

2.3 Transport, Movement and Accessibility

- 2.3.1 Transport accounts for 27% of the UK's carbon emissions, making it the largest emitter of carbon by sector⁹. Road transport accounts for 90% of these emissions. Not only does road transport have implications for carbon emissions, but it is also one of the biggest contributors to poor air quality in our towns and cities. The Greater Cambridge area already has three air quality management areas (AQMA) in place, one covering Cambridge city centre, and two in South Cambridgeshire along the A14 and M11.
- 2.3.2 In response to these challenges, Government has launched its Road to Zero Strategy, which sets out its mission to put the UK at the forefront of the design and manufacturing of zero emission vehicles, and for all new cars and vans to be effectively zero emission by 2040. The sale of new conventional petrol and diesel cars and vans will end by 2040, by which time the majority of new cars and vans sold will be 100% zero emission and all new cars and vans to have significant zero emission capability. By 2050 we want almost every car and van to be zero emission. At least 50%, and as many as 70%, of new car sales and up to 40% of new van sales will need to be ultra low emission by 2030.
- 2.3.3 Planning has its part to play in facilitating this transition to zero emissions vehicles, but it also has a wider role to play in facilitating development that makes best use of walking, cycling and public transport to enable people to go about their lives without having to rely on the use of private cars. Within the Greater Cambridge area, the Greater Cambridge Partnership are in the process of delivering a wide range of sustainable transport infrastructure projects to help shift the focus of peoples trips from private vehicles to a greater share of public transport and cycle trips. In many cases these projects are focussed around growth areas such as the new settlements at Waterbeach, Bourn Airfield and Northstowe as well as key employment areas such as the Cambridge Biomedical Campus.
- 2.3.4 Within Cambridge, all major schemes are likely to be close to public transport and cycle networks due to the compact form and scale of development. In South Cambridgeshire many of the existing larger villages also benefit from existing public transport routes, with proposals in place to enhance these as well as enhancing cycle routes to villages surrounding the city via Greater Cambridge Partnerships Greenways project (see figure 2). However, good design is required to ensure the full potential of public transport, walking and cycling will be realised.
- 2.3.5 When considering new development, proposals should structure places around the principles of walkable neighbourhoods, highlighted in section 2.2 above, and so reduce the dependence on private cars. All developments, irrespective of size, create the opportunity to ensure the impacts from trips generated by the development are minimised and to support the patronage of public transport and other more sustainable modes of transport.

⁹ HM Government (July 2018). The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy.

“Research suggests net densities of 100 persons per hectare (pph) are necessary to sustain a good bus service (LGMB, 1995). Taking the 800m (10 minute) walking distance as a starting point (generating a walkable neighbourhood of 97.5 ha), this equates to 45 units/ha if the average UK household size of 2.2 is applied.”¹⁰

- 2.3.6 Planning applications will need to provide evidence that the design and layout of developments will help to reduce the number of trips generated through development forms that link movement, land use and density, as part of Design and Access Statements, with greater detail provided in Transport Assessments. A thorough understanding of the context of the development and its relationship to existing services and facilities including public transport connections and cycle infrastructure, will be crucial in achieving well integrated and well connected forms of development.
- 2.3.7 Where car free developments or developments with reduced parking allocations (lower than levels suggested by Local Plan policy) are proposed, connectivity to public transport and local amenities based on the walkable neighbourhoods principles (section 2.2 above) will be key. Other measures such as car clubs and off-gauge bikes will be necessary to minimise overspill parking in neighbouring communities.
- 2.3.8 There is much information available on good and best practice measures to enable more sustainable transport modes. Table 2.1 below provides suggestions of some of the possible ways in which more sustainable transport objectives can be met. The table is not intended to be exhaustive and not all measures will be applicable to all sites. Many of these measures will have multiple knock-on effects, many of which should be positive. For example, establishing a car club on a site will help reduce CO₂ emissions, improve air quality and potentially provide a greater developable area or more land for open space through reduced land take for private car parking.
- 2.3.9 Following on from work with the Design Council, South Cambridgeshire District Council is in the process of developing a toolkit to help deliver an increase in active travel as part of new developments. Developers should make reference to this toolkit once it is available.

¹⁰ Llewelyn-Davies (2000). The Urban Design Compendium. English Partnerships

Table 2.1: Potential measures to meet sustainable transport objectives

OBJECTIVE	POTENTIAL MEASURES
1. Reduce the need for travel by private car	<ul style="list-style-type: none"> • Mixed use developments; • Complementary uses with surrounding area; • Ensuring daily needs of occupants can be met within walking and cycling distance; • Providing an onsite car club; • Provide parking for off gauge bikes • Provide travel plans for development; • Provide travel information packs for building occupants.
2. Prioritising walking and cycling	<ul style="list-style-type: none"> • Cycle and pedestrian infrastructure is ready prior to occupation of dwellings on new developments • Designing footpaths and cycle ways along ‘desire lines’ to principal likely destinations both in the vicinity of the development and the wider area; • Locating cycle parking for maximum speed of access from buildings, making it more convenient than car parking; • Ensuring cycle parking is safe and secure; • Ensuring paths are safe and well lit, with natural surveillance from surrounding buildings; • Minimising disruption of footpaths and cycle paths from the road network and car park layouts; • Incorporating traffic calming measures; • Ensuring that all transport modes are integrated so that there are good walking and cycling routes to and from bus stops and that sufficient safe and secure cycle parking is provided at bus stops.
3. Integrating new and existing pedestrian and cycle networks successfully	Existing networks should be used as a starting point for design.
4. Retaining and improving existing networks	<ul style="list-style-type: none"> • Minor upgrading of junctions, signage and/or pavements and cycle ways; • Re-routing sections of cycle paths where necessary.
5. Ensuring these networks are in place prior to first occupation	
6. Developing an appropriate car parking and cycle parking strategy	<p>For developments in Cambridge:</p> <ul style="list-style-type: none"> • See Policy 82 and Appendix L of the Cambridge Local Plan 2018 <p>For developments in South Cambridgeshire:</p> <ul style="list-style-type: none"> • See Policy TI/3 of the South Cambridgeshire Local Plan 2018

OBJECTIVE	POTENTIAL MEASURES
7. Ensuring both existing and proposed high quality sustainable transport links (both public transport and cycle paths/bridleways) are not inhibited by the development	
8. Choosing the most suitable location for sustainable modes (non-residential only)	
9. Using the sequential approach to ensure that non-residential development is located in areas easily accessible by sustainable mode	
10. Consider freighting options using sustainable modes (e.g. bike couriers)	
11. Ensuring accessibility for all	<ul style="list-style-type: none"> • Locate disabled parking spaces close to the entrances to buildings; • Ensure spaces and routes are not obstructed; • Provide dropped kerbs, shallow inclines and cambers, flat thresholds; • Ensure all housing in urban extensions and new settlements are within 400 metres of high quality public transport networks; • Provide seating along key routes to public transport stops and key facilities within developments (Ambulant disabled people can often only travel 100 metres and 50 metres without seated rests).
12. Ensuring all housing within urban extensions and new settlements are within 400m of public transport networks	
13. Ensuring transport infrastructure minimises impact on wildlife, landscape and amenity	<ul style="list-style-type: none"> • Use of Sustainable Drainage Systems (SuDS) to improve the quality of surface water run-off from roads; • Using existing vegetation or planting to reduce long distance views of roads; • Use of home zones and other traffic calming measures; • Routing transport infrastructure away from known wildlife migration routes or integrating mitigation

OBJECTIVE	POTENTIAL MEASURES
	measures into schemes to enable continued use of routes (e.g. wildlife crossings underneath and over roads and paths).
14. Supporting the transition to low emission vehicles	<ul style="list-style-type: none"> • Provision of electric vehicle charging points for all new developments (see section 3.6 Air Quality for further guidance)

Further guidance

- Ministry of Housing and Local Government and Department for Transport (2007) Manual for Streets. Available online at: <https://www.gov.uk/government/publications/manual-for-streets>
- Cambridgeshire County Council (2014). Transport Strategy for Cambridge and South Cambridgeshire. Available online at: <https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/transport-plans-and-policies/cambridge-city-and-south-cambs-transport-strategy/>
- Cambridge City Council (2010). Cycle Parking Guide for New Residential Development. Available online at: <https://www.cambridge.gov.uk/media/6771/cycle-parking-guide-for-new-residential-developments.pdf>