OUR STRATEGY

INTRODUCTION

Overview

This chapter contains the overarching transport strategy for Cambridgeshire and Peterborough – explaining how our transport network will be enhanced to support the goals and objectives set out in the previous section, including the key transport planning approaches and schemes/initiatives that will be required.

The schemes included in this LTCP have been informed by a review of multiple sources, including:

- Independent Commission on Climate;
- Cambridgeshire and Peterborough Independent Economic Review;
- Previous LTPs for Cambridgeshire and Peterborough;
- Developmental work by our constituent Councils, Greater Cambridge Partnership, and ourselves; and
- Emerging and adopted Local Plans.

The schemes included have been reviewed with officers at a local, regional, and national level. Based on an initial assessment, a balanced, integrated, and realistic package of schemes has been brought forward for inclusion in the Plan.

Notwithstanding the high-level scheme assessment and sifting undertaken to inform this Plan, all individual schemes are subject to further scrutiny as plans for their delivery are progressed. These include further value for money testing (through the business case development process) and environmental assessment (including carbon, air quality and noise assessments) where required.

This Plan includes a range of different transport investments, from projects already approved and being delivered, through to initial ideas and concepts that require further study. A significant volume of work is needed to develop, appraise, and prioritise the transport interventions identified, and to ensure that new ideas and alternative approaches can be accommodated within future amendments.

The remainder of this chapter:

- Describes the guiding principles that have been employed to inform and shape our strategy for transport in Cambridgeshire and Peterborough; and
- Presents an overview of our overall strategy, including how we intend to deliver the overarching vision and goals for transport in Cambridgeshire and Peterborough, and a sample of selected schemes.

The overarching strategy is then followed by Chapter 3 that outlines more detailed strategies for Peterborough City Council, the Greater Cambridge area (Cambridge City Council and South Cambridgeshire District Council), and the Local Planning Authority areas of Huntingdonshire, East Cambridgeshire, and Fenland.

OUR OVERALL STRATEGY

Overview

Our region is both large and diverse: 850,000 residents and 42,000 businesses call Cambridgeshire and Peterborough home, in an area covering some 340,000 hectares. It is home to a wide range of communities, settled in diverse geographical and social settings – from the cities of Peterborough and Cambridge to large towns, new towns and a network of rural villages and hamlets.

Developing a unified transport strategy for the whole region is complex and challenging. At its core is our vision for sustainability and growth delivered through the provision of healthy, thriving communities. In doing so, we must put our communities – the places we live, work and visit – at the heart of planning our integrated transport network. To effectively meet the key recommendations of the Independent Commission on Climate whilst providing individuals and businesses with a realistic choice regarding the way they travel, it is important to reduce our reliance on the private car and to decarbonise transport.

To successfully meet the vision and goals for this Plan it is important that an integrated transport network is delivered. This includes:

- Integrated and seamless interchanges between modes;
- Accessible travel and spatial planning;
- High-quality and effective digital connectivity through the region;
- Investment in high quality public realm;
- Safe and attractive walking and cycling infrastructure;
- Efficient highway network that accommodates the needs of all users;
- Accessible, affordable, reliable, and frequent public transport; and
- Innovative new transport modes.

The preparation of this Plan has been guided by several high-level principles to ensure we deliver sustainable economic growth, including decarbonising transport on our journey to net zero carbon emissions. The guiding principles are:

- Integrating spatial planning and reducing the need to travel;
- Providing high quality digital connectivity;
- Supporting sustainable economic growth and distributing prosperity;
- Considering and improving the safety of our transport network, whilst ensuring actual and perceived barriers are addressed and minimised;
- Delivering real, attractive alternatives to the private car;
- Being able to be responsive and flexible to adapt to future changes in mobility and technology;
- Greening our transport infrastructure and enabling access to our high quality green open spaces;
- Supporting social mobility and enhancing accessibility to opportunities that improve the quality of life for our people; and
- Protecting our natural environment and increasing biodiversity.

Guiding Principles

Productivity

Growth must be inclusive, truly sustainable and spread appropriately across the entirety of the region. This should create places where all members of our community contribute to, and benefit from, our region's growth. Currently, employment, amenities and prosperity are predominantly centred in and around the cities of Cambridge and Peterborough, but these cities also contain significant areas of deprivation, with Cambridge having the most uneven income distribution of any UK city. Our proposals will spread our success across the region, ensuring that all benefit from the sustainable growth wherever they may live.

This strategy will help to deliver our strategic ambition to double the size of its economy over the next 25 years with sustainability and accessibility to opportunities at its heart. Improving journey times, both by road and rail, and reliability is important for businesses to access their markets, partners, and supply chains. This helps to increase the geographical catchment from which to draw its workforces, helping businesses to realise their full potential.

We want to connect all new and existing communities sustainably, so residents can easily access a good job. In many areas of Cambridgeshire and Peterborough, the transport network across the area is of a relatively of good quality. However there remain significant areas for improvement, especially for those socially deprived areas of the region, and those people without access to a private car. We want to encourage transfer from the private car to public transport and active travel modes, thereby reducing 'car dependency' and helping to meet our climate targets. This will be especially key in our new settlements, and a range of tools and policy measures will be used to help us achieve this. These could include trip budgets and alternative methods of providing car parking, where it considered appropriate, particularly in Cambridge and its urban edge. Improving the links between our more rural towns and our larger urban centres is essential to improve both productivity and connectivity.

Traffic congestion risks our future growth and prosperity. Solutions to manage demand for road space will continue to be explored especially within and between our urban and surrounding areas. Targeted, localised improvements to the highway network will be undertaken to allow more efficient movement of vehicles, goods, and people; whilst ensuring that the needs of all road users are considered as these schemes are developed and delivered. In addition, freeing up road space within our main urban areas is key to ensure an integrated, seamless, and sustainable transport network is available for all.

To help alleviate bottlenecks which cause congestion and serious disruption to the journeys of many residents daily, a significant number of infrastructure improvements have been implemented on our road network. For example, at the existing level crossing on the Peterborough Road, near the Kings Dyke Nature reserve, has long been the cause of serious delays between Peterborough and Whittlesey. It is important that the appropriate balance is struck between reducing congestion and therefore making car trips more attractive and potentially inducing more car trips.

Large-scale investment in public transport (faster, more reliable, more frequent and with easy to use through-ticketing), including the potential for an ultra-light rail link to Wisbech, coupled with improved highway links designed to accommodate ultra-low emission vehicles, electric vehicle charging points and other emerging technology will provide extra capacity for people to travel sustainably while helping the region to grow.

Large-scale investment in public transport is also key to alleviating pressures on the Greater Cambridge economy. Rapid growth has placed huge pressures on the area's transport infrastructure, with congestion and pollution impacting on quality of life. The CPIER report outlined that without action to address the infrastructure deficit in the Greater Cambridge area, economic growth would start to slow down and tail off, with knock on impacts for the wider geography and the strategic ambition to double the Cambridgeshire and Peterborough economy. The Greater Cambridge City Deal, signed in 2014, was in part agreed to address these pressures, and includes investment in 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 essentially to supporting growing communities and large employment clusters in the area.

Buses form a fundamental component of our transport network, allowing people to access employment opportunities. We will improve our public transport offer by developing and delivering the most appropriate financial and operational framework for buses. Work will continue to ensure the right option is delivered for the people of Cambridgeshire and Peterborough. This new operating model will drive quality and efficiency, increasing patronage and ensuring we deliver key public transport priorities across the region. We want to create a virtuous circle: increasing usage, with reduced operating costs so better services can be sustained without a permanently higher per-passenger subsidy.

Working with partners, we aim to deliver an enhanced bus network with more reliable, faster and more frequent services that opens up access to employment, education and services and becomes the natural choice for many more people. Our Bus Service Improvement Plan (BSIP) aims to ensure that everyone should have the opportunity to travel; their chances in life should not be constrained by the lack of travel facilities open to them. The BSIP's ambition is to:

- A return to pre-Covid patronage levels as soon as possible followed by new patronage growth;
- Priority measures to speed up journeys and make buses more reliable;
- A revamped, integrated bus network offering links to more places, clockface timetables, more frequent services and longer operating hours;
- Comprehensive coverage and consistent levels of service;
- Zero emission buses on all services by 2030;
- Tickets that can be used on all services and provide value for money;
- Cheaper travel for young people;
- Comprehensive information from one source in all media formats; and
- Better bus stops and waiting facilities.

Improvements will be tailored to local needs, but may include:

- Demand Responsive Transport (DRT) in rural areas feeding into our towns, which are connected by major routes to Cambridge and Peterborough;
- Enhanced urban networks; and
- Using e-bikes and Mobility as a Service (MAAS) for last mile connections where appropriate.

As part of our investment in public transport, due consideration will be given to the appropriate first/last mile options to deliver a truly integrated transport offer for all.

Rail usage continues to be on the rise across the region, and we will promote a range of schemes to help encourage and accommodate this trend. For example, new railway stations being proposed for the region, including Cambridge South station, the construction of which would provide much needed

additional capacity near the Cambridge Biomedical Campus. East West Rail, a new rail link from Cambridge to Bedford, Milton Keynes, and Oxford, would transform public transport connectivity along the Oxford to Cambridge corridor. A potential ultra-light rail scheme to connect Wisbech and its surrounding hinterlands would improve public transport connectivity and allow the area to truly meet its potential through the provision of greater accessibility. In addition, rail improvements such as Ely Area Capacity Enhancements (EACE) and Snailwell Loop scheme will enable more frequent services and make journeys quicker for passengers, whilst improving the potential for greater freight movements.

Cycling also plays a key role in commuting whilst also improving people's health. More than a quarter of people within Cambridge alone travel to work by bike – the highest rate in the country. The increasingly popularity of e-bikes will extend the reach and distances people are prepared to cycle. Greater levels of cycling will not only help more people travel to work easily and cheaply, but help to improve health, air quality, carbon emissions and relieve traffic congestion, thereby enabling the region to grow sustainably. We will continue to work with our partners to improve infrastructure for cyclists, and all non-motorised users, with segregated Dutch-type infrastructure along major road corridors, improved cross-city cycle links and a network of 'Greenways' connecting more rural areas to major employment hubs.

To assist with increasing productivity and connectivity, our policies support the promotion and roll-out of new technology, such as affordable e-bikes, cargo bikes, and non-standardised bikes, especially in our towns and more rural areas. This will allow new groups of people the opportunity to cycle and commute longer distances.

Although we want to prioritise the development of public and active travel modes, we also recognise that the private car will remain a key mode for many residents across Cambridgeshire and Peterborough in the short-medium term particularly where no alternative exist. We will support highway infrastructure and enhancement schemes such as upgrades to the A47 between Kings Lynn, Wisbech and Peterborough, to improve labour market accessibility to and from the Fens and Wisbech; and dualling of the A428, which will significantly improve commuter links along the Oxford to Cambridge corridor. These improvements need to be offset against the overarching ambition to reduce car mileage by 15% from 2019 levels by 2030.

Existing and new travel hubs and interchanges on key strategic routes will act as gateways to our public transport network and will allow car users to switch to modes earlier and travel sustainably for a large proportion of their journeys. To allow for seamless multi-modal transport interchange these hubs will be designed to enable movement between fast and reliable public transport services and 'first/last mile' connections.

In spaces with a high movement function and low place function, efficient transport modes will be given priority. For example, along fast-moving roads such as the A14, the private car and Heavy Commercial Vehicles will be given higher priority, while consideration will also be given to how the infrastructure can facilitate walking and cycling through measures, such as parallel segregated pathways and safe and convenient junction crossings, in line with LTN 1/20.

We will continue to work with partners to develop and implement an appropriate *Freight Strategy* for the whole region. This Strategy will consider the efficient movement of goods and services, whilst balancing this with the needs of the local community and environment. Through this Strategy, we and our partners will:

- Identify hotspots where enforcement is needed and use the information to influence the industry and the Police on education and enforcing restrictions;
- Encourage freight operators to use specialised satellite navigation systems that produce specialist information for HCV drivers;
- Support constituent Councils in securing lorry parking facilities across the region and encourage developers to provide safe, secure lorry parks at strategic points across Cambridgeshire and Peterborough, especially along the strategic routes and in towns and development with a high generation of HCV traffic;
- Reduce the number of vehicle journeys and thereby the carbon emissions and other pollutants which can be directly detrimental to human health. This will include support for the concept of 'secure freight consolidation centres', last mile delivery and alternative fuelled vehicles where appropriate;
- Supporting constituent Councils and partners to manage deliveries within towns and cities, such as maximising deliveries during the off-peak period and encouraging last mile deliveries by cargo bikes other sustainable modes;
- Liaise with Planning Authorities to identify and investigate freight issues and bring together spatial planning, freight transport and transport planning interests; and
- Seek funding from new and innovative sources to help us deliver our priorities to develop a fit-for-purpose freight network that allows Cambridgeshire and Peterborough to grow and prosper with due regard for a sense of well-being overall.

Connectivity

Our communities depend upon regional, national, and international connectivity to drive economic prosperity. We must therefore ensure that our businesses are connected sustainably to the main transport hubs, ports, and airports. For example, we are currently working in partnership with National Highways to assess the viability of dualling the A47 that would significantly improve east-west movement. In addition, we will continue to work with England's Economic Heartland to understand the complexity of movements in and through the Oxford-Northampton-Peterborough corridor and promote the appropriate schemes that emerge from this study.

We will support infrastructure and signalling enhancements to improve rail freight capacity, taking freight off the road network, and moving it across the region more sustainably. These interventions will ensure that goods continue to flow freely into and out of the region, allowing trade and local businesses to flourish. We will work with neighbouring Local Authorities and partners to look at schemes and initiatives that improve access to London Stansted and London Luton Airports.

The transport infrastructure must be provided and maintained to a high standard as inadequate footways, cycleways, and roads present significant risks to all transport users. There is a direct connection between the quality of maintenance and people's willingness to adopt active travel as an alternative to driving. Therefore, it is important that the Local Highways Authorities continue to invest in the transport infrastructure to ensure a safe, reliable, and effective network is available for all.

The Covid-19 pandemic accelerated our reliance on digital connectivity. At a time when access to healthcare, jobs, retail, education, training, and key services such as banking, have all become highly dependent on digital connectivity, it highlighted and exacerbated the "digital divide" excluding those without access to connectivity. This lack of connectivity can be due to a lack of access because the infrastructure is not available and those that cannot access due to ability to pay for the service and/or have the appropriate skills to access.

Digital connectivity is important in meeting the key challenges facing the region, such as sustainable growth, climate change mitigation, the management of scarce resources including water and energy and improving people's life chances through the provision of access to retail, leisure, education, and health facilities. Therefore faster, more reliable digital connectivity – with digital infrastructure such as fibre ducting delivered alongside transport infrastructure where appropriate – will provide improved connectivity between businesses and to homes; greater working flexibility, thereby taking the strain off the transport network; and allowing better management of our transport networks to increase capacity, make travel times more reliable, and ultimately, make journeys safer.

The *Cambridgeshire and Peterborough Digital Connectivity Infrastructure Strategy* will deliver a future facing, long lasting digital infrastructure that will ensure that digital connectivity is available to all – supporting effective public service delivery, thriving communities and sustainable business growth. This Strategy, which is a child document to the LTCP, will:

- Improve internet access to reduce digital exclusion and health inequalities;
- Use 'Smart' technology to support sustainable lifestyles and mitigate climate change;
- Attract investment in fibre broadband and mobile connectivity infrastructure to strengthen the local economy and create jobs; and
- Ensure businesses have access to leading-edge digital connectivity to help them grow and succeed.

We launched TING (our new on-demand bus service) in October 2021 to support rural communities across the western part of Huntingdonshire. The 'Uber' style bus service is operated by Stagecoach East and aims to increase accessibility across the area, especially without having to rely on the private car. The TING branded fleet of four solo, single deck vehicles, provide an overlay service, and operate in addition to the existing bus services currently running across the area. The six-month trial has recently been extended for another three months as a viable public transport option to get people out of their cars and supports its plans to help the region meet the 2050 Net Zero target for carbon emissions and to make its own operations net zero by 2030. Following a thorough assessment of the TING trial, we will look to roll out the Demand Responsive Transport network across the region in a phased, prioritised approach.

In addition, we will investigate the potential reopening of the rail line between March and Wisbech with onward connections to Cambridge expected to bring greater employment, educational, retail and health opportunities and housing growth. As this scheme is developed, we will examine the use innovative technologies to deliver the most appropriate solution.

Health

A good transport system is essential for a healthy society. The impact of air pollution on health is well-known, but transport affects the health of people across society, in multiple ways.

Increasing physical activity and minimising time spent sitting down helps maintain a healthy weight and reduces the risk of cardiovascular disease, type 2 diabetes, cancer, and depression. It is recommended that to stay physically and mentally healthy, adults should do at least 150 minutes of moderate or 75 minutes of vigorous activity per week. Walking and cycling as part of routine travel – whether for an entire journey, part of one, or to access public transport – can help meet these targets. Undertaking physical activity regularly has a positive impact on both our mental and physical health. Research shows that keeping physically active can reduce the risk of heart and circulatory disease by as much as 35% and risk of early death by as much as 30%.

Use of sustainable and active travel modes is significantly higher in parts of our area than the national average, the result of proactive efforts to improve the attractiveness of these modes. Within some areas of the region, a number of barriers remain that reduce the attractiveness and viability of active travel modes.

It is important that capital improvements across the region are supported by sufficient revenue support through greater promotion, training, and education. Cambridgeshire County and Peterborough City Council for example, has used funding from the DfT to deliver Bikeability training, which aims to give children confidence on their bikes, so they are more likely to take up cycling as adults.

Everybody should be able to access our transport network and feel safe when they do so. We will promote social inclusion through the provision of a sustainable transport network that is affordable and accessible. To achieve this, the network must be examined at every scale, from kerb-heights to area-wide highway network planning, ensuring that nobody is excluded from using the transport network due to personal circumstances, income, age, disability, or any other factors.

Having well-designed streets and public spaces will increase the attractiveness and safety of the environment. Our transport system will make it easier and safer for people to walk to the shops, schools and other amenities that can help improve people's health by reducing social isolation, which is harmful for physical and mental health especially among older people.

Investment in key active travel routes is essential as more people walking and cycling for short journeys helps to reduce road congestion and air pollution, save commuters money, and improve their physical and mental health. With twenty million adults in the UK physically inactive, contributing to one in six deaths in the UK, active travel can help people incorporate physical activity into their daily routine.

Transport is inextricably linked with mental health. Some of the connections are obvious whilst others are often invisible and therefore harder to mitigate. The lack of transport can lead to a sense of social isolation, particularly in rural hinterlands and pockets of urban environments and especially for those without access to a car and where the public and active transport offer is severely limited. Individuals who suffered isolation due to a lack of transport are three times as likely to have a GHQ score (general health questionnaire score, which measures minor psychiatric health conditions) that indicated a risk of depression.

Participation in social, cultural and leisure activities is important to people's quality of life and can play a major part in meeting policy goals like improving health, reducing crime, and building cohesive communities. People without cars are around twice as likely as those with cars to identify transport as a barrier to participation in a range of social and cultural activities. Our affordable, public transport network will promote social inclusion, with four key factors being considered: it must be available, accessible, affordable, and appropriate.

We will continue to work with operators to place inter-urban bus services, combined with local rail services, at the centre of an integrated rural public transport network. For example, we are currently investing in a DRT pilot (TING) and the lessons learned from this initiative will be used to benefit everyone across the region.

Place Making & Public Realm

High quality public realm plays a crucial role in encouraging urban culture and creating citizenship. Public realm is not only about major urban spaces that have important social and symbolic functions,

but they are simply the summit of a hierarchy of spaces that starts with the local street, the link from home to school, from shops to work.

A series of improvements to the 'public realm' of the villages, towns and cities have been implemented. The completion of the St Neots Masterplan, for example, includes a range of projects in the town centre that once established will ensure it is the first 'Smart Town' in the country.

In Peterborough, the City Council has recently delivered a package of significant infrastructure developments along Bourges Boulevard. These are designed to relieve congestion, significantly reduce delay at critical locations (to improve access to the railway station car park) and promote development as part of regenerating the city centre.

We are continuing to develop our non-statutory Spatial Framework and one of its guiding principles is to integrate spatial and transport planning to reduce the need to travel and shorten many of the journeys we do need to make – making our communities more walkable and cyclable.

Whilst we are the Strategic Transport Authority, it is the region's City and District Councils that are the Local Planning Authorities. We will therefore continue to work with the Local Planning Authorities to support their Local Plan processes and ensure that supplementary planning document and guidance promotes integrated planning.

With our partners we will help to deliver changes that would provide for 'healthy streets' and high-quality public realm. These improvements will put people first and promote active lifestyles. We will work with partners to investigate, develop, and implement appropriate Low Traffic Neighbourhoods (LTNs) across the region. These LTNs will reduce motor traffic, and in doing so, reduce air pollution, noise pollution and road accidents. In addition, they will make the character of residential streets more pleasant, inclusive, and safer for people to walk and cycle, whilst creating spaces to play and socialise. Buses would be routed to provide improved connectivity thereby reducing traffic levels and helping to connect people to local amenities.

In addition, we fully support the idea and appropriate implementation of 20-minute neighbourhoods. These will ensure that in our urban areas a complete, compact, and connected neighbourhood is provided, where people's everyday needs can be met within a short walk or cycle. As a result of successful implementation, appropriate 20-minute neighbourhoods and LTNs can boost local economies, improve health and wellbeing, increase social connections within our communities, and help to tackle climate change.

Safety

The safety of public highway users across Cambridgeshire and Peterborough is an absolute priority. We will ensure that road safety is a key component in everything we and our partners deliver. We all

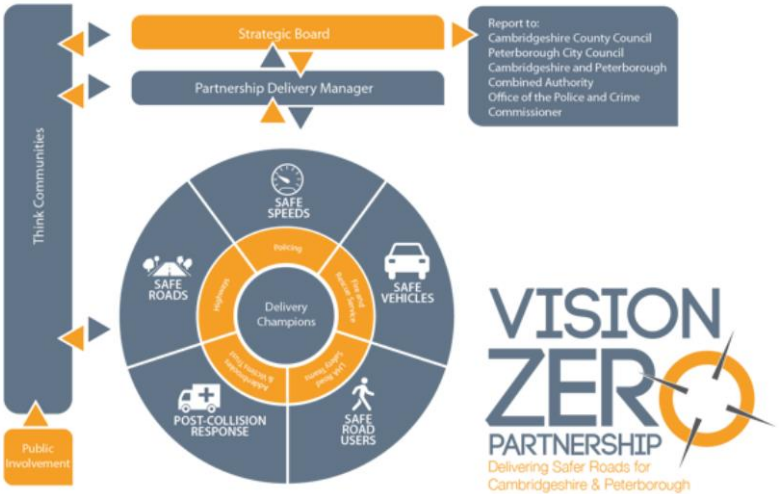
have a responsibility for road safety – either as road users, Local Authorities, or transport providers. It is also important that we improve the perceptions of safety as these can often be barriers themselves.

Road traffic collisions have a devastating effect on the lives of those involved, not only the people who have been injured, but also their families and friends. Serious collisions can deeply affect many people in the wider community and extended road closures can have serious consequences for the road user and the economic prosperity.

Having seen significant progress in reducing road casualties during the early part of the century; since 2010 this progress has stalled and requires considerable attention to achieve further reductions in the coming decades.

The number of deaths and injuries on our roads is still far too high, and progress was slowing before the Covid-19 pandemic. The annual cost to society of road accidents in the region is estimated to be £822m and the misery which it inflicts on the injured and bereaved families is immeasurable. In 2020, 411 people were killed or seriously injured - this is still too many. We will continue to work with the Cambridgeshire and Peterborough Road Safety Partnership and other agencies, such as the Police and Fire Services to provide a safe transport network for the people of Cambridgeshire and Peterborough. The Road Safety Partnership deliver, influence and support evidence-led highway design and road safety interventions to improve safety on the highway network, and to fund education, training, and publicity programmes to improve road user behaviour and reduce casualty numbers, aspiring to 'zero tolerance' of transport-related deaths.

We will continue to work closely with the Cambridgeshire and Peterborough Vision Zero Partnership to achieve our overarching safety goals – with regular direction given to and from the Combined Authority Board. The overall vision and long-term goal for the Partnership is to achieve Vision Zero, where no people are killed or severely injured on the partnership's roads. This will be achieved by the adoption of local targets to measure and monitor progress. Given the international adoption of a 2030 target of a 50% reduction in road deaths and serious injuries using a 2021 baseline, this is a suitable target for the Vision Zero Partnership.



In addition, we will continue to utilise road safety initiatives that recognise the commitments outlined in the UN "Stockholm Declaration" especially in relation to 20mph in built-up areas; to reduce speeds, improve levels of road safety and encourage walking and cycling as day-to-day forms of travel.

Safety will remain a fundamental consideration when developing and delivering our transport portfolio. It is essential that we and our partners continue to seek to identify, analyse, and develop solutions to transportation hazards through the embedding of safety conscious planning that addresses highway, public transport, pedestrian, bicycle, equestrian, and heavy vehicle safety. We will continue to work with partners to create active travel routes that reduce the number of interactions with HCVs and buses.

As we strive to increase the number of active travel users it is important to remember that currently 19% of KSI collisions involve cyclists, and a further 9% involve pedestrians. Therefore, we need to ensure we provide a safer road environment that gives people the confidence to make this shift. In addition, it is also important to manage potential conflicts between cyclists, equestrians, and pedestrian (and other modes such as e-bikes, e-scooters, scooters) and the specific issues faced by the disabled.

Climate Change

Climate change is a fundamental issue for all of us. It is already impacting on how we live our lives and if we do not reduce our greenhouse gas emissions to zero over the next 30 years, the impacts both here and globally will become very severe. If we look at the risks to the UK from climate change many of the impacts are particularly acute in Cambridgeshire and Peterborough: the risk of flooding, very high summer temperatures and water shortages. We all need to act, and act now, to avoid the most damaging aspects of climate change. The actions outlined in this Plan offer potential benefits and opportunities, including providing a more inclusive and sustainable transport network, jobs in low carbon industries, more energy efficiency, for residents and businesses, better air quality and more greenspace improving our health and well-being.

The Cambridgeshire and Peterborough area is one of the driest in the UK, yet also susceptible to flooding due to its predominantly low-lying topography. This means that transport infrastructure can be vulnerable to extreme weather events and must be appropriately protected. We will incorporate climate resilience into the new transport network, designing infrastructure that is resilient but also easily reparable.

The transport network needs to be resilient and adaptable to climate change. It is recognised that the transport network does not always function flawlessly and is subject to internal and external stresses (human and environmental disruptions) that can cause delays. We must therefore make the transport network resilient and adaptive to human and environmental disruption.

To successfully meet our climate change objective, it is important to minimise the impact of transport and travel on climate change. We understand that climate change, a global issue, requires interventions at a local scale and by committing to a target of net zero carbon by 2050, Cambridgeshire and Peterborough must be at the forefront of driving reductions in emissions from transport. We and our constituent Councils signed up to the recommendations outlined in the *Cambridgeshire and Peterborough Independent Commission on Climate Report* and this Plan aims to provide the framework to allow for appropriate and timely progress. This commitment includes a reduction in car mileage by 15%, using a 2019 baseline, across the region.

Many of the levers to achieve a significant reduction in harmful emissions – such as vehicle emissions standards – are at national level. However, the CPCA and local partners are developing a charging network for electric vehicles (EVs); improving public transport through new infrastructure, bus reform and network improvement and replacement electric buses; integrating and expanding active travel

measures and infrastructure, including e-bikes, across the region, such as through e-bike and e-scooter hire schemes; encouraging a switch to cleaner modes; improving the ease of working from or near to home through better connectivity; and management of deliveries within our urban areas.

Embodied and operational carbon refers to the emissions during the construction and maintenance of our infrastructure. It comes from the embodied energy consumed to extract, refine, process, transport and fabricate the materials required to deliver any transport scheme. To truly decarbonise our transport network to meet ours and central government's targets and objectives; it is becoming increasingly important for our delivery partners, contractors, and developers to tackle it appropriately. It should be possible to reduce the embodied energy and carbon of a construction project significantly without adding to the cost. Therefore, in order to minimise and potentially neutralise carbon emissions, due consideration will be given to carbon emissions (both embodied and operational) during our scheme assessment phase and throughout any scheme's development through the formal business case stages.

The implementation of the East Anglian Alternative Fuels Strategy (EAAFS) is key in ensuring that the impacts of climate change are addressed at the very local level. This Strategy focuses on how the uptake of alternatively fuelled land vehicles can be boosted across East Anglia, what and how much infrastructure (such as electric vehicles charge points) needs to be delivered to support this transition, and other policies and actions that will be necessary to deliver a decarbonised transport system. The alternative fuelled vehicles (AFV) covered in this Strategy include battery electric, hydrogen fuel cell and renewable natural gas vehicles. In each case the study considers the emissions of the production and use of the fuels but not the production of the vehicles. The delivery plan for this Strategy is being developed and focuses on:

- Actions to expand electric vehicle charging infrastructure;
- Actions to encourage AFV uptake, especially for freight transportation and buses; and
- Actions to deliver a modal shift and encourage behavioural change, including incentives and support for AFV for construction vehicles.

An implementation and delivery plan for the EAAFS will be published, monitored as part of the LTCP suite of documents.

Reductions in vehicle mileage and shifting journeys to sustainable modes such as active travel and an affordable public transport offer, are very important but need to be achieved alongside 'greening' of public transport vehicle fleets and improvements to transport infrastructure to enable easy uptake of low emission transport modes.

The Greater Cambridge Partnership, Cambridge City Council and Cambridgeshire County Council have continued to work on a Spaces and Movement Supplementary Planning Document and has commissioned and have published a Clean Air Zone Feasibility Study, the outputs of which will be used to inform the Cambridge City Access Package. In addition, an 'Intelligent City Platform' has been developed by 'Smart Cambridge', which makes use of real-time travel data to provide clear information for travellers across the city through an app-based interface, helping to provide information to travellers and local authorities about the functioning of the transport network.

Looking ahead to the future of public transport, the Greater Cambridge Partnership recently funded two electric buses in Cambridge to understand and examine their operation on the local network. The GCP's Smart Cambridge workstream also supported a project trialling the use of autonomous shuttles running between Madingley Park&Ride and the West Cambridge site.

Overall, there are around 350 buses operating on the urban and interurban bus network across the CPCA area. We and our partners have successfully secured funding from Zero Emission Bus Regional Areas allocation that will enable us to replace 10% of the most heavily polluting fleet with the electric vehicles entering into operational service in the third quarter of 2022. The bid aligns with our vision to develop and implement a rolling programme to replace 30-35 buses a year across the region to decarbonise the entire network affordably, progressively, and systematically. By funding electric bus charging infrastructure in the region now, we are starting to remove a significant barrier to operator transition to zero emission vehicles by our local bus.

In addition, we aim to ensure transport initiatives improve air quality across the region, exceeding good practice standards. We have a responsibility to implement measures that ensure improvements to air quality can continue to be delivered alongside growth by creating conditions that will change travel behaviour and bring about the use of cleaner vehicles.

Our proposals to improve air quality are directly linked to the key priorities identified in the Cambridge City Council Air Quality Action Plan (AQAP) 2018-2023 and the Joint Air Quality Action Plan for the Cambridgeshire Growth Areas (2015).

The key areas identified for action, and to be supported through the LTCP, include:

- Reducing emissions from taxis, buses, coaches, and HCVs, with the potential to link to demand management measures;
- Mandating consideration of electric vehicle charging points for all new or upgraded highway infrastructure;
- Maintaining low emissions through the planning process, and long-term planning; and
- Improving public health.

Our approach, including a commitment to biodiversity net gain through investment in transport and the developments it supports, will help our communities to become high quality, sustainable environment where people want to live. Reducing the need to travel, and distances travelled, through integrated land use, transport planning, investment in digital and mobile connectivity and energy supply, will be a central pillar in meeting local and national ambitions to significantly reduce greenhouse gas emissions as we move towards net zero carbon.

Natural Environment

We want to deliver a transport network that protects and enhances our natural, historic, and built environments. We are fortunate to have exceptionally high-quality environments within Cambridgeshire and Peterborough, which also have positive impacts on the quality of life for our residents. We will therefore integrate environmental considerations, including biodiversity net gain, throughout the development of the future transport network and ensure that all new transport schemes cause minimal disruption to the environment during construction and operation. Biodiversity net gain can be achieved through, for example the provision of tree lined streets and planting wildflowers along verges. In addition, there is a significant opportunity to remove non-essential traffic from sensitive areas / removing traffic from historic core and pedestrianisation through work being undertaken by partners to examine our network hierarchy.

The network hierarchy review in Cambridge provides an opportunity to redirect through traffic to more appropriate routes and remove non-essential traffic from sensitive parts of the City and reallocate the space to non-motorised users, to improve air quality and safety, and create attractive, healthy, and thriving streets and communities.

Attractive Alternatives

This Plan includes investment in world-class Dutch-quality walking and cycling facilities, including a network of segregated cycleways and new bridges, and designed to accommodate a wide range of active travel users with a focus on utility journeys. Wider non-motorised users including horse riders and carriage drivers will be considered on a scheme-by-scheme basis where there is opportunity to address existing or likely demand. More people travelling on foot, by bike and public transport, rather than by private car, will help to reduce congestion, improve air quality and safety, and create attractive, healthy, and thriving streets and communities.

To help promote walking and cycling, we will continue to develop and implement Local Cycling and Walking Infrastructure Plans (LCWIPs) to provide evidence for prioritised investment in infrastructure for walking, cycling and other non-motorised users. We will develop high quality cycle provision, through schemes such as the Greater Cambridge Partnership's Greenways.

Cambridgeshire County Council are continuing to work on an *Active Travel Strategy*. The document will form a 'child' document to this Plan and will provide a long-term vision for how to deliver the bold and ambitious active travel aims of both central government and the CPCA as Transport Authority. It will cover a broad range of policies that sets out the position on a variety of issues and will include a range of active transport modes.

The use of active travel as part of multi-modal trips will be encouraged wherever possible. For example, we will investigate the possibility of a cycle hub in Peterborough city centre and improve cycle links to other key destinations around the city. Broadly we must consider 'place' and 'movement' function when designing new infrastructure to ensure that we can provide good transport connectivity whilst retaining and developing 'healthy streets'.

We will work with Active Travel England to ensure that all new public transport and highway infrastructure will be designed to include high quality cycling and walking corridors and facilities with suitable integration, access and crossing points, thereby being compatible with LTN 1/20. We will focus on the use of active travel for the first and last miles of journeys where through-bus services are inappropriate. The use of these modes can help ensure people remain active and undertake the recommended amount of physical activity as well as making our transport network more sustainable.

The most basic and readily available first/last mile option is walking. Almost every public transport trip starts or ends with, at least, a short walk. We will focus on pedestrian movements as the reach of the existing public transport system can be extended significantly simply by making walking to and from hubs and bus stops easier, less prone to barriers and more pleasant by creating attractive urban spaces that are well connected to public transport infrastructure.

In addition, we will look to utilise a first/last mile strategy for deliveries. Electric last mile delivery vehicles are increasingly desirable but important to balance sustainability and environmental consciousness whilst lowering fuel bills and significantly less vehicle maintenance. Therefore, we will work with partners to actively encourage the more sustainable first/last mile delivery strategy is implemented within our cities and urban centres, wherever possible.

Vital steps have been taken to maintain and improve our public transport network. For example, we committed £9 million of investment into March, Manea, and Whittlesea railway stations to aid their regeneration, and £18.9 million to deliver the new station at Soham (opened in December 2021), returning rail services to the town for the first time in 56 years. The Greater Cambridge Partnership has progressed four high-quality public transport corridors to the west, north, east, and south-east, as

well as wider investments including completing an upgrade to Histon Road providing better bus, walking and cycling facilities.

We have saved several critical bus services from closure and have completed a strategic review of bus services in Cambridgeshire and Peterborough. This review recommended that we should engage with operators to investigate short term improvements, while exploring alternative long-term delivery models. To provide an integrated response to the recommendations from the report, the Combined Authority Board approved the establishment of the Bus Reform Task Force, which commenced work in early 2019. This recommendations from the review will be embedded within the Plan and these include:

- Establish an integrated framework to assess subsidy requirements;
- Identify and implement tangible short- term improvements to bus services; and
- Develop and examine the business case for alternative delivery options for bus services in Cambridgeshire and Peterborough.

In the meantime, this Plan supports the work of the Greater Cambridge Partnership, who are developing their 'Making Connections Project'. This aims to provide a competitive, comprehensive public transport network and reduce traffic levels in and around Cambridge city by 10-15% on 2011 levels in order to improve journey times and reduce pollution. To this end, the Greater Cambridge Partnership has and continues to undertake wide-reaching public engagement and consultation on improvements to the public transport network; options for reducing congestion; and improving air quality, including running the UK's first Citizens' Assembly on transport.

Demand Management

Travel Demand Management (TDM) is an umbrella term for the application of strategies and policies to reduce travel demand, or to redistribute this demand in space, mode or in time. An effective TDM plan is based around four key pillars: the creation of capacity; the provision of genuine alternatives through a safe, integrated network; network management; and travel behaviour change solutions.

The use of a package of TDM measures can bring forward a number of benefits to the local community and will be investigated in specific locations across the region. It is essential that when any TDM project and associated measures are developed, due consideration is given as to whether they are appropriate to the environment and consider the various localised demographics, challenges, and issues.

For any TDM to be successfully implemented, it is important that the following success factors are taken into consideration:

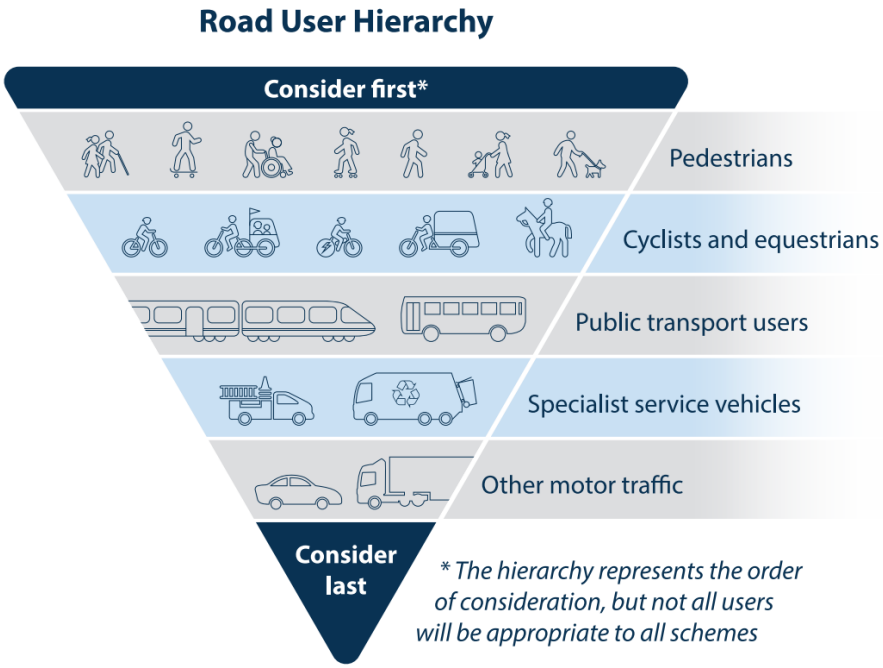
- Level of support and endorsement from public sector partners to provide the relevant leadership;
- A clear definition of the problem to understand the size of the challenge in the local environment;
- The provision of a range of alternative travel options;
- Due consultation and engagement when shaping the appropriate TDM scheme for the local environment;
- Quality of information provided to the audience must be of the highest quality, thereby ensuring trust and credibility in the process is maintained;
- Time and resources available to implement the programme; and

- The ability to track and monitor your impact, thereby able to make the necessary changes as lessons are learnt at the local level.

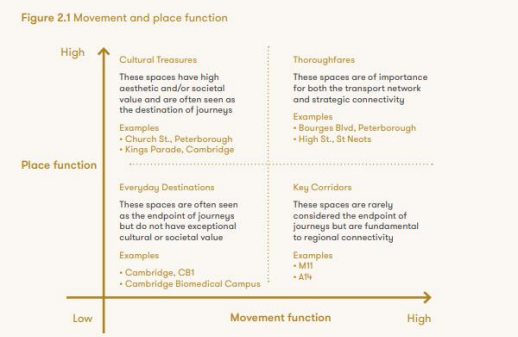
Shaping Our Investment

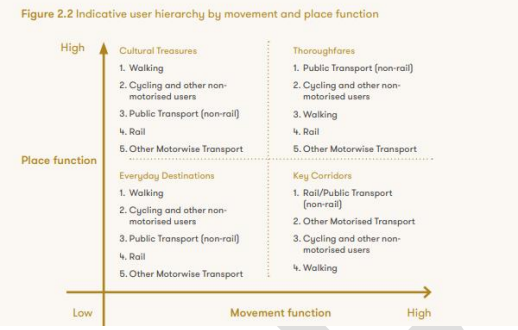
To assist in the development of new transport schemes, we utilise a user hierarchy that outlines how consideration will be given to the needs of different transport modes. The portfolio of transport schemes will be assessed against this Plan's vision and the six overarching goals of Productivity, Connectivity, Climate, Environment, Health, and Safety.

In the Hierarchy of Road Users, those at most risk in the event of an accident are at the top of the hierarchy. The hierarchy of users therefore helps to guide the planning and design of new developments, interventions, schemes, and proposed traffic management schemes.



In addition, consideration of both 'place' and 'movement' function will be used to identify the suitability of a given transport scheme within a specific location. An explanation of the relationship between place and movement is provided below along with an indicative user hierarchy for each of the four broad quadrants.





Different transport modes have different strengths and weaknesses, meaning that certain modes are appropriate for certain situations. The best transport networks enable a mix of modes to operate effectively aligned to the geographical requirements of an area. We believe that considering 'place' and 'movement' function as part of our user hierarchy is the best way to deliver a transport network that provides good connectivity, whilst preserving the localities which it serves.

Our Sustainable Growth Ambition Statement outlines that we recognise that the investment programme has six themes, all of which are anchored in the devolution deal. We aim to build up the capital stock of Cambridgeshire and Peterborough across the six dimensions of:

- **People:** building human capital - the health and skills of the population - to raise both productivity and the quality of life so that that people in our region are healthy and able to pursue the jobs and lives they want;
- **Climate and Nature:** restoring the area's depleted natural capital and addressing the impact of climate change on our low-lying area's special vulnerabilities, and encouraging businesses to come up with solutions;
- **Infrastructure:** from digital and public transport connectivity to water and energy, building out the networks needed to support a successful future;
- **Innovation:** building on our reputation for new thinking, new technology and new ideas in Cambridgeshire and Peterborough to ensure this area can continue to be one of the most dynamic and knowledge economies in Europe;
- **Reducing Inequalities:** investing in the community and building social capital to complement improved skills and connectivity as part of the effort to narrow the big gaps in life expectancy and people's income between places;
- **Financial and Systems:** improving the institutional capital – the ways we work, organise, and fund ourselves - which supports decision-making and delivery.

The utilisation of this approach in prioritising spends and schemes, will require us and our partners to monitor more outcomes than simply GVA growth (data which is anyway only available from the ONS with a two-year time lag). We will track progress on outcome indicators such as the gap in healthy life expectancy, employment, land use for nature, CO_2 emissions, and earnings gaps – further information on this is provided within the Performance Section of the Plan.

MAJOR SCHEMES

This Plan is designed to be focused on meeting our overarching ambitions. In doing so, this LTCP presents a clear strategy for meeting our Productivity, Connectivity, Natural Environment, Climate, Health, and Safety goals which will need to be fulfilled if our ambitions are to be achieved.

Steps are being taken to ensure each goal is met and the following key schemes will be instrumental in the success of the Plan.