

# Transport Strategy *and* 5-Year Implementation Plan





# 1. Introduction

## Purpose

- 1.1. The Cambridge Biomedical Campus (CBC) combines world-class biomedical research, patient care and education on a single site. CBC is one of the largest traffic generators within both Cambridge and Cambridgeshire. It is also one of the fastest growing business locations in Greater Cambridge. In 2016 over 26,000 people (Figure 1) visited the Campus each day and this will increase with the current and further planned expansion. Ensuring staff, patients, business representatives (authorised personnel, contractors etc.) and visitors can travel sustainably to and from the site is an essential part of reducing congestion on Campus, in Cambridge and in the surrounding area.
- 1.2. The realities of transitioning the Campus Travel Plan from one that was predominantly focused on the access issues of a highly respected acute teaching hospital, and embedded long-term partners, to a Transport Strategy and Implementation Plan now framed in the context of an internationally renowned and expanding Campus is a challenging one. It requires all partners to take active, shared and collaborative responsibility to develop more sustainable travel options for the wider CBC as a whole. This will ensure that the growing Campus can continue to thrive in a manner that brings credit and prosperity to all its partners and Greater Cambridge as a whole.
- 1.3. The current major phase in the development and expansion of the CBC puts it at a very important juncture in terms of managing its strategic transport arrangements. This document therefore encompasses more than the conventional aspects of advancing a more sustainable modal split for those accessing the site. It also includes the physical infrastructural aspects of a Transport Strategy.

## Scope

- 1.4. This Transport Strategy builds on the achievements made by Cambridge University Hospitals NHS Foundation Trusts (CUH) Access to Addenbrooke's Travel Plans (Figure 2) and moves the Campus into a new era of travel and transport. The CBC is comprised of many different partner organisations and this new Transport Strategy brings the organisations together to collectively deliver improved sustainable travel choices for everybody seeking to access the Campus.

- 1.5. The Transport Strategy sets out the CBC's role and responsibility for minimising motorised traffic whilst developing, facilitating and promoting more sustainable and healthy travel choices to Campus for staff, patients, business representatives and visitors, who have to access the site from a wide and dispersed area. The Transport Strategy encompasses a mixture of physical infrastructure and soft behaviour change measures, which together are proven to have the greatest impact on modal shift.
- 1.6. Delivering against the Transport Strategy is a priority action within CUH's Sustainable Development Management Plan (SDMP) and is a commitment for all Campus partners. This Transport Strategy presents key transport challenges and opportunities and establishes a 15 year vision and accompanying 5-year implementation plan, which will be refreshed every 5 years, to support the sustainable growth of the CBC with a set of objectives and targets.

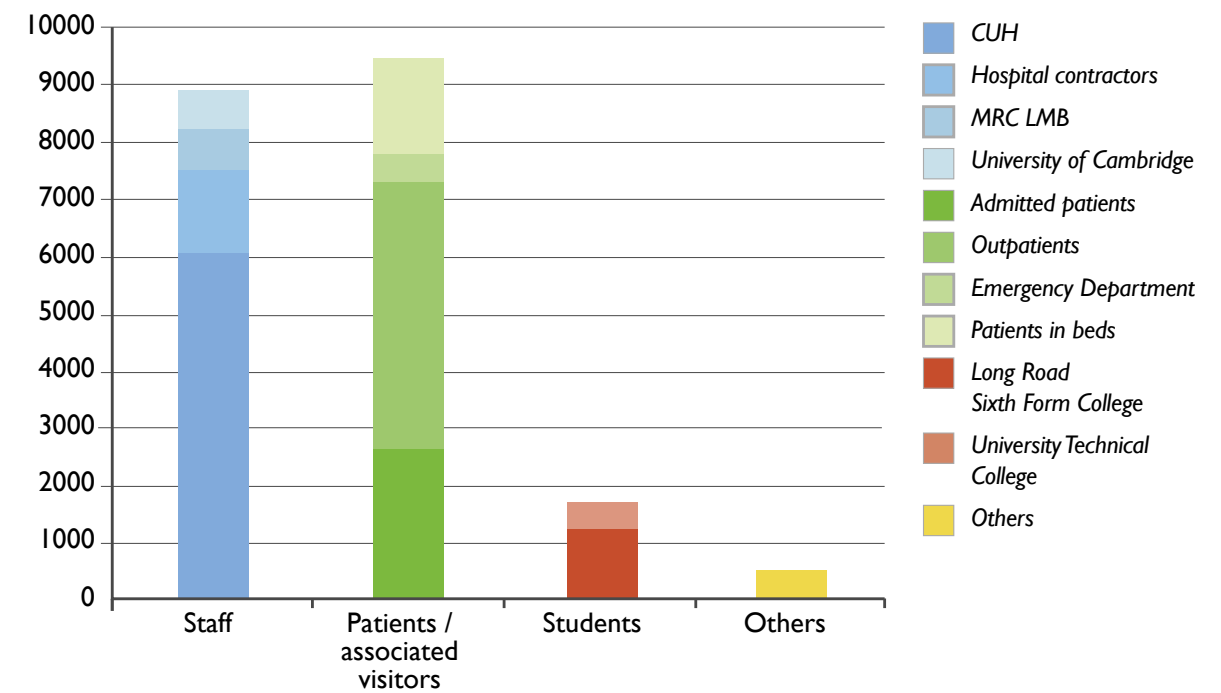
## Consultation

- 1.7. This Transport Strategy was developed following consultation with staff, partners and our local community in May 2017. The final draft was subsequently consulted with Campus partners through the Travel, Transport and Sustainability Group before being finalised for adoption.

## Working in Partnership

- 1.8. Travel planning activity on the Campus is underpinned by strategic partnerships and relationships with site occupants, developers, local government, service operators and charitable organisations. Currently there are 17,250 staff working at the CBC, future projections predict this will increase to 26,000 by 2031 and up to 30,000 beyond. Using these figures, CBC staff currently represent approximately 18% of the Cambridge workforce and therefore working with partners to deliver change in the broader Cambridge area is critical to enable the CBC to achieve the ambitions of the Transport Strategy.
- 1.9. We, the Campus partners (see cover page), also engage with future occupants before they reside on the Campus. Campus partners will continue to work together on matters of mutual interest.

Figure 1: Staff / visitor and patient numbers accessing the Campus on a daily basis (2016).



## 2. Achievements to Date

2.1. The CUH travel plans to date have been delivered in phases, with each phase focussing on different elements that contribute to the site's overall objectives. This successful incremental change has created an environment where sustainable travel is now very much part of Campus life.



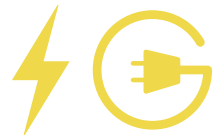
Provision of a dedicated bus interchange adjacent to our Hills Road entrance since 2001, a first for the NHS, with 8 additional bus stops around the site



Provision of cycle parking stands for 3460 bicycles – a significant proportion of which are covered and/or secure



Provision of a full-time on-site cycle repair and servicing facility in 2017 (expanded from the part-time service which had been established since 2009)



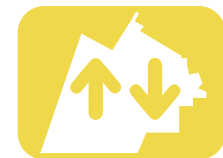
Provision of 9 electric vehicle charging points



Provision of a free on-site courtesy shuttle bus (charitably funded) for patients and visitors



Provision of real-time bus information



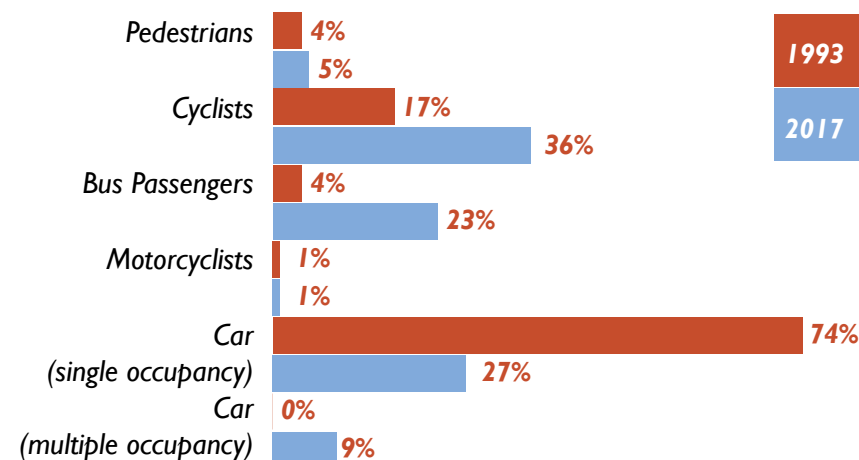
Improvements to Campus way finding and signage



Provision of 3 dedicated areas for Cambridge bike-share schemes

**Figure 2: Staff Modal shift 1993 – 2017**  
(figures based on annual traffic survey data.)

Car share was not measured in 1993 so all car trips were assumed as single occupancy.



## 3. Transport Challenges and Opportunities

3.1. A series of transport challenges (Table 1) and opportunities (Table 2) have been identified through analysis of the Strategy's Context Review and in consultation with a range of internal and external stakeholders informing the development of the Transport Strategy.

**Figure 3: CBC expansion and local housing developments**



**Table 1: Key transport challenges**

Challenges	Evidence
High levels of congestion in Cambridge resulting in unreliable and unpredictable journeys to CBC	Significant congestion on M11 and A14. Staff, patients, business representatives and visitors all contribute to this congestion with 35% of all CBC users travelling to site by car. Traffic congestion delays bus services on most bus routes across Cambridge, resulting in longer journey times. Reliability is worst during the weekday peak hours.
Congestion is likely to increase due to future growth in employment and housing	Cambridgeshire is one of the fastest growing sub-regions in the UK. It is estimated that there will be 35,000 new homes and 44,000 new jobs in Cambridge and South Cambridgeshire by 2031, with some of the business development being on CBC (Figure 3). This is likely to put additional pressure on the transport network, resulting in high levels of congestion and delays to journeys.
Poor air quality	All of central Cambridge is an Air Quality Management Area (AQMA). If current levels of NO <sub>2</sub> continue they may be expected to cause significant health issues and have an impact on mortality rates. Levels of nitrogen dioxide on Campus are below the national objective but monitoring should continue.
Walking environment is of varying standard	10% of all people accessing the Campus walk to CBC. The roads are designated as 20mph, but the nature of the roads and their design is variable. CBC is a large site and walking distances between buildings and organisations can be significant.
Cycling infrastructure and parking is of varying standard	33% of people accessing Campus cycle, however the quality of provision onsite is becoming a major issue, especially given the significant improvements taking place within the city.
Cycle parking on CBC does not meet demand	There is a significant shortage of cycle parking on Campus and some locations of parking are more popular than others. This means bicycles are often left in inappropriate locations creating potential hazards and friction with other users.
Limited public transport network, particularly in the early mornings and evenings	Park and Ride and City bus services operate at lower frequency from mid-evening, which restricts shift staff and some patients and visitors from using public transport.
A high proportion of staff, patients, business representatives and visitors live outside of Cambridge resulting in more journeys to CBC by car	An analysis of CUH employee home postcodes from 2017 employee records suggests that the average return distance to and from work for CUH employees was 34.8 miles. In 2016 an analysis of patient data showed that most patients came from CB postcodes and the average return journey for patients was 49.4 miles. The highest proportions of patients are treated as Outpatients.



**Table 2: Key transport opportunities**

Opportunities	
Working with other organisations	<p>Working with CBC partners to deliver this Transport Strategy and associated Implementation Plan.</p> <p>Working with Cambridgeshire County Council, Cambridge City Council, South Cambridgeshire District Council and Highways England in regard to other projects not related to the Greater Cambridge Partnership (GCP).</p> <p>Working with other large employers, as part of the Travel, Transport and Development Group (TTDG) to collaborate on sustainable transport projects.</p> <p>Working with transport operators to negotiate discounts and promote the use of services and for better frequency, coverage and extended scheduled services.</p> <p>Working with transport operators to support the uptake of public transport by staff, patients, business representatives and visitors. Encouraging services to be timely, reliable, safe and cost effective.</p> <p>Working with bicycle shops to offer cycle purchase and maintenance discounts.</p> <p>Working with Travel for Cambridgeshire.</p> <p>Working with local interest, community groups and others, as appropriate, to support and encourage the take-up of sustainable travel options.</p>
GCP funding and partnership work	<p>The GCP has secured £100 million in funding up to 2020, with a potential for a further £400 million up to 2025, to tackle transport challenges and enhance the future economic growth and quality of life in the Greater Cambridge area.</p> <p>A series of strategic projects for Cambridge are planned, covering bus improvements, cycle provision, public space and air quality, demand management, parking management, travel planning, smart technology, and communications and engagement.</p> <p>Many of the projects have the potential to significantly help address the CBC's transport challenges.</p>

Opportunities	
Upgrade existing infrastructure on CBC	Development of new, and the improvement of existing, infrastructure to accommodate additional bus services, join up desire lines and support and encourage further sustainable and active travel.
New developments	<p>Master planning of the CUH and wider CBC estate provides opportunities to improve the quality of the walking and cycling routes, public realm and to redesign the way public transport is facilitated and serves the key areas of CBC.</p> <p>Development of CBC design standards to ensure new developments have the facilities required to encourage sustainable travel from first occupation.</p> <p>Development of key worker housing and local residential communities, leading to a higher number of staff living within walking, cycling or public transport distance of Campus will make sustainable travel the easier option.</p> <p>The co-location of world-class biomedical research, patient care and education on a single site to promote healthcare collaboration will also promote collaboration and support infrastructure such as transport.</p>
Cambridge South Station	Development of a Cambridge South Station with key train services calling at CBC to bring about significant mode shift.
Technology-enabled changes	<p>Advances in online technologies may reduce the need to travel both for staff (such as working remotely) and for patients who may be able to participate in remote consultation appointments.</p> <p>Advances in online journey planners and smart payment technologies are leading to the pilot development of "Mobility as a Service" platforms that provide easy and convenient access to a range of travel modes, enabling easy identification of sustainable travel modes.</p> <p>Autonomous vehicles may come forward supporting demand responsive and shared transport services reducing the number of vehicles accessing CBC.</p>





## 4. Ambition and Objectives

### Ambition Statement

- 4.1. The CBC's ambition is to become one of the largest internationally competitive concentrations of healthcare-related talent and enterprise in Europe, while also serving the healthcare needs of an increasing local population. This Transport Strategy will contribute by ensuring the Campus will be easily accessible to all:

The ambition of the Cambridge Biomedical Campus Transport Strategy is to support all to be able to access the Campus easily, efficiently and sustainably whilst supporting the day-to-day operations of one of the largest and best known hospitals in the country.

This Transport Strategy will support the creation of an exemplar 'sustainable travel' campus environment, which encourages active, healthy and sustainable travel. All organisations on the Campus will work in partnership to help deliver this Transport Strategy, making a positive contribution to the development of CBC and Greater Cambridge.

### Objectives

- 4.2. The objectives of the Transport Strategy are to:
1. Facilitate convenient, predictable, and where possible, cost effective travel to, from and around CBC for staff, patients, business representatives and visitors.
  2. Provide supportive transport infrastructure within CBC to practically facilitate people in navigating to their destination and move intra-site in an effective, efficient and safe way.
  3. Through the expansion of CBC, and the promotion of sustainable travel modes, make a positive contribution to the Greater Cambridge area.
  4. Work with city and regional partners to ensure that the development and delivery of transport planning policies and schemes for the city and surrounding area make a positive contribution to the growth of the Cambridge economy and the quality of life for new and existing communities.
  5. Facilitate the development of affordable and sustainable travel linkages for all local community residents needing to access the Campus as staff, patients, business representatives or visitors.
  6. Minimise the CBC's environmental impact – particularly in relation to the issues of air quality and man-made climate change.
  7. Support the above objectives by exploiting emerging and future technologies effectively and making the best use of world-class research opportunities from our partner organisations.





## 5. The Long-Term Vision

- 5.1. This sets out the aspirations for the 15-year period, which will be used to develop the 5-year Implementation Plans. Our aspirations cover all journeys to, from and around the Campus.
- 5.2. CBC partners will promote sustainable transport choices to its staff, patients, business representatives and visitors to manage and reduce our travel impact.
- 5.3. Where access to the Campus is required, options will include practical and sustainable 'last mile' opportunities. Such options endeavour to reduce congestion, seeking to make it easy to arrive on-site from local interchanges such as Park and Ride via transfer onto bus, bike or foot for the final part of the journey. Emerging technologies will aid this process. App or web-based software will provide easy journey planning, booking and payment for a range of sustainable travel options. CBC partners will seek to exploit shared transport solutions as they come on-stream, as well as testing autonomous vehicle solutions. Agile working arrangements will be available to staff alongside the availability of online consultations for patients, where feasible. CBC will establish itself as an exemplar for sustainable travel by embracing these opportunities.
- 5.4. Campus partners will work collaboratively and innovatively together, alongside local partners, to ensure that Campus traffic levels push beyond the regulatory targets set by the Planning and Highway Authorities, with a significant modal shift from car use. This modal shift will apply to all Campus partners who will work together to encourage alternatives to the car and fairness for staff, patients and visitors. Data collection equipment will be installed to monitor our progress.
- 5.5. The section below outlines the CBC's 15-year long-term aspirations for transport. The 5-year Implementation Plan targets (section 7) will be used to ensure the CBC is on track to meet these aspirations.

### Emergency Services

**Goal: Infrastructure on CBC will allow the easy movement of emergency service vehicles with dedicated provision at patient access points.**

- All temporary on-site road closures or closures as part of planned long-term developments, will allow for the easy movement of ambulances and other emergency service vehicles.

- CBC will grow in a way that limits changes in traffic flows which may adversely affect the movement of ambulances and other emergency vehicles.

### Walking and Running

**Goal: The level of walking and running for staff as the main mode of travel to work will be maintained and increased.**

- CBC will have easily identifiable walking and running routes across the Campus, with particular attention to prominent desire lines.
- Routes will be segregated, well-lit and built to, or exceed, good practice standards: connecting seamlessly to the wider public network and the city.
- Where space allows, fully-inclusive and high quality public realm will be maintained and created for the enjoyment of our staff, patients, business representatives and visitors.

### Cycling

**Goal: The level of staff cycling as a main mode of travel to work will be maintained and increased.**

- CBC will, where possible, have segregated, direct and prioritised cycle routes built to good practice standards; connecting seamlessly with the wider cycle network and adjacent road network.
- Sufficient levels of high quality cycle parking will be available to accommodate demand, meeting or exceeding the all-inclusive CBC Cycle Parking Standards.
- Where developments or temporary works on-site remove spaces where bikes have been parked (within or outside of formal parking) an equivalent number will be provided nearby, either on a temporary or permanent basis.
- Charging facilities will be available for electric bicycles.
- All CBC staff will have access to facilities such as lockers, showers and drying facilities.
- All CBC staff will have access to cycle training to help them feel safe when cycling and reduce the number of accidents.

### Public Transport (Bus and Rail)

**Goal: More journeys will be made by public transport, particularly for: staff, patients, business representatives and visitors living outside Cambridge city; which may also include journeys made by staff with mobility difficulties, and; walking and cycling journeys after dark or in poor weather.**

- CBC will have a new rail station on or adjacent to the Campus, connecting seamlessly with other local stations and the wider rail network.
- All passenger transport hubs on CBC will provide sheltered, secure and safe waiting facilities for all users, meeting or exceeding the CBC Bus Stop Standards.
- Where needed and feasible, CBC will have direct, segregated public transport links built to good practice standards connecting seamlessly with the wider network.
- Flexible site design will be retained in order to respond to emerging trends such as development of demand-responsive shared transport or to link in with city-wide transport schemes.

### Shared Transport (Taxis, Private Hire, Minibuses, Coaches, Community Transport, Patient Transport, Company Transport and School Transport)

**Goal: Use of shared transport will be supported for drop-off and pick-up.**

- Community transport will be encouraged providing it meets standards set out by the local authorities for safety, insurance and vehicle emissions.
- Dedicated pick-up and drop-off areas for shared transport will be identified and available for use.

### Intra-Campus Transport

**Goal: Travel will be supported by intra-Campus transport measures to enable staff, patients, business representatives and visitors to reach their destination seamlessly.**

- Public bus services will be encouraged to serve as much of CBC as possible.
- A CBC on-site shuttle bus or equivalent will serve Campus transport hubs and key locations supporting Campus users in their journey.
- Bike-share and pool bikes will be available across CBC and extended to local Park and Ride sites to enable users to travel around and to their destination on-site.

### Motorcycles

**Goal: The level of provision on CBC for motorcycles will be maintained and reviewed regularly.**

- Regular reviews of the space allocated for parking motorcycles (covered and uncovered) will be undertaken regularly.

### Car Access

**Goal: Journeys to CBC as a single occupancy car driver will not exceed 20% and car sharing will be increased.**

- Car parking, including disabled parking provision, will be effectively and efficiently managed through the implementation of appropriately sustainable and timely supply, maintenance and enforcement measures, making best use of technology, to ensure access is maintained to all parts of CBC for those with the highest priority need.

### Electric Vehicles

**Goal: Journeys to CBC and within CBC by electric vehicles will be increased.**

- All car parks will have sufficient fairly priced electric vehicle charging points to fulfil demand.
- Where possible, electric pool vehicles and fleet vehicles will be used.
- Where possible, passenger transport services provided by CBC partners will be provided using hybrid or fully electric buses.



## Servicing and the Distribution of Goods

**Goal: The number of service and delivery journeys to CBC will be minimised and the use of sustainable modes for these trips will be maximised particularly for the 'last mile' element of the journey to the Campus.**

- Services will be in place to reduce the number of delivery vehicles entering CBC to improve traffic safety, reduce local air pollution and reduce carbon emissions.

## Buildings

**Goal: New buildings, and where possible existing buildings, will be equipped with supportive facilities to enable active travel.**

- New buildings and where possible existing buildings will provide shower and locker facilities for staff use.
- New buildings will provide adequate drying space or pegs (coat hooks) for staff.
- Where possible suitably sized lockers will be provided for staff either within buildings or close to cycle or motorcycle parking.

## Maintenance

**Goal: Governance and funding arrangements will be defined to ensure funds are available to undertake necessary works.**

- Formal agreements will be in place to ensure adequate funding is available to undertake maintenance work of the transport and supportive infrastructure on CBC.
- Paths, roads, cycle ways and street lighting will be well maintained with vegetation cut back regularly
- Surfaces gritted, in accordance with adverse weather policies and snow cleared when necessary.

## Agile Working

**Goal: Support the development of agile working policies across CBC.**

- Policies will be in place to provide flexibility for staff that facilitate the co-ordination of start and finish times with public transport and Park and Ride services times, or, help parents/carers manage dropping-off and picking-up children.

## Travel for Work

**Goal: More trips will be made at work using sustainable travel modes.**

- A fleet of pool bikes will be available from all major employers on-site to enable local journeys to be completed sustainably.
- A fleet of electric or hybrid pool cars will be available from all major employers for trips where trips by public transport, walking or cycling are not viable.
- All CBC employers will have a travel at work policy, where staff are encouraged to try to use sustainable travel modes for business purposes before using their own private vehicles.

## Engagement and Promotion

**Goal: Development of a suite of resources to promote sustainable transport to staff, patients, business representatives and visitors.**

- All staff, patients, business representatives and visitors will have access to everything they need to make their sustainable travel journeys seamlessly in an easy-to-use format, including journey planning.
- The CBC will have easy-to-use way-finding signage in key locations.
- All staff, patients, business representatives and visitors will be encouraged to use sustainable travel modes through regular awareness-raising campaigns, marketing and direct communications.
- All staff will be given the option to sign up to tailored travel information to keep them informed about their travel options.

## Monitoring Progress

**Goal: Monitoring equipment will be available at all key entry points to CBC to monitor traffic movements.**

- Fixed data collection equipment will be installed at all key entrances to CBC to continually monitor traffic and cycle movements to and from CBC.

## 6. Partnership working in the broader Cambridge area

6.1. The successful delivery of the CBC Transport Strategy is dependent upon a number of actions being taken by others, most notably the GCP, Cambridge City Council, Cambridgeshire County Council, South Cambridgeshire District Council, local bus and rail operators and logistics companies. The delivery of schemes in the wider area is critical to enable CBC to achieve the ambitions of this Transport Strategy and to further develop the Campus.

6.2. CBC partners will work together and with external partners by:

- Providing CBC representation to engage in project boards or steering groups in the development of schemes: providing active input to encourage the development of schemes which will help CBC achieve its Transport Strategy and Implementation Plan objectives.

- Providing financial contributions through mechanisms such as land-use planning obligations and agreements to contribute to the delivery of transport improvements which will benefit CBC users and mitigate the effects of development.

- Collaborating with other large employers on sustainable transport projects.

- Negotiating improvements with bus and rail operators for our staff, patients, business representatives and visitors.

- Engaging with logistics companies to look at consolidation of deliveries and last mile delivery.

6.3. The CBC's approach to working with external partners is summarised in Table 3 overleaf, outlining the interventions in the broader Cambridge region that CBC expects to see from the GCP and other investment programmes that should have a positive impact on travel and maximise the impact of the CBC's Transport Strategy. The measures have been prioritised based on which would have the most significant impact on influencing staff, patient, business representative and visitor travel behaviours over the course of the 15-year strategy.





## 7. The 5-year Implementation Plan

7.1. The success of the Strategy is closely linked to the successful growth of the CBC. An important indicator to this success is the level of motorised vehicles accessing CBC and the modal shift away from single occupancy car driving; to maintain the existing progress will be challenging in the coming years. The volume of individuals travelling to CBC daily is already significant therefore if the CBC is to make progress towards our ambition of being an exemplar sustainable travel campus we, the Campus partners, need to ensure that sustainable travel is, where feasible, the most efficient and effective way to travel.

7.2. The Transport Strategy will be delivered through 5-year implementation plans. The key themes of the first 5-year implementation plan are:

- **Project delivery:** Delivering a range of CBC-specific projects and associated measures to support the Transport Strategy, to include supportive walking and running infrastructure, cycle access and parking provision, new and improved bus infrastructure.
- **Contribution to development plans:** Ensuring the ethos of the Transport Strategy is adequately reflected through land-use planning and to develop a set of design standards.
- **Policy changes and development:** A review of organisational policies such as the car parking policy and the development of additional new policies as needed.
- **Services and incentives:** A review of existing services and incentives on offer for staff, patients, business representatives and visitors with the aim of delivering more attractive schemes in the future.

- **Engagement and promotion:** On-going engagement and promotion to influence staff, patient, business representative and visitor travel behaviour and encourage further modal shift to sustainable travel modes.
- **Data collection and research:** Commissioning of surveys or research, as required, to inform the implementation plan. This may include the use of pilots and trials where appropriate, to demonstrate impact and refine proposals accordingly.
- **Working with partners to implement initiatives (Table 6) in the broader Cambridge area:** To include the Greater Cambridge Partnership and others as outlined in the Transport Strategy.

7.3. The measures have been prioritised based on:

- **The impact on travel behaviours:** schemes which are recognised to have a significant impact on behaviour have been prioritised first.
- **Ease of delivery:** quick wins proposed to be implemented earlier in the 5-year period.
- **Feasibility:** where required, trials have been proposed to determine how effective the scheme would be before it is rolled out further.

7.4. The implementation plan details the key measures to be delivered over the next 5-years, as shown in Table 3. Table 5 collates the CBC schemes which currently meet the CBC's approach to working with external partners, as set out in Table 4. All the measures listed are subject to approval of funding, either from within identified individual organisations which form part of CBC or through the collective CBC governance arrangements for broader Campus schemes. Each of the measures will be prioritised by the CBC Delivery Group to align with the amount of funding available, while also working with the CBC landowners developing and managing the public realm.

**Table 3: 5-year implementation plan**

Mode	Measures	Years
On Campus Transport	Make improvements where necessary to address on-Campus congestion.	1-5
Motorcycles	Review existing motorcycle parking provision and agree plan to relocate or expand parking dependant on identified demand.	1-5
Driving	Monitor the CBC ANPR enforcement and lobby Police to continue enforcement action.	1-5
	Establish interest in applying for Traffic Regulation Orders for the establishment and enforcement of 20mph speed limit on all CBC roads.	2
Car Parking Including Disabled Parking, Drop-off and Pick-up Arrangements	Develop, consult, adopt and implement a new car parking policy and supportive operational procedures. Staff car parking eligibility criteria to be reviewed and implemented to ensure that those who really need to park on CBC have the opportunity to do so. Communicate the results of the new policy and staff eligibility criteria to staff.	1
	Enhance the management systems, software and hardware to monitor and restrict, where necessary, car parking in accordance with the adopted policy.	2
	Enforce the new car parking policy and staff eligibility criteria.	1-5
	Review patient drop-off and pick-up locations and design enhanced facilities to reduce congestion and improve access for ambulances.	1-5
	Review car park utilisation and car movements to make best use of existing capacity.	1
	Research the potential for improved data capture from car parks.	1
	Review on-street, including disabled, parking - utilisation and car movements.	1-5
	Conduct a review of staff car-sharing and develop an improved system and incentives to increase take up.	2
	Review and where necessary expand the electric vehicle charging network.	1-5
	Engage with car park operators regarding schemes which may impact CBC car parking demand such as on-street parking restrictions and workplace parking levy.	1-5
Goods Distribution	Review goods delivery and goods distribution requirements and identify opportunities for shared distribution and 'last mile' delivery.	1-5
Buildings	Audit the existing estate to assess whether there is adequate provision of showers, lockers, drying and changing facilities. Identify where provision is lacking and design solutions to resolve.	1-5
Maintenance	Identify revenue and capital means to share maintenance costs across CBC.	1-3
Agile Working and Travel for Work	Partners to prepare their own agile/flexible working schemes, encouraging sustainable travel where travel is necessary. Explore opportunities for joint working.	1-5
	Encourage and promote the use of electric and standard pool bikes for staff business use, expanding provision if required.	1-5
	Promote the use of low-emissions pool cars for longer journeys to reduce use of grey fleet.	1-5
Influencing	Identify opportunities and revenue to support sustainable travel promotion to staff, patients, business representatives and visitors.	1-5
Delivery, Monitoring Progress and Keeping on Track	Establish equitable cost-sharing /funding agreements for the delivery of this implementation plan and the Transport Strategy.	1-5
	Conduct an annual review of progress and proposed actions and produce an annual monitoring report.	1-5





**Table 3: 5-year implementation plan contd**

Mode	Measures	Years
Delivery, Monitoring Progress and Keeping on Track	Update implementation plan for future years.	1-5
	Draft new 5-year implementation plan for 2022-2027.	5
	Traffic parking and person survey to be completed annually (October).	1-5
	Conduct an annual staff travel survey with a more detailed survey every 5 years to inform the development of the next implementation plan.	1-5
	Determine how best to capture patient and visitor travel information and conduct a trial.	3
	Develop methodology for a patient, business representative and visitor travel survey and conduct bi-annually.	1-5

**Table 4: Approach to working with external partners**

Table 3 outlines CBC’s support for current partnership initiatives. As additional schemes are developed the CBC will review proposals against Table 3 and determine whether the scheme should be supported.

Mode	Goals to be achieved through partnership working	Priority level
Walking and Running	Improve conditions and ensure specific consideration is made for people with disabilities.	Medium
Cycling	Improvements to the cycling network from Park and Ride sites and from surrounding villages within cycling distances of CBC to improve safety, reduce journey times and allow for all-inclusive cycling.	High
	Enhance ‘last mile’ travel options so that people can drive to local Park and Ride interchanges, use the train or bus/coach services to Cambridge and move easily and conveniently by bicycle for the last part of the journey.	High
Bus Infrastructure and Services	Extension of bus service coverage, schedules and frequencies to and from CBC.	High
	Improvements to the highway network to reduce the journey time of buses.	High
	Integrated ticketing allowing one-ticket journeys and contactless payment to be used for all services.	High
	Implementation of demand responsive transport to connect rural communities with CBC.	High
Park and Ride	Increase capacity at existing sites, and bring forward the development of additional sites, to enable greater interception of journeys before users experience congestion.	High
	Reduce the cost of Park and Ride, including the reduction or removal of parking charges.	High
	Expansion of Park and Cycle provision including options of shared or pool bicycles to encourage ‘last mile’ travel to CBC.	High
	Operation of other services e.g. employer or school shuttle services, ‘click and collect’ and freight consolidation centres.	Medium
Electrification	Installation of vehicle charging points at key locations (including funding towards installation of charging points on CBC).	Medium
Information, Ticketing and Technology	Improvements to journey planning information, including provision of real-time multi-modal journey planning information.	High
	Encourage bus operators to have lower fares and improved ticketing options, such as a CBC ticket or annual tickets.	High

**Table 4: Approach to working with external partners contd**

Mode	Goals to be achieved through partnership working	Priority level
Information, Ticketing and Technology	Improvements to rail and bus ticketing arrangements, such as ticket integration, contactless and Mobility as a Service.	High
Services and Incentives	Improvements to the quality of the Cambridge-wide sustainable travel offers and incentives (such as negotiated train travel discounts and cycle purchase discounts).	High
Distribution of Goods	Consolidation of deliveries and consideration of ‘last mile’ opportunities.	Medium
Planning Policy	Longer-term requirement to provide additional housing within Cambridge to address the growing imbalance between jobs and housing supply so that economic growth can continue without placing too much pressure on the transport network.	High

**Table 5: 5-year implementation plan measures outside Campus partner control**

Table 5 summarises the initiatives being developed by external partners and the CBC’s approach to working with them.

Mode	Measures	Years
Public Transport	Negotiate with service operators for improved service frequency, coverage and extended schedules to CBC.	1-5
	Negotiate with service operators the establishment of discounted tickets, such as a CBC or annual ticket, to reduce the cost of bus travel to CBC.	2
	Work with partners to secure routing and funding for a new service from the West (Papworth and Cambourne).	1-2
Rail	Work with external partners to improve way-marking and connectivity with Cambridge Station.	2
Park and Ride	Work with contractors and Cambridgeshire County Council to identify opportunities for alternative parking to free up space at Park and Ride sites.	1-5

**Table 6: Partnership initiatives to be supported over the next 5 years**

Scheme	Leading organisation	Impact on CBC staff, patients, business representatives & visitors	Level of priority
CBC Study	GCP	To plan the future transport needs of CBC to support the Transport Strategy beyond the current programme of works and with or without a new Cambridge South station to better define the role of a new station. Provide a robust evidence base to inform future infrastructure investment decisions for the Campus and other key stakeholders, including Local Authority partners.	High
A1307 bus priority, including additional Park and Ride capacity	GCP	A high number of staff live and commute on this corridor; therefore, it will have an impact on staff travel and is supported.	High
Western Orbital bus priority scheme via bus route or near the M11 including a Park and Ride scheme at junction 11	GCP	Direct connection between CBC and key University of Cambridge sites is a high priority. Provision of additional Park and Ride capacity at junction 11 is supported.	High



**Table 6: Partnership initiatives to be supported over the next 5 years contd**

Scheme	Leading organisation	Impact on CBC staff, patients, business representatives & visitors	Level of priority
Cambourne to Cambridge bus priority, including additional Park and Ride capacity	GCP	A high number of staff live and commute on this corridor; therefore, it will have an impact on staff travel and is supported.	High
Enhanced walking and cycling links on A10 corridor from Royston to Cambridge	GCP	A key commuter corridor for those travelling from the south of Cambridge, therefore improved cycle and walking links would enable a higher proportion to travel actively and sustainably, this is supported.	Medium
Histon Road bus priority	GCP	A key commuter corridor for those travelling from north of Cambridge, therefore reducing travel time and congestion, therefore this is supported.	Medium
Milton Road bus priority	GCP	A key commuter corridor for those travelling from north of Cambridge, therefore reducing travel time and congestion, therefore this is supported.	Medium
City Access 8-Point Plan  1. Pedestrian and cycling infrastructure 2. Public space and air quality 3. Better bus services 4. Travel planning 5. Smart technology 6. Traffic management 7. Workplace parking levy (WPL) 8. On-street parking management (including controlled parking zones)	GCP	<p>Improved cycle and walking links are likely to benefit staff, patients, business representatives and visitors significantly, who already demonstrate high take-up of these modes.</p> <p>Public space and air-quality measures are important to CBC to improve the environment for our staff and recovering patients and to reduce the negative impact of poor air quality on our staff, patients, business representatives and visitors.</p> <p>Bus priority measures will improve reliability and journey times for bus services, making them more attractive.</p> <p>Cambridge-wide travel planning would be effective for CBC to link with in-house services and incentives offered by organisations.</p> <p>Proposals to improve smart transport technology are very important, particularly to enable improved journey planning and real-time information for users and to provide better multi-modal fares and ticketing products to make it easier for people to use a range of travel options.</p> <p>The WPL would generate significant revenue for the local authority to spend on improvements to local transport services and facilities. A number of NHS and emergency service organisations, in addition to education and research organisations and supportive businesses are based on the CBC, some of whom share parking facilities. Organisations at CBC manage and restrict access to staff parking through eligibility, therefore the CBC Partners would need to see this recognised and accounted for in a WPL proposal.</p>	High

**Table 6: Partnership initiatives to be supported over the next 5 years contd**

Scheme	Leading organisation	Impact on CBC staff, patients, business representatives & visitors	Level of priority
City Access 8-Point Plan	GCP	<p>On-street parking controls would encourage people to seek alternatives which may have marginal improvements to safer cycling, bus reliability and improvements to the public realm. It is also likely to increase demand for Park and Ride provision.</p> <p>The CBC supports plans to tackle congestion, improve transport and local air quality.</p>	High
Chisholm Trail walking and cycling, between Cambridge Station and Cambridge North Station	GCP	A number of staff live and commute from the area of the proposed route and beyond. Improved cycle and walking links would enable a higher proportion to travel actively and sustainably, therefore this is supported.	Medium
Cross city cycling and walking projects	GCP	A number of staff live and commute from the areas on the routes identified. Improved cycle and walking links would enable a higher proportion to travel actively and sustainably, therefore this is supported.	Medium
Opening of Cambridge South station	Network Rail	Increased accessibility to CBC for staff, patients, business representatives and visitors, therefore is supported.	High
East-west rail connecting Cambridge and Oxford	East West Rail JV	Improved east-west connectivity will assist with access to Cambridge generally and therefore is supported.	High
A14 Huntingdon to Cambridge	Highways England	A high number of staff live and commute on this corridor; therefore, it will have an impact on staff travel and is supported.	Medium





## 8. Delivering the Plan

- 8.1. The 5-year Implementation Plan is supported by Campus partners with the aim to deliver the measures appropriate to their organisations or collectively as necessary, whilst also supporting our staff, patients, business representatives and visitors sustainable travel options, thus reducing congestion in and around CBC.
- 8.2. To support the delivery of the Transport Strategy and the 5-year Implementation Plans, each partner, prior to occupation, will have an identified Transport Co-ordinator who will take the leading role in implementing the Plan and its associated measures in coordination with the other Campus partners.
- 8.3. Due to the number of organisations residing on CBC, and to support this co-ordinated approach, the CBC Travel Transport and Sustainability Group will act as a forum to support the transport co-ordinators, building the business case for funding and enabling cross partner support, discussion and the sharing of good practice.

## 5-year Implementation Plan targets

- 8.4. This section outlines the 5-year Implementation Plan targets linking each to the Transport Strategy objectives. Where possible, SMART targets have been established using the 2016 Traffic, Parking and Person Survey data as a baseline. Those marked with an asterisk (\*) do not have baseline data and therefore baseline data will be collected, where possible, from 2018 onwards.
- 8.5. When developing the targets, the following have been considered:
  - Maintaining or reducing the absolute level of car driver trips will be a challenge for CBC in the next few years as the number of staff on Campus will be increasing significantly, with more staff living outside Cambridge City.
  - Consultation with Cambridge City Council, Cambridgeshire County Council and the Greater Cambridge Partnership indicates that there will be significant investment in Park and Ride facilities and therefore there is an opportunity to be more ambitious with this target.

### Objective 1

**Facilitate convenient, predictable, and where possible, cost effective travel to CBC for staff, patients, business representatives and visitors.**

- Reduce and maintain journeys to CBC as a single occupancy car driver to 30% by 2022.\*
- Increase the number of people using bus (including Park and Ride), rail, Park and Cycle, Park and Walk as part of a multi-modal journey to CBC by 2022.\*
- Maintain or increase the number of walking and cycling journeys to CBC by 2022.

### Objective 2

**Provide supportive transport infrastructure on the CBC to seamlessly support people to arrive at their destination and move intra-site in an effective, efficient and safe way.**

- This is linked to the targets developed for objective 1 and 3.

### Objective 3

**Through the expansion of CBC and the promotion of sustainable travel modes, make a positive contribution to the Greater Cambridge area.**

- Increase the levels of satisfaction staff members have in regards to their journey to work by 2022\*.

### Objective 4

**Work with city and regional partners to make a positive contribution to the growth of the Cambridge economy, the quality of life for new and existing communities, and the development and delivery of transport and planning policies and schemes for the city and surrounding area.**

- Demonstrate active involvement, participation and contribution to the Greater Cambridge Partnership scheme development and other partner discussions.\*

### Objective 5

**Facilitate the development of affordable housing and staff accommodation located close to CBC, both reducing travel demand and reliance on motorised travel.**

- Reduce the number of motorised car journeys made by staff in the morning peak hours entering CBC.

### Objective 6

**Minimise the CBC's environmental impact from transport and improve air quality.**

- This is linked to the targets developed for objective 1, 3 and 5.

### Objective 7

**Support the above objectives by exploiting emerging and future technologies effectively and making the best use of world-class research from our partner organisations.**

- Engage with Smart Cambridge and the research community to undertake and pilot innovative projects and monitor their impacts.\*





## 9. Monitoring and Evaluating Progress

### Monitoring Progress

9.1. Regular monitoring and evaluation will be carried out to demonstrate our progress in delivering the Transport Strategy and Implementation Plan. Monitoring will be linked to the achievement of the objectives and the agreed targets, with progress reported annually to relevant CBC groups.

### Monitoring against Targets

#### Annual Traffic Parking and Person Survey (every October)

9.2. The annual traffic parking and person survey, which utilises technology to monitor movements onto CBC, means that CBC can accurately monitor the progress of the modal shift being made as a result of the Implementation Plans.

#### Annual Staff Travel Survey (every October)

9.3. Campus partners will survey staff in order to gather feedback from users of different modes of travel to determine whether the CBC is meeting their requirements and improving upon their level of satisfaction in regard to their journey to work.

#### Bi-annual Patient, Business Representative and Visitor Survey (every other October)

9.4. There is currently little data available on the travel choices made by patients, business representatives and visitors to CBC and so a monitoring methodology will be developed to capture information on origin, destination, and mode of travel and satisfaction levels with those travel options. Options will be identified as to how this might be appropriately ascertained for the different user groups ensuring that it can be collected in a proportionate and non-invasive way that is compliant with data protection regulations.

#### Monitoring Use of Sustainable Transport Schemes

9.5. In addition to monitoring the behaviours of people accessing CBC through surveys, monitoring will also be carried out by looking at the uptake of sustainable transport options. Table 7 sets out the key performance indicators that will be reported on.

#### Air Quality Monitoring

9.6. Cambridge City Council has air quality monitoring (diffusion tubes) in place in 8 locations across CBC. These are located near to Addenbrooke's Bus Station, Car Park H (nr Hills Road), the Accident and Emergency Department, the Rosie Hospital, Keith Day Road, Francis Crick Avenue, Puddicombe Way and Richard Howe Way. Campus partners will continue to support this monitoring including any further locations identified.

9.7. Air quality monitoring, adjacent to 2040 land, will continue under the associated section 106 agreements.

## 10. Governance and Funding

10.1. The Transport Strategy will be overseen by the CBC Delivery Group and coordinated by the CBC Travel, Transport and Sustainability Group, led by a nominated Transport Manager, who will:

- Review progress
- Conduct periodic refreshes of the Implementation Plan
- Monitor and evaluate progress.

10.2. An annual review of the Transport Strategy will be reported to the CBC Delivery Group, for onward report to the Campus Strategy Group and to the local Councils, if required.

10.3. Projects which require additional approval such as large infrastructure schemes will be reported directly to other Groups as required.

## Funding

10.4. Until such time that Campus governance arrangements are agreed each measure identified within the 5-year Implementation Plan will be brought forward through the CBC Travel Transport and Sustainability Group as an outline business case to identify funding opportunities and contributions from partners to support. Where budgets exist these measures should progress quickly.

10.5. For other measures, particularly larger schemes, they will require a comprehensive business case, further supportive documentation and identification of partners benefit. In these instances the documents will be presented to the appropriate CBC group(s) to identify funding and for project approval.

**Table 7: Volumetric to measure key performance indicators**

Transport mode or service	Volumetric
Walking	Number of people walking on to CBC
Cycling	Number of cycles entering CBC Number of cycles parked on CBC
Bus	Number of bus passengers arriving at CBC
Motorcycles	Number of motorcycles entering CBC
Driving	Number of motorcycles, cars, LGV, HGV and buses entering CBC/time Vehicle occupancy entering CBC and on site car parks Number of vehicles violating the through route restriction
Car parking	Number of car parking spaces (staff/patient and visitor) Number of staff with authorisation (opportunity) to access car parking
Staff travel survey	Response rate Staff satisfaction level

