

GREATER CAMBRIDGESHIRE

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OVERVIEW

Each district of Cambridgeshire and Peterborough is different; hence we have developed distinct approaches for the distinct geographical areas of Peterborough, Greater Cambridge, Huntingdonshire, East Cambridgeshire, and Fenland. These are set out in this chapter, and each reflects local transport constraints, opportunities, and patterns of growth.

Each approach outlines the major schemes expected to be delivered within each area to deliver our objectives, both directly by ourselves and in partnership with other local and national stakeholders. Some aspects of the strategies are, by necessity, still under development and hence all schemes will need to demonstrate value-for-money and affordability, together with alignment with our strategic priorities before they are able to proceed.

This section includes:

- Summary of recent and planned growth, and local transport constraints;
- Progress and projects delivered to date; and
- Transport schemes to help deliver each strategy.

BACKGROUND

Greater Cambridge includes both the city of Cambridge and the surrounding district of South Cambridgeshire with a combined population of approximately 308,000 people. The Greater Cambridge area is of national economic significance and includes the historic city centre; two world class universities; internationally renowned high-tech research, innovation, and science parks (including the largest centre of medical research and health science in Europe: the Cambridge Biomedical Campus); more than one hundred rural hamlets, villages, and three new towns under development.

Cambridge itself forms the centre of Greater Cambridge with a population of approximately 146,000 people. It includes a city centre with an extensive retail, leisure and tourist offer, two universities, and a number of large employment sites. Many residents cycle or travel by public transport to work (31% of people cycle). South Cambridgeshire, by comparison, is a predominately rural district, comprising over a hundred villages and hamlets of a variety of sizes and with varying degrees of connectivity by public transport and active modes. There are also four new settlements under development:

- Cambourne is the most established, a new settlement located ten miles west of Cambridge. Cambourne West (2,350 homes) is currently being developed, and the emerging *Local Plan* indicates the potential for a significant number of further additional homes;
- Close to Cambourne, a new village at Bourn Airfield (3,500 homes) is planned
- Northstowe, a new town located five miles north-west of Cambridge, is in development and is expected to accommodate approximately 10,000 homes; and
- A new town north of Waterbeach has received planning permission for 11,000 homes.

Aside from the cluster of biotechnology and science parks located in South Cambridgeshire, including the Cambridge Science Park, the Wellcome Genome Campus, Babraham Research Campus and Granta Park, the area predominately looks to Cambridge for employment, shopping, leisure, education, training, and major services. 23,400 residents in South Cambridgeshire commute to work in Cambridge, compared to 23,800 who work within the district itself.

RECENT DEVELOPMENTS

Greater Cambridge has grown significantly over the last two decades, with more businesses choosing to locate in the area. This has put pressure on the area's infrastructure. The population of the area has increased by 12% over the past ten years, while property prices have increased by more than 64% between 2011 and 2021. Greater Cambridge is now one of the most unaffordable places to live in the country, with average house prices more than ten times average local earnings in 2021. This has the potential to undermine quality-of-life and the region's attractiveness as a place to live and work.

Recent growth has seen the historic development pattern of Greater Cambridge change significantly in recent years, with Cambridge emerging as the heart of a rapidly growing, polycentric city region.

Historically, employment and economic activity in Cambridge was focused in and around the city centre; however, beginning with the construction of the Cambridge Science Park in 1971, development has increasingly occurred on the city 'fringe'. Partly reflecting the constraints on land for development in and around the city centre's historic core, Cambridge's development and employment has become increasingly decentralised, with existing and planned employment and leisure activity focused within six key areas:

- Cambridge City Centre;
- Cambridge Station, CB1 and Hills Road;
- Cambridge Biomedical Campus and 'Southern Fringe';
- North East Cambridge, including Cambridge Science Park;

- West Cambridge and North West Cambridge (Eddington); and
- Cambridge East.

These sites collectively account for 63% of all jobs within the Cambridge urban area, and 40% of all jobs within Greater Cambridge.

Both Cambridge and South Cambridgeshire have plans to meet identified development needs, which will require continued investment in the region's transport network to provide the capacity, connectivity and accessibility required. More than 33,500 homes and 44,000 jobs are expected to be delivered by 2031 under both districts' adopted 2018 *Local Plans*, where the most sustainable locations are prioritised first for growth. Housing growth is proposed under the Plans from 2011 to 2031:

- In the existing urban area of Cambridge (6,800 homes);
- Within defined fringe sites on the edge of Cambridge, and sites proposed to be released from the inner Green Belt boundary (e.g., at North West Cambridge) (12,700 homes);
- Within existing and newly identified new settlement locations at Cambourne, Northstowe, Bourn Airfield and Waterbeach (8,100 homes); and
- Lastly within identified villages (8,200 homes), reflecting the difficulty in achieving sustainable growth in these locations.

In 2014, the Greater Cambridge area negotiated a City Deal with government, delivering up to £500 million of grant funding to invest in projects to support future sustainable growth as outlined in the 2018 *Local Plans*. The City Deal recognised the area's national importance and provided funding to address several key constraints to growth – particularly the transport network. The Greater Cambridge Partnership (GCP) was established to plan and deliver the City Deal. Its Board comprises a representative from each of Cambridgeshire County Council (CCC), Cambridge City Council (Cambridge CC), South Cambridgeshire District Council (SCDC), the University of Cambridge, and the business community.

Looking to the longer-term post-2031, the two Local Planning Authorities are preparing a joint *Local Plan for Greater Cambridge* which will consider the development needs for homes and jobs to 2041. The emerging Plan directs development to where it has the least climate impact, where active and public transport is the natural choice, where green infrastructure can be delivered alongside new development, and where jobs, services and facilities can be located near to where people live to reduce reliance on the private car.

We are working closely with the Local Planning Authorities, GCP, CCC, and other relevant partners to deliver a world class transport network in Greater Cambridge. Our partnership working here seeks to ensure that the adopted and emerging development strategy is supported by effective and sustainable transport policy and infrastructure. This includes supporting the potential role of a sub-strategy for the Greater Cambridge area, that would update the previous *Transport Strategy for Cambridge and South Cambridgeshire* that was prepared in parallel with the 2018 *Local Plans* under a previous *Local Transport Plan*. The strategy will form a 'child' document to this Plan.

TRANSPORT CHALLENGES

Supporting growth presents a unique challenge for Greater Cambridge. There is a clear need for an ambitious approach to significantly increase transport capacity to shift current trips to sustainable modes as well as support additional trips from new residents, while tackling congestion on the highway network and creating more attractive, less car-focused places to live and work. Tackling congestion was identified in the City Deal as a key barrier to growth. The GCP aims to reduce traffic by up to 15% on 2011 levels. This is equivalent to taking one in four cars off the road

compared to today's traffic flows, as commuters into Cambridge by car spend on average a quarter of their journey time stuck in traffic.

Current levels and patterns of travel in the Greater Cambridge area already have a detrimental environmental and social impact. An increase in the number of people making journeys in the area will make these worse if not accommodated sustainably. In 2020, air pollution contributed to 121 early deaths in Cambridge and South Cambridgeshire. The toxic pollutant nitrogen dioxide (NO2) has, on occasions, breached legal limits for human health on Drummer Street, Emmanuel Street, Regent Street and St Andrew's Street in Cambridge.

In addition, transport causes almost half (45%) of our local climate-warming carbon emissions - more than any other source. Particulate matter from transport is also of concern. Cambridge CC, CCC and SCDC have pledged to reach net zero carbon in the coming decades. Without action, the number of car journeys may rise by up to 50% by 2031, impacting on local air quality and health outcomes, and potentially threatening the region's quality-of-life. Cambridge is a historic city, and simply providing additional highway capacity to support growth does not form a viable or attractive option.

To address the current congestion and environmental problems, accommodate new growth and address the climate emergency we need to make sustainable transport a more attractive option than the private car for many journeys. We will invest in tackling the barriers that we already know prevent people using public transport or walking and cycling, as well as discouraging car trips where these could be made by other means. Extensive public engagement has shown that reliability, speed, and frequency of public transport are all key barriers to encouraging more people to use bus services. The high cost of public transport is often cited as a deterrent to people making the swich from private car, especially when balanced against the cost and availability of car parking. Feedback from the GCP's 'Choices for Better Journeys' consultation in 2019 identified that if parking charges or flexible charges were introduced, additional money should be used to improve transport across the area and that it should be cheaper to travel into Cambridge by public transport than drive and park. Congestion means that

many bus services are comparatively slow, particularly on routes into the city, leading to poor reliability that can mean that users do not feel they can rely on the bus.

Bus operators highlight traffic congestion as the most important issue affecting the efficiency of operations and relative attractiveness of services. In Cambridge for example, the average speeds on roads entering the city during peak hours is less than 60% of free flow speed. Vehicular tracking data from buses identified that on routes serving central Cambridge 21% of services were late. Competition for road space between public transport, private vehicles and non-motorised users result in delays for everyone. Accessibility to bus services can be problematic even within the city with routes largely run along radial corridors into the city centre and often not penetrating major destinations and employment sites. In addition, the lack of bus depot provision is also problematic for operators and a further barrier to addressing the efficiency of operations.

Due to high housing costs within the city, there is an increasing number of people who reside outside the city and travel in for employment. Services from these towns and the surrounding rural area are often infrequent or non-existent, with services limited at evenings and weekends, undermining the ability of the public transport network to compete with the private car.

The area is well-served by rail, with four lines radiating from the city itself, providing connectivity for the more rural areas via village stations. However, accessibility to these village stations can be problematic due to a lack of integration with bus services and poor connections by active travel. Along the Cambridge to Kings Cross line, the Meldreth, Shepreth and Foxton Community Rail Partnership has been proactive in identifying what these deficiencies are through the production of a *Local Rail Improvement Plan*.

During the pandemic, traffic levels in Greater Cambridge fell significantly, demonstrating significant benefits for bus reliability and speeds, as well as creating safer and more pleasant environments for active travel. Recent data suggests that traffic levels are now returning to near pre-pandemic levels, with clear peaks in the morning and evening, even as significant levels of homeworking continue. Bus patronage has not recovered at the same rate. Without action, trends around increasing congestion and pollution are likely to continue in the area particularly given predicted levels of growth.

Historically, Cambridge has a proud tradition of active travel. The city is unique in this country in having a very significant level of cycling, with the 2011 Census revealing that 29% of journeys to work were made by bike. The topography of the area lends itself to cycling and where safe infrastructure is provided there is strong evidence that people will commute much further by bike than traditionally assumed. Different types of bikes, such as e-bikes and cargo bikes, are also expanding the range and nature of trips that people are making.

Significant investment has been made in improving active travel infrastructure across the city in recent years, with bold steps taken to prioritise non-motorised users over vehicular traffic. During the pandemic, many more people turned to cycling, revealing a hidden demand for more journeys to be active. However, we know that there are barriers to people undertaking more journeys by active modes.

A consultation undertaken by the GCP in 2021 revealed that safety and interaction with traffic were key themes to address in order to encourage greater use of active travel modes. These included:

- Safer routes and junctions;
- Less traffic;
- Direct routes;
- More segregation; and
- Quieter routes.

The challenge of increasing the use of sustainable transport is in large part due to the priority given to private vehicles over sustainable transport modes. Although through traffic has been banned from the city centre for many years, there remain a number of key routes into and around the city where private vehicles and sustainable transport

compete for limited road space. Furthermore, the cost and availability of parking can determine whether people choose to leave their car at home. Although public car parking in the centre of Cambridge is priced to encourage commuters to use Park & Ride sites on the edge of the city, there is still a considerable stock of private car parking spaces. Similarly, residents' parking schemes exist in several areas but there remain many streets where parking is freely available. Neither of these situations provides a deterrent to people driving into the city, even if they could use sustainable transport.

PROGRESS TO DATE

In 2020, the GCP secured a further £200m to deliver its programme following a government review of its progress since the initial £100m investment in 2015. This review by central government has enabled GCP to continue with plans to significantly enhance the sustainable transport network, including through provision of four segregated public transport and active travel corridors, public transport, and active travel improvements on key radial routes into the city, as well as the network of Greenways and cross-city cycle improvements.

Case Study: Greenways



The Greater Cambridge Greenways is a series of twelve greenways feeding into Cambridge, forming the spokes of a wheel, making it easier to travel into, out of and around Cambridge for walkers, cyclists, horse riders and other non-motorised vehicle users. The routes will link up with other Cambridge projects such as the Chisholm Trail and where possible to each other to make a seamless journey both around the outskirts and into the heart of the city. In some cases, these are new routes, or routes

with new sections, whilst others will be based on existing paths.

In 2021, the Histon Road scheme was completed providing better bus, walking, and cycling facilities for those travelling on this busy key route into Cambridge. Phase 1 of the Chisolm Trail opened to the public at the end of 2021, including the new Abbey-Chesterton bridge, providing walking, and cycling links between Cambridge North Station and Coldham's Lane. Work is now turning to the more detailed design of Chisholm Trail Phase 2 which will connect Coldham's Lane to Cambridge Station and Clifton Road. Four cross-city cycling schemes have been completed to improve key routes within the city, improvements to the A10 cycleway to Melbourn, as well as a range of early improvements on key schemes including phase 1 of Cambridge South East Transport and Greenways 'quick wins'. Work has now commenced on Milton Road to improve infrastructure for pedestrians, cyclists, and buses. This is due to complete in 2024.

Considerable progress has been made on the development of all four of the flagship public transport and active travel schemes. All four corridor schemes have undergone further public consultation to advance the business case of each:

- Cambourne to Cambridge. In July 2021, the GCP Board approved the Outline Business Case (OBC) for the scheme and gave approval for the project to advance to the next stage of the application process by commencing work on the Environmental Impact Assessment (EIA). The EIA consultation took place in summer 2022 with the Transport and Works Act Order (TWAO) submission scheduled for 2023. The decision to agree to the submission of the TWAO was taken by CCC in April 2023.
- Cambridge Eastern Access. In July 2021, the GCP Board approved the Strategic Outline Business Case (SOBC) for the scheme, which confirmed that there is a strategic case for the project. Following this, a consultation was held in late 2021 on the preferred options for public transport, cycling and walking on Newmarket Road, as well as initial plans for the Park & Ride site relocation. The OBC for Newmarket Road was approved in September 2022. A detailed consultation on the Newmarket Road proposals and possible locations for the Park & Ride took place in early 2023. The decision on the next steps for these schemes will be taken in the autumn of 2023.

- Cambridge South East Transport. Implementation of road safety, walking, cycling and horse-riding improvements along the A1307 has already begun under Phase 1 of the scheme. The GCP Board approved work on the next phase of the project, working towards the submission of a TWAO in 2023.
- Waterbeach to Cambridge. Following on from a consultation on initial options, the GCP Board approved the SOBC for the scheme in July 2021. Consultation took place in early 2023 on the preferred options for the route alignment and for the location of a new Park & Ride near the new town at Waterbeach. The decision on both of these will be taken in the autumn of 2023.
- Twelve Greenway routes are being taken forward, linking communities around Cambridge to the city through provision of new and improved active travel infrastructure. The technical design for 11 of these Greenways will be subject to engagement through 2022 and early 2023 with delivery to begin in late 2023. The Linton Greenway has already started construction as part of phase 1 of Cambridge South East Transport (CSET).

A number of 'quick wins' have been delivered, including road resurfacing, improvements to junction safety and new crossing points, both within Cambridge but also within and between villages in South Cambridgeshire. Preliminary design is currently underway for active travel improvements along Madingley Road, between Eddington Avenue and Northampton Street.

CCC has continued to deliver the schemes secured through its successful bid to the Department for Transport's (DfT) Cycle City Ambition Fund, the aim of which was to provide separate cycle lanes on the main roads in Cambridge and to create good quality cycle links to employment areas in Cambridge and South Cambridgeshire. This includes the newly opened bridge in Chesterton which forms an integral part of the Chisholm Trail.

The first Dutch-style roundabout in the country was opened at the Fendon Road/ Queen Edith's way/Mowbray Road junction in 2020, giving equal priority to active travel as motor vehicles through an innovative design. The Covid-19 pandemic has had an unprecedented effect on the way people travel around in Greater Cambridge. In response to the initial wave of the disease, steps were taken to make it easier for people to walk and cycle around the city and maintain social distancing. This was done through a series of experimental traffic management measures that closed various streets to through motor vehicle traffic. Following the trial period, CCC as the Highway Authority has decided that all the trials should be made permanent.

More widely, various schemes have been delivered to encourage uptake of active travel. This includes an e-scooter trial in Cambridge as well as e-bike hire and an e-cargo bike scheme to give residents and businesses the opportunity to try these out. Alongside improvements to sustainable transport infrastructure, proposals have been developed to significantly improve bus services across the Cambridge travel to work area, encourage uptake of active travel, and identify a mechanism to create space and raise revenue in order to deliver these improvements. In autumn 2021, the 'Making Connections' consultation set out proposals for an improved bus network and explored measures that could be delivered to create space for walking and cycling, alongside improving bus speeds and reliability, and options for raising money to pay for improvements to the transport network. This was followed by further consultation in autumn 2022.

The first steps towards a move to cleaner buses has been made though a successful bid to the DfT for a grant towards thirty new zero emission double decker buses which will come into service early in 2023. The buses will operate on the Park & Ride and Citi2 routes and will also include in-depot charging and charging infrastructure at one Park & Ride site. This follows an initial pilot of two electric buses operating in the city co-funded by the GCP and Stagecoach.

A number of schemes being advanced by other partners which connect the city to the wider strategic rail and road networks. Plans for the new Cambridge South Station were approved by the Secretary of State in December 2022.

The upgraded Huntingdon to Cambridge A14 opened in May 2020, delivering 21 miles of new and upgraded road, as well as improvements to connections for cyclists, walkers, and horse riders. The A428 Black Cat roundabout to Caxton Gibbet scheme received approval from the Secretary of State in August 2022.

OUR APPROACH

Our strategy involves transforming the sustainable transport offer, so more people choose to travel by public transport, active travel and fewer by car. In doing so, we will be flexible and responsive to changing patterns of mobility and technology, and improve accessibility to jobs, services, and leisure opportunities.

The public transport network needs to be quicker, more reliable, and convenient than the private car. To do this, it is essential that the whole journey is considered, and an integrated, and high-quality public transport system is provided that seamlessly connects with other modes for the first and last mile. It also needs to be able to compete on cost.

The figure illustrates the GCP's Future Network 2030 vision and includes wider strategic infrastructure being delivered by other bodies. This includes a new railway station serving the Cambridge Biomedical Campus and the introduction of a completely new railway line into Cambridge from the west as part of East West Rail. Building on this, the vision shows a significantly improved bus network, linked to a number of Mobility (Travel) Hubs.

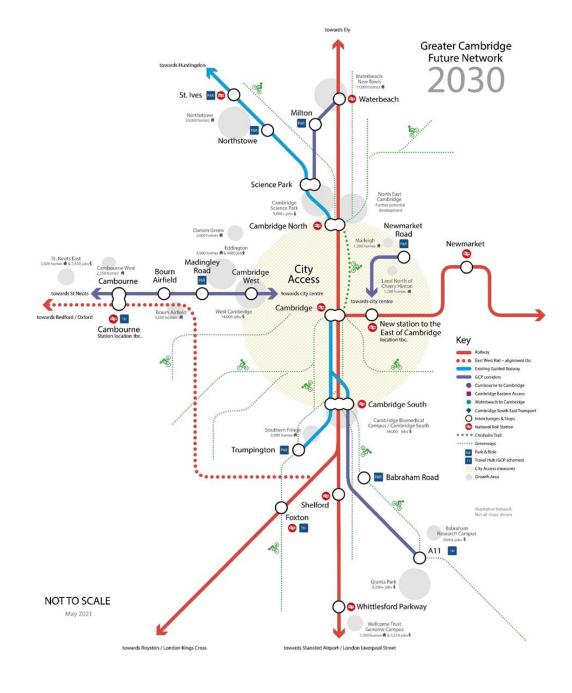


Figure 1 - GCP's Future Network 2030 vision

Integral to this network will be four segregated corridor schemes designed to offer better public transport and active travel routes to the west, north, east, and south east of the city. These routes have been identified as essential to linking the growing communities along each corridor, including Cambourne and the new town north of Waterbeach as well as large employment clusters at West Cambridge, North East Cambridge, Cambridge Biomedical Campus and Granta Park. In addition, it sets out a strategic network of greenways and improvements for non-motorised users that will provide the backbone of a comprehensive network of infrastructure for active travel that stretches outside the city.

This framework provides the basis for a transformed public transport network that will better connect the places where people currently live and work, as well as encompassing the new and growing areas. This will include more rural connections as well as new routes into employment centres, coupled with more frequent services and longer operating hours. The figure illustrates the Future Bus Network 2030 and shows how contemporary Cambridge with its polycentric employment sites, railway stations and Park & Ride sites will be better connected to the surrounding rural areas.



Figure 2 - Future Bus Network 2030

Mobility (Travel) Hub capacity will be enhanced to enable people to join the sustainable transport network further from Cambridge. These will link up bus and active travel (including facilities for e-bikes) networks whilst providing capacity enhancements to the Park & Ride provision. This ring of Mobility (Travel) Hub sites will be seamlessly integrated into the surrounding local transport networks, allowing high-quality interchange between local bus and demand- responsive services, together with the active travel network.

To genuinely be able to compete with the private car, services in rural villages will have longer operating hours and higher frequencies. This may include a core, rural service, and a move towards Demand Responsive Transport (DRT) that will better connect to railway stations and Mobility (Travel) Hubs to facilitate onward journeys. Towns and larger villages will have substantially improved services of higher frequency and longer operating hours, some of which will include express services, thereby substantially improving journey times. This would mean more direct services between employment sites, residential areas and local shops and services in Cambridge, and more journeys to the key trip generators including the hospitals operating as a turn up and ride service of less than ten-minute intervals. This will be complemented by an extensive set of DRT services focused on addressing the gaps in the public transport network. Work will be undertaken to consider how fares could be reduced to attract more people to use the bus.

However, additional services, improved infrastructure and better connections alone will not facilitate a modal shift from the private car if the bus still gets stuck in traffic and fares are too expensive. To make public transport a realistic alternative, priority will be given to buses so that they do not get stuck in the same congestion as cars. And they need to be more affordable for people to use. To do this we must cut congestion and free up road space for more services as well as raise money for additional services, cheaper fares. To do this, a form of demand management will need to be considered in the city so that the road network is prioritised for active travel and public transport.

Freeing up road space will improve conditions for active travel users dues to the reduction in conflicts. In addition, a mechanism to raise funding for sustainable transport improvements will also be identified.

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The GCP's City Access project has developed proposals for significantly improving the bus network, investing further in active travel provision alongside exploring options to create space for sustainable transport and a funding mechanism for improvements. The Making Connections consultation explored these issues in autumn 2021, including seeking feedback on a new bus network as well as options for introducing charges for driving and/or parking in Cambridge. This built on previous public engagement through 'Choices for Better Journeys' and the Greater Cambridge Citizens' Assembly.

Shaped by the feedback from that process, a proposal for a package of bus and active travel improvements, funded by a Sustainable Travel Zone within which drivers would pay a charge, has been out to consultation during autumn 2022. The GCP's Executive Board will review the responses to the consultation and make recommendations about the way forward during 2023. The implementation of any future charging scheme would be a decision for CCC as the Highway Authority. If there were to be a decision to proceed, bus network improvements and fare reductions could start to be implemented, front funded by the City Deal funds, from as early as the end of 2023.

Alongside this, work is continuing on developing a revised network hierarchy for Cambridge that prioritises sustainable transport and active travel modes. With a mechanism that raises funds to provide better bus services and reduces traffic volumes in the city, bold physical measures can be introduced as a complementary measure to prioritise people over the private car and to provide a framework on the basis of which to decide the best use of public space. Physical measures could include bus lanes, cycle lanes and wider footways, modal filters to allow for an environment attractive and conductive for buses, cyclists, and pedestrians.

In addition, further controls on parking will be introduced across the Greater Cambridge area. This includes the delivery of civil parking enforcement in South Cambridgeshire, as well as delivering area parking schemes within Cambridge, including residents' parking schemes. Following a decision on Making Connections, an *Integrated Parking Strategy* will set out how on and off-street parking can be more effectively managed to encourage greater use of sustainable transport options. Significant investment will continue to be made in the active travel network across the area. To spread Cambridge's cycling culture further into the rural parts of South Cambridgeshire, 12 Greenways will be developed and connected to the city centre. The Greenways will enable walkers, cyclists, wheelers, horse riders and other non-motorised users to travel sustainably into the city. These will form the basis of a network linking the rural areas to the city.

This network will be complemented by additional active travel infrastructure alongside the four public transport corridor projects to the north, east, southeast, and west of the city. Within the city, the Chisholm Trail will connect the north of the city to Cambridge Station and the Biomedical Campus, alongside improvements to active travel infrastructure on key radial routes including Milton Road and Madingley Road, building on successful delivery of schemes on Histon Road, Huntingdon Road and Hills Road. Building on the *Local Walking and Cycling Infrastructure Plan*, analysis has been undertaken on the current active travel network to identify further gaps and missing links, and this work has identified thirteen more gaps and missing links within the city and its hinterlands that could benefit from significant improvements. Work is being progressed on two of these links, on Hills Road and the A1134 (Perne Road, Mowbray Road, Fendon Road).

There is a desire to identify gaps and missing links further away from the urban areas of Cambridge, where the nature of travel is much more rural. Linking into the *Rights of Way Improvement Plan* and the *Active Travel Strategy*, to help identify the key areas for improvement and better connectivity will be vital, and to get past the barriers to active travel. This could include linking villages to key services in neighbouring villages, such as schools, healthcare, and shops. It could also include linking rural areas to key public transport hubs and bus stops, by providing safe routes and facilities for switching mode.

To move away from the traditional 'predict and provide' approach to vehicular traffic on new developments, developers will be expected to adopt a 'decide and provide' approach. Therefore, where appropriate, new developments will need to clearly set out what mode shares will need to be achieved and how it will be monitored and enforced, so that there is no increase in development-related vehicular trips on the network. For strategic sites, this will mean a significantly reduced mode share for cars. Developers will be expected to demonstrate how a combination of supporting measures, policy requirements and behaviour change will work together to deliver new communities where it is easier to make sustainable transport choices. A move away from plentiful unconstrained parking within new developments will be critical to achieving this. Supporting measures and policy requirements for helping to achieve these low car mode shares could include trip budgets and using alternative methods of parking provision on the edge of developments, for example. The vehicular trip budget approach is already being used at North East Cambridge.

Our highway network will continue to play an important role for some journeys, particularly those between our rural villages and for freight movements.

Where appropriate, targeted highway or junction improvements will address safety and congestion issues on the highway where this is identified as an issue, particularly where major population growth is expected. For example, the A10 at Waterbeach New Town, accompanied by investment in sustainable transport. Improvements to orbital corridors would help to ensure that strategic traffic can bypass Cambridge effectively and reduce traffic flows through the city and smaller towns and villages.

We will assess the feasibility of investing in a limited number of specific 'pinch points' in the highway network that currently contribute to severe localised traffic congestion and cannot be alleviated through other means, accompanied by complementary initiatives to avoid knock-on impacts elsewhere on the network. We will ensure our partners are given support to develop and implement a number of wider strategic upgrades to the highway network, such as the completion of the A428 to the Black Cat junction. This will improve connectivity and key freight linkages with the rest of the country.

WORKING IN PARTNERSHIP

Key to successfully delivering our strategy is working in collaboration with key local and national partners. Several organisations have specific responsibilities for transport, planning and project delivery, and hence, partnership working is key to delivering our vision for the Greater Cambridge sub-region. We will work closely with:

- The GCP, who are currently leading the development and delivery of a programme
 of sustainable transport improvements, including a series of public transport
 corridors connecting Cambridge to growth sites to the north, east, south east and
 west of the city. We will support the GCP in delivering the proposed bus network
 improvements set out in Making Connections, through our bus reform work, if the
 decision is taken for the scheme to progress;
- The Local Planning Authorities of Cambridge CC and SCDC, who will be updating the *Transport Strategy for Cambridge and South Cambridgeshire* alongside the development of the *Greater Cambridge Local Plan*;
- CCC, who have responsibilities for maintenance and investment in the local highway network; and, if a decision were to be taken to proceed, for administering any future road pricing scheme to fund the bus network improvements that we will deliver; and
- DfT, National Highways, Network Rail, the East West Rail Company, and train operating companies responsible for delivering wider strategic transport improvements, including improvements at Fen Road Crossing.
- The schemes that are required to sustainably deliver the planned growth proposed within the current *Local Plans for Cambridge and South Cambridgeshire* are listed

below. These schemes are being developed and delivered in partnership by us, the GCP, CCC, and national partners such as National Highways and Network Rail.

- Greater Cambridge Partnership (GCP) schemes:
 - o Cambourne to Cambridge;
 - o Cambridge South East Transport;
 - o Cambridge South West Mobility (Travel) Hub;
 - o Waterbeach to North East Cambridge;
 - o Cambridge Eastern Access Phase A;
 - o City Access including Making Connections;
- GCP Active Travel Schemes;
- Waterbeach Station relocation;
- A10 (Waterbeach to Cambridge) highway improvements; and
- A10 Ely to Cambridge Improvements.

There are also a number of other schemes being developed which are not specifically required in the adopted plans, these include:

- City Access;
- Foxton Rural Mobility (Travel) Hub;
- The A428 Black Cat to Caxton Gibbet;
- Cambridge South Station; and
- The A10 (Ely to Cambridge) highway improvements.

Further potential transport schemes were identified as required to mitigate the transport impacts of draft allocations included in the 2021 *Greater Cambridge Local Plan* First Proposals consultation. The revised *Transport Strategy for Cambridge and South Cambridgeshire* will be prepared to support later stages of the *Greater Cambridge Local Plan*. This will confirm the transport infrastructure and policies required to mitigate the proposed sites once the development strategy is finalised. Engagement with the wider community, businesses, large employers, organisations at large employment sites, and developers will be critical in successfully delivering the vision for the area.

STRATEGIC PROJECTS

Several highway and public transport corridors link the Cambridge urban area to the towns and villages of South Cambridgeshire, and form strategic links between Greater Cambridge, the rest of the region, and the UK.

A new railway station serving the southern fringe of Cambridge has been a long-term aspiration. By 2031, there will be 27,000 jobs at Cambridge Biomedical Campus – an internationally significant health and life sciences cluster – and 4,000 new homes in the southern fringe area. Local partners have worked collaboratively for several years to build up the evidence to demonstrate the benefits that improved rail connectivity would be bring to this part of the city. In 2018, Network Rail submitted a TWAO to the Secretary of State for Transport for deemed planning permission to build a two storey, four-platformed new station on the West Anglia Main Line, next to Cambridge Biomedical Campus. The TWAO was approved in December 2022, with a provisional opening date of 2025.

We support the Ely Area Capacity Enhancement (EACE) project that will help significantly enhance the national strategic freight route between Felixstowe to Nuneaton (F2N) as well as unlock the capacity necessary to deliver proposed improvements to rail services from the north.

A further boost to the rail offer for the area will be East West Rail. This major infrastructure scheme will deliver a sustainable east-west transport option that connects the communities, businesses, and universities of the cities of Oxford and Cambridge and the settlements along the corridor. Services will run all the way from Oxford to Cambridge by the end of the decade if the consents are forthcoming in the anticipated timeframe.

We shall continue to work with partners to explore options for upgrading the railway between Cambridge and Newmarket to enable greater frequencies on this route and to identify the potential for additional access to the railway network to the east of the city should East West Rail extend to the east of Cambridge. We support electrification of this key route from Day One of operation, to reduce journey times and limit carbon impacts.

To facilitate improvements to the bus fleet we will work proactively with partners to identify and deliver appropriate bus depot provision that is fit for the future. We support National Highways' plan to upgrade the A428 between the Black Cat roundabout on the A1 and the Caxton Gibbet roundabout to the west of Cambourne with a new 10-mile dual carriageway and a number of junction improvements. This is a Nationally Significant Infrastructure Project (NSIP), and a Development Consent Order was granted by the Secretary of State in August 2022.

In addition, we shall continue to work with National Highways if they decide to investigate future improvements to the reliability of the M11 around Cambridge.

LOCAL PROJECTS

With our partners, we have developed a package of significant public transport, active travel improvements, alongside targeted highway investments. The aim of this package of measures is to deliver a more sustainable transport system. These schemes, underpinned by our policies, will help make travelling on foot, by bike or public transport more attractive.

CAMBRIDGE CITY

The principles set out in the GCP's City Access project and the 'Making Connections' consultation form the basis of developing a cohesive, people-focused sustainable

transport system. Improved bus services and active travel links will offer people an attractive choice to travel sustainably into, out of and around the city, and will better reflect the polycentric nature of the city. A form of demand management will not only free up road space to be able to give priority to public transport and active travel but will also raise funds to dramatically increase the number, quality, reliability, and coverage of bus services available as well as to reduce fares. Any such scheme will consider the accessibility needs of different groups of people, particularly disabled people. This will be complemented by a revised network user hierarchy for the city and an *Integrated Parking Strategy* that prioritise and support uptake of sustainable transport modes.

The 'wheel' of Greenways feeding into the city will join up with cross-city routes such as the new Chisholm Trail to connect existing areas of the city with new growth areas, creating a coherent network for active travel. Targeted local improvements and connectivity gaps will be addressed based on the routes identified through the GCP's Cycling Plus consultation, the Local Cycling and Walking Infrastructure Plan and the Making Space for People Supplementary Planning Document by Cambridge CC, intended to help deliver a people focused environment.

Improvements to the bus fleet in Cambridge will commence following a successful bid to central government for funding to contribute to zero emission replacements of the first 10% of the local bus fleet. Thirty new electric double decker buses will be rolled out across the city as part of the Zero Emission Buses Regional Area (ZEBRA) initiative with an ambition to meet our Climate Commission's recommendation for all services to be zero emission by 2030.

We shall continue to explore the role new technologies can have in catering for first and last mile trips, such as e-scooters and e-bikes, as we look to integrate modes of travel throughout the area. There is also an opportunity to use new and developing technologies to help improve freight delivery across the city, including consolidated delivery hubs and the facilitation of more sustainable last mile delivery options. North and Northwest– towards Waterbeach and Ely, and Northstowe A new town north of Waterbeach, located six miles north of Cambridge along the A10 corridor towards Ely, will be home to a new settlement of around 11,000 dwellings. At the southern end of this corridor is Cambridge Science Park, a major employment site which is part of a wider growth area called North East Cambridge. This area will expand to become an important new quarter of Cambridge, with a further 8,350 homes and 15,000 new jobs identified in the proposed North East Cambridge Area Action Plan that would come forward over the next 20 years and beyond.

Key to building sustainable travel patterns, and a successful thriving community, is comprehensive and reliable public transport and active travel provision, coupled with significantly reduced levels of vehicle trip generation which will be controlled through a vehicular trip budget. We will support the GCP in the delivery of a new segregated public transport and active travel corridor between Waterbeach and Cambridge. This will be integrated with a new Mobility (Travel) Hub, to provide a genuine alternative to the private car. This forms one of four segregated corridor routes into the city that will be integral to the GCP's Cambridge Future Network concept.

The relocation of Waterbeach railway station, with a larger car park and longer platforms, and 'Greenways' from Waterbeach to Cambridge and Horningsea to Cambridge for active travel users, wheelers, and horse riders, will help to attract drivers away from their cars and create a more sustainable transport system.

Interventions and improvements to the A10, including at Milton Interchange will be investigated to support the delivery of the new town north of Waterbeach and assist in the alleviation of severe traffic congestion and safety concerns along the corridor. This will be accompanied by parallel infrastructure for non-motorised users.

The new town of Northstowe, served by the existing Busway which connects St lves (via Northstowe) to the Science Park and Cambridge North Station, is also located close to this corridor.

WEST – TOWARDS CAMBOURNE, ST NEOTS AND BEDFORD

Significant growth is planned along the A428/A1303 corridor towards Cambourne, St Neots and onwards to Bedford. Around 8,000 new homes are planned for major new developments at Cambourne West, Bourn Airfield and Eddington in North West Cambridge, connecting to a significant employment cluster to the east of the corridor at West Cambridge. Public transport will be transformed by GCP's Cambourne to Cambridge scheme offering segregated public transport and active travel provision. The scheme includes a new Mobility (Travel) Hub at Scotland Farm as well as parallel facilities for active travel, wheelers, and horse riders. A new railway station at Cambourne as part of the East West Rail scheme will offer rail connections to Cambridge and St Neots.

Key routes from Comberton, Barton and Haslingfield will be serviced by new Greenways linking to the city. The existing St Ives Busway active travel path also forms part of the new Greenways network with upgraded/ new links from the Busway to Over, Cottenham and Fen Ditton.

Case Study: Guided Busway

The busway track - the longest in the world - is made up of two concrete beams with kerbs and guide wheels on the bus connect with the kerb and run along it to steer the bus. Stagecoach and Whippet are the two bus companies running services for the busway.

There are three Park & Ride sites served by busway routes, with frequent buses throughout the day.

SOUTH – INTO SOUTH CAMBRIDGESHIRE AND TOWARDS STANSTED AIRPORT

We will continue to work with partners to secure and deliver improvements to both the infrastructure and services on key rail routes. A new railway station at the Cambridge Biomedical Campus will transform connectivity to the site and we shall continue to lobby the rail industry for more frequent services on the route to London Stansted Airport, as well as proposed frequency increases on the King's Cross route as part of the current franchise.

New Mobility (Travel) Hubs at the junction of the M11 with the A10 (Cambridge South West Mobility [Travel] Hub) and on the A10 at Foxton will provide further opportunities to join the sustainable transport network further out of the city and to access highfrequency public transport links. These will also be integrated with local bus and active travel networks. The Melbourn Greenway and the Sawston Greenway will form the backbone of the strategic cycle network into the city, connecting to railway stations, Mobility (Travel) Hubs and linking to other Greenways. We will continue to support Hertfordshire County Council to develop and deliver a cycle bridge over the A505 near Royston and provide the final section of cycleway between Melbourn and the town.

We will continue to investigate a multimodal package of improvements along the A505 corridor between Royston and Granta Park to support the internationally important cluster of Science Parks in the area through better orbital public transport links, active travel measures and safety improvements. These schemes will be tied into the Whittlesford Station improvements.

EAST – THE BIOTECH CORRIDOR AND TOWARDS NEWMARKET AND HAVERHILL

In addition to the new railway station proposed for the Cambridge Biomedical Campus, further sustainable transport choices will be delivered. This will cater for the

significant number of people who will be working on the site through the provision of the third of the GCP's segregated public transport and active travel corridor – the CSET scheme. CSET will link the campus to other major employment sites along the A1307 corridor towards Haverhill, connecting the internationally significant life sciences and R&D clusters at Babraham Research Campus and at Granta Park.

The scheme will see a new segregated public transport route between the A11, Sawston, Stapleford and Great Shelford and the Biomedical Campus as well as active travel, bus, and road safety improvements along the A1307. Additional parking spaces will be provided at Babraham Road P&R, along with a new Mobility (Travel) Hub at the junction of the A11 and A1307. This will allow drivers to transfer to sustainable transport modes well before they approach the city, as well as being integrated with local bus and active travel networks. Alongside the public transport route will be a new active travel path, which will complement the Sawston and Linton Greenways.

Major new development is planned for the east of the city. A development of 1,300 new homes is under construction off Newmarket Road, with planning permission granted for a further 1,200 on land north of Cherry Hinton. In addition, land at Cambridge Airport, safeguarded in the 2018 Cambridge Local Plan and South Cambridgeshire Local Plan should it become available, has been identified for redevelopment in the Greater Cambridge Local Plan First Proposals. This follows Marshall's announcement that it intends to relocate its Aerospace and Defence businesses by 2030. A fourth corridor scheme is being developed to accommodate growth and to help address existing congestion and pollution issues in this part of the city. The scheme consists of short-term improvements which can be in place by 2025 to serve the sites with planning permission. The potential for longer term improvements, which could include segregated public transport and potential for policy and behavioural interventions, have been identified that would be needed if the airport site is included in the final adopted version of the Local Plan for redevelopment.

Short term improvements focus on Newmarket Road and include improvements to the Elizabeth Way and Barnwell Road roundabouts to make them more accommodating for public transport and active travel, as well as improvements along the length of

Newmarket Road for cyclists and pedestrians. These active travel improvements will also connect into other active travel infrastructure being delivered, such as the Fulbourn, Bottisham, Swaffhams and Horningsea Greenways and the Chisholm Trail. To intercept traffic before it gets into the city, the longer-term aspiration is for the current Newmarket Road Park & Ride site to be relocated further out that would ensure more spaces can be delivered, and options for orbital public transport and active travel movements to North East Cambridge and Cambridge Biomedical Campus will be explored.

RURAL SOUTH CAMBRIDGESHIRE

South Cambridgeshire has a dispersed population spread across more than a hundred villages and other settlements that means that conventional bus services are often not viable, leaving much of the district currently reliant on the private car. The comprehensive plans for public transport and active travel routes into the city provide a strategic network that reaches out into the rural parts of Greater Cambridge in each direction. The future bus network also envisages greater rural links to local services, market towns and key transport hubs such as rail stations. The ring of Mobility (Travel) Hubs further out of the city means that locally led transport solutions including DRT can feed into high quality public transport corridors even in remote villages where conventional bus services are often not viable, and drivers can join the public transport or active travel network to complete their journeys. This approach will be complemented by the region-wide application of the DRT network that will also provide greater access between villages and outlying market towns.

In addition, the 'wheel' of Greenways will connect smaller settlements and can be used for local journeys as well as longer distance commutes into the city and provide the focus for further links that connect local bus and rail services. The 12 Greenways are: Barton, Bottisham, Comberton, Fulbourn, Horningsea, Haslingfield, Linton, Melbourn, Sawston, St Ives, Waterbeach and Swaffhams.