Halifax Town Centre Parking Strategy

August 2017

Calderdale Council

Policy Context

Halifax town centre needs a Parking Strategy to support the ambitions set out in the Halifax Town Centre Delivery Plan. The Parking Strategy complements the Calderdale Transport Strategy and aligns with wider transport and access improvements being delivered through the West Yorkshire plus Transport Fund.

It is cognisant of wider strategic objectives locally, regionally, nationally and globally. These include improving air quality, increasing physical activity, supporting economic activity and reducing our impact on the environment.

The strategy attempts to balance these competing objectives against a backdrop of significant capital investment and growth in and around the town. Technology and travel behaviour is changing; and we have a responsibility to respond proactively to that change to ensure we not only meet customer's expectations but that we operate our highways and systems as efficiently as possible.

Halifax Town Centre Delivery Plan (2014)

The Halifax Town Centre Delivery Plan has six objectives:

1. Unlocking sites to attract investment;
2. Attracting people to spend more time in Halifax town centre, creating vibrancy and buzz;
3. Providing commercial accommodation to support existing business and encourage growth;
4. Giving greater recognition to Halifax's heritage status;
5. Broadening Halifax's social and cultural offer; and
6. Providing space to support skills and education.

The Delivery Plan seeks to achieve these objectives through a series of spatial, economic, social and cultural priorities/projects that will enable Halifax town centre to realise its full potential. These priorities are categorised over short, medium and longer term timescales. The details of the Town Centre Delivery Plan projects are shown in Appendix A.

The Delivery Plan includes schemes to redevelop existing sites, to refurbish existing assets and to develop currently vacant development opportunities. The aim of the Delivery Plan is to prioritise investment focus in order to maximise benefits from committed and future regeneration schemes, stimulating further economic growth than would otherwise be achievable.

In order to realise its objectives and to underpin the viability of individual schemes, the Delivery Plan identified a set of specific transport and connectivity improvements as being necessary. These aim to:

- enhance the quality of arrival in Halifax;

- create a better pedestrian arrival within the town centre;
- frame and enable development opportunities within the town;
- provide a better bus/rail interchange and improve access to the railway station;
- reducing through traffic levels on Square Road/Winding Road to enable the enlargement of the town centre;
- facilitate easier way-finding around the key town centre attractions;
- allow better penetration of the town centre by active modes;
- provide a better balance of traffic between the western and eastern routes around the town centre to reduce severance; and
- improve connectivity around the railway station, between Northgate and North Bridge, around Commercial Street/Fountain Street junction, at the bus station, and at Square Road/Charles Street/Winding Road.

While supporting measures to improve public transport and active modes in the town centre, the Delivery Plan acknowledged that *'parking within the town centre is, and will remain, an important consideration for businesses, residents and visitors.'* Accordingly, the Delivery Plan recommended a study of car parking and servicing in Halifax town centre *'to ensure that proposals in the Delivery Plan do not adversely impact upon car parking and servicing arrangements and to ensure that any additional measures necessary with regard to car parking…are identified and included in the relevant scheme packages.'*

Fore Study (2015)

Following the recommendation in the Delivery Plan a study was undertaken by Fore Consulting between 2014 and 15. The final report was issued in November 2015. The Fore study contained

- A review of the provision and use of off-street and on-street car parking, using data supplied by Calderdale Council and surveys carried out in Halifax in September 2015;
- An analysis of future town centre car parking supply and demand;
- An examination of options for future car parking arrangements; and
- A discussion of procedures for delivery and monitoring.

This Strategy is informed by the data and analysis contained in the Fore report. In particular, the sections on the current and future supply of and demand for car parking in Halifax town centre are based on data in the Fore Report. It should be noted that this data was collected in 2015.

West Yorkshire plus Transport Fund

Many of the transport and connectivity improvements identified in the Halifax Town Centre Delivery Plan will be delivered through the West Yorkshire plus Transport Fund (WY+TF) to unlock sites by tackling transport and access issues that currently compromise commercial viability.

The A629 Halifax to Huddersfield Corridor Improvements is Calderdale Council's flagship WY+TF scheme, prioritised for early delivery within the programme. Phase 2 of the A629 scheme responds to the agenda set out in the Halifax Town Centre Delivery Plan by delivering the spatial and connectivity improvements needed to support the Delivery Plan's goals.

The scheme will deliver:

- A new Eastern Gateway and improved Rail Station Access
    - creation of a modified eastern route for vehicular traffic enabling the expansion of the town centre to the east and improving access to development sites at the eastern gateway in addition to improving pedestrian linkages to the railway station and wider town centre attractors.
- A Northern Gateway and Bus Interchange improvements
    - improve bus accessibility to the expanding eastern side of the town centre through creation of a 'bus box' around the town centre core, facilitated by the diversion of through traffic away from the core area via the existing western and new eastern orbital routes;
    - Bus interchange facilities at the railway station to enhance public transport connectivity; and
    - improve public realm at the northern gateway to the town centre and along Market Street, which will benefit from a reduction in vehicle movements.
- Southern/Western Gateways
    - Reconfigure traffic signalled controlled junctions along the western route around the town to improve the flow of traffic, reduce congestion and increase accessibility for pedestrians and cyclists.
    - enhance public realm at the western and southern gateways, overcoming the severance effects of existing highway infrastructure; and

The high level implications of scheme are set out in Appendix A.

Implications for car parking

The Halifax Town Centre Delivery Plan and the West Yorkshire Plus Transport fund scheme will impact the availability of and accessibility to some car parking in the town centre in respect of both supply and demand:

- A small amount of land required to deliver components of the West Yorkshire Plus Transport fund proposals for Halifax Town centre will effect some existing parking availability;
- the new developments will alter the demand for particular types of parking in certain areas;
- access routes to existing car parks will be altered;
- new parking may need to be offered as part of new developments;
- certain areas of the town centre will become less suitable as a location for parking;
- improved provision for buses and the enhancement of facilities for walking and cycling will cause some car users to switch to sustainable modes; and
- demand for car parking among the users of certain new developments will be strong and there will be spikes in demand at certain times of the year, such as during events.

Calderdale Transport Strategy (CMBC, 2016)

The Calderdale Transport Strategy articulates a high level transport strategy for Calderdale up to 2032, mirroring the period of the Local Plan. The Strategy outlines the principles the Borough must follow in order to promote economic growth, improve connectivity, capitalise on national and regional opportunities, respond to social and technological change, and enhance the environment. This entails a departure from traditional thinking on the role of transport in the Borough and the relationship between transport and development. It encourages the Council and its partners to embrace new approaches to public transport, active modes and smart technology.

The Calderdale Transport Strategy outlines the developing social, technological and economic trends that will influence the need for car parking in town centres up to 2032. The Strategy emphasises the relationship between parking policy, the built environment, sustainable transport and economic growth:

> *In urban areas, planners and developers are increasingly recognising that space once devoted to moving and parked cars can be put to more productive use such as public realm, green space, housing or retail. Several large cities have introduced levies on car use and car parking in central areas with revenues used to fund public transport. While large cities are taking the lead in controlling parking and car use, smaller cities and towns are learning that effective management of car use increases*

competitiveness by releasing space for new development and enhanced public realm.

In order to enhance connectivity in Calderdale, the Strategy advocates the development of *'parking policies for town centres that ensure land is used efficiently and promote sustainable travel, while maintaining appropriate levels of car access.'*

Car parking must be provided as part of a mixture of transport options, which together support economic growth and enhance quality of life for Halifax residents and workers. Appropriate levels of car parking are a key part of this set of options to maintain the appeal of Halifax to investors and visitors.

Another key objective of the Calderdale Transport Strategy is to increase levels of cycling by 100% by 2026. In 2011, only 1% of Calderdale residents commuted to work by bicycle. To make cycling more attractive, the Calderdale Cycling Strategy supports the development of cycling infrastructure. An important component of cycling infrastructure is cycle parking. There should be sufficient cycle parking in Halifax town centre to meet the needs of an expanding number of cyclists.

The Calderdale Transport Strategy aims to use transport interventions to improve air quality. Supporting the use of electric vehicles (EVs) by providing charging points can help to reduce local air pollution. The use of EVs in Calderdale is currently low because EV users lack confidence that they will be able to charge their vehicles in the main settlements in the Borough.

Wider policy considerations

The Parking Strategy must also be consistent with the aims of regional and national policies.

West Yorkshire Transport Strategy (WYCA, 2016)

The WYTS describes the over-provision of car parking in central areas a key transport challenge: *'Car dominance – in town and city centres due to a lack of orbital road capacity to remove through traffic, combined with past prioritisation of car parking in centres.'* Another transport challenge relates to the under-provision of car parking for users wishing to change to sustainable modes: *'Insufficient car parking at rail stations – and limited bus park and ride options to our centres.'*

Consequently, the WYTS supports the re-allocation of space from vehicle use to pedestrian and cycle in certain high profile locations, new orbital roads to remove traffic from central areas, additional railway station car parking and the provision of new park and ride facilities to serve city and town centres.

While these goals are applicable to Calderdale in the medium to long term, park and ride is unlikely to be viable in the short term in Halifax. This is because the car currently offers more reliable, faster and more cost-effective journey times than bus services. Car parking in Halifax town centre is not sufficiently expensive to make park and ride sites attractive.

However, consistent and effective policy interventions can change these conditions over the next five years by improving journey time reliability on bus services and reducing bus journey times on key corridors. This will begin with the significant investment proposals funded by the WY+TF. This includes the multi-modal enhancement schemes for the A629 and A641 and, as part of the Corridor Improvement Programme, investment in the A646 and A6036.

National Planning Policy Framework (NPPF)

Chapter 4 of the NPPF lays down guidance regarding parking in town centres:

> *Local authorities should seek to improve the quality of parking in town centres so that it is convenient, safe and secure, including appropriate provision for motorcycles. They should set appropriate parking charges that do not undermine the vitality of town centres. Parking enforcement should be proportionate.*

This supports the development of a balanced and evidence-based parking policy which recognises the needs of different groups of users. Running through the NPPF is a presumption in favour of sustainable development. This implies that the provision and regulation of car parking must help to improve the appeal of sustainable modes so that developments do not depend on car access.

Goals

Drawing on local, regional and national policy, the Halifax town centre Parking Strategy will:

- provide a major new parking facility in the town centre, outside of the bus box potentially on the current swimming pool site on Huddersfield Road.
- improve the user experience by ensuring Halifax town centre has a modern parking system that is efficient, provides useful real-time information direct to the user, reduces circulation and enables the Council to understand the changing needs of the user through the collection of data;
- ensure there is sufficient car parking, of the right type and in the right place, for those who cannot reasonably be expected to use other transport modes to reach the town centre, including disabled people;
- manage the demand for car parking by regulating the supply to grow demand for sustainable transport;

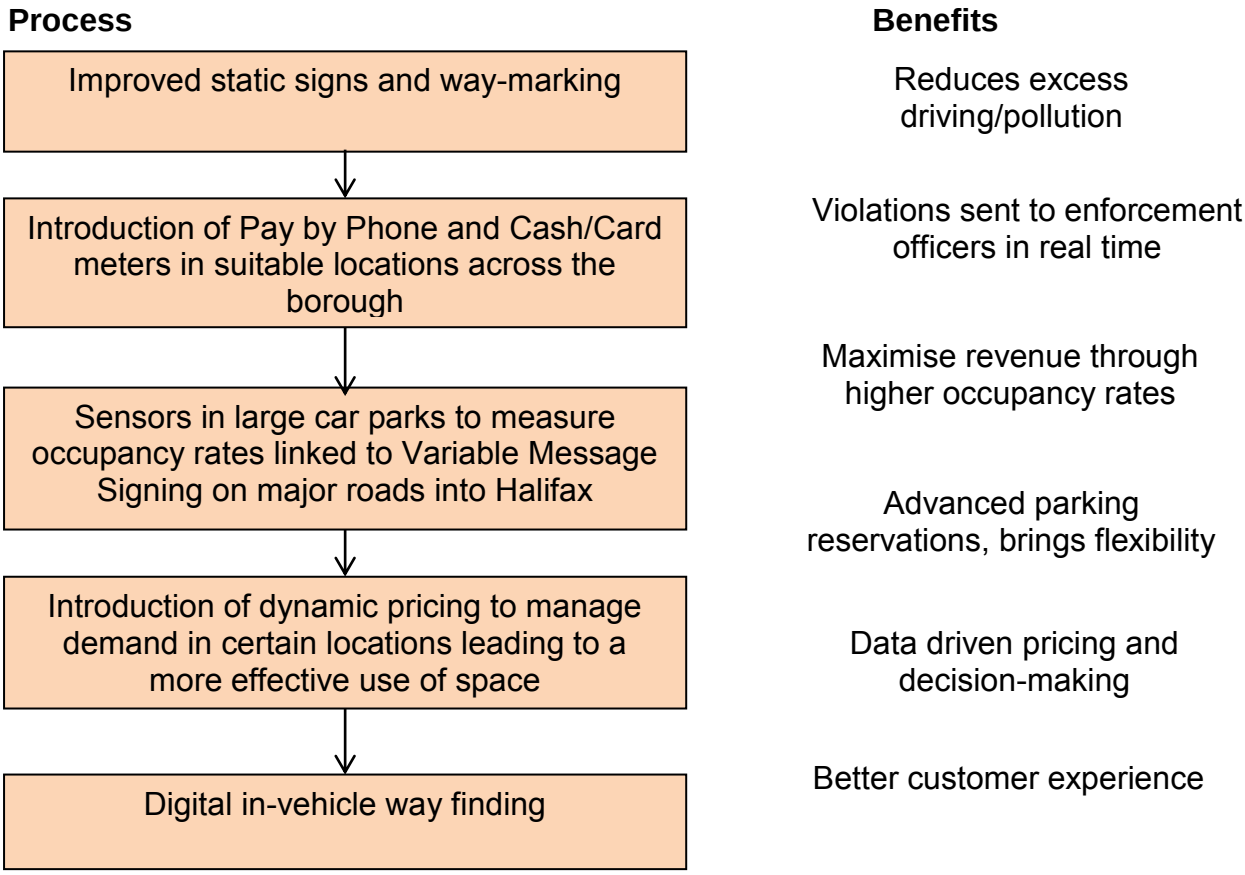
- ensure there is sufficient land in the town centre for economic regeneration, improvements to public realm and the provision of enhanced walking and cycling facilities;

- ensure the Council can respond rapidly to changing social and economic conditions;

- balance the role played by car parking in maintaining the competitiveness of the town centre against the need to support other economic, social and transport goals; and

- support parking for sustainable and low emission modes of transport, such as electric vehicles (EVs) and bicycles.

The process in delivering this strategy will include:



Current Position

Parking typologies

The Parking Strategy is required to determine how much parking is needed and where it should be located. The Strategy distinguishes between short, medium and long stay parking, between on-street and off-street parking, and between permanent and temporary off-street parking.

The Council has collected data on supply of and demand for car parking in Halifax town centre. This data is summarised in Appendix B. This section summarises the key points that are pertinent to the development of this Strategy:

Existing Supply

- The vast majority of car parking is long stay, off-street parking and a majority of that supply is privately owned.

- Most off-street parking is surface parking, with one quarter provided in multi-storey facilities. Of that surface parking, the vast majority is permanent parking: less than 20% is temporary.
- Off-street car parks are mainly located on the eastern and northern side of the town centre, outside the proposed Bus Box. Within the proposed Bus Box, off-street provision is mainly short and medium stay.
- There are only two public EV charging points in Halifax town centre.
- Secure and sheltered cycle parking in Halifax town centre is limited.
- There are 30 on-street and 38 off-street disabled parking spaces in Halifax town centre.

Existing Demand

- On average, there is 25% spare capacity in Halifax town centre across all spaces.[1]
- The publicly accessible car parks on the Eureka! site have a combined vacancy rate of 65%. However, it is important to note that occupancy levels in the Eureka! car park very significantly throughout the year: demand rises significantly in school holidays and at certain weekends. Excluding the Eureka car parks, the level of spare parking capacity in Halifax town centre is 20%.
- Occupancy rates in council off-street car parks are greater than in private off-street car parks. Private off-street spaces cater for users who are prepared to pay a premium for the location and quality of facility.
- On-street occupancy rates (87%) are higher than rates in private off-street car parks (65%) but lower than rates in council off-street car parks (96%). The council's pricing policy for on-street parking aims to achieve a higher level of turnover by charging higher prices than off-street car parks.
- There is anecdotal evidence that car users spend time searching for desired on-street parking spaces in the inner zone, which contributes to congestion.

Future Position

Demand for car parking is influenced by a number of inter-related factors, including:

- housing and employment growth throughout Calderdale;
- commercial and cultural development in the town centre;
- the provision of sustainable transport modes; and
- the cost, location and supply of car parking.

By understanding the relationship between these factors, the Strategy will shape the demand for car parking in the long term to minimise the need for new provision. The Strategy recognises that simply providing additional car parking is rarely an adequate solution to the transport and economic challenges the town centre faces.

Analysis of likely impact of committed and planned Town Centre Delivery Plan projects on town centre parking indicates that, if all of the Delivery Plan projects are delivered as expected, the vacancy rate would fall to an average of just below 20%. In peak months, the vacancy rate could dip to just over 15%. For the data on which these calculations are based, see Appendix C.

By managing car parking and highway assets more efficiently and using new techniques, it should be possible for the town centre to function effectively with only 10% (or less) spare capacity across all spaces. The interventions that will facilitate more efficient management of town centre car parking will be discussed in the Delivery section. It is critical that sufficient car parking for disabled people in the town centre is retained.

Delivery of the West Yorkshire Plus Transport Fund A629 scheme and the development opportunities identified within the Halifax Town Centre Delivery Plan will remove some existing parking provision and generate new demand for parking. However, the reduction in parking supply will be offset, to some extent, by those Delivery Plan schemes which will enhance public realm and sustainable transport, thereby effecting modal shift away from the car. Moreover, new parking may be delivered as part of the Halifax Town Centre Delivery Plan projects (such as the Eastern Gateway sites and the railway station) which will help to accommodate new demand.

Currently, there is sufficient land to replace all of the parking that is likely to be lost as a result of Halifax Town Centre Delivery Plan projects, even if only one third of the supply of spaces identified as being deliverable on these sites are developed. This analysis is based on the data presented in Appendix C.

There are currently a number of sites where additional parking spaces could be provided. These sites are shown in Appendix C. These sites will enable the council:

1. to make strategic decisions on when to grant permission for new car parking as part of new developments or for rail users; and
2. to work pro-actively with partners in the private sector to deliver strategically necessary parking provision as part of new development schemes.

Where it is essential to provide new parking to facilitate Delivery Plan projects, this should be located on the south and east sides of the town centre, especially for short and medium stay parking, close to the key attractors but outside the Bus Box.

Demand for cycle parking and Electric Vehicle (EV) charging points is likely to increase in the next decade as the uptake of EVs increases and cycling levels rise following the delivery of the transport and cycling strategies. However, the rate of increase, in both cases, will be constrained by the level of provision for cycle users and EV users in Halifax town centre and Calderdale more generally. This must expand in line with the goals of the transport and cycling strategies.

The Strategy

Strategic Principles

Car parking is a means to an end. It exists to support the needs of residents, businesses and the wider economy. The Strategy is underpinned by six core principles which articulate the purpose of car parking.

i) Car parking should enable access to employment, public services, retail and leisure destinations

The parking Strategy recognises that car parking performs a valuable economic and social function in Halifax. It allows businesses to trade, it allows employees to access their workplaces and it allows customers to reach businesses. It also allows citizens to reach education and healthcare, and to participate in the social and cultural life of the town. Parking policy should ensure spaces are available in the right location for those who cannot reasonably use other modes and it should limit the time users spent searching for car parking which contributes to congestion. This means that:

- Parking must be available for different categories of users. Some users require parking for short periods located in close proximity to their final destination, while other users need parking for longer periods but are happy to walk further to their final destination without influencing their decision to come to Halifax.
- There should be adequate parking for users who cannot reasonably be expected to use other modes, or for whom alternative modes would be substantially less efficient. This includes business visitors, disabled people, older people and residents of settlements with limited public transport services. As far as possible, policy should ensure that valuable parking spaces are not used by users who do not have a pressing need to use them.
- Multi-storey and decked car parks should be located near to key attractors and should be easily accessible from the main radials to minimise the volume of cross-town vehicle movements.
- The price of council owned car parking should encourage an appropriate level of turnover in relation to the location of the car park or parking space.
- Car users should have access to information to enable them to locate parking spaces quickly and efficiency, minimising circulation time.
- Sufficient car parking spaces should continue to be provided for disabled people.

ii) Car parking should help to facilitate regeneration

Car parking occupies scarce urban land which could be used for a variety of other economic and social purposes. In order to cultivate growth in Halifax town centre, it is necessary to derive the maximum economic and social benefit from land in the town centre. As regeneration progresses, the pressure to take full advantage of the value of town centre sites will increase. This means that:

- There must be a sound justification for land to be used for parking rather than other competing uses. This will ensure that land is available for other important functions, including housing, retail and office developments, public realm, and leisure and cultural facilities.
- Parking facilities should use land as efficiently as possible. New car parks should be provided as part of new developments, rather than as standalone facilities. Multi-storey or decked structures are preferable to surface car parks.
- Temporary car parks should be discouraged. They will only be supported in exceptional circumstances when there is abundant evidence of the need for such a facility in a particular location.

Users are more willing to pay higher parking charges or use alternative modes of transport when town centres are vibrant and attractive places. The Town Centre Delivery Plan and the A629 scheme will leverage investment in public realm and transport to attract private investment in the town centre by making the town more accessible and attractive. This stimulates a virtuous cycle where investment stimulates footfall which attracts further investment and this generates tax revenue for additional public investment. This results in fewer vacant sites and greater increases the demand for public transport to the town centre. This means that:

- The management and provision of parking should help to create the right conditions for investment and should ensure land is available for development.
- A balance should be struck between the avoidance of excessive parking provision, which could erode the vitality of the town centre, and the need for new development to be commercially viable, for which it may require car parking.
- There should be sufficient flexibility to enable developers to vary the quantum of parking in a scheme to strengthen a business case in response to fluctuations in the property market.

iii) Car parking should support the growth of sustainable transport modes

There is a clear relationship between the availability of parking and the use of sustainable modes. If car parking is too plentiful or too cheap, car owners have little incentive to use sustainable transport (even if public transport is accessible and high quality). Declining patronage makes it more expensive to operate an effective and comprehensive public transport system and increases need for public subsidy to retain a public transport network. Cuts to service levels due to falling patronage adversely affect the mobility of public transport users. Meanwhile, increased use of cars exacerbates congestion on the roads, which makes journey times longer and less reliable for all road users, and increased use of high emission vehicles reduces local air quality. This means that:

- The availability and price of car parking should be regulated to encourage the use of sustainable transport modes.
- In managing the supply and cost of car parking, there must be an incentive for car owners to use public transport. This can support the growth of sustainable modes and help to improve air quality.

iv) Car parking should ensure Halifax remains competitive

As the Calderdale Transport Strategy explains, Halifax can learn from best practice in parking policy from cities such as Leeds, Manchester and York. However, it is not possible to transplant wholesale the parking policies from these cities to Halifax town centre. This is because Halifax town centre:

- does not yet enjoy a comparable standard of public transport services;
- does not have such a high concentration of employment;
- has more land available for parking relative to its size, which reduces the cost of town centre parking for users;
- has a less congested road network overall (notwithstanding pockets of congestion that do exist); and
- has a large rural hinterland, which means public transport cannot meet journey requirements as efficiently as it can in these larger, denser cities.

Cities such as Leeds and York have developed park-and-ride systems to reduce the need for car parking in the central areas of these cities. For the reasons cited above, it would be more challenging to construct financially cost-effective park-and-ride services in Halifax. Currently, the car usually offers more competitive and reliable door-to-door journey times in Halifax than it does in Leeds and York. Consequently, the role of car parking in Halifax town centre will differ to larger cities in the North of England. Halifax requires a bespoke parking policy to respond its particular needs and the specific market conditions.[2]

Locally, Halifax competes with Huddersfield and Bradford for consumer spending, employees and investment. The Strategy must be mindful of parking policies of neighbouring centres to ensure Halifax is not disadvantaged. This need not imply a "race to the bottom" in which other objectives are abandoned and the towns compete to provide the cheapest parking. The evidence base does not support the view that increasing the price or reducing the supply of parking necessarily erodes the appeal of urban centres.[3] Neighbouring local authorities should co-ordinate their policies so that all centres can pursue a measured approach to car parking that enables each to exploit their own qualities and, in doing so, attract residents, workers and visitors. This means that:

- Decisions on the supply and price of parking should consider the particular position of Halifax in the Leeds City Region and the North of England.
- Decisions on the supply and price of parking should be innovative, dynamic and based on the long term goal of enhance the appeal of Halifax town centre so it can compete with other City Region settlements.

v) Car parking should not place a burden on council finances

Generating surplus revenue is not the primary purpose of charging for publicly owned parking, but this revenue is needed, in the first instance, to ensure that the council's parking service does not require financial support. Any surplus income generated from on-street must be ring-fenced for transport purposes, while surplus income from off-street parking can be used in other budget areas. This means that:

- The Strategy will help the council to continue to run a financially sound parking service,
- Through the use of new technology the Strategy will help the council to reduce the operational and management costs of its car parking service. This is explored in the Delivery section.

Having elaborated the core principles, the Strategy now explains the implications of the Strategy for the provision and management of car parking in Halifax town centre.

vi) Parking provision should meet the needs of all users

The Strategy recognises that EV users and cycle users have particular requirements. EV users need access to public charging points to ensure they have the confidence to use their vehicles. Currently, the limited EV charging provision in the town centre deters EV users from travelling to Halifax.

- The Strategy will encourage all car park operators to provide appropriate EV charging points in public car parks for EV users
- The Strategy will encourage public and private bodies to provide secure, sheltered and convenient parking for cycle users.

Bicycle and motorcycle users require secure, convenient and, ideally, sheltered cycle parking.

Providing high quality cycle provision in Halifax town centre will indicate that cycle users are welcome and it will encourage non-users to begin using cycles for trips.

This means that:

Further work is needed to understand the needs of motorcycle users, but it is expected that motorcycle parking will be provided in existing off-street car parks and in some on-street spaces.

Strategy for Locating Parking by Type

Short and medium stay

All short stay parking and the majority of medium stay parking should be continue to be located on the edge of the core retail area, outside the bus box.[4] These car parks should be easily accessible from the key radials. This will enable shoppers and business visitors to gain easy access to the town centre, while retaining the land inside the bus box for other uses. Disabled parking spaces should be located as close to the town centre core as possible where the majority of attractors are located. Sufficient disabled parking should also be provided close to attractors on the fringe of the town centre.

Car parks will be evenly dispersed around the edge of the town centre to enable traffic to access car parks soon after exiting the network. This will reduce the need for vehicles to circulate searching for parking spaces which conflicts with bus, cycling and pedestrian movements. This is in line with the Urban Traffic Management Control Strategy which is being developed in parallel with the West Yorkshire Plus Transport Fund A629 scheme.
With certain exceptions, on-street parking should be designated as short or medium stay:

- In the inner zone, on-street parking should be predominantly short stay parking to increase the turnover of users in these highly valuable parking spaces. A quantum of these spaces must be reserved for disabled users.
- In the outer zone, where demand is less intense, more on-street parking can be designated as medium stay.

- It might be appropriate to designate on-street parking as long stay in locations where there is evidence that there is no demand for short or medium stay parking. However, consideration might also be given to using this road space for other purposes.

Long stay

Long stay parking should be located further from the core to avoid detracting from other uses and to enable vehicular access from the eastern and western orbital routes. This means that vehicles will be intercepted on the network before they reach the town centre core.

- On the western side of the town centre, car parks should be located west of the A629.
- On the eastern side, car parks should be located close to the proposed eastern orbital route along Church Street, Cripplegate and Charlestown Road.

The approach to long stay parking must balance the need to encourage commuters to use sustainable transport where this is an option with the need to ensure employees can access their workplaces. Commuters will tolerate a longer walk to their final destination, but this slight inconvenience may encourage commuters making shorter trips to work by car to switch to sustainable modes where it is available. Public transport, by contrast, should be able to convey commuters more directly to their place of work. Land closer to, or within, the core area for long stay parking should be prioritised for commercial development, short and medium stay parking, or other high value uses. For these reasons, it is widely accepted that the distance between long stay car parks and employment locations can be significantly greater than the distance between short stay car parks and shopping or leisure locations.

Residential parking

Limiting the supply of long stay parking in the town centre core may displace commuter parking from the core into adjacent residential neighbourhoods as commuters seek free on-street, long stay parking further afield. The Strategy prioritises the ability of residents to access on-street parking spaces close to their residences over the needs of commuters. In light of this and the Local Plan developments to increase housing supply in the town centre, the policy on residential parking zones will be reviewed periodically and zones will be designated or extended where there is evidence of a commuter parking problem in residential areas.

Strategy for the Supply of Parking by Offer

On-Street Parking

On-street parking should continue to meet the needs of shoppers, disabled people and business visitors who have a need to park very close to their final destination, usually for short periods of time. This means that:

- Pricing rates for on-street parking should encourage a rapid turnover of users, particularly in the inner zone, to ensure it is available for those who need it.
- It is not appropriate to designate long stay-street parking in the inner zone.
- As a premium parking offer, on-street parking should be more expensive than off-street car parks for comparable periods of time; this also helps to ensure that off-street parking is used appropriately and remains commercially viable.

On-street parking in the inner zone requires cars to penetrate the bus box, which can cause conflicts between cars and pedestrians, buses and cyclists. The council already operates a 'zones and loops' approach to traffic management which limits through vehicle movements in the town centre; this will be reviewed as part pf the A629 Phase 2 scheme. The result is likely to be that on-street parking in the central area will only be accessible from one direction.

In the inner zone, the quantum of on-street parking will be reduced to free up space for public realm improvements, cycling provision and commercial development. It is important that suitable alternatives are available for disabled users. Any revenue loss for parking providers, including the council, in the town centre core will be offset by the economic returns to be derived from creating more attractive spaces that attract visitors, businesses and investors to the town.

Numerous studies from around the world have shown that removing on-street parking rarely has a negative effect on adjacent businesses (in fact, it often has a positive impact on trade) and business owners often over-estimate the proportion of their customers who arrive by car.[5] In Halifax town centre, the vast majority of people who use the town centre core do not park on-street in the inner zone. They travel by bus, foot or bike, or they park in an off-street location or on-street in the outer zone. Improvements in public realm and cycling provision often increase footfall, which benefits business.

Strategy for Off-street Parking

Most new parking should be provided in off-street locations because there is insufficient space on-street to meet the needs of the town centre and as much on-street space as possible should be re-allocated for other transport uses and public realm. In line with the introduction of controls on cross-town movements, off-street car parks should be located around the edges of the town centre to cater for users arriving from different directions.

New on-street parking should only be provided to serve new developments and transport interchanges and the number of spaces provided should follow the maximum parking guidelines set out in the Local Plan. There will be an in-principle objection to any applications for standalone long-stay off-street car parking, both temporary and permanent in order to promote sustainable modes.

It is important to distinguish between the two types of off-street car parking.

1) Permanent Car Parks

Since the property market is difficult to predict, the Strategy does not specify precisely where, when or by whom permanent car parks should be provided, but it encourages landowners, developers and the local authority to deliver such facilities when opportunities arise, provided they meet the conditions outlined above. Appendix C indicates those sites where permanent facilities could be provided in the future based on land that is currently available. Permanent car parking facilities should seek to cater for specific segments of the market, such as commuters or shoppers.

2) Temporary Car Parks

There will be a presumption against the provision of temporary car parks because they are not consistent with the goals of the Transport Strategy. Applications for temporary car parks must make a strong case to be supported. There may be a case for a temporary car park on a short term basis if an applicant can demonstrate that a development scheme on the site is forthcoming with a strong degree of certainly and the applicant can demonstrate that the car park provides an essential short term revenue stream. Temporary car park consents will be reviewed at least every two years.

Strategy for Seasonal and Event Car Parking

There is seasonable variation in demand for parking. These trends are captured in council car park income trends for parking across the town centre. For example:

- Eureka! experiences intense demand for parking during the school holidays when school age children visit..
- Events at the Square Chapel and the Victoria Theatre generate spikes in demand for parking.
- The Piece Hall will host large events with capacity for several thousand people which will have a significant impact on demand for parking, but this will vary by time of day and time of year.

The Strategy discourages organisations from trying to provide sufficient dedicated parking on site to meet the highest possible levels of demand. To do so, would mean a large proportion of the parking spaces would sit idle for much of the year, which would constitute an unproductive use of town centre land, which could otherwise be used to support regeneration. Instead, the Strategy encourages organisations that experience varying demand to work with other parking providers to explore smarter approaches to meeting seasonable and event demand.

To meet seasonal and event needs, the Strategy proposes that:

- Organisations that experience seasonal or event-related surges in demand for parking should meet this additional demand by reaching agreements with the owners of car parking on nearby sites, which are likely to have sufficient

surplus capacity to absorb the additional demand. Many car parks that are heavily used by commuters and shoppers during the working day (such as Dean Clough) are under-used in the evenings and at weekends.

- When these car parks are used to provide overflow provision for particular organisations, they should be properly way-marked and highlighted in marketing literature. In some circumstances, it might be necessary to serve overflow car parks with a circulating bus.
- Organisations that experience high levels of seasonal or event-related demand should produce a Parking Plan and specific Event Management Plans, which will set out how they intend to accommodate higher levels of demand in an efficient and sustainable way.
- Where events are held during office hours in the working week or when seasonal demand coincides with normal working hours, it might be more challenging to identify surplus parking capacity in the town centre to accommodate the rise in demand. However, such scenarios – such as a weekday afternoon in summer when multiple large events are held simultaneously – will be rare and do not, in themselves, justify the provision of additional permanent parking provision on land that could be used for other purposes.

Further work is required to understand the particular long term needs of the Piece Hall, Lloyds Bank and Eureka! This should form an Addendum to this Strategy in due course.

Strategy for public electric vehicle charging points

The Council will support the provision of an increased number of EV charging points throughout the town centre. All car park operators will be encouraged to provide EV charging points in existing and new car parks. This will give EV users the confidence to use their vehicles in Halifax. Charging points should be tailored to likely duration of stay: 3kW and 7-22kW charging points will be appropriate for medium and long stay car parks, while 43kW Rapid AC and DC charging points will be suitable for short stay car parks.

Strategy for public cycle parking

Public cycle parking in Halifax town centre should be secure, well-located and, where possible, sheltered. There should be short and long stay public cycle parking, which should be designed to suit its purpose. Cycle parking should be provided on-street, in existing and new car parks and in other locations on sites throughout the town centre. Cycle parking should be spread across the town centre to ensure that all locations are well-served. Particular locations, such Market Street, the Piece Hall and the railway station should have larger quantities of cycle parking.

The Strategy supports the key principles for designing cycle parking set out by Sustrans.[6] Cycle parking in Halifax town centre should:

- Be accessible and convenient – it should be located as close as possible to the entrances of key attractors, with adequate space for storing and retrieving bikes. Steps and long detours should be avoided.
- Have good natural surveillance.
- Be secure against theft and vandalism.
- Have stands that allow the bicycle frame *and* at least one wheel to be locked to the stand, and which are suitable for a wide variety of bike shapes and sizes.
- Be well-lit, with CCTV and a covering, if it is intended for long stay users.
- Be free of charge as far as possible.
- Have sufficient capacity for peak use and future growth (Calderdale aims to increase cycle use by 100% by 2026).
- Be clean and well-maintained.

The provision of cycle parking in Halifax town centre should seek to follow these principles as far as possible.

Further work is required ascertain the current supply of cycle parking in Halifax town centre and identify where additional cycle parking, of different types, should be provided and who should provide it.

Example :1 car park space provides cycle parking for several bikes.

Implementation

To deliver the Strategy, the Council will:

1. Regulate parking providers to follow the principles set out in the Strategy, particularly when proposals for new car parks are prepared. Conditions will be attached to grants of planning permission to help to deliver the policy. This could require car park providers to provide a certain quantum or type of parking, manage access to their facility, or invest in public realm and walking routes.
2. Issue licences to temporary car park operators if a strong case is made, though there will be an in-principle presumption against the provision of temporary car parks. Where necessary licences will be issued with conditions attached and these must be reviewed periodically. The Council will monitor operators to ensure these terms are followed.
3. Support the goals of this strategy through the management of council-owned car parks and on-street parking. This will include delivering a major new car park outside of the inner core. Council-owned car parks account for a diminishing proportion of the overall quantum of car parking, the council is the single largest owner of car parking and council car parks will remain a significant component of the overall offer for the foreseeable future. The price and size of council car parks influences the behaviour of private operators.
4. Ensure that car parks meet the needs of users by responding rapidly to market changes.
5. Work with organisations in the town centre that host events which generate a large number of trips to develop event management plans to identify how these special parking needs can be catered for by using existing parking provision throughout the town centre.
6. Work with partners in the town centre to ensure sufficient EV charging points, motorcyle and bicycle parking spaces are provided as the need for these increases.

Flexibility

To ensure the Strategy remains relevant, it will be updated regularly in response to changes in the economy, society and transport provision. However, it is important that the core principles are not altered in the absence of a robust evidence base. The Council must differentiate between systemic changes in the market or transport offer that demand that the Strategy is modified and minor changes that can be tackled by the existing Strategy.

In managing its own car parks, the Council cannot respond as rapidly to changing market conditions as private developers because it is required to consult with stakeholders and undertake rigorous scrutiny of proposed car parking measures. In the event of unexpected or fast-moving changes in circumstances, the Council must rely on its development control and licencing powers to ensure private providers are adhering to the Strategy. The Council will aim to respond more rapidly to market changes so that it can anticipate any problems and respond to them in their early stages, or capitalise on any emerging opportunities.

Infrastructure and Innovation

The Council will continue to explore how new infrastructure and technology can help the Council to:

1) Enable the car parking stock to be managed and monitored more efficiently;

2) Allow car parking to perform more effectively in meeting user expectations; and

3) Ensure that the development and management of car parking meets the Council's strategic goals.

Four possible interventions are summarised here.

Way-finding

Physical and digital way-finding reduces the need for spare capacity by facilitating the more efficient use of car parking supply. Way-finding will be used more extensively in Halifax town centre to:

- direct people to the most appropriate parking locations;
- encourage people to use orbital routes to access car parks sites at the key gateways to minimise the number of cross-town movements;
- reduce the number of vehicles crossing or circulating in the town centre core; and
- ensure the journey between car parks and the town centre is attractive and legible.

Way-finding interventions will include the use of

1. Basic signs, which indicate the location of car parks, the type of parking offered and the route to the car park;
2. Variable message signs (both fixed and portable) which are updated in real-time based on the number of spaces available in particular car parks;
3. Way-finding finger post signs and high quality, legible public realm between car parks and the town centre core, so car park users can easily navigate between car parks and their final destination; and

4. To facilitate digital way-finding, the Council should share data on the location of parking spaces, routes to parking spaces and the capacity of car parks (in real time) so that this data can be incorporated in travel apps.

Consideration will be given to how the town centre will transition from physical signs to digital in-vehicle wayfinding. While digital wayfinding is likely to become more useful in the future as more users adopt the in-car technology, in the interim period physical variable message signs will continue to have value.

Cashless Payment

Car park providers in Halifax town centre, including the Council, should adopt payment methods that are cashless. This would facilitate the option to pay by debit or credit card instead of cash. Consumers increasingly expect to be able to pay using these methods. It makes payment faster and more seamless and reduces the cost of cash collection.

Payment by phone

Car park providers in Halifax town centre, including the Council, should adopt payment methods that allow users to pay for parking using mobile phones and smartphone apps. These systems are provided by external providers. Payment by phone has been adopted by Kirklees Council and Leeds City Council.

This payment method has the following advantages:

- It is a seamless payment method for the user, who does not need to insert coins into a meter or handle parking tickets.
- Users benefit from greater flexibility in managing their parking session. Provided they do not exceed the overall time limit set by the parking provider, users can choose to pay for additional time remotely (within the limits set by the provider).
- Where the method has been introduced, long term costs for the parking provider are reduced because fewer payment machines are required and less cash needs to be processed.
- Several local authorities who have adopted the system have reported increases in revenue and recorded high levels of user satisfaction.
- With the appropriate software, parking enforcement can be aided by real time information on parking patterns.
- The pay-by-phone provider can offer detailed usage and payment data, which enables analysis of usage and payment patterns.

This payment method would support the delivery the goals of this Strategy by streamlining enforcement, reducing Council costs and facilitating digital way-finding.

Intelligent Parking Systems

In the longer term, the Council and private providers should assess the feasibility of investing in an intelligent parking system for off- and on-street car parks. Such systems can be comprised of sensors embedded in parking spaces, number plate scanners or mounted cameras.[7] These devices can monitor in real time the availability of parking spaces across multiple sites and the ingress and egress of users within sites. The data can be communicated to parking providers and users.

Intelligent parking systems can be used to manage demand, particularly at busy times, and reduce the time drivers spend searching for a place which causes congestion. This is particularly useful in scenarios where parking is in high demand when intelligent management can help to reduce emissions and congestion, and facilitate a rapid turnover of parking users.[8]

The data generated by the systems is useful for network managers who can monitor the utilisation and pricing of parking stock. This data can be used to inform the council's proposals for varying the price of car parking. Private car parking providers could adopt a dynamic pricing policy where prices change regularly in response to demand. This can help to promote a more efficient utilisation of car parks by incentivising users to use car parks where there is surplus capacity and ensuring that there is a higher turnover of users in car parks where demand is high.

Live data from the system can be communicated to enforcement officers allowing them to target particular vehicles, as opposed to checking large numbers of vehicles. This raises productivity levels among enforcement staff.

While intelligent parking systems require significant capital investment, these costs would be offset in the medium term by the extensive financial and transport benefits outlined above.

Future trends

The Council should research and monitor the social, economic and mobility trends that will influence the demand for car parking in Halifax town centre. These are discussed in the Calderdale Transport Strategy and summarised here.

- **Significant investment in sustainable transport provision**, including railway infrastructure and provision for cycling and walking, which will make these modes more attractive to a wider range of users.
- **Mobility as a Service** (MAS) describes a scenario where users pay a third party to provide transport services rather than purchasing transport vehicles.[9] MAS can take the form of app-enabled vehicle hire (provided by platforms such Uber) or on-street cycle hire (such as Santander Cycles). The appeal of MAS reduces the incentive for people to purchase transport vehicles. In the longer term, the expansion of MAS and the attendant decline in personal vehicle ownership may reduce the need for car parking.
- **Autonomous vehicles** (AVs) are likely to become a major transportation mode in the 2020s.[10] AV buses could reduce the cost of providing bus services in the long term which will make it more economically viable to provide bus services to rural areas and to offer more orbital services. Many AVs are likely to function as vehicles for hire, which will accelerate the growth of MAS and reinforce the trends discussed above. Hired AV will not require as much parking as driven vehicles because they will circulate on the highway between trips and spend a greater proportion of the day in use. Storing unused fleets of AVs is likely to require less space.[11] Each of these developments will reduce the need for car parking.
- **Electric vehicles** (EVs) are likely to grow in popularity exponentially in the next decade. The demand for EV charging points will increase significantly. While in the near future EV users might be satisfied with EV charging points in a proportion of car parks, in the medium term, they will expect to find public EV charging points in all public car parks. This will influence the design of car parks and require existing car parks to be retrofitted.
- **The continued expansion of town and city centre living** and the expansion of employment opportunities in large urban centres such as Leeds and Manchester will influence the transport choices of Calderdale residents and businesses. The growth of these large urban centres, which have well-developed rail links, will increase the proportion of people who can access key jobs and services without needing to own a car or use one for work trips.[12]

In light of these trends, it may be possible to maintain car parking supply at current levels despite increases in population, economic activity and trips. In the very long term, should these trends become entrenched, it might be possible to reduce the supply of car parking, releasing land for other uses.

Conclusions

1. Halifax town centre currently has sufficient car parking capacity to meet its needs. The key challenge is to ensure that the existing supply of car parking is used efficiently and in a way that supports the Council's wider strategic goals.
2. Parking capacity will be reduced following the delivery of the West Yorkshire plus Transport Fund A629 scheme However, in the next decade, there will be opportunities to replace this car parking and to increase supply where this is necessary.
3. On-street parking should be priced to facilitate a high turnover of users to ensure it is available for those who need it, especially in high demand locations.
4. Permanent off-street car parks in appropriate locations should cater for the vast majority of parking demand. Temporary car parks will not normally be acceptable and there will a presumption against temporary provision.
5. The Council should support the delivery of particular types of new car parks in appropriate locations to replace lost supply and support new developments where this is essential. There should be no new parking within the Bus Box; short and medium stay car parking should be located on the edge of the bus box; and long stay car parking should be situated further away from the Bus Box, accessible from orbital routes. Most new parking provision should be located on the southern and eastern edge of the town centre, close to significant developments, where parking provision is currently limited.
6. Decisions on car parking should strike a balance between the important economic and social functions of car parking and the need to promote sustainable transport, regeneration and public realm enhancements. The Council's approach to setting parking prices should be informed by data generated by intelligent systems.
7. The Council should monitor market trends, the development of sustainable transport and the emergence of new transport technologies in assessing future requirements for car parking.
8. Further work is needed to understand the impact of The Piece Hall on the balance between supply and demand in the town centre under various scenarios.

    a. Major events will be concentrated at weekends and evenings when commuter parking is low and there is a greater availability of spaces in the town. However, the management and charging of the Council owned car parks will need to respond quickly to meet customer demand, ensure clear and accurate information is given to drivers at key decision points to reduce hunting for spaces; and to generate sufficient revenue to allow the Council to maintain and invest in car parks.

b. This work will also need to identify how some of the Piece Hall's parking needs might be met by adjacent development schemes.

9. Halifax town centre must continue to meet the evolving needs of businesses, consumers, employees and visitors by offering the appropriate type of EV charging points, motorcycle and bicycle parking spaces in suitable locations.

Next Steps

1. The Transportation team will continue to ensure that the developing Halifax Town Centre WY+TF scheme meets the objectives as set out in this strategy.
2. The Highway and Transportation team will continue to monitor the progress of Town Centre Delivery Plan projects and assess the likely impact on parking supply and demand.
3. Guidance for developers will be developed to ensure that we maximise any potential opportunities to deliver against these strategic objectives.
4. Further consideration will be given to the impact on parking of the Halifax Station Gateway project and the report will be extended accordingly.
5. The Highway and Transportation team will explore the feasibility of intelligent parking solutions in Halifax town centre, including smart payment options and smart monitoring.
6. The Highway and Transportation team will explore the minimum level of spare parking capacity required in Halifax in the short and long term, in light of the economic, social and technological trends outlined in this policy.
7. The Highway and Transportation team will conduct further work to assess the extent of the need for different types of EV charging points and bicycle parking spaces in Halifax town centre and to identify where these might be most effectively located.
8. The Council will seek to refresh and expand the evidence base for this Strategy. There is a need to source new data on the supply of and demand for car parking in Halifax town centre to update the figures provided in the Fore report. There is a further need to obtain more detailed evidence on the level of demand at different times of the day and week and the extent of demand for particular types of car parking. In addition pricing structures across private and public car parks will be reviewed.

Appendix A: Town Centre Delivery Plan and A629 Scheme

Figure 1: Location of Delivery Plan Projects in Halifax town centre

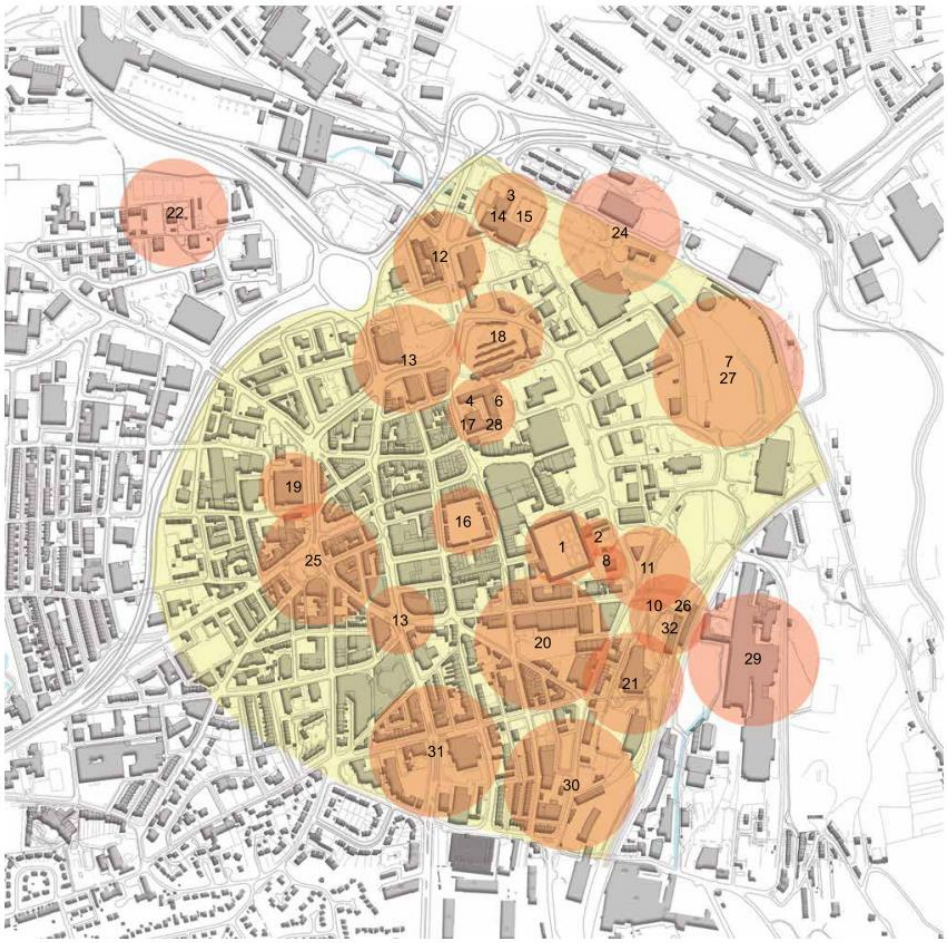
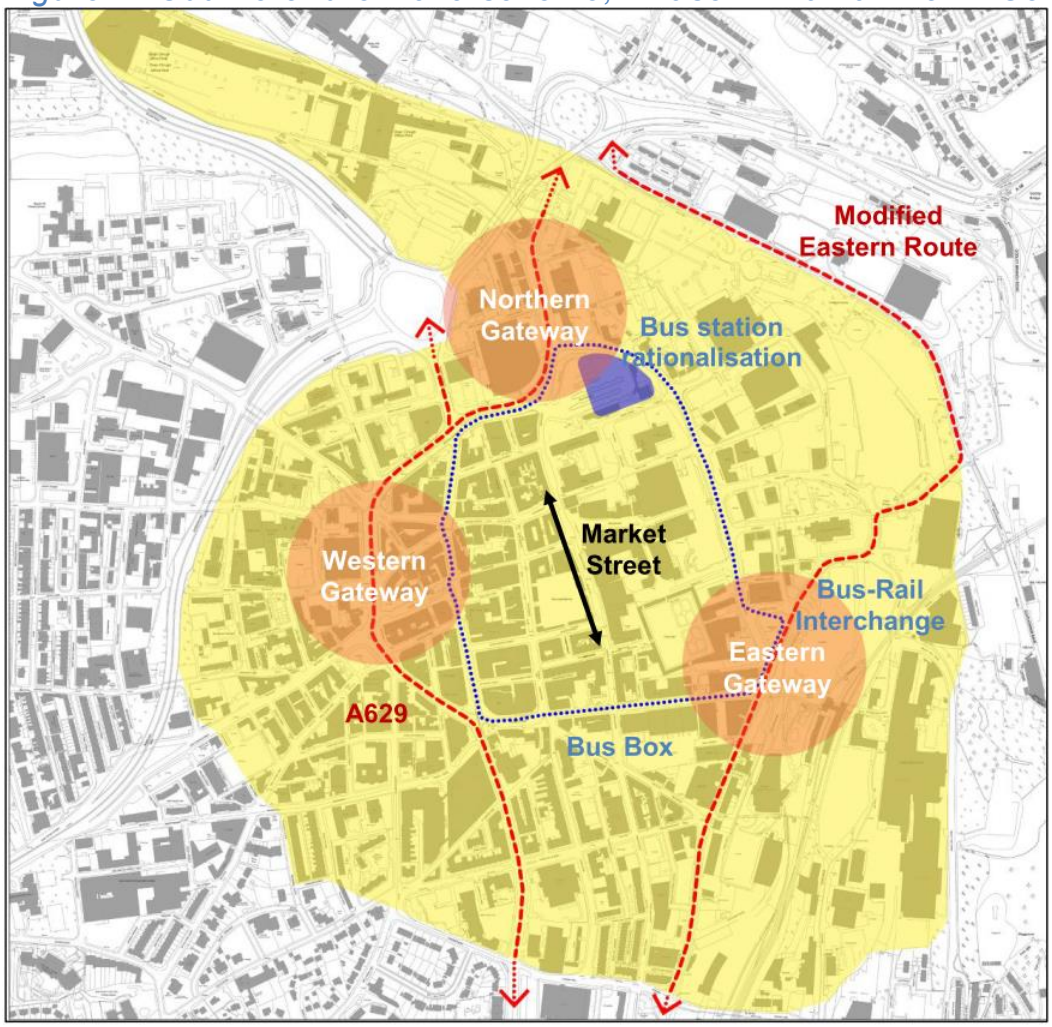


Table 1: List of Projects in Halifax Town Centre Delivery Plan

Number	Project
1	Piece Hall Transformation
2	New Central Library
3	Leisure Centre/Swimming Pool
4	Halifax Town Centre Asset Rationalisation
5	Commercial Business Strategic Development Forum
6	Northgate House: marketing and disposal
7	Cripplegate: resolve issues
8	Square Chapel: Cornerstone Project
9	Cultural Quarter Promotion
10	Station Access
11	Eastern Highway Improvements
12	North Bridge Gateway
13	Western Highway Improvements
14	Northbridge Leisure Centre
15	Leisure Centre/Swimming Pool: Delivery
16	Borough Market

17	Northgate House and Site Surroundings: Site Preparation
18	Bus Station: Relocation or Rationalisation
19	Cow Green Car Park
20	Horton Street
21	Implementation of Eureka! site wide Masterplan
22	Beech Hill
23	Residential Growth Strategic Development Forum
24	Eastern Highway Improvements: Phase 2
25	Western Highway Improvements: Phase 2
26	Station Access Improvements: Phase 2
27	Cripplegate: Delivery
28	Northgate House and Surroundings: Delivery
29	Nestle/Bailey Hall Factory
30	Eastern Highway Improvements; Phase 3 (now phase 2b)
31	Western Highway Improvements: Phase 3 (now phase 2b)
32	Station Access Improvements: Phase 3 (now phase 2b)
33	Opportunities for Urban Heat Networks
34	Opportunity for Sixth Form College / Skills and Training Centre

Figure 2: Outline of the A629 scheme, Phase 2: Halifax Town Centre



Appendix B: Analysis of current supply of and demand for parking :

Figure 3: Distribution of On-street parking and location of inner and outer zones

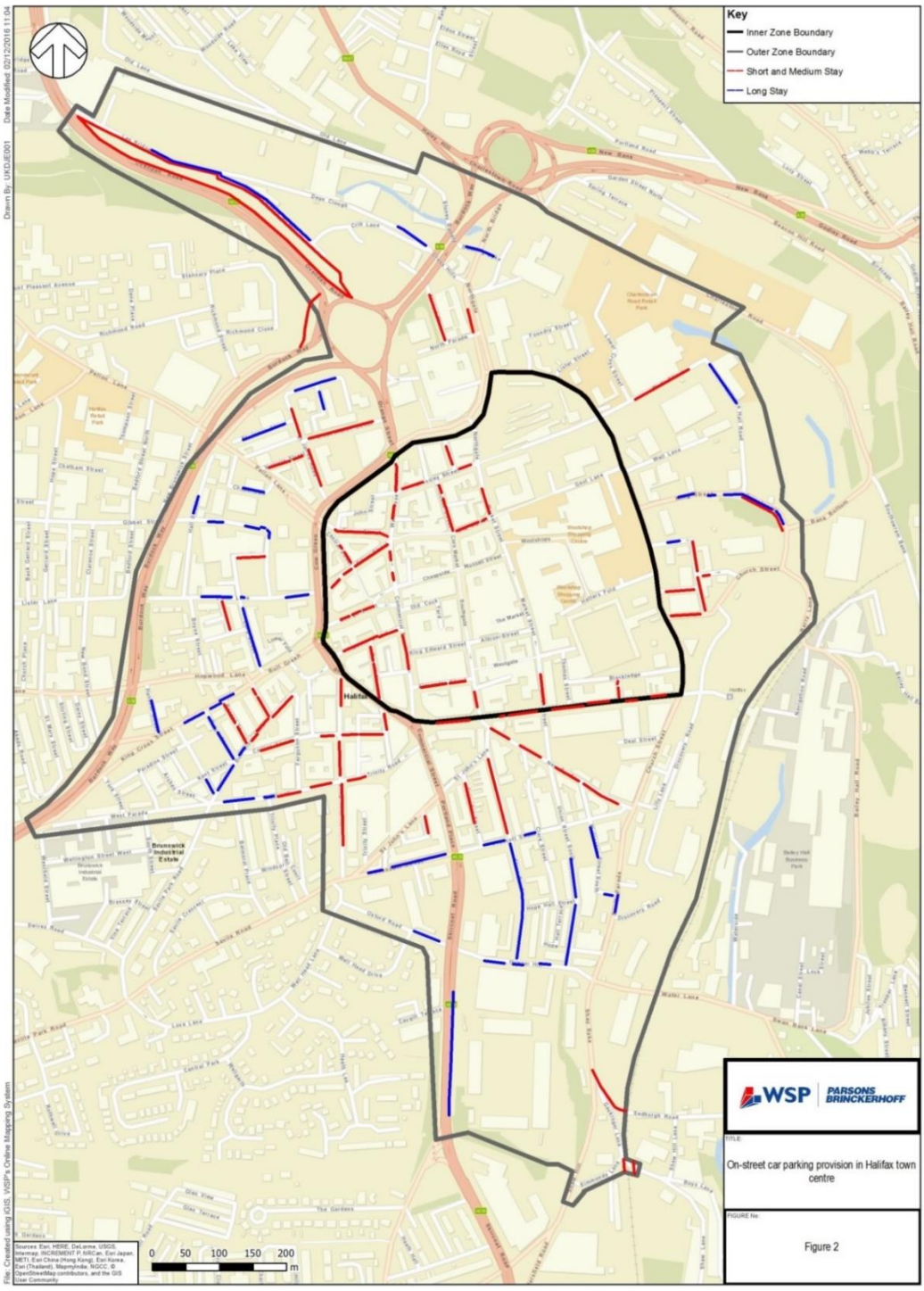


Table 2: Distribution of car parking by offer (Fore, 2015)

	Off-street	On-street	
		Inner zone	Outer zone
Total supply (number of spaces)	3,626	250	695
Proportion of total supply (%)	80%	5%	15%

Table 3: Distribution of off-street car parking by ownership and type (Fore, 2015)

	Council		Private	
	Long stay	Short stay	Long stay	Short stay
Total supply (number of spaces)	689	73	2284	580
Proportion of total supply (%)	18%	2%	63%	17%
Overall total	762 (20%)		2864 (80%)	

Table 4: Distribution of off-street car parking by product (Fore, 2015)

Off-street Parking Products (% Total)		
Permanent		Temporary
3019 (85%)		545 (15%)
Multi-storey	Surface	
844 (24%)	2175 (61%)	

Table 5: key to Figure 3 (Fore, 2016, Google Maps, 2016, Parkopedia, 2016-17)

The data in this table was collected after the research for the Fore report was conducted so the totals columns in this table should not be compared with the data presented in Tables 2-4 and 6.

Key	Private Car Parks	Spaces	*Key*	Council Car Parks	Spaces
AA	Thomas Street	14	*1*	Akroyd Place	11
A	Alfred Street	35	*2*	Bull Green	39
B	Bull Green	82	*3*	Cow Green (surface car park)	72
C	Bowling Dyke	56	*4*	Crosshills	11
D	Broad Street	429	*5*	Hanover Street	27
E	Dean Clough Lee Bridge	640	*6A*	High Street	160 (for LBG Mon-Fri)
F	Dean Clough Multi-storey	160	*6B*	High Street	78
G	Dean Clough Crib Lane	285	*7*	King Street	48
H	Eureka!*	289	*8*	Mulcture Hall 1	167 (for LBG Mon-Fri)

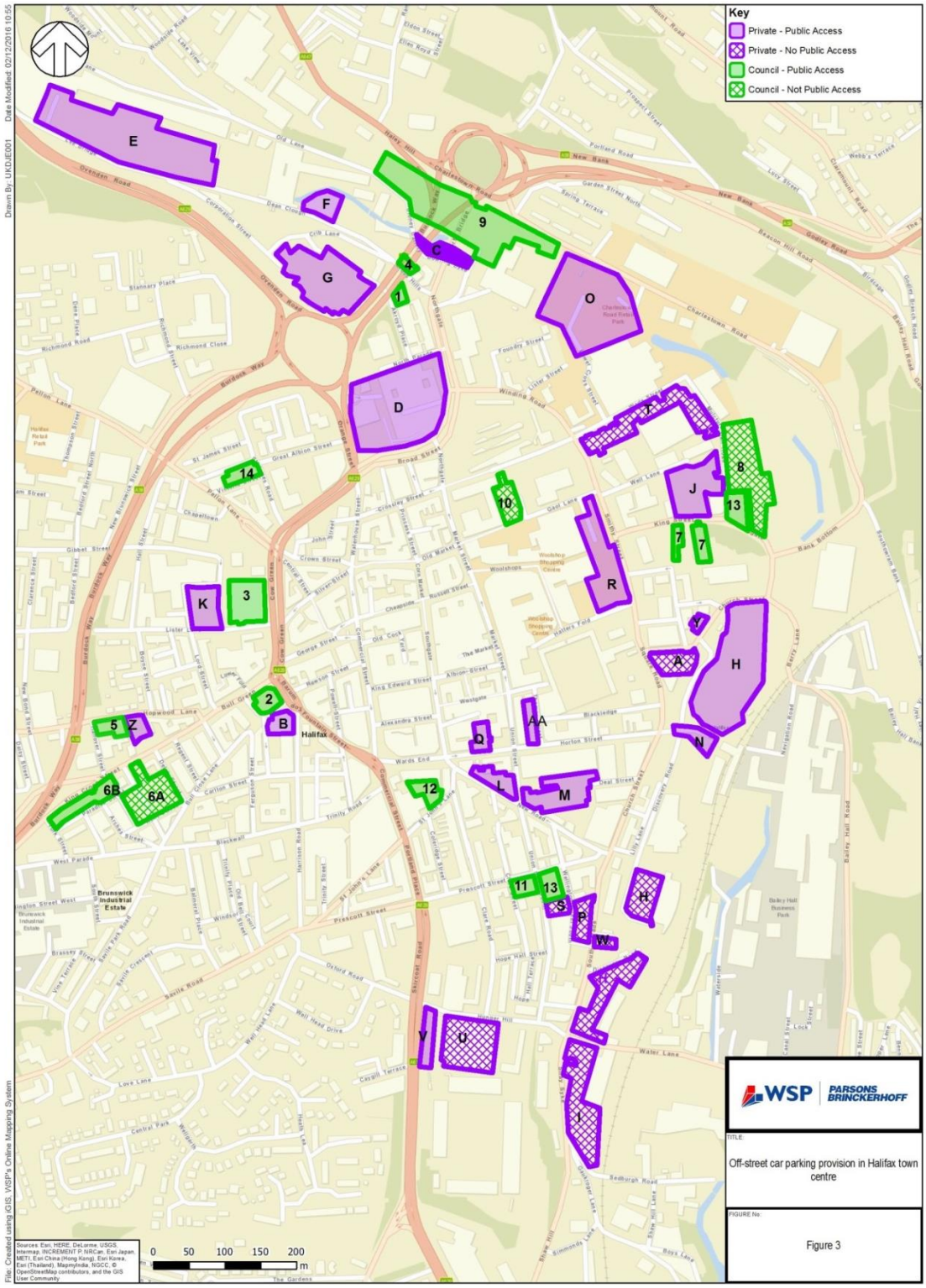
I	B&M	130	*9*	North Bridge	367
J	King Street	190	*10*	Northgate	35
K	Mount Street	85	*11*	Prescott Street	22
L	New Road	56	*12*	St John's Lane	27
N	Rail Station	40	*13*	Mulcture Hall 2	26
O	Sainsbury's	530	*14*	Union Street	35
Q	Westgate	30	*15*	Victoria Street	29
R	Woolshops	309	Total		1154
S	Wellington Street	35			
T	Wickes	145			
U	LBG				
V	Shay				
W	South Parade				
Y	Church Street				
Z	Hopwood Lane				
Total (A-T)		3540			

* Eureka! has 289 parking spaces available for public use. Eureka! has a further 169 spaces (in marked and unmarked bays) available to Eureka! visitors only at peak times and a further 100 spaces for visitors which require marshalling and security; this brings the total potential capacity on the Eureka! site to 558 spaces

Table 6: Supply of and Demand for Car Parking in Halifax town centre (Fore, 2015)

Type	Off-Street		On-Street	
Number of spaces	3,431		945	
Average occupancy	Council 96%	Private 65%	Outer Zone 60%	Inner Zone 81%
	71%		65%	
Total spare capacity	25%			

Figure 4: Off-street car parking provision in Halifax Town Centre



Appendix C: Analysis of Possible Change in Parking Supply

Table 7: Impact of Town Centre Delivery Plan projects on parking supply (Fore, 2015)

Town Centre Delivery Plan Scheme	Parking spaces lost	Notes
Piece Hall, Square Chapel and new Library	Zero	No parking supply removed (but these developments will generate increased *demand* for car parking)
Northgate House demolition and redevelopment for retail uses, with parking	32	Spaces available to the public at weekends only. Scheme may include a car parking component.
Cripplegate site redevelopment	167 (LBG) and 26 (public)	Mulcture Hall Road car park lost as part of this scheme. This generates a need to identify alternative parking supply for LBG and to replace the lost public spaces.
Pennine Shopping Centre redevelopment (Royal London site)	123	This assumes all parking is lost but the future land use for this site is unknown. If all parking is lost
North Bridge leisure centre	Unknown	
Total	367	Figure does not include North Bridge as it is assumed these spaces would be replaced by scheme
Remaining available supply	4009	

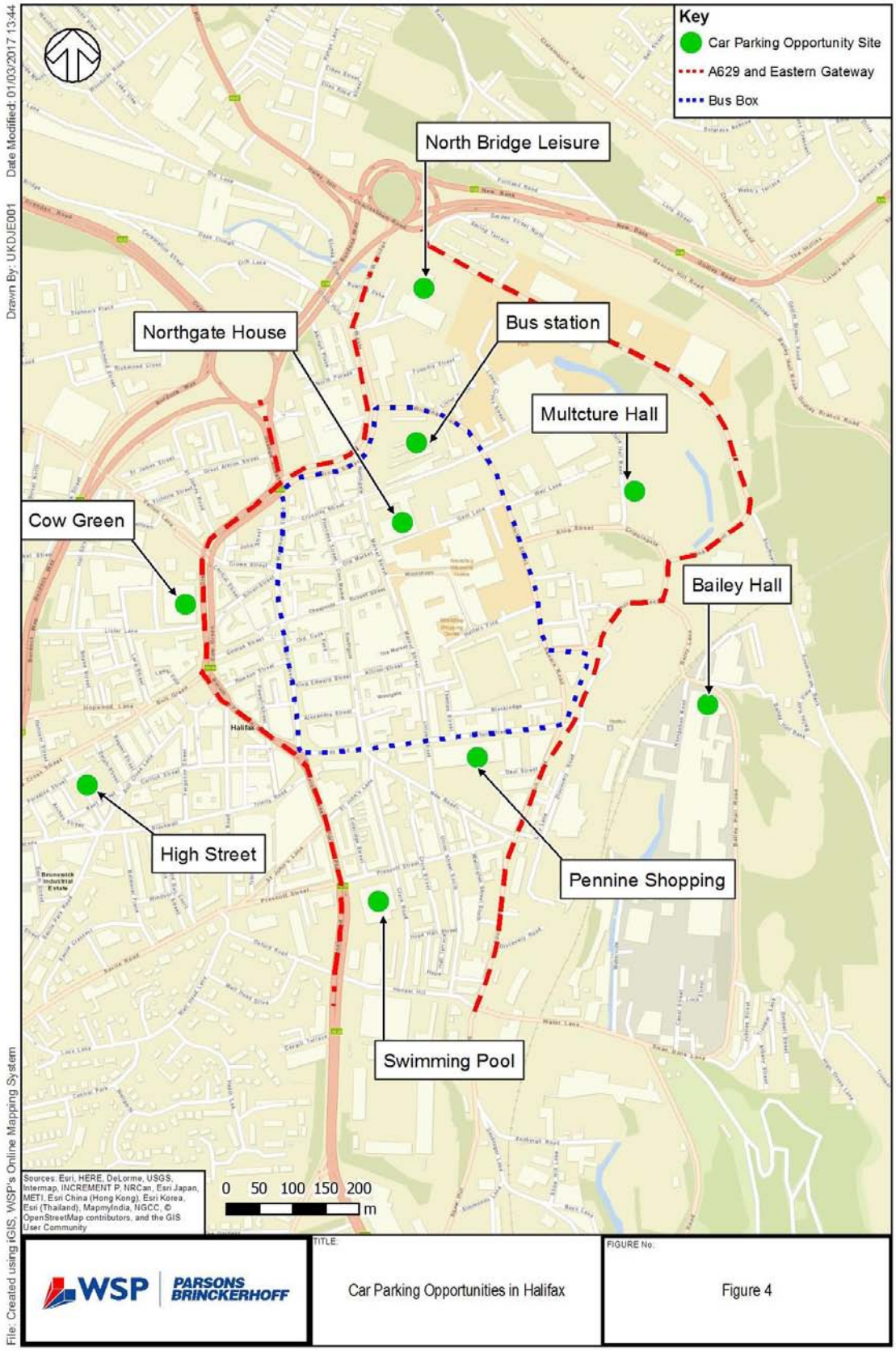
Table 8: Potential for new parking spaces on sites in Halifax town centre (Fore, 2015, WSP)

Type	Site	Potential additional public parking spaces	Location in town centre	Notes

Short stay	Decking the High Street surface car park	168	W	This could replace the LBG car parking spaces lost as a result of the Cripplegate scheme.
	Northgate House site	Unknown)	N	Public parking provision should be short or medium stay and vehicular access should be from the east. 32 spaces on this site are currently available at to the public at weekends only.
	Bus station site (part)	Limited	N	This refers to the part of bus station site released for development. Parking provision here should be limited to prevent large numbers of vehicles penetrating town centre core.
	Total	308		Sufficient to meet shortfall and new demand
Medium stay	Swimming pool site	150-200	S	Surface car park on cleared site or decked solution. This is the maximum amount of parking that could be provided if the site was dedicated to parking. The quantum of parking would be less if all or part the site was developed for other purposes.
	Pennine Shopping Centre (Royal London site)	Unknown	S	Quantum of parking depends on type of development and the extent to which the site is dedicated to parking.
	Cow Green site	Unknown	W	New multi-storey car park on current surface car park (site of former 1970s MSC).
	Total	200+		Sufficient to meet shortfall and new demand
Long stay	North Bridge car park leisure centre	100+	N	This quantum of spaces assumes partial decking.

	Bailey Hall	200+	E	Multi-storey car park for multiple uses (Nestle, rail station, new development, overflow from Eureka!) adjacent redeveloped Bailey Hall site
	Total	246-266		Sufficient to meet shortfall and new demand
Overall	**Grand Total**	1209-1359		More than sufficient to meet shortfall arising from the loss of existing provision and to meet additional demand.

Figure 5: Car parking Opportunities in Halifax town centre


Key
Car Parking Opportunity Site
A629 and Eastern Gateway
Bus Box
North Bridge Leisure
Northgate House
Bus station
Multcture Hall
Cow Green
Bailey Hall
High Street
Pennine Shopping
Swimming Pool
Halifax
0 50 100 150 200
m
Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community
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File: Created using iGIS, WSP's Online Mapping System
WSP PARSONS BRINCKERHOFF
TITLE:
Car Parking Opportunities in Halifax
FIGURE No:
Figure 4

References

Some references are formatted as hyperlinks in the list below. Alternatively, the reference can be obtained by googling the reference title provided below.

[1] All figures for current and future demand are sourced from 'Halifax Town Centre Car Parking Strategy,' 27 November 2015, by Fore Consulting for Calderdale Council

[2] For an exploration of how local authorities in the UK and the US have developed innovative parking policies to suit their specific needs, see: Association of Town and City Management,' In-Town Parking: What Works? Innovative Practices in Parking Provision.'

[3] For an overview of the evidence base on the impact of different parking policies, see Greg Marsden, 'The Evidence Base for Parking Policies – A Review'.

[4] For a discussion of the benefits of reducing the supply of car parking in the town centre core, see Ben Kochan, 'Advice: Integrating parking into town centres'

[5] For evidence of the positive economic effects of removing on-street parking to widen pavements or provide bike lanes, see: Eric Jaffe, 'The Complete Business Case for Converting Street Parking Into Bike Lanes'; Dylan Reid, 'Study finds removing parking to install bike lanes or widen sidewalk would benefit businesses'; Sophie Tyler et al, 'The means: to change places for the better: The relevance of parking in the success of urban centres'; Joshua de Jong, 'The Importance of On-Street Parking to Business Vitality: A Study of Agricola Street, Halifax NS'

[6] Sustrans, Sustans Design Manual Chapter 12: Cycle parking (draft), November 2014, 3

[7] For an overview of intelligent parking censor technology, see: Siemens, 'Intelligent Parking'.

[8] For a discussion of the use of intelligent parking systems by local authorities, see: Nate Berg, 'The Future of Intelligent Parking'; ITS International, 'Growth of smart parking initiatives'; Rachel England, 'The technology fixing Britain's parking problem'.

[9] For a detailed discussed of the opportunities presented by Mobility as a Service for urban centres, see: Catapult Transport Systems, 'Mobility as a Service: Exploring the Opportunity for Mobility as a Service in the UK,' July 2016.

[10] For an overview of the possible implications of Autonomous Vehicles for Urban areas, see Stelios Rodoulis, 'The Impact of Autonomous Vehicles on Cities'

[11] For a discussion of the implication of Autonomous Cars for parking, see: Patrick Sisson, 'Why high-tech parking lots for autonomous cars may change urban planning'.

[12] For evidence of lower rates of car ownership in inner and central urban areas in Britain, see: Jonn Elledge, 'These maps show which English cities are least reliant on cars'.