

Accessibility

In this section

This section will detail:

1 / Key considerations to ensure your development supports and promotes active travel + sustainable transport

2 / How site design can enable car-free environments

3 / Cycle and Electric Vehicles charge points + provision

Executive summary

> Developments should prioritise car-free travel. Providing viable active alternatives like walking and cycling, as well as adequate access to public transport, should be done in a way that promotes safety and accessibility for all.

> Transport emissions in the UK have fallen by less than 5% since 1990. Large-scale developments can have a significant impact in shaping behaviour change in this area through decisions in areas such as parking design.

> Charge points for Electric Vehicles should be integrated into your site to coincide with the phasing out of petrol and diesel cars. Increased homeworking should be considered for domestic schemes. Appropriate cycle storage and parking should also be a key consideration.

Introduction

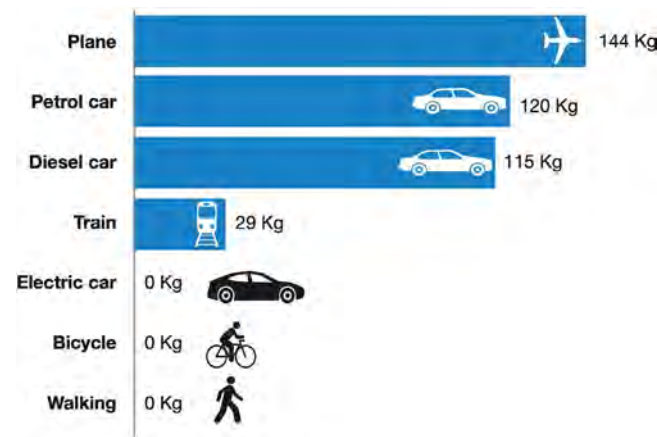
The Road to Zero sets out the Government’s ambition to put the UK at the forefront of the design and manufacturing of zero emission vehicles and to end the sale of new petrol and diesel cars and vans by 2040. By 2050 it is the intention that almost every car and van will be zero emission. Although today’s new vehicles are more efficient than those bought in 1990, transport related greenhouse emissions have fallen by only 2% since 1990 (*Road to Zero DfT*). Consequently, transport is the largest contributor to UK greenhouse gas emissions at 27%, (*2021 Annual Report DfT*) which also has negative effects on air quality and noise pollution.'

Driving the manufacture and use of electric cars is one approach to reducing greenhouse gas emissions, another is to change our behaviours, through the promotion and increased use of sustainable transport methods.

This section looks at options around improving the sustainability of projects from the perspective of reducing car dependency and prioritising pedestrian and cycle use - or, at very least, targeting options that future proof the built environment, by allowing flexibility and access to renewable energy, such as electric car charging.

Core Strategy policy SS4 identifies a need to develop in sustainable locations, which is discussed at the beginning of this chapter in the SPD.

Alternatively, promotion of sustainable modes of transport and active travel should be encouraged, which can facilitate sustainable development. For example; designing out the car and car-free development to ease of accessibility to cycle storage and electric charging. Such actions would be in alignment with Core Strategy policies SS7, SD1 and MT1. This chapter of the SPD demonstrates how design can facilitate this.



Indicative GHG emissions for a passenger travelling from London to Edinburgh, 2018

Plane journey excludes travel to/from airports
 Car emissions exclude tyre and brake wear
 Train emissions are based on an average for diesel and electric trains; if a route is fully electrified, emissions would be lower than those presented

Policies

- Policy SS4 Movement and transportation
- Policy SS7 Addressing climate change
- Policy SD1 Sustainable design and energy efficiency
- Policy MT1 Traffic management, highway safety and promoting active travel

Further Information

- [The Road to Zero, Department for Transport \(July 2018\)](#)
- [Decarbonising Transport Setting the Challenge Department for Transport\(March 2020\)](#)

Large scale developments have a significant role to play in achieving a focus on sustainable modes of transport and shift away from reliance on the private car, although most developments have the opportunity to take a step in the right direction.

Proposals should therefore consider:

- Removing the need to travel where possible;
- Prioritising pedestrian routes through neighbourhoods
- delivering cycling, walking and passenger transport networks, thereby facilitating and prioritising car free movement;
- Adopting initiatives that encourage alternative behaviours around car usage; such as, the redesigning of parking areas.
- Future-proofing new developments through the introduction of adaptable technologies and allowing change in behaviour to be accommodated;
- Facilitating deliveries and servicing, without impacting on a pedestrian and cycle priority environment.

From the outset, measures can be introduced in the design of a development that can reduce the overall need to travel, particularly by private car.

Sustainable locations

When choice of site is an option, look to develop a site that minimises the need to travel, by utilising and supporting existing infrastructure that is in close proximity. Where larger developments are proposed, that are more distanced from existing facilities, there should be an aim to strengthen existing sustainable transport links, such as public transport and cycleways, whilst also implementing community transport initiatives, such as ring and ride.

Design out the need for the car

Mixed use development helps to minimise car use for small journeys, with shops and other services in close proximity.

Increasingly, working from home is more common and designing new homes which facilitate this should be encouraged, as this will, in turn, minimise the need to travel. Additional space will be required in new homes, along with a reliable broadband connection. Another option is for development to incorporate community working areas/hub spaces for individuals to use.

Car-free environments

To create sustainable communities, the infrastructure must be designed around people rather than cars. Creating a car-free or pedestrian dominant scheme is one way to do this; enabling

Best Practice Recommendations

- Prioritising pedestrians and cyclists over vehicles; delivering cycling, walking and passenger transport networks.
- Large developments to strengthen existing public transport, cycleways and implement community transport initiatives.

Further Information

- [Gear Change: A bold vision for Walking and Cycling. Department for Transport](#)
- [Cycle Infrastructure Design Department for Transport LTN 1/20](#)

places where vehicles are greatly reduced or eliminated. Pedestrian and cycle access, to and within the site, should be prioritised over vehicular. The design of shared space schemes, that remove or reduce the distinction between the pavement and carriageway, must take into consideration the needs of people with disabilities, particularly visual impairment.

Designing routes and pathways that create a hierarchy through the scheme is important and this can be successfully implemented by using different surface materials, colour, texture, signage etc. Routes for cyclists should be well considered and must feel direct and logical, whilst also ensuring that they connect to existing cycle paths. Whilst the emphasis should be on pedestrians and cyclists, it is important that cyclists are treated as vehicles and are separated from pedestrians, to ensure safety.



Image 65:
65 Shared Space, Marmalade Lane

Movement plans help to demonstrate that sustainable transport is at the forefront of the design, prioritising pedestrians and cyclists; making it easier for them to move across the site that it would be for car users.

When developing a car-free environment, a considered access strategy must also be developed from the site to wider destinations. This will ensure that continuous and useable routes to key locations are within acceptable walking and cycling distances. Such a strategy is crucial in the success of developments which seek to ensure that the use of private cars is not required.

The Department for Transport's guide 'Manual for Streets' provides guidance on the planning and design of new residential streets, and modifications to existing ones. It aims to increase the quality of life through good design and to meet the needs of pedestrians and cyclists in order to create more people orientated places.

Multi-purpose parking

Parking, both in curtilage and as part of a car park, can create expanses of hard surface, which during large parts of the day are unoccupied by cars. Consideration should be given to allowing these areas to become an integral part of the landscaping strategy, by repurposing the space during day and considering alternative softer, or more environmentally friendly, surface materials.

Further Information

- [Energy Savings Trust](#)
- [Local Government Association](#)
- [Manual for Streets](#)
- [National Design Guide, Ministry of Housing, Communities and Local Government \(2021\)](#)
- [Transport for New Homes](#)

Sustainable transport

The sustainable travel hierarchy is a useful tool in considering sustainable travel options. The most sustainable option is walking, followed by cycling, both of which are classed as **active travel**.

There are a number of community transport initiatives that reduce the reliance on the car and that can be encouraged and designed within developments.



Image 67:
67 Beryl Bikes, Hereford

Bike share schemes are publicly available bikes that can be hired by the hour or by the day. The Beryl bike scheme based in Hereford was launched in the summer of 2019 and now includes a network of 200 bikes, available from 65 bays. Discussion with the council regarding provision of bays in new development in Hereford would be encouraged.

Car clubs offer instant access to cars in and around a local area, without the need for individual car ownership. Annual membership ensures payment is only required when the car is used. Car clubs can provide a cheaper alternative to a second car, and are also suitable for those who do not frequently drive, yet still want access to a car when needed. Providing provision for a car club space in a new development is actively encouraged and can lead to an acceptable reduction in parking requirements. The council website has a link to the Park and Share scheme, which encourages people to car share when making trips into and out of Hereford city.

Definitions

- **Active Travel:** Moving in ways that don't use fossil fuels. Active travel improves health and wellbeing, whilst also helping to reduce a person's carbon footprint and reducing money spent on transportation.

Further Information

- [Beryl Bikeshare, Hereford](#)

Best Practice Recommendations

- New residential development to provide bike storage for all properties.

Cycle storage & provision

Cycle storage should be conveniently positioned and sensitively integrated into public spaces, amenity space, gardens or buildings. New development should provide either private or communal cycle storage for occupants, with a charging point becoming an important addition, as electric bikes become more popular. Cycle storage should be secure, to minimise theft and for personal security. Include lockers and ensure there is enough operating space so that bikes are not damaged when taking them from the stands. It should be positioned so that it is well-lit, visible and sheltered.



Image 68:
68 greenroofshelters.co.uk

Electric vehicles and charging

It is important that all new developments of a certain size facilitate the transition to ultra-low emission

vehicles, for example by including charge points.

The Road to Zero explains the Government's ambition to end the sale of new conventional petrol and diesel cars and vans by 2040.

Charge points are primarily categorised by their power, (measured in kW), which reflects the speed at which they can charge an **electric vehicle** (EV). Whilst standard charging (7kW or lower) adds 10-25 miles of range per hour and typically requires cars to be parked for a long time. Rapid charging (around 50kW) provides around 100 miles of range in half an hour, requiring only 25-40 minutes for 80% charge. Ultra-rapid is currently being developed, with most EV's on sale from 2020 onwards likely to accept 100kW charging, providing a range of 200 miles in half an hour.

Charge points take a variety of forms and can be placed at on-street or off-street locations. Private charging will require a socket to be mounted externally within the property's boundary. Public charge points are integrated into a free-standing column, or into streetlights, whereas rapid chargers are similar to a parking payment machine.

Where parking is being provided, there should be an allowance for EV charging. The type of charging will depend on whether parking is allocated or not. For example, EV charging must be considered for all in-curtilage parking, whereas unallocated will instead require an allowance for a payment system and the potential to install rapid charging points.

Definitions

- **Electric Vehicle (EV):** A vehicle powered only by electricity. The vehicle is charged by an external power source and incorporates regenerative braking which helps to extend its range.

Best Practice Recommendations

- Non-residential development to provide cycle user showers, changing facilities and secure cycle storage.
- Inclusion of charge points for all residential and visitor parking spaces, and 1 for every 5 cars in non residential developments.

Further Information

- [Charging electric vehicles](#)
[Energy Savings Trust](#) 102

Building for a Healthy Life (BHL) is a national design code for creating places that are better for people and nature and replaces the previous Building for Life 12. The latest edition has been written in partnership with Homes England, NHS England and NHS Improvement.

BFL comprises of 12 considerations that are designed to be used as a way of structuring discussions about a proposed development at the very start of the design process. The considerations capture the areas of design and placemaking that need most attention but are often the most overlooked; helping people improve the design of new and growing neighbourhoods.. There are three chapters, each with 4 of the 12 consideration questions:

- Integrated neighbourhoods
 - Natural connections
 - Walking, cycling and public transport
 - Facilities and services
 - Homes for everyone
- Distinctive Places
 - Making the most of what's there
 - A memorable character
 - Well defined streets and spaces
 - Easy to find your way around

- Streets for All
 - Healthy streets
 - Cycle and car parking
 - Green and blue infrastructure
 - Back of pavement, front of home

With a proposed development reviewed and awarded a green, amber or red for each of the 12 topics, the more greens that are achieved, the better the development.

This tool encourages the wider external context to be considered, initiating thought beyond the buildings themselves. Other design considerations discussed in this SPD, such as the embodied carbon and operational carbon of buildings will need to be considered independently.

Further Information

- [Building for Life](#)



▲ Image 69:
69 Building for a Healthy Life Cover

Best Practice Recommendations

- AC1** Prioritising pedestrians and cyclists over vehicles; delivering cycling, walking and passenger transport networks.
- AC2** Large developments to strengthen existing public transport, cycleways and implement community transport initiatives.
- AC3** Non-residential development to provide cycle user showers, changing facilities and secure cycle storage.
- AC4** New residential development to provide bike storage for all properties.
- AC5** Inclusion of charge points for all residential and visitor parking spaces, and 1 for every 5 cars in non residential.