NEC AAP Topic Papers – Transport

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) and will promote low levels of parking provision.

The NEC AAP is supported by the 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.

Key Evidence Documents

Evidence that we already have:

- Ely to Cambridge A10 Transport Study 2018 -https://www.greatercambridge.org.uk/transport/transport-projects/waterbeach-to-cambridge
- NEC AAP Transport Evidence Base 2019 -https://www.greatercambridgeplanning.org/media/1234/nec-aap-transport-evidence-base.pdf
- Cambridgeshire and Peterborough Combined Authority Local Transport Plan 2020 –
 - https://cambridgeshirepeterborough-ca.gov.uk/assets/Transport/Draft-LTP.pdf
- Cambridge and South Cambridgeshire Transport Plan Adopted March 2014 -https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/transport-plans-and-policies/cambridge-city-and-south-cambs-transport-strategy
- Cambridgeshire and Peterborough Economic Review (2018) https://www.cpier.org.uk/
- Future of Mobility: Urban Strategy (Department for Transport) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/

 attachment_data/file/846593/future-of-mobility-strategy.pdf
- The Future of Mobility foresight report (2019), Government office for science -https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/780868/future_of_mobility_final.pdf
- The opportunity for Mobility as a Service (Transport Systems Catapult) -https://ts.catapult.org.uk/wp-content/uploads/2016/08/Mobility-as-a-service_Exploring-the-Opportunity-for-MaaS-in-the-UK-Download.pdf
- ALL CHANGE? The future of travel demand and the implications for policy and planning The First Report of the Commission on Travel Demand -http://www.demand.ac.uk/wp-content/uploads/2018/04/FutureTravel_report_final.pdf

Topic Papers:

- Environmental Monitoring
- Digital Infrastructure
- Health Facilities and Wellbeing
- Environmental Health
- Climate Change, Energy and Sustainable Design and Construction
- Community Safety
- Anti-poverty and Inequality
- Internalisation (trip capture)
- Future Mobility

Context

National Planning Policy Framework (NPPF 2018)

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 102 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 104 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 105 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 106 state 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 108 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 109. 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 110. 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 111. 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.

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 is developing a climate change and environment strategy. This was meant to go full council in March 2020 but has been delayed due to Covid-19. 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.

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:

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.

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.

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 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
- Putting our customers at the centre of everything we do

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. The 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,

¹ https://cambridgeshirepeterborough-ca.gov.uk/assets/Transport/Future-Mobility-Zone-for-Greater-Cambridge-Redacted.pdf ² https://www.scambs.gov.uk/media/13250/greater-cambridge-housing-strategy-2019-2023.pdf

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 Transport Study (January 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 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. 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 policy section) and it is in the process of developing a mass transit system, CAM metro that would likely serve the development.

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 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 at Appendix A to this paper). 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.

³https://www.racfoundation.org/assets/rac_foundation/content/downloadables/car%20ownership%20rates%20by%20local%20authority%20-%20december%202012.pdf

⁴ http://www.demand.ac.uk/wp-content/uploads/2018/04/FutureTravel report final.pdf

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 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 was prepared, to inform the preparation of the draft 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, with the current draft AAP proposing 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 aligns with Development Option 4 within the 2018 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.

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

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

	AM	PM
	Peak	Peak
HIF	29%	29%
OP1	38%	38%
OP2	29%	29%
OP3	26%	26%
OP4	26%	26%

Table 4: Residential vehicular Mode Share

	AM	PM
	Peak	Peak
HIF	12%	15%
OP1	15%	20%
OP2	12%	15%
OP3	10%	13%
OP4	10%	13%

Inclusion of additional development areas within the NEC AAP site

Since the 2018 Transport Evidence Base Study was commissioned, through consultation on the NEC AAP and number of changes have been made to the boundary of the AAP area. The additional areas now proposed to be 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 Show rooms 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.

If this site is included within the AAP area it 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 Show Room 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

	AM Peak	AM Peak		
	Arrive	Depart	Arrive	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 trip generation and so 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 to ensure consistency.

Cambridge Science Park

Table 6: CSP King Hedges Road Parking Accumulation

Time	Arrival	Departure	Arrival	Departure	Trip	Trip	Parking
	trip	trip rate	%	%	arrivals	departures	Accumulation
	rate						
07:00-	0.581	0.077	18%	2%	197	26	171
08:00							
08:00-	1.208	0.123	37%	4%	409	42	538
09:00							
09:00-	0.421	0.124	13%	4%	143	42	639
10:00							
10:00-	0.136	0.09	4%	3%	46	30	654
11:00							
11:00-	0.123	0.122	4%	4%	42	41	654
12:00							
12:00-	0.166	0.256	5%	8%	56	87	624
13:00							
13:00-	0.201	0.168	6%	5%	68	57	635
14:00							
14:00-	0.142	0.15	4%	5%	48	51	632
15:00							
15:00-	0.09	0.261	3%	8%	30	88	575
16:00							
16:00-	0.091	0.421	3%	13%	31	143	463
17:00							
17:00-	0.069	0.851	2%	27%	23	288	198
18:00							
18:00-	0.031	0.561	1%	18%	10	190	19
19:00							
	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	Departure	Arrival	Departure	Trip	Trip	Parking
	trip	trip rate	%	%	arrivals	departures	Accumulation
	rate						
07:00-	0.012	0.003	5%	1%	45	11	57
08:00							
08:00-	0.067	0.021	27%	8%	253	79	332
09:00							
09:00-	0.027	0.013	11%	5%	102	49	151
10:00							
10:00-	0.017	0.01	7%	4%	64	38	102
11:00							
11:00-	0.015	0.014	6%	6%	57	53	110
12:00							
12:00-	0.016	0.019	6%	8%	60	72	132
13:00							
13:00-	0.016	0.015	6%	6%	60	57	117
14:00							
14:00-	0.011	0.018	4%	7%	42	68	110
15:00							
15:00-	0.013	0.023	5%	9%	49	87	136
16:00							
16:00-	0.015	0.036	6%	14%	57	136	193
17:00							
17:00-	0.015	0.031	6%	12%	57	117	174
18:00							
18:00-	0.012	0.011	5%	4%	45	42	87
19:00							
	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 Strand 3 report of the Ely to Cambridge Transport Study (January 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 (September 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 Area Wide Transport Strategy.

Area Wide 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 will be required to prepare an area wide Transport Strategy. This should articulate 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. This should focus on 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 and why the development within the NEC area can be accommodated and would include a phasing schedule/plan that matches development to new infrastructure. This needs to be done by all major landowners as a joint strategy.

The NEC AAP will encourage innovation therefore the Transport Strategy should also consider and propose innovative transport and mobility solutions, not simply rely on planned schemes and initiatives proposed by the GCP and Combined Authority. For example, the strategy should explore whether there is scope for orbital

connections for sustainable modes to capture longer distance east-west movements further afield (e.g. perhaps from Madingley Road through to East Cambridge), or 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 sits within the area wide Transport Strategy and what mitigation the individual site 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 is likely to 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 will include 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 should incorporate a monitoring and mitigation plan within the Area Wide 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. Within South Cambridgeshire enforcement currently rests with the police. South Cambridgeshire District Council and

Cambridgeshire County Council are currently exploring their options for introducing parking controls and enforcement within South Cambridgeshire district.

Transport Position Statement for Development Management Decisions

Cambridgeshire County Council has established its position in a Transport Position Statement⁵ 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 developers should prepare the Area Wide Transport Strategy as soon as possible to inform the decision-making process.

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.

⁵ https://www.greatercambridgeplanning.org/emerging-plans-and-guidance/north-east-cambridge-area-action-plan/evidence-base-and-and-development-management-guidance/

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.

Appendix A - NEC AAP Issues and Options Report 2 (2019) questions and representations received

Contents

Question 16 (Local movement and connectivity) – Should the AAP include any or a combination of the options A to E to improve pedestrian and cycling connectivity through the site and to the surrounding area?

Question 17 (Crossing the railway line) Should we explore delivery of a cycling and pedestrian bridge over the railway line to link into the River Cam towpath?

Question 18 (Milton Road Connectivity) – Which of the Options A-E would best improve connectivity across Milton Road between Cambridge North Station and Cambridge Science Park?

Question 20 (Managing car parking and servicing) Do you agree with proposals to include low levels of parking as part of creating a sustainable new city district focusing on non-car transport?

Question 21a (Managing car parking and servicing) In order to minimise the number of private motor vehicles using Milton Road, should Cambridge Science Park as well as other existing employment areas in this area have a reduction in car parking provision from current levels?

Question 21b (Managing car parking and servicing) Should this be extended to introduce the idea of a reduction with a more equitable distribution of car parking across both parts of the AAP area?

Question 22 (Managing car parking and servicing) Should the AAP require innovative measures to address management of servicing and deliveries, such as consolidated deliveries and delivery/collection hubs?

Question 23 (Car and other motor vehicle storage) Should development within the North East Cambridge area use car barns for the storage of vehicles?

Question 25 (Non car access) As set out in this chapter there are a range of public transport, cycling and walking schemes planned which will improve access to the North East Cambridge area. What other measures should be explored to improve access to this area?

Question 26 (Car usage in North East Cambridge) Do you agree that the AAP should be seeking a very low share of journeys to be made by car compared to other more sustainable means like walking, cycling and public transport to and from, and within the area?

Question 27 (Car usage in North East Cambridge) Do you have any comments on the highway 'trip budget' approach, and how we can reduce the need for people to travel to and within the area by car?

Question 28 (Car parking) Do you agree that car parking associated with new developments should be low, and we should take the opportunity to reduce car parking in existing developments (alongside the other measures to improve access by means other than the car)?

Question 29 (Cycle parking) Do you agree that we should require high levels of cycle parking from new developments?

Question 30 (Cycle parking) Should we look at innovative solutions to high volume cycle storage both within private development as well as in public areas?

Question 31 (Cycle parking) What additional factors should we also be considering to encourage cycle use (e.g. requiring new office buildings to include secure cycle parking, shower facilities and lockers)?

Question 32 (Innovative approaches to movement) How do we design and plan for a place that makes the best use of current technologies and is also future proofed to respond to changing technologies over time?

Question 33 (Linking the station to the Science Park) What sort of innovative measures could be used to improve links between the Cambridge North Station and destinations like the Science Park?

Summary of responses received by question

Question 16 (Local movement and connectivity) – Should the AAP include any or a combination of the options A to E to improve pedestrian and cycling connectivity through the site and to the surrounding area?

Summary of responses to Question 16

• Respondents – 39 in total to Question 16

Option	Support	Object	Comments
A – East-West link	21	1	9
B – North-South movement	16	-	3
C – Connections to Milton Country Park	16	-	8
D – Additional Guided Bus stop	12	-	1

E – Connections between sites	15	-	5

Main issues in representations:

32535, 32615, 32661, 32682, 32734, 32752, 32792, 32810, 32821, 32864, 32906, 33093, 33288, 33526, 33617, 33710, 33446, 32579, 32703, 32742, 33044, 33154, 33172, 33305, 33335, 33425, 33458, 33510, 33560, 33691, 33768, 33801, 33455, NECIO007, NECIO008, NECIO009, NECIO053, NECIO054

Option A – Create a strong east-west axis to unite Cambridge North Station with Cambridge Science Park across Milton Road. This pedestrian and cycle corridor would be integrated into the wider green infrastructure network to create a pleasant and enjoyable route for people to travel through and around the site. The route could also allow other sustainable forms of transport to connect across Milton Road.

- Support 21
- Object 1
- Comment 9

Question	Key Issues from Issues and Options consultation 2019
Q16 Local movement & Connectivity Option A – Strong East to West axis (Support)	 Support all Options A-E. Together will create a much greater sense that NEC is not car-friendly and is integrated through walking/cycling. Needs all of the interventions to create strong links to walking/cycling and public transport. Essential to get some kind of bridge over Milton Road, so that people can cycle from Station directly to Science Park and Regional College. A better way across Milton Road for pedestrians and cyclists to and from the Science Park is necessary. Support for Option A. Crossing Milton Road is a slow nightmare – needs improvement. East-West axis across Milton Road is essential. A strong east/west axis is desirable to connect the Trinity Science Park to Cambridge North Station. The two lanes of traffic that stream into the Science Park in the morning will only be reduced if the rail alternative is made highly attractive. Strongly support the concept of a bridge over Milton Road similar to that on Mile End Road. This should be created as part of a green corridor flowing the line of the 'First

	Public Drain'.
Q16 Local	 Note and support a strategy which improves east-west connectivity, particularly for pedestrians and cyclists, which addresses the current physical barriers (e.g. the railway line) and allows for developments and infrastructure to be fully integrated. The emphasis of the movement principles must be the promotion of non-car and active modes of travel and delivering a highly connected, and accessible development by walking, cycling and public transport. Option A can be successfully achieved on Cowley Road without impacting on the Veolia site and operation. Priority should be the east-west movements to connect the Railway Station west to Science Park, CRC and the wider community to increase the use of the train. The priority should be for cycle and pedestrian connectivity, but with allowance for introduction of autonomous vehicles. The east-west movement will connect Science Park with the regeneration area and create a single place where people that live in NEC can easily work in NEC. Milton Road and Kings Hedges Road are already under
movement & Connectivity Option A – Strong East to West axis (Object)	tremendous stress and cannot cope with additional traffic. Suggest connecting Science Park and the proposed development both to the motorway and a road going through the development cross the river to Fen Ditton of McDonalds roundabout connecting North to South Cambridge (part of wider objection to development at NEC).
Q16 Local movement & Connectivity Option A – Strong East to West axis (Comment)	 Junction of Milton Road and Cowley Road needs major improvement for cyclists. Need a 4-way crossing or roundabout here combined with the proposed green bridge to provide a safe route for cyclists. The proposed Green Bridge should give good access to the Innovation Centre, Jane Costen Bridge and the proposed housing and businesses in NE corner of the site. Need to ensure NEC has is good linkage to other bus and cycle routes into the city and further afield. For example, it must link up conveniently with local greenways, the Chisholm trail etc. There is need for the proposed pedestrian and cycling corridor between CRC and the Innovation & Business Parks and the proposed housing and businesses, but it must be of as high quality as the busway route, with as few

- junctions to negotiate as possible.
- Strongly support segregated pedestrian and cycle use to minimize conflict.
- Connectivity MUST include safe equestrian access. All routes created for/used by cyclists must also be accessible to horse-riders and carriage-drivers, who are equally vulnerable road users.
- Support for all improvements to pedestrian and cycling connectivity through the site and to the surrounding area.
- The challenge of crossing Milton Road is that any route that involves a significant grade (up or down) will deter people from using it. Therefore, a bridge over Milton Road is probably not going to work. However, if Milton Road could be raised (to create an airy, light-filled underbridge) or lowered, that would potentially be a major improvement.
- Milton Road should also be reduced in size in order to reduce the amount of car traffic entering the city.
- Support for all Options A-E, especially the increased permeability of currently impermeable barriers such as the business park and A14.
- Not sure if allowing "other sustainable forms of transport to connect across Milton Road" means a bus route - is this needed when there is already the guided busway? Perhaps if tickets were easily transferable between different types of buses, this wouldn't be needed.
- Pedestrian and cycling connectivity both within and external to the AAP area will be critical to the success of this development and will be one of the determinants to what level of development can be accommodated. At this stage no options should be ruled out and indeed further connections may be included as work continues.

Option B –Improve north-south movement between the Cowley Road part of the site and Nuffield Road. Through the redevelopment of the Nuffield Road area of NEC, it will be important that new and existing residents have convenient and safe pedestrian and cycle access to the services and facilities that will be provided as part of the wider North East Cambridge area proposals.

- Support 16
- Object 0
- Comment 3

Question	Key Issues from Issues and Options consultation 2019
Q16 Local movement & Connectivity Option B – Improved North – South movement (Support)	 Support all Options A-E Support for Option B. North-South links between Cowley Road and Nuffield Road are essential. Note and support a strategy which improves north-south connectivity, particularly for pedestrians and cyclists, which addresses the current physical barriers. Options to improve connectivity between Cowley Road and Nuffield Road are supported and will ensure safe and convenient travel through the wider site ensuring coordinated development. Option B will ensure safe and convenient travel through the wider site.
Q16 Local movement & Connectivity Option B – Improved North – South movement (Comment)	 Preferred option - road linking Cowley Road/Nuffield Road, and road bridge across the railway line continuing this north-south corridor to the industrial and caravan sites currently accessed via the level crossing on Fen Road. The current necessity for a level crossing is very limiting to the potential use of Cambridge North station. New road access via Cowley Road without a level crossing would improve the potential of NEC and reduce traffic along the river so improving this space for recreation. A road should be constructed linking the industrial estate directly with Milton Road. Then Nuffield Road can be closed off to motor traffic at the corner. (cycle and pedestrian access should be maintained of course). Upgraded cycle paths along Milton Road need to be suitable for thousands more people. Need to ensure there is coherent cycling in all directions that is safe, wide and well lit. Coherent infrastructure for cycling, walking and bus priority required. Coordination between NEC site and GCP Milton Road project required.

Option C – Upgrade connections to Milton Country Park including improved access to the Jane Coston Bridge, the Waterbeach Greenway project and existing underpass along the river towpath.

- Support 16
- Object 0
- Comment 8

Question	Key Issues from Issues and Options consultation 2019
Q16 Local movement & Connectivity Option C (Support)	 Support all Options A-E Current approaches to the JC bridge are terrible. Milton residents need the Greenway alongside the railway, or both the JC Bridge and towpath will become congested. Strongly support the proposed connections to Milton Country Park and the River Cam. Note and welcome Option C to upgrade connections to Milton Country Park by both foot and cycle, including improving access to the Jane Coston Bridge, the Waterbeach Greenway project including a new access under the A 14. Would welcome consideration of options for a crossing of the railway line and the use of green bridges. It will be important to ensure that any proposal for an underpass will maximise connectivity through the Site, capitalising on permeability and wider Green Infrastructure initiatives (e.g. Waterbeach Greenway, Chisholm Trail, improving the public realm function of the 1st Drain etc). Multi-user access required, including equestrian not the provision of restrictive cycle and pedestrian access.
Q16 Local movement & Connectivity Option C (Comment)	 There is an opportunity here to give explicit equestrian access on NCN 11 and NCN 51, including over the Chisholm Trail bridge, which would link equestrians in Fen Ditton to Milton Country Park and the Waterbeach Greenway (and vice versa). Option C provides a sensible approach and also justifies the extension of the AAP boundary to include the river corridor. A cycle/foot/(& bus?) link should be created adjacent to the A14 and over both railway and river to connect to the B1047 (and beyond). Currently cycle links over the Cam are limited as there are only FP links east of the river. Linked to the proposed Greenway beneath the A14 this would vastly improve the permeability' for both cycling and walking in the area. Support the use of non-motorised vehicular travel. However, the towpath along the River Cam should remain predominately an area for pedestrians and those who wish to enjoy the tranquillity of the river bank and the Fen Rivers Way that runs along the river bank from Cambridge to Ely in a more leisurely and peaceful fashion. Safeguarding this

unique public space and biodiversity should be a priority. The necessary transport links for this development and Waterbeach New Town need to be funded, considered and strategically delivered together as a cohesive plan and not in a piecemeal fashion or to the detriment of surrounding communities. Greenways link from the NEC to Waterbeach should include usage dedicated to cycle, bridleway, pedestrians, wheelchair and mobility scooter users. The towpath between the NEC and Waterbeach should be maintained for leisure to ensure a tranquil enjoyment of the banks of the river Cam. Cycle super highway and recreation tranquillity uses need to be segregated. Open up routes across the river for pedestrians, bikes, cars and public transport. Suggested multiuser (pedestrian, cyclists and equestrian) links include - the Guided Bus bridleway at Milton Road to Waterbeach and Milton Country Park via the Waterbeach Greenway or any other proposed cycle and pedestrian routes; Waterbeach to Byway 162/3 Milton via the Guided Bus bridleway via the Waterbeach Greenway or any other

proposed cycle and pedestrian routes; Links to Ditton

Meadows or any other communities to the East.

Option D – Provide another Cambridge Guided Bus stop to serve a new District Centre located to the east side of Milton Road.

- Support 12
- Object 0
- Comment 1

Question	Key Issues from Issues and Options consultation 2019
Q16 Local movement & Connectivity Option D (Support)	 Support all Options A-E A new Guided Bus stop for the area East of Milton Road will be necessary. Another guided bus stop (of which there are too few) would be very sensible.
Q16 Local movement & Connectivity Option D	 Support the suggestion to improve public transport accessibility around NEC, but further work should be undertaken to determine appropriateness of this Option.

(Comment)	

Option E – Increase ease of movement across the sites by opening up opportunities to walk and cycle through areas where this is currently difficult, for example Cambridge Business Park and the Cambridge Science Park improving access to the Kings Hedges and East Chesterton areas as well as the City beyond.

- Support 15
- Object 0
- Comment 5

Question	Key Issues from Issues and Options consultation 2019
Q16 Local movement & Connectivity Option E (Support)	 Support all Options A-E Strongly support point E, to increase ease of pedestrian and cycle movements across the Business and Science Park and improve access to E. Chesterton and Kings Hedges areas Pedestrian-cycle links to all these areas are currently terrible and car-centric. Cambridge Business Park currently gated and inaccessible to public transport users/cyclists/pedestrians – essential this if opened up and made porous with routes such as those suggested in B and links to C. Very much support opportunities to increase the ease and convenience of walking and cycling movements across sites in NEC, as this will strengthen the concept of promoting internalised trips and reduce the reliance on travel by car.
Q16 Local movement & Connectivity Option E (Comment)	 Suggest road are planned with wide cycle lanes, plenty of walking space with cars and lorries only allowed along the periphery (exceptions being for the disabled) before any bricks are lain and discuss it with the developers. Equestrian access required on the inter community links.

Question 17 (Crossing the railway line) Should we explore delivery of a cycling and pedestrian bridge over the railway line to link into the River Cam towpath?

- Respondents 64
- Support 24

- Object 7
- Comment 33

Main issues in representations:

32536, 32588, 32606, 32616, 32682, 32733, 32743, 32749, 32789, 32811, 32822, 32833, 32907, 33035, 33066, 33230, 33312, 33338, 33367, 33396, 33527, 33618, 33711, 32498, 32609, 32942, 32949, 33239, 33459, 32600, 32608, 32652, 32704, 32736, 32842, 32874, 33045, 33077, 33110, 33129, 33173, 33183, 33200, 33218, 33362, 33409, 33482, 33462, 33493, 33500, 33575, 33696, 33802, NECIO010, NECIO011, NECIO012, NECIO013, NECIO014, NECIO015, NECIO016, NECIO017, NECIO018, NECIO019, NECIO055

Question	Key Issues from Issues and Options consultation 2019
Q17 Crossing the railway line (Support)	 The Wildlife Trust BCN - Must include the river corridor. Railfuture East Anglia – Consider a road bridge with clearly demarcated/separated uses. A new road (north end of Cowley Rd?) could link a rail freight terminal and relieve traffic. U+I Group PLC – Welcome subject to funding. Brookgate Land Ltd – Support, but already a pedestrian and cycle route to River Cam via Moss Bank and Fen Road. Cambridge Past, Present and Future – Support the inclusion of a bridge to better connect area and enhance connectivity and inclusivity. Investment into much larger walking/cycling infrastructure is needed. As much cycle permeability as possible to discourage car use. Could also include a spacious underbridge providing grade separation under the railway, with lots of light & air. Should be a river crossing for walking and cycling in vicinity of and adjacent to the A14 Bridge. Rather than towpath links, proper connection to roads are needed as well as connections to Waterbeach Greenway. A new bridge over the railway line to Fen Road will allow pedestrians and cyclists to avoid the railway crossing. Its location should be in the middle of this part of the site to allow good access to the River Cam.
Q17 Crossing the railway line	Waterbeach Parish Council - Towpath should remain a tranquil area for leisure. Protect river from overuse.

(Object)

- No. We have enough cyclists in that area as it is.
- What is needed is closing the Level Crossing [LC] and building a road bridge. This is due to:
- Traffic which will increase due to development.
- Already pedestrian and cycle access at North station.
- Wait time at LC is unacceptable (20 mins) so effectively cuts off communities (Traveller site; Residential Home at 71 Fen Rd; cyclists going to Moss Bank).
- Closing of LC causes frustration and is blatant discrimination and ghettoization (traffic / emergency and residential access / availability of facilities etc.). This will make the area unsafe and unattractive to residents.
- LC causes traffic surges on Fen Rd, Water Street and Chesterton (including heavy vehicles).
- LC causes antisocial driving as vehicles race to miss barriers.
- Road link should be able to take HGV's; Have a single lane to allow HGV access, prohibit trucks and vans from using LC (if it remains).
- Safer access over railway.
- Reduce timetable risk for Rail operations; Can increase train paths; open up possibility for metro style movement.
- Will act as extension of Chisholm Trail.
- AAP facilities should be accessible to all (inclusive of Travellers site).
- AAP employment opportunities should be open for all (inclusive of Travellers site).
- Suggestions for road bridge: across to the Sewage Farm site and Milton Road; North of Fen Road; North of North Station Connecting and continuing Cowley Rd; Connecting Milton Rd to Fen Rd; From the A14 roundabout to Fen Rd).

Q17 Crossing the railway line (Comment)

- Cambridgeshire County Council Future plans for rail network line will inform suitability of alternative crossing.
 Thus, no options should be ruled out at this stage.
- Cllr Hazel Smith Fen Rd will get ever-more cut off as development progresses. Provide a link road. Access must be funded & safeguarded without exceptions.
- Trinity College, Cambridge All connectivity is a positive and must be east-west across Milton Rd as a priority.
- Cycling and pedestrian bridge must be suitable for equestrian access.

- People would not use a footpath over the river as it will
 pass through Gypsy and Traveller camps and people will
 feel threatened using it. Much better to include east of the
 railway and regenerate inclusively.
- Far more interested in reducing commercial vehicles using Fen Rd, Water Lane and Green End Rd.
- If a cycle/pedestrian bridge is built, it should be sited to allow for a future road bridge.
- The railway level crossing at Fen Road is currently closed for long periods of time and an alternative road access should be provided. Fen Road is dangerous due to the number of vehicles and vehicle speeds. A new access road onto the A14 or a new road bridge into the NEC AAP site should be provided which could also accommodate public transport and be managed to avoid rat running.
- Unobtrusive lighting on the towpath would make it more useable for cyclists at night, enabling them to avoid Fen Road more.

Question 18 (Milton Road Connectivity) – Which of the Options A-E would best improve connectivity across Milton Road between Cambridge North Station and Cambridge Science Park?

Summary of responses to Question 18

Respondents – 43 in total to Question 18

Option	Support	Object	Comments
A – Green bridges	14	1	1
B – Tunnelled road	2	3	3
C – Rebalancing of road	15	-	5
D – East-west connectivity suggestions	2	-	-
E – Connections – other suggestions	-	1	3

Main issues in representations:

32617, 32662, 32751, 33028, 33078, 33095, 33143, 32499, 32537, 32602, 32684, 32705, 32735, 32793, 32823, 32844, 32878, 32908, 32911, 33046, 33132, 33155, 33174, 33246, 33340, 33528, 33550, 33576, 33619, 33712, 33776, 33803, NECIO020, NECIO021, NECIO022, NECIO023, NECIO024, NECIO025, NECIO026, NECIO027, NECIO028, NECIO056, NECIO057

Option A – One or more new 'green bridges' for pedestrians and cycles could be provided over Milton Road. The bridges could form part of the proposed green infrastructure strategy for NEC, creating a substantial green/ecological link(s) over the road.

- Support 14
- Object 1
- Comment 1

Question	Key Issues from Issues and Options consultation 2019
Q18 Milton Road Connectivity Option A (Support)	 A combination of A and C. There must be safe access for cycling/walking, but also the options for cars around the wider area need to be reduced Milton Rd is certainly a barrier at present and options A-C sound sensible. Support for Option A. Strongly support the Green Bridge option across Milton Road. Support the idea of a green bridge (rather than tunnelling) for pedestrian/cycle access and the rationalisation of junctions around the Science and Business parks with prioritisation for sustainable forms of transport. Green bridges very appealing. Also feel that there should be a transit system extending from
	 Cambridge North to the Regional College, perhaps like the systems used in airports. One or more green bridges are a fantastic idea; with the potential if well designed to be iconic statements in the area.
	 Would welcome consideration of the use of green bridges.
	Strongly support the concept of a bridge over Milton Road similar to that on Mile End Road. This should be created as part of a green corridor flowing the line of the 'First Public Drain'.
	 Preferred option as it provides the opportunity to create a substantial green link over the road without adversely affect the flow of traffic on Milton Road. Will also limit the impact on the operation of Milton Road during construction when compared with either Option B and C.
	 Support in principle but question the practicalities of 'green bridges' and the associated cost and impact on the viability of the overall development area. A 4-way crossing or roundabout combined with the

	proposed green bridge will provide a safe route for
	cyclists. Bridge should give access to Innovation
	Centre, Jane Costen Bridge & housing/businesses
	proposed for NE corner of site.
Q18 Milton	A bridge over Milton Road would involve steep
Road	grades for people walking and cycling, which means
Connectivity	people would avoid using it. Instead, walking/cycling
Option A	journeys should enjoy the benefit of the relatively
(Object)	level connection while motorised journeys go under
	or over (using an open, airy and light-filled
	'underbridge' structure).
Q18 Milton	The introduction of a bridge over Milton Road would
Road	create yet another physical structure in an already
Connectivity	visually crowded and confusing corridor.
Option A	
(Comment)	

Option B – Subject to viability and feasibility testing, Milton Road could be 'cut-in' or tunnelled below ground in order to create a pedestrian and cycle friendly environment at street level. This option would allow for significant improvements to the street which would be more pleasurable for people to walk and cycle through.

- Support 2
- Object 3
- Comment 3

Question	Key Issues from Issues and Options consultation 2019
Q18 Milton Road Connectivity Option B (Support)	 Great, if affordable. Suggest on top of undercut, have green space, grass, and separate walking paths and cycle paths. Tunnelling the road would be ideal as it is more convenient for cycling and walking without inconveniencing road users. While a green bridge (A) would be fantastic, would rather option B is explored so that cycling and walking remains at grade, with the road connections cut-in/tunnelled.
Q18 Milton Road Connectivity Option B (Object)	 Object to tunnelling under. This has not worked well at the Queen Elizabeth Way roundabout as the underpass has many blind corners and feels very unsafe after dark. Putting Milton Road into a cutting feels like a 1960s

	 concrete nightmare. Get rid of the hard landscape and make this a green space. Placing the existing road in a cutting risks the appearance of a concrete channel/cutting, and that should be avoided.
Q18 Milton Road Connectivity Option B (Comment)	 It may be possible to go underground with a well-designed and creative subway that links both sides of the road. This may be more costly, but visually and aesthetically it could be a preferred option. Likely to result in significant disruption to the road network during construction and would likely require the lowering or redirecting or Statutory Undertakers Utilities. Would result in alterations to the access junctions into Science Park and the Site, both of which have limited access opportunities for their respective sizes. Prohibitively expensive, and creates a lot of difficult engineering challenges to overcome.

Option C – Milton Road could be significantly altered to rebalance the road in a way that reduces the dominance of the road, including rationalising (reducing) the number of junctions between the Guided Busway and the A14 as well as prioritising walking, cycling and public transport users.

- Support 15
- Object 0
- Comment 5

Question	Key Issues from Issues and Options consultation 2019
Q18 Milton Road Connectivity Option C (Support)	 A combination of A and C. There must be safe access for cycling/walking, but also the options for cars around the wider area need to be reduced. Milton Rd is certainly a barrier at present and options A-C sound sensible. Support for Option C. To reduce the amount of car traffic entering the city overall, overbuilding Milton Road for high levels of car traffic is wrong. Milton Road should be smaller than it is today. Agree that other approaches should be considered to reduce the dominance of Milton road.

- The issue is not only Milton Road as a cyclist, it's crossing Cowley Road and Cowley Park too if trying to get from Jane Coston Bridge to the city. Area as a whole needs looking at, not just getting from east to west.
- Anything that reduces the dominance of the road is to be welcomed.
- Strongly support improvements to pedestrian and cycling access across this junction. Current movements require waiting for pedestrian signals at five locations to fully cross between Science and Business parks.
- Support the idea of a bridge over Milton Road, in conjunction with a roundabout replacing the multiple traffic lights.
- Fully support. There are opportunities to significantly alter and rationalise the existing signalised junctions on Milton Road and rebalance pedestrian and cyclist priority through targeted interventions.
- A 4-way crossing or roundabout combined with the proposed green bridge will provide a safe route for cyclists.

Q18 Milton Road Connectivity Option C (Comment)

- Do not see crossing Milton Road by cycle or foot as a problem. Problem relates to relative location of multiple sets of traffic lights and poor coordination between them leading to congestion.
- Sceptical about how much the 'public realm' around the road could be improved due to the levels of motor traffic. Inappropriate location for shared space designs but should link in well to new segregated cycle lanes on the more southerly stretch of Milton Road.
- Should this not be in scope for the Milton Road project?
- Crossing Milton Road from east to west is problematic due to the number of lanes and congestion. The introduction of formal pedestrian/cycle crossings could exacerbate this congestion.
- Option C would result in alterations to the access junctions into the Science Park and the Site, both of which have limited access opportunities for their respective sizes.

Option D – Connectivity across Milton Road could be improved through other measures. We would welcome any other suggestions that would improve the eastwest connectivity through the site.

- Support 2
- Object 0
- Comment 5

Question	Key Issues from Issues and Options consultation 2019
Q18 Milton Road Connectivity Option D (Support)	Not clear how this would be possible with Milton Road specifically but support the general principle.
Q18 Milton Road Connectivity Option D (Comment)	 Whichever of the options is chosen, it is essential that the cycling route is more convenient and faster than just going along or crossing the road, otherwise many people will not use the provided infrastructure. Would like to see proper segregation of motor traffic, bicycles and pedestrians into three sets of routes. Connectivity must include equestrian access - would be fantastic to link to the guided bus way. No option should be ruled out at this stage, segregation of bus, pedestrian and cycle and any future transit solutions across Milton Road is the ideal and would allow for better streetscape and urban realm. The permanent infrastructure should be flexible to allow innovation in the future. All five options generally supported. The means of crossing Milton Road will involve a range of complex issues, which cannot be determined at this stage. The crossing solution(s) should not ultimately be compromised by concerns about short-term disruption and inconvenience. The east-west axis will be fundamental in the overall success of NEC, and the justification for internalising trips will be partly made on the basis that pedestrian and cycle connectivity across NEC will be safe and convenient. Fully support. There are opportunities to significantly

	alter and rationalise the existing signalised junctions
	on Milton Road and rebalance pedestrian and cyclist
	priority through targeted interventions.
•	Difficult to select a preferred option without the
	detailed implications of each; however, the ultimate
	choice should be selected on the benefits it offers to
	the ease, convenience and safety of the pedestrian
	and cyclist, along with the attractiveness of those
	routes.
•	Must be recognised that any scheme for Milton Road
	will need to allow for a Milton Road vehicular access

Option E – Other ways of improving connections

to Science Park.

- Support 0
- Object 1
- Comment 3

Question	Key Issues from Issues and Options consultation 2019
Q18 Milton Road Connectivity Option E (Object)	Make roads better for cars
Q18 Milton Road Connectivity Option E (Comment)	 Assuming that the options expressed in Q18 would be focussed on connecting Cambridge North Station and the Science Park. St John's Innovation Park is not mentioned and therefore this leads to a question as to whether there is a need for such a connection across Milton Road connecting the Science Park with the Innovation Park. The cost and delivery of such a route will be significant and there would be a question as to whether it would actually be needed if a much more justifiable option at the Science Park junction leading into Cowley Road would be more appropriate? How can we improve connections? The size of the new community will bring permanent gridlock to the end of Milton Road. Already avoid the A14 at the roundabout here.

 Supports the principles proposed in Qu 18, however,
concerns about the potential overlap or conflict with
the other projects being proposed for this area,
including the GCP Milton Road improvements, the
GCP Greenways project, the Combined Authority
Metro proposals, the East- West Rail proposals, etc.

Question 20 (Managing car parking and servicing) Do you agree with proposals to include low levels of parking as part of creating a sustainable new city district focusing on non-car transport?

- Respondents 29
- Support 15
- Object 5
- Comment 9

Main issues in representations:

32539, 32586, 32618, 32623, 32640, 32686, 32795, 32860, 32915, 33010, 33047, 33079, 33529, 33621, 33713, 32500, 32511, 32664, 33368, 32824, 32910, 33133 33248, 33306, 33341, 33426, 33561, 33769, 33805

Question	Key Issues from Issues and Options consultation 2019
Q20 Car parking (Support)	 Hurst Park Estate Residents Association/Milton Road Residents Association – Support. However, assumption of low car use does not take into account visitors/car hire/borrowing/retail. A critical explanation is needed on how it will be enforced. Otherwise parking problems will emerge inappropriately elsewhere. Cambridgeshire County Council – Parking policy and internalisation fundamentally impacts a constrained highway network. A suitable mix of uses is appropriate. Railfuture East Anglia – Agree. U+I Group PLC – Suggest interim parking strategies until full non-parking options can be realised. Parking can then be phased out. Brookgate Land Ltd – Sustainable low parking infrastructure options essential and should be consistently applied across whole of NEC land. Car use should not be needed, given the proximity to North Station/transport hubs. Suggest one space per residential unit, or area will become another car-

	dominated commuter suburb of the A14.
	 Any parking provided should be underground and will
	improve look of area. Essential access only.
	 The car spaces provided should be chargeable by day
	and/or hour. Monthly charging will not work as people will
	just view it as a long-term parking option.
Q20 Car	More parking spaces needed. Not everyone cycles.
parking	Not all visitors to the area have good public transport links
(Object)	to reach the area, especially from the North East.
	 Low numbers of parking spaces will cause surrounding
	area to be swamped with cars.
	 Unfeasible given the inadequate public transport.
	This zero-carbon non-car position has not been achieved
	anywhere else. What makes this place different?
Q20 Car	St. Johns College, Cambridge – Reduction in parking
parking	needs to be matched by a proportional provision of public
(Comment)	and non-car transport. The college will accept a position
	to provide no new car parking spaces over the park as a
	consequence of new development.
	Histon Road Residents' Association - The site will have
	car-free zones necessitating some parking facilities on the
	edge of site and underground.
	Ridgeons Timber and Builders Merchants and Turnstone Fatatos Vestia and Turnstone Fatatos Consideration
	Estates/Veolia and Turnstone Estates – Consideration
	needed for parking and access needs of commercial uses on site.
	Trinity College, Cambridge – Support more sustainable
	modes of transport. May need a range of policies to
	recognise different uses, needs, requirements and
	transition options to align with viability and delivery
	realities.
	 Underground parking/parking areas/10 minutes walk to car
	(allowing time to only drop off)/Cycle parking outside
	door/Clear and direct cycle routes.
	 Improve accessibility, reliability and cost of public transport
	to relieve this issue.
	to reneve tine location

Question 21a (Managing car parking and servicing) In order to minimise the number of private motor vehicles using Milton Road, should Cambridge Science Park as well as other existing employment areas in this area have a reduction in car parking provision from current levels?

- Support 11
- Object 7
- Comment 5

Main issues in representations:

32540, 32619, 32796, 32861, 32916, 33011, 33049, 33081, 33530, 33622, 33714, 32501, 32512, 32665, 32880, 32947, 33014, 33369, 32603, 32757, 32846, 33342, 33806

Question	Key Issues from Issues and Options consultation 2019
Q21a Reduction in car parking (Support)	 Cambridge County Council/Brookgate Land Ltd - Evidence suggests car parking at CSP underused and unwelcome North Station environment so little incentive not to drive. If implemented, consideration has to be given to preventing cars parking in streets adjacent to area and providing excellent public transport and walking/cycling provision. Railfuture East Anglia – Emphasis on quality public transport. U+I Group PLC – Support this initiative to reduce car use. Data needed as Science Park users going to/from A14 may be less of a problem than other users. Adequate transport options must be offered, such as Park and Ride, Company shuttles and prioritised, segregated and wider cycle paths to prevent car/non car conflict. The council has declared a climate emergency and offering car parking will not create the modal shift needed.
Q21a Reduction in car parking (Object)	 Orchard Street Investment Management – Given the congestion in the area already, careful cooperative consideration from all stakeholders is needed. More parking is needed. Reducing parking while offering no appropriate viable alternative (outside of peak times; before transport hub is operating) is dis-incentivising. Not all visitors to the area have good public transport links to reach the area, especially from the North East. This will result in car swamping in surrounding streets.
Q21a Reduction in car parking (Comment)	 Trinity College, Cambridge – Already reducing car parking at CSP and this will continue. Policy needs to reflect that parking will reduce over time and is a shared ambition to encourage sustainable non-car transport. Encourage car sharing, businesses with showers (for

	cyclists); consider allowing 1 car space per unit only.
•	Peak times on Milton Rd are people just passing through, so parking will not address the issue.
•	Reducing car spaces means only the rich can afford spaces.
•	If parking is a problem, why provide such a big car park at North Station?
•	Is the Science Park not currently building a car park?

Question 21b (Managing car parking and servicing) Should this be extended to introduce the idea of a reduction with a more equitable distribution of car parking across both parts of the AAP area?

- Respondents 9
- Support 6
- Object 2
- Comment 1

Main issues in representations:

 $32541,\,32918,\,33050,\,33531,\,33623,\,33715,\,32666,\,33370,\,33807$

Question	Key Issues from Issues and Options consultation 2019
Q21b Distribution of car parking (Support) Q21b	 Cambridgeshire County Council/Railfuture East Anglia/U+I Group PLC/Brookgate Land Limited – Essential to reduce car parking availability and promote a package of sustainable transport measures. Low levels of parking throughout. Car parking could be grouped in certain areas with good walking/cycling connections with concessions for those with low mobility. This proposal will just encourage swamping of displaced
Distribution of car parking (Object)	cars to park on streets adjacent to area. Reducing parking unfeasible until adequate alternatives available.
Q21b Distribution of car parking (Comment)	 Trinity College, Cambridge – CSP is moving towards an approach with fewer car parking spaces in alignment with the non-car ethos of new development. However, please consider policy that reflects a slower transitional period to allow the well-established businesses here with long leases to encourage and adopt initiatives. Parking should be 1 space per residential unit.

Question 22 (Managing car parking and servicing) Should the AAP require innovative measures to address management of servicing and deliveries, such as consolidated deliveries and delivery/collection hubs?

- Respondents 16
- Support 10
- Object 2
- Comment 4

Main issues in representations:

32542, 32797, 32920, 32948, 33018, 33052, 33299, 33532, 33624, 33716, 33502, 32667, 32866, 33175, 33343, 33808

Question	Key Issues from Issues and Options consultation 2019
Q22 Servicing & deliveries (Support)	 Cambridgeshire County Council/Brookgate Land Ltd – Innovative measures, such as a centralised refuse collection can help to reduce demand of highway network supported. Railfuture East Anglia – Consolidation of deliveries not only for this area, but for Cambridge as a whole. A Rail freight terminal accessed on Cowley Rd extension could facilitate this. U+I Group PLC – Area could include a number of hubs. More understanding is needed about needs of residents and businesses to consider fully. Consider future proofing for the growth of online shopping. Consider cycling logistic firms to make last-mile deliveries within site, wider area using cargo bikes and assigned delivery parking outside of peak hours. Trans-shipment hub appropriate given proximity to A14. Allow for a bulk/break/consolidation depot to service local businesses and lessen environmental impact.
Q22 Servicing	This is a silly idea.
& deliveries	
(Object)	
Q22 Servicing	 Trinity College, Cambridge – AAP should allow for
& deliveries	innovative solutions as technological advances come
(Comment)	forward, rather than be absolute and restrictive

Question 23 (Car and other motor vehicle storage) Should development within the North East Cambridge area use car barns for the storage of vehicles?

• Respondents – 19

- Support 11
- Object 3
- Comment 5

Main issues in representations:

32543, 32587, 32620, 32624, 32641, 32825, 32867, 32912, 32922, 33533, 33717, 32503, 32668, 32758, 32737, 33053, 33344, 33809

Question	Key Issues from Issues and Options consultation 2019
Q23 Car barns (Support)	 Hurst Park Estate Residents Association/Milton Road Residents Association – Support, but lack of testing means it may just end up a concrete multi-storey car park in all but name. Railfuture East Anglia – Yes. Brookgate Land Ltd – Unsure how periphery barn will access Milton Rd. Shuttlebuses from Park and Ride to NEC, cycle and pedestrian links an option. Car barn should be flexibly designed to be able to be repurposed in the event of a car-free future. Enforced via unavailability of car park spaces on site. Financial incentive not to take car space? Reduces pollution and noise while offering a sensible parking alternative to the reality of car use. Car parking not the issue. Car use is. Make non-car use & access more attractive to solve. Car-clubs could manage use and ownership.
Q23 Car barns (Object) Q23 Car barns (Comment)	 Storage magnet for criminals. Another drain on scarce free time. Better to develop low-cost or free travel via park and ride on far side of A14. Cambridgeshire County Council – Car barns should only be used to make non-car travel easier and convenient. It is the time of day and level of car use that is the issue,
	 rather than car ownership per se. U+I Group PLC – Inevitable demands for some on site parking is needed and should be priced accordingly to the end user. A car barn will form part of a wider package of parking solutions. Trinity College, Cambridge – Car Barns should not be a mandatory rule as technology may render it useless in future. Policy should therefore be flexible.

 Yes. An innovative car transport hub (including bus, bike share, car share, car charging) managed through website/phone app has potential to take many cars off streets. Car storage should be easily accessible.

Question 25 (Non car access) As set out in this chapter there are a range of public transport, cycling and walking schemes planned which will improve access to the North East Cambridge area. What other measures should be explored to improve access to this area?

- Respondents 97
- Support 15
- Object 2
- Comment 80

Main issues in representations:

32545, 32576, 32577, 32760, 32932, 33054, 33106, 33168, 33177, 33184, 33194, 33201, 33211, 33219, 33298, 33313, 33313, 33353, 33410, 33432, 33275, 33483, 33509, 33535, 33693, 33719, 33778, 33784, 33811, 33850, 32589, 32610, 32625, 32642, 32781, 32806, 32885, 32979, 33627, 33501, 33698, NECIO053, NECIO054, NECIO055, NECIO056, NECIO057, NECIO058, NECIO059, NECIO060, NECIO061, NECIO062, NECIO063, NECIO064, NECIO065, NECIO066, NECIO067, NECIO068, NECIO069, NECIO070, NECIO071, NECIO072, NECIO073, NECIO074, NECIO075, NECIO076, NECIO077, NECIO078, NECIO079, NECIO080, NECIO081, NECIO082, NECIO083, NECIO084, NECIO085, NECIO086, NECIO087, NECIO088, NECIO089, NECIO090, NECIO091, NECIO092, NECIO093, NECIO094, NECIO095, NECIO096, NECIO097, NECIO098, NECIO099, NECIO099,

Question	Key Issues from Issues and Options consultation 2019
Q25 Non car access (Support)	 Hurst Park Estate Residents Association/Milton Road Residents Association – Need to avoid management by wishful thinking. Ensure plans are realistic. Needs to be explanation of how features are going to work. U&I Group PLC - Generally support the suggested options for improving public transport, cycling and walking accessibility around NEC. It will be important to ensure that consideration is always given to promoting access beyond the AAP boundary. Cycling needs to be planned for coherently and considered county-wide. Important to protect cycle routes from vehicles and make them safe, accessible and well-lit.

	 More buses needed at peak times as cycling sometimes not an option.
	A walking/cycling bridge alongside the A14 bridge to
	connect Horningsea and Cambridge.
	Close Fen Road level crossing.
	If you want people to use public transport it needs to be
	accessible and better value for money.
Q25 Non car	 Need clarity and an overarching vision.
access	 Lack of supporting evidence that any of the transport
(Object)	proposals being considered in the AAP are attainable.
	Ambition is no substitute for evidence.
	 Should be new access directly onto A14.
Q25 Non car	Shelford & District Bridleways Group, Barton & District
access	Bridleways Group – Routes and crossings linking
(Comment)	settlements proposed as shared use should include
	equestrian. Detailed routes are suggested, linking to
	green infrastructure strategy.
	Brookgate Land Ltd - A frequent shuttlebus could be
	provided. Make better use of Milton P&R, including better
	cycling facilities.
	North Station should be developed as the main hub of
	train and bus services. Changes should be made to the
	station and the surrounding area to make it more user
	friendly and to accommodate extra services.
	Should be more bus routes to the station from different
	areas.
	Cycle paths need to be pf a high quality. Existing Milton Band property to a had.
	Road crossing isn't too bad.
	High quality walking and cycling access from the Milton
	end of Fen Road to both Chesterton and the NECAAP
	area, to safely bypass the level crossing.
	Requires a road link over the railway into the new
	development so existing crossing can be closed.
	Why has the Ely to Cambridge Study identified A10
	expansion rather than increased rail frequency as the
	solution? Cars using new dual carriageway will require
	parking spaces, so findings a contradictory.
	 How will the plans in the AAP fit with the CAM Metro?
	 Will cycle paths like those on Milton Rd be able to cope?
	What about all the delivery vehicles?
	Consider those who cannot walk or cycle e.g. small
	electric vehicles.
<u> </u>	

- Roads are currently full, so concerned about extra traffic.
- How is school access being addressed? With no school, will children need to be bussed across the city?
- Priority order of walking, cycling, bus, train. Cars should not be prioritised.
- The existing Guided Busway route provides a high-quality cycling route between CRC and Cambridge North Station, and any new routes going through the site should be of a similar standard. The road junctions close to CRC and the Science Park are dangerous and need to be carefully redesigned.
- Support for a new bridge over Milton Road to enable better cross site movements for pedestrians and cyclists.
- A new connection from NEC to the Shirley School and health centre on Nuffield Road is needed as well as a route through Bramblefields and Cambridge Business Park onto the Guided Busway. Better crossing points for cyclists are needed across the site and wider area.
- Milton Road requires significant improvements to enable better pedestrian and cycling movements across the site. This includes junction improvements and crossing facilities. Milton Road is also already at capacity at peak times and public transport needs to be encouraged to avoid new residents using cars.
- Better permeability throughout this area is desirable for residents and cycle segregation should be provided. This includes better connectivity over the River Cam.
- Improved surface quality and street lighting on the River Cam towpath would enable people to use this route throughout the day and year. Foot and cycle access could be created between the river tow path and Milton through the Country Park to avoid Milton Road.
- Use Mere Way as a busway/cycleway to connect Cambridge Science Park to the Park and Ride.
- Public transport should be subsidised to encourage people
 to use it and could be funded by demand management.
 Bus services to the Science Park and CRC should be
 improved as they are at capacity, whilst CRC buses
 should be allowed to use the Guided Busway to avoid
 congestion. Buses should run between Orchard Park and
 Cambridge North Station and local buses should also
 connect the site to the local area. Bus interchange
 facilities are required.

- Consider adding an alternative access point to the Science Park to relieve congestion on the existing accesses and improve signal sequencing to reduce waiting times. An additional lane into the Science Park is required.
- Whilst minimal car use should be encouraged, the needs of elderly people and local businesses needs to be considered.
- Open up other connection points from Fen Road over the railway line for industrial traffic.

Question 26 (Car usage in North East Cambridge) Do you agree that the AAP should be seeking a very low share of journeys to be made by car compared to other more sustainable means like walking, cycling and public transport to and from, and within the area?

- Respondents 40
- Support 9
- Object 2
- Comment 29

Main issues in representations:

32917, 33134, 33234, 33433, 33454, 33502, 33812, 32546, 32592, 32626, 32643, 32688, 32708, 32761, 32780, 32808, 32869, 32886, 32933, 33055, 33157, 33536, 33628, 33720, 32954, 33015

Question	Key Issues from Issues and Options consultation 2019
Q26 Car usage (Support)	 Cambridgeshire County Council - There needs to be a step change in car mode share, public transport and non-car access within and outside the area to levels that are more akin to those seen in central London. Sufficient quality in public transport key to this aspiration. Natural England - A focus on sustainable, non-car travel including cycling, walking and public transport supported. Milton Road Residents Association/Hurst Park Estate Residents' Association - Difficult to see how there can be other than a minimal bus service unless local government has some control over the service. Lighting important to make walking routes safe. Brookgate Land Limited - The NEC area as a whole can support a low car parking strategy due to the abundance of other non-car mode options available.

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	 U+I Group PLC - A greater share of non-car modes of travel supported yet note that the concept will need to be accepted by all landowners/occupiers in the AAP boundary in order for it to be implemented successfully. It is already a congested area and it is important we improve traffic issues rather than worsen them. More public transport (buses) are needed to enable this. Should be done by NOT adding more jobs to Cambridge but redressing the existing imbalance between jobs and residential accommodation.
Q26 Car usage (Object)	 Orchard Street Investment - Milton Road is already very congested at peak hours. Increasing employment and residential development will negatively impact the wider transport network. Low car journey measures should be made clear and subject to public consultation. Provision should be made for car journeys within the area to improve car access to the area east of the railway.
Q26 Car usage (Comment)	 CPRE – Support but, the towpath along the River Cam should remain predominately an area for pedestrians and those who wish to enjoy the tranquillity of the riverbank and the Fen Rivers Way. Support, but what is the evidence it is attainable? There should be car pool dedicated parking and sponsorship to discourage ownership. More consideration needs to be given to the reality of car use.

Question 27 (Car usage in North East Cambridge) Do you have any comments on the highway 'trip budget' approach, and how we can reduce the need for people to travel to and within the area by car?

- Respondents 26
- Support 17
- Object 2
- Comment 7

Main issues in representations:

32917, 33134, 33234, 33433, 33454, 33502, 33812, 32546, 32592, 32626, 32643, 32688, 32708, 32761, 32780, 32808, 32869, 32886, 32933, 33055, 33157, 33536, 33628, 33720, 32954, 33015

Question	Key Issues from Issues and Options consultation 2019
Q27 Trip budget (Support)	 Cambridgeshire County Council/U+I Group PLC – Prefer practical highway 'trip budget' approach rather than the traditional approach to achieve aspirations set out in AAP. However, this approach must be tested to ensure that it is both suitable and realistic, and if implemented, shared and monitored appropriately and managed fairly if/when the trip budget is exceeded. Highway trip budget approach supported but best understood as making the best out of an unsustainable development. A range of non-car transport modes needed to enable choice and support innovation. For example, increasing capacity on the railway to reduce car dependence and more trains. Learn from elsewhere, e.g. free shuttle buses for employees.
Q27 Trip budget (Object)	The traffic from this development is alarming, and each house will own 1 or more cars, with additional visitors.
Q27 Trip budget (Comment)	 Brookgate Land Ltd - A highway 'trip budget' approach is considered to be reasonable as long as it is applied to the NEC as a whole, both the existing science parks and the currently undeveloped (or underdeveloped) areas. St. John's College, Cambridge – TBA should be applied to existing developments in a sustainable way to encourage a shift to non-car modes. This only achievable with significant investment. A robust and well-funded areawide Travel Plan should be conducted. In principle this is a good idea; however, in practice limiting the number of car parking places will not behave linearly in accordance with people's behaviour. Can only be affective where a proper system of public transport is in place. Do not add to jobs, but address imbalance with homes.

Question 28 (Car parking) Do you agree that car parking associated with new developments should be low, and we should take the opportunity to reduce car parking in existing developments (alongside the other measures to improve access by means other than the car)?

- Support 11
- Object 3
- Comment 8

Main issues in representations:

32919, 33176, 33287, 33435, 33562, 33814, 32547, 32605, 32689, 32782, 32937, 33025, 33057, 33538, 33630, 33722, 33770, 32710, 33016, 33373, NECIO101, NECIO098

Question	Key Issues from Issues and Options consultation 2019
Q28 Car parking (Support)	 Cambridgeshire County Council - Parking policy is directly linked to number of trips generated and put onto the external highway network. Given constraints on the highway network surrounding and through the AAP area, this is fundamental to making the development acceptable in transport terms. Veolia/Ridgeons Timber and Builders Merchants and Turnstone Estates - Non-car modes of travel are supported, but also consider business needs for Veolia and car space requirements for deliveries/customers. Brookgate Land Ltd - More restrictive car parking standards supported across the whole area to reflect the highly sustainable location. Priority should be given to zero or low parking schemes, electric cars and car clubs as maintaining existing parking levels is not acceptable. Transport modelling work will assist in achieving this. There should be energetic promotion of cycling schemes, car clubs and other pay as you go opportunities to change the underlying culture of urban transport. Improving non-car access from villages outside Cambridge is vital. Parking should be underground, especially in residential
Q28 Car parking	 developments. Orchard Street Investment - Reduction to existing car parking provision for existing developments, especially
(Object)	those associated with business uses is not supported as car spaces are essential for business operations, especially when public transport is not available.
	This can only be affective where a proper system of public transport is in place. The integration of the AAP with a tramway or CAM is an essential prerequisite.

	Adequate car parking MUST be provided for residents to keep their car next to their home. Failure to do this results in overspill parking to the nearest alternative area.
Q28 Car parking (Comment)	 Site should be made permeable to public transport rather than cars, with more stops to make the area accessible. Site should make provision very short-term parking (dropoff) at Cambridge North Station. Ensure route to station is kept clear. Transport to be on time and more spaces.

Question 29 (Cycle parking) Do you agree that we should require high levels of cycle parking from new developments?

- Respondents 20
- Support 18
- Object 1
- Comment 1

Main issues in representations:

33815, 32548, 32690, 32711, 32763, 32783, 32871, 32887, 32921, 32938, 32956, 33026, 33058, 33082, 33374, 33436, 33537, 33631, 33723, 33250

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Question	Key Issues from Issues and Options consultation 2019
Q29 Cycle parking (Support)	 Cambridgeshire County Council/Brookgate Land Ltd – To be sustainable, a significant proportion of trips will need to be undertaken by bike, so connectivity will be critical as will be high levels of cycle parking to make trips as easy and seamless as possible. U+I Group PLC - This approach will be supported by the new cycling infrastructure that is planned for Cambridge. Workplaces can provide showers, changing facilities and lockers to encourage staff to cycle into work. Railfuture East Anglia – Yes. Highly depends on the design, quality and capacity of these cycle parking facilities and routes. Ease and convenience key. Set at aspirational levels (e.g. as seen in Netherlands or Denmark). 'Enable' not 'require' in wording – people respect choice.
Q29 Cycle	St. Johns College, Cambridge - New developments should
parking	provide cycle parking but 'high level' is not the correct

(Object)	wording. More relevant to require 'appropriate levels' of
	cycle parking as significant over provision is not
	appropriate in every circumstance.
Q29 Cycle	Trinity College, Cambridge - Include percentages of cycle
parking	parking suitable for larger cycles such as box bikes,
(Comment)	tricycles, and adapted cycles. Not multi-tier systems.
	Ensure they are appropriately secured.

Question 30 (Cycle parking) Should we look at innovative solutions to high volume cycle storage both within private development as well as in public areas?

- Respondents 15
- Support 6
- Object 7
- Comment 2

Main issues in representations:

32549, 32872, 32873, 32923, 33632, 33724, 33816, 32691, 32940, 33059, 33375, 33437, 33539, 32712, 32784

Question	Key Issues from Issues and Options consultation 2019
Q30 Cycle parking – innovative solutions (Support)	Please bear in mind that the current cycle parking solution with two racks on top of each other is not friendly to women and older people. This will inevitably lead people to prefer using their car.
Q30 Cycle parking – innovative solutions (Object)	Most high-volume cycle parking solutions are not suitable due to design and capabilities. The development should adopt the Cycle Parking Guide SPD from Cambridge City Council or any successor document.
Q30 Cycle parking – innovative solutions (Comment)	 Brookgate Land Ltd – High density requires equally ample cycle parking and should be the norm for commercial and residential developments in the NEC. U+I Group PLC – Innovative storage solutions should be explored as part of further capacity testing, master planning and detailed design enabling cycle parking to be integrated appropriately into the public realm. Provision should also be made for dockless bikes so that they are not left in inconsiderate locations. Trinity College, Cambridge - Support clustered parking for

efficient land use and preventing cluttered sprawl.

• Make it easy for people to store bikes in their homes.

Question 31 (Cycle parking) What additional factors should we also be considering to encourage cycle use (e.g. requiring new office buildings to include secure cycle parking, shower facilities and lockers)?

- Respondents 19
- Support 6
- Object 1
- Comment 12

Main issues in representations:

32785, 32877, 33060, 33083, 33100, 33328, 33438, 33633, 33725, 33817, 32713, 32888, 32926, 32943, 32958, 33540, 32692, NECIO102, NECIO103

Question	Key Issues from Issues and Options consultation 2019
Q31 Encouraging cycling (Support)	 Railfuture East Anglia – Support. Offices should provide secure cycle parking, shower facilities and lockers. Pool bikes for business use (meetings etc), bike shops and repair places within the area, cargo bikes for business deliveries. Facilities for cyclists e.g. drying rooms rather than just lockers. Make cycle network easy to use, and prominent, with good interaction with public transport.
Q31 Encouraging cycling (Object)	 Lockers attract crime and harbour smells and dirt. Not a good use of resources.
Q31 Encouraging cycling (Comment)	 Cambridgeshire County Council – Welcomes any planning mechanisms that encourage cycling. Brookgate Land Ltd/Trinity College, Cambridge - Convenient and secure cycle parking with showers and lockers welcomed. Charging points for electric bike should also be considered. U+I Group PLC - Support convenient, covered, secure cycle storage, showers and lockers at basement/ground floor level or within easy access of lifts capable of transferring bikes between levels. To minimise conflict,

consider segregated access for cyclists from pedestrians
and vehicles accessing buildings.
 Must be safe, comfortable and attractive with well-defined
and connected routes facing residential and business
uses. In short, cycling should be an obvious choice.
This is successful on the biomedical campus and
reinforces a cycling culture.
 Homes and offices should be able to store multiple bikes,
including those outside the standard design (assistance
tricycles / cargo trailers / Child seats etc). These should
be easily accessible to all and useable in all weathers.
Offices should also provide showers.
 Planners need to review what went wrong with the "secure
by design" approach and learn from their mistakes.
 Cycle parking at Cambridge North Station is not secure
and more is needed.

Question 32 (Innovative approaches to movement) How do we design and plan for a place that makes the best use of current technologies and is also future proofed to respond to changing technologies over time?

- Respondents 13
- Support 1
- Object 0
- Comment 12

Main issues in representations:

32550, 33027, 33061, 33300, 33439, 33541, 33578, 33634, 33698, 33726, 32787, 33818, 32950

Question	Key Issues from Issues and Options consultation 2019
Q32 New technologies (Support)	 The area should have excellent access and technological integration so that users find it easy to switch between modes. Public transport stops should have the highest quality information about related routes. Buses should be single-ticket and cashless. Buses could also hold bikes.
Q32 New technologies (Comment)	 Brookgate Land Ltd - The CGB corridor has the potential for early delivery of a rapid transport, autonomous vehicle shuttle between Cambridge North Station, the Science Park and Cambridge Regional College.

- U+I Group PLC Options that encompass energy strategies, form and fabric, building services and energy generation and supply welcomed.
- Shelford & District Bridleways Group Sustainable transport includes horse riding.
- Cambridge Past, Present & Future Need flexibility to ensure changes in trends to housing needs and size of commercial properties.
- Railfuture East Anglia Route(s) should be protected for emerging light rail (or other similar technology) networks.
- Cambridgeshire County Council No comment can be made until all transport evidence is compiled and analysed.
- Trinity College, Cambridge Flexibility in policy will allow for changes in future. Overly prescriptive policy will stifle innovation.
- Transport is not about fancy technology but offering a safe and convenient space that people want to use. This human-centred approach will enable identification and procurement of best in class future-proof technologies.
- Make technologies 'pay as you go'. Capital equipment should be earning its keep rather than standing idle.
- Design in the possibility for repurposing of infrastructure (at least that infrastructure most subject to significant changes in societal attitudes - most likely transport related infrastructure).

Question 33 (Linking the station to the Science Park) What sort of innovative measures could be used to improve links between the Cambridge North Station and destinations like the Science Park?

- Respondents 18
- Support 1
- Object 0
- Comment 17

Main issues in representations:

32693, 32765, 32788, 33062, 33104, 33126, 33376, 33440, 33542, 33635, 33695, 33727, 33781, 33819, 32952, NECIO104, NECIO105, NECIO057

 Q33 Linking station to Science Park (Support) Q34 Linking station to Science Park (Support) Q35 Linking station to Science Park (Object) Q36 Linking station to Science Park (Object) Q36 Linking station to Science Park (Object) Q36 Linking station to Science Park (Object) Q37 Linking station to Science Park (Object) Q38 Linking station to Science Park (Comment) Q39 Linking station to Science Park (Comment) Q30 Linking station to Science Park (Comment) Q31 Linking station to Science Park (Comment) Q32 Linking station to Science Park (Comment) Q33 Linking station to Science Park (Comment) Q34 Linking station to Science Park (Comment) Q35 Linking station to Science Park (Comment) Q36 Linking Station to CSP could be addressed via a frequent shuttle bus, pedestrian and cycle connectively across Milton Road and better 'wayfinding' to encourage walking and cycling. Q4 Linking Uttle Group - Unlikely that an at grade crossing can be located to link the Science Park with the station due to capacity constraints on Milton Road. May be overcome with a well-designed overpass and micro mobility solutions to unify connectivity the area. Shelford & District Bridleways Group - Obvious linking opportunities are Guided Bus bridleways. Public money should be spent to benefit the widest range of users Railfuture East Anglia - Autonomous vehicles running at frequent intervals between North Station and CSP. Cambridgeshire County Council - Forthcoming transport evidence will inform our position on this matter. Free shuttle/minibus from North Station to CSP that can use busway. 	Question	Key Issues from Issues and Options consultation 2019
station to Science Park (Object) Q33 Linking station to Science Park (Comment) • Brookgate Land Ltd. – Links between Cambridge North Station and CSP could be addressed via a frequent shuttle bus, pedestrian and cycle connectively across Milton Road and better 'wayfinding' to encourage walking and cycling. • U+I Group - Unlikely that an at grade crossing can be located to link the Science Park with the station due to capacity constraints on Milton Road. May be overcome with a well-designed overpass and micro mobility solutions to unify connectivity the area. • Shelford & District Bridleways Group - Obvious linking opportunities are Guided Bus bridleways. Public money should be spent to benefit the widest range of users • Railfuture East Anglia - Autonomous vehicles running at frequent intervals between North Station and CSP. • Cambridgeshire County Council – Forthcoming transport evidence will inform our position on this matter. • Free shuttle/minibus from North Station to CSP that can use busway.	station to Science Park (Support)	(with hubs at the station and in the business areas). On- demand transport for those with low mobility.
station to Science Park (Comment) Station and CSP could be addressed via a frequent shuttle bus, pedestrian and cycle connectively across Milton Road and better 'wayfinding' to encourage walking and cycling. U+I Group - Unlikely that an at grade crossing can be located to link the Science Park with the station due to capacity constraints on Milton Road. May be overcome with a well-designed overpass and micro mobility solutions to unify connectivity the area. Shelford & District Bridleways Group - Obvious linking opportunities are Guided Bus bridleways. Public money should be spent to benefit the widest range of users Railfuture East Anglia - Autonomous vehicles running at frequent intervals between North Station and CSP. Cambridgeshire County Council – Forthcoming transport evidence will inform our position on this matter. Free shuttle/minibus from North Station to CSP that can use busway.	station to Science Park (Object)	discouraged in order to create an area that more successfully prioritises active travel modes and doesn't
 Long term: move businesses closer to North Station. Short term: safe streets with activity. Off-road space between destinations can be used to trial innovations. Not just busway; consider trams and CAMS, low cost scooters, autonomous vehicles. More very short stay spaces (15 minutes) at North Station. Avoid creating bottle necks between Milton Road the Station Area and in particular avoiding the poor design of the approach to Cambridge Central Station. Think this would be addressed by the cut-through beneath Milton Road or bridges over Milton Road. Bus link is needed crossing site and to wider area, including outside peak times. 	Q33 Linking station to Science Park	 Brookgate Land Ltd. – Links between Cambridge North Station and CSP could be addressed via a frequent shuttle bus, pedestrian and cycle connectively across Milton Road and better 'wayfinding' to encourage walking and cycling. U+I Group - Unlikely that an at grade crossing can be located to link the Science Park with the station due to capacity constraints on Milton Road. May be overcome with a well-designed overpass and micro mobility solutions to unify connectivity the area. Shelford & District Bridleways Group - Obvious linking opportunities are Guided Bus bridleways. Public money should be spent to benefit the widest range of users Railfuture East Anglia - Autonomous vehicles running at frequent intervals between North Station and CSP. Cambridgeshire County Council – Forthcoming transport evidence will inform our position on this matter. Free shuttle/minibus from North Station to CSP that can use busway. Long term: move businesses closer to North Station. Short term: safe streets with activity. Off-road space between destinations can be used to trial innovations. Not just busway; consider trams and CAMS, low cost scooters, autonomous vehicles. More very short stay spaces (15 minutes) at North Station. Avoid creating bottle necks between Milton Road the Station Area and in particular avoiding the poor design of the approach to Cambridge Central Station. Think this would be addressed by the cut-through beneath Milton Road or bridges over Milton Road. Bus link is needed crossing site and to wider area,

 The Guided Busway and associated combined cycle/footpath are already the main thoroughfare for cyclists entering the CSP from Central/East Cambridge as well as from Cambridge North Rail station. However, the traffic management around the Milton Road junction is far from optimal with long waiting times for cyclists/pedestrians for the traffic lights to change. A diagonal fly-over for cyclists (including perhaps for pedestrians) connecting the two Busway Cycle/footpaths would improve access and encourage further commuterbased cycling to CSP.