





A summary of work carried out by Sustrans on behalf of England's Economic Heartland as a first step towards realising the potential of the Varsity Way between Oxford and Cambridge

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## INTRODUCTION

As the region's sub-national transport body (STB), England's Economic Heartland (EEH) plays a vital role in the development of active travel across our area, with the ultimate aim of increasing levels of walking and cycling.

EEH's transport strategy, published in 2021, includes a commitment to work 'with our partners and the walking and cycling charity, Sustrans, to improve the national cycle network, making it segregated wherever possible'.

The strategy continues: "This includes maximising the potential of an Oxford-Cambridge 'Varsity Way' segregated cycling and walking route as a 'green spine' across the Heartland: one that can act as a focal point for developing a region wide network of cycle routes."

This report – and the detailed work which sits behind it – demonstrates EEH's determination to take forward this ambition.

'Introducing the Varsity Way' includes consideration of the policy context for the Varsity Way, the current baseline for cycling in the region, a summary of discussions with stakeholders, and the high-level outputs from an assessment of the current route and the opportunities to improve it.

Sitting behind this summary is Sustrans'
Network Assessment and Options
Development report which is available
to our local authority partners and other
stakeholders where appropriate. It includes
a more granular assessment of the current
National Cycle Routes 51 and 66 and, based
on this, lists recommendations for how
specific sections can be improved.

The nature of Varsity Way varies greatly as it travels through the Heartland. Its 200km traverses through urban areas and country lanes. As Sustrans' analysis shows, nearly half of the route is classified as 'very poor or poor', based on consideration of factors including condition, signage, flow and safety. The answer to creating a safe cycling route for users of all abilities varies from each section.

Initial work clearly demonstrates the opportunity to develop the Varsity Way to a high-quality greenway standard linking Oxford and Cambridge. The Varsity Way can transform active travel in the region by:

- Being a leisure and tourism drawcard for the region
- Improving local connectivity to cities, towns, villages and tourist attractions
- Enabling better 'first mile, last mile' connectivity to transport hubs such as railway stations, including those which will be served by East West Rail
- Acting as a catalyst for improvements to the wider national cycle network across the Heartland
- Realising health benefits that arise from increased levels of walking and cycling.

'Introducing the Varsity Way' – and the work which underpins it – provides the foundation for all partners to make all these benefits a reality.

## **About Sustrans**

Sustrans is the charity making it easier for people to walk and cycle.

We connect people and places, create liveable neighbourhoods, transform the school run and deliver a happier, healthier commute. Join us on our journey. <a href="https://www.sustrans.org.uk">www.sustrans.org.uk</a>.

Registered Charity No. 326550 (England and Wales) SC039263 (Scotland).

#### Our vision

A society where the way we travel creates healthier places and happier lives for everyone.

#### Our mission

We make it easier for people to walk and cycle.

#### How we work

We make the case for walking and cycling by using robust evidence and showing what can be done.

We provide solutions. We capture imaginations with bold ideas that we can help make happen.

We're grounded in communities, involving local people in the design, delivery and maintenance of solutions.

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### **Sustrans and the National Cycle Network**

Sustrans is custodian of the National Cycle Network, a UK-wide network of traffic-free paths for everyone, connecting cities, towns and countryside.

We bring people together to create places with clean air and green spaces, where friends and facilities are just a short walk away. We believe everyone should be able to thrive without having to use a car.

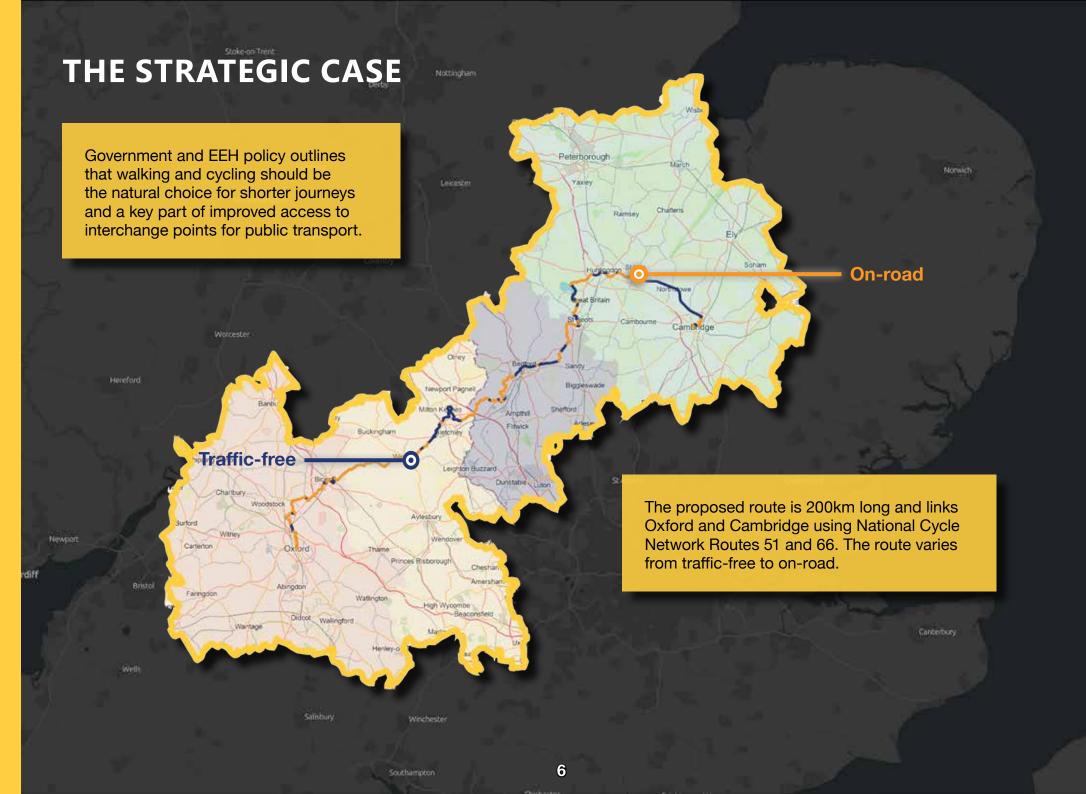
Our vision is to create a UK-wide network of safe and accessible traffic-free paths for everyone.

We want the Network to:

Be wide enough for all users Be cared for and well maintained Have a smooth surface Be clearly and consistently signed Be fully accessible to everyone Feel safe

As custodians of the National Cycle Network, we are experienced at working with partners such as EEH to provide them with a network assessment and options to progress.







## **POLICY CONTEXT**

This section considers the national, regional and local policy context for creating the Varsity Way.

#### National objectives to increase active travel

The Cycling and Walking Investment Strategy 2, published July 2022, sets out the government's objectives to increase active travel by 2025.

#### These include:

- Increase the percentage of short journeys in towns and cities that are walked or cycled from 41% in 2018 to 2019 to 46% in 2025
- Increase walking activity, where walking activity is measured as the total number of walking stages per person per year, to 365 stages per person per year in 2025
- Double cycling, where cycling activity is measured as the estimated total number of cycling stages made each year, from 0.8 billion stages in 2013 to 1.6 billion stages in 2025
- Increase the percentage of children aged 5 to 10 who usually walk to school from 49% in 2014 to 55% in 2025

Other key messages in the strategy focus on:

- Inclusivity
- 'High quality infrastructure'
- Integration
- Maximising impact on wider government objectives such as net zero

The strategy outlines the total investment into active travel across government through to 2025. The revised projection looking ahead to 2025 (outside of London) is £3.245 billion.

Beyond 2025, further objectives reflect commitments originally set out in Gear Change and Transport Decarbonisation Plan are to:

- Increase the percentage of short journeys in towns and cities that are walked or cycled to 50% in 2030 and to 55% in 2035
- Deliver a world-class cycling and walking network in England by 2040

# Cycling and walking measures are no longer seen as an afterthought but have moved to the very heart of considerations for all transport policy and planning, at all levels of leadership. -- Department for Transport - Gear Change Report 2020

#### **Active travel in the UK**

In July 2020 the UK government published 'Gear Change: a bold vision for cycling and walking' outlining its intent to kick off 'the most radical change to our cities since the arrival of mass motoring'.

This ambitious plan - backed up by £2 billion of new funding for walking and cycling - sets out a vision a step change in provision for active travel in this country.

The report notes the contribution made by active travel to:

- · Health and wellbeing
- Easing congestion
- Increasing footfall for local businesses
- Improving environmental and air quality
- Reducing transport CO2 emissions

In particular the report encourages the use of bicycles for everyday trips that replace car journeys

- not simply as a form of recreation.

## Cambridgeshire Local Cycling and Walking Infrastructure Plan



## Cambridgeshire Local Cycling and Walking Infrastructure Plan

The Cambridgeshire Local Cycling and Walking Infrastructure Plan (LCWIP) forms part of the Government's ambition to increase walking and cycling, particularly to school, in the UK by 2025 as outlined in the first Cycling and Walking Investment Strategy (CWIS, 2017).

## Cambridgeshire

Cambridgeshire is a diverse county, formed by Cambridge city, several market towns and large rural areas.

The strategy's targets, by 2025 are to:

- Double cycling from 0.8 billion stages in 2013 to 1.6 billion stages in 2025, and to work towards developing the evidence base over the next year.
- 2. Increase walking activity to 300 stages per person per year in 2025, and to work towards developing the evidence base over the next year.
- 3. Increase the percentage of children aged 5 10 that usually walk to school from 49% in 2014 to 55% in 2025.

The directly elected Mayor and the Cambridgeshire and Peterborough Combined Authority (CPCA) hold strategic powers and are the Local Transport Authority for the Cambridgeshire and Peterborough area. This Greater Cambridge Partnership is leading on the

development of the Greater Cambridge Greenways. The intention is that they "will make it easier both to travel in a pleasant and sustainable way into and out of Cambridge and to enjoy our countryside for leisure purposes." The Mayor sets the overall transport strategy for Cambridgeshire and Peterborough and is responsible for the CPCA Local Transport Plan which was approved by the CPCA board in January 2020. Included in the Local Transport Plan are the objectives to:

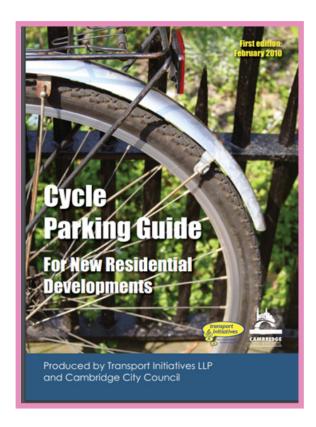
Promote social inclusion through the provision of a sustainable transport network that is affordable and accessible for all.

Provide 'healthy streets' and highquality public realm that puts people first and promotes active lifestyles.

The document also includes policies for walking and cycling which aim to:

Support an increased number of walking trips by establishing safe, interconnected pedestrian connections between key destinations.

Increase the number of cycling trips through establishing safe and interconnected cycling links across the region's cities, towns and settlements.



## Cycle Parking Guide For New Residential Developments

Recognition of the contribution cycling can make as a sustainable and healthy

form of transport for trips within and around town and cities, Cambridge City Council, in partnership with Bedford Borough Council and Central Bedfordshire published this guidance aiming to provide detailed guidance on the nature and layout of cycle parking, and other security measures by reflecting on best practice whist taking into consideration the need to balance between the different demands on land use. Targeted users for the guidelines as set out in the documents are:

- Developers and their agents;
- Planning and highway engineering staff of local authorities;
- Anyone else with an interest in this subject.

#### Protection and Funding of Routes for the Future Expansion of the City Cycle Network

Cycling levels in Cambridge are the highest in the country with 26% of residents cycling to work in the city. The local authority has realised the vitality that this culture of cycling is carried into the new areas of urban expansion in order to at least maintain this high level. The objectives of Protection and Funding of Route for the Future Expansion of the City Cycle Network, drafted by Cambridge City Council, are to expand

and enhance the current city cycle network by:

Identifying and safeguarding strategic cycle routes through the city urban expansions as defined in the redeposited Local Plan and ensuring their delivery by developers.

Identifying potential new cycle links to and from these areas of urban expansion to be funded through planning obligations.

#### Prioritised corridors identified in the Cambridgeshire LCWIP that align with Varsity Way are:

- St Neots Route 7
- Brampton LCWIP Route 1, 2, 4

Routes identified in the Peterborough LCWIP was also investigated and there is minimal overlap with Varsity Way. Alignment with the NCN and LCWIP corridors will increase funding opportunities for improvements. Access to funding channels specific to Local Authorities such as Active Travel Fund, Transforming City Funds can be supplemented with Sustrans Paths for Everyone funding avenues.

Bedford Borough Council are in the process of updating their Local Plan which builds on the Local Plan 2030 strategy. Once adopted, this will be the principal document of the statutory development plan for Bedford Borough. The Local Plan 2040 will form a partial update to the existing policies included in the Local Plan 2030. The draft plan contains four key themes of which Theme 2 is the most relevant to this report:

More accessible – encouraging sustainable travel as well as taking the opportunities offered by strategic infrastructure for greater regional and national connectivity.

#### **Objectives:**

- Reduce congestion in the borough, particularly into and around the town centre, including making journeys by public transport, walking and cycling more attractive to encourage an increase in more sustainable and healthy modes of transport.
- Improve east-west connectivity and enhance multi-modal travel through the construction of the East West Rail line routed through Bedford Midland station.
- Improve "first mile / last mile" local connections to strategic

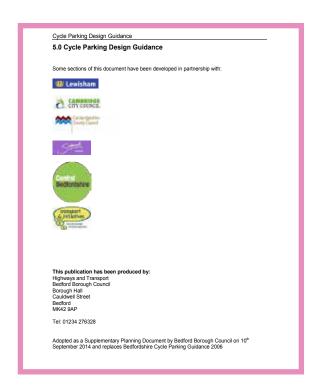
infrastructure, allowing for easier access and greater integration.

These objectives suggest the Varsity Way could serve a valuable role in linking settlements across Bedfordshire to strategic infrastructure, particularly the benefits East West Rail is set to deliver.

## Bedford Borough

Bedford Borough is located within the East of England. The borough contains the county town of Bedford, but is also predominantly rural with multiple villages; in total, approximately 66% of the population live in the Bedford/Kempston area, yet this accounts for only 8% of the land of the Borough as a whole.

Bedford Borough Council (BBC) is in the process of preparing a Bedford LCWIP which will include the production of an evidence base of existing travel behaviour and possible measures which may lead to people undertaking more local walking and cycling journeys.



## **Bedford Borough's Parking Standards** for Sustainable Communities

Supplementary Planning Document (SPD) was adopted by the Council's Executive on 10th September 2014. Key policies

associated with walking and cycling are:

- Policy T21 Accessibility for Less
  Mobile People
- Policy BE3: Uses and Infrastructure to promote Self Sustaining Communities
- Policy BE48 Accessible Environments



**Core Strategy and Rural Issues Plan** 

This plan sets out the long term spatial

vision for Bedford Borough to 2021, including supporting a coordinated delivery of transport improvements with emphasis on non-car modes. It also seeks to deliver high quality design that takes account of sustainable access and community safety. The following Core Policies are relevant to cycling:

CP1 Spatial Strategy – Sustainable levels, locations and forms of development will be sought in accordance with the stated objectives and policies of this Plan.

CP2 Sustainable Development
Principles - The development and
use of land will ensure that the use
of public transport, walking and
cycling is encouraged and car use
minimised.

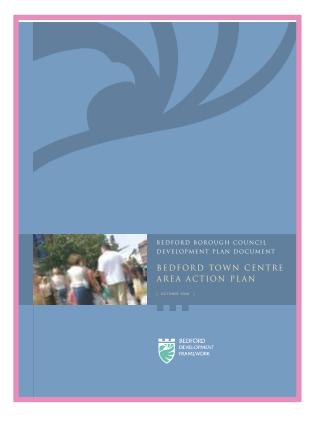
CP27 Strategic Transport Infrastructure – To support introduction of National Cycle Network routes.

CP28 Local Transport Plan – The Borough Council supports the objectives, strategy and programme set out in the Local Transport Plan.

CP29 Accessibility – To encourage sustainable modes of transport and reduce reliance on the car.

CP30 Developer Contributions
- Where implementation of a

development would individually or cumulatively create a need to provide additional or improved infrastructure, amenities or facilities, or would exacerbate an existing deficiency in their provision, the developer will be expected to make or contribute towards such provision by means of planning condition or legal obligation.



#### **Town Centre Area Action Plan**

The Town Centre Area Action Plan sets out the spatial strategy for the Bedford town centre. One of its objectives is to give a Better Connected Centre - to improve access to the town centre through the provision of new public transport interchanges, new highway infrastructure, public transport priority when feasible, the use of park and ride facilities and improved facilities for pedestrians, cyclists, taxis and private hire vehicles. Where and when highway capacity can be increased, priority should be given to modes other than private cars.

#### **Local Transport Plan**

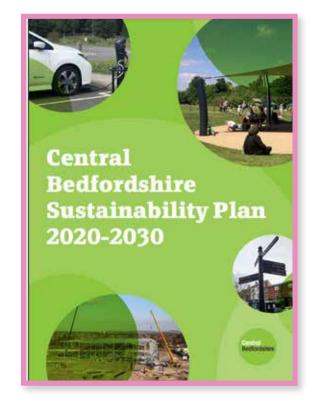
The plan contains a Vision for Transport in Bedford Borough to enable the people of the Borough, visitors and businesses to benefit from the opportunities that the Borough has to offer by working together to create a transport system which positions walking, cycling and public transport as the natural choices of travel for the majority of journeys because they are an affordable, healthy, convenient and safe alternative to the private car.



#### **Central Bedfordshire Sustainability Plan**

The Sustainability Plan developed by Central Bedfordshire has been codeveloped with council officers and members, and focuses on how the Council can: improve our own operations and processes; lead by example in buildings we are responsible for; facilitate investments in infrastructure-led projects; and influence, support and enable residents and local businesses to adopt

## Central Bedfordshire

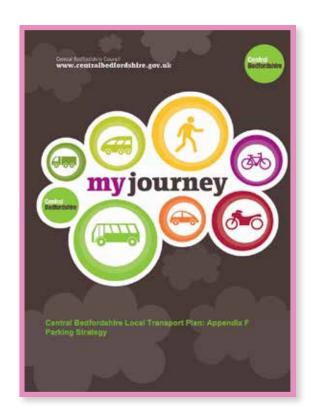


sustainable behaviours and practices.

In Chapter 3.3 Active Travel and Public Transport, Central Bedfordshire demonstrated that their objective is to "Facilitate investments and invest in a strategic active travel and public transport network, improving countryside access and connectivity between towns. Create compact walkable networks within town centres to maximise pedestrian comfort, and encourage micromobility and healthier modes of transport." Local government is expecting to see investments in active travel and public transport infrastructure to create a permeable, connected safe transport network between Central Bedfordshire's main towns and along main transport routes, as well as compact, walkable and safe networks within Central Bedfordshire's town centres.

#### **Central Bedfordshire Sustainability Plan**

As part of the LTP (Local Transport Plan), the strategy set out by Central Bedfordshire covers the period between April 2011 and March 2026, and informs the development of a rolling programme of schemes to be identified and delivered through the Local Area Transport Plans which apply the strategic principles



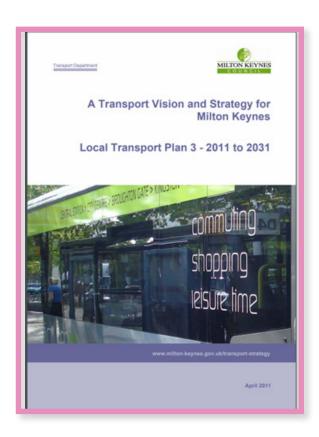
established within the Strategy at the local level.

The vision of the strategy seeks to "Encourage more people to cycle, to cycle safely, and to cycle more often". To achieve this, the authority will implement a programme of infrastructure, training and promotional measures which will build upon best practice established within the Leighton Linslade Cycle Town, an exemplar scheme which has been subject

to significant levels of Government funding to deliver high quality cycling interventions.

A series of objectives have been revised to represent the range pf areas through which it will be achieved:

- Headline Objective: Increase the number of people cycling
- Improve the quality of the cycling environment
- Improve the safety and perceived safety of cycling
- Increase awareness of the benefits of cycling
- Increase access to a bicycle.



## Milton Keynes Local Cycling and Walking Infrastructure Plan

Following the recent adoption of the Walking and Cycling Strategy, Milton Keynes Council has developed the strategic active travel infrastructure plan – Local Cycling and Walking Infrastructure Plan (LCWIP). The plan was developed by the consultant City Science and the Transport Policy Team, in line with

Department for Transport Technical Guidance for LCWIPs.

In the cycling and walking strategy, Milton Keynes identified their key issues:

- The proportion of walking and cycling trips for journeys to work in Milton Keynes (10%) is currently below the regional and national averages for journey to work (13%) (CWi3) 27 due to commute patterns of local residents
- Routes are often perceived to be indirect (CWi4) and unsafe (CWi5).
- The Redway network does not extend fully into Central Milton Keynes, older towns and rural areas (CWi12) and a lack of good trip end facilities, including at bus stops and interchanges.

The local transport plan set out short, medium and long term interventions to deliver information, promotion, education and training, combined with Smarter Choices Strategy, aimes to "make Milton Keynes the envy of other local authorities in terms of low carbon travel", reduce CO2 emissions, improve air quality, and have significant health and quality of life benefits for the population.

## Milton Keynes

Milton Keynes addressed their transport vision statement and objectives to have the most sustainable transport system in the country, increasing its attractiveness as a place to live, work, visit, and do business by 2031. The transport system will provide fast and efficient movement of people and goods, and will be accessible for all. Everyone will have access to key services and amenities, including employment, health, education, retail and leisure.

## Buckinghamshire

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Buckinghamshire Council are in the process of developing a Buckinghamshire Local Cycling and Walking Infrastructure Plan (LCWiP) which seeks to establish a comprehensive walking and cycling network across Buckinghamshire and identify future investment priorities for walking and cycling infrastructure. Whilst there is not currently an LCWIP which covers the whole of Buckinghamshire, local LCWIPs have been, or are in the process of being, developed. The Buckinghamshire LCWIP will provide a series of outputs including a prioritised

programme and future network, evidence base and guide for future bidding and a tool for influencing stakeholders.

The flagship and spine connecting this network is the Buckinghamshire Greenway (see Figure 1). It is hoped the Buckinghamshire Greenway will be a transformational north to south spine connecting local active travel networks and links; the route will connect from Brackley to the Colne Valley. The vision emerged from a combination of the struggle with HS2 to ensure that local communities were not severed from their local networks and links, the desire to see a more active population for fitness and health, the need to enable the public to respond to global environmental concerns by driving less and by the realisation that traffic on many of the roads in the area was now simply too great for any sort of

popular walking and cycling to flourish. The Greenway is being progressed and delivered in phases.

A key aim of the Buckinghamshire Greenway is to link with a series of local active travel routes and network. Therefore, the Varsity Way has the potential to deliver additional connectivity to the Greenway, as well as between communities across Buckinghamshire. The Varsity Way runs between Steeple Claydon and Winslow which are both either directly on, or near to, the proposed Greenway. There is a real opportunity for the Varsity Way to serve a valuable role in connecting communities up to form a network of walking and cycling routes Buckinghamshire Council.

## The Greenway will be delivered in a number of phases:

#### Phase 1

The 4km Waddesdon Greenway route which runs between Aylesbury Vale Parkway Station and Waddesdon Manor has been completed. There has been a 165% uplift in walking and cycling usage during the period 2019 – 2021.

#### Phase 2

The Misbourne Greenway runs south

### Buckinghamshire Greenway

The Buckinghamshire Greenway is an accessible, high-quality active travel route that will connect people and communities running the full length of the county.

It will be the walking and cycling backbone for everyday trips in Buckinghamshire, connecting with both existing active travel routes and other new routes currently in development. The Greenway will also link up with rail and bus services.

#### The Greenway will:

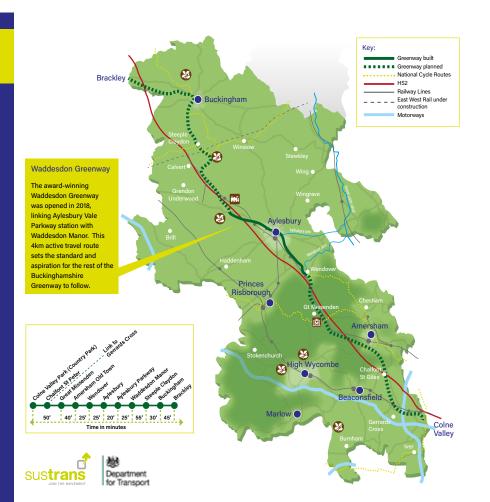
- Open up new opportunities for the people of Buckinghamshire to access education and employment;
- Provide an attractive and safe active travel alternative to local car journeys;
- Be a local leisure and tourism asset for Buckinghamshire, running through the Chilterns AONB and to key tourist destinations.

The Greenway also supports the vision for a north-south National Cycleway connecting London and the West Midlands, and communities in between.

Buckinghamshire Council is working with communities and local organisations, Sustrans and the Department for Transport to bring the Buckinghamshire Greenway vision to life.



Figure 1



from Wendover connecting with Great Missenden and has received planning approval although is not yet built.

#### Phase 3

The Colne Valley Greenway is the final link in the southern section connecting Great Missenden through to the Colne Valley via various towns and villages in the Chilterns.

Northern Phase - HS2 interface

The Buckinghamshire Greenway could become one key route in a wider network of Greenway routes across the Heartland with spurs to less well connected villages.

Oxfordshire County Council (OCC) are in the process of developing a countywide 'Strategic Active Travel Network' (SATN). The concept is to plan a county-wide network of key cycling and walking routes in order to prioritise investments and seek more coherence and connectivity between locations. have, or will have, LCWIPs in place – by means of active travel.

To propose improvements to, or to propose entirely new, active travel links to public transport connections.

The Varsity Way will directly serve towards enhancing existing cycle and walking links, particularly between rural

### Oxfordshire

Oxfordshire comprises four district councils; Cherwell, South Oxfordshire, Vale of White Horse and West Oxfordshire, in addition to the city council of Oxford who have local planning functions and Oxfordshire County Council as the transport authority. The emerging Local Transport and Connectivity Plan identifies a series of challenges and areas where work is required, these include the significant rise in car usage, the need to encourage walking and cycling usage and address the fact that transport is responsible for the largest proportion of greenhouse gas emissions in the county.

The Oxfordshire SATN will propose a rural cycling network aiming to link together towns and villages to improve and increase the viability of rural utility cycling trips. Two keys aims of SATN are:

To improve rural connectivity between settlements – mainly those which

settlements in Oxfordshire. The route also overlaps with several routes and/or key areas where existing LCWIP schemes have been identified

In addition to the county-wide LCWIP, OCC have several LCWIPs for areas across Oxfordshire:

### **Approved LCWIPs:**

Oxford – approved by Cabinet on 17
March 2020

Bicester – approved by Cabinet on 15 September 2020

Kidlington – approved by Cabinet on 18 January 2022

OCC have recently produced a new Local Transport Plan now approved by Oxfordshire County Council; it is referred to as the 'Local Transport and Connectivity Plan' to better reflect OCC's strategy both for digital infrastructure and for connecting the whole county, whose vision is for "a zero-carbon Oxfordshire transport system that enables all parts of the county to thrive. The transport system will enable the county to be one of the world's leading innovation economies, whilst supporting clean growth, tackling inequality and protecting our natural and historic environment. It will also be better for health, wellbeing, social inclusivity and education. Our plan sets out to achieve this by reducing the need to travel and discouraging unnecessary individual private vehicle use through making walking, cycling, public and shared transport the natural first choice."

EEH Active Travel Strategy describes a high-level ambition for active travel in England's Economic Heartland and is the first phase in developing a full active travel strategy for the region. This first phase sets out the active travel ambition for the Heartland based on a review of key European, national, regional and local policies and ambitions and the views of active travel officers across the region.

The region has many towns and cities with dense populations that support the ability to walk and cycle. It also has a varied and attractive rural landscape with the potential to grow both longer distance leisure and everyday shorter utility trips.

It has the world-famous cities of Cambridge and Oxford, both beacons of active travel excellence with well established active travel cultures and visitor economies.

The region's growing connections create opportunities for integration with active travel in the form of first mile and last mile trips.

In addition, new development in the region offers exciting opportunities for new active travel infrastructure and 'locking in' sustainable travel behaviours from the outset.

## **EEH Active Travel Strategy**

The area is a region of contrasts with large rural areas and a significant rural population as well as cities/large towns (referred to as primary economic centres) and a large number of small and medium-sized market towns.

The biggest population centres are Milton Keynes, Northampton, Luton, Swindon, Peterborough, Oxford and Cambridge, followed by a number of larger towns such as Bedford, High Wycombe, Stevenage, Watford, Aylesbury and Hemel Hempstead.

A quarter of the population live in rural areas, within settlements containing fewer than 10,000 people as defined by DEFRA. This is significantly higher than the England and Wales average of 18.5%. Analysis in the Heartland in Context document states that around 34% of the population live in rural areas or rural hubs (small and medium sized market towns), compared with 23% in the rest of England and Wales.

The active travel ambition developed for the Heartland takes into account the needs of the different place typologies.

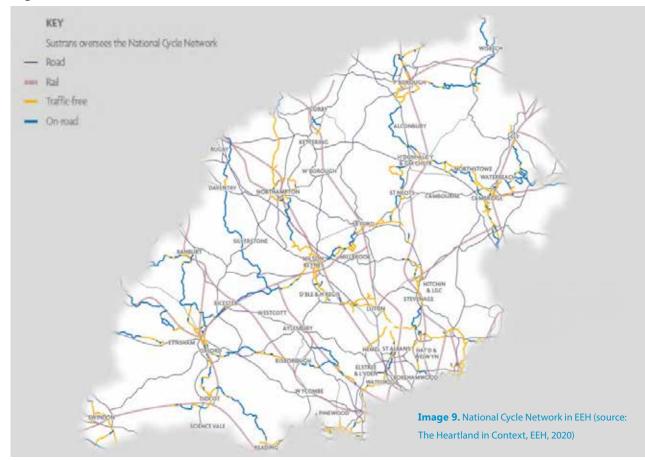
## Longer distance cycling and walking routes in the Heartland

Cycling for leisure and recreational purposes is a popular and growing activity within the EEH region. The spatial characteristics, landscape and historic places of the EEH region lend themselves well to these longer-distance routes which include many traffic free sections.

Longer distance cycling is supported through the National Cycling Network (NCN) which offers some existing routes in the Heartland as shown in Figure 2. The EEH transport strategy makes clear its support for the creation of a pan-regional network of greenways which enhance opportunities for active travel.

It is important to note that these routes connect urban and rural areas within the Heartland and are not exclusively for leisure trips. Many shorter trips could be

Figure 2



made using these routes for utility active travel purposes and should be a key part of the ambition.

Several other longer distance cycling routes already exist or are being planned in the Heartland. These include the following:

#### Varsity Way

Route 51 of the NCN, also known as the Varsity Way, is a 200 km long key existing route forming a cycling spine through the Heartland linking several towns and cities between Oxford and Cambridge via Milton Keynes and Huntingdon. There

is considerable scope for this longer distance route to be used for shorter, utility walking and cycling trips and helping to better connect rural areas with market towns and villages and provide access to opportunities. The EEH regional transport strategy supports "maximising the potential of an Oxford – Cambridge 'Varsity Way' segregated cycling and walking route as a 'green spine' across the Heartland: one that can act as a focal point for developing a region wide network of greenways across the region".

The EEH regional transport strategy supports "maximising the potential of an Oxford – Cambridge 'Varsity Way' as a 'green spine' across the Heartland: one that can act as a focal point for developing a region wide network of greenways across the region"

#### **East West Rail**

The EWR project will provide the key public transport connection between Oxford and Cambridge. Whilst the section between Oxford and Bicester has been completed, other sections of the line to the east are in construction and planning stages.

EWR will provide a once in a lifetime opportunity to transform East West

passenger transport in the EEH region, ensuring active travel is considered in the early stages and throughout would provide an opportunity to truly enable sustainable end to end journeys.

#### **The EEH Active Travel Ambition**

The Active Travel Strategy Ambition outlined in the Phase 1 strategy is as follows:

"To create an exemplar active travel network and culture that encourages mode shift for both shorter journeys and for the first and last mile of longer journeys." This will help to reduce carbon emissions; improve air quality; support residents' physical and mental health; improve safety for users; reduce inequalities; decrease congestion; enhance the planned environment and support sustainable growth across the region.





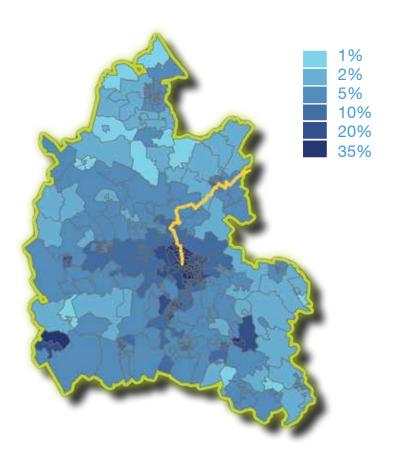
## **BASELINE**

This chapter contains data/ maps extracted from Census 2011 for Oxfordshire, Buckinghamshire, Bedfordshire, Milton Keynes and Cambridgeshire - the counties that Varsity Way passes through

The data/maps show baseline conditions, for example current percentage of commuters who choose cycling as their main means of transport, and the existing gap addressed by "Government Target" and "Go-Dutch Scenario".

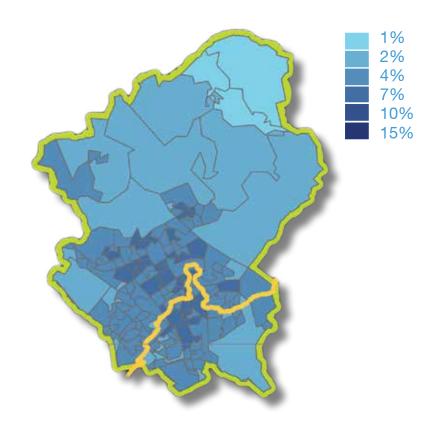
## Percentage of existing cycling commuters





#### **OXFORDSHIRE**

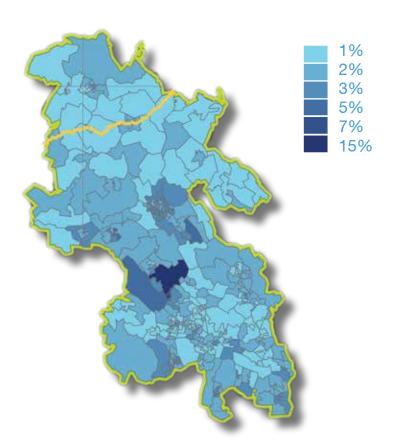
There are a total of 23,349 regular residents who actively choose to cycle to work out of 301,482 commuters in Oxfordshire.



#### **MILTON KEYNES**

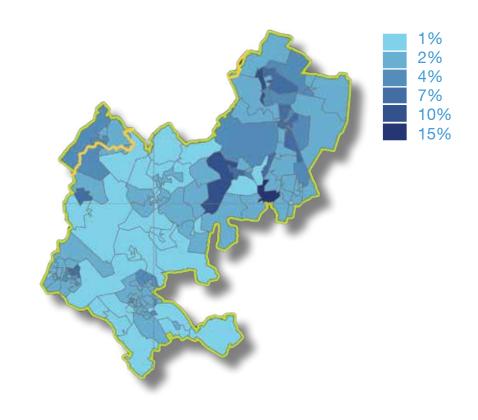
There are a total of 3,636 regular residents who actively choose to cycle to work out of 119,761 commuters in Milton Keynes.







There are a total of 4,126 regular residents who actively choose to cycle to work out of 253,358 commuters in Buckinghamshire.

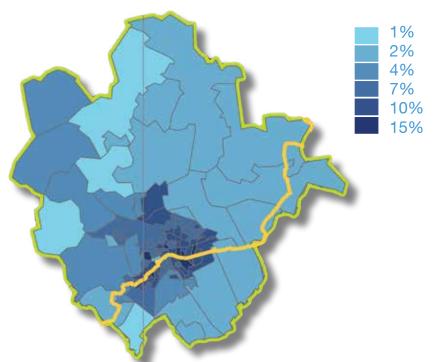


#### **CENTRAL BEDFORDSHIRE**

There are a total of 2,411 regular residents who actively choose to cycle to work out of 143,017 commuters in Central Bedfordshire.

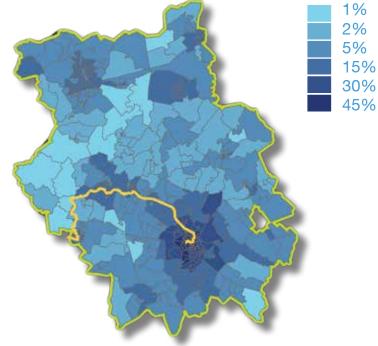
## Percentage of existing cycling commuters







There are a total of 2,991 regular residents who actively choose to cycle to work out of 77,554 commuters in Bedfordshire.



residents who actively choose to cycle to work out of 366,058 commuters in

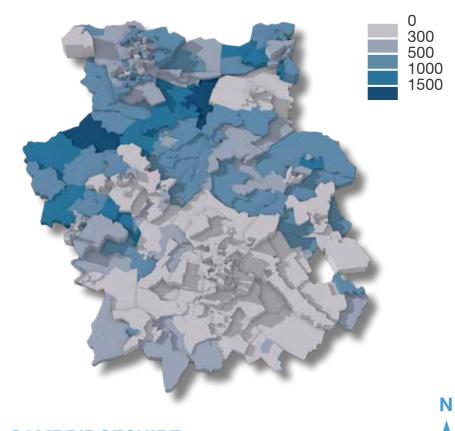
Cambridgeshire.

The five extruded 3D maps following this section illustrate the gap between existing number of cycling commuters and cycling commuters we will be able to achieve in godutch scenario (demonstrated by different shades of blue in percentage increase), as well as the increase in number of cyclists if the parish council was to hit the government target (demonstrated by height of extrusion, the higher the extrusion goes, the bigger the increased number of cyclists needs to be) for Cambridgeshire, Milton Keynes, Buckinghamshire, Central Bedfordshire, Bedford Borough, and Oxfordshire respectively.

Data displayed here is all extracted from the Propensity to Cycle Tool (PCT, https://www.pct.bike/), which is designed to assist transport planners and policy makers to prioritise investments and interventions to promote cycling. The PCT answers the question: 'where is cycling currently common and where does cycling have the greatest potential to grow?'.

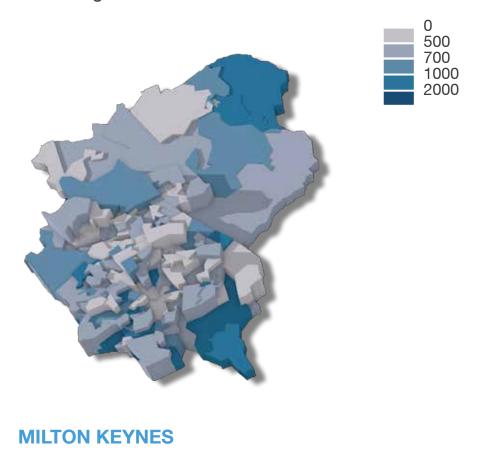
The Go Dutch scenario uses Dutch likelihoods of cycling trips of particular length and hilliness, and applies this to English commutes. This means that Go Dutch provides an ambitious scenario under which we assume that infrastructural and cultural barriers to cycling have been overcome. Reaching Go Dutch potential is likely to require substantial investment in high quality cycling infrastructure and related programmes.

#### Percentage increase to meet Go-Dutch scenario

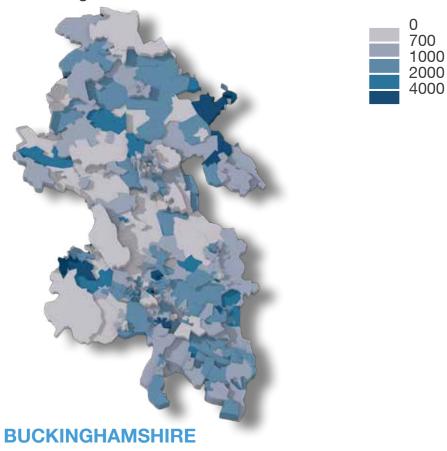


**CAMBRIDGESHIRE** 

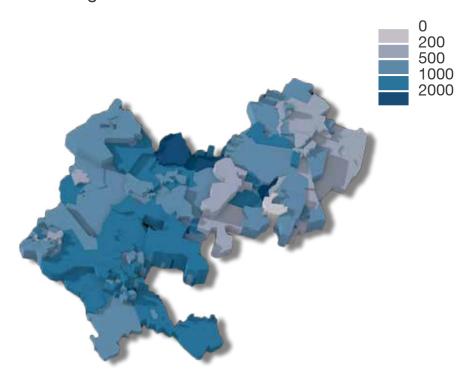
Percentage increase to meet Go-Dutch scenario



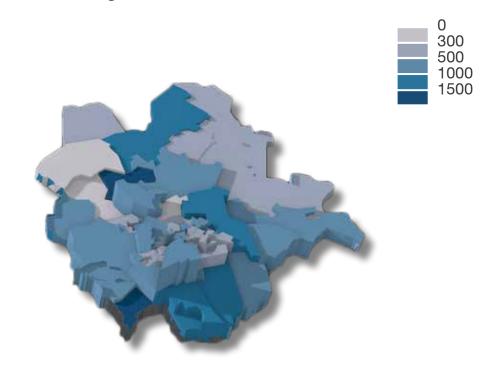




Percentage increase to meet Go-Dutch scenario



Percentage increase to meet Go-Dutch scenario

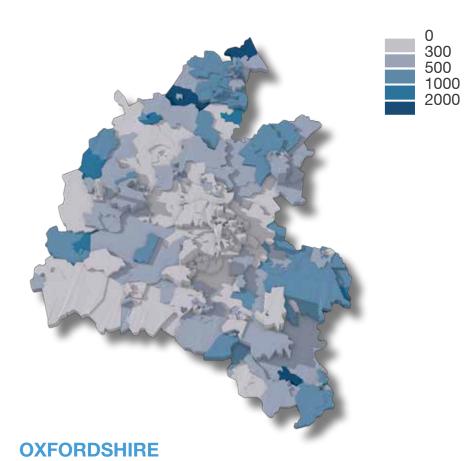


**CENTRAL BEDFORDSHIRE** 

**BEDFORD BOROUGH** 



Percentage increase to meet Go-Dutch scenario



### Summary, scope, limitations and liability

According to Census 2011, Cambridgeshire has the highest ratio of cycling amongst all commuters (9.5%) while Buckinghamshire and Central Bedfordshire are the lowest (both around 1.6%). However the government target sets out an ambitious number for each authority to work towards, and both Buckinghamshire and Milton Keynes need to make significant progress towards meeting the traget compared to the other four, which can also be summarized from the maps given above.

PCT is a planning support system to improve cycling provision at many levels from regions to specific points on the road network.

The PCT uses transparent methods and reliable, tested data. However, the tool is limited in scope: the PCT is based on hypothetical national scenarios of cycling uptake. It is not a predictive tool and does not provide estimates of cycling uptake resulting from a given intervention. The PCT is limited by the geographic resolution of the origin-destination data it uses, and uses a deterministic routing algorithm. Thus, care should be taken when using the PCT to plan for specific interventions, for example estimating cycling potential on two parallel streets. The tool is designed to support planning based on local knowledge and cannot accept liability for any loss or damage

## SUMMARY OF STAKEHOLDER COMMENTS

A stakeholder workshop was held on 22 February 2022 to provide an opportunity to obtain stakeholder feedback and input into local priorities and opportunities linking with the Varsity Way. The primary focus for the workshop was to understand stakeholders' ambition in the area, and potential projects that lead and interact with the Varsity Way to enable the project team to produce a complete picture of the opportunities and priorities of the route. Furthermore it offered the project team a chance to work collaboratively with partners to understand local ambitions.



The first half of the workshop aimed to introduce the concept of the Varsity Way, define Sustrans' role in the project and briefly summarise how the project is being delivered.

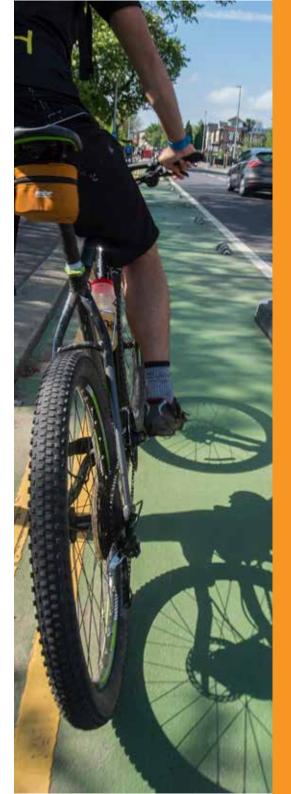
The second half of the workshop was predominantly interactive and focused on gaining feedback from key stakeholders regarding the following questions:

- How important is the Varsity Way to you in terms of education, leisure and business?
- Key places of interest to your communities - what's not accessible, keys links to services etc
- Examples of local cycle, walking and equestrian routes that work well or are popular with local residents?
- What aspirations have you in plans (ie Local Transport Plans, Development Frameworks) to grow or to link to the Varsity Way?
- Are there any opportunities to link the Varsity Way as part of a first mile last mile solution, particularly links to stations?
- Do you support the development of improving the route?



## Key points raised in the workshop discussion:

- Multiple stakeholders expressed support for realigning sections of the Varsity Way to serve additional communities and/or emerging developments. For example, realigning the Varsity Way route to connect with the Greensand Country and Bedford-Milton Keynes Waterway.
- Stakeholders requested further clarity regarding the purpose of the Varsity Way and if it was intended to be a leisure or commuter route.
- Providing links from the Varsity Way route to existing and future East West Rail stations was recognised as important. The importance of cycle hubs and cycle repair facilities being available at stations was raised.
- The British Horse Society emphasised the importance of providing a surfacing suitable for all users. BHS representatives also highlighted the need to ensure that where the route interacts with bridleways, suitable crossings should be provided for equestrians.
- Stakeholders emphasised the importance of wayfinding and local routes being promoted along the Varsity Way route.
- Stakeholders were interested in how the route development was being funded.



 What is the purpose of the Varsity Way - Is it for leisure or economic/ commuting use?

The Varsity Way is promoted as a 'green spine'; a high quality route which can act as a focal point for developing a region wide network of cycle routes. The route currently predominantly serves as a leisure

route, but sections may become key commuting/ economic corridors, especially with the arrival of East West Rail. Varsity Way may play a differing role across the regions it crosses; sections of the route may serve as valuable commuting corridors, linking people with services whilst

others provide links to key leisure

destinations.

A green spine would provide an opportunity for a network of active travel, with opportunities to link to other networks and with local authority aspirations for new routes. The purpose of the Varsity Way is not to provide the most direct links to/from local economic hubs, as this would be difficult to achieve for each local area, rather it can provide a basis for routes to grow off.

 How will the Varsity Way route be funded and delivered?

Funding for the delivery of the Varsity Way upgrades is not yet confirmed. At this stage of the project, we are aiming to produce a cost estimate for upgrading the route based on findings from the route assessment and options identification.

he feedback received was recorded and has been drawn upon throughout this report. The following questions were raised by stakeholders as a result of the workshop. Sustrans and EEH have provided a joint-response to each of the points raised in this section.

 Links to the Varsity Way in rural areas will be important – how are you proposing to do this?

The Varsity Way should act as a catalyst for developing new cycle and pedestrian routes. Whilst the Varsity Way cannot link to all rural areas, this project strives to ensure the Varsity Way alignment enables the development of secondary route networks which deliver these valuable rural connections.

 Links from the Varsity Way to rail stations will be important – how are you proposing to do this?

We recognise the Varsity Way has the potential to play a key role in linking to existing and new EWR stations for everyday journeys for education, commuting and leisure. We have considered the EWR proposals

throughout the route assessment and options identification, which has informed possible changes to the route alignment.

In addition, when EWR is complete, the Varsity Way could become an even more attractive leisure route

as it will be possible to cycle one way and easily return by train.

• What wayfinding provision will be available along the route?

We will look to make recommendations for signposting and wayfinding in the final report, however the design and content used to produce the signs is not in scope at this stage. Whilst we cannot confirm the type, level and extent of wayfinding provision along



the Varsity Way at this stage, we will strive to ensure signage is coherent and appropriately relevant to the local geographical area. We are hopeful that, with input from key stakeholders, the Varsity Way signage will serve to contextualise sections of the route within the relevant town or county, as well as signpost users to key leisure destinations such as National Trust properties etc.

 Some sections of the Varsity Way are poor quality through and don't have a suitable alignment.

The premise of the Varsity Way options assessment is to consider the current condition of the Varsity Way and make recommendations for improvements.

We are conducting a detailed audit of the existing route. The audit findings will inform the recommendations made to improve the Varsity Way route – e.g. where sections of the existing route are along highly trafficked country roads, it may be proposed that an alternative route alignment is explored.

How could local authorities create links and improvements to their part of the route given that funding can be quite piecemeal?

We hope the development of the Varsity Way route assessment and options report will support Local Authorities, providing reference to potential improvements. The nature of the study means that the assessment covers the entirety of a long route, seeking to consider the whole at a more strategic level. However the assessment has been split into a number of smaller sections (around 200) which will allow partners to draw information and recommendations specific to their area.

We recognise that nationally the funding picture can be challenging and therefore wish to provide information about potential improvements for as and when funding becomes available.

The ultimate aim is that the Varsity Way

is to provide an 'anchor'/exemplary route. for local authorities to draw upon when bidding for funding. Where possible and appropriate, the Varsity Way should be upgraded to LTN 1/20 standards which could make bids for new routes connecting to the Varsity Way more attractive to funders.

 Could the Varsity Way route be taken along the BMK Waterway? It is already protected in local plans and a requirement for it to be delivered in Central Beds and Marston Vale.

Key transport and leisure corridors in close proximity to the Varsity Way route will be considered throughout this project, specifically when reviewing the existing route alignment. Whilst it may not be feasible to reroute the Varsity Way to directly connect and overlap with existing key transport and leisure corridors/destinations. the development of links to the route will be strongly encouraged. Wholescale re-alignment of the Varsity Way is beyond the cope of the project but where there is a case to consider this in the future it is noted in the report alongside next steps.

 Links from Greensand Country to the Varsity Way need to be improved as they are currently not to Sustrans

## NCN standard. A good link could be made from Greensand Country to south of Bedford.

The Sustrans/CBC aspiration to realign the Varsity Way through Sandy (on NCN 12) to RSPB, Potton and Gamlingay will deliver considerable improvements in Greensand Country links in the east as these are key links for leisure routes.

Externally to this project, Sustrans welcome discussions with Greensand Country regarding links to the Varsity Way, specifically the link from Greensand Country to the south of Bedford.

 Are there any opportunities to link the Varsity Way as part of the first mile last mile solution, particularly links to stations?

The Forest Centre and RSPB connections to main line stations.

First Mile Last Mile options as part of an end to end sustainable journey, such as to stations forms part of the narrative of EEH's Transport Strategy and therefore such proposals are welcome. The project itself will consider access to stations from the



Varsity Way, outlining the locations of stations, distance from the (current) Varisty Way alignment and where there are options for improved connectivity to them.

 Where possible the Varsity Way project will consider proposed alternative alignments, although we acknowledge the individual links to all leisure attractions and attractors is out of scope of this project.

Proposed links as part of separate projects, particularly those which are LTN 1/20 compliant, to the Varsity Way are likely to be welcomed by the EEH and Sustrans.

The route has the potential to become one of the more popular long distance routes. These routes, such as Coast to Coast, Way of the Roses attract longer distance recreational cyclists on multi day rides. The Varsity Way will link two very popular tourist destinations which are both relatively 'cycle friendly' and therefore we could expect this to be popular with both UK and overseas

based tourists. When EWR is complete, this will make it even more attractive as it will be possible to cycle one way and easily return by train.

We hope the Varsity Way will serve as a key leisure route; effective communication and promotion across all local authorities, community groups and charities will be valuable in achieving this vision.

 The potential equestrian use of the more utility urban/urban fringe routes should not be ruled out – people keep and ride their horses in some unexpected places, including in towns.

Equestrian businesses are important contributors to the rural economy as well as to health/wellbeing, providing opportunities for children and other to engage in active leisure outdoors in the natural/semi-natural environment. It's also worth noting

inclusion here: a high proportion of equestrians are female and/or older/less mobile – many women feel safer going out alone on horseback that on foot, and riding enables people with mobility problems to go further into the countryside than they would be able to on foot.

We appreciate the Varsity Way route is likely to be enjoyed by equestrian users as well as pedestrians and cyclists. Therefore we will consider the needs of equestrian users throughout the development of the Varsity Way.

 Horse riders should be acknowledged users of the Varsity Way wherever the route intersects with bridleways (and also minor roads) and thus create local circular routes for all.

The BHS supports the development of improving the Varsity Way, but it must not be to the detriment of established legal users. Surfacing of rural bridleways in particular should be appropriate for all users (see guidance https://www.bhs.org.uk/advice-and-information/free-leaflets-and-advice).

We will strive to consult the BHS

guidance whilst undertaking the route assessment and options identification process. We appreciate the feedback and case study examples provided by the BHS and have noted the Oxfordshire Science Vale Network (Icknield Way) is supported by the BHS.

The Varsity Way could be useful in tackling car use for short journeys (to school, shops etc) by giving local residents and tourists the option to walk/cycle. Could school streets be woven into the Varsity Way design and engagement?

Whilst we hope the Varsity Way will provide useful connections for local people wishing to access nearby destinations along the route, we are unable to align the path to meet specific local connectivity needs given the length and scale of the route and the project budget. Nevertheless, we would encourage local authorities to share any key documents or policies which can be drawn upon to inform the route assessment and options identification. For example, Buckinghamshire Council recommended we consult their county-wide LCWIP when considering local authority priorities.



## **ROUTE ANALYSIS AND OPPORTUNITIES**

To assess and provide recommendations for the Varsity Way, the route was split into different counties and high-level recommendations (and costings) were made based on reviewing the National Cycle Network scoring data and undertaking site visits. This provides a first step for further work or conversations with stakeholders.

Recommendations include interventions specific to different areas of the route, noting that each section requires different interventions to ensure everyone can enjoy the route.

The recommendations range from geographically specific:

- Signage improvements
- Surface improvements
- Path widening

- Accessibility improvements
- Quietways
- Junction improvements

Realignment



## **National Cycle Network Scoring Guidelines**

#### Overall Score

- All sections are scored between 0 and 15.
- Only sections that score the full 15 points are considered to meet the Very Good standard.
- Lower scores are classified as Good, Poor or Very Poor as below:

Score	15	10-14	6-9	0-5
Classification	Very Good	Good	Poor	Very Poor

## Criteria and scoring mechanism

The overall section scores are made up from the combined scores for 4 categories – surface quality, flow, signage and traffic safety:

#### Surface quality - score from 0 to 3

Question – is the surface smooth enough for all types of cycle to be used here?

- Yes = 3
- Perhaps = 2

- Probably not = 1
- No = 0

#### Flow - score from 0 to 3

Question - can a relaxed speed (typically around 8 mph) be continually and safely maintained here?

Scores based on the available width and presence of barriers on the route:

- No barriers and width is greater than 2m = 3
- Width is greater than 2m but barrier restrict the route = 2
- No barriers but width is less than 2m = 1
- Barriers restrict the route and width is less than 2m = 0

#### Signage - score from 0 to 3

Question - can this route be followed without a map?

Scores based on the directional signage on the route:

Signed in both directions = 3 Signed in only one direction = 2 Not signed in either direction = 0

#### Traffic Safety - score from -4 to +6

Traffic safety has been weighted more heavily than the other categories:

- Traffic-free section = +6
- Road section meeting quiet-way traffic threshold\* = +4
- Road section not meeting quiet-way traffic threshold = -4

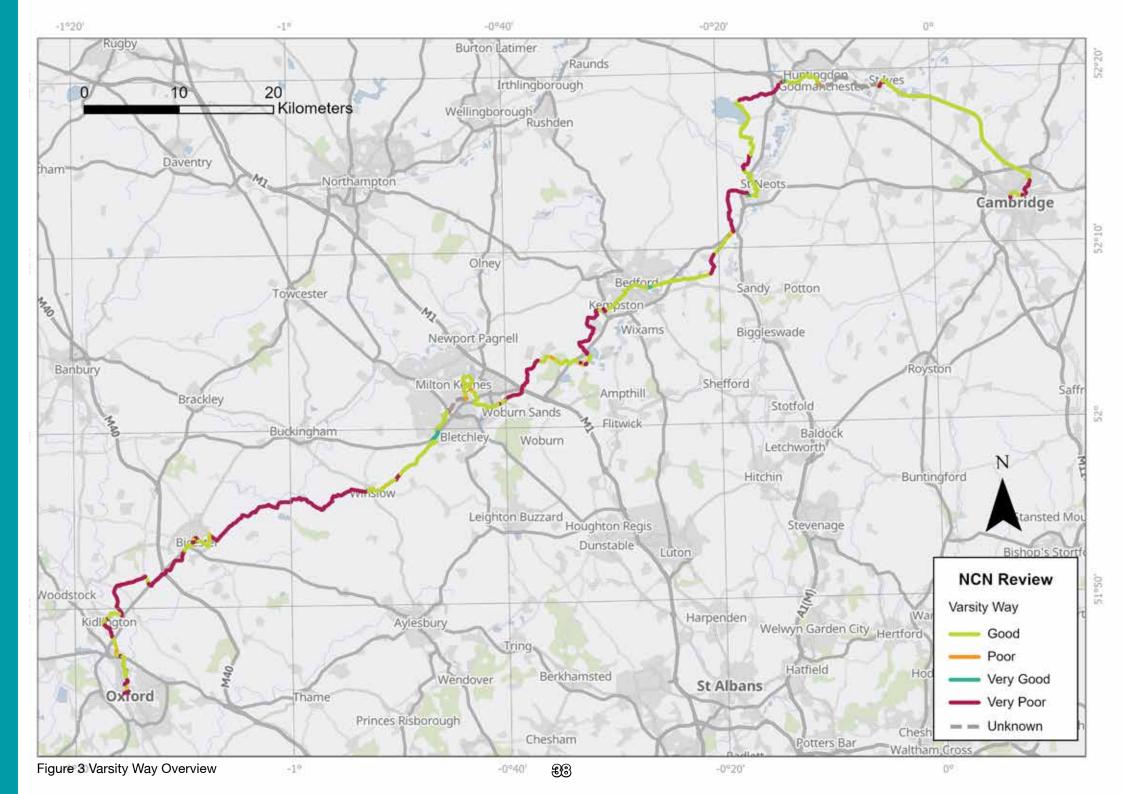
\*To qualify as a quiet-way road the section must have traffic speed and volume equal to or less than the thresholds set out in table 1

## ► INRIX Traffic Speed and Volume dataset

The quiet-way traffic thresholds are calculated using a dataset known as the INRIX traffic speed and volume dataset (2018).

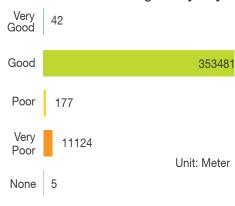
The dataset contains average traffic speeds and volumes on all UK roads during off peak times and is based on millions of data-points taken from invehicle GPS and mobile devices.

 The INRIX average speed data gives the median speed for vehicles

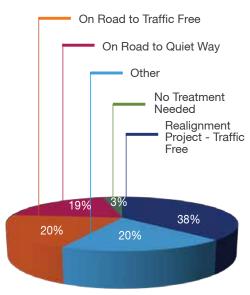


## **Cambridgeshire Sustrans Route Audit**

Sustrans National Cycle Network Route Audit Result along Varsity Way



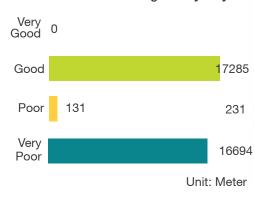
## **Cambridgeshire Route Sections Appraisal**



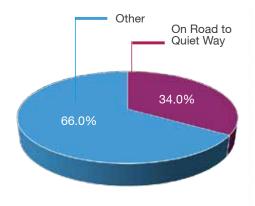
Treatment to Varsity Way sections in Cambridgeshire

## **Bedford Sustrans Route Audit**

Sustrans National Cycle Network Route Audit Result along Varsity Way



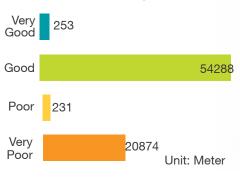
## **Bedford Route Sections Appraisal**



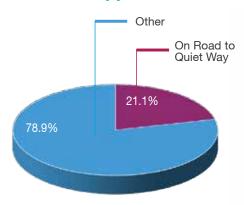
Treatment to Varsity Way sections in Bedfordshire

## **Central Bedfordshire Sustrans Route Audit**

Sustrans National Cycle Network Route Audit Result along Varsity Way



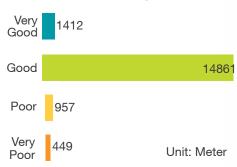
## **Central Bedfordshire Route Sections Appraisal**



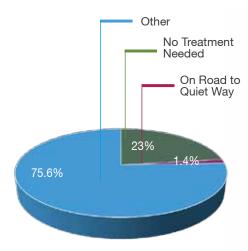
Treatment to Varsity Way sections in Central Bedfordshire

#### Milton Keynes Sustrans Route Audit

Sustrans National Cycle Network Route Audit Result along Varsity Way



#### Milton Keynes Route Sections Appraisal



Treatment to Varsity Way sections in Milton Keynes

#### Buckinghamshire Sustrans Route Audit

Sustrans National Cycle Network Route Audit Result along Varsity Way



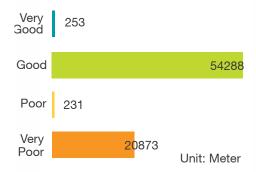
## **Buckinghamshire Route Sections Appraisal**



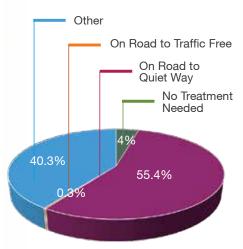
Treatment to Varsity Way sections in Buckinghamshire

#### Oxfordshire Sustrans Route Audit

Sustrans National Cycle Network Route Audit Result along Varsity Way



## Oxfordshire Route Sections Appraisal



Treatment to Varsity Way sections in Oxfordshire

**Varsity Way Overview** 

Traffic Free Section

48.64%

Weighted Average National Cycle Network Review Score

8.5/10

157,238

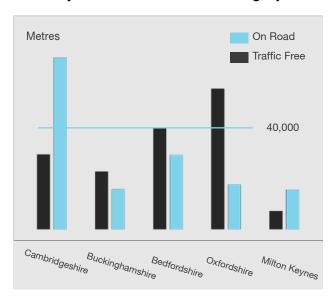
metres of Good to Very Good Section

133,317

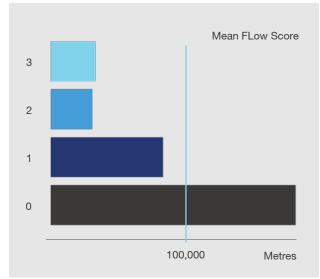
metres of Poor to Very Poor Section OnRoad Section

51.36%

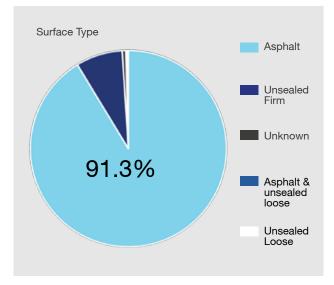
The charts/table/texts below outlines the basic information for Varsity Way, including length of Varsity Way sections within different National Cycle Network Review category from Sustrans 2018 audit.







Varsity Way NCN Review Category (Unit: Meter)						
	Very Good	Good	Poor	Very Poor		
Buckinghamshire	2,150	20,635	0	16,113		
Oxfordshire	429	19,742	3,238	49,976		
Milton Keynes	421	19,796	2,759	0		
Bedfordshire	0	345,67	0	34,918		
Cambridgeshire	42	353,481	177	111,24		





### **Stations**

The Varsity Way has close interactions with the rail network at several stations including Oxford, Oxford Parkway, Bicester North, Bicester Village, Winslow, Bedford, Huntingdon and Cambridge North.

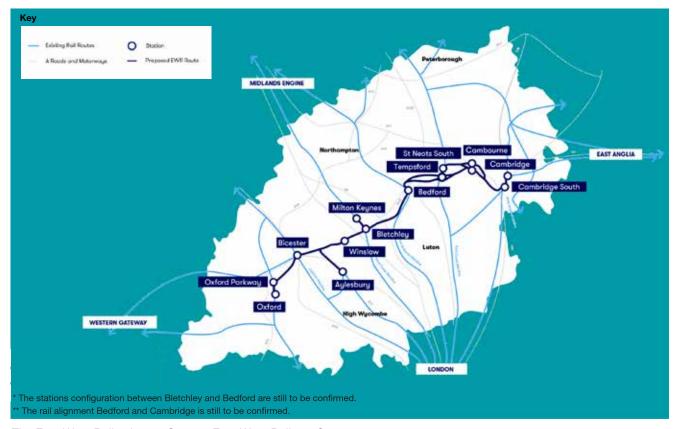
The route has the potential to link to these stations for everyday journeys for education, commuting and leisure.

Using the Varsity Way to boost sustainable connectivity to railway stations supports the aims of the 'Great British Railways: The Williams-Shapps Plan for Rail' which outlines how the government will make railways the backbone of a cleaner, more environmentally friendly and modern transport system across the country. Safe and accessible cycle routes to stations are needed, particularly in commuter and rural towns.

A particular area of opportunity is through East West Rail. The section of East West Rail between Oxford and Milton Keynes is due to open in 2024, while the link eastwards to Bedford and Cambridge is currently in planning stages under the East West Railway Company. The Varsity Way can play an important role in improving first mile, last mile connectivity to East West Rail stations.

In addition, once East West Rail is delivered to Cambridge, the Varsity Way is likely to become even more attractive to leisure users and tourists, who will be able to cycle one way and easily return to their starting point by train. Enhancing signage to the Varsity Way from stations, alongside improving cycle storage facilities, will also be crucial.

It should be noted there was some support for investigating a more wide-scale realignment of Varsity Way in the Marston Vale. Although not investigated in this report, there would be a strategic benefit to further investigate this option to greater align with East West Rail and stations (the configuration of stations in Marston Vale is still to be confirmed).



The East West Rail scheme. Source: East West Railway Company



## **NEXT STEPS**

The Varsity Way has the potential to become a leisure and tourism drawcard for the area. The connections via Varsity Way between the different towns and cities in Oxfordshire, Buckinghamshire, Milton Keynes, Bedfordshire and Cambridgeshire provide an opportunity to change the way residents travel and use greenspaces. The Varsity Way is a long distance active travel route, which can link major tourism attractions, our towns and cities and those communities along the route.

There are issues with the existing route that will need to be addressed to fulfil the vision of maximising the potential of Varsity Way to make it a green spine for the region. Current issues identified through the assessment include access barriers that block legitimate users from access the path, narrow shared paths, dangerous on-road sections and deteriorating surfaces.

East West Rail is a major transformative scheme in the study area, providing an opportunity - with the right first mile solutions available - to facilitate end to end sustainable journeys. The route largely mirrors some of the East West Rail route, however, there is potential for further investigation of future alignment of Varsity Way within the Marston Vale area, and to link with projects such as MK Bedford Waterway.





Further discussion and engagement will be required by all parties to ensure any future work reflects integration with wider policy and infrastructure ambitions. Wide-scale realignment of the Varsity Way did not form part of the scope of the first stage of the project but strong stakeholder engagement input suggests there is benefit to further work.

Additional funding will be required to undertake this work and there are advantages to collaborative working on funding and investigation of the joint strategic benefits. Additional ecological investigations, landowner registries and further highway authority engagement would be required as part of this work.

Additional opportunities through projects such as existing greenway aspirations in the EEH region could significantly change the walking and cycling network in the area and it is important that all stakeholders are engaged with from concept design through to next steps on the Varsity Way to enable a network approach.

This work will help inform discussions with stakeholders. The assessment provides a mix of short and long term solutions for the Varsity Way and some will require political and community support to proceed.







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