Parking Standards

Evidence Base

Evidence supporting the Draft Birmingham Parking Supplementary Planning Document 2019

Contents

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PROJECT CENTRE

1. Introduction

Purpose

1.1 This document outlines the evidence base underpinning the proposed parking standards in the draft revised Parking SPD. It provides the background to how the parking standards were calculated, which sources of data were used and how they differ from the Council's existing parking standards adopted in 2012, and other local authorities.

National Planning Policy Framework

1.2 The National Planning Policy Framework (2019) sets out what local authorities are expected to consider when setting local parking standards for residential and non-residential development, which include:

- the accessibility of the development;
- the type, mix and use of development;
- the availability of and opportunities for public transport;
- local car ownership levels; and
- an overall need to reduce the use of high-emission vehicles.

1.3 Paragraph 106 also states that: *"Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with chapter 11 of this Framework). In town centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists."*

Local Planning Policy

1.4 The **Birmingham Development Plan** (BDP) (adopted January 2017) sets out the strategic planning policies for the city and provides the spatial strategy for growth in the plan period 2011-2031. Key objectives of the BDP include encouraging the increased use of public transport, walking and cycling, and creating a more sustainable city that minimises its carbon footprint. To that end, the transport policies (TP38 -45) in the BDP aim to support the development of a sustainable transport network. This includes managing travel demand through a range of measures including the availability and pricing of parking and ensuring effective and proportionate parking enforcement. (Policy TP44).

1.5 Paragraph 9.53 of the BDP refers to the city's Parking SPD which provides information on the appropriate levels of parking for various land uses. It states that *"These are set out as maximums and the cycle/motorcycle and disabled car parking standards are minimums. The City Council will take account of whether there are any circumstances, related either to the site or the operation of the development, which may support an alternative level of parking."*

1.6 The Council is currently preparing the **Development Management in Birmingham** Development Plan Document (DMB) which, when adopted, will replace the saved policies of the Unitary Development Plan 2005. Examination hearings on the DMB took place in November 2020. The DMB contains non-strategic development management policies to support the delivery of the BDP.

1.7 Proposed policy DM15 Parking and servicing (as amended through the proposed modifications) sets out that:

1. *Parking and servicing should contribute to the delivery of an efficient, comprehensive and sustainable transport system. Development should promote sustainable travel, reduce congestion, and make efficient use of land.*

2. *New development will **need** ~~be required~~ to ensure that the operational needs of the development are met **in terms of** ~~and~~ parking provision, including parking for people with disabilities, cycle parking and infrastructure to support the use of low emission vehicles and car clubs. ~~is in accordance with the Council's Parking Supplementary Planning Document.~~*

3. *Proposals for parking and servicing shall avoid highway safety problems and protect the local amenity and character of the area. Parking **and servicing** should be designed to be secure and fully accessible to **its** ~~all~~ users and adhere to the principles of relevant Supplementary Planning Documents.*

4. *Proposals for standalone parking facilities must demonstrate that there is a deficit in local publicly available off-street parking, or that it will help to relieve on-street parking problems.*

*Para 5.13 (to become Para 5.14 following modifications) The Council**'s** parking **standards currently set out in the** ~~is currently consulting on a new Parking Supplementary Planning Document (SPD) which will replace the existing~~ Car Parking Guidelines Supplementary Planning Document (2012) **will be replaced by updated standards in the Parking Supplementary Planning Document** ~~and elements of the Birmingham Parking Policy (2010)~~. It provides revised parking standards for all new developments in the city to reflect the National Planning Policy Framework. The approach to the provision of parking aims to promote sustainable transport, reduce congestion, improve road safety and reduce pollution. **The Parking SPD will be used as a guide in the determination of planning applications. The City Council will take account of whether there are any circumstances, related either to the site or the operation of the development, which may support an alternative level of parking provision.** The Parking SPD will also set out how the city will manage on-street (public highway) and off-street parking provision across the city.*

1.8 The **draft Birmingham Design Guide** (November 2020) contains detailed guidance on parking design and layout, supporting the application of the BDP, DMB and Parking SPD.

1.9 Local and regional transport strategies 'Birmingham Connected' and 'Movement for Growth' both acknowledge the role of parking policy as a key part of an integrated transport network. Parking pricing and provision can support the objectives of the city and region's transport strategy, forming a key element together with the delivery of improvements to public transport, cycling and walking.

1.10 The transport vision in **Birmingham Connected** and **the draft Birmingham Transport Plan** have provided a clear steer for the Parking SPD; creating an efficient, attractive, sustainable, healthy and equitable transport system by seeking a reduction in over-reliance of private cars and developing a go-anywhere integrated public transport system supported by walking and cycling.

1.11 The existing **Car Parking Guidelines SPD** for Birmingham was adopted by Cabinet in May 2012. The Council has undertaken a review of current car parking issues to inform the formulation of the revised standards. Further information is set out in section 2 of this report.

The Birmingham Context

1.12 Birmingham is home to roughly 1.1 million people and is the second largest city in the UK. Located in the West Midlands county, it is the regional capital, major international commercial centre and an important retail, transport, retail events and conference hub. The City is a major employment centre, drawing in workers from across the West Midlands. It is a leading European business destination with an economic output of £20bn per annum.

1.13 Birmingham's City Centre is a major business and tourist destination benefiting from a diverse mix of retail, cultural, recreation and leisure uses. It is the UK's largest financial centre outside of London, with a large number of regional and national headquarters.

1.14 Birmingham also has a strong network of over 70 local centres across the City, with the largest being Sutton Coldfield. These centres help to meet a range of shopping needs, and act as a focus for local life and successful communities.

1.15 Being at the centre of the West Midlands region, Birmingham has important relationships with surroundings areas. There are significant amounts of in-commuting to Birmingham, particularly from South East Staffordshire, South Warwickshire, Solihull and North Worcestershire and net migration from Birmingham to these areas. There are also important connections to neighbouring communities, regeneration programmes and environmental networks in the Black Country, North Solihull and Bromsgrove.

1.16 Also, due to its central location, Birmingham is a major transport hub on the motorway, rail and canal networks. There are three main railway stations (New Street, Moor Street and Snow Hill), located in the City Centre with direct services to cities across England, Scotland and Wales. Significant investment has seen New Street Station redeveloped in recent years and plans for High Speed 2 (HS2) will significantly improve national connections in future years. Curzon Street railway station, which is currently under construction, will be the terminus for trains to the city on HS2, the first phase of which will open around 2030.

1.17 The City has excellent links with the national motorway network served by the M5, M6, M40, and M42. Birmingham Airport, adjacent to the City boundary, operates routes worldwide.

1.18 Birmingham's local public transport network is co-ordinated by Transport for West Midlands. The network includes: the busiest urban rail system in the UK outside London, with 122 million passenger entries and exits per annum; the UK's busiest urban bus system outside London, with 300.2 million passenger journeys per annum; and the West Midlands Metro, a light rail system that operates between the Library in Central Birmingham and Wolverhampton via Bilston, Wednesbury and West Bromwich.

1.19 The bus network is extensive and is fully integrated with the local train and tram networks. As an example, Sutton Coldfield (a town towards the outer boundary of the council area) is served by four separate direct services (110, X3, X4, X5, 907, X14) providing roughly 12 buses per hour (each service running separately at 15-30 min intervals) during the day and taking approximately 30-40 mins travel time.

1.20 The Midland Metro tram service between Wolverhampton and Birmingham now extends to Centenary Square, via Birmingham New Street. Construction is underway for further expansion of this line to Edgbaston. The services run every 6-8 minutes during the day and every 15 minutes in the evenings and Sundays. Connectivity to HS2 is also bringing an Eastside Metro expansion which

is currently under development. This will run between Birmingham Bull Street and Birmingham HS2 Interchange (beyond the NEC), via Digbeth and Birmingham International Airport.

1.21 Other transport resources are already available such as park and ride schemes (with nearly 2400 parking spaces) at train stations across the city, Co-Wheels Car Club provision, and electric vehicle charging points.

The Challenges

Climate change

1.20 In June 2019 Birmingham City Council declared a Climate Emergency and made tackling climate change one of the authority's six main priorities. A taskforce (Route to Zero) has been set up to help the city achieve its ambition to be carbon neutral by 2030. Transport is a very significant contributor to carbon emissions and therefore Birmingham must set ambitious goals to change our transport network dramatically over the next 20 years.

Air quality and health

1.21 The effects and significance of poor air quality are likely to have been underestimated. Not only does air pollution contribute to respiratory and cardiovascular diseases, there is increasing evidence of its impact on strokes and dementia. In the 2016 report 'Every Breath We Take,' the Royal Colleges of Physicians and of Paediatrics and Child Health estimate that ambient air pollution causes approximately 40,000 premature deaths, over 6 million sick days, and an estimated total social cost of £22.6 billion per year.[1] Up to 80% of the UK's air pollution comes from motor vehicles; poisonous gases and particles in the air lead to the early deaths of nearly 900 people in Birmingham every year.[2]

1.22 In 2015 the Government published its "UK Air Quality Plan for tackling nitrogen dioxide". This plan identified five cities outside London that need to take action by 2020 to address excessive levels of nitrogen dioxide. One of those cities is Birmingham. In response Birmingham City Council will be introducing a Clean Air Zone for the city in 2021, which proposes to levy a charge the most polluting[2] vehicles entering the central area. Revenue generated by Clean Air Zone will be reinvested in transport schemes to improve the network and further reduce emissions.

1.23 Reliance on the motor car has led to us becoming less active. A recent report from the World Health Organisation identified that fewer than 60% of the adults in England achieve 150 minutes of moderate or 75 minutes of vigorous exercise per week[3]. The report links the transition in wealthier countries towards more sedentary jobs and hobbies, along with increased use and reliance on motor transport. The wider societal costs to the UK of overweight and obesity have been estimated to be at least £27 billion each year [4]. Were obesity levels to be reduced by 1% every year from the predicted trend between 2015 and 2035, £300 million could be saved in direct health and social care costs in the year 2035 alone.[5]

[1] Lancet Countdown 2017 Report: Briefing for UK Policymakers
[2] A Clean Air Zone for Birmingham, Consultation 2018 Birmingham City Council
[3] Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1.9 million participants, The Lancet Global Health, September 2018
[4] McKinsey Global Institute. 2014. Overcoming Obesity: an initial economic analysis
[5] Cancer Research UK and UK Health Forum (2016). Tipping the Scales: why preventing obesity makes economic sense. https://www.cancerresearchuk.org/sites/default/files/tipping_the_scales_- _cruk_full_report11.pdf

1.24 Promoting active travel will support improvements in individuals' health, help to bridge health inequalities between advantaged and disadvantaged communities and contribute to Birmingham's commitment to tackle climate change and prosper environmentally as well as economically.

Growth

1.25 Birmingham's population is set to grow by 150,000 people by 2031. The Birmingham Development Plan sets out delivery of over 51,000 new homes and creation of 100,000 new jobs. Without strong steps to address current travel demand, the increased demands on the road network will result in considerable delays across much of the city's road network. While clearly unappealing for our quality of life, this will also have serious ramifications for Birmingham as a place to live and do business.

1.26 For Birmingham to remain a leading contender for inward investment and an attractive destination for workers it will need to provide an urban environment that offers amenity for contemporary business. This includes providing open spaces that are clean, safe and suitable for people to spend time[6]. Locations that limit noise and pollution, are unhurried and easy to navigate are consistently popular spaces for recreational and social use. Creating attractive and "human-scale" spaces has become a key pre-requisite for new and regenerated urban developments and is seen to be essential to generating land value uplift. Spaces that are dominated by motor traffic impinge on users' access, perception of personal safety, ambient noise and air quality.

1.27 Available land is in short supply and in order to meet the future housing demand, more effective use of land is needed to sustain the growing population. Reducing reliance on cars will also serve to reduce the demand for car parking, releasing land for more productive use, for example new homes and new employment sites.

Road and rail capacity

1.28 Birmingham's road and rail networks are already at or near capacity during peak weekday periods and increasingly at weekends. Not only is this a source of personal frustration to commuters, it also comes as a serious dent to commercial efficiency and productivity. The annual cost of congestion to Birmingham's economy currently stands at £632 million[7]. This figure is expected to rise as demand increases.

1.29 If these issues are to be addressed and tackled, current levels of car-based travel must be reduced. While newer engines will generate lower levels of pollution per vehicle, a more immediate effect on air quality, congestion, people's health and the adverse impacts that traffic has on an area can be achieved by reducing the demand for and use of motor vehicles.

Equity

1.30 How transport is provided can be fundamental in creating the foundations for a fairer and more inclusive city. Improving transport is essential to ensuring that the growth of the city is inclusive. Introducing new routes for trams, rapid transit buses and passenger trains will deliver equitable access to opportunities for the benefit of both job seekers and employers.

[6]Analysis: Quantifying the value of public realm, 2017, Smit www.placemakingresource.com/article/1439972/analysis-quantifying-value-public-realm

[7] INRIX 2017 Global Traffic Scorecard, https://www.twinfm.com/article/traffic-congestion-costs-uk-377-billion

2. Review of Parking Guidelines SPD 2012

Introduction

2.1 The City Council has undertaken a review of current car parking standards to inform the formulation of revised standards. In addition to the factors set out in paragraph 106 of the NPPF, the review considered:

- The existing parking situation in a variety of areas across the city in terms of on-street parking, and associated highway safety and traffic management issues;
- The effectiveness and impact of recent car parking provision on new development;
- Benchmarking parking standards adopted by other local authorities;
- Other relevant planning and transportation policies related to car parking; and
- Literature review of research into parking.

Current approach

2.2 The Car Parking Guidelines SPD was adopted by Cabinet in May 2012. The standards are set as maximums for car parking for all land uses. Parking for people with disabilities and the provision for cycle and motorcycle parking is specified as minimums.

2.3 The standards are applied based on a zoning system. The City Centre is Zone 1. Zone 2 is based on a crow-fly distance of 500m from railway stations and Zone 3 applies to all other areas. The values adopted are derived from those previously contained within in PPG13 (first published in 2001) and PPS4, published in 2009.

2.4 While Zone 2 does reflect the higher level of public transport accessibility in locations close to rail stations, the current zoning approach does not take account of the significant role and impact of those areas of the City that while without rail provision, have very good bus provision.

2.5 In terms of residential development, Birmingham's current car parking guidelines provide an average to be achieved within an area/ zone. Maximum standard parking provision using the unit of 'per dwelling' for residential land use is as follows. No distinction is made between the 'size' / number of bedrooms in the dwelling.

	Area/Zone		
	1	**2**	**3**
Maximum number of spaces per dwelling	1	1.5	2

2.6 The local planning authority consider a range of circumstances when assessing the parking needs of each proposed scheme.

- The proximity of schools, places of employment and retail/shops;
- The availability (or deficiency) of on-street and off-street public car parking;
- The capacity for safe on-street parking, by considering the width of the highway;
- The probability that any existing on-street parking issues will be exacerbated;
- The availability of public transport.

Observational evidence

2.7 Considerable experience from the application of the 2012 standards can be drawn upon. The approach applied in Birmingham for the last six years has largely been successful. Evidence from the Development Management Team is that in most cases the parking standards have been applied and accepted with limited difficulty. Applications have continued to come forward and gone on to be viable and successful contributions to the urban form and economy of the city.

2.8 A summary of the key observations from application of the current SPD parking standards is that:

- The car parking maximum standards for many land uses are generally accepted;
- Within the city centre there is limited expectation for parking to be provided with commercial developments. Many developers are seeking to deliver competitively priced housing from their sites. Generally, only those residential developments at the high end of the market look to provide parking;
- A number of commercial uses present traffic problems and high albeit temporal parking demand due to the nature of use. These include:
    - Day nurseries and childcare
    - Places of Worship
    - Hot Food Takeaway (often delivery traffic, rather than customers)
- A specific level of parking was seen to be an essential requirement for most retail developers. Food retailers in particular were likely to seek a minimum level of provision on-site;
- Pressure for minimum parking standards to be applied to residential developments outside the central area can come from the local communities and their representatives concerned about overspill exacerbating existing difficulties with parking supply;
- There is scope for some maximum standards to be revised downward based on location, context and land use;
- There is a need for greater reinforcement of requirements, and clearer guidance, for cycle parking/facilities, car club provision, and ULEV provision.
- Residential parking standards created the greatest level of debate and prove the most contentious. Many existing residents will object to new developments on the grounds that there is already insufficient parking in the local area and overspill from the development will exacerbate that situation.
- Developers are generally accepting of low levels of residential parking provision in central areas and those with high levels of public transport. Outside the central area there is a range of approaches, with some developers seeking to bring forward higher density sites with limited parking and others for whom parking provision is seen to be necessary to make housing attractive to the market. In particular, the lack of relationship between current parking standards and dwelling size has been seen to be an issue and fails to acknowledge the very different needs of residents and likely car ownership between a 4-bedroom house and a 1-bedroom apartment.
- There is a need for a less arbitrary approach to defining public transport accessibility and linking this to the level of parking required.
- Standards may require some limited flexibility on a case by case basis, therefore a guidance approach to parking standards is preferred by development management officers.

3. Car ownership

3.1 The most comprehensive available data on car ownership is from the last national census in 2011. The majority of wards in Birmingham experienced an increase in car ownership levels between 2001 and 2011. Table 1 shows the average increase in Birmingham and selected wards compared with other cities. The increase in car ownership in the Birmingham area as a whole (8.14%%) is comparable with other large core cities such as Greater Manchester (8.82%) and Leeds (7.45%). Significant investment in cycling and public transport infrastructure may be considered a major catalyst for a notable decrease in car usage in London (14.3% decrease).

3.2 In Birmingham the average car or van ownership per household is 0.93. Nationally, it is to 1.16 cars or vans per household on average. The 2018/19 National Travel Survey confirms that for the West Midlands region (the lowest level at which data is available), the average number of cars/vans per household is 1.25.

3.3 2011 Census information in Table 1 below clearly shows a wide variance in levels of car ownership in different parts of the city. Sutton Vesey (Sutton Coldfield) has a significantly higher car ownership level than any other ward. Sutton Coldfield is an affluent area towards the northern outskirts of the Birmingham Council area. The areas of Soho, Aston, Nechells and Ladywood have significantly lower levels of car ownership than elsewhere. Some of these wards represent inner city communities with lower levels of social and economic mobility.

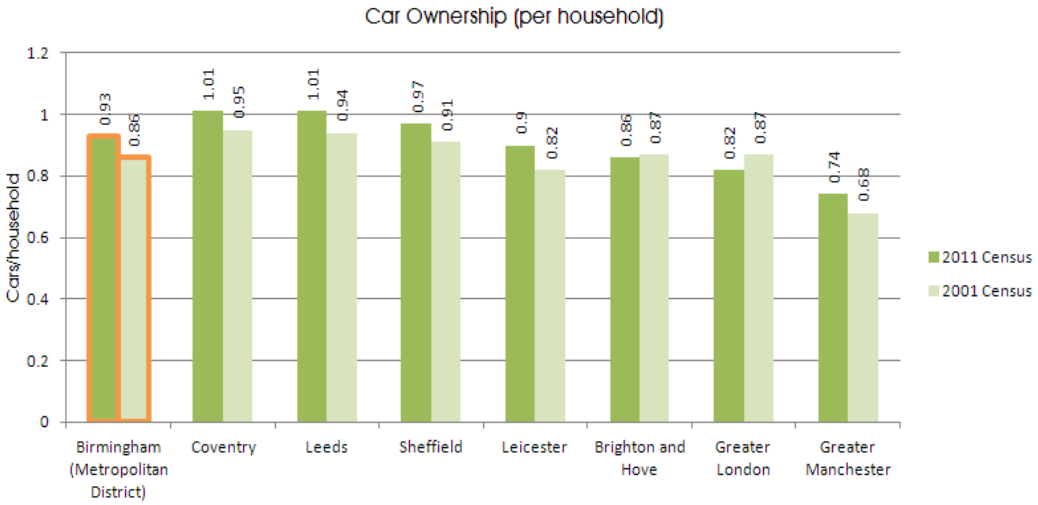
Table 1: Change in car ownership 2001-2011

Ward	Birmingham Parking Guidelines SPD (2012) Zone Area	Car Ownership (Cars per Household)			
		2011	2001	Change	% Change
Sutton Vesey	Area 2	1.43	1.36	0.07	5.15%
Perry Barr	Area 2	1.06	1.03	0.03	2.91%
Moseley & Kings Heath	Area 2	0.99	0.98	0.01	1.02%
Selly Oak	Area 2	0.99	0.97	0.02	2.06%
Longbridge	Area 2	0.99	0.85	0.14	16.47%
Northfield	Area 2	0.98	0.94	0.04	4.26%
Edgbaston	Area 2	0.96	0.9	0.06	6.67%
Bordesley Green	Area 2	0.82	N/A	N/A	N/A
Tyburn	Area 2	0.82	0.73	0.09	12.33%
Soho	Area 2	0.64	0.59	0.05	8.47%
Aston	Area 2	0.61	0.48	0.13	27.08%
Ladywood	Area 1	0.56	0.56	0	0.00%
Nechells	Area 2	0.51	0.55	-0.04	-7.27%
Birmingham		0.93	0.86	0.07	8.14%
Coventry		1.01	0.95	0.06	6.32%
Leeds		1.01	0.94	0.07	7.45%
Sheffield		0.97	0.91	0.06	6.59%
Leicester		0.9	0.82	0.08	9.76%
Brighton and Hove		0.86	0.87	-0.01	-1.15%
Greater London		0.82	0.87	-0.05	-5.75%
Greater Manchester		0.74	0.68	0.06	8.82%

Source: Census 2001 and 2011

Note: All ward boundaries were subject to change between the 2001 and 2011 Census surveys

Figure 1: Change in car ownership by area



Source: Census 2001 and 2011

3.4 Table 2 shows car or van availability in Birmingham against the regional and national context. 35% of households had no access to a vehicle, which is much higher than the regional and national average of 24.7% and 25.8% respectively. Conversely, the % of households that have 2 or more vehicles and 3 or more vehicles is much lower than the regional and national average as shown in Table 2.

Table 2: Car ownership in context

	% no cars in household	% 1 car per household	% 2 cars per household	% 3+ cars per household
England	25.8	42.2	24.7	7.4
West Midlands	24.7	41.5	25.8	8.0
Birmingham	35.8	41.4	18.1	4.7

Source: Census 2001 and 2011

3.5 Table 3 shows car ownership by ward. Blue denotes lower than the Birmingham average, red denotes higher than the Birmingham average.

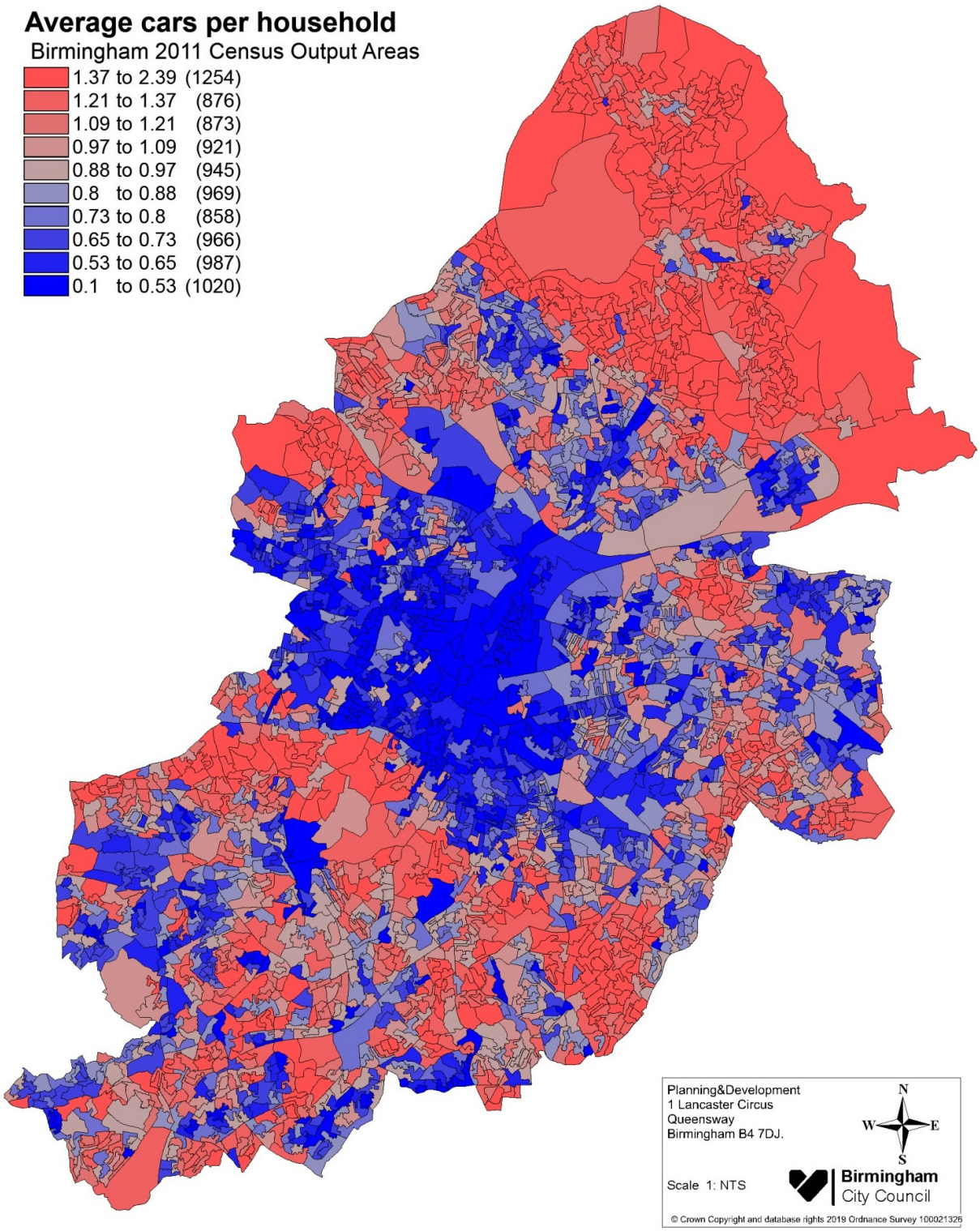
Table 3: Car Ownership by ward

Ward	Percentage of households with car or van				Cars per household - Ward Average
	No car	One car	Two cars	Three or more cars	
Birmingham Average	**36%**	**41%**	**18%**	**5%**	**0.93**
Nechells	58%	35%	6%	1%	**0.51**
Ladywood	54%	37%	7%	1%	**0.56**
Aston	53%	37%	8%	2%	**0.61**
Soho	51%	37%	9%	2%	**0.64**
Lozells and East Handsworth	50%	36%	11%	3%	**0.68**

Ward	Percentage of households with car or van				Cars per household - Ward Average
	No car	One car	Two cars	Three or more cars	
Birmingham Average	**36%**	**41%**	**18%**	**5%**	**0.93**
Sparkbrook	47%	40%	10%	3%	**0.69**
Washwood Heath	42%	43%	12%	3%	**0.76**
Shard End	43%	41%	14%	3%	**0.77**
Kingstanding	42%	41%	14%	3%	**0.79**
Tyburn	40%	43%	14%	3%	**0.82**
Bordesley Green	39%	45%	14%	3%	**0.82**
Stockland Green	38%	44%	15%	3%	**0.85**
Bartley Green	38%	42%	17%	3%	**0.86**
Erdington	38%	42%	17%	3%	**0.87**
Acocks Green	37%	43%	16%	3%	**0.87**
Weoley	37%	43%	17%	4%	**0.88**
South Yardley	37%	43%	17%	4%	**0.88**
Hodge Hill	35%	43%	17%	5%	**0.92**
Kings Norton	35%	42%	19%	4%	**0.93**
Springfield	34%	45%	16%	5%	**0.93**
Stechford and Yardley North	34%	43%	18%	5%	**0.95**
Edgbaston	37%	39%	18%	6%	**0.96**
Bournville	32%	45%	20%	4%	**0.96**
Northfield	33%	42%	20%	5%	**0.98**
Brandwood	33%	42%	20%	5%	**0.98**
Longbridge	32%	43%	21%	4%	**0.99**
Moseley and Kings Heath	34%	41%	20%	5%	**0.99**
Selly Oak	37%	39%	18%	7%	**0.99**
Billesley	32%	43%	20%	5%	**1.00**
Quinton	32%	42%	21%	5%	**1.01**
Sheldon	30%	44%	21%	5%	**1.02**
Harborne	32%	41%	22%	6%	**1.04**
Oscott	27%	46%	22%	5%	**1.06**
Perry Barr	27%	46%	22%	5%	**1.06**
Handsworth Wood	33%	40%	19%	8%	**1.06**
Hall Green	20%	43%	28%	8%	**1.26**
Sutton Trinity	20%	40%	31%	9%	**1.32**
Sutton Vesey	16%	39%	34%	11%	**1.43**
Sutton New Hall	15%	40%	35%	10%	**1.45**
Sutton Four Oaks	14%	38%	36%	12%	**1.51**

Source: Census 2011

Figure 2: Average cars per household
(Birmingham-wide average cars per household is 0.93)



3.6 Table 4 shows car usage figures expressed in the form of 'travel to work by employed residents' data collected in the Census surveys for the same areas summarised in Table 1 previously. The figures reflect a similar pattern in that car usage is significantly higher (more than double) in outer wards such as Sutton Coldfield, Longbridge and Northfield when compared with inner city areas such as Aston, Ladywood and Nechells. It is worth considering that, some of the inner-city areas noted are likely to suffer higher levels of unemployment and as such exaggerate the difference in the figures based on employment status - reflecting social circumstances to some degree rather than specific differences in modal choices/preferences.

Table 4: Car use by ward (Travel to Work)

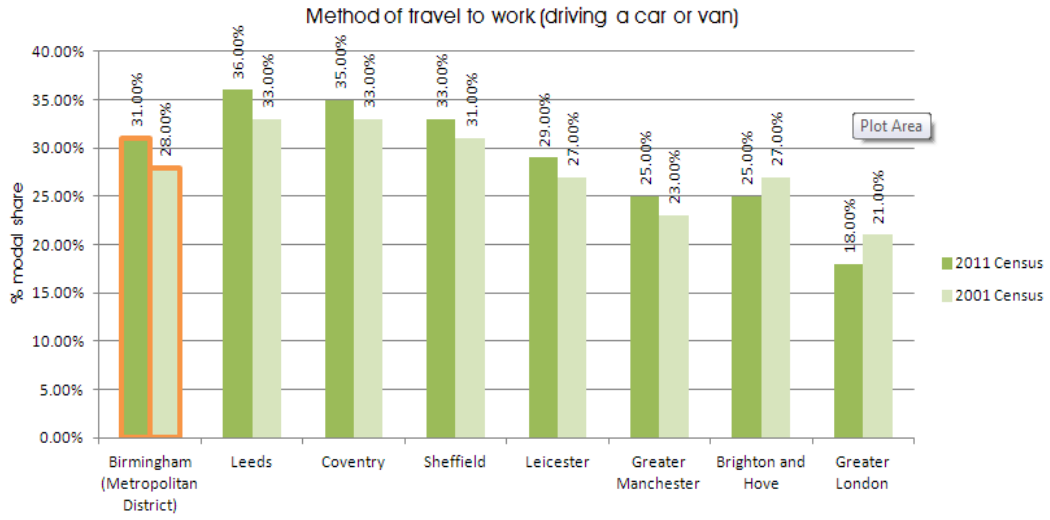
Ward	Birmingham Parking Guidelines SPD (2012) Area	Car Use (Modal Share %)			
		2011	2001	Change	% Change
Sutton Vesey	Area 2	47.00	45.00	2.00	4.44%
Longbridge	Area 2	38.00	31.00	7.00	22.58%
Northfield	Area 2	37.00	34.00	3.00	8.82%
Perry Barr	Area 2	36.00	37.00	-1.00	-2.70%
Moseley & Kings Heath	Area 2	35.00	32.00	3.00	9.37%
Tyburn	Area 2	31.00	25.00	6.00	24.00%
Edgbaston	Area 2	24.00	24.00	0.00	0.00%
Bordesley Green	Area 2	21.00	N/A	N/A	N/A
Soho	Area 2	20.00	16.00	4.00	25.00%
Ladywood	Area 1	19.00	18.00	1.00	5.56%
Aston	Area 2	17.00	13.00	4.00	30.77%
Selly Oak	Area 2	17.00	22.00	-5.00	-22.73%
Nechells	Area 2	15.00	14.00	1.00	7.14%
Birmingham		31.00	28.00	3.00	10.71%
Leeds		36.00	33.00	3.00	9.09%
Coventry		35.00	33.00	2.00	6.06%
Sheffield		33.00	31.00	2.00	6.45%
Leicester		29.00	27.00	2.00	7.41%
Greater Manchester		25.00	23.00	2.00	8.70%
Brighton and Hove		25.00	27.00	-2.00	-7.41%
Greater London		18.00	21.00	-3.00	-14.29%

Source: Census 2001 and 2011

Note: All ward boundaries were subject to change between the 2001 and 2011 Census surveys

3.7 The increase in car usage in the Birmingham area as a whole (10.7%) is higher than all the nationwide comparison sites. The changes in car use for work is illustrated in Figure 3.

Figure 3: Change in car use by area



3.8 With regard to the relationship between the number of bedrooms in a property and the number of cars or vans in the household, the Census data indicates that the smallest properties are generally associated with having no cars and the larger properties with owning more cars. Therefore, as expected, the average number of car or vans per household increases with the number of bedrooms.

Table 5: Car ownership by number of bedrooms per dwellings

No. of bedrooms	Average number of cars or vans per household
1	0.4
2	0.7
3	1.0
4	1.5
5+	1.8

Source: Census 2001 and 2011

3.9 A summary of key points on car ownership:

- Between 2001 and 2011, car ownership in Birmingham increased by 8.14%
- Car use for travel to work increased by 10.7%.
- Average car ownership in Birmingham is 0.93.
- There is a marked difference between car ownership levels in the city. Households with no cars generally tend to be located in the inner-city areas. The number of households not owning a car can be up to 22% higher than the city average in these areas, and up to 44% higher than those wards with highest car ownership. Households owning 3 or more cars range from fewer than 1% in inner city wards up to 12% in Sutton Four Oaks. This is owing to the accessibility and availability of public transport options available in the respective areas, as well as other factors including the mix of housing types (including number of bedrooms) and method of travel to work.

- This evidence suggests that average car or van ownership increases alongside an increase in the number of bedrooms a dwelling has. Therefore, it would be appropriate for future parking standards to differentiate by number of bedrooms.

4. Accessibility and availability of public transport

4.1 In the 2012 Car Parking Standards SPD, the city was demarcated into three zones/ areas based on the availability of public transport . The City Centre fell in Area 1. Area 2 was based on a distance-based measure of proximity to a railway station. The third zone applied to all remaining areas. The SPD permitted officers' discretion to consider urban form and other locations that had high accessibility not adequately captured using the railway catchment process, such as the fringe of the city and recognised local centres.

4.2 The process of defining which standard to apply has largely worked well and remains consistent with the points of consideration set out in the national guidance. There is no suggestion to make any significant change to the process. Developing the process used to date, this has now been made more sophisticated to reflect a wider and more nuanced set of characteristics impacting on the approach and level of standards to be applied.

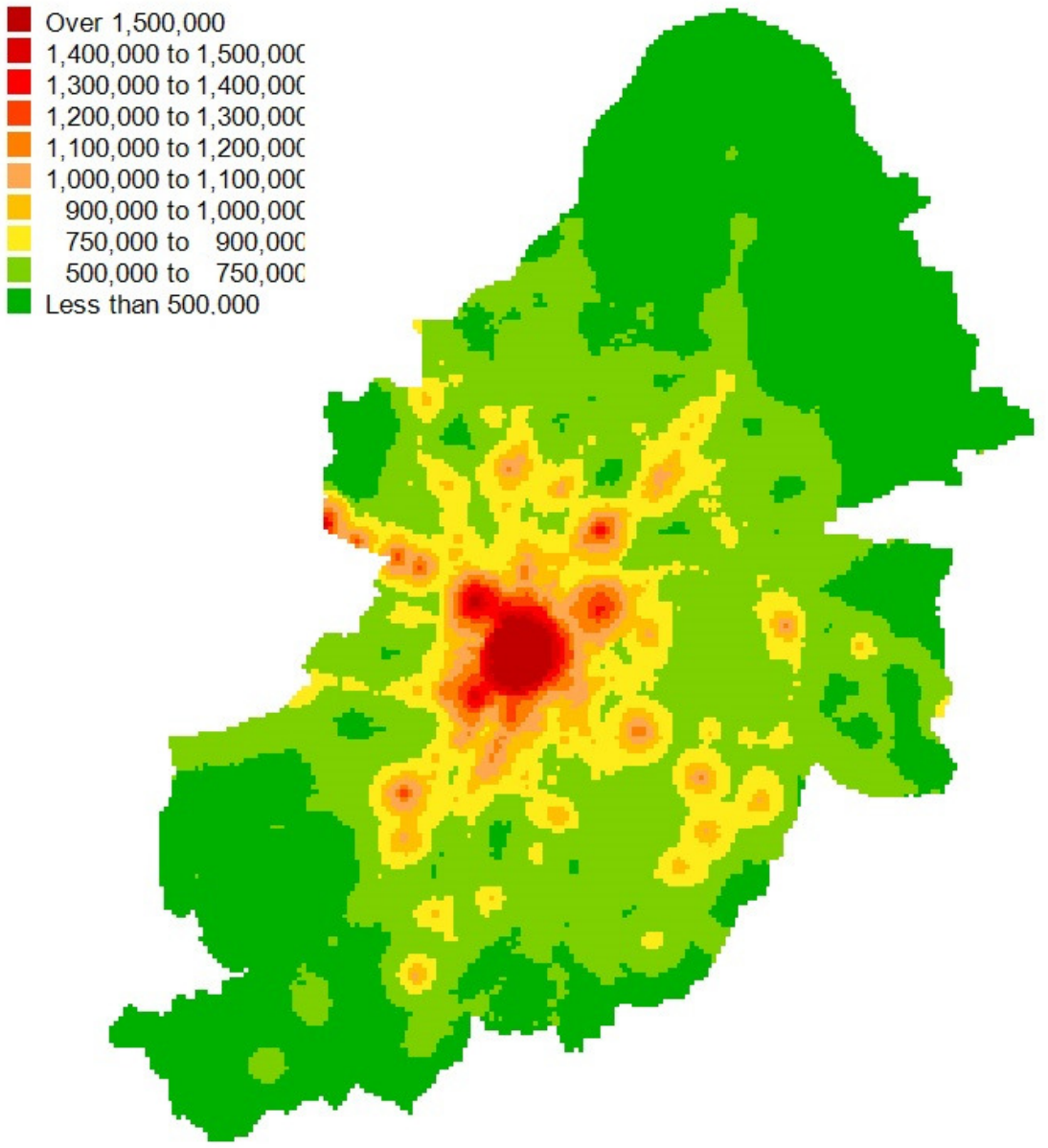
Accessibility mapping

4.3 Mapping was completed (Figure 3) to show the total population (2017) that can access each 100m grid square of the city within 45 minutes on public transport (AM peak – 8:00 to 10:00, 2019 timetabling). This included key public transport projects that are proposed for delivery within the next 3 years; Midland Metro extension to Edgbaston, A34 Sprint to Walsall, A45 Sprint to Birmingham Airport/Solihull, and Camp Hill train Line.

4.4 As can be seen in Figure 3, the central area of Birmingham including the city centre has the highest levels of public transport accessibility, followed by areas on the periphery of the city centre and around the main urban centres, especially those located on key arterial routes and at public transport interchanges and close to railway stations. The areas with the lowest level of public transport accessibility are generally located on the fringes/ outer areas of the city.

4.5 The results of the public transport accessibility mapping have been used to inform the zones. Following the same approach as the 2012 SPD, the highest areas of public transport accessibility will justify lower levels of car parking provision. Areas with lower levels of public transport accessibility will need to provide for more generous levels of car parking provision.

Figure 4: Public Transport Accessibility (total population that can access each 100m grid square on public transport)



5. Zoning

5.1 The practical application of selecting different parking standards based on the context of the development has been to apply zones across Birmingham City. Zoning for Birmingham was introduced in the 2012 SPD. It is an accepted and understood practice and as a principle has not been challenged. The use of zoning, or differentiation of parking standards based on location, is used by most major cities in the UK.

5.2 The zoning process has enabled all locations across the city to be classified taking into account the considerations listed in NPPF and other relevant criteria that impact on the appropriateness of the standards to be applied. This presents a transparent process by which any development is assigned standards.

Zoning approach in other cities

5.3 Cities that currently utilise some form of zoning or differentiated application of standards based on location or context are shown below.

Table 6: Other authorities parking zoning

City	Number of zones
London	numerous
Manchester	3
Leeds	3
Liverpool	2
Newcastle upon Tyne	3
Sheffield	2
Cardiff	2
Edinburgh	10

5.4 Zoning offers considerable opportunity to establish levels of parking standards that reflect the local circumstances. Edinburgh specify zones that take account of anticipated public transport connectivity. This accords with the guidance that “the opportunity for public transport” is considered.

5.5 Several cities differentiate their zones based on whether the streets have controlled parking or not. This can have a bearing on whether restrictive parking standards will have the desired, rather than an adverse, effect. It is, for Cambridge, the principal and sole determinant between the two parking standards zones applied in the city.

Approach to zoning in Birmingham

5.6 Three zones have been identified using:

- public transport accessibility mapping and opportunities for future public transport;
- car ownership levels;
- the presence of on-street parking restrictions/ traffic regulation orders;
- key district and local centres; and
- the Clean Air Zone.

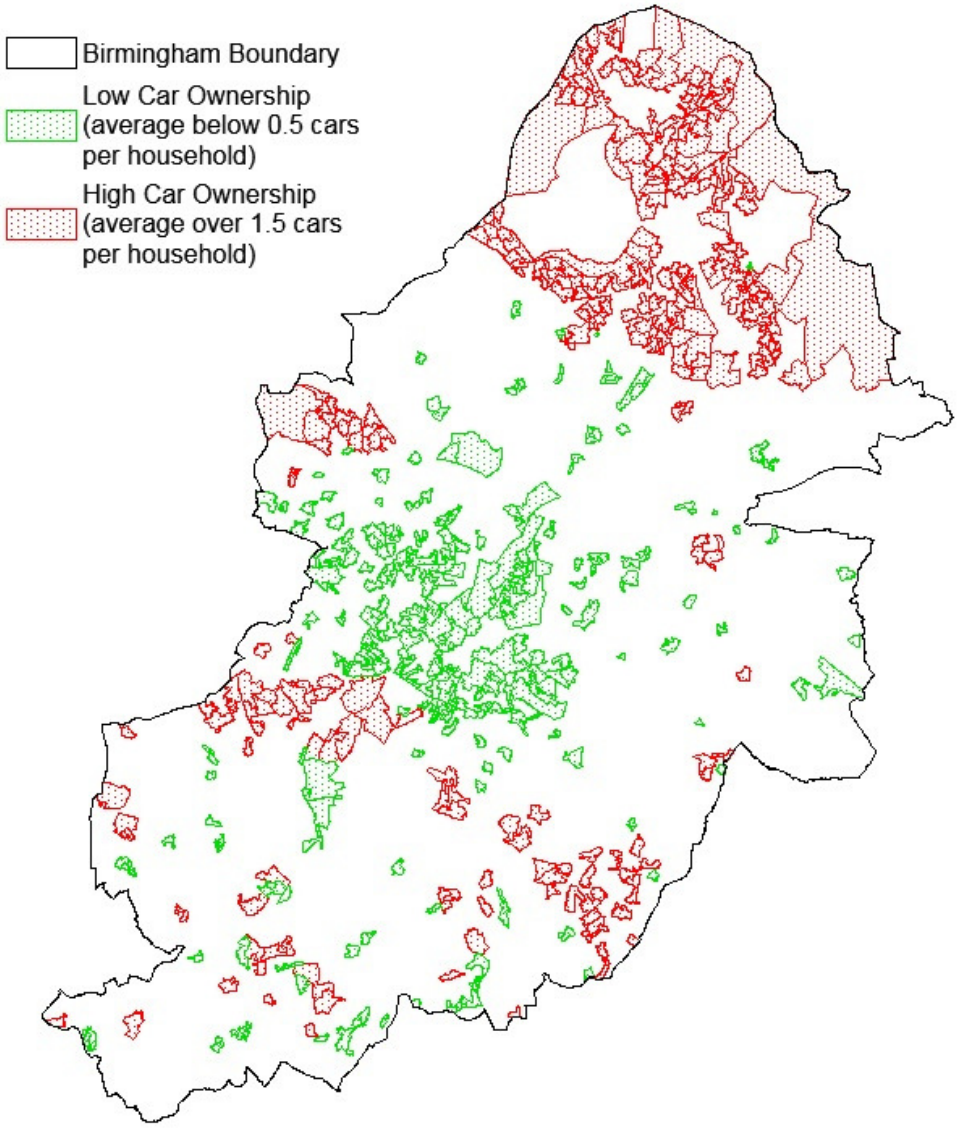
Public transport accessibility

5.7 The results of the public transport accessibility mapping is summarised in section 4 of this report.

Car ownership

5.8 Car ownership levels were also considered in the zonal process. Where possible, locations with higher than average car ownership, and where parking enforcement abilities are not in place, were allocated to Zone C rather than Zone B. This is not deemed appropriate in areas with particularly high public transport accessibility, however. In general, much of zone B is dominated by relatively low car ownership levels.

Figure 5: Areas of high and low car ownership



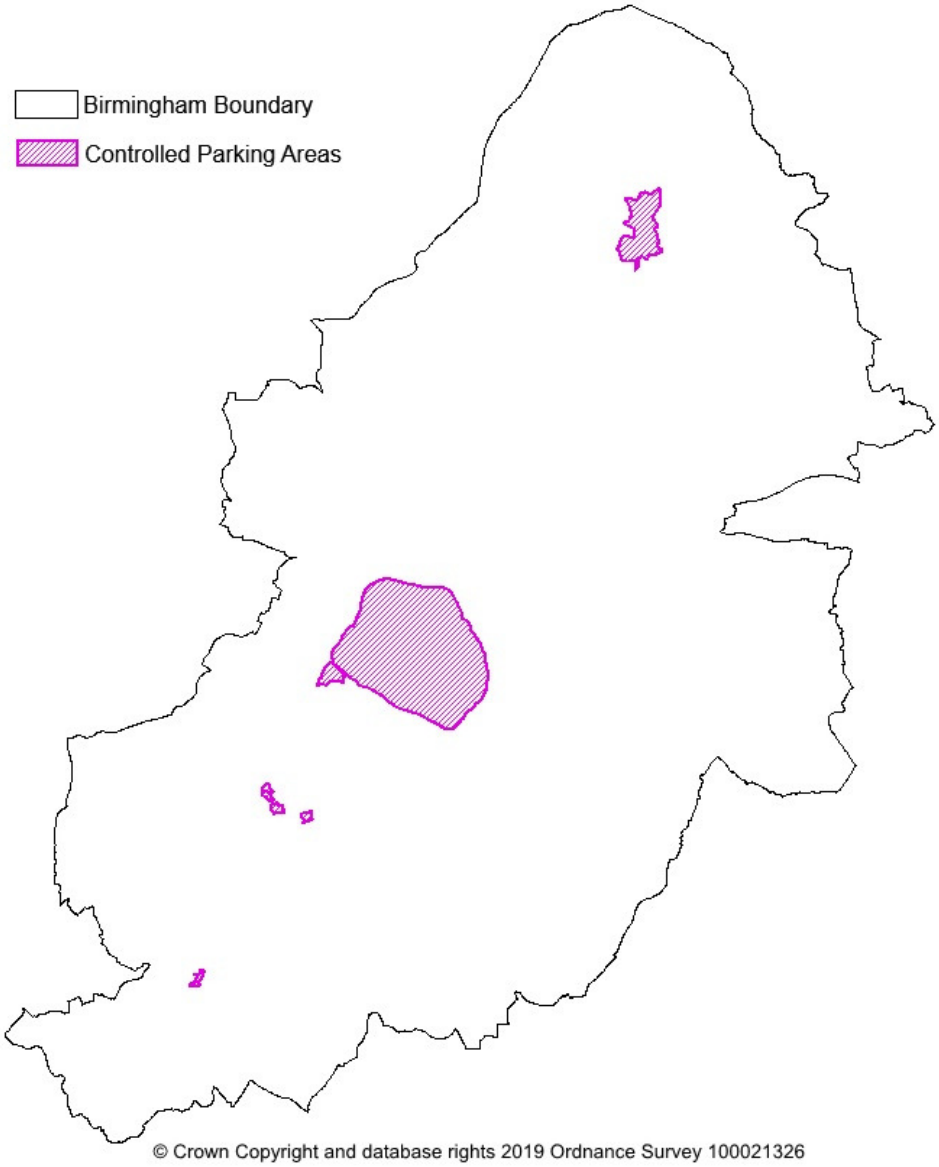
Source: 2011 Census data, average number of vehicles per household over census output area)

Parking restrictions

5.9 Zones were further defined by including areas with controlled parking (Figure 5). In particular Controlled Parking Zones (CPZs) and Residents Parking Schemes were considered, as well as some areas with comprehensive on street restrictions. It was not possible to consider all locations with parking restrictions, and it may be that certain locations in Zone C where these are in place, or will be introduced in future, could be treated as Zone B on a case by case basis.

5.10 The ability to enforce on street parking is a key component of successful parking management. Where parking controls exist, it is possible to allow development with lower levels of parking availability and at the same time ensure this does not create 'overspill' onto local streets.

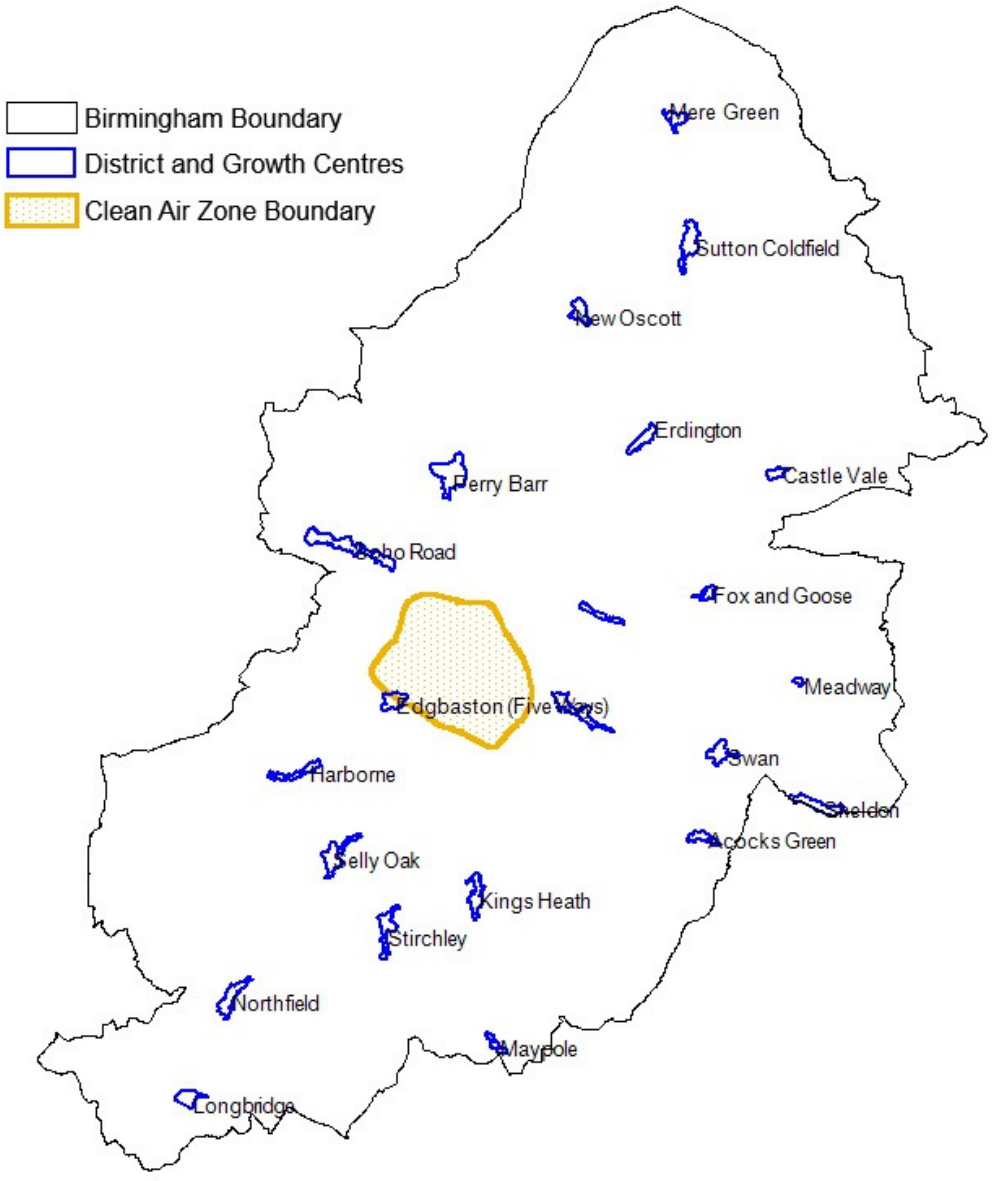
Figure 6: Areas with controlled parking measures (excluding match day parking schemes)



District Centres

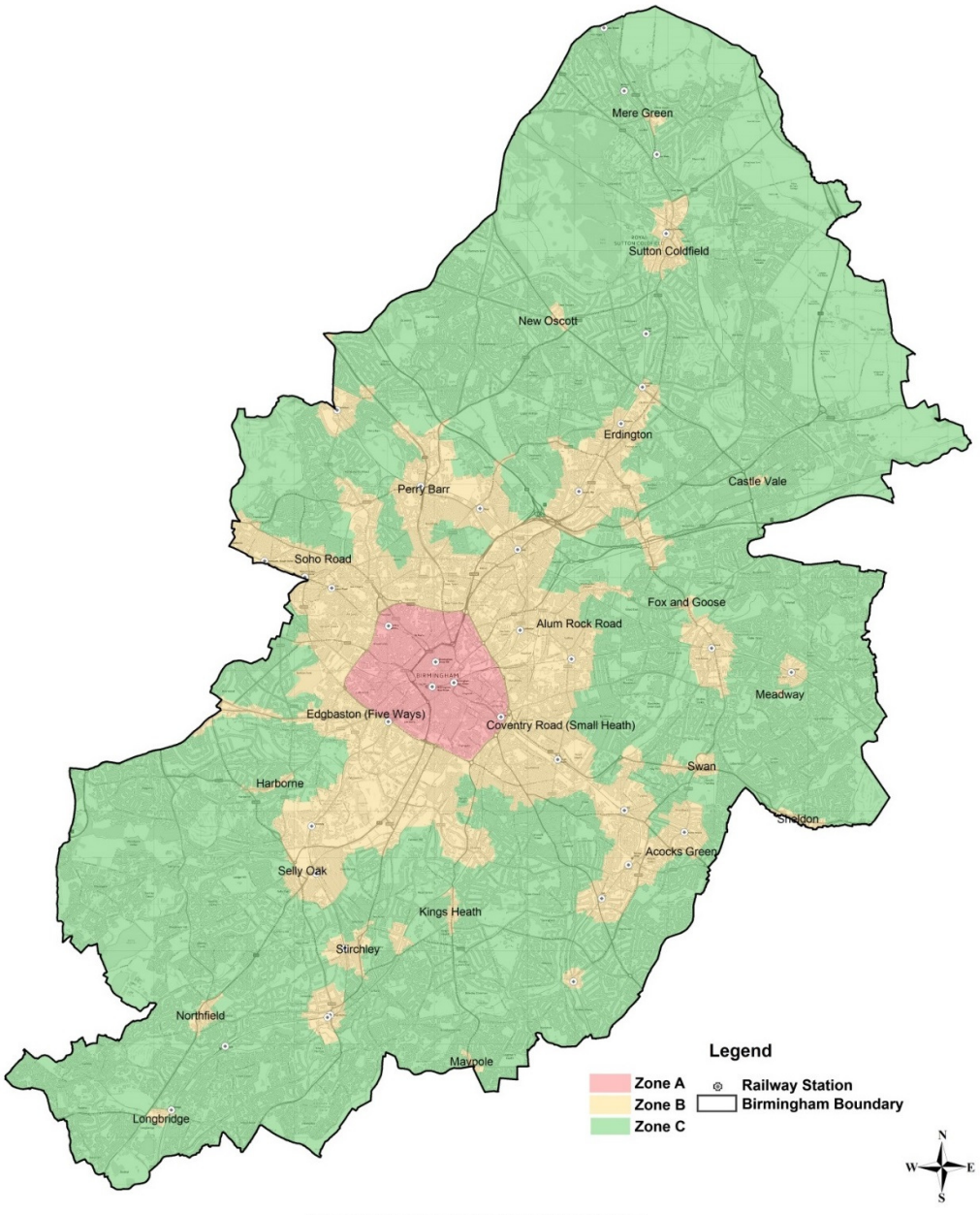
5.11 Zones were further defined by including the Sub-Regional Centre, District Centre Growth Points, District Centres (Figure 6) as identified in the Birmingham Development Plan (adopted 2017). These are key destinations where it is important to manage the transport network and parking availability.

Figure 7: District Centres and Growth Centres defined in the Birmingham Development Plan



5.12 In drawing together the above, the proposed parking zones as set out below, have been developed. The characteristics for each zone are broadly summarised in paras. 5.13 to 5.19 and Figure 8 shows the concluding mapping of the zones.

Figure 8: Proposed Parking Standard Zones



Zone A - Total 2017 Population that can access grid square within 45 minutes future public transport >1,500,000
Or within the Clean Air Zone
Zone B - Total 2017 Population that can access grid square within 45 minutes future public transport < 1,500,000 and >750,000
Or within an area with on-street parking controls, or within a district or growth local centre
Zone C - Total 2017 Population that can access grid square within 45 minutes future public transport >750,000

Zone boundaries have been rationalised to road and property boundaries, including further consideration of car ownership levels.

Source - MOTT MACDONALD accessibility analysis

NB - Services coded in to the future public transport model include:-
Metro Extension to Edgbaston
Sprint - A34 Walsall
Sprint - A45 Airport/Solihull
Camp Hill Line

* Indicative timetables sourced from PRISM

Birmingham City Council

Table 7: Zone characteristics

Zone	Zone Characteristics	Parking Provision Characteristics
A	· Very high or high public transport accessibility · All locations within the Clean Air Zone · High population density · Well served by cycle and walking facilities · Primarily retail and commercial with high density residential · Comprehensive on-street parking restrictions.	· Low and car free development · High provision for cycling, Car Clubs, ULEV (and bike hire where appropriate). · Adequate servicing and operational provision.
B	· High public transport accessibility · High to medium population density · Well served by cycle and walking facilities · Includes the most accessible urban centres and growth areas	· Restricted maximum parking levels for certain land uses · High provision for cycling, Car Clubs, ULEV. · If not in place already, these locations will be prioritised for on-street parking controls in the future.
C	· Medium to low public transport accessibility · Medium to low population density · Predominantly residential	· More generous car parking · Minimum requirements for residential developments. · Good provision for cycling and ULEV (and Car Clubs where market demand allows).

ZONE A

5.13 This zone is highly accessible by public transport. It encompasses the city centre which has comprehensive parking management to be completed as part of the Clean Air Zone work. The need to manage air quality and traffic levels within this zone is high. With large numbers of people living within close proximity and goods, services and employment close by, walking and cycling is a viable option for all local trips, and public transport is available for longer distances.

5.14 The city centre parking review undertaken in 2016 concluded that peak occupancy in the public off street parking was under 70%. The report concluded there is an over-supply of circa 10,000 parking spaces available for public use within the A4540 ring road[8]. This surplus parking capacity allows for more restrictive parking standards. Low levels of on-site parking can also be accommodated as the whole of the city centre now has on-street parking controls which ensure that parking does not 'overspill' on roads surrounding a development.

ZONE B

5.15 Locations in and around urban centres or transitional areas may already have or offer the opportunity for increased access by walking, cycling and public transport and offer the potential for increased access. These areas are also suitable for enhanced urban development. In these areas

[8] Table 3.12 Birmingham City Centre Parking Study, September 2016

there may be an on-going need to provide some access by car, but there is scope for the parking provision to be reduced as part of a process of increasing land use density and supporting a change in travel choice by creating an element of scarcity for parking. This constrains growth in car use and in many situations creates gentle competition and pressure on the parking that is provided. The reduced availability ensures that more focus is given to ensuring the parking space is used most effectively. Local landowners look to control how their parking is allocated to ensure the most appropriate use. In a retail and business context this may be limiting the number of employees permitted to park on-site so that space can be reserved for customers and those with specific operational needs. It may also encourage greater use of shared or unallocated parking within the design to maximise how available space can be used.

5.16 As part of the process of controlling overspill parking and promoting greater use of alternative non-car modes in these areas it may prove necessary, if not already in place, to introduce or extend on-street parking controls[9]. Those unable to park on site must seek alternative parking which may incur a cost and/or be less convenient which in turn will make alternative modes more acceptable as options.

5.17 The designation of areas to within Zone B is consistent with the policy that there is a requirement to constrain car use but that its reduction must be part of a progressive and gradual change in expectations and travel habits.

ZONE C

5.18 Locations that have limited accessibility by public transport and have lower levels of population density will be more reliant on access by car. It is recommended that the strategy for the parking standards should identify and pick those locations in which parking can be successfully reduced and separate those from locations where at this time the demand and expectations for parking are such that further reductions would create untenable access difficulties for residents or business.

5.19 Zone C will apply to locations with a low accessibility score. The zone should adopt higher parking maximums and for residential land uses it may be appropriate to also apply parking minimums. In these locations, for residential areas, the maximum parking standards will be supplemented by a minimum requirement for unallocated parking for residential developments. This step is to limit the impact of overspill from residential parking on existing streets. These minimums are not expected to be onerous but will support a reduction in potential overspill. The intent remains that the parking standards should be set to apply tolerable levels of pressure on the parking available in an area to encourage consideration of other travel options.

[9] Parking controls includes highway subject to waiting restrictions or within a controlled or restricted parking zone

6. Development type, mix and use

6.1 The NPPF stipulates that parking standards should be based on the "type, mix and use of development". The principal influence in parking demand is the land use. As already established within Birmingham's current Parking Standards SPD (2012) the levels applied are subject to the particular land use. As appropriate, this has been further differentiated on particular land uses within that classification. This approach is common to most if not all planning authorities in the UK and remains appropriate. It is accepted, understood and unchallenged.

Benchmarking

6.2 Benchmarking provides a useful tool in developing parking standards; it enables direct comparisons and serves to highlight where there is consistency and disparity in standards for any given use class. The tables below set out parking standards for non-residential and residential uses in other core cities.

Maximums and minimums

6.3 Maximums are set to ensure that developments continue to come forward with levels of parking provision that remain commensurate with the vision to reduce car dependency and thus exert some pressure on uncontrolled car ownership.

6.4 A list of benchmark cities is shown below. All but Newcastle upon Tyne place some degree of restriction on the amount of car parking provision permitted for non-residential developments. For residential developments, many cities apply maximums in central or accessible locations but elsewhere set minimums or guidelines to limit permission for developments that will create uncontrolled overspill.

Table 8: Benchmarking the approach to maximums with other cities

City	Car Parking Maximums
London	Apply to all areas and all land uses for the existing London Plan. The Draft London Plan proposes acceptance of Minimum Parking Standards only for residential developments that are in outer boroughs with very low levels of public transport accessibility (PTAL 0-1). [The London Plan March 2016 & Draft London Plan Dec 2017]
Manchester	Maximum standards for car parking apply to District Centres and the rest of the city for non-residential land uses. City Centre developments do not have standards but are assessed individually. Standards are not specified for Residential. [Manchester Core Strategy 2012 to 2027]
Leeds	In the Central Area (Public Transport Box), Core and Fringe Areas, Car Parking Standards are Maximums for all non-residential use. Minimums are not set "as long as it can be demonstrated that there will be no detrimental impact on surrounding streets". Student Accommodation is presumed to have no parking. In the remaining outer areas, car parking standards are set to be 'Expected Levels' [Leeds Parking Policy SPD January 2016]

Bristol	Car parking maximums apply for all land uses across the city. [Bristol Local Plan July 2014] The Central Area is subject to separate consultation.
Newcastle upon Tyne	Car parking standards are not presented as maximum or minimums. In the Central area, non-residential uses are set to zero or at levels suitable for operational needs only. [Newcastle Development and Allocations Plan Submission Mar 2019]
Liverpool	Maximum staff and visitor car parking standards apply to commercial and institutional developments. Servicing or operational minimums apply to commercial and institutional developments. For residential developments the standards are guidelines. The required provision can be lowered where it can be demonstrated that overspill will not cause safety or amenity issues for existing residents and/or businesses. Lower levels of car parking (including car free development) are encouraged where appropriate, and off-site car storage may be accepted. Other options include developer-funded implementation of a Controlled Parking Zone. [Consultation Draft Supplementary Planning Document April 2008]
Cardiff	Residential car parking standards consist of both minimums and maximums. Minimum parking required for residents. Visitor parking is not a requirement for any residential development and specified as a maximum]. Non-residential car parking standards are classified as operational and non-operational. Operational parking is specified as a requirement while non-operational parking is expressed as maximums. [SPD Access, Circulation and Parking Standards, January 2010]
Edinburgh	Car Parking Standards are set as a maximum. In most cases a minimum is also applied. Parking standards are applied to all small and medium developments and the starting point for assessing large developments that require Transport Assessments. The aim is to maximise the use of public transport, cycling and walking to access development. [Parking Standards for Development Management, City of Edinburgh Council, December 2009]
Brighton	Car parking maximums apply for all land uses across the city. [Brighton City Plan Part Two Draft Plan Jul 2018]
Coventry	Car parking maximums apply for all land uses across the city. [Coventry Local Plan Dec adopted 2017]

6.5 Those cities face similar challenges to Birmingham and recognise that parking maximums are an appropriate policy tool. For a number of the cities, maximums are applied to all land uses. For others the maximums are more stringent in the central areas where densities are greatest and suitable travel alternatives to car are available.

6.6 Edinburgh also adopts an approach that includes a Site Area Restriction for a number of zones. In those locations the maximum parking provision for a development is determined by either the site area or more typical gross floor area-based standards, depending on which results in the lower level of provision. The site area is defined to include landscaping, car parking, car park circulation areas and appropriate share of private roads but excludes adopted and adoptable roads. The purpose of the site area standard is to avoid traffic generation escalating when development

intensifies. Leeds applies maximums in their central areas where public transport provision is good but minimums in the outer, less dense, areas of the city.

Car parking - non-residential development

6.7 The benchmarking tables below illustrate that, for a number of use classes, the method of calculating parking numbers varies. For example, within D1 use-class some authorities have devised parking spaces based upon FTE job creation whilst others take a 'per room' approach. Within the C2 use class, parking standards for residential care homes are variously devised by a combination of FTE staff and bedrooms, or simply the number of bedrooms. This can make direct comparison of standards in some use classes challenging.

6.8 The benchmarking below is based upon the Use –class order, and specific land uses within some use classes as defined in the 2012 Car Parking Guidelines SPD. It should be noted however, that in a number of cases the grouping of specific land uses and the specification of land uses in parking standards varies between different local authority areas. The variation is most significant in the 'D' use classes.

6.9 Most of the benchmark cities differentiate standards for some land uses based on the scale of use. Retail in particular is categorised further based on scale, with many benchmark cities adopting a small, medium and large classification dependent on overall floor area. For food retail, this reflects the difference in hinterland and different mix in mode of travel expected for those going to a corner shop compared to a large grocery supermarket.

6.10 In areas where provision of parking on the site is inconsistent with the design or layout, or for other cases that on-site provision is unfavourable, benchmark cities allow for the use of commuted sums to support measures to mitigate the parking demand generated.

Car parking - residential development

6.11 All the benchmark cities base their car parking standards on the number of bedrooms within a dwelling to reflect the likely car ownership levels. Thus, the larger/ more bedrooms per dwellings, the higher the number of car parking spaces. Where a zonal approach is adopted by the local authority, this was also reflected in the parking standard. Thus, the more accessible an area, the lower the car parking standard.

6.12 The identification of allocated and unallocated/ visitor spaces for residential development is commonly used by local authorities. Unallocated parking is that provided in a way that can be accessed and used by all with legitimate purpose for being on the development site; residents and their visitors. It may be on-street or designed within the development for shared use. This is in contrast to allocated, or on-plot parking, that is by virtue of being within a residential curtilage or being reserved/numbered, only for use by the tenant or owner of a specific property.

6.13 Often unallocated parking, which remains private property under the stewardship of the landlord or estate manager, will be reserved for the collective and shared use of only the residents/visitor of that site. The extent to which this is enforced will be down to local management and need. This may also apply where unallocated parking is provided on-street, if the street remains under the control and maintenance of a private landlord. Where the street is adopted, this parking is effectively available for use by all, and unless controlled in other ways, available to satisfy parking overspill needs generated by other nearby developments.

6.14 Newcastle City Council state that "In many new developments allocating parking spaces for each house/ flat may not be the most efficient use of development land and unallocated parking could be provided with residents and visitors sharing communal parking spaces. This can work particularly well where car ownership is lower, the area is served by good public transport and a controlled parking zone is in place in the surrounding area." Leeds operate a reduction allowance on minimum standards if parking is unallocated.

6.15 Research on parking in residential areas in over 400 housing schemes in Kent[10] has shown that where parking is unallocated, provision can be reduced for residents' needs by 18%. Those spaces could also be used as visitor parking, further reducing provision. In its illustration, the report shows that parking provision can be reduced to less than 75% where it is unallocated rather than allocated.

6.16 Manual for Streets (2007) recognises the advantages of unallocated parking and while not specifying a quantity, suggests that unallocated on-street parking should be provided in preference to on-plot parking.

6.17 Unallocated parking offers another significant advantage. From a strategic perspective, retention of a significant parking provision on-street or in unallocated spaces ensures the purpose of that space remains consolidated and under centralised control by the landlord or local authority. This means that there is some flexibility in the future for space to be re-purposed, in aggregate if necessary, as the needs of the community change. In the not too distant future parking requirements may change very significantly with the introduction of autonomous vehicles, for example.

Table 9: Benchmarking of car parking standards

B'ham Parking Guidelines Feb adopted 2012 (max)	Newcastle Development and Allocations Plan Submission Mar 2019	Leeds Parking SPD adopted Jan 2016	Coventry Local Plan Dec adopted 2017 (max)	Bristol Site Allocations and DM Policies Plan adopted July 2014 (max)	Brighton City Plan Part Two Draft Plan Jul 2018 (max)
A1 Convenience/ Food retail					
Area 1 1:28m^2	**City Centre** Below 250m^2 – no parking	**Core (max)** Below 250m^2 - 1 space 250-800m^2 - 1:70m^2 Over 800m^2 - 1:100m^2	**City Centre** Determined in site by site basis	Below 250m^2 No standard Within centre From 250m^2 1:100m^2	**Central** Disabled user only
Area 2 1:21m^2	**Urban areas** Below 250m^2 – 1:80m^2	**Fringe (max)** Below 250m^2 - 1:30m^2 250-800m^2 - 1:35m^2 Over 800m^2 - 1:14m^2	**Outer city** 1:25m^2	Not within centre Between 250 – 1000m^2 1:100m^2 Over 1000m 1:14m^2	**Key Public Transport Corridors** 1:25m^2
Area 3 1:14 m^2		**Remaining (expected)** Below 250m^2 - 1:25m^2 250-800m^2 - 1:15m^2 Over 800m^2 - 1:14m^2			**Outer Areas** 1:15m^2
A1 Comparison/ Non-Food Retail					
Area 1	**City Centre**	**Core (max)**	**City Centre**	Below 250m^2	**Central**

[10] "Space to Park" URBED, University of Edinburgh and Design for Homes, 2014

B'ham Parking Guidelines Feb adopted 2012 (max)	Newcastle Development and Allocations Plan Submission Mar 2019	Leeds Parking SPD adopted Jan 2016	Coventry Local Plan Dec adopted 2017 (max)	Bristol Site Allocations and DM Policies Plan adopted July 2014 (max)	Brighton City Plan Part Two Draft Plan Jul 2018 (max)
1:40m^2	Below 880m^2 – no parking	Below 250m – 1 space 250-800m 1:70m^2 Over 800m 1:100m^2	Determined in site by site basis	No standard Within centre From 250m^2 1:100m^2	Disabled user only
Area 2 1:30m^2	**Urban areas** Below 800m^2 – 1:50m^2	**Fringe (max)** Below 250m – 1:30m^2 250-800m 1:45m^2 Over 800m 1:25m^2	**Outer city** 1:35m	Not within centre Between 250 – 1000m^2 1:100m^2 Over 1000m^2 1:14m^2	**Key Public Transport Corridors** 1:40m^2
Area 3 1:20m^2		**Remaining (expected)** Below 250m – 1:25m^2 250-800m 1:25m^2 Over 800m 1:25m^2			**Outer Areas** 1:30m^2
A2 Financial and Professional Services					
Area 1 1:60m^2	**City Centre** Zero parking	**Core (max)** 1 space	**City Centre** Determined in site by site basis	Below 250m^2 No standard Within centre From 250m^2 1:100m^2 Not within centre Between 250 – 1000m^2 1:100m^2	**Central** Disabled user only
Area 2 1:45m^2	**Urban areas** 1:50m^2	**Fringe (max)** 1:30m^2	**Outer city** 1:30m^2		**Key Public Transport Corridors** 1:75m^2
Area 3 1:30m^2		**Remaining (expected)** 1:10m^2			**Outer Areas** 1:40m^2
A3 Restaurants and Cafes and A4 Drinking Establishments					
Area 1 1:12 covers	**City Centre** Zero parking	**Core (max)** 1:9 covers	**City Centre** Determined in site by site basis	1:20m^2	**Central** Disabled user only
Area 2 1:9 covers	**Urban areas** 1:8 covers	**Fringe (max)** 1:3 covers	**Outer city** 1:10m^2		**Key Public Transport Corridors** 1:20m^2
Area 3 1:6 covers		**Remaining (expected)** 1:3 covers			**Outer Areas** 1:10m^2
A5 Hot Food Takeaways					
No standard	**City Centre** Zero parking	**Core (max)** 1:9 covers	**City Centre** Determined in site by site basis	1:20m^2	**Central** Disabled user only

B'ham Parking Guidelines Feb adopted 2012 (max)	Newcastle Development and Allocations Plan Submission Mar 2019	Leeds Parking SPD adopted Jan 2016	Coventry Local Plan Dec adopted 2017 (max)	Bristol Site Allocations and DM Policies Plan adopted July 2014 (max)	Brighton City Plan Part Two Draft Plan Jul 2018 (max)
No standard	**Urban areas** 1:26m^2	**Fringe (max)** 1:3 covers	**Outer city** 1:10m^2		**Key Public Transport Corridors** 1:35m^2
No standard		**Remaining (expected)** 1:3 covers			**Outer Areas** 1:20m^2
B1 Offices and Light Industry					
Area 1 1:60m^2	**City Centre** 1:200m^2	**Core (max)** Offices 1:175m^2 Call Centre 1:120m^2 Light industry 1:680m^2	**City Centre** Determined in site by site basis	1:50m^2	**Central** B1 Office Disabled user only
Area 2 1:45m^2	**Urban areas** 1:50m^2	**Fringe (max)** Offices 1:100m^2 Call Centre 1:70m^2 Light industry 1:388m^2	**Outer city** 1:45m^2		**Key Public Transport Corridors** B1 Office 1:100m^2 B1 Industry 1:150m^2
Area 3 1:30m^2		**Remaining (expected)** Offices 1:33m^2 Call Centre 1:22m^2 Light industry 1:66m^2			**Outer Areas** B1 Office 1:50m^2 B1 Industry 1:100m^2
B2 General Industry					
Area 1 1:120m^2	**City Centre** Zero parking	**Core (max)** 1:680m^2	**City Centre** Determined in site by site basis	1:50m^2	**Central** Disabled user only
Area 2 1:90m^2	**Urban areas** 1:50m^2	**Fringe (max)** 1:388m^2	**Outer city** 1:60m^2		**Key Public Transport Corridors** 1:150m^2
Area 3 1:60m^2		**Remaining (expected)** 1:66m^2			**Outer Areas** 1:100m^2
B8 Storage and Distribution					
Area 1 1:120m^2	**City Centre** Zero parking	**Core (max)** 1:680m^2	**City Centre** Determined in site by site basis	1:200m^2	**Central** Disabled user only
Area 2 1:90m^2	**Urban areas** 1:50m^2 for first 200m^2 of individual unit than 1:200m^2	**Fringe (max)** 1:388m^2	**Outer city** 1:100m^2		**Key Public Transport Corridors** 1:200m^2

B'ham Parking Guidelines Feb adopted 2012 (max)	Newcastle Development and Allocations Plan Submission Mar 2019	Leeds Parking SPD adopted Jan 2016	Coventry Local Plan Dec adopted 2017 (max)	Bristol Site Allocations and DM Policies Plan adopted July 2014 (max)	Brighton City Plan Part Two Draft Plan Jul 2018 (max)
Area 3 1:60m^2		**Remaining (expected)** 1:80m^2			**Outer Areas** 1:150m^2
C1 Hotels and Guest Houses					
Area 1 Up to 50 rooms 1:4 rooms Over 50 rooms As above for first 50 then 1:6 rooms	**City Centre** Zero parking	**Core (max)** 1:3 rooms	**City Centre** Determined in site by site basis	1:1 room	**Central** 0.25: 1 bed
Area 2 Up to 50 rooms 1:3 rooms Over 50 rooms 1:4.5 rooms	**Urban areas** 75 % of total bedrooms. Additional parking required if leisure and conferencing facilities	**Fringe (max)** 2:3 rooms	**Outer city** 1:2 rooms + parking provision for any A3 and D2		**Key Public Transport Corridors** 0.5: 1 bed
Area 3 Up to 50 rooms 1:2 rooms Over 50 rooms 1:3 rooms		**Remaining (expected)** 1:1 room			**Outer Areas** 1:1 bed
C2 Residential care homes and nursing homes					
1:3 bed space	**City Centre** Zero parking	**Core (max)** 1:3 residents	**City Centre** Determined in site by site basis	Staff 1:2 staff Visitors 1:6 residents	**Central** Staff 1:3 staff
	Urban areas 1: 1 resident staff, 1 space per 2 non-resident staff, 1 space per 8 bed spaces	**Fringe (max)** 1:3 residents **Remaining (expected)** 1:3 residents	**Outer city** 1:2 staff + 1:2 bed spaces		**Key Public Transport Corridors** Staff 1:3 staff Visitors 1:8 residents
C3 Dwellings					
Area 1 1:1 dwelling	**Citywide** 3 habitable rooms 1 No allocated spaces 1.5 1 allocated space	**Core (max)** Disabled user parking only	**City Centre** Determined in site by site basis	1 bed 1:1 dwelling 2 bed 1:1.25 dwelling 3+ bed 1:1.5 dwellings Sheltered Housing:	**Central** 1 & 2 bed 0.25 spaces per dwelling 3 & 4+ bed 0.4 spaces per

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	2.4 allocated spaces 4 habitable rooms 1.3 No allocated spaces 1.5 1 allocated space 2.4 allocated spaces 5 habitable rooms 1.8 No allocated spaces 1.9 1 allocated space 2.5 allocated spaces 6 habitable rooms 2.2 No allocated spaces 2.2 1 allocated space 2.6 allocated spaces 7 habitable rooms 2.5 No allocated spaces 2.5 1 allocated space 2.7 allocated spaces 8 habitable rooms 2.6 No allocated spaces 2.6 1 allocated space 2.7 allocated spaces			1: 1 warden	dwelling
Area 2 1:1.5 dwelling		**Fringe and remaining** Method 1 1 bed 1:1 + visitor parking as appropriate 2 bed 1.25-1.5: 1 dwelling + visitor parking as appropriate 3 bed 2:1 dwelling + visitor parking as appropriate Visitor car parking to be provided at a rate of 1 space per 5 units Method 2 As set out in Leeds Street Design Guide	**Outer city** 1 per dwelling + 1 unallocated space per 5 dwellings for visitors		**Key Public Transport Corridors** 1 & 2 bed 0.5 spaces per dwelling plus 1 space per 2 dwellings for visitors 3 & 4+ bed 1 space per dwelling plus 1 space per 2 dwellings for visitors
Area 3 1:2 dwelling					**Outer Areas** 1 & 2 bed 1 space per dwelling plus 1 space per 2 dwellings for visitors 3 & 4+ bed 1 space per dwelling plus 1 space per 2 dwellings for visitors
D1 Medical/ Health Centres					
Area 1 4:1 consulting	**City Centre** Zero parking	**Core (max)** 1:1 staff + 3:1 treatment room	**City Centre** Determined in site by site basis	1:1 doctor/ nurse/medical + 1: 2 admin staff +	**Central** 1:1 consulting room

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room + 1:1 treatment room				3:1 consulting room	
Area 2 4:1 consulting room + 1:1 treatment room	**Urban areas** 3:1 consulting room	**Fringe (max)** 1:1 staff + 3:1 treatment room	**Outer city** Determined in site by site basis		**Key Public Transport Corridors** 1:1 consulting room + 1: 2 staff
Area 3 4:1 consulting room + 1:1 treatment room		**Remaining (expected)** 1:1 staff + 3:1 treatment room			**Outer Areas** 2:1 consulting room + 1: 2 staff
D1 Creches, day nurseries, day centres, madrassahs					
Area 1 1:8 children	**City Centre** Zero parking	**Core (max)** Each case on merit	**City Centre** Determined in site by site basis	1:5 staff + buggy storage	**Central** 1:3 staff No parent drop off
Area 2 1:8 children	**Urban areas** 1:2 staff + 1:5 pupils	**Fringe (max)** Each case on merit	**Outer city** 1:2 staff + appropriate drop off facilities		**Key Public Transport Corridors** 1:2 staff No parent drop off
Area 3 1:8 children		**Remaining (expected)** Each case on merit			**Outer Areas** 1:1 staff No parent drop off
D1 Education – primary and secondary schools and colleges					
Area 1 1:4 staff	**City Centre** Zero parking	**Core (max)** 1:1 staff	**City Centre** Determined in site by site basis	1:2 staff + visitor space 10% of staff spaces	**Central** 1:3 staff No parent drop off
Area 2 1:3 staff	**Urban areas** 1:1 staff Adequate pick up and drop off area	**Fringe (max)** 1:1 staff	**Outer city** Primary schools 1:2 staff + appropriate drop off facilities		**Key Public Transport Corridors** 1:2 staff No parent drop off
Area 3 1:2 staff		**Remaining (expected)** 1:1 staff			**Outer Areas** 1:1 staff No parent drop off
D1 Higher and further education					
Area 1	**City Centre**	**Core (max)**	**City Centre**	1:2 staff +	**Central**

B'ham Parking Guidelines Feb adopted 2012 (max)	Newcastle Development and Allocations Plan Submission Mar 2019	Leeds Parking SPD adopted Jan 2016	Coventry Local Plan Dec adopted 2017 (max)	Bristol Site Allocations and DM Policies Plan adopted July 2014 (max)	Brighton City Plan Part Two Draft Plan Jul 2018 (max)
1:4 staff 1:30 students	Zero parking	1:2 staff	Determined in site by site basis	1:15 students	1:3 staff
Area 2 1:3 staff 1:22.5 students	**Urban areas** 1:1 staff Adequate pick up and drop off area	**Fringe (max)** 1:2 staff	**Outer city** 1:2 staff + appropriate drop off facilities		**Key Public Transport Corridors** 1:2 staff
Area 3 1:2 staff 1:15 students		**Remaining (expected)** 1:2 staff			**Outer Areas** 1:1 staff
D1 Halls, libraries, galleries, museums, places of worship					
Area 1 Local need 1:10m^2 Wider need 1:4.5m^2	No standard	**Core (max)** Museums/ public galleries 1:700m^2 Other on merits	**City Centre** Determined in site by site basis	None	**Central** Disabled user only
Area 2 Local need 1:10m^2 Wider need 1:4.5m^2		**Fringe (max)** Museums/ public galleries 1:200m^2 Other on merits	**Outer city** Museums/ public hall/ library 1:30m^2 Places of worship 1:10m^2		**Key Public Transport Corridors** Halls 1:30m^2 Libraries 1:45m^2
Area 3 Local need 1:10m^2 Wider need 1:4.5m^2		**Remaining (expected)** Museums/ public galleries 1:60m^2 Other on individual merits			**Outer Areas** Hall 1:20m^2 Libraries 1:30m^2
D2 Cinemas, bingo, theatres, concert, music, dance and conference halls					
Area 1 1:10 seats	No standard	**Core (max)** Cinemas 1:10 seats Other on merits	**City Centre** Determined in site by site basis	1:2 staff + Theatres/ cinemas/ concert halls 1:10 seats Bingo/ casino/ dance hall 1:22m^2	**Central** Disabled user only
Area 2 1:7.5 seats		**Fringe (max)** Cinemas 1:10 seats Other on merits	**Outer city** Cinemas 1:8 seats Concert/ bingo hall 1:8 seats		**Key Public Transport Corridors** 1:15 seats
Area 3 1:5 seats		**Remaining (expected)** Cinemas 1:5 seats Other on merits			**Outer Areas** 1:7.5 seats
D2 Swimming pools, ice rinks, sports centres, gyms and leisure centres					
Area 1 1:44m^2	**City Centre** Zero parking	**Core (max)** Stadia 1:15 seats Leisure centres/	**City Centre** Determined in site by site basis	1:2 staff + Sports hall/	**Central** Disabled user only

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		bowling alleys 1:50m^2 Other on merits		swimming pool/ gym 1:22m^2 Stadia 1:15 seats	
Area 2 1:22m^2	**Urban areas** 1:30m^2	**Fringe (max)** Stadia 1:15 seats Leisure centres/ bowling alleys 1:50m^2 Other on merits	**Outer city** Gyms/ fitness centre 1:15m^2 Sports hall 1:20m^2		**Key Public Transport Corridors** 1:35m^2
Area 3 1:22m^2		**Remaining (expected)** Stadia 1:15 seats Leisure centres/ bowling alleys 1:22m^2 Other on merits			**Outer Areas** 1:25m^2

EV charging standards

6.18 In July 2018 Central Government set out a strategy which identified for at least 50% of new car sales to be ultra-low emissions by 2030. Birmingham recognises the role that electric vehicles will play in helping to reduce CO2 emissions and improve air quality. The Birmingham Development Plan includes policy ensuring that new developments include adequate provision of charging infrastructure for low emission car club vehicles (TP43).

6.19 Ultra-low emission vehicles accounted for 1.7% of all new vehicle registrations in 2017. This is up from 1.2% in 2016. By the end of 2017, over 53,000 ULEVs had been registered in the UK with 12,000 of these in Birmingham[11].

6.20 The Draft London Plan sets out that all operational parking must provide infrastructure for electric or other Ultra-Low Emissions vehicles. London all-residential car parking spaces must provide infrastructure for electric of Ultra Low Emission vehicles. At least 20% of spaces should have active charging facilities, with passive provision for all remaining spaces.

6.21 Leeds City Council have a positive agenda for EV provision and have the fifth highest uptake of ultra-low emission vehicle registrations.

6.21 In July 2019 the Department for Transport launched a public consultation on proposed national standards for new and existing developments. These national proposals have not yet been adopted but it is deemed appropriate that they are reflected in the proposed standards so as to align as closely as possible with potential national legislation, whilst bringing forward clear guidance for the city as soon as possible.

[11] https://www.openaccessgovernment.org/ultra-low-emission-vehicles-uk/46714/

Table 10: Benchmarking of EV charging standards

B'ham Parking Guidelines Feb adopted 2012 (max)	Newcastle Development and Allocations Plan Submission Mar 2019	Leeds Parking SPD adopted Jan 2016	Coventry Local Plan Dec adopted 2017 (max)	Bristol Site Allocations and DM Policies Plan adopted July 2014 (max)	Brighton City Plan Part Two Draft Plan Jul 2018 (max)
Non-residential development					
No standard	No standard	Commercial/ industrial/ retail 1 charging point per 10 parking spaces	5% of all new parking spaces	No standard	10% of car parking provision + 10% of car parking provision for passive provision
Residential development					
No standard	No standard	**Commercial/ industrial/ retail** 1 charging point per 10 parking spaces **Residential** 1 EVCP per dwelling with dedicated parking 1 EVCP per 10 spaces for unallocated parking	5% of all new parking spaces	For schemes of 10+ car parking spaces, 1 EVCP per 5 spaces. For individual dwellings with a driveway or garage, passive provision should be made so that a charging point can be added in the future. This could take the form of a 13 amp socket within a garage for example.	10% of car parking provision + 10% of car parking provision for passive provision

6.22 Where the provision of this allocation is demonstrated to be impractical, some authorities require that spaces should have the capacity to easily retrofit recharging points. This should include the provision of ducting to accommodate a suitable power supply which facilitates high speed recharging. In cases where charging points, including infrastructure to enable retrofitting, cannot be provided within the development site, developer contributions may be sought to enable those facilities to be suitably provided in other locations including public car parks or on-street parking spaces.

Car clubs

6.23 Most of the benchmark cities are not prescriptive about car club provision within their standards. Despite the widespread use and success of car clubs in London, The Draft London Plan suggests that "car club spaces may be considered appropriate in lieu of private parking." Brighton and Hove similarly consider car club bays, car club membership and public transport season ticket vouchers

as options within a Travel Plan and require them only on a case by case basis for major residential developments.[12]

6.24 Leeds has a more established position on the promotion and provision for parking for car clubs. Leeds provides *recommended* provision for car club vehicles for residential, student and business uses (C3 and B1). Developments not satisfying the recommended level are to provide reasoned justification. Car club bays are to be provided in a visible location within the development that is accessible to the public 24 hours/day. Within the City Centre, developers may satisfy the recommended car club requirement by conversion and compensation for the loss of an on-street pay and display bay. Leeds set car club bay provision to be 1 for every 20 parking spaces in the core area.

6.25 Bristol stipulates that residential developments provide commuted sums in support of the city provider[13]. Reading requires developments of more than 10 residential units in their central zones and more than 50 residential units in outer zones to provide parking for and support a car club on the site, or demonstrate that the development will have access to and the use of a car club on a nearby site.[14]

6.26 Chelmsford City state in their interim residential parking guidance that:

- Car clubs need a high density of residents although there is no minimum threshold for a car club to work especially if it is part of a wider network.
- For smaller sites, a car club might work if it is also promoted to other nearby sites. For a development to support a car club parking should be 0.8 spaces per unit or less.
- To increase the viability of a car club, it is preferable if businesses in the area can use the cars too.[15]

6.27 Based on London's data, each car club car relies on 80 members. Assuming those geographically in-scope for car club use in the capital to be 4 million, membership is 5% of the total population. Based on an average occupancy of 2 per dwelling, a London car club car is sustained by 800 dwellings. With a more intensive allocation, such as a focus on a Car Free development, the number of dwellings to sustain a car club maybe substantially lower.

6.28 The Marconi Evolution development in Chelmsford includes a car club within its Section 106 agreements. Other large residential sites being developed in Chelmsford have similar conditions. These are large city centre developments: The Marconi Evolution site consists of nearly five hundred dwellings, a seven-storey office block and ground level commercial use within 100 metres of the mainline railway station and business district[16]. The site is close to other high-density residential areas and the University.

Bicycle parking

6.29 Cycling is a sustainable means of transport which has health benefits to the user and strongly contributes towards reducing carbon emissions and improving air quality. Between 2001 and 2011, the number of London commuters cycling to work more than doubled and nationwide cycling to work grew by 14% over the same period[17]. The Birmingham Cycle Revolution, with funding support

[12] Brighton & Hove Council SPD Parking Standards Oct 2016
[13] Citation required
[14] Revised Parking Standards and Design SPD, Reading Borough Council, Oct 2011 page 34
[15] Interim Residential Parking Guidance, Chelmsford City Council, 2015
[16] Block M Marconi Evolution, Chelmsford City Centre, Marketing Report, Savills, 2013
[17] Evening Standard 6 August 2015 https://www.standard.co.uk/news/london/number-of-londoners-cycling-to-work-doubles-in-10-years-10442787.html

from DfT Cycle City Ambition Grants and Local Growth Fund, sets out a vision to make cycling an everyday way to travel in Birmingham with 10% of all trips in the city to be made by bike by 2033. Birmingham's aspiration for cycling is clearly set out in the Birmingham Development Plan 2031 through Policy TP40 'Cycling'.

6.30 Many cities apply different rates for specific uses and operate sub-divisions based on scale of development. Cycle parking provision is often specified as short and long stay. The former is provision for those visiting the site as customers or service users. Long stay cycle parking is relevant for employees or residents.

6.31 The standard values have been set to progressively deliver cycle parking infrastructure that can support desired future growth. The standards outlined therefore reflect this aspiration and are in line with the benchmark cities that share the same aspirations for cycling. The following table presents the standards applied across benchmark cities to illustrate the values adopted.

Table 11: Benchmarking of bicycle parking standards

B'ham Parking Guidelines Feb adopted 2012 (max)	Newcastle Development and Allocations Plan Submission Mar 2019	Leeds Parking SPD adopted Jan 2016	Coventry Local Plan Dec adopted 2017 (max)	Bristol Site Allocations and DM Policies Plan adopted July 2014 (max)	Brighton City Plan Part Two Draft Plan Jul 2018 (max)
A1 Convenience/ Food retail					
Up to 1000m^2 1:125m^2 Over 1000m^2 1:400m^2	Below 500m^2 2:250m^2 for staff plus 2:300m^2 500-2500m^2 2:375m^2 for staff plus 2:300m^2 Over 2500m^2 2:600m^2 for staff plus 2:300m^2	Staff 1:500m^2 Customer 1:250m^2 20 cap	Up to 2500m^2 Staff 1:400m^2 Customer 1:200m^2 Min 2 spaces Over 2500m^2 Staff 1:600m^2 Customer 1:400m^2 Min 2 spaces	From 250m^2 Staff 1:250m^2 Customer 1:250m^2	Staff 1:5 staff Customer 1:150m^2 up to 2500m^2 thereafter 1:500m^2
A1 Comparison/ Non-Food Retail					
Up to 1000m^2 1:300m^2 Over 1000m^2 1:400m^2	Below 500m^2 2:250m^2 for staff plus 2:300m^2	Staff 1:500m^2 Customer 1:250m^2 20 cap	Staff 1:400m^2 Customer 1:400m^2 Min 2 spaces	From 250m^2 Staff 1:250m^2 Customer 1:250m^2	Staff 1:5 staff Customer 1:150m^2
A2 Financial and Professional Services					
Up to 1000m^2 1:300m^2 Over 1000m^2 1:400m^2	2:250m^2 for staff and visitors	Staff 1:500m^2 Customer 1:250m^2 20 cap	Staff 1:400m^2 Customer 1:400m^2 Min 2 spaces	From 250m^2 Staff 1:250m^2 Customer 1:250m^2	Staff 1:5 staff Customer 1:150m^2
A3 Restaurants and Cafes and A4 Drinking Establishments					
1:18 covers	2:50m^2 for staff and visitors	Staff 1:65m^2 Customer 1:40m^2	Staff 1:10 staff Customer 1:200m^2	From 250m^2 Staff 1:250m^2	Staff 1:5 staff Customer

B'ham Parking Guidelines Feb adopted 2012 (max)	Newcastle Development and Allocations Plan Submission Mar 2019	Leeds Parking SPD adopted Jan 2016	Coventry Local Plan Dec adopted 2017 (max)	Bristol Site Allocations and DM Policies Plan adopted July 2014 (max)	Brighton City Plan Part Two Draft Plan Jul 2018 (max)
		10 cap	Min 2 spaces	Customer 1:250m^2	1:250m^2
A5 Hot Food Takeaways					
None	2:80m^2 for staff and visitors	Each case on merits	Staff 1:10 staff Customer 1:200m^2 Min 2 spaces	From 250m^2 Staff 1:250m^2 Customer 1:250m^2	Staff 1:5 staff Customer 1:250m^2
B1 Offices and research and development					
Up to 1000m^2 1:500m^2 Over 1000m^2 1:400m^2	2:50m^2 for staff Additional provision required for visitors.	Staff 1:150m Visitor 1:1000m^2 10 cap	Staff 1:400m^2 Visitor 1:400m^2 Min 2 spaces	From 200m^2 Staff 1:100m^2 Visitor 1:1000m^2	Staff 1:100m^2 Visitor 1:500m^2 Shower and changing facilities for 500m^2 and above
B1 Light industry					
Up to 1000m^2 1:500m^2 Over 1000m^2 1:400m^2	2:50m^2 for staff Additional provision required for visitors.	Staff 1:300m^2 Visitor 1:500m^2 20 cap	Up to 4000m^2 Staff 1:400m^2 Visitor 1:750m^2 Min 2 spaces Over 4000m^2 Staff 1:500m^2 Visitor 1:1000m^2 Min 2 spaces	From 200m^2 Staff 1:100m^2 Visitor 1:1000m^2	Staff 1:200m^2 Visitor 1:1000m^2 Shower and changing facilities for 500m^2 and above
B2 General Industry					
Up to 1000m^2 1:500m^2 Over 1000m^2 1:400m^2	2:500m^2 for staff and visitors	Staff 1:300m^2 Visitor 1:500m^2 20 cap	Up to 4000m^2 Staff 1:400m^2 Visitor 1:750m^2 Min 2 spaces Over 4000m^2 Staff 1:500m^2 Visitor 1:1000m^2 Min 2 spaces	Staff 1:1000m^2 Visitor 1:500m^2	Staff 1:300m^2 Shower and changing facilities for 500m^2 and above
B8 Storage and Distribution					
Up to 1000m^2 1:500m^2 Over 1000m^2 1:400m^2	2:750m^2 for staff and visitors	Staff 1:1000m^2 Visitor 1:2000m^2 10 cap	Up to 4000m^2 Staff 1:400m^2 Visitor 1:750m^2 Min 2 spaces Over 4000m^2 Staff 1:500m^2 Visitor 1:1000m^2 Min 2 spaces	Staff 1:1000m^2 Visitor 1:4000m^2	Staff 1:350m^2 Shower and changing facilities for 500m^2 and above

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C1 Hotels and Guest Houses					
Determined by number of expected staff	2:10 bed spaces For staff and visitors. Provision for any A3/ and D2 use	Long stay 1:8 beds Short Stay 1:50 beds 10 cap	1:2 bedrooms Provision for any A3/ and D2 use	1:10 bed spaces	Long stay 1:10 bed spaces + 1:5 staff Short stay 1:50 bed spaces Min 1
C2 Residential care homes and nursing homes					
None	1:3 bedrooms for staff + 2:15 non-resident staff	Long stay 1:6 beds Short stay 1:20 beds	Staff 1:10 staff Visitors 1:8 bedrooms Min 2 spaces	Staff 1:5 staff Visitors 1:10 bed spaces	**Central** Staff 1:3 staff **Key Public Transport Corridors** Staff 1:3 staff Visitors 1:8 residents
C3 Dwellings					
1:1 dwelling	Housing: 1:1 unit. Dwellings without garages must contain adequate internal storage for cycles. Flats: 1:1 unit (long stay) 2:1 unit or 1:16 units whichever is greater (short stay)	Houses: 1:1 dwelling plus 1:40 dwellings for visitors (unallocated) Flats: 1:1 dwelling plus 1:10 dwellings for visitors (unallocated) Student: 1:5 students plus 1:15 for visitors Retired/ Sheltered 1:5 dwellings plus 1:10 dwellings for visitors	1 & 2 bed 1:1 dwelling 3+ bed 1:2 dwellings	Studio and 1 bed 1:1 dwelling 2 and 3 beds 2:1 dwelling 4+ bed 3:1 dwelling Visitors From a threshold of 10 dwellings 1:10 units Min 2 spaces	1 and 2 bed 1:1 unit (long stay) From a threshold of 5 units 1:3 units (short stay) 3 and 4 bed 2:1 unit (long stay) From a threshold of 5 units 1:3 units (short stay)
C4 Houses in multiple occupation					

B'ham Parking Guidelines Feb adopted 2012 (max)	Newcastle Development and Allocations Plan Submission Mar 2019	Leeds Parking SPD adopted Jan 2016	Coventry Local Plan Dec adopted 2017 (max)	Bristol Site Allocations and DM Policies Plan adopted July 2014 (max)	Brighton City Plan Part Two Draft Plan Jul 2018 (max)
None	No standard	1 per bedroom	1 per 3 bedrooms	Studio and 1 bed 1:1 dwelling 2 and 3 beds 2:1 dwelling 4+ bed 3:1 dwelling Visitors From a threshold of 10 dwellings 1:10 units Min 2 spaces	1 space per 2 bed spaces (long stay)
D1 Medical/ Health Centres					
1:1 consulting room	2:15 staff plus 2:2 consulting rooms	Staff 1:3 staff Visitor 1:10 people 20 cap	Staff 1:6 staff Visitor 0.5:1 treatment room Min 2 spaces	Staff 1:5 staff Visitor 1:2 consulting room	Staff 1:5 staff Visitor 1:1 consulting room
D1 Creches, day nurseries, day centres, madrassahs					
None	2:15 staff Additional provision required for visitors.	Each case on merits	Staff 1:10 staff Visitor 1:15 children Min 2 spaces	Staff 1:5 staff + buggy storage Visitor 1:10 children	Staff 1:5 staff + buggy and scooter parking Visitor 1:100 children
D1 Education – primary and secondary schools and colleges					
None	2:225 pupils Cycle storage which allows for a 10% increase in pupils cycling. Staff cycle requirements based on max. no. of staff employed at one time.	Primary 1:10 pupils (long stay) 1:100 pupils (short stay) Secondary 1:5 pupils (long stay) 1:100 pupils (short stay)	Primary 1:10 staff (long stay) 1:500 staff (short stay) 1:5 students for student use Secondary 1:10 staff (long stay) 1:500 pupils (short stay) 1:5 students for student use	Primary Staff 1:5 staff Pupils 1:10 pupils and scooter storage Visitor 1:10 children	Staff 1:5 staff Pupils 1:10 pupils + scooter parking Visitor 1:100 children
D1 Higher and further education					
1:10 staff/ students	2:225 pupils Cycle storage which	1:1- staff/ students	Staff 1:10 staff Students 1:5 students Visitor 1:500	Staff 1:5 staff Students 1:5 students Visitor 1:100	Staff 1:5 staff Pupils 1:2 students Visitor 1:75

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	allows for a 10% increase in pupils cycling. Staff cycle requirements based on max. no. of staff employed at one time.		pupils	students	students
D1 Halls, libraries, galleries, museums, places of worship					
None	2:15 staff plus 2:100m^2	Long stay 1:800m^2 Visitor 1:60m^2 20 cap	Staff 1:10 staff Visitor 1:20 people expected to visit at any one time	None	2 spaces + 1:350m^2
D2 Cinemas, bingo, theatres, concert, music, dance and conference halls					
1:50 seats	2:15 staff plus 2:50m^2	Long stay 1:100m^2 Visitor 1:100m^2 20 cap	Staff 1:10 staff Visitor 1:20 people expected to visit at any one time	Staff 1:300 seats Visitors 1:30 seats	Staff 1:5 staff Customer 1:30 seats
D2 Swimming pools, ice rinks, sports centres, gyms and leisure centres					
None	2:15 staff plus 2:10 players	Long stay 1:2400m^2 Visitor 1:60m^2 20 cap	Staff 1:10 staff Visitor 1:20 people expected to visit at any one time	Staff 1:5 staff Visitors 1:100m^2	Staff 1:5 staff Visitor 1:50m^2 up to 2000m^2 thereafter 1:250m^2

Disabled user parking

6.32 Across all benchmark authorities, the parking needs of disabled motorists are required to be met in full, irrespective of location and land use. The number of disabled spaces specified is generally expressed as part of total capacity. National guidance and standards for disabled parking, based on significant research, are set out in BS8300:2009. This guidance is used as a key benchmark for local authorities across the country. This bases the minimum level of disabled parking on three requirements. The first requirement is that, when known, one space is provided per disabled employee. The second is that an additional fixed percentage (5% or 6%) of the actual be provided for visitors or customers and thirdly, that a remaining percentage (5% or 4%) of spaces should be laid out so there is the potential for their conversion to disabled spaces when required.

Table 12: Benchmarking of disabled user parking standards

B'ham Parking Guidelines Feb adopted 2012 (max)	Newcastle Development and Allocations Plan Submission Mar 2019	Leeds Parking SPD adopted Jan 2016	Coventry Local Plan Dec adopted 2017 (max)	Bristol Site Allocations and DM Policies Plan adopted July 2014 (max)	Brighton City Plan Part Two Draft Plan Jul 2018 (max)
A1, A2, A3, C1, C2, D1 and D2 A minimum of one space or 6% of the total capacity up to a total of 200 bays (whichever is the greater) plus 4% of any capacity above 200. An additional 4-5% of provision of enlarged parking spaces to meet future increasing needs, particularly for/in health/medical locations.	No standard	A1, A2, A3, A4, A5, C1, 6% of parking provision + 1 per disabled employee	5% of the total parking provision.	A1, A2, A3, A4, A5 Staff From a threshold of 500m2, 5% of the parking standard to be provided in addition – minimum of one space Customer 5% of capacity to be reserved for disabled people (minimum of one space) where form of development permits	A1, A2, A3, A4, A5, C1, C2 0 to 200 bays – 3 bays or 6% of total capacity whichever is greater Over 200 bays – 4 bays plus 4% of capacity
B1, B2, B8 at least 1 space or 2% of total capacity whoever is greater.		B1, B2, B8 5% of parking provision + 1 per disabled employee		B1, B2, B8 , C1, D1, D2 From a threshold of 500 m², 3% of the parking standard to be provided in addition – minimum of one space	B1, B2, B8 0 to 200 bays – Individual bays for each disabled employee where known plus 2 bays or 5% of total capacity whichever is greater Over 200 bays – 6 bays plus 2% of total capacity
	C3 1 space per wheelchair accessible unit plus 1 space or 5% of total units whichever is greater	Flats 5% of actual provision		From a threshold of 10 dwellings (where parking is communal) – 5% of the parking standard to be provided in addition – minimum of one space	1 space per wheelchair accessible unit plus 50% of the minimum parking standard for ambulant disabled people & visitors
Places of worship, crematoria and	D1, D2	D1, D2			D1, D2

B'ham Parking Guidelines Feb adopted 2012 (max)	Newcastle Development and Allocations Plan Submission Mar 2019	Leeds Parking SPD adopted Jan 2016	Coventry Local Plan Dec adopted 2017 (max)	Bristol Site Allocations and DM Policies Plan adopted July 2014 (max)	Brighton City Plan Part Two Draft Plan Jul 2018 (max)
cemetery chapels A minimum of two designated spaces or 6% of total capacity as close as possible to the entrance.	6% of parking provision + 1 per disabled employee Over 200 parking bays 12 bays plus 4% of total capacity	The greater of 2 spaces or 6%			0 to 200 bays – Individual bays for each disabled employee where known plus 2/ 3 bays or 5%/ 6% of total capacity whichever is greater according to different types Over 200 bays – 4/ 6 bays plus 2%/ 4% of total capacity according to different types

Benchmarking of motorcycle parking standards

6.33 Powered Two Wheelers (PTW) includes motorcycles, mopeds, powered scooters and other motorised two wheeled vehicles. Leeds and Brighton have adopted motorcycle standards. Brighton's approach requires for provision for major developments based on at least 5% of the maximum total car parking standard. Minor developments provision is determined on a case by case basis.

6.34 Leeds have adopted a more complex approach which can be summarised as:

- A1, A2, B1, B2 – 1:1000m2
- A3 – 1:200m2
- A4, A5– Individual applications considered on their merit
- B8 – 1:5000m2
- C1 – 1:40 bedrooms
- C2 Care homes – 1:20 residents, other types on merit
- D1- 1:20 staff
- D2 cinema – 1:200 seats, D2 leisure centre 1:2000m2

7. Observational evidence and surveys

Development Management Team evidence

7.1 Observational evidence from the Development Management Team on specific development types, mix and use and the outcomes of the application of 2012 standards provides useful information on their effectiveness and how they can be improved. Changing priorities and considerable experience from the application of the existing standards can be drawn upon to update the standards to better serve local needs and intent.

Food retail

7.2 Increased urban living and a change in shopping habits more consistent with continental Europe to buy fresh goods frequently from a local provider, has seen in the last decade a rise in smaller format stores. This model supports much of the vision to promote more access by non-car modes. Given the aims of the strategy, it would be a tempting approach to adopt standards that enabled the large format grocery stores to continue to provide considerable parking capacity in edge of city locations whilst driving down the available parking for urban and smaller format stores.

7.3 The risk with such an approach is that a reduction of parking availability for "metro-style" food retail will limit their appeal and accessibility to a sufficient number of patrons with cars that the site becomes unviable; trade with those cycling, walking or taking a short bus ride to the store is insufficient in its own right to sustain the business. Those with cars faced with difficulties parking at the local store will drive to locations able to offer ample uncharged parking. Removal of this key element of trade results in either loss or the potential development of the local store. This then reduces options for those who would choose to shop locally, forcing them to find ways to access a supermarket format designed around the car.

7.4 Consequently while within the City Centre, food retail will be expected to be car free, as part of the longer-term vision, parking standards for food retail outside the urban core will, while maximums, be set at a level to enable some car access and support a viable proposition. The standards will not change for larger formats. The large supermarket will be limited as to the amount of parking it provides per square metre to the same extent as a smaller format store.

Places of worship

7.5 Birmingham is a highly diverse city and places of worship are an important cultural and historical aspect of the city. Places of worship must address the high level of short-term demand that can be generated. Some places of worship draw users from a very local area and therefore generate only limited car-based demand. Others may have a much more substantial hinterland leading to a greater volume and car mode share. While there may be some expectation of the function and draw of a place of worship, it cannot be assured over the longer term that a "local" facility will remain so.

7.6 To require minimums for places of worship offers *prima facie* an attractive solution. However, to do so contradicts the policy throughout the parking standards that non-residential developments should apply parking maximums to limit car use. Parking capacity permitted for a place of worship can be put to use at other times of the week when not required for those attending for worship purposes as general parking. This enables more efficient use of parking space but could undermine efforts to manage parking demand and limited impact on the local road network.

7.7 To remain consistent with its own approach and with standards adopted by the other benchmark cities, parking maximums will apply to places of worship for any on-plot provision. It will however be a requirement that applicants can demonstrate adequate parking capacity, available at the typical times of worship, within an 800-metre walk distance of the place of worship, for the expected car-based demand. Applicants will be required to undertake surveys to an agreed specification and produce evidence to satisfy this requirement.

Day Nurseries

7.8 Early years childcare facilities can present a temporal pressure of nearby roads with parental/carer pickups and drop offs. Often parents are dropping off children as part of an onward journey to work. Ideally such onward journeys should be encouraged on public transport. Providing secure buggy storage at nurseries can support this by enabling parents to walk children to the site but still make an onward journey to work afterwards. Whilst such facilities can often generate parking pressures, they are generally very short term as pick up and drop off times are more dissipated than for schools. Maximum standards for such facilities are still deemed appropriate, however consideration should be given regarding local on-street parking capacity and whether this can sustain short-term parking requirements.

Educational uses – schools

7.9 Observational evidence from school travel plan officers suggests that providing parking for parents/carers is not advisable. Those schools which happen to have local parking availability for parents to use (local private car parks, for example) have been known to withdraw this provision due to safety concerns. Without very careful management, any designated parental parking area can become overwhelmed. Usage is so concentrated at drop off and pick up times, that it becomes unsafe for children to be exiting vehicles and crossing car parks whilst substantial traffic surrounds them. The Council's policy is to encourage walking or cycling to school wherever possible. This offers health, air quality, environmental and traffic management benefits for all concerned.

7.10 It is acknowledged that provision for staff parking on school sites is generally justified. Whilst standards should provide for and encourage those staff who are able to walk or cycle locally, many teaching staff do not live within close proximity to their place of employment. Transporting books and resources can make public transport a less viable option.

7.11 Good, secure cycle and scooter parking on school sites can make a significant difference in encouraging sustainable travel to school. School travel plan officers observe that, even in newer-build sites, this is often something which gets overlooked, or poorly designed, and can be costly to retrofit.

Restaurants and Hot Food Takeaways

7.12 Car parking demand for restaurants in the city centre and local centres is usually limited in nature as these sites are accessible by a wide range of modes and typically linked with journeys by public transport. Those restaurants that operate as pub/family restaurants have a greater level of demand, but with these uses its unlikely customers will decide to park illegally given the duration of stay in the venue. However a reduced level of car parking provision can lead to additional pressures on local streets that are not covered by parking control measures.

7.13 The impact of car parking demand for hot food takeaways on traffic flow and road safety is an important consideration when determining applications. Hot food takeaways can attract a high proportion of car-borne and short-stay customers, particularly when areas in which they are located are not highly accessible. Often, in the vicinity of hot food takeaways, there is an increased occurrence of indiscriminate parking and interruption to the free flow of traffic along the roads adjacent to these premises. Customers may be tempted to park inappropriately and

indiscriminately for short periods to quickly pop in and out of takeaway premises, often jeopardising the safety of other road users and the free flow of traffic on the highway network.

7.14 Insufficient parking facilities in and around hot food takeaways can also have an adverse impact on the amenity of the immediate and surrounding areas. The demand is generally greater in the evenings and at weekends. One issue that has grown over the last few years is parking demand (both by car, moped and bike) from food delivery services. This may have the benefit of reducing customer parking demand by providing multiple customers on one delivery but can lead to more indiscriminate parking.

Offices

7.15 Offices that are located in highly accessible areas such as the City centre have a limited requirement for parking apart from the necessary level of accessible parking provision for staff. Ample, quality, secure cycle storage should be in place to support this approach. In areas of lower public transport accessibility, the demand for car parking can be higher and may affect on-street car parking if this is available with no parking controls.

Industrial

7.16 It is important to consider facilities which operate on a shift basis and how parking demand is managed at shift turn-around times. Working times can be when public transport is limited which may lead to a higher level of car use. Travel plans can encourage the use of more sustainable modes, with measures such as dedicated shuttle buses for staff and promotion/support for cycling.

Leisure centres

7.17 A key issue with leisure centres is fluctuating parking demand through the day and at weekends. When classes are taking place and facilities (such as gym areas and swimming pools) are in a high levels of use, the demand can increase significantly. This will typically be at evenings and weekends. This can lead to increased pressure for off-street parking which can conflict with local residents.

7.18 During the day public leisure facilities need to cater for drop-off and pick-up movements by bus and coach if they provide access to local education facilities.

Health centres

7.19 Demand for car-parking at health centres will arise from the following main areas and depend on the type of facility; patients, visitors, staff, ambulances/patient transport and deliveries. Some facilities will operate 24-hours-a-day/365-days-a-year operation and the consequent shift patterns need to be considered. There are other staff factors which can affect the demand for parking, such as security concerns for shift workers and the need for some staff to work between sites.

Cinemas/bingo halls/music venues;

7.20 Coach parking and facilities must be considered for music venues. Multifunctional uses must be considered per individual class use. Adequate parking should be allocated to encompass all uses, when assessing the parking requirements of a development, taking into account linked trips. A lower provision of vehicle parking will be appropriate in the City centre and other local centres

where there is good access to alternative forms of transport and existing car parking facilities that are available for public use.

HMO's

7.21 HMO parking provision requires a balanced approach which may be dependent on the type of development. More expensive units for young professionals, for example, could have the potential to generate more parking demand. However it is also not desirable to supply high levels of parking for such high density accommodation, which could discourage use of alternative, more sustainable modes of travel. In locations where HMOs are particularly prevalent, it can be useful to have on-street parking management.

Other uses

7.22 For a number of land uses parking is an operational requirement. Motor repair garages will rely on some storage capacity for vehicles being worked on. Consistent with most other authorities, operational parking does not include customer or employee parking. Operational needs are set out as minimums.

Evidence from the development control team has indicated that parking standards for particular land uses have not been helpful or suitable. Parking standards are invariably defined as a ratio against some unit of measure that indicates the scale of the development and by association the likely parking demand. For some types of application such measures have invariably been inappropriate and unhelpful due to the bespoke and complex nature of the developments being proposed. Hospital sites are such an example.

The complexity and various ways that the site can be used has rendered any straightforward correlation to a measure such as beds as largely irrelevant. This approach is not unique; Edinburgh take the view that "where transport patterns cannot be easily generalised (e.g. hospitals), it is not feasible to set specific standards" [page 3, City of Edinburgh, Parking Standards for Development Management]. Thus, for a number of land uses quantified parking standards are withdrawn. These will be considered on their own merits although a similar process as outlined in Chapter 8, and the wider document, when setting bespoke standards.

Site audits and surveys

City Centre Parking Study

7.23 In 2016, an extensive review of the existing parking situation within the City Centre was undertaken by Jacobs on behalf of the City Council. A report (available here: Birmingham City Centre Parking Study) was produced in September 2016 with the pertinent findings as follows:

- There was a significant over provision of car parking identified that was equivalent to almost 10,000 spaces;
- The average car to dwelling ratio was 0.47 in the city centre – significantly below the existing SPD maximum standard of 1.0-1.5 (indicating some scope to lower this);
- The majority of people that drive into the city centre are not driving from within the local authority boundary (but from the wider West Midlands area;
- The current number of PNR (Private Non-Residential) long stay spaces per worker in the city centre is significantly higher than other comparable cities (Manchester and Nottingham)
- The proposed growth levels in Birmingham identified in the Birmingham Plan 2031 could be accommodated without any further additional long stay parking being provided or replaced– this would bring the levels of 'spaces per worker' in line with other comparable

cities (from 0.37/worker to 0.22/worker – Manchester was found to be currently 0.22/worker).

7.24 The study included the following recommendations which are relevant to the setting of parking standards:

- The SPD maxima standards should be reduced as the current standards are facilitating parking spaces per worker that are 50 per cent higher than other core cities, and higher than developers have necessarily provided.
- No Private Non-Residential (PNR) parking should be approved above operational needs if the permissible maximum parking provision is exceeded in the quarter (this is the case in all quarters except the Gun Quarter and Ladywood).
- The SPD should support car-free developments (office and retail) in areas with controlled or planned controlled parking, along with planning conditions stipulating that occupiers are not allowed to obtain business permits.
- As there is an over-supply of parking in the city centre, no further temporary car parks should be granted approval. The car parks which have or are due to expire by 2019 should not have the approvals extended.
- The SPD should be amended to take account of the current level of car ownership and travel to work behaviours in the quarters which are below the SPD maxima standards. The percentage of no car households in the city centre is 56 per cent. The current provision of parking in private residential developments is 0.73 spaces per dwelling. This should also potentially support and promote car free developments for residential and businesses, including stipulating and enforcing planning conditions to ensure no permit parking is available to the building occupiers.
- SPD standards for residential parking maxima should be reviewed to be in line with observed car ownership conditions and characteristics for each quarter. This should be done as a priority as the analysis has shown considerable increases in residential parking has been approved in the city centre, despite trends showing lower car ownership and use.
- The SPD should support car-free developments (residential) in areas with controlled or planned controlled parking, along with planning conditions stipulating that occupiers are not allowed to obtain resident permits.
- All residential parking should require a management system to be in operation, which should be monitored and enforced through the planning system.

7.25 The findings above will need to be reflected in both the revised guidance for the level of parking for new developments and associated design standards. Since this review, the imminent introduction of the Clean Air Zone and the roll out of comprehensive on street parking management allows for very low parking provision within the ring road. Parking management allows control over any potential overspill from low car developments onto local streets. There has been significant improvement in public transport accessibility into the city centre and this will continue to improve in coming years with further Sprint, Metro and bus provision. Whilst a very low maximum is proposed for those developments which can demonstrate clear need, it is felt that a zero-parking approach for the majority of future development in zone A is now realistic and necessary to support Clean Air, Climate Change and traffic management objectives.

7.26 As part of the 2016 City Centre Parking study, information regarding city centre planning applications processed by Birmingham City Council in the last five years (2010-2015) indicates an approximate average of 0.5 parking spaces per room was provided at approved residential developments (e.g. 1 space for a two-bedroom dwelling). Seventeen car free residential

developments were approved in the city centre as well as seventy-two car free non-residential developments.

7.27 A more recent assessment of full major residential led city centre applications (excluding student accommodation) approved in the last 3 years (between 2018 - 2020) shows that the:

- Average number of car parking spaces per dwelling = 0.15 car parking spaces
- Number of car free developments = 26% of applications
- Where non-residential development is included within the scheme (normally as small scale retail/ leisure units) car parking provision for such uses is predominantly zero.

Residential Site audits

7.28 In order to assess the impact of parking provision within recent residential developments, an appraisal has been undertaken on a handful of recently completed developments across the city. The purpose of which was to determine if the level of parking on each development is sufficient and if there are any design issues could be observed to improve guidance on design. Sites were selected in different wards and different parking standard zones. A variety of types of housing was included; 2, 3, 4, 5 and 6 bed housing as well as apartment blocks. Table 13 details the developments selected. Table 13 details the parking provision and layout details for each development, based on the planning application approval.

Table 13: Residential developments selected for parking audit

Ref	Development site	Planning app Ref	Ward	Total dwellings	Type of housing
1	Shyltons Croft and Graston Close, Ladywood, B16 8BA	2009/05407/PA	Ladywood	28	Affordable housing. 2,3 and 4 bed. For rent BMHT
2	New Imperial Crescent, Springs Road/Reddings Lane, (former Breed Steering Systems), Tyseley, B11 3DL	2007/02589/PA	Springfield	90	59 houses (2,3,4 and 6 bed) and 31 flats (2 bed)
3	Silver Mere, Sheldon, B26 3XA	2012/08329	Sheldon	129	2,3 and 4 bed
4	Land adjacent Sutton Council House , Upper Clifton Road, Sutton Coldfield B73 6AB	2014/04828/PA	Sutton Trinity	41	41 flats; 1 and 2 bed
5	Former Hardy Spicer Sports Ground, land between Signal Hayes Road and Weaver Avenue, Walmley, Sutton Coldfield B76 2QA	2015/07790/PA	Sutton New Hall	110	Open Market: 5x5 bed, 15x4 bed, 64x3 bed, 10x2 bed. Affordable housing (inc 4 apartments): 2 x 4 bed, 4x3 bed, 10x2 bed
6	Booths Lane, Sandy Lane, Great Barr, B42	2013/09475/PA	Oscott	249	Mix of detached, Semi - detached and terraced 63x 2 bed, 108x 3 bed , 78x 4 bed

Table 14 Parking allocation for selected residential developments

Ref	Parking Standard Zone		Parking details	Total bedrooms	Total parking spaces	Space per dwelling	Space per bedroom
	2012 SPD	2019 Draft SPD					
1	1	A	164% in total: 2 beds with 100%, 3&4 beds 200%, all within curtilage except for 3 visitor spaces. All on road space within the estate is double yellow lines.	79	46	1.64	0.58
2	3 (2 border)	C (B border)	141 spaces in garages or driveways, and in parking courts.	232	141	1.57	0.61
3	3	C	All 196 parking spaces on curtilage plus some visitor parking in bays off road.	407	196	1.52	0.48
4	2	B	14 spaces in car park off Upper Clifton Road. Only for 2 bed flats. No provision for 1 beds. Site within town centre with good public transport accessibility.	54	14	0.34	0.26
5	3	C	194 spaces for open market properties, 25 for affordable housing. All parking within curtilage.	337	219	1.99	0.65
6	3	C	All 470 spaces on plot, with some additional visitor spaces (figure not given)	762	470	1.89	0.62

7.29 Site visits were undertaken to each development at 3 different times of day to survey parking occupancy, including evenings and weekends when residential parking occupancy is generally at its peak. Surveys took place during term time in June and July 2018.

7.30 The surveys showed (table 15) that the parking occupancy at all sites was not excessive, with a maximum of 87.5% at peak times. The actual usage at each site ranged from 0.66 to 1.32 parked cars per household.

Table 15: Percentage of parking spaces occupied

Ref	Development	Early Morning	Daytime	Evening	Maximum
1	Shyltons Croft	87.5%	45.0%	72.5%	87.5%
2	New Imperial Crescent	81.5%	43.8%	74.7%	81.5%
3	Silvermere	81.5%	43.1%	76.9%	81.5%
4	Sutton House/ Upper Clifford Road	70.3%*	70.3%*	73.0%*	73.0%*
5	Signal Hayes Road	78.6%	43.9%	82.7%	82.7%
6	Booths/ Sandy Lane	78.9%	38.8%	78.0%	78.9%

Table 16: Parked Cars per household

Ref	Development	Early Morning	Daytime	Evening	Maximum
1	Shyltons Croft	1.25	0.64	1.04	1.25
2	New Imperial Crescent	1.32	0.71	1.21	1.32
3	Silvermere	1.23	0.55	1.16	1.23
4	Sutton House/ Upper Clifford Road	0.63*	0.63*	0.66*	0.66*
5	Signal Hayes Road	1.04	0.58	1.09	1.09
6	Booths/ Sandy Lane	1.01	0.49	0.99	1.01

* It should be noted that the survey at Sutton House/Upper Clifford Road included local publicly available parking provision, beyond the allocated parking spaces for the development. The 8 visible allocated spaces within the curtilage of the development showed an occupancy rate of between 63% and 100% (with 6 spaces in garages not being visible to survey).

7.31 Whilst the survey occupancy levels demonstrated some surplus parking availability within the developments, observational evidence showed that many of the sites still experienced some pavement parking. This suggests that design and layout of parking are as important as level of provision. Greater provision of unallocated parking (outside the curtilage of the dwelling) would allow more flexible usage of these spaces to be shared by visitors, deliveries and those households that require more vehicles. Longer narrow drives were also observed to exacerbate pavement parking. Where parking provision for two cars requires one to block the other vehicle, drivers are more likely to park on street/pavement rather than create inconvenience later on.

Booths Lane Development (Ref 6), Woodland Mews

New Imperial Crescent Development (Ref 2)

Non-residential site audits

7.32 Site audits have also been undertaken at a variety of other developments across the city, representing different land uses. A summary table of these is available in Appendix 1. In reviewing non-residential land uses, there are an extremely wide number of variables to consider; including the breadth of different land uses, different usage times and patterns, different parking zones, and the impact of other local conditions. This means that it is not possible to draw clear conclusions regarding how to approach parking for a whole range of land use types without conducting an unfeasible number of site surveys. However, some observational points have been noted for certain land uses.

7.33 **Purpose built Student Accommodation** is generally encouraged to be car free, however consideration of parking space for disabled drivers, and deliveries and drop offs is useful.

Developments are encouraged to have a plan in place for start/end of term activities when temporary stress may be placed on local roads due to student arrivals and unloading belongings.

Student accommodation, Somerset Road, Edgbaston

7.34 A parking management and enforcement approach for any parking facility linked to a large development is very important.

Parking management/enforcement arrangements

7.35 The **Retail and Service** Development in Longbridge Town Centre, including a multi-storey car park, was the largest development visited. 1716 parking spaces were allocated for this development

which showed an occupancy rate of below 50%. This suggests an over provision of spaces. This site would sit within Zone B of the draft SPD, therefore this is a very high level of provision for a highly accessible local centre location. Some floors of the car park were over 95% empty. However, the high capacity of parking is intended for future phases development including a gym and a cinema complex. Site staff felt that low occupancy also related to design and layout, with key retail access on certain floors but not others and a lack of awareness/signposting that there are lower parking floors.

Longbridge multi-storey car park

7.36 A convenience **food retail** development in Sutton Four Oaks evidenced very high levels of occupancy at 100% peak. The store provides 10 parking spaces, with the survey observing 3 additional cars parked in the delivery area, inhibiting access. This is a local 'express' store which would therefore be aimed at local residents who are more likely to walk or cycle to the site. A high turnover of customers would also be expected at sites such as this.

Food Retail, Four Oaks

7.37 Two **medical** sites were surveyed, a Dental Hospital and a Primary Care Centre. They had contrasting parking occupancy levels of 44.93% to 100%. This variance demonstrates the complexity of these land uses, particularly when parking management and parking charges are influencing parking behaviours as was observed at the Dental Hospital. Observational evidence also demonstrates the importance of considering other local land uses and parking availability within the vicinity of medical facilities, which can be significant trip generators.

Hodgehill Primary Care Centre

Birmingham Dental Hospital, Millpool way

8. Setting standards

8.1 In considering the evidence set out in the previous sections: local and national policy and strategies, car ownership levels, accessibility, land use, benchmarking, observational evidence, audits/ surveys - this section assigns numeric values to a land use and zone. Through the Birmingham Development Plan, Birmingham City Council is committed to facilitating modes of transport that reduce carbon emissions and improve air quality (TP38). For this reason, while most developments will be required to provide maximum parking levels for cars, they will be obligated with minimum levels of parking or facilities to support the use of non-car modes and more sustainable car usage such as Ultra Low Emission Vehicles (ULEV) and Car Club provision in combination.

Maximums and minimums

8.2 Consistent with other authorities, maximum car parking standards are set to ensure that developments continue to come forward with levels of parking provision that remain commensurate with the vision to reduce car dependency and thus exert some pressure on uncontrolled car ownership. Accordingly, there is no expectation that a minimum level of spaces to be provided, as long as it can be demonstrated that this would not result in detrimental problems on the local highway. The exception is for residential development in lower accessibility areas, where a minimum will be applied to unallocated parking to ensure that lack of provision does not create detrimental 'overspill' parking onto local roads and pavements. This is set out in further detail in para 8.4

8.3 Commensurate with other authorities, minimums are applied to disabled, bicycle and motorcycle parking. While the standards for general car parking vary by location, the minimum standards that relate to disabled, bicycle and motorcycle parking do not. Unless otherwise specified, parking maximums should be rounded up to the next whole number. This practice is consistent with other benchmark cities.

Residential development

8.4 Census-based research on behalf of The Department for Communities and Local Government (CLG), in 2007 indicated that for a given location, dwelling size and tenure are major factors in determining car ownership levels. Car ownership increases with the number of habitable rooms and is highest in owner-occupied houses rather than rented property.

8.5 In response to officers' application of the current standards and consistent with many of the benchmark cities, the standards will adopt the use of 'per bedroom' as a unit to allocate spaces. The application of any adjustment for 'tenure' is not included given the significant change in socio-economic status and mix of those who may rent property now, and in the future, compared to 2001.

8.6 Evidence shows that parking provision can be reduced to less than 75% where it is unallocated rather than allocated. From a strategic perspective, retention of a significant parking provision on-street or in unallocated spaces means that there is some flexibility in the future for space to be re-purposed should the needs of the community change. For the purposes of the parking standards for Birmingham it is proposed there is a distinction between private unallocated and adopted unallocated parking. However, there is no intent for new developments to be required to provide sufficient parking not only for its own needs and additional surplus for the purposes of absorbing

existing parking pressures and demand. Given this, the unallocated parking is prescribed on the basis that is only needs to serve the needs of the development to which it applies.

8.7 The standards are defined such that where minimum standards are applied for residential schemes and developments, those minimums will require and apply to unallocated parking. The minimum value is set at a level that ensures that a significant amount of the parking demand expected to be generated from the development can be accommodated through unallocated provision. This controls developments coming forward that would create severe overspill by having no provision for its own residents and the minimums limit the amount of overspill. Within and up to the maximums prescribed, developers can provide further parking, either unallocated or allocated, to offer a mix of dwelling types and offer to the market. The combination is designed to ensure that schemes not only provide a level of parking that is commensurate with the strategic aims of the City, but also that a significant amount of it is brought forward in a way that uses space efficiently and offers flexibility in the future. This concept is embodied within the Draft London Plan, that states that parking should be "flexible for different users and adaptable to future re-purposing in the context of changing requirements."

8.8 Consistent with the strategic approach, it is recommended that residential developments be subject to maximum parking provision. For developments within Zone A and B, on-street parking is generally controlled which helps to limit overspill. For these zones, the maximum standards should be lowered to encourage residents to consider their car ownership. This approach is consistent with a number of the benchmark cities, that require car free or low provision in areas where parking is controlled and where public transport accessibility and walking and cycling opportunities are high.

8.9 For zone C, where on-street controls do not exist, restrictions on residential parking present a greater risk of overspill. For these schemes, the maximum is considerably higher and at a level that satisfies the likely expectation of car ownership without presenting a level of provision that could lead to developments inconsistent with the vision for the city. It is recommended that for a two-bedroom dwelling, the maximum standard in zone C be set at 1.4, higher than the value of 1.2 observed from the survey to provide scope and flexibility for developers.

8.10 For zones A and B, applicants may bring forward car free developments or minimal parking provision. As the local roads are controlled, or there are plans for the local streets to be controlled, concerns of parking overspill can be allayed. New developments should be excluded from controlled parking zoning, so residents or tenants are not eligible for residential parking permits in the adjacent streets.

8.11 For zone C, where overspill cannot be controlled, it is recommended that a minimum requirement applies. Based on the evidence and approaches presented above, these minimums are for unallocated parking and must be included in the overall provision detailed in the standards table. Developers are not required to provide any parking on-plot if they choose not to, but must satisfy the unallocated minimum and must not provide more parking of any type in excess of the maximum.

8.12 The design of parking will be provided within the Birmingham Design Guide SPD.

Non-residential development

8.13 The land use categories for the proposed standards are broadly similar to the 2012 Parking Guidelines.

- Retail – consistent with other authorities, different standards are applied to different scales of development.

- Hot food takeaways – a parking standard for hot food takeaways is considered necessary to ensure that parking generated by such development does not impact onto local roads.
- C4 and Sui Generis HMOs and shared housing - acknowledging the parking pressures that can be associated with HMOs and the growth in HMOS in Birmingham in recent years, the Council is seeking to introduce standards for such development.
- D1 Educational establishment - consistent with benchmark cities, this is sub-divided into primary, secondary and higher education acknowledging the different types of parking requirements generated by such uses.

8.14 For a number of land uses parking is an operational requirement. Motor repair garages will rely on some storage capacity for vehicles being worked on. Consistent with most other authorities, operational parking does not include customer or employee parking. Operational needs are set out as minimums.

8.15 Evidence from the development control team has indicated that parking standards for particular land uses have not been helpful or suitable. Parking standards are invariably defined as a ratio against some unit of measure that indicates the scale of the development and by association the likely parking demand. For some types of application such measures have invariably been inappropriate and unhelpful due to the bespoke and complex nature of the developments being proposed. Hospital sites are such an example.

Disabled Parking

8.16 National guidance and standards for disabled parking, based on significant research, are set out in BS8300:2009[18]. This guidance is used as a key benchmark for local authorities across the country. It recommends that the disabled parking provided is comprised of:

- when known, one space is provided per disabled employee
- an additional fixed percentage (5% or 6%) of the actual be provided for visitors or customers
- a remaining percentage (5% or 4%) of spaces should be laid out so there is the potential for their conversion to disabled spaced when required.

8.17 For Sports facilities, Sport England identify some facilities for which they recommend a minimum requirement of 8 or 8% of total provision to be for disabled parking[19].

8.18 Design specifications are provided in Birmingham City Council's SPD "Access for People with Disabilities SPD"[20]. Adequate car parking provision is still required for disabled people in developments which are proposing no off-street car parking. Developers may look to seek alternative provision on-street for sites unable to deliver minimums on-site.

8.19 Since 2012, Birmingham has applied a higher rate for the first 200 parking spaces for many land uses, and a lower rate thereafter. This approach is used by a number of benchmark cities including Cardiff and Liverpool. This approach is designed to reflect actual likely demand and is a measure to ensure adequate provision without creating considerable over-provision of disabled parking that may lead to its abuse. Active reduction of disabled parking provision to match actual demand, to minimise the provision becoming disregarded is a recommended function and good practice for those seeking accreditation under the Disabled Parking Award Scheme[21].

[18] BS 8300:2009 + A1:2010 Design of buildings and their approaches to meet the needs of disabled people. Code of Practice February 2009, British Standards Institution
[19] Accessible Sports Facilities Design Guidance Note Updated 2010 guidance, Sport England 2010
[20] Access for People with Disabilities, Supplementary Planning Document, Birmingham City Council, 2006, section 9.7
[21] Considerations for the DPA Accreditation Award, Disabled Parking Award Handbook, Disabled Motoring UK

8.20 The guidance to provide wider parking bays ready for later conversion is not universally adopted by the benchmark cities and has not been required in Birmingham. It is unclear what the process would be to trigger this conversion. Furthermore, should standard parking provision be required for disabled use, standard bays can be re-marked. Inclusion of this conversion provision in the initial design appears unwarranted for cities that are applying maximums.

Bicycle parking

8.21 Cycling is a sustainable means of transport which has health benefits to the user and strongly contributes towards reducing carbon emissions and improving air quality. Between 2001 and 2011, the number of London commuters cycling to work more than doubled and nationwide cycling to work grew by 14% over the same period[22]. The Birmingham Cycle Revolution, with funding support from DfT Cycle City Ambition Grants and Local Growth Fund, sets out a vision to make cycling an everyday way to travel in Birmingham with 10% of all trips in the city to be made by bike by 2033. Birmingham's aspiration for cycling is clearly set out in the Birmingham Development Plan 2031 through Policy TP40 'Cycling'.

8.22 The policy outlines that cycling will be encouraged through a comprehensive city-wide programme of cycling infrastructure improvements (both routes and trip end facilities) which will include ensuring that new development incorporates appropriately designed facilities which will promote cycling as an attractive, convenient and safe travel method.

8.23 In order to deliver Birmingham's aspirations, providing the appropriate cycle parking at new developments is critical. The cycle parking standards outlined are provided to make parking the cycle at its destination and origin convenient and secure. It removes a barrier to cycling and thus supports the vision for cycling for Birmingham.

8.24 Cycle parking is specified as short and long stay. The former is provision for those visiting the site as customers or service users. Long stay cycle parking is relevant for employees or residents. In design terms short stay cycle parking should focus on accessibility and convenience; for long stay parking, security, protection from the weather and potentially the proximity to different access points into the building is important. The short and long stay approach to cycle parking is taken by many other authorities across the UK.

8.25 The standard values have been set to progressively deliver cycle parking infrastructure that can support desired future growth. The standards outlined therefore reflect this aspiration and are in line with the benchmark cities that share the same aspirations for cycling.

8.26 Good design of cycle parking supports its use and aspirations for cycling. Design specifications will be set out in the Birmingham Design Guide. To be counted as part of the minimum requirement cycle parking will need to satisfy the design guidelines.

8.27 All residential properties are required to provide one secure cycle storage space per bedroom. For houses cycle storage may be provided in garages. Storage in outbuildings at the rear of the property are acceptable subject to access to these buildings without passing through the dwelling. For apartments, secure, communal cycle shelters are to be provided

8.28 Whilst not specified in the standards it is recommended that primary schools provide scooter storage alongside cycle storage. Both are sustainable and popular forms of travel for school children, and scooter storage ensures that cycle racks do not get blocked with scooters.

[22] Evening Standard 6 August 2015 https://www.standard.co.uk/news/london/number-of-londoners-cycling-to-work-doubles-in-10-years-10442787.html

Cycle hire

8.29 London's Cycle Hire scheme has supported a transformation in cycle use in the capital. Birmingham City Council wish to encourage a similar trend. To support the provision of cycle hire locations for the Transport for West Midlands Cycle Hire provider and facilitate easy access to the cycle hire scheme for visitors to the city, it is recommended that there be specific requirements that will apply to new hotels, boarding or guest houses that have over 10 guest rooms. This could be reasonably waived where application is unreasonable due to site constraints or costs incommensurate with the scale of works for which consent is applied for. Leisure Centres, Stadiums, Cinemas and sports facilities will also be subject to this requirement. All other commercial sites should be required to have considered the viability of a cycle hire stand.

Powered Two Wheelers (Motorcycle) parking

8.30 Powered Two Wheelers (PTW) includes motorcycles, mopeds, powered scooters and other motorised two wheeled vehicles. Birmingham recognises the benefits that PTWs can provide compared to a conventional car in regard to the reduced land space and road space requirements. The standards developed in the 2012 Parking Standards Guidelines are considered to have been effective. These standards and design guidance should be largely maintained. Additional design guidance will be included in the forthcoming Birmingham Design Guide.

Electric and Low Emission Vehicles

8.31 In July 2018 Central Government set out a strategy which identified for at least 50% of new car sales to be ultra-low emissions by 2030. From 2035, the Government are seeking a ban on selling new petrol, diesel or hybrid cars in the UK. For these reasons, the Government are driving a transition to more efficient, lower polluting technologies such as Electric Vehicles. Birmingham recognises the role that electric vehicles will play in helping to reduce CO2 emissions and improve air quality. The Birmingham Development Plan includes ensuring that new developments include adequate provision of charging infrastructure for low emission car club vehicles (TP43).

8.32 Ultra-low emission vehicles accounted for 1.7% of all new vehicle registrations in 2017. This is up from 1.2% in 2016. By the end of 2017, over 53,000 ULEVs had been registered in the UK with 12,000 of these in Birmingham[23]. Advances in technology have resulted in increased popularity in electric vehicles and it is anticipated that as technology and Government initiatives develop, their use and popularity will increase further.

8.33 Infrastructure, and in particular the limited availability of charging points and capacity for charging points, is a barrier to achieving greater uptake of electric vehicles. Therefore, as part of promoting wider use and ownership of ULEVs, Birmingham policies are geared to providing electric vehicle charging and providing suitable locations for them to park and charge.

8.34 The Draft London Plan sets out that all operational parking must provide infrastructure for electric or other Ultra-Low Emissions vehicles. London all-residential car parking spaces must provide infrastructure for electric or Ultra Low Emission vehicles. At least 20% of spaces should have active charging facilities, with passive provision for all remaining spaces.

[23] https://www.openaccessgovernment.org/ultra-low-emission-vehicles-uk/46714/

8.35 The standards outlined are minimums for the Electric Vehicle Charging Points. They are commensurate with Leeds City Council who have a positive agenda for EV provision and have the fifth highest uptake of ultra-low emission vehicle registrations.

8.36 As research took place to compile EV charging standards for Birmingham, the Department for Transport launched a public consultation on proposed national standards for new and existing developments. These national proposals have not yet been adopted, but it was deemed appropriate for new Birmingham standards to meet these national levels. It is hoped that national guidance will be confirmed prior to the adoption of a final Parking SPD for Birmingham. If not, it will be made clear that any local standards may change in recognition of national legislation.

8.37 Proposed government EV charging standards and related evidence/ research can be found at: https://www.gov.uk/government/consultations/electric-vehicle-chargepoints-in-residential-and-non-residential-buildings

8.38 The related technical guidance which has determined the proposed standards for Birmingham is available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/816913/Annex_C_-_Draft_Technical_Guidance.pdf

8.39 Furthermore, a Financial Viability Assessment (FVA) was prepared by BNP Paribas Real Estate (November 2019) for the Development Management in Birmingham Development Plan Document (DMB).The FVA was undertaken in line with the NPPF and NPPG and assessed the policy requirements in the DMB Publication version alongside the policy requirements in the adopted Birmingham Development Plan. Policy DM15 of the DMB requires new development to ensure that the operational needs of the development are met and parking provision, including parking for people with disabilities, cycle parking and infrastructure to support the use of low emission vehicles and car clubs. The FVA assumed that 100% of spaces will require a charging point. The assumption of 100% of spaces exceeds current levels of supply. The FVA concludes that this does not have a significant impact on viability. (See sections 3.16, Table 4.5.1 and 5.5 of the FVA).
The FVA was undertaken in line with the NPPF and NPPG. The FVA can be viewed here: https://www.birmingham.gov.uk/downloads/file/18101/ebd71_development_management_in_birmingham_-_development_plan_document_financial_viability_assessment

8.40 The City Council is working to appoint an EV network provider who will determine the appropriate provision of on and off street, publicly available electric vehicle charging infrastructure. The EV Network provider will be asked to consider new development opportunities and growth areas as part of a forthcoming EV Network Charging Development Strategy.

Car club provision

8.41 The Birmingham Development Plan (TP43) supports the growth of car clubs in the city as an alternative to private car ownership. A car club offers members access to nearby vehicles which can be hired on an hourly, daily or weekly basis. Birmingham has an assigned provider for all highway car club bays and these operate under a 'return to base' model which means vehicles must be returned to where they are collected from.

8.42 Evidence from London indicates that for each car club vehicle deployed, members sell or dispose of more than 10 private cars and defer the purchase of 22 cars[24].

[24] Carplus annual survey of car clubs 2015/16 London

8.43 The indications are that car clubs can rapidly appeal to large numbers: Car Clubs in London have nearly 200,000 members using over 2,500 shared cars.

8.44 Provision of short-term car availability on demand can noticeably impact driven miles and have a positive impact on non-car mode choice. Surveys of the round-trip car club members indicate that they have reduced miles driven by 570 miles a year and their travel by train or cycle is more than twice the London average.

8.45 The car club offers other air quality advantages. The fleet is modern and more readily replaced than a private car may be. The London car club fleet is significantly cleaner than a typical private car; 80% of car club cars are in the lowest three emission bands and nearly all meet the anticipated Ultra Low Emission Zone (ULEZ) standards. Car clubs are also having a strategic effect in normalising electric car use and ownership by providing early access to electric vehicles for drivers[25].

8.46 Car clubs have the potential to have a significant impact on reducing car ownership when provided within or close to residential developments, particularly in city centre locations where the density of potential users is high and the need to own and use a car on a regular or frequent basis may be low. This accords with the practice of the other authorities cited above and Brighton & Hove Council, an active promoter of the car club, which sets out requirements for car club parking bays only for residential developments.

8.47 The indications are that car clubs will require a minimum threshold and residential density if they are to be viable and for all but large developments, a single site is insufficient in its own right to carry a car club. However, for urban areas, the car club requirements are not based exclusively on being used by the site, but as part of a strategic policy to develop a car club network and provision for the wider community.

8.48 Residential developments over a threshold size in Zone A will be required to provide a car club parking bay accessible to the public, or commuted sums to enable provision on the highway. Developers that are required to provide car club parking but can evidence that there are no accredited car club operators interested in providing a car for the site, due to adequate provision already in the area or poor potential viability, will be able to waive this requirement. They will instead be subject to commuted sums to support existing car club provision.

8.49 Outside central areas, the policy recognises that there may be less reliance on existing population to demand car clubs, and thus thresholds are higher. In zone C car clubs can reduce second and marginal car ownership.

8.50 Developments under the threshold for providing car club facility in zone A, will be required to provide either;

- A contribution per dwelling towards community car club facilities; or
- A number of years' free membership to the nearest car club bay provider for all residents/occupiers.

8.51 In regard to non-residential developments, there are no standards applied. It is recommended that all developments consider the viability of car clubs and car share opportunities for staff and business use. In city centre locations residential and corporate car club usage can be complementary, with businesses utilising the service for fleet purposes during weekdays, and residential usage at evenings and weekends.

[25] Carplus annual survey of car clubs 2016/17 London

Other Requirements

8.52 Depending on specific uses, there are operational, servicing and specific service user needs to ensure parking provision is suitable for planned use.

8.53 Operational parking is specifically identified as that required for the purposes of the site to conduct the business or service operated. This may be space for:

- vehicles that are used by staff to perform tasks associated with the use of the site (cars used by estate agents to visit properties or to deliver takeaway food);
- the delivery of goods;
- storage of vehicles that are being serviced or repaired (such as at a garage/MOT centre)

8.54 Whilst it is recognised that parking may be a requirement for a business to attract and support customers, operational parking excludes parking for patrons, visitors or service users. Furthermore, operational parking is not parking provided for employees unless the vehicle is substantively used by that employee in the course of their day to day business.

8.55 The servicing of a development is a key component to ensure that it operates in a safe and sustainable manner and the requirements for each individual development vary greatly for each land use category.

8.56 Bus/coach drop off and other bus-based transport users is recommended for some land uses. A key requirement for many developments will be a larger parking bay close to the entrance for use by special needs transport.

8.57 The standards currently adopted have largely served well and are thus maintained with suitable additions.

The proposed standards

8.58 On the basis of the evidence set out in this document, the following parking standards are proposed for Birmingham.

Table 17: Proposed draft parking standards

Land Use	Parking Type	Zone A	Zone B	Zone C
A1 Shops (Convenience/ Food Retail) Up to 1000m²	**Car parking (maximum)**	Disabled user car parking only	1 space per 28 m²	1 space per 15m²
	Bicycle Spaces	**Staff:** 1 space per 10 staff (long stay) **Customer:** 1 space per 125m² (short stay) Minimum of 2 spaces		
	Disabled User Parking	Minimum of 1 space or 6% of total.		
	Motorcycle spaces	Minimum of 1 space		
	Electric Vehicle Charging	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers		
	Other requirements	**Servicing:** over 250m², identification of adequate loading space for size of operation		

Land Use	Parking Type	Zone A	Zone B	Zone C
A1 Shops (Convenience/ Food Retail) Over 1000m²	**Car parking (maximum)**	Disabled user car parking only	1 space per 30 m²	1 space per 20m²
	Bicycle Spaces	**Staff:** 1 space per 10 staff (long stay) **Customer:** 1 space per 250m² (short stay) Minimum of 2 spaces		
	Disabled User Parking	Up to 200 bays: Minimum of 1 space or 6% of total. Over 200 bays: 12 bays plus 4%		
	Motorcycle spaces	1 space per 400m². Minimum of 1 space		
	Electric Vehicle Charging	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers		
	Other requirements	**Service User:** Larger Parking bay for Ring and Ride and special needs transport close to entrance. Family Parking Spaces should be available (zones B and C). **Servicing:** Over 1000m², one 3.5m x 26.5m bay and associated off-street manoeuvring space.		
A1 Shops (Comparison/ Non-Food Retail)	**Car parking (maximum)**	Disabled user car parking only	1 space per 40 m²	1 space per 30m²
	Bicycle Spaces	**Staff:** 1 space per 10 staff (long stay) **Customer:** 1 space per 250m² (short stay) Minimum of 2 spaces		
	Disabled User Parking	Up to 200 bays: Minimum of 1 space or 6% of total. Over 200 bays: 12 bays plus 4%		
	Motorcycle spaces	1 space per 400m² Minimum of 1 space		
	Electric Vehicle Charging	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers		
	Other requirements	**Servicing:** 3.5m x 26.5m loading bay and associated off-street manoeuvring space.		
A2 Financial and Professional services (Banks, Estate Agents, Building Societies)	**Car parking (maximum)**	Disabled user car parking only	1 space per 60m²	1 space per 30m²
	Bicycle Spaces	**Staff:** 1 space per 10 staff (long stay) **Customer:** 1 space per 150m² (short stay) Minimum of 2 spaces		
	Disabled User Parking (minimum)	Minimum of 1 space or 6% of total capacity, whichever is greater.		
	Motorcycle spaces	Over 10 staff, minimum of 1 space		
	Electric Vehicle Charging	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers		

Land Use	Parking Type	Zone A	Zone B	Zone C
A3 Food and Drink (Restaurants, Cafes, snack bars) **A4 Drinking Establishments/ Public Houses**	**Car parking**	Disabled user car parking only	1 space per 20 m²	1 space per 10m²
	Bicycle Spaces	**Staff:** 1 space per 10 staff (long stay) **Customer:** 1 space per 200m² (short stay) Minimum of 2 spaces		
	Disabled User Parking (minimum)	Minimum of 1 space or 6% of total capacity, whichever is greater.		
	Motorcycle spaces	Over 10 staff, minimum of 1 space		
	Electric Vehicle Charging	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers		
	Other requirements	**Operational –** demonstration of adequate space to operate delivery fleet		
A5 Hot Food Takeaways	**Car parking**	Disabled user car parking only	1 space per 35m²	1 space per 20m²
	Bicycle Spaces	**Staff:** 1 space per 10 staff (long stay) **Customer:** 1 space per 200m² (short stay) Minimum of 2 spaces		
	Disabled User Parking (minimum)	Minimum of 1 space or 6% of total capacity, whichever is greater.		
	Motorcycle spaces	Over 10 staff, minimum of 1 space		
	Electric Vehicle Charging	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers		
	Other requirements	**Operational –** demonstration of adequate space to operate delivery fleet		
B1 Office	**Car parking (maximum)**	Disabled user car parking only	1 space per 60m²	1 space per 40m²
	Electric Vehicle Charging	10% (minimum 1) of disabled user bays to be EVCP	Over 10 parking bays: Min 1 EVCP plus EVCP or passive provision for every 1 in 5 bays. 5% EVCP (min 1) to be accessible to disabled drivers	
	Bicycle Spaces	**Staff:** 1 space per 10 staff (long stay) **Visitor:** 1 space per 400m² (short stay) Minimum of 2 spaces Showers and changing facilities should be provided for all office developments of 600m² and above.		
	Disabled User Parking	1 space per disabled employee, where known. Plus 1 space or 5% of total capacity, whichever is greater Over 200 parking bays: 6 bays plus 2% of total capacity		

Land Use	Parking Type	Zone A	Zone B	Zone C
	Motorcycle spaces	Minimum of 1 space or 2% of total capacity, whichever is greater.		
	Car Club	Consider viability of a car club scheme for staff/ business use, particularly in Zone A		
B2 General Industry and Warehousing	**Car parking (maximum)**	Disabled user car parking only	1 space per 120m²	1 space per 60m²
	Electric Vehicle Charging	10% (minimum 1) of disabled user bays to be EVCP	Over 10 parking bays: Min 1 EVCP plus EVCP or passive provision for every 1 in 5 bays. 5% EVCP (min 1) to be accessible to disabled drivers	
	Bicycle Spaces	1 space per 10 staff Minimum of 2 spaces Showers and changing facilities should be provided for all developments with 40 or more staff.		
	Disabled User Parking	1 space per disabled employee, where known. Plus 1 space or 5% of total capacity, whichever is greater Over 200 parking bays: 6 bays plus 2% of total capacity		
	Motorcycle spaces	Minimum of 1 space or 2% of total capacity, whichever is greater.		
	Other Requirements	Appropriate provision for HGVs/ Lorries/ Freight, including overnight parking facilities where necessary. Vehicle maintenance/ repair/ tyre and exhaust fitting: must have adequate on-site provision for all vehicles (min 4 spaces per working bay)		
B8 Storage and Distribution	**Car parking (maximum)**	Disabled user car parking only	1 space per 150m²	1 space per 60m²
	Electric Vehicle Charging	10% (minimum 1) of disabled user bays to be EVCP	Over 10 parking bays: Min 1 EVCP plus EVCP or passive provision for every 1 in 5 bays. 5% EVCP (min 1) to be accessible to disabled drivers	
	Bicycle Spaces	1 space per 10 staff Minimum of 2 spaces Showers and changing facilities should be provided for all developments with 40 or more staff.		

Land Use	Parking Type	Zone A	Zone B	Zone C
	Disabled User Parking	1 space per disabled employee, where known. Plus 1 space or 5% of total capacity, whichever is greater Over 200 parking bays: 6 bays plus 2% of total capacity		
	Motorcycle spaces	Minimum of 1 space or 2% of total capacity, whichever is greater.		
	Other Requirements	Appropriate provision for HGVs/ Lorries/ Freight, including overnight parking facilities where necessary.		
C1 Hotels Hotels, boarding and guest houses	**Car parking (maximum)**	Disabled user car parking only. (1 space per 10 beds where clear need for provision can be demonstrated)	Under 50 bed spaces: 1 per 4 beds Over 50 bed spaces: 1 per 6 beds	Under 50 bed spaces: 1 per 2 beds Over 50 bed spaces: 1 per 3 beds
	Electric Vehicle Charging	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers.		
	Bicycle Spaces	**Staff and guests:** 1 space per 10 bed spaces (long stay) Minimum of 2 spaces For establishments with event/conference facilities provision should be made for visitor spaces at 5% of visitor capacity.		
	Disabled User Parking (minimum)	1 space per disabled employee, where known. Plus 1 space or 6% of total capacity, whichever is greater Over 200 parking bays: 6 bays plus 2% of total capacity.		
	Motorcycle spaces	Minimum of 1 space or 2% of total capacity, whichever is greater.		
	Other requirements	Must consider viability of TFWM cycle hire provision. Larger parking bay for special needs transport close to entrance. Adequate taxi pick up and drop off. Over 50 bed spaces: min 1 coach drop-off.		
C2 Residential Institutions - Residential Care homes, Nursing homes	**Car parking (maximum)**	1 per 2 staff	1 per 2 staff Visitors – 1 space per 8 residents	
	Electric Vehicle Charging	Over 10 parking bays: Min 1 EVCP plus EVCP or passive provision for every 1 in 5 bays. 5% EVCP (min 1) to be accessible to disabled drivers.		

Land Use	Parking Type	Zone A	Zone B	Zone C
	Bicycle Spaces	**Staff:** 1 per 10 staff (long stay) **Visitor:** 1 per 20 bed spaces (short stay) Minimum of 2 spaces		
	Disabled User Parking (minimum)	1 space or 6% of total capacity, whichever is greater. Over 200 parking bays: 6 bays plus 2% of total capacity.		
	Motorcycle spaces	Minimum of 1 space or 2% of total capacity, whichever is greater.		
NB – C2 Hospitals and C2A Secure Residential Institutions – Assessed on own merits				
C3 Dwelling Houses	**Car parking Maximum spaces per dwelling** (allocated plus unallocated parking must not exceed this value)	Disabled user parking only (or 1 space per 10 residential units where clear need can be demonstrated)	1 bed: 0.8 space	1 bed: 1 space
			2 bed: 1 space	2 bed: 1.4 spaces
			3 bed: 1.3 spaces	3 bed: 2.5 spaces
			4 + bed: 1.6 spaces	4 + bed: 3 spaces
				To include unallocated as below
	Car Parking Unallocated Requirement (minimum)	None	None	1 bed: 0.4 spaces
				2 bed: 0.6 spaces
				3 bed: 0.7 spaces
				4 + bed: 0.8 spaces
				1 bed: 1 space
	Car Club	5 to 50 units: 2 years membership to the nearest car club bay provider (1 per unit) upon occupation. Between 51- 300 units: 1 car club bay per 50 units. 1 car club bay per each subsequent 500 units.	Between 100 – 300 units, 1 car club bay per 50 units. 1 car club bay per each subsequent 500 units.	Over 300 dwellings: 2 car club bays per 300 units.

Land Use	Parking Type	Zone A	Zone B	Zone C
	Electric Vehicle Charging	All car parking spaces to be active Electric Vehicle Charging Point (EVCP).	**Allocated parking:** 1 Active EVCP per dwelling with an associated parking space. **Unallocated parking off street:** 5 parking spaces or more: 20% active EVCP provision. Passive capacity for all spaces. **Unallocated parking on street:** Subject to EV Network Charging requirements.	
	Bicycle Spaces	**Housing:** One secure, covered cycle storage space per bedroom. **Flats/apartments:** 1 secure, covered cycle storage space per unit, plus 1 visitor space (short stay) per 10 units.		
	Disabled User Parking (minimum)	1 space per wheelchair accessible unit. **Flats/ apartments:** 1 space per wheelchair accessible unit plus 1 space or 5% of total units, whichever is greater.		
	Motorcycle spaces	**Flats/apartments:** 1 space per 20 units.		
C3 Purpose Built Student Accommodation	**Car parking (maximum)**	Provision for disabled user parking only	1 space per 10 bedrooms where clear need for provision can be demonstrated, unallocated parking only	1 space per 3 bedrooms where clear need for provision can be demonstrated, unallocated parking only
	Electric Vehicle Charging	**Allocated parking:** 1 Active EVCP per dwelling **Unallocated parking off street:** Over 10 parking spaces: EVCP or passive provision for each space.		
	Bicycle Spaces	1 secure, covered cycle storage space per unit, plus 1 visitor space (short stay) per 20 units.		
	Disabled User Parking (minimum)	1 space per wheelchair accessible unit plus 1 space or 5% of total units, whichever is greater		
	Motorcycle spaces	1 space per 20 units.		
	Other requirements	Sufficient space for drop off and pick up/ moving. Timed management arrangements for student moving days.		

Land Use	Parking Type	Zone A	Zone B	Zone C
C4 Houses in Multiple Occupancy (HMO) **And Sui Generis HMOs**	**Car parking**	Provision for disabled user parking only	0.5 unallocated spaces per bedroom generally sought. Alternative provision levels considered on a case by case basis.	
	Electric Vehicle Charging	**Allocated parking:** 1 Active EVCP per dwelling **Unallocated parking off street:** Over 10 parking spaces: EVCP or passive provision for each space.		
	Bicycle Spaces	1 secure, covered cycle storage space per bedroom.		
	Disabled User Parking (minimum)	1 space per wheelchair accessible unit plus 1 space or 5% of total units, whichever is greater		
	Other requirements	Sufficient space for drop off and pick up/ moving.		
D1 Clinics and Health Centres	**Car parking (maximum)**	4 spaces per consulting room and 1 per treatment room	4 spaces per consulting room and 1 per treatment room	4 spaces per consulting room and 1 per treatment room
	Electric Vehicle Charging	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers.		
	Bicycle Spaces	**Staff:** 1 space per 10 staff (long stay) **Visitor:** 1 space per 20 people expected to use the facility at any one time (short stay) Minimum of 2 spaces		
	Disabled User Parking (minimum)	1 space per disabled employee, where known. Plus 1 space or 6% of total capacity, whichever is greater Over 200 parking bays: 12 bays plus 4% of total capacity		
	Motorcycle Spaces	2% of total capacity (min 1).		
	Other requirements	Larger parking bay(s) for special needs transport or ambulance close to entrance.		
D1 Crèches, Day Nurseries, Day Centres and	**Car parking (maximum)**	1 per 8 pupils	1 per 8 pupils	1 per 8 pupils

Land Use	Parking Type	Zone A	Zone B	Zone C
Madrassahs	**Electric Vehicle Charging**	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers.		
	Bicycle Spaces	**Staff:** 1 space per 20 staff **Visitor:** 1 space per 100 pupils Minimum of 2 spaces		
	Disabled User Parking (minimum)	1 space per disabled employee, where known. Plus 1 space or 6% of total capacity, whichever is greater Over 200 parking bays: 12 bays plus 4% of total capacity		
	Motorcycle Spaces	2% of total capacity (min 1).		
	Other requirements	Demonstrable available short term parking space within 100 metres for 1 car per 5 pupils. Provision should be made for buggy storage.		
D1 Educational Establishments Primary, Infant and Junior Schools, Secondary and 6th form Schools/Colleges	**Car parking (maximum)**	Staff: 1 per 4 staff Visitors: additional 10% of staff parking	Staff: 1 per 2 staff Visitors: additional 10% of staff parking	Staff: 1 per 2 staff Visitors: additional 10% of staff parking
	Electric Vehicle Charging	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers.		
	Bicycle Spaces	**Staff:** 1 space per 20 staff **Pupils:** 1 space per 20 pupils **Visitor:** 1 space per 100 pupils Minimum of 2 spaces		
	Disabled User Parking (minimum)	1 space per disabled employee, where known. Plus 1 space or 6% of total capacity, whichever is greater Over 200 parking bays: 12 bays plus 4% of total capacity		
	Motorcycle Spaces	2% of total capacity (min 1).		
	Other requirements	Provision for SEN transport. **Primary:** Space for min 1 coach. Provision for scooter storage. **Secondary:** Space for min 2 coaches		

Land Use	Parking Type	Zone A	Zone B	Zone C
D1 Educational Establishments Higher and further education	**Car parking (maximum)**	Provision for disabled user parking only	Staff: 1 per 2 staff Visitors: additional 10% of staff parking	Staff: 1 per 2 staff Visitors: additional 10% of staff parking
	Electric Vehicle Charging	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers.		
	Bicycle Spaces	**Staff:** 1 space per 20 staff **Pupils:** 1 space per 20 pupils **Visitor:** 1 space per 100 pupils Minimum of 2 spaces		
	Disabled User Parking (minimum)	1 space per disabled employee, where known. Plus 1 space or 6% of total capacity, whichever is greater Over 200 parking bays: 12 bays plus 4% of total capacity		
	Motorcycle Spaces	Minimum of 1 space or 2% of total capacity.		
	Other requirements	Space for 1 coach. Provision for SEN transport.		
D1 Halls and Places of Worship	**Car parking (maximum)**	Provision for disabled user parking only	1 space per 15 m²	1 space per 10m²
	Electric Vehicle Charging	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers.		
	Bicycle Spaces	**Staff:** 1 space per 10 staff **Visitor:** 1 space per 20 people expected to use the facility at any one time (typical peak occupancy). Minimum 2 spaces		
	Disabled User Parking (minimum)	1 space per disabled employee, where known. Plus 3 spaces or 6% of total capacity, whichever is greater Over 200 parking bays: 12 bays plus 4% of total capacity		
	Motorcycle Spaces	1 space per 50 seats (min 1)		
	Other requirements	Provision for Special Needs transport, parking and loading within the site.		
D2 Assembly and Leisure	**Car parking (maximum)**	1 space per 20 seats	1 space per 10 seats	1 space per 4 seats

Land Use	Parking Type	Zone A	Zone B	Zone C
Cinemas, Bingo, Casinos, Conference Centre, Music and Concert Halls, Theatres	**Electric Vehicle Charging**	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers.		
	Bicycle Spaces	**Staff:** 1 space per 10 staff **Visitor:** 1 space per 20 people expected to use the facility at any one time (typical peak occupancy) Minimum of 2 spaces		
	Disabled User Parking (minimum)	1 space per disabled employee, where known. Plus 3 spaces or 6% of total capacity, whichever is greater Over 200 parking bays: 12 bays plus 4% of total capacity		
	Motorcycle Spaces	2% typical peak occupancy (min 1)		
	Other requirements	Where appropriate, adequate provision for coach drop off and HGV loading bays provided. Must consider viability of TFWM cycle hire provision.		
D2 Swimming Pools, Leisure centres, Gyms and Sports Centres	**Car parking (maximum)**	Disabled user parking only	1 space per 35m²	1 space per 25m²
	Electric Vehicle Charging	Over 10 parking bays: Min 1 EVCP Plus EVCP or passive provision for every 1 in 5 bays 5% EVCP (min 1) to be accessible to disabled drivers.		
	Bicycle Spaces	**Staff:** 1 space per 10 staff **Visitor:** 1 space per 15 people expected to use the facility at any one time (typical peak occupancy) Minimum of 2 spaces		
	Disabled User Parking (minimum)	1 space per disabled employee, where known. Plus 3 spaces or 6% of total capacity, whichever is greater Over 200 parking bays: 12 bays plus 4% of total capacity		
	Motorcycle Spaces	2% typical peak occupancy (min 1)		
	Other requirements	Adequate provision for coach drop off Must consider viability of TFWM cycle hire provision.		

9. Consultation feedback

Consultation on Draft Parking SPD (November 2019)

9.1 The draft parking standards set out in section 8 were incorporated into the Draft Parking SPD which was published for consultation 9 January 2020 – 28 February 2020. The key issues raised specifically in relation to the parking standards are summarised below. The table also provides an indication on how we propose to address the issues raised in the SPD.

Table 18: Consultation feedback on draft Parking SPD

Main issues raised	How they will be addressed in the SPD
Car parking	
Retail standards are overly restrictive in Zone B	This will be reviewed with a view to ensuring that the standard allows for adequate provision.
Educational uses need more than 1 space per 2 staff; should be 2 spaces per 3 staff.	This will be reviewed with a view to ensuring that the standard allows for adequate provision.
Assembly and leisure uses in Zone A should be limited to disabled parking only consistent with other use classes.	This will be reviewed with a view to ensuring parity and further detail will be set out in the SPD.
Guidance on C2 Extra Care/ independent living (different from a care home) needs to be provided. Should be set at 50% parking provision.	Further guidance on provision for extra care/ independent living housing will be set out in the SPD.
Serious viability implications for development in Birmingham. 10% provision of parking spaces is not supported because the public transport infrastructure in Birmingham is not currently sufficient to support such proposals.	The evidence contained within this document demonstrates the contrary. See paragraphs 8.31 – 8.40 of this report.
Not enough provision for visitor parking for residential.	The approach to unallocated parking will cater for visitors.
Maximums in Zone C are unjustified.	Maximums will be reviewed with a view to removing maximums in Zone C and adjusting the values.
Residential parking standards of allocated and unallocated parking spaces are too complicated and difficult to apply.	The approach to residential car parking will be reviewed and simplified in terms of the provision of unallocated spaces.
Car parking maximums in Zone C for 3-bed should be 2 spaces not 2.5 and for 4+-bed should be 2.5 spaces not 3.	Residential car parking standards will be reviewed with a view to removing maximums in Zone C and adjusting the values.
EV Charging	
The SPD should not seek to exceed the requirements the Department for Transport standards for EV charging.	The minimum expectations will be clarified in the SPD and it is not expected that they exceed to the DfT standards.
No evidence base has been provided to justify EV	The evidence base (this document) has now

charging requirements.	been published.
Costs for new houses will be unaffordable with EV chargers.	The evidence contained within this document demonstrates the contrary. See paragraphs 8.31 – 8.40 of this report.
Bicycle parking	
Include standards for electric cycle parking.	Guidance will be included regarding provision for electric bicycles, this is further supported by the Design Guide SPD. However, it is not deemed viable to stipulate standards for provision
Support option to finance off-site unallocated cycle parking but developers should be included to dissuade developers from taking this route in the first instance.	The guidance on offsite contributions will be clarified.
Cycle hire requirements should apply to all major trip generators, not only leisure facilities.	This will be reviewed with a view to ensuring parity for all major trip generators
Include the option for hotels to choose to provide cycle hire for their guests instead of spaces for the cycle hire scheme.	This will be reviewed with a view to providing this option.
Where the parking standards specify a minimum of 2 spaces, as for A1 shops, that means 1 Sheffield stand. It would be better to have a minimum of 4 spaces (2 Sheffield stands) so that if one of the Sheffield stands is damaged, there is still cycle parking available.	This is agreed and will be clarified in the SPD.
Educational establishments should not have a reduced level of provision compared to other businesses.	This will be reviewed with a view to ensuring parity with other uses.
Require a minimum of at least 1 cycle stand for every 10 people.	The standards generally provide for this level of provision.
All developments of 40 or more staff should have to provide shower and changing facilities for cyclists.	Requirements for shower and changing facilities will be clarified in the SPD.
Provision for cyclists is too low/unambitious and should match Birmingham Cycle Revolution aspirations for future levels of cycling.	The proposed standards generally align with BCR aspirations for long stay cycling parking. The only circumstance it does not is for educational uses. The standards will be updated to ensure consistency.
Motorcycle parking	
No motorcycle spaces required. Content that they are parked in car parking spaces.	Designated provision for motorcycles is justified and considered important. Parking motorcycles in car parking spaces means that car parking provision will be reduced.
Need greater consideration/provision including appropriate facilities and design/location guidance.	Further guidance and consideration will be given to motorcycle parking in the SPD.
Other comments	
Further clarification of minimum levels should be provided.	Further clarification will be provided regarding minimum standards.

Flexibility should be built into the SPD so that applicants can justify an alternative level, where there are legitimate reasons for doing so.	Additional text relating to how the standards will be flexibly applied will be included.
Clarity on how the zone boundaries are set.	Further detail on how the zones are set will be included.

APPENDIX 1 Parking Site Surveys, Varied Land Uses, September 2017

Use Class	Planning App No:	Development Description	Site Address	Ward	SPD Area	Car parking spaces		AM Occupancy		PM Occupancy		Site Visit Notes
						Planning app	Counted on site	Count	%	Count	%	
Medical	2011/05676/PA	Erection of Dental Hospital and School of Dentistry, with associated research & development and teaching facilities, ancillary office and support facilities, access, parking and landscaping. Outline consent is sought for 16,000 sqm gross internal floorspace (three to six storeys), with all matters Reserved.	Birmingham Dental Hospital, Mill Pool Way, B5 7EG	Edgbaston	2	241	341	341	100%	296	86.80 %	The car park site is managed by APCOA Parking and has a full-time car parking manager on site. The car parking manager said at peak times they have to let patients use any other free space. Even though some staff have permits to park on site they still have to pay a rate (unsure if it is discounted for staff) To park from 9am to 5pm it costs £15. As a result of the charge some staff choose to park for free on Pebble Mill Road and for free at nearby attractions including Birmingham Nature Centre and Cannon Hill Park. As from the 2nd October 2017 charges come into force at the above attractions.
Medical	2009/01477/PA	Reserved matters application for external appearance in connection with outline application N/07648/07/OUT for construction of a new health centre	Hodge Hill Primary Care Centre, Roughlea Avenue, B36 8GH	Hodge Hill	3	69	69	-	-	31	44.93 %	The car park is an L shape, with what seemed to be staff car parking on the right which has barriers (barriers were open during our site visit). There seemed to be sufficient car parking, perhaps some over provision. No on-street parking issues observed on surrounding streets.
Retail	2012/07433/PA	Demolition of existing buildings and construction of 5 non-food retail stores (A1), provision of servicing, landscaping and parking	Morrisons, 2259-2279 Coventry Road, B26 3PD	Sheldon	3	544	544	274	50.37 %	-	-	The car park site is managed by ParkingEye with 3 hours free parking for customers. Only half of the car was occupied, we counted 270 empty spaces. Weekend site visit would reflect truer occupancy levels.
Retail	2013/05304/PA	Erection of a new retail food store (Use Class A1) with associated parking and landscaping.	Aldi, Stratford Road / Wycome Road, B28 9EH	Hall Green	3	62	62	-	-	30	48.39 %	The car park site is managed by ParkingEye with 1 and half hours free parking for customers. Around half of the car park was occupied
Retail	2013/05427/PA	Demolition of existing petrol filling station, removal of underground tanks and redevelopment comprising the erection of a Class A1 convenience store, floodlights and associated parking.	Sainsburys, 58-62 Walsall Road, Four Oaks, Sutton Coldfield, Birmingham, B74 4QY	Sutton Four Oaks	3	10	10			10	100%	The car park site is managed by Horizon Parking with 30 minutes free parking for customers. During our site visit the parking was at full capacity with a further 3 cars parked in the delivery drop-off area and 2 rogue parkers near the entrance and exist areas.
Retail	2010/00515/PA	Erection of a new single storey food retail store and associated car parking and landscaping.	Aldi, Edgbaston Road, Birmingham, B5 7QS	Edgbaston	3	83	78	26	33.33 %	63	80.77 %	The car park site is managed by ParkingEye with 1 and half hours free parking for customers. Aldi store directly opposite Edgbaston Cricket Ground. Provision appears sufficient.

Student Accommodation	2015/03891/PA	Alterations and extensions to existing single storey and two storey flat roof additions to the side and rear to create a modified two storey side and two single storey rear extensions; change of use from medical facility (Use Class D1) to student accommodation (Sui Generis) providing 33no. bedrooms plus warden accommodation (second floor) and lecture theatre (ground floor).	24 Somerset Road, Edgbaston, Birmingham, B15 2QD	Edgbaston	3	22	22	7	31.82 %	-	-	At the moment there isn't a car parking management plan in place. There were only 7 cars parked during our visit.
Residential	2013/08450/PA	Demolition of existing ambulance station and erection of new 2 and 3 storey blocks containing 14 no. apartments, with associated car parking and landscaping.	Shooters Hill, Sutton Coldfield, Birmingham, B72 1HX	Sutton Trinity	3	18	21	5	23.81 %	-	-	There isn't a car parking management company looking after this site however each car parking bay is clearly numbered (e.g. BP1-BP4). In total there was 21 car parking spaces; 14 residential, 5 visitor and 2 disabled. During our site visit there were 5 cars parked. To get a truer reflection of car parking occupancy it would involve evening visit.
Office	2012/07880/PA	Proposed erection of three storey biomedical innovation HUB (including laboratory and offices (Use Class B1b)), alterations to the car park and the provision of new landscaping.	Birmingham Research Park, Vincent Drive, Edgbaston, Birmingham, B15 2SQ	Edgbaston	3	172	172	151	87.79 %	-	-	The car park site is managed by UKPC. It is free for visitors and staff park there. To get a pass the driver needs to give registration details at the reception. During our site visit there was 21 empty spaces. Spoke to a security guard who said the car park is usually full especially when there are events (mainly conferences). The Research Park is owned by UoB and partly owned by BCC. The Research Park have an agreement with university that any overspill can be parked in one of the UoB car parks with there being 69 spaces available.
Retail	2013/09229/PA	Retail and service development (A1, A3 and A5) comprising 14,832sqm (GEA) anchor store, retail units of 4,383sqm (GEA), restaurant/takeaway pavilion building of 589sqm (GEA), erection of multi storey car park of 1216 spaces and surface level car park of 500 spaces, access, landscaping and associated works	Longbridge Town Centre, Austin Way, Longbridge, Birmingham, B31 2TW	Longbridge	2	1716	1716	-	-	857	49.94 %	The car park consists of a surface car park alongside a multi-storey car park which has 5 floors. The car park is owned by St Modwen, and run by the Estates Team. St Modwen is responsible for kiosks, car park signage, on-site staff as well as any routine maintenance or repair work that may be required. The surface car park including the ground floor, first floor and second floor of the multi-storey are short stay with 3 hours free parking. Floors three and four are long stay with the fifth floor for staff and permit holders. During our site visit the ground floor and first floor of the multi-storey were 95% empty. We spoke to the Estates Team who have an office onsite said the reason for the low occupancy level on these floors is due to the design of the multi-storey car park in which Marks & Spencers on the second floor has it's own entrance from Cooper Way and drivers not being aware that there are 2 floors beneath. The high capacity multi-storey car park has been designed with future phase development in mind including a gym and a cinema complex.

Mixed	2013/03011/PA	Erection of 4 storey and 2 storey building accommodating cafe, kitchen, multi-use hall, assorted training rooms and 34 supported move on residential units (sui generis)	YMCA Erdington (Phase 2), 300 Reservoir Road, Erdington, Birmingham, B23 6DB	Erdington	3	20	20	-	-	20	100.00%	PM visit was on a Friday at 12:40. There was no signage to suggest that there was car parking management in place. The YMCA site had a nursery at the rear, in total we counted 60 car parking spaces, 20 car park spaces at the front, 20 in the middle and 20 rear of the building behind the gated access which is presumably staff parking. However for this particular development which is Phase II, was for the erection of a coffee shop and training rooms with 20 parking spaces provided. The car park at front which is for this development was at 100% occupancy with a further 4 cars which were parked on curbs showing there is a lack of parking provision.
Residential	2013/03081/PA	Demolition of existing buildings and structures and erection of 14 dwelling houses, associated access, landscaping & car parking	Brookhouse Mews, Sutton Coldfield, B76 1PU	Sutton New Hall	3	28	28	-	-	10	35.71%	This development consists of 14 dwellings, each with double garages. We counted 28 parking spaces + 2 visitor spaces. During our site visit there were 10 spaces in use. Brookhouse Mews is a private residential road off Walmley Ash Road and is a quiet road, on-street parking was not an issue.
Residential	2013/03485/PA	Demolition of existing care home and erection of 6 no. 4 bed terraced dwellings	22 Cartland Road, Sparkbrook, Birmingham, B11 1EQ	Sparkbrook	3	6	12	-	-	6	50%	This development consists of 6 terraced dwellings each with their own driveways and dropped curbs for access. Each dwelling can easily park 2 cars.
Care Home	2013/05870/PA	Development of 80 bed, dementia care and nursing home (Phase II)	Bournville Care Village, Bristol Road South, Bournville, Birmingham, B31 2AJ	Bournville	3	23	34	-	-	17	50%	There isn't a car parking management company on-site. On planning application the client applied for 23 car parking spaces but we counted 34 in total. There is another phase of development adjacent to the site which is currently under construction.
Multi-Storey Car Park	2013/00181/PA	Reserved matters application for the erection of a multi storey car park (element 1a) associated with hybrid planning application 2012/02047/PA for all outstanding reserved matters and consisting of 496 spaces	Birmingham University, Pritchatts Road Adjacent to Gisbert Kapp Building, Edgbaston, Birmingham, B15 2TT	Edgbaston	2	496	491	470	95.72%	-	-	The car parking site is managed by the UoB Security Office. The multi-storey car park is open to staff, visitors and students. Spoke to two traffic officers who were working in the car park and they said the car park is usually at full capacity.
Student Accomodation	2013/07698/PA	Demolition of Ambulance Depot building and erection of 259 bed, four and five storey, student hall development (Use Class C2) with associated landscaping and vehicular access.	Athena Studios, 360 Bristol Road, Birmingham, B5 7SS	Edgbaston	3	0	0	2		-	-	In the planning application zero parking provision was given however during our site visit there were two cars parked at the front of the building even though there were no marked bays for any parking. Lady at reception said there is 1 disabled bay at the rear of the building. There is a sign outside the building which says "Private Parking Zone".