



# Guidance for Parking at New Residential Development

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# Guidance for Parking at New Residential Developments

## Introduction

The purpose of this document is to give the Local Planning Authorities specific, evidence based parking guidelines to enable them to apply local factors and characteristics when formulating parking provision at new residential development. It is considered that this Guidance will offer a flexible approach to defining optimum levels of car parking provision. This guidance has been updated to include data from the 2011 Census.

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## Background

The provision of the right amount and type of parking is key in helping to deliver successful and sustainable developments. A lack of suitable parking can often cause concern and distress in a local community. Pavement parking, obstruction of driveways and damage to soft landscaping and footways are just some examples of what can occur as a result of parking problems. In some cases, emergency or refuse vehicles are unable to pass as a result of obstructive parking.

In January 2011, the Government removed maximum parking standards at new residential development. The Government concluded that previous policies have directly resulted in an increased level of on-street parking consequently causing congestion and potential hazards for pedestrians and drivers.

While the emphasis remains on local planning and highway authorities to set parking standards for their areas, it is recognised that due consideration should be given to local circumstances, accessibility and local car ownership levels.

The National Planning Policy Framework (NPPF) echoes these sentiments with paragraph 39 stating, “If setting local parking standards for residential and non-residential development, local planning authorities should take into account:

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

Residential Car Parking Research (May 2007), a report published by the Department for Communities and Local Government identified that car ownership levels can vary greatly depending on these factors:

- Location of development
- Size of dwelling
- Type of tenure (private or affordable)
- How parking is to be provided (e.g. allocated/on plot, or unallocated)
- The type of dwelling (e.g. house or flat)

The report also identifies the 2001 Census data as a starting point to try to understand local levels of car ownership. Now the 2011 Census data has been published this Guidance and associated Parking Calculator have been updated. Additional detail on parking space dimensions and advice of carrying out on street parking surveys has also been included.

This guidance document for East Sussex supports the suggested methodology and is in accordance with National Planning Policy Framework and has been updated with the 2011 Census data.

## The optimum approach for East Sussex

It is important to understand the characteristics of East Sussex before identifying appropriate parking standards. East Sussex consists of three Districts (Lewes, Rother and Wealden) and two Boroughs (Eastbourne and Hastings). Parts of Lewes, Wealden and Eastbourne are also covered by the South Downs National Park Authority and this guidance is equally applicable to proposals within this area.

While the two Boroughs could be classed as urban, the three Districts are predominantly rural with urban settlements located throughout.

Therefore it is clear that the advice specified in the National Planning Policy Framework needs to be carefully considered for each individual Local Authority. In order to create a robust evidence base East Sussex County Council commissioned both site surveys and household questionnaires in 2011.

A number of site surveys were undertaken to assess the current parking trends of new residential developments across East Sussex. The aim of conducting these site surveys was to give an indication of how effective the overall site layout was and to ascertain the existing level of car parking, both on and off street.

Household questionnaires were delivered in November 2011 to approximately 8000 properties built between 2001 and 2010 with a response rate of approximately 29% achieved. The responses have been used as part of the evidence base that has helped determine aspects of this guidance document.

As highlighted in the document Residential Car Parking Research (May 2007), the use of the 2001 Census data is considered appropriate as a starting point for estimating levels of car ownership. Full Census 2001 car ownership was originally analysed as part of the study.

The data showed that in East Sussex, car ownership levels were influenced by dwelling size, type and tenure and that different levels of car ownership were apparent in each of the districts and boroughs.

In comparing Census 2001 car ownership with the 2011 surveys it was shown that 2011 survey car ownership was significantly higher than the 2001 Census data and as expected houses have higher car ownership than flats. The data also identifies that affordable dwellings have lower car ownership rates compared with private dwellings, however, the gap is closing indicating that tenure may not be as significant a factor in setting local parking standards within East Sussex.

With the release of the 2011 Census data the patterns of car ownership remained broadly similar but were slightly higher. Also it was noted that tenure played a more significant factor in car ownership levels in certain areas, but not across the entire county.

The figures in the parking calculator have therefore been updated to reflect the 2011 Census data. The tenure (Affordable or Market housing) of the proposed dwellings is also now required to ensure the likely parking demand calculated is as accurate as possible.

## Layout & Design of Parking

Determining the appropriate level of overall provision will help establish whether the optimum number of parking spaces can be provided. However, the type of spaces being provided (i.e. location, design, control and management) greatly influences the effectiveness of provision. Poor layout can lead to problems that can be detrimental to pedestrian and road safety such as parking on footways and in turning areas.

A lack of visitor or unallocated parking can have an adverse effect on residential roads. The perceived success of residential parking can often be determined by the design. Under-utilised on-site parking areas and congested on-street parking would indicate that the parking design was not effective.

With regard to the type of space provided, designers are faced with a number of options that include allocated spaces, un-allocated spaces, on-street, garages, car-ports, driveway parking, tandem parking and parking courtyards.

Car parking also needs to be designed with security in mind. Therefore, parking for each dwelling is often best located on plot, preferably at the front or side of the dwelling where it can be overlooked by the owner. Parking provided off plot should be provided as close as is practicable to the property it will be serving and should be overlooked to encourage its use.

Tandem parking is unlikely to be utilised to its potential, especially if both cars are in regular use. Acceptance of this by designers may require additional provision of un-allocated parking spaces.

Courtyard parking, especially when at the rear of properties is often not used, results in additional on-street parking and should therefore be avoided. It is therefore imperative that parking courtyards where they are considered are overlooked and/or secured and would normally include at most 10 spaces, in which case they may be acceptable. They will also need to be accompanied by on-street parking capacity.

Where possible echelon parking (i.e. parking spaces at an angle) should be considered due to the manoeuvring benefits within limited spaces and the lack of turning space required.

Parking provision should be appropriate to the location, based on local ward data, tenure and not be detrimental to road safety and should not create additional pressure on existing streets that cannot be mitigated. Parking should not be over generous as this will be an inefficient use of land.

Manual for Streets refers to a multitude of documents on parking design. 'Car Parking: What Works Where' by English Partnership is a toolkit that examines parking treatments and their effectiveness.

This report highlights the current design setting of providing rear parking courts that remove the parking from property frontages.

Although this has left streets for the free movement of vehicles it has reduced garden sizes which are now used for parking, created streets that have little activity and reduced street width as residents who cannot see their vehicles in rear parking courts due to poor design choose to park on the street, often inappropriately. Developments should be flexible in how parking is provided balancing between on-street and on-plot.

In new developments it is preferable if on-street parking bays can be incorporated into the overall width of the street i.e. the adopted highway, demarcated by paving, planting and trees. The use of delineated parking bays using different materials and texture of road surfacing can add to the overall design of the new housing.

Where a residential development parking layout is incorporating on-street parking or general on-street parking is to be relied upon, the street must be wide enough to accommodate parking without compromising access by emergency/waste collection vehicles and must not impair visibility at junctions or on bends. The street must be wide enough to accommodate two lanes of traffic and the on street parking space/layby.

Designers are also encouraged to designate convenient storage areas for refuse and recycling bins to help prevent the loss of parking areas at any new development.

A copy of the Manual for Streets is available by following the link below.

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

## **Disabled Parking Spaces**

Provision of Disabled Parking Bays should be considered during the design stage. While the majority of larger dwellings will have adequate on-site parking available, it may be necessary to include unallocated Disabled Parking Bays for flatted developments.

Disabled parking provision should be provided in accordance with guidance contained with Manual for Streets.

## **Powered Two Wheeler Parking**

Provision of Motorcycle parking provision should be provided in accordance with guidance contained with Manual for Streets.

In general Motorcyclists prefer to park close to their destination in a secure, overlooked location. In most residential situations motorcyclists will be able to use car parking spaces or garages.

## Parking Space Dimensions

To ensure that the level of parking for a given development functions as intended, it is essential that parking spaces, car ports and garages are large enough to comfortably accommodate vehicles.

Each car parking space should have the minimum dimensions as set out below. **Any space that does not meet these dimensions will not count towards the overall parking provision.**

- Parking Space – 5m x 2.5m  
(A minimum additional 0.5m will need to be added to either or both dimensions where the space is adjacent to a wall(s) or fence(s). Spaces in front of garages must be a minimum of 6m long to maintain access to the garage)
- Disabled Parking Space - 5m x 3.6m
- Car Ports – 5m x 2.8m

## Garages

Garages are often not used for parking vehicles for a number of reasons including

- Garages increasingly being used for the storage of other possessions
- Modern cars are too long and wide to fit into older garages
- Modern cars are more reliable, more resistant to rust and more secure, meaning people believe it is safe and practical to leave them outside
- An increase in multi-car households which means there is not enough garage space for every vehicle
- Garages being converted into extra accommodation
- Perceived as inconvenient

Research nationally has indicated that only 19% - 45% of garages are used for parking vehicles.

In East Sussex, 33% of garages are used for parking, based on surveys that were carried out in 2011. 42% of respondents identified providing additional storage as the main use of their garage.

The main stated reasons for garages not being used for parking were, insufficient storage in the home (47%) and the garage being too small (40%).

**For these reasons parking on new developments is best provided on driveways, car ports or allocated parking bays.**

**Where garages are proposed they will need to meet the minimum dimensions set out below and even then will only count as 1/3<sup>rd</sup> space each due to their limited use. This means for every 3 garages to be provided, they will only count as 1 parking space towards the overall parking requirement.**

Where garages are still provided they should be constructed to the following minimum internal dimensions:

- Garages – 6m x 3m or 7m x 3m, if to be used for cycle parking  
(Any garage must be positioned a minimum of 6m from the highway so there is sufficient space for a car to park in front, access to the garage is maintained and to stop cars parked in front of garage from creating an obstruction on the highway)

## Cycle Parking

Safe and secure cycle storage facilities are equally important at new development as cycling has the potential to replace short car journeys. Requirements need to take account of the location, size and type of dwelling. The recommended levels of cycle provision can be found in the table below. The storage provided will need to be safe, secure and covered.

Dwelling Type	Number of Bedrooms	Cycle Provision per Unit
Flat	1 & 2	0.5 spaces if communal 1 space if individual
Flat	3 or more	1 space
House	1 & 2	2 spaces
House	3 or more	2 spaces

## Electric Vehicles

Road transport is responsible for the vast majority the UK's domestic transport emissions. The Government considers that low emission and plug-in vehicles offer the potential to reduce those emissions and thereby assist in delivering climate change targets, whilst still allowing people the mobility that they want and need.

The Government is committed to growing the market for plug-in vehicles in the UK and proposes to ban the sale of petrol and diesel vehicles from 2040. It is recognised that safe, convenient and cost-effective recharging infrastructure is necessary to realise the potential environmental, economic and energy benefits.

The NPPF states that developments should be located and designed where practical to incorporate facilities for charging plug-in and other ultra-low emission vehicles.

Recharging at home, at night, will be the most convenient and practical option for drivers. It will maximise the environmental and economic benefits of plug-in vehicles by using cheaper off peak, lower carbon night-time electricity generation and will make the best use of available electricity supply capacity.

The Council encourages developers to include charging facilities for electric vehicles at all properties with off-street parking in accordance with current standards and codes of practise as and when they become available. Charging points should also be considered for other parking areas.



## The Calculation Tool

A calculation tool has been developed that uses Census Ward data and allows site specific determination of predicted parking demand by entering data including the location (ward) dwelling type (house or flat) size (number of bedrooms) and the way parking is provided (allocated or unallocated). Expected levels of car ownership and demand will be calculated using Census 2001 ward data adjusted using 2011 household survey data. Corrected data will take account of expected growth to 2026 using TEMPro data.

The tool automatically calculates an estimate for the unallocated parking demand and demand for visitors. By altering the allocation of parking the influence on the total parking demand is automatically updated so that the right balance of parking can be determined so that it is an efficient use of land.

Visitor parking demands are generally clustered at evenings and weekends. Often some residents themselves are visiting and therefore by providing unallocated parking spaces, a balance can be met.

If there is additional demand generated by visitors and parking is solely allocated then on-street parking will exacerbate. Studies by Noble and Jenks have shown that the demand for residents is 1 for every 5 dwellings (20%). If more than 50% of parking is allocated at a development then this additional demand should be added. The tool will automatically add this demand.

The tool will provide the appropriate level of parking provision and should be used as a guide. Some flexibility should be applied in determining the actual provision at developments a guide of +/- 5% should be appropriate but will depend on the location and be under discretion of officers and be supported with justification.

## User Guide

The East Sussex Residential Parking Demand Calculator has been designed to calculate the number of parking spaces required at new residential development on a site specific basis. The calculator predicts levels of car ownership using information about the location (ward), tenure, unit type, size and the number of allocated spaces. This guidance aims to inform users about how to use the calculator.

The user is only required to enter data into the columns with the marked blue arrows only.

## Opening the Tool

When opening the calculator, click "Enable Macros" as these play an important role in calculating parking demand.

Before inputting any information into the spreadsheet, the user should click the "Reset" button on the summary worksheet.

## Ward Information

The calculator uses information about car ownership in wards to calculate levels of car ownership on a site-specific basis. You must know the ward in which the development is located in order to use the tool. To find the appropriate ward it may be necessary to refer to the following link and input postcode or search on Map viewer.

<http://www.neighbourhood.statistics.gov.uk/dissemination/>

A map showing the wards in East Sussex is available using the following link or by copying the URL into your internet browser:

<http://www.eastsussex.gov.uk/community/local/factsandfigures/mapsusedforstatistics/default.htm>

If you know the postcode for the site, the ward finder can be used by inputting the postcode **without** a space between the characters.

For every development, the user should specify three wards:

Ward 1 – the ward in which the development is located

Ward 2 & 3 – either i) the two nearest wards (other than ward 1), or ii) two nearby wards where the existing housing stock is similar to the proposed development

## Unit Type

The user should specify whether the units are flats or houses.

## Tenure

The user should specify whether the units are private or affordable.

## Dwelling Size

The user should specify how many bedrooms rooms the units will have as this figure will be the basis for the tool to calculate appropriate parking standards. This measurement of dwelling size has been used because the number of bedrooms is a coarse measure of dwelling size and significant variation in car ownership has been found between dwellings with the same number of bedrooms.

Habitable rooms include all living rooms, bedrooms and kitchens, but **not** bathrooms, WCs or circulation space. If the number of bedrooms is known, but the number of habitable rooms is not then the following conversion should be used until this information is available. Similar if the number of bedrooms have not been specified then the comparison between bedrooms and habitable will be used.

The bedroom – habitable conversion table is shown below:

## Allocated Parking

The user should specify how many parking spaces will be specifically allocated to individual units.

Allocated spaces include numbered parking bays, driveways, garages and parking barns.

## Description of Totals

The totals provided by the spreadsheet reflect the expected needs of the development and should be considered in the design of the development.

The following list of cells corresponds to cells in the Residential Parking Demand Calculator.

### Cell J36

The input total number of allocated spaces (will depend on the design of the development)

### Cell L36

The calculated number of unallocated spaces (in addition to those which are being allocated) required to accommodate residents of the development

## Bedroom – Habitable Room Conversion

### Flats

Studio = 1 room

1 bed = 2 rooms (1 bedroom, 1 kitchen/living room)

2 bed = 3 rooms (2 bedrooms, 1 kitchen/living room)

3 bed = 4 rooms (3 bedrooms, 1 kitchen/living room)

4 bed = 5 rooms (4 bedrooms, 1 kitchen/living room)

### Houses

1 bed = 3 rooms (1 bedroom, 1 kitchen, 1 living room)

2 bed = 4 rooms (2 bedrooms, 1 kitchen, 1 living room)

3 bed = 5 rooms (3 bedrooms, 1 kitchen, 1 living room)

4 bed = 6 rooms (4 bedrooms, 1 kitchen, 1 living room)

5 bed = 7 rooms (5 bedrooms, 1 kitchen, 1 living room)

### Cell N36

The calculated total number of unallocated spaces which would be required to accommodate visitors to the development (will remain zero if less than 50% of spaces are allocated to residents)

### Cell O36

The calculated expected level of demand for parking at the development.

## Reduced Parking Provision

In some circumstances, it may be appropriate to provide some flexibility in the application of parking requirements where robust evidence demonstrates that this is appropriate. This does not mean that standards will be relaxed in every case nor will any case set a precedent for lower parking provision.

While any reduction will need to be clearly and robustly demonstrated at the design stage, there are mitigation measures that could be provided to help achieve lower levels of parking such as:

- High levels of accessibility  
(i.e. the site is located within appropriate walking distance to a bus and train services to allow the use of non-car modes to travel to local amenities and facilities/commuting)
- Travel Plans  
(i.e. a travel plan is submitted with realistic targets aimed at reducing car ownership levels)
- Car Clubs  
(i.e. access to a vehicle that can be shared by residents of the development, as well as a designated parking bay at a convenient and accessible location to help promote the use)

Where a reduced parking provision is proposed then it will usually be necessary for the applicant to demonstrate that there is sufficient freely available on street parking to cater for the increased demand. This would be expected to be through a Car Parking Capacity Survey carried out in accordance with the details below.

Where a reduction in parking provision is proposed, we would expect the proponent to discuss this with the Highway Authority in advance of submitting a formal planning application.

### **Car Parking Capacity Surveys**

A car parking capacity survey should be carried out and submitted as part of any application as set out below, to ensure that they are robust and that information is of a consistent standard, therefore providing a reliable basis for decision making.

They should be agreed with the County Council at the scoping stage for transport statements and assessments and are expected to be carried out only when it is reasonably expected that parking will take place on existing streets, and should follow calculation of the expected levels of car ownership and consideration of how this parking can be provided.

Surveys are expected to be reported in the form of a short summary report which may form part of a transport statement or assessment.

The geographical area which should be surveyed (survey area) should be proportionate to the impact of the development – determined as the number of vehicles that are expected to park on-street in the surrounding area. The survey area should include sufficient available space to accommodate the number of vehicles expected to be owned by residents of the site and their visitors. This can be determined using the East Sussex County Council Residential Car Parking Demand Calculator.

The survey area is expected to centre on the development site and should include the area's most likely to be used for parking by those living in, or visiting the site, and will therefore need to have regard for site access arrangements.

Surveys should be carried out when usage of available parking space is at its greatest (i.e. peak time) in the survey area. This may include early morning surveys to assess the amount of overnight parking in the area. The duration of the survey will be dependent on the likely impact of the development and whether or not there are existing pressures on parking space in the area. A development which is likely to have a large impact on on-street parking in an area where available space is already well used or insufficient to meet existing demands, would be expected to carry out an extensive survey throughout the day.

A car parking capacity survey should take the form of a beat survey (or similar alternative) where an enumerator walks a planned route at regular intervals recording registration plate details of the parked vehicles. The enumerator should record sufficient information to provide the following information in a summary report:

- The rate of turnover of vehicles on each street expressed as a number of vehicles leaving/arriving per hour
- The number of vehicles parked on each street
- An estimate of the parking capacity of each street and a brief explanation of how this was calculated

If the development is located within a Controlled Parking Zone, the summary report should also provide details of the existing resident permit take-up and/or any waiting lists. This information can be obtained from the East Sussex County Council Parking Team at [parking.escc@eastsussex.gov.uk](mailto:parking.escc@eastsussex.gov.uk)

A summary report of car parking capacity surveys should be accompanied by:

- A map displaying the geographical area surveyed at a suitable scale for interpretation
- Details of the dates and times of day when survey(s) were undertaken
- Details of parking restrictions (Traffic Regulation Orders) which apply in the survey area.