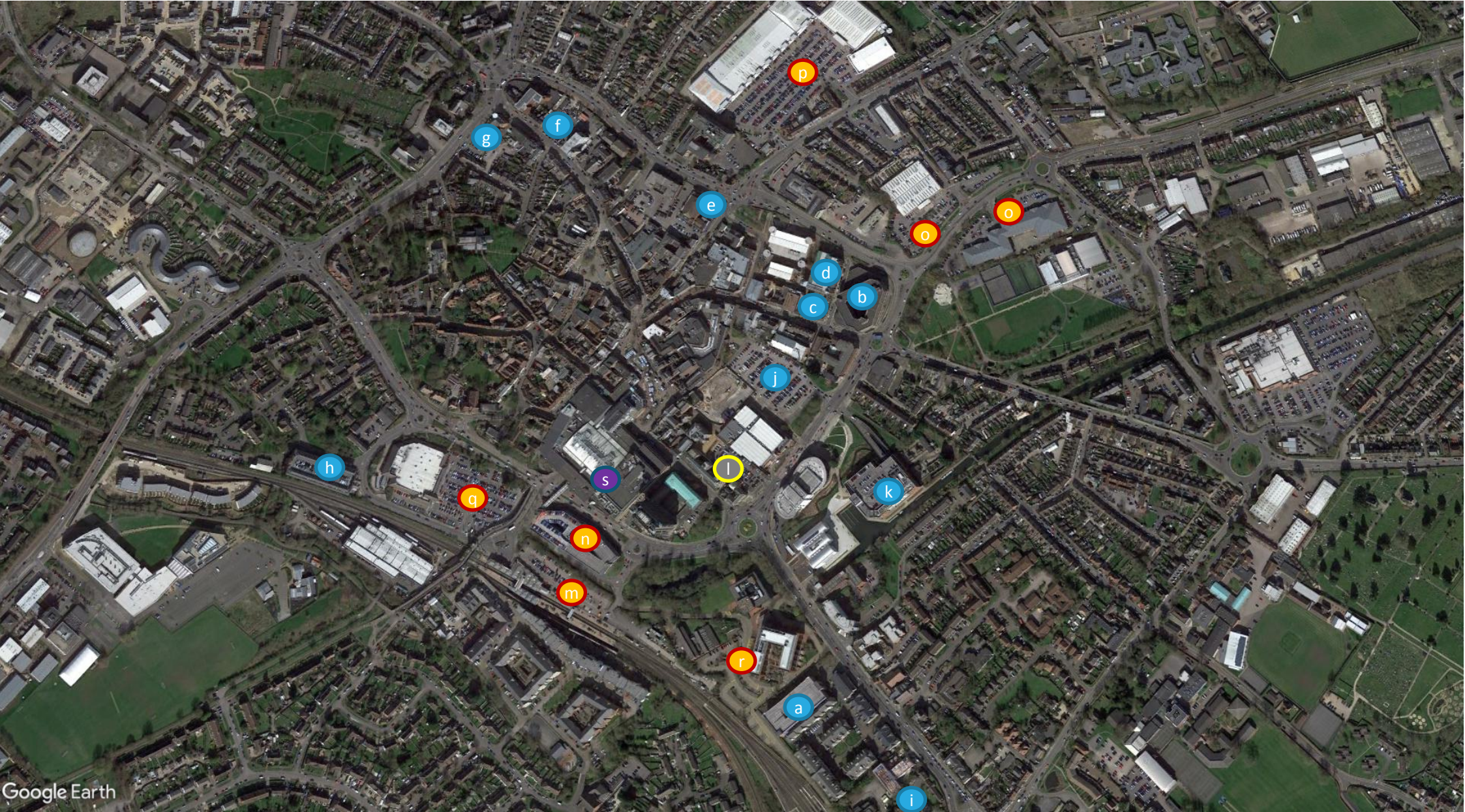
Transforming
Aylesbury as a
destination of **choice...**
and a **centre** for
entertainment and
the **arts**

Aylesbury Town Centre Plan

April 2014

Fig. 1.0: Parking in study area

KEY	●	AVDC Managed	●	Privately Managed	●	BCC Managed	●	Coach Parking

2. Context

2.3 Existing Parking Capacity

The tables below provide a summary of the parking provision within the study area in Aylesbury town Centre as defined in **(Fig. 1.0, page 7)**.

Key	Car Park Name	No. of spaces	Operator	Type
	CAR PARKING			
a	Walton Street	525	AVDC	Long and Short Stay
b	Hampden House	364	AVDC	Long Stay
c	Hale Street	16	AVDC	Short stay (1hr max)
d	Upper Hundreds	305	AVDC	Short stay
e	Anchor Lane	7	AVDC	Blue badge only
f	Coopers Yard	59	AVDC	Short stay
g	Whitehall Street	38	AVDC	Long stay
h	Friarscroft	342	AVDC	Long stay
i	Walton Green	14	AVDC	Long stay
j	Exchange Street	238	AVDC	Short stay
k	Waterside	275	AVDC	Short Stay
l	Waterside North	98	BCC	Short Stay
-	Controlled RPZ	X	BCC	Permit
-	Public On-street	X	BCC	Short Stay
m	Railway Station	302	Chiltern Rail	Long and Short Stay
n	Friars Square	360	Private	Short Stay
o	The Vale Hundreds	180	Private	Short Stay
-	Tesco (Tring Road)	660	Private	Short Stay
p	Aylesbury Shopping Park	600	Private	Short Stay
q	Morrisons	300	Private	Short Stay
r	Blue Leanie	X	Employee only	Short Stay
	OTHER PARKING			
-	Cycle Parking	250	Chiltern/BCC	-
s	Coach	1	Private	Permit

Type	Description
Blue badge spaces	Most car parks have reserved bays and are free to badge holders and special on-street parking concessions apply.
Cycle parking	Cycle parking is disbursed throughout the town centre. Some formal locker parking is situated in multi-storey car parks. There are approximately 250 free bike parking spaces in and around the town centre. 100 of these spaces are located at Aylesbury railway station.
Motorcycle Parking	Free motorcycle parking is available in a number of public car parks across the town centre; Exchange Street, Coopers Yard (Buckingham Street) and Upper Hundreds.
Electric Charging Points	A review of electric charging facilities in the Aylesbury town centre using www.zap-map.com shows that there is one charging point at Aylesbury railway station.

Our Approach

3. Our Approach

The vision and objectives are an important part of this strategy. They define what needs to be achieved in the lifespan of the document in terms of successful outcomes for the residents, workers and visitors to Aylesbury.

Six objectives have been identified underpinned by key themes. They have been developed in response to evidence led analysis and aligned to relevant local and national policy and strategy.

A delivery plan has been developed to guide investment and resources to achieve the aspirations expressed through the vision and objectives and is summarised in the final part of this document.

The following section provides an overview of our strategic approach to each of the six strategy objectives with further analysis provided by theme.

Priorities areas are identified with further analysis that will directly inform the actions we will take to deliver positive change.

Vision – To deliver an improved parking experience in Aylesbury for all
1. Responsive to the needs of different groups and customers • **Theme: People centred** • **Theme: Provision and use** • **Theme: Legibility and convenience**
2. Positively contributes to the local economy and regeneration • **Theme: Assets and land use** • **Theme: Supporting business** • **Theme: Coach parking**
3. Commercially sustainable & efficient parking management model • **Theme: Pricing and equipment** • **Theme: Management and Enforcement**
4. Enhances the local environment • **Theme: Placemaking** • **Theme: Ultra-low emission travel**
5. Integrates effectively with wider policy and plans • **Theme: Planning policy** • **Theme: Local transport authority**
6. Resilience and anticipation of future change • **Theme: Addressing growth** • **Theme: Evolving town centre** • **Theme: Automation and technology**

Objective 1: Responsive to the needs of different groups and customers

Theme: People Centred

Priorities

- Take a balanced and data led approach to meet current and future parking demands, considering impacts on all groups and customers;
- Conduct effective engagement to understand the needs of all groups that are impacted by parking provision;
- Actively consider the needs of the most vulnerable when maintaining and delivering the parking service;
- Proactively manage large events in partnership with other operators using effective event management protocols;

As a public sector body, AVDC has a responsibility to meet the needs of both customers who use AVDC parking services and facilities and those groups who are indirectly impacted by the use of those services and facilities. For example, well-designed, managed and maintained car parks will have a positive impact on the customer experience and reduce negative impacts on the local public realm and amenity.

Conversely, the unrestrained provision of car parking will impact on the availability of business and housing land in the town centre and generate significant amount of new car journeys leading to an increase in congestion and pollution, negatively impacting all. The experience will also have an impact on the local economy and sustainability of the town centre

Fig. 2.0 highlights a number of different groups whose perspectives will be considered when managing existing and providing new parking facilities and services in the town centre. This reflects our approach to put customers and residents at the centre of service provision and respects the wider impacts of car parking policy on our community, environment and economy.

In particular, we recognise that the impacts of our service on the most vulnerable groups in society need to be considered and addressed as a priority. We want the town centre to provide a safe and pleasant environment in which families and children are encouraged to dwell and play, enlivening the environment. Accordingly, we will manage parking in a way to help meet this aim.

Fig. 2.0: Considering different perspectives on parking

Residents	Through traffic	Employees	Businesses
Visitors	People with disabilities	Other operators	Children
	Out commuters	People attending events	

Theme: Provision and Use

Priorities
- Maintain the current provision and type of car parking but improve quality and management of that provision;
- Focus promotion of underutilised car parks, particularly large off-street multi-storey car parks;
- Increase the provision of blue badge parking in central locations;
- Encourage use of car parking within AVDC/BCC control;

The spatial distribution of car parking varies across the town centre – see Fig 6.0 on page 21. It is noticeable that the 'old town' to the west of the centre lacks provision of large multi-storey or surface car parking, relying more on small surface car parks and on-street car parking.

There is a concentrated provision of off-street car parking to the south and west. Long stay parking is predominantly situated to the south. There is a dedicated provision of blue badge parking at Anchor Lane and blue badge holders can park for free in on-street provision. On-street provision is distributed throughout the town centre.

All off-street car parks are within ten minutes walking distance of the town centre. The quality of routes to and from car parks appears to be generating a negative perception and is a barrier to use, particularly of the outlier car parks.

An audit of eleven AVDC off-street car parks was undertaken on Thursday 1st February 2018. The purpose of the audit was to establish the baseline of existing facilities and identify any notable issues and instances of good practice. The visit was supplemented by information provided by the AVDC parking service. **Fig. 3.0** provides a summary of the results of the audit.

Fig. 3.0: AVDC car park audit summary

	Payment Options	Accessibility and Physical Constraints	Efficiency	Environmental Quality and Surfacing	Safety and Security	Space size	Signage and way finding	Other Parking Types
Walton Street	A	G	G	G	G	G	G	A
Walton Green	G	G	A	A	G	A	A	A
Waterside	G	G	G	G	G	G	G	G
Exchange Street	G	A	G	A	G	G	A	G
Hale Street	G	A	G	A	A	G	A	A
Hampden House	G	A	A	A	R	A	G	A
Upper Hundreds	A	G	G	A	A	G	G	G
Anchor Lane	G	A	G	G	G	G	A	G
Coopers Yard	G	A	G	G	G	G	A	A
Whitehall Street	G	G	G	A	A	G	A	A
Friarscroft	G	G	G	R	R	G	A	A

KEY
Green (G) indicates good practice
Amber (A) indicates some minor issues
Red (R) indicates fundamental issues against the criteria.

Theme: Provision and Use

Key findings of the car park survey include:

- Improving and updating the visual environment and maintenance of both Hampden House and Friarscroft car parks would have a positive impact;

- Although many of the car parks scored positively on Payment Options, standardised methods of payment would offer a more consistent choice to customers, specifically Pay-by-phone;

- As a general comment, signage and way finding could be improved across all eleven car parks, with a general improvement on provision of up-to-date maps;

- None of the car parks presently provide electric charging facilities for motorists, which is in contrast to many other UK towns and cities that are implementing charging provisions;

- Cycle parking provision was limited across all car parks;

In terms of car park use, occupancy surveys were undertaken on two separate dates, one busy period in December and one quiet period in January, of all eleven AVDC car parks in scope. Counts covered the period from 7am until 10pm, to capture day and evening use.

Fig. 4.0 (page 15) provide a summary of the results, indicating the maximum occupancy observed on the day of the surveys and the percentage this represents of the total car park capacity On 14th December, there was a high prevalence of Christmas shoppers, with free late night parking from 16:30 onwards in the car parks. It was also noted that the pantomime and cinema may have impacted on parking between 19:00-21:00. No abnormal conditions were noted on Thursday 25th January.

 Occupancy of the car parks varies greatly across the eleven sites. Smaller car parks such as Hale Street, Cooper's Yard, Anchor Lane and Whitehall Street exhibit high occupancy, whilst the larger car parks show lower usage in relation to total capacity, especially in the January count. Upper Hundreds car park and Waterside car park both had a maximum occupancy of less than 30% in the January surveys.
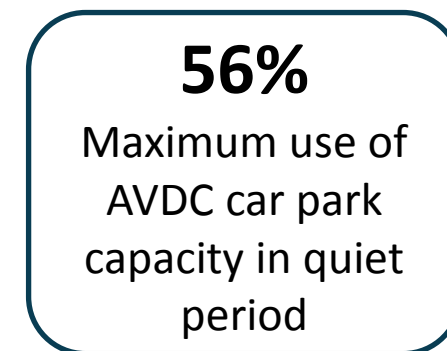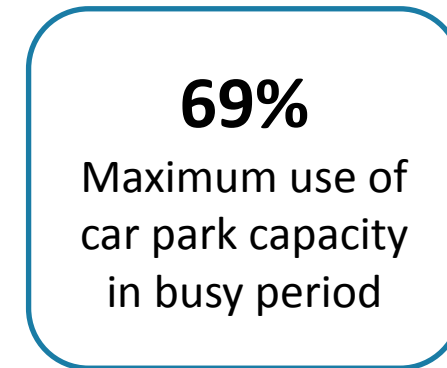
69%
Maximum use of car park capacity in busy period

56%
Maximum use of AVDC car park capacity in quiet period

Fig. 4.0: AVDC car park utilisation

Car Park - **Thursday 14th December 2017**	No. of spaces	Maximum occupancy	% of total capacity
Walton Street Car Park	525	256	49%
Walton Green Car Park	14	11	79%
Waterside Car Park	275	144	52%
Exchange Street	238	229	96%
Hale Street Car Park	16	16	100%
Hampden House Car Park	364	358	98%
Upper Hundreds Car Park	305	149	49%
Anchor Lane Car Park (disabled only)	7	7	100%
Buckingham Street / Cooper's Yard Car Park	59	58	98%
Whitehall Street Car Park	38	32	84%
Friarscroft Car Park	342	247	72%
Total	2183	1507*	69%
*Maximum occupancy is measured individually for each site, so does not represent maximum occupancy for a single time period.			

Car Park - **Thursday 25th January 2018**	No. of spaces	Maximum occupancy	% of maximum capacity
Walton Street Car Park	525	231	44%
Walton Green Car Park	14	13	93%
Waterside Car Park	275	55	20%
Exchange Street	238	226	95%
Hale Street Car Park	16	14	88%
Hampden House Car Park	364	226	62%
Upper Hundreds Car Park	305	85	28%
Anchor Lane Car Park (disabled only)	7	6	86%
Buckingham Street / Cooper's Yard Car Park	59	59	100%
Whitehall Street Car Park	38	38	100%
Friarscroft Car Park	342	267	78%
Total	2183	1220*	56%
*Maximum occupancy is measured individually for each site, so does not represent maximum occupancy for a single time period.			

Theme: Provision and Use

Across the eleven AVDC car parks, the maximum occupancy in comparison to total capacity is 69% for the December count and 56% for the January count. In reality, it is likely to be lower than this, as 56% is the cumulative average of maximum use for each car park. However, this does indicate that for the eleven car parks, there was at least minimum a spare capacity of 31% and 46% respectively. This could be interpreted as the overprovision of parking in the town centre.

In terms of duration of stay at AVDC car parks, analysis of tariff data indicates as expected a higher turnover of spaces in short stay compared to long stay car parks.

Fig. 5.0 (page 17) provides a summary of non-AVDC car park use based on information gained from operator interviews and publically available document reviews. There is an extensive amount of parking linked to superstores and out-of-town shopping areas on the periphery of the town centre. Most is short stay, limited to two hours. BCC manages the provision of a significant amount of on-street car parking provision both public and residential. The majority of on-street residential parking is provided to the west of the town. Anecdotal evidence indicates that the on-street parking is well used. However, the additional on-street parking for multi-use vehicles has led to some displacement of taxis creating a tension between the taxi trade and people wishing to park in the shared spaces.

As part of the study, account was also taken of the current and planned use of car parks in private ownership to see if they could be used in the evenings and weekends to help meet any increase in public parking demand. For operational reasons, these parking spaces cannot be released.

Drawing on all surveys and analysis of data the following conclusions can be drawn:

- Current AVDC car parking provision more than meets current demand for short and long stay car parking particularly when other public parking is available eg Friars Square and Waterside North;

- Audits have revealed an issue with quality of provision at car parks;

- Most car parks have reserved bays and are free to blue badge holders and special on-street parking concessions apply;

- Car parking provided by private operators accounts for a significant proportion of available car parking in the town centre;

- Cycle parking provision in general is poor;

Fig. 5.0: Other Car Parks

Car Park	No. of Spaces	Operator	Commentary
Waterside North	98	BCC	A well situated and designed surface car park in the centre of the town centre that is well used and often at capacity during peak periods.
Controlled RPZ	Data not available	BCC	Residents permit parking is used across the town centre, with a significant use in the historic residential area west of the town centre. Car parking spaces are well used by residents.
Public On-street	Data not available	BCC	On-street parking in the town centre tends to be short-stay pay and display, with no charge on Sundays. Maximum duration of stay can vary but typically is 1 hour or 2 hours, with no return within 1 hour. On-street parking is popular and well used.
Railway Station	302	Chiltern Railways	Situated next to the railway and managed by Chiltern Rail who are considering car park expansion but their franchise has only 5 years to run so decking is not a viable option. They operate the station car park via a management agreement with Apcoa. The car park is full generally on Tuesday – Thursday but slightly less so on Monday and Friday. There is space at weekends and they would be happy to consider alternative pricing options to drive increased usage and revenue. At the moment there is a peak or an off-peak charge.
Friars Square	360	Private Operator	Well provisioned multi-storey car park located next to and linked to the Friars Square shopping centre. Graded payment based on time. Allocated disabled parking spaces can be found on every level. Parking for disabled people is not free of charge. Well used during peak periods. (NB The adjacent floors used by BCC during the week are released at weekends and Bank Holidays for public use. These additional spaces are not included in the 360).
The Vale Hundreds	180	Private Operator	Surface car park situated to the north east of the town centre split across two sites. Free but for customers only.
Tesco (Tring Road)	660	Private Operator	Located on the Tring Road to the East of the town centre. Free for up to three hours. Customers only.
Aylesbury Shopping Park	600	Private Operator	Surface car park located to the north of the town centre. Tariffs apply which are managed by UKPC. Well used, particularly during peak periods.
Morrisons	300	Private Operator	Surface car park to the south of the town centre that is free for up to two hours. They have a problem with people parking for free and walking across to the town hence the charge after 2 hours. They employ a management company use ANPR to monitor and enforce charges. They were looking to deck in 2016 but it was not practical due to the bridge.
Lloyds Building (known as the Blue Leanie)	Data not available	Private Operator	N/A for public.

Theme: Legibility and Convenience

Priorities
- Align digital and physical wayfinding information to aid consistency;
- Deploy effective directional signing from the highway, indicating type and availability of parking;
- Ensure clear and consistent onward signing and destination information at each car park;
- Simplify naming conventions and provide consistent payment options at all car parks;
- Improve provision and signing of cycle parking in the centre;
- Focus improvement on key routes between parking and destinations;

Audits undertaken of existing AVDC off-street car parks have highlighted a number of issues and inconsistencies that need to be addressed to improve the customer experience in terms of legibility and convenience. Key issues identified include:

- Variable Message Signs (VMS) with information about car parks and capacity are not operating fully;

- Limited assistance locating available spaces;

- Car park names lack meaning for casual visitor;

- Some signage showing signs of neglect;

- No sense of destination when walking out of most car parks;

Poor legibility and information can lead to cars circulating to find spaces in the town centre exacerbating congestion and air quality issues and generally providing a poor initial impression of the town.

Wayfinding systems

Smarter wayfinding systems are able to actively promote and encourage walking by providing access to real-time data and making walking more engaging, efficient and informed. GPS enabled apps can more accurately inform users of their route possibilities and present walking as a viable mode choice. Travel-planning apps like *Citymapper* now enable users to calculate the fastest route from A to B, using multiple modes of transport, including walking.

New modes of city exploration

While transportation and wayfinding apps help us travel efficiently and reliably, exploration apps like *Likeways* – which suggests an indirect route to a destination that guides users through places of interest – can provide exciting and interactive ways to learn about and even get lost in cities. Hyper-local storytelling, location-based prompts and challenges and superimposed layers of digital communication provide entertaining ways for people to discover familiar and unfamiliar places.
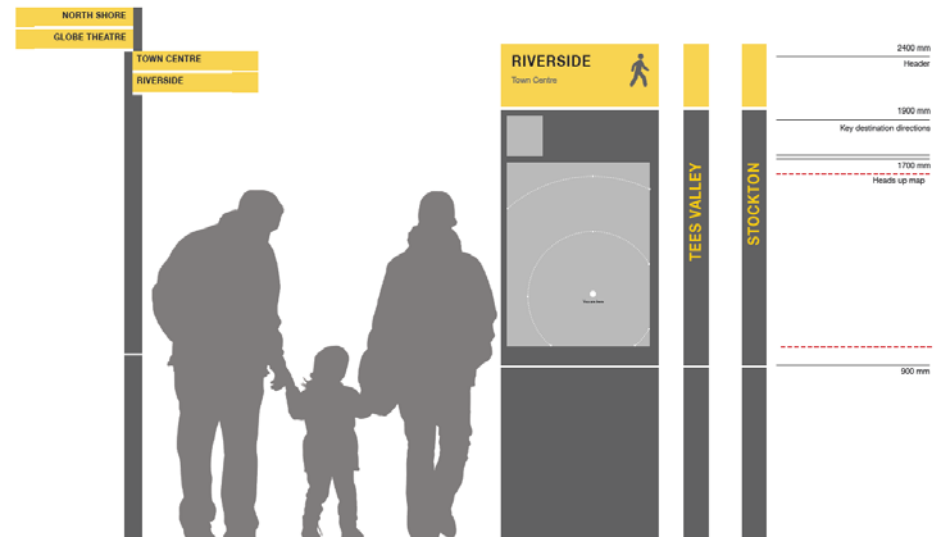
Theme: Legibility and Convenience

Improvements are also required relating to the legibility of cycle parking within the town centre which is dispersed in nature, generally unattractive, and poorly signed.

In order to provide a high level of customer service it is important that all parking information provided is consistent, accessible and kept up to date.

Onward destination information is also important to help customers quickly find their way once they have arrived through the provision of legible wayfinding information. This will frame the town in a positive manner providing a good first impression. For example, key routes between car parks and town centre can be improved both with physical improvements and digital information to improve the customer experience.
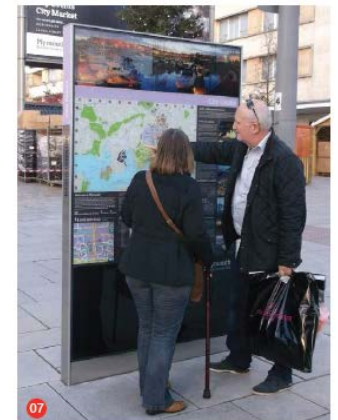
Objective 2: Positively contributes to the local economy and regeneration

Theme: Assets and Land Use

Priorities
- Seek and develop opportunities to maximise regeneration value from the parking assets within the control of AVDC;
- Align car park asset management plans with wider regeneration aspirations for the town;

AVDC own a significant number of car parking assets in the town centre in the form of surface car and multi-storey car parks. They are primarily distributed to the north and east of the study area as indicated in **Fig. 6.0 and listed in Fig 4 (page 15).**

The general structural condition of the assets is adequate, however, ticketing equipment and the general appearance of the multi-storey car parks is poor.

Given the evolving nature of the town centre and transformative regeneration plans in the pipeline, as a general principle, there is potential to consider the redevelopment of land which is currently occupied by car parks if a strong business case exists for action.

The following section provides analysis of land use opportunities in the town split by four sectors – north, east, west, south. Our approach primarily focuses on consolidation of car parking sites, retaining the net number of car park spaces across the town centre.

Fig 6.0 Town Centre Car Parks Assets
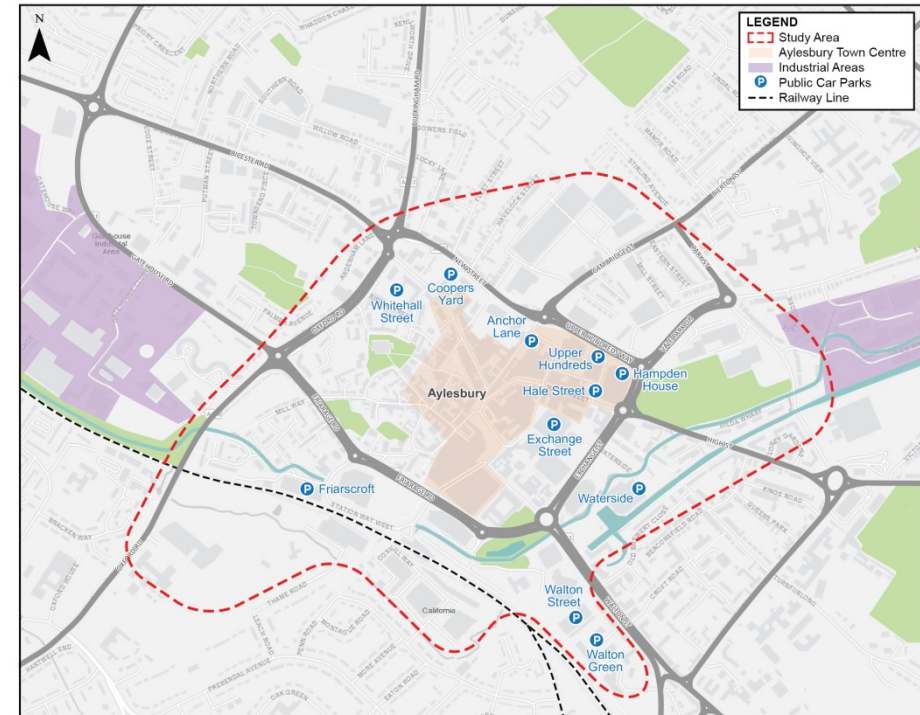
Theme: Assets and Land Use

North

Whitehall Street and Cooper's Yard are two similar, short stay surface car parks situated to the north of the town centre. They are well maintained and well used and perform an important function to help enliven and support business in this area of the town centre.

We propose that due to their close proximity they can be considered for consolidation, therefore releasing a plot of land for redevelopment. The total number of spaces provided would not be lost by adding a single deck structure to the remaining car park plot.

To note, Aylesbury Vale Estate have an option to develop these sites, therefore any proposal would require agreement and may have cost implications for AVDC.
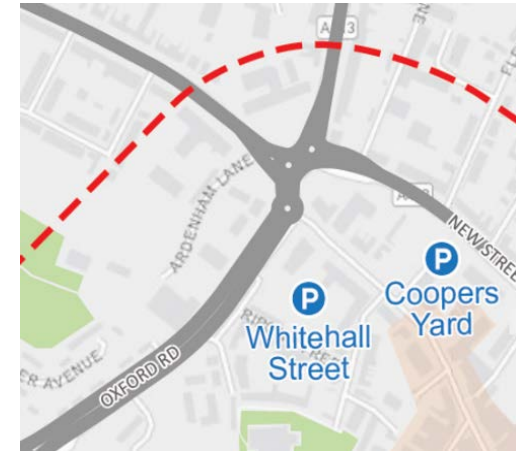
East

There is significant provision of car parking in the eastern quadrant of the town centre. Anchor Lane is blue badge only and provides an important function to support those with mobility issues to access the town centre. Upper Hundreds is an ageing multi-storey car park that occupies a large plot. Hampden House is an underground car park with office and retail above owned by Freshwater who have permitted development in place for conversion to apartments. Hale Street is a small surface car park that offers a convenient short stay option. Exchange Street is a large surface temporary car park that is situated on a prime site for furthering the regeneration of the town centre.

This area of the town centre is a focus of redevelopment and regeneration plans as part of the wider town centre vision. Due to the underutilisation of the car parks combined with the inefficiency of managing a number of assets in close proximity, consolidation offers a real opportunity to add value (eg plot release for redevelopment) whilst retaining sufficient capacity.

In particular, we recognise that due to the importance of place making and public realm in this area, any car parking needs to be high quality, well maintained and in line with the vision for the town centre.

Theme: Assets and Land Use

West

Friarscroft is underutilised with competition from Morissons, Network Rail and Friar Square car parks that are situated in a more convenient and attractive location. It's use as a car park by commuters and permit holders is currently constrained by its early closure. Later closing times would enable space occupied in in other car parks by these customer groups to be released creating more capacity for short stay customers.

The link between Friarscroft would need to be enhanced with improved wayfinding. If parking provision remains at similar levels in the town centre, then the site would be available for redevelopment. The site has excellent accessibility to the town centre and onward sustainable transport connections therefore would be a good location for homes. It's close proximity to the railway line may lend itself to affordable homes provision and/or assisted living.

At the same time consideration should be given to the possibility of wider redevelopment in this area over the longer term in line with the aspirations set out in the draft Vale of Aylesbury Plan for a better integrated transport hub. It is recognised that this will be complicated by the existing land ownership/occupations with respective parties having competing objectives and priorities

West

Walton Street is a high quality car park in a good location that is well maintained and offers a good customer experience.

Although it is a short walk to the town centre it appears longer due to the relatively unwelcoming walk alongside the highway and the need to cross the road.

Walton Green is a small long stay surface car park that is in poor condition. It serves a limited long stay function. Consideration should be given to redeveloping the site.
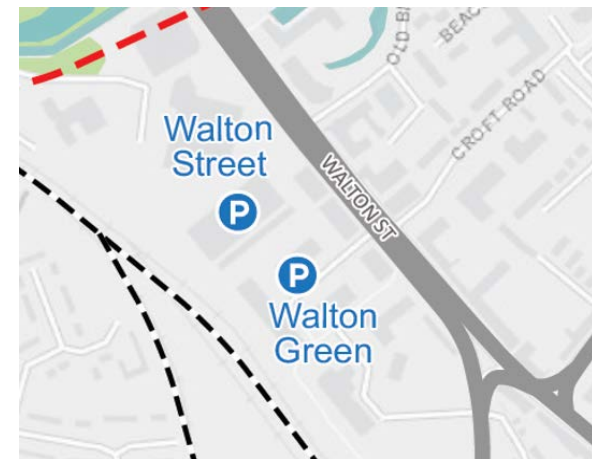
Theme: Supporting Business

Priorities
- Actively engage business and shoppers in parking discussions;
- Promote safe and secure cycle parking at employment and retail sites;
- Prioritise the use of organised off-street parking provision over on-street that may negatively impact the public realm;
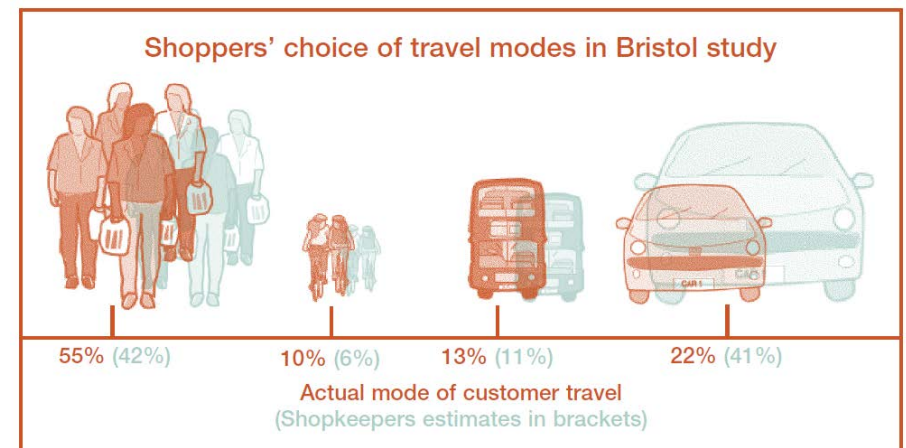
Car parking provides an important function to support business. Customers use parking as part of their journey to access goods and services. Employees use car parking during the course of their shift. Occasionally, delivery companies use parking provision to load and unload.

There is often a perceived and actual position in terms of car parking provision that does not fully align. For example, a study conducted by Sustrans in Bristol indicated that shop keeper's perception of how customers travelled to their shop differed considerably from the actual mode of travel (See **Fig. 7.0**). Particularly, access by non-car travel choices were underestimated.

Research undertaken by the Campaign for Better transport (2014) indicated that car dominated towns are less resilient and have lower commercial vitality than those which are accessed by a more diverse range of transport modes.

A survey undertaken by AVDC in 2016 revealed that town centre businesses feel that the provision of car parking needs to be improved. It also indicated that car parking prices were an issue.

Fig. 7.0: Sustrans research (2014)

Shoppers' choice of travel modes in Bristol study

55% (42%)   10% (6%)   13% (11%)   22% (41%)

Actual mode of customer travel
(Shopkeepers estimates in brackets)

Theme: Supporting Business

Priorities
- Facilitate and encourage town centre access by coach, particularly for events and theatre visits;
- Improve capacity and provision for coach drop at the Aylesbury bus station

Surveys undertaken reveal that there is more than adequate car parking capacity and choice in the town centre, even during busy periods.

Likewise, pricing when benchmarked against similar towns is cheaper or comparable. Research also indicates parking price levels do not have a strong correlation with economic activity within an urban centre.

Regardless of the actual situation, the perception of car parking needs to improve in the town centre as it may be acting as a barrier and/or deterrent for businesses remaining or relocating to the town, negatively impacting the economy.

However, we also note the over provision of car parking can both use up valuable space in urban centres that can be used for more economically beneficial uses. In addition, car parking by its very nature generates additional car trips contributing towards congestion which has a significant impact on economic growth and vitality.

At a strategic level, AVDC and BCC are currently working together to deliver the Aylesbury Transport Plan (www.aylesburyvaledc.gov.uk/transport-strategy) to address town centre congestion and the related negative impacts on business.

On-street provision, although visible and convenient, generates conflict between cars and other road users, particularly along Cambridge Street, in and around the town's central squares and adds to the disconnect between the theatre area and the rest of the town centre.

We recommend that all visitors to the town centre are encouraged to use formal off-street car parking opposed to on-street provision. Pilots should be undertaken to test the removal of on-street parking and replacement of these on-street spaces with other, meanwhile uses – see **Fig 11, page 33** for an example.

"Business owners often over-value the importance of parking and car access to their sales. Business organisations in particular need to become more familiar with the evidence in this area, so as to promote the economic benefits of public spaces to their members, and the importance that customers place on them."
Source - The pedestrian pound The business case for better streets and places

+65%
retail spent

According to Transport for London analysis, pedestrians usually spend 65% more than drivers.

Theme: Coach Parking

Priorities
- Investigate a more effective and higher capacity coach drop-off provision as part of the redevelopment of Exchange Square

How to provide adequate coach parking is a question that many towns and cities find difficult to deal with. Coach parking creates a dichotomy in that it requires large amounts of land in the same location where land values are highest, in prime town centre locations. It can be difficult to justify setting aside such land for the purposes of coach parking which may be vacant for much of the time or whole periods of the year.

Visit Britain makes a strong case for coach provision in its 'Welcoming Coaches and Groups' Advice Document. In 2012 almost 2.4 million overnight trips were taken by domestic residents as part of an organised coach tour in Great Britain, accounting for 8.6 million overnight stays, contributing £617 million to the domestic tourism economy.

The Aylesbury Town Centre Plan (2014) identifies coach parking as an important means to access the town centre, particularly for visitors to the theatre. One coach parking space is available at Aylesbury Bus Station. This is free of charge but must be booked in advance. Exchange Street can be used for set down for those visiting the Waterside Theatre by coach, however, only a limited number of coaches can stop at a time can stop (See **Fig. 8.0)**. Coaches usually arrive for events in groups therefore this generates an issue on the road network.

Options for additional coach parking and drop-off in the town centre are currently limited. Potentially, the AVDC car park at The Gateway could be used for coach layover following drop-off but this would have to be on a charged basis to at the very least cover operational costs of security.

Fig. 8.0 – Coach drop off Exchange Street

Objective 3: Commercially sustainable & efficient parking management model

Theme: Pricing and Equipment

Priorities
- Annually review parking tariffs and implement a reasonable pricing regime;
- Set on-street and short stay parking tariffs at proportionately higher levels than off-street and long stay;
- Regularly review equipment and standardised and upgrade where practicable;

Current parking tariffs in AVDC are lower than comparable towns for both long and short stay (**See Fig. 9.0**).

Research indicates that most do not consider the tariff level when they park. However, if car parks become noticeably more expensive than those offered by other providers in a locality, drivers may choose to park elsewhere.

As such, there is an opportunity to review tariff levels at AVDC car parks but any increase must be benchmarked against and co-ordinated with local and regional providers.

For on-street parking, best practice dictates that charges should be proportionally higher than off-street and stays shorter. This will encourage the appropriate use of both forms of car park. Similarly, short stay parking should be set at higher cost levels per hour than long stay to encourage appropriate use.

In terms of equipment, currently there is lack of standardisation both across AVDC car parks and car parking as a whole in the town centre. For example, some methods of payment are available at some car parks but not others. In addition, much of the equipment is ageing and leading to operational inefficiencies.

Collectively, this is having a negative impact on the customer experience of those visiting the town.

Fig.– 9.0 Comparison of Average Short Stay Tariffs
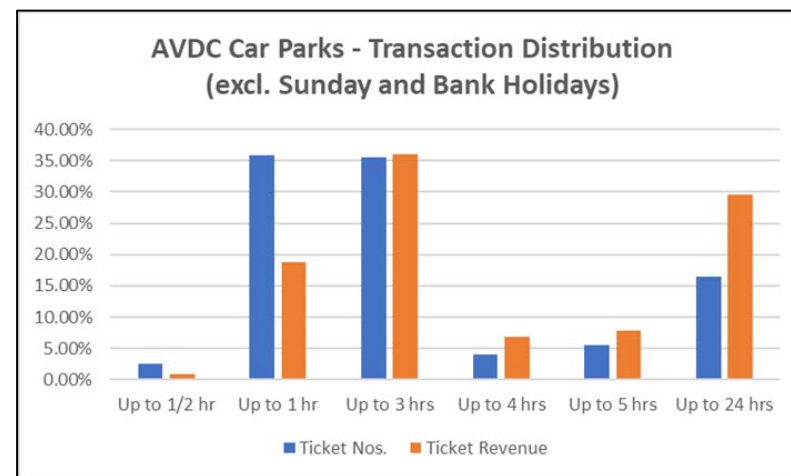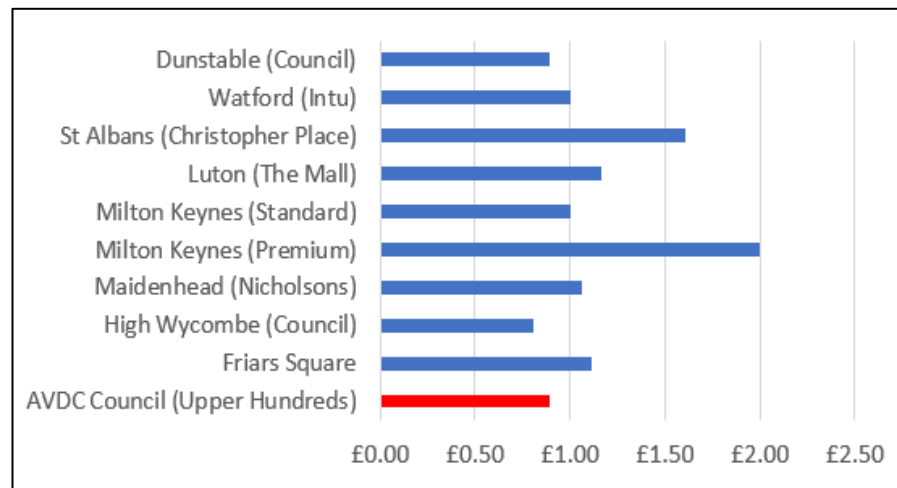
# Theme: Pricing and Equipment

We recognise there is a need to implement a programme of equipment standardisation and upgrades whilst providing payment flexibility, and choice. Measures that will be considered include:

- Contactless payment is fast becoming the natural way to pay in large parts of the country and is a convenient way to pay;

- Optimise the use of Permits and long term passes. Purchased online, these permits and passes can be a very efficient way of accepting payment for visitors and regular users alike.;

- Provide a 'multi-vendor' platform to accept payments from a variety of sources. The current model of contracting with a single mobile payment service is unsustainable in the long term.

- Vehicles and apps from 'out of town' will need to be able to make payments, therefore a platform able to accept payments from a variety of 3rd party sources is required. A similar platform has already been established in a number of European cities. The Council should seek to join with other authorities in jointly procuring a system.

The implementation and phasing of measures will be based on a sound business case for investment with a focus on improving customer service for those using the car parks.
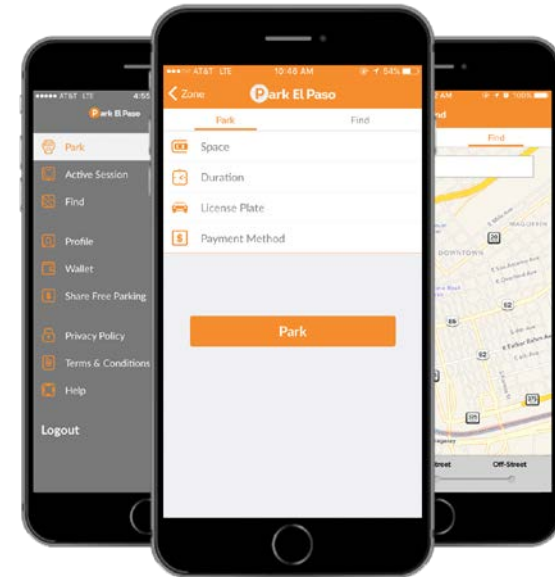
Theme: Management and Enforcement

Priorities
- Champion the co-ordination of parking within the town;
- Take an evidence led approach to investment decisions;
- Provide a suitable staff resource to effectively manage AVDCs parking function;
- Produce and release and annual performance report;
- Adopt an efficient, fair and polite approach to parking enforcement;
- Improve enforcement recording and management systems;

Parking within the town centre is managed by four broad groups:

- AVDC is responsible for managing its off-street car parks;

- BCC manages on-street and one off-street car park;

- Private operators, such as retail parks and Chiltern Rail;

- Employers with parking on-site;

It is essential that parking management activity is coordinated to ensure an effective service is provided to the customer and community.

Currently, AVDC parking revenue is heavily reliant on commuter and long stay visitors. Given current policies regarding the need to deliver modal shift from private car to public transport, walking and cycling there is a conflict in terms of supporting commuter car parking and providing a disincentive to those travelling by car.

Until significant investment is made in supporting alternative modes and the uptake of new technology advances (e.g. autonomous vehicles) traditional commuter parking will still be required.

To reduce the impact of congestion on the town centre we recommended that car parks on radial routes outside of the town centre are prioritised for commuters eg Friarscroft with car parks within the town centre used for short stay parking, serving the economic function of the town centre economy. Tariff pricing should reflect and support this approach.
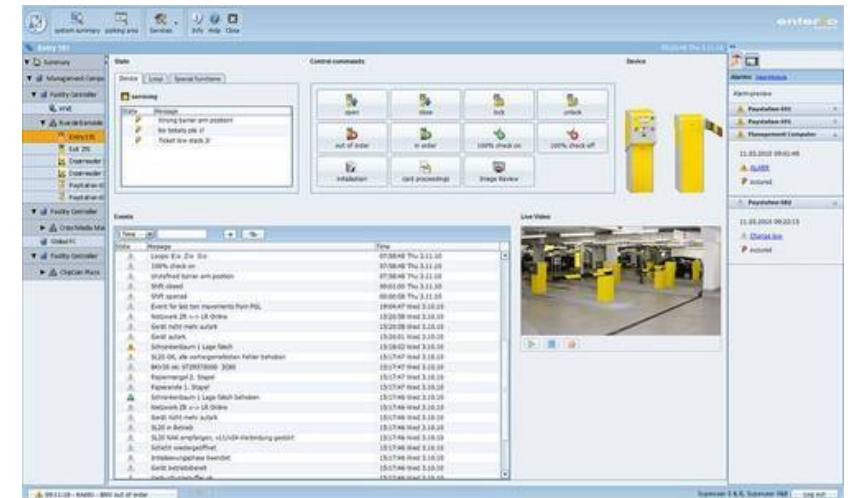
Theme: Management and Enforcement

In addition, we will seek to maximise the use of the current parking provision by improving the both the efficiency of operation, optimising the customer experience.

Where practicable, surplus generated form tariffs will be reinvested into improvements to parking and the public realm. Investment decisions will be made on sound business cases and involve appropriate stakeholders.

We will measure the performance of the service by maintaining and publishing key performance indicators to ensure continuous improvement.

Recognising the scale of the car parking operations and the significant impact of car parking on town vitality and visitor experience we will resource the parking management function appropriately.

In terms of enforcement, management process are aligned to legislation set out in the Traffic Management Act 2004.

Although parking enforcement can be an emotive issue it is a necessary element of parking management. We will continue to approach enforcement in a fair and polite manner and request that the community responds in a similar fashion.

In particular, enforcement needs to target behaviours which have an impact on the flow of traffic, road safety and the public realm. For example, inappropriate parking on residential streets (Old Town), on narrow roads (Cambridge Street) and on junctions/entrances will be addressed.

Due to current limitations in data gathering and recording it is not possible to ascertain the current effectiveness of enforcement by AVDC. We will commit to ongoing reviews to ensure that we deliver an evidence led and efficient enforcement regime.

Objective 4: Enhances the local environment

Theme: Placemaking

Priorities
- Seek opportunities to innovatively use car parking assets to support the local economy and amenity;
- Apply good design principles when constructing new car parks;
- Plan and deliver an annual maintenance and upkeep programme;
- Apply low cost measures such as planting and relocating of recycling bins and embrace community ownership in town car parks;
- Revise tariffs to support investment in townscape and place making, with a proportion of this money ring-fenced for this purpose.

Parking management and policy can play a significant role in placemaking. Placemaking focuses on how the public realm should be designed to create a great environment where people want to spend time and enjoy (**Fig. 10**). It can have a bearing on how people and vehicles move around and activate different spaces within an area. The design, condition and scale of car parks and parking assets can have a direct impact on the public realm.

Increasingly, there is a move to think innovatively about car parking assets within urban centres. On-street parking provision can temporarily be used for other uses such as the pocket parks/parklets (**Fig. 11**).

Meanwhile installations can be useful to activate public spaces and offer additional retail and cultural amenity with limited capital investment. They can also help to enliven an area and create footfall ahead of permanent development.

More permanent solutions can be applied to existing multi-storey car parks to help with local regeneration and offer additional benefits. For example, the Peckham Levels scheme in London has seen a number of floors of an existing multi-storey car park be repurposed for other uses providing additional local amenity **(Fig. 12)**.

Fig. 10 – What makes a great place, Public Spaces Project
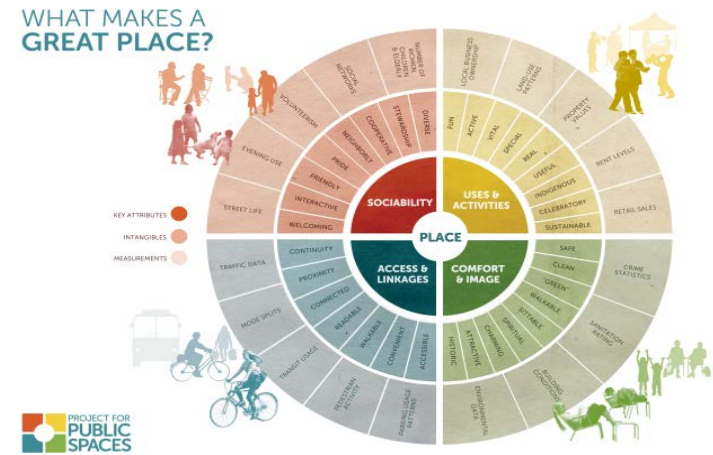

Fig. 11 – Meanwhile parklets

Fig. 12 – Peckham levels – reinventing the car park

Theme: Placemaking

Like all town centres, there are areas of Aylesbury which are run down or unattractive. This affects both visitors' perception and those of potential new investors. The Vale of Aylesbury Local Plan outlines key challenges that the town faces moving forward (**Fig. 13**)

The recent retail study highlighted that the town is failing to capitalise fully on high spending consumers within the town catchment because, while some are visiting the town centre for employment reasons or to use services such as banks, they are not necessarily visiting in the numbers that could be achieved in terms of retail and other activities.

Of those who are visiting, an insufficient number are spending their money in the town. So, unless Aylesbury improves its offer to give its catchment market what it is increasingly looking for, current leakage to neighbouring towns will continue, even though the nearest competitor retail destinations are over 25 minutes' drive away.

This requirement, supported by the Aylesbury Town centre plan requires that parking assets in the town centre should be considered in a placemaking context and be of sufficient quality without negatively impacting on the public realm to provide a good impression on visitors to encourage them to dwell.

Fig. 13 – Aylesbury Town Centre Challenges, Vale of Aylesbury Local Plan

- Increase in economic and political uncertainty
- Attractiveness and identity
- A growing population
- Protecting existing investment
- Competition and changing expectations
- Out of town retailing
- Competition form major supermarkets
- Omni channel shopping
- Consumers making fewer, shorter trips to towns
- Leisure time is becoming more important
- The proposed East-West Rail route
- The rising popularity and enhancement – of other competing centres

Case Study – Designing for urban childhoods
A child-friendly approach to urban planning is a vital part of creating inclusive urban centres that work better for everyone. Designing for urban childhoods inspires us to respond positively to the challenges, and sets out actions that can help take us to a more child-friendly future – moving well beyond simply providing playgrounds It advocates a coherent and systematic approach to planning and designing towns and cities that improves children's development, health and access to opportunities. It recognises the fundamental importance, not just of independence and play, but of the built environment as a whole in helping to shape a child's development and prospects, and hence their adult lives. The benefits of a child-friendly city go beyond children to add value to all citizens' lives. The amount of time children spend playing outdoors, their ability to get around independently, and their level of contact with nature are strong indicators of how a city is performing, and not just for children but for all urban dwellers. Perhaps uniquely, a child-friendly approach has the potential to unite a range of progressive agendas – including health and wellbeing, sustainability, resilience and safety – and to act as a catalyst for urban innovation.

Cities Alive
Designing for urban childhoods
ARUP

Theme: Ultra Low Emission Travel

Priorities
- Incorporate electric charging bays in existing car parks where possible;
- Continue to monitor and assess usage of electric vehicles;
- Progress ULEV pilots and promotion programme, monitoring usage of charging points, review and provide additional charging points if demand requires;

Aylesbury has issues of poor air quality, primarily caused by harmful emissions released by vehicles powered by fossil fuels. There are three Air Quality Management Area (AQMA) in Aylesbury (Tring Road, Friarage Road, Stoke Road) where levels of pollutants are deemed to be harmful to human health and action must be taken.

Ultra-Low Emission Vehicles (ULEV) such as fully electric and hybrids are becoming more popular and affordable (**Fig. 14**). They have environmental benefits, including lower C02 and at source air quality emissions compared to fully fossil fuelled modes of travel.

Electric car sales are increasing, reaching 2.2% of overall car sales in the 3rd quarter of 2017. Over the year to October 2017, 38,700 new cars were sold (an average of 1.8% over the year). However, electric cars still account for less than 0.5% of the 26 million cars on UK roads.

*Fig. 14 – Number of UK charging locations and connectors over past 12 months, Zap-Map, March 2018*
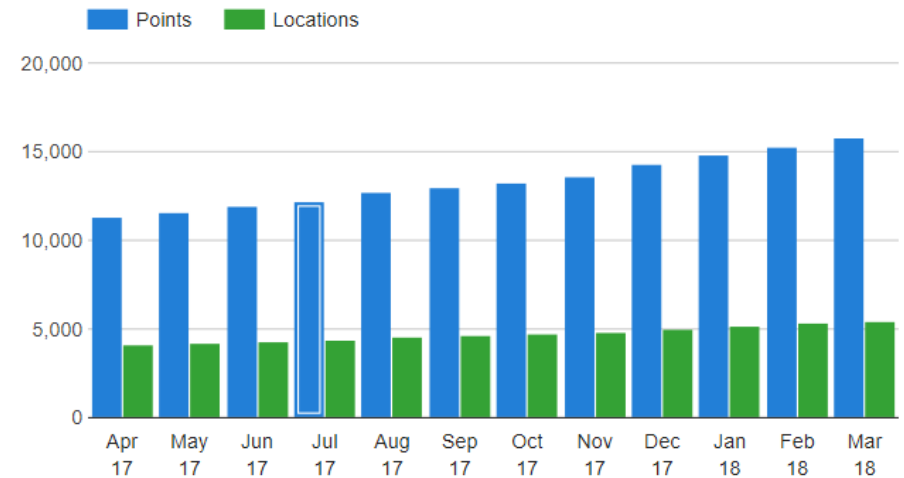
Theme: Ultra Low Emission Travel

There are no electric charging points currently within AVDC car parks (**Fig. 15**). A review of electric charging facilities in the Aylesbury town centre (www.zap-map.com) shows that there is one charging point at Aylesbury railway station. Further charging points are required to support the increase use of ULEVs and will be informed by an evidence led study.

Although ULEV have a significant upside for emissions, they do not alleviate negative economic and convenience impacts associated with congestion.

Cycling is a zero emission mode of transport at point of source and therefore would result in environmental improvements if use increased, particularly if otherwise taken by car. Aylesbury has a topography suitable for cycling and has existing infrastructure linked to previous cycle investment programmes. Opportunities to support cycling by the provision of safe and secure cycle parking will be progressed.

Fig. 15 – Profile of charging connectors across the UK regions, Zap-Map, March 2018
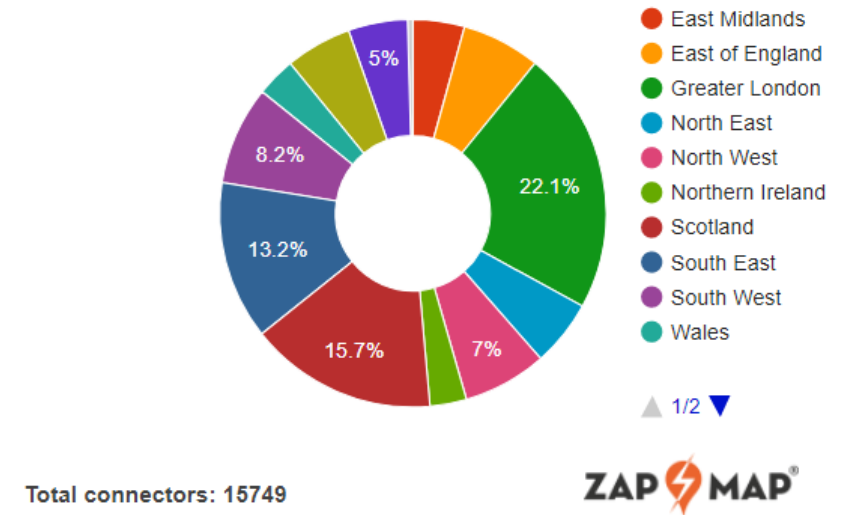
Objective 5: Integrates effectively with wider policy and plans

Theme: Planning Policy

Priorities
- Reduce the number of parking spaces permitted in policy for development in the town centre;
- Promote and enable support and facilitation of electric charging points as part of new development (Policy T7, VALP);

Parking standards are included within local planning policy and provide guidance to new development. **Fig. 16** provides a summary of the current parking standards and **Fig. 17** outlines the new local plan parking policy.

When benchmarked against other authorities these standards permit more car parking associated with development. A continued policy approach that permits and enables significant parking provision will encourage car journeys. An increase in car trips will contribute to congestion and air quality issues currently impacting Aylesbury residents, economy and the public realm.

Fig. 16 – Aylesbury Vale District Local Plan SPD Car Parking Standards (2002)

Use type	Typical town centre uses	Maximum Parking Requirement
Retail	Shops with GFA less than 100sqm	1 space per 33sqm GFA
	Shops with GFA between 100sqm and 2500sqm, and Retail warehouse	1 space per 22sqm GFA
	Superstores with GFA over 2500sqm	1 space per 17sqm GFA
Residential	1 and 2 bedroom dwellings	1 space per dwelling (+1 visitor space per 2 dwellings)
	3 bedroom dwellings	2 spaces per dwelling
Leisure	Restaurant / cafes	1 spaces per 6sqm public floorspace
	Hotels	1 space per bedroom

Fig. 17 – Extract Vale of Aylesbury Local Plan, Parking Policy

T5 Vehicle Parking:

Development must provide an appropriate level of parking, taking into account:

a. The accessibility of the site, including the availability of public transport, and

b. The type, mix and use of development

Garages/integral garages/car ports will not be included within the allocation of parking spaces unless they meet a minimum internal size as set out in the design SPD.

Design must enable and encourage the maximum use of sustainable modes of transport, including provision for cyclists and low-emission vehicles. Within Aylesbury, Buckingham, Haddenham, Wendover, and Winslow infrastructure for electric vehicles should be built into new major development schemes where local centres are proposed. Vehicle parking standards will be set out in the design SPD.

Theme: Local Transport Authority

Priorities
- Agree and deliver a joined up approach for all elements of parking including consideration of a single centralised service, outsourcing services and partnerships with neighbouring authorities;
- Support and align initiatives and investments to deliver cycle parking, routes, and network improvements;
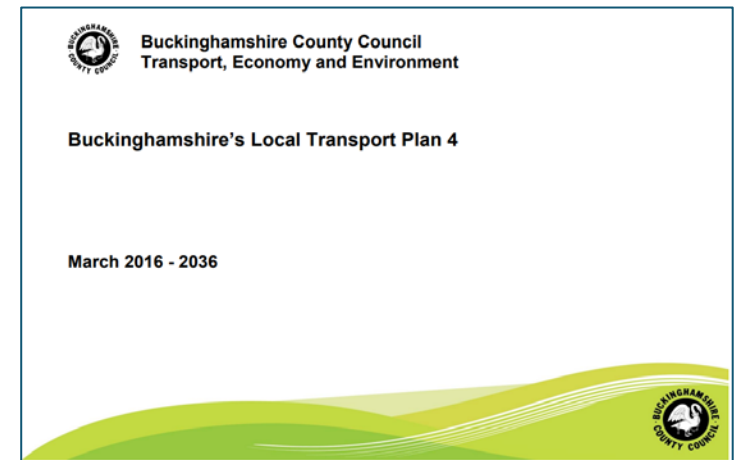
BCC fulfils the functions of the Local Transport Authority for Aylesbury. The Council manages on-street parking, including resident parking zones.

BCC policy and strategy is outlined in the Fourth Buckinghamshire Local Plan (LTP4) and more locally within the Aylesbury Transport Strategy (2017). The publication of LTP4 and revised guidance from the Secretary of State for Transport necessitated the publication of a revised Buckinghamshire Vision for Parking and a new on-street Parking Implementation Plan (PIP).

The PIP is designed to help shape, manage and deliver BCC's Vision for Parking, and is based on the following principles:

- Provide parking where appropriate;

- Control parking where necessary;

- Enforce parking fairly; and

- Operate parking efficiently and cost effectively.

Twenty-two parking implementation plans are included within the document, which deal specifically with the delivery of civil parking enforcement of on-street waiting, loading and parking.

Buckinghamshire County Council
Transport, Economy and Environment

Buckinghamshire's Local Transport Plan 4

March 2016 - 2036

Theme: Local Transport Authority

The 2017 Parking Guide for Local Area Forums (LAFs) is a subsidiary document of the PIP produced by BCC, which sets out how BCC go about designing, consulting and implementing waiting, loading and parking controls. The Guide sets out the background to some of the commonly voiced parking issues for a locality and the processes for getting parking issues investigated and actioned.

BCC have also produced a countywide parking guidance document in 2015 specifically for developers, which sits alongside the PIP. This aim of this guidance is to ensure that developers provide the appropriate level and type of parking for new developments. This will play a role in promoting sustainable development across the county by attracting businesses and economic activity; ensuring the county's towns and villages remain attractive places to live and visit; and ensuring that residents continue to experience a high quality of life.

The levels of parking specified have been developed to reflect real-world demand, whilst still encouraging sustainable modes of transport. BCC state that they are pursuing a combined policy response to encourage sustainable transport, as opposed to a solution based largely on parking supply constraint, which has proven to be of limited impact.

The scope of the document does not cover parking enforcement or charging for car parking, which are left to the discretion of the district authorities.

In order to provide an improved experience to the customer in terms of car parking in Aylesbury we recognise that a joined up approach would deliver benefits in terms of operator efficiency and the quality of parking provision.

2017

Buckinghamshire
Parking Guide for LAFs

TURK, ALISTAIR

March 2017
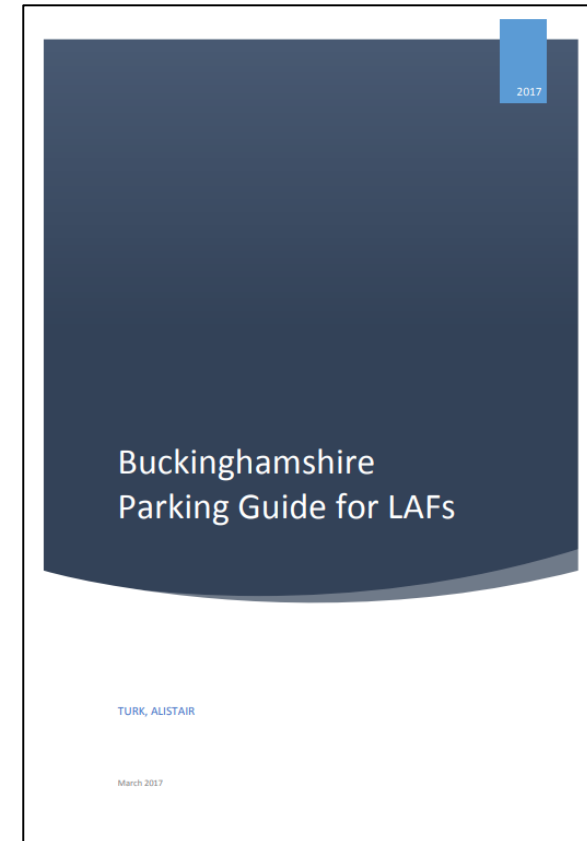
Objective 6: Resilience and anticipation of future change

Theme: Addressing Growth

Priorities
- Improve the quality of existing car park utilisation through capital improvements and improved management without adding additional net provision;
- Maximise the use of formal off-street car parks;
- Support access by sustainable modes;
- Work with the private operators to investigate market led solutions;
- Conduct a review of permitted development parking allocations;

Between 2010 and 2015, Aylesbury Vale built nearly 6,000 homes – the 5th fastest rate of house building of the 326 local authorities in England. As part of the government's Garden Town programme, AVDC are now planning to deliver 33,000 additional dwellings in the Vale by 2033, which represents 50% additional housing growth.

Fig. 18 shows the Concept Plan included in the Aylesbury Garden Town: Expression of Interest document (2016), indicating the strategic masterplan for the area around Aylesbury, showing significant growth in housing and employment areas.

Whilst the ambition of AVDC is for sustainable growth supported by sustainable travel, current forecasts indicate an increase in car travel and corresponding increase in congestion in and around the town.

As outlined in **Fig. 19 (page 43),** latest rankings for congested cities in the UK places Aylesbury as sixth worst. Therefore, the town is already facing significant congestion issues prior to the additional growth. Measures, including new link roads have been identified to help mitigate the impact of congestion on the town centre. Nevertheless, the significant planned growth in Aylesbury Vale will have a direct impact on congestion in the town during the morning and evening rush hours in particular.

Unless addressed, this will result in a decrease in journey time reliability and delays that will have a negative impact on the economy, air quality and the perception of the town. In particular, it is highlighted in policy and research that modal shift from the private car to sustainable modes of travel – walking, cycling and public transport, is required to ease the impact of congestion.

Fig. 18 – Concept plan for Aylesbury growth (2016)
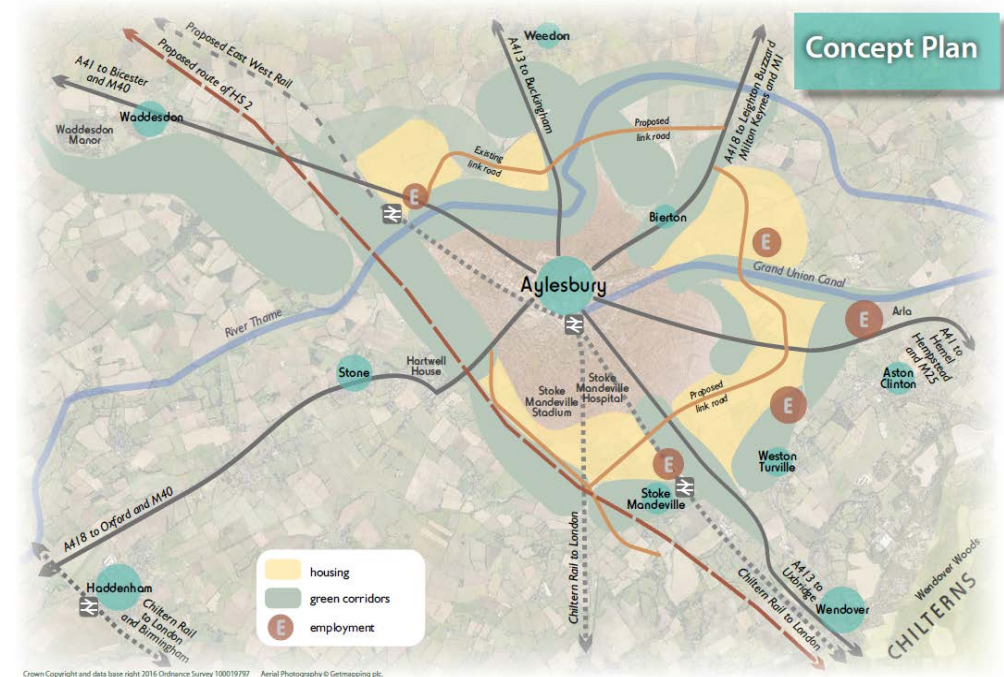
Theme: Addressing Growth

Aylesbury town centre is served by various car parks and there is currently little disincentive for people driving to the town centre, therefore this encourages people to access the town by car contributing towards the current congestion issues.

There is a large supply of parking within the town centre and public car parks offer a capacity of over 2,500 car spaces through eleven parking sites, with an additional 2,000 car spaces provided by retailers. Whilst these are intended for customers use only they are also used by the general public to access the town centre. In addition, there is on street provision and residents parking zones.

Back in 2011, The Aylesbury Parking and Access Study Final Report, identified that supply exceeded demand in Aylesbury town centre. This still appears to be the case given the results of the surveys that were undertaken as part of this study.

Existing permitted development in the town centre is also significant which will increase the number of car parking spaces in the town centre.

Even when considering the residual car park capacity, when reflecting on the impact of growth by 2033 in a demand led car park provision scenario, additional car park capacity will be required to meet projected demand.

However, a demand led provision scenario is contrary to local policy and strategy and will have the following negative impacts:

- Compound current congestion issues in the town negatively impacting the economy;

- Reduce the visitor experience due to delays and poor journey time reliability;

- Additional car parking would take land within the town centre that could be used for placemaking and regeneration interventions;

- Emissions linked to car travel will add to the current air quality issues in Aylesbury;

Fig. 19 - INRIX Global Traffic Scorecard (2017)

Table 15: Top 25 UK City Ranking

RANK	CITY	PEAK HOURS SPENT IN CONGESTION	INRIX CONGESTION INDEX	AVERAGE CONGESTION RATE	TOTAL COST PER DRIVER	TOTAL COST TO THE CITY
1	London	74	14.1	13%	£2,430	£9.5bn
2	Manchester	39	6.8	10%	£1,403	£345m
3	Birmingham	36	6.3	9%	£1,281	£632m
4	Lincoln	36	7.1	15%	£1,790	£127m
5	Braintree	33	5.3	10%	£1,264	£52m
6	Aylesbury	32	5.3	10%	£1,331	£110m
7	Guildford	29	4.6	9%	£980	£63m
8	Bath	29	5.8	12%	£1,543	£120m
9	Luton	29	5.2	11%	£1,143	£102m
10	Aberdeen	28	5.5	11%	£1,422	£176m

Theme: Addressing Growth

In terms of addressing parking via intercept of car trips at a park and ride, previous studies have indicated that this is not a viable option. A review undertaken as part of this strategy agrees with this assessment. Key issues are summarised below:

- Dispersed nature of access would require a ring of P&R sites **(Fig. 20, page 44)**;

- Significant capital cost and ongoing subsidy;

- Lack of space on highway for bus priority measures;

The provision and management of parking in the context of growth is an important consideration, particularly when framed against the need to access the town centre and the need to tackle congestion.

On balance, the provision of additional car parking spaces at this time would not be appropriate unless supported by significant investment in sustainable transport modes to help mitigate the congestion currently experienced on the access roads to and around the town centre from through traffic.

However, evidence suggests that improved management of current car parks, particularly in terms of more efficient utilisation and access from the road network, would release additional car park capacity and reduce congestion from behaviours such as vehicles circulating looking for car park spaces.

Fig. 20 – Access direction and flow to Aylesbury Town Centre (2011 Census)
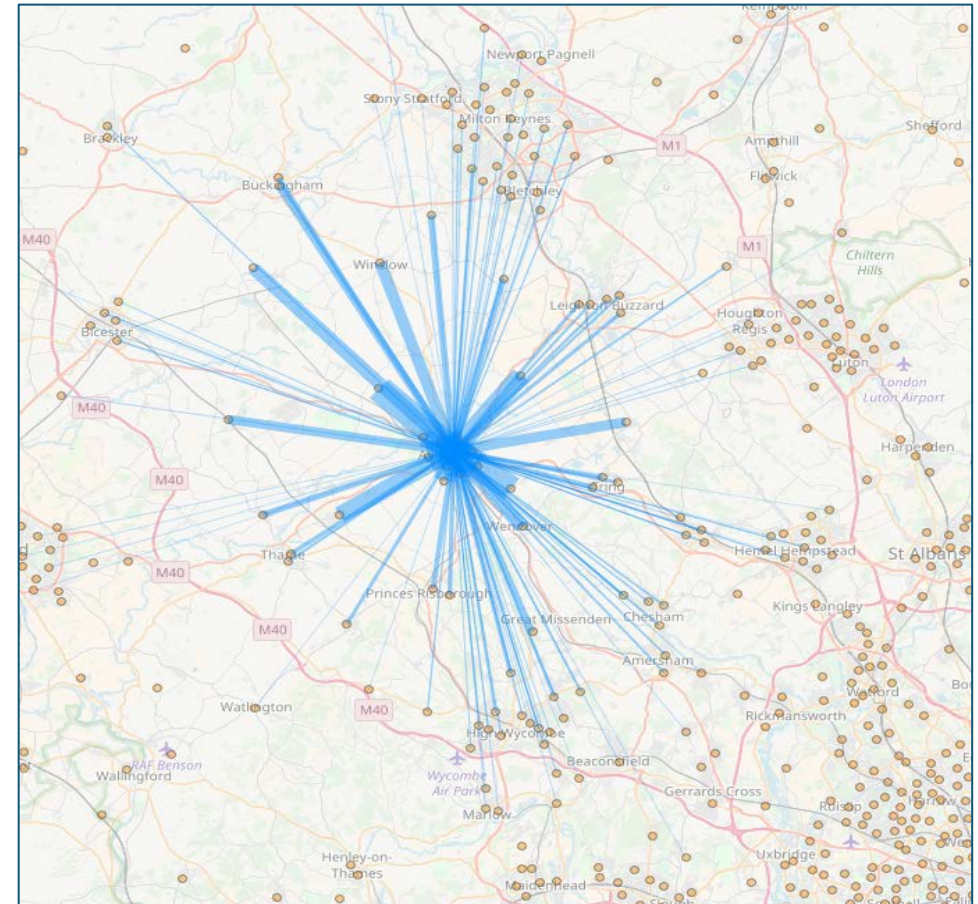
Theme: Evolving Town Centre

Priorities
- Shape car parking delivery to positively contribute towards the aspiration for Aylesbury to be a high quality destination;
- Adopt a flexible, proactive and responsive approach to changes that impact parking and town centre functionality;
- Work closely with town centre partners;

Across the UK high streets are changing. High streets are now seen as the diverse heart of the community, and no longer exclusively centred on retail. Accordingly, they are being designed and planned to provide an attractive walking and street space environment, accessible to the whole community. There is a requirement that they adapt to the new retail landscape and become more focused on offering convenience and experience that cannot be replicated online.

In order to help achieve the transition of the town centre to a quality destination, parking should make the end-to-end customer experience as pleasant as possible, achieving this will require better back office systems and payment methods. However, if parking dominates and contributes towards congestion it will directly impact on the aspirations of improving the town centre as a walkable, pleasant environment. In addition, traffic congestion will impact on the customer experience before they even get to the car park.

Therefore a balanced approach to parking is required in order to meet the aspirations outlined in the Aylesbury Town Centre Plan and Vale of Aylesbury Plan (**Fig. 21**).

Preparedness, being fleet of foot and responsive to change that is likely to be rapid is also required. Proactively horizon scanning to manage risks and take advantage of opportunities will be a necessity to stay ahead of developments.

In light of technology and responding to future growth, flexibility is required in terms of the parking assets that AVDC hold to offer resilience to future changes in demand. Strong links will continue to be forged with all town centre partners.

Fig. 21 – Guiding principles and strategic aims for future development Aylesbury Town Centre Plan (2014)

- **Principle 1**: Positioning the town centre correctly by providing a complementary, credible experience to nearby centres such as Milton Keynes and Watford and being a 'best in class' sub-regional centre.
- **Principle 2:** Being different, rather than a clone, but basing the town's unique selling point on reality. Aylesbury needs to distinguish itself from other town centres in the area, but in a way that is credible.
- **Principle 3:** Offering what the 'market' is looking for to capitalise on our enviable catchment. Whilst there has been significant investment in the town centre in recent years by both the public and private sector, Aylesbury's retail offer is currently weighted towards the lower/mass market consumer, with a limited choice in terms of product categories, ranges and brands for the mid/upper market, discerning consumer. When asked what would make people visit Aylesbury Town Centre more often, 'better quality shops' was the most common answer, followed by 'more independents, better department stores and more high street brands'24. An independent food and beverage assessment carried out by Coverpoint in 2014 also concludes that the town centre food and beverage sector needs more choice across all categories, but particularly in the family dining and mid-higher quality categories. This research was used to inform phase one of The Exchange scheme. However, with the continued growth in the food and beverage market, coupled with the housing growth planned for the Aylesbury area and the development of a residential community in the heart of the town itself, there is still significant unmet demand.
- **Principle 4:** Encouraging social interaction. Whilst the retail experience is changing largely as a result of omnichannel retailing, visitors will still value a physical town centre outlet, particularly if it offers them opportunities to browse and spend time in an attractive environment and meet their friends and family. They will see the town centre as a place not just for shopping or business, but for social interaction in its widest sense and as a place in which to meet, relax and spend their leisure time. New improvement schemes need to recognise this by delivering, integrated mixed uses including housing and quality public space throughout the town to help connect the different areas.
- **Principle 5:** Build community spirit. Social interaction is about inclusiveness and using space and facilities to help build a sense of togetherness as one community. We should aim to create a town which shows its community spirit through welcoming events and activities.
- **Principle 6:** Take a connected, 'whole town' approach. The success of one area of the town should not be compromised by development in another and we must take a strategic approach to work such as green infrastructure and signage. Principle 7: Appeal to all our different town centre users. We must make sure we're appealing to the whole of our potential catchment including families, young professionals, students, college and university leavers who are looking for their first jobs, empty nesters and older people

Theme: Automation and Technology

Priorities
- Plan for autonomous parking at MSCP/s;
- Reconfigure an area to enable drop-off and pick-up (may need to be outside car park) & allocate a pedestrian free section of the car park;
- Respond to major advances in vehicle technology;
- Review design, number and size of car parks;
- Prepare for some MSCPs becoming obsolete;

The incredible pace of technological change in transportation makes it difficult to know exactly what changes will occur or how they will play out. However, trends point to an intelligent, more integrated system for moving passengers and freight.

As populations grow, providing safe, convenient and affordable mobility will become one of the greatest challenges for policy makers. Transport infrastructure will also need to cope with rising volumes and the increasing demand for fast, reliable and environmentally friendly mobility solutions. Rapidly evolving technology, especially in relation to electric and autonomous vehicles, will also impact the future of highways design, leading to innovative business models and new service offerings.

Shifting mobility needs and customer expectations will require mobility systems to evolve and adapt. Transport users will expect reliable and accurate travel information in order to make informed choices about routes and modal options. Travellers across the spectrum, from tourists to seasoned commuters, will soon come to expect seamless, end-to-end journey experiences. This will require policy makers to plan for people and outcomes, not just transport systems.

We recognise connected vehicles are already here and driver assisted or driverless vehicles are coming and there need to be on the front foot to meet the challenges and take advantage of opportunities that arise.
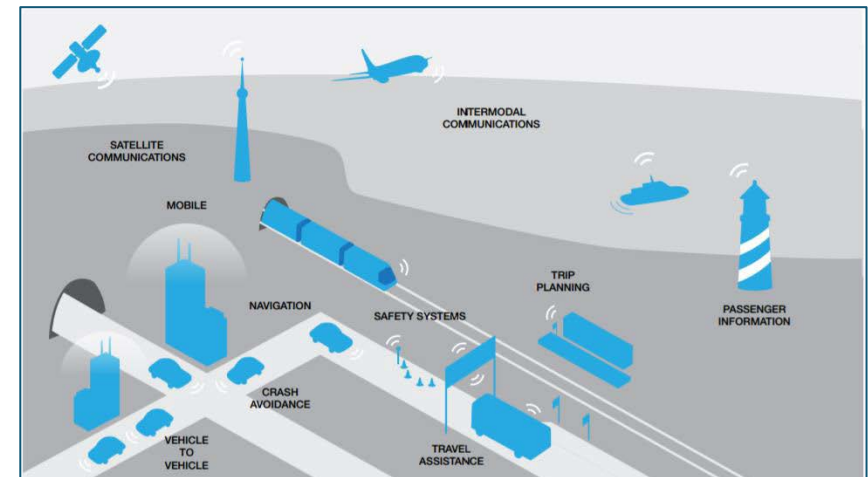
Theme: Automation and Technology

As more effective use is made of the big data associated with our transport networks, there will be increasing acceptability of new ownership models, rapid gains in the quality of travel planning, and increasingly sophisticated customer decision-making tools and capabilities.

Within the timescale of the strategy to 2033, navigation to car parks should be automated, as should payment, and to some extent enforcement. **Fig. 22 (page 48)** provides and overview of expected vehicle technology trends.

Systems will need to be flexible enough to handle automated and connected vehicles. The operation of parking, both on and off-street will become totally dependent on technology. Parking management will become a question of data and payment systems.

Information about parking availability and digital solutions to pay for it will become integrated within on-line services from giants such as Google and Apple as well as the myriad of specialist parking and transportation apps.

From the users point of view the current distinction between on-street and off-street parking will become blurred and largely irrelevant. This will be reflected by the convergence of on-street and off-street parking operations.

Local authority parking services will have to adapt to operate within the context of intense public scrutiny and increasing expectations of efficient, user friendly service. At a time of immense pressure to reduce costs, local authorities will need to invest in staff with expert skills, as well as new infrastructure and services just to keep up with the pace of change, let alone make the most of opportunities that change will bring.
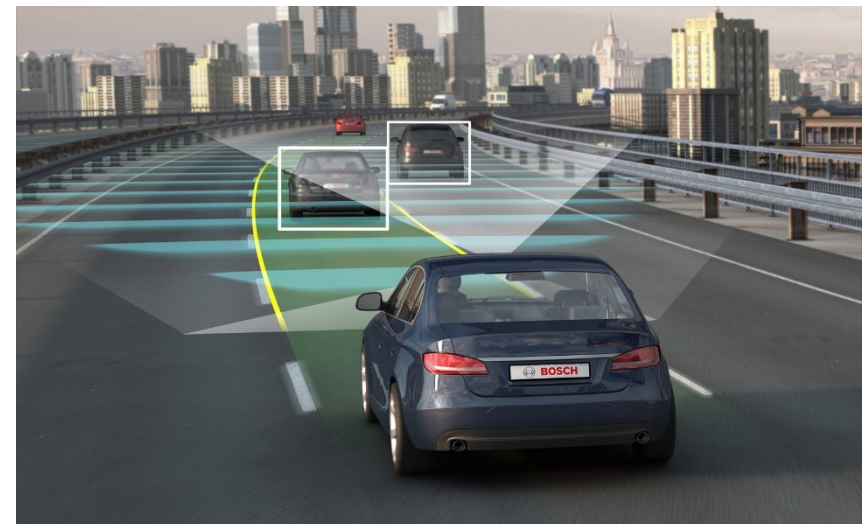
Fig. 22 - Vehicle Technology Trends

Period	Analysis
Now – 2021: Integrating parking payment into vehicles	Some drivers already use smartphones to locate car parks and there are an increasing number of apps that can be used for reservation and payment of parking. With certain exceptions, e.g. station parking, these payment apps are not widely used by customers and the app providers are trying to capture market share by making deals with individual operators (including local authorities) who pay for the service. This is predicted to change in the period to a model where apps are consumer focussed, aimed at providing the best parking experience and will be capable of identifying and paying for parking in many areas. At the same time most operators will need to be digitally enabled to ensure they are 'visible' to these parking apps. Vehicle manufacturers are now including similar functionality in their in-car information and navigation systems. By 2021 over 30% of all cars are likely to be 'connected' and drivers will expect their car or app to find and pay for their parking automatically.
2022 – 2024: Introducing autonomy	The major vehicle manufacturers have announced that they will release vehicles with autonomous capability from 2021. The exact extent of this capability is yet to be announced; however, it is very likely that Autonomous Vehicle Parking (AVP) will be one of the functions provided. The necessary technology is still in development and it is unclear whether vehicles will be able to negotiate their way around any car park or whether they will only function in car parks that have installed specialist equipment. If no such equipment is required then operators may be faced with drivers dropping off and collecting their cars in service roads and other unauthorised areas, potentially causing congestion at busy times. If it is agreed that a car park should accommodate AVP, then some adaptation will be required from around 2024.
2025 – 2030: Vehicles park themselves and handle the payments	The majority of vehicles will be connected, with significant numbers of users delegating to their car the task of finding, reserving and paying for parking and then guiding them to the space. Cars with AVP will become common, bringing new challenges to parking operators as a large number of car users use "drop-off" and "pick-up" areas instead of accessing their vehicle in its parking space.
Beyond 2030	Cars will gradually acquire more autonomous features during this period, however it seems likely that 'truly' autonomous vehicles i.e. those that need no driver intervention under any circumstances will not appear in any numbers before 2030 – 2040. There may also be a significant change in the way these vehicles are owned (with significant numbers of customers hiring vehicles for periods of use rather than owning their own car). Most predictions however relate to city based scenarios. No studies focus on semi-rural locations or take the needs of specific users (such as caravan users) into account when considering autonomous cars, their ownership and use. From a parking point of view, the introduction of autonomy may result in the need for fewer car parks (as users share vehicles they will be less likely to be parked) or car parks that resemble storage areas (i.e. with no walkways and fewer aisles) that can contain a higher density of vehicles. However, based on the current studies these questions would not be key to the Council's policies until the 2040s at the earliest.

Delivery Plan

4. Delivery Plan

4.1 Action Plan

An action plan will be developed that will be reviewed and updated on an annual basis.

The action plan will cover a three-year period. Every year it will be rolled forward one year and updated accordingly.

Actions are directly linked to the objectives and priorities in this strategy to ensure a clear link between activities and desired outcomes for Aylesbury.

4.2 Metrics

Fig. 23 provides a summary of the metrics that will be used to monitor the parking service in Aylesbury Town Centre. Targets will be set following the first year baseline.

Fig. 23 – Metrics

Indicator	Summary	Frequency
Customer satisfaction survey	Survey of customers and town centre stakeholders regarding parking	Every two years
Annual condition audit	Review of 11 AVDC car park condition as per Fig. 3.0	Every two years
Conversion of penalties notices	% conversion of penalty notices. Baseline in year one	Annual
Income – tariffs	Tariff sales	Annual
Income – non-tariff	e.g. rental income	Annual
Parking surplus reinvestment – Aylesbury Town	Annual investment (£)	Annual
No. of cycle parking bays	Formal cycle parking bays	Annual
No. of EV charging bays	Formal bays	Annual

Objectives → Action → Metrics