

Strategic Cycle Route A – Alignment 1 via Manuden, Arkesden, Strethall and Ickleton

Route Description: Route A, alignment 1 provides a north-south connection from Bishop’s Stortford in the south to Great Chesterford, Ickleton and the Wellcome Genome campus in the north, which is located on the boundary between Essex and Cambridgeshire and is a key local employer. Alignment 1 also provides direct connections to villages such as Ickleton, Manuden, Rickling Green, Wicken Bonhunt, Arkesden and Catmere End, with spurs to link into Wendens Ambo, Newport and Stansted Mountfitchet. It therefore has the potential to improve short linkages between settlements and facilitate regular utility cycling trips, as well as operating as a longer distance route which might be popular as a more leisure focused cycle route.

The alignment of route 1 is primarily along unclassified rural roads which likely carry low volumes of vehicular traffic, however are mostly subject to national speed limit and therefore vehicle speeds are likely to be high in places. Although much of the route is suitable for a percentage of cyclists at present, there are interventions to further reduce traffic volume, reduce traffic speed and improve visibility of cyclists that could be implemented to ensure the route is attractive and safe for all users. Traffic volumes are likely to be higher on the southern section of the route on Hazel End Road and therefore further interventions may be required (subject to traffic counts) in order to provide segregation from traffic for cyclists.

There are some short sections of bridleway, in particular linking Coploe Road to Great Chesterford and Bromley Lane to Wendens Ambo. Although cyclists are permitted to use these routes at present, interventions will be required in order to bring the route up to a sufficient standard for regular cycling.

Route Typologies: On-Carriageway (Minor Roads), PROW

RST Commentary

Directness: The route scored highly for Directness with a score of 100%. The proposed route is primarily on-carriageway and is therefore just as direct as the equivalent vehicle route. The short section of PROW on the approach to Great Chesterford provides a shorter route than the vehicular alternative.

Gradient: The route, for the most part, is reasonably flat, and therefore scored reasonably well for gradient with an overall score of 69% (3.45 out of 5). The flattest sections of the route were around Great Chesterford, Rickling Green and Wendens Ambo. The most challenging gradient recorded along the route was 4.1% on the section between Catmere End and Arkesden. The overall score for gradient is therefore unlikely to deter most users from travelling along this route.

Safety: The route scored poorly for safety, with an overall score of 11% (0.57 out of 5). The primary reason for this low score was the fact that the majority of the route is on-carriageway, unlit and without passive surveillance. Although traffic flows are generally lower than 2,500 (AADT), many sections of the route were on roads subject to national speed limit where vehicle speeds could regularly exceed 30mph.

Connectivity: The route scored fairly low for connectivity, with an overall score of 26% (1.29 out of 5). This reflects the rural and often isolated nature of the route, which passes through areas of the district where there is a fairly sparse street network. The lowest scoring sections of the route are therefore the links between the various settlements, for instance the section between Ickleton and Strethall scores particularly poorly. At the southern end of the route, closer to Bishop’s Stortford and other larger settlements, there are a greater number of connections which is reflected in the scoring.

Comfort: The route scored highly for comfort, with an overall score of 86% (4.28 out of 5). The vast majority of sections scored 5/5, as they were smooth, machine-laid bituminous surfacing with traffic flows of less than 2,500 vehicles per day. There were two sections which scored 0 and these were both unsurfaced sections of PROW.

RST Overall Score = 58%

RST Sub-Scores

Directness	Gradient	Safety	Connectivity	Comfort
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Design Recommendations

- Many rural sections along the route are suitable for ‘Quiet Lane’ interventions to reduce vehicle speeds and improve conditions for vulnerable road users. Much of the northern half of the route, including the section between Ickleton and the Wellcome Genome Campus, is located along NCN 11 so these interventions would also improve the quality of this existing leisure route.

- There are sections of the route which pass through villages, which provide an attractive streetscape and contribute to the overall attractiveness of the route. These village centres may benefit from interventions to further reduce vehicle speeds using interventions such as centre line removal, visual narrowing and gateway features on approaches into the village. Villages that might benefit from these interventions include Ickleton, Arkesdon and Manuden.
- Much of the route follows rural lanes subject to the national speed limit. A review of publicly available collision data highlights some collision locations, including a fatal collision involving a cyclist on Wenden Road. The main focus of improvements should therefore be to reduce vehicle speeds and improve visibility of vulnerable road users. In some cases, this could be achieved by extending the existing speed limit changes within the village extents to also include the roads leading into the village. Along some lanes the traffic conditions are suitable to implement 'Quiet Lanes' in line with existing ECC guidance.
- Traffic count data along the southern section of the route should be obtained and reviewed to determine whether segregated cycle facilities are required on the northern approach/exit from Bishop's Stortford. Due to low pedestrian flows, this could take the form of a high quality 3m wide shared path.
- Similarly, the northern section of the route which utilises Frogge Street and provides a connection between Great Chesterford and Ickleton could also be upgraded to provide a high quality 3m wide shared path, utilising the existing footway on the eastern side of the carriageway.
- Due to road width constraints, the provision of a shared-use facility is not feasible along the section running through Ickleton and connecting to the Wellcome Genome Campus. While the 20mph speed limit and narrow carriageway should help to keep speeds low, it is recommended that the existing traffic calming measures are reviewed and upgraded if required to create a safer environment for cycling through the village. Speed data for this route, as well as general traffic flow data would help to inform this further.
- The existing wayfinding on the route isn't very legible and therefore a 'quick win' would be to introduce more visible and attractive wayfinding along the route. For the northern section of the route, this should include a review of the existing NCN wayfinding provision.
- There are locations on the route which would benefit from junction improvements. These are primarily rural junctions such as Strethall Road / Batt's Lane, where there is likely to be high vehicle speeds on the major arm of the junction and visibility could be impeded by overgrown vegetation. In these locations, improvements could be made by introducing traffic calming measures to reduce vehicle speeds on the junction approach and improving visibility from the minor arms through maintenance of vegetation to achieve the appropriate visibility splays.
- There are two short sections of bridleway that link into Wenden's Ambo and Great Chesterford. These would need to be upgraded by widening and resurfacing to enable safe, year-round access for cyclists.
- For any traffic-free sections, including bridleways and byways in particular, consideration should also be given, where space permits, to including "trotting paths" parallel to the route to maintain the quality of the route for equestrian use.

Strategic Cycle Route A – Alignment 2 via Newport and Littlebury

Route Description: Route A, Alignment 2 provides an alternative to the northern section of Alignment 1, mainly utilising busier yet more direct B-roads. The route extends from Great Chesterford, which is located at the northern border between Uttlesford and Cambridgeshire, at its most northern point, passing through Little Chesterford (with a spur connecting to Chesterford Research Park), Littlebury, Newport, Quendon, Stansted Mountfitchet and Birchanger. This route provides important linkages to four railway stations (Stansted Mountfitchet, Newport, Audley End and Great Chesterford) and also connects to Audley End House which is a major tourist attraction in the district, as well as providing a connection to Stansted Airport and the western end of the Flitch Way.

The majority of the route comprises on-carriageway cycling along B-roads with traffic flows up to c. 5,000 vehicles per day. Therefore, the conditions for on-carriageway cycling are likely to be unsuitable for most users. Speed limits vary along the route, with sections of 50mph along the more isolated stretches of the B1383 to 30mph on the approach to Great Chesterford, through Newport, Littlebury, Quendon and Stansted Mountfitchet. There is a short section of shared-use path between Station Road and Walden Road, west of Church Road as the route passes through Stansted Mountfitchet and another short section of shared-use connecting into Birchanger. There are sections of footway at various points along the route.

The northern section of this route, between Audley End and Great Chesterford was subject to a cycle route feasibility study in 2014, which provided a series of recommendations for a new route alongside the B1383.

There are also regular bus services along the route – including the 301, 444, 441, 419, 321 and 320.

Route Typologies: On-Carriageway (Major Roads), On-Carriageway (Minor Roads), Shared-Use

RST Commentary

Directness: The route is on-carriageway and primarily follows the most direct route in terms of driving and cycling, therefore scores 100% for directness.

Gradient: The route scores highly for gradient with a score of 73%. This means the route is overall reasonably flat with a few steeper sections.

Safety: The route scores poorly for safety with an overall score of 16%. This is due to the vast majority of the route being on-carriageway with traffic flows of between 2500-5000 vehicles and vehicle speeds in excess of 30mph, meaning most sections of the route score 0 under this criterion. There are some shorter sections of the route which scored higher than 0 and these were within Newport, Littlebury, Quendon and Stansted Mountfitchet, where 30mph speed limits are in place. It should also be noted that some sections of the route between the settlements lack passive surveillance and lighting.

Connectivity: The route scored relatively low for connectivity, with an overall score of 54%. Generally, the route sections within the settlements of Littlebury, Newport and Stansted Mountfitchet scored more highly due to the denser street network. The remainder of the route is rural and fairly isolated with limited connections onto other routes.

Comfort: The route scored poorly for Comfort (15%) which suggests that conditions for cyclists are currently uninviting for the vast majority of cyclists. Generally, route sections are on-carriageway with traffic flows of greater than 2,500 which results in a default score of 0 under this criteria. As mentioned, there are three short sections of shared-use between Wendens Ambo and south of Stansted Mountfitchet and another going into Birchanger from the north with an approximate width of 3m.

RST Overall Score = 50%

RST Sub-Scores

Directness	Gradient	Safety	Connectivity	Comfort
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Design Recommendations

- This route primarily follows the B1383 as it passes through Littlebury, Newport, Quendon and Stansted Mountfitchet. It therefore mainly follows relatively highly trafficked roads subject to 50mph speed limits where segregated cycling facilities would be required to deliver a route to LTN 1/20 standards.
- For the urban sections through Littlebury, Newport, Quendon and Stansted Mountfitchet it is likely that it will be more challenging to deliver a segregated facility within the existing highway boundary. Therefore, where segregated facilities are not feasible, improvements should focus on improving crossing facilities, side-road treatments, tightening geometry at side-road junctions, consideration of 20mph speed limit, centre-line removal and footway widening where possible. All of these improvements combined would contribute to a safer environment for both pedestrians and cyclists.
- There is existing footway provision along the B1383 for most of the route, except from the section to the north between Littlebury and Great Chesterford. Therefore, the design approach for this route would be to investigate widening the existing footways, using the verge space available to provide a consistent shared-use facility alongside the B1383 and the entirety of the route, aiming for a minimum width of 3m. Where feasible, a grass verge should be provided between this facility and the carriageway to improve the safety of pedestrians and cyclists using the facility from motor traffic. This would be LTN 1/20 compliant, given the low pedestrian flows.
- There are existing shared use facilities through Wendens Ambo with a wide carriageway, which provides further scope for improvements to this facility. There is therefore the potential to upgrade and widen the existing shared-use facilities, or provide a segregated cycle facility given that pedestrian flows are likely to be higher in this location. This section of the route also forms part of the Saffron Walden LCWIP Route 1.
- Although, as noted above, there is no footway between Littlebury and Great Chesterford, there is ample verge space to provide a shared-use facility alongside the carriageway. This should also be designed to connect with the recently constructed shared use facility adjacent to the Chesterford Meadows development. Again, pedestrian flows are likely to be low throughout this section of the route, so a shared-use facility would be acceptable provided it is designed in accordance with LTN 1/20 standards and minimum width requirements are adhered to.
- The provision of cycle facilities is not feasible due to width constraints along the section of route on Gypsy Lane, south of Stansted Mountfitchet. Therefore, the recommended design approach is to implement traffic calming measures to create a safer environment for cyclists. Speed data for this route, as well as general traffic flow data would help to inform this further. If flows are too high to have cycles mixing with general traffic, then a route behind the hedgerow may be an option.
- For the spur which connects the B1383 to Chesterford Research Park (via Little Chesterford), it is recommended that:
 - o B1383 / High Street junction is improved to tighten junction radii and improve north-south crossing movements along the proposed new shared-use path
 - o Wayfinding is provided to direct users from the B1383 to the research park
 - o A village-wide 20mph limit is considered in Little Chesterford to further reduce r vehicle speeds

- Dedicated crossing provision in the form of a toucan crossing is provided for cyclists at the High Street / Walden Road roundabout, upgrading the existing uncontrolled crossing points. Reducing the speed limit at the roundabout to 30mph is also recommended to slow turning movements and improve safety.
- Provide a segregated route alongside the research park access road to protect cyclists (and pedestrians) from traffic accessing and exiting the site during peak hours. Subject to predicted pedestrian flows, a shared-use route may be acceptable in this location.

Strategic Cycle Route B – Alignment 1 via Hatfield Broad Oak and Chignal St James

Route Description: Route B, Alignment 1, provides a north-west to south-east connection between Bishop’s Stortford and Chelmsford, a large portion of which is within the Uttlesford District boundary. As well as linking up these two towns, the route also connects multiple small villages and offers potential as a leisure route due to the low traffic levels and mostly level terrain – this is reflected in the Strava data collected in the area.

The western section of the route starts from the B1383 in Bishop’s Stortford and uses Pig Lane through Twyford to connect up with the network of minor roads which traverse the countryside east of the M11 and south of the A120. The route mostly relies on lightly trafficked lanes, some of which already have suitable conditions to be converted to ‘Quiet Lane’s. The sections of the route through Hatfield Broad Oak and High Easter could provide an opportunity to implement traffic calming and placemaking measures that would both enhance the quality of the cycle route while also improving general conditions for pedestrians within the village centres and for residents.

There is a short section of PROW at the eastern end of Cammas Lane, east of Hatfield Broad Oak, which provides a missing link in the route and avoids the need to cycle along A1060 Chelmsford Road to the south. This is currently unsurfaced and generally not suitable for cycling at present.

Route Typologies: On-Carriageway (Minor Road), PROW

RST Commentary

Directness: The route scores 100% for directness as it primarily follows the most direct vehicular route, with a short section of PROW to maintain a direct alignment.

Gradient: The route scores highly for gradient with an overall score of 94%. The majority of sections do not have gradients steeper than 2% and therefore score 5/5. The exception to this is the section through Hatfield Broad Oak, where there are gradients of up to 7.5% over a distance of greater than 150m which results in a score of 0. There are also some slightly steeper gradients of <3.5% on the western section of the route along Pig Lane. Overall, gradient is unlikely to deter users from travelling along this route.

Safety: The route scores poorly for safety, with an overall score of 7%. Generally, the route follows roads with traffic flows of less than 2,500 vehicles, however the speed limits are generally national speed limit (60mph) with short sections of 30mph where the route passes through villages. As such, vehicle speeds are likely to exceed 30mph for most of the route. The route is also unlit and lacks passive surveillance along most of its length, which further reduces the score for safety.

Connectivity: The route scores relatively poorly for connectivity, with an overall score of 33%. This is mainly due to the rural nature of the route and the sparse nature of the highway network meaning there are limited connections along the route. The exception to this is the western end of the route, near Bishop’s Stortford and the section of the route passing through Hatfield Broad Oak.

Comfort: The route scores well for comfort, with an overall score of 97%. Most sections of the route are along lightly trafficked roads with less than 2,500 vehicles per day and smooth machine-laid surfacing, which automatically scores a 5. The exception to this is the short section of PROW which is currently unsurfaced and therefore scores a 0 for this criterion.

RST Overall Score = 74%

RST Sub-Scores

Directness	Gradient	Safety	Connectivity	Comfort
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Design Recommendations

- The majority of this route could be unlocked by implementing ‘Quiet Lane’s along quiet rural roads.
- There are some locations where traffic flows would need to be checked and if necessary, implement traffic calming or traffic reduction measures.

- Localised improvements in villages such as Hatfield Broad Oak and High Easter to improve public realm, general conditions for walking and provide a traffic calming effect. This could include centre line removal, rationalisation of junctions + formalising parking arrangements, further speed limit reduction and provision of new crossings along desire lines.
- Where the route interfaces with B-roads, consideration should be given to providing crossing facilities for cyclists. There may be a need to widen short sections of footway to provide short sections of shared-use where there is a “dog-leg” in the route at these crossing points.
- There is a short section of public right of way which is a missing connection in the route. This is currently a muddy track (designated as a bridleway) so would need to be surfaced to enable year-round cycling. Consideration should also be given where feasible to including a “trotting path” parallel to the route to maintain the quality of the route for equestrian use.
- For the western section of the route through Twyford, there is scope to investigate filtering through-traffic as this appears to be a rat-run between London Road and the A1060. Due to very narrow carriageway widths, particularly over the River Stort, it is unsuitable for high traffic volumes and signals are used over the bridge. There may be a need to consider exemptions for residents in order to achieve local support for such a scheme. This would be the responsibility of Hertfordshire County Council rather than ECC as it falls outside the Uttlesford district boundary.

Strategic Cycle Route B – Alignment 2 via Great Canfield and High Roding

Route Description: Route B, alignment 2, provides an alternate option for connecting Bishop’s Stortford to Chelmsford. The southern section of the route connects to alignment 1 in High Easter and extends north on School Lane. It then crosses the B184 at High Roding before continuing north through Great Canfield. At its northern extent, the route connects to the Flitch Way and the B1256, which are both alignment options for SCR C and provide a connection to Bishop’s Stortford to the west, or Stansted Airport to the north.

The roads along the route are lightly trafficked and should therefore be considered to implementing ‘Quiet Lane’s to further enforce the priority of pedestrians, cyclists and horse riders. A key barrier on the route is the severance created by the B184 at High Roding, where there is no crossing and the geometry of the B184 encourages high vehicle speeds through the major arm of the junction.

Route Typologies: On-Carriageway (Minor Roads)

RST Commentary

Directness: The route scores 100% for directness as it follows the most direct vehicular route.

Gradient: The route scores highly for gradient with an overall score of 100%, meaning it is very flat throughout its length.

Safety: The route scores relatively poorly for safety, with an overall score of 44%. Generally, the route follows roads with traffic flows of less than 2,500 vehicles, however the speed limits are generally national speed limit (60mph) with short sections of 30mph. As such, vehicle speeds could exceed 30mph on some sections of the route. The route is also unlit and lacks passive surveillance along most of its length, which further reduces the score for safety.

Connectivity: The route scores relatively poorly for connectivity, with an overall score of 40%. This is mainly due to the rural nature of the route and the sparse nature of the highway network meaning there are limited connections along the route, apart from at its northern and southern points.

Comfort: The route scores well for comfort, with an overall score of 100%. All sections of the route are along lightly trafficked roads with less than 2,500 vehicles per day and smooth machine-laid surfacing, which automatically scores a 5.

RST Overall Score = 77%

RST Sub-Scores

Directness	Gradient	Safety	Connectivity	Comfort
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Design Recommendations

- Similar to Option 1, this route is largely low-trafficked and generally conducive to cycling on-carriageway. The route is effectively split into two sections, bisected by the B184. The aim would therefore be to implement ‘Quiet Lane’ style improvements on the northern and southern sections of the route, to enforce priority for vulnerable road users and reduce traffic speeds and volumes.

- There is a chance the northern section of the route is used as a rat-run from the B184 to Takeley and onwards to Stansted Airport. If so, it may be appropriate to either consider rural modal filtering, or traffic calming measures, however there isn't an obvious alternative route for drivers so this may be unfeasible/unpopular.
- The key severance issue to address is the B184. A crossing would need to be provided in High Roding across the B184 to accommodate the route and enable cyclists and pedestrians to safely cross the road.
- To the north, this alignment provides a valuable connection to the Flitch Way and therefore also could facilitate a route to Stansted Airport, which is the largest employer in the district.

Strategic Cycle Route C – Alignment via Flitch Way and Great Dunmow

Route Description: Route C provides a connection between Bishop's Stortford and Braintree and utilises the existing Flitch Way Route (NCN 16). As such, the majority of the route is traffic-free, apart from the central section of the route which passes through Great Dunmow and is considered in greater detail as part of the Great Dunmow LCWIP. The section of the route through Great Dunmow requires on-carriageway cycling with fairly high traffic flows and therefore interventions would be required to ensure there is a continuous route that is suitable for the majority of users.

The Flitch Way is a popular leisure route in the area and is well-used by local walkers and cyclists. A full review of the route and connections to the route was undertaken by Transport Initiatives in April 2023 and this provides a detailed audit of the route and recommends various improvements.

The route alignment along the Flitch Way is primarily an unbound gravel surface, however some sections of the route are muddy which detracts from the overall comfort of the route. Widths vary along the route and there are many pinch points which can create difficulties in terms of accessibility.

The route also considers additional connections from Takeley and the Flitch Way to Stansted Airport and Stansted Business Park, as well as connections to development sites in Takeley, north of the B1256. It is noted that the sections of this route within the Stansted Airport boundary are within airport land ownership and therefore would require the airport to deliver any proposed improvements.

Route Typologies: Off-Highway Route, Shared-Use Path, On-Carriageway (Main Roads)

RST Commentary

Directness: The route scores 100% for directness as the route for cyclists is more direct than the equivalent driving route.

Gradient: The route scores relatively well for gradient, with a score of 80%. Gradients for the most part of less than 2%, apart from a small number of specific locations along the Flitch Way where there are short, steep sections.

Safety: The route scored moderately for safety, with an overall score of 56%. The sections of the route running along the Flitch Way are traffic-free, which score positively for safety, however these sections are unlit and lack passive surveillance, which impacts on perception of safety for users and therefore reduces the score. Sections of the route within the airport boundary provide a combination of sections of shared-use path, cycling mixed with traffic and advisory cycle lanes. The scores along these sections are also impacted by lack of lighting and passive surveillance. Where the route passes through Great Dunmow, the score for safety is reduced given that cyclists are required to mix with traffic volumes exceeding 5,000 vehicles per day.

Connectivity: The sections of the route along the Flitch Way score fairly low for connectivity, contributing to the low overall score of 34%. Despite the fairly low number of connections per km, the Flitch Way does provide a reasonable number of connections onto adjoining routes, such as the B1256 and connections into Takeley, connections via the minor roads to the south which link into various villages, and a number of connections in Flitch Green, Bannister Green and Felsted which form part of the Velo Villages scope of work. The additional sections of the route connecting to the airport and parts of Takeley present none or few connections per km. The sections of the route through Takeley and Great Dunmow score a 5 for connectivity due to the urban nature of these parts of the route and the dense street network.

Comfort: The route scored low for Comfort (0%). This was primarily due to the muddy/unsurfaced sections of Flitch Way which automatically score a 0 in the RST criteria. The additional sections of the route connecting to the airport and parts of Takeley present a smooth, machine-laid bituminous surface, but where cyclists mix with traffic, sections score 0. Similarly, the sections passing through Great Dunmow also scored a 0 as cyclists are required to cycle on-carriageway and mix with traffic flows greater than 2,500 vehicles per day.

RST Overall Score = 54%

RST Sub-Scores

Directness	Gradient	Safety	Connectivity	Comfort
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Design Recommendations

- The majority of the route follows the Flitch Way, which is an existing traffic-free route providing a connection between Bishop's Stortford and Braintree.
- The main constraint of this route is the quality of surfacing along the route and the fact that the route is unlit and lacks passive surveillance along the traffic-free sections. This means that the route is not suitable as a utility route for regular commuting trips, and/or trips undertaken outside of daylight hours or in poor weather conditions.
- The focus of improvements along the route therefore is to upgrade the existing surfacing in sections to a smooth, bound surface that is clear of debris, cracks and has suitable drainage in place. It may not be possible to provide lighting along the route due to ecological constraints, however this should be investigated and alternative solutions such as recessed stud lighting could be considered.
- The route also varies in width and for the most part is less than 3m wide. It should therefore be investigated whether some localised widening could be undertaken at the narrower parts of the route to reduce potential conflict between pedestrians and cyclists. The focus of widening should be on pinch points initially, before rolling out improvements across the rest of the route.
- There is also a gap in the route as it passes through Great Dunmow. This section of the route also forms part of LCWIP Route GD 1 and a series of improvements have been recommended, including footway upgrades, new crossing points and corridor-wide measures to reduce traffic speeds and volumes. These interventions will help address the severance created by this on-carriageway section of the NCN route and ensure a continuous level of service from start to finish.
- As part of the package of design measures for this route the access controls along the route should be reviewed and upgraded to ensure they are accessible for all users. The Transport Initiatives report identifies a number of locations for this.
- The Flitch Way crosses a number of roads along its length and the Transport Initiatives report identifies a series of crossings where improvements are required in order to meet LTN 1/20 standards.

Recommendations for Connections to Airport/Takeley

- The route connects Takeley to Stansted Airport via Parsonage Road. Vehicle volumes and speeds are unlikely to be suitable for cyclists to mix with traffic and there is an existing 2m wide footway which runs alongside the carriageway. Given the low pedestrian flows, it is recommended that this facility is upgraded to a high quality shared-use route, measuring at least 3m in width. Within Takeley itself, it would be preferable to separate pedestrian and cycle traffic given the higher pedestrian flows, likely through provision of segregated cycle tracks on either side of the carriageway along Parsonage Lane. Where there are width constraints, alternative on-carriageway solutions or short sections of shared-use might be necessary.
- As a more ambitious future measure, the role of traffic along Parsonage Road should be investigated and whether there is any potential to restrict motor traffic and reduce traffic levels, perhaps through a modal filter north of the A120.
- As part of any improvements, key junctions along the route, such as B1256 / Parsonage Rd and the Coopers End Roundabout should be upgraded to include dedicated crossing provision for cyclists. Reducing the speed limit at the roundabout to 30mph is also recommended to slow turning movements and improve safety.
- Within the airport site, the route utilises the internal road network to connect to the terminal and to the business park. As noted, there are some sections of on-carriageway cycle lanes along Long Border Road, as well as a footway separated from the carriageway by a grass verge. Given likely vehicular flows and proportion of HGVs within the airport site, cyclists should be separated from motor traffic. Therefore, it is recommended that the existing footway is upgraded and widened to provide a high quality shared use route alongside the carriageway, aiming for a minimum width of 3m. Where no footway provision exists, as in the section along Round Coppice Road, the feasibility of providing a new route alongside the carriageway should be investigated. This will likely require the removal of vegetation and trees, and is dependent on the highway boundary.
- As part of any improvements, junctions along Round Coppice Road will need to be upgraded to include dedicated crossing provision for cyclists. Reducing the speed limit at the roundabout to 30mph at junctions is also recommended to slow turning movements and improve safety.
- For the shared-use section connecting Birchanger with the airport site, lighting provision should be reviewed to ensure that the route is accessible 24 hours.
- For the short connection into Takeley, along Smiths Green, sufficient pedestrian and cycle facilities will need to be provided as part of any development that comes forward in this area. As a minimum, this should include 2m wide footways for pedestrians and consideration given to whether segregated facilities for cyclists are required (subject to future traffic volumes).

Strategic Cycle Route C – Alignment via Takeley (B1256)

Route Description: This route follows the alternative road alignment to the Flitch Way, providing an east to west connection across the district to link Bishop's Stortford with Takeley and Great Dunmow, before continuing eastwards towards Braintree. A

route spur also connects Dunmow Road with Warish Hall Farm to the north, via Smiths Green. The analysis undertaken as part of this project shows that this is a corridor with high potential demand for both commuting and everyday cycling trips and therefore there are clear benefits to implementing a route along the B1256 as a more utility-focused alternative to the Flitch Way, which lends itself more to leisure trips.

The route primarily follows the B1256 which is a busy road with limited cycling infrastructure along its length, meaning that cyclists are often required to mix with vehicular traffic in the region of 8-10,000 vehicles per day. The road is also a busy bus route, particularly given the proximity to Stansted Airport and Bishop’s Stortford, both of which are key centres of employment. Therefore, at present, conditions are fairly hostile and uninviting for cyclists and the focus of improvements should be to provide protected facilities that enable safe and accessible cycling.

Route Typologies: Shared-Use Path, On-Carriageway (Main Roads)

RST Commentary

Directness: The route scores 100% for directness as it follows the most direct vehicular route.

Gradient: The route scores highly for gradient with an overall score of 81%. Most sections of the route have no gradients steeper than 2.5% however there is a short section of 10% gradient on Stortford Road and a short section of 4% gradient along Rayne Road which slightly bring down the overall score.

Safety: The route scores poorly for safety, with an overall score of 11%. Generally, the route follows roads with traffic flows of more than 5,000 vehicles per day which automatically scores a 0 in the RST tool. There are some short sections of shared-use path in Takeley and at the roundabout between the B1256 / A120 which provide protection from motor traffic, however the scores on the B1256 section are reduced by the lack of passive surveillance. Similarly, the route spur connecting into Warish Hall Farm, lacks lighting and passive surveillance and despite accommodating low traffic flows (below 2,500 vehicles per day) scores 1.

Connectivity: The route is mixed in terms of connectivity, with an overall score of 57%. The route does provide several connections through settlements (Takeley, Great Dunmow and Rayne) however there are some more isolated stretches of route in between settlements which bring the overall score down.

Comfort: The route scores poorly for comfort, with an overall score of 6%. This is due to most sections of the route requiring cycling in mixed traffic with daily traffic volumes of greater than 2,500 vehicles. As mentioned there are two sections of shared-use which score more highly for comfort.

RST Overall Score = 50%

RST Sub-Scores

Directness	Gradient	Safety	Connectivity	Comfort
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Design Recommendations

- There is an existing shared-use footway cycle route through Takeley, via the residential area north of the B1256. This starts east of Parsonage Lane and terminates at Thornton Road. It then starts again east of Bluegates Farm and continues into Great Dunmow. Therefore, a critical issue to address along this route is the gap in provision along the B1256 between these two points. To do so, widening of the existing footway would be required and land purchase may be necessary to provide a “behind the hedge” type facility if there is not sufficient width available within the highway boundary.
- Likewise, west of Parsonage Lane and up to the A120 junction there are no dedicated facilities and on-carriageway cycling would not be suitable due to high traffic volumes and speeds. As such, a new facility would be required, likely widening the existing footway on the northern side of the carriageway and again potentially requiring land purchase to the north of the carriageway. Given the low pedestrian flows, this could be a shared-use facility.
- Some sections of the shared-use facility through Takeley are not LTN 1/20 compliant, particularly given that pedestrian flows are higher in this area. Although this isn’t a critical issue to address on the route, upgrades to this section to provide separate cycle facilities should be considered as a longer-term intervention. Likely to be constrained by carriageway width so might not be feasible.
- M11 J8 is currently a major barrier to cycling and there are no dedicated facilities for cyclists and limited facilities for pedestrians. This junction is currently being upgraded, however improvements to walking and cycling are focussed on the A120 / Birchanger Lane junction to the west of the main motorway junction. This scheme would need to be extended to link up with any proposed facilities along the B1256, including dedicated crossing facilities across the M11 NB on-slip and SB off-slip. A key constraint here will be the width on the bridge over the M11, where there appears to be limited scope to provide a facility for cyclists. A cantilevered cycling bridge may however be an option here.
- Recommendations within Great Dunmow are summarised within the LCWIP, as part of routes GD 1 and GD 3.

- The recommendations for Braintree and Dunmow Road, east of Great Dunmow align with the recommendations for the B1256 east of Takeley i.e., upgrading the existing footway to widen and convert to an LTN 1/20 compliant shared-use facility, aiming for a minimum of 3m width.
- Through Takeley/Little Canfield and Rayne, traffic calming and speed reduction should be investigated and could be provided alongside public realm improvements to reduce the impact of motor traffic on these settlements.
- Through the section connecting to Warish Hall Farm, provision of a shared-use facility along the section that is LTN 1/20 compliant should be investigated.

Strategic Cycle Route D – Alignment 1 via Bartlow

Route Description: Route D, alignment 1, provides a connection between the north of Saffron Walden and Linton. The primary aim of the route would be to provide a connection onto the Linton Greenway, which is currently being implemented in phases and once complete will provide a connection to Cambridge.

Alignment 1 follows minor roads, from Ashdon Road in the north-east of Saffron Walden, through Church End and Ashdon and finally through Bartlow before terminating at the junction with the A1307 on the edge of Linton. The northern section of the route on the approach to Linton is outside of the Uttlesford district boundary and therefore would be the responsibility of CCC as the local highway authority to implement.

Traffic flows along the route are likely to be fairly low and conducive to cycling on the carriageway. However, there is a mixture of speed limits with sections of 60mph in between the villages along the route which reduces the safety and comfort of the route. As such, most of the interventions recommended focus on corridor approaches to reducing vehicular speeds, including traffic calming and extension/reduction of speed limits.

Route Typologies: On-Carriageway (Minor Roads)

Level of Service Commentary

Directness: The route scores 100% for directness as it follows the most direct vehicular route.

Gradient: The route scores 100% for gradient and there are no slopes with a maximum gradient of more than 2%.

Safety: The score for safety could be improved, with an overall score of 44%. Although the roads along the route are lightly trafficked, there are posted speed limits of greater than 30mph on some sections which reduces the overall score for safety. This is particularly the case on the northern and southern extents of the route on the approaches to Linton and Saffron Walden.

Connectivity: The route scores fairly low for connectivity, with an overall score of 43%. This is unsurprising given the inter-urban nature of the route, with a fairly sparse and rural road network meaning connections are limited.

Comfort: The route scores well for comfort, with a score of 100%. This is because the roads along the route are lightly trafficked (<2,500 vehicles per day) which scores an automatic 5 in the RST scoring criteria.

RST Overall Score = 78%

Level of Service Sub-Scores

Directness	Gradient	Safety	Connectivity	Comfort
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Design Recommendations

- This route primarily follows minor roads and connects Saffron Walden with Linton via Ashdon and Bartlow
- Along the initial section of Walden Road, there are daily vehicular flows of circa 2,000 vpd - therefore this link would be suitable for on-carriageway cycling if speeds can be reduced. For this section, the potential to extend the 30mph speed limit from Saffron Walden to Church End should also be investigated to create a more consistent provision and improve compliance with the speed limit.
- Other traffic calming measures could be explored along Walden Road, including visual narrowing and centre-line removal.
- In Church End itself, the main focus should be on providing a consistent footway provision throughout the village. At present there is a sharp gradient on the footway which links Walden Road to Church Hill and this should be addressed. This section of the footway should also be widened to a minimum of 2m using the verge space available.

- Between Church End and Ashdon, traffic calming measures such as centre line removal and visual narrowing are recommended, given the winding nature of the road which might impede visibility to cyclists. This could be implemented alongside a reduction in the speed limit.
- The focus in Ashdon should be the junction between Crown Hill and Radwinter Road, which is currently very wide. The layout of the junction should be simplified and the geometry tightened. As part of this, public realm improvements (seating, greening etc) could be implemented to create a focal point in the village.
- A 20mph speed limit should also be implemented throughout the village, particularly given the presence of the primary school. At present there is a temporary 20mph limit during school hours which shows there is precedent for a reduction in speed limit in the local area.
- The remainder of the route follows Bartlow Road, which will require traffic calming measures in order to reduce vehicle speeds and enable safer on-carriageway cycling conditions.

Strategic Cycle Route D – Alignment 2 via Chalky Road

Route Description: This route provides an alternative to the northern section of Route D. It primarily uses PROWs (bridleways and byways) to link the on-carriageway section of the route along Bartlow Road to Long Lane in Linton and ultimately the A1307 where the Linton Greenway begins.

The southern section of the route is currently designated as a byway and is therefore permits use by cyclists, however the conditions/surfacing of the route is poor and would require improving to enable regular use. The middle section of the route follows Bartlow Road which is very lightly trafficked and offers ideal conditions for conversion to a 'Quiet Lane'. Finally, the route follows a bridleway to connect into Linton to the north which would also require a series of interventions to improve its accessibility and usability.

Route Typologies: On-Carriageway (Minor Roads), PROWs

RST Commentary

Directness: The route scores 100% for directness as its is more direct than the equivalent vehicular route due to its use of PROWs.

Gradient: The route scores reasonably well for gradient (74%), with most sections scoring 5 and containing no gradients greater than 2.5%. The exception to this is the southern end of the route on the initial section of byway from Bartlow Road, where there is a 4% gradient over a slope of 650m.

Safety: The route follows either PROWs or very lightly trafficked roads and therefore scores fairly well in terms of safety with an overall score of 60%. The route is unlit for its length and also lacks passive surveillance which brings down the overall score in terms of safety.

Connectivity: The route scores low for connectivity, with an overall score of 29%. This is due to the route, particularly the PROW sections, being isolated with limited interface with settlements.

Comfort: The route scores relatively poorly for comfort with an overall score of 37%. The score is brought down by the sections along PROW, which are unsurfaced and therefore automatically score 0 in the RST criteria. The on-carriageway sections are along roads with fewer than 2,500 vehicles per day and are smooth machine-laid surfacing, therefore automatically score a 5 in the RST criteria. The focus of improvements on this route would therefore be to improve the comfort along the sections which currently score a 0 under this criterion.

RST Overall Score = 68%

RST Sub-Scores

Directness	Gradient	Safety	Connectivity	Comfort
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Design Recommendations

- This alternative route primarily utilises existing public rights of way to provide an alternative connection between Ashdon and Linton for the northern section of the SCR.
- The initial section of the route follows a byway that runs parallel to Bartlow Road. The majority of this byway is wide enough for cycling, however would require resurfacing to be suitable for the majority of bicycles.
- Bartlow Road (west of the village) would be designated as a 'Quiet Lane' as it is a narrow single track road with low traffic flows.

- At the northern end of the route, a bridleway connects Bartlow Road to Long Lane. Again, this would require resurfacing to provide a sufficient quality route for cyclists. Widening would be required at certain pinch points to achieve a minimum width for cyclists, i.e. at the northern end of the route where the bridleway joins Long Lane.
- For the sections of PROW along the route, including bridleways and byways in particular, consideration should also be given where feasible to including "trotting paths" parallel to the route to maintain the quality of the route for equestrian use.
- For both SCR D alignments, consideration will need to be given at the northern end of the route as to how the routes connect into Linton and/or with the start of the Linton Greenway. This might require the extension of the Linton Greenway further east from its current starting point near Linton Village College, or by providing an improved crossing over the A1307 so that cyclists can continue into the village