



North East Cambridge Area Action Plan

Proposed Submission

Topic Paper: Transport

Greater Cambridge Planning Service

November 2021

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Introduction

To enable new development to come forward at North East Cambridge requires a new approach to managing transport impacts. In essence, new development will only be considered acceptable if it can demonstrate that it will not result in increased traffic movements on the surrounding road network. This means both existing and new development must ensure the vast majority (circa 75%) of all trips are made by sustainable means (i.e. walking, cycling or by public transport). Achieving this level of mode shift requires the principles of walkable neighbourhoods and healthy towns to be embedded from the outset at all levels of planning from the inclusion of facilities within individual buildings through to AAP-wide interventions and strategic transport schemes.

Nevertheless, North East Cambridge (NEC) is well placed to meet this challenge. Located a 15-minute cycle ride from the city centre NEC already has good public transport links, including the North Cambridge Station and Guided Busway. In addition, there are many walking, cycling and public transport improvements already planned to serve the area. Alongside enhancements to sustainable travel options, the Area Action Plan (AAP) will facilitate the mode shift by limiting car use to and from the area (through a trip budget), the application of urban design principles and the promotion of low levels of parking provision.

The NEC AAP is supported by the NEC Transport Evidence Base (2019) which builds upon the wider Ely to Cambridge A10 Transport Study (2018). Since these reports were prepared further work has been undertaken on the development capacities and land use mix being promoted through the AAP. This Transport Topic Paper addresses these and other issues that have arisen following the Transport Evidence to inform the preparation of the draft AAP.

This topic paper should be read alongside the NEC Transport Evidence Base study and the Internalisation 'trip capture' Topic Paper. The latter considers policies for inclusion within the NEC AAP that create the right conditions for internalisation (trips which start and end within the boundary of the AAP) and minimise the demand on the external road system. Internalisation will be a key component in meeting the

AAP's trip budget. The Internalisation 'trip capture' Topic Paper explores the opportunities to establish a high share of internalisation at NEC. New advances in mobility and emerging technology can break the dependency on private cars, particularly single occupancy, by creating a transport system that is flexible, integrated and personalised. Promoting easy navigation and transition between sustainable modes using density and critical mass to support and sustain public transport solutions. This is explored further in the Future Mobility Topic Paper.

Further to the above, the five main landowners within NEC were asked to confirm their acceptance of the trip budget approach and, therein, the ability to deliver the target mode share. In response, the transport consultant teams have prepared, in consultation with the Councils and County Council, a High Level Transport Strategy for NEC (2021) that sets out the detail for how the trip budget is apportioned and the package of interventions and measures needed to be brought forward at the site, NEC and wider level, to deliver development that would keep within the trip budget. It also includes further detail on how development will be monitored to ensure the sustainable mode share is achieved and compliance with the trip budget and parking restrictions. The High Level Transport Strategy is intended to be an iterative ('live') document, updated on a regular basis to take account of new survey data, changes affecting the wider transport network, the timetable for delivery of strategic and NEC transport projects, and emerging new technologies. New development proposals will need to demonstrate their contribution towards meeting the overall package of measures contained in the High Level Transport Strategy.

Key Evidence Documents

- [Ely to Cambridge A10 Transport Study \(2018\)](#)
- [Cambridgeshire and Peterborough Local Transport Plan \(2020\)](#)
- [Cambridge and South Cambridgeshire Transport Plan Adopted March \(2014\)](#)
- [Cambridgeshire and Peterborough Economic Review \(2018\)](#)
- [Future of Mobility: Urban Strategy \(Department for Transport\)](#)
- [The Future of Mobility foresight report \(2019\), Government office for science](#)
- [The opportunity for Mobility as a Service \(Transport Systems Catapult\)](#)
- [ALL CHANGE? The future of travel demand and the implications for policy and planning The First Report of the Commission on Travel Demand](#)
- [Cycle Parking Guide for New Residential Developments \(Cambridge City Council\)](#)
- [Local Transport Note 1/20 Cycle infrastructure design \(Department for Transport\)](#)
- [Advice on Specifications and Standards recommended for equestrian routes in England and Wales \(British Horse Society\)](#)
- [Cambridge City Council – Electric Vehicle and Infrastructure Strategy \(2019\)](#)
- [Future Mobility Hubs: Supporting the transition to sustainable mobility \(Arup & Go-Ahead\)](#)
- [Manual for Streets \(Department for Transport, 2007\)](#)
- [Waltham Forrest Mini Holland Design Guide \(2015\)](#)
- [Cambridgeshire Rights of Way Improvement Plan \(2016\)](#)
- [Draft Cambridgeshire Local Cycling and Walking Infrastructure Plan \(2020\)](#)

NEC Evidence and Topic Papers:

- NEC AAP Transport Evidence Base (2019)
- NEC AAP High Level Transport Strategy (2021) (prepared by the five main NEC landowners in collaboration with the Councils and County Council (2021)
- Smart Infrastructure Topic Paper: Environmental Monitoring (2021)
- Smart Infrastructure Topic Paper: Digital Infrastructure (2021)
- Smart Infrastructure Topic Paper: Future Mobility (2021)
- Health Facilities & Wellbeing Topic Paper (2021)
- Environmental Health Topic Paper (2021)
- Climate Change, Energy, Water and Sustainable Design and Construction Topic Paper (2021)
- Community Safety Topic Paper (2021)
- Anti-Poverty and Inequality Topic Paper (2021)
- Internalisation Topic Paper (2021)

National Planning Policy Framework (NPPF 2021)

The National Planning Policy Framework (NPPF) has a presumption in favour of sustainable development for both plan-making and decision-taking. The NPPF has a requirement for developments which generate significant amounts of movement to be supported by a Transport Assessment or Transport Statement and Travel Plan.

The NPPF establishes that it is for the planning system to actively manage patterns of growth in support of sustainable development. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health.

However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

Paragraph 104 states that transport issues should be considered from the earliest stages of plan-making and development proposals, and that opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, should be realised. Also that;

- potential impacts on transport networks can be addressed and patterns of movement, streets, parking and other transport considerations are integral to the design and contribute to making high quality places
- opportunities to promote walking, cycling and public transport use are identified and pursued
- the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains

Paragraph 106 states that planning policies should support a mix of uses to minimise the number and length of journeys, aligned with strategies and investment for

supporting sustainable transport to widen transport choice and provide for high quality walking and cycling networks and supporting infrastructure.

Additionally, Paragraph 107 addresses setting local car parking standards taking into consideration site accessibility, type and mix of uses, availability of public transport and also states that there is a need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles. Paragraph 108 states that maximum standards should only be set where there is a clear and compelling justification for managing the road network, optimising density of development and locations well served by public transport.

Paragraph 110 states - In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
- any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

Paragraph 111. Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

Paragraph 112. Within this context, applications for development should:

- (a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
- (b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

- (c) create places that are safe, secure and attractive which minimises scope for conflict between pedestrians, cyclists and vehicles, avoid unnecessary street clutter and respond to local character and design standards;
- (d) allow for efficient delivery of goods, and access by service and emergency vehicles; and
- (e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

Paragraph 113. All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

Corporate Objectives and Strategies

There are four relevant authorities that will be involved in the development of the NEC development, Cambridgeshire County Council, Cambridge City Council and South Cambridgeshire District Council and Cambridgeshire and Peterborough Combined Authority. These are supported by the Greater Cambridge Partnership on the delivery side. These are the objectives and strategies that are relevant to this topic paper:

Cambridgeshire and Peterborough Combined Authority (CPCA)

The devolution deal for Cambridgeshire and Peterborough sets out key ambitions for the combined authority. Most relevant to this topic paper is its ambition to 'deliver outstanding and much needed connectivity in terms of transport and digital links'.

As the CPCA is now the local transport authority with strategic transport powers it has prepared a local transport plan which sets out its aims and objectives. The plan supports the CPCA's non statutory spatial framework which looks to align essential infrastructure, housing, and job growth. The plan brings together the local transport plans prepared by the County Council and the local transport plan for Peterborough supporting the objectives set out for the Transport Strategy for Cambridge and South

Cambridgeshire. The CPCA is currently updating the Local Transport Plan and rebranding it Local Transport and Connectivity Plan (LTCP).

Cambridgeshire County Council

The County Council's vision is to make the county 'a great place to call home' supported by three priority outcomes:

- A good quality of life for everyone – by nurturing healthy communities that can access resources, connect with others and become sustainable. Improve social and economic equality and encourage people to choose healthy lifestyles.
- Thriving places for people to live – by investing in the environmental, infrastructure and services and building supportive, resilient communities that are great places to live.
- The best start for Cambridgeshire's children.

Accessibility and mobility are integral in helping to achieve these aims. The County Council is the highway authority with responsibility for on-street parking and for maintaining the county's roads. The County Council was the transport authority however this responsibility has now passed to the Cambridgeshire and Peterborough Combined Authority. In its previous role the County Council put together the Transport Strategy for Cambridge and South Cambridgeshire which covers the NEC AAP area and remains relevant until superseded.

The Transport Strategy for Cambridge and South Cambridgeshire

The Transport Strategy for Cambridge and South Cambridgeshire (TSCSC) was adopted by Cambridgeshire County Council in March 2014 and ensures that local councils plan together for sustainable growth and continued economic prosperity in the area.

Approximately 44,000 new jobs and 33,500 new homes will be created in Cambridge and South Cambridgeshire by 2031, as set out in the adopted Local Plans (2018). The TSCSC supports the levels of growth provided for through the adopted Local Plans and provides an overarching strategy to address the rising population and increase in demand on our travel network by shifting people from cars to other modes of travel including cycling, walking and public transport.

This strategy has two main roles:

- It provides a detailed policy framework and programme of schemes for the area, addressing current problems, and is consistent with the Cambridgeshire Local Transport Plan 2011-26. It is part of how the Council manages and develops the local transport network of the County as a whole
- It supports the Cambridge and South Cambridgeshire Local Plans and takes account of the future levels and distribution of growth in the area. It details the transport infrastructure and services necessary to deliver this growth

The strategy contains details of the major schemes proposed in the short, medium and longer term. The programme will be regularly reviewed given the extent of growth and development in the area.

What the Strategy does:

- States the County Council's aim for more journeys to be made on foot, by cycle, bus, and train, so that traffic levels aren't increased.
- Ensures extra capacity for traffic to travel round the outskirts of Cambridge, so that road space into and across the city can be prioritised for pedestrians, cyclists and buses.
- Provides additional Park and Ride options on the fringes of Cambridge, to reduce the amount of unnecessary traffic travelling through the city
- Ensures walking, cycling, and public transport are the best ways of getting around and across the area, since they will be quicker and more convenient than by car

- Reduces car traffic by using a variety of techniques, which may mean limiting the available road space for cars
- Enables people to use public transport for at least some of their journey into Cambridge or surrounding towns, by creating a frequent, quality service across major route
- Development of local transport solutions with communities, which link to public transport along key routes

Within the urban areas of the city, the strategy seeks to:

- Encourage more people to walk, cycle and use public transport for journeys into, out of and within the city
- Promote bus routes that connect key economic hubs and link to the new train station at Cambridge Science Park Railway Station
- Persuade more people to car share
- Prioritise pedestrian, cycle and bus trips across the city and make these methods of transport more convenient than using a car
- Maintain general traffic at current levels

The County Council has declared a Climate Emergency and has published a climate change and environment strategy (May 2020). It sets out a vision to deliver net zero carbon by 2050. Transport is a priority area of the strategy and the County will manage its highways to prioritise walking, cycling and public transport and supporting the uptake of electric vehicles. This will minimise carbon emissions and improve air quality. Active network management will allow all communities to access alternative forms of transport such as autonomous vehicles and electric vehicles. These strategy aims have been embedded into the Combined Authority's local transport plan.

The Greater Cambridge Partnership (GCP)

The GCP is the local delivery body for a City Deal with central Government. It provides powers in decision making and investment worth approximately £500

million over 15 years, to crucial infrastructure improvements and projects and supports the creation of 44,000 new jobs, 33,500 new homes and 420 additional apprenticeships. They are seeking to deliver a range of transport schemes, particularly focused on public transport, cycling and walking opportunities.

Cambridge City Council Corporate Plan (2019-2022)

The City Council has a vision to lead a unified city 'one Cambridge fair for all' that includes the following objectives:

- Cambridge - a great place to live, learn and work: A city where getting around is primarily by public transport, bike and on foot.
- Cambridge - caring for the planet: A city that takes robust action to tackle the local and global threat of climate change, both internally and in partnership with local organisations and residents, and to minimise its environmental impact by cutting carbon, waste and pollution.

This vision and objectives of the Corporate Plan are delivered through a number of policies, plans and strategies:

Cambridge City Council Air Quality Action Plan (2018-2023)

The Air Quality Action Plan sets out priorities for maintaining and improving air quality.

The actions fall into three main categories:

- Reducing local traffic emissions as quickly as possible to meet national objectives. Proposals in this area include:
 - lowering emissions from taxis, by increasing the number of electric and hybrid vehicles through incentives and installing more charging points.
 - reducing bus and coach emissions, by working with partners to invest in more environmentally friendly vehicles.

- reducing HGV emissions in the city centre, by promoting 'greener' methods for making deliveries of goods, such as by cycle.
- Maintaining levels of pollutants below national objectives, including by using planning policies to improve access to sustainable modes of transport.
- Improving public health, including by educating people about the health impacts of poor air quality and encouraging 'greener' lifestyles.

Cambridge City Council Electric Vehicle and Infrastructure Strategy (2019)

The Electric Vehicle and Infrastructure Strategy sets out a plan for how the city council will support the deployment of charging infrastructure to facilitate the move to electric vehicles.

Cambridge City Council Climate Change Strategy (2016-2021)

The Climate Change Strategy sets out a number of key objectives including 'reducing emissions from transport by promoting sustainable transport, reducing car travel and traffic congestion and encouraging behaviour change' This is to be achieved through the city's partnership within the Greater Cambridge Partnership which is investing City Deal funding to make improvements to public transport and cycling infrastructure with the aim of tackling congestion, reducing journey times, reducing greenhouse gas emissions, improving air quality and promoting low emission buses and taxis. The City Council have declared a climate emergency with an ambition to be carbon neutral by 2050.

Cambridge City Council Cambridge Local Plan (2018)

The local plan sets out the way we will meet the development needs of Cambridge to 2031. Over that time the city has plans to grow significantly; supporting the nationally important economic contribution the city makes and the factors that are inseparable from that success, seen in the exceptional quality of life and place that Cambridge benefits from. The local plan is supported by the TSCSC, setting out the transport mitigations for new development. The relevant policies in the local plan are;

Policy 1: The presumption in favour of sustainable development – Future mobility will support the move to more sustainable modes of transport, supporting the economic development of the area and improving quality of life.

Policy 5: Strategic transport infrastructure – Cambridge City Council will work to support the uptake of sustainable transport by supporting.

1. Delivery of local and strategic transport schemes, subject to the outcome of up-to-date, detailed assessments and consultation, where appropriate;
2. Promoting greater pedestrian and cycle priority through and to the city centre, district centres and potentially incorporating public realm and cycle parking improvements;
3. Promoting sustainable transport and access for all to and from major employers, education and research clusters, hospitals, schools and colleges;
4. Working with partners in supporting the TSCSC's aim for a joined-up, city-wide cycle and pedestrian network by addressing 'pinch-points', barriers and missing links;
5. Linking growth to the proposed city-wide 20 mph zone; and
6. Easing pressure on the air quality management area (AQMA) in the city centre.

Policy 15: Cambridge Northern Fringe East and new railway Station Area of Major Change - designates the Cambridge Northern Fringe East and the new railway station to enable the creation of a revitalised, employment focussed area centred on a new transport interchange. This formed the basis of the Area Action Plan, which has now expanded to include the Science Park and other areas of west of Milton Road.

Policy 28 Carbon Reduction, community energy networks, sustainable design and water use – promotes patterns of development that reduce the need to travel by less environmentally friendly modes of transport. The sustainability statement should address how the proposals meet policies relating to sustainability including, transport mobility and access.

Policy 36: Air quality, odour and dust – development will only be permitted if it has adequately addressed any adverse impacts on air quality in the Air Quality Management Area (AQMA).

Policy 80: Supporting sustainable access to development – ensures that development on the edge of the city are supported by high quality public transport linking them to the city centre and major centres of employment and supporting public transport, walking and cycling to, from and within the development

Policy 81: Mitigating the transport impact of development – Developments will only be permitted where they do not have an unacceptable transport impact.

Policy 82: Parking management - Planning permission will not be granted for developments that would be contrary to the parking standards.

New developments will be favoured where they take a holistic, early, and design-led approach to the management of parking for motor vehicles and cycles. Car parking standards are an important means of managing traffic levels in and around a development, especially when combined with measures to increase access to transport alternatives to the private car. The Council continues to promote lower levels of private car parking in order to help achieve modal shift, particularly for non-residential developments where good, more sustainable transport alternatives such as walking, cycling and public transport exist.

Car-free and car-capped development, where new on-street permits are restricted to existing (not new) residents, is supported by the Council where the development will not impact negatively on the surrounding area by displacing car parking. It is therefore important that where car-free development is proposed, the appropriate on-street parking management is in place.

The Council strongly supports contributions to and provision for car clubs at new developments to help reduce the need for private car parking. Electric vehicle charging points or the infrastructure to ensure their future provision will be provided within a development where reasonable and proportionate.

The Cambridge Local Plan is currently being reviewed and a joint Greater Cambridge Local Plan with South Cambridgeshire being developed.

South Cambridgeshire District Council Business Plan 2019-2024

South Cambridgeshire has a vision to put the heart into Cambridgeshire by:

- Helping businesses to grow - Helping to ensure people's homes are close to their jobs and can be accessed by walking, cycling, and using public transport
- Building homes that are truly affordable to live in - Working with partners to provide alternatives to private car travel through new and improved walking, cycling and public transport routes
- Being green to our core - Installing new air quality monitors so that we can track, maintain and improve air quality, installing electric vehicle charging points at Council offices and incentivising taxi operators and drivers to make the move to electric vehicles

South Cambridgeshire District Council Zero carbon strategy and action plan

South Cambridgeshire has declared a climate emergency with an ambition to be zero carbon by 2050. The Business Plan 2019-24 includes a broad and far-reaching programme consisting of 14 high level actions on zero carbon, including actions reducing the emissions from transport.

South Cambridgeshire Local Plan (2018)

The South Cambridgeshire Local Plan sets out the planning policies and land allocations to guide the future development to meets the needs of the district up to 2031. It includes policies on a wide range of topics such as housing, employment, services and facilities, and the natural environment. The policies relevant to future mobility are:

Policy SS/4: Cambridge Northern Fringe East and Cambridge North railway station

c. Ensure that appropriate access and linkages, including for pedestrians and cyclists, are planned for in a high quality and comprehensive manner;

Policy CC/1: Mitigation and Adaptation to Climate Change - Planning permission will only be granted for proposals that demonstrate and embed the principles of climate change mitigation and adaptation into the development. To mitigate climate change, proposals should demonstrate: promotion of sustainable forms of transport, such as using buses, cycling or walking, and reduction of car use (Policy HQ/1 & Transport Policies);

Policy HQ/1: Design Principles - All new development must be of high-quality design, with a clear vision as to the positive contribution the development will make to its local and wider context. As appropriate to the scale and nature of the development, proposals must: Achieve a permeable development with ease of movement and access for all users and abilities, with user friendly and conveniently accessible streets and other routes both within the development and linking with its surroundings and existing and proposed facilities and services, focusing on

delivering attractive and safe opportunities for walking, cycling, public transport and, where appropriate, horse riding; Ensure that car parking is integrated into the development in a convenient, accessible manner and does not dominate the development and its surroundings or cause safety issues;

Policy SC/12: Air Quality - Where development proposals would be subject to unacceptable air quality standards or would have an unacceptable impact on air quality standards they will be refused. Larger development proposals that require a Transport Assessment and a Travel Plan as set out in Policy TI/2 will be required to produce a site based Low Emission Strategy. The development promotes sustainable transport measures and use of low emission vehicles in order to reduce the air quality impacts of vehicles.

Policy TI/2: Planning for Sustainable Travel - Development must be located and designed to reduce the need to travel, particularly by car, and promote sustainable travel appropriate to its location. Planning permission will only be granted for development likely to give rise to increased travel demands, where the site has (or will attain) sufficient integration and accessibility by walking, cycling or public and community transport, including: Developers of 'larger developments' or where a proposal is likely to have 'significant transport implications' will be required to demonstrate they have maximised opportunities for sustainable travel and will make adequate provision to mitigate the likely impacts through provision of a Transport Assessment and Travel Plan. All other developments will be required to submit a Transport Statement. Where a Transport Assessment / Statement or Travel Plan is required, a Low Emissions Strategy Statement should be integrated.

Policy TI/3: Parking Provision - The Council will encourage innovative solutions to car parking, including shared spaces where the location and patterns of use permit, and incorporation of measures such as car clubs and electric charging points.

Existing Issues

Climate Change and Pollution

Greenhouse gas emissions: Today, transport is the largest greenhouse gas emitting sector in the UK, accounting for 27% of greenhouse gas emissions. Road transport accounts for 91% of these. In south Cambridgeshire emissions from transport accounts for around 50% of total emissions across the district.

Without action the levels of congestion will cause a significant worsening of air quality. The centre of Cambridge has been within an Air Quality Management Area since 2004. Air quality has been improving, albeit slowly, in most parts of Cambridge in recent years, but there are parts of the city, including the busy central streets, where levels of nitrogen dioxide (NO₂) continue to be high. The main source of NO₂ in Cambridge is vehicle emissions. Public Health data attributed 257 deaths in Cambridgeshire in 2013 to Particulate Air Pollution, of which 47 deaths were in Cambridge. This compares with 34 deaths from Road Traffic Accidents.

Traffic and congestion are also contributing to noise nuisance. In England alone, the annual social cost of urban road noise was estimated in 2010 to be £7–£10 billion. This includes the costs of sleep disturbance, annoyance and health impacts from heart attacks, strokes, and dementia.

With the proposed introduction of a trip budget approach for managing car trips to and from the NEC area there will be no additional traffic on Milton Road or Kings Hedges Road and thus no worsening of air quality or noise from vehicular traffic. Priority will be given to sustainable modes, including improving connectivity to all surrounding areas, which should reduce the impact of vehicular traffic and help with addressing the climate agenda. Other measures are explored further in the Climate Change, Energy and Sustainable Design and Construction, Environmental Health and Environmental Monitoring Topic Papers, such as the inclusion of a delivery consolidation hub served by cycle couriers to reduce vehicle trips within the AAP area which received a positive response in the Issues and Options consultation.

Congestion

Cambridge experiences over 206,000 vehicle movements into and out of the city every day.¹ Issues with affordability of housing (affordability ratio of 14.3²) means employees are moving further away from the city and spending more time travelling, significantly impacting quality of life and health as well as creating dependence on the private car. The Greater Cambridge area is growing rapidly with plans to build 33,500 houses by 2031 and to create 44,000 new jobs. This will put increasing pressure on the highway network and if nothing is done to address it road traffic is forecast increase by 30% at peak in Cambridge and by 40% at peak in surrounding areas, doubling the time travellers will spend in traffic. The amount of traffic is having a significant impact on the operation of the public transport system with buses particularly at peak time being caught in congestion making journey times slow and unreliable.

The Ely to Cambridge A10 Transport Study (2018) considered the transport needs of the Ely to Cambridge corridor as a whole, including the needs of the major developments on the corridor such as the new town north of Waterbeach and North East Cambridge. The 2011 Census indicated that around 71% of work trips to the North East Cambridge area were made by car. This is significantly higher than many other areas in and around Cambridge, such as the Cambridge Biomedical Campus or CB1 around Cambridge Station. The site has seen a gradual reduction in this figure over the intervening period through the travel planning work that has been undertaken but there is still a need to reduce this further.

The North East Cambridge area has seen a significant increase in the range of sustainable transport connections over recent years with the introduction of the Guided Busway in 2011 and the opening of Cambridge North railway station in 2017. In addition, there are a wide range of public transport, cycling and walking improvements in development via the Greater Cambridge Partnership (GCP) and Combined Authority

¹ [Future Mobility Zones Fund \(Cambridgeshire and Peterborough Combined Authority\)](#)

² [Greater Cambridge Housing Strategy 2019-2023](#)

that mean there is a real opportunity to greatly improve the sustainable connectivity of the North East Cambridge area.

In view of the evidence of existing and future highway constraints, a trip budget approach is proposed for managing car trips to and from the area. The trip budget essentially establishes a cap on the number of future vehicle trips the area can make based on current trip levels. Alongside the trip budget, the emphasis is on providing access to the area via sustainable modes of transport including walking, cycling and public transport, and the application of parking constraint. This will require the developers to achieve a very low share of journeys by car to, from and within the area. To facilitate this, it is proposed that NEC be designed around the principles of walkable neighbourhoods, with services and facilities provided locally to reduce the need to travel and facilitate travel by non-car modes. The Internalisation (trip capture), Future Mobility and Digital Infrastructure Topic Papers consider other measures to deliver these aspirations.

The Greater Cambridge Partnership has a programme of work to help address issues of congestion and is aiming to get 1 in 4 people out of their cars and using more sustainable modes including walking, cycling or public transport by creating a world class public transport system that is better than the private car. The CPCA's Local Transport Plan sets out its ambitions relating to tackling congestion (see context section) and it is in the process of developing a strategy for the improvement of public transport.

Land Use and Parking

Inefficient use of limited space: There are six cars for every ten people in the UK, but the average car is unused 96% of the time. According to one report, parking spaces occupy around 15-30% of a typical urban area. However, the trend appears to be for less car ownership. RAC Foundation evidence from the Census shows that car and van ownership in Cambridge has fallen by 7.1% between 2001 and 2011.³ Nationally there has been a reduction in driving linked to reductions in driving license uptake. Whereas

³[RAC Foundation evidence from the Census](#)

in 1993 55% of 17 to 20 year old males held a license this is now 33% with the corresponding figures for women being 42% and 29%.⁴ Conversely, it is possible to fit 10 cycles into the space typically required to park one car.

Responses to the Issues and Options consultation raised concerns about existing employees currently parking on the streets within Milton (further transport related responses to that consultation can be found in the Consultation Statement). Any reduction in car parking could lead to a further displacement of parking by some who may be reluctant to switch to other modes. A range of responses were received to whether there should be lower levels of car parking across the AAP area, with broad support provided there are suitable alternatives in place. At the same time, there was support for high levels of cycle parking.

The AAP provides the opportunity to rethink the amount of car parking to be provided to serve the area and how and where cars will be stored to make more efficient use of land. Parking cars (private vehicles and car club shared vehicles) off-plot in hub car parks will create better places by freeing up the public realm for people and enabling higher density development to sustain high quality public transport services and provide space to seamlessly interchange between sustainable modes. Coupled with plentiful, conveniently located, cycle parking at homes, businesses, and other key locations, it makes access to cars less convenient, helping to make sustainable modes the automatic choice. Car park hubs provide opportunities to make use of and incorporate technology to improve efficiencies finding vacant spaces, and electric charging infrastructure to avoid street clutter.

Severance

The Area Action Plan area is tightly bounded by the A14 and railway line to the north and east, whilst the Guided Busway crosses the site east to west. They constrain the connectivity of the site with communities outside the Area Action Plan area by walking, cycling and public transport. Furthermore, inward-looking sites and fencing exacerbate these physical barriers creating added psychological barriers which further discourage

⁴ [Demand- Future Travel Report \(2018\)](#)

through movement. Internally, the greatest severance is caused by Milton Road which dissects the area and is a hostile environment for anyone wanting to travel from east to west.

Responses to the Issues and Options consultation raised concerns about the severance effect of these barriers to movement and made suggestions where improvements could and should be made to the walking and cycling network to improve connectivity with surrounding communities. These barriers also directly impact on community safety, social inclusion, and equalities (addressed in the Community Safety and Anti-poverty and Inequality Topic Papers). The AAP provides an opportunity to reduce the severance effect and enhance community safety and social inclusion through the provision of new and improved pedestrian and cycle crossings and networks.

Delivery of transport infrastructure and services

Responses to the Issues and Options consultation raised comments about the need for timely delivery of alternative transport infrastructure and affordable services. The delivery of transport infrastructure and service improvements is dependent on several partners including local authorities and private companies, available funding, as well as planning processes. There are four relevant authorities that will be involved in the development of the NEC development, Cambridgeshire County Council, Cambridge City Council and South Cambridgeshire District Council and Cambridgeshire and Peterborough Combined Authority. These are supported by the Greater Cambridge Partnership on the delivery side. Additionally, public transport services are provided by private rail and bus companies. Developers of North East Cambridge, together with other development sites (including Waterbeach New Town), will contribute funding towards schemes. Delivery of more complex schemes require the acquisition of necessary permissions (such as through the Transport and Works Act) which can be protracted processes. The AAP provides a conduit through which the necessary infrastructure and service requirements can be identified, appropriate funding mechanisms put in place, and their delivery coordinated and secured. This is the role of the NEC Infrastructure Delivery Plan.

The NEC AAP will prioritise non-car modes, creating a place designed around and for people. It also provides the opportunity to provide mobility hubs which provide seamless interchange between sustainable modes, with cycle parking and access to dockless cycles, and makes use of technology and other innovative solutions to mobility (refer to the Internalisation (trip capture), Future Mobility and Digital Infrastructure Topic Papers).

Transport Opportunities and Key Issues

This section addresses the following issues which have arisen since the Transport Evidence (2019) was prepared, to inform the preparation of the draft and Proposed Submission AAP:

- Quantum of Development
- Vehicular Trip Budget
- Inclusion of additional development areas within the NEC AAP site
- Car Parking Provision
- The impact of traffic from the AAP area on the A14
- Area Wide Transport Strategy and Transport Assessments
- Car parking displacement and enforcement
- Transport Position Statement for Development Management Decisions

Quantum of Development

The Transport Evidence Base prepared in support of the NEC AAP tested five development scenarios. The scenarios are distinguished as follows, and summarised in Table 1:

- HIF scenario – this reflects the successful Housing Infrastructure Bid (HIF) submitted to Government by the Combined Authority, City Council and Anglian Water in 2018.
- Options 1 to 4 – these are land use scenarios testing difference scales and mixes of development to enable the impact of the redevelopment of the NEC area on the surrounding highway network to be assessed.

Table 1: Development mix options in Transport Evidence Base

Development mix options in Transport Evidence Base	Jobs	Residential Units
HIF	18,900	9,200
Option 1	18,200	5,500
Option 2	23,200	6,650
Option 3	27,000	7,600
Option 4	23,200	8,700

These options were considered a reasonable range of scenarios, based on available information from developers within the NEC area. Since the options above were tested, the development mix has continued to be refined through engagement on the development typologies and capacities

The draft AAP proposed circa 20,000 new jobs, through provision for 234,500m² of net new business floorspace, and with no overall loss of industrial floorspace, and 8,000 homes of different sizes and types.

This broadly aligned with Development Option 4 within the 2019 Transport Evidence Base – 23,000 jobs and 8,700 homes. The resulting car mode share, required to ensure that the vehicle trip budget of this level and mix of development is not exceeded, is 26% for employment uses and 10% for residential properties.

Following further refinement of the development mix, the Proposed Submission AAP proposes approximately 8,350 and 15,000 jobs. A reduction in the numbers of jobs gives more comfort that the trip budget is deliverable as it gives a better balance between homes and jobs and reduces in-commuting.

Vehicular Trip Budget

The Transport Evidence Base introduced the idea of a vehicular trip budget for the AAP area, to ensure that there was no increase in the number of vehicles recorded accessing the site.

Table 2: Site Wide Trip Budget

Time	Trip Budget
AM Peak (08:00-09:00)	3,900
PM Peak (17:00–18:00)	3,000

Tables 3 and 4 show the vehicular mode shares needed to comply with the trip budget, for the four options.

Table 3: Employment vehicular Mode Share

Development mix options in Transport Evidence Base	AM Peak	PM Peak
HIF	29%	29%
Option 1	38%	38%
Option 2	29%	29%
Option 3	26%	26%
Option 4	26%	26%

Table 4: Residential vehicular Mode Share

Development mix options in Transport Evidence Base	AM Peak	PM Peak
HIF	12%	15%
Option 1	15%	20%
Option 2	12%	15%
Option 3	10%	13%
Option 4	10%	13%

Inclusion of additional development areas within the NEC AAP site

Since the 2019 Transport Evidence Base Study changes have been made to the boundary of the AAP area. The additional areas included within the AAP area are as follows:

- The Car Showrooms situated to the south of Kings Hedges Road and accessed off Milton Road, and
- The Cambridge Regional College Campus accessed off Kings Hedges Road

Car Showrooms

The inclusion of the Car Showrooms situated to the south of Kings Hedges Road is unlikely to have a significant impact on the operation of the area as a whole as this is an existing use and therefore already generates trips on Milton Road in the peak periods and throughout the day.

This site would need to have its own trip budget and parking target so as not to add to the existing levels of congestion on Milton Road. The setting of a trip budget for this area would not alter the trip budget already set out in the Transport Evidence Base. Any trip budget for this additional area would need to look at the current level of trips generated by the existing land use on the Car Showroom site.

Cambridge Regional College

The inclusion of Cambridge Regional College (CRC) within the AAP area requires the introduction of a trip budget and car park cap for the Kings Hedges Road site access. The existing trip budget and car park levels apply to trips accessing the AAP area via Milton Road and therefore, the introduction of a trip budget for the Kings Hedges Road access would not result in any reduction in the trip budget set out in the Transport Evidence Base (September 2019) assuming that the internal road network within the Cambridge Science Park (CSP) does not allow for through trips from Milton Road to Kings Hedges Road and vice versa.

The Kings Hedges Road trip budget would cover current trips made using the Kings Hedges Road site access that serves both the college and the CSP. In order to generate this information, the count data collected in 2017 for the Hub application on the Science Park has been used (this is the same data set used to generate the Milton Road trip budget in the Transport Evidence Base published in September 2019).

The count data collected indicated that there was a total of 656 trips turning off Kings Hedges Road on to the access road. Of these, 409 vehicles entered the Science Park in the AM peak with the remaining 247 trips entering the college via one of the three possible access points.

The junction is largely able to cope with this number of trips and therefore the trip budget for the Kings Hedges Road junction is proposed to be 656 trips with the split between CSP and CRC as follows:

Table 5: Kings Hedges Road Trip Budget

Site	AM Peak Arrive	AM Peak Depart	PM Peak Arrive	PM Peak Depart
CSP	409	106	71	527
College	247	18	31	125
Total	656	124	102	652

Car Parking Provision

Car parking provision has a strong relationship with vehicular trip generation and so car parking standards will have an important role to play in helping to manage traffic levels associated with development.

The following sections set out the resulting parking levels for the CSP and College needed to accommodate the predicted trip budget set out above.

Kings Hedges Road Parking Figures

The methodology for deriving both sets of parking figures is the same as that used in the Transport Evidence Base (2019) to ensure consistency.

Cambridge Science Park

Table 6: CSP King Hedges Road Parking Accumulation

Time	Arrival trip rate	Departure trip rate	Arrival %	Departure %	Trip arrivals	Trip departures	Parking Accumulation
07:00-08:00	0.581	0.077	18%	2%	197	26	171
08:00-09:00	1.208	0.123	37%	4%	409	42	538
09:00-10:00	0.421	0.124	13%	4%	143	42	639
10:00-11:00	0.136	0.09	4%	3%	46	30	654
11:00-12:00	0.123	0.122	4%	4%	42	41	654
12:00-13:00	0.166	0.256	5%	8%	56	87	624
13:00-14:00	0.201	0.168	6%	5%	68	57	635
14:00-15:00	0.142	0.15	4%	5%	48	51	632
15:00-16:00	0.09	0.261	3%	8%	30	88	575
16:00-17:00	0.091	0.421	3%	13%	31	143	463
17:00-18:00	0.069	0.851	2%	27%	23	288	198
18:00-19:00	0.031	0.561	1%	18%	10	190	19
Total	3.259	3.204	100%	100%	1103	1085	-

In order to ensure that the car park operates effectively it has been assumed that 654 vehicles represents 85% occupancy of the car park and therefore the number of spaces proposed for the Kings Hedges Road access is 770.

In order for the Milton Road and Kings Hedges Road accesses to be accurately monitored and managed it will be necessary to prevent traffic driving through the Science Park as currently some traffic is recorded as driving through from Milton Road to Kings Hedges Road and vice versa.

The separation of the two access roads means that there is no impact on the trip budget for the remaining sites within the AAP area as these can only be accessed via Milton Road.

Cambridge Regional College

The trip budget has been set by taking the number of trips recorded in the 2017 surveys. The resulting cap on the number of parking spaces the college can have in order to comply with the trip budget is shown in the table below:

Table 7: Cambridge Regional College Parking Accumulation

Time	Arrival trip rate	Departure trip rate	Arrival %	Departure %	Trip arrivals	Trip departures	Parking Accumulation
07:00-08:00	0.012	0.003	5%	1%	45	11	57
08:00-09:00	0.067	0.021	27%	8%	253	79	332
09:00-10:00	0.027	0.013	11%	5%	102	49	151
10:00-11:00	0.017	0.01	7%	4%	64	38	102
11:00-12:00	0.015	0.014	6%	6%	57	53	110
12:00-13:00	0.016	0.019	6%	8%	60	72	132
13:00-14:00	0.016	0.015	6%	6%	60	57	117
14:00-15:00	0.011	0.018	4%	7%	42	68	110
15:00-16:00	0.013	0.023	5%	9%	49	87	136
16:00-17:00	0.015	0.036	6%	14%	57	136	193
17:00-18:00	0.015	0.031	6%	12%	57	117	174
18:00-19:00	0.012	0.011	5%	4%	45	42	87
Total	0.25	0.251	100%	100%	944	948	1892

In order to ensure that the car parking operates effectively we have assumed that 332 vehicles represents 85% occupancy of the car park and therefore the number of spaces proposed for the Kings Hedges Road access is 390. This compares to the maximum occupancy recorded during the survey of the college car park (undertaken

10th March 2020) of 621. Therefore, the college will need to ensure the car mode share for the site is reduced to ensure the trip budget and parking cap are not exceeded.

The impact of traffic from the AAP area on the A14

The Ely to Cambridge A10 Transport Study (2018) identified that over 50% of trips entering and leaving the AAP Area via Milton Road originate from the A14. As is set out in the Transport Evidence Report (2019) it is the intention to manage the development of the NEC by means of a trip budget thereby limiting the number of vehicular trips in the future to the levels recorded in the surveys carried out in 2017.

Therefore, trips from the NEC area should not contribute to additional vehicles on the A14. However, the car mode share indicated for the AAP area is significantly lower than is currently the case for any of the existing uses within the AAP area therefore it will be important as the development progresses to ensure that there is not an increase in the number of trips on the A14 that are then parking off site and using other modes for the last part of the journey. The developers of North East Cambridge will need to demonstrate that longer distance trips to the area are captured further out to minimise the impact of any development at the scheme on the A14 as part of the Transport Strategy.

Transport Strategy and Transport Assessments

To demonstrate the deliverability and achievability of the scale of development proposed for NEC within the prescribed trip budget (Table 2), the developers have prepared an initial High Level Transport Strategy (which will be kept under review). This articulates a multi modal strategy for the area in terms of measures, mode shares and progression to a low car mode share over time, to ensure the trip budget for the site is not exceeded and factors such as air quality are maintained or improved. It outlines how development quantum, trips, and mode shares correlate with strategic and local transport infrastructure improvements to the area. This is a strategic rationale as to how development within the NEC area can be accommodated and includes a phasing schedule/plan that matches development to

new infrastructure. This has been prepared by the five main landowners within the Area Action Plan area as a joint strategy.

The NEC AAP encourages innovation therefore the Transport Strategy also considers and proposes innovative transport and mobility solutions, not simply relying on planned schemes and initiatives proposed by the GCP and Combined Authority. For example, whether there are other potential initiatives and tools considered through the GCP 'Choices for Better Journeys' and 'City Access' projects which would assist delivery (e.g. residential parking controls, workplace parking levy, congestion charge). The Councils will expect that there will need to be a phased reduction in car parking provision across the AAP area to facilitate and reinforce the delivery of the aims of the Transport Strategy.

Each individual developer will then need to produce a site-specific Transport Assessment that sets out how their development aligns with and will contribute towards delivery of the High Level Transport Strategy (2021) and what mitigation the development proposal needs to provide, including towards strategic, local and site specific infrastructure and provisions. Many businesses already have Travel Plans which will need updating to further outline measures to encourage staff to switch to sustainable modes, such as through incentivising use of public transport, provision of a shuttle bus from the station, and provision of showers and lockers for cyclists. Other measures could include a gradual reduction in car parking provision, phased with the availability of alternative sustainable modes such as planned public transport services and cycling and walking infrastructure provision. Where necessary, consideration may be given to the introduction to parking or traffic controls, adopting both a carrot and stick approach to the delivery of mode shift.

Car parking displacement and enforcement

The Transport Strategy will require a reduction in car parking across the area, in tandem with further improvements to public transport services, cycling and walking infrastructure to deliver upon the required mode share.

Responses to the Issues and Options consultation raised concerns about existing employees currently parking on the streets within Milton. A significant reduction in car parking could lead to a further displacement of parking by some who may be reluctant to switch to other modes.

The AAP includes a requirement to monitor the existing car parking situation in the area surrounding the AAP area. If this monitoring indicates that there is additional parking in the surrounding area as a result of development within the AAP area, then it may be appropriate to introduce wider control measures, such as Controlled Parking Zones. Developers have incorporated a monitoring and mitigation plan within the Transport Strategy.

If there is found to be any displacement parking this could potentially be addressed within the City through measures outside the scope of the AAP, such as residential parking areas and parking enforcement. The GCP is developing an Integrated Parking Strategy which will identify how parking across Greater Cambridge can promote sustainable modes, discourage car use, improve access, and more effectively manage the use of on and off-street parking to reduce congestion on the network. A key part of this will be the delivery of civil parking enforcement in South Cambridgeshire – currently the responsibility of the police – to encourage the use of designated parking facilities and address issues with problematic parking. The GCP Executive Board (on 18 March 2021) committed to providing funding to support the application for civil parking enforcement powers and Cambridgeshire County Council (at its Highway & Transport Committee on 7 September 2021) agreed to prepare an application to the Department for Transport for the implementation of civil parking enforcement in South Cambridgeshire.

Vehicle access and inclusivity

Feedback to the consultation on the Draft AAP raised concerns that disabled people and others reliant upon vehicles were being excluded. NEC is already very accessible by non-car modes and is being designed around the principles of walkable neighbourhoods, whereby facilities and services are located within a short walk or cycle. Priority will be given to pedestrians and cyclists over vehicular modes,

providing safe, direct, and generous space for footpaths and cycle paths that will cater for all abilities (including people using mobility scooters and non-standard cycles) to make the place more inclusive. At the same time vehicular access will be maintained, including for disabled, taxis, public transport and service vehicles. It is not intended that NEC will be completely vehicle free, however the street design and layouts, together with low traffic speeds will put people first. People will still be able to own and use cars but the majority will be parked away from houses in car barns, with an exception for disabled parking provision, visitor parking for carers and drop-off points for loading/unloading and deliveries, which will be designed into the public realm. There will be several car barns located throughout the development to accommodate parking within a reasonable distance of housing, employment and community uses, and these will have electric charging infrastructure and electric car clubs for people who want access to a vehicle on an occasional basis without having to own their own.

Transport Position Statement for Development Management Decisions

Cambridgeshire County Council has established its position in a Transport Position Statement published previously in the Reg 18 consultation stage of the AAP, to provide clarity to developers within the North East Cambridge area on how their proposals will be considered in advance of the AAP having material weight. This will ensure that development proposals, that come ahead of the NEC AAP do not prejudice or frustrate the comprehensive delivery of the strategic transport solution or wider development aspirations of the NEC AAP area. The High Level Transport Strategy will also inform the decision-making process.

Provision for non-motorised modes

Cyclists

Feedback to the consultation on the Draft AAP raised comments about the standard of new cycle infrastructure provision, as well as the quality and capacity of surrounding routes. Since the preparation of the Draft NEC AAP the Department for Transport published Local Transport Note (LTN) 1/20 Cycle infrastructure design. Whilst the AAP seeks to ensure delivery of a very high standard of infrastructure and incorporates design principles contained within this guidance, it could usefully reference it. In addition to planned improvements in the cycle network, the Transport Strategy sets out strategic and local transport infrastructure improvements the developers will deliver; this includes improvements to surrounding routes.

Feedback to the consultation on the Draft AAP raised comments that insufficient cycle parking was proposed (there is overcrowding within the City) and suggested that further design guidance was needed. The availability of secure cycle parking at home, the end of a trip or at an interchange point has a significant influence on cycle use. It is acknowledged there are issues with under provision of cycle parking in parts of the City, which the AAP seeks to avoid in NEC by including cycle parking standards that go beyond those required in the adopted Cambridge Local Plan, reflecting that greater provision will be needed to encourage and enable greater cycle mode share. However, flexibility is provided to avoid over proliferation in areas where demand may be at different times, for example, where serving a mix of day and night uses. Cambridge City Council has adopted cycle parking design guidance. Although a bit dated, as it does not address non-standard cycles, many of the principles remain valid and it can be read alongside more recent guidance in LTN1/20. In addition, the Councils are preparing an Active Travel Toolkit to ensure the timely provision of high-quality new infrastructure in new developments.

Equestrians

Feedback from equestrian groups raised concerns that not enough provision is being made for equestrians within NEC. The AAP will make provision for all non-motorised users, which includes equestrians. To the north west of the AAP area Mere Way is

an existing route suitable for and used by equestrians. The planned Waterbeach Greenway (being delivered by GCP) will provide an opportunity for NEC to create circular routes by joining the two routes. Whilst equestrians can ride on or alongside roads a mix of NMU routes are proposed within NEC including greenways away from traffic.

E-scooters

At the time of writing use of e-scooters on the public highway are not permitted, although national trials are being run in several locations. The Cambridgeshire and Peterborough Combined Authority are managing the year-long trial in Cambridge with Voi Technology, which started in October 2020. They operate 300 scooters on a subscription basis (via an App) during the period 6am to 8pm. Riders must be at least 18 and hold a provisional driving licence. Scooter speeds are capped at 10mph with geofencing to ensure the scooters do not go outside the trial area. The Government is monitoring the trials to inform a decision on whether to legalise the use of electric scooters on UK roads. The AAP has been drafted to be flexible and adaptable to future technology and innovations. Should the law on e-scooters be amended there is scope to accommodate dockless e-scooters at the mobility hubs alongside cycle parking and dockless e-cycle / cycle hire.

Public Transport

Cambridge Autonomous Metro (CAM)

The CAM was proposed by the former Mayor of the Cambridgeshire and Peterborough Combined Authority after the early work on the Transport Evidence (2019) was complete. As such, the scheme at that point did not have any confirmed status or funding and therefore was not included or relied upon in the scenario testing that was undertaken for the AAP in the Transport Evidence Report (2019). In the intervening period, the former Mayor developed plans for a tunnelled system underneath central Cambridge, with four portals connecting to routes out from the city. One of these portals was intended to be located within the NEC area and as such, a policy was included in the Draft Plan to safeguard land for this purpose. In

May 2021, a new Mayor was elected who has stated his intention to halt further development of the scheme and the Combined Authority Board suspended work of the delivery body (One CAM Ltd) until a review of the CAM programme was carried out and an update on work to revamp the Local Transport Plan is reported to the Board. The Proposed Submission draft of the AAP does not therefore take forward the safeguarding of land adjacent to Cambridge North Station for a future CAM portal but recognises land around the station and Guided Busway will still be needed as a public transport interchange.

[Waterbeach to Cambridge \(W2C\)](#)

The Better Public Transport – Waterbeach to Cambridge project has been developed by the GCP to help ensure that planned residential and employment growth at both Waterbeach and North East Cambridge can be accommodated in a sustainable way that doesn't increase levels of vehicular traffic on the northern approach to the city. A Strategic Outline Business Case was developed in 2020 which set out a clear case for the requirement for a segregated transport route as opposed to just enhancing on-road bus service provision in this corridor. A subsequent consultation towards the end of 2020 sought feedback on four different routes, with a recommendation now being put forward to undertake further work as part of an Outline Business Case on two of them, a western alignment and an amended central alignment. Both alignments link the relocated Waterbeach Station to the western end of Cambridge Science Park via different alignments to the west of the A10, joining the existing Guided Busway. The next stage of work will also consider a comprehensive review of park and ride provision within the corridor.

[Bus Strategy](#)

The CPCA is preparing a 'refresh' of the 2020 Local Transport Plan, to be rebadged as a Local Transport and Connectivity Plan which is currently under preparation. It will look at the longer-term proposals for bus provision in the Combined Authority area, including Greater Cambridge and will provide an updated framework for a new Bus Strategy.

Bus market reform is one of the CPCA's key priorities. Following the publication of the National Bus Strategy for England - 'Bus Back Better' in March 2021, the government is making grant funding available to areas that commit to produce a Bus Service Improvement Plan (BSIP) by October 2021. Working with members of the local Bus Operators' Forum, the CPCA is currently developing a Cambridgeshire and Peterborough BSIP. The plan will describe the improvements the Transport Authority (CPCA), bus operators and other partners intend to make from April 2022. At the same time, the CPCA is assembling evidence to evaluate franchising and enhanced partnership options for the future delivery of bus services in the area. This work may open up opportunities to explore improvements to the bus service provision in the NEC area.

The BSIP and the Franchising Assessment will form part of the CPCA Bus Strategy which also includes a bid to Government for Zebra funding for an initial 30 electric buses and supporting infrastructure, to be provided at the Cowley Road Depot site.

[Bus depot relocation](#)

North East Cambridge seeks to create a new urban quarter to Cambridge which can make a significant contribution to the future housing and employment needs of Greater Cambridge. The AAP promotes future structural changes in the layout and land use of parts of the area to optimise development potential, mitigate constraints, and for place-making purposes. This includes proposals for new strategic walking and cycling connections; the residential use of Nuffield Industrial Estate; the consolidation of and intensification of industrial use around the aggregate railhead (which is remaining in situ for the foreseeable future); and the relocation of incompatible uses in order to deliver the vision for the area. Through preparation of the AAP, it has been concluded that the Bus Depot use is not compatible with the proposed future vision and development of the NEC area or with the vehicular trip budget. However, the depot will need to remain in place until at least 2031 in order to provide value for money for the Zebra funding. The Councils are working with the Combined Authority, Cambridgeshire County Council and the GCP to find suitable alternative location(s) for the bus depot to relocate at an appropriate time consistent with the phasing of development at NEC. It is recognised that in relocating the depot,

any alternative site would need to provide good access to Cambridge in order to provide effective and efficient public transport to serve the area.

Rail

Rail will form a key component to getting people in and out of the site as an alternative to the private car, in order to ensure that the site stays within its vehicular trip budget. For more trains to serve Cambridge North station than are currently planned, further capacity needs to be created on the railway network in the Ely area, which is currently operating at capacity, so that more trains can run through. Network Rail have a project called the [Ely Area Capacity Enhancement \(EACE\)](#) Programme the scope of which is to consider all the railway systems between Cambridge and Ely, Ely and Peterborough and Ely and King's Lynn. 126 level crossings are included in this programme, including Chesterton Fen level crossing which is adjacent to the NEC area and has been the subject of a number of representations made at both the Issues and Options stage and also the Draft Plan stage.

Feedback at both stages has suggested that the level crossing should be replaced by a bridge over the railway into the NEC area due to the duration that the barrier is down for and the severance it causes the community to the east of the railway. The planning authorities, along with the highways authority and the CPCA have been engaging with Network Rail as the responsibility for any changes to a level crossing needs to be taken by Network Rail. A second phase of consultation on the EACE programme is being undertaken by Network Rail in the autumn 2021, which will include consideration of the level crossings, including Chesterton Fen.

Additional connections into Cambridge by rail will be delivered through the East West Rail project, which will link destinations to the west that aren't currently directly connected to the city by rail. Stage 3 of the project will link Bedford to Cambridge via St Neots/Sandy and Cambourne.

City Access Strategy

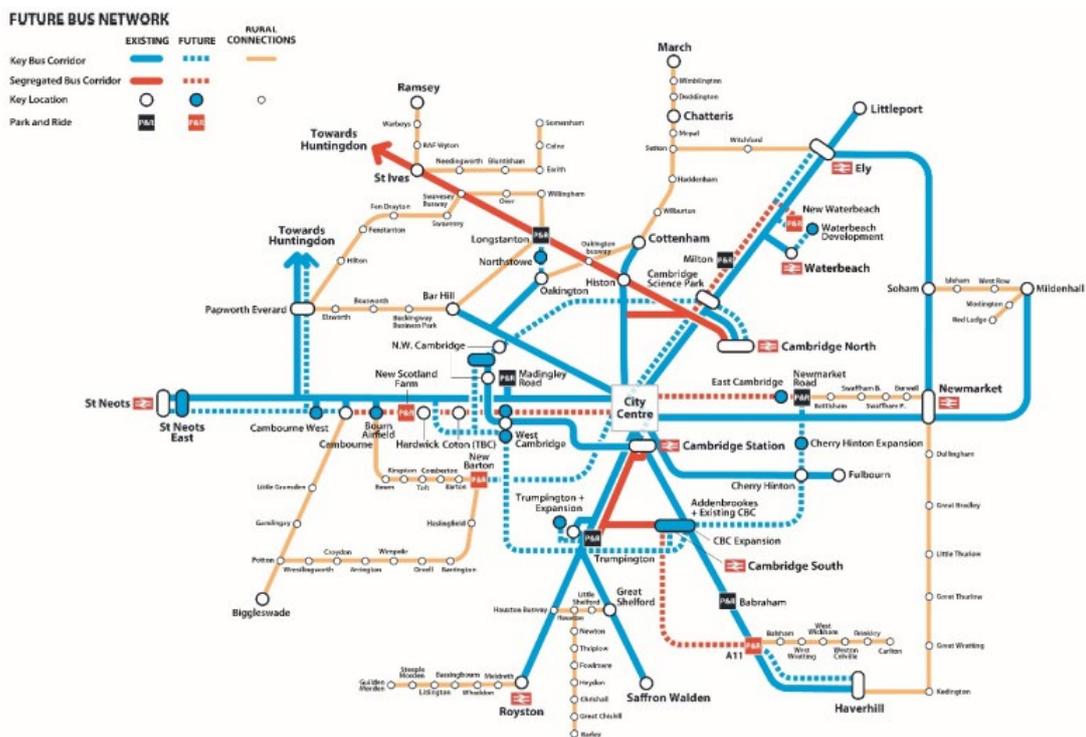
The GCP are developing a city access strategy around three principles, namely:

- Supporting a significant uplift in use of sustainable transport as part of a green recovery;

- Prioritising road space for sustainable transport and making it a more competitive choice, by discouraging car use
- Reducing pollution and emissions

As feedback on the Draft Plan has highlighted, it is recognised that in order to be able to compete with the private car, changes are needed to the transport system in a number of ways to allow sustainable transport to become a truly competitive choice. A Strategic Bus Review undertaken by the CPCA resulted in a future bus network concept for Greater Cambridge (see below) which aims to set out how a new network could offer more people a competitive public transport option.

Future Bus Network concept (Source: Greater Cambridge Partnership)



To support this concept and as part of a green recovery, the GCP is working with the CPCA and operators to deliver a package to incentivise the use of public transport, including lengthening bus operating hours, increasing frequencies on the bus core network, providing additional bus routes and services and developing a targeted fare pilot.

A blended approach of road space reallocation and changes to parking is proposed to enable more road space to be prioritised for sustainable transport, which will help to speed up journey times, improve reliability and improve safety. To ensure that vehicle trips are reduced rather than simply displaced, parking restrictions will be introduced in parallel with significant changes to road space. The approach being taken at North East Cambridge is wholly consistent with this ethos.

Wider Sustainable Connectivity

Crossing Milton Road

Feedback was received about the crossings of Milton Road, including concerns about the proposals to provide grade separate crossing via an underpass and bridge. As set out in the Transport Strategy, the transport consultants working on behalf of the main landowners, will need to do detailed analysis of the number of trips crossing Milton Road to establish the most appropriate form and design of the crossings. Until such further analysis is undertaken, the Proposed Submission draft of the AAP assume a bridge will be required to provide for the walking and cycling movements, ensuring these do not impact congestion on Milton Road.

Improvement to existing routes

A number of representations to the Draft Plan highlighted the lack of capacity, facilities and missing links on existing walking and cycling routes. Many of these are likely to fall outside the NEC area. A draft Local Cycling and Walking Infrastructure Plan (LCWIP) has been developed by the County Council, which will help to address this. The plan uses a methodology that is intended to identify routes that have the highest potential to increase the number of people cycling for short journeys which are then prioritised. A selection of walking routes also follows a similar process. The methodology follows Department for Transport guidelines and leads to a focus on urban and utility trips aimed at replacing short car journeys with walking and cycling. Building on the draft LCWIP, the GCP have undertaken further analysis of the current cycle network to identify gaps and missing links and consider how these could be addressed. A prioritised list was drawn up and consulted on during the

summer of 2021; Cycling Plus: Investing in Greater Cambridge's Active Travel Network.

Electric Vehicles

With Government seeking to phase out sales of new petrol and diesel by 2030 it is vital that new developments are ready to support electric vehicles. Vehicle parking must include electric charging infrastructure (with appropriate grid reinforcement), which should be designed into the public realm, for example to minimise conflicts such as cables across pedestrian and cyclist routes.

Developers will be required to submit evidence of a management strategy for any communal charge points, such as those within car barns. Charging infrastructure should be able to accommodate other vehicles including mobility scooters, electric cycles and electrification of the bus fleet.

Impact of Covid-19 restrictions

The impact of restrictions imposed during the pandemic continue to have an impact on the long-standing characteristics of the transport system. During the lockdowns, traffic levels were significantly lower than pre-pandemic levels, however these have been gradually rising again. Monitoring is in place to help better understand what longer-term trends are developing. More generally, it is unclear at the moment what the long-term effect of remote working is likely to be and the subsequent effect on travel habits. The Transport Evidence Report (2019) included a conservative estimate for future homeworking patterns which is likely to be borne out and could be even higher. These trends will continue to be monitored and will be considered in future updates to the Transport Strategy as the plan is developed.

Preferred approach for relevant policy development

The following approach for policy development responds to the issues raised in the 'Existing Issues' and 'Transport Opportunities and Key Issues' sections.

That NEC facilitates and encourages a modal shift to sustainable modes to meet the trip budget.

Reasons for preferred approach

Significant reduction in vehicle trips:

NEC will carefully manage vehicle use through a trip budget to ensure there is no unacceptable impact on the highway network.

Improved connectivity:

NEC will enhance intra- and inter-Area Action Plan mobility enabling people to move around the site using sustainable modes and improving its overall integration with Cambridge.

Place making and social equity:

NEC will improve the ability of all existing and future residents, visitors, and workers to move around, while providing potential for improvements in streetscape, greening, and road safety.

Embedding innovation in NEC:

Enabling NEC to become a location for future mobility experiments will ensure new innovations are tested and piloted in situ to ensure that new developments can benefit from new transport and facilitate modal shift.

Minimise the impacts of pollution, particularly air quality:

NEC can help with the reduction of pollution including noise and air pollution by supporting modal shift towards active and sustainable travel modes, in support of the Councils' response to their declared climate emergency.