

Dacorum Borough Council

Parking Standards Supplementary Planning Document

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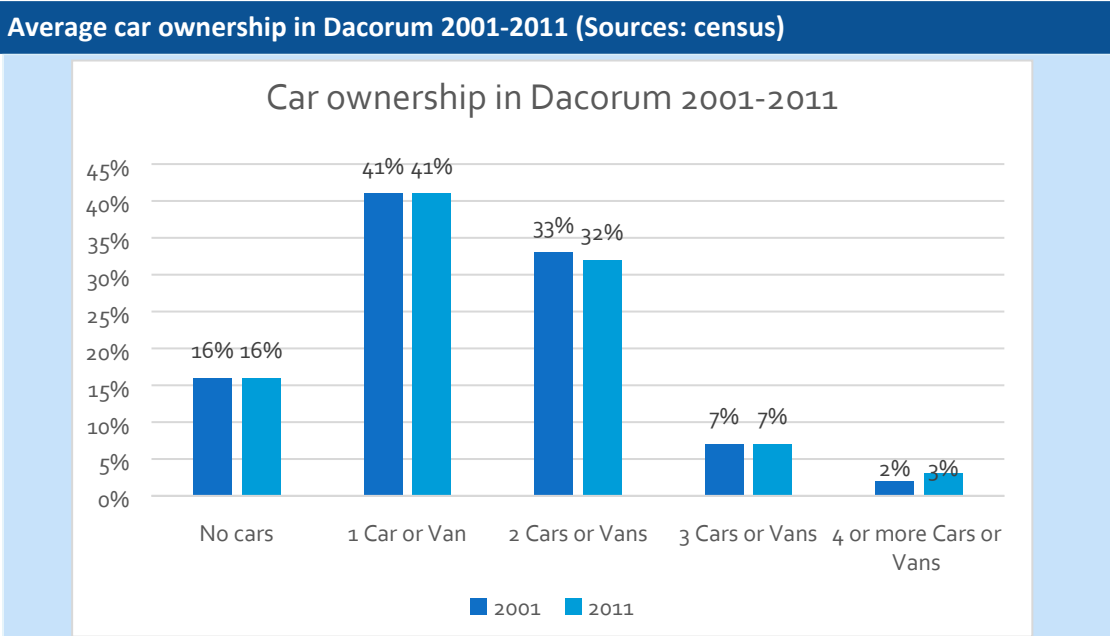
1. INTRODUCTION AND POLICY CONTEXT

Background

- 1.1 The purpose of this SPD is to set appropriate car and cycle parking standards for different types of development within Dacorum Borough.
- 1.2 There is no doubt that parking can have an impact on the economic vitality of town centres, help manage congestion, influence patterns of development and the liveability of various communities and affect the way people access key services and facilities. Insufficient parking can result in on-street parking stress and unsafe or obstructive parking, with high levels of frustration for residents and businesses.
- 1.3 However, parking is also an important travel demand tool, and lower parking provision can, in the right circumstances (usually where there is high accessibility to other transport and facilities and a controlled parking zone) also lead to lower car ownership and use. This Supplementary Planning Document (SPD) aims to provide a way to achieve a balance between these two aspects based on the current evidence available.

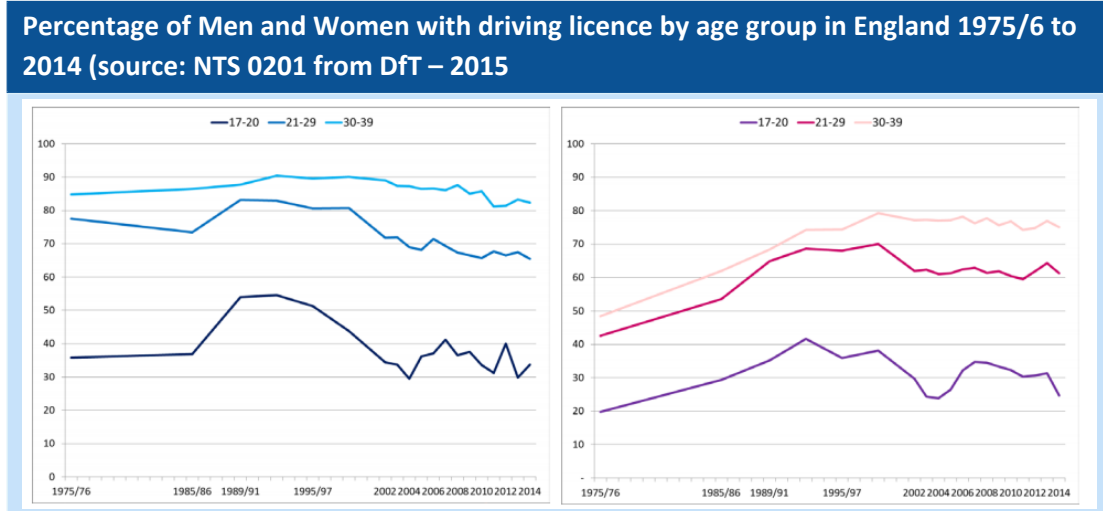
Context

- 1.4 There are different trends in factors affecting car parking, amongst them car ownership and vehicle use and driving licence holding. While nationally car ownership has been increasing over the last two decades, locally in Dacorum there has been little change between 2001 and 2011 (see graph below). The DfT estimate of the growth in future car ownership by households in Dacorum is an increase of approximately 8% between 2011 and 2031 after the underlying growth in the number of households is accounted for¹.



¹ National Trip End Model (NTEM), DfT, 2017

- 1.5 However, these are averages across the borough, and there has also been recent research showing that travel behaviour is changing due to wider societal factors. There is clear evidence that the younger generation is postponing obtaining a driving licence for longer - across the whole age group (of 17- 29-year-olds) there was a decrease from 62% having a driving licence and car in their household in 1995-99 to 50% in 2010-14 (see graphs below).



- 1.6 In addition, there is increasing market activity around ‘shared mobility’ such as car share and car clubs, ‘Mobility as a Service’ (with integrated travel provision by different modes) and highly demand-responsive transport such as Uber and similar providers. Many of the younger generation are increasingly high users of these products and of more walking and cycling, and in the right location this is likely to delay or reduce car ownership.
- 1.7 There is also an emphasis in recent years on increases in residential development density, particularly in or near town centres and to some extent near railway stations. These developments typically contain a higher proportion of flats and a higher proportion of younger generation occupants, which is likely to lead to lower car ownership numbers.
- 1.8 The lower car ownership and use potential in some locations can also be supported by facilities for walking, cycling (including cycle parking) and public transport, travel plans and associated car park management plans.
- 1.9 There is limited available data of recent car ownership trends at the very detailed level, and each development is to some extent unique. Consequently, it is believed that the census data on car ownership provides a good basis for a parking standard, around which the council can allow some flexibility for highly accessible developments in certain conditions. Given local transport policy, the aim should be to encourage a gradual downward trend in car ownership and use in the most accessible locations – elsewhere in the borough it is likely that car ownership will remain the same or increase slowly over time.

The Parking Standards

- 1.10 These standards propose a ‘parking standard’ (rather than a maximum or minimum standard), but with the possibility to reduce these in appropriate locations and conditions to sustain lower car ownership, subject to Council approval. There is also a mechanism for the Council to consider flexibility in particular cases.

- 1.11 The Council currently uses the parking standards in the 2004 Dacorum Borough Local Plan Appendix 5, along with the 2002 Accessibility Standards. This SPD would replace both these documents if adopted. The existing standards for residential and non-residential development are maximum standards, with lower standards applied progressively on a zonal basis in the urban areas of Tring, Berkhamsted and Hemel Hempstead. This national policy approach to parking has changed with the publication of the National Planning Policy Framework (NPPF, the latest update February 2019) requires that maximum standards need clear justification.
- 1.12 The production of this SPD follows a Parking Standards Review study (October 2017 – in this document it is referred to as the technical report), commissioned by Dacorum Borough Council and undertaken by Markides Associates. This technical report has formed the evidence base of this SPD. Where relevant, this SPD has refined or developed the methodology used within the Parking Standards review study.

2. PLANNING AND TRANSPORT POLICY

2.1 A brief summary of relevant policy is described below.

National Planning Policy Framework (February 2019)

2.2 Chapter 9 of the NPPF deals with Sustainable Transport, with key policies in relation to parking summarised below.

2.3 Paragraph 102 requires (inter alia) that opportunities from existing or proposed transport infrastructure, and to promote walking, cycling and public transport use should be identified and pursued; while parking is regarded as integral to scheme design and making high quality places.

2.4 Paragraph 103 requires that significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. Opportunities to maximise sustainable transport solutions will vary between urban and rural areas.

2.5 Paragraph 105 notes that if setting local parking standards for residential and non-residential development, policies should take into account:

- a) the accessibility of the development;
- b) the type, mix and use of development;
- c) the availability of and opportunities for public transport;
- d) local car ownership levels; and
- e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.

2.6 Paragraph 106 requires 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 transport². 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.

2.7 Paragraph 107 provides that planning policies and decisions should recognise the importance of providing adequate overnight lorry parking facilities. Proposals for new or expanded distribution centres should make provision for sufficient lorry parking.

2.8 Paragraph 109 states that development should only be prevented or refused on highways grounds if there would be significant unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

² A ministerial statement in 2015 (which forms part of the PPG) emphasised that the government was keen to ensure that there is adequate parking provision both in new residential developments and around our town centres and high streets, and that in its view 'Arbitrarily restricting new off-street parking spaces does not reduce car use, it just leads to parking misery. It is for this reason that the government abolished national maximum parking standards in 2011'.

- 2.9 Paragraph 110 goes on to say that applications for development should: (inter alia) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.
- 2.10 Paragraph 111 requires that all developments that will generate significant amounts of movement should be required to provide a travel plan and a transport statement or transport assessment.
- 2.11 The NPPF is supported by the guidance in the Planning Practice Guidance issued by the Ministry of Housing, Communities & Local Government on Transport Assessments, Travel Plans and Transport Statements³.

Hertfordshire County Council Transport Guidance

Local Transport Plan (LTP₄)

- 2.12 Hertfordshire County Council's (HCC) fourth Local Transport Plan (LTP₄) covers the period 2018 to 2031 and sets out the vision and strategy for the long-term development of transport in the county. The LTP₄ aims to achieve a switch from the private car to more sustainable transport and provides descriptions of the objectives and policies to achieve this switch, including the use of parking as demand management.
- 2.13 In terms of parking, the LTP₄ states that proposals should align or be part of local parking policies, so that decisions on parking standards and provision complement efforts to reduce demand for car use. The LTP states that evidence suggests that, on its own investment to improve provision for and encourage use of alternative modes of travel to the car, will not be sufficient to change existing travel behaviour and deliver sufficient modal shift.
- 2.14 Policy 4: Demand Management, states that the county council considers greater traffic demand management to be essential in the county's urban areas to achieve modal shift and improve sustainable travel provision. The policy states that this can only currently be achieved efficiently and effectively through parking restrictions and charging applied to on-street, off-street and potentially at workplace parking.
- 2.15 Policy 5: (Development Management) provides that the county council will ensure that any new parking provision in new developments provides facilities for electric charging of vehicles, as well as shared mobility solutions such as car clubs and thought should be given to autonomous vehicles in the future.

South West Herts Growth & Transport Plan

- 2.16 The South West Herts Growth & Transport Plan (GTP) is a new transport strategy which is currently undergoing consultation - the area covered by the plan includes the Dacorum Borough area. Amongst other objectives, it seeks to provide a greater choice of alternatives to the private car and encourage sustainable modes. The draft Plan (2018) includes a proposal for an east-west, cross-town, multi-modal corridor across Hemel Hempstead, between the railway station, the Town Centre, Jarman Park and Maylands Business Park.

³ <https://www.gov.uk/government/collections/planning-practice-guidance>

Roads in Hertfordshire: A Design Guide

- 2.17 The third edition of this Design Guide, prepared by Hertfordshire County Council (HCC), was produced in 2011. It focusses on the design aspects of roads and the streetscene of Hertfordshire. Section 2, Chapter 14 provides details of parking (including parking bay dimensions) and confirms that standards of parking to be provided in new development, or when changes of use of land are proposed, they shall be in accordance with the standard of the Local Planning Authority.
- 2.18 This guidance is being updated and the County drafted 'Parking: Design and Good Practice' in 2017 – the final version is expected to be published in 2019. Once published, these guidelines should be used to inform the detailed guidance for the provision of parking under this SPD.

Dacorum Borough Council Local Plans

Adopted Core Strategy, 2013

- 2.19 The purpose of the Core Strategy is to anticipate and manage change in Dacorum over the years to 2031. It seeks to balance the need for new development and infrastructure against the need to maintain the environmental assets and unique character of the borough. It is also one of the key tools to help maximise and coordinate new investment in Dacorum and help promote economic regeneration.
- 2.20 An average of 430 new homes will be provided within the borough each year, for the plan period (2006-2031). This equates to a total of 10,750 homes. In addition to new homes, an additional 131,000 sqm (net) of office floorspace will be provided, and there will be no net loss of industrial, storage and distribution floorspace over the plan period.
- 2.21 Policy CS8 provides that "All new development will contribute to a well-connected and accessible transport system whose principles are (inter alia) to:
- "provide sufficient, safe and convenient parking based on car parking standards: the application of those standards will take account of the accessibility of the location, promoting economic development and regeneration, supporting shopping areas, safeguarding residential amenity and ensuring highway safety."*
- 2.22 Policy CS8 also states that development proposals will also contribute to the implementation of the strategies and priorities set out in the Local Transport Plan and local Urban Transport Plans.
- 2.23 Policy CS12 requires that on each site, development should provide sufficient parking and sufficient space for servicing.

Dacorum Borough Local Plan, April 2004

- 2.24 There are several saved policies from the 2004 Local Plan. The relevant transport policies in this document include:
- 2.25 **Policy 51 on Development and Transport Impacts** requires that all development proposals should have no significant impact upon the design and capacity of parking areas, consider

the implications for on-street parking; and that major development applications should be accompanied by a Transport Assessment and Travel Plan.

2.26 **Policy 54 on Highway Design** requires that new development proposals will be expected to meet current national and local standards for highway design, access and servicing arrangements and circulation space.

2.27 **Policy 57 on Provision and Management of Parking** requires that on street and off-street parking space will be provided and managed in accordance with the following key principles:

- (a) parking provision and management will be used as a tool to encourage reduced car ownership and usage.
- (c) the minimum level of car parking provision will be sought in developments by adopting maximum demand-based standards of provision, reduced in locations accessible (or which can be made more accessible) by other travel modes.
- (d) provision of short stay visitor or shopper parking will be managed to reduce dependence on the car, whilst supporting the vitality and viability of town/local centres.
- (e) in order to provide a local incentive to shift transport modes to walking, cycling or public transport, long stay commuter parking will be discouraged by limiting total provision and managing demand for space by physical or pricing measures.
- (g) in areas experiencing severe on-street parking pressures, consideration will be given to the establishment of residents parking schemes.

2.28 **Policy 58 on Private Parking Provision** covers requirements for new development and the expansion and change of use of existing development. It requires application of the principles summarised above from Policy 57. The policy states that:

- New development with a significant parking requirement will only be permitted where parking provision is minimised, measures are taken by the applicant to address the problems (of traffic generation, congestion and on-street parking pressure) likely to arise from the parking demands generated by the development and where appropriate improvements to alternative travel modes are supported either directly as part of the development or through accessibility charges.
- The level of parking provision to be provided in new development will be assessed using the demand-based parking guidelines and approach to parking (set out in Appendix 5 of the 2004 Local Plan).

Non - Residential Development

- Car parking standards will apply as a maximum, unless it has been demonstrated that a higher level of parking is needed.
- For retail and leisure developments within the town centre, or on an edge of centre site, permission may be granted for parking that exceeds the relevant maximum standard. These parking facilities must serve the town centre as a whole to ensure the scale is consistent with the centre's size and be secured by planning obligation.
- Operational and customer car parking provision on site will be kept to a minimum. The precise level of provision must be justified in each case, and the figure included within the maximum based standard. Employee parking needs should as far as

possible not be met on site, and instead should be dealt with through a Green Travel Plan by alternative provision for non-motorised or public transport, or off-site public parking.

- Where a major development is proposed, the applicant will be expected to enter into a planning obligation to apply a 'Green Travel Plan'.
- Where new customer car parking is proposed as part of a development it must ensure its usage is consistent with the overall parking strategy for the area, including shared use of the parking facility and for use by the general public, secured through a planning obligation.

Residential Development

- Parking needs, calculated by reference to the parking guidelines in Appendix 5 of the 2004 Local Plan, will normally be met on site. Car free residential development may be considered in high accessibility locations. Parking provision may also be omitted or reduced on the basis of the type and location of the development (e.g. special needs/affordable housing, conversion or reuse in close proximity to facilities, services and public transport).

2.29 **Policy 62** requires appropriate provision for cyclists (including secure parking/storage and changing/shower facilities for employees) for all major development proposals.

2.30 Appendix 5 of the 2004 Local Plan and the Accessibility Zones for the Application of Car Parking Standards 2002 will be replaced by this SPD (once adopted).

Site Allocations DPD, July 2017

2.31 This document also forms part of the adopted Local Plan for Dacorum. Policy SA3 covers improvement of transport infrastructure which is a key part of managing the impacts of development on the transport network. Policy SA4 covers use and management of public car parking.

Emerging New Local Plan

2.32 The Council is preparing a new Local Plan. This SPD will inform this process in due course. As a result of the strategy in the emerging Local Plan, the SPD may need to be reviewed (as set out in **Section 12**) to reflect allocated new development sites or higher density schemes in accessible locations which could drive changes to or the need for extended accessibility zone locations.

Parking Standards Technical Report

2.33 Prior to the production of this SPD, a Parking Standards Report was prepared by Markides Associates in October 2017. This Technical Report forms the evidence base upon which this SPD has been produced and provided the following evidence/information:

- Policy and guidance
- 2011 Census data
- Local site surveys and parking surveys
- Information on parking standards from other authorities
- Feedback from officers and councillors in applying existing standards

- Responses to consultation letters sent to developers/local business organisations

2.34 This is available at: [http://www.dacorum.gov.uk/docs/default-source/strategic-planning/parking-standards-review-\(pdf-14-mb\).pdf?sfvrsn=2](http://www.dacorum.gov.uk/docs/default-source/strategic-planning/parking-standards-review-(pdf-14-mb).pdf?sfvrsn=2).

Multi Modal Transport Interchange (Maylands)

2.35 A study has assessed, at a high level, the issues related to the planning and delivery of a multi-modal transport interchange (MMTI) in Hemel Hempstead. The study involved reviewing the Maylands Parking Strategy (2011)⁴. This evidence will be considered as the Local Plan progresses and may inform future decisions in the area.

2.36 Details of this were included in the latest consultation of the SW Herts Growth and Transport Plan⁵.

⁴ http://www.dacorum.gov.uk/docs/default-source/planning-development/spar-11.11.10-maylandsparkingstrategy_finaldraft.pdf

⁵ <https://www.hertfordshire.gov.uk/about-the-council/consultations/transport-and-highways/south-west-herts-growth-transport-plan-consultation.aspx>

3. BRIEF, PURPOSE AND OBJECTIVES OF THIS SPD

- 3.1 The purpose of this SPD is to provide parking standards which are (1) reflective of the current situation in the borough but (2) allow for some flexibility to encourage trends towards lower car ownership in some accessible higher density locations.
- 3.2 The SPD has been prepared following the Parking Standards Review of October 2017 which considered the current situation, in terms of policy and guidance, the most up to date census data available, parking surveys, Council and stakeholder consultation and feedback.
- 3.3 This data provides a good basis for a parking standard, around which the council can allow some flexibility for highly accessible developments in certain conditions. Given local transport policy, the aim should be to encourage or 'nudge' a gradual downward trend in car ownership and use in the most accessible locations – elsewhere in the borough it is likely that car ownership will remain the same or increase slowly over time.

4. DACORUM CONTEXT AND EVIDENCE BASE

- 4.1 In order to deliver appropriate parking standards, it is important to consider the context and evidence base for the Dacorum Borough area. This is summarised below, in terms of car ownership and cycle ownership levels, as well as accessibility zones.

Car Ownership Levels

- 4.2 The 2011 Census provides details of car ownership levels. These are given in **Table 3.1** below, along with car ownership levels for Hertfordshire as a whole. The Technical Report (October 2017) describes how these vary across the borough. Car ownership in Dacorum has changed very little between 2001 and 2011, and the proportion of households with no car has remained at 16% during that time.

TABLE 4.1 CAR OWNERSHIP LEVELS⁶

Date of Census	Location	No cars	1 Car or Van	2 Cars or Vans	3 Cars or Vans	4 or more Cars or Vans
2001	Dacorum	16%	41%	33%	7%	2%
	Hertfordshire	18%	42%	32%	7%	2%
2011	Dacorum	16%	41%	32%	7%	3%
	Hertfordshire	17%	42%	31%	7%	3%
2001-2011 Change	Dacorum	-	-	-1%	-	+1%
	Hertfordshire	-1%	-	-1%	-	+1%

Cycle Ownership Levels

- 4.3 Although information on cycle ownership levels is not available, information presented in the Hertfordshire Transport Facts 2017 document confirms that cycling levels have increased by 40% since 2004, whilst the percentage of cycling journeys undertaken for work purposes is the same as that undertaken for social or leisure purposes. Some 51% of Hertfordshire residents own a cycle, with this proportion increasing to 62% for those aged 45 – 54⁷. There is clearly potential to increase cycling mode share, and provision of cycle parking at both homes and work/retail/leisure other destinations is an important part of this.

⁶ Source: 2001 and 2011 Census

2001: <https://www.ons.gov.uk/census/2001censusandearlier>

2011: <https://www.ons.gov.uk/census/2011census>

⁷ Hertfordshire Travel Survey, 2015 Report, Hertfordshire County Council

Accessibility Zones

- 4.4 The Technical Report (October 2017) shows that public transport accessibility, combined with access to many local facilities, is only high in the core urban areas of Hemel Hempstead, and to some degree, Berkhamsted.
- 4.5 For residential development, the 2011 census car ownership reduces by some 15-30% from the Dacorum average in central Hemel Hempstead - this is probably due to a mix of factors, including accessibility to facilities and public transport, the type of housing (more flats and smaller houses) and the availability of parking in controlled parking zones.
- 4.6 This recorded level of lower car ownership supports the principle of having a lower parking standard (of up to a 30% reduction from the general parking standard) in this location, referred to as Accessibility Zone 1. Based on the census data, this zone is an approximate 10-minute walk from the centre of the town. There are areas in central Berkhamsted and the fringes of Hemel Hempstead where car ownership is some 10% below the average, where a 10% reduction to the general parking standard has been applied, these being referred to as Accessibility Zone 2. In Hemel this Zone 2 is within an approximate 20-minute walk of the town centre; in Berkhamsted a 10-minute walk catchment has been used to reflect the census data and the more limited accessibility and facilities in this smaller town. The location of these Accessibility Zones is shown in **Appendix B**.
- 4.7 There are also indications that non-car journey to work mode share is higher in these accessibility zones than in the rest of the borough, and they have therefore also been used to reduce the parking requirement for non-residential uses. Based on census travel to work data the Council will reduce the standards by 30% in Accessibility Zone 1 and 10% in Accessibility Zone 2; elsewhere in the borough the standard will apply without reduction unless the Council agree to changes for particular sites.

5. OVERALL APPROACH TO PARKING STANDARDS

General

- 5.1 An appropriate level of car parking is vital in ensuring that new development functions effectively - car parking and its location also have impacts upon the quality of the environment – how it looks, how it functions and on road safety.
- 5.2 The availability and convenience of parking at the final destination of the trip can have a real effect on the choices people make regarding travel. This can be far more effective than managing parking levels at the origin i.e. residential properties. Policies within the National Planning Policy Framework (NPPF), the LTP4 and the Dacorum Adopted Core Strategy seek to manage the demand for car travel and encourage the use of more sustainable forms of travel, particularly public transport, walking and cycling.
- 5.3 However, research⁸ has also indicated that attempts to curb car ownership through restricting parking may not be effective in limiting the number of cars a household would acquire, unless other factors apply, including high accessibility to public transport and other modes, a high level of local facilities within easy walking distance, and (usually) extensive on-street controls preventing uncontrolled parking. Experience from many residential developments has been that rather than just encouraging a shift away from car ownership and reducing demand, restrictive parking standards in some locations in Dacorum can intensify the demand for any available on-street parking.
- 5.4 Census and other data provide a good estimate of average household car ownership, although there is significant variation around these averages. It is appropriate to use this data to propose required standards, but further elements are applied to adjust this figure depending on location and the accessibility factors mentioned above. There is also the presumption that adequate levels of vehicle parking must be designed into new development schemes to include accommodation for on-site parking; on-street parking can only be proposed and deemed acceptable if there is sufficient capacity on surrounding streets.

The general use of parking standards

- 5.5 There is clear evidence in Dacorum from officers, councillors and site visits that parking standards are required to manage the highway network and reduce pressure on the on-street supply, which leads to parking that can increase congestion and reduce road safety. There are many complaints regarding new development with parking standards that are too low, with consequent unmanageable on-street pressures.
- 5.6 Basing all standards on a maximum approach is likely to lead in many cases to under-provision of parking and pressure on scarce on-street resources. These standards have therefore moved away from a maximum approach to a 'standard' approach, with the expectation that development will meet its own needs on-site by providing parking to this

⁸ DfT Parking Research Review, TRL, 2010 - <https://www.britishparking.co.uk/write/Documents/Library/Reports%20and%20research/parkingreport.pdf>

standard. The standards are also related to accessibility zones, with a reduction in the standard in the most accessible areas in Dacorum, where lower car ownership can be encouraged. In exceptions, the standard can also be adjusted upward or if the Council accepts this approach for specific sites (following the provision of robust evidence). The standards also encourage shared rather than allocated parking, as this results in a more efficient use of parking spaces (see box below). In effect, this overall approach results in a range of requirements around the general standard.

Sharing unallocated spaces – an example

- In 2011, the profile of car ownership for households in Dacorum was as shown in Table 4.1, with 17% having no car – the overall average demand was 1.2 car parking spaces per dwelling. So, assuming that a development has 50 dwellings and that all spaces are unallocated, the car parking requirement would be 60 spaces (50 x 1.2).
- But if 1 space was allocated per dwelling, 50 spaces would be allocated, but 9 of these would not be used, as 17% of households do not have a car, the other 41 would be used. But there would also be additional demand from those households with more than one car. Assuming the other dwellings had average car ownership, 31% would need another space (they have two cars each), 7% would need two more spaces (they have three cars) and 3% would need three more spaces – this would total an additional demand of 27 spaces.
- So, with 1 space per dwelling allocated, 9 spaces would be empty (households with no cars), 41 would be filled with the other households, and a further 27 spaces would be needed for those households with more than one car. This results in a total requirement of 78 spaces, or some 30% more than the 60 unallocated spaces.

5.7 The approach to these standards is set out in the sections that follow, and are provided in the tables in Appendix A.

6. RESIDENTIAL PARKING STANDARDS

Application of standards

6.1 The starting principle is that all parking demand for residential development should be accommodated on site; and the requirements shown are 'standards' - departures from these may only be justified by appropriate evidence provided by the agent/developer for consideration by the Council as to whether it is acceptable.

6.2 The C3 standards apply to all housing (including apartments and flats as well as houses) and to any affordable or social housing. This has the advantage that should tenures of a development change over time, there are unlikely to be parking difficulties.

Three standards for the C3 use are provided, as set out in the table in Appendix A:

- Accessibility Zone 1 – up to 30% reduction permitted
- Accessibility Zone 2 – up to 10% reduction permitted
- Rest of the borough – parking standard unless Council accepts reductions in specific cases

6.3 The accessibility zones are described in section 4.6 and shown in Appendix B.

6.4 The potential reduction in residential parking in high accessibility locations forms part of Policy 58 of the 2004 Local Plan.

6.5 The accessibility zones are based on current levels of accessibility and facilities and census car ownership data. The Council appreciates that in some areas this could change where accessibility and facilities change fundamentally post the development of these standards. The Council will at its discretion consider applying reductions in other locations where the applicant has shown with clear justification (which the Council accepts) (i) that similar levels of accessibility and facilities will be achieved for the long-term (ii) that other relevant conditions are in place (such as controlled parking, or low levels of on-street parking stress).

Visitor Parking

Visitor parking research

Visitor demand can fluctuate, but in general certain times, such as evenings and weekends, are when residents are likely to receive significant numbers of visitors in cars. While these can also be times of peak resident parking demand, this demand can to some degree be offset by other residents being away at the same time. A key issue is whether spaces are allocated or not. A research study⁹ recommended that no special provision need be made for visitors when at least half of the parking provision associated with a development is unallocated. In all other circumstances it was advised that an additional demand, equivalent of up to 0.2 spaces per dwelling, would be generated by visitors.

- 6.6 Consequently, these standards require visitor parking at an additional 20% of the relevant standard, as shown in the table in Appendix A – this standard depends on the extent of allocation of spaces to individual units or organisations.
- 6.7 For very small developments (less than 10 units) the visitor parking standard will not be applied, even if all spaces are allocated.

Garages

- 6.8 Garages will be counted as parking spaces if robust evidence can be provided that the garages are of an appropriate size, including storage space, that will result in a high probability of use for parking – see section 8.4 for details. In conditions of high parking stress on-street, the council may require further local evidence of garage use, before accepting garages as parking spaces to meet the parking standard.

Car-free development and other reduced parking provision

- 6.9 Car-free residential development will be considered where developers can provide robust evidence that this will be appropriate¹⁰. This type of development will not normally be acceptable outside Accessibility Zone 1.
- 6.10 Car-free and other reduced standards may be appropriate where the Council accepts evidence of the following:
- The nature, type and location of the development proposed is likely to make this acceptable; this could include particular regeneration schemes, re-use of previously developed land/buildings with low parking provision in highly accessible areas with acceptable on-street conditions.
 - The Transport Assessment has acceptable evidence and mitigation
 - The Travel Plan measures including car clubs or other shared vehicles are appropriate and secured for the long-term
 - There is high accessibility to public transport and local facilities, in locations such as town centres and the Two Waters area
 - On-street parking stress surveys (undertaken in accordance with the specification provided in Appendix C) indicate sufficient spare capacity or there is a controlled

⁹ Jenks and Noble, 1996 study of Lower Earley in Reading

¹⁰ In accordance with Policy 58 of the 2004 Local Plan

parking zone for the area or one is proposed (new residents will not normally be allocated permits unless surveys show ample spare on-street capacity).

- Surveys of developments in the same town and potentially other towns show that lower parking is appropriate.
- Disabled car parking provision is appropriate.

6.11 There may be merit in consideration of off-site provision or collection of commuted sums where developments are seeking to provide lower parking standards than set out in **Appendix A**.

6.12 There may be exceptional circumstances when justification can be provided by developers/agents (which the Council considers is acceptable) to vary from the parking standards. These will be considered on a case by case basis. Where there is a material change in circumstances, the Council will undertake a review of this SPD (see **Section 13** for details).

Dwelling Houses with Multiple Occupation (HMO)

6.13 A property is an HMO if it is let as a main or only home to at least three tenants, who form more than one household and who share a kitchen, bathroom or toilet.

6.14 When assessing planning applications, the Council will seek to ensure that the proposals provide adequate levels of car parking to meet the future standards of the likely occupants. Where possible, the car parking should be provided off street.

Elderly Persons Accommodation

6.15 The reductions for accessibility zones will not apply automatically to this use but may be accepted based on evidence provided. Use class category C2 (Residential Institutions) is dealt with in **Appendix A**.

Parking for Disabled motorists

6.16 The parking needs of disabled motorists shall be met in full irrespective of location i.e. where the zonal procedure results in on-site parking restraint, there shall be no corresponding reduction in disabled spaces.

6.17 The number of disabled spaces specified are part of total capacity, not additional.

Residential parking calculation flowchart

6.18 The flowchart below shows the stages in the residential parking calculation, and a worked example is provided below.



Worked example

6.19 A worked example of the application of the standard contained in **Appendix A** is as follows:

- If the development is in the highest accessibility zone (Zone 1) and is for 30 2-bedroomed units, the parking standard would be 27 spaces (30 x 0.9).

Zone 1

- In addition, visitor spaces need to be added (20% more spaces) if 50% or more of spaces are allocated. If no spaces are allocated, no visitor parking need be provided. So, in this case, assuming all spaces are allocated, visitor parking needs to be added, so the full standards would be $27 \times 1.1 = 30$ spaces rounded up. If no spaces were allocated, no visitor parking would be required, and the 27 spaces would be the full standard.

Zone 2

- If the development is in Zone 2, and is for 30 2-bedroomed units, the parking standard would be 30 spaces (30 x 1.0) – visitor spaces would be then added (or not) as above

Rest of Borough (outside of accessibility zones)

- If the development is any other location in the borough, and is for 30 2-bedroomed units, the parking standard would be 33 spaces (30 x 1.1) plus the visitor spaces standard.
- This standard can be adjusted, at council discretion, based on further information provided by the applicant.

7. NON-RESIDENTIAL PARKING STANDARDS

- 7.1 These are set as standards, with any developments seeking provision above or below these standards having figures needing to produce evidence acceptable to the council of the proposed provision. The standards are shown in **Appendix A**.
- 7.2 These standards will be reduced by the following percentages in different accessibility zones:
- 30% in Accessibility Zone 1
 - 10% in Accessibility Zone 2
 - 0% in remainder of borough
- 7.3 As with residential standards, the council will require evidence of on-street parking stress, on-street controls, travel plans and other similar developments which have not negatively impacted on the area, before accepting reductions.
- 7.4 It is important that non-residential parking is appropriate for the location and type of land use, and that parking is managed, both on site and off site to avoid parking problems, for example a lack of designated HGV parking in parts of the Maylands Business Park.

Shared Parking standards and Parking Space Allocation

- 7.5 When different types of uses occupy the same area, there is the potential for parking spaces to be shared. This is highly desirable, provided this works without conflict and that car parking provision is sufficient for the combined peak of all land uses. For example, a development with commercial and leisure uses can experience peak commercial parking demand on a weekday at midday, but for leisure use its peak may be on a weekday in the evening and on the weekends. Shared use may result in a reduction of the number of parking spaces which a developer is required to provide, but such an approach will require evidence acceptable to the council, and these will be judged on a case by case basis. Where this is not accepted by the Council, the parking standard in **Appendix A** should be provided.
- 7.6 In general, where there are mixed uses or a number of different units, allocation of spaces to specific uses means that more spaces are required on-site, while unallocated spaces can be used by all, improving efficiency. The Council wishes to encourage efficient parking use and would in general prefer unallocated spaces. Subject to satisfactory evidence, the council may consider some relaxations of standards where limited numbers of spaces are allocated.

Car free and low car parking

- 7.7 As with residential development, car free or very low parking provision will only normally be considered in Accessibility Zone 1, and the same evidence standards will apply (see section 6.9 – 6.11).
- 7.8 There may be exceptional circumstances when justification can be provided by applicants (which the Council considers to be acceptable) to vary from the parking standards. These will be considered on a case by case basis. Examples of situations where such flexibility might be accepted could include close proximity to transport interchanges and other highly accessible locations.

7.9 Where there is a material change in circumstances, the Council will undertake a review of this SPD (see **Section 13** for details).

Lorries, Other Commercial Service Vehicles and Coaches

7.10 The NPPF (paragraph 107) stresses the importance of providing adequate overnight lorry parking facilities.

7.11 The Council will require relevant developments to provide adequate lorry, commercial service vehicle and/or coach parking. This standard will be assessed through the Transport Assessment or Transport Statement and agreed on an individual case basis. ‘Roads in Hertfordshire: highways design guide’ includes guidance on service vehicle and coach parking bay design.

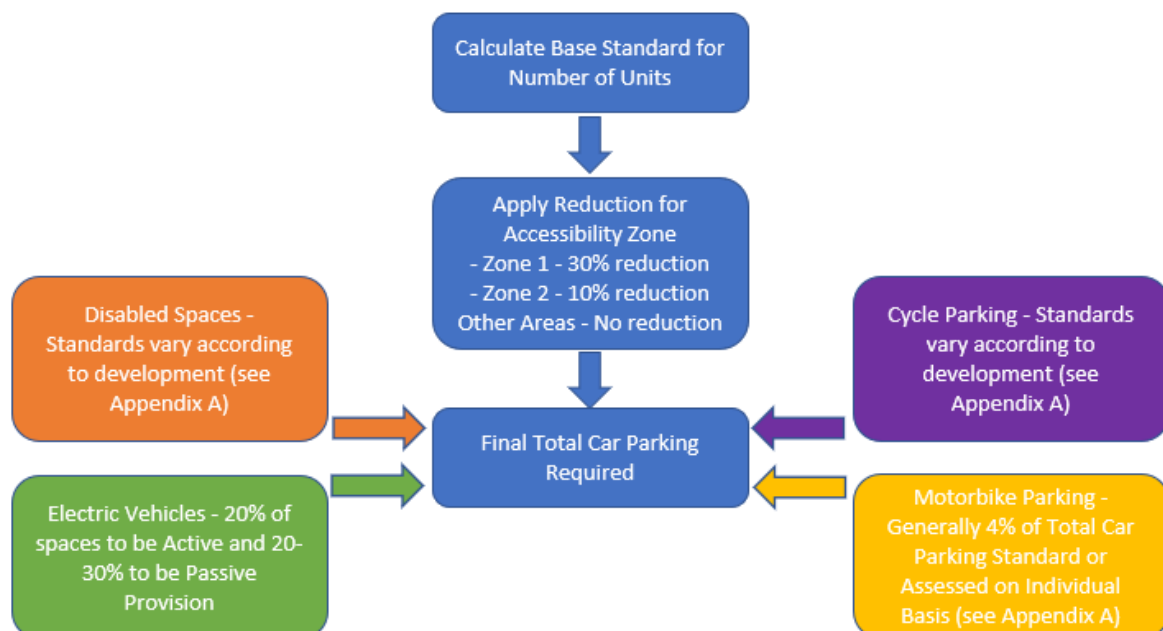
7.12 Some non-residential standards within **Appendix A** include lorry parking standards for certain land uses. The Council will normally expect proposals for new or expanded distribution centres to make provision for sufficient lorry parking.

Car parking management

7.13 The Council may require a parking management plan (see Appendix B) to be prepared and submitted as an integral part of any planning application where parking is an acknowledged problem, or where parking standards have been relaxed.

Non-residential parking calculation flowchart

7.14 In accordance with the information presented in Appendix A, the flowchart below provides guidance as to the process required to calculate the different elements of car and cycle parking provision for non-residential development.



Worked example

7.15 Worked examples of the application of the standard contained in Appendix A is as follows:

- A B1 office use development of 2,000 sqm. has to provide 57 parking spaces if the site is outside of the accessibility zones (1 space per 35 sq.m, GEA), a lower standard (10% less) of 51 spaces in Accessibility Zone 2 and the lowest standard (30% less) of 40 spaces in Accessibility Zone 1. Both the reductions for accessibility zone will require appropriate evidence on likely parking demand, accessibility and on-street controls and stress to be acceptable to the Council. Allocation of spaces (e.g. to visitors) is the responsibility of the landowner, but the Council will take a high level of allocation into account when considering reductions in standards and may request a parking management plan.
- An A1 Non-food retail warehouse development without garden centre is proposed at the same location as a large food retail centre- the location is outside the 2 accessibility zones. The A1 development of 2,000 sq.m. GEA parking standard is 1 per 35 sq.m so 57 spaces are required; the A1 food development of 2,200 sq.m has a standard of 1 space per 22 sq.m. so 100 spaces are required, a total of 157 spaces. The applicant provided parking accumulation evidence, an on-street parking stress survey showing extensive controls and a parking management plan to show that only 140 spaces were required at peak times. The Council is considering this request.

8. SPECIFIC PARKING PROVISION

Design and Layout of Parking Spaces

- 8.1 The design and layout of parking spaces should be in accordance with the Hertfordshire County Council ‘*Roads in Hertfordshire: Highway Design Guide*’¹¹. The Third Edition of this Guide was issued in 2011, with Chapter 9 of Section 4 providing details of vehicle parking facilities. This guidance is being updated and the County drafted ‘Parking: Design and Good Practice’ in 2017 – the final version is expected to be published in 2019. Once published, these new guidelines should be used in the provision of parking under this SPD. These guidelines will cover the more detailed aspects of parking provision, including guidance on different kinds of parking.

Dimensions of Spaces

- 8.2 The ‘Roads in Hertfordshire: Highway Design Guide’ focusses on the design aspects of roads and the streetscene in Hertfordshire. It advises on the dimensions and location requirements for parking bays and driveways. Guidance is in the process of being updated but until this new guidance is adopted the dimensions required for a standard parking space are 2.4m x 4.8m.
- 8.3 Turning areas shall be in accordance with the guidance in Manual for Streets¹². Wider parking bays for use by disabled people should be provided in accordance with the guidance given in Traffic Advisory Leaflet 5/95¹³. Any space not meeting this standard will not be taken into account when assessing whether the parking requirement has been met.

Garage Sizes

- 8.4 The ‘Roads in Hertfordshire: Highway Design Guide’ advises that it is recommended that Local Planning Authorities stipulate that in order to be an effective storage space for cars, on-plot garages must measure at least 6m long and 3m wide. If spaces aren’t at least this size they will not be counted as part of the parking provision to meet the parking standards.

Tandem Parking

- 8.5 Tandem (in-line) parking generally means that the provision of two parking places one after another, configured like a single, double-length perpendicular parking place. Tandem parking is inconvenient, and both spaces may not be used at all times. It should not be used for unallocated, off-plot spaces; however, it may be appropriate for spaces on-plot within the curtilage of the dwelling or commercial property if for use by the same property/dwelling and if an additional vehicle parking on the highway would not have unacceptable consequences. Consequently, the presumption is for tandem spaces counting as part of the parking provision if on-plot provided they are allocated spaces.

¹¹ <https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/development-management/highways-development-management.aspx#highwaydesignguide>

¹² <https://www.gov.uk/government/publications/manual-for-streets>

¹³ <https://www.gov.uk/government/collections/traffic-advisory-leaflets>
<https://tsrgd.co.uk/pdf/tal/1995/tal-5-95.pdf>

Location of Parking Provision

- 8.6 In terms of provision, the ‘Roads in Hertfordshire: Highway Design Guide’ identifies key principles which should be followed when considering the design and location of car parking, confirming that within residential development, car parking allocated for individual dwellings will normally be provided off highway, within the curtilage of the dwelling. It also states that Hertfordshire County Council (and Dacorum Borough Council) need to be satisfied that the location of both allocated and unallocated spaces will not result in parking that is obstructive to pedestrians, cyclists, the mobility impaired and other vehicles.

Parking Management

- 8.7 The council may require applicants to prepare a Car Park Management Plan as part of a condition when granting planning permission – guidance on these requirements is given in Appendix E. This may form part of a Section 106 planning agreement to enable the Council to enforce and monitor the objectives of the Plan. This is typically required when the parking provision is below the Council’s standards or is shared provision between different uses but may be required in other situations.

Disabled Parking Provision

- 8.8 In relation to residential uses, the Government’s non-statutory Manual for Streets¹⁴, published in 2007, advises that spaces for disabled people “need to be properly marked and meet the minimum space standards”. It is preferable to provide these spaces in unallocated areas, including on-street, as it is not normally possible to identify which properties will be occupied by or visited by disabled people. In the absence of any specific local policies, it is recommended that 5% of residential car-parking spaces are designated for use by disabled people. A higher percentage is likely to be necessary where there are proportionally older residents. This provision is recommended as the initial standard in this SPD.
- 8.9 The most recent guidance on provision of disabled parking for non-residential parking is in the BSI British Standards, BS 8300-1:2018: Design of an accessible and inclusive built environment. External environment. Code of practice, and the minimum standards in this are proposed in this SPD; it is desirable that applicants should also make provision for enlarged standard spaces (3.6m x 6m) as set out below. The provision is therefore:
- Workplaces: the minimum number of designated spaces should be one space for each employee who is a disabled motorist, plus 5% of the remaining total capacity for visiting disabled motorists. It is desirable that a further 5% of the remaining total capacity should be enlarged standard spaces.
 - Educational facilities: the minimum number of designated spaces should be one space for each employee who is a disabled motorist, plus 5% of the remaining total capacity for visiting disabled motorists. It is desirable that a further 5% of the remaining total capacity should be enlarged standard spaces.
 - Shopping, recreation and leisure facilities and medical facilities: the minimum number of designated spaces should be one space for each employee who is a

¹⁴ <https://www.gov.uk/government/publications/manual-for-streets>

disabled motorist, plus 6% of the remaining total capacity for visiting disabled motorists. It is desirable that a further 4% of the remaining total capacity should be enlarged standard spaces.

- Hotels should have at least one designated car parking space per accessible bedroom.
- Railway and other transport-related car parks: the minimum number of designated spaces should be one space for each employee who is a disabled motorist, plus 5% of the remaining total capacity for visiting disabled motorists. It is desirable that a further 5% of the remaining total capacity should be enlarged standard spaces.
- Religious buildings and crematoria: the minimum number of designated spaces should be two spaces or 6% of the remaining total capacity, whichever is the greater. It is desirable that a further 4% of the remaining total capacity should be enlarged standard spaces.
- Sports facilities: Designated parking provision for sports facilities should be determined according to the usage of the sports facility. Detailed guidance on parking provision for sports facilities can be found in the Sport England publication *Accessible sports facilities*¹⁵.

8.10 An example calculation for shopping, recreation and leisure is as follows:

- total number of car parking spaces = 100;
- three spaces are provided for specific disabled members of staff, leaving 97 spaces;
- 6% of remaining 97 spaces are to be designated accessible spaces = 5.82, round up to 6; and
- 4% of remaining 97 spaces are to be enlarged spaces = 3.88, round up to 4, thus providing 87 standard spaces

8.11 In all cases, the numbers of designated spaces might need to be greater at locations, venues of facilities that specialize in accommodating groups of disabled people.

8.12 Detailed guidance on layout and access to spaces/buildings is given in Part M of the Building Regulations (2010)¹⁶.

8.13 The standard is set out in **Appendix A**. Blue badge parking is part of the overall total of parking required by the standards, not additional to it.

Motorbike Parking

8.14 '*Traffic Advisory Leaflet 2/02*', (March 2002)¹⁷ from the DfT sets out advice on motorbike parking – particularly on design issues - no specific advice is given on the extent of off-street provision.

¹⁵ Accessible Sports Facilities, Updated 2010 guidance, Sport England section 3 and Table 2

<https://www.sportengland.org/facilities-planning/design-and-cost-guidance/accessible-facilities/>

¹⁶ https://www.planningportal.co.uk/info/200135/approved_documents/80/part_m_-_access_to_and_use_of_buildings

¹⁷ <https://www.gov.uk/government/collections/traffic-advisory-leaflets>

<https://www.gov.uk/government/publications/traffic-advisory-leaflets-1989-to-2009/traffic-advisory-leaflets-1989-to-2009#section-7>

- 8.15 Institute of Highways Engineers – ‘*Guidelines for Motorcycling, Cycle Parking*’¹⁸, notes the significant increase in motorcycling, and the problems of insufficient parking and theft. It highlights educational establishments, employment sites, retail and leisure and transport interchanges as being important locations for motorbike parking, as well as residential development. No guidance is given on off-street provision.
- 8.16 The provision of an additional 4% of total parking spaces for motorbikes for all non-residential development is required. For residential development, motorbike parking may depend on other provision (e.g. garages and car ports) and each case will be treated on its merits (developers should clearly set out how this standard is being met).

Cycle Parking

- 8.17 Cycling is environmentally friendly and cheap compared with other transport modes. It is non-polluting and takes up less road space and parking space. It also provides a valuable form of healthy exercise.
- 8.18 Dacorum Borough Council’s long-term vision is that the continuing improvement of cycle facilities in the borough will encourage a culture where the uptake of cycling as a mode of transport will be a popular, safe, attractive and enjoyable alternative to the private car.
- 8.19 For cycle provision around places of employment, sufficient showers and lockers should be provided to cater for demand, with lockers large enough to include hanging space for formal work wear. An appropriate level of provision should be provided in accordance with expected operational requirements and nature of the development proposed.
- 8.20 Cycle parking standards are shown in **Appendix A**.

Electric Vehicle Charging Points

- 8.21 For this report, an Electric Vehicle (EV) is considered as any road vehicle with a battery that is intended to be charged from mains electricity, which therefore includes plug-in hybrids, extended range EVs and pure electric EVs.
- 8.22 New development provides the best opportunity to accelerate the scale of provision for electric vehicles and should include charging provision for EV use as standard¹⁹. The National Planning Policy Framework supports the provision of EV plug-in recharging infrastructure within new employment and residential developments recommending that: “*Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to incorporate facilities for charging plug-in and other ultra-low emission vehicles*”.
- 8.23 The distinction between active and passive provision is as follows:

¹⁸ <http://www.motorcycleguidelines.org.uk/the-guidelines/6-0-motorcycle-parking/>

¹⁹ The Road to Zero DfT strategy (2018) states that it is the government’s intention that all new homes, where appropriate, should have a chargepoint available.

- **Active provision** for electric vehicles: an actual socket connected to the electrical supply system that vehicle owners can plug their vehicle into.
- **Passive provision** for electric vehicles: the network of cables and power supply necessary so that at a future date a socket can be added easily. It is significantly cheaper and less disruptive to install the underlying infrastructure for EV charge points during construction than to retrofit later.

Electric Vehicle charging options

This is a rapidly changing technology, but chargepoints are primarily one of three main types, based on the power output:

Slow: up to 3kW AC – between 6-12 hours to charge a battery electric vehicle throughout, less for a plug-in hybrid; These are typically installed at homes, where units are wired directly into the fuse board, include overload protection circuitry and are fully weatherproof.

Typical homecharge unit²⁰



Fast: 7 to 22kW AC power outputs, and typically charge a battery electric vehicle throughout in 3-4 hours; some homes use 7 kW chargers.

Rapid: Typically, rapid AC chargers are rated at 43kW, while rapid DC are typically 50kW. Will typically charge a BEV to 80% in around 30 minutes.

Typical public rapid charge unit²¹



Superchargers and high-powered charging are becoming increasingly relevant, though current EVs are limited in the charging power they can accept.

Different cars and vans can have different charging sockets; there are three main types.

(1) Type 2 and CCS, an option which includes a Type 2 for slow/fast charging, and a Type 2 Combo (also known as 'CCS') for rapid charging;

²⁰ Source; www.zap-map.com; Source – The Road to Zero, DfT, 2018 and www.goultralow.com

²¹ Source: www.zap-map.com

- (2) Type 1 and CHAdeMO, for slow/fast and rapid charging respectively; and
- (3) Tesla Type 2.

The cable that comes with a car will fit the car's socket. At the other end, all standard cables have a 'Type Two' plug, which connects with the universal 'Type Two' sockets found on the latest charging points.

Rapid chargers don't have sockets, but have the cables built in, you simply use the one for your car to connect up.

Homecharge units can be specified with either a Type Two socket, or with a cable already attached. Some cars also come with charging cables that connect to a standard 13 amp socket. However, a dedicated homecharge unit is the preferred method of charging at home

8.24 The standard proposed is as follows:

Table 1 Electric Vehicle Charging Standards

Land use	Provision	Type of charger (minimum) ²²	Power supply
C3 houses	1 per house active charging point	7kW Mode 2 with Type 2 connector	230v AC 32 Amp Single Phase dedicated supply
C3 Flats and other C3 uses	1 active charging point per 5 parking spaces provided, all remaining parking spaces to have passive provision	7kW Mode 2 with Type 2 connector Feeder pillar or equivalent permitting future connection.	230v AC 32 Amp Single Phase dedicated supply
Commercial Development (Offices / Employment Retail / Leisure Uses) B1,B2,B8, D1, D2, C1, A1, A2-A5	1 active charging point per 5 parking spaces provided, 20-30% of all remaining parking spaces to have passive provision (as specified in SPD standards table Appendix A)	7kW Mode 3 with Type 2 connector For large retail/leisure developments with high turnover of parking a minimum of 1 space should be for rapid charging Mode 4 multi-standard charge point. (> 50kW) Feeder pillar or equivalent permitting future connection.	230v AC 32 Amp Single Phase dedicated supply Rapid chargers 400v AC 100Amp Triple Phase dedicated supply 230v AC 32 Amp Single Phase dedicated supply
Other uses	Individual case basis		

8.25 Off-street EV bays may be achieved in the standard 2.4m x 4.8m bays referred to in 8.2.

8.26 The Transport Assessment or Transport Statement should indicate the provision and describe the detail of active and passive provision and bay/chargepoint layouts to show that chargepoints will be accessible. At least one chargepoint should be provided in a disabled parking space.

²² For more detailed information see <http://www.beama.org.uk/resourceLibrary/beama-guide-to-electric-vehicle-infrastructure.html>

Cars and small commercial vehicles

- 8.27 The Council strongly encourages all developments to include passive provision and essential infrastructure i.e. ducting capability across their developments (allowing developments to be simply retrofitted – to limit secondary costs). Table 1 above sets out the provision required. Dacorum Borough Council require that 20 per cent of all spaces must be active provision for electric vehicles with an additional 20 per cent passive provision for electric vehicles in the future.

Large commercial vehicles

- 8.28 New development that requires regular freight deliveries should be expected to include charging infrastructure provision dedicated for use by electric-powered freight delivery vehicles. This will be determined on a site by site basis. It is expected that such provision will include rapid charging facilities. In exceptional circumstances, where the full provision cannot be made on site, alternative arrangements of financial contribution towards the provision of off-site publicly accessible charging points may be acceptable which is at the discretion of the Council.

9. TRANSPORT STATEMENTS AND TRANSPORT ASSESSMENTS

- 9.1 Transport Statements or Assessments are required to support planning applications, according to criteria set out in Dacorum Borough Council's Local Validation Checklist. Contact should be made with the Local Highway Authority (Hertfordshire County Council) in order to agree the scope of these documents. Where a proposed development is predicted to have an impact on the Strategic Road Network (SRN), consultation with Highways England will also be required.
- 9.2 DfT guidance is provided at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/263054/guidance-transport-assessment.pdf

10. PARKING STRESS STUDIES

- 10.1 This section refers to on-street Parking Stress Surveys which may be required by the Council where developments are proposed that do not meet the standards.
- 10.2 For proposed residential developments of less than 10 units, or for non-residential developments of less than 500 sq.m., the need for a Parking Stress Survey is at the Council's discretion.
- 10.3 Most forms of development have the potential to increase the amount of on-street parking, more commonly known as parking stress. High parking stress can affect highway safety, the free-flow of traffic, amenity, access by emergency services, refuse collection and delivery of goods. Investigation of this impact forms an important part of the Council's analysis of proposed developments and therefore it is essential that enough information is submitted by a developer to allow a full analysis of the issue. An unacceptable increase in parking stress or the submission of an insufficient level of information, can lead to a recommendation for refusal of a planning application.
- 10.4 In situations where previous committed development has not been implemented, this should be taken into consideration when evaluating the results of Parking Stress Surveys. This is to allow for the cumulative impact of development on on-street parking supply in order to ensure that all potential additional on-street parking demand is taken account of when an application is considered.
- 10.5 Guidelines on undertaking a Parking Stress Survey are provided in **Appendix C**.

11. TRAVEL PLANS AND TRAVEL PLAN CHECKLIST

Introduction

- 11.1 Hertfordshire County Council's Travel Plan Guidance²³ and National guidance²⁴ provides more information on these elements. The Hertfordshire guidance states that Travel Plans are an essential tool for enabling development by creating sustainable access to, from and around a site. Travel plans are essential for sustainable development. They aim to deliver sustainable transport objectives through a positive action plan. They are effective in managing travel demand, with the potential to contribute to significant reduction in national and local traffic. They can also be effective in promoting social inclusion, community cohesion and healthier communities.
- 11.2 A Travel Plan is a long-term management strategy for an occupier or site that seeks to deliver sustainable transport objectives. They are required in Hertfordshire to support a number of national and local policy objectives, including:
- reducing pressure on highway capacity;
 - reducing road danger and protecting vulnerable road users;
 - encouraging behavioural change towards public transport, walking, cycling and other forms of active travel; and
 - creating more attractive and liveable neighbourhoods

Travel Plans and Parking

- 11.3 The over-supply of car parking spaces against modal share targets set out in a Travel Plan can be a reason for the refusal of an application. A Travel Plan needs to consider the options for parking provision amongst its checklist of criteria.
- 11.4 Car parking can be used as to encourage more sustainable travel patterns through measures such as:
- providing free/guaranteed parking for car sharers;
 - limiting the parking provision on a site;
 - implementation of car parking charges; and
 - parking restraint and the development of car-free sites.
- 11.5 The Council has a particular interest in travel in new development in and around air quality management areas, and any Transport Assessments and Travel Plans in or near such areas will have to indicate how this will be addressed; this could include more of an emphasis on sustainable travel including higher levels of electric vehicles or other lower emission vehicle provision.

²³ <https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/development-management/highways-development-management.aspx#travelplans>

²⁴ <https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements#travel-plans>

Further Information

- 11.6 If you have any questions, email Hertfordshire County Council on travelplan@hertfordshire.gov.uk. Hertfordshire's Travel Plan Guidance provides details of when Travel Plans are required as part of the planning process for all types of development, with different travel plans relating to the scale of each development – see the extracted table below, which requires a simpler Travel Plan Statement for smaller developments and a Travel Plan for larger developments.

Guidance on the thresholds requiring a travel plan or travel plan statement (Source: Table 4 of Hertfordshire Travel Plan Guidance)		
<u>Land Use</u>	<u>Travel Plan Statement</u>	<u>Travel Plan</u>
A1 Food Retail	>250<800 sq. m	>800 sq. m
A1 Non-food Retail	>800<1500 sq. m	>1500 sq. m
A2 Financial and Professional Services	>1000<2500 sq. m	>2500 sq. m
A3 Restaurants and Cafés	>300<2500 sq. m	>2500 sq. m
A4 Drinking Establishments	>300<600 sq. m	>600 sq. m
A5 Hot-food Takeaway	>250<500 sq. m	>500 sq. m
B1 Business	>1500<2500 sq. m	>2500 sq. m
B2 General Industrial	>2500<4000 sq. m	>4000 sq. m
B2 Storage or Distribution	>3000<5000 sq. m	>5000 sq. m
C1 Hotels	>75<100 sq. m	>100 sq. m
C2 Residential Institutions - Hospitals, Nursing homes	>30<50 beds	>50 beds
C2 Residential Institutions - Residential Education	>50<150 students	>150 students
C2 Residential Institutions - Institutional Hostels	>250<400 residents	>400 residents
C3 Dwelling Houses	>50<80 units	>80 units
D1 Non-residential Institutions	>500<1000 sq. m	>1000 sq. m
D2 Assembly and Leisure	>500<1500 sq. m	>1500 sq. m

- 11.7 A Travel Plan will need to provide details on
- the sustainable accessibility of a development site;
 - the measures proposed to encourage sustainable travel;
 - administrative arrangements for the travel plan
 - targets, including mode split targets; and
 - monitoring and reporting procedures

11.8 Where a development proposes the introduction of a Car Club or 'Car on Demand' services as part of its Travel Plan measures, if this is being used to justify a reduction in parking provision against the applicable standard, then evidence will need to be provided to justify how the scheme will operate and how it warrants a reduction in parking provision.

11.9 Further details are available at:

<https://www.hertfordshire.gov.uk/media-library/documents/highways/development-management/travel-plan-guidance.pdf>

Travel Plan Checklist

11.10 For developments requiring a Travel Plan, the document should be submitted with the planning application. Hertfordshire County Council use an assessment tool that evaluates all sections of the Travel Plan. **Appendix D** provides a Travel Plan outline example and checklist.

12. SECTION 106 CONTRIBUTIONS AND COMMUNITY INFRASTRUCTURE LEVY

Section 106 Contributions

- 12.1 Requirements under Section 106 exist to make a development acceptable in planning terms and, as such, need to meet three tests of being directly related, relevant and true to scale. Development impacts the local area, which requires both new infrastructure and investment in existing infrastructure. As part of the planning application process, developers are asked to either include on-site provisions or pay contributions to Dacorum Borough Council, with this traditionally being done through the legal process known as Section 106 planning agreements.

Community Infrastructure Levy (CIL)

- 12.2 CIL largely replaces the Section 106 element to our developer contribution system. We adopted our charging schedule for CIL on 25 February 2015 and implemented it on 1 July 2015. No planning application can be validated without the necessary CIL Additional Information Forms.

[More information on our CIL and related Planning Application forms.](#)

- 12.3 Although, there may be instances where S106 agreements are still required for sites e.g. for routing agreements, to cover legal matters or where sites are CIL exempt.

13. FUTURE REVIEWS OF THE SPD

- 13.1 Dacorum Borough Council will periodically assess the need for a review of all or part of the SPD. This may be required due to:
- The adoption of a new Local Plan
 - New census or other local car ownership and use data becoming available
 - Changes in accessibility of areas, possibly due to large-scale development proposals (e.g. around areas proposed in the emerging masterplans i.e. Maylands and Two Waters development areas)
 - Travel behaviour data showing appropriate change in the borough
 - Significant change to the parking management approach in Dacorum or specific towns/large villages. i.e.
 - Use of additional CPZs and/or yellow lining of roads
 - Reduction in availability of public car parking
 - Improvements to bus services (either frequency or cost)
- 13.2 A review could simply be an internal check as to whether this document is still relevant or could involve a complete rewriting (and consultation) of the SPD.
- 13.3 This review will occur alongside the frequency of the Local Plan reviews (expected to be on a maximum 5 yearly cycle). Please see the Local Development Scheme²⁵ for the proposed Local Plan review timetable.
- 13.4 The need for a periodical review of parking standards is an important consideration for Dacorum Borough Council, given current and likely future trends in transport within the UK.
- 13.5 In conjunction with the development of electric vehicles, the Government has pledged to remove cars powered by petrol and diesel from UK roads by 2050 as part of its Road to Zero strategy.
- 13.6 This is just one of the major shifts in transport trends expected to take place over the coming years. Nationally, people are travelling less often – including for shopping, commuting and business. Although as a whole, people are making more trips by car than by any other means, in cities other patterns are emerging, with the car becoming steadily less dominant.
- 13.7 Furthermore, nationally Private Hire Vehicle numbers have soared by 41% between 2007 and 2017, whilst taxis have grown by 17%. At the same time, van traffic has increased recently and is forecast to increase further, this in part being down to the growing trend for internet food shopping.
- 13.8 Cycling remains very low in the country as a whole but there is evidence that investment boosts numbers, particularly in urban areas.

²⁵ <http://www.dacorum.gov.uk/home/planning-development/planning-strategic-planning/local-development-scheme>

- 13.9 Therefore, with these trends in mind, there will be an ongoing need to review parking standards (both car and cycling) to ensure that the levels proposed as part of future developments are appropriate to the needs of the development, whilst also providing for more sustainable travel patterns.

APPENDIX A: PARKING STANDARDS TABLES

Use Class	Description	Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸
		Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)				
A1 Retail foodstores	(a) Small food shops up to 500 m ² GEA	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 30 m ² GEA	1 space per employee who is a disabled motorist + 6% of total provision. It is desirable that a further 4% of the total capacity should be enlarged standard spaces ²⁹ .	Calculate 4% of total standard; add this number for Motorbike bays	20% of all spaces to be active provision, further 20% to be passive provision	1 S/t space per 150 m ² GEA plus 1 L/t space per 10 maximum staff on site at any one time
	(b) Food supermarkets exceeding 500 m ² GEA but not exceeding 2,500 m ² GEA			1 space per 22 m ² GEA ³¹				
	(c) Food superstores/ hypermarkets exceeding 2,500 m ² GEA			1 space per 18 m ² GEA				
	(d) Food retail parks			Assessed on an individual case				
A1 Non-food retail	(a) Non-food retail warehouses with garden centres	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 25 m ² GEA				1 S/t space per 350 m ² GEA plus 1 L/t space per 10 maximum staff on site at any one time
	(b) Non-food retail warehouses without garden centre			1 space per 35 m ² GEA				

²⁶ Part of car parking standard, not additional to it

²⁷ Additional to parking standard

²⁸ For cycle parking provision around places of employment, sufficient showers and lockers should be provided to cater for demand, with lockers larger enough to include hanging space for formal work wear. An appropriate level of provision should be provided in accordance with expected operational requirements and nature of the development proposed.

²⁹ See 4.2.1.1. of BS 8300:2009 – 3mx6m

³⁰ See 4.2.1.1. of BS 8300:2009 – 3m x 6m

³¹ TRICS and site survey data indicates over-provision of food retail parking generally, TRICS data suggests approx. 1 space per 30 sqm, but this has been adjusted to 1 space per 22 sqm (i.e. more parking provision) to allow for some seasonal peaks. A similar proportionate reduction has been applied to the larger superstores.

Use Class	Description	Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸
		Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)				
A1 Non-food retail (continued)	(c) Garden centres up to 4,000 m ² GEA			1 space per 25 m ² GEA	1 space per employee who is a disabled motorist + 6% of total provision. It is desirable that a further 4% of the total capacity should be enlarged standard spaces ³⁰	Calculate 4% of total standard; add this number for Motorbike bays .	20% of all spaces to be active provision, another 20% to be passive provision	1 S/t space per 350 m ² GEA plus 1 L/t space per 10 maximum staff on site at any one time
	(d) Garden centres exceeding 4,000 m ² GEA			Decided in each case on individual merits				
	(e) Non-food retail parks where individual land use components are known	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	Each case on individual merits (shared parking & an overall reduction in provision, taking into account linked trips on site)				
	(f) Non-food retail parks where individual land use components are not known			1 space per 40 m ² GEA (shared parking)				
A2 ³² Financial & professional Services	Banks, building societies, estate agencies, betting shops	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 30 m ² GEA	1 space per employee who is a disabled motorist + 6% of total provision. It is desirable that a further 4% of the total capacity should be enlarged standard spaces ³³	Calculate 4% of total standard; add this number for Motorbike bays	20% of all spaces to be active provision, another 20% to be passive provision	1 S/t space per 200 m ² GEA plus 1 L/t space per 10 f/t staff
A3, A4 and A5 Food & drink	(a) Restaurants/cafes	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 5 m ² floorspace of dining area plus 3 spaces per 4 employees				
	(b) Public houses/bars			1 space per 3 m ² of floorspace of bar area plus 3 spaces per 4 employees				
	(c) Hot food			1 space 3 m ² of				

³² Note: A2 offices should be treated as B1 offices

³³ See 4.2.1.1. of BS 8300:2009 – 3mx6m

Use Class	Description	Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸
		Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)				
A3, A4 and A5 Food & drink (continued)	takeaway shops ³⁴			floorspace of public area plus 3 spaces per 4 employees			100 m ² GEA plus 1 L/t space per 10 maximum staff on site at any one.	
	(d) Fast food drive thru restaurants			1 space per 8 m ² GEA				
	(e) Roadside restaurants	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 4 m ² of floorspace of dining area plus 3 spaces per 4 employees			1 L/t space per 10 maximum staff on site at any one time.	
	(f) Transport café			Considered on a case by case basis – starting point 1 lorry space per 3.5 m ² GEA plus 3 standard parking spaces per 4 employees				
B1 Business	(a) B1 (a) offices	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 35 m ² GEA	1 space for each employee who is a disabled motorist, plus 5% of the total capacity for visiting disabled motorists. It is desirable	20% of all spaces to be active provision, another 30% to be passive provision	1 S/t space per 500 m ² GEA plus 1 L/t space per 10 f/t staff	
	(b) B1 (b) research & development, high-tech/B1 (c) light industry			1 space per 35 m ² GEA				
B2 General industry	General industry	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 75 m ² GEA Parking provision for lorries to be considered on a case by case basis.				

³⁴ Excluding fast food drive thru restaurants

Use Class	Description	Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸
		Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)				
B8 Storage & distribution	Wholesale distribution, builder's merchants, storage	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 75 m ² GEA Parking provision for lorries to be considered on a case by case basis.	that a further 5% of the total capacity should be enlarged standard spaces.			1 L/t space per 10 f/t staff
Business Parks	Mixed B1/B2/B8 (unless heavily orientated to B8) for use where individual land use components are not known	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 40 m ² GEA Parking provision for lorries to be considered on a case by case basis.				Calculate 4% of total standard; add this number for Motorbike bays
C1 Hostels & hostels	(a) Hotels	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per bedroom (including staff accommodation) plus 1 space per manager plus 2 spaces per 3 staff minus spaces related to staff bedrooms plus 1 space per 5 m ² dining area plus 1 space per 5 m ² dining area plus 1 space per 3 m ² bar area plus 1 space per 5 m ² public area in conference facility plus 1 space per 6 m ² of public area in exhibition hall plus a minimum of 1 coach parking space per 100 bedrooms	At least one designated car parking space per accessible bedroom and 1 space for each employee who is a disabled motorist. It is desirable that a further 4% of the total capacity should be enlarged standard spaces.			1 L/t space per 10 beds plus 1 L/t space per 10 maximum staff on site at any one time
C1 Hostels & hostels (continued)	(b) Hostels i. Small (single parent or couple with no children)	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	3 spaces per 4 units				Assessed on individual case basis

Use Class	Description	Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸
		Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)				
	ii. Family (2 adults & 2 children)			1 space per unit			30% to be passive provision	
C2 Residential institutions	(a) Institutions/ homes with care staff on premises at all times (excluding nursing homes, hospitals, residential schools, colleges or training centres)	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 5 residents' bed spaces plus 1 space per 2 staff (non-resident); parking for resident staff to be based on general needs standard	1 space for each employee who is a disabled motorist, plus 5% of the total capacity for visiting disabled motorists. It is desirable that a further 5% of the total capacity should be enlarged standard spaces.	Assessed on individual case basis	20% of all spaces to be active provision, another 20% to be passive provision	1 S/t space per 20 beds plus 1 L/t space per 10 staff on duty at any one time
	0.25 spaces per resident bed space; parking for resident staff to be based on general needs standard							
	1 space per 0.5 beds or to be decided on individual merits (including a full transport assessment & proposals in a green transport plan); special hospitals must be considered individually							
	(b) Elderly persons residential & nursing homes (Category 3)							
	(c) Hospitals					Calculate 4% of total standard; add this number for Motorbike bays		

Use Class	Description		Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸
			Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)				
C2 Residential institutions (continued)	(d) Education – halls of residence				1 space per 2 full-time staff plus 1 space per 6 students (but with linkage to student transport plans where appropriate)	5% of spaces	Calculate 4% of total standard; add this number for Motorbike bays	20% of all spaces to be active provision, another 20% to be passive provision	1 L/t space per 10 f/t staff plus 2 L/t space per 3 students
C3 Residential ³⁵	Studio or bedsit	Allocated	0.7	0.8	1.0	5% of spaces Disabled persons parking bays must be for residents' use only and not be allocated to specific dwellings, unless provided within the curtilage of the dwelling	Assessed on individual case basis	20% of all spaces to be active provision, another remaining 80% to be passive provision; Houses to have 1 charging point per house.	1 L/t space per unit if no garage or shed provided
		Unallocated	0.6	0.7	0.8				
	1 bedroom	Allocated	0.7	0.8	1.0				
		Unallocated	0.6	0.7	0.8				
	2 bedrooms	Allocated	1.1	1.2	1.3				
		Unallocated	0.9	1.0	1.1				
	3 bedrooms	Allocated	1.4	1.6	1.7				
		Unallocated	1.2	1.3	1.4				
	4 bedrooms	Allocated	1.7	1.8	1.97				
		Unallocated	1.4	1.5	1.6				
	More than 4 bedrooms	Allocated	Assessed on individual case basis						
		Unallocated	Assessed on individual case basis						
	PTO for visitor parking provision for C3 residential								
	Visitor parking³⁶	50 – 100% of spaces allocated	Car parking standard plus 20%.						-

Use Class	Description		Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸
			Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)				
		All unallocated	No visitor parking is required.						
		Less than 50% of spaces allocated	Allocation between these ranges subject to Council decision.						
C3 residential – elderly persons accommodation	Retirement dwellings, no warden control, 1 bedroom	Reductions not automatically applied, assessed on individual case by case basis	1.25 spaces per unit		5% of spaces. Should not be allocated to specific dwellings, unless provided within the curtilage of the dwelling	Assessed on individual case basis	20% of all spaces to be active provision, another remaining 80% to be passive provision	1 S/t space per 3 units plus 1 L/t space per 5 units	
	Sheltered housing, warden control 1 or 2 bedrooms		0.50 spaces per unit						
	Other unit sizes		To be determined on case by case basis						
	Visitor parking required for C3 residential : elderly persons accommodation	0.25 per unit							
C3 - Dwelling Houses with Multiple Occupation (HMO)	All sizes	Reductions not automatically applied, assessed on individual case basis	0.5 spaces per bedroom					N/A?	

³⁵ Where garages are provided to meet some or all of the parking standard – see paragraph 5.9 and 7.3 before applying the car parking standards

³⁶ See paragraph 6.7 for allocation of visitor parking at small developments (those less than 10 units)

Use Class	Description	Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸					
		Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)									
D1 Non – residential institutions	(a) Public halls/places of assembly (excluding D2)	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 9 m ² GEA or 1 space per 3 fixed seats plus 3 spaces per 4 staff members	1 space per employee who is a disabled motorist + 6% of total provision. It is desirable that a further 4% of the total capacity should be enlarged standard spaces ³⁷	Calculate 4% of total standard; add this number for Motorbike bays	20% of all spaces to be active provision, another 20% to be passive provision	1 S/t space per 200 m ² GEA plus 1 L/t space per 10 staff on duty at any one time					
	(b) Community/family centres			1 space per 9 m ² GEA plus 1 space per full-time staff member or equivalent									
	(c) Day centres			1 space per 2 staff members plus 1 space per 3 persons attending or 1 space per 9 m ² GEA									
	(d) Places of worship								1 space per 10 m ² GEA				
	(e) Surgeries & clinics								3 spaces per consulting room plus 1 space per employee other than consulting doctors/dentists/vets				1 S/t space per consulting room plus 1 L/t space per 10 staff on duty at any one time
	(f) Libraries								1 space per 30 m ² GEA of freestanding development (otherwise assessed on merits)				1 S/t space per 100 m ² GEA plus 1 L/t per 10 f/t staff
	(g) Miscellaneous cultural buildings								2 spaces plus 1 space per 30 m ² of public floorspace				

³⁷ See 4.2.1.1. of BS 8300:2009 – 3mx6m

Use Class	Description	Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸
		Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)				
D1 Non – residential institutions (continued)	(h) Educational establishments (including residential) (i) Schools ³⁸			1 space per full-time member of staff plus 1 space per 100 pupils plus 1 space per 8 pupils over 17 years old plus 1 space per 20 pupils under 17 years old	1 space per employee who is a disabled motorist + 6% of total provision; It is desirable that a further 4% of the total capacity should be enlarged standard spaces	Calculate 4% of total standard; add this number for Motorbike bays	20% of all spaces to be active provision, another 20% to be passive provision	1 L/t space per 10 f/t staff plus primary school: 1 L/t space per 15 students secondary school: 1 L/t space per 5 students further education: 1 L/t space per 5 students nursery schools/ playgroups: none additional
D1 Non – residential institutions (continued)	(h) Educational establishments (ii) Further education ³⁸	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per full-time member of staff plus 1 space per 5 full-time students	1 space per employee who is a disabled motorist + 6% of total provision; It is desirable that a further 4% of the total capacity should be enlarged standard spaces	Calculate 4% of total standard; add this number for Motorbike bays	20% of all spaces to be active provision, another 20% to be passive provision	1 L/t space per 10 f/t staff plus primary school: 1 L/t space per 15 students secondary school: 1 L/t space per 5 students further education: 1 L/t space per 5 students nursery schools/playgroups: none additional
	(ii) Nursery schools/	Up to a 30% reduction on the 'Rest of Borough'	Up to 10% reduction on the 'Rest of Borough'	1 space per 4 pupils				

Use Class	Description	Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸
		Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)				
	playgroups ³⁸	standard.	standard.					
D2 Assembly & leisure	(a) Places of entertainment/leisure parks for use when individual land use components are known	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	To be decided in each case on individual merits:	1 space per employee who is a disabled motorist + 6% of total provision; It is desirable that a further 4% of the total capacity should be enlarged standard spaces	Calculate 4% of total standard; add this number for Motorbike bays	20% of all spaces to be active provision, another 20% to be passive provision	Assessed on case by case basis, depending upon mix of uses
	(b) Places of entertainment/leisure parks for use when individual land use components are not known	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 15 m ² GEA (shared parking)				
D2 Assembly & leisure (continued)	(c) Cinemas (including multiplexes)	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 4 seats ³⁹	1 space per employee who is a disabled motorist + 6% of total provision; It is desirable that a further 4% of the total capacity should be enlarged standard spaces ⁴⁰	Calculate 4% of total standard; add this number for Motorbike bays	20% of all spaces to be active provision, another 20% to be passive provision	<p>Cinemas up to 500 seats: 1 S/t space per 20 seats plus 1 L/t space per 10 staff on duty at any one time</p> <p>Cinemas over 500 seats: 25 S/t spaces plus 1 S/t space per 100 seats more than 500 plus 1 L/t space per</p>

³⁸ Note: overspill parking for community purposes (outside school day) should be catered for by use of dual-purpose surfaces such as school play areas.

Use Class	Description	Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸
		Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)				
								10 staff on duty at any one time
D2 Assembly & leisure (continued)	(d) Swimming pools	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	1 space per 15 m ² GEA	Determined according to the usage of the sports facility. Detailed guidance on parking provision for sports facilities can be found in the Sport England publication Accessible sports facilities ⁴¹ .	Calculate 4% of total standard; add this number for Motorbike bays	20% of all spaces to be active provision, another 20% to be passive provision	1 S/t space per 25 m ² GEA plus 1 L/t space per 10 f/t staff
	(e) Tennis/badminton			4 spaces per court				
	(f) Squash courts			3 spaces per court				
	(g) Ice rinks			1 space per 12 m ² GEA of rink				
	(h) Fitness centres/sports clubs			1 space per 15 m ² GEA				
	(i) Ten pin bowling			2 spaces per lane ⁴²				
	(j) Indoor bowls			4 spaces per rink				
(k) Outdoor sports grounds	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	20 spaces per pitch				1 S/t space per 10 players/ participants at busiest period	
(i) with football pitches			50 spaces per hectare					
(ii) without football pitches								

³⁹ TRICS data suggests 1 space per 5 seats, 1 per 4 assumed (existing standard 1:3)

⁴⁰ See 4.2.1.1. of BS 8300:2009 – 3mx6m

⁴¹ Accessible Sports Facilities, 2010 guidance, Sports England - <https://www.sportengland.org/media/4508/accessible-sports-facilities-2010.pdf>

⁴² TRICS data suggests reductions

Use Class	Description	Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸
		Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)				
	(l) Golf (i) 18-hole golf course (ii) 9-hole golf course (iii) golf driving range (iv) golf courses for more than local use			100 spaces 60 spaces 1.5 spaces per tee To be decided in each case on individual merits		Assessed on individual case basis	20% of all spaces to be active provision, another 20% to be passive provision	10 L/t spaces per 18 holes 5 L/t spaces per 9 holes 5 S/t spaces per 20/30 tee driving range Pro rata to the above
Motor trade related	(a) Showroom car sales	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	3 spaces per 4 employees plus 1 space per 10 cars displayed	1 space for each employee who is a disabled motorist, plus 6% of the total capacity for visiting disabled motorists. It is desirable that a further 4% of the total capacity should be enlarged standard spaces.	Calculate 4% of total standard; add this number for Motorbike bays	20% of all spaces to be active provision, another 20% to be passive provision	1 L/t space per 10 f/t staff
Motor trade related (continued)	(b) Vehicle storage	Up to a 30% reduction on the 'Rest of Borough' standard.	Up to 10% reduction on the 'Rest of Borough' standard.	3 spaces per 4 employees plus 2 spaces per showroom space or provision at rate of 10% annual turnover				1 L/t space per 10 f/t staff
	(c) Hire cars			3 spaces per 4 employees plus 1 space per 2 hire cars based at site				
	(d) Ancillary vehicle storage			3 spaces or 75% of total if more than 3 vehicles				

Use Class	Description	Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸
		Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)				
	(e) Workshops			3 spaces per 4 employees plus 3 spaces per bay (for waiting & finished vehicles) in addition to repair bays				
	(f) Tyre & Exhaust			3 spaces per 4 employees plus 2 spaces per bay				
	(g) Parts stores/sales			3 spaces per 4 employees plus 3 spaces for customers				
	(h) Car wash/ petrol filling station			3 spaces per 4 employees plus 3 waiting spaces per bay or run in to row or bays (additional parking is required where a shop is provided)				1 L/t space per 10 f/t staff plus 5 S/t spaces if shop included
Public transport facilities	(a) Rail stations	To be decided in each case on individual merits			1 space for each employee who is a disabled motorist, plus 5% of the total capacity for visiting disabled motorists. It is desirable that a further 5% of the total capacity should	Calculate 4% of total standard; add this number for Motorbike bays	20% of all spaces to be active provision, another remaining 20% to be passive provision	5 L/t spaces per peak period train
	(b) Bus stations							2 L/t spaces per 100 peak period passengers

Use Class	Description	Car Parking Standard			Disabled parking provision ²⁶	Motorbike parking ²⁷	Electric Vehicles ²⁶	Cycle parking standards ²⁸
		Accessibility Zone 1	Accessibility Zone 2	Rest of Borough (outside of accessibility zones)				
					be enlarged standard spaces.			

Car Parking Notes:

GEA = Gross External (Floor) Area

The standards given above are on the basis of GEA (Gross External Area). If floorspace areas are expressed in terms of GIA (Gross Internal Area), without GEA being provided, then the general benchmark is to apply a reduction of 5% according to the Homes and Communities Agency 'Employment Density Guide' 3rd Edition (November 2015). A worked example of how to convert GEA to GIA is provided below:

Example Development: 1,000sqm GEA development of B1a office development

Appraisal: GIA is calculated using the benchmark specified above

$$1,000 \times (100-5)\% = 950\text{sqm GIA}$$

Cycle Parking Notes:

Space = space to park 1 bicycle

L/t = long term

S/t = long term

f/t staff = full time staff equivalents

L/t cycle parking provision of a ratio of 1 space per 10 f/t staff is equivalent to a modal split of 10% by bicycle provision of showers and changing facilities are also important of staff cycling is to be encouraged

APPENDIX B: ACCESSIBILITY ZONE PLANS

APPENDIX C: ON-STREET PARKING SURVEY STRESS SPECIFICATION⁴³

Undertaking a Survey

1. The following guidelines should be followed when undertaking a survey.

Residential Developments

2. The Council requires a parking survey to cover the area where residents of a proposed development may want to park. This generally covers an area of 200m (or an approximate 2-minute walk) around a site. For further detail see 'Extent of survey' below.
3. The survey should be undertaken when the highest number of residents are at home; generally late at night during the week. A snapshot survey between the hours of 00:30-05:30 should be undertaken on two separate 'neutral' weekday nights (Tuesday, Wednesday or Thursday).

Commercial Developments

4. Surveys for commercial developments should cover an area within 500m walking distance (or an approximate 5-minute walk) of a site. For further detail, see 'Extent of survey' below. Surveys should generally be done during proposed opening hours of the commercial development on an hourly beat basis.
5. Excluding the extent and time of the surveys the same principles apply as a survey for a residential development as set out above.

Survey times

6. For sites close to any of the following land uses, additional survey times may be necessary:
 - Town centre locations: surveys should be undertaken Monday-Wednesday only.
 - Regular specific evening uses close to the site (e.g. church, etc): additional surveys should be undertaken when these uses are in operation.
 - Commercial uses close to the site: morning and early evening surveys may also be required due to conflict with commuter parking. In these cases, surveys between the hours of 07:00-08:30 and 18:00-19:00 may be required, noting the amount of parking on a 15-minute basis over this time.
 - Railway stations/areas of commuter parking: additional morning and evening peak hour surveys will be required in order to assess the impact of commuter parking. These should be done between 07:00-08:00 and 17:30-18:30.
7. Surveys **should not** be undertaken:
 - in weeks that include Public Holidays and school holidays and it is advised that weeks preceding, and following holidays should also be avoided;
 - on or close to a date when a local event is taking place locally since this may impact the results of the survey.

⁴³ Based upon the Lambeth method

8. In some cases, the hours of the survey may need to be extended or amended. Applicants should contact the Council prior to undertaking a survey if there is any doubt.

Extent of survey

9. All roads within 200 metres (or 500m for commercial uses) walking distance of the site. Note this area is **NOT** a circle with a 200m/500m radius but a 200m/500m walking distance as measured along all roads up to a point 200/500m from the site.
10. Since people are unlikely to stop half way along a road at an imaginary 200m/500m line so the survey should be extended to the next junction or shortened to the previous one or taken to a suitable location along a road.
11. The following areas should be *excluded* from surveys:
- If the site is in a Controlled Parking Zone (CPZ) any parking bays in an adjoining CPZ (where permit holders of the surveyed CPZ cannot park) should be excluded.
 - If the site lies adjacent to, but not in, a CPZ then all roads in that CPZ should be excluded.
 - Areas that fall outside of the borough but are available for parking should be included but noted separately,
 - Places where drivers are unlikely to want to park, foreexample:
 - If there is no possibility of parking somewhere within the 200m boundary
 - If drivers would not wish to park in an area, due to perceived safety issues, or difficulty in accessing the parking for example.
12. Common sense should be applied in all cases and the extent of the survey area and justification for any amendments should be included in the survey. If inadequate justification is provided for a survey area, then amendments may be required, or a recommendation made accordingly.

Required Information

13. The following information should be included in the survey results, to be submitted to the Council:
- The date and time of the survey.
 - A description of the area noting any significant land uses in the vicinity of the site that may affect parking within the survey area (e.g. churches, restaurants, bars and clubs, train stations, hospitals, large offices, town centres etc).
 - Any unusual observations, e.g. suspended parking bays, spaces out of use because of road works or presence of skips, etc.
 - A drawing (preferably scaled at 1:1,250) showing the site location and extent of the survey area. All other parking and waiting restrictions such as Double Yellow Lines and Double Red Lines, bus lay-bys, kerb build-outs, and crossovers (vehicular accesses) etc should also be shown on the plan.
 - The number of cars parked on each road within the survey area on each night should be counted and recorded in a table as shown below. It would be helpful to note the approximate location of each car on the plan (marked with an X).

- Photographs of the parking conditions in the survey area can be provided to back-up the results. If submitted, the location of each photograph should be clearly marked.

Areas Within A Controlled Parking Zone (CPZ)

14. Only Resident Permit Holder Bays and Shared Bays which allow residents parking (these may be shared with Pay-and-Display parking and/or Business Permit Holders) should be counted.
15. Any committed development in the area that has not yet been implemented should also be taken into account by estimating the on-street demand and adding this to the survey results, describing the adjustments made.
16. To calculate parking capacity each length of parking bay must be measured and then converted into parking spaces by dividing the length by 5 (each vehicle is assumed to measure 5m) and rounding down to the nearest whole number. For example, a parking bay measuring 47m in length would provide 9 parking bays ($47/5=9.4=9$). The capacity of each separate parking bay must be calculated separately and then added together to give a total number of parking spaces for each road in the survey area.
17. The results should generally be presented in the following format (figures given as an example):

Street Name	Total Length (m) of parking spaces	No. of Resident Permit Holder parking spaces	No. of cars parked in R Resident Permit Holder PH bays	Resident Permit Holder Parking Stress (%)
A Street	350	70	70	100
B Street	250	50	40	80
C Street	150	30	10	33
Total	750	150	120	80

18. A separate note should be made of any areas where cars can legally park overnight. These are generally Single Yellow Lines or short-term parking or Pay-and-Display bays. The number of cars parked in these areas should be counted and presented separately.

Areas Not In A Controlled Parking Zone (CPZ)

19. All areas of unrestricted parking should be counted. To calculate parking capacity each length of road between obstructions (such as crossovers, kerb build-outs, yellow lines, etc) must be measured and then converted into parking spaces by dividing the length by 5 and rounding down to the nearest whole number. For example, a length of road measuring 47m in length would provide 9 parking bays ($47/5=9.4=9$). The capacity of each section of road must be calculated separately and then added together to give a total number of parking spaces for each road in the survey area.
20. The distance between crossovers should be measured in units of 5m. For example, if the distance between 2 crossovers or a crossover and a junction is 12m then only 10m should be counted in the survey, and any space between crossovers measuring less than 5m should be

discounted from the calculation. For reasons of highway safety, the first 5m from a junction should also be omitted from the calculation.

21. A map or plan showing the measurements used in calculating parking capacity should be supplied so that this can be verified by the Council. The parking survey may not be accepted if this is not supplied.
22. The results should generally be presented in the following format (figures given as an example):

Street Name	Total Length (m) of kerb space	Length of unrestricted parking (m)	No. of parking spaces	No. of cars parked on unrestricted length of road	Unrestricted Parking Stress (%)
A Street	400	350	70	70	100
B Street	300	250	50	40	80
C Street	200	150	30	10	33
Total	900	750	150	120	80

Understanding the Results

23. The results of the parking survey will be analysed by the Council in accordance the Council's Local Plan, any Supplementary Planning Documents produced by the Council in relation to parking, and any other Transport policy guidance produced by the Council, Hertfordshire County Council or nationally.
24. The Council will also take into consideration the impact of any recently permitted schemes in determining the acceptability or not of each proposed development.
25. Note that stress levels of over 100% stress (or 100% occupancy level) are possible. This is because small cars may need less space than 5 metres to park, meaning that additional cars can be accommodated.

APPENDIX D: TRAVEL PLAN OUTLINE EXAMPLE AND CHECKLIST

Section	Business	Residential
Executive Summary	A summary of the travel plan with committed statement from senior management.	A summary of the travel plan with a committed statement from Developer senior management representative.
Introduction	Explain the reasons for the plan, site location, history of the site and on-site activities.	Explain the reasons for the plan, site location, history of the site and on-site activities.
Roles and Responsibility	Must include details of the business director, the travel plan coordinator and information on any steering groups.	Must include details of the person(s) in charge of the travel plan and the details of the people involved in the handover of the travel plan from development to occupation.
Objectives	Clear objectives of what the plan is trying to achieve.	Clear objectives of what the plan is trying to achieve.
Site Audit	Site audit of the access for all modes of transport, staff surveys, business travel data, visitor surveys and a fleet audit.	Site audit of the access for all modes of transport and visitor survey, detailed information on the build out process including the types of units to be built.
Action Plan	A package of measures to be implemented.	A package of measures to be implemented.
Targets	SMART targets than can be monitored.	SMART targets than can be monitored.
Budgets and Finance	State the financial implications and funding streams of the plan.	State the financial implications and funding streams of the plan.
Monitoring and Evaluation	State the frequency of surveys and plan review, who is responsible for monitoring, collecting and publication of data.	State the frequency of surveys and plan review, who is responsible for monitoring, collecting and publication of data.
Publicity and Promotion	Explain how measures will be publicised and promoted to staff and visitors.	Explain how measures will be publicised and promoted to staff and visitors.
Securing and Enforcement	Details of planning obligations and conditions and any remedial actions.	Details of planning obligations and conditions and any remedial actions.

Source: Hertfordshire's Travel Plan Guidance for Business & Residential Development, 2018

APPENDIX E: CAR PARK MANAGEMENT PLAN GUIDANCE

The car park management plan should contain the following information as a starting point for discussion. The plan should clearly identify its objectives and relate to enforcement, monitoring as well as design issues.

Context	Existing land uses, existing parking, and parking charges, on-street conditions Relationship to Council’s policies and strategies
Development	Type of land uses, scale, programme of development
Parking provision	Primary purpose of the car park, who and when will it be used. Overall parking provision, including for specific users e.g. lorries, disabled, electric spaces etc., shared uses etc. Details of parking allocation. Any auxiliary or special services offered. Charging and tariffs, how they’re collected and how they can encourage low emission vehicle use.
Parking design	Locations and access routes (vehicle and pedestrian) Dimensions and layout Signage and information Lighting, personnel safety, user safety and security.
Management	Who will manage the car park: the owners of the associated building, a commercial company or an independent contractor? How it will be managed – control and enforcement
Monitoring and enforcement	How the plan will be monitored, enforced and reviewed