



Greater Cambridge Partnership - Active Travel Policy Framework

April 2022

Mott MacDonald
35 Newhall Street
Birmingham B3 3PU
United Kingdom

T +44 (0)121 234 1500
mottmac.com

Greater Cambridge
Partnership

Greater Cambridge Partnership - Active Travel Policy Framework

April 2022

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
Working Draft	12/06/20	Eddie Jackson	Nigel Wilkinson	Mike Salter	
B	20/08/20	Eddie Jackson	Nigel Wilkinson	Mike Salter	
C	30/10/20	Nigel Wilkinson		Mike Salter	Final draft following Client comments
D	11/02/22	Nigel Wilkinson	Eddie Jackson		FINAL draft
E	25/02/22	Vrunda Shukla		Nigel Wilkinson	FINAL
F	11/04/22	Nigel Wilkinson		Abdul Wahab Ghumra	Final – updated to GCP comments

Document reference: 377897 | 01 | F

Information class: Standard

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

Contents

1	Introduction	7
2	Key planning and design principles	9
3	Key design outcomes	10
3.1	Safe	10
3.2	Direct	10
3.3	Comfortable	10
3.3.1	Surface quality	11
3.3.2	Spatial comfort	11
3.4	Coherent	11
3.5	Attractive	11
3.6	Adaptable	11
4	Key design decisions	13
4.1	Who is the provision for?	13
4.2	How will the new route tie into the wider network and be accessible to users?	13
4.3	How many users will use it now and in the future?	14
4.4	Assessing future demand	14
4.4.1	Approach where existing levels of Active Travel use can be readily ascertained	15
4.4.2	Approach where existing levels of Active Travel use cannot be ascertained	16
4.5	What type of infrastructure should be provided?	16
4.5.1	Optimal Active Travel provision	16
4.6	What are potential users looking for?	18
5	Design considerations	19
A.	List of Active Travel stakeholders	1

1 Introduction

This framework has been developed to be used by all designers working on Greater Cambridge Partnership (GCP) projects and it should be reviewed and consulted at all stages of design to ensure that consideration is given to various core design principles in developing proposals for Active Travel. Active Travel Users (ATUs) are defined as pedestrians, cyclists and equestrians. Users of electrically assisted pedal cycles, powered wheelchairs, mobility scooters and electrically powered scooters that conform with Department for Transport regulations and may legally be used on pedestrian or cycling routes are also considered to be ATUs.

The principles of inclusive design and accessibility should be adhered to throughout the development of any new Active Travel routes and provision, to ensure it is accessible to all, including young people, older people, and disabled people. The planning and design of Active Travel provision should begin with the principle that all potential users, and their equipment, will be catered for, and that no-one is to be excluded, or negatively impacted, through the design of any provision. All local authorities have responsibility under the Public Sector Equality Duty to ensure consideration of equality and good relations as part of their day to day business, which means designers will need to strongly consider how any Active Travel proposals affect different groups, as it can do so in different ways, which if not considered could contribute to greater inequality and poorer outcomes. An access audit, and engagement with relevant groups including those representing disabled people, should be undertaken to ensure that a scheme meets the needs of those with protected characteristics under the Equality Act.

This framework policy is intended to provide guidance for use on all GCP projects, although it is noted that more detailed guidance is provided on some specific programmes, such as Greenways.

It is acknowledged that there is limited guidance (national or otherwise) on providing for all modes in one document. However, there are numerous guidance documents for each specific mode. Where available, this framework will signpost to guidance that covers all modes but, where this is not possible, it will signpost to the most appropriate guidance and it will be the responsibility of the designer to ensure that a balanced and safe solution, that provides for all modes, is produced based on the recommended guidance. It is intended that this guidance will be used to help identify and develop best practice so that this can then be shared across design teams to enable a more consistent and high-quality approach to the design of Active Travel infrastructure.

The framework is not a:

- definitive 'must do this document'. However, it does outline some of the key aspects and considerations designers will need to take account of, along with links to best practice and key relevant guidance.
- One size fits all policy, so each designer will need to review this framework and understand the aspects that need to be considered and apply them to their proposals on a scheme-by-scheme basis.

The framework will also not:

- Replace any current adopted policy, plan or design guide for any constituent authority within the Greater Cambridge area.
- Replace any standard/legal process required within the planning or design process, it is merely intended as a guide to help designers to consider good practice in the planning and design of Active Travel routes.

This framework is structured as follows:

- Key planning and design principles – these are key overarching aspects that designers will need to consider from the outset of any design on all schemes that include provision for Active Travel. Key planning and design principles have also been developed in conjunction with the Cambridgeshire Active Travel Working Group, available [here](#).
- Key design outcomes – these are the required outcomes we are striving to achieve and should be used as a checklist to assess whether the provision being implemented can meet all of these outcomes and, if not, what the constraints are which result in some desired outcomes not being achieved.
- Key design decisions – this is a list of questions that designers need to think about at an early stage of scheme development that will help to define the infrastructure to be provided. A technical note will need to be produced to summarise this initial assessment which will inform the level and type of provision.
- Design considerations - a table of design considerations that designers can review when developing Active Travel infrastructure, including links to further guidance.

It is envisaged that this should be a 'live' document, and one that undergoes regular review and revision to enable new ways of working and any lessons learnt to be added, along with any new guidance.

2 Key planning and design principles

The following are a list of key principles that designers will need to consider from the outset when planning and designing a route.

- The planning of provision for Active Travel will need to be assessed in a similar way to planning for other modes, through an assessment of **appropriateness**, based on need and demand, and **reasonableness**, based on acceptable cost and impact.
- Wherever feasible the design of provision for Active Travel should be commenced at the same time as the design of other modes and should be given the **same weight and relevance** in the design process as other modes (i.e. buses/mass transit etc). The design of Active Travel provision should not be an after-thought once all other modes have been provided for.
- That the route, and any Active Travel provision, is **inclusive and accessible** for all users and takes account of all types of users and be suitable for all equipment types (such as cycles used by disabled cyclists, cargo cycles and mobility scooters¹). There also needs to be an understanding that different groups may use this provision which may have different priorities/requirements
- To ensure that the route will be, and feel, **safe** for all types of users (for cycling a common yardstick is that provision needs to be suitable for a 12-year-old child to use un-supervised). The provision will need to be and feel safe and be useable in all weather conditions. The design must not be detrimental to one user group or place them in more danger.
- That the route forms part of the wider network and be **well-connected**. It is imperative that any new provision connects into the wider network of paths, bridleways and rights of way and connects places people want to go from and to.
- That the route is **future-proofed** so that it can (or could be in the future) accommodate the expected numbers of users now and in the future. The provision will also need to take account of any potential changes/improvements in technology that will affect the provision (i.e. e-bikes).
- That engagement with key stakeholders is undertaken from the outset (a list of key Active Travel stakeholders is included in Appendix A plus importantly groups representing disabled people), as they will be the **ultimate users** of the route, to ensure that there is clear understanding of the current provision (who uses what and where they go from and to) and what may be needed in the future.
- That any Active Travel provision has due regard for the **environment** that it passes through and looks to minimise any impact on the landscape, ecology or heritage assets.
- That key consideration is given to **future maintenance** of any new Active Travel provision, where any future maintenance requirements are minimised wherever possible to reduce the impact of any future maintenance burden, but where required an acceptable maintenance plan will need to be developed with the maintaining authority to ensure that the value of the route does not deteriorate over time.

¹ LTN 1/20 p41, Figure 5.2 provides dimensions of different types of cycles

3 Key design outcomes

The following aspects are internationally recognised desirable key outcomes for most active modes. Although they were developed specifically for cycling these outcomes can be as easily applied to all aspects of Active Travel and will provide a checklist for designers to allow them to consider whether the provision being proposed exceeds or meets these six outcomes. The sixth outcome was developed by Transport for London and seeks to ensure that any provision is adaptable and can meet the needs of the future.

3.1 Safe

To attract people to travel along Active Travel routes they will need to **be safe, feel safe and look safe**.

This means that the risk of collisions, both at junctions and along links, is minimised through separation in time and/or space; that a user has a reasonable expectation of feeling safe, secure and confident on that route; and that crime and anti-social behaviour are not enabled through the design of the environment.

Junctions are seen as locations where there is the most potential for conflict with other users and are often the determining factor that will deter people from travelling by active modes, so careful consideration will be needed at these locations to enable safe movement for ATUs through junctions.

3.2 Direct

An Active Travel route should be as direct, or more direct, than the motor traffic alternative to ensure that it appeals to all users. A route which is indirect, and winds along back streets which are “easier” to design, is less likely to be used than one which uses the main roads which people already know and is intuitive. Routes should be logical and continuous and planned holistically as part of a coherent network.

That said there are situations where quieter/parallel routes are also provided (to avoid busy congested routes) that can be more attractive and feel safer for those who wish to use them.

3.3 Comfortable

All users will want to have a comfortable experience whilst using any new Active Travel provision, comfort will include not having to continuously stop and start and also to look to minimise any steep gradients. Designers should consider comfort for all users including children, families, and older and disabled people. Comfort can be split into the following two categories:

3.3.1 Surface quality

Riding surfaces should be machine-laid, not undulating or laid by hand. Transitions from one surface to another (e.g. footway to carriageway) should be simple and take place in appropriate places.

It should be noted that not all surfacing types will be suitable for all users, therefore consideration of this will need to be undertaken at the outset and trade-offs might need to be made (for example, between provision for equestrians and cyclists).

3.3.2 Spatial comfort

Spatial comfort ensures that users do not feel uncomfortable as they are using a constrained space either with lots of other similar or dissimilar users. For a route to be comfortable it should have enough width and separation, from other higher speed modes, so that users feel comfortable using it.

3.4 Coherent

In order to be coherent Active Travel routes should:

- form part of a network linking people to places they need to go to and from
- be coherent and obvious, with as minimal use of traffic signs and road markings as possible
- avoid changes in the type and quality of provision
- be inclusive to all users, legible and consistent.

3.5 Attractive

Active Travel routes should be attractive, as users are more aware of the environment and spend more time moving along them, then users will decide to choose a particular route if it feels attractive. Routes that are situated very close to high-speed, high-volume roads are less likely to attract new users and will only cater for a limited type of user. For example, whilst this might not be such a significant deterrent to an already-experienced cyclist, this is unlikely to maximise take-up among other potential users.

The infrastructure provided as part of an Active Travel route should enhance the street environment, not detract from it. Road markings, signs and any segregation should make the street feel a well-designed and connected place. This design not only makes the street look better but will make the infrastructure simpler and easier to use.

3.6 Adaptable

Active Travel user numbers grow and change over time, so infrastructure should allow people to use it using different types of equipment and in increasing numbers. Retrofitting Active Travel infrastructure to existing streets can be challenging where space is at a premium, so it is key that when we have an opportunity to implement new provision that this provision also looks to cater for the demand and needs of the future including emerging new modes of

transport whose popularity may increase such as e-bikes and e-scooters, although it is recognised that the legal status of e-scooter use is still evolving at the time of writing².

² Department for Transport (DfT) have just concluded a consultation on legalising rental scooters. The report and further information is available [here](#).

4 Key design decisions

The questions below are those that a designer should consider at an early stage when planning new Active Travel infrastructure. They should be worked through in order to help the designer decide on the appropriate level and type of provision that should be provided and will therefore inform the footprint that any new provision will require. It is therefore imperative that these questions, and the ultimate decisions that come from these, are addressed before the 'red line' boundary for a scheme is fixed. It is assumed that a technical note detailing the assessment undertaken to respond to these questions will be provided at a suitable point in the planning process to summarise the work undertaken to answer these questions. In order to undertake this assessment, it is likely that the route will need to be split into sections as characteristics for each section may be different and types of use and environment etc may be different along the route.

4.1 Who is the provision for?

All local authorities have responsibilities under the Public Sector Equality Duty to ensure infrastructure is accessible to all, is inclusive and caters for all users. It is therefore important to understand the types of users that will use the route but also of their likely trip purpose, as use of the route by different user groups will affect the design and the footprint of the provision.

4.2 How will the new route tie into the wider network and be accessible to users?

As part of any first tasks in planning a new Active Travel route it is imperative that the wider network of existing paths, bridleways and rights of way are mapped so that an understanding of how the route integrates with the wider network can be ascertained³. This should also include any future Active Travel proposals (i.e. Greenways) and how these will be integrated with the route.

It is also important that if the new provision only impacts on a short section of a route, then there needs to be an understanding of how that route will function upstream and downstream of the route being improved to ensure there is wider connectivity to final destinations that users will want to travel to, i.e. Cambridge city centre.

Consideration should also be given to:

- the provision of connections from new routes to other key destinations (such as Country Parks) or origins (i.e. such as a travel hub or a currently poorly served village) where it is practicable and reasonable to do so.
- understanding where users will be able to access the new route, and any facilities due to be provided as part of a wider scheme (i.e. travel hubs and bus stops), so that it is coherent and accessible for all – a good route will need well-spaced and frequent access points where users can join and exit so that it provides most benefit to the locations it passes through.

³ Cambridgeshire County Council have an interactive web map that displays Public Rights of Way. It is available [here](#).

- understanding where users will be able to access any new facilities due to be provided as part of a wider scheme, for example travel hubs and bus stops, as existing provision may not be suitable for higher numbers of users.

4.3 How many users will use it now and in the future?

Before designing any route, the numbers of potential users will need to be calculated, as the footprint of the provision will vary significantly depending on how many people will be using it. It is likely that different sections of the route will have different numbers of users so, for example, the provision is likely to change as more users join the route the nearer it gets to its final destination. Therefore, an understanding is needed of each section but also how user numbers will be cumulatively assessed along the route.

Designers should take account of current levels of use but more importantly future levels of use, which should consider potential growth aspects such as new development, as it is likely that any new development will have the effect of increasing the number of users, together with the potential for new, high-quality provision, to induce demand that might currently be suppressed if existing provision is not attractive. The number of users will affect key design parameters, so it is critical to understand this at the outset to provide the basis for the level and type of infrastructure to be provided.

As noted above, whilst it should be recognised that sub-standard existing provision can suppress demand with the result that current levels of use are low, it is important to understand current usage so that effective monitoring and evaluation can be undertaken and so that scheme benefits can be evaluated after a scheme has been implemented.

4.4 Assessing future demand

There are two key elements to assessing future demand. One is the potential overall demand which is driven by issues such as proximity to workplaces and residential locations. The second is how that potential demand is further influenced by Active Travel provision. As noted above, there is a relationship between the type of provision and use with poor levels of provision inhibiting, or suppressing Active Travel demand, and high-quality provision increasing it. Providing one prescriptive approach to determine potential future use is therefore difficult but designers should consider both of the above principles in developing their forecasts.

A further important over-arching point is that Active Travel demand forecasting should not require an over-complex methodology. It should, however, be robust enough to provide reassurance that provision is appropriate for demand and to demonstrate that demand thresholds, set out in guidance for different levels of provision, are not likely to be exceeded.

Two steps to help designers to assess future levels of use are therefore outlined below, but the key aspect for both is to ensure that any assessment of future use takes account of existing 'potential demand', future growth in demand (either through new development, general increases in propensity for Active Travel use, or through increases in use once new infrastructure has been provided). The two methodologies are outlined below.

4.4.1 Approach where existing levels of Active Travel use can be readily ascertained

This applies to locations where new infrastructure is being provided within an existing network, or where a new route is being provided, where an assessment can be undertaken to estimate likely usage based either on existing user numbers on the current route or on user numbers on alternative routes, that are likely to re-assign to the new route.

Currently there is limited guidance on how to forecast the future Active Travel demand. A bespoke methodology has therefore been developed for use on Greater Cambridge Partnership projects, which attempts to provide a relative assessment of future demand based on a number of growth and demand assumptions. This methodology is still at a draft stage and is a work in progress but can be used to help to quantify anticipated levels of future Active Travel movements. The draft approach is outlined below. It should be noted that there is limited national data on levels of increases in use to account for suppressed or latent demand. There is, however, some information available specifically for cycling, and therefore this approach focusses most on the cycling elements as, with new Active Travel routes, they are most likely to use the route from start to finish.

4.4.1.1 Baseline surveys

In order to assess future demand, current baseline levels of ATUs on the route should be captured. These figures should be factored by a number of growth aspects, detailed below, to assess the potential scale of future demand. It is important that 'before' surveys are undertaken at sections along the whole proposed route to understand current levels of use and how this varies. Where surveys are not available, data from the Propensity to Cycle Tool (PCT) can be used. However, this is based on data from 2011 and only includes journey to work trips and no other journey purposes so only gives a partial picture.

4.4.1.2 Growth factors

The baseline data is adjusted to account for the following growth and demand factors:

- Background growth – this is growth between the baseline survey and the opening year based on growth seen in the Cambridge area over previous years based on existing survey data.
- Development/amenity growth – this is growth that is likely to come from two sources (but to note only one source is used to avoid any double counting):
 - Where there are new housing, employment, or other significant development, sites in proximity to the new provision potential users from these developments are added to the baseline numbers. This would also include an assessment of proposed users from any travel hub sites.
 - If there are no proposed significant developments in proximity to the new provision, then an assessment for amenity growth – where the implementation of new high-quality provision naturally attracts more users – is undertaken using publicly available data on increases in use based on different types of infrastructure.

4.4.1.3 Limitations

This methodology has purposely been kept concise so as to be used as a simple tool in forecasting likely future Active Travel demand to assist with the planning and design of future infrastructure provision.

It is appreciated that the methodology has limitations (i.e. it may not forecast all users who may use the route for leisure purposes) but it does provide a relative assessment of likely future demand which can be used to determine whether thresholds are likely to be exceeded which could require further enhanced provision.

4.4.2 Approach where existing levels of Active Travel use cannot be ascertained

It is understood that where new routes are being planned in greenfield locations, or where there is no existing provision, current levels of use are of limited value in the demand estimation process.

Therefore, designers will need to assess the level of future demand by undertaking the following tasks. It is suggested that this is undertaken in collaboration with key stakeholders (for example the local planning authority to get their advice on development proposals) to fully understand the likely potential demand.

- Identify key origins and destinations along the route and which type of users would need access to these, to include aspects such as employment locations, country parks and bridleways
- Identify any new committed development proposals, including residential, employment or travel hubs, that will increase the number of users along the route. An estimate of likely increases in users using different modes can be obtained from sources such as TRICS
- Assess previous usage data from other similar schemes from within Cambridgeshire to assess the potential likely future demand.

If it is not possible to assess current or future levels of use then it is proposed that the optimal level of provision, as noted below, is provided.

4.5 What type of infrastructure should be provided?

It is important to understand the types of infrastructure we should be providing and this, as mentioned above, can vary between different sections – although care is needed to not continuously change the type of provision as it makes the route less coherent.

It is important that, at an early stage, of planning that the correct type of infrastructure is identified as this will impact on the footprint required.

4.5.1 Optimal Active Travel provision

Guidance has therefore been provided on the optimal level of provision for any new Active Travel infrastructure so that all designers are starting to plan from the same point. These optimal provisions are detailed below for a number of scenarios but note that this table is not prescriptive and does not fit all scenarios

and therefore designers will need to use judgement and refer to current guidance, as detailed in chapter 5, as to how they will apply this provision on a scheme-by-scheme basis.

It is acknowledged that in some cases it may not be possible to apply this level of provision to all locations and if this is the case then a statement outlining why there has been a variation will need to be provided to clearly demonstrate this.

Location	Type of route	Pedestrian provision	Cycle provision	Equestrian provision
Rural ⁴	High speed ⁵ road or offline route	3m shared use path		2m grassed verge (to be determined on a scheme-by-scheme basis)
Urban	Residential streets – lower speed and flows ⁶	2m footway on both sides of the road	Cycling on carriageway – mixed with traffic	To be determined on a scheme-by-scheme basis but no formal provision likely
	Main roads with high flows and speeds	2m footway on both sides of the road	Separated cycle provision (light, stepped or full separation) 2.2 – 2.5m wide lanes (one direction) and 4m for bi-directional tracks	To be determined on a scheme-by-scheme basis but acknowledging that these locations are not an equestrian-friendly environment

Some further key guidance on provision is provided below.

4.5.1.1 Width and 'effective width'

There may be a need to increase the widths of this optimal provision if numbers of current or future users warrant this.

There also needs to be careful consideration of the actual 'effective' width of any new provision (i.e. the actual useable width). This will be affected by a number of aspects such as edge protection (barriers and bridge parapets), proximity to a high-speed road or vegetation encroachment. In these cases, the actual width of the provision will be reduced as users will be offset from the edge – this needs to be assessed at an early stage to ensure the useable width is acceptable.

⁴ Note 'rural' in this context means a higher speed road with no / limited frontage activity. It is unlikely to be feasible to introduce shared use paths within many rural villages within Cambridgeshire due to physical constraints and as a result when assessing NMU options each village should be considered on its own merits in line with the three types of route identified in the Optimal NMU provision table

⁵ High Speed is deemed to be 40 mph and above (as per Figure 4.1 in Local Transport Note (LTN) 01/20 Cycle Infrastructure Design)

⁶ Lower speed and traffic flows are deemed to be 20mph or less and lower than 2,500 vehicles per day (vpd) as per LTN 01/20 Paragraph 7.1.1)

4.5.1.2 Shared use paths

Shared use paths can be of benefit in certain locations, most notably where there are low numbers of users of a particular group or where groups of users are split by time. It is generally not acceptable to provide shared use facilities in busy urban areas as the potential for actual and perceived conflict between users is high, however it is accepted that this may not be possible in every location (i.e. due to historic street patterns) therefore in some cases this will not be able to be achieved – in these cases the design team will need to document why a certain provision has been chosen. However, it is recommended that early engagement is undertaken with relevant interested parties, particularly those representing disabled people, to discuss whether a shared use provision would be appropriate. The decision as to whether a shared use path should be segregated will depend on the anticipated number of users and the split of those users.

4.6 What are potential users looking for?

As designers it is important to have a proper understanding of what people will need and how they will use any new route, rather than designing in isolation based on what it is thought people will need and how the designer would like people to use it. Therefore, it is important to engage with stakeholders, such as local cycling, walking and equestrian groups (see Appendix A for a list of current key Active Travel stakeholders), groups representing disabled people and potentially parish councils and other local forums, at an early stage so that designers can understand what is needed and how users will actually want to use the new route. There is no benefit in designing a route that doesn't meet or reflect the needs of the users as ultimately it will mean that users will not use it or will use it in ways that may be contrary to the design.

5 Design considerations

The following pages provide details on key design considerations and links to recommended references / guidance material and further reading to help designers and scheme promoters develop high quality Active Travel routes.

Subject	Design consideration
Access Controls	<p>The use of access controls are likely to reduce the usability of a route for all users and may exclude some people, such as disabled people and others riding nonstandard cycles. Therefore, and as stated in Local Transport Note 01/20, as a general rule access controls should not be designed for use along Active Travel routes, unless there are significant mitigating requirements for them, and if they are required then the requirements for each user shall be considered such that any access controls provided conform to current design standards and guidelines and maintain access for all applicable ATUs regardless of choice of mode, mobility and ability. Access controls that limit access by certain groups are not to be used. The provision of lockable gates and bollards can ensure access for maintenance vehicles.</p> <p>The positioning of access controls shall be carefully considered such that they do not impede or present an obstruction that may cause risk of injury to ATUs. Access controls shall be clearly visible and illuminated throughout the hours of darkness by either street lighting or retro reflective material. The implementation of access controls can represent an opportunity for artwork or creative design.</p> <p>Access controls should not be positioned at locations where there is the potential of conflict between users (i.e. at the start of a route or on a bend) or where manoeuvring is required as this will impact on how easily a user can negotiate the access controls.</p>
Bus stops	<p>It is likely that most Active Travel routes will need to interact with existing or proposed bus stops, either through the need to provide access to them or the need to avoid conflict between those using the route and those using the bus stop. Engaging with relevant groups early (including those representing disabled people) can help to inform the design at these locations and will be an important step in meeting the authority's responsibilities under the Public Sector Equality Duty.</p> <p><u>Access to bus stops</u></p> <p>As part of any new provision or route, access to new or existing bus stops will need to be maintained or provided for all users.</p>

Subject	Design consideration
	<p data-bbox="427 236 853 263"><u>Conflict between users at bus stops</u></p> <p data-bbox="427 276 2004 475">There will be a need for designers to assess the potential for conflict between users of an Active Travel route and those using a particular bus stop. The type of solution will most likely depend on the frequency of buses, usage levels of the bus stop and the Active Travel route. For those higher use locations then providing a bus stop bypass will generally be the ideal solution, along with the provision of a ‘floating island’ where bus passengers can wait and alight before using a dedicated crossing point across the Active Travel route. For lower use bus stops highlighting the potential conflict zone to ensure all users are aware of the likely interaction with other users may be all that is required.</p>
<p data-bbox="181 531 338 558">Crossings</p>	<p data-bbox="427 531 2018 659">The design of crossings, including the type and location, requires careful consideration as these are locations where most conflicts occur and the actual, and perceived, hazards are greatest. New crossings are to be designed so that they are fully inclusive. Guidance, such as that contained in LTN 01/20 suggests, that in most situations a controlled crossing will be required to ensure that a crossing is fully inclusive and caters for all users.</p> <p data-bbox="427 711 2009 807">The location of any crossings will be fundamentally dictated by where the Active Travel route is bisected by an existing route. Crossings increase the risk of conflict to any Active Travel mode. In addition, if the provision is implemented poorly then the user experience of the route can be diminished. It is therefore important that significant consideration is given to the design of any crossing.</p> <p data-bbox="427 860 629 887"><u>Type of crossing</u></p> <p data-bbox="427 900 1964 959">The choice of crossing provision will be based upon several factors, including such elements as traffic speed, number of lanes and levels of use for each mode. Where crossings are located at junctions, they will form part of the junction operation.</p> <p data-bbox="427 1011 2004 1241">In some circumstances a grade separated crossing may be required to crossroads with higher traffic flows and speeds. However, grade separation is likely to involve changes in level and potential deviation from the desire line, plus will be costlier to implement and, therefore, a detailed assessment of demand and value for money will be required. There can also be concerns over personal security on grade separated routes particularly on underpasses and subways. Consideration could be given to the potential for Active Travel routes to continue at the same level through a new grade separated crossing, through the use of under- and overbridges, so deviation and changes in level for ATU’s are minimised, although this is likely to be costlier to implement and, therefore, a detailed assessment of demand and value for money will be required.</p> <p data-bbox="427 1294 669 1321"><u>Location of crossing</u></p> <p data-bbox="427 1334 2013 1393">The safety of those crossing a carriageway shall be paramount and therefore the design, frequency and location of any crossings shall be carefully considered such that they are effective and provide convenient facilities for ATUs of all abilities. The sight lines of crossing</p>

Subject	Design consideration
	<p>users and road users should be considered; therefore, crossings should be located where a clear line of sight between both users (those crossing and those using the road) is possible. Crossings provided away from the desire line or in the wrong place won't be used and will lead to conflict in unexpected locations as people seek a more convenient route.</p> <p><u>Crossing characteristics</u></p> <p>There are several important considerations when designing Active Travel crossings:</p> <ul style="list-style-type: none">– Where an island is proposed then it will need to be a suitable width to accommodate all users and for all types of equipment types (cargo cycles, mobility scooters etc.)– On each side of a crossing, and on any island, there needs to be enough space for users to wait for a suitable time to cross whilst also letting other users pass by along the route– Crossings should be as straight and direct as possible and if there is any need for a change of direction, anywhere on the crossing, then this needs to be suitable to be maneuvered around by any equipment type. Changes of direction on the approaches to, and on, crossings should be avoided as much as possible– Crossing locations shall be further defined and highlighted by the presence of dropped kerbs and the required tactile paving– Where connecting to existing or proposed bridleways Pegasus crossings shall be provided as far as reasonably practicable.
Cycle Parking	<p>The provision of cycle parking is integral to any cycle network and is a key consideration to many who currently cycle or those who wish to take up cycling. The presence of travel hubs, bus stops, places of interest and local amenity require the introduction of cycle parking as the lack of adequate provision, or poorly sited provision is likely to impact on a user's choice of whether they will cycle. Space for cycle parking should be considered at an early stage and some key considerations when planning and designing for cycle parking are outlined below.</p> <p><u>Number and type of stands to be provided</u></p> <p>Where cycle parking is to be introduced, consideration shall be given to the number and type of stands to be provided, ensuring that spare capacity is provided for future growth in demand. All cycle parking should allow the cycle frame, not just the wheel, to be locked to the stand. Guidance on acceptable types of stands and their requisite spacing is included in the City Council's 'Cycle Parking Guide for New Residential Development'.</p> <p>The proportions of different types of cycle parking at travel hub sites needs to reflect the expected use. There is emerging guidance for cycle parking at travel hub sites, to allocate 10% of the proposed car parking spaces as cycle parking, consisting of 5% of secure cycle boxes (velo) boxes and 5% covered racks, however there is a need to assess each location on a case-by-case basis so that it reflects</p>

Subject	Design consideration
	<p>what level of cycle parking will be needed. Designers should consider the range of trip and interchange purposes which take place at Travel Hubs, for example park and cycle, cycle then bus, bus then cycle etc. The style or type of stand could be adapted to reflect local character, improving visual appeal and aesthetics, although security and function should take precedence over appearance.</p> <p>Other aspects to consider when providing for cycle parking include:</p> <ul style="list-style-type: none">– Including provision for non-standard cycles, so that the facility can be used by disabled people with adapted cycles – typically 5% of the overall provision.– Including passive provision for growth in cycling in line with (or in excess of) local growth expectations.– Consideration of future mobility and the potential need for space for dockless cycle hire, e-scooters etc in the near future. <p>At key public transport interchanges, such as travel hubs, further provision for cycle amenity may be appropriate and could include such items as bicycle lockers and bicycle pumps.</p> <p><u>Location of stands</u></p> <p>The location of cycle parking is of paramount importance as convenience is a key factor in whether someone will use cycle parking. Inconveniently sited parking will be ignored in favour of railings, lampposts and other informal parking. Siting cycle parking as close as possible to the final destination is a key principle – although tolerances increase for longer stay cycle parking if greater security is offered slightly further away.</p> <p><u>Security and weather protection</u></p> <p>Cycle parking should be safe and secure, its presence should not encourage anti-social behaviour. Consideration should be given to the level of security provided at each cycle parking area to determine whether its location is vulnerable or whether the level of natural surveillance or the introduction of CCTV will prevent or reduce the risk of crime.</p> <p>Wherever practicable, shelters to protect cycles from inclement weather shall be provided, but care must be taken that the installation of shelters would not encourage anti-social behaviour.</p>
Design speed	The design speed of an Active Travel route will be heavily dependent on local conditions and should be considered on a section-by-section basis. Sight lines, curve radii, gradients, surface type and path width will impact on the appropriate speed. Speeds on approaches to junctions or crossings should be managed through design.

Subject	Design consideration
	<p>Careful consideration of the route environment is required to strike the balance between designing inclusively – for example providing width suitable for non-standard cycles – and encouraging high speeds. Cyclists travelling at high speeds are intimidating for people on foot and can startle horses on shared or adjacent equestrian routes. Visual techniques, such as apparent narrowing and pathside activity, can help reduce speeds by changing the ‘feel’ of the route. However, measures to control speeds through restricting space, introducing vertical deflection or introducing blind bends are likely to increase the potential for user conflict and may prevent access for larger cycles and disabled people and so should not be used.</p> <p>Surface type will have an impact on stopping distances, for example unbound surfaces will require around 50% greater stopping distance for cyclists.</p>
Drainage	<p>As with any well-designed infrastructure, the discharge of surface water from Active Travel routes shall be carefully considered such that it does so effectively without detrimentally affecting the surrounding environment or increasing any flood risk. For the most part the drainage of the Active Travel route will form part of the design of either the bus transport route or public highway. However, when the Active Travel route is implemented in isolation from other infrastructure elements then consideration for the discharge of surface water may be required which may result in an increase in the overall Active Travel route corridor width.</p> <p>Within the urban environment it is likely that surface water will be discharged via existing drainage infrastructure. Therefore, all existing or proposed gully gratings shall be appropriate for use within a cycleway or footway (i.e. cycle or pedestrian/equestrian friendly). Within the rural environment it is likely that surface water will discharge to either the verge or a drainage ditch. Therefore, the location of any drainage ditches should be sufficiently offset to ensure user safety.</p> <p>The introduction of any new paved surfaces should provide the minimum required crossfalls to avoid standing water. The maintenance requirement of drainage systems should be considered at the outset.</p>
Gradients	<p>Gradients or rates of inclines will affect the level of effort required by ATUs and as such these must be kept to a minimum wherever possible. Consideration shall be given to gradients such that they are not detrimental to the route attractiveness or safety, and they ensure that routes are accessible and inclusive for all users. In the majority of cases, new AT provision will follow existing roads and paths and will therefore usually have to follow the existing gradient, although opportunities to reduce gradients on steep sections should be assessed. Gradients of AT infrastructure on new build routes or major highway alterations should follow the best practice shown in the core guidance table.</p>

Subject	Design consideration
	<p data-bbox="427 236 712 263"><u>Gradient considerations</u></p> <p data-bbox="427 276 1111 303">The following are key considerations relating to gradients:</p> <ul data-bbox="450 319 1995 619" style="list-style-type: none"><li data-bbox="450 319 1995 383">– Different ATUs will have different requirements relating to gradients, therefore it is important to understand who will be using the provision so that the differing needs of users can be assessed.<li data-bbox="450 395 1995 459">– Overly circuitous routes to avoid a steep gradient should be avoided as they are likely to be away from the desire line. Where possible the design should allow step free routes on the desire line.<li data-bbox="450 472 1995 536">– Consideration will be needed to assess whether a longer less steep incline is to be provided as opposed to a shorter steeper gradient, with appropriate landings.<li data-bbox="450 549 1995 576">– Any proposed landing areas should be long enough to accommodate all types of cycles/equipment<li data-bbox="450 588 1995 619">– On steep gradients widths should be increased to take account of slower speeds of users travelling in an uphill direction <p data-bbox="427 667 1944 730">Due to these varying considerations, it is recommended that early discussions with stakeholders are held to understand potential concerns or preferences with respect to gradients on a new Active Travel route.</p>
Legal procedures	<p data-bbox="427 790 2002 949">In some circumstances, appropriate TROs will need to be sought for a new Active Travel path to ensure the route is used as intended and allow enforcement as required. There are a number of Acts which can be used to legally establish an Active Travel route and the most appropriate route depends upon the location and intended usage. Local Transport Note (LTN) 01/20 (Appendix C) and the Cycling England guidance note (see links to documents in table below) both provide a comprehensive list of options available to scheme promoters.</p> <p data-bbox="427 1002 2018 1066">Public consultation is not always a mandatory requirement, such as when creating a cycle track within the highway boundary, however, engagement with those likely to be affected, particularly groups representing disabled people is recommended.</p>
Maintenance	<p data-bbox="427 1125 1995 1220">Regular maintenance of any Active Travel provision is necessary to maintain the quality, safety, user comfort and to ensure available widths or headroom, through seasonal growth of vegetation, are not compromised. Winter maintenance may also be necessary to ensure continued use of the route during inclement weather or snowfall.</p> <p data-bbox="427 1273 2002 1369">Identifying maintenance responsibilities and liaising with the maintaining authority early on within a scheme's development will help to identify any major considerations to be incorporated into the design and should also allow for the designing out of some maintenance requirements through the use of resilient materials or through the use of higher design specifications.</p>

Subject	Design consideration
	<p>Monitoring of the use of Active Travel routes can help prioritise the maintenance programme.</p>
Road Markings	<p>Surface markings will complement signage and natural wayfinding to provide information, warnings and route reassurance to ATUs. On-highway, markings will be compliant with TSRGD, but there is some flexibility off-road, although most highway markings are fair universally understood and drastic departures should be avoided. As with signage, over-reliance on surface markings risks appearing cluttered and losing clarity.</p>
Safety and Surveillance	<p>Safety or the perception of safety should be a key consideration of any design process such that the user does not feel vulnerable or unsafe.</p> <p>Safety concerns will appear in many forms, whether it be risk of conflict, segregation from vehicles, separation from other ATUs, poorly lit sections, poor surveillance or anti-social behaviour. The perception of safety may well be considered subjective and vary between users, but still should be considered, evaluated and minimised or removed wherever possible.</p> <p><u>Surveillance</u></p> <p>Natural surveillance – ensuring Active Travel infrastructure (for example an Active Travel route or cycle parking) is overlooked and visible - will help a route feel safe to use. Routes or sections that feel isolated will likely be avoided – particularly by more vulnerable users - so care should be taken to ensure good natural surveillance along the length of the route. A temptation is to align Active Travel routes well away from main roads to make a route quieter and more pleasant, but this should be tempered to ensure that the route is well overlooked. The best form of natural surveillance comes from other ATUs – so a well-designed route that is popular and well-used, will feel safest.</p> <p>Other aspects to consider around safety and surveillance include:</p> <ul style="list-style-type: none">– Subways and tunnels are often the most hostile environments for ATUs, so the design of any new subways will need to consider the actual and perceived security and safety of those likely to use it. Even if subways exist (under busy roads, for example) an at-grade crossing is likely to be preferable for most people, even if it involves additional delay.– Growth of dense vegetation can cause a previously open environment to become secluded but can also provide benefits such as protecting from crosswinds, so the choice of planting and regular maintenance are essential considerations.– CCTV coverage does not provide the same reassurance as natural surveillance and should not be seen as an alternative.

Subject	Design consideration
	<ul style="list-style-type: none">- Routes should be lit, wherever possible, but as noted in the street lighting section, consideration is needed as to the environment the route passes through and whether it is appropriate- Liaison with local police and local councillors can highlight particular areas of concern.
Separation/ segregation from other modes	<p>Designers will need to consider at an early stage whether there will be a need for separation/segregation (both terms mean the same) from other modes, including separating cyclist from pedestrians or ATUs from motor traffic.</p> <p><u>Separation/segregation of Active Travel modes</u></p> <p>There is currently no clear and specific guidance on when separation/segregation should be provided between Active Travel modes, although Local Transport Note 01/20 notes that the most effective way to manage user conflict is to provide separate routes if space and budget allows. Most guidance states that any approach should be assessed on a case-by-case basis looking at the particular context of the situation and looking at key criteria, such as:</p> <ul style="list-style-type: none">- width- types of users- when the route will be used by various groups,- nature of route (i.e. rural/urban),- whether users will need to cross paths/desire lines etc. <p>Designers are encouraged to assess these key criteria and to engage with key stakeholders to understand their thoughts and concerns. If separation/segregation is not provided, consideration should be given to potentially providing enough width to provide this at some point in the future if the need arises.</p> <p><u>Separation/segregation from motor traffic</u></p> <p>On roads where traffic flows and speeds are higher, ATUs should be separated from traffic. Where traffic flows and speeds are lower, it may be appropriate for all users to share the space.</p> <p>Separation from traffic should be proportionate. Routes adjacent to higher speed, heavily trafficked or HGV-heavy roads will benefit from a wider 'buffer' between ATUs and general traffic. A verge with planting as well as a kerb can help soften this separation.</p>

Subject	Design consideration
Side road crossings	<p>Lower speeds can mean more subtle separation, with simple kerbs and stepped tracks appropriate in many cases. Implied separation – using different surface types or markings can provide a low-cost, low impact form of separation if road conditions allow.</p> <hr/> <p>How side roads and accesses along the Active Travel route are designed will be influenced by the traffic volume and composition using the road, as well as visibility of the crossing for all users. Designers should consider reducing the number of times that ATU's will need to stop and start along a route, along with the number of times they will need go up and down kerbs as this will impact on their level of comfort of using the route, however, it is key to ensure that it is clear to all users who has priority at each location.</p> <p><u>Minor road crossings/local accesses/crossovers</u></p> <p>The coherence of the Active Travel route is important at minor road crossings and local accesses, so in general designers should aim for continuity of the route across minor side roads with side road users giving way to ATUs, unless other factors – such as traffic speeds in excess of 40mph - make this inappropriate. Continuous level footways/cycleways can imply priority in low-speed environments, and surface type/colours can reinforce the priorities. Visibility on the approach to side road crossings is important for ensuring the safety of crossing users.</p> <p><u>Major road crossings</u></p> <p>Major road crossings should maintain the coherence of the Active Travel route but additional measures – signals, cycle zebras or simply painted markings – may be appropriate to ensure that user priorities are clear.</p>
Signage	<p>Signage will form part of the overall design strategy for all Active Travel elements, these signs will provide clear and unambiguous information with respect to warning, information and directions.</p> <p><u>Clear and unambiguous signage</u></p> <ul style="list-style-type: none">– Clear signage at entry points, and at points along the route, should make it clear which users are permitted to use a path– Consider the vertical and horizontal siting of signs so they are visible to moving cyclists as well as pedestrians and equestrians– Look to minimise signage along a route, ensure their size is reflective of the environment and look to utilise existing street furniture rather than implementing new posts– The position of signs and any associated posts should not impede or restrict Active Travel modes and be set sufficiently back from the edge of defined path(s) to not affect the comfort levels for all users

Subject	Design consideration
	<ul style="list-style-type: none"><li data-bbox="450 236 1906 300">– Traffic sign requirements will need to be developed in accordance with current standards and guidelines and reflect local requirements and preferences<li data-bbox="450 312 1899 341">– In the case of direction signs these will need to provide continuity with respect to destinations and associated distances. <p data-bbox="427 395 696 424"><u>Reducing street clutter</u></p> <p data-bbox="427 435 1917 496">There is a need to consider rationalising the number of signs provided, to reduce clutter, but also to ensure that any signage is sensitive to its environment, such as in Conservation Areas and other historic locations.</p> <p data-bbox="427 547 651 576"><u>Natural wayfinding</u></p> <p data-bbox="427 587 1995 647">There is potential to consider the role of natural wayfinding, through using the line of sight and surface colours/textures to avoid over-reliance on direction signage and potential clutter.</p>
Street Furniture	<p data-bbox="427 703 2022 834">The review or development of the design may introduce new elements of street furniture and therefore consideration of the position and impact upon the wider streetscape will be necessary to ensure that available widths and required offsets are not compromised. Street furniture within the urban environment may already be present, as such consideration as to whether relocating or repositioning will be necessary to accommodate any Active Travel provision.</p> <p data-bbox="427 885 1995 1016">The introduction of street furniture could as be directly related to the Active Travel route and form part of the route provision. In the case of walking this could be a bench to enable a rest stop or to enjoy local views, in the case of cycling this could be secure cycle parking near a place of interest or local amenity and for equestrian use this could be mounting blocks for riders or watering facility for horses.</p> <p data-bbox="427 1067 1973 1128">Regular seating can improve accessibility of a route for people less able to walk long distances. Liaison with stakeholders can help inform appropriate locations for street furniture.</p>
Street lighting	<p data-bbox="427 1182 2022 1313">Lighting fulfils a dual safety function, providing visibility for all users and contributing to personal security. It is important that Active Travel routes are illuminated to an appropriate standard so that they are safe and perceived to be safe – in urban areas this is likely to mean standard highway street lighting. Specific attention for lighting is needed around junctions and crossings, or any potential conflict location to ensure all users can be seen clearly, especially where there are high numbers of different types of users.</p>

Subject	Design consideration
	<p>In rural locations consideration should also be given to the positioning and location of street lighting such that it does not detrimentally affect the character of sensitive locations or wildlife habitat during the hours of darkness. In these locations it may be that more innovative solutions are needed, such as:</p> <ul style="list-style-type: none">– solar studs,– user activated lighting,– low-level or– 'bat friendly' lighting <p>which can offer options for extending the usable hours of more rural paths.</p> <p>Identifying the requirements for lighting and liaising with the relevant authority early on within a scheme's development will help to identify the types of acceptable lighting and to ensure that any major considerations are incorporated into the design.</p>
Structures	<p>The presence of structures along any proposed route may result in a compromise or restriction to available width or clear headroom. It is therefore important to determine these issues early within the design process such that any mitigation can be carefully considered.</p> <p>In overcoming such issues, it may be necessary to reconstruct an existing structure to meet current standards, construct a new structure adjacent or develop alternative route options to avoid this restriction. Another potential mitigation for equestrians could be the provision of mounting blocks to enable riders to dismount due to insufficient parapet or underpass height.</p> <p>Problems encountered usually comprise of:</p> <ul style="list-style-type: none">– existing bridge decks being too narrow to accommodate Active Travel provision.– Bridge parapets being too low for cyclists and horse riders– Subways being too low or too narrow.– Instances of anti-social behaviour in and around subways. <p>In some circumstances there will be a need to provide a new structure, with the most common of these being new bridges. Bridges can be designed as a major feature of a route and, if designed well, can become attractors in their own right. In the case of a new bridge the following would need to be considered:</p> <ul style="list-style-type: none">– That the gradients of the approach ramps are suitable for all users, as noted in the section on gradients above

Subject	Design consideration
	<ul style="list-style-type: none">- That the effective width of the bridge is wide enough to accommodate all users (current and forecast demand). The provision of appropriate height parapets will reduce the effective width so this will need to be considered.- That the surface of the bridge deck is suitable for all users. <p>Careful consideration would be needed if a new subway/underpass is being proposed as this has potential issues with respect to the attractiveness and safety of the route, with some users not willing to use subways/underpasses. However, it is noted that equestrians prefer underpasses to overbridges where grade separation is required. Consideration could be given to the potential for Active Travel routes to continue at the same level through a new grade separated junction, through the use of under- and overbridges, so deviation and changes in level for ATU's are minimised, although this is likely to be costlier to implement and, therefore, a detailed assessment of demand and value for money will be required.</p>
Surface Material	<p>The surface material used for the Active Travel route will define the appearance and provide clarification of the intended use. The choice of surface material will also be dependent upon the end user and frequency of use. Other factors could include, but not be limited to, surface colour, skid resistance, local character and public realm. Surface material choice can also form part of the natural wayfinding of a route, helping to minimise signage clutter.</p> <p>Consideration will be needed when selecting surfacing materials in rural locations, as there is a need to avoid urbanising rural environments. The maintenance requirement of the chosen material should also be considered.</p> <p>Stakeholder input will be very valuable when selecting surface materials and can have a strong impact on scheme acceptability, so seeking local views is important, especially those representing disabled and older people, as some types of surfaces (such as textured surfacing) can create high levels of discomfort.</p> <p>Different ATUs have different needs and it may be necessary to provide dual surfacing where demand is sufficient to justify this. Bound surfaces offer much greater accessibility for wheelchair and mobility scooter users, as well as people with visual impairments, and should be a key consideration in determining surface type. It is important to ensure that no particular user group is excluded through the choice of surface material for an Active Travel route.</p>
Tactile paving	<p>Tactile paving is important for ensuring that routes are accessible for all users, but inappropriate or over-use can lead to confusion and disadvantage all users of the route. Design guidance should be closely followed to ensure that the correct type of tactile paving is used at crossings and where use of the path changes.</p>

Subject	Design consideration
	<p>Tactile paving is a requirement on highway routes, but there is greater flexibility off-highway, although it is useful to maintain a consistent approach and the use of tactile paving will help to ensure inclusive design. Consultation with local access groups will help inform the appropriate use of tactile paving.</p>
Visibility	<p>Good visibility gives users confidence when using the route and avoids surprise conflicts at corners or pinch points. Good forward visibility allows users time to position themselves on the path, minimising conflict between users. Where possible routes should be designed with good sight lines and avoiding sharp bends. Consideration should be given to the type and volume of vegetation alongside a route – vegetation that grows quickly can rapidly deteriorate sight lines.</p> <p>Visibility splays at junctions and crossings should ensure appropriate visibility for all users.</p>
Widths	<p>Guidance documents, as shown in the table below under core guidance, provide details on appropriate widths for most circumstances, but the width of the route will be influenced by how many people use the route and how and when they use it. In the event of conflicting guidance, the designer should assess the relative merits of the options and liaise with the scheme promoter and key stakeholders to agree a way forward.</p> <p>Other aspects to consider around widths include:</p> <ul style="list-style-type: none">– Consideration of numbers of users, by mode, using the route and for this to include an assessment of likely numbers using the route in the future– Consideration of who will be using the route – not only the type of ATU, but any characteristics. Routes serving schools, for instance, are likely to see high use by novice cyclists, scooters and groups. Additional path width may be appropriate in these circumstances.– Routes with a high tidal flow – generally commuters moving towards city centres or employment centres in the morning – may require additional width to deal with a significant peak in demand. Designers should interrogate flow information to understand if a large proportion of daily demand is likely to occur in a short space of time and design the route accordingly. <p><u>Effective width</u></p> <p>The useable width of a route should be clearly understood. Walls, trees, bridge parapets, kerbs and even high-speed traffic along the edge of the path will encourage users – especially cyclists – to position themselves centrally, which will mean the useable width of any new provision will be reduced. Soft verges have a lesser ‘edge effect’ and users may make use of the verge to pass other path users,</p>

Subject

Design consideration

however the use of a verge should not be a substitute for appropriate width provision. These behaviours should be factored into width requirements at an early stage of design.

Regular maintenance is a requirement to ensure the intended effective width remains available as vegetation grows.

Core Guidance

Document (Date)	Sustrans traffic free routes and greenways design guide (Nov 2019)	CD143 – designing for cycling, walking and horse-riding (May 2020)	Local Transport Note 1/20 – Cycle Infrastructure Design (July 2020)	British Horse Society Leaflets and Advice (Various)	Inclusive mobility, UK Government (2021)	CIHT Designing for walking (2015)
Modes covered	Walking, cycling and equestrian	Cycling, walking and equestrian	Cycling	Equestrian	Primarily walking, some cycling	Walking
Access controls	Chapter 9	Chapter 5.17	Chapter 8.3	Vehicle barriers (Dec 19)	Chapter 7.6	Chapter 4.9
Bus Stops			Chapter 6.6.		Chapter 9	
Crossings	Chapter 10	Chapter 5.20 Chapter E/4	Chapter 10	Road Crossings (Dec 19)	Chapter 4.10	Chapter 6
Cycle Parking			Chapter 11		Chapter 7.4	
Design speed	Chapter 7	Chapter 5.2 Chapter E/3.1	Chapter 5.6	Dimensions for width, area and height (Dec 19)		
Drainage	Chapter 10	Chapter 5.28 Chapter E/6.2	Chapter 15.2		Chapter 4.3	Chapter 4.6
Gradients	Chapter 7	Chapter 5.12	Chapter 5.9	Bridges, fords, gradients and steps (Oct 19)	Chapter 4.3	Chapter 4.3
Legal procedures	Chapter 12 Chapter 13		Appendix C			Chapter 5
Maintenance	Chapter 11		Chapter 15		Chapter 7.7	
Road Markings			Chapter 13		Chapter 4.10	
Safety and Surveillance	Chapter 1					
Separation/ segregation from other modes		Chapter E1.2.1	Chapter 4 Chapter 6 Chapter 8		Chapter 6.4	
Side road crossings	Chapter 10	Chapter E/4	Chapter 10	Road Crossings (Dec 19)	Chapter 4.11	Chapter 6
Signage	Chapter 5		Chapter 13		Chapter 7.5 Chapter 13	Chapter 8
Street Furniture					Chapter 4.3	Chapter 10
Street lighting	Chapter 10	Chapter 5.27 Chapter E/6.1	Chapter 8.7 Chapter 15.3		Chapter 14	Chapter 4.5
Structures	Chapter 10	Chapter 5.26 Chapter E/4	Chapter 10.8	Bridges, fords, gradients and steps (Oct 19) Dimensions for width, area and height (Dec 19)	Chapter 5.7	Chapter 6.6
Surface Material	Chapter 8	Chapter 5.29 Chapter E/6.3	Chapter 8.5 Chapter 15.2	Surfaces (Mar 20)	Chapter 4.8	Chapter 4.4
Tactile paving	Chapter 4		Chapter 6		Chapter 6	Chapter 4.7
Visibility	Chapter 7	Chapter 5.5 Chapter E/5	Chapter 5.8		Chapter 4.10	
Widths	Chapter 6 Chapter 7	Chapter 5.16 Chapter E/1.2	Chapter 5	Dimensions for width, area and height (Dec 19)	Chapter 4.2	Chapter 4.2

Additional guidance including from other UK regions

Document	Active Travel Act Guidance (Wales) July 2021	Cycling by Design – Transport for Scotland Sep-21	CD195 – designing for cycle traffic (Mar 2020)	Cambridgeshire Design Guide for Streets and Public Realm (2007)	Manual for Streets (2007)	Manual for Streets 2 – Wider Application of the Principles (2010)	London Cycling Design Standards (2014)	BHS Advice on Specifications and Standards recommended for equestrian routes in England and Wales (2013)	Cycling England Cycle Schemes and Legal Procedures (2009)
Modes covered	Walking and cycling	Cycling	Cycling	Cycling and walking	Walking and cycling	Walking and cycling	Cycling	Equestrian	Cycling
Access controls	Chapter 15.3	Chapter 3.5				Chapter 12	Chapter 4.5.15	Page 5	
Bus Stops	Chapter 13.2 Chapter 13.3	Chapter 3.10	Chapter E/3	Chapter 6.2	Chapter 6.5.9	Chapter 7.3	Chapter 3.2.7		
Crossings	Chapter 12	Chapter 4	Chapter E/4	Chapter 4	Chapter 6.3	Chapter 9	Chapter 5	Page 4	
Cycle Parking	Chapter 14.8	Chapter 6.2		Chapter 5	Chapter 8.2	Chapter 6.3	Chapter 8		
Design speed	Chapter 9.14 Chapter 9.13	Chapter 3.4	Chapter E/3.16		Chapter 6.4		Chapter 4.5.8		
Drainage	Chapter 15.2	Chapter 3.4		Chapter 9	Chapter 11.4		Chapter 7.1		
Gradients	Chapter 9.7 Chapter 9.15	Chapter 3.4	Chapter E/3.9	Chapter 4	Chapter 6.3 Chapter 6.4		Chapter 7.1 Chapter 7.5	Page 11	
Legal procedures	Appendix I	Appendix A (Note that this is guidance for Scotland)		Chapter 14			Chapter 1.3		Whole document
Maintenance	Chapter 15.6	Chapter 3.13			Chapter 11	Chapter 4.6	Chapter 7		
Road Markings	Chapter 11	Chapter 3			Chapter 9	Chapter 6.2 Chapter 13	Chapter 6		
Safety and Surveillance	Chapter 15.7 Chapter 16	Chapter 3.3		Chapter 4.5					
Separation/segregation	Chapter 9.17	Chapter 3.3	Chapter E/3	Chapter 2.4			Chapter 1.2		
Side road crossings	Chapter 12	Chapter 4	Chapter E/4		Chapter 6.3	Chapter 9	Chapter 5		
Signage	Chapter 14.7	Chapter 4	Chapter E/6	Chapter 12	Chapter 9	Chapter 13	Chapter 6	Page 12	
Street Furniture	Chapter 14				Chapter 10	Chapter 12	Chapter 3.4.6	Page 12	
Street lighting	Chapter 9.5 Chapter 15.5	Chapter 4.9		Chapter 12	Chapter 10	Chapter 12.6	Chapter 7.1.2		
Structures	Chapter 15.6.18 - 15.6.21	Chapter 4.8	Chapter E/4.35				Chapter 7.5	Page 6-9	
Surface Material	Chapter 9.8 Chapter 9.23	Chapter 3.12		Chapter 13	Chapter 6		Chapter 7	Page 11	

Document	Design Guidance Active Travel (Wales) July 2021	Cycling by Design – Transport for Scotland Sep-21	CD195 – designing for cycle traffic (Mar 2020)	Cambridgeshire Design Guide for Streets and Public Realm (2007)	Manual for Streets (2007)	Manual for Streets 2 – Wider Application of the Principles (2010)	London Cycling Design Standards (2014)	BHS Advice on Specifications and Standards recommended for equestrian routes in England and Wales (2013)	Cycling England Cycle Schemes and Legal Procedures (2009)
Tactile paving	Chapter 15.1.19 - 15.1.21	Chapter 4					Chapter 7.3		
Visibility	Chapter 9.14	Chapter 3.4	Chapter E/3.4		Chapter 7.8	Chapter 10	Chapter 5.1.5		
Widths	Chapter 9.17	Chapter 3.4	Chapter E/3	Chapter 4	Chapter 7	Chapter 5	Chapter 4	Page 2	

A. List of Active Travel stakeholders

Stakeholder	Key Contact Name
Cambridgeshire County Council Cycling Team	Grant Weller
Cambridgeshire Local Access Forum	Mary Sanders
CamCycle	Roxanne de Beaux
	Matthew Danish
The Ramblers Association	Jill Tufnell
Sustrans	Matthew Barber
British Horse Society	Lynda Warth
The Gardens Trust	Alan Brown
Cambridge City Council - accessibility	Mark Taylor
American Cemetery Memorial	
Campaign to Protect Rural England	
Sport England	Philip Raiswell
Greater Cambridge Shared Planning	Claire Spencer
Cambridgeshire County Council	James Stringer
Cambridgeshire County Council	Daniel Ashman
Cambridgeshire County Council	Camilla Rhodes
Cambridge Past, Present and Future	James Littlewood

