# **CAMBRIDGE** BIOMEDICAL CAMPUS STRATEGY & TRAVEL PLAN (2017-2022)(FULL CONSULTATION **VERSION)** DRAFT MARCH 2017

As the Cambridge Biomedical Campus grows, staff, patients, visitors and goods will be able to access the Campus easily, efficiently and sustainably. Active and healthy travel will flourish.

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#### **Foreword**

Cambridge University Hospitals NHS Foundation Trust (CUH) and the wider Cambridge Biomedical Campus (CBC) is a location that generates intense travel activity with over 23,000 staff, patients and visitors travelling daily to and from the site in 2015. The Campus is currently in a period of exceptional sustained growth and development, as is the whole Greater Cambridge area.

Well managed, healthy and environmentally sustainable travel choices are important aspects of the Campus's continuing recognition as an international centre of innovation and excellence in healthcare. The Campus is often cited as an example of good practice, but there remains much more that needs to be done. The Campus strives to be considered as an exemplar "sustainable travel" campus and an example of best practice in terms of delivering environmentally sound, active and healthy outcomes. Indeed the Campus is home to internationally recognised experts on links between the built environment and public health and it is only right that the Campus itself should reflect this agenda.

The CBC comprises many different partner organisations. This fully revised Strategy and Travel Plan recognises the importance of a partnership approach in delivering sustainable travel choices to everybody seeking to access the Campus – staff, patients, business representatives and visitors alike.

This Strategy and Travel Plan builds on the achievements and work carried out to date to reduce single occupancy motor car trips to and from our site. It is a priority action within the CUH Sustainable Development Management Plan (SDMP) and a commitment for Campus partners. The Plan sets out our continued objectives of minimising motorised traffic whilst developing, facilitating and promoting more sustainable and healthy travel choices available to Campus for staff, patients, business representatives and visitors, who have to access the site from a wide and dispersed area.

Our records show that we have made good progress in achieving these objectives. We recognise that many will expect to use a motor car to travel, but we recognise that the road network and Campus infrastructure cannot accommodate this. Choices need to be made, so that those who really have to use cars, ambulances, buses, delivery vehicles, alongside cyclists and pedestrians can all get to and from Campus in a safe, efficient way.

Historically CUH has worked hard with Cambridgeshire County Council and others to ensure that the site is well provided with public transport, park & ride, cycling and walking access. The take-up of these options as an alternative to the lone car driver has been achieved through a balance of communication, incentives and policies. The realities of the transition from a highly respected acute teaching hospital to an internationally renowned and expanding Biomedical Campus requires all partners to take active and collaborative responsibility to develop more sustainable options. 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.

## Introduction

CBC is all about looking after people – our patients, our staff, our visitors (public and business) and our local community. Our commitment is to improve the health and wellbeing of everyone, promoting good corporate citizenship and social responsibility by developing hospital, research and knowledge transfer facilities on our Campus in a sustainable and environmentally friendly way.

Today parking space on Campus is limited and the nearby roads can get congested. From 2018 the numbers on Campus will grow and the pressure on the road network may markedly increase; action is needed to maintain acceptable levels of access. We encourage all Campus staff, patients and visitors to use sustainable methods of travel. We realise that this is not possible in all instances and circumstances, however the core aim of this Plan is to encourage those that currently use the car not to travel as lone car drivers, by providing and promoting alternatives to ensure a greater element of travel choice is available.

This new Plan comes at a time of major growth in Greater Cambridge and at a time when the authorities are working hard to improve the sustainable transport offering in the area. This Plan therefore, has an unprecedented opportunity to deliver very significant improvements in sustainable travel outcomes for CBC by pulling together an agreed set of actions that will secure:

- 1. Ongoing and iterative development of sustainable travel infrastructure, services and behaviours .
- 2. Contributions from further new development/site expansion and commercial projects.
- 3. Off-site local authority-driven Greater Cambridge transport infrastructure led by others.

# Our Background and the Partners

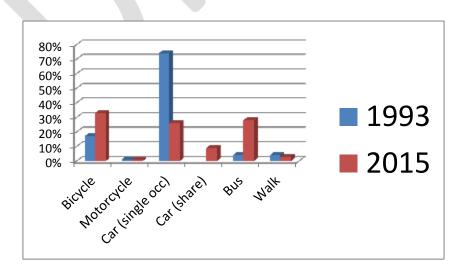
Cambridge Biomedical Campus (CBC) combines world-class biomedical research, patient care and education on a single site. The Campus is on track to becoming one of the leading biomedical centres in the world by 2020.

The Campus dates back to 1962 when Addenbrooke's Hospital and the Medical Research Council (MRC) Laboratory of Molecular Biology (LMB) moved from their respective locations in Cambridge City Centre to the current Hills Road site. In the 1970s the first students were admitted to the University of Cambridge (UoC) Clinical School, in the 1980s the Rosie Maternity Unit opened, in the 1990s the MRC Cambridge Centre for Brain Research was opened, in 2004 Addenbrooke's and the Rosie became one of the first NHS Foundation Trusts. The site has a long history of expanding healthcare, research and teaching provision and this is set to step up another gear with the completion of the new Papworth Hospital, AstraZeneca, Abcam and a number of University projects in 2018. There will undoubtedly be further growth to follow.

CBC is one of the largest traffic generators within Cambridge and Cambridgeshire and is also one of the fastest growing locations in Greater Cambridge. In 2015 over 23,000 people visited the Campus each day and this figure is due to increase due to the planned expansion of the Campus. The challenge is to ensure that this growth happens in a way that allows the Campus and the surrounding area to continue to thrive.

CUH, as the largest body on site and the biggest traffic generator has developed its own travel plan over the years and this has been delivered in phases, with each phase focussing on different elements that contribute to the overall objectives of effective and sustainable access (see following page). This successful incremental change has created an environment where sustainable travel is now very much part of Campus life.

Over the years there has been a steady shift in staff travel to Campus from being car dominated to a more sustainable travel mode share, as shown below. (Figures based on annual Travel Survey data).



Note that car share was not measured in 1993 so all car trips were counted as single occupancy

#### Phases one and two: Taking action for ourselves (1997-2001)

- Introducing a variety of initiatives including arrangements to control car park management.
- Helped found the Cambridgeshire Travel for Work Partnership.
- Providing additional cycle parking and interest-free loans for the purchase of cycles and motorcycles.

#### Phase three: Partnership working (2001)

 Delivering a first of its kind (for the NHS) interchange bus station, in partnership with Cambridgeshire County Council, supporting a Trust operated direct bus route to the Campus from the Trumpington Cambridge Park & Ride site. Stagecoach Cambridge also partnered with the Trust to provide subsidised weekly staff bus tickets during this phase.

#### Phase four: Reviewing progress and communicating our actions (2003)

- Launch of a programme aimed at integrated communication.
- Awareness raising of the *Access to Addenbrooke's* travel plan and encouraging patients and visitors to travel to the Campus by means other than the private car.

## Phase five: Planning related infrastructure development and improvements (2007)

- Addenbrooke's Road opened in 2010 providing enhanced highway access to the M11 motorway.
   The road will play an integral part in the local road network delivering access to Clay Farm and
   Glebe Farm developments, with an estimated 21,500 vehicles using the road daily by 2023.
- The Cambridgeshire Guided Busway opened in 2011 providing improved bus and cycle links to the Campus. Services run from St Ives to Trumpington providing a direct, traffic-free route between the Trumpington Park & Ride, the Campus, and Cambridge railway station with several stops around the hospital including outpatients and the Addenbrooke's Treatment Centre.

#### Phase six: Looking at the Hospitals as part of a growing Campus (2013)

- Co-operation, co-ordination and collaboration with our site partners.
- Preparation for the growth of the Campus, standardising the design of infrastructure to reflect the Master Planning process.
- Developing and implementing the Way finding project ensuring a coordinated approach with the Campus developments to ensure maximum benefits for all.

## Phase seven: Preparing for major growth on the Campus (2016)

- Construction works underway for a number of new buildings on Campus.
- Work on a new Campus Travel Plan that reflects the needs of the growing Campus in preparation for a large increase in staff, patients and visitors on site in 2018.

# **Partnerships on Campus**

Travel planning activity on the Campus is underpinned by strategic partnerships and relationships with our partners including site occupants, developers, local government, service providers and charitable organisations. Campus partnerships have developed and grown over time and we are now engaging with future occupants before they reside on Campus. We aim to provide support and encouragement for sustainable travel methods from the outset, working with organisations to assist with their travel planning for staff, patients and visitors. Partners have a history of working together on the Campus through a variety of bodies. In 2014 a process of formalising the relationships and associated collaborative action was brought forward through Cambridge University Health Partners. This included the establishment of the very productive Travel, Transport and Sustainability Group. Other collaborative bodies include the CUH Site Liaison Group and the Bicycle User Group and Walking Action Group (BUGWAG). Partners will continue to work together on matters of mutual interest. Campus partners of this Plan include:

- Cambridge University Health Partners
- Cambridge University Hospitals NHS Foundation Trust
- Abcam
- Addenbrooke's Charitable Trust
- AstraZeneca
- Cambridgeshire & Peterborough NHS Foundation Trust
- Cambridge Regional College
- Cancer Research UK
- Countryside and Liberty Property Trust
- East of England Ambulance NHS Trust
- GlaxoSmithKline Plc
- Key Health (Addenbrooke's) Limited
- Bright Horizons
- John Laing Plc
- Medical Research Council
- NHS Blood and Transplant
- Papworth Hospital NHS Foundation Trust
- Sanctuary Housing
- University of Cambridge

## **External Bodies**

Partners will play their part in supporting the Greater Cambridge area and the local communities. As part of this partners expect to continue to work with various external bodies on travel and transport matters including:

- Cambridgeshire and Peterborough Combined Authority and the new Mayor
- Cambridgeshire County Council
- Cambridge City Council
- South Cambridgeshire District Council
- Greater Cambridge City Deal
- Greater Cambridge Greater Peterborough Enterprise Partnership
- Cambridge Ahead
- Travel 4 Cambridgeshire
- Camcycle
- Sustrans
- Stagecoach
- Whippet
- Abellio Greater Anglia
- GTR
- Network Rail
- University Technical College
- Long Road Sixth Form College

As Local Government changes partners will engage with the new people and organisations that are relevant to the Campus.

Partners will also work to strengthen relationships with local residents groups such as Queen Edith's Community Forum and Trumpington Residents Association and will engage with emerging interest groups such as Smarter Cambridge Transport.

As CBC grows the relationship with other Campus sites and large employers in the area is also growing. As well as working on research matters, CBC will work with others to identify and address shared transport needs.

# **Our Future - 2031 Strategic Travel Vision**

Current and future development of the Campus is all part of bringing the vision — for the hospitals and for the CBC — to reality. The drive to succeed must be supported by appropriate development of our physical environment.

Achieving our ambition to become the best biomedical campus in Europe, while also serving the healthcare needs of an increasing local population, recognises the need for Campus development and expansion. The CUH 2020 Vision unites the Trust's reputation as a leading acute teaching hospital with the wider context of what comprises a successful and thriving biomedical campus – the CBC. There are currently no outline plans to grow beyond the 2020 Vision, but in the light of emerging proposals for the Biomedical Campus, a third phase with further growth is possible. Any future growth will be expected to fit with the ambition to become the best biomedical campus in Europe and this Transport Strategy and Plan.

In transport terms the future success of the Campus will be based on being easily accessible, an attractive place to work, visit and recuperate and a Campus that fits in well to its environment. As the Campus expands, the number of trips to the Campus will grow, but car traffic will need to be restrained, with challenging choices being made that give priority to certain modes - ambulances, public transport, cycle, foot, car sharing and priority groups who need to travel by car to the Campus.

The realisation of a Campus railway station would be a very positive step in improving site access - one that would be further advanced with the arrival of east-west rail, which could help provide the Campus with train access from many locations.

The high levels of walking, cycling and public transport usage in Greater Cambridge will grow as the City Deal schemes come to fruition and the Campus partners address the existing infrastructure problems on site. The Campus will become a place that is easy to walk around and where it is easy to work out where your next bus goes from. Most travel within the Campus will be on foot and bike, with buses arriving frequently at clearly designated transport hubs, before continuing unhindered on their journeys. For those with mobility issues or who do not want to walk the large distances on Campus there is the potential for electric vehicles linking public transport hubs with car parking and all of the key sites on Campus.

# **Policy Background**

Travel Plans form an important element of the Government's Integrated Transport Strategy and are a means of managing the transport impacts generated by a development site. This new CBC Travel Plan endeavours to deliver an effective Travel Plan in accordance with good practice guidance. The Travel Plan does not attempt to repeat that guidance or list relevant policies, in detail, but rather focuses on a transparent mode-by-mode framework to address the needs of the site and the surrounding area.

It is envisaged that the measures included in a Travel Plan should demonstrate a holistic approach by incorporating both the 'hard' engineering measures and the 'soft' marketing and management measures necessary to address the transport impacts arising from the development. A Travel Plan should also include targets, monitoring and management arrangements to ensure that the objectives of the plan are achieved and that it remains sustainable over the longer term.

Guidance provided by the Department for Transport (DfT) in the form of the document 'Good Practice Guidelines: Delivering Travel Plans Through the Planning Process' (2009) and Travel for Cambridgeshire (TfC 2013) have been noted in the development of this Travel Plan.

Delivering Travel Plans through the Planning Process (DfT, 2009) sets out the role the planning process can play in securing an effective Travel Plan, which minimises the impact of development on transport infrastructure and assists in reducing carbon dioxide emissions. In particular, it highlights that the key to a robust plan is the development of a clear and integrated framework together with an explicit relationship between the plan and the site. The document addresses current policy and describes the role of both the Local Authority and the applicant in facilitating the Travel Planning process.

In order to understand if a Travel Plan has been effective, the document also outlines the importance of a monitoring and enforcement regime, and the specification of outcomes which are clear and measurable. In delivering a successful plan, the document identifies the importance of involving all parties who are likely to influence the strategy to ensure that the document is relevant to ongoing site development. Finally, the document outlines that Travel Plans need to be a 'living document' which is periodically updated to ensure that it remains effective, responsive and up-to-date.

Planning Policy for CBC is led by Cambridge City Council, the planning authority responsible for the Campus, but any expansion of the Campus would be likely to involve South Cambridgeshire District Council, who work closely with Cambridge City Council on planning and growth matters.

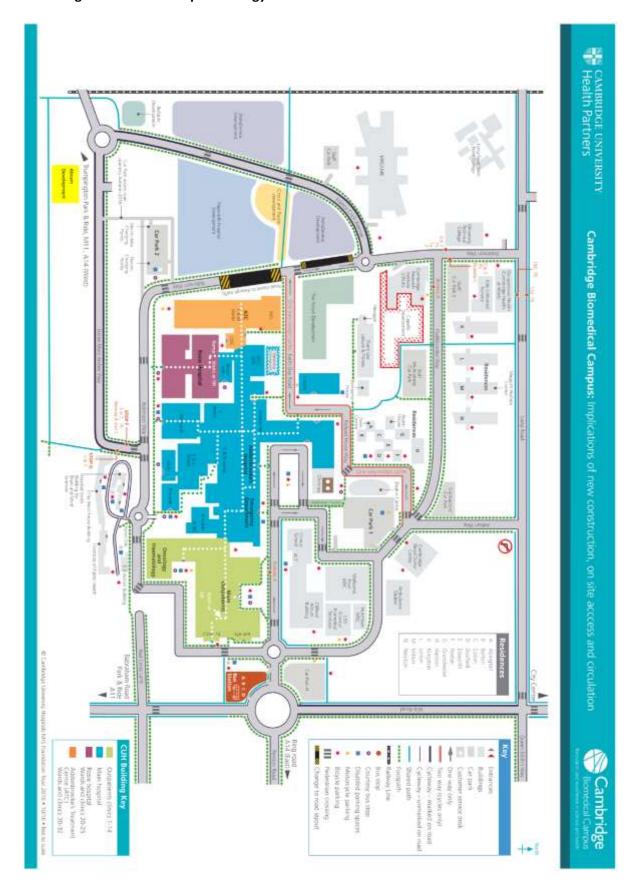
Highway matters for Cambridgeshire are led by Cambridgeshire County Council, with Highways England having responsibility for the major roads such as the M11 and Network Rail having responsibility for the rail network.

A Combined Authority for Cambridgeshire and Peterborough is likely to come into existence during the period of this Travel Plan and would have certain powers, responsibilities and funding transferred to it from Central Government and would comprise of the following organisations — Peterborough City Council, Cambridgeshire County Council, Fenland District Council, Huntingdonshire District Council, East Cambridgeshire District Council, South Cambridgeshire District Council, Cambridge City Council and the Greater Cambridge Greater Peterborough Local Enterprise Partnership. Elections for a new Mayor for the Combined Authority are due in May 2017.

The Greater Cambridge City Deal is a unique opportunity to secure the future of Greater Cambridge as a leading UK and global hub for research and technology, support economic growth and improve quality of life for residents of Cambridge and South Cambridgeshire. The deal aims to bring over £1 billion of investment in vital <a href="mailto:transport">transport infrastructure improvements</a> and thousands of <a href="mailto:new">new</a> <a href="mailto:homes">homes</a>, <a href="mailto:jobs and employment training opportunities">jobs and employment training opportunities</a> to Greater Cambridge.

## **Site Overview**

CBC is sited on the southern edge of Cambridge with the London to Cambridge railway line to the west, Long Road to the north and Hills Road to the east. Land ownership is complex, but the major landowner is CUH. The Hospitals themselves are indicated in the following plan with Outpatients, Main Hospital, the Rosie Hospital and Addenbrooke's Treatment Centre shown in different colours. The Hospitals are mostly used by CUH staff, patients and visitors, but they are also occupied by a number of partner organisations. University buildings, MRC LMB, Papworth Hospital, the proposed Forum Development and AstraZeneca are all shown on the plan. The Abcam site is in the south — west corner of the site with land allocated for further expansion generally to the south of the site.



# **Transport Provision**

## Trips to site

There is a lot of data on trips to the Campus, going back to 1993. Surveys have been undertaken over a 12 hour period in October for most years. A summary of data is shown below. The largest employer and traffic generator has always been CUH, but the data relates to all site activity.

Bicycle Motorcycle Car (single occup) Car (multiple occup) Bus Walk

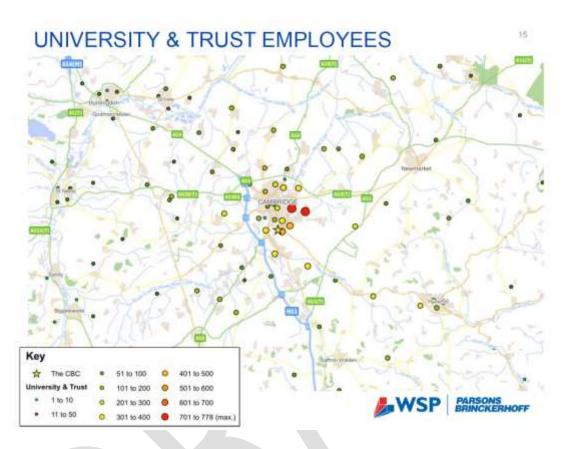
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1993		2005		2009		2013		2014		2015	
697	17%	1,307	22%	2,312	27%	2,791	30%	2,735	33%	2,891	33%
53	1%	153	3%	194	2%	165	2%	136	2%	94	1%
2,962	74%	2,142	36%	2,785	32%	2,673	29%	2,064	25%	2,308	26%
	$\neg$	210	4%	321	4%	558	6%	292	3%	801	9%
144	4%	1,424	24%	1,983	23%	2,424	26%	2,085	25%	2,484	28%
136	4%	639	11%	1,079	12%	569	6%	1,080	13%	236	3%
3,992	100%	5,875	100%	8,674	100%	9,180	100%	8,392	100%	8,814	100%

Bicycle Motorcycle Car (single occup) Car (multiple occup) Bus Walk

				F	atients /	Visitors						
199	1993		2005		2009		2013		2014		2015	
133	2%	216	2%	408	3%	493	4%	483	3%	510	4%	
114	1%	27	0%	34	0%	29	0%	24	0%	17	0%	
7,224	93%	3,555	36%	3,473	28%	4,416	32%	6,612	48%	5,064	35%	
$\neg$	$\neg$	5,139	52%	6,813	56%	7,348	53%	5,085	37%	7,462	51%	
259	3%	780	8%	1,067	9%	1,305	9%	1,123	8%	1,338	9%	
91	1%	209	2%	439	4%	310	2%	582	4%	127	1%	
7,821	100%	9,926	100%	12,234	100%	13,901	100%	13,909	100%	14,518	100%	

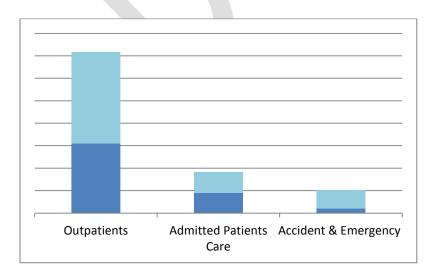
It should be noted that there are various ways of counting mode share, especially where a number of modes are used. The above data generally relates to the mode used to access the Campus, but some allowance is made for those who drive and park near the Campus and then walk onto site.

In 2015 an analysis of University of Cambridge and CUH and Trust employees showed that staff based on the Campus lived over a wide area (as below). Note that this is only a partial picture and the image excludes places like Ely.



In 2016 an analysis of patient data (from over 800,000 postcodes) showed that most patients came from CB postcodes, but many travelled from much further across the region. The highest proportion of patients are treated as Outpatients.

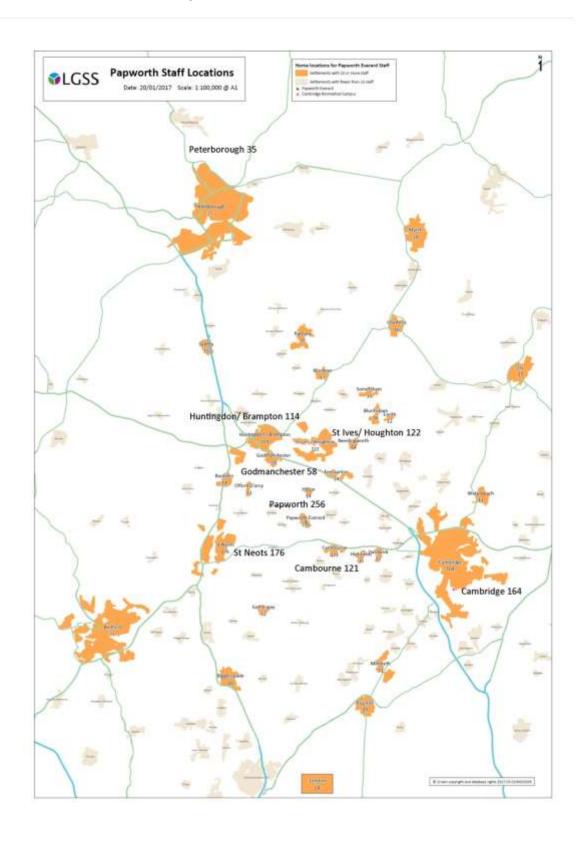
# PATIENTS (FROM 2016 data)



Light Blue = CB postcode

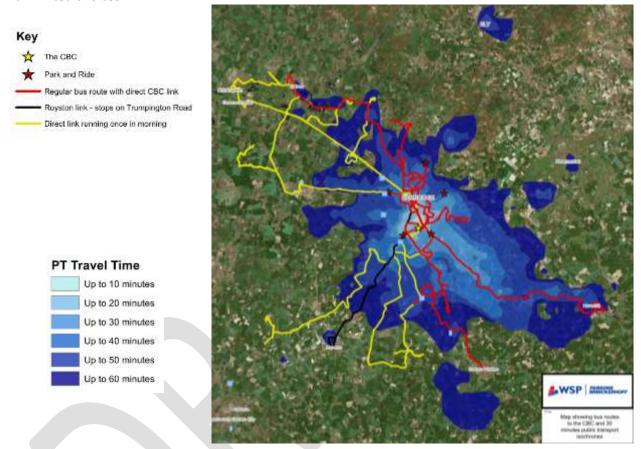
Dark Blue = Other postcode

The arrival of Papworth, AstraZeneca and others on site in 2018 will alter the balance of staff postcodes, with Papworth staff locations shown below. This shows a focus of staff in the Cambridge area and also significant clusters focused around the existing Papworth site in St Ives, Papworth, Cambourne, St Neots and Huntingdon.



## **Travel Options to Site**

In 2015 Joshua Stevens, a 6<sup>th</sup> Form student at Hills Road undertook a study of travel options to CBCand much of this still stands. The Plan below shows Public Transport Travel Time to and from site. It shows for instance good travel options from Ely and Haverhill, but also shows large areas with limited choices.



Work is currently underway to review travel options, as well as to understand how this fits with typical staff and visitor travel times and as part of this travel plan regular reviews will be undertaken with the aim of working with operators and others to improve choices.

#### **Current Built Infrastructure on Site**

The roads, bus infrastructure, paths, car parks, cycle parking has developed in stages as the Campus has grown. The infrastructure is of varying conditions and ages.

#### There are currently:

- 1 x Guided Busway access
- 4 x road accesses
- 12 x cycle/ pedestrian accesses
- 4 Bus stops at Addenbrookes Bus Station.
- 6 Bus stops around the Campus
- Cycle Parking for 2660 bicycles
- Parking for 115 motorbikes
- 4381 car parking spaces of which 359 disabled parking spaces
- 5km roads
- 2 x signalled junctions
- 7 x zebra crossings with Belisha Beacons
- Automatic Number Plate Recognition cameras at all entry/ exit points to deter "rat running"

#### **Current Service Infrastructure**

- Cambridge train station with services across the region
- City Park & Ride direct bus service from Babraham Road with options from all City sites involving change
- Guided Bus services from Trumpington Park and Ride site, Cambridge station, St Ives,
   Longstanton and Madingley Road Park & Ride site via City Centre.
- Citi 1, Citi 2 and Citi 7 bus services
- X13, 13 bus services to and from Haverhill
- 114, 31 bus services
- Various rural bus services
- Student bus services
- Car share options
- Pool cars
- Electric loan bikes
- OWL bike maintenance

## **Current Policy and Control**

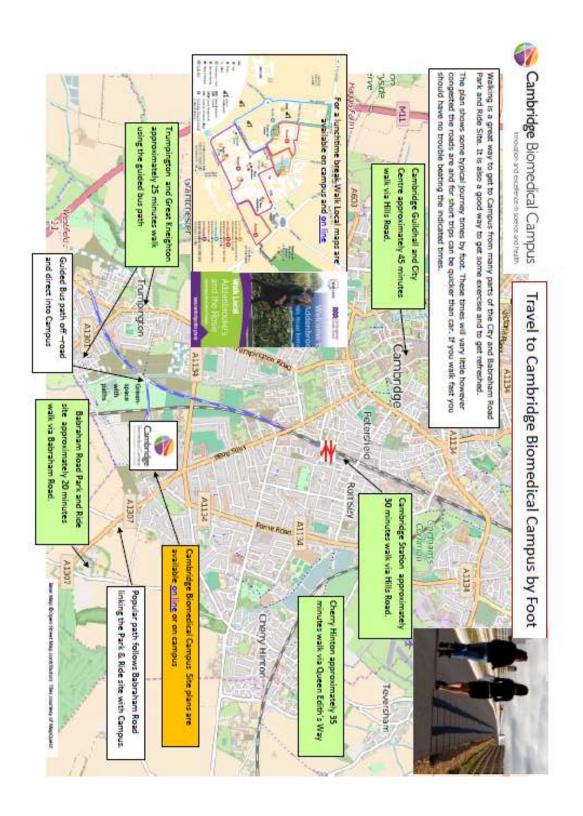
All major developments on Campus have their own Travel Plans and all major employers have their own parking policies.

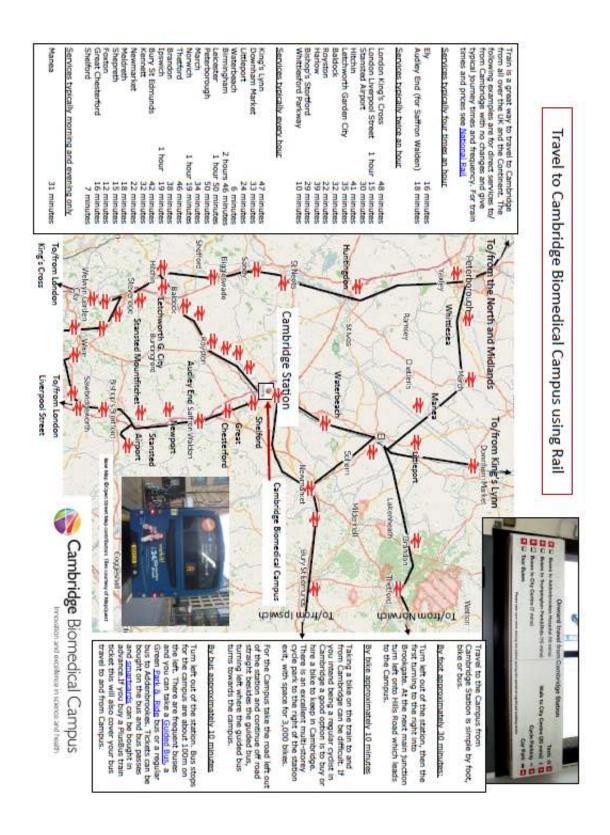
# **Current Communications**

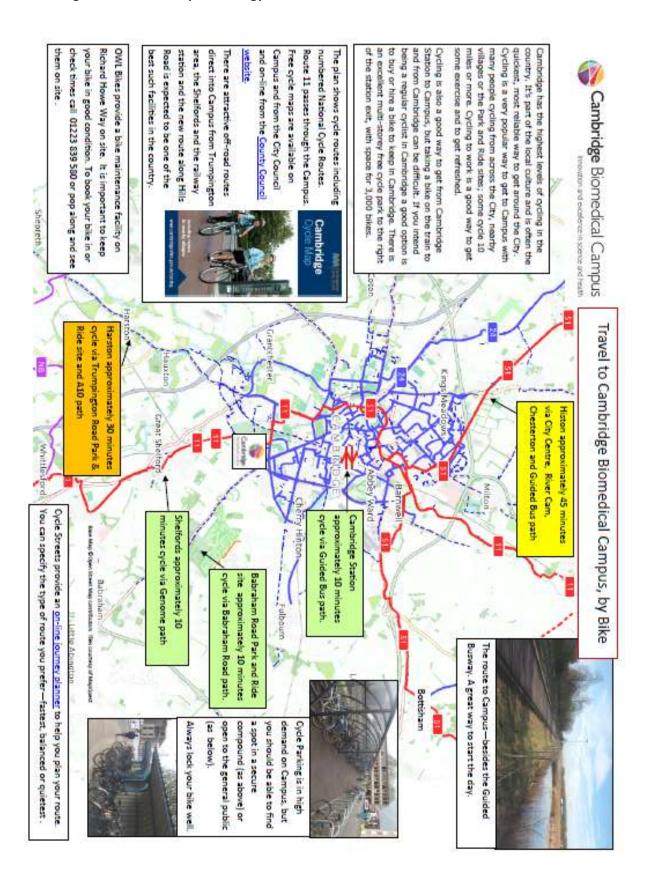
The various organisations on Campus have their own ways to communicate with their own staff, patients and visitors, but there are also shared needs. Methods used include:

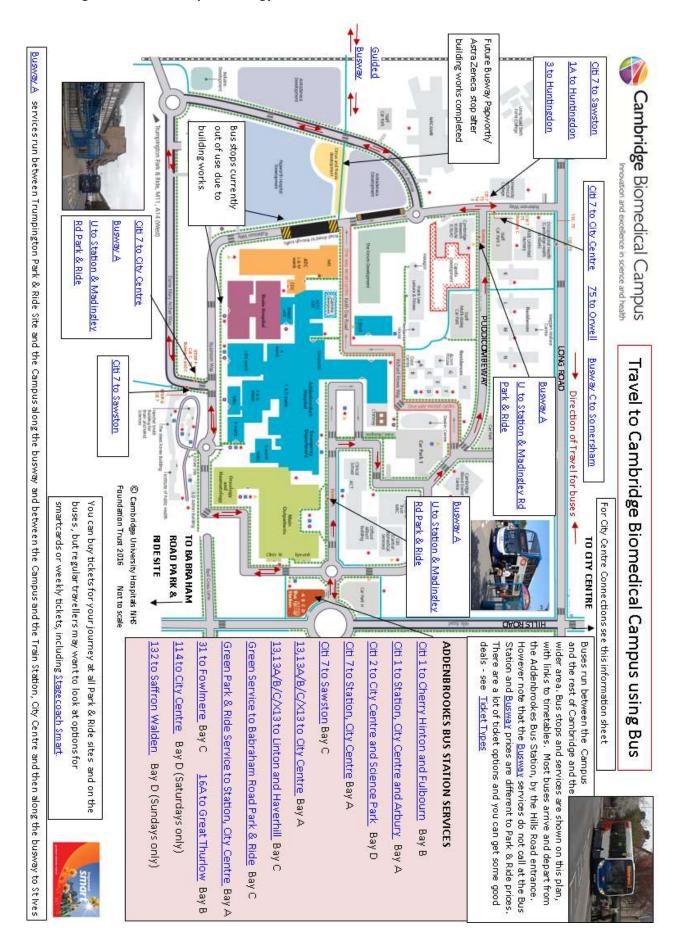
- Wayfinding signage to and on the Campus, including waymarking in buildings
- Journey Planners (nationally available)
- Real Time Passenger Information for bus travel
- Posters
- Webpages e.g <a href="http://www.cuh.org.uk/finding-us">http://cambridge-biomedical.com/working-together/</a>
- Internal staff intranet pages
- Staff appointment and induction
- Patient letters
- Events in the CUH Concourse or elsewhere.

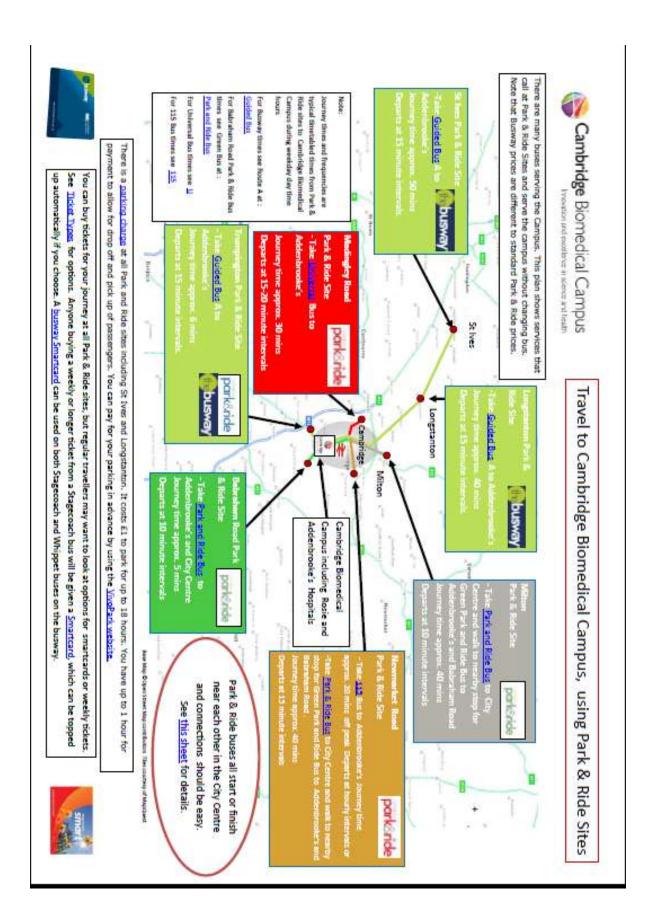
# **Examples of Travel Information from 2016**

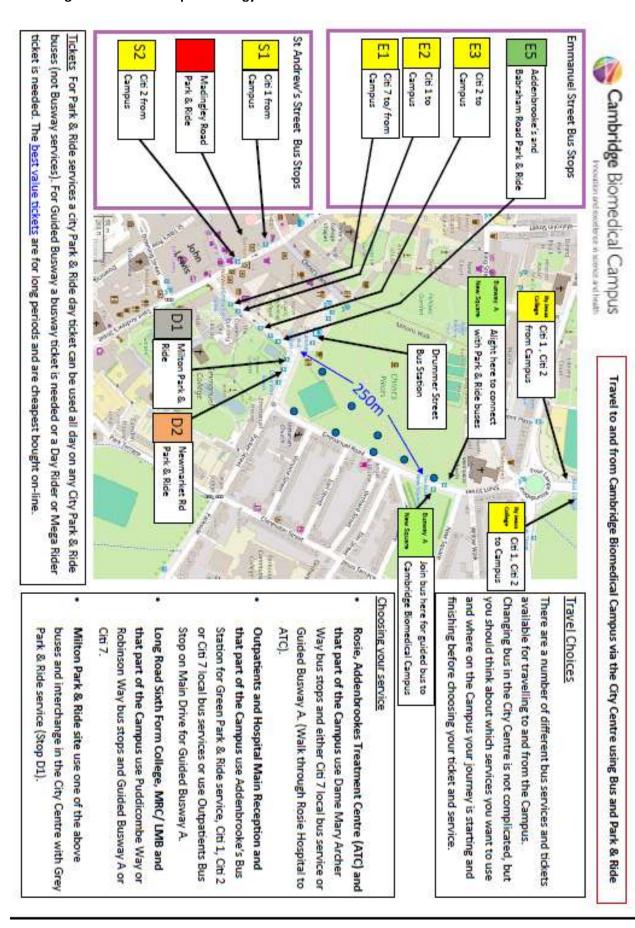












## **Future Built Infrastructure on site**

The Biomedical Campus has grown rapidly over recent years and land is allocated for further expansion as indicated below. It should be noted that these images are computer generated and are indicative only.













For key see following page.



Whilst the plan shows the main existing buildings on site and ideas for new development these are likely to change. In addition to new buildings on the expansion land it is also likely that there will be changes to existing buildings. All changes will need to consider carefully their transport implications and where possible and necessary new bus infrastructure will be incorporated as well as provision for walking and cycling, with the aim of ensuring that opportunities are taken to improve sustainable transport access to all parts of the Campus.

This Travel Plan will be updated regularly to reflect changes and new opportunities on this Campus.

## **Future Service Infrastructure**

There are many factors that will influence the success of this Plan and one of the main factors will be the services provided in future. Many of these services will be led by others, but Campus partners will encourage good provision that meets the needs of the Campus. It is hoped that this will include:

- The continuation of current services with some possible revisions to Park & Ride services as sites change.
- Changes to the hours of some existing services to better cater for the operating hours of the Campus.
- New bus services through the City Centre as conditions improve, including potentially reinstating the Citi 8 service.
- New orbital bus services including from the west and serving Papworth, Cambourne, Huntingdon and St Neots.
- New bus services linking with the other Southern Campus sites.
- New train services calling at Cambridge South Station, including the future east-west rail.

## **2031 Strategic Travel Statement**

CBC welcomes patients, visitors and staff onto site and Campus partners want to ensure that this happens easily, efficiently and sustainably as the Campus grows. Access to the site is mostly via the public highway and access on Campus is under the control of Campus partners. Good access to all parts of the Campus is vital for its success and partners will therefore do what they can to improve that access, in iterative, planned and opportunistic ways depending upon the prevailing circumstances.

The Draft Local Plan for Cambridge and South Cambridgeshire predicts that, by 2031, the population of Cambridge will be 21% greater than it was in 2011 and that there will also be a 25% growth in Cambridge jobs.

The County Council's aspirations are that city centre traffic levels in 2031 will be no greater, and preferably lower, than 2011 traffic levels... a significant mode shift from car use. The Campus expects to contribute in an appropriate manner to delivering these aspirations, with all partners playing their part. This will require a major and concerted effort.

The Campus Transport Strategy to 2031 is:

Cambridge Biomedical Campus will create an exemplar 'sustainable travel' campus environment, that encourages active, healthy and sustainable travel. Provision for walking, cycling and public transport on Campus will be improved to bring it in line with the best provision in Greater Cambridge, whilst ensuring easy and efficient movement around Campus for ambulances, delivery vehicles and those who have to drive. Good provision will be made for those with limited mobility to ensure that they can easily access all parts of the Campus. Car parking spaces will be managed efficiently so that those with essential need can park their cars on Campus. Partners will work with staff, patients and visitors to seek to promote alternatives to the car and minimise the number of cars coming on to site.

Campus partners will work collaboratively and innovatively together, alongside local partners, to ensure that Campus traffic levels in 2031 contribute in an appropriate manner to the demanding targets set by the Planning and Highway Authorities, with a significant mode shift from car use. This mode shift will apply to all Campus partners who will work together to encourage alternatives to the car and fairness for staff, patients and visitors. Staff travel targets will be directly related to the increase in jobs compared to the expected growth in jobs in Cambridge, so that the Campus plays its part in addressing transport issues across Greater Cambridge. Visitor and patient car traffic in 2031 shall not exceed the 2011 traffic levels.

# **Scope of this Travel Plan**

This Travel Plan will help to deliver the 2031 Strategic Travel Statement. It covers the period to January 2022 and will be updated at that time or before, based on the 2031 Statement. The period to January 2022 is a very significant period of change for the Campus and the Travel Plan will:

- 1. account for the arrival of new staff, patients and visitors, from the completion of new development construction projects. This will include 5,000 + new staff and potentially a 20% increase in visitors from 2018\*.
- 2. identify how staff, patients and visitors can be influenced to make sustainable and healthy travel choices.
- 3. influence the highway authority, railway authorities and others, including commercial services so as to ensure that staff, patients and visitors to the CBC have good travel choices as alternatives to lone car driving.
- 4. drive and promote improved infrastructure on Campus including better walking and cycling provision, major revisions to existing bus facilities and a new Cambridge South rail station.
- 5. encourage the delivery of improved infrastructure off site, including improved Park & Ride and bus provision and services and cycle lanes.
- 6. address the car, freight, construction, contractor, delivery and maintenance traffic requirements on site in a way that allows good and easy access for people, emergency services and public transport.
- 7. address the challenges presented by local on street parking restrictions, road closures, workplace charging and other cross-city proposals.

## **Travel Plan Objectives**

This Travel Plan will ensure that the growth and development of the Campus happens in a way that contributes to delivery of the 2031 Strategic Travel Statement. The objectives are that:

- by the end of this Travel Plan period Cambridge Biomedical Campus is on the way to delivering an exemplar 'sustainable travel' campus environment, that encourages active and healthy travel.
- during the Travel Plan period the Campus plays its part in addressing transport issues across Greater Cambridge.

<sup>\*</sup> These figures will need to be regularly reviewed

## **Travel Plan Targets**

The success of the Travel Plan will be closely linked to the successful growth of the Campus. One important indication will be in the numbers of vehicles travelling to the site and in the modal splits and vehicle occupancy. Even to maintain the existing modal splits is likely to be challenging, due to the dispersed locations where new staff, patients and visitors are expected to travel from and the long term difficulties that there have been in achieving modal shift amongst patients and visitors. The numbers are large – many people travel to and from the Campus already on a daily basis and those numbers are expected to expand significantly as the site grows. The exact number of new trips is hard to measure, as is the exact number of trips to the existing Campus, so the figures below are indicative but give a good indication of the challenges and the need for changes.

	2017/	<b>1</b> 18	2018/	19	2019/20		
Forecast		-					
Visits per	Car users on site	11000	Car users on site	13800	Car users on site (Cars)	13700	
day	Car users P&R	1200	Car users P&R	3200	Car users P&R (Cars)	3900	
	Car users street	1100	Car users street	600	Car users street (Cars)	0	
	HGV/ LGV users Bus	2300	HGV/ LGV users Bus	2000	HGV/ LGV users	1800	
	passengers less P & R	3000	passengers less P & R	4300	Bus passengers less P & R	5000	
	Cyclists (not from P & R or Street)	5000	Cyclists (not from P & R or Street)	6100	Cyclists (not from P & R or Street)	6500	
	Pedestrians	3900	Pedestrians	4500	Pedestrians	4600	
	Total people	27500	Total	34500	Total	35500	
	Average Car		people		people		
	occupancy	1.45	Average Car	1.6	Average Car	1.6	
Ba Lilia III	Car users (on	40%	occupancy Car users (on	40%	occupancy Car users (on	39%	
Modal split	site)	40%	site)	40%	site)	39%	
assumptions	Car users		Car users		Car users		
(Assumes	(P&R)	4%	(P&R)	9%	(P&R)	9%	
Cambridge	Car users	4%	Car users	2%	Car users	0%	
South Station	(street)		(street)		(street)		
not open)	LGV/HGV	8%	LGV/HGV	6%	LGV/HGV	5%	
not open)	Bus	11%	Bus	12%	Bus	14%	
	passengers		passengers		passengers		
	Cyclists	18%	Cyclists	18%	Cyclists	18%	
	Pedestrians	14%	Pedestrians	13%	Pedestrians	13%	
Those figures will							

These figures will be reviewed at least every 2 years and will be updated to allow for projected future growth.

- For staff there is an expectation that from 2011 to 2020 the growth in jobs on campus will be 56%.
- Over this period the growth in peak time car traffic will be no more than 25%

This is in line with a 25% increase in jobs and no growth in peak time traffic.

Note that these numbers are approximate and will need to be checked against actual growth in numbers of people on Campus annually if possible. Note also that the car figures are not the same as car parking spaces needed on Campus which will be determined by many factors including parking space turnover and alternatives such as Park & Ride and on-street parking options.

# **Travel Plan Delivery**

The Travel Plan will be delivered in four main ways:

- 1. **On Campus.** Campus Partners will work collectively to change the environment on site to support the delivery of this Travel Plan.
- 2. **Existing Facilities on Site**. Partners already on site and who are not undertaking major new developments will use their best endeavours to deliver this Travel Plan.
- 3. **Off Campus.** Campus Partners will work collectively to influence the external environment, lobbying for actions that will be beneficial for the Campus and in line with this Travel Plan.
- 4. **New Developments on Campus.** New developments on Campus will be in accordance with this Travel Plan.

# **Travel Plan by Mode or Issue**

## **Summary**

The plan sets out the need for change across the whole Campus and the proposed approach off and on Campus by mode and issue. These are then summarised in tables at the end of the document, linked with annual action plans.

The plan sets out significant changes that are needed, with a number of urgent actions needed to address the major challenges for the Campus associated with the growth due in 2018. The plan is not a funded plan so delivery will be challenging.

Some of the major issues highlighted in the plan are:

- Securing additional Park and Ride spaces and services.
- Creating two New Bus Hubs on Campus (a Guided Bus Hub and a Main Bus Hub) and undertaking works to improve bus flows on the Campus as well as to and from the Campus.
- Working with the bus operators to develop new routes and improve services for people working on shifts.
- Looking at how cycling can be improved on and off the Campus: from cycle lanes to parking.
- Improving the walking environment on Campus.
- Bringing forward a Cambridge South railway station.
- Encouraging greater car sharing across the Campus.
- Reviewing parking options and parking policies.

# **Emergency Services**

#### The Need for Change

Greater Cambridge is growing and if this does not happen in a well-managed sustainable way there is a danger that congested conditions will delay ambulances and other emergency services.

Papworth Hospital, Cambridge University Hospitals and the`East of England Ambulance NHS Trust provide a vital service to the local community and the Region. Good and easy access to the site for ambulances will always be a top priority. At times ambulances can get held up in traffic on Campus. If traffic levels on Campus grow this could get worse.

At times ambulances cannot get easy access to Hospital entrances due to the number of vehicles and other activity in the immediate vicinity, both on and off the Campus.

#### **Proposed Approach off Campus**

Campus partners will encourage and support measures that reduce congestion particularly in areas where access for emergency services would be difficult otherwise.

Campus partners will monitor any proposed changes to the public highway to ensure that good access for emergency services is maintained.

#### **Proposed Approach on Campus**

Infrastructure on Campus will allow the easy movement of emergency service vehicles to all parts of the Campus and in particular provision will be made for easy access for ambulances to all patient access points.

Any road closures for construction works or as part of long term changes will allow for easy movement of emergency service vehicles.

Priority will be given to:

- ensuring that construction works allow for the movement of ambulances.
- ensuring that as the Campus grows the changes in traffic flows do not interrupt the movement of ambulances.
- addressing the delays that can occur in the vicinity of Car Park 1, the ambulance centre, Car Park H and the main Hills Road entrance.
- ensuring that parked vehicles do not block access for ambulances.

# **Walking and Running**

#### The Need for Change

- For health and transport reasons the Campus encourages walking and running. Walking is simple, free and one of the easiest ways to get more active, lose weight and become healthier. It is underrated as a form of exercise, but walking is ideal for people of all ages and fitness levels who want to be more active. Regular walking has been shown to reduce the risk of chronic illnesses, such as heart disease, type 2 diabetes, asthma, stroke and some cancers. (Source NHS Choices).
- Walkers are concerned about their walking environment feeling under threat from motorised traffic and in places cyclists.
- Walking infrastructure off and on Campus is poor in places.
- The walking environment on Campus is very variable, due to the way that the Campus has developed over many years. For a visitor the site layout can be confusing and the best walking routes are not always obvious. There are a number of zebra crossings and signalled junctions on Campus. The roads are designated as 20 mph, but the nature of the roads is very variable. There are footways besides some roads but not along all and there are dropped kerbs in some areas, but not others. There are barriers on some footways and access for those with mobility or visual impairments is difficult in places.
- As the Campus grows the quality of the walking environment is becoming increasingly important with people sometimes needing to walk significant distances across Campus to access services or to get between public transport interchanges and their place of employment.
- The walking environment is important for public transport users and binds together much of the Travel Plan and a poor walking environment could put much of the Plan at risk.

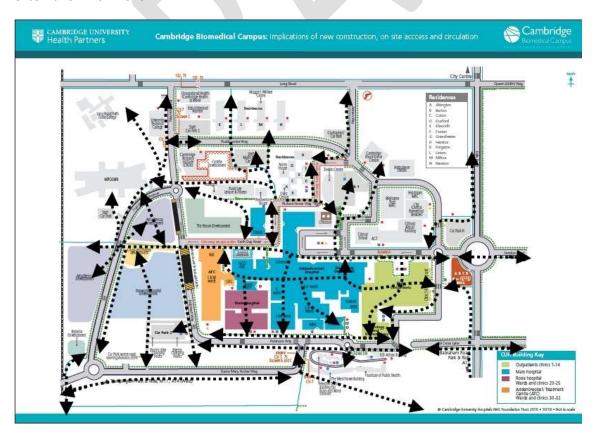
Walking is a good option for getting to Campus from Great Shelford, Babraham Road Park & Ride site, Trumpington Park & Ride site, from Cambridge City Centre, Cambridge Station and much of the southern part of Cambridge. A number of staff run to work and this can be done from a wider area. Walking and running is to be encouraged.

#### **Proposed Approach off Campus**

In order to encourage walking the following infrastructure improvements are proposed off campus (in no particular order):

- Add new signage/ wayfinding to Campus, particularly in the vicinity of Cambridge station.
- Complete new path between Campus and Babraham Road (through Nine Wells Development).
- Widen existing Babraham Road path to link above path with Babraham Road Park & Ride site or construct new wider path.
- Surface existing path between busway path and Foster Road, Trumpington.
- Widen existing Shelford Genome path.
- Make changes to the busway path to improve the environment for pedestrians, possibly adding a new parallel path in places.
- Improve crossing of Hills Road by Hills Road roundabout.
- Improve Queen Edith's Way/ Fendon Road roundabout for walking.
- Improve walking provision along main corridors by completing Hills Road and Queen Edith's Way schemes.
- Additional schemes as opportunity and need arises.

An illustrative plan of some of the key walking routes on Campus is shown below. This illustrates the importance of routes across sites and within buildings as well as the importance of routes in the external environment.



#### **Proposed Approach on Campus**

In order to encourage walking the campus infrastructure needs to be brought in line with best practice and should be amongst the best provision in Greater Cambridge. Whilst site expansion works are underway any interim arrangements will need to consider carefully the needs of pedestrians and wherever possible minimise diversions and the risks of potential conflict including those with cyclists. Guidance documents will include Manual for Streets 1 and 2, best practice guidance for Cambridgeshire and NICE Guidance PH 31 and PH 41.

The following infrastructure improvements are proposed on campus in no particular order:

- Provision of high quality walking environment within new developments including the Circus/ Piazza
  and a new path as part of the Capella development to link the Oval near the Frank Lee Centre with
  Robinson Way.
- Removal of guardrailing and reconfiguration of the main Hills Road entrance and the Campus flagpole roundabout to create a more pedestrian friendly environment.
- Traffic calming works on Robinson Way to transform it into a safer 20mph road environment including:
  - o the addition of raised zebra crossings, in two locations near Puddicombe Way.
  - the addition of a new zebra crossing near the Francis Crick Avenue roundabout to align with the new Capella path.
  - o alterations to junctions including the roundabout at Francis Crick Avenue junction.
  - o changes to surfacing including road markings.
  - the provision of a footway along the western side of Robinson Way from Long Road to MRC LMB.
  - o the provision of a footway over the southern side of the road from Dame Mary Archer Way to Red Cross Lane, with new path to Red Cross Lane.
  - o improvements to crossing arrangements on Robinson Way near the Forvie site entrance.
  - the addition of raised crossings and flush kerbs at all side road crossings.
  - changing priority at Keith Day Road junction with Robinson Way so that the main walking and bus route has priority.
- Works on Francis Crick Avenue and Dame Mary Archer Way to include:
  - o reviewing road markings and changing as required.
  - o possible calming measures to reduce vehicle speeds.
- Works on Richard Howe Way to provide raised crossings of side road junctions and flush kerbs in line
  with the footways and a raised crossing of the Frank Lee Centre car park entrance area.
- Works on the Main Drive to:
  - ensure that dropped kerbs are flush.
  - remove inappropriate cycle routes and dedicate these as footways, in line with cycling upgrade actions.
  - review all barriers, benches and planters to ensure that they are in line with best practice for the visually impaired.
- Works on Keith Day Road to:
  - o provide a raised footway across S Block cycle parking entrance.
  - o provide a raised crossing near the Hospital rear entrance.
  - o ensure continuity of footways near the hospital rear entrance.
  - ensure that all barriers, benches and planters are in line with best practice for the visually impaired.
- Review of paths between Puddicombe Way and Keith Day Road and changing as required.
- Waymarking of routes around Campus integrated with waymarking inside buildings.

## **Cycling**

#### The Need for Change

- For health and transport reasons the Campus wants to encourage cycling. Cycling has a big potential to increase for local trips and as part of multi-modal trips such as cycling from the train station or local Park & Ride sites for instance.
- Many people are put off cycling by concerns about safety, worries about bike theft, because
  of a lack of confidence or perhaps because they do not know the best routes.
- The cycling environment on Campus is variable, due to the way that the Campus has developed over many years and as the Campus continues to develop changes to this infrastructure can impact on cycle routes and cycle parking. Cycle parking is also variable with some excellent provision and some areas where provision is inadequate.
- As the Campus grows and the partners seek to increase cycling's modal share the quality of provision is becoming a major issue, especially given the significant improvements that are taking place off campus.
- In order to encourage cycling, the cycling infrastructure needs to be brought in line with best practice and should be amongst the best provision in Greater Cambridge. It should be noted that in many ways Cambridge is a long way ahead of the rest of the country and the kind of provision that is needed to encourage cycling on Campus is likely to be more akin to Continental standards than to the kind of provision that has often been typical in the UK. Current provision on Campus is generally not up to the standard of new infrastructure on the public highway such as on Hills Road.
- If the cycling environment on Campus is not improved it is unlikely that the ambitious plans to increase the modal share of trips to Campus by bike will be achieved.
- There is currently no permanent bike maintenance facility on Campus.
- The facilities for those arriving on site by bike are variable, with some people having no access to storage lockers and a lack of drying and shower facilities.

Cycling has good potential to grow and Cambridgeshire County Council has ambitious plans to see cycling increase significantly. This will need a concerted effort.

Cycling is already one of the most popular ways for staff to travel to the Campus and it has good potential to grow. Cycling is a good option for travelling to the Campus from the whole of Cambridge and from numerous villages around Cambridge. Many people regularly cycle 10 miles or more and Cambridge already has some of the best facilities in the country.

## **Proposed Approach off Campus**

In order to encourage cycling the following infrastructure improvements are proposed off campus (in no particular order):

- New signage to Campus, particularly in the vicinity of Cambridge station.
- Complete a new path between Campus and Babraham Road through Nine Wells Development.
- Widen the existing Babraham Road path to link above path with Babraham Road Park & Ride site or construct new wider path.
- Widen the existing Shelford Genome National Cycle Network (NCN) path.
- Surface the existing path between the Guided Busway path and Foster Road, Trumpington.
- Improve the crossing of Hills Road (between the Campus and Fendon Road) by Hills Road roundabout.
- Improve Queen Edith's Way/ Fendon Road roundabout for cycling.
- Improve cycling provision along main road corridors by completing Hills Road, Cherry Hinton High Street, Huntingdon Road, Histon Road, Milton Road and Queen Ediths Way schemes to a high standard.
- Complete Chisholm Trail for better links with north Cambridge.
- Complete A10 cycle route linking with all communities along A10 corridor including a route through Trumpington Park & Ride site.
- Add new village links particularly to those villages within 5 miles of Campus, including Haslingfield, Barton, Comberton, Sawston and Fulbourn.
- Complete 3 Campus cycle route linking Babraham Institute, Granta Park and CBC with a high quality route.
- Additional schemes as opportunity and need arises.

#### **Proposed Approach on Campus**

Within new developments there are opportunities to make good provision for cyclists and these opportunities should be taken. On Campus most cycling is likely to be on Campus roads and it important that these are safe for cycling. Where appropriate new cycling infrastructure on new roads (or existing roads that are being improved) should be to a similar standard to the provision on Hills Road. Unless there are exceptional reasons cycling should be two-way on all roads including one-way streets and all roads should be designed for 20 mph. Whilst construction works are underway any interim arrangements will need to consider carefully the needs of cyclists and wherever possible minimise diversions and the addition of unnecessary barriers as well as minimising the risks of potential conflict including with pedestrians. Cycle parking should be as close as possible to major destinations. Guidance documents will include Manual for Streets 1 and 2, best practice guidance for Cambridgeshire and Nice Guidance PH 31 and PH 41.

The following infrastructure improvements are proposed on Campus in no particular order:

- Provision of high quality cycling environment within new developments.
- Removal of guardrailing and reconfiguration of the main Hills Road entrance and the Campus flagpole roundabout to create a more cycle friendly environment.
- Establishment of two-way cycling on all roads with or without special provision. Particular attention will need to be paid to the road between the Main Drive, near the Clinical School Main Entrance, and the ramp to the Service Yard.
- Look at options for a major redesign of the Main Drive linked with development and bus infrastructure.
- Improvements to the road environment to reduce traffic speeds and ensure that 20 mph designated roads are 20mph roads.
- Provision of flush kerbs at all interfaces between on and off-road provision.
- Waymarking of cycle routes in accordance with highway standards.
- Removal of barriers at the car park H shared use entrance to site.
- Reconfiguring the Adrian Way junction to allow cyclists to turn right at the junction with Long Road.
- Changes to the Red Cross Lane entrance to allow cyclists to enter/ exit site from that direction, with ease.
- Changes to the Addenbrooke's Road roundabout to improve linkages between on-road and off-road cycle provision in the vicinity.
- Addition of a new cycle path to link Dame Mary Archer Way with Robinson Way, near Car Park 2.
- Major increases in cycle parking provision to ensure that within every area of the site there
  is space for staff to park and space for visitors to park their bikes.
- Establishment of a permanent bike maintenance facility open at least 5 days per week.

## **Cycle Parking**

## The Need for change

- There is a shortage of cycle parking spaces on Campus, particularly in some key areas.
- There is a shortage of gated cycle parking areas and some existing gated parking areas lack CCTV and other security measures.
- Lack of cycle parking spaces means that bikes are left in inappropriate locations creating potential hazards and causing friction amongst staff, patients and visitors.
- Lack of cycle parking is a deterrent to people cycling. However cycling is a priority mode of transport to/from the Campus.
- Where bikes are parked against stands they are often parked in an untidy manner, reducing space for other cycle users.
- Need to allow for existing demand and an increase in the number of bikes on site.
- Cycling is a healthy activity and the Campus wishes to be an exemplar site that encourages cycling and sets a good example.
- There is a shortage of identified land for cycle parking and suitable locations need to be identified and protected.
- There is currently no Campus standard for cycle parking.

People will choose to cycle if it is a convenient and attractive option for them, but this is a personal decision and a matter of habit. Campus partners will:

- Provide sufficient cycle parking so that most staff can usually park their bikes in a gated area near their workplace.
- Provide sufficient cycle parking in prominent and convenient locations for patients and visitors to use.

- Numbers of cycle parking spaces are to be reviewed as cycling increases and are to
  exceed the City Council standard for new buildings. This should allow for at least 45% of
  staff cycling, based on maximum numbers of staff in work on any one day. For visitors
  and patients numbers of spaces are to allow for at least 15% of visitors and patients
  arriving by bike and assume that any one space can be used three times per day.
   Numbers are to be based initially on the following schedule, which will be complimented
  by detailed work on exact locations and numbers of proposed cycle parking.
- Gated staff cycle parking areas are to be adequate to allow most staff to park in a gated area, that can only be entered using a security fob or similar methods. Doors that open automatically are preferred, but in any case doors need to be easy to operate by someone who will be holding a loaded bike.
- Where possible and appropriate staff secure compounds will include or be positioned close to showers and lockers and will include provision for charging of electric bikes.
- Open cycle parking is to be in prominent locations and covered by CCTV cameras where possible.
- For new provision two-tier cycle parking will be preferred as long as it is appropriate to the area, is covered and is to a good standard and at least of similar quality to that at Cambridge train station.
- Where two-tier cycle parking is not appropriate adapted Sheffield stands with front
  wheel fixing of variable height will be acceptable for new provision. This is to be
  galvanised or stainless steel and at least of similar quality to that in Cambridge city
  centre.
- Designated areas are to be provided around Campus with easy access and a suitable arrangement for locking bikes for the use of cargo bikes, tricycles, cycles for those with disabilities etc. The area is to be designated with suitable signing.
- Cycle parking numbers on Campus are to be regularly reviewed to ensure that there is adequate provision and that new developments provide sufficient new cycle parking to the appropriate standard.
- Where new developments or temporary works remove spaces where bicycles have been
  parked an equivalent number of new cycle parking spaces will be provided nearby either
  on a temporary or permanent basis, as appropriate. Spaces where bicycles have been
  parked shall include official cycle parking and bikes parked in the vicinity elsewhere and
  will be based on the Hospital's monthly cycle count data or equivalent data.

The proposed cycle parking standard is that all new cycle parking is to fall into three categories:

1. The preferred cycle parking is to be two-tier with both top and bottom layers having multiple locking positions and cycle parking positions being of variable height to allow high density parking. The top tier is to include a mechanism and suitable handles for easy operation. The mechanism including any damper system is to be durable and tested with the expectation that it will not have to be replaced for at least 10 years. This cycle parking is to be covered. This type of cycle parking is now in use at Cambridge Station and any cycle parking on Campus is to be at least of similar quality.

Two tier cycle parking is only to be installed in areas where there is sufficient space and height and where it is appropriate i.e. in particular the cycle parking should not obscure important views and needs to fit in with the landscaping. Two tier cycle parking should not be installed so close to important access routes that the top tier rack could block an access route or footway if left in the down position.





**Cambridge Train Station** 

Norwich Train Station (with covered two-tier parking)

2. Adapted Sheffield stands with front wheel fixing. This fixing is to be in different positions on each side of the stand. The stands are to have multiple locking positions and are to allow bikes with baskets to be easily parked adjacent to each other with a minimum separation of 0.9m between stands. These are now common in Cambridge city centre. The finish is to be galvanised or stainless steel. This cycle parking is to usually be covered but if this is not appropriate for its setting uncovered is acceptable.





Cambridge City Centre

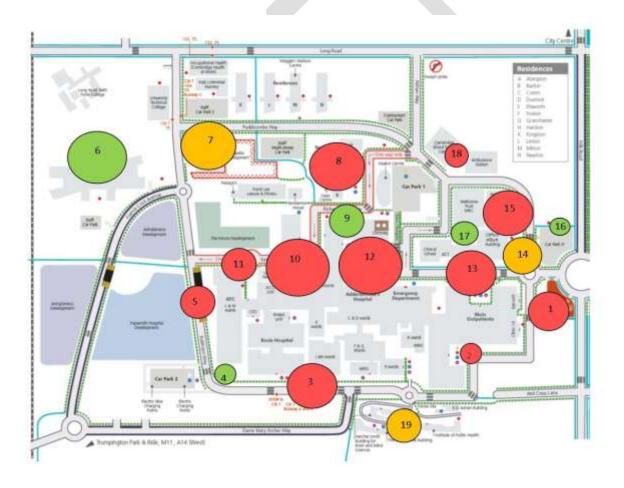
Cambridge City Centre

3. A designated area with easy access and a suitable arrangement for locking bikes to be kept for the use of cargo bikes, tricycles, cycles for those with disabilities etc. The area is to be designated with suitable signing.

In the 2015 Travel survey there were 8815 staff on site during the day which would suggests a need for 4,000 spaces, based on 2015 numbers. There were 14,518 patients and visitors during the day that would equate to 725 spaces for patients/ visitors. These figures are for the existing Campus and suggest 4,700 spaces are needed now. There are currently approximately 3000. This is in addition to the spaces already allowed for by Papworth Hospital, AstraZeneca, Abcam and Capella.

The best location for cycle parking is the location that is the most convenient. For many hospital and other buildings there are numerous entrances and the best location may depend on how cyclists approach the building, which may vary as new routes are opened. Unless there is clear evidence otherwise the best evidence of where there is demand for cycle parking is likely to be the historical cycle count data that has been collected for many years.

The main existing cycle parking locations that are counted regularly are indicated in the following plan. The numbers within the circles relate to the Reference number in the following table.



The size of the circle relates to the recommended number of spaces in any one area. Provision in red areas is below the recommended level and in green areas is currently sufficient.

16	Car Park H	60	43	60
17	Between Clinical School and	90	10	90
	Wellcome Trust			
18.	Blood donor centre	57	70	110
19.	Forvie Site	186	155	186
TOTAL		2973	3151	4768

## **Bus**

## **The Need for Change**

- Bus travel in Cambridge has suffered due to congestion in the City, which makes it difficult to run reliable and efficient services. Other known congestion points include the A1307 at Linton, the A10 from the south and Junction 11 on the M11, as well as many roads around Cambridge. In order to improve bus services buses need to be able to run on uncongested roads and will need to have priority over other traffic in places.
- For CBC the current bus ticketing structure is an issue. The cost of using the Guided Busway
  from Trumpington differs from the cost of using standard Park & Ride Services and
  Stagecoach only has two standard ticketing zones.
- Real Time Passenger information for buses is not reliable at present, as congestion is not adequately accounted for and thus it is not easy to be sure when your bus will arrive.
- Double decker buses cannot use the Busway between Trumpington and Cambridge Station and this restricts the service options and may mean that interchanging between buses is needed. This is not generally a popular option.
- The Busway includes a stretch of single-way working which could limit the numbers of buses that can run between Trumpington Park & Ride site and CBC unless carefully managed. This is not an issue at present, but may become one if services grow significantly.
- Bus services to the Campus are very good from some locations, but are not good for all staff, patients and visitors.
- Bus services in the early morning and evening are limited, meaning that some staff do not have the option of using a bus to get to and from work.
- Many people are reluctant to use buses for a variety of reasons.
- New infrastructure is needed on the Campus to allow for significant increases in numbers arriving on by bus and more buses arriving on the Campus.
- There is a need to allow for the growing Campus and in particular the shift in the centre of population further towards the west of the Campus.
- The bus station is not to modern standards and needs changing.
- Bus stops are not up to modern standards and need updating.
- There is congestion around the Hills Road entrance. Congestion causes unreliable bus services and is a deterrent for bus operators and bus passengers.
- There is congestion on Campus particularly around the Car Park 1 entrance which deters bus operators from providing services around Campus.
- In some areas (including the Main Drive) buses can only travel in one direction meaning that bus routing can be hard to understand.
- The size of the Campus is such that operators are reluctant to run services around the whole Campus, due to the time taken.
- It is not always easy to find bus stops or know where to get your bus from.
- The opening of a new Cambridge South Station and a Cambridge North Station could significantly change travel across the city with opportunities for new bus-rail interchange and a means for rapid travel across the City by rail.

Travelling by bus is already a popular way to get to Campus despite the difficulties of reliability that bus companies have faced over recent years due to congestion and the challenges caused by major construction projects. The services are delivered by the bus companies with the majority of services provided by one operator.

## **Proposed Approach off Campus**

In order to encourage bus travel services need to be improved and increased bus services will be encouraged. Campus partners will work with the operators to seek to address the needs of the Campus. Campus partners will work with the highway authority and others to support measures that tackle congestion and improve the flow of buses.

The following additional services will be encouraged, in addition to existing provision in no particular order:

- Services that provide for the majority of shift patterns on site i.e. arrive on site for 06:45 with services leaving site up until at least 20:45 Monday to Friday and with reasonable weekend services.
- Increased services from the City Centre along Hills Road.
- A more direct service with Shelford and Sawston.
- A service that links Great Kneighton with Campus.
- A regular service that links Cottenham and Histon and Impington with Campus.
- Additional direct services from Waterbeach and Milton to and from Campus.
- A new direct service from Papworth and Cambourne to Campus potentially extending to Huntingdon and St Neots, with support for the highway and busway measures needed to improve these services.
- Additional services along the A10 corridor including early morning services from the Royston area.
- Additional services along the A1307 corridor including an earlier morning rapid service from Haverhill.
- Improved links with the various southern Campus sites including potentially sharing bus services.
- New services to connect with new train services following the opening of Cambridge North and Cambridge South railway stations.

Campus partners will encourage quality provision by bus operators and where Campus partners are not satisfied with the quality of provision they may choose to restrict access to Campus for unsuitable vehicles.

Campus partners will lobby for changes to bus ticketing that are beneficial for Campus staff, visitors and patients.

Campus partners will work with Cambridgeshire County Council and others to improve the reliability of Real Time Passenger Information (RTPI).

Where a bus interchange is likely to be needed Campus partners will lobby for convenient locations and good timetabling so that journeys connect seamlessly.

Bus services are provided by private operators either on a commercial basis or as part of contracted services, so Campus partners can influence but cannot control all services. Campus partners will:

- Create conditions that encourage more and better bus services.
- Create conditions that encourage more staff, patients and visitors to use the available bus services.

## **Proposed Approach on Campus**

- Liaise with bus operators, Cambridgeshire County Council and others to encourage more and better bus services.
- Identify standards for bus stops and waymarking to be used across the Campus.
- Improve the existing bus station or close it and instead provide suitable bus stops and
  road infrastructure (including changing the Hills Road entrance) to encourage buses to
  use bus stops closer to the hospital main entrance and preferably along the Main Drive.
  This is likely to be dependent on Campus Masterplanning and may well not be
  achievable in the short term, so an interim/ alternative solution may be required.
- Subject to further studies introduce two-way bus flow on the Main Drive and between Car Park 1 and the Main Drive.
- Provide suitable bus stops and road infrastructure that allow Guided Buses to be focused at the western side of the Hospital and the Circus to give rapid and frequent links with the Busway.
- Provide suitable bus stops and road infrastructure to encourage as many buses as possible to circulate around the Campus.
- Improve walking routes on Campus and in particular routes to bus stops.
- Improve waymarking to bus stops on Campus including inside buildings, where appropriate.
- Improve promotion of bus services by working with staff, patients and visitors and ensuring that information provided is up-to-date, useful and promotes the benefits of bus travel
- Regularly review the infrastructure on site and how people and buses are managed, particularly at peak times, taking action as necessary.

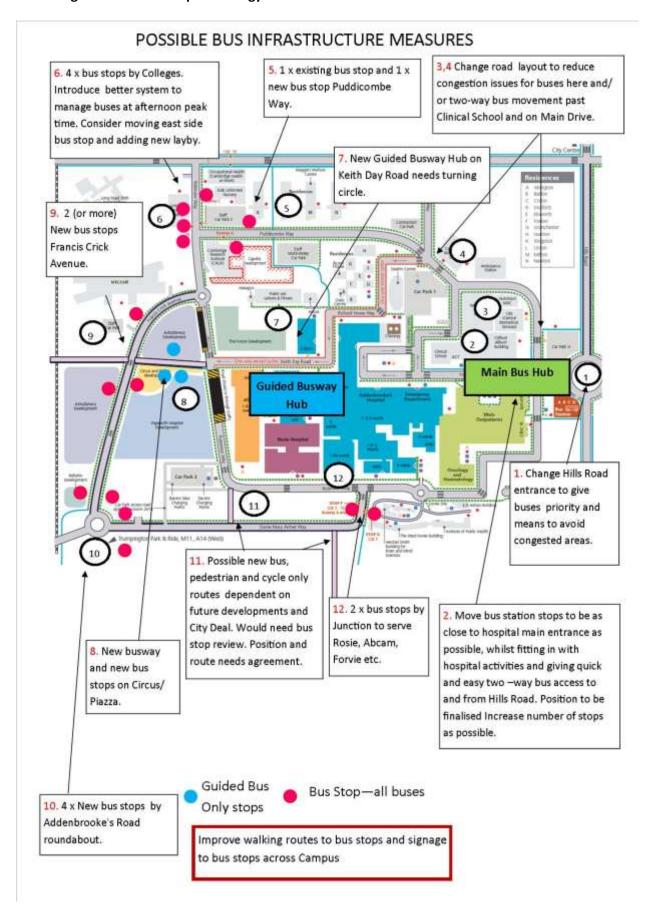
All bus stops will be to a modern standard with seating and Campus standards will be agreed for Guided Busway and standard buses. Guided Busway bus stops will match the new bus stops to be installed in the Circus area. All bus stops will have Real Time Passenger Information and shall include up to date stop specific timetables. A video screen or other system may be included to promote bus travel, campus activities and messages. Sponsorship of bus stops will only be considered if it is in line with Campus policies and health messages. Bus stops will all include raised kerbs in the correct location to allow easy access for wheelchairs, pushchairs etc.

Particular actions that have already been identified as part of the above approach are:

- Remodelling of the Hills Road entrance to ensure that buses have priority and easy
  access to Campus. This could potentially create a bus, cycle and ambulance priority
  route as a continuation of the Main Drive.
- Remodelling of the Main Drive to allow for 2—way bus access along as much of the Main Drive as possible, including the addition of a bus turning circle and Bus Hub on the Main Drive. This is subject to this linking in with masterplanning and hospital operational needs.
- The addition of a bus turning circle and creation of a Guided Busway Hub on Keith Day Road.
- The remodelling of the area by the Blood Donor centre and Car Park 1 with the aim that buses are not delayed by cars queuing to enter the car park. This will need detailed design work, but is likely to involve creating turning and waiting space for cars entering the car park in order to keep clear space for buses and ambulances.

Potential bus stop locations and other bus measures are indicated on the following page:





- Bus stops standards need to be agreed as soon as possible, as well as interim and long term arrangements for bus stops.
- Improve walking routes to bus stops and signage to bus stops across Campus.

Ref.	lte m	Action	Time scale	Comment
1	Change Hills Road entrance and approach to Main Drive.	Highway and off-highway changes.	Medium Term	Linked to A1307 and possibly to development plans. Landtake, funding and design needs to be agreed.
2	Create new Bus Hub at Hills Road end of Campus.	Close bus station. New stops to be as close to hospital main entrance as possible.	LongTerm	Linked to A1307 and to Campus masterplanning. Landtake, funding and design needs to be agreed.
2	Improve/ redesign bus station and bus stops at Hills Road end of Campus.	Relocate bus station or redesign existing.	Medium term	Beneficial now. Interim arrangement may be necessary depending on Hospital operational needs.
3	Address congestion issues from Car Park 1 to Hills Road.	If possible 2 –way bus movements along Main Drive and past Clinical School or re-organise traffic past ambulance station.	Medium Term	Beneficial now, but lack of space in front of Medical School and on Main Drive an issue.
4	Address congestion issues from Car Park 1 to Adrian Way.	Change Road layout and entry to car park.	Medium Term	Landtake, funding and design needs to be agreed.
5.	Additional bus stop Puddicombe Way.	Add stop to north of Puddicombe Way.	Medium Term	Not needed until bus movements change linked to 3 and 4.Landtake, funding and design to be agreed.
6.	Bus stop management.	Review safety arrange ments and working.	Medium Term	Needs to involve Colleges. Funding and scheme to be agreed.
7	Guided Busway Hub and turning circle on Keith Day Road.	Add stop, waiting area and turning circle change road layout.	Short term	Study underway . Landtake, funding and design needs to be agreed.
8.	Bus stops Circus and Piazza.	Possible changes to agreed scheme.	Short term	Study underway . Landtake, funding and design needs to be agreed.
9.	2 (or more) x stops Francis Crick Avenue.	New stops either side of busway. Needed now. Consider possible short term arrangement.	Short term	Study underway . Landtake, funding, exact position and design needs to be agreed.
9.	More Stops Francis Crick Avenue.	Need to be considered as part of station plans.	Medium Term	Await station details in Summer 2017.
10.	4 x stops by Addenbrookes Road roundabout.	New stops either side of roundabout. Preferably before Abcam starts.	Medium Term	Landtake, funding, exact position and design needs to be agreed.
11	Link road, plus changes to bus stops.	New bus road through development will change bus routes and stops.	Medium to Long Term	City Deal scheme could be for 2020. Needs to be reviewed as land develops and City Deal progresses.
12	Two bus stops currently temporary.	Make bus stops permanent subject to review (See Item 11).	Short term	Need to be agreed with CML, upgrade stops, add RTPI. Funding.

#### Rail

## The Need for Change

- As the Campus expands rail could be a good option for many staff, patients and visitors.
   However with passenger numbers growing nationally some services are congested and Cambridge Station can be very busy.
- Many places do not have direct or easy services to Cambridge.
- Cambridge Station is about 2km from Campus. There is currently no station on Campus but trains pass along the western edge of the Campus with services to and from Cambridge Station.
- A Campus Station offers a big opportunity for modal shift, by enabling more staff, patients and visitors to Campus without a car.

Cambridge Station is a major rail hub with services from across the region and fast, direct services to both London King's Cross and London Liverpool Street. Plans for a new east-west rail link with the east coast mainline and with Oxford are progressing but it will be many years before it is built. However improvements to existing services are already underway. In 2017 the new Cambridge North Station is due to open and Campus partners are working to bring forward an additional new station on Campus.

# **Proposed Approach off Campus**

In order to increase rail travel the following will be encouraged, in addition to existing provision in no particular order:

- A new Cambridge South Station on CBC land and Network Rail land with as many trains as possible stopping at the station.
- Improved waymarking and information about getting to Campus at Cambridge Station.
- Increased frequency on the Kings Lynn and Cambridge line with half hourly service all day.
- Increased services from Royston to Cambridge particularly in the early morning.
- Support for east-west rail.

An Addenbrooke's Railway Station was first given serious consideration in the 1990s, but the scheme never progressed. There is now a better opportunity than ever to bring forward a Cambridge South Station to match the Cambridge North Station that will open in 2017.

#### **Proposed Approach on Campus**

A new station will need Campus land and support and Campus partners are already working
with Network Rail and others to progress the scheme. The partners believe that using
private sector skills and private finance a new station can be opened within the period of
this Travel Plan. Some public sector finance may be needed and the scheme will need the
full support of Network Rail and the Train Operating Companies to proceed.

In order that the station can integrate well with the Campus the intention is to link it as closely as possible to Campus facilities and to provide a facility that is useful for staff, visitors and patients. The intention is not to compete with the main Cambridge Station and not to generate significant additional motorised traffic. In order to achieve this the following will be needed:

- The Station entrance will be as close to the Circus/ Piazza as possible with high quality walking and cycling routes to the entrance and across Campus.
- No station specific car parking will be provided.
- There will be restrictions on station users using Campus Car Parks.
- Drop off and pick up by private car will be discouraged.
- A Campus shuttle bus, public buses and taxis will be the only vehicles permitted near the station entrance/ exit.
- Adequate cycle parking will be needed with numbers modelled on the usage at Cambridge Station and Cambridge North so that there is adequate secure and covered cycle parking.
- All train services that pass through the station will be encouraged to stop at the station.
- There will be displays and information across the Campus promoting the station and its services.

## Park & Ride

## The need for Change

- As the Campus expands and when further restrictions are introduced to on-street parking there is likely to be additional demand for parking spaces at Park & Ride sites.
- There is concern about capacity at Park & Ride sites, particularly Trumpington, which has on
  occasions nearly been full. (The site is currently used by contractors who are not expected to
  be there long term, but Campus partners are still concerned about the ability of the site to
  cope with growth in usage.)
- In order for Park & Ride to work well there are likely to need to be more car parking spaces and more frequent bus services than at present. There will need to be a pricing structure that is more favourable to Park & Ride than driving and parking on Campus.
- The service from Trumpington to Campus on the Busway is not treated as a Park & Ride service and tickets are more expensive than Park & Ride tickets. Services on this route run every 15 minutes rather than every 10 minutes for Park & Ride. This seems likely to discourage usage of Trumpington Park & Ride site for access to the Campus.
- Following the introduction of the £1 parking charge at Park & Ride sites Park & Ride usage fell, but the income is needed to maintain the sites. The £1 charge is seen as a problem and has made use of Park & Ride more expensive than staff and visitor (1 hour) parking on the Campus.
- The last bus service to Trumpington from Campus is at 20:04 and the first service to Campus from Trumpington is at 06:42 with a later start on Saturdays and no service on Sundays. The Service from Babraham Road Park & Ride site is similar, but does include a Sunday service. Times do not suit the many staff who start work at 07:00 am.
- The 115 service from Newmarket Road Park & Ride started in 2016 was only hourly, was not been well used and is now no longer running.
- Park & Ride services no longer continue through the city centre, meaning that the Campus has no direct connection with Milton Park & Ride site.
- The existing Campus bus station is unlikely to have capacity in its current design to cope with the expected increase in bus numbers and the changes in Campus.

Park & Ride is already an important means of travel to Campus, but there is scope for significant growth, if there is adequate capacity. Trumpington and Babraham Road Park & Ride sites provide rapid connections to Campus and many staff walk or cycle from these locations.

## **Proposed Approach off Campus**

In order to increase usage of Park & Ride the following will be encouraged:

- Promotion of services from all Park & Ride sites, including Longstanton and St Ives, including details on how to interchange in the City Centre.
- Encouragement of early expansion of capacity particularly at Trumpington Park & Ride site and/or Hauxton.
- Support for a new Park & Ride site at or near the A11 Fourwentways as long as Babraham Road Park & Ride site is retained as a Park & Walk/ Park & Cycle site. If a site at Fourwentways does not go ahead support for expansion of capacity at Babraham Road Park & Ride site.
- Support for additional Park & Ride sites that could serve the Campus well, including Park & Rail.
- Increased frequency of services from Park & Ride sites, in particular from Trumpington.
- Inclusion of Busway services from Trumpington Park & Ride site in the Park & Ride ticketing structure.
- Extension of hours of services to and from Park & Ride sites including support for Sunday services. Early morning and late night services, from at least one local site.
- Support for innovative ways to improve and expand links with Park & Ride sites including testing solutions such as driverless vehicles running on the busway.
- Where bus interchange is likely to be needed Campus partners will lobby for convenient interchange locations and good timetabling so that journeys connect seamlessly.
- Changes to the payment arrangements to make it easier to pay for parking and bus services at the same time or so that parking charges are removed.

## **Proposed Approach on Campus**

 Park and Ride services will be treated in a similar way to other bus services with new arrangements for bus stops, wayfinding and with changes to the Campus bus station.

# **In Campus Transport**

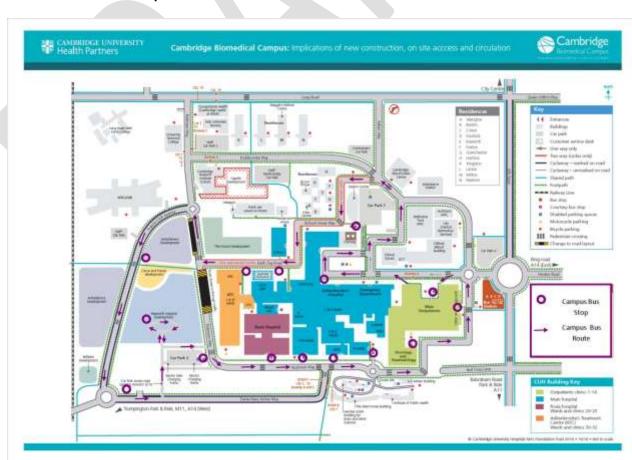
## The Need for Change

- It is nearly 1km as the crow flies from Addenbrooke's Road to Hills Road and as the Campus grows travel within the Campus is becoming more of an issue, especially for those with mobility difficulties. For most people walking is likely to be the best option, but that will not be an option for all.
- There is no significant bike share scheme on Campus that people could use to get around Campus or to travel to destinations such as the Park & Ride sites.
- Public buses are unlikely to serve all parts of the Campus. For those arriving by bus or Park & Ride there will be a need to get between bus stops and their destination.
- Future bus services between Babraham Road Park & Ride site and the Campus are uncertain. For many it is an easy walk or cycle but for others the distance is likely to be too much.
- When the Cambridge South railway station opens there will be a need to get from the station to other destinations on Campus.
- It is not possible for everyone with mobility issues to park immediately outside their nearest destination entrance and most people driving to Campus will need to park in the multi-storey car parks and will then need to get to their destinations.
- CUH runs a Patient Courtesy Bus service that runs around the hospital sites. The
  service takes patients from car parks to their destinations. Usage is not high but it
  provides an important service for its users. Due to lack of funding its future is
  uncertain.

## **Proposed Approach on Campus**

- Public buses will be encouraged to serve as much of the Campus as possible.
- A Campus bus or equivalent service that serves the main public car parks, bus stops and the main building entrances will be run and innovative ways to fund and run this service will be explored. A potential service is shown on the plan below with the preference that the service runs 7 days a week and for most of the day. The preference is that there will be two buses at least running at a maximum of 10 to 15 minute intervals. Revenue and capital funding for the service will be sought from Campus partners and elsewhere with the preference being that the service will be free to use. The preference is that the vehicles should be electric and fully wheelchair accessible with display boards in nearby buildings indicating the arrival of the next service and provision within buildings to ensure that the vehicle stops at a building when needed.
- The possibility of introducing a bike share scheme across Campus and extending to Park & Ride sites will be explored subject to a suitable funding package and system for maintaining and managing the bikes.
- The possibility of extending the Campus bus service to Babraham Road Park & Ride site and charging for tickets will be considered if there is a clear need.

## **Potential Route for Campus Bus**



Taxis and Private Hire Vehicles, Minibuses and Coaches, including Community Transport, Patient Transport, Company Transport, School Transport

## The Need for Change

- There are large numbers of private vehicles on site providing important roles in transporting patients and pedestrians, but there is very little regulation or control of these vehicles.
- The vehicles may be contributing to congestion on site.
- The vehicles may be impacting negatively on air quality on Campus.
- There are limited parking spaces available for these vehicles.
- Different Campus partners have different demands for these vehicles and there is little coordination across Campus.
- A number of these vehicles may be electric vehicles and may need charging points.
- Transport options are subject to change and people, businesses, schools and colleges may
  choose to make their own travel arrangements. Granta Park and the Wellcome Trust Sanger
  Institute both already run their own separate bus services, the University Technical College
  (UTC) and Long Road Sixth Form College also run their own bus services and some staff
  members have expressed an interest in establishing community shared transport between
  their villages and the Campus. New options may emerge.

- Consideration will be given to establishing a licensing system and minimum standards for
  passenger transport vehicles on Campus, including the possibility of charging for such a
  licence. Taxis will be expected to conform to Cambridge City Council standards. Coaches and
  minibuses will be expected to be collecting or dropping off a minimum number of people on
  Campus per visit before being considered for a licence.
- Coaches, mini buses and taxis will only be permitted on Campus to pick up or drop off staff, patients, visitors and students with business on Campus. Where these vehicles are providing Community Transport and wherever possible the service will be available for all organisations based on Campus.
- No parking will be allocated for private hire vehicles.
- Subject to funding, space will be allocated for a rapid charging point for electric taxis, that may be available for other vehicles at other times. The location will be dependent on suitable electricity supplies and the availability of land.
- Community Transport will be encouraged providing that it meets Cambridge City Council,
   South Cambridgeshire District Council and Cambridgeshire County Council standards for
   safety, insurance and vehicle emissions and any additional standards for emissions set by the
   Campus partners. The body running the service will be required to register the details of the
   service with the Campus partners and received confirmation that the service is supported.
  - If possible land will be allocated for parking, for taxis, coaches and mini buses with consideration being given to the following locations:
    - A taxi rank (for licensed vehicles only) on the Main Drive close to the Main Entrance.
    - A taxi rank (for licensed vehicles only) on Robinson Way between Francis
       Crick Avenue roundabout and Car Park 2.
    - Coach and mini bus drop off (for licensed vehicles only) and waiting on Robinson Way between MRC/LMB and Car Park 2.
    - Other locations on Campus.
- If possible space will be provided in one of the surface car parks (Car Park H or elsewhere) for patient transport vehicles to wait. Policies to govern this will be agreed and drivers will be expected to comply with standards that will be agreed.

## **Driving**

#### The Need for Change

In order to address congestion issues and in particular peak-time congestion some restrictions will need to be placed on car driving, particularly for single occupancy vehicles.

In order to address air quality and environmental issues some restrictions may be needed on certain types of vehicles.

Any restrictions may cause concerns and difficulties for staff, visitors and patients and could cause operational difficulties for the Campus.

As the Campus grows and if there is not sustained modal shift additional car parking spaces will be needed on Campus. It is a planning requirement associated with the opening of buildings currently under construction that additional car parking spaces are provided. Car parks use up valuable land on Campus.

There are concerns about traffic speeds on Campus, road safety and "rat running" where people drive through the Campus without any business on Campus.

Vehicles are changing, with the possibilities of more electric vehicles, car clubs and driverless vehicles. The safety of everyone on Campus is top priority and there is a need to regularly review and manage vehicle speeds and movements to ensure a safe environment.

Cyclists and pedestrians have expressed concerns about the road environment and this may be deterring the less confident from walking or cycling.

Air quality on site is a concern. Improving air quality is desirable and could become essential if conditions or regulations are changed.

Buses get caught up in traffic on Campus and this makes bus operators reluctant to run services around the Campus.

Ambulance movements and access to some hospital entrances can, at times, be difficult.

The Patient Courtesy Bus can sometimes find it difficult to access some areas. Patient drop-off and pick up is not always easy due to the number of vehicles parked around entrances.

Many patients and visitors have mobility issues and there is not always easy access for them.

It was a condition of the construction of Addenbrooke's Road that it should not become a through route for motorised traffic. The system has not always worked well and as a consequence there has been a lot of traffic cutting through the Campus ("rat running"), as a short cut.

It is not possible for visitors to Campus to know if there are parking spaces available until they arrive on Campus. Wayfinding directs people to the Campus rather than Park & Ride sites.

Pedestrians, wheelchair users, cyclists, motorbikes, ambulances, patient transport, private cars, taxis, private hire vehicles, minibuses, buses, coaches, freight vehicles and services/ construction/ maintenance vehicles will continue to be an essential part of the transport mix on Campus.

Driving to Campus will continue to be important and as the Campus and Greater Cambridge grow it is important that priority vehicles are able to get to Campus without major delays. It is likely that during the period of this Travel Plan various measures will be introduced to restrict the usage of private cars.

## **Proposed Approach off Campus**

Campus partners will work with the authorities to ensure that the Campus continues to operate efficiently.

Where appropriate Campus partners will work with the authorities on encouraging alternatives to driving to Campus.

In order to encourage alternatives to driving to Campus, particularly at peak times, Campus partners will look to:

- Support alternative means of transport such as walking, cycling, public transport, Park & Ride, rail, community transport, company transport and school/college transport.
- Encourage and provide incentives for car sharing.
- Co-ordinate travel provision across Campus so that where appropriate this provision can be shared across partners.
- Consider ways to reduce the impact of freight and deliveries by working together and looking at the opportunities for shared "last mile" deliveries.
- Ensure that wherever possible freight, construction and maintenance vehicle operations avoid peak times.
- Support car clubs.
- Liaise with the highway authorities regarding waymarking to the Campus and where to park, including the possibility of directing people to Park & Ride sites.

In order to minimise the environmental impact of motorised traffic Campus partners will:

- Work with the City Council to support the introduction of electric taxis to Cambridge.
- Ensure that the environmental performance of vehicles is a factor in the procurement of services such as patient and staff transport.
- Seek to minimise business miles and encourage the more sustainable travel options, for business mileage.

- Car sharing will be encouraged and all employers will consider the provision of dedicated car sharing parking spaces.
- The proposed speed limit across the whole Campus will be set at 20 mph and all new
  roads on Campus will be designed as 20 mph roads (or lower if appropriate). The
  design and layout of roads and enforcement processes will be regularly reviewed,
  with the aim of discouraging speeding. The potential to fine those who speed or to
  identify and contact those who are speeding will be investigated.
- In order to enforce a 20mph limit new Traffic Regulation Orders may need to be introduced and progress with this will be reviewed on an annual basis.
- There will continue to be restrictions on which vehicles can go where and when they can access site and this will be reviewed on an annual basis.
- Electric charging points and dedicated parking spaces will be provided in multistorey car parks with the expectation that there will be a significant growth in the use of electric cars. The number of spaces available for electric cars and the demand will be reviewed on an annual basis with parking spaces re-allocated to provide additional space for electric cars if necessary.
- Air Quality Zones may be introduced with restrictions on vehicle emissions.
- Cars will be directed to the nearest car park to their entry to site and will be discouraged from driving around Campus.
- Road signing on site will be rationalised and brought in line with Highway Standards.
- Traffic passing through the Campus is controlled through an Automatic Number
  Plate Recognition system that should lead to the issue of a fine to anyone who
  spends less than a set time on Campus. The time limit and effectiveness of the
  system will be reviewed on an annual basis and appropriate action taken to ensure
  that it operates in an effective manner.
- Disabled parking and allowance for waiting will be reviewed with priority given to keeping hospital entrances clear for ambulances, the Patient Courtesy Bus and drop off and pick up of patients. Priority will be given to changes at Outpatients and Oncology.
- Wheelchairs will be distributed in or near car parks and at or near bus stops for the use of those with mobility issues.

# Disabled Parking and Patient Drop-Off and Pick Up Arrangements

## The Need for Change

- This is a particular issue for Addenbrooke's Hospital, where there are significant numbers of visitors with mobility issues. There is not enough space for everyone to park where they would like.
- Some parking can get in the way of ambulances, the Patient Courtesy Bus and patient pickup and drop-off.
- There are serious congestion issues on the Main Drive, particularly at Outpatients and around the Addenbrooke's Main Entrance and also at Oncology.

- Changes to car parking, including disabled parking, will be planned and implemented to
  ensure that easy access is maintained to all parts of the Campus for those with the highest
  priority.
- Disabled parking spaces will be provided around the Campus and the major car parks will be served by a local Campus bus to take people across the Campus.
- Traffic will be discouraged from using the Main Drive apart from dropping off and picking up patients.
- Car parking by the Addenbrooke's Main Entrance, on the Main Drive and at Oncology will
  be relocated with the aim of creating an improved environment for pedestrians, to improve
  access for drop off and pick up of patients, for a taxi rank and for space for cycle and
  motorcycle parking. The amount of parking to be provided elsewhere will be determined
  following review.
- Wheelchairs will be provided at suitable locations around the site and as close as possible to all main disabled parking locations and transport hubs.

## **Car Parking**

#### The Need for Change

- Parking policies and practice are closely linked to the delivery of this Travel Plan. The
  introduction of parking restrictions and charges in the 1990s was a key part of the
  modal shift, which has been achieved to date. As the Campus grows, planning
  policies change and with the arrival of the City Deal it is necessary for car parking
  allocation and pricing to keep up-to-date.
- It is likely that during the period of this Travel Plan a workplace parking levy will be introduced.
- The introduction of further restrictions to on-street parking may cause people to seek to park on the Campus.
- When the new Railway Station opens on Campus there will be a need to address associated parking issues.
- There are always going to be people who need to park on Campus and effective systems are needed to prioritise parking spaces for them.
- The expansion of the Campus will increase pressure on car parking and additional car parking spaces are likely to be needed.

- Parking policies across Campus will be set by all Campus partners with the intention
  that these policies will contribute to the overall Transport Strategy in a fair manner.
  Parking restrictions and parking prices are known to be a significant factor in modal
  choice and policies will need to be set to encourage the use of alternatives to the
  private car, where this is a realistic option and to ensure that those who have the
  greatest need to bring a car onto Campus have the opportunity to park. Parking
  policies will encourage car sharing.
- Additional car parking spaces will be provided on Campus as the Campus grows. Car
  Parking allocations will be in line with Parking Strategies relating to the various
  developments and will be reviewed on an annual basis.
- The partners will ensure that any Workplace Parking Levy is well managed and complies with the City Deal requirements.
- The partners will work together to prevent uncontrolled parking on Campus so that vehicles do not park in locations not set aside for parking.
- Prior to the opening of a new Railway Station on Campus parking policies will be introduced to prevent usage of Campus car parking by those accessing the Railway Station.

For CUH and Papworth Hospital parking policies will be based on the following key principals:

- If public transport (including Park & Ride) is available it will always be cheaper for staff to use public transport than to park on site (assuming one person per car).
   Prices will be reviewed on an annual basis.
- If public transport (including Park & Ride) is available it will always be cheaper for patients/ visitors for a one day visit to use public transport than to park on site (assuming one person per car). Prices will be reviewed on an annual basis.
- Discounts and support will be available for patients/ visitors making repeat visits over a number of days. This is to be reviewed on an annual basis.
- Spaces will be prioritised for those most in need
  - ensuring that sufficient spaces are available for those staff on shifts that start or finish outside the main public transport hours with these hours being reviewed as public transport changes and at least on an annual basis.
  - ensuring that those with a disability or medical need that prevents them using public transport can find a suitable parking space.
- Car parking charges are a matter for agreement with car park operators, but the aim
  is that any income from parking charges will be used to cover the cost of providing
  car parking (including the operators costs, with any excess going to paying
  workplace parking charges (if introduced), supporting the travel costs of patients
  and visitors with the most needs and promoting and supporting walking, cycling and
  public transport.

For CUH the number of disabled parking spaces will be in accordance with NHS Guidance, but it will not always be possible to provide disabled parking spaces to match demand outside every hospital entrance. For vehicular access, priority will always be given to ensuring good access for ambulances, with the second priority being to provide space for drop off and pick up of patients.

For staff car parks shared between CUH, Papworth Hospital and University of Cambridge car parking spaces will be allocated as agreed between the organisations. Permits to use car parks will be controlled in a manner that means that the numbers do not exceed the numbers allocated for each organisation. Each organisation shall also ensure that spaces are available for priority users, when needed. For CUH and Papworth Hospital spaces will be prioritised as above. At present the main work hours served by public transport are considered to be 07:30-20:00, Monday to Friday, but it is hoped that this can be extended to 07:00-20:30.

Car Parking allocations are dealt with in Parking Strategies relating to the various developments and will be reviewed on an annual basis and as required for the Workplace Parking Levy.

# Car Park Provision as detailed in Cambridge Biomedical Campus Parking Strategy up to 2025

	Period	Spaces	Notes
Car Park H	2016	151	
Staff Multi-Storey	2016	1182	
(CRUK)			
Car Park 1	2016	1037	
Car Park 2	2016	1154	
Car Park S	2016	295	
Car Park K2	2016	35	
Car Park K3	2016	21	
LMB/MRC	2016	310	
Blood Donor Centre	2016	40	
Other parking	2016	391	
AstraZeneca Head	2018	620	AstraZeneca
Office Car Park			Parking
Abcam Car Park	2018	115	Abcam Parking
Plots 8 & 9 Car Park	2018	237	Plots 8 & 9 parking
Forum Development Car Park	To be confirmed	226	Forum will also use 120 spaces in Hospital car parks.
New Hospitals Multi-	By 2025	1200 max	Has Outline
Storey Car Park			Planning
			permission but
			may be
			changed.
Commercial Parking	By 2025	579	Commercial
			Multi-Storey on
			top of Abcam
			parking
Total	By 2025	7593	

# Car Parking Demand as detailed in Cambridge Biomedical Campus Parking Strategy up to 2025 (Staff, Patients and Visitors)

Date	Description	Total
Nov 2016	Current Usage November 2016	4616
2017	Project Gemma	48
2018	Project Capella	200
2018	Papworth Hospital	507
2018	Plots 8 & 9	237
2018	Abcam	144
2018	AstraZeneca	620
After 2018	Forum	346
After 2018	Heart and Lung Institute	101
After 2018	New Hospital buildings	186
Ongoing	Savings as a result of Travel Plan actions	-235
Unknown, after 2018	Subtotal	6770
Unknown	CBC Phase 2 Commercial	579
anticipated		
prior to		
2025		
Unknown	Additional Clinical buildings	369
anticipated		
prior to		
2025		
Ongoing	Further Savings as a result of Travel Plan actions	-125
Unknown	Total	7593
anticipated		
prior to		
2025		

## **Motorbikes**

## The Need for Change

- A small proportion of staff, patients and visitors travel to Campus by motorcycle.
   The Campus has a number of areas for motorcycle parking and will aim to maintain parking spaces in similar numbers to the number of motorbikes typically on site in 2016, with provision at new developments on top of this.
- At present there is no special provision for those arriving by motorbike to store helmets or other accessories and some similar sites have made provision.
- There is very little covered storage for motorbikes.

- Review parking spaces for motorbikes including the provision of covered spaces.
   Identify any potential for relocating spaces and adding spaces.
- The option of providing secure parking with lockers for motorbikes will be explored.
   This will need to be accompanied by a system that ensures that the spaces and lockers are correctly managed. The proposed location for an initial trial would be the Puddicombe Way motor-bike parking area, but other locations will be investigated as a possible alternative.

## **Distribution of Goods**

## The Need for Change

- There are large numbers of goods vehicles on site providing important roles in transporting goods across Campus.
- The vehicles may be impacting negatively on air quality on Campus.
- The vehicles may be contributing to congestion on site.
- Different Campus partners have different demands for these vehicles and there is little coordination across Campus.
- There are a number of schemes being developed for last mile distribution in Cambridge, including the possibility that Trumpington Park & Ride site becomes a distribution centre for such vehicles.

## **Proposed Approach on Campus**

• Consideration will be given to co-ordinating last mile deliveries on Campus, with all partners working together to minimise "white van" trips onto Campus.

# **Buildings**

#### The Need for Change

Almost all journeys start and finish in a building and the way that the buildings are equipped and the messages given, can influence travel behaviour. Some of the issues encountered include:

- Some people may want to change clothes on arrival and need suitable storage and changing facilities.
- Some people may want to wash or shower and need suitable facilities.
- In wet weather people are likely to be wet and have wet clothes, shoes and umbrellas that need to be stored and dried.
- Cycle helmets or motorcycle helmets need to be stored.
- When in a building, it is not always obvious which is the best way to go for your transport needs.

- New buildings will be equipped with shower, hair dryer and locker facilities for staff, appropriate for the numbers of staff. Where possible existing buildings will be equipped with shower, hair dryer and locker facilities for staff, appropriate for the numbers of staff.
- New buildings will be provided with pegs and hooks and adequate space to hang wet clothes.
   Where possible existing buildings will be provided with pegs and hooks and adequate space to hang wet clothes.
- Where possible suitably sized lockers will be provided for staff to store helmets either within buildings or near where motorcycles or cycles are stored.

## **Maintenance**

#### The Need for Change

- Financial pressures are putting CUH and Cambridgeshire County Council maintenance budgets under strain.
- As more and more people cycle and walk around the Campus the demands for good maintenance of infrastructure are growing.
- As the infrastructure on Campus develops maintenance demands will grow.
- Maintenance is becoming a Campus wide issue not just a CUH issue.
- Climate change may bring more extreme weather and maintenance demands.

- Those responsible will work to ensure that paths and roads are maintained as well as possible with vegetation cut back regularly, surfaces gritted, in accordance with adverse weather policies and snow cleared when necessary. (Although responsibilities vary across the Campus depending on land ownership and how maintenance responsibilities have been allocated Campus partners will work together with the aim of ensuring consistency.)
- Plans will be developed to ensure that adequate revenue funds are available to undertake work, including looking at opportunities for funding from external sources, parking revenues (where they exist) and other avenues.

# **Home Working, Travel for Work**

All partners will be expected to operate their own procedures best suited to their own operations, but there may be scope for joint working between organisations and individuals on Campus.

- Partners will prepare their own policies on homeworking and provide support as is required.
- Partners will prepare their own expenses policies and travel for work policies based on minimising the need to travel and encouraging sustainable transport.
- Partners will explore the potential for sharing journeys and sharing provision, including the potential for shared pool cars, shared pool bikes and car sharing for travel for work.
- CUH will undertake a marketing programme to increase usage of the electric staff bikes that they have available.



# **Influencing**

All partners will want to influence external partners for the benefit of their own operations, for the benefit of the Campus and the local area.

- Partners will work to encourage better transport provision and in particular better sustainable transport options for the Campus, Greater Cambridge and the local area, including options for discounted train and bus tickets for Campus staff.
- Partners will share information with regards to travel choices, including identifying the current choices available for travel to the Campus from across the Travel to Work area and identifying locations where improvements are a priority.
- Partners will meet and communicate regularly. Where appropriate partners will prepare joint responses or act together with regard to key issues or principles.
- Where one partner is representing the whole Campus that partner will ensure that there is good communication with other Campus partners and that the interests of the Campus as a whole are represented.

All partners will have important roles in influencing the travel behaviour of their own staff and visitors. Whilst this will mostly be a matter for individual partners there is potential for some joint working.

- Partners will share experiences and information with regards to promoting sustainable travel
  and where appropriate will facilitate communications between staff, patients and visitors,
  who are looking for others with similar transport needs or who may be able to provide
  support.
- Partners will work together with Cambridgeshire County Council and others to create and maintain a travel planner that is focused on promoting sustainable travel options to the Campus, including details of how to get to the different parts of the Campus.
- Partners will work with Travel4Cambridgeshire and others to jointly promote sustainable transport.
- Where appropriate partners will jointly seek funding for activities to promote sustainable transport amongst staff.
- Car sharing, car clubs or shared community transport will be promoted across the Campus. A
  system to identify when employees are living close to other employees will be developed and
  line managers will be encouraged to consider aligning the working hours of individuals who
  could benefit from car sharing.
- At key moments, such as when there is new infrastructure or major changes in the area or for new starters and new arrivals on Campus (including visitors and patients) people will be provided with information before they arrive that promotes sustainable transport. Where funding is available staff will be offered personalised travel planning before they start work on Campus, which where appropriate may include Bikeability Level 3 training or personal safety training.
- Events to promote sustainable transport will usually be promoted and organised by the employers on Campus, but on occasions joint events will be held with the aim of creating a big impact. Activities such as led walks or led rides will be promoted across Campus.
- Financial incentives will be different for individual employers to consider, but all will promote discounts for rail season tickets, salary sacrifice for bike purchase and if possible salary sacrifice or other schemes that incentivise bus travel.

## **Monitoring Progress and Keeping on Track**

Delivery of the Plan will involve many organisations internal and external and all partners will be expected to prepare an annual report on progress of the Travel Plan and any particular issues for their own organisations. This report will complement an annual report on progress prepared by the CBC Travel Transport and Sustainability Group for the Campus Delivery Group on overall delivery of the plan.

Where possible the annual travel survey will continue, with results reported as part of the annual report.

## **Proposed Approach on Campus**

- Campus Travel Transport and Sustainability (TT&S) Group will prepare an annual report on progress with the Travel Plan and will produce an updated Action Plan to complement this.
- Partners will prepare their own annual report on progress with the Travel Plan, highlighting any particular issues for their own organisations.
- Regular traffic surveys will continue and where the results are available they will be included in the annual TT&S Group report.

## **Delivering the Plan**

Campus partners will work collectively to change the environment on Campus to support the delivery of this Travel Plan.

Most of the relevant infrastructure on Campus is under the control of the Campus partners with CUH, University of Cambridge and Countryside and Liberty Property Trust being the main landowners. Campus partners have a shared interest in most infrastructure as well as some infrastructure that is specific to their own operations. Campus partners have a role in encouraging and supporting changes, as well as delivering changes.

Campus partners will work collectively to influence the external environment, lobbying for actions that will be beneficial for the Campus and in line with this Travel Plan.

Most of the relevant infrastructure off Campus is under the control of the Highway Authority (Cambridgeshire County Council), but other parties also have key roles to play including the Greater Cambridge City Deal, Cambridge City Council and South Cambridgeshire District Council, developers and landowners. Campus partners have a role in encouraging and supporting changes, but are unlikely to be directly involved in delivery.

## **Tables**

Actions are summarised by year in the following tables:

	Action Plan 2017			
Item	To Change	2017 Target	Notes	
Emergency Services	Address on- Campus congestion issues and ensure road network works well for ambulances.	Change road markings near ambulance centre and Car Park 1.	Need to ensure that emergency vehicles are given priority.	
Walking and Running	Improved walking environment near Campus.	Completion of new path through Nine Wells housing development and Red Cross Lane path.	List of priorities to be kept updated and reviewed annually.	
	Existing Campus provision not up to current standards and some infrastructure lacking. Road network does not reflect 20mph limit.	Add zebras, side road crossings, flush kerbs on Robinson Way, Keith Day Road, Richard Howe Way. Add footways along Robinson Way.		
Cycling	Improved cycling environment in area.	Completion of new path through Nine Wells housing development and Red Cross Lane path. Hills Road scheme completed with improved links on Campus.		
	Existing Campus provision not up to modern standards and some infrastructure lacking. Road network does not reflect 20mph limit.	Signing up to highway standards. Permanent bike maintenance facility open at least 5 days per week. Flush kerbs throughout. Redesign and remove barriers at Car Park H entrance. Reconfigure Adrian Way exit. New Red Cross Lane entrance open.		
Cycle Parking	Address shortage of parking spaces, security issues and quality of provision.	Review all cycle parking and identify locations for 1500 extra spaces. Replace and move some existing cycle parking. Add new parking, increasing secure parking. 500 new spaces.		

	Action Plan 2017				
Item	To Change	2017 Target	Notes		
Bus	Increased frequency and extended hours of service.	New Great Kneighton service. More direct Sawston service.	List of priorities to be kept updated and reviewed annually. Major step change needed to address 2018 growth on		
	Current bus station unlikely to be suitable for long term. Bus routes likely to change as Campus grows and City Deal and growth bring changes, so need new bus stops. Congestion on Campus causing delays to be addressed.	Identify standards for Bus stops and signage to be used across Campus. Complete Keith Day Road turning circle Bus Hub. Add bus stops across Campus in line with schedule.	Campus and driven by City Deal. Need to work with City Deal, Cambridgeshire County Council, bus operators and others to bring about change.		
Park & Ride	More frequent services, increased capacity, extended hours, change in ticketing and change in parking charges, good interchange.	New Park & Ride system working well with interchange. Earlier services from Trumpington.			
Rail	New Cambridge South Station and in mean time better links to Cambridge Station.	Completion of Cambridge Station works and new better waymarking and information. Make allowance for and encourage the early opening of Cambridge South Station. Timetabling finalised and preliminary station design agreed for Cambridge South. Continue to encourage better services to and from Cambridge.	Need to continue supporting groups making case for improved services. Timetable hard to predict due to Network Rail, train operator and planning needs.		

	Action Plan 2017			
Item	To Change	2017 Target	Notes	
Driving	Walking, cycling and public transport and shared "last mile" goods deliveries. Need to address challenges of growth, changing operations on site, new technology and the opportunities provided by City Deal and others. Need to encourage safer driving.	Road signing rationalised and brought in line with highway standards. Signing to site reviewed. Review Traffic Regulation Orders and 20mph signing across Campus. ANPR "rat running" system operating. Review of where vehicles are permitted completed.	List of priorities to be kept updated and reviewed annually. Policies and practice need to reflect priorities.	
Disabled Parking and Patient Drop-Off and Pick Up Arrangements.	It is not possible for all vehicles to park adjacent to entrances and parked vehicles are restricting access for others including ambulances.	Review and change parking arrangements at Outpatients and Oncology and on Main Drive. Progress new disabled parking, if required.	Need to keep accesses clear for priority users and provide suitable parking across growing site.	
Motorbikes	Consider providing secure lockers. Consider new or relocated parking.	Review situation. Move or add parking as agreed.	Ongoing review.	
Car Parking	Parking policies and provision will be set across Campus in line with Travel Plan and developments commitments.	CUH to complete review of parking policies and identify changes to car parking in preparation for 2018.	Need for parking on site would significantly reduce if capacity at Park & Ride sites increased and services increased.	
In Campus Transport	As the Campus increases in size travel across Campus is significant especially for some.	Continue existing Courtesy Bus and identify revenue for improved extended service.	Preference for electric/ low emission vehicle.	
Taxis and Private Hire Vehicles, Minibuses and Coaches, including Community Transport, Patient Transport, Company Transport, School Transport	There are large numbers of private vehicles on site providing important roles, but there is very little regulation or control of these vehicles. Want to encourage good provision and services.	Consider introducing licensing system. Introduce charging point for electric taxi rapid charging.	New options are likely to emerge and need to encourage good standards.	
Distribution of Goods	Determine whether there can be sharing of deliveries on to Campus	Complete review of requirements.	Potential for Hubl or others to introduce service based at Trumpington or elsewhere.	

	Action Plan 2017			
Item	To Change	2017 Target	Notes	
Buildings	Good provision for new buildings. Improve provision in existing buildings.	New buildings to be adequately equipped with showers, hair dryers, lockers, coat hangers etc Existing buildings to be adapted if possible.	For partners to deliver within their own facilities.	
Maintenance	Need to ensure that infrastructure is well maintained and that it encourages sustainable travel.	Identify revenue means to share maintenance costs across Campus.	Need to also consider potential funding sources internal and external.	
Home Working, Travel for Work	Need to ensure that sustainable travel opportunities are maximised.	Partners will prepare their own policies that encourage sustainable travel and explore opportunities for joint working. CUH will undertake a marketing campaign to promote usage of their electric pool bikes.	For partners to deliver within their own facilities.	
Influencing Staff, Patients, Students and Visitors	All partners will have important roles in influencing the travel behaviour of their own staff and visitors. There is potential for some joint working.	Identify revenue means to deliver activities. Promotion of sustainable travel with information activities, incentives etc.	For partners to deliver with their own staff, but potential for joint working with Travel4 Cambridgeshire and others.	
Influencing External Partners	Need to ensure that Campus interests and opportunities are maximised.	Partners will work together to make the case to Greater Cambridge City Deal and others for changes.	For partners to deliver within their own facilities.	
Monitoring Progress and Keeping on Track	Need to ensure that Plan is being delivered and evolves in rapidly changing times.	Annual review of progress and proposed actions. Traffic survey if possible.	Plan to operate for 5 years and needs to evolve as the Campus grows and as travel choices emerge.	

	Action Plan 2018			
Item	To Change	2018 Target	Notes	
Emergency Services	Address on- Campus congestion issues and ensure road network works well for ambulances.	Change road layout near ambulance centre and Car Park 1.	Need to ensure that emergency vehicles are given priority.	
Walking and Running	Improved walking environment near Campus.	Queen Ediths Way, Fendon Road improvements completed. Surface path to Trumpington from busway.	List of priorities to be kept updated and reviewed annually.	
	Existing Campus provision not up to current standards and some infrastructure lacking. Road network does not reflect 20mph limit.	Add zebras, side road crossings, flush kerbs on Robinson Way, Keith Day Road, Richard Howe Way. Add footways along Robinson Way. External waymarking completed. New path by Project Capella completed.		
Cycling	Improved cycling environment in area.  Existing Campus provision not up to modern standards and	Queen Ediths Way, Fendon Road improvement underway. Chisholm Trail underway. A10 cycle route improvements. Various City schemes completed. New Piazza route completed. Changes to Addenbrooke's Road		
	some infrastructure lacking. Road network does not reflect 20mph limit.	roundabout.		
Cycle Parking	Address shortage of parking spaces, security issues and quality of provision.	Replace and relocate some existing cycle parking. Add new parking, increasing enclosed parking. 1000 new spaces in addition to those provided by new developments and in addition to the 500 due in 2017.		

	Action Plan 2018			
Item	To Change	2018 Target	Notes	
Bus	Increased frequency and extended hours of service.  Current bus station unlikely to be suitable for long term. Bus routes likely to change as Campus grows and City Deal and growth bring changes, so need new bus stops. Congestion on Campus causing delays to be addressed.	New Papworth service. Better A10 services. More frequent city services and extended hours. Change road layout by Car Park 1 and Clinical School entrance and possibly on Main Drive to improve bus movements. Complete new Piazza bus stops. Complete design of new Bus Hub at Hills Road end of Campus (possibly	List of priorities to be kept updated and reviewed annually. Major step change needed to address 2018 growth on Campus and driven by City Deal. Need to work with City Deal, County Council, bus operators and others to bring about change.	
Park & Ride	More frequent services, increased capacity, extended hours, change in ticketing and change in parking charges, good interchange.	interim and final plans). 5-10 minute frequency services on busway. Routes extended beyond Park & Ride sites. Increased capacity at Trumpington/ Hauxton. Ticketing changes.		
Rail	New Cambridge South Station and in mean time better links to Cambridge Station.	Cambridge South Station works underway. Complementary measures in hand to address potential car parking and access issues for new station. Continue to encourage better services to and from Cambridge.	Need to continue supporting groups making case for improved services. Timetable hard to predict due to Network Rail, train operator and planning needs.	

	Action P	lan 2018	
Item	To Change	2018 Target	Notes
Driving	Walking, cycling and public transport and shared "last mile" goods deliveries. Need to address challenges of growth, changing operations on site, new technology and the opportunities provided by City Deal and others. Need to encourage safer driving.	Campus agreement on last mile delivery trial. Ongoing reviews of access requirements and priorities Additional 20mph signing introduced across Campus. Car sharing parking bays introduced.	List of priorities to be kept updated and reviewed annually. Policies and practice need to reflect priorities.
Disabled Parking and Patient Drop-Off and Pick Up Arrangements.	It is not possible for all vehicles to park adjacent to entrances and parked vehicles are restricting access for others including ambulances.	Add new disabled parking spaces, if required.	Need to keep accesses clear for priority users and provide suitable parking across growing site.
Motorbikes	Consider providing secure lockers. Consider new or relocated parking.	Ongoing review. Introduce trial of lockers.	Ongoing review.
Car Parking	Parking policies and provision will be set across Campus in line with Travel Plan and developments commitments.	Additional car parking capacity in place if needed. Partners to have plans in place for workplace parking levy.	Need for parking on site would significantly reduce if capacity at Park & Ride sites increased and services increased.
In Campus Transport	As the Campus increases in size travel across Campus is significant especially for some.	Introduce extended service.	Preference for electric/ low emission vehicle.
Taxis and Private Hire Vehicles, Minibuses and Coaches, including Community Transport, Patient Transport, Company Transport, School Transport	There are large numbers of private vehicles on site providing important roles, but there is very little regulation or control of these vehicles. Want to encourage good provision and services.	Introduce waiting areas in certain car parks. Introduce controlled taxi rank and parking for licensed vehicles. Review and control situation.	New options are likely to emerge and need to encourage good standards.
Distribution of Goods	Determine whether there can be sharing of deliveries on to Campus	Undertake trial of shared "last mile" deliveries.	Potential for Hublor others to introduce service based at Trumpington or elsewhere.

	Action Plan 2018			
Item	To Change	2018 Target	Notes	
Buildings	Good provision for new buildings. Improve provision in existing buildings.	New buildings to be adequately equipped with showers, hair dryers, lockers, coat hangers etc Existing buildings to be adapted if possible.	For partners to deliver within their own facilities.	
Maintenance	Need to ensure that infrastructure is well maintained and that it encourages sustainable travel.	Ensure sufficient revenue available to keep site well maintained.	Need to also consider potential funding sources internal and external.	
Home Working, Travel for Work	Need to ensure that sustainable travel opportunities are maximised.	Partners will prepare their own policies that encourage sustainable travel and explore opportunities for joint working.	For partners to deliver within their own facilities.	
Influencing Staff, Patients, Students and Visitors	All partners will have important roles in influencing the travel behaviour of their own staff and visitors. There is potential for some joint working.	Identify revenue means to deliver activities. Promotion of sustainable travel with information activities, incentives etc. With major changes to Campus in 2018 this will be a key period.	For partners to deliver with their own staff, but potential for joint working with Travel4 Cambridgeshire and others.	
Influencing External Partners	Need to ensure that Campus interests and opportunities are maximised.	Partners will work together to make the case to Greater Cambridge City Deal and others for changes.	For partners to deliver within their own facilities.	
Monitoring Progress and Keeping on Track	Need to ensure that Plan is being delivered and evolves in rapidly changing times.	Annual review of progress and proposed actions. Traffic survey important this year with major growth. Update Action Plan for 2019. Prepare and agree Action Plan for 2020, 2021.	Plan to operate for 5 years and needs to evolve as the Campus grows and as travel choices emerge.	

	Action Plan 2019			
Item	To Change	2019 Target	Notes	
Emergency Services	Address on-Campus congestion issues and ensure road network works well for ambulances.	Review provision and identify any issues and actions needed.	Need to ensure that emergency vehicles are given priority.	
Walking and Running	Improved walking environment near Campus.	Main Hills Road entrance improvements underway.	List of priorities to be kept updated and reviewed annually.	
	Existing Campus provision not up to current standards and some infrastructure lacking. Road network does not reflect 20mph limit.	Create more pedestrian friendly Main Drive. Review and consider changes to nature of Francis Crick Avenue, Dame Mary Archer Way.		
Cycling	Improved cycling environment in area.	Main Hills Road entrance improvements underway. 3 Campus Cycle Route underway. Various village links completed.		
	Existing Campus provision not up to modern standards and some infrastructure lacking. Road network does not reflect 20mph limit.	Change road layout near Clinical Schools. Change Main Campus Flag roundabout and Hills Road end of Main Drive and have 2-way cycling on all roads.		
Cycle Parking	Address shortage of parking spaces, security issues and quality of provision.	Review cycle parking and address any remaining issues.		

	Action Plan 2019			
Item	To Change	2019 Target	Notes	
Bus	Increased frequency and extended hours of service.	Ongoing reviews of services and action as necessary.	List of priorities to be kept updated and reviewed annually. Major step change needed to address 2018 growth on	
	Current bus station unlikely to be suitable for long term. Bus routes likely to change as Campus grows and City Deal and growth bring changes, so need new bus stops. Congestion on Campus causing delays to be addressed.	Change Main Flag roundabout and Hills Road end of Main Drive and create new Bus Hub, (possibly interim, subject to future developments).	Campus and driven by City Deal. Need to work with City Deal, County Council, bus operators and others to bring about change.	
Park & Ride	More frequent services, increased capacity, extended hours, change in ticketing and change in parking charges, good interchange.	Fourwentways site underway. Parking charge removed or system changed.		
Rail	New Cambridge South Station and better links to Cambridge Station.	Cambridge South Station open, with information, waymarking etc across Campus. Continue to encourage better services to and from Cambridge.	Need to continue supporting groups making case for improved services. Timetable hard to predict due to Network Rail, train operator and planning needs.	

	Action P	lan 2019	
Item	To Change	2019 Target	Notes
Driving	Walking, cycling and public transport and shared "last mile" goods deliveries. Need to address challenges of growth, changing operations on site, new technology and the opportunities provided by City Deal and others. Need to encourage safer driving.	Ongoing reviews of access requirements and priorities	List of priorities to be kept updated and reviewed annually. Policies and practice need to reflect priorities.
Disabled Parking and Patient Drop-Off and Pick Up Arrangements.	It is not possible for all vehicles to park adjacent to entrances and parked vehicles are restricting access for others including ambulances.	Ongoing reviews of requirements and opportunities for new/revised provision.	Need to keep accesses clear for priority users and provide suitable parking across growing site.
Motorbikes	Consider providing secure lockers. Consider new or relocated parking.	Ongoing review.	Ongoing review.
Car Parking	Parking policies and provision will be set across Campus in line with Travel Plan and developments commitments.	Successful introduction of workplace parking levy, subject to City Deal programme and requirements.	Need for parking on site would significantly reduce if capacity at Park & Ride sites increased and services increased.
In Campus Transport	As the Campus increases in size travel across Campus is significant especially for some.	Sustain and review extended service.	Preference for electric/ low emission vehicle.
Taxis and Private Hire Vehicles, Minibuses and Coaches, including Community Transport, Patient Transport, Company Transport, School Transport	There are large numbers of private vehicles on site providing important roles, but there is very little regulation or control of these vehicles. Want to encourage good provision and services.	Review and control situation.	New options are likely to emerge and need to encourage good standards.
Distribution of Goods	Determine whether there can be sharing of deliveries on to Campus	Ongoing review and actions.	Potential for Hubl or others to introduce service based at Trumpington or elsewhere.

Action Plan 2019			
Item	To Change	2019Target	Notes
Buildings	Good provision for new buildings. Improve provision in existing buildings.	New buildings to be adequately equipped with showers, hair dryers, lockers, coat hangers etc Existing buildings to be adapted if possible.	For partners to deliver within their own facilities.
Maintenance	Need to ensure that infrastructure is well maintained and that it encourages sustainable travel.	Ensure sufficient revenue available to keep site well maintained.	Need to also consider potential funding sources internal and external.
Home Working, Travel for Work	Need to ensure that sustainable travel opportunities are maximised.	Partners will prepare their own policies that encourage sustainable travel and explore opportunities for joint working.	For partners to deliver within their own facilities.
Influencing Staff, Patients, Students and Visitors	All partners will have important roles in influencing the travel behaviour of their own staff and visitors. There is potential for some joint working .	Identify revenue means to deliver activities. Promotion of sustainable travel with information activities, incentives etc. With potential introduction of workplace parking levy this could be a key period.	For partners to deliver with their own staff, but potential for joint working with Travel4 Cambridgeshire and others.
Influencing External Partners	Need to ensure that Campus interests and opportunities are maximised.	Partners will work together to make the case to Greater Cambridge City Deal and others for changes.	For partners to deliver within their own facilities.
Monitoring Progress and Keeping on Track	Need to ensure that Plan is being delivered and evolves in rapidly changing times.	Annual review of progress and proposed actions. Traffic survey if possible. Update Action Plans for 2020, 2021.	Plan to operate for 5 years and needs to evolve as the Campus grows and as travel choices emerge.

Action Plan Long Term				
Item	To Change	Long Term Target	Notes	
Emergency Services	Address on- Campus congestion issues and ensure road network works well for ambulances.	Change Hills Road entrance and create dedicated ambulance and bus route to entrance.	Need to ensure that emergency vehicles are given priority.	
Walking and Running	Improved walking environment near Campus.	Need to widen paths and generally improve routes.	List of priorities to be kept updated and reviewed annually.	
	Existing Campus provision not up to current standards and some infrastructure lacking. Road network does not reflect 20mph limit.	Change Main Campus Flagpole roundabout and Hills Road end of Main Drive.		
Cycling	Improved cycling environment in area.  Existing Campus provision not up to modern standards and some infrastructure lacking. Road network does not reflect 20mph	Variable standard of routes in City and lack of routes to some villages needs to be addressed. Change Hills Road entrance and create dedicated cycle route to entrance. New path Dame Mary Archer Way to Robinson Way.		
Cycle Parking	limit.  Address shortage of parking spaces, security issues and quality of provision.	Keep provision under review.		

Action Plan Long Term				
Item	To Change	Long Term Target	Notes	
Bus	Increased frequency and extended hours of service.	Ongoing reviews of services.	List of priorities to be kept updated and reviewed annually. Major step change needed to address 2018 growth on Campus and driven by City Deal. Need to work with City Deal, County Council, bus operators and others to bring about change.	
	Current bus station unlikely to be suitable for long term. Bus routes likely to change as Campus grows and City Deal and growth bring changes, so need new bus stops. Congestion on Campus causing delays to be addressed.	Change Hills Road entrance and create 2 way priority bus route to Main Drive.		
Park & Ride	More frequent services, increased capacity, extended hours, change in ticketing and change in parking charges, good interchange.	Major shift to Park & Ride and capacity in place to cope.		
Rail	New Cambridge South Station and in mean time better links to Cambridge Station.	Half hour frequency Kings Lynn trains all day and early morning Royston service. Support for east-west rail and 4 tracking line. Need to assume that there will be changes if 4 tracking is introduced.	Need to continue supporting groups making case for improved services. Timetable hard to predict due to Network Rail, train operator and planning needs.	

Action Plan Long Term				
Item	To Change	Long Term Target	Notes	
Driving	Walking, cycling and public transport and shared "last mile" goods deliveries. Need to address challenges of growth, changing operations on site, new technology and the opportunities provided by City Deal and others. Need to encourage safer driving.	Potential for introducing Air Quality Zones, licensing, driverless vehicles etc.	List of priorities to be kept updated and reviewed annually. Policies and practice need to reflect priorities.	
Disabled Parking and Patient Drop-Off and Pick Up Arrangements.	It is not possible for all vehicles to park adjacent to entrances and parked vehicles are restricting access for others including ambulances.	Ongoing reviews of requirements and opportunities for new/revised provision.	Need to keep accesses clear for priority users and provide suitable parking across growing site.	
Motorbikes	Consider providing secure lockers. Consider new or relocated parking.	Ongoing review.	Ongoing review.	
Car Parking	Parking policies and provision will be set across Campus in line with Travel Plan and developments commitments.	Keep provision under review.	Need for parking on site would significantly reduce if capacity at Park & Ride sites increased and services increased.	
In Campus Transport	As the Campus increases in size travel across Campus is significant especially for some.	Sustain and review extended service. Opportunity for driverless vehicle and other innovations.	Preference for electric/ low emission vehicle.	
Taxis and Private Hire Vehicles, Minibuses and Coaches, including Community Transport, Patient Transport, Company Transport, School Transport	There are large numbers of private vehicles on site providing important roles, but there is very little regulation or control of these vehicles. Want to encourage good provision and services.	Review and control situation.	New options are likely to emerge and need to encourage good standards.	
Distribution of Goods	Determine whether there can be sharing of deliveries on to Campus	Ongoing review and actions.	Potential for Hubl or others to introduce service based at Trumpington or elsewhere.	

Action Plan Long Term				
Item	To Change	Long Term Target	Notes	
Buildings	Good provision for new buildings. Improve provision in existing buildings.	New buildings to be adequately equipped with showers, hair dryers, lockers, coat hangers etc Existing buildings to be adapted if possible.	For partners to deliver within their own facilities.	
Maintenance	Need to ensure that infrastructure is well maintained and that it encourages sustainable travel.	Ensure sufficient revenue available to keep site well maintained.	Need to also consider potential funding sources internal and external.	
Home Working, Travel for Work	Need to ensure that sustainable travel opportunities are maximised.	Partners will prepare their own policies that encourage sustainable travel and explore opportunities for joint working.	For partners to deliver within their own facilities.	
Influencing Staff, Patients, Students and Visitors	All partners will have important roles in influencing the travel behaviour of their own staff and visitors. There is potential for some joint working.	Identify revenue means to deliver activities. Promotion of sustainable travel with information activities, incentives etc.	For partners to deliver with their own staff, but potential for joint working with Travel4 Cambridgeshire and others.	
Influencing External Partners	Need to ensure that Campus interests and opportunities are maximised.	Partners will work together to make the case to Greater Cambridge City Deal and others for changes.	For partners to deliver within their own facilities.	
Monitoring Progress and Keeping on Track	Need to ensure that Plan is being delivered and evolves in rapidly changing times.	Annual review of progress and proposed actions. Traffic survey if possible. Update Action Plan.	Plan to operate for 5 years and needs to evolve as the Campus grows and as travel choices emerge.	