



Cambridge County Council

Cambourne to Cambridge Better Public Transport Project

Equality Impact Assessment



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Executive summary

GCP is proposing to construct the infrastructure required to enable a high-quality public transport service to operate between Cambourne and Cambridge. This scheme is known as the Cambourne to Cambridge Better Public Transport project (referred to hereafter as 'the C2C Scheme')

WSP UK Limited has been commissioned by GCP to carry out an equality impact assessment (EqIA) of the C2C Scheme to demonstrate compliance with the Equality Act (2010). An EqIA considers the impact of a project or policy on persons or groups of persons who share characteristics which are protected under Section 4 of the Equality Act 2010 ("protected characteristics").

The EqI Screening identified that a full EqIA should be carried out for the following protected characteristic groups:

- Age;
- Disability; and
- Gender (including pregnancy and maternity).

The EqIA concludes that low level negative impacts may be experienced during construction for young people and their carers and for disabled people due to construction activities and disruption. However, during operation the C2C Scheme is likely to result in high level positive impacts for young and elderly people, medium level positive impacts for disabled users and overall positive impacts of various levels for all genders due to improved connectivity.

1 Introduction

1.1 Background and Context

- 1.1.1 GCP is proposing to construct the infrastructure required to enable a high-quality public transport service to operate between Cambourne and Cambridge. This scheme is known as the Cambourne to Cambridge Better Public Transport project (referred to hereafter as ‘the C2C Scheme’) for which a Transport and Works Act Order application is due to be submitted in Spring/Summer 2023 by the Applicant.
- 1.1.2 WSP UK Limited has been commissioned by GCP to carry out an equality impact assessment (EqIA) of the C2C Scheme to demonstrate compliance with the Equality Act (2010) (see Section 2 for further detail).
- 1.1.3 The C2C Scheme is located in Greater Cambridge, running for approximately 13.6km between Cambourne and Cambridge City Centre along the A428/A1303 corridor, terminating on Grange Road in the western outskirts of Cambridge. The Cambridgeshire and Peterborough Independent Economic Review¹ found evidence that, across the regional economy, growth is higher than official figures suggest. Examination of employment growth in individual companies suggests firms are increasing employment at a rate greater than that captured by the Office of National Statistics (ONS) data; similarly, turnover growth is strong. There are, however: “major doubts as to how well the area is set up to cope with future growth, particularly where the strain is already evident”. Therefore, the following summarises the requirement for the C2C Scheme:
- The A428 is a nationally important route and forms part of the nationally strategically important Oxford-Milton Keynes-Cambridge arc - highlighted by the National Infrastructure Commission as a priority for growth;
 - Large population growth will require the delivery of significant additional housing, much of which is planned to be located to the West of Cambridge along the A428/A1303 route;
 - Employment is growing rapidly within Greater Cambridge², including in destinations on the edge of the city such as West Cambridge and the Biomedical Campus to the

¹ The Cambridgeshire and Peterborough Independent Economic Review (CPIER). Available at: <https://www.cpier.org.uk/final-report/> [Accessed November 2021].

² The Greater Cambridge area covers the footprint of the Cambridge city and South Cambridgeshire district councils – as defined in the City Deal agreement. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/321722/Greater_Cambridge_City_Deal_Document.pdf [Accessed November 2021].

South, with a need to provide effective transport connections from existing and future settlements;

- The demand generated by the growth in housing and employment will generate ever greater levels of demand for travel in and around Greater Cambridge and will thereby exacerbate current congestion issues;
- Car ownership in Greater Cambridge is high, with 85% of households having access to a car compared to the national average³ of 74%;
- The existing rail network does not serve movements along the A428/A1303 route;
- The existing A428/A1303 is inadequate for walking and cycling as a mode of transport into Cambridge;
- Congestion on the route means that current public transport services are unable to offer an attractive alternative to private car; and
- Without intervention, those living and working in the new developments could become locked into a cycle of car dependency and low use of other modes exacerbating capacity issues along the route.

1.2 Description of the C2C Scheme

1.2.1 The C2C Scheme is approximately 13.6km in length, comprising three core elements:

- A new, largely segregated, roadway for bus use, with public transport priority measures between Cambourne and Cambridge where the route joins the existing road network, that avoids general traffic congestion;
- A new travel hub at Scotland Farm; and
- A shared use path (for non-motorised users and emergency and maintenance vehicle access).

1.2.2 The C2C Scheme is shown on the General Arrangement drawings (Drawing no. 70086660-WSP-HGN-XX-DR-HW-001001 to 70086660-WSP-HGN-XX-DR-HW-001018).

1.2.3 Working from west to east, the C2C Scheme begins in Cambourne passing along Sterling Way passing east along a section of segregated route which is being provided as part of the Section 106 agreement for the Cambourne West development. The route crosses Broadway, using a signalised junction, and enters the site of the Bourn Airfield which is allocated for a new development. It passes around the western and northern perimeter of this future new community, where it will be accommodated on its own dedicated route.

1.2.4 The route bears north out of Bourn Airfield and crosses St Neots Road about 150m northwest of Childerley Gate roundabout. A new signalised crossing will be installed on St

³ The Cambridgeshire and Peterborough Independent Economic Review (CPIER). Available at: <https://www.cpier.org.uk/final-report/> [Accessed November 2021]

Neots Road. North of St Neots Road, the route bears east onto a structure that will use retaining walls to take it between the A428 and the nearest of three residential properties at Childerley Lodge.

- 1.2.5 The route continues off road on the south side of the A428 for approximately 1.2km before bearing south to join St Neots Road, 170m west of Scotland Road. C2C buses will be able to use Scotland Road to access the travel hub located east of Scotland Farm. A new signalised junction will allow the buses to pass to and from the travel hub. Scotland Farm Travel Hub will provide space for around 2,000 cars and 300 bicycles, as well as coach parking. It will include recharging points for electric vehicles and will have a central single storey building offering toilets and waiting facilities.
- 1.2.6 The C2C Scheme will continue along St Neots Road for about 2km, passing the northern edge of the village of Hardwick. West of Long Road, the route bears south from St Neots Road, passing west and south of the Comberton plantation (also referred to as the Waterworks site). The route will use a signalised junction across Long Road.
- 1.2.7 The route continues east across farmland that takes it north of the built settlement of Coton. The footpath between Coton and Madingley will be maintained across the route. The route crosses Cambridge Road at a new signalised junction before continuing across Coton Orchard to a new bridge that will carry it over the M11. East of the M11 crossing, the C2C Scheme will enter West Cambridge University Campus, passing along Charles Babbage Road. It will then bear south through a gap between existing campus buildings and enter West Fields, bearing east and south around the edge of Cambridge University Athletics Sportsground
- 1.2.8 The route continues eastward along the Rifle Range track, crossing Bin Brook over a new bridge. The route passes north of the Cambridge Rugby Ground and south of properties on Herschel Road, before connecting to Grange Road, where the C2C Scheme ends, but from where buses will continue along existing routes into Cambridge.

2 Legislation and Policy

2.1 Legislation

2.1.1 The Equality Act⁴ 2010 provides a legal framework to protect the rights of individuals that share defined "protected characteristics" from discrimination (being treated worse than someone else because of who they are). The Equality Act 2010 also introduced the Public Sector Equality Duty (PSED) on all public authorities. In fulfilling this duty, the County Council in all its activities must have 'due regard' to the need to:

- eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act;
- advance equality of opportunity between people who share a protected characteristic and those who do not; and
- foster good relations between people who share a protected characteristic and those who do not.

2.1.2 In addition, the Act states that, when making decisions, an authority must consider methods to reduce any inequalities which may arise for those from a disadvantaged socio-economic background.

2.1.3 The "protected characteristics" which identify the groups who may be disproportionately impacted upon or discriminated against are outlined in **Table 2-1**. Protection extends to those who are perceived to have these characteristics or who suffer discrimination because they are associated with someone who has that characteristic, e.g. cares for someone who is disabled.

Table 2-1 – Protected groups listed under the Equality Act 2010

Protected Characteristic	People and Aspects Included
Sex	Men and women; parenting, caring, flexible working and equal pay concerns.
Religion or belief	Religion refers to any religion, including a lack of religion. Belief refers to any religious or philosophical belief and includes a lack of belief. Generally, a belief should affect your life choices or the way you live for it to be included in the definition.

⁴ The Stationary Office, Equality Act 2010. Available at: http://www.legislation.gov.uk/ukpga/2010/15/pdfs/ukpga_20100015_en.pdf [Accessed: 23rd August 2022]

Protected Characteristic	People and Aspects Included
Age	Children (0-16), young people (17-25), working age people (15-64) and elderly people (65 and over).
Disability	People who have a physical or mental impairment which has a substantial and long-term adverse effect on that person's ability to carry out normal day-to-day activities. This includes sensory, visible or hidden impairments (e.g. cancer, HIV, dyslexia).
Race	Refers to a group of people defined by their race, colour, and nationality (including citizenship) ethnic or national origins. The Census categories can be used for reference, e.g. White British, Chinese, British Asians, Travellers, Gypsies, Roma, those who are of Caribbean origin, people of mixed heritage, White Irish communities, and people of other nationalities who reside in Britain.
Sexual orientation	Includes a wide range of sexual orientations, including but not limited to; heterosexual/straight, gay, lesbian, bisexual, asexual, pansexual
Gender reassignment (Transgender)	Anyone who is proposing to undergo, are undergoing or have undergone a process for the purpose of reassigning their sex, this includes non-binary people as well.
Pregnancy and maternity	People who are pregnant – protection against maternity discrimination (including as a result of breast feeding).
Marriage and civil partnership	People who are married or are in civil partnerships
Deprivation *	People at risk of socio-economic disadvantage.

** Although it is not included as a protected characteristic within the Equality Act 2010, deprivation has been included in the assessment as the Act also requires due regard to reducing the inequalities of outcome which result from socio-economic disadvantage. It should be noted that Cambridgeshire County Council⁵ have adopted the Socio-Economic Duty⁶*

⁵ <https://www.cambridgeshire.gov.uk/news/county-council-backs-motion-to-address-socio-economic-disadvantages-in-decision-making-process>

⁶ <https://equalitytrust.org.uk/socio-economic-duty>

3 Equality Impact Assessments

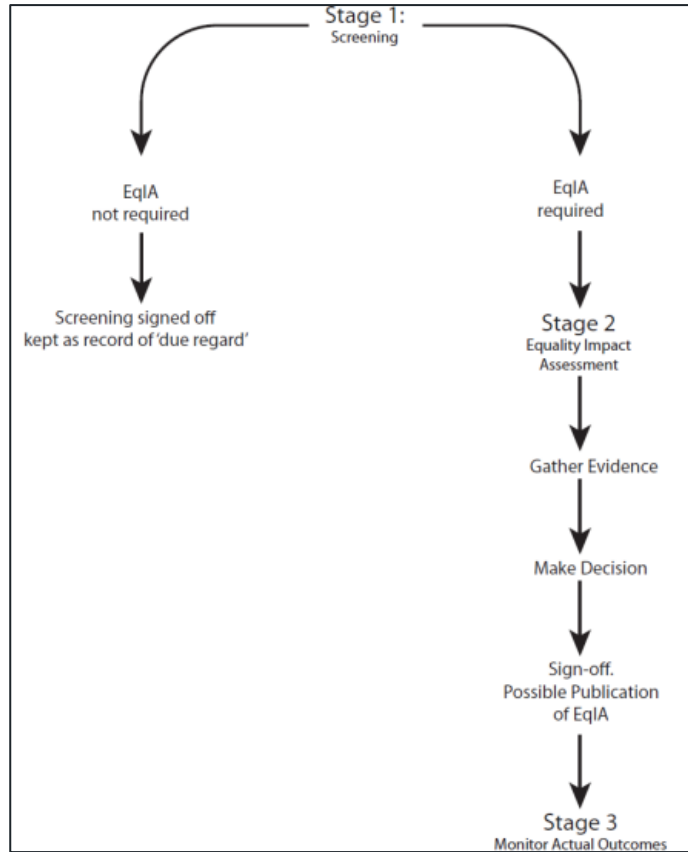
3.1 What is an EqIA?

- 3.1.1 An Equality Impact Assessment (EqIA) considers the impact of a project or policy on persons or groups of persons who share characteristics which are protected under Section 4 of the Equality Act 2010 ("protected characteristics"). The protected characteristics considered within the EqIA are shown in **Table 2-1** above. It is an information gathering tool which enables decision makers within public bodies to implement their equality duty under the Equality Act 2010.
- 3.1.2 An EqIA guides decision makers and designers to:
- Consider the effects of existing and proposed policy or practice on people who share a "protected characteristic"; and
 - Identify opportunities to improve equality of opportunity and eliminate discrimination.
- 3.1.3 An EqIA should be carried out before making decisions, so as to inform and shape the outcomes and prevent and mitigate inequality. They should be updated throughout the decision-making process as necessary, as policy or practices are developed.
- 3.1.4 There are three stages to an EqIA; screening, full assessment and outcome monitoring. The screening stage would determine which protected characteristics are likely to experience potential disproportionate impacts, and therefore require consideration within the EqIA. This may take into account the nature of the public function being exercised and available information on users and impacts.

3.2 Screening and EqIA Methodology

- 3.2.1 National Highways (formally Highways England) has developed guidance to the EqIA process (**Ref. 3.1**). This guidance has been adopted as current industry practice for highways sector schemes and has been adopted by this assessment. This guidance sets out the three key stages involved in an EqIA as depicted in **Figure 3-1**.

Figure 3-1 - The three stage EqIA process



3.2.2 This methodological framework has been used to inform the approach for the EqIA Screening of the C2C Scheme. The key objective of this initial screening exercise was to identify which (if any) of the protected characteristics could experience direct or indirect disproportionate impacts (either positive or negative), thereby setting out whether or not a full EqIA is necessary.

3.2.3 The screening exercise was a process by which the following issues were considered:

- Whether there is evidence to suggest that any of the protected characteristics set out in **Table 2.1** have particular sensitivities or needs in relation to the C2C Scheme;
- Whether there are existing inequalities or access barriers to services or facilities which need to be considered; and
- Whether there are particular community groups or stakeholders representing protected characteristics who have expressed interest or concerns about the C2C Scheme.

3.2.4 In order to complete the screening phase, the following actions have been undertaken:

- An initial review of existing baseline information to gather data and understand the communities which may be affected by the C2C Scheme. This includes review of previously published documents, Census 2021 data (where available), Census 2011 data (where Census 2021 data is unavailable) and information held by the local authority; and

- Identification of the priority groups and sensitive receptors to be considered within this assessment, which have the potential to experience disproportionate impacts as a result of the development of the C2C Scheme.

3.3 Study Area

3.3.1 The EqIA was based on the following Study Areas:

- Protected Characteristic Profile – census data and other publicly available information has been gathered for the administrative areas of South Cambridgeshire (within which the C2C Scheme is located) to provide a baseline of the demographic of the area for the protected characteristics under *the Act*.
- Sensitive receptors, within 1km of the current C2C Scheme boundary (hereafter referred to as ‘the Study Area’), including:
 - Nearby residential and commercial properties;
 - Schools;
 - Care homes;
 - Hospitals;
 - Places of worship;
 - Community facilities;
 - Food banks; and
 - Public transport.

3.3.2 Impacts from changes in traffic flows, noise and vibration and air quality (which can disproportionately impact on several protected characteristic groups) are described in the Environmental Statement for the C2C Scheme. Noise impacts will be assessed within a 600m Study Area and impacts on air quality will be assessed within a Study Area that extends into Cambridgeshire.

3.4 Equality Impact Assessment

3.4.1 The EqIA assesses the impacts of the C2C Scheme on the protected groups. The screening assessment has considered which of the protected groups have the potential to experience disproportionate impacts (in comparison to those not falling under the protected characteristic group), as a result of the C2C Scheme.

3.4.2 **Table 3-1** outlines the basis of the assessment criteria, determining whether a high, medium or low negative or positive impact for each of the protected characteristic groups is assigned. These criteria are based on professional judgement in the absence of industry guidance criteria. In the absence of quantifiable data these guidelines have been used to assess significance. They are guidelines only and should not be treated as definitive.

Table 3-1 – Proposed Equality Impact Assessment Criteria

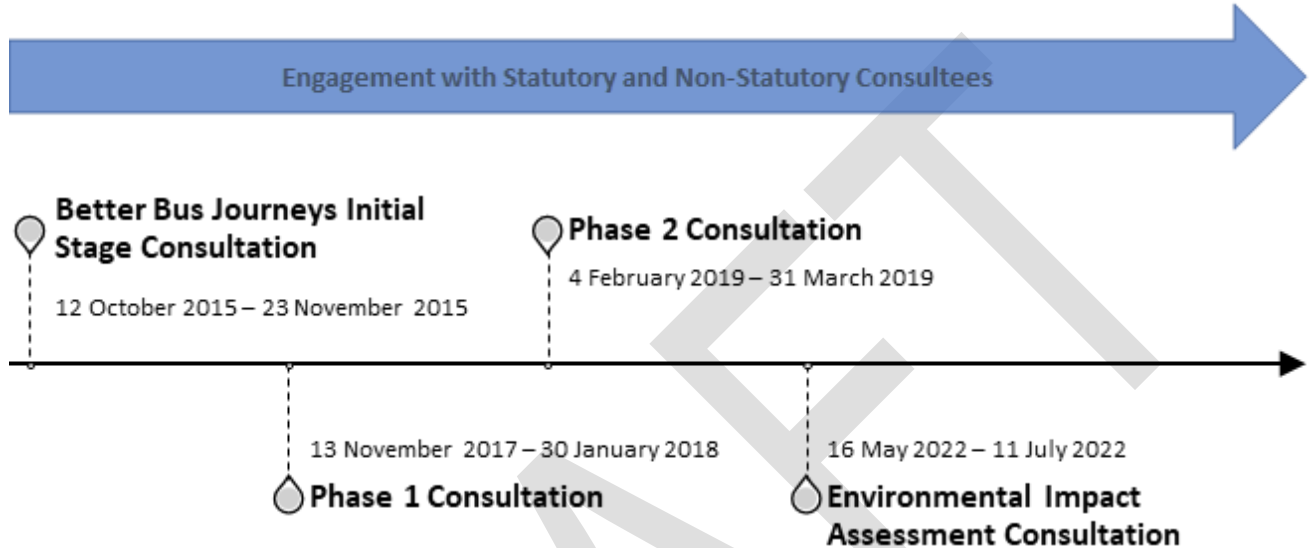
Protected group	High negative impact	Medium negative impact	Low negative impact	High/Medium/Low positive impact
Age	<p>Extent: Likely to adversely affect the well-being of most or all people from the specified equality group.</p> <p>Duration: Long term</p> <p>Reversibility: Not likely to be</p>	<p>Extent: Likely to adversely affect the well-being of many people from the specified equality group.</p> <p>Duration: Medium term</p> <p>Reversibility: Likely to be to some extent</p>	<p>Extent: Likely to adversely affect a small number of people from one or more equality groups</p> <p>Duration: Short-medium term</p> <p>Reversibility: Likely to be</p>	<p>Assessment criteria proposed to follow that for negative impacts in terms of extent, duration and reversibility, but for positive effects instead of adverse ones.</p>
Disability				
Sex/Gender				
Gender identity/ Transgender				
Race				
Religion and Belief				
Sexual Orientation				
Pregnancy and Maternity				
Marriage and Civil Partnerships				



4 Consultation

4.1.1 The consultation programme for the C2C Scheme between 2015 and 2022 is shown in **Figure 4-1** below.

Figure 4-1 - Consultation Timeline



- 4.1.2 During the initial stage consultation in autumn 2015, the Cambourne to Cambridge: Better Bus journeys initial stage consultation asked people about their journey experiences, proposed options and associated provision. More than 2,000 comments were received, with many agreeing in principle to better bus journeys between Cambourne and Cambridge, emphasising that ‘reliable journey times’ would be key to making bus travel a better alternative to the car.
- 4.1.3 The Cambourne to Cambridge Phase 1 consultation was held in winter 2017/2018, on the section of proposed route between the city and Madingley Mulch Roundabout. Consultation on proposals for the Phase 2 section of the route, from Madingley Mulch to Bourn Airfield and on to Cambourne, and for updated proposals for Park and Ride sites followed in early 2019.
- 4.1.4 The fourth public consultation was held in spring/summer 2022. Information was sent to a consultation zone of almost 12,000 addresses in the vicinity of the scheme.
- 4.1.5 The GCP also identified the following groups to consult, which are relevant to the EqlA and protected characteristic groups:
- Landowners and impacted communities;
 - Local groups / representatives;
 - Hospitals, Colleges and Universities;
 - Transport groups;
 - Schools;

- Youth and seldom heard community groups; and
- Residents of Greater Cambridge and anyone with an interest in the scheme.

4.1.6 Consultation activities included:

- Publishing the Consultation Brochure;
- Setting up a project specific page (online portal) on ConsultCambs website;
- Publishing the survey (online and hard copy);
- Holding online event webinars;
- Promotion through print media advertising and social media posts;
- Mailing a leaflet to almost 12,000 properties; and
- Holding information events and in-person presentations.

4.1.7 Consultation activities were promoted through a variety of channels including emails, letters, social media posts and bus stop advertising to ensure accessibility, inclusivity and maximise promotion. The letters sent to landowners and key stakeholders included the option to order a printed consultation pack via phone to ensure the information is accessible to those without access to the internet. The online and in-person information events were conducted on separate days with the in-person events held at accessible locations (Cambourne Village College and Selwyn College). A pre-recorded radio interview discussing the consultation of the C2C Scheme was played on 18th May 2022 to target those unable to access written media.

4.1.8 During this public consultation, respondents were asked to comment if they felt any of the proposals would either positively or negatively affect or impact people or groups with a protected characteristic. 408 comments were received from 213 respondents, which were then coded into themes. 8% of coded comments related to the impact of the scheme on those with limited mobility and the same percentage had concerns about the impact on the elderly. Typical comments expressed concern that elderly and disabled people in those areas would be disproportionately affected by the noise of the building and the negative effect of the busway on the environment.

5 Local social profile

5.1 Introduction

- 5.1.1 The C2C Scheme crosses the boundary between the local authorities of South Cambridgeshire and Cambridge. The 2021 Census⁷ recorded the population of South Cambridgeshire as 162,000, and the population of Cambridge as 145,700.
- 5.1.2 A social profile for South Cambridgeshire and Cambridge has been compiled from publicly available data to provide context for the assessment. This comprises information on the following:
- Protected characteristic groups (PCGs);
 - Local communities; and
 - Sensitive receptors, local community facilities and public transport.

5.2 Protected Characteristic Profile

Data from the Office of National Statistics (ONS) has been gathered (as outlined in paragraph 3.2.4) on the following protected characteristics from the Equality Act 2010:

- Age;
 - Disability;
 - Race/ethnicity;
 - Religion or belief;
 - Sex/Gender;
 - Gender reassignment;
 - Sexual Orientation; and
 - Marriage and civil partnership.
- 5.2.2 Due to the lack of publicly available data, certain protected characteristics, including pregnancy and maternity have not been included in the baseline. Although not required under the Equality Act 2010, the social profile also includes deprivation as it provides a measure of a combination of social-economic matrices.

⁷ Population and household estimates, England and Wales: Census 2021. Available online at <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationandhouseholdestimatesenglandandwalescensus2021> [Accessed: 24th August 2022]

Race/Ethnicity Profile

- 5.2.3 The percentage of each ethnicity as measured by ONS, and as outlined in the 2021 Census⁸, is presented in **Table A-3** in **Appendix A**. It shows that the percentage of the population classified as White in South Cambridgeshire (89%) is higher than the England and Wales average percentage (82%), but lower within Cambridge (66%). The proportion of the population classified as Asian, Asian British and Asian Welsh is higher than national average (9%) in Cambridge (at 15%) but lower for South Cambridgeshire (6%).

Religion Profile

- 5.2.4 The proportion of different beliefs held by the population in South Cambridgeshire and England and Wales⁹ is provided in **Table A-4** in **Appendix A**. The table shows that the majority of the population in South Cambridgeshire and Cambridgeshire identify as Christian (58.8% and 44.8% respectively), which is lower than the national average. It also indicates that the population in South Cambridgeshire and Cambridgeshire has a higher percentage than the England and Wales average (25.1%) that identify as having no religion.

Age Profile

- 5.2.5 The age profile in South Cambridgeshire and Cambridge in 2021 compared to England and Wales⁹ is provided in **Table A-5** in **Appendix A**. The table shows that South Cambridgeshire has a greater percentage of residents aged 5 to 14, and 35 to 85 and over compared to the national average, and a lower percentage of residents aged 15 to 34. Cambridge has a lower percentage of residents aged 0 to 14 and 55 to 64, and a higher percentage of residents aged 15 to 54, and 75 to 84.

Sex Profile

- 5.2.6 The sex profile of South Cambridgeshire in 2021 is shown in **Table A-6**. It shows that the percentage of females in South Cambridgeshire and Cambridge is less than the national average, and the percentage of males is higher than the national average.

Disability

- 5.2.7 In South Cambridgeshire and Cambridge, a total of 148,755 and 123,867 residents were living with a long-term health problem or disability¹⁰ respectively in 2011. The percentage of

⁸ Office of National Statistics, (2021). Ethnic group. Available at: https://www.nomisweb.co.uk/sources/census_2021_bulk

⁹ Office of National Statistics, (2011). Religion. Available at: <https://www.nomisweb.co.uk/census/2011/ks209ew> [Accessed: 24th August 2022]

¹⁰ Office of National Statistics, (2011). Long-term health problem or disability. Available at: <https://www.nomisweb.co.uk/census/2011/qs303ew> [Accessed: 25th August 2022]

those who are limited a lot or a little by their long-term health problem or disability is below the national average, as shown in **Table A-7** in **Appendix A**.

- 5.2.8 **Table A-8** in **Appendix A** shows that a greater percentage of the population within South Cambridgeshire experience sight loss within every category in comparison to the whole of England. Cambridge however has a lower percentage within each category in comparison to England¹¹.
- 5.2.9 In total 1984 people were registered as deaf or hard of hearing in Cambridgeshire in 2010, as shown in **Table A-9** in **Appendix A**¹².

Marital and Civil Partnership

- 5.2.10 The 2011 Census marital and civil partnership status in South Cambridgeshire and England and Wales¹³ for all usual residents aged above 16 is shown in **Table A-10** in **Appendix A**. South Cambridgeshire contains a larger percentage of residents who are married and a lower percentage of residents who are single, separated, divorced or formerly in a same-sex civil partnership which is now legally dissolved, and widowed or surviving partner from a same-sex civil partnership compared to the national average. Cambridge contains a significantly higher percentage of the population who are single and a lower percentage who are married, separated, divorced or widowed.
- 5.2.11 The 2021 census data for marital and civil partnerships has been released for Cambridge which saw a decrease in the percentage of people aged 16 years and over who had divorced or dissolved a civil partnership¹⁴ (from 6.6% in 2011 to 6.0% in 2021). Gender Reassignment
- 5.2.12 Trans is a general term for people whose gender is different from the gender assigned to them at birth. The 2021 Census¹⁵ states that 94.33% of people aged 16 and over in South Cambridgeshire, and 89.73 in Cambridge have a gender identity the same as their sex registered at birth, compared with a national (English) average of 93.47%. Those who did

¹¹ RNIB Sight Loss Data Tool Version 4, available online at: <https://www.rnib.org.uk/professionals/health-social-care-education-professionals/knowledge-and-research-hub/sight-loss-data-tool/>

¹² Number of people registered as deaf or hard of hearing in Cambridgeshire. Available online at: <https://digital.nhs.uk/data-and-information/publications/statistical/people-registered-as-deaf-or-hard-of-hearing/people-registered-as-deaf-or-hard-of-hearing-england-year-ending-31-march-2010>

¹³ NOMIS (2011). KS103EW - Marital and Civil Partnership Status [online] available at: <https://www.nomisweb.co.uk/census/2011/ks103ew> [Accessed: 25th August 2022]

¹⁴ How life has changed in Cambridge, available online at: <https://www.ons.gov.uk/visualisations/censusareachanges/E07000008/?s=09>

¹⁵ Office of National Statistics, (2021). Gender Identity. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/genderidentity/bulletins/genderidentityenglandandwales/census2021> [Accessed 23 February 2023]

not identify with their sex registered at birth equates to a total of 262,000 people nationally, for which the following breakdown was found:

- 118,000 (0.24%) answered “No” but did not provide a write-in response
- 48,000 (0.10%) identified as a trans man
- 48,000 (0.10%) identified as a trans woman
- 30,000 (0.06%) identified as non-binary
- 18,000 (0.04%) wrote in a different gender identity

Deprivation

- 5.2.13 The Indices of Multiple Deprivation¹⁶ (IMD) 2019 use a combination of information relating to income, employment, education, health, skills and training, barrier to housing and services, and crime to create an overall score of deprivation. These scores are then used to rank specific geographical extents, out of a total of 32,844 areas in England. A low rank indicates higher, relative deprivation; hence the most deprived area is ranked 1. IMD data is broken down into smaller areas, known as Lower-layer Super Output Areas (LSOA), which are a standard statistical geography designed to be of a similar population size, with an average of approximately 1,500 residents or 650 households.
- 5.2.14 The C2C Scheme lies in the ten LSOAs shown in **Table A-11**, in **Appendix A**, and on **Figure 1: Equality Impact Assessment Receptors**.
- 5.2.15 There are pockets of deprivation crossed by the C2C Scheme (LSOA 021E and 009A) which may result in different use of the Scheme in these areas (for example those with limited access to private vehicles are more likely to travel by public transport or active means). The limited difference in deprivation levels between the other affected LSOAs within the C2C Scheme mean that people living and working within these areas are likely to use and uptake the C2C Scheme in similar ways (depending on host and source destinations and means of travel).

Sexual Orientation

- 5.2.16 The sexual orientation profile of Cambridge and South Cambridge¹⁷ as reported in 2021 is shown in **Table A-12**, in **Appendix A**. This shows that the percentage of the population of Cambridge who identified as gay or lesbian, bisexual, pansexual, asexual, queer or ‘all other sexual orientations’ on the 2021 census was higher than the national percentage. The

¹⁶ Indices of Deprivation, Indices of Deprivation 2019 (2019). Available at: http://dclgapps.communities.gov.uk/imd/iod_index.html [Accessed: 25th August 2022]

¹⁷ Sexual Orientation England and Wales (2021) Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/sexuality/bulletins/sexualorientationenglandandwales/census2021>

percentage in of the population in South Cambridge who identified as straight or heterosexual on the 2021 census was higher than the national percentage.

5.3 Communities and facilities in proximity to the C2C Scheme

5.3.1 Residential communities located within the Study Area (within 1km of the current C2C Scheme boundary) include the following:

- Cambourne, at the western edge of the C2C Scheme;
- Highfields Caldecote, located 425m south of the C2C Scheme;
- Hardwick, on the southern side of the C2C Scheme;
- Madingley, located 700m north of the C2C Scheme;
- Coton, on the southern side of the C2C Scheme; and
- the western fringe of Cambridge, at the eastern edge of the C2C Scheme.

5.3.2 The C2C Scheme is located in an area spanning small communities and villages connected via the A428, agricultural land and the urban fringe of western Cambridge. Of these communities, Cambourne is the largest with a population of approximately 10,400 people and contains the majority of community facilities including education and healthcare facilities. The city of Cambridge is located to the east of the C2C Scheme and provides the majority of the community facilities for the area; however, the majority of these lie outside of the Study Area.

5.4 Public transport, pedestrian and cycling facilities

Public Transport

5.4.1 There are several PRoW, cycle paths and transportation facilities located within the Study Area.

5.4.2 Existing public transport includes a direct bus service from Cambourne to Cambridge, with approximately 3 buses per hour at 20-minute intervals, with stops along the St Neots Road at Hardwick. Along the route of the C2C Scheme there are 14 bus stops servicing the following bus routes: 4, and 18. There are no taxi ranks or rail stations located within the C2C Scheme boundary.

5.4.3 New bus stops will be provided along the busway at Cambourne, west of Bourn Airfield, east of Bourn Airfield, Hardwick, Coton and West Cambridge.

Pedestrians, Cyclists and Equestrians

5.4.4 Two unsegregated cycle lanes run along either side of the St Neots Road at Hardwick (linking with the Madingley Road to Cambridge), close to the C2C Scheme. One off-road cycle and pedestrian path runs to the south of the West Cambridge site, crossing the C2C Scheme. There are also unsegregated cycle lanes on Grange Road at the eastern end of the route.

- 5.4.5 There are no National Cycle Network (NCN) routes in the Study Area, but there are NCN routes running through Cambridge City Centre including NCN Route 51 to Oxford from Cambridge, and Regional Cycle Network Route 24, which runs north-west of Cambridge towards St Ives which cyclists on the local network may travel onward to.
- 5.4.6 There are 17 PRow within or partly within the Study Area including three bridleways. These are shown in **Table A-11 in Appendix A** and on **Figure 1: Equality Impact Assessment Receptors**.
- 5.4.7 Other pedestrian routes include footways along the St Neots Road and in Cambourne, Hardwick, Highfields Caldecote, Coton and Cambridge.

5.5 Sensitive Receptors

- 5.5.1 A number of sensitive receptors situated within the Study Area have been identified below. Sensitive receptors identified in this section are not considered to be exhaustive and further receptors may be identified during further public consultations, assessment development and scheme development.

Higher Education Centres

- 5.5.2 There are a large number of facilities owned by the University of Cambridge at the eastern end of the C2C Scheme, including research institutes, laboratories, libraries and university sports facilities.

Schools

- 5.5.3 There are four schools located in the Study Area:
- Jeavon's Wood Primary School, 530m west of the C2C Scheme. This is a mixed gendered school for pupils aged 4 to 11. The school has a capacity of 420 and currently caters for 410 as of September 2022. 13.4% of children are eligible for free school meals;
 - Coton Church of England Primary School, 235m south of the C2C Scheme. Coton Church of England Primary School is a voluntary controlled mixed gendered school catering for pupils aged 4 to 11. The school has a capacity of 120 and currently caters for 109 students as of September 2022. 14.7% of these children are eligible for free school meals¹⁸;
 - Hardwick and Cambourne Community Primary School (Hardwick Campus), 320m south of the C2C Scheme. This is a community mixed gendered school for pupils aged 3 to 11. The school has a capacity of 735 and currently caters for 517 students as of September 2022. 15.3% of these children are eligible for free school meals¹⁸; and

¹⁸ Gov.uk Get Information About Schools: Coton Church of England (Voluntary Controlled) Primary School. Available <https://get-information-schools.service.gov.uk/ SelectedTab= Establishments> [Accessed: 8th September 2022]

- The Vine Inter-Church Primary School, 330m south of the C2C Scheme. Vine Inter-Church Primary School is a mixed gendered school catering for pupils aged 4 to 11. The school has a capacity of 420 and currently caters for 402 students as of December 2022. 15.7% of these children are eligible for free school meals¹⁸.

Nurseries

5.5.4 There are three nurseries located within the Study Area:

- Coton Preschool located 320m south of the C2C Scheme. Coton Preschool provides year round care for children aged 0 to 5 years old, five days a week;
- Stephen Perse Nursery Madingley located 950m north of the C2C Scheme. Stephen Perse Nursery Madingley provides care for children aged 10 months to 5 years;
- Hardwick Pre-School, located 450m south of the C2C Scheme, providing care for children aged 2-5.

Places of Worship

5.5.5 There are four places of worship located within the Study Area:

- Cambourne Church Centre, 700m west of the C2C Scheme;
- Peacehaven Baptist Church, 750m west of the C2C Scheme;
- Hardwick Evangelical Church, adjacent to the C2C Scheme on St Neots Road; and
- St Peter's Church Coton, 175m south of the C2C Scheme.

Social and Healthcare Providers

5.5.6 Gracefield Nursing Home and Residential Care Home is registered to provide care for dementia, learning disabilities, mental health conditions, old age, physical disabilities and sensory impairments, specialising in Alzheimer's disease. This is the only care home within the Study Area.

5.5.7 Monkfield Medical Practice is located in Cambourne and is the only GP service located within the Study Area.

Allotments

There is a public allotment located 100m south of the C2C Scheme in Cambourne, and another south of Coton Orchard, approximately 75m from the Scheme boundary.

Other Facilities

5.5.8 Within the Study Area there are other community facilities including a supermarket, Great Cambourne cricket pitch, the Hub Community Centre, Cambridge American Cemetery and Memorial, Madingley Hall, Hardwick Scout Hut, Coton Orchard Garden Centre and Coton Village Hall. There are also a number of open and play spaces, including Hardwick Play Park, one in Upper Cambourne, and south of The Footpath in Coton.

6 Equality Impact Screening

6.1 Overview

6.1.1 This section presents the Equality Impact (EqI) Screening assessment completed for the C2C Scheme, taking into account the baseline information outlined in this document. It also takes into account the following conclusions, which have been drawn from noise, air quality and traffic assessments of the Environmental Statement, alongside any associated health impacts:

- Technical Report 1: Acoustics of the Environmental Statement has identified that significant adverse noise impacts are predicted to be possible at approximately 279 receptors as a result of the construction works during the site clearance, earthworks and road construction. Additionally, potentially significant adverse vibration impacts are predicted at 95 receptors as a result of the construction works. As such, temporary negative health outcomes associated with mental health for those residing in these receptors are anticipated during construction.
- Technical Report 2: Air Quality has identified that based on the current local air quality in the area, the proximity of sensitive receptors to the roads likely to be used by construction vehicles, and the likely numbers of construction vehicles and plant that will be used, the effects within the assessment of air quality during construction are considered to be negligible and not significant.
- Technical Report 2: Air Quality also concluded that overall, in relation to AQS objectives and the PM_{2.5} limit value, the implementation of the C2C Scheme is not expected to significantly effect local air quality. As such, it is anticipated that there will be a neutral outcome on human health associated with respiratory and cardiovascular diseases during construction or operation of the C2C Scheme.
- Technical Report 12: Traffic and Transport concluded that change in journey time for drivers and passengers for road links in the study area is not expected to be greater than 10 seconds as a result of construction traffic as such the magnitude of impact is expected to be low. The resultant level of effect will be negligible to minor and adverse effect (not significant). Additionally, the level of effect on journey delay for pedestrians and cyclists due to construction traffic will be **negligible to minor** and **adverse** (not significant).
- Technical Report 12: Traffic and Transport states that there are no significant existing road safety issues within the vicinity of the C2C Scheme. Construction traffic is therefore not expected to have a material adverse effect on accidents and safety.
- Technical Report 12: Traffic and Transport concludes that the change in traffic from the C2C Scheme during operation will result in a generally beneficial effect across the network for pedestrian journey time.

6.1.2 Key elements of the C2C Scheme which could disproportionately affect vulnerable and protected characteristic groups are as follows:

- C2C Scheme and design considerations:
 - Provision of dedicated busway;
 - Provision of a segregated active travel route, with tie-ins to existing infrastructure;
 - Provision of a travel hub for a ‘park and ride’ service to access the dedicated busway;
 - Retention and relocation of a number of existing bus stops, and provision of new, along St Neots Road to accommodate the active travel route; and
 - Amendments to PRow and WCH routes, including Bridleway 39/30 which will be permanently rerouted around the toe of the proposed M11 Bridge embankment.
- Construction considerations:
 - Pedestrian or community severance due to disruption caused by construction works;
 - Temporary diversion to key routes, PRow and cycle paths;
 - Access to local services could be affected during construction; and
 - Noise, dust, and environmental impacts associated with the construction of the C2C Scheme have the potential to impact on health and wellbeing of the local populations.

6.1.3 The screening assessment is presented in **Table 6-1** and supported by the rationale provided in the following sections.

Table 6-1 – Equality impact screening

Protected group	Impact		
	Negative impact	Positive impact	Unknown
Age	Potential for adverse impacts during construction.	Potential for beneficial impacts during operation.	-
Disability	Potential for adverse impacts during construction and operation.	Potential for beneficial impacts during operation.	-
Gender (including pregnancy and maternity)	Potential for adverse impacts during construction and operation.	Potential for beneficial impacts during operation.	-
Gender identity / Transgender	No impact likely to cause disproportionate adverse effects to this protected characteristic.	No impact likely to cause disproportionate adverse effects to this protected characteristic.	-

Protected group	Impact		
	Negative impact	Positive impact	Unknown
Race	No impact likely to cause disproportionate adverse effects to this protected characteristic.	Potential for beneficial impacts during operation.	-
Religion and belief	Potential for adverse impacts during construction.	Potential for beneficial impacts during operation.	-
Sexual orientation	No impact likely to cause disproportionate adverse effects to this protected characteristic.	No impact likely to cause disproportionate adverse effects to this protected characteristic.	-
Marriage and civil partnership	No impact likely to cause disproportionate adverse effects to this protected characteristic.	No impact likely to cause disproportionate adverse effects to this protected characteristic.	-
Deprivation	No impact likely to cause disproportionate adverse effects to this protected characteristic.	Potential for beneficial impacts during operation.	-

6.2 Age

- 6.2.1 There are no schools or nurseries located within the C2C Scheme boundary. However, Coton Preschool and Coton Church of England Primary School are located 320m and 235m south of the C2C Scheme boundary respectively. The C2C Scheme bisects Cambridge Road, the main access road to Coton Preschool and Coton Church of England Primary School from the A1303. Journeys between these facilities and the local communities in the area may therefore be disrupted during construction. Pupils and children in care (and their carers) from communities east and west of Coton can utilise the Scotland Farm Travel Hub park and ride facility, dedicated busway and Active Travel Route (ATR) to access these educational facilities once the C2C Scheme is in operation.
- 6.2.2 Based on the National Travel Survey England 2018, people that are aged between 17 and 20, and over 70, have a higher average use of local buses¹⁹. The C2C Scheme involves restricting St Neots Road during the construction of an ATR, which forms part of the bus route for bus service 4. Some bus stops will also need to be relocated along this road to

¹⁹ Department for Transport, (2018). National Travel Survey: England 2018.

accommodate the Scheme, with temporary provision during construction in these locations. However, no existing bus services are anticipated to require diversion during construction. During the operational phase, the C2C Scheme will increase public transport facilities in the area which will benefit young and older people.

- 6.2.3 There are allotments (which are typically used by higher proportions of older people) located approximately 75m south of the Scheme boundary, near Coton Orchard. These will not be directly affected by the C2C scheme and access from High Street and Brook Lane will not be affected.
- 6.2.4 There will be a temporary and permanent impact on the practice rugby ground, owned by Cambridge University, which will experience temporary and permanent land take to accommodate the C2C Scheme. During construction, the practice field will be occupied. A proportion of this land will be acquired permanently to be used for the operational scheme, and therefore limit facilities available to university students.
- 6.2.5 Temporary and permanent reductions or improvements in air quality and increases in noise levels (as a result of construction activities or amended traffic patterns) could impact disproportionately on young people or older people who are more sensitive to such changes, and who can find adverse impacts to be more detrimental to health. For example, air pollution could lead to a negative influence on neurodevelopment and lung function growth in children²⁰ and could also lead to negative health outcomes for young people with respiratory illness²¹. Additionally, people with dementia could be hyper-sensitive to noise and could be affected by increased noise levels²². Air quality is not reported to be significantly adversely affected during construction or operation, with the implementation of measures outline in the CoCP, and therefore there are unlikely to be disproportionate impacts on this protected characteristic. However, there are likely to be a number of receptors that could be subject to significant increases in noise and vibration levels during construction, as detailed in paragraph 6.1.1. even with implementation of measures outlined in the CoCP
- 6.2.6 The Travel Hub provides a permanent location for car parking and bus provision, but also will provide accessible toilet facilities, cycle storage and waiting areas. Inclusive design will ensure that these facilities are suitable for older users with limited mobility.

²⁰ World Health Organisation, (2018). Air pollution and child health: prescribing clean air.

²¹ BMJ, (2020). Air pollution from road traffic contributed to girl's death from asthma, coroner concludes. BMJ 2020; 371

²² Designing Buildings Wiki, (2020). Dementia and the built environment. Available at: https://www.designingbuildings.co.uk/wiki/Dementia_and_the_built_environment (Accessed: 12 September 2022).

6.3 Disability

- 6.3.1 The 2011 census reported that 148,755 residents in South Cambridgeshire were living with a long-term health problem or disability.
- 6.3.2 Construction plant has the potential to generate additional noise, dust and lighting which people with respiratory or long-term illnesses could be temporarily disproportionately affected by.
- 6.3.3 There is potential for the temporary diversion of key routes and PRoW during construction. Although wheelchair and mobility scooter users have not currently been identified as using facilities within the C2C Scheme boundary in high numbers, active travel and public transport are likely to be used by those who are not able to drive or have access to an accessible vehicle.
- 6.3.4 Cambridge and Peterborough Combined Authority provide a free bus pass for those who meet one of the following criteria:
- You are sight impaired or severely sight impaired;
 - You are registered as profoundly or severely deaf;
 - You are without speech or have limited speech;
 - You are without the use of both arms;
 - You qualify for the higher rate mobility component of the Disability Living Allowance;
 - You have been or would be refused a driving licence for medical reasons;
 - You have a learning disability;
 - You have a Personal Independence Payment (PIP) and been awarded at least eight points against either the PIP 'Moving around' and/or 'Communicating verbally' activities;
 - You have a war pensioner's mobility supplement; or
 - You are an ex-service man or woman who has lost a leg.
- 6.3.5 As the C2C Scheme provides a dedicated busway to develop a better integrated network of public transport, this has the potential to have a disproportionate positive impact on disabled people who meet the criteria above and will therefore benefit from free use of the C2C Scheme.
- 6.3.6 Bridleway 39/30 will be permanently rerouted around the toe of the proposed M11 Bridge embankment. It is not anticipated that the rerouting will disproportionately affect disabled equestrian users due to the minor nature of the changes.
- 6.3.7 The C2C Scheme provides a dedicated busway and ATR to develop a wider, better integrated network of public transport and walking and cycling-friendly routes, which will provide wider footways, segregation from traffic, flush surfaces and safer crossings, which will be an improvement on current provision, and will benefit all users. However, there is potential for conflict with other users (such as pedestrians and cyclists) on shared use sections and at interfaces with private accesses to residences, and for barriers to use at crossings (particularly uncontrolled crossings) for those with visual impairments. There are

also a number of short sections where gradients may be challenging for manual wheelchair users or users with mobility limitations:

- Chainage 11250 – 11500 - this section is partly on embankment and crosses Bin Brook (0.65% and 1.5% gradient on either side);
- The approach to Cambridge Road (in Coton), with a gradient of 3.5%; and
- The Overbridge for the M11 (4% at steepest gradient on eastern embankment).

6.3.8 Temporary and permanent reductions or improvements in air quality and noise levels (as a result of construction activities or amended traffic patterns) have the potential to impact disproportionately on disabled people who are more sensitive to such changes, and who can find adverse impacts to be more detrimental to health or harder to cope with. For example, air pollution could lead to negative health outcomes for people with respiratory illness²¹. People with dementia²³ and autism²⁴ could be hyper-sensitive to noise and could be affected by increased noise levels.

6.3.9 The Travel Hub provides a permanent location for car parking and bus provision, but also will provide accessible toilet facilities, cycle storage and waiting areas. Inclusive design will ensure that these facilities are suitable for disabled users..

6.4 Sex / Gender (including pregnancy and maternity)

Education escort

6.4.1 The National Travel Survey England 2018 data shows that women make more education escort trips than men, with an average of 143 trips made per person per year by women and 109 trips made per person per year by men²⁰ in 2018. There are no schools located within the C2C Scheme boundary. Coton Preschool and Coton Church of England Primary School are located 320m and 235m south of the C2C Scheme boundary respectively. The C2C Scheme bisects Cambridge Road (in Coton), the main access road to Coton Preschool and Coton Church of England Primary School from the A1303. Therefore, women have the potential to be disproportionately affected during construction due to road congestion on access routes from the A1303.

Public transport use

6.4.2 The 2018 survey also indicates that women take larger numbers of bus trips than men for all age groups, with an average of 54 trips made per person per year by women, and 41 trips

²³ GOV.UK, (2005). Inclusive Mobility: making transport accessible for passengers and pedestrians. Available at: Inclusive mobility: making transport accessible for passengers and pedestrians - GOV.UK (www.gov.uk) (Accessed: 12 September 2022)

²⁴ Kristi Gaines, (2014). The Effects of Environmental Noise on the Behaviour of Children with Autism Spectrum Disorders. The International Journal of Architectonic Spatial and Environmental Design 7(2):51-64

made per person per year by men. It is anticipated that the construction of the C2C Scheme is expected to have a negligible impact on buses and public transport users, and therefore women are not anticipated to be disadvantaged by the C2C Scheme, but may disproportionately benefit from the improvements during operation.

Active travel

- 6.4.3 The National Travel Survey England 2018 data indicates that men accounted for a much higher number of cycle trips in all age groups than women, with an average of 25 trips made by men per person per year, whilst women made an average of 10 trips per person per year. The survey also shows that the majority of cycling trips are for leisure and commuting. Therefore, men are more likely to be affected by any delays and disruptions to St Neots Road which has two unsegregated cycle lanes running along either side of the road at Hardwick (linking with the Madingley Road to Cambridge). Access should be maintained where possible or diversions of existing cycle routes should be provided during construction to ensure this user group is not disproportionately affected.

Safety and Security

- 6.4.4 The Travel Hub provides a permanent location for car parking and bus provision, but also will provide toilet facilities, cycle storage and waiting areas. Inclusive design will ensure that these facilities are suitable for all genders and will provide changing facilities for those caring for young children.
- 6.4.5 There will be lighting installed in areas of high use, including junctions with highways, at busway stops, and at the travel hub, which will increase perceptions of safety. The lighting strategy for the C2C Scheme outlines the proposed lighting regime for the Active Travel Route, bus stops and shelters and the Travel Hub, considering the safety and security of users and in compliance with relevant British Standards.

Access to healthcare

- 6.4.6 No healthcare facilities, including those for pre and post-natal care are affected by the C2C Scheme. The CoCP states that the Principal Contractor will ensure that access points will be suitable for ambulances.

6.5 Gender identity/transgender

- 6.5.1 Limited information regarding the barriers to travel for trans people is available, however trends show that trans people experience higher incidents of hate crime because of their gender identity. The Crime Survey for England and Wales²⁵ recorded that there were 2,630

²⁵ Office for National Statistics. Crime Survey for England and Wales 2022. Available online at: <https://www.crimesurvey.co.uk/en/SurveyResults.html> [Accessed 22/02/2023]

hate crimes against trans people, 3% higher than the previous year. Therefore, it is reasonable to conclude that trans people may alter their journeys or avoid certain transport modes for personal security. Inclusive design of the Travel Hub, and of the Active Travel Route should improve perceptions of safety for vulnerable users. It is not anticipated that the C2C Scheme will result in disproportionate impacts for users in this protected characteristic group.

6.6 Race

6.6.1 There is no clear evidence, data or rationale to consider that the C2C Scheme will have a disproportionate effect on these groups. However, it is known that people from ethnic minorities are less likely to partake in active travel. For example, Sustrans reported²⁶ in 2020 that 74% of people from ethnic minority groups in cities and towns do not currently cycle, with confidence stated as one of the main reasons. The Active Travel Route will be segregated from the road, and will be 3.5m wide along the majority of its length. This dedicated provision may result in those with lower levels of confidence feeling able to use more active modes of travel.

6.7 Religion and belief

- 6.7.1 There are no places of worship located within the C2C Scheme boundary. However, St Peter's Church Coton is located 175m south of the C2C Scheme boundary. The C2C Scheme bisects Cambridge Road, the main access road to St Peter's Church Coton from the A1303. Hardwick Evangelical Church is also located on St Neots Road, along which the proposed C2C Scheme will run. Journeys between these facilities and the local communities in the area may therefore be disrupted during construction. As long as safe temporary road diversions, temporary traffic management or partial closures are provided to maintain access, it is anticipated that worshippers will not be disproportionately affected during construction.
- 6.7.2 Worshippers from communities east and west of Coton can use the Scotland Farm Travel Hub park and ride facility, dedicated busway and ATR to access this facility once the C2C Scheme is in operation.

6.8 Sexual orientation

6.8.1 Those identifying as LGTBQ+ may be targeted under hate crimes and avoid locations for fear of being assaulted, threatened, or harassed because of their status. The Crime Survey for England and Wales estimates that there were just over 17,000 hate crimes due to an

²⁶ <https://www.sustrans.org.uk/our-blog/news/2020/july/new-report-shows-large-unmet-demand-for-cycling-from-ethnic-minority-and-disadvantaged-groups#>

individual's sexual orientation recorded by police in 2020/21; this figure is 7% higher than the previous year. Inclusive design of the Travel Hub, and of the Active Travel Route should improve perceptions of safety for vulnerable users. It is not anticipated that the C2C Scheme will result in disproportionate impacts for users in this protected characteristic group. Marriage and Civil Partnerships

6.8.2 There is no clear evidence, data or rationale to consider that the C2C Scheme will have a disproportionate effect on these groups.

6.9 Deprivation

6.9.1 There is no clear evidence, data or rationale to consider that the C2C Scheme will have a disproportionate effect on these groups during the construction stage.

6.9.2 The C2C Scheme crosses multiple LSOAs, including LSOA 021E which is amongst the 40% least deprived neighbourhoods in the country. Poorer households are much less likely to have access to private vehicles²⁷ and therefore have an existing dependence on the walking and cycle network, for education, employment or access to facilities. The C2C Scheme will provide an improved busway and ATR which may benefit this user group during operation. The Outline Business Case states that *“there may be slight beneficial impacts that arise from the free parking (at the Travel Hub) compared to costly parking in the city centre, and the reduction of miles travelled therefore a reduction in fuel consumption, though this may be offset by the cost of the bus service, however this is expected to be in line with costs across the Cambridge network”*.

6.10 Summary

6.10.1 In summary, older and younger people, people with disabilities and both men and women would have the potential to be adversely impacted by the C2C Scheme during construction, but also are likely to benefit from the improved busway and ATR during operation.

6.10.2 On the basis of the potential impacts that have been outlined above, the Eql Screening has identified that a full EqlA should be carried out for the following protected characteristic groups:

- Age;
- Disability; and
- Gender (including pregnancy and maternity).

²⁷ Office for National Statistics, (2011). Available at: <https://www.gov.uk/government/statistical-data-sets/nts07-car-ownership-and-access> (Accessed: 16 September 2022)

6.10.3 Actions proposed to be accounted for in the full EqIA, and thus to be included within the C2C Scheme are listed as follows (but not limited to):

- Where possible, continue consultation with receptors groups to identify potential issues;
- Ensure temporary road and non-motorised route diversions would be in place to mitigate impact on women and men, young people and their carers, people with disabilities, people with religious beliefs, and poorer households; and
- Implement measures outlined within the CoCP to limit identified impacts on those groups outline above.

DRAFT

7 Equality Impact Assessment

7.1 Introduction

- 7.1.1 In line with the recommendations of the Eql Screening (Section 6), this EqlA assesses the potential effects of the C2C Scheme on the following protected characteristic groups:
- Age;
 - Disability; and
 - Gender (including pregnancy and maternity).
- 7.1.2 The following impacts have been considered for the three specified protected characteristic groups, and those considered to be at risk of socio-economic disadvantage, and the justification for the level of impact is outlined in the sections below.

7.2 Age

Schools and education

- 7.2.1 There are three primary schools and two nurseries located within the Study Area. Pupil numbers attending these schools have been extracted from publicly available government data where possible, to inform the assessment. The catchments of pupils attending the schools were not publicly available at the time of writing, but as they are nurseries and primary schools, the catchment are likely to be local. There are also a large number of facilities owned by the University of Cambridge at the eastern end of the C2C Scheme, including research institutes, laboratories, libraries and university sports facilities.
- Nurseries*
- 7.2.2 Coton Preschool is located 320m south of the C2C Scheme. Pupils attending Coton Preschool and their carers living east and north of the C2C Scheme boundary may use Cambridge Road and Whitwell Road to access it. Given the C2C Scheme involves the addition of signalised junctions on Cambridge Road and St Neots Road (connecting to Whitwell Road), traffic management measures would potentially be in place during construction. However, as outlined within the CoCP, pedestrian access will be retained along existing routes as far as reasonably practical, and therefore impacts on pedestrian travel are expected to be negligible.
- 7.2.3 Stephen Perse Nursery Madingley is located 950m north of the C2C Scheme. Pupils attending Stephen Perse Nursery Madingley and their carers living south of the C2C Scheme may utilise St Neots Road or the A428 to access this facility. Given that the C2C Scheme involves the realignment of St Neots Road, access to Stephen Perse Nursery Madingley via this route is likely to be severed temporarily during construction, negatively impacting pupils and their carers. However, as outlined within the CoCP, pedestrian access will be retained along existing routes as far as reasonably practical, and therefore impacts on pedestrian travel are expected to be negligible.

7.2.4 There is potential for pupils and their carers to be temporarily negatively affected by any road disruption, congestion or bus route changes during construction along Cambridge Road and St Neots Road. However with implementation of measures outlined in the CoCP this is anticipated to be of a low level at worst case.

Schools

7.2.5 Coton Church of England Primary School is located 235m south of the C2C Scheme. Pupils attending Coton Church of England Primary School and their carers living east and north of the C2C Scheme boundary may utilise Cambridge Road and Whitwell Road to access it. Given the C2C Scheme involves the addition of signalised junctions on Cambridge Road and St Neots Road (connecting to Whitwell Road), traffic management measures would potentially be in place during construction. Pupils and their carers are likely to be temporarily negatively affected by any road disruption or congestion during construction along Cambridge Road and St Neots Road.

7.2.6 Cambridgeshire County Council offer a pre-16 transport bus pass for primary school children in Cambridgeshire who live more than 2 miles from primary school and can complete the journey in less than 45 minutes. The C2C Scheme will provide a dedicated busway which could be used by pupils of Coton Church of England Primary School, including those using the pre-16 transport bus pass, who have the potential to be disproportionately positively impacted by the C2C Scheme due to the increased public transport connectivity.

7.2.7 The C2C Scheme has the potential to improve connection between the communities and schools. Additional to the schools located in the Study Area, the catchments for secondary schools in Cambridge are likely to encapsulate the communities to the west of Cambridge, listed in the Study Area. Pupils of secondary schools located in the centre of Cambridge will benefit from improved bus and active travel provision for the purposes of travelling to school independently. It is likely that there would be positive impacts on young people and education escorts during operation.

Universities

7.2.8 Cambridge University has numerous facilities, including research institutes, laboratories, libraries and university sports facilities. The provision of the Active Travel Route, and improved bus facilities will be beneficial for students living to the west of Cambridge, accessing and travelling into the centre to access university and other facilities, and those accessing university facilities in proximity of the eastern end of the C2C Scheme.

7.2.9 There will be a temporary and permanent impact on the practice rugby ground, owned by Cambridge University, which will experience temporary and permanent land take to accommodate the C2C Scheme. During construction, the practice field will be occupied. A proportion of this land will be acquired permanently to be used for the operational scheme. The impact on this protected characteristic is anticipated to be low in the long term as the facility will be largely retained.

Social and Healthcare Providers

- 7.2.10 Gracefield Nursing Home and Residential Care Home is located 50m south of the C2C Scheme, and is registered to provide care for dementia, learning disabilities, mental health conditions, old age, physical disabilities and sensory impairments, specialising in Alzheimer's disease. People with dementia can be noise sensitive and can be affected by noise generated during construction. Gracefield Nursing Home is not identified within the noise assessment to be significantly affected by construction noise, but residents may still be subject to increased noise levels.
- 7.2.11 Signalised junctions will be installed along St Neots Road, at Childerley Gate and southwest of Scotland Road, located 350m and 870m from Gracefield Nursing Home and Residential Care respectively. However, given the distance and temporary nature of the construction works, residents are not likely to be significantly affected by the C2C Scheme during construction. It is not anticipated that the change in traffic as a result of the C2C Scheme would create significant noise impacts during the operational phase.
- 7.2.12 Best practice measures including the usage of low noise machinery and other best practice measures are included in the CoCP and will be implemented during construction to ensure older people are not disproportionately affected. Consultation should be undertaken with the care providers to identify potential impact on residents and ensure residents of the care home would not be directly affected.

Use of Public Transport

- 7.2.13 Based on the National Travel Survey England 2018, people that are aged between 17 and 20, and over 70, have a higher average use of local buses, as discussed in **Section 6.2**. As the C2C Scheme provides a dedicated busway to develop a better integrated network of public transport, this has the potential to have a disproportionate positive impact on people within these age ranges. In addition, Cambridge and Peterborough Combined Authority provide a free bus pass to those of state pension age, and will therefore benefit from free use of the C2C Scheme. Older residents who are not able to or happy to drive into the centre of Cambridge will have improved bus facilities to enable travel to key facilities, such as healthcare.

Interaction with the C2C Scheme

- 7.2.14 This could cause confusion or uncertainty for people who are not so confident in driving, such as learner drivers and older people with reduced reaction times. However this is not likely to be a long term impact as drivers become familiar with the new road layout.

7.2.15 There are sections of the ATR where gradients will be steeper than recommended gradients for pedestrian environments²⁸, and which may be less accessible to those with limited mobility:

- Chainage 11250 – 11500 - this section is partly on embankment and crosses Bin Brook (0.65% and 1.5% gradient on either side);
- The approach to Cambridge Road (in Coton), with a gradient of 3.5%; and
- The Overbridge for the M11 (4% at steepest gradient on eastern embankment).

7.2.16 Older users of the C2C scheme may not be able to traverse for as long distances as others, and may benefit from benches and rest stops.

7.2.17 There are a number of proposed crossings for users of the ATR and associated infrastructure as part of the C2C Scheme (as shown on the General Arrangement drawings):

- There are uncontrolled crossing links along:
 - South of Bristol Drive (Chainage 0 – 350);
 - Retention of an existing crossing at the northern Scotland Road roundabout, on the east bound arm;
 - Old St Neots Road (Chainages 4025, 4500);
 - The junction with Old St Neots Road and Cambridge Road (Chainage 4900);
 - Chainage 5920;
 - The junction with Long Road (approximate Chainage 6250); and
 - Diverted PRow at Chainage 8025;
- Controlled crossings are included in the design at:
 - The interface with Broadway, where there is a proposed bus gate (Chainage 400);
 - Long Road (Chainage 6250); and
 - At junction with Cambridge Road (Chainage 8550).

7.2.18 Controlled and uncontrolled crossings for the C2C Scheme are designed in accordance with CD 143 Designing for walking, cycling and horse-riding of the Design Manual for Roads and Bridges²⁹, Inclusive Mobility, Guidance on the Use of Tactile Paving Surfaces³⁰ and Chapter

²⁸ Where possible, pedestrian environments should not be in excess of a gradient of 1 in 60 (1.67%), and where level routes are not possible gradients should not exceed 1 in 20 (5%) for wheelchair users²⁵.

²⁹ National Highways, 2021. Design Manual for Roads and Bridges: CD 143 - Designing for walking, cycling and horse-riding. Available online at: <https://www.standardsforhighways.co.uk/dmr/search/9b379a8b-b2e3-4ad3-8a93-ee4ea9c03f12>

³⁰ Department for Transport, 2021. Guidance on the Use of Tactile Paving Surfaces. Available online at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1046126/guidance-on-the-use-of-tactile-paving-surfaces.pdf

6 of the Traffic Signs Manual³¹ and will be configured to account for older people who may be hard of hearing or have limited mobility, and therefore take longer to cross.

7.2.19 There are a number of features at the Travel Hub which could be less accessible for older users. Detailed design measures, in accordance with relevant guidance and design standards, will be outlined during the detailed design stage and which will ensure the design is inclusive:

- The Travel Hub will provide parking for bus users. As stated in the Inclusive Mobility guidance²⁸, a minimum of 2% of the volume of parking should be designated disabled user bays;
- Cycle stands located at the Hub will be inclusive and suitable for all types of cycle;
- Cycle lockers will be accessible. People with limited mobility may struggle more with higher bike lock-ups so a design solution should be used which is accessible for all;
- Accessible toilet provision will be included within the proposed toilet block at the Travel Hub;
- Signing and information will be in accordance with Inclusive Mobility guidance²⁸; and
- The Travel Hub will be lit in accordance with BS 5489-1:2020 and as outlined within the C2C Scheme Lighting Strategy. Security measures such as CCTV should be considered to act as a deterrent to anti-social and violent behaviour for vulnerable groups, particularly outside of daylight and peak hours.

Mitigation

7.2.20 Route-wide, local area and site-specific traffic management measures will be implemented during the construction of the project on or adjacent to public roads, bridleways, footpaths and other PRow affected by the C2C Scheme. These measures include:

- Retaining access for cyclists and pedestrians, where safe and appropriate;
- Use of internal haul routes for construction vehicles to minimise the need to use public roads; and
- Timing of traffic management operations, if their scope can be undertaken during off peak, night or weekend working.

7.2.21 Measures to reduce noise impacts on local receptors during construction are detailed in the CoCP.

7.2.22 With the implementation of the above mitigation, and detailed design measures implementing design standards, no significant impacts on age as a protected characteristic are anticipated during the construction phase. The C2C Scheme is anticipated to have a

³¹ Department for Transport, 2019. Traffic Signs Manual, Chapter 6. Available online at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/851465/dft-traffic-signs-manual-chapter-6.pdf

positive impact on this protected characteristic during the operational phase, should the design be in accordance with best practice. However, there will be some short sections of the ATR where the gradient will be more challenging for users with mobility limitations.

Recommendations

- 7.2.23 Provision of seating at periodic locations along the ATR to allow for rest stops for users.

7.3 Disability

- 7.3.1 As outlined in **Section 6.3**, temporary increases in noise levels (as a result of construction activities or amended traffic patterns) have the potential to impact disproportionately on people with disabilities.

Public transport use

- 7.3.2 As the C2C Scheme provides a dedicated busway to develop a better integrated network of public transport, this has the potential to have a disproportionate positive impact on people with a disability who meet the criteria above and will therefore benefit from free use of the C2C Scheme.

- 7.3.3 Bus stops (proposed at Chainages 790 and 8500) will be designed following best practise bus stop design³² including kerb heights of 100mm to 140mm to reduce the gradient of ramp required for wheelchair access, and ensuring boarding and alighting areas are free from obstructions such as bins and signposts. Where possible, provision should be made for bus stops to be sheltered (with a transparent shelter) for the wellbeing of users and to discourage anti-social and threatening behaviour for vulnerable users. The C2C Scheme's Lighting Strategy outlines the lighting regime to be adopted at bus stops and at the Travel Hub.

Use of Active Travel Route

- 7.3.4 The C2C Scheme will provide an ATR to develop a wider, better integrated network walking and cycling-friendly routes. Wider footways, flush surfaces, segregation from traffic, safer crossings and improved public transport from existing provision will ensure the C2C Scheme is accessible for all, and that disable people are not disadvantaged.
- 7.3.5 The ATR is designed to be 3.5m wide for the majority of its length (with exception to a small section at the eastern end of the C2C Scheme along Charles Babbage Road, where

³² Transport for London, Accessible Bus Stop Design Guidance (2017). Available online at: <https://content.tfl.gov.uk/bus-stop-design-guidance.pdf> (Accessed October 2022)

constraints result in the reduction of the ATR to 3m), which is in accordance with inclusivity guidance³³.

- 7.3.6 Shared use routes should not be used in areas of high footfall, to avoid conflict or collisions between cyclists and other users (this is particularly relevant for those users with visual or hearing impairments who may not be able to sense an oncoming cyclist). Guidance states that where shared use routes are implemented, physical separation between cyclists and pedestrians or wheeled users should be designed using different levels or a kerb. The ATR is designed to be shared use, but the majority of its length will not be located in areas of high footfall. There is a section intersecting the route at the West Cambridge Campus that will be in an area of higher footfall, which is to be designed by Cambridge University, and where different design measures may be implemented. The widening of a shared use path to 3m adjacent to Scotland Road roundabout will be beneficial to disabled users.
- 7.3.7 Therefore although there is potential for conflict with other users (such as pedestrians and cyclists) on shared use sections and at interfaces with private accesses to residences, and for barriers to use at crossings (particularly uncontrolled crossings) for those with visual impairments, it is not deemed that this will be a high occurrence for the C2C Scheme, particularly taking into account the proposed 3.5m width of the ATR.
- 7.3.8 Lay-by's will be removed along Old St Neots Road, which will be beneficial to pedestrians, wheelers and cyclists who will have access to the dedicated ATR. However, during detailed design, consideration should be given to the design of interfaces with private driveways to ensure priority is maintained for pedestrians, wheelers and cyclists. This is particularly relevant for visually impaired and deaf people.
- 7.3.9 There are sections of the ATR where gradients will be steeper than recommended gradients for pedestrian environments²⁸, and which may be more challenging to manual wheelchair users and those with limited mobility:
- Chainage 11250 – 11500 - this section is partly on embankment and crosses Bin Brook (0.65% and 1.5% gradient on either side);
 - The approach to Cambridge Road (in Coton), with a gradient of 3.5%; and
 - The Overbridge for the M11 (4% at steepest gradient on eastern embankment).
- 7.3.10 Users of the C2C scheme with disabilities or limited mobility may not be able to traverse for as long distances as others, and may benefit from benches and rest stops.

³³ The minimum width should be 2m to allow two wheelchair users to pass (a minimum of 1.5m could be regarded as the minimum where there are land restrictions, which will allow a wheelchair user and a pedestrian to pass)²⁵. Street furniture should not be positioned in the pathway to avoid restriction of widths, but if unavoidable restricted areas should not be less than 1m wide for more than a 6m section.

7.3.11 There are a number of proposed crossings for users of the ATR and associated infrastructure as part of the C2C Scheme:

- There are uncontrolled crossing links along:
 - South of Bristol Drive (Chainage 0 – 350);
 - Retention of an existing crossing at the northern Scotland Road roundabout, on the east bound arm;
 - Old St Neots Road (Chainages 4025, 4500);
 - The junction with Old St Neots Road and Cambridge Road (Chainage 4900);
 - Chainage 5920;
 - The junction with Long Road (approximate Chainage 6250); and
 - Diverted PRoW at Chainage 8025;
- Controlled crossings are included in the design at:
 - The interface with Broadway, where there is a proposed bus gate (Chainage 400);
 - Long Road (Chainage 6250); and
 - At junction with Cambridge Road (Chainage 8550).

7.3.12 Uncontrolled crossings are not likely to be suitable for some people with sensory impairments (particularly the visually impaired), and therefore there will be limited locations along the ATR for which there are safe crossing points for these users.

7.3.13 Controlled and uncontrolled crossings for the C2C Scheme are designed in accordance with CD 143 Designing for walking, cycling and horse-riding of the Design Manual for Roads and Bridges³², Inclusive Mobility, Guidance on the Use of Tactile Paving Surfaces³³ and Chapter 6 of the Traffic Signs Manual³⁴ and will be configured to account for older people who may be hard of hearing or have limited mobility, and therefore take longer to cross.

Use of the Travel Hub

7.3.14 There are a number of features at the Travel Hub which could be less accessible for disabled users. Detailed design measures, in accordance with relevant guidance and design standards, will be outlined during the detailed design stage and which will ensure the design is inclusive:

- The Travel Hub will provide parking for bus users. As stated in the Inclusive Mobility guidance²⁵, a minimum of 2% of the volume of parking should be designated disabled user bays. These should be located as close as possible to bus stops to limit distance to be travelled by disabled users;
- Cycle stands located at the Hub will be inclusive and suitable for all types of cycle;
- Cycle lockers will be accessible. People with disabilities or limited mobility may struggle more with higher bike lock-ups so a design solution should be used which is accessible for all;
- Accessible toilet provision will be included within the proposed toilet block at the Travel Hub;

- Signing and information (including audible announcements for the visually impaired) will be in accordance with Inclusive Mobility guidance²⁵; and
- The Travel Hub will be lit in accordance with BS 5489-1:2020 and as outlined within the C2C Scheme Lighting Strategy. Security measures such as CCTV should be considered to act as a deterrent to anti-social and violent behaviour for vulnerable groups, particularly outside of daylight and peak hours.

Mitigation

- 7.3.15 Measures to reduce noise impacts on local receptors, particularly those who maybe hyper sensitive to noise, during construction are detailed in the CoCP.

The Principal Contractor's Management Systems will define the arrangements and responsibilities for auditing and assuring compliance with the mitigation set out in the CoCP and the schedules of work. The Principal Contractor should include an accessibility audit to identify whether any remedial action is required to completed works, for example to ensure flush surfaces. Recommendations

- 7.3.16 Provision of seating at periodic locations along the ATR to allow for rest stops for users.

- 7.3.17 With the implementation of the above mitigation and detailed design measures implementing design standards, no significant impacts on disability as a protected characteristic are anticipated during the construction phase. The C2C Scheme is anticipated to have an overall positive impact on this protected characteristic during the operational phase, should the design be in accordance with best practice. However, there will be some short sections of the ATR which are not suitable for all users with mobility limitations, and some informal crossings will not be suitable for some users with visual impairments.

7.4 Sex and Gender (including pregnancy and maternity)

Schools

- 7.4.1 The National Travel Survey England 2018 data shows that women undertake more education escort trips than men on average. Therefore, women are more likely to be affected by potential closures and road congestion on access routes from the A1303 as outlined in **Section 6.4**. However, they would likely benefit from the improved connectivity between Cambourne and Cambridge, the Scotland Farm Travel Hub park and ride facility, dedicated busway and ATR to access these educational facilities during operation.

Public Transport

- 7.4.2 The 2018 survey also indicates that women take larger numbers of bus trips than men for all age groups. Passenger and driver delay is not anticipated to be significantly affected during construction so it is unlikely that a disproportionate impact on women will occur.
- 7.4.3 The C2C Scheme, once operational, might benefit women who can utilise the Scotland Farm Travel Hub park and ride facility and dedicated busway.

Cycling Facilities

- 7.4.4 The National Travel Survey England 2018 data indicates that men accounted for a much higher number of cycle trips in all age groups than women. Therefore, men are more likely to be affected by any delays and disruptions to St Neots Road which has two unsegregated cycle lanes running along either side of the road at Hardwick (linking with the Madingley Road to Cambridge). The C2C Scheme, will increase cycling connectivity between Cambourne and Cambridge via the construction of an ATR.

Use of the Travel Hub

- 7.4.5 There are a number of features at the Travel Hub which could be less accessible for different genders. Detailed design measures, in accordance with relevant guidance and design standards, will be outlined during the detailed design stage and which will ensure the design is inclusive:
- Cycle stands located at the Hub will be inclusive and suitable for all types of cycle;
 - Cycle lockers will be accessible. Women, who are typically shorter may struggle more with higher bike lock-ups so a design solution should be used which is accessible for all. The lockers are proposed to be placed in the forefront of the travel depot, near the waiting area, and therefore visibility should be good and improve perceptions of safety for users;
 - Gender neutral toilet (or a mix of single sex and gender neutral) provision, with single contained units should be considered within the proposed toilet block at the Travel Hub, providing a safe environment for all users is deemed possible; and
 - The Travel Hub will be lit in accordance with BS 5489-1:2020 and as outlined within the C2C Scheme Lighting Strategy. Security measures such as CCTV should be considered to act as a deterrent to anti-social and violent behaviour for vulnerable groups, particularly outside of daylight and peak hours.

Mitigation

- 7.4.6 Route-wide, local area and site-specific traffic management measures will be implemented during the construction of the project on or adjacent to public roads, bridleways, footpaths and other PRow affected by the C2C Scheme. These measures include:
- Retaining access for cyclists and pedestrians, where safe and appropriate; and
 - Use of internal haul routes for construction vehicles to minimise the need to use public roads.
- 7.4.7 With the implementation of the above mitigation and detailed design measures implementing design standards, no significant impacts on sex and gender as a protected characteristic are anticipated during the construction phase. The C2C Scheme is anticipated to have a positive impact on this protected characteristic during the operational phase, should the design be in accordance with best practice.

7.5 Equality Impact Assessment Table

- 7.5.1 The assessment presented in **Table 7-1** assigns either a high, medium or low negative or positive impact for each of the protected characteristic groups.

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Table 7-1 - Equality Impact Assessment

Protected Characteristic Group	High negative impact	Medium negative impact	Low negative impact	High / Medium / Low positive impact
Age	-	-	Likely to temporarily affect a small number of nursery and school age children, and those attending the University of Cambridge in the short-term during construction due to potential road diversion, and congestion. Likely to be reversible.	Potential for high level positive impact in the long-term for pupils and students who travel within the western area of Cambridge due to the provision of an ATR, busway and the park and ride provision at Scotland Farm Travel Hub. Additionally, more elderly residents will be able to travel into Cambridge to access facilities, including healthcare.
Disability	-	-	Temporary increases in noise levels as a result of construction activities or amended traffic patterns have the potential to impact disproportionately on people with disabilities. Likely to be reversible.	Potential for low level adverse impact in the short-term for those with mental health conditions caused or worsened by construction noise.
Sex / Gender (including pregnancy and maternity)	-	-	Likely to affect a small number of those within this protected group due to potential road diversion and congestion (women as primary care givers)	Potential for medium to high level positive impact in the long-term for women (education escort) who travel within the western area of Cambridge due to the provision of an ATR, busway and the park and ride provision at Scotland Farm Travel Hub. Low level positive impacts are likely in the long-term for both

Protected Characteristic Group	High negative impact	Medium negative impact	Low negative impact	High / Medium / Low positive impact
			and cycling route diversions (men). Likely to be reversible.	genders, but particularly, men who are more likely to use the improved ATR provision for cycling.

7.6 Action Plan

7.6.1 Table 7-2 summarises the action plan proposed following this EqIA.

Table 7-2 – Action Plan

Protected Characteristic	Issues Identified	Action to be taken	Expected Outcomes	Owner	Timescale
Age / Sex and Gender	Potential delay in access to Coton Preschool, Coton Church of England Primary School and University of Cambridge	Ensure Coton Preschool, Stephen Perse Nursery Madingley, Coton Church of England Primary School and University of Cambridge are included on the stakeholder database and in all stakeholder communication.	Note that Coton Preschool, Stephen Perse Nursery Madingley, Coton Church of England Primary School and University of Cambridge to be sensitive receptors.	Author of CTMP and CEMP	Detailed design stage/ preconstruction

Protected Characteristic	Issues Identified	Action to be taken	Expected Outcomes	Owner	Timescale
	during construction.	Coton Preschool, Stephen Perse Nursery Madingley, Coton Church of England Primary School and University of Cambridge should be noted as sensitive receptors within the Construction Traffic Management Plan (CTMP) and the CoCP to be produced and implemented by the Principal Contractor.	Implementation of CTMP and CoCP.	Principal Contractor	Construction
		A Communications Plan will be developed by the Principal Contractor in collaboration with the Applicant.	Implementation of the Communication Plan to enable closures or diversions of any routes to be communicated directly to these schools.	Principal Contractor	Construction
Age	Potential noise impact on residents of Gracefield Nursing Home and	Undertake engagement with Gracefield Nursing Home and Residential Care Home. Mitigation outlined in CoCP to mitigate impacts identified within Noise and	Understand specific issues regarding potential impacts on residents, especially those with dementia. Communicate and agree on proposed mitigation measures.	Cambridge County Council and Principal Contractor (engagement)	Pre-planning (during production of environmental impact assessment)/ Detailed

Protected Characteristic	Issues Identified	Action to be taken	Expected Outcomes	Owner	Timescale
	Residential Care Home	vibration impact assessment to be Implemented.			design stage / Pre-construction
		Incorporate proposed mitigation measures to the CoCP.	Reduce impact on Gracefield Nursing Home and Residential Care Home during construction.	Author of CoCP	Detailed design stage / Pre-construction
Age / Disability	Opportunity for benefit to older users / users with limited mobility	Provision of seating along the ATR.	Allow for rest areas and improved uptake by older users and those with limited mobility.	Principal Designer	Detailed design stage
Disability / Pregnancy and Maternity / Age	Potential for barriers to use and conflict between users of ATR	Design the ATR in accordance with the Department for Transport's LTN 1/20 ³⁴ And Inclusive Mobility guidance ²⁵	Ensure the ATR is inclusive and fit for all users, encouraging higher uptake and maximising other associated benefits.	Principal Designer	Detailed design stage

³⁴ Department for Transport 2020. Local Transport Note 1/20 Cycle Infrastructure Design. Access online at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/951074/cycle-infrastructure-design-ltn-1-20.pdf

Protected Characteristic	Issues Identified	Action to be taken	Expected Outcomes	Owner	Timescale
Disability / Age / Sex and Gender / Race / Religion and Belief / Sexual Orientation / Transgender	Potential for criminal activity, barriers to use or discomfort for users at bus stops.	Bus stops (including along the route and in the Travel Hub) to be designed to be inclusive and to discourage criminal behaviour, in accordance with best practice guidance such as the Inclusive Mobility guidance ²⁵ and Accessible Bus Stop Design guidance ³² and relevant design standards. Implementation of the C2C Lighting Strategy	Ensure bus stop provision is inclusive and fit for all users.	Principal Designer / Bus Operator	Detailed design stage
Disability / Age	Safety and inclusivity of controlled and uncontrolled crossings for active travel provisions.	Controlled and uncontrolled crossing design should be designed in accordance with the Traffic Signs Manual, Chapter 6 ³⁴ , CD 143 Designing for walking, cycling and horse-riding ³² and with consideration of the Inclusivity Mobility guidance ²⁵	More inclusive design of the ATR, reduced risk of accidents, and higher uptake by disabled, older and younger users.	Principal Designer	Detailed Design

Protected Characteristic	Issues Identified	Action to be taken	Expected Outcomes	Owner	Timescale
Disability	Inclusive design for visually impaired users.	Use of tactile paving within design of ATR and associated infrastructure in accordance with the Inclusivity Mobility guidance ²⁵ , CD 143 Designing for walking, cycling and horse-riding ³² and Guidance on the Use of Tactile Paving Surfaces ³³ .	More inclusive design of the ATR, reduced risk of accidents, and higher uptake by visually impaired users.	Principal Designer	Detailed Design
Disability / Sex and Gender / Age	Safety and inclusivity of users of Travel Hub.	Design in accordance with the Inclusivity Mobility guidance ²⁵ and BS 5489-1:2020 for the following elements: <ul style="list-style-type: none"> ▪ Cycle stands and lockers ▪ Safety measures ▪ Toilets ▪ Lighting (Implementation of the C2C Lighting Strategy) ▪ Accessible parking ▪ Signage and Information 	More inclusive design of the Travel Hub and reduced risk of criminal behaviour.	Principal Designer	Detailed Design

Protected Characteristic	Issues Identified	Action to be taken	Expected Outcomes	Owner	Timescale
Sex and Gender	Potential delays to cycle routes	Incorporate route diversion mitigation measures to the CTMP	Reduce impact on local cyclists	Author of CTMP	Detailed design stage / Pre-construction

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7.7 Next Steps

- 7.7.1 GCP, WSP and the Principal Contractor will continue to engage with the existing stakeholder groups during the TWAO determination period and during detailed design. It is proposed that the project distribution list should be reviewed to ensure that it incorporates nurseries, primary schools and places of worship identified within the EqIA to ascertain how vulnerable users may be affected by the C2C Scheme and potential appropriate mitigation measures. Discussion should continue to be undertaken with equality and access council officers in regard to the proposed mitigation measures and scheme design, to identify hard to reach groups in advance of further public consultations.
- 7.7.2 Design of the C2C Scheme is in accordance with best practice guidance, and design standards. Measures included in this EqIA should be considered and actioned during detailed design, where reasonable, to ensure as inclusive a scheme as possible and so that use is maximised.
- 7.7.3 During detailed design and construction, it is proposed that targeted engagement should take place where listed as recommended in **Table 7-2**, to ensure that the potential impacts of the Proposed Scheme are reduced and that benefits reaped from the Proposed Scheme are maximised. As stated above, the CTMP and CoCP should ensure specific stakeholders are kept informed of relevant construction activities. The production and implementation of a Communications Plan by the Principal Contractor in collaboration with the Applicant should ensure that any road and PRow closures or diversions are communicated directly to these facilities.
- 7.7.4 This EqIA will be updated during the detailed design stage and will incorporate any further information gathered from future consultation activities which may affect the outcome of this assessment.

Appendix A

Protected Characteristic Data

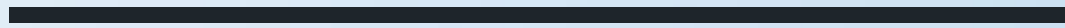


Table A-1 – Race/Ethnicity Profile

Ethnic group	South Cambridgeshire		Cambridge		England and Wales
	Total Number	Total (%)	Total Number	Total (%)	Total (%)
Asian, Asian British or Asian Welsh	9,399	6	21,626	15	9
Black, Black British, Black Welsh, Caribbean or African	2,019	1	3,561	2	4
Mixed or Multiple ethnic groups	4,591	3	7,410	5	3
White	144,285	89	108,570	75	82
Other ethnic group	1823	1	4,507	3	2

Table A-2 - Percentage of people belonging to specific faiths in South Cambridgeshire, Cambridge, and England and Wales (2011)

Religion	South Cambridgeshire		Cambridgeshire		England and Wales
	Total Number	Total (%)	Total Number	Total (%)	Total (%)
Christian	87,463	58.8	55,514	44.8	59.3
Buddhist	700	0.5	1,573	1.3	0.4

Religion	South Cambridgeshire		Cambridgeshire		England and Wales
	Total Number	Total (%)	Total Number	Total (%)	Total (%)
Hindu	1,123	0.8	2,058	1.7	1.5
Jewish	362	0.2	870	0.7	0.5
Muslim (Islam)	1,464	1.0	4,897	4.0	4.8
Sikh	186	0.1	213	0.2	0.8
Other religion	568	0.4	703	0.6	0.4
No religion	44,741	30.1	46,839	37.8	25.1
Religion not stated	12,148	8.2	11,200	9.0	7.2

Table A-3 - Age Profile South Cambridgeshire and Cambridge 2021

Ages (Years)	South Cambridgeshire		Cambridge		England and Wales
	Total Number	Total (%)	Total Number	Total (%)	Total (%)
Under 4	8,800	5.4	34,500	5.1	5.4
Ages 5 - 14	21,000	13.0	77,500	11.4	11.9
Ages 15 - 24	15,000	9.3	82,400	12.1	11.7
Ages 25 - 34	18,400	11.4	94,000	13.9	13.5
Ages 35 - 44	22,900	14.1	89,900	13.2	13.0
Ages 45 - 54	23,700	14.6	91,200	13.4	13.0

Ages (Years)	South Cambridgeshire		Cambridge		England and Wales
	Total Number	Total (%)	Total Number	Total (%)	Total (%)
Ages 55 - 64	20,500	12.7	82,700	12.2	12.6
Ages 65 - 74	16,000	10.2	67,300	9.9	9.9
Ages 75 - 84	10,800	6.7	42,600	6.3	6.2
Ages 85 and over	4,400	2.7	16,600	2.4	2.4

Table A-4 – Sex Profile South Cambridgeshire and Cambridge 2021

Sex	South Cambridgeshire	Cambridge	England and Wales
All people (total no)	162,000	145,700	59,597,300
Male (%)	49.1	50.1	49.0
Female (%)	50.9	49.9	51.0

Table A-5 – Disability profile South Cambridgeshire and Cambridge 2011

Day to Day activities	South Cambridgeshire		Cambridge		England and Wales
	Total Number	Total (%)	Total Number	Total (%)	Total within population (%)
Limited a Lot	8,271	5.6	6,798	5.5	8.5
Limited a little	12,457	8.4	9,266	7.5	9.4
Not limited	128,027	86.1	107,803	87.0	82.1

Table A-6 – Sight Loss profile South Cambridgeshire and Cambridge 2021

Sight Loss	South Cambridgeshire		Cambridge		England
	Total Number	Total within population (%)	Total Number	Total within population (%)	Total within population (%)
Estimated number of people living with mild sight loss (partial sight)	3,580	2.2	2,100	1.4	2.1
Estimated number of people living with moderate sight loss (partial sight)	1,230	0.8	710	0.5	0.7
Estimated number of people living with severe sight loss (blindness)	750	0.5	420	0.3	0.4

Table A-7 – Number of people registered as deaf or hard of hearing in Cambridgeshire, 2010

Age	Total Number
0-17 (deaf)	15
0-17 (hard of hearing)	0
18-64 (deaf)	195
18-56 (hard of hearing)	180
65-74 (deaf)	40
65-74 (hard of hearing)	100
75 or over (deaf)	125
75 or over (hard of hearing)	1330

Table A-8 - Marital and civil partnership status in South Cambridgeshire 2011

Marriage / Civil Partnership	South Cambridgeshire		Cambridge		England and Wales
	Total Number	Total (%)	Total Number	Total (%)	Total (%)
Single (never married or never registered a same-sex civil partnership)	33,110	27.7	55,781	52.6	34.6
Married	66,819	56.0	36,177	34.1	46.6
In a registered same-sex civil partnership	277	0.2	324	0.3	0.2
Separated (but still legally married or still legally in a same-sex civil partnership)	2,594	2.2	1,861	1.8	2.6
Divorced or formerly in a same-sex civil partnership which is now legally dissolved	9,278	7.8	7,024	6.6	9.0
Widowed or surviving partner from a same-sex civil partnership	7,264	6.1	4,840	4.6	7.0

Table A-9 – LSOAs cross by the C2C Scheme

LSOA	Rank out of a total of 32,844 areas in England	Deprivation
South Cambridgeshire 020D	30,154	Amongst the 10% least deprived neighbourhoods in the country

LSOA	Rank out of a total of 32,844 areas in England	Deprivation
South Cambridgeshire 020E	28,055	Amongst the 20% least deprived neighbourhoods in the country
South Cambridgeshire 021E	22,151	Amongst the 40% least deprived neighbourhoods in the country
South Cambridgeshire 010A	32,844	Amongst the 20% least deprived neighbourhoods in the country
South Cambridgeshire 010B	30,467	Amongst the 10% least deprived neighbourhoods in the country
South Cambridgeshire 010C	30,227	Amongst the 10% least deprived neighbourhoods in the country
South Cambridgeshire 010D	28,990	Amongst the 20% least deprived neighbourhoods in the country
South Cambridgeshire 009A	24,319	Amongst the 30% least deprived neighbourhoods in the country
Cambridge 007D	26,513	Amongst the 20% least deprived neighbourhoods in the country
Cambridge 007F	29,028	Amongst the 20% least deprived neighbourhoods in the country

Table A-10– Sexual Orientation

Sexual Orientation	South Cambridgeshire		Cambridge		England and Wales
	Total Number	Total (%)	Total Number	Total (%)	Total (%)

Straight or Heterosexual	117371	90.03	100519	80.56	89.4
Gay or Lesbian	1486	1.14	3419	2.74	1.54
Bisexual	1614	1.24	4769	3.82	1.28
Pansexual	248	0.19	547	0.44	0.23
Asexual	146	0.11	386	0.31	0.06
Queer	43	0.03	201	0.16	0.03
All other sexual Orientation	18	0.01	67	0.05	0.02
Not Answered	9436	7.2	14860	11.91	7.5

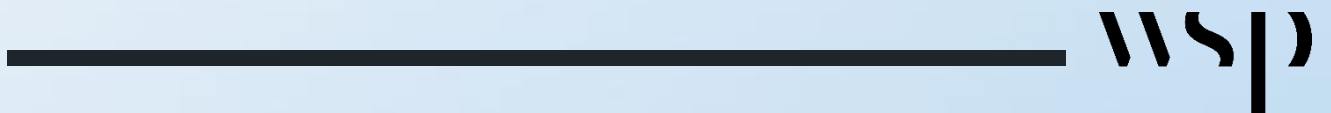
Table A-11 – PRow and Bridleways within the Study Area

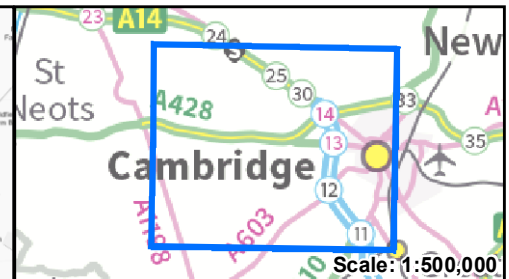
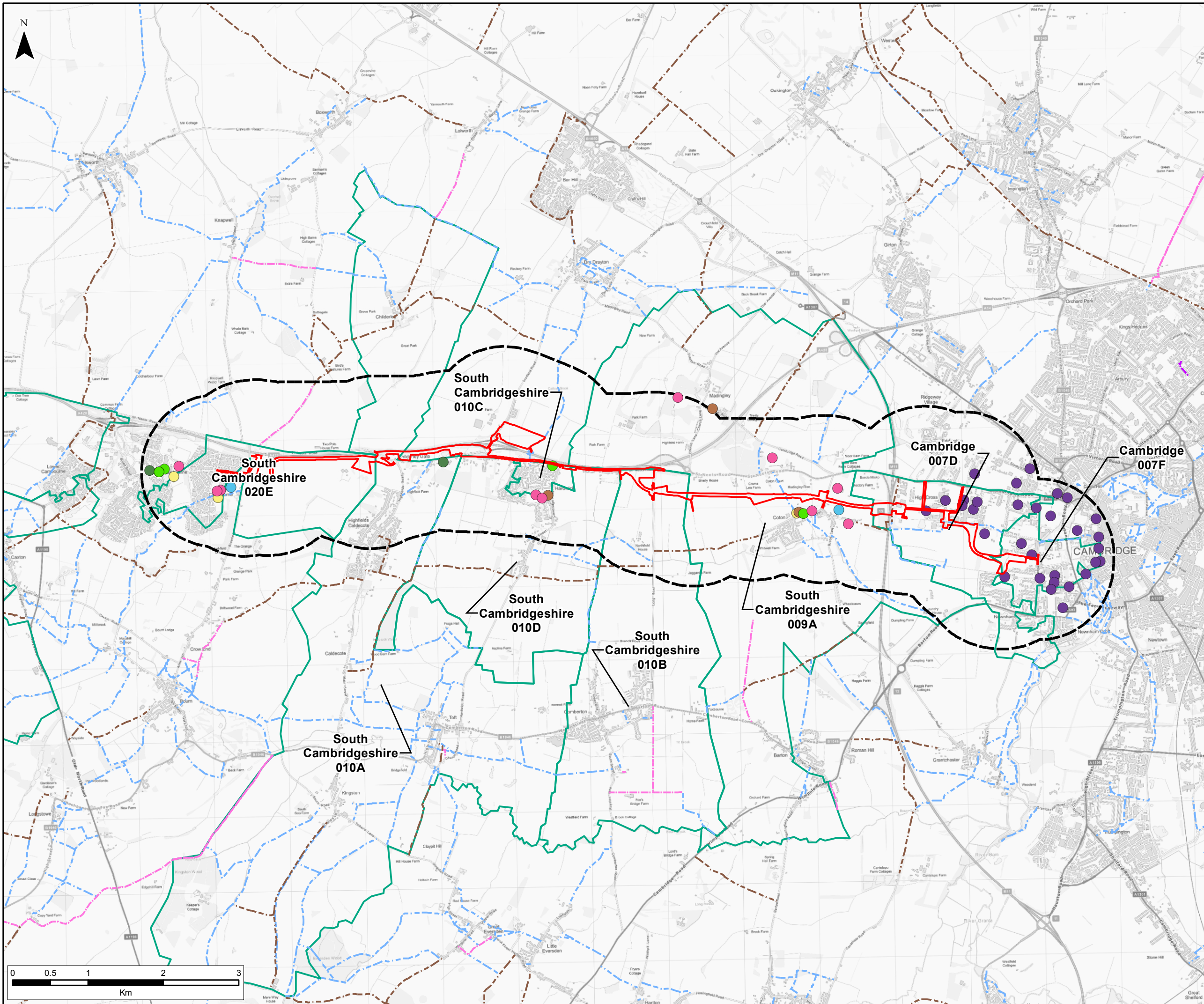
PRow/Bridleway	Location
279/2 (Bridleway)	Bridleway 2.5km in length following Broad Street in Cambourne
39/30 (Bridleway)	Bridleway 0.6km in length alongside the M1
38/11 (Bridleway)	Bridleway 0.7km in length within Highfields
279/3 (PRow)	A footpath 1.9km in length following Brace Dein and continuing along the eastern edge of Sirius Lake
142/8 (PRow)	A footpath 1.1km in length north of the A428
142/7 (PRow)	A restricted byway 1.1km in length between agricultural fields north of the A428
38/1 (PRow)	A footpath 0.6km in length between St Neots Road and Highfields Road
114/1 (PRow)	A footpath 0.1km in length connecting to Main Street, Hardwick
114/2 (PRow)	A footpath 1.1km in length between Main Street and Long Road
38/9 (PRow)	A footpath 0.9km in length between agricultural fields in Caldecote
66/17 (PRow)	A footpath 2.9km in length between Dry Drayton and the A428
55/2 (PRow)	A footpath 0.7km between Madingley Road and Coton

PRoW/Bridleway	Location
39/31 (PRoW)	A footpath 1.7km in length south of the West Cambridge Site, University of Cambridge
154/4 (PRoW)	A footpath 0.4km in length west of Cambridge American Cemetery
154/3 (PRoW)	A footpath 1.7km in length between Cambridge Road and the M11
154/2 (Bridleway)	A bridleway 1.9km in length between Cambridge Road and the A14
55/3 (PRoW)	A footpath 0.4km in length within Coton
55/10 (PRoW)	A footpath 0.5km in length between Coton and Barton Road
55/6 (PRoW)	A footpath 2.0km in length between Brook Lane and Granchester Road
39/114 (PRoW)	A footpath 0.3km in length between agricultural fields east of the M1
39/58 (PRoW)	A footpath 0.4km north of Cambridge University Library

Appendix B

Figure 1





- Key**
- Site Boundary
 - 1km Buffer
- Receptors**
- Allotments
 - Community Facilities
 - Healthcare Provider
 - Nursery
 - Place of Worship
 - Primary School
 - University of Cambridge Facilities
- PRoW**
- Bridleway
 - Byway
 - Restricted Byway
 - Footpath
 - Lower Layer Super Output Areas

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P01	PB	LH	SC	24/02/2023
FIRST DRAFT ISSUE				
REVISION	DRAWN	CHECKED	APPROVED	DATE
DESCRIPTION				



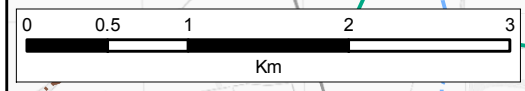
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