

**A Transport
Strategy to support
the improvement
and growth of the
Cambridge
Biomedical Campus
as part of the
Emerging Spatial
Framework**

May 2026

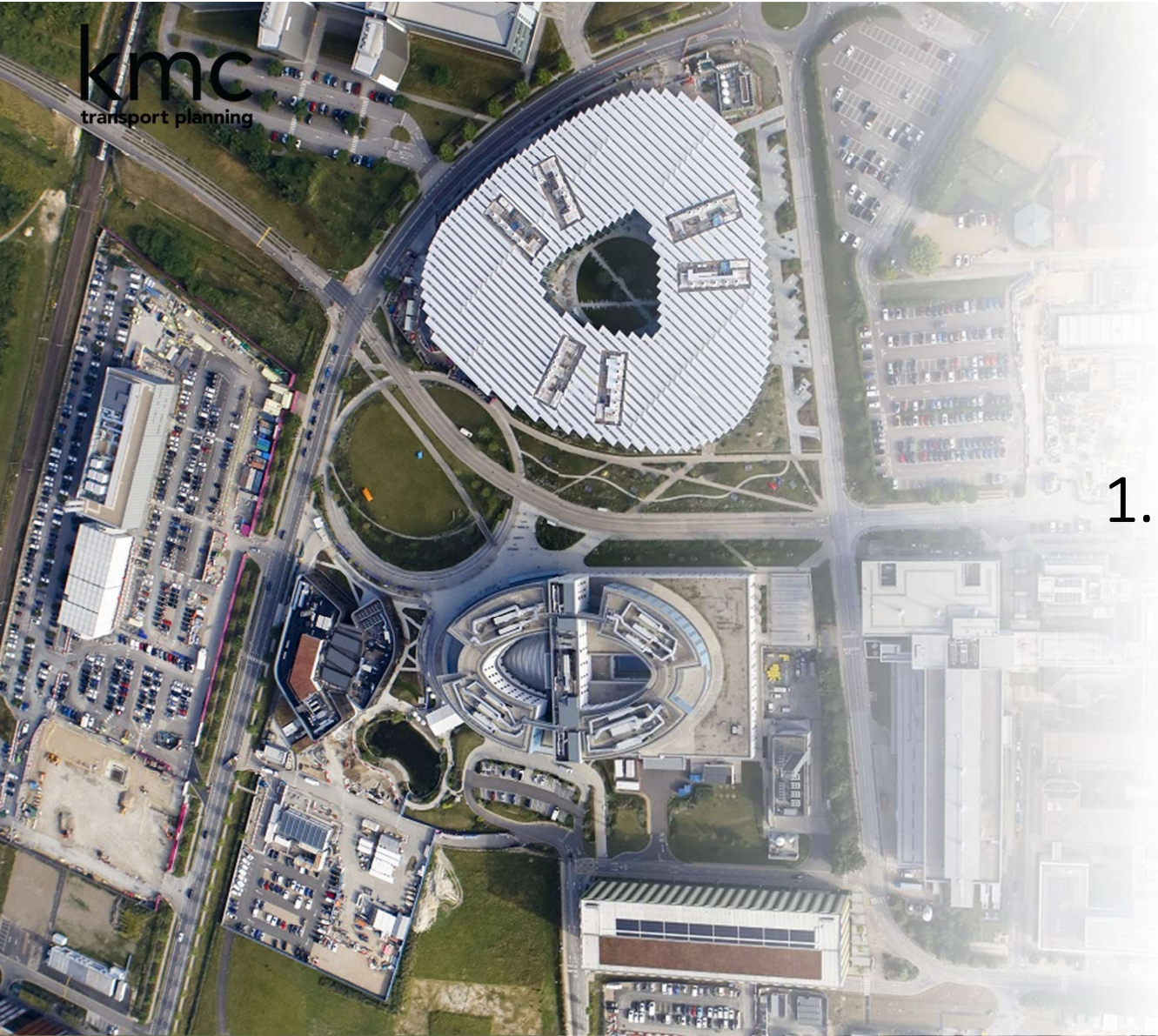
On behalf of
Cambridge Biomedical Campus Landowner
Collaboration Group (LCG)





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1. Introduction, Context, Planning History & The Need for Growth

Introduction & Report Purpose

KMC Transport Planning Ltd (KMC) is appointed by the Cambridge Biomedical Campus Landowner Collaboration Group (LCG) to provide transport advice pertinent to the enhancement, and expansion, of the campus as part of the Greater Cambridge Local Plan Development process.

This Transport Strategy supports and relates to, the Allies and Morrison (AAM) Emerging Spatial Framework. The AAM Emerging Spatial Framework builds on previous work undertaken by Hawkins Brown in 2022 and to which KMC also contributed.

This report supplements analysis undertaken in 2022 and reported by KMC as part of the 'Movement & Transport Strategy'.

This report, and the previously published Movement and Transport Strategy (2022), utilises to some extent the most significant body of transport work undertaken to understand the transport challenges associated with the Cambridge Biomedical Campus which is the 'Cambridge Biomedical Campus Transport Needs Review'. This was prepared by Atkins on behalf of the Greater Cambridge Partnership and Cambridgeshire County Council. It was first published in 2018 with an Addendum in 2019 and a more recent refresh in 2022. The Greater Cambridge Partnership (GCP) commissioned the study to understand the growth in travel demand at CBC and the resulting transport needs. The relationship of the referenced documents sits alongside.

The purpose of this report is to propose the possible and necessary transport interventions to support growth at the campus and support movement between it and the Greater

Cambridge area.

These measures are presented for the following key phases which correlate with time slices proposed and assessed by AAM:

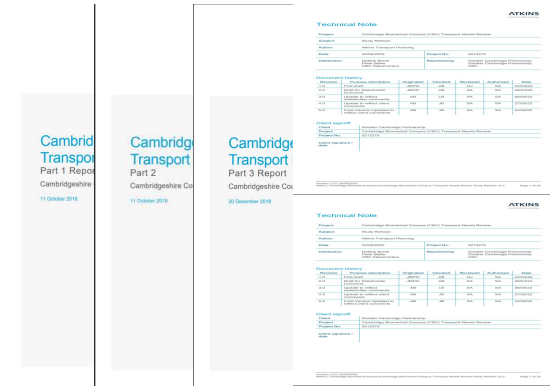
- 2030
- 2035
- 2040
- 2050

To appreciate the high-level costs of the infrastructure and transport related interventions, an indicative schedule of costs (or contributions) is also summarised in this report. The costs have been prepared by AECOM.

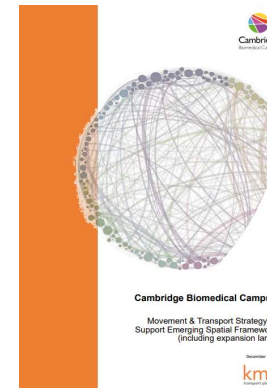
Ultimately the full transport strategy and associated costs will only be determined through a more detailed design process as part of a planning application, but this work can and will be used to inform the emerging Infrastructure Delivery Plan (IDP) which is a core component of a Local Plan and Major Site allocation process.

In order to understand the consequences of not allocating further land for development, beyond that already allocated, a further section of report considers the improvement schedule that could be delivered should only the existing estate and allocated land come forward.

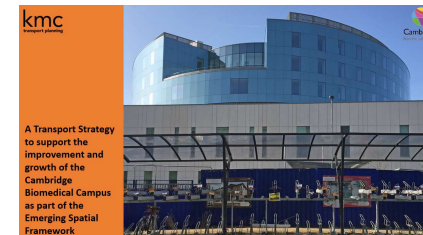
This work supplements work being undertaken by the Greater Cambridge Shared Planning Service (GCSP) as part of the development of their emerging Local Plan. This is a 2026 refresh to work undertaken first undertaken in 2023.



2018-2022



December 2022



Summer 2023 and Refreshed in March 2026

Cambridge Biomedical Campus Context

The site is located on the southern edge of Cambridge. It is abutted by the London to Kings Lynn railway corridor to the west, Long Road to the north and Hills Road and Babraham Road to the east. South of CBC lies open landscape which forms part of the city's Green Belt. An extension into the Green Belt to the south of the campus is proposed as part of the emerging Local Plan

The CBC is a major destination and generator of travel demand. In 2017 it was estimated that around 17,250 staff worked on-site and a further 14,500 visitors came to the site each day. By the end of 2023, it is estimated this will have increased to around 23,000 staff and 18,200 visitors. Further committed growth to 2031 sees this increase again and therefore travel demand needs ongoing management and growth beyond these figures needs both management and further investment.

Future development growth must be in the right place. The DfT has defined 'place-based solutions' as one of six strategic priorities for its Transport Decarbonisation Plan. Rapid decarbonisation will be difficult to achieve if transport investment is focussed on road capacity to more rural locations.

Poor spatial planning decisions will create an imbalance which lock-in high carbon travel

patterns by increasing road accessibility to land further away from existing urban centres. The investment in these areas also then encourages the relocation of residents and businesses to cheaper, car dependent locations and incentivises low-density development on lower-value land. This can increase overall traffic volumes, congestion, air pollution, and carbon emissions and have a greater environmental impact across the region as a result of car-based journeys but without anything material by way of mitigation.

Instead, growth should be focussed on areas that can support public transport, walking, cycling and measures to reduce travel demand at source. CBC is this scenario, where sustainable transport investments are committed, car access and car parking can be minimised and managed, and the density of employment can ensure major public transport investments remain viable. CBC has demonstrated over a number of years that through active management and travel planning, car trips can be managed down.

CBC is also uniquely placed to reduce private motorised travel if development with higher levels of density, improved complementary land use mix and greater levels of non-car-based accessibility in conjunction with demand management can be achieved.

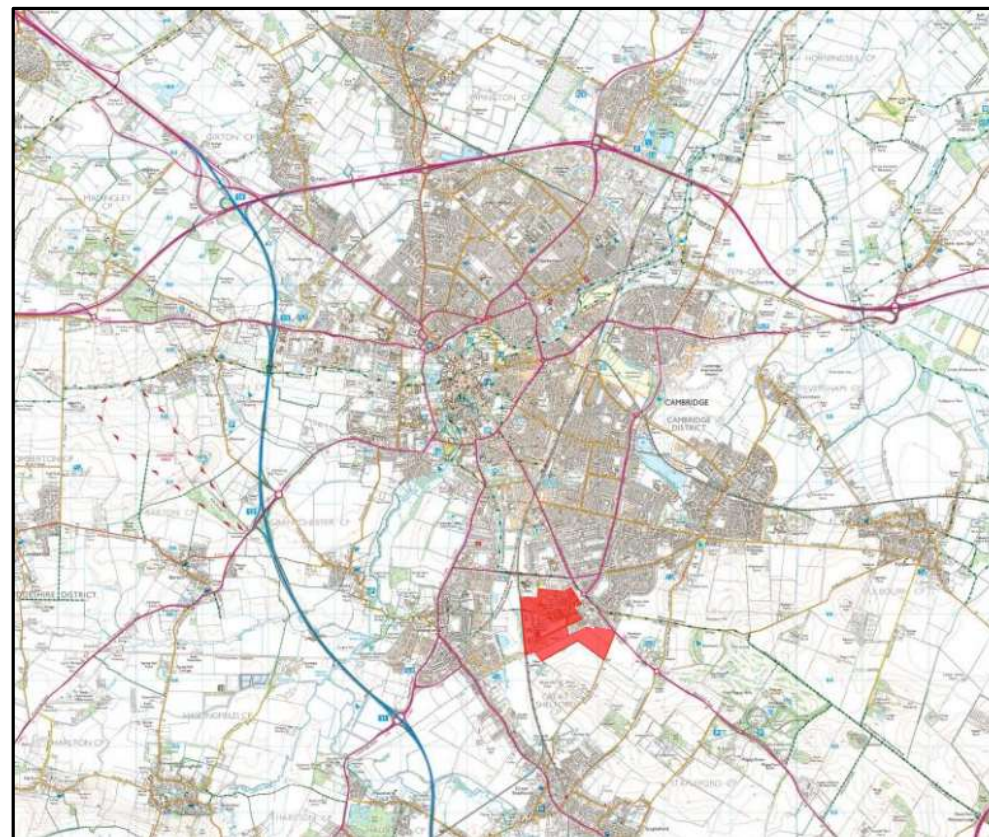


Figure 1: Cambridge Biomedical Campus with Preferred Options Site Expansion Land

Planning History & Current Position

In October 2009, the CBC Phase 1 outline planning application (06/0796/OUT) was approved. The outline planning application proposed the following at CBC:

- A total of 215,000m² floorspace of development consisting of the following:
 - 60,000 m² of clinical research and treatment;
 - 115,000 m² of biomedical and biotech research and development;
 - 15,000 m² of biomedical and biotech research and development or clinical research and treatment; and
 - 25,000 m² of clinical research and treatment or higher education or sui generis medical research institute uses.
- A new MSCP.

The following have since been delivered under the outline consent received:

- Medical Research Campus for Molecular Biology (MRC) (07/0651/FUL). The MRC was brought forward as a full planning application but is located within Phase 1 land;
- MSCP2 (11/0780/REM);
- Papworth Hospital (14/1411/REM);
- AstraZeneca Phase 1a (14/1633/REM);
- Plot 8 Anne McLaren Building (16/0653/REM);
- Heart and Lung Institute (Project Atria) (16/1523/REM); and
- AstraZeneca Phase 1b (20/0527/REM).

The Cambridge Children's Hospital reserved matters application as part of the CBC Phase 1 outline planning application (21/04336/REM) was approved in 2022. The Children's Hospital comprises 46,300sqm of clinical land use, with a first phase building of 34,500 sqm due to open by 2028.

In September 2017, the CBC Phase 2 outline planning application (16/0176/OUT) was approved. The outline planning application proposed the following to be developed at CBC:

- 75,000 m² floorspace comprised of:
 - Research and Development;
 - Clinical, sui generis and higher education;
 - Supporting activities within use class A1, A4, B1, D1 and / or D2.
- Two further MSCPs.

The Abcam development was brought forward as a full planning application located within Phase 2 land Abcam and has since been delivered (16/0165/FUL). In January 2021, planning permission was granted for Plot 1000, Discovery Drive, a reserved matters application (20/03950/REM) for a five-storey mixed use laboratory and office building, which has since been completed and occupied. Reserved Matters approval (24/01529/REM) has been secured for Plots 2000 and 3000 Discovery Drive, both of which are now under construction. A MSCP currently under construction to support the commercial uses, this is MSCP4 and is located at the western end of the Phase 2 land, adjacent Abcam, subsuming the existing surface car park currently in operation.

The other MSCP is MSCP3, located to the east of the Phase 2 land. No programme for the delivery of MSCP 3 is currently confirmed and the option for its delivery and use sits with CUH.

The adopted 2018 South Cambridgeshire Local Plan made provision for an expansion of the campus into the Green Belt. This land is referred to as Phase 3 and is covered by Policy 8 E/2: Cambridge Biomedical Campus Extension. The policy states that 'An extension to the Cambridge Biomedical Campus will be supported on land shown on the Policies Map for biomedical and biotechnology research and development within class B1(b) and related higher education and sui-generis medical research institutes.' No planning applications have yet been made against this allocation.

A new Cancer hospital is currently in the process of being developed within the campus. This does not yet have planning consent and sits outside of both the Phase 1 and Phase 2 approvals. Much of the new floorspace represents an improved cancer care facility from the services already on site as opposed to a new healthcare facility for services not currently provided. In transport terms this means that much of the travel demand associated with the new Cancer Hospital will be present on the site currently.

Supplementary Planning Documentation (2025)

In March 2025, the CBC Supplementary Planning Document (SPD) was adopted by the GCSP. The document provides guidance on the implementation of policies within the adopted Cambridge and South Cambridgeshire Local Plans, respectively. The purpose of the SPD is to provide planning guidance to inform development at the CBC and sets out the development principles that provide a clear framework for planning applications at the time and ensuring that decisions made do not undermine the future of the Campus.

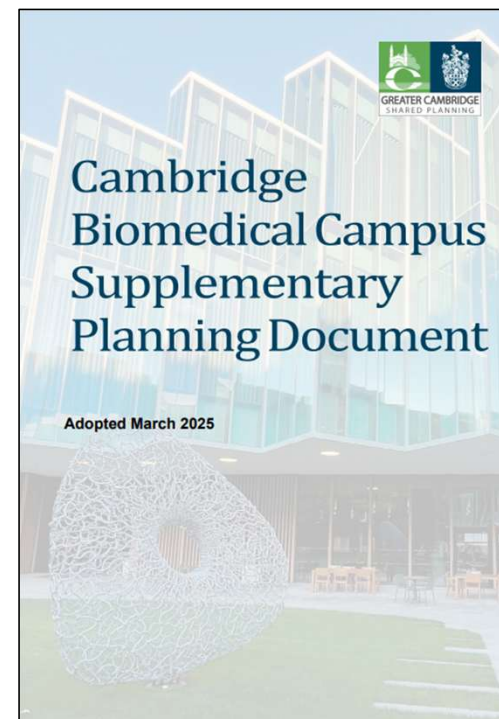
The SPD identifies a series of CBC ‘development principles’ to help guide design at the Campus, and provide direction for future, high quality, development. Development principle ‘4D: Connectivity and Movement’ provides the overarching transport framework for development that this Transport Strategy must consider. The SPD sets out three key principles for connectivity and movement. A high-level summary of each principle is as follows:

- **Wayfinding and Permeability** – The Campus should provide an accessible, easy-to-navigate movement network that prioritises pedestrians while maintaining key internal street connections and safeguarding essential blue-light routes along Dame Mary Archer Way and Robinson Way. Servicing and delivery operations should be streamlined—potentially through last-mile hubs and cycle-based logistics—to minimise impacts on pedestrians, cyclists and public transport, reduce peak-time pressures, and ensure efficient material distribution across all buildings.
- **Wider integration of the Campus** – The Campus should strengthen its relationship with surrounding communities by improving walking, wheeling, cycling and public transport links to key healthcare and employment destinations. New development

must align with emerging transport projects—such as Cambridge South Station—to create seamless wayfinding and connectivity across the Campus and wider area. Access via Public Rights of Way should be safe and inclusive for pedestrians, cyclists and equestrians, ensuring easy movement between the Campus, neighbouring countryside and local amenities.

- **Accessibility** – Active travel should be central to Campus travel planning, ensuring strong connections to existing and future sustainable transport options, including Cambridge South Station and CSET, for users of all mobility levels. Cycling and wheeling should be encouraged by placing secure parking close to building entrances, supported by strategies that prioritise new and enhanced cycling infrastructure and further develop the wider walking and cycling network. Car parking strategies should manage cumulative impacts and facilitate a shift toward electric vehicles through appropriate charging provision, reflecting the standards applied within Cambridge City.

The SPD also details ‘obligations and mitigation guidance’ which sets out guidance to mitigate potential impacts from development proposals coming forward on the Campus. The SPD states that new development may create cumulative impacts beyond the application boundary, and proposals should demonstrate how these wider effects have been considered. It explains that following the guidance helps ensure site-wide mitigation is coordinated and contributes to addressing broader pressures across the Campus and surrounding area. The SPD also notes that individual schemes should be planned holistically, alongside relevant checklists and guidance from other Supplementary Planning Documents, recognising that not every project will be able to meet all objectives.



March 2025

The Need for Further Growth

In September 2022, a report was published by CBC . This states that, as a global leader in healthcare R&D, in 2021 alone CBC supported an aggregate economic footprint of £2.2 billion worth of Gross Value Added to the UK economy and a collaborative operating income of £1.9 billion, as well as contributing £291million to the Exchequer through tax revenues.

Whilst the development of the medical and research buildings, and larger institutional features based on planning consents and earlier masterplans has been an undoubted economic success, the potential for shared amenity space and consistent high quality public realm has not fully come to fruition. The essential infrastructure for CBC has been added alongside the growth, but the pace of the growth has limited the ability of the partners to create the integrated, appealing quarter CBC needs to be to enable further and world leading innovation to flourish.

Cambridge presents the ideal model for how to support talent and enable collaboration between different organisations. The city offers the quality of life, institutions, and finance for workers and businesses; the accessible social spaces where chance encounters can take place; and the network of mentors to guide fledgling entrepreneurs and researchers. Expanding on this system by creating a liveable, thriving quarter will enable CBC to fulfil its promise. CBC has the foundations in place to act as a standout global centre of healthcare delivery, life sciences research and commercial activities, but needs to be nurtured to become more.

To reflect these ambitions and indeed global trends, CBC published their 2050 Vision in 2021. The Vision sets out an up to date forecast of a thriving, sustainable campus and the emerging Spatial Framework prepared by CBC and Hawkins Brown seeks to progress this ambition. The 2050 Vision seeks to ensure that the: Cambridge Biomedical Campus will be globally leading and locally rooted, the preferred destination for life sciences, where research, commercialisation and real-world application come together to create life-saving innovation in a vibrant local community. The updated AAM Emerging Spatial Framework maintains broad adherence to the Hawkins Brown proposals and therefore this Vision. The detail of the spatial layouts and phasing are indicative at this stage and subject to change depending on commercial requirements. The core principle of the emerging spatial framework remains.

Cambridge University Hospital Trust's Masterplan Summary

CUH have produced their own masterplan in 2021 which makes the case for growth but primarily for improved facilities using land within their control. The CUH masterplan, thinking, and aspiration has, and continues to be, central to the emerging CBC Spatial Framework.

The CUH masterplan bases itself on the fact that there is a demand to progress forward with solutions for the Cancer Research Hospital and the Children's Hospital in the intermediate term. The accommodation where these services are currently located is seen as 'not fit for purpose' according to modern healthcare delivery standards. As well as this, the current capacity of both services will soon be insufficient to be able to cope with the demographic growth and increases in the workload across the region.

In the medium term, there are other services that will need to be replaced to fully allow the transition to the integrated clinical model, which will be able to provide the additional capacity to meet the future demand. This will include developing a new acute hospital with a dedicated planned care facility and a new outpatient and diagnostic hub. Currently, business cases are being developed for these projects and are collectively referred to as 'Addenbrookes 3'. The Addenbrooke's 3 programme includes:

- A new acute hospital (early 2030s)
- Planned care centre (early 2030s)
- Outpatient and diagnostic hub (early 2030s)
- New clinical facilities to replace existing (prior to 2040)
- New clinical, administration and collaboration facilities (prior to 2040)
- Estates facilities and servicing facilities (prior to 2040)

The NHS has the ambition to be emission net zero by 2040 and one of the most effective methods to achieve this goal is for the NHS to replace its environmentally inefficient and aging estate. Therefore, the long-term CUH aim is to implement their masterplan, replacing remaining Trust services by relocating into modern accommodation, resulting in the oldest parts of the hospital to be demolished.

The CUH masterplan for the hospital estate portfolio seeks to align short-term projects (Cancer Research Hospital and the Children's Hospital), and the longer term re-provision of remaining hospital services.

The Need for Further Growth

Governments Ambition for Cambridge

The Case for Cambridge, published in 2024, sets out the UK Government's long-term ambitions for the continued growth and evolution of Cambridge, together with the actions required to support its delivery. This includes the establishment of the Cambridge Growth Company, intended to help coordinate, accelerate, and strategically guide development activity across the city and surrounding area. Since the document's publication in 2024, Cambridge has continued to be recognised by central Government as a location of exceptional national importance as well as a globally significant centre for innovation, research excellence, and high-value economic activity, and a key driver of wider UK economic growth.

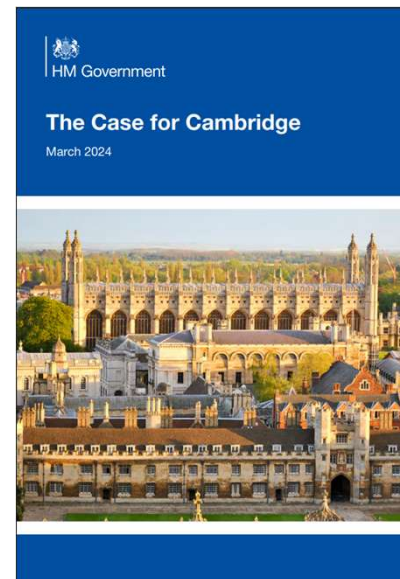
The Case for Cambridge supports substantial increases in employment and population, alongside the continued expansion of knowledge-intensive sectors, including life sciences and technology, within Cambridge and expanding along the 'Oxford-Cambridge Corridor'. It also recognises that the realisation of this growth is currently constrained by infrastructure limitations, particularly in relation to transport capacity and connectivity. As such, it emphasises the need for coordinated investment in transport infrastructure to enable sustainable access to key employment locations and support the continued expansion of the Cambridge economy.

The currently established Cambridge Growth Company will likely evolve to become a Development Corporation for the area, which again reflects the continued importance of Cambridge to the current government's ambitions for growth.

Life Sciences

The UK Government's Life Sciences Sector Plan, published in 2025, sets out a long-term ambition to significantly expand the scale, capability, and international profile of the UK life sciences sector through targeted and sustained investment in established clusters. Within this national framework, Cambridge is identified as one of the UK's most important and internationally renowned life sciences locations, with an ecosystem of academic, clinical, and commercial institutions including the CBC alongside multiple research institutes.

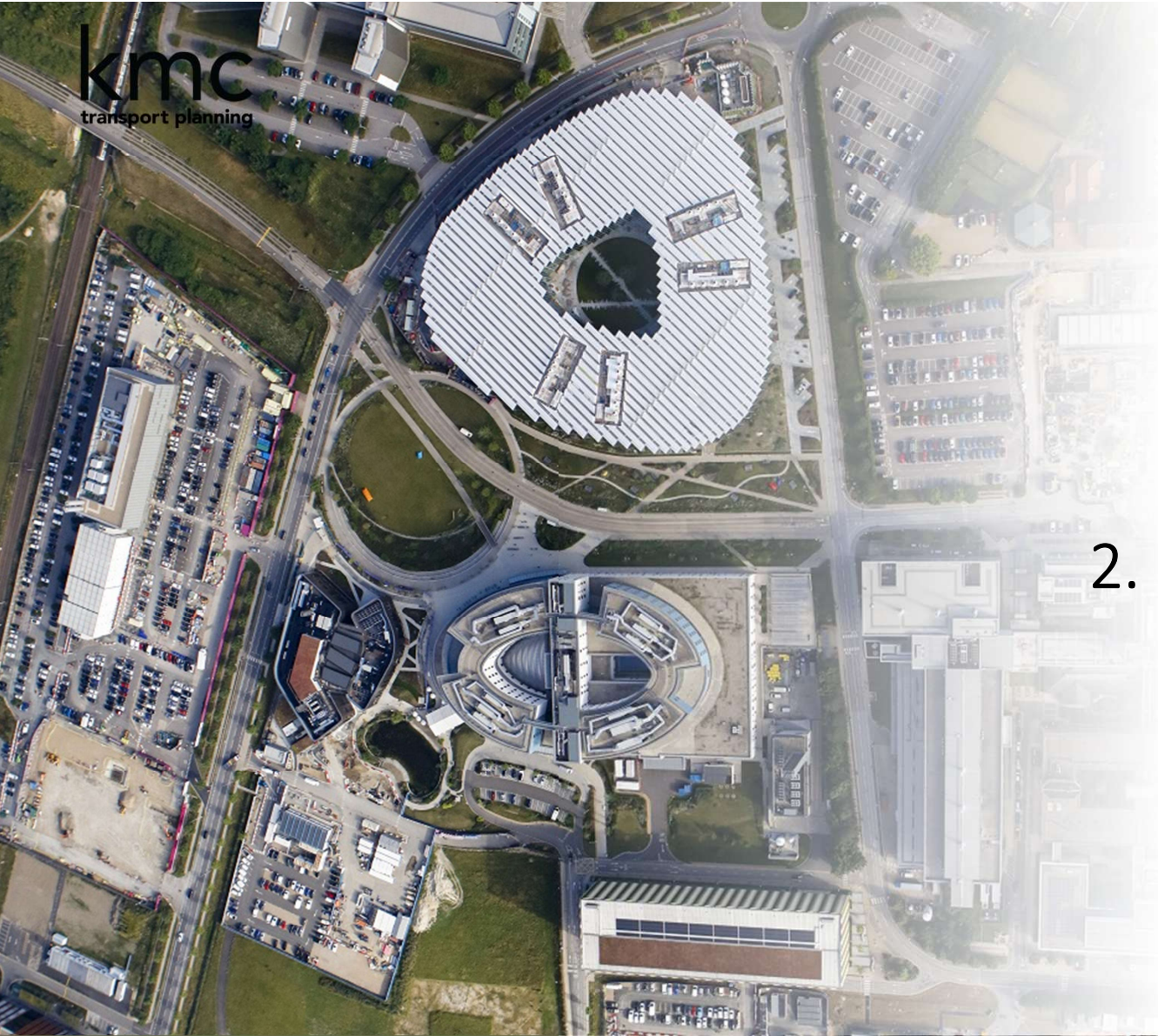
Government support for continued investment in life sciences clusters such as Cambridge reflects a clear national policy direction, in which growth is expected to be concentrated in those locations with the greatest capacity to attract research funding, foster collaboration, and generate world-leading innovation. As a result, the life sciences sector is anticipated to experience sustained expansion in both employment and associated population growth, further reinforcing the need for supporting physical and social infrastructure. In particular, it highlights the importance of transport infrastructure capable of enabling efficient, reliable, and sustainable access to these locations.



March 2024



July 2025



2. Existing Challenges & Issues Facing CBC

Existing CBC Staff & Visitor Estimates

The consents highlighted in Section 1 have meant that there has been, and will continue to be, an increase in employment and visitors to the site.

In 2017, CBC confirmed that there were 17,250 employees estimated to be working on-site on any given day with a further 14,500 daily patients/visitors on average.

It is now estimated that, with the occupation of several consented schemes, the number of jobs across CBC at the end of 2023 will sit at 23,000 with a further 18,200 daily patients/visitors. The schemes that have delivered this increase are as follows:

- AstraZeneca
- Jeffrey Cheah Building
- Royal Papworth
- Heart and Lung Institute
- Plot 8 (Anne McLaren Building)

Not all staff will be present on any single day and, for the purposes of assessing transport impacts, this distinction is appreciated in Table 1 below. The proportion of staff present on any single day is assumed to be 81% which is consistent with the Atkins Transport Needs Study and information provided by CBC.

| Year | Total Jobs | Daily On-Site Staff | Daily Patients / Visitors |
|------|------------|---------------------|---------------------------|
| 2023 | 23,000 | 18,697 | 18,200 |

Table 1: Existing Staff, Patient, and Visitor Numbers

Location of Existing CBC Employees

CBC supplied postcode data shows that the areas of east Cambridgeshire mostly, but also East Suffolk with Haverhill and Newmarket, provide the main areas for staff to reside. The overall catchment for staff is wide, which is reflective of the specialist nature of many of the employers within the CBC but also housing affordability in and around Cambridge. This shows that transport infrastructure from the south, east and north are equally important, particularly for longer distance journeys outside the city itself. The lack of staff shown to reside to the west of Cambridge will likely be due to the lack of accessibility from the west currently.

Roadside Interview surveys undertaken by Atkins, showed that vehicular access to the Campus was heavily biased to the south, with around 88% of vehicles approaching from Addenbrooke's Road or Babraham Road rather than the north. This significant weighting puts pressure on these southern approaches and impacts the Hills Road corridor significantly given the lack of specific access provision when compared to the Addenbrookes Access Road.

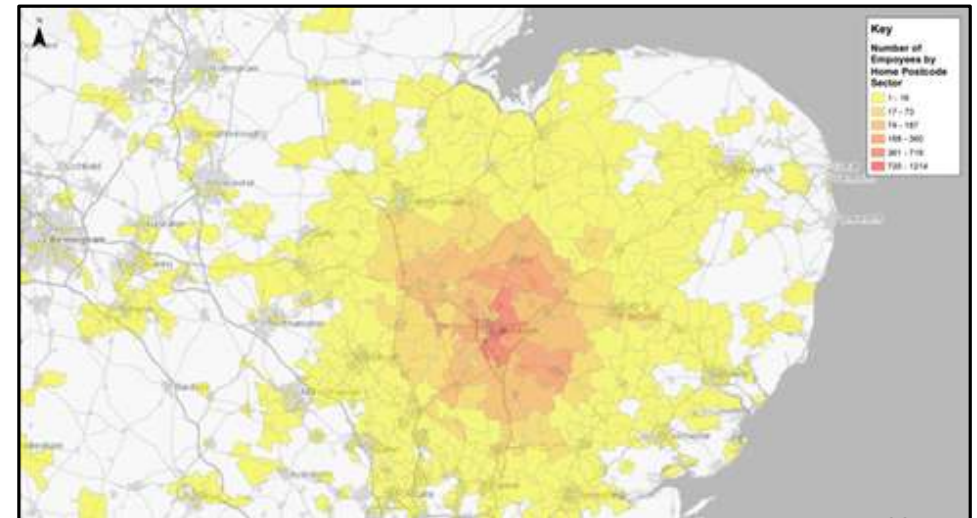


Figure 2: Heatmap of Existing Employee Residences (Extract from Stantec Report)

Staff Satisfaction with Travel Times

In 2020 Savills published a report for Cambridge University Hospitals NHS Foundation Trust (CUH) which assessed the housing needs of hospital workers.

Within the research, an assessment of relative satisfaction of commuting travel times was set out. The survey found that there was a relationship between commute time and dissatisfaction with commute. The increase in dissatisfaction was found to be gradual until 60 minutes + length of commute, when the proportion of those that are very dissatisfied more than doubles.

It should therefore be a focus of any transport strategy to reduce the amount of time spent travelling to work to less than an hour. Overall, 45% of the survey respondents are dissatisfied or very dissatisfied with their commute. Assuming this is representative of the whole of CBC employees then over 10,000 employees are dissatisfied or very dissatisfied with their commute.

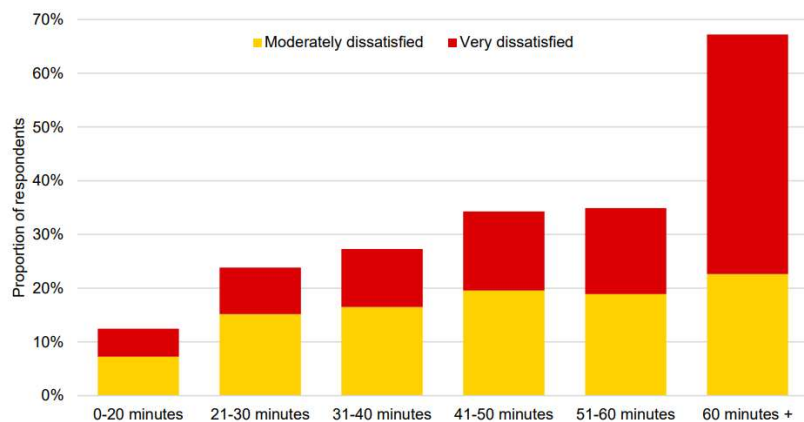


Figure 3: Journey Time Satisfaction Survey Results (CUH Workers)

Source: CUH NHS Foundation Trust

Isochronal Accessibility Analysis

An existing accessibility analysis of the campus has been undertaken using PODARIS software. This utilises walk times in combination with rail and bus timetables, stations and bus stops. The following time bands have been considered 0-15 minutes, 15-30 minutes, 30-45 minutes and 45 minutes to 60 minutes.

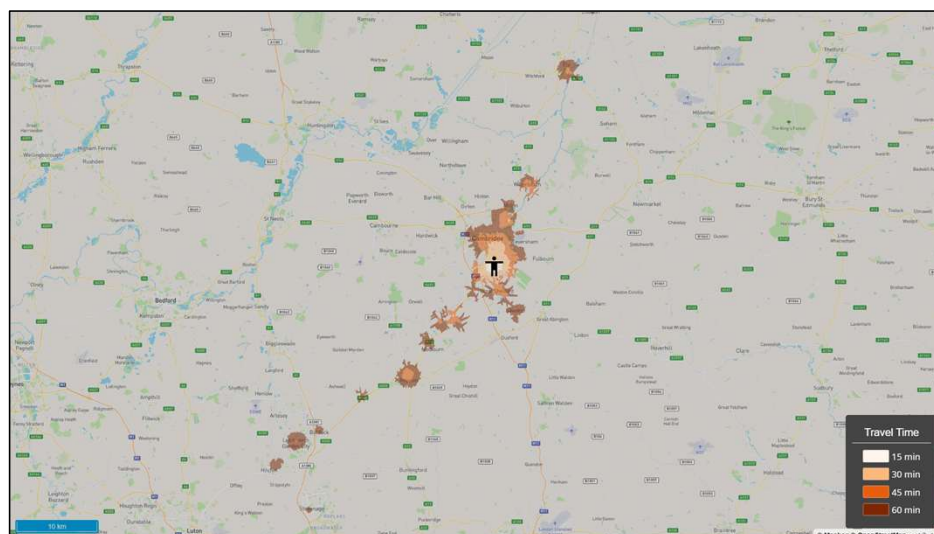


Figure 4: Existing Bus, Rail and Walk Access in 60 minutes

At a strategic level it is possible to see that existing access to and from the campus by bus and rail covers a relatively small part of the Greater Cambridge area. Even where trips originate along the railway corridor the catchment remains limited due to the time spent travelling from Cambridge Railway Station to the campus.

Any area east or west of the city is shown to have no access to the campus within the time parameters selected.

This lack of reasonable accessibility shown in the isochronal outputs is in stark contrast to the spread of employees shown previously. Assessing them both in combination i.e., the employee's postcodes and the public transport travel time has again been undertaken using PODARIS software. This is shown below. To calculate access times, only full postcodes are able to be used and these have been used as proxy for all staff to derive percentages of staff within each time band.

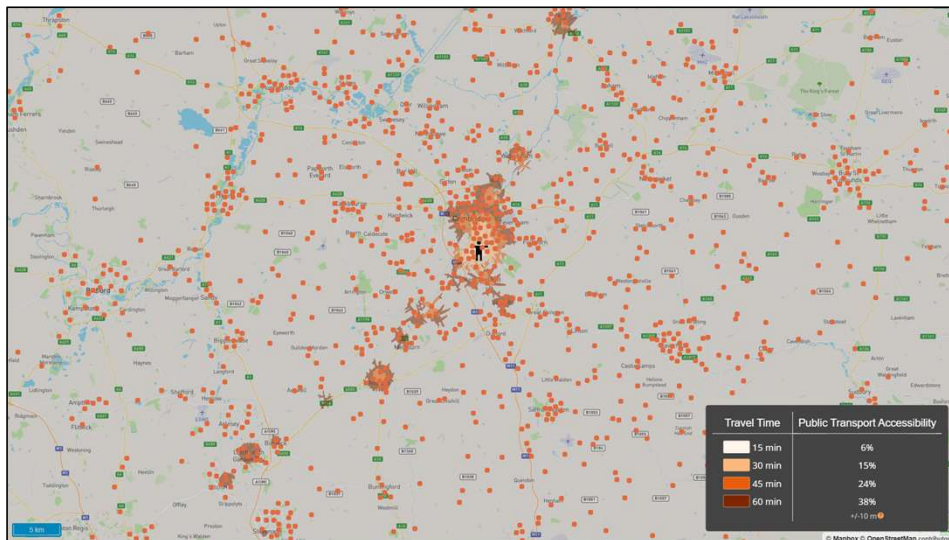


Figure 5: Bus, Rail, and Walking Accessibility up to 60-minutes for Staff Postcodes (Existing)

The number of staff residing within the time bands is shown in Table 2.

Of the employee postcodes provided, only 6% are within 15 minutes of the campus using modes other than the car, 15% within 30 minutes, 24% within 45 minutes and only 38% in total within 60%.

As stated, the CBC Travel Survey has indicated that a stepped change in dissatisfaction with commuting times occurs once travel times exceed 60 minutes (although noting that for many dissatisfaction occurs before this threshold). Given that 62% of postcodes currently do not have public transport options that would see them able to travel to the campus in under an hour, significant enhancements are needed to avoid dependency on car-based travel to provide a reasonable journey time to the campus.

It should be noted that the accessibility analysis is not able to accurately map the effects of P&R trips and as such these trips are excluded.

| Travel Time | Travel Times (Existing) for Cumulative % Staff |
|-------------|--|
| 15-minutes | 6% |
| 30-minutes | 15% |
| 45-minutes | 24% |
| 60-minutes | 38% |

Table 2: Existing Staff Travel Times using Public Transport

Existing City Scale Movement Challenges

At a city scale, the site currently has a number of issues but plentiful opportunities.

By 2030/31, the Greater Cambridge Partnership is planning to have delivered a significant number of off-road busways providing reliable and quick public transport options to and from growth areas. However, the value of these connections is somewhat lessened due them not connecting to one another. Therefore, there is significant importance on the primary 'on road' bus corridors to support the bus network. In turn, these corridors are dependent upon the relatively few crossings of the rail network in order to connect the east of the city with the west.

Despite having the benefit of two bridge connections across the rail corridor, the CBC campus itself is currently a barrier to primary 'on road' bus routes with a distinct separation between the north south routes along Babraham Road, Cambridge Guided Busway (S), and services along Trumpington Road.

The implication of this compromised connectivity is that the campus itself can be accessed by public transport, but it does not support journeys through it, between other P&Rs and growth areas. This fails to maximise the opportunity of Cambridge South and in time, East West Rail. The campus needs to be redesigned to do more for connectivity at a city scale.

The Chartered Institute of Highways and Transportation has provided guidance on how to support Buses in Urban Developments. It states:

In terms of effective bus operations, the challenge bus operators face when trying to provide high-quality bus services are the following:

- *Competition from the car, particularly where there is ample low-cost parking;*
- *Delays to services by congestion;*
- *Street layouts that make it impossible to provide an economically efficient bus service that is attractive to passengers.*

Many out-of-town business parks use a layout consisting of a ring road off which business developments are located on culs-de-sac. These tortuous street layouts make it impossible to provide an attractive and efficient bus service, even if it is physically possible for a bus to pass along. Thus, even where developments are appropriately located for bus provision, this cannot be done because of the inadequate street layout.

The opportunity for CBC is to address the existing challenges which undermine the ability to deliver high quality bus services and to provide a network that allows both bus and rail orientated growth to be achieved for the benefit of the campus and the wider city and southern fringe.

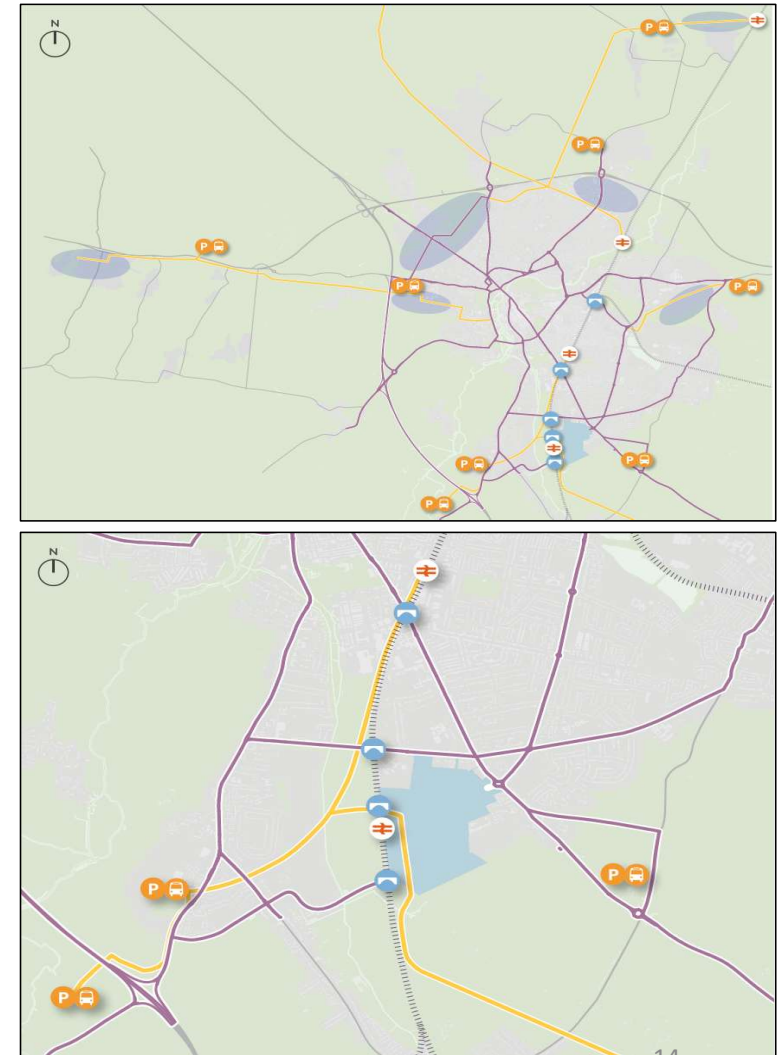


Figure 6: Existing City Scale Movement

Existing Local Level Challenges by Mode

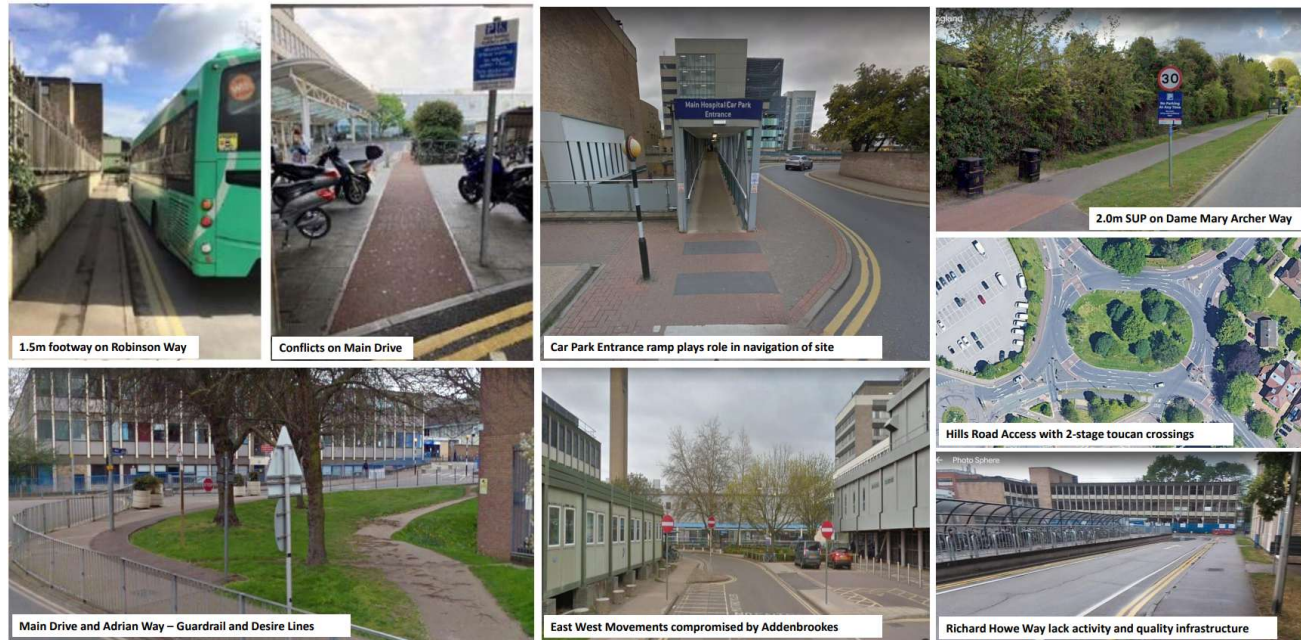
Pedestrian Infrastructure & Network

The pedestrian network within the campus lacks continuity, legibility, and quality. Often key pedestrian routes into the campus from surrounding areas are shared with cyclists which creates conflicts due to different speeds and design requirements when volumes are high. Conflicts have been observed on Addenbrookes Road, the shared path that crosses the railway alongside the busway and at Main Drive close to the Hills Road main entrance.

Within the campus itself the quality of footways are in places poor, narrow in many places with obstructions from street furniture and foliage. At junctions, footways are broken to give way to turning traffic. Additionally, surveillance along many routes is poor and this is particularly the case with regard to routes to Park and Ride sites which becomes less attractive at night.

Wayfinding within the campus is particularly challenging for visitors, patients and for those who do not come to the campus often. This is due to a lack of a coherent signage strategy but also as a result of consistency of routes and built form to provide the visual prompts.

In terms of key movement corridors, both the primary east-west and north-south routes are compromised by buildings and lack clearly define routes. This not only impacts campus users but also the wider communities who use the campus as a means to go elsewhere or access transport services.



Key pedestrian issues:

- Fragmented and indirect pedestrian network.
- Key north south and east west connections lack directness and or completeness.
- At crossings priority is often not afforded to pedestrians
- Some walking routes, particularly to Park and Rides lack activity.
- Street furniture clutters and narrows footways
- Condition of footways is inconsistent
- Legibility / wayfinding is poor
- Gateways to site can be hostile or lack notable features
- Lack of quality infrastructure on approaches to site with shared infrastructure and 2-stage crossings.
- Dame Mary Archer Way signed for 20mph but designed for 30 mph
- Lack of direct connectivity to south and Babraham Road from heart of campus - although Knightly Avenue and link to Babraham Road is strong connection

Existing Local Level Challenges by Mode

Cycle Infrastructure & Network

The National Cycle Route 11 connects CBC into Cambridge and to the north towards St Ives and into surrounding villages such as Great Shelford and Sawston to the south. This is a hugely beneficial asset for the campus. However, the cycle path is extremely well used and conflicts with pedestrians and other cyclists occur regularly. A lack of lighting along the length to Great Shelford can exacerbate these conflicts at night.

However, east west cycling connectivity is less favourable with limited longer distance strategic connections available. The campus itself also acts as a barrier to east west movement.

The gateways to the site are largely hostile environments for cyclists. The Hill Road main entrance has been subject to some recent improvement works but requires cyclists and pedestrians to mix for cyclists to be able safely negotiate the signalised roundabout. Addenbrookes Road also requires the convergence of cyclists and pedestrians at the Roundabout with Francis Crick Avenue and Dame Mary Archer Way as high-quality segregated infrastructure does not exist to enable full and safe segregated movements to occur. There are particular pressures in this location as it provides a route from southern communities towards the city centre. Robinson Way at the junction with Long Road has no segregated cycle infrastructure and highway design is for the benefit of vehicular traffic.



Dame Mary Archer Way – White line 'segregation'



Good Quality Connection into CBC from Babraham Road



Shared User Path to Babraham P&R (pre CSET)



DNA Path – 2.0 m width



Addenbrookes Road / Francis Crick/ Dame Mark Archer – lack of consistent infrastructure



Hills Road Entrance - 2 stage toucan crossings

Key cycling issues:

- Fragmented and indirect cyclist network
- As with pedestrian network, key north/ south and east / west connections lack directness and or completeness.
- Lack of consistent segregated infrastructure with little provision able to meet LTN 1/20 standards.
- Hostile junctions/ gateways especially Hills Road and at Francis Crick Avenue.
- Crossings external to the site are often shared with pedestrians and 2- stage
- No coherent story as to how campus links with some offsite GCP proposals
- DNA path limited in usable width and condition but important asset
- Connections from P&R's lack surveillance and activity and are shared with pedestrians.
- Lack of direct connectivity to south and Babraham Road from heart of campus -although Knightly Avenue and link to Babraham Road is strong connection

Existing Local Level Challenges by Mode

Other Micro-mobility & Shared Transport Solutions

Technological advances and changes in personal choice have, in recent years, transformed micro mobility in our towns and cities. E-scooters, e-bikes and other forms of micro mobility have the potential to cut the congestion, emissions and noise pollution and represent a real tangible solution to the first- and last-mile transportation gap. The potential at CBC is significant.

Currently there is very little infrastructure or cognisance of micro mobility (beyond cycling) design needs or storage. Generally, e powered micro mobility can share cycle infrastructure if segregated and of good design quality to enable smooth and consistent journeys. Scooters in particular work well as part of a bus journey and for the first and last mile.

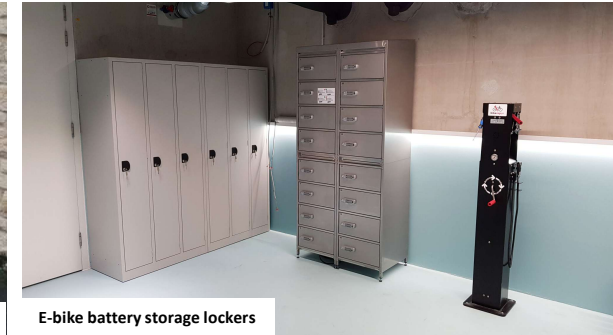
Shared transport solutions which typically include car clubs and micro mobility hire are only partially provided for on site. Voi scooter hire which exists across the city has a number of geo-fenced parking areas within the campus but car club operators do not have spaces. Voi scooters only operate within the city and thus do not provide connectivity to the villages south of CBC. No mobility hubs, which provide a physical and recognisable location for transport solutions, currently exist. There are a number of individual occupier schemes for pool bikes and cars which are distinct from a campus wide offer.

Key micro-mobility issues:

- Lack of segregated infrastructure within and to campus
- Lack of shared transport solutions
- Lack of mobility hubs to rationalise and advertise sustainable transport choices
- No electric bike battery lockers or scooter parking



E-scooter Hire, Cambridge City Centre



E-bike battery storage lockers



Scooter Hire / Bus Interchange



E-Cargo Deliveries



Enterprise Car Club Spaces and App

Existing Local Level Challenges by Mode

Public Transport Network

Public transport routes are a vital component of the CBC environment given constraints to car parking and the lack of affordable housing in the area meaning that longer distance journeys are inevitable.

However, currently there is a varying quality and inconsistency in public transport routes and waiting facilities around CBC, as well as a lack of quality interchange facilities between other modes and public transport which includes a lack of cycle parking adjacent to stops or limited crossing facilities within the immediate vicinity of bus stops. There is a lack of consistent information at bus stops which serves as a barrier to people visiting the campus or wanting to switch to buses from other modes.

There are however 19 bus services that currently stop at CBC. However, the majority of these services originate within the city, resulting in a lack of direct and fast services from the west and east of Cambridge. In addition, few of these services pass through the campus to connect the east to the west or the Babraham Road and Trumpington P&R's.

As stated previously there is a lack of physical connections that exist to provide east west connections and currently north south (the Cambridge Guided Busway runs north south but west of the campus). The orbital routes are substandard for public transport as it adds journey time and reduces legibility.

A lack of bus layovers restricts some flexibility around bus timetabling in the area.

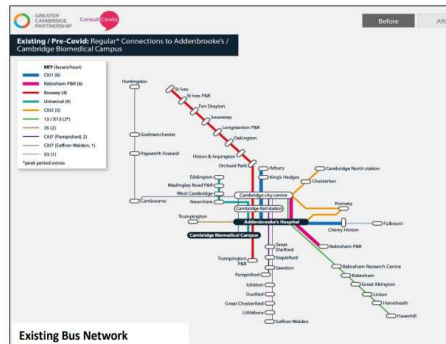
There is currently no direct rail access into the campus.



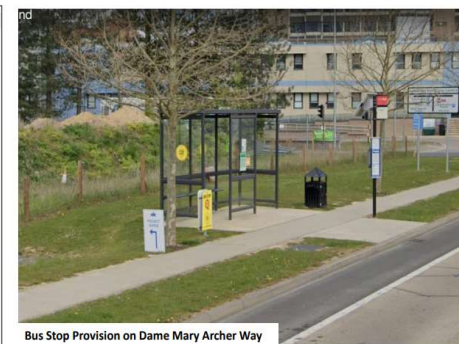
Existing Hills Road Bus Station



End of segregated bus provision at Keith Day Road



Existing Bus Network



Bus Stop Provision on Dame Mary Archer Way



Babraham Road Bus Corridor

Key public transport issues:

- Poor interchanges (physical infrastructure and information)
- A constrained and operationally challenging Addenbrookes Bus station which results in conflicts with other users.
- A lack of east west connectivity
- Sub-optimal orbital bus routing
- A lack of bus layovers
- The Babraham Road bus corridor suffers from congestion and therefore delays and reliability
- A lack of rail access

Existing Local Level Challenges by Mode

Private Vehicle Network

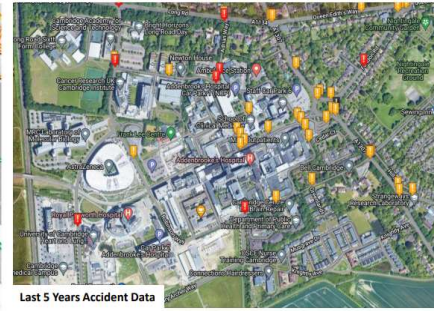
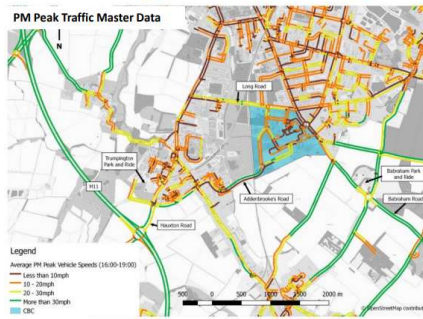
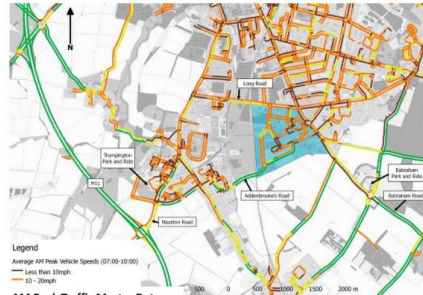
The road network around and inside CBC operates in a low traffic/congestion level for most of the day and night. However, during the two peak hours of the day (0800-0900 in the morning and 1700-1800 in the evening) the network gets close to capacity, notably Babraham Road and Hills Road in the AM Peak and parts of Addenbrooke’s Road in the PM Peak. In terms of the performance of the local highway network, on-site observations found that although traffic was slow with points of congestion around junctions, there was not flow breakdown.

Through traffic is prohibited from using the CBC road network and enforced through the use of Automatic Number Plate Recognition (ANPR) cameras. This enforcement was a planning obligation from the Phase 1 S106 agreements. Despite ANPR technology being used, through traffic continues to be an issue.

Currently vehicular traffic accesses many parts of the campus as the road network lacks clear definition and hierarchy. The penetration of vehicular traffic into most areas of the campus results in conflict with other users and worsening environmental outcomes.

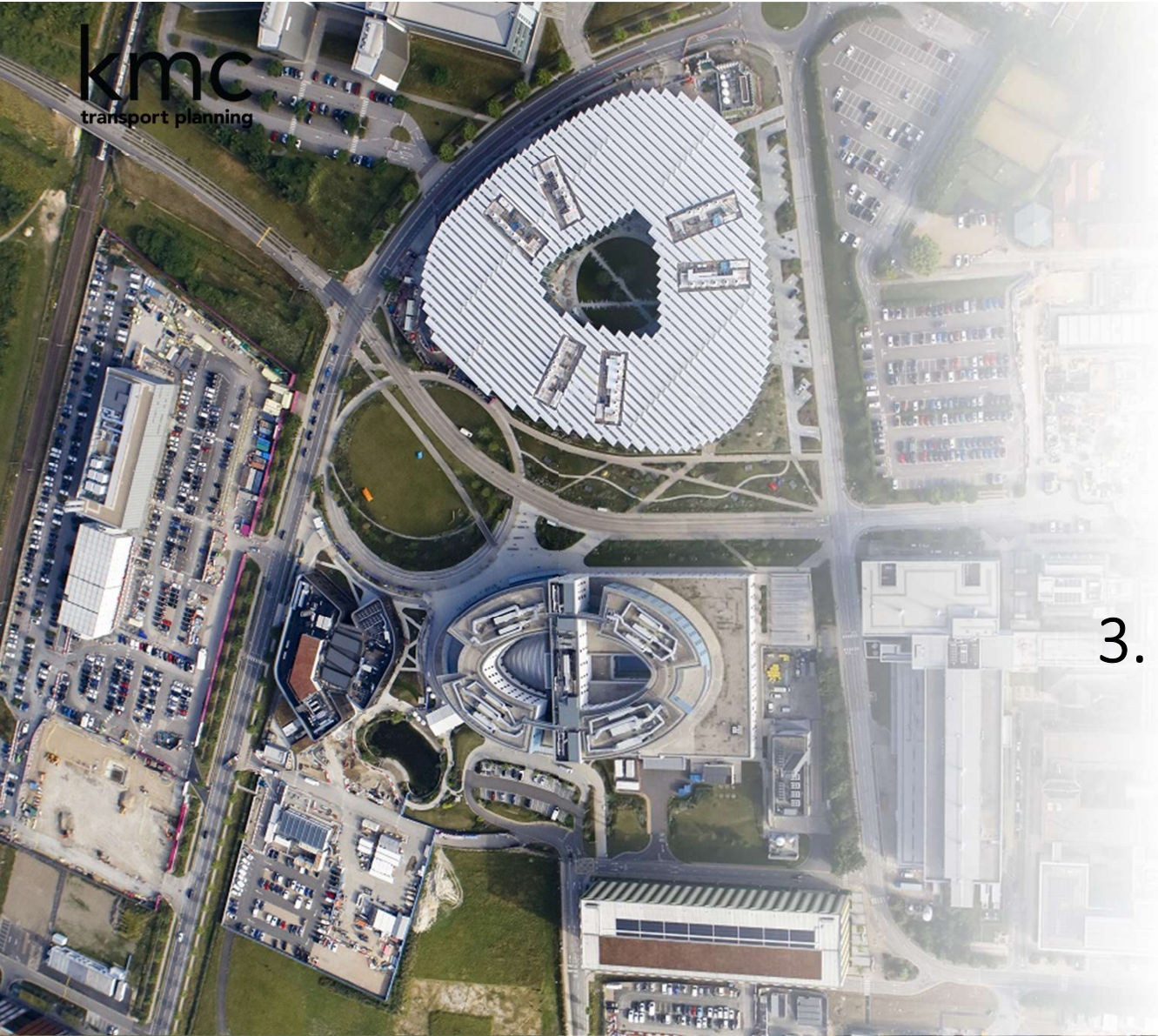
The primary network in particular is designed around the needs of the car. Roads are straight and junctions are designed to provide vehicular traffic with priority over pedestrians or crossing cyclists.

Whilst a number of the major car parks are located off or close to the primary road network, there are many smaller surface car parks that are spread across the campus which means car proliferation into many areas of the campus results from dispersed car parking.



Key issues of the private vehicle network:

- The private car dominates the campus and can make the environment for pedestrians and cyclists unpleasant.
- A primary orbital network which runs around the perimeter of the site with one secondary route (Robinson Way) which runs north to south through the centre .
- Congestion at key gateways and at peak hours –significant pressure on Babraham Road and Hills Road access.
- Dame Mary Archer Way has higher vehicle speeds making it difficult for people crossing who may have mobility difficulties
- Some rat running traffic and a lack of effective prohibition from existing ANPR cameras
- Dispersed parking model in conjunction with a lack of hierarchy of routes which results in car penetrating all parts of the campus and bringing them into conflict with pedestrians and cyclists.
- A clustering of road traffic collisions mainly focused on Main Drive



3. Existing Travel Patterns

Existing CBC Staff & Visitor Mode Share

Understanding the existing challenges and issues faced by CBC from a transport perspective, provides useful context to existing travel patterns of all CBC staff, patients, and visitors.

Each year in October, the CBC undertakes a Travel Survey to understand the transport patterns of its staff. The classified counts consider campus-wide entries/exits and can be used to calculate **the combined mode share of all staff and visitors**. Mode shares for the campus, as reported in the 2024 CBC report prepared by Advanced Transport Research, are summarised as follows:

| Mode | 2017 Inbound | % Mode Share 2017 | 2018 Inbound | % Mode Share 2018 | 2019 Inbound | % Mode Share 2019 | 2020 Inbound | % Mode Share 2020 | 2021 Inbound | % Mode Share 2021 | 2022 Inbound | % Mode Share 2022 | 2023 Inbound | % Mode Share 2023 |
|---------------------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|
| Car Driver | 11354 | 36.7 | 11453 | 36.5 | 13105 | 37% | 12723 | 42% | 12634 | 40% | 12995 | 40% | 13837 | 40% |
| Car Passenger | 4890 | 15.8 | 3557 | 11.3 | 4455 | 12% | 5528 | 18% | 3768 | 12% | 4065 | 12% | 5060 | 15% |
| Cycle | 5855 | 18.9 | 6186 | 19.7 | 6161 | 17% | 3969 | 13% | 4771 | 15% | 5160 | 16% | 4026 | 11% |
| Scooter | | | | | | | | | 167 | 1% | 201 | 1% | 182 | 0% |
| Pedestrian | 2686 | 8.7 | 4666 | 14.9 | 4742 | 13% | 3293 | 11% | 4109 | 13% | 4599 | 14% | 3819 | 11% |
| Bus Passenger | 4313 | 14.0 | 3941 | 12.6 | 4583 | 13% | 2058 | 7% | 3133 | 10% | 3003 | 9% | 4553 | 13% |
| HGV (Includes passenger) | 244 | 0.8 | 242 | 0.8 | 168 | 0% | 169 | 1% | 292 | 1% | 139 | 0% | 252 | 1% |
| LGV (Includes passenger) | 1382 | 4.5 | 1131 | 3.6 | 989 | 3% | 1088 | 4% | 1468 | 5% | 1218 | 4% | 1089 | 3% |
| Motorcycle (Includes passenger) | 183 | 0.6 | 194 | 0.6 | 199 | 1% | 173 | 1% | 259 | 1% | 199 | 0% | 195 | 1% |
| Ambulance (Driver only) | | | | | 133 | 0% | 208 | 1% | 204 | 1% | 220 | 1% | 209 | 1% |
| Taxi (Includes driver) | | | | | 1110 | 3% | 868 | 3% | 1165 | 4% | 928 | 3% | 1318 | 4% |
| Total | 30907 | 100% | 31370 | 100% | 35645 | 100% | 30077 | 100% | 31970 | 100% | 32727 | 100% | 34540 | 100% |

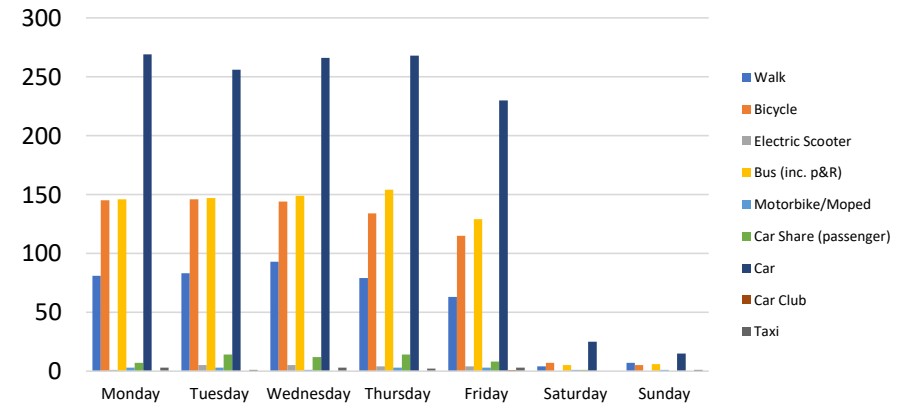
Table 3: Existing Staff, Patient, and Visitor Mode Share

In terms of staff-only mode share, the bar chart opposite has been developed based on ATR’s interview surveys for staff. University of Cambridge staff also undertook a survey during the same period across their estate.

This indicates that around across the seven-year period, approximately 35%-40% of staff drive and overall, around 40%-50%, arrive via car whether as a passenger or driver. These proportions are consistent with the mode shares presented as part of the Transport Needs Study for CBC which has also used data from previous annual travel surveys.

Highway demand to the site has been captured through surveys of the number of vehicles at key locations on the highway network. This shows that during the peak hours, Hills Road and Addenbrooke’s Road are the most heavily used access points, with 827 vehicles accessing the site via Addenbrooke’s Road during the AM peak and 640 departing in the PM Peak. Hills Road has 663 vehicles inbound in the AM peak and 590 vehicles outbound in the PM Peak. Over the course of the survey period (06:00 – 21:00), 15,569 vehicles entered the CBC site via the entrances shown.

Figure 7: Existing Staff Mode Share



In terms of overall directional arrival patterns, the following diagrams indicate 88% of employees arrive from the south and 80% of patients and visitors arrive from the south.

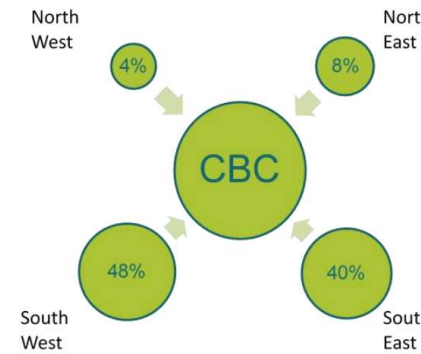


Figure 8: Direction of Staff Access to CBC

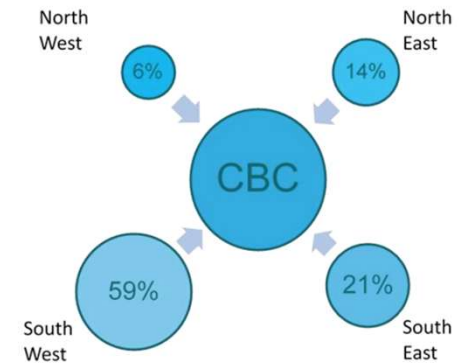


Figure 9: Direction of Patient/Visitor Access to CBC

Existing Car Parking Provision

Car parking across the campus is already managed carefully. Limited supply has been used effectively as a demand management measure for a number of years, but this results in demand exceeding supply and therefore any changes resulting from new buildings requires a car parking strategy to be produced to understand and manage the change.

These periodically produced management plans provide a high degree of granularity on the approach being adopted. The most recent submitted document relates to the Cambridge Cancer Hospital which illustrates the cumulative impact of the proposals on parking. It relies on temporary facilities to address demand prior to the opening of Cambridge South Station and other strategic infrastructure investments.

The current parking supply within CBC is 5,837. The total parking provision for CBC is made up mostly of multi-Story Car Parks but also includes surface car parking and temporary car parks. These space totals for each car park have been reviewed with key CBC stakeholders.

Using this dataset, it has been possible to derive a 2023 base understanding of the existing car parking stock categorised by one of the three principal land uses moving forwards: commercial, CUH, and education. A summary is provided below.

It should be noted that this summary includes a number of temporary car parks that are operational and managing specific needs in the shorter term.

| Status | CUH | Education | Commercial | Total |
|----------|-------|-----------|------------|-------|
| Existing | 3,977 | 1,158 | 649 | 5,784 |

Table 4: Existing Staff, Patient, and Visitor Mode Share

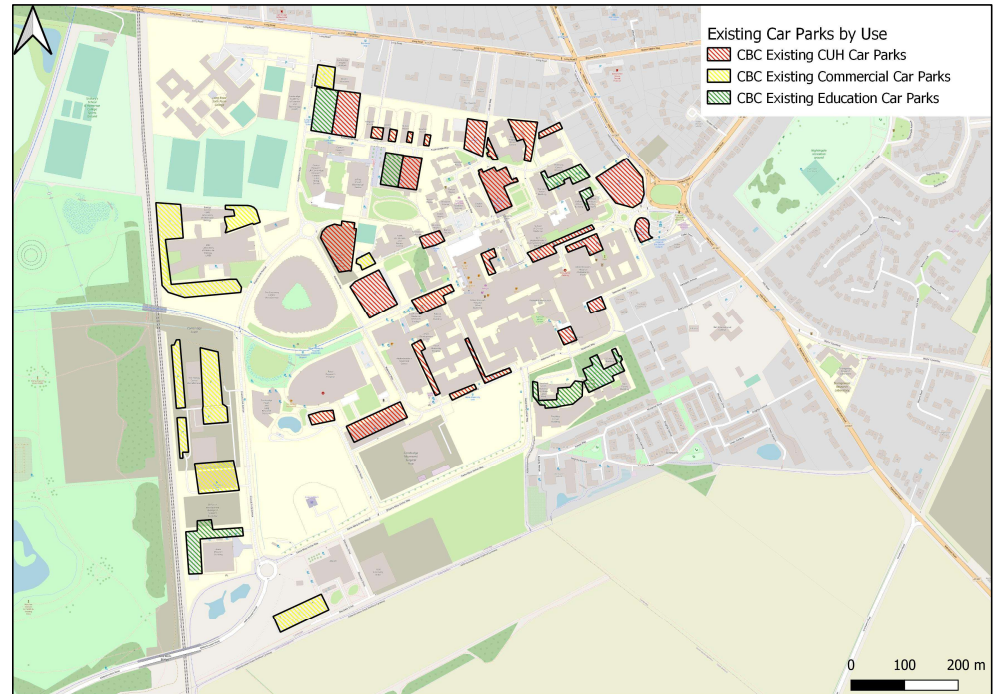
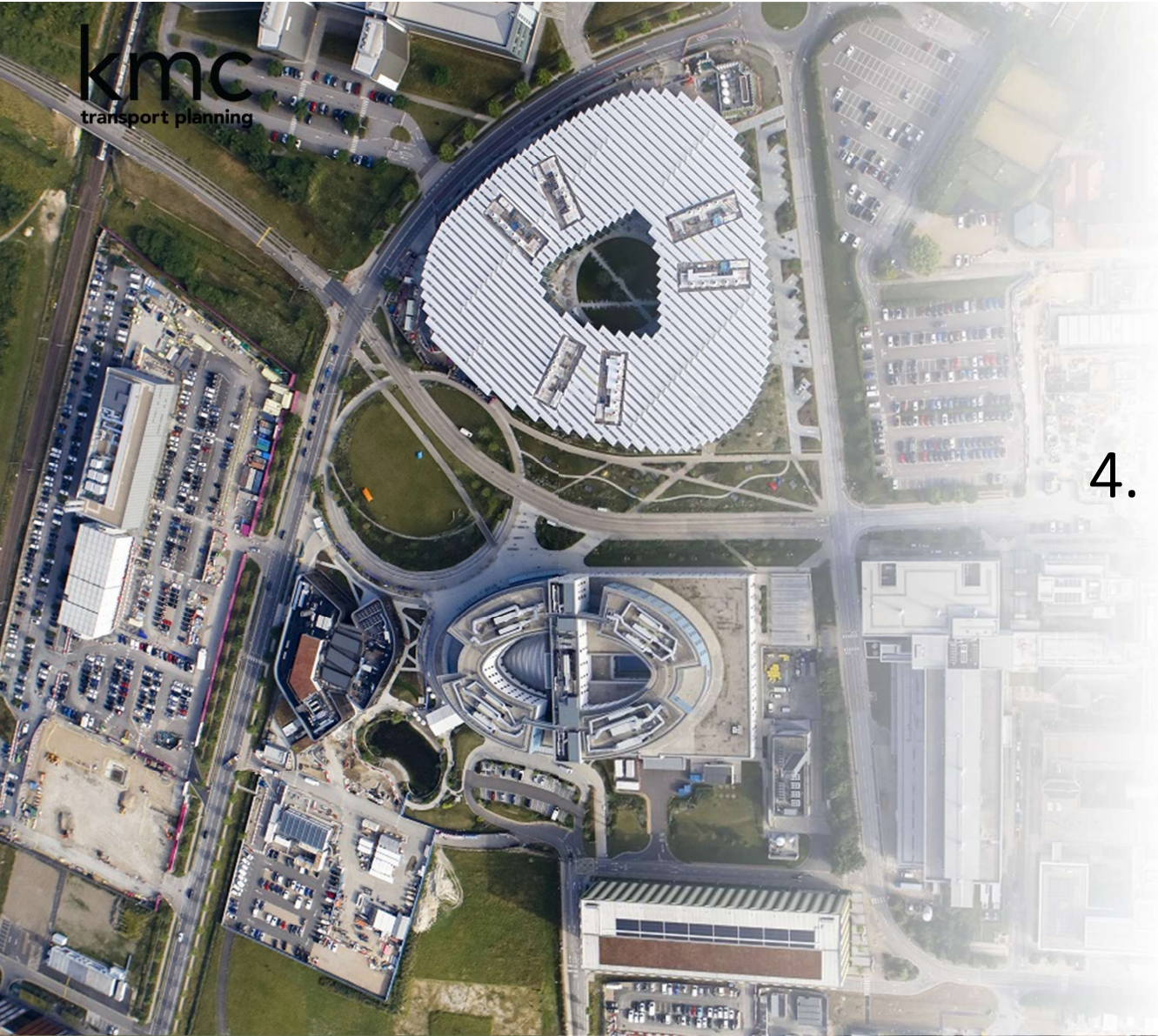


Figure 10: Existing Car Parks by Use



4. Emerging Spatial Framework Summary

Full Masterplan by 2050

Allies & Morrison have prepared the Emerging Spatial Framework which includes the full masterplan set out alongside in Figure 11. This masterplan proposal seeks to create a better-established, better-defined edge to the southern gateway to the city. Framed by a significant green edge the masterplan will also seek to better integrate both physically and socially the campus into the city's southern fringe.

This masterplan proposal has been developed through close discussion with KMC Transport Planning and many of the aspects reported further into this Transport Strategy report are evident within this masterplan proposal.

The masterplan will deliver a significant amount of additional floorspace, and this is set out below. For the full detail on the proposals and the way in which they could be phased over time, the Allies & Morrison Emerging Spatial Framework report should be read.

The implications from a transport perspective are considered in the next section of this report.

CBC 2050 Vision - Illustrative Site Plan



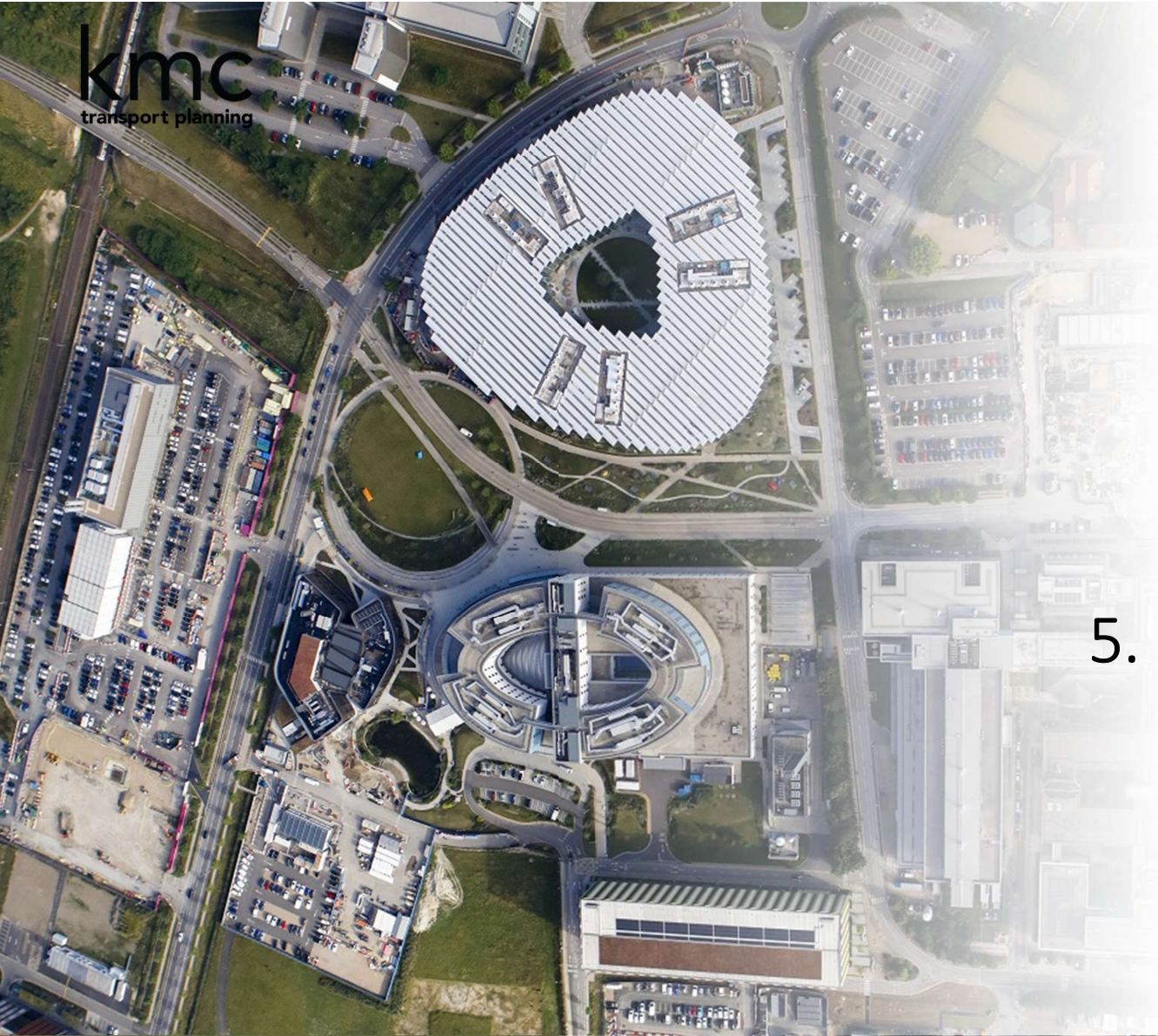
..... Proposed Area of Major Change
..... Expansion Land Phases 3 and 4

Figure 11: Emerging Spatial Framework Full Masterplan

| | |
|---|------------------|
| TOTAL PHASES (EQUALS TOTAL AREAS OF ENHANCEMENT) | 1,225,277 |
|---|------------------|

| | |
|---|------------------|
| TOTAL OVERALL CBC 2050 (Existing & Proposed) | 1,583,499 |
|---|------------------|

| Lab/ Office | Inst. & Academic Research/Edu. | Healthcare | Residential | Leisure | Utilities | Parking |
|-------------|--------------------------------|------------|-------------|---------|-----------|---------|
| 594,529 | 196,974 | 439,725 | 66,300 | 62,393 | 19,214 | 222,050 |



5. Demand Forecasts

Demand Forecasts

Building upon the baseline travel patterns and the additional floorspace created by the Emerging Spatial Framework and summarised in Section 4, a first principles approach to forecasting future trip generation and travel demand has been undertaken. The approach and the forecasts is fully set out in **Appendix A**.

Employees

Using the combined consented and proposed floorspace areas for the 2050 horizon year, broken down by the primary land uses, employment densities have been applied to establish the net additional jobs that the CBC expansion is forecast to generate. Given that all density ratios are expressed in terms of Net Internal Area (NIA), the GEA totals provided in the AAM masterplan have been reduced by 19% to be consistent with the broader project team assumptions. The density assumptions are set out below in **Table 5**.

| Land Use | Density | Source/Notes |
|-------------|--------------------------|--|
| Lab/Office | 1 person per 35 sqm NIA | HCA Guide |
| Academic | 1 person per 25 sqm NIA | University of Cambridge information. This is considered a blended density accounting for students and staff. |
| Healthcare | 1 person per 26 sqm NIA | Derived from existing healthcare staff & floorspace |
| Residential | 1.3 persons per unit NIA | 60 sqm per unit assumed |
| Leisure | 1 person per 120 sqm NIA | HCA Guide |

Table 5: Density Assumptions

As with the calculation of existing staff numbers (Section 2), the proportion of future employees present on any single day is assumed to be 81%, which is consistent with the Atkins Transport Needs Study.

Table 6 indicates that the net additional floorspace (consented & proposed) could generate **23,227 new daily on-site employees**.

| Land Use` | Total | | Total Jobs | Daily On-Site Employees |
|--------------|------------------|----------------|---------------|-------------------------|
| | sqm GEA | sqm NIA | | |
| Lab/Office | 532,471 | 430,290 | 12,294 | 9,994 |
| Academic | 116,200 | 93,901 | 3,756 | 3,053 |
| Healthcare | 368,425 | 297,724 | 11,451 | 9,309 |
| Residential | 62,900 | 50,829 | 652 | 530 |
| Leisure | 62,393 | 50,428 | 420 | 342 |
| Total | 1,142,389 | 923,165 | 28,573 | 23,227 |

Table 5: Forecasting Methodology for Future Employee Population

Patient & Visitors

In addition to new jobs, there will be an increase in the number of visitors that will be generated by any proposals. This will be most significant in terms of additional healthcare uses, which will result in increased patient numbers to the site as these facilities are expanded. To reflect this, a 4% growth rate per annum has been applied up to 2031 in line with estimates provided by Atkins (TNR, Part 3). Beyond 2031, new development will be limited predominantly to commercial uses rather than healthcare and a reduced growth rate of 1% per annum for visitors has been assumed beyond 2031 up to 2050. A further **11,892 patients and visitors** are forecast in 2050 compared with 2023 resulting in a total of **30,092 patients and visitors**.

Summary

The following table provides a summary of existing and future population totals for the CBC campus comprised of employees, patients, and visitors. Overall, CBC is projected to accommodate 72,016 daily person trips in 2050; an increase of 34,382 from a 2023 baseline.

| | Employees | Patients & Visitors | Total |
|--------------------|---------------|---------------------|---------------|
| Existing | 18,697 | 18,200 | 36,897 |
| Consented/Proposed | 23,227 | 11,892 | 35,119 |
| Total | 41,924 | 30,092 | 72,016 |

Table 7: Daily On-Site Employees, Patients, and Visitors for 2050

Demand Forecasts

Daily & Peak Hour Vehicle Trips

The projected growth of daily on-site employees, patients, and visitors has been translated into growth in terms of CBC-wide daily and peak hour vehicle trips. A summary of this process is outlined below:

- The most recent baseline for determining the number of person trips to CBC was derived by Atkins using CBC data for 2017. Whilst forecasts were also provided by Atkins for 2022 and 2031, these have since been superseded by KMC’s updated assessment.
- An uplift equal to the increase in CBC population estimates from 2017 to 2050 (+127%) has been applied to 2017 daily person trips to estimate the daily person trips for 2050. Across all modes, approximately 94,000 daily person trips (one-way) are forecast for 2050.
- To derive peak hour vehicle trips, the following assumptions were applied to these daily person trip forecasts:
 - An existing CBC mode share for ‘person car’ (car driver + car passenger) trips of 69%.
 - Average vehicle occupancy rate of 1.83 people per vehicle, per Atkins assumptions.
 - Daily trips were converted to peak hours based on the ratio of existing traffic volumes at CBC, i.e., 8.8% and 7.0% of daily trips occurred during the AM and PM peak hour, respectively.

It should be noted that the 2017 trip observations have been compared simply based on the timing of the Atkins Study, and Atkins’ desire to not exceed this level of traffic at their horizon year of 2031. A comparison between the resulting 2050 peak hour car driver trip forecasts and the 2017 baseline is presented in **Table 8**. This assumes unfettered growth with no interventions.

| | AM Peak Hour | PM Peak Hour |
|----------------------------------|--------------|--------------|
| 2017 Baseline | 2,730 | 2,169 |
| 2050 Forecast (No Interventions) | 6,192 | 4,920 |
| Net Difference | +3,462 | +2,751 |

Table 8: Net Difference Between 2050 Forecast and 2017 Baseline (Car Driver Trips, 2-Way)

If no action was taken and travel patterns continued in accordance with patterns observed in 2017, Table 8 indicates there would be approximately 4,900-6,200 two-way car driver trips during the weekday peak hours. This step-change from 2017 is further illustrated below, along with other key horizon years examined in this assessment.

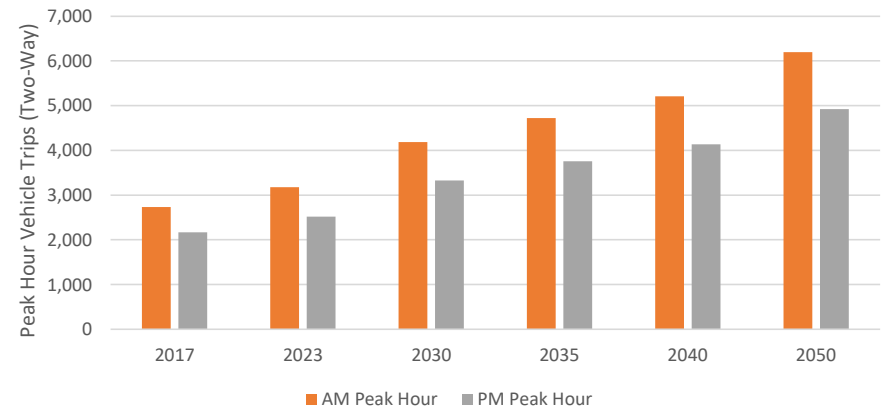


Figure 11: Unfettered Growth (No Interventions) in Vehicle Trips

This highlights the transformative change required to reduce car trips from a ‘business as usual’ growth forecast. Given this position there is a clear and pressing need for interventions to change the trajectory from the ‘do nothing’ position outlined above.

Demand Forecasts

Effects of Transport Interventions

To reduce levels of vehicle trip-making at CBC in order to accommodate growth, a suite of transport interventions will be required, and these are outlined further into this Transport Strategy. The impact of these interventions has been calculated through a variety of methods which are more fully set out in Appendix A and are consistent with the KMC Transport and Movement report prepared in December 2022.

Inherent in the effectiveness of the interventions is that car parking is used as a demand management tool whereby the availability of car parking spaces on the campus is matched to the necessary vehicle trip outcomes.

The resulting peak hour car driver trip estimates ‘with interventions’ are presented in the chart’s opposite, paired with their unfettered growth counterparts.

Based on the measures and interventions discussed in this Transport Strategy, our analysis indicates that sufficient demand management and sustainable transport investment can be relied upon to help mitigate the additional growth. A ‘Trip budget’ will be determined based off the level of development and the measures and interventions discussed in this Transport Strategy (discussed further in Section 6 of this report).

Sensitivity of Interventions

The Demand Forecasting Topic Paper contained in Appendix A reports on a number of sensitivity tests undertaken using the Spreadsheet Tool developed. This exercise considers the sensitivity of transport interventions assumed and the impact of their removal. It should be noted that this is not a transport model and therefore the results are an indication of impact.

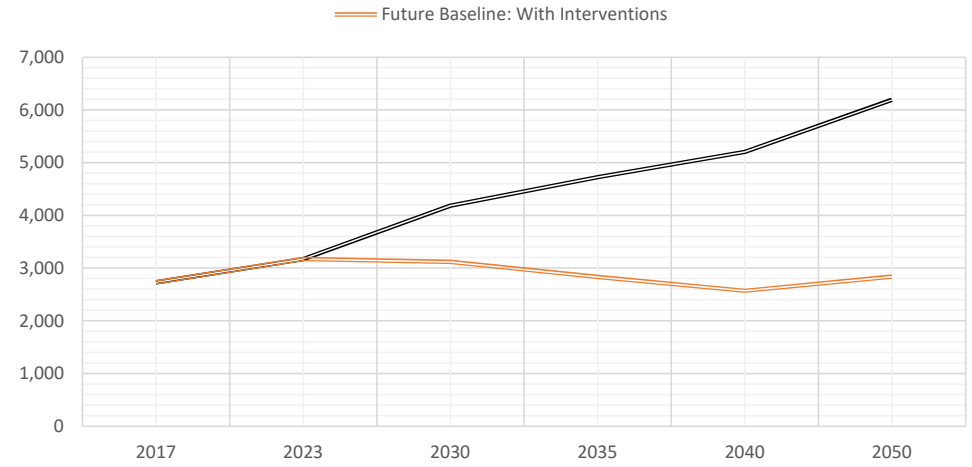


Figure 12: Effects of Transport Interventions on AM Peak Hour Car Driver Trips

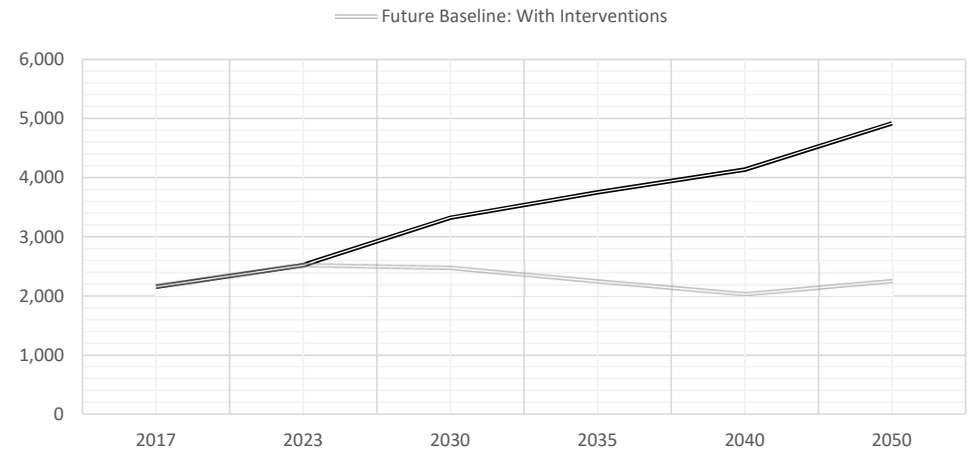


Figure 13: Effects of Transport Interventions on PM Peak Hour Car Driver Trips



6. Planning Controls

Transport Strategy – Planning Controls

The Emerging Trip Budget

All major sites, including CBC, within the emerging Greater Cambridge Local Plan will be required to work to, and within, a Trip Budget. As a refresher, the principle of a Trip Budget is defined by CCC as:

A transport policy approach that sets a limit on the level of vehicular trips that can be generated from a particular development. It seeks to ensure through all stages of the planning process that there are tools and mechanism in place to measure performance with reference back to this level of trip making.

The Trip Budget approach should consist of distinct stages that allow proportionate evidence at each stage of the plan making progress, planning application, delivery, and occupation. The stages are schematically shown below.



Figure 15: Stages for Determining Trip Budget

The range finding stage is considered appropriate for CBC as it reflects the pre-reg 18 stage of the Greater Cambridge Local Plan.

In range setting a trip budget for CBC at this early stage of the masterplanning and transport assessment process, previous studies and evidence has been sourced and reviewed.

From this process it has been determined that the traffic flows assessed and ultimately approved as part of a full EIA and Transport Assessment process for the Phase 2 Outline planning consents, would represent a robust and defensible position for any future masterplan.

The adoption of flows assessed for Phase 2 for a Trip Budget do not account for any traffic that was forecast to occur from Phase 3 allocated as part of the adopted 2018 Local Plan and do not assume a continuation of traffic generation for any further expansion of the campus. Therefore, it is considered that at a trip budget at this level continues to reflect a commitment to more sustainable travel over time and would reflect the significant infrastructure investments being made at the campus.

The flows approved as part of the Ph2 Outline Planning Consents, and which are therefore being proposed as a Trip Budget at this stage in the process are set out below.

Phase 2 (Ref: 16/0176/OUT) Two-way Peak Hour Vehicle Trips.

| Period | Arrivals | Departures | Two-way |
|--------|----------|------------|---------|
| AM | 2,776 | 849 | 3,625 |
| PM | 864 | 2,372 | 3,236 |

Transport Strategy – Planning Controls

The Emerging Trip Budget

Not only is it important to understand the Trip Budget options in terms of peak hour trips, but the feasibility from a mode share must also be considered. This is a critical consideration from a highway authority perspective i.e., *is the car driver mode share both ambitious but also credible to support the trip budget selected?*

To calculate the car driver mode share, the car trips outlined in the above scenarios have been divided by the 2050 person trips forecast of 16,461 and 13,078 two-way person trips during the AM and PM peak hours, respectively, for the fully built out masterplan (inclusive of the Phase 4 land).

The car driver mode share for each of the Trip Budget scenarios outlined above when considered against these two-way peak hour person trip totals.

| Scenario | AM | PM |
|---------------------------------------|-----|-----|
| CBC Ph. 2 Assessed and Approved Flows | 22% | 25% |

Table 10: Car Driver Mode Share of Trip Budget

Compared to other strategic employment sites on the fringes of Cambridge, a target mode share in this range positions CBC lower than all. However, given that the site is the most accessible in Greater Cambridge (once committed infrastructure is delivered) this could be considered reasonable and to be expected:

- Babraham Research Campus – 50.2%
- Granta Park – 53.6% (2021)
- Melbourn Science Park – 79.5%
- Peterhouse Technology Park – 47%
- Wellcome Trust Genome Campus – 55.1%
- St Johns Innovation Centre – 53%
- NECAAP Target Mode Share – 29% (for employment)

The Local Plan transport evidence paper, calculated a car (rather than car driver) mode share proportion of 36% for the CBC model zone without site-specific mitigation.

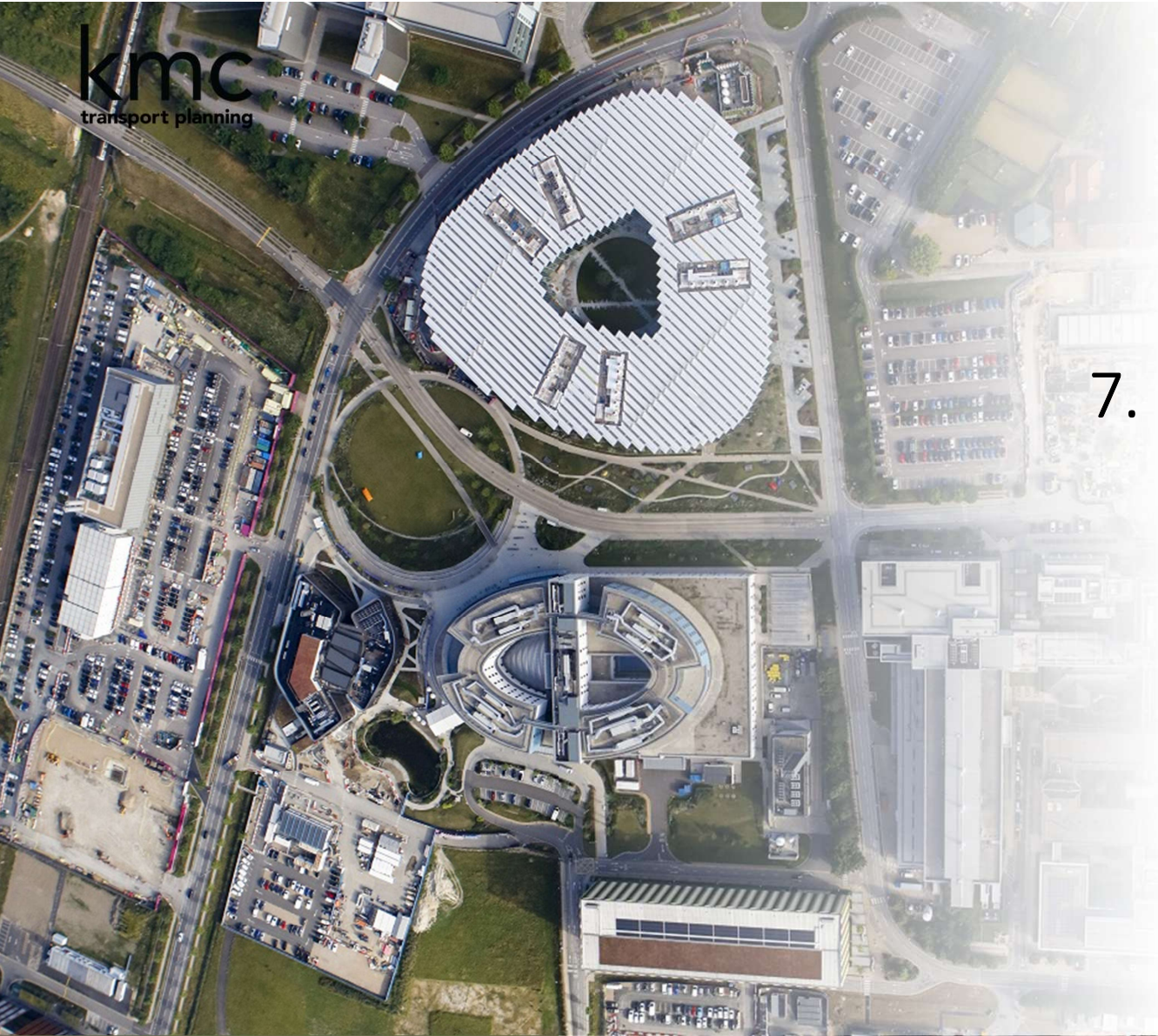
From this comparative assessment, a car driver mode share in the region of ~22% to ~25% appears a reasonable and/or defensible at the range finding stage of identifying a trip budget. It would be a significant reduction from existing car driver mode share of 36% reflecting a positive direction of travel and the significant investments being made at the campus but does not reflect a shift which is likely to be unachievable or too restrictive for healthcare operations in particular.

Car Parking Provision and Management

Given that car parking provision has a strong relationship with vehicular trip generation it is anticipated that parking provision will have an important role to play in helping to manage traffic levels associated with development. Additional to this, the level of car parking provision needs to be evidenced as being required when compared back to the trip budget being considered.

However, at this stage, the level of car parking has not been specified as ultimately it is a product of an agreed trip budget and specific user requirements. The commitment to only provide car parking that supports the adherence to the trip budget is made by the LCG through this report.

The broad locations for car parking are set out further into this report with the absolute scale of the provision to be determined through more detailed assessment work. The broad locations for car parks reflect the design ambitions of the masterplan and seek to consolidate car parking into multi-storeys so as to avoid inefficient and visually impactful surface parking.



7. Transport Vision & Key Moves to Unlock Movement & Connectivity

Transport Vision & Objectives

Transport Vision

Achieving the targeted car driver mode share and, consequently, the ultimate trip budget and corresponding parking supply recommendation, CBC's transport vision will need to be realized:

The Cambridge Biomedical Campus will evolve and improve. From a transport and movement perspective less impactful modes will be prioritised, and the campus will become inclusive to all. All stakeholders and visitors will benefit from increased accessibility and a less hostile environment to work, visit and spend time. Transport, through placemaking, will stitch the campus together. Any growth will be sustainable growth predicated on transport investments that maintain and increase access, but which positively contribute to reaching lower carbon future.

This vision is based (and can only be fully achieved) on the presumption that current challenges and issues with access to and within the Campus are addressed. Without positive intervention, transport and access to the site has the potential to become a detriment. Providing capacity and easier access for sustainable modes instead of cars is imperative. This shift is consistent with the policy objectives of stakeholders within the campus and decision makers in local government. Delivering the vision will ensure that the campus can become a more attractive place to invest and enable continued economic growth. It would help CBC to contribute to the economic growth targets set for the Cambridge Sub-region by both the CPCA and GCP and attract further investment.

Objectives

In order to deliver this vision, the following objectives have been developed. These are objectives identified through this work but will exist longer term and should be used to validate subsequent choices through different stages of the planning process and, in the much longer term, implantation and delivery. They seek to address identified shortcomings and provide the platform and framework for an improved future.

1. **Appreciating Adjacencies and the importance of Land Use Mix** – Transport is a derived need. Even at a local level the relationship of separate buildings and uses can create or reduce travel demand, conflict and the reliance of infrastructure and capacity. Promoting a better mix of uses and a sensible distribution of buildings is part of the transport solution.

2. **Design inclusivity, legibility, and wayfinding** – Ensure that the design of infrastructure, the use of materials and signage are both in keeping with best practice but also consistent within the campus and city. Ensure that infrastructure caters for all users and maximises inclusivity and reduces apprehension when using spaces and crossing roads. Pedestrians and cyclists should be afforded infrastructure that is coherent, direct, safe, comfortable, and attractive. Gateways to the site will be welcoming and safe.
3. **Increased permeability and priority for selected user groups** – A hierarchy of users and connections will be reflected in designs and movement strategies. Sensible design responses to the car will allow increased granular connectivity for pedestrians, cyclists and improved reliability and penetration for public transport. Delivering east west public transport connectivity to connect into the north south corridors must be achieved.
4. **Managed parking** – Support a coordinated approach to car parking across the Cambridge Biomedical Campus that makes efficient and flexible use of existing parking stock, while recognising the operational requirements of individual occupiers.
5. **Designing to reduce the dominance of the car** – Through sensibly located car parks and a hierarchy of routes that serve them. The blight of car traffic within the campus will be managed and designed for. The strategy for cars allows the strategy for other users to be successful.
6. **Support and complement infrastructure investment** – Significant investment in and policy direction for sustainable transport infrastructure is being made. CBC cannot dictate the pace of delivery but will embrace it and will seek to maximise the effectiveness of it. Designs will seek to allow ease of interchange, increased integration with the campus environment, and incentivisation to use.
7. **Conditional Support to City Wide and Regional Policies** – Longer term transport solutions are needed to support continued growth. CBC will continue to support the transport authorities in the Greater Cambridge area to deliver radical and sustainable change. Interventions need to be timely.

Key Moves to Unlock Movement & Connectivity

To achieve the Vision and many of the stated objectives, two key moves have been identified as part of the evolution of the transport strategy and the Emerging Spatial Framework. These are reported in this section of the report and are then subsequently reflected in the structure of the masterplan and many of the supporting transport measures and interventions.

Structurally, the addition of two key connections are able to transform public transport connectivity in the south of the city:

- i. An enhanced gateway from Hills Road coupled with an East West High Street would provide the opportunity for bus-based journeys to and from east Cambridge and the significant growth area at Cambridge Airport, through the campus via Cambridge South station and onwards to the southern Fringe and the Southwest Travel Hub.
- ii. A connection from Babraham Park and Ride to CBC, Cambridge South, and the Cambridge Guided Busway (S) provides the opportunity for buses to bypass congestion along Babraham Road and access the city centre via the existing segregation afforded by the CGB(S). Additionally, P&R to P&R services via CBC and Cambridge South station provide the potential for dedicated high frequency buses to link P&R sites and the campus.

The structural connectivity, as described, assists with the interception of car trips on the most appropriate radial corridors for their origins rather than cars navigating to the corridors upon which their destinations lie i.e., a network is created, and CBC sits at the heart of it.

These two key moves in combination with other strategic investments being made at the campus would help to address many of the 'city scale' movement challenges set out in the earlier section of this report. Clearly many other issues also exist or will as a result of further growth and that will require different measures to be implemented. However, from an Access and Movement perspective these structural moves have been central to the thinking and development of the Emerging Spatial Framework.

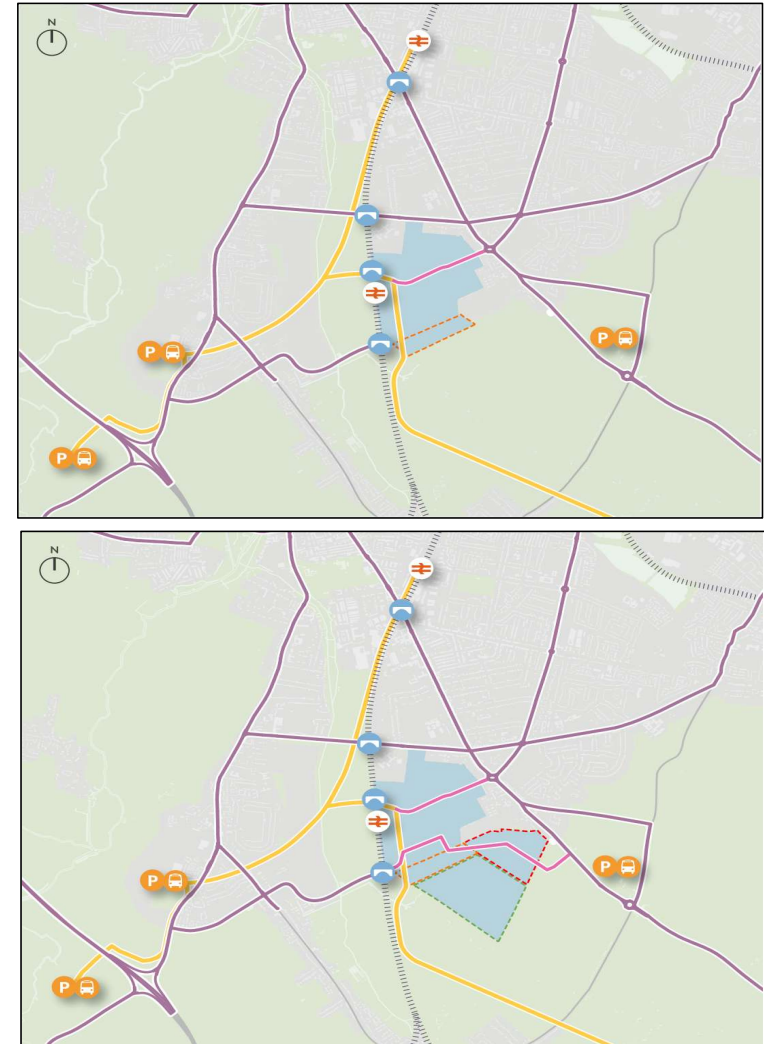
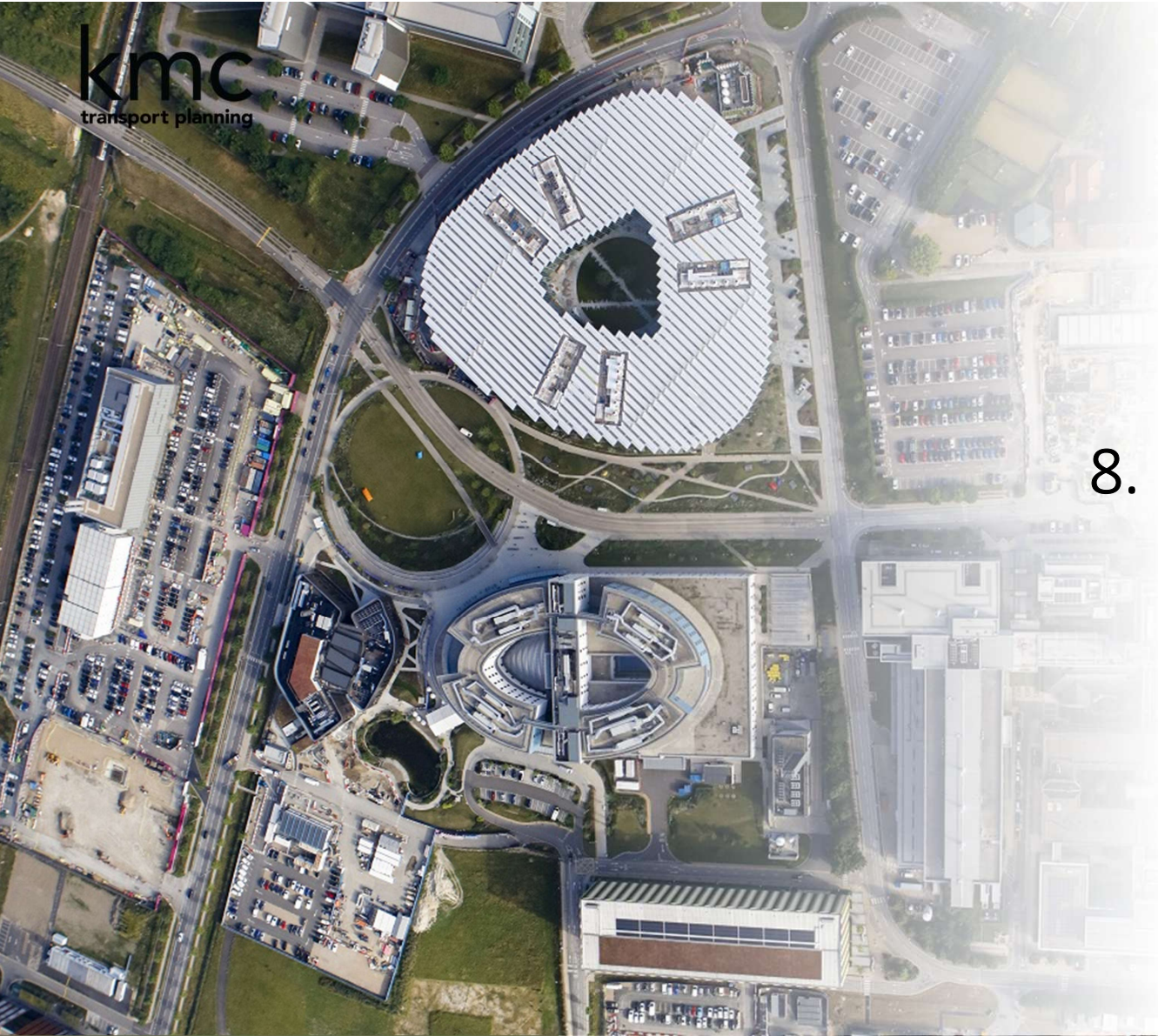


Figure 19: Existing City Scale Movement



8. Transport Strategy to Support Growth 2030

*The following section interprets the potential phasing of development and how a progressive, incremental approach to infrastructure delivery could support that growth. **The phasing is considered illustrative**, giving an early sense of when interventions may be needed. Actual sequencing will depend on further technical work, funding and partnership input, with a monitor-and-manage approach ensuring delivery remains flexible as the Spatial Framework and evidence base evolve. This is a first draft and will iterate further to inform the first full Infrastructure Delivery Plan.*

Cambridge Biomedical Campus at 2030

The AAM Emerging Spatial Framework has proposed that additional growth up to 2030 would be as follows and as set out alongside:

- The continual buildout of the Phase 2 land with the Prologis commercial space being opened;
- The first buildings of the Phase 3 allocation being built with the Confluence commercial space built and occupied (The exact timing of the Confluence will need to be established through more detailed assessment and commercial modelling. The timing of the Southern Access Road will be material to the scale and timing of the Confluence);
- The completion of the AstraZeneca site on the west of the campus and the associated multi story car park (along with Cambridge South Station);
- Plot 9 commercial building to the south of the AZ site; and
- The Cancer Research Hospital (RSC20) and the Childrens Hospital (RCS56) buildings (not resulting in any additional floorspace), will be operational by 2030.

These changes and growth assumptions would see 200,315 m² of additional floorspace delivered beyond the existing total. Of this figure 103,814 m² is already consented through the previous Phase 1 and 2 consents obtained.

To support this growth a number of transport related measures are deemed to be necessary and appropriate. These are documented on the following pages of this section of the report and include:

- **Public Sector Investments (both on and off site)** – to be delivered by public bodies with potential that some further funding would be sourced through new planning consents.
- **On Site Shared Infrastructure** – Deemed to be primary and critical infrastructure that relates to the Emerging Spatial Framework and can not be expected to be delivered through plot development
- **Other Transport Measures** – Other transport measures or management strategies deemed necessary to support growth, but which are not to be delivered by public bodies or considered to be primary physical infrastructure necessary to support the overarching principles of the Emerging Spatial Framework.

*The following section interprets the potential phasing of development and how a progressive, incremental approach to infrastructure delivery could support that growth. **The phasing is considered illustrative**, giving an early sense of when interventions may be needed. Actual sequencing will depend on further technical work, funding and partnership input, with a monitor-and-manage approach ensuring delivery remains flexible as the Spatial Framework and evidence base evolve. This is a first draft and will iterate further to inform the first full Infrastructure Delivery Plan.*

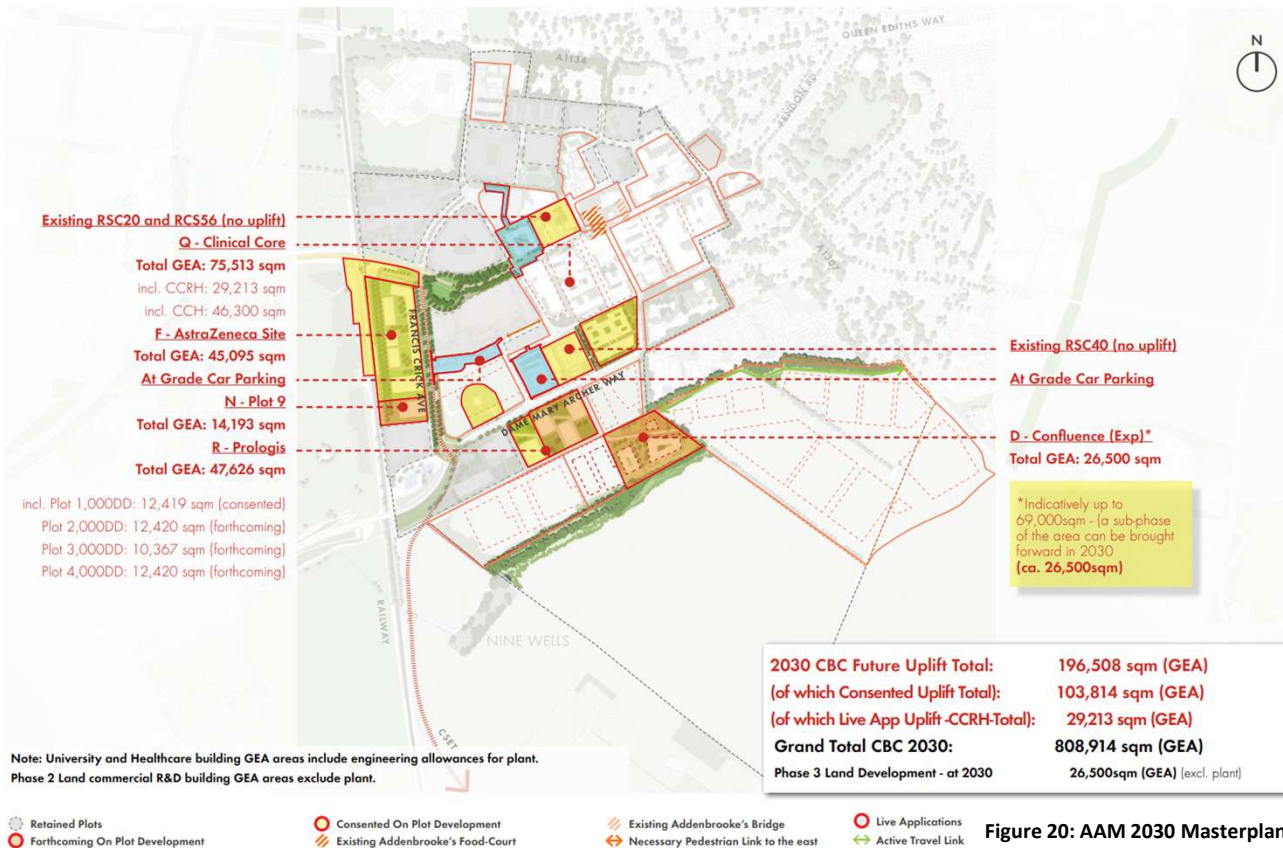


Figure 20: AAM 2030 Masterplan

Cambridge Biomedical Campus at 2030

The transport additions to be delivered by 2030 which will support and enable growth as envisaged by the Emerging Spatial Framework are shown in the following table.

The status of the public sector investments is that they can be expected to be delivered regardless of the further growth anticipated by the Emerging Spatial Framework although their business cases would be improved. These investments will therefore help to address an existing infrastructure deficit, support much needed accessibility improvements as well providing a platform for further growth as envisaged.

The on-site shared infrastructure by 2030 is limited given the quantum of additional floorspace beyond that which has already been consented. These measures largely relate to schemes that improve access, movement, and safety.

It is proposed that 26,500m² of the Phase 3 land is brought forward by 2030 which is less than the 30,685m² allocation and hence, there is no reliance on significant transport infrastructure beyond that which was assumed at the time of the allocation. However, the delivery of Primary Mobility Hub is an important intervention that brings a transport focus and interchange to coincide with Cambridge South Station and CSET.

The Shared Infrastructure for 2030 is shown alongside and further detail on all measures is provided in the remaining pages of this report.

| Public Sector Investments | On Site Shared Infrastructure | Other Transport Measures |
|---|---|--|
| Cambridge South Station (Network Rail) | Mobility Hub as part of Amenity building and west of high street bus interchange with CSET and Cambridge South (CBC) | (3no.) Secondary Mobility Hubs |
| Cambridge Southeast Transport Study Phase 2 (CSET) (GCP) (on pause but still part of the GCPs schedule) | Additional pedestrian cycle connection from Babraham Road south of Nine Wells (CBC) | Temporary parking strategies linked to infrastructure delivery |
| SWTH (GCP) | Tactical small scale mobility Improvements within the campus (Phase 1 Land) (CBC) | Encourage Work-from-Home practices |
| Foxton Travel Hub (GCP) | Initial interventions to Addenbrooke's food-court (as a meanwhile use) to allow for east west public through route for pedestrians and cycles (CBC) | Bus pass subsidies for new / relocated staff |
| Planned On-Street Parking Controls (GCP) | Enhanced north south routes connecting Phase 2 into Phase 1 and western end of High Street | - |
| Sawston Greenway (GCP) | - | - |
| Cambourne to Cambridge (GCP) | - | - |
| Fendon Road Cycle Plus (GCP) | - | - |
| Hills Road Cycle Plus (GCP) | - | - |

Table 13: Transport Measures in Place by 2030

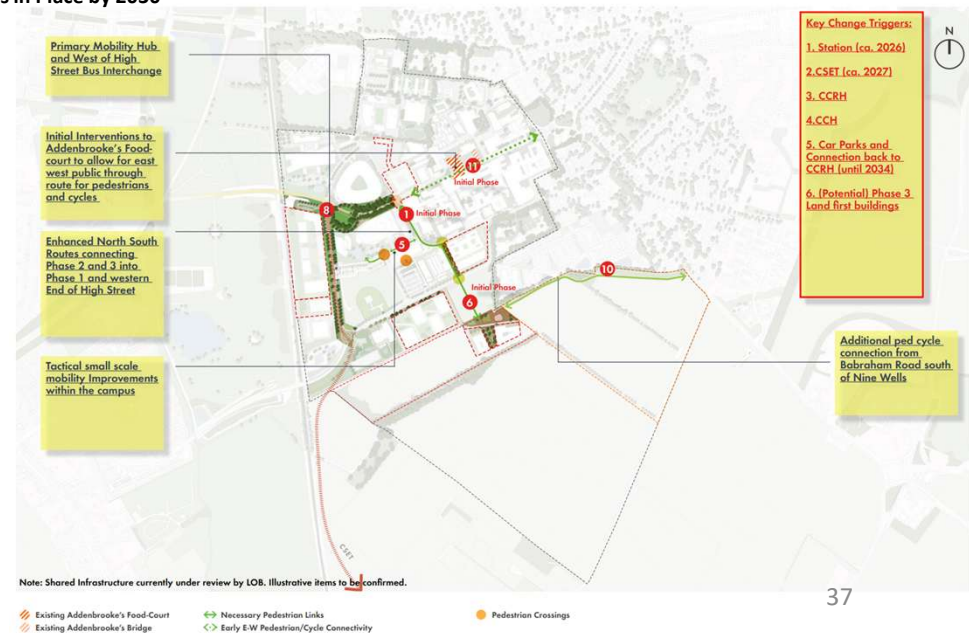


Figure 21: CBC at 2030 Shared Infrastructure

Transport Strategy to support Growth to 2030: Public Sector Investments Scheme Summaries

Cambridge South Railway Station (Network Rail – Programmed opening 2026)
Cambridge South Railway Station is a new railway station that is located to the west of and adjacent to the campus. It will be accessed via Francis Crick Avenue to the east for drop offs, taxi, walking and cycling, and via Hobsons Park to the west on foot and by bicycle only.

There is to be cycle parking provided to both east and west of the railway, adjacent to the entrances, and bus stops are located on Francis Crick Avenue and on the Green where access to the existing Cambridge Guided Busway is provided. These stops and interchange will be enhanced through the Primary Mobility Hub proposed in this area.

Direct rail access will transform transport accessibility for the campus which will be enhanced further through longer term strategic rail investments such as East West Rail and Ely Area Capacity enhancement (EACE).

Funding is in place and construction has begun. The station will open for passengers in Summer 2026.

Cambridge Southeast Transport Study (Phase 2) (GCP – Programmed opening late 2020's) –
The Cambridge Southeast Transport project will offer better public transport and active travel options for the A1307 and A1301 area. It will improve journey times, reliability and link communities and employment sites in the area southeast of Cambridge.

Phase 1 of the CSET project focused on the safety of walk, cycle, and bus routes between Haverhill and Cambridge along the A1307 and will encompass part of the Linton Greenway.

Phase 2 includes a new segregated public transport route from a new Park& Ride at the A11 to CBC via stops in Sawston, Stapleford and Great Shelford. After serving CBC and Cambridge South Station the route would continue via the Cambridge Guided Busway to central Cambridge.

Grange Farm has been included in the Reg 18 stage of the Local Plan to the east of the proposed travel hub as part of CSET Phase 2. CSET will ensure that Grange Farm and CBC are well connected with high quality public transport services.

An application has been submitted to Secretary of State for Transport as part of the Transport and Works Act Order Application in 2025. It is scheduled that a public inquiry will take place in 2026.



Figure 21: Cambridge South Station Forecourt

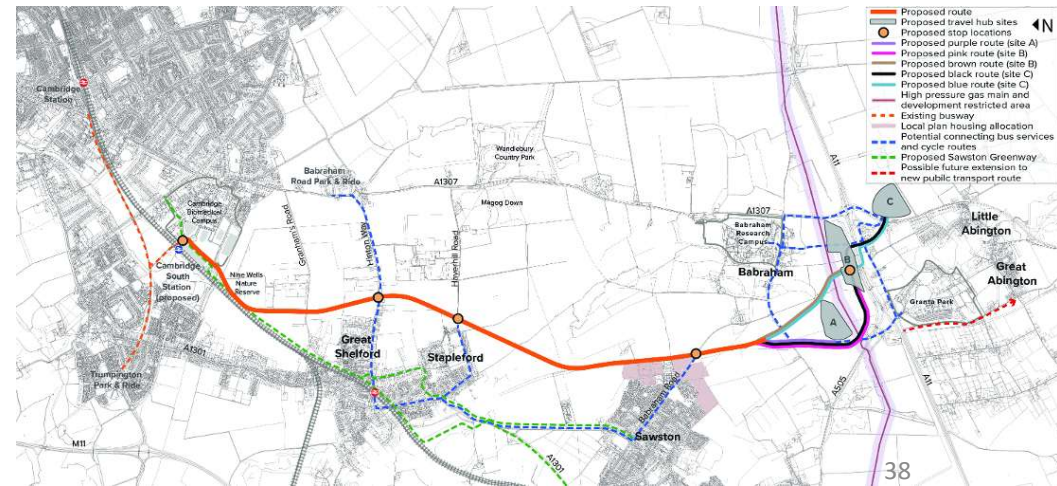


Figure 22: Cambridge Southeast Transport Study Phase 2

Transport Strategy to support Growth to 2030: Public Sector Investments Scheme Summaries

Southwest Travel Hub (GCP – Programmed opening mid/late 2020's)

Junction 11 of the M11 is a key entry point into Cambridge from the south. A new travel hub is proposed by the GCP, thus helping reduce the number of cars travelling into the city.

The draft layout is shown alongside. A planning application for the hub was submitted in 2020, and the proposals include for 2,150 car parking bays and a segregated public transport route which link the Travel hub west of the M11 with the A1309/Hauxton Road north of the M11, bypassing M11 Junction.

The application was passed to the Secretary of State for final approval, which was granted in July 2022(ref: CCC/20/040/FUL). An opening year of 2026 is anticipated.

The CSWTH will provide significant benefits to the campus with car trips able to be intercepted at Junction 11 and then a fully segregated public transport trip to the heart of the campus or a fully segregated cycle trip alongside the busway.

In addition to the delivery of the SWTH, the GCP plans to expand the existing Trumpington Park & Ride site, thus helping to reduce the number of cars travelling into the city.

Foxton Travel Hub (GCP – Currently Paused)

The Foxton Travel Hub is planned to provide in the region of 500 car parking spaces and 150 cycle parking spaces to provide more people with the opportunity to travel into Cambridge and the campus by train.

Similar to the CSWTH, the Foxton Travel Hub will intercept car trips before the city fringes and in this case along the A10 rather than the M11. The Foxton Travel Hub in combination with Cambridge South Station provides a further opportunity for expanded rail access for the campus.

The scheme is currently paused based on funding being allocated to other high priority schemes. The scheme is not however, abandoned.

Planned On-Street Parking Controls (GCP Scheme – Mid 2020s)

As part of the City Access Strategy, it is proposed to extend the On-street Parking Controls, already in place in the City Centre to areas around CBC, amongst others. In combination with parking restrictions on-site, this means that existing on-street parking is displaced, forcing drivers to make alternative travel choices that may include making use of a Park and Ride site.



Figure 23: Cambridge South West Travel Hub



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Figure 24: Foxton Travel Hub

Transport Strategy to support Growth to 2030: Public Sector Investments Scheme Summaries

Sawston Greenway (GCP – Programmed opening late 2020's)

The Sawston Greenway will provide a safer and better route for people using active travel modes between Sawston and CBC. The Sawston Greenway will connect into Stapleford, and Great Shelford.

The Sawston Greenway will include a new high-quality pedestrian and cycle crossing at the junction of Long Road and Robinson Way and safer, more direct cycle tracks on Robinson Way through the Addenbrooke's/Biomedical Campus. This will transform this existing hostile gateway.

Further to this the Linton Greenway, Melbourn Greenway, and the Chisholm Trail will connect into CBC. The Linton Greenway is under construction and partially completed, with full completion by 2025/26. The Melbourn Greenway will run from Royston and connect into the Foxton Travel Hub, Trumpington and then branch off to CBC. The Chisholm Trail will connect the current two train stations in Cambridge and then connect into the Greenways to connect into CBC.

The Greater Cambridge Greenways will follow off-road paths, along quiet streets or provide improved facilities along busier roads to provide more people with safer, easier and more direct routes in and out of Cambridge.

Cambourne to Cambridge – Programmed opening late 2020's)

The C2C is one of four major corridor schemes that form part of the GCPs Sustainable Transport Program. The route is to link Cambourne to Cambridge via the new Bourn Airfield development and a new Travel Hub at Scotland Farm, Hardwick and West Cambridge campus. Outside of the city the route will be segregated from general traffic.

The proposals include a 6 buses per hour to the city centre and two per hour to CBC.

The route is made up of three key elements:

- A public transport route between Cambourne and Cambridge, providing reliable and sustainable services bypassing general traffic congestion.
- A new travel hub at Scotland Farm, off the A428/A1303.
- New cycling and walking links.

A full Transport & Works Act Order (TWAO) has been submitted by CCC, with a public inquiry held in November 2025. The scheme is currently under consideration by the secretary of state.

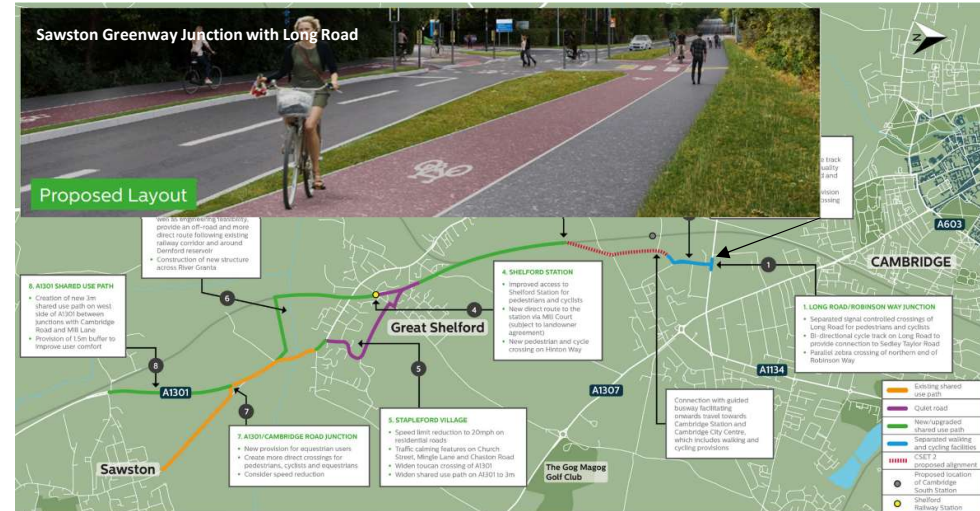


Figure 25: Sawston Greenway



Figure 26: Cambourne to Cambridge (C2C)

Transport Strategy to support Growth to 2030: Public Sector Investments Scheme Summaries

Fendon Road Cycle Plus (GCP – Programmed Opening 2027)

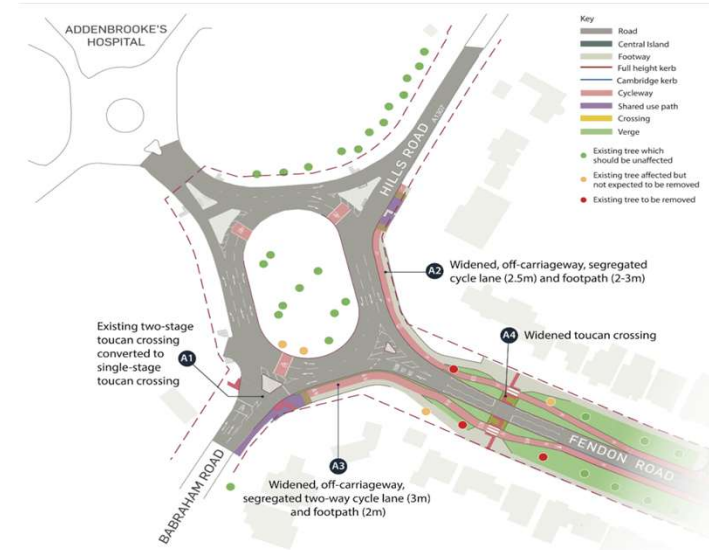
The Fendon Road Cycle Plus scheme will see much improved cycle infrastructure provided along the Fendon Road corridor from CBC towards the east of the city. It also includes upgrades to the **Addenbrookes Roundabout** which were delivered in early 2026.

The new design removes the two stage crossings on the Addenbrookes Roundabout and has replaced them with single stage crossings allowing pedestrians and cyclists to cross in one stage. The new design aims to make it safer and easier for all road users to access Addenbrooke's Hospital and CBC. The GCP has secured the funding from the Cambridgeshire and Peterborough Combined Authority (CPCA).

The current designs do not account for changes in traffic flows or wider redevelopment around the junction as part the Emerging Spatial Framework. Whilst the proposals are positive further reaching and more transformative arrangements could be delivered if undertaken in conjunction with the masterplanning of the campus.

A potential alternative arrangement that utilises some land outside of the public highway is shown alongside. This is an illustrative arrangement but demonstrates that a comprehensive redesign, in conjunction with the opportunities that can be provided through the Emerging Spatial Framework, can see a more complete design solution and a gateway more befitting the longer-term vision of the campus.

**Figure 26:
Addenbrookes
Roundabout
Changes as part of
Greater Cambridge
Partnership
Fendon Road Cycle
Plus**



**Figure 27:
Illustrative
Alternative
Addenbrookes
Roundabout
Changes enabled
by the Emerging
Spatial Framework**



Transport Strategy to support Growth to 2030: Public Sector Investments Scheme Summaries

Hills Road Cycle Plus (GCP – Programmed Opening 2027)

Hill Road is a key route into the Centre of Cambridge as well as connecting into CBC, but the active travel infrastructure is suboptimal. Currently the GCP have a live consultation to allow people to comment on the two proposed options for Hill Road. The consultation is live until the 24th of July. The proposals include CYCLOPS junctions, extended cycle lanes, and floating bus stops to provide cyclists with a continuous path. Some of the aims of the scheme are to improve pedestrian and cycle safety along Hills Road and reduce bus journey times along Hills Road wherever practicable.

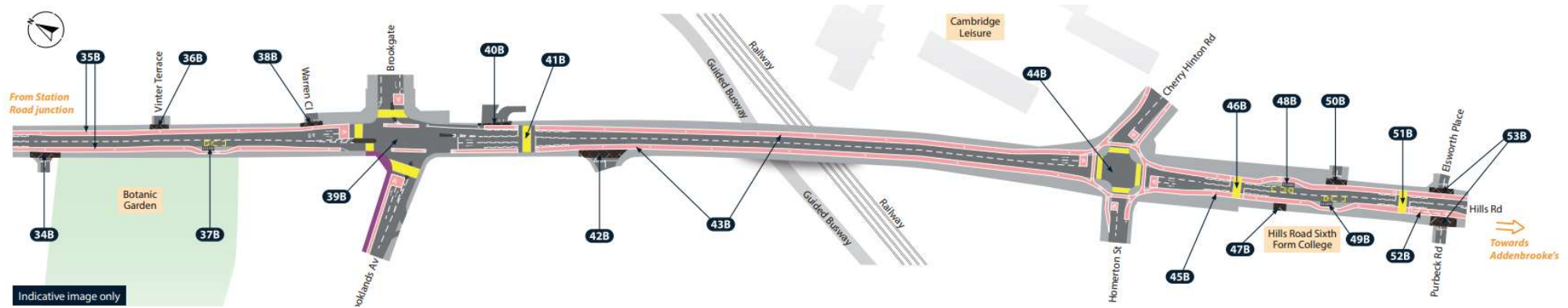


Figure 28: Hills Road Cycle Plus Proposals

Transport Strategy to support Growth to 2030: On-site Shared Infrastructure

Mobility Hub as part of Amenity Building and west of High Street with Bus Interchange with CSET and Cambridge South (CBC Transport Strategy – by 2030)

A mobility hub type facility will be located at the west end of the High Street and will be located close to Cambridge South Station and at the convergence of CSET and the existing Cambridge Guided Busway.

The design will use the existing public space around a large public transport hub to allow ‘first & last mile’ connectivity. The facility can be part of a planned amenity building and would be a front door to the campus for transport and travel information. The majority of the infrastructure is already in place or part of the plans for CSET or Cambridge South.

COMO UK Guidance states that:

Mobility hubs are highly visible, safe, and accessible spaces where public, shared and active travel modes are co-located alongside improvements to public realm, along with community facilities where relevant. The redesign and reallocation of space away from the private car enhances the experience for travellers and creates a more pleasant environment for everyone.

The mobility hub will be designed and spatially organised so as to facilitate access to and transport between modes, including human-powered and shared modes, as well as provide extra transport-related and digital services. In this location it will provide a recognisable network of defined areas providing services to connect people through sustainable travel and the public realm. It will have a direct and obvious relationship to Cambridge South station and CSET and any passenger's arrival experience.

An illustrative example of a Primary scale mobility hub is shown alongside whilst spatially, the area proposed, is also shown alongside its relationship to bus stops and Cambridge South Station.



Figure 29: Illustration Mobility Hub type facilities that can be integrated into the public realm

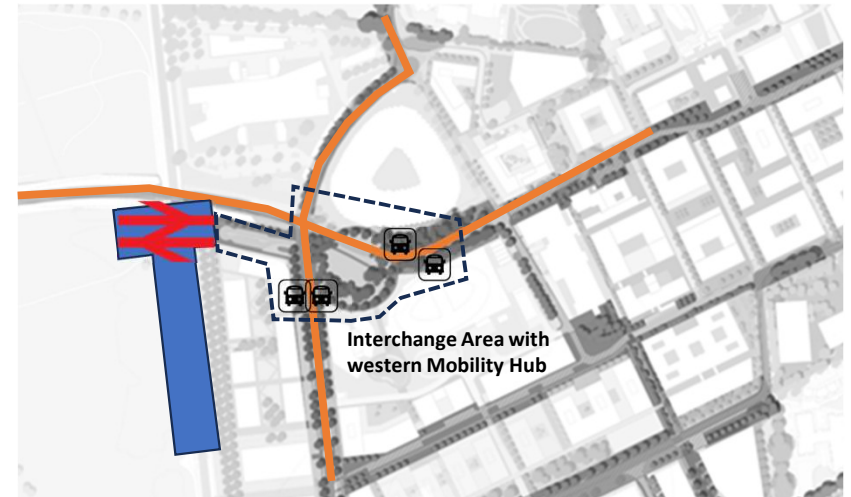


Figure 30: Illustrative location of Primary Mobility Hub

Transport Strategy to support Growth to 2030: On-site Shared Infrastructure

Additional pedestrian and cycle connection from Babraham Road south of Nine Wells (CBC Transport Strategy – by 2030)

This would see an extension of the existing Shared User Path from Babraham Road which currently connects into Knightly Avenue and the Nine Wells residential area to the east of CBC.

The extension of this route would be to the south of Nine Wells and would connect Babraham Road into the Phase 3 land meaning better and more direct access from CSET Phase A and the Babraham Road Park & Ride to CBC.

Tactical small scale mobility Improvements within the campus (Phase 1 Land) (CBC Transport Strategy – by 2030)

In advance of the delivery of more significant streetscape and infrastructure improvements afforded by further development a number of small-scale tactical improvements would be implemented. These would include dropped kerbs, pedestrian and parallel crossings, and small-scale connections provided to address failings in the existing campus.

A number of such improvements are proposed as part of CUH temporary car parking proposals.

One location where a small-scale improvement could be implemented is improving pedestrian and cycle connections between Francis Crick Avenue and Robinson Way south of the Royal Papworth Hospital.

Enhanced North South Routes connecting Phase 2 into Phase 1 and western End of High Street

By 2030 the early delivery of what will become the North South route will be delivered. At this stage of the masterplan, the proposal will need to work with many of the constraints that exist within the current campus and prior to the benefiting from the ‘breathing space’ afforded through the Phase 4 land.

Nonetheless a better demarcated and legible connection will be delivered that will connect the Confluence to the South with the Western Primary Mobility Hub and Cambridge South Station. Minor early interventions may include:

- Resurfacing road and pavement
- Removal of canopy on West side of road;
- Provision of trees and associated pits at regular intervals
- update/refresh of external lighting
- road widening for new cycle way?
- soft landscaping



Figure 31: Additional Ped/Cycle Connection from Babraham Road, south of Nine Wells



Figure 32: Example of Parallel Crossing installation

Transport Strategy to support Growth to 2030: Other Transport Measures

Initial Interventions to Addenbrooke’s Food-court (as a meanwhile use) to allow for east west public through route for pedestrians and cycles (CBC Transport Strategy – by 2030)

In advance of full delivery of the East West High Street, it is proposed that a low-cost reconfiguration/ minor works amendment to the existing food court is explored to allow pedestrian and cyclist connectivity east west to support movements to, from and through the campus. This would have a clear and direct relationship to Cambridge South and CSET to the west.

This will however require a more detailed study as the extent of work required and associated costs for providing this is currently unclear. The conclusions of the further study will inform the viability of this ‘meanwhile’ scheme.

(3no.) Secondary Mobility Hubs (CBC Transport Strategy – by 2030)

Secondary mobility hubs to be located northern, central and confluence.

Wayfinding and accessibility are at the forefront of Secondary Mobility Hubs and this view shows both these elements at the forefront of the design. These hubs can be in a linier design or can be more compact depending on the restrictions at each of the locations. The infrastructure of the hub does not need to be extensive but should be homogenous and give a sense of place. By providing quality infrastructure and services, new users can be enticed to try the hub and leave the car at home.

Secondary Mobility Hubs provide a ‘first and last mile’ solutions – as well as the bus, there could be a bike share and an EV car club along with journey planning information.

Temporary parking strategies linked to infrastructure delivery (CBC Transport Strategy – by 2030)

Whilst the phases are implemented and constructed, temporary car parks will be needed before and whilst the proposed multistorey car parks are being constructed and also potentially in advance of major infrastructure.

This could be in the form of organising one temporary car park to close as the next is needed or timing it so that when permanent car parks are closed, the temporary car park can open.

CUH have two temporary car parks proposed which are shown and accounted for in the AAM on the 2030 land use plans. The temporary car park to the south of MSCP 2 is shown alongside with the proposed crossing points that would be delivered in conjunction.

Encourage Work-From-Home (WFH) Practices (CBC Transport Strategy – by 2030)

Post-pandemic trends indicate that WFH activity will persist. Employment and labour market research indicates 14% of employees WFH exclusively with a further 24% of employees partaking in a hybrid model (Office of National Statistics, 2022). For this assessment, it is estimated that 20% of the admin/clerical staff would WFH.

Free Bus Pass for New/Relocated Staff (CBC Transport Strategy – by 2030)

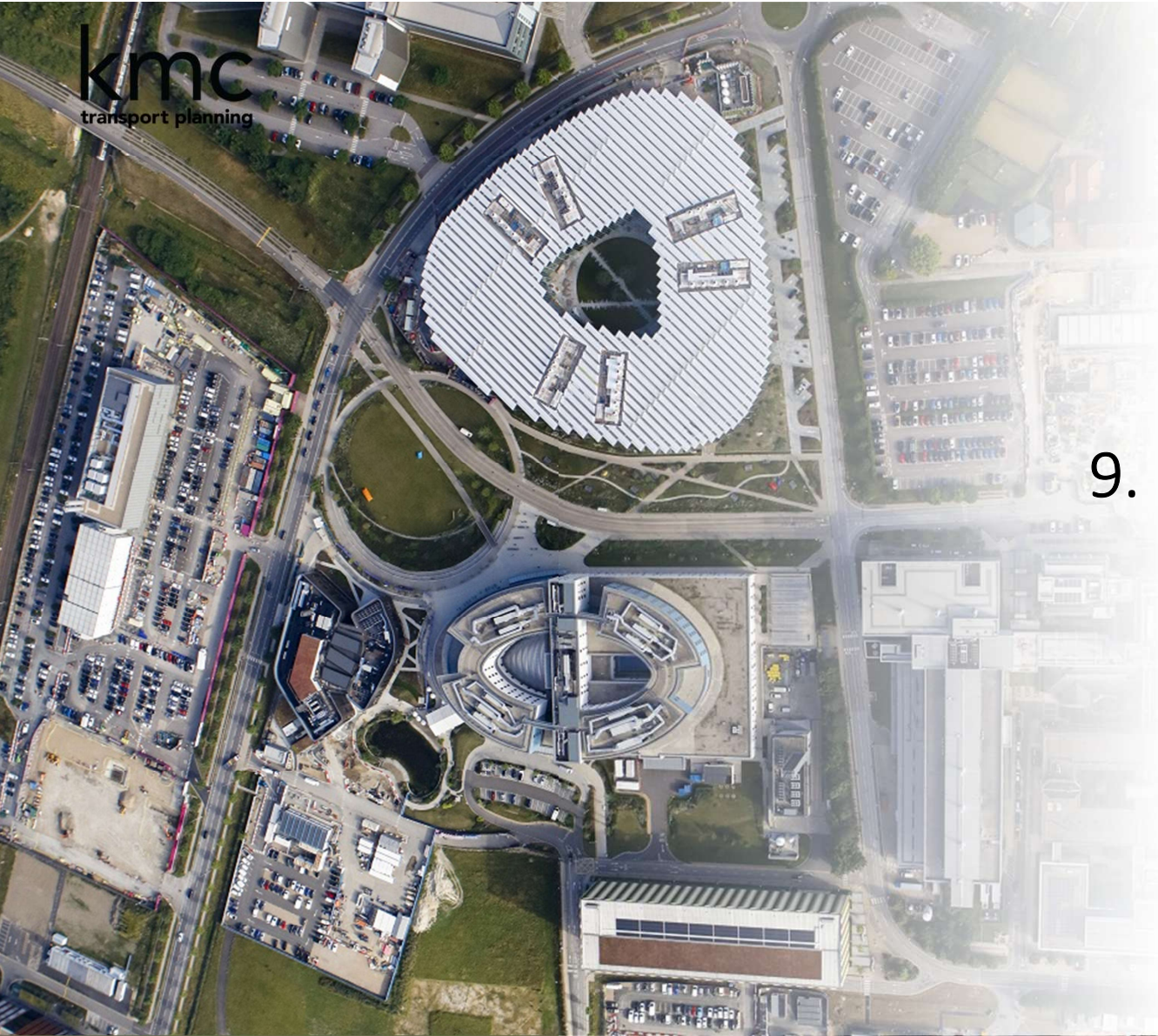
New / relocated staff to receive free bus passes that cover the first month of their employment to instill positive travel habits from the outset.



Figure 33: Illustrative Location of Further 3 No. Secondary Mobility Hubs (●)



Figure 34: CUH Temporary Car Park, South of MSCP 2



9. Transport Strategy to Support Growth 2035

*The following section interprets the potential phasing of development and how a progressive, incremental approach to infrastructure delivery could support that growth. **The phasing is considered illustrative**, giving an early sense of when interventions may be needed. Actual sequencing will depend on further technical work, funding and partnership input, with a monitor-and-manage approach ensuring delivery remains flexible as the Spatial Framework and evidence base evolve. This is a first draft and will iterate further to inform the first full Infrastructure Delivery Plan.*

Cambridge Biomedical Campus at 2035

The AAM Emerging Spatial Framework has proposed that additional growth up to 2035 would be as follows and as set out alongside:

- The redevelopment of the northern gateway, resulting in the loss of Car Park S;
- The Frank Lee Centre development comprising a mix of commercial and leisure floorspace;
- The additional Healthcare space associated with the Clinical Core and the Hospital expansion;
- The continued buildout of the Phase 3 land and its associated commercial floorspace;
- The eastern gateway with the Front Door commercial building (removing Car Park H);
- The upgrade to the existing Island Site;
- The development Bus Layover area;
- The redevelopment of the Forvie Site resulting in additional commercial floor area;
- The Confluence commercial space is split on the Phase 2 and Phase 3 land, with the Confluence building (and MSCP3) finishing the Phase 2 land and further commercial floorspace within the Phase 3 land (The precise timing of the Confluence will need to be established through more detailed assessment and commercial modelling. The timing of the Southern Access Road will be material to the scale and timing of the Confluence);
- Finally, the start of the Phase 4 land will be built providing additional commercial floorspace.

These changes and growth assumptions by 2035 would see 457,363m² of additional floorspace delivered beyond the existing total. Of this figure 63,000m² would be delivered within the Phase 3 land and 65,000m² within the Phase 4 land. To support this growth a number of transport related measures are deemed to be necessary and appropriate. These are documented on the following pages of this section of the report and include:

- **On Site Shared Infrastructure** – Deemed to be primary and critical infrastructure that relates to the Emerging Spatial Framework and can not be expected to be delivered through plot development
- **Other Transport Measures** – Other transport measures or management strategies deemed necessary to support growth, but which are not to be delivered by public bodies or considered to be primary physical infrastructure necessary to support the overarching principles of the Emerging Spatial Framework.

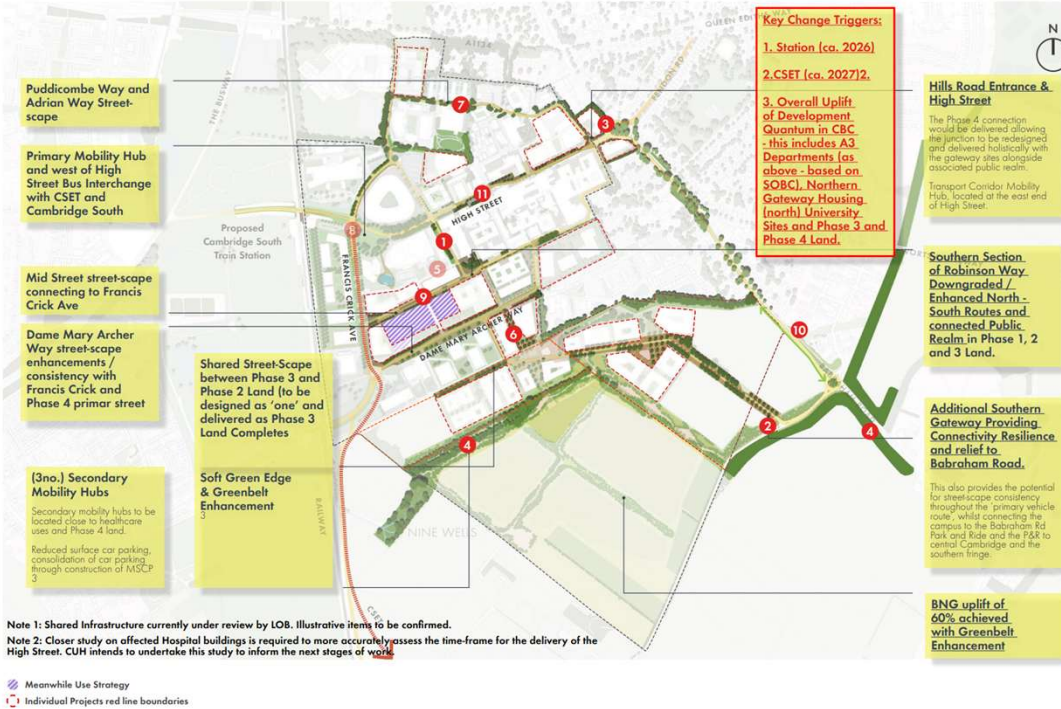
*The following section interprets the potential phasing of development and how a progressive, incremental approach to infrastructure delivery could support that growth. **The phasing is considered illustrative**, giving an early sense of when interventions may be needed. Actual sequencing will depend on further technical work, funding and partnership input, with a monitor-and-manage approach ensuring delivery remains flexible as the Spatial Framework and evidence base evolve. This is a first draft and will iterate further to inform the first full Infrastructure Delivery Plan.*



Figure 35: AAM 2035 Masterplan

Cambridge Biomedical Campus at 2035

The transport additions to be delivered by 2035 which will support and enable growth as envisaged by the Emerging Spatial Framework are shown below in Table 5. By 2035 all known public sector investments are expected to be delivered except for East West Rail. The on-site shared infrastructure by 2035 is significant as it aligns with the delivery of the most significant quantum of floors space which is beyond any existing planning consents or allocations and therefore requires some further additionality to mitigate impact. The Shared Infrastructure for 2030 is shown alongside and further detail on all measures contained in Table 5 in the remaining pages of this report.



Note 1: Shared Infrastructure currently under review by LOB. Illustrative items to be confirmed.
 Note 2: Closer study on affected Hospital buildings is required to more accurately assess the time-frame for the delivery of the High Street. CUH intends to undertake this study to inform the next stages of work.

Meantime Use Strategy
 Individual Projects red line boundaries

Figure 36: CBC at 2035 Shared Infrastructure

| Public Sector Investments | On Site Shared Infrastructure | Other Transport Measures |
|---|--|---|
| East West Rail (Network Rail/ East West Rail Company) | Full High Street delivered including Gateway from Hills Road along with east High Street Bus Stops (CBC) | Bus services from: <ul style="list-style-type: none"> - Newmarket – A11 P&R – Cambridge South - Babraham Park and Ride - Cambridge South – Cambridge Station – City Centre - Foxton Travel Hub - Cambridge SW Travel Hub – Trumpington P&R - Cambridge South – Cambridge East - Milton - Babraham Road P&R – Cambridge South – Trumpington P&R - SW Travel Hub - A11 P&R – Cambridge South – Cambridge East - DRT Service |
| | South section of Robinson Way downgraded. | Consolidation of car parking through construction of MSCP 3 and Phase 2 MSCP |
| | New Southern Gateway access only link plus bus, pedestrian, and cycle route from Granham's Road / Babraham Road | (3no.) Secondary Mobility Hubs |
| | Phase 4 Primary Street | Residential for key workers |
| | Puddicombe Way and Adrian Way Streetscape and infrastructure | Sensor and AI technology for Trip Budget Adherence and on-site priority and management |
| | Hospital Mid Street streetscape | Micro-Consolidation Centre in MSCP 1 |
| | Dame Mary Archer Way streetscape enhancements / infrastructure consistency with Francis Crick and Phase 4 primary Street | |
| | Segregated infrastructure of Addenbrookes Road | |

Table 13: Transport Measures in Place by 2035

Transport Strategy to support Growth to 2035: Public Sector Investments Scheme Summaries

East West Rail (Network Rail/ East West Rail Company – by 2035)

East West Rail provides the opportunity to unlock productivity in the Oxford-Cambridge region, with the railway also linking into Milton Keynes and Bedford. During the consultations for East West Rail, CBC is consistently referenced with regard to its national importance and therefore, in part, the justification for the new railway.

In June 2023, the final route from Bedford to Cambridge was announced, completing the route to Cambridge. The final route alignment serves Cambridge from the south, via CBC and Cambridge South Station. The southern approach was in part due to the importance of serving CBC and Cambridge South with EWR stating the southern approach ‘... serves the Cambridge Biomedical Campus, which is an unparalleled centre for life sciences of global importance and is home to Addenbrooke’s Hospital. Our work found a southern approach is more likely to unlock the region’s potential for transformational economic growth and create jobs, attract investment and support the UK economic recovery.’

For CBC, the effect of EWR will be significant as it increases the accessibility of the hospital for staff and visitors living further away, particularly to the west which is currently only accessible using the car. Two new stations are proposed at Tempsford and Cambourne with the expectations being that these will also lead to the growth of these settlements significantly.

The DfT said “East West Rail will allow us to connect these vital sites with a much greater talent pool and allow the region to retain and grow its reputation globally”.

Network Rail, as part of the Transport and Works Act Order confirmed that the design work for Cambridge South does not preclude options for East West Rail Central (EWR) Section from Bedford to Cambridge. The station and infrastructure design can be adapted relatively easily to meet the longer-term needs of the railway network in the area and thereby allow potential future EWR Central Section services to call at the new station.

Whilst this is the tested position with regard to the station and rail related infrastructure, the CBC masterplan and designs for the area around the station will need to be cognisant further EWR demand forecasts and physical changes when they are better known and understood.

The proposed route from Oxford to Cambridge with the approach into Cambridge are shown alongside.

The EWR project now includes the proposal to deliver a **new station to the East of Cambridge**. This was not previously part of the EWR project but is now within the core scope of the project. This provides a significant transport benefit for CBC in combination with Cambridge South station. Cambridge East (Cambridge Airport) will be a significant new community for Cambridge with a population possibly in excess of 20,000 people and having direct rail access from this side of the city and its potential growth to CBC is a significant transport benefit.



Figure 37: East West Rail Approach to Cambridge

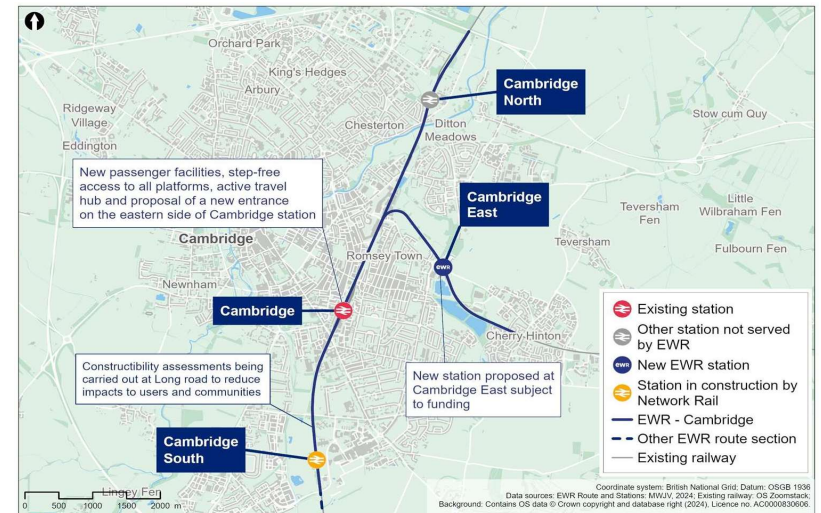


Figure 38: East West Rail Preferred Route Plan into Cambridge including Cambridge East Station

Transport Strategy to support Growth to 2035: On-site Shared Infrastructure

Full High Street delivered including Gateway from Hills Road along with east High Street Bus Stops (CBC Transport Strategy – by 2035)

Whilst a detailed feasibility study is required to establish options for early delivery of the High Street, the delivery of the Full High Street between Francis Crick Avenue and Hills Road is considered to be one of the two key structuring principles in the formulation of the access and movement aspects of the Emerging Spatial Framework.

The full high street, including the right turn from Francis Crick Avenue, would enable an east-west public transport connection to be achieved which would unlock the potential for direct and express services through the Campus that link to rail opportunities at Cambridge South, CSETS, but also provide interchange with the Guided Bus network and a number of the Park & Rides to the south and east of the city. 'Preferential routing' of bus services enables the distance by bus to be shorter than the equivalent journey by car. This can increase bus journey speeds and thus the attraction of choosing the bus over the car. As a 'virtuous circle', it can also reduce the amount of other traffic on the bus route, reducing delays.

This delivers not only benefits to the campus but the wider city and bus network. This east west connection helps to support connections from the east side of the city and orbital connectivity to support further growth. This is a hugely important connection that stakeholders will work together to deliver through further discussion on delivery mechanisms and timings.

By 2035, the existing Addenbrookes Bus Station is shown to be redeveloped. The 4 stops that currently exist within the station would be relocated to Hills Road and the High Street as on street stops. Additional stops or double cages will be necessary

for an increase bus services.

A number of the bus services referenced further into this section of the report are dependent on this connection being provided.

Whilst cyclists will be provided for along this corridor, full segregated cycle infrastructure is not proposed as it does not form part of the Primary Street network and width constraints preclude. Instead, the High Street will be a slow speed environment and the only traffic permitted to use it beyond public transport is for limited, low volume front door access to buildings.

Robinson Way Upgraded (CBC Transport Strategy – by 2035)

As a result of the Southern Gateway and the reorganisation of the Primary Road network, traffic is extracted from the existing eastern gateway (Addenbrooke's Roundabout) and the southeastern section of Robinson Way.

The change in the role for Robinson Way means that there is the opportunity to downgrade the southeastern section of Robinson Way to become a secondary route designed for pedestrian and cyclists and local access.

As a result of this change, there will also be scope to improve the crossings from Nine Wells and Red Cross Lane to access the heart of campus with the current severance effect of crossing the primary road network in these locations.

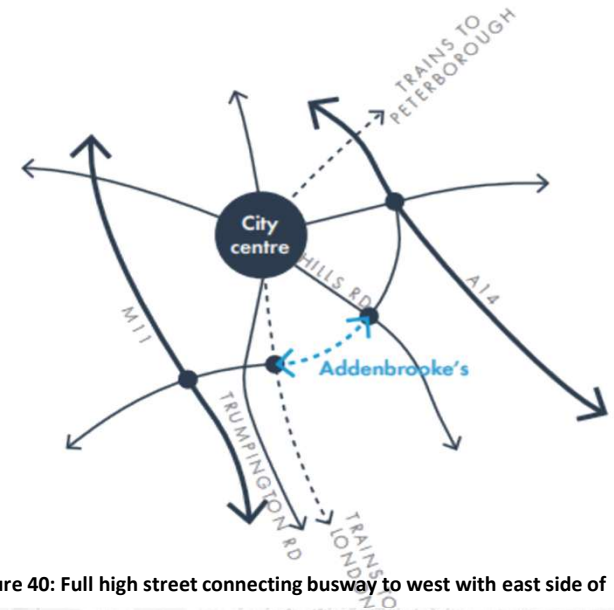


Figure 40: Full high street connecting busway to west with east side of city



Figure 41: Robinson way upgraded to route that provides access but no longer part of primary road network

Transport Strategy to support Growth to 2035: On-site Shared Infrastructure

Southern Gateway (CBC Transport Strategy – by 2035)

The southern gateway into CBC would comprise:

- A new signal junction would be formed between the Phase 4 land and Granham's Road. This would include pedestrian and cyclist facilities to safely cater for demand from the south.
- Granham's Road is realigned at its eastern end and a new roundabout junction is formed with Babraham Road which would include the consented residential scheme to the east of Babraham Road.
- Bus priority between the Granham's Road junction and the Babraham Road P&R would be delivered using land in the control of the LCG or the adopted highway.
- The existing signal-controlled toucan crossing facility north of the existing Granham's Road junction would be brought 150 metres south to align with a convergence of connections at this point and which would also provide access to the east and the historic Worts Causeway and Roman Road beyond. This crossing in conjunction with the crossing from the P&R means that a roundabout as part of the realigned Granham's Road is appropriate because pedestrians and cyclists do not need to cross at the roundabout to access CBC.
- The existing toucan crossing at the signal junction with the Park & Ride is retained. It is then supplemented by a new 2-metre footway (and 3 metre cycle path) that runs from the crossing up to Granham's Road and onwards into the campus and onto an improved PROW towards Nine Wells.

The proposed roundabout plays an important role in providing a Better arranged arrival sequence to City and the campus. Importantly the southern gateway into CBC intercepts CBC bound traffic sooner and reduces flows along Babraham Road and at the

Hills Road access where around 40% of traffic relates to CBC. This capacity relief will result in more reliable and faster bus services along Babraham Road and provides an opportunity for a further improved Addenbrookes Roundabout.

With the Addenbrooke's roundabout relieved of some of the demand currently using the site, it unlocks the opportunity for east / west bus connectivity to run through the site. Further measures outlined in subsequent pages of this report will need to come forward to successfully achieve a fully integrated east / west connection through the campus, but the southern gateway has an important relationship to it.

The southern Gateway and link road through Phase 4 has been identified as one of the key structural moves and is essential for unlocking the development capacity of Phases 3 and 4 beyond the original allocation of Phase 3.

Phase 4 Primary Street (CBC Transport Strategy – by 2035)

The Phase 4 Primary Street will form part of the primary street network for the campus and will connect Granhams Road to the south with Dame Mary Archer Way. Its use will be restricted to traffic that has legitimate campus business but will also have a key role in providing accessibility for public transport, walking and cycling.

The approach to infrastructure design will be consistent with the rest of the Primary Street network whereby segregated uni-directional cycle tracks will be provided and wherever possible will be separated from the carriageway by a landscape strip. Footways will be generous and will be continuous across side road.

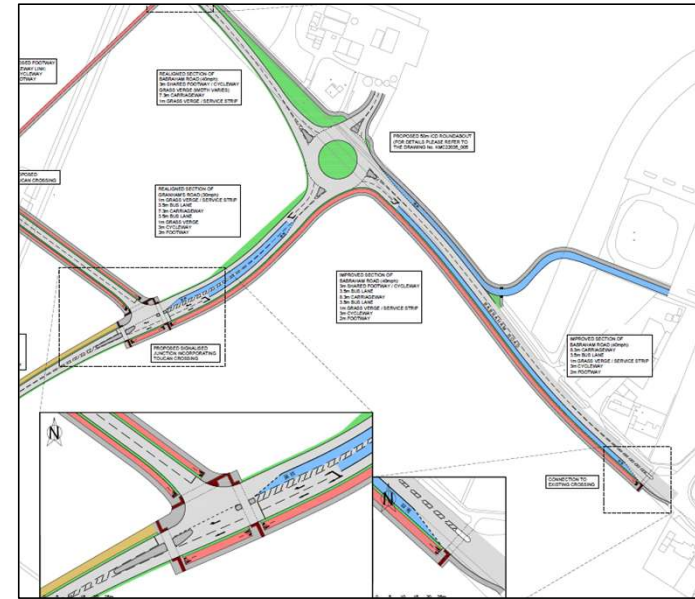


Figure 42: Illustrative Southern Gateway with bus priority and pedestrian and cycle infrastructure



Figure 43: Illustrative Primary Street Cross-Section

Transport Strategy to support Growth to 2035: On-site Shared Infrastructure

Puddicombe Way and Adrian Way Streetscape and infrastructure (CBC Transport Strategy – by 2035)

Puddicombe Way and Adrian Way are part of the exiting primary street network within CBC and will continue to be so as the site expands.

As with the Phase 4 Primary Street, Puddicombe Way and Adrian Way will be redesigned to ensure that the streetscape and infrastructure are consistent and of the same quality as is proposed for the rest of the Primary Street network.

A more detailed study will need to be undertaken to determine the viability and scale of this improvement.

Hospital Mid-Street streetscape (CBC Transport Strategy – by 2035)

As part of hospital relocation a new Hospital Mid street will be created between Robinson Way and Francis Crick Avenue.

It will provide some access to hospital use front doors but will not be a primary vehicle route. It is assumed to be 6.0 carriageway, 2.5m drop off bays and 3 metre footways with some soft landscape and consistent materials. It will include a hospital square as part of the public realm strategy.

Dame Mary Archer Way streetscape enhancements / infrastructure consistency with Francis Crick and Phase 4 primary Street (CBC Transport Strategy – by 2035)

The Southern Gateway allows access from south and connects into Dame Mary Archer Way. This will then upgrade Dame Mary Archer Way into part of the primary street network around the campus as it will connect the Southern Gateway with Addenbrooke's Road and Francis Crick Avenue. It will continue to provide access to the Phase 2 land as previously consented.

As part of the primary street network the streetscape and infrastructure typology will be consistent with the rest of the primary street network and as described previously.

Segregated infrastructure of Addenbrookes Road

As the campus expands south, Addenbrooke's Road takes on more importance for cyclists arriving from the southwest including the new southern fringe communities, the Greenways and the Park & Rides.

Addenbrookes Road is currently comprised of a duplication of cycle provision. The off-

road facility, separated from pedestrians by a painted white line, is punctuated by vehicle access points. The on carriageway mandatory cycle lane facilities are often sporadic and provide no protection from traffic.

It is proposed therefore that some of these arrangements should be replaced by the higher-quality cycle infrastructure that affords the level of prioritisation and convenience that is appropriate for this route. It is proposed that these would be targeted improvements rather than a full corridor re-design.

Should residential development west of the railway line come forward as previously proposed a full redesign could be expected with full segregation of cyclists from pedestrians and vehicles and priority at side road junctions. The entire corridor has previously been assessed and designed by Vectos. The extent of the route is shown alongside.

A more detailed study will be undertaken to determine the viability and scale of this improvement.



Figure 44: Mid-Street Example



Figure 45: Extent of segregated cycle infrastructure along Addenbrookes Road

Transport Strategy to support Growth to 2035: Other Transport Measures

Updated Bus Services (CBC Transport Strategy – by 2035)

By 2030, The Greater Cambridge Partnership will have delivered a significant number of off-road busways providing reliable and quick public transport options to and from growth areas.

The GCP proposed a significant uplift in bus provision in and around Cambridge through the Making Connections road user charging scheme. This has subsequently failed to be agreed by the council, however there is likely to be future proposals that allow the increase in public transport provision as well as further active travel infrastructure schemes come forward, of which we would expect a number of which to connect into CBC.

However, there are no plans in the public domain currently that provide CBC with confidence that an increase active and public transport provision is possible, but there are a number of services which are deemed of necessary importance to support the growth considered in this report that would need to be funded through contributions or part subsidy. We note the CPCA’s ongoing review of bus franchising in this vein.

The following services are proposed as part of this transport strategy. All take advantage of the new infrastructure provided by CSET and the Emerging

Spatial Framework in the form of the East West High Street and Southern Gateway. The proposals seek to directly link P&Rs to the campus and to one another.

Newmarket – A11 P&R – Cambridge South

- Bus services from: Babraham Park and Ride - Cambridge South – Cambridge Station – Cambridge City Centre – Madingley P&R
- Bus services from: Royston - Foxton Travel Hub - Cambridge SW Travel Hub – Trumpington P&R - Cambridge South – Cambridge East – Milton (Waterbeach beyond)
- Bus services from: Babraham Road P&R – Cambridge South – Trumpington P&R - SW Travel Hub (service now implemented by CBC)
- Bus services from: A11 P&R – Cambridge South – Cambridge East
- DRT Bus Service (Autonomy enabled – Cambridge Connector)

The routes, or similar could be secured through a franchising agreement with the CPCA along with the service particulars. The principle of the routes being enabled through the campus and the key moves is a unique benefit that the masterplan can bring to transport connectivity in the city.

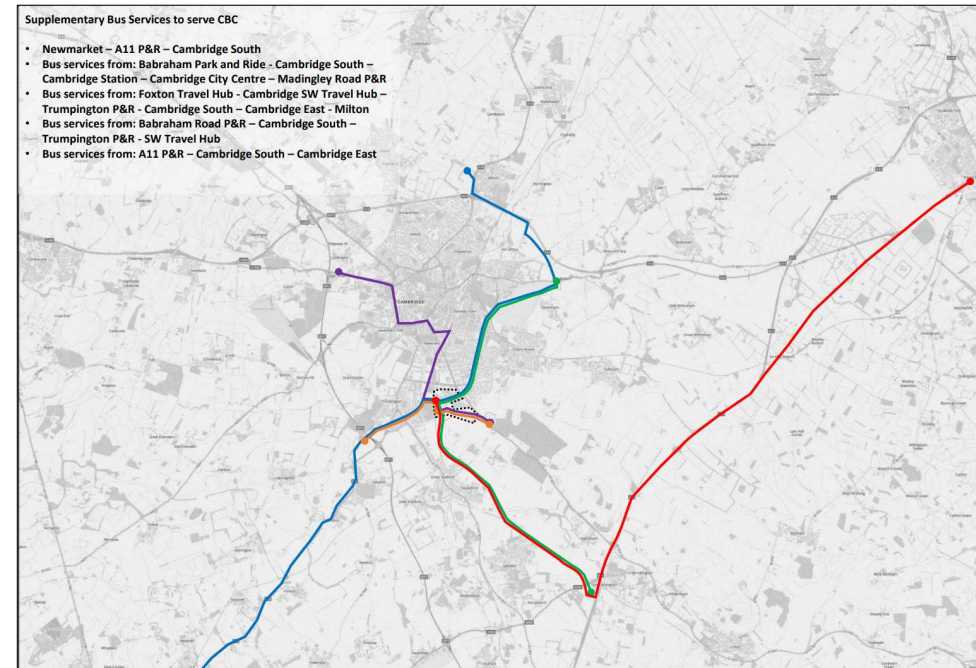


Figure 46: Supplementary bus services to serve CBC

Transport Strategy to support Growth to 2035: Other Transport Measures

The Demand Responsive Transport Bus Service is an enhanced version of the existing campus hopper service to embrace demand responsive transport with the aim of providing seamless integration of key interchanges and arrival points within the Campus. Consistent with the CUH masterplan we are seeking to identify a number of pick-up and drop-off stops for DRT or community services and to provide effective coverage of the Campus and compliment the fixed route services. It is anticipated that these services will become autonomous which will reduce operating costs over time.

Much of the Cambridge hinterland is relatively rural in nature, with small towns and villages. Semi demand responsive services (buses or smaller vehicles) are capable of maximising occupancy by developing routes that pick up a string of towns and villages relative to the demand. These services are likely to be focussed on CBC staff and hospital visitors and at the times at which those staff want to, or need to, travel. They are pre booked on a smart phone or computer. Over time, the system learns the likely locations of demand and adjusts routes and sizes of vehicle accordingly. Arriva Click is one example of a successful and growing demand responsive service in the UK whilst the CPCA operate an existing service through Stagecoach East named Ting which is currently serving West Huntingdonshire

The Greater Cambridge Partnership has been awarded £8.7 million by government, matched by industry, to pilot on-demand self-driving vehicles. The trials are across Cambridge University's West Cambridge campus and the Cambridge Biomedical Campus. The DRT service outlined above could be developed from these trials with the route of the trial being shown below. From this, it is apparent that the route between Babraham P&R and Trumpington P&R is proposed and would be a beneficiary of the southern gateway.

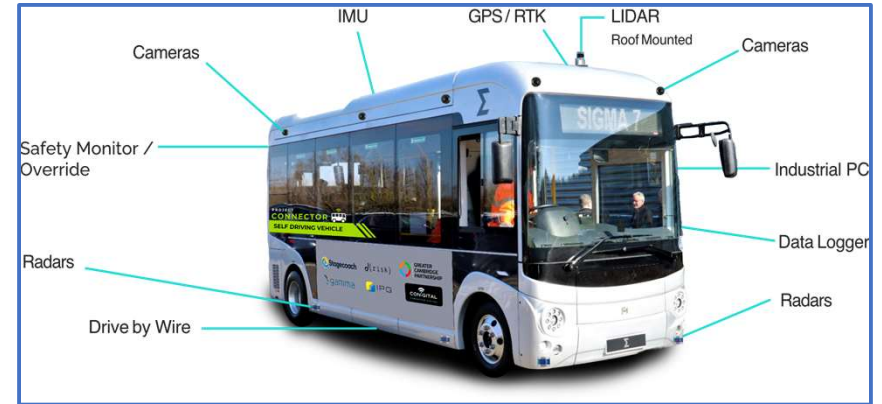


Figure 48: Mellor Sigma 7 & 8 vehicle mock-up of vehicle type that will be used in the Cambridge Connector trial due to start in March 2024

Route Complexity - Phased Deployment Approach

Stage 5

- Higher Risk
- Medium Risk
- Lower Risk
- Alternative Route
- Proposed Stops
- Proposed Roadside Sensors

WP Lead: Conigital



Biomedical Campus Route with Complexity Highlighted

Figure 47: Cambridge Connector Trial Route at CBC

Transport Strategy to support Growth to 2035: Other Transport Measures

Reduced surface car parking, consolidation of car parking through construction of MSCP 3 and Phase 2 MSCP (CBC Transport Strategy – by 2035)

The rationalisation of existing car parking into MSCP’s and the replacement of significant surface car parks where leases allow forms part of the land use and transport strategy. By 2035 it is proposed that the delivery of the Northern Gateway and The Front Door sites would replace the existing surface car parks in these same locations.

The loss of surface car parking in 2035 would be compensated by the construction of MSCP 3 for 1,200 spaces and the MSCP within the Phase 2 land.

The way in which car parking is proposed to be managed and provided for over time is complex.

(3no.) Secondary Mobility Hubs (CBC Transport Strategy – by 2035)

3 further secondary mobility hubs are proposed by 2035. These complement the mobility hubs delivered by 2030. The additional hubs would be located at the north end of the Phase 4 land, between Phase 3 and 2 and at a location close to the island site. As with the previous commentary relating to mobility hubs, these will be for the use of employees, residents, community groups & neighbourhood businesses.

The secondary mobility hubs will be of a high design quality providing integrated transport services, coherently presented under one overarching brand alongside improvements in public realm.

The hub model will require collaboration between partners and the Local Authority. The local authority leads on and manages some elements and partners managing components are collaborating on management tasks and contributing to overall costs.

Wayfinding and accessibility are at the forefront of Secondary Mobility Hubs and this view shows both these elements at the forefront of the design. These hubs can be in a linier design or can be more compact depending on the restrictions at each of the locations. The infrastructure of the hub does not need to be extensive but should be homogenous and give a sense of place.

Secondary Mobility Hubs provide a ‘first and last mile’ solutions – as well as the bus, there could be a bike share and an EV car club along with journey planning information.

The business case and operating model for mobility hubs will need to be evidenced through subsequent stages of work.

SUGGESTED COMPONENTS:

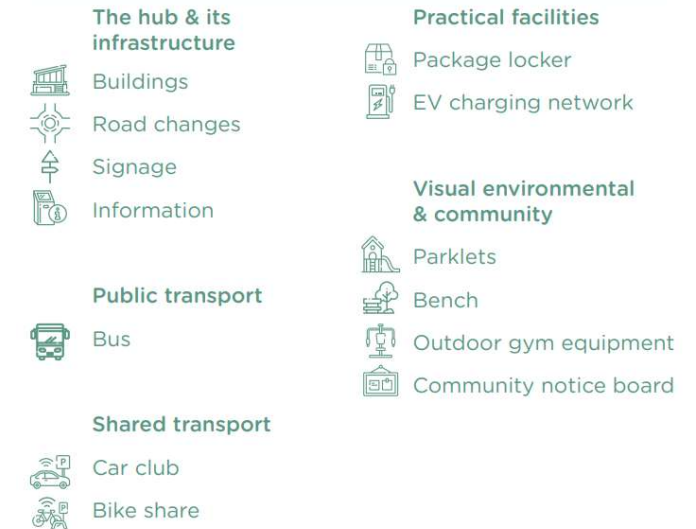


Figure 49: Illustrative components of secondary Mobility Hubs



Figure 50: Illustrative location of further 3 no. secondary Mobility Hubs (●)

Transport Strategy to support Growth to 2035: Other Transport Measures

Residential for key workers (CBC Transport Strategy – by 2035)

The Emerging Spatial Framework includes proposals for an increased quantum of key work residential housing within the campus. Whilst detail on the exact quantum is to be determined, the inclusion of residential land uses within the masterplan has transport benefits through the internalisation of what would otherwise be external trips.

It is anticipated that all residential uses on the site would be car free except for blue badge car parking.

Sensor and AI technology for Trip Budget Adherence and on-site priority and management (CBC Transport Strategy – by 2035)

Increasingly strategic sites in the Greater Cambridge area and the city itself are utilising Smart Sensors based on Vivacity hardware and software. The sensors provide access to real-time and historic data view on different types of transport modes, how they use roads and pathways, how they interact and how this is changing over time. This detailed data supports strategic decision making to improve the road network and urban environment, helping to make environments smarter, safer and more sustainable. In the case of CBC better and more accurate enforcement can also be undertaken. The data that would be captured by the installation of sensors would be:

- Classified Counts – Pedestrian – Cyclist – Motorbike – Car – Taxi – Van/LGV – OGV 1 – OGV 2 – Public Service Vehicles/Buses. E-scooters and micro mobility
- Vehicle Path across the road space to understand interactions and to assess junction turning counts.
- Median Journey Time of road users with number plates between any two sensors within the network.
- Speed to capture travel behaviour, stopped vehicle detection and identify queue formation.
- Origin/Destination can count a vehicle along routes between two sensors (points) for insight into traffic levels and travel patterns, tracked by anonymously hashed ANPR.
- Near Misses track paths to identify dangerous interactions between vulnerable road users and vehicles.
- Sensor Image on request, a blurred image or low-res video of the road space to help understand abnormal behaviour on a live data feed.

Adherence to trip budgets, understanding quantum of through traffic, station trip generation along with safety and conflicts would all be collected through sensors.

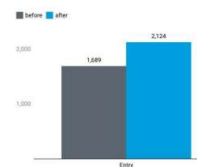
VivaCity Solution

Proposed Sensor Locations



Outcomes and Benefits of Long Term Monitoring

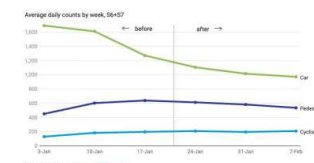
Trend / Intervention Analysis



Identify correlations between the time of day or week and traffic with the Trend Analysis tool.

Get the most out of your pre- and post-implementation data to evidence the success of active travel schemes and interventions going forward using our Intervention Analysis tool

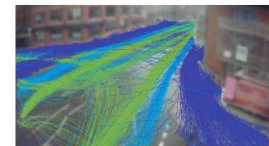
Qualitative Modal Shift Evidence



Baseline data will help your decision-making when developing the intervention or scheme, leading to a strategic investment with clear predetermined goals.

Compare this pre-implementation data with post-implementation data to assess modal shift following implementation.

Visual Behaviour Insights



Tracking the paths objects take across the sensor's field of view offers a clear understanding of the usage of precise spaces within an environment.

Colour coding for aggregate road user categories helps to maximise the legibility of the data.

Figure 51: Vivacity proposal for sensor-based technology at CBC

Transport Strategy to support Growth to 2035: Other Transport Measures

Micro-consolidation and micro-distribution in MSCP 1 (CBC Transport Strategy – by 2035)

Both terms refer to interventions at a small-scale and local level, which would be for the campus. They are an important part of last-mile logistics. Out of city consolidation is also important in reducing overall freight trips but would need to be led by the local authority as part of a city wide strategy.

Micro-consolidation is an approach whereby deliveries – most often items common to several businesses or departments, such as stationery or personal deliveries – are delivered to a single place before being distributed on to their end recipient. This allows for efficiency in terms of reducing trips and the need for multiple deliveries to be managed on-site.

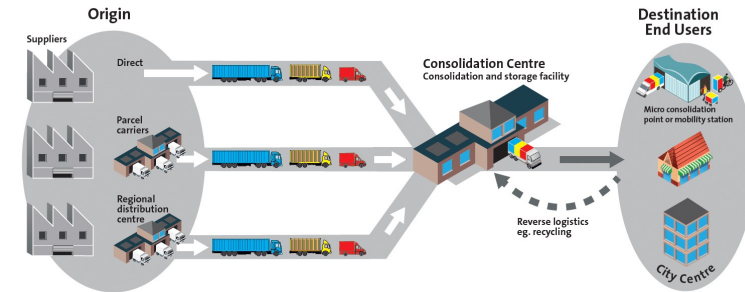
For micro-consolidation to work well, there needs to be an agreed approach which the participants are signed up to, so can work well as part of collective procurement. It also needs a suitable place to store the deliveries, which is safe and secure and with chilled and ambient facilities as necessary. For CBC and at this stage in the process, it is proposed that MSCP 1 could be an appropriate location for a small-scale facility.

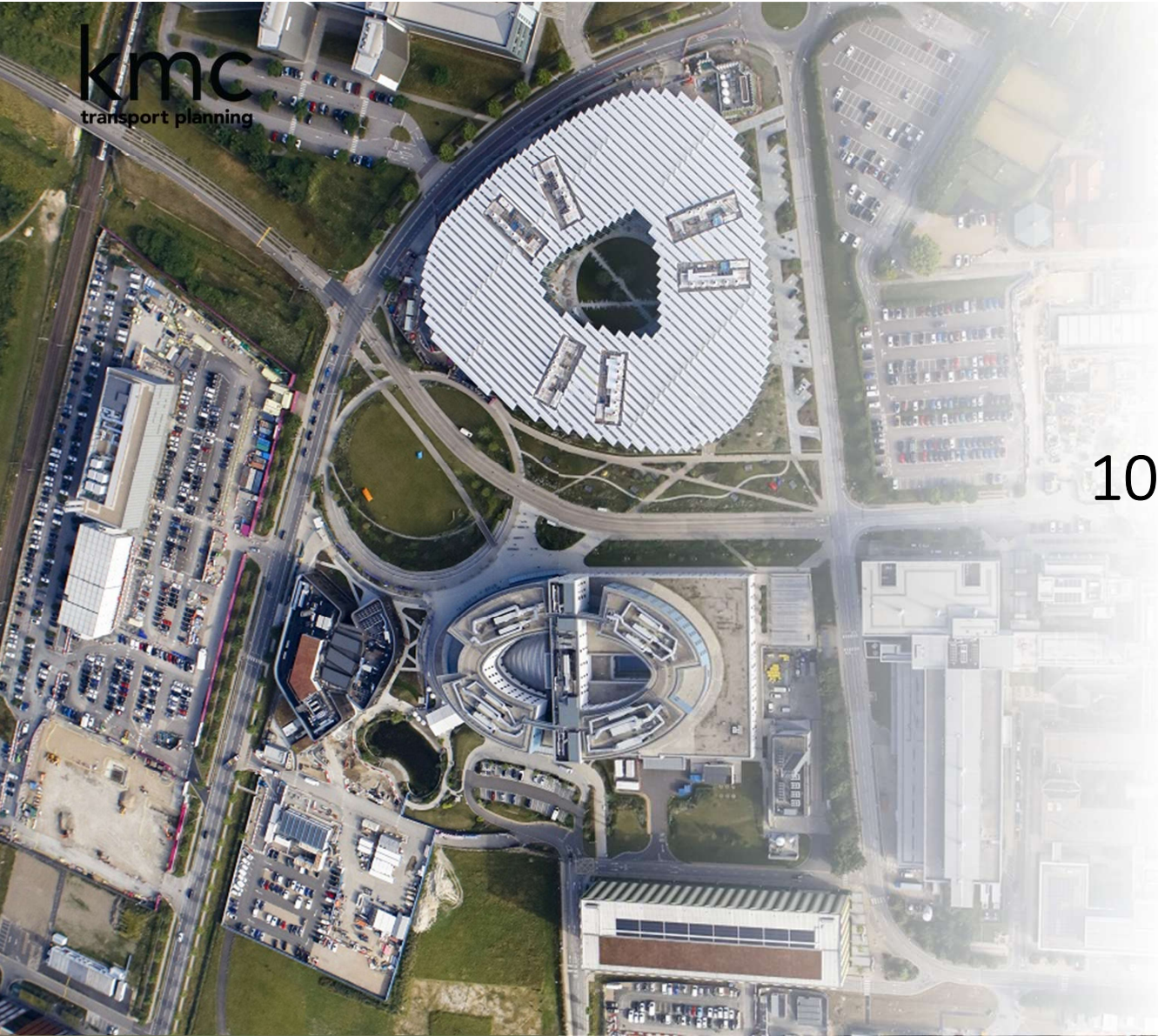
Micro-distribution is the next step – the stored goods are distributed at agreed times by low impact modes, which can also reduce the overall number of trips.

The last mile logistics strategy can, and should, overlap with the mobility hub strategy and the operating model for both.

GCP Autonomous Vehicle Programme

The Greater Cambridge Partnership (GCP) Autonomous Vehicle Programme, delivered through the “Connector” project, is a pilot initiative to test the feasibility of integrating self-driving buses into the area’s public transport network. The objective of the program is to understand operational performance, safety, passenger acceptance, and wider network integration. CBC is currently at the heart of the trail with a route being trialled between Babraham P&R and Trumpington P&R through CBC. The next step is to increase the routes to benefit the staff of CBC.





10. Transport Strategy to Support Growth 2040

*The following section interprets the potential phasing of development and how a progressive, incremental approach to infrastructure delivery could support that growth. **The phasing is considered illustrative**, giving an early sense of when interventions may be needed. Actual sequencing will depend on further technical work, funding and partnership input, with a monitor-and-manage approach ensuring delivery remains flexible as the Spatial Framework and evidence base evolve. This is a first draft and will iterate further to inform the first full Infrastructure Delivery Plan.*

Cambridge Biomedical Campus at 2040

The AAM Emerging Spatial Framework has proposed that additional growth up to 2040 would be as follows and as set out alongside:

- The redevelopment of the Sanctuary Housing site
- The further redevelopment of the Frank Lee Centre to provide healthcare related floorspace;
- Additional clinical special and cancer related services in the Clinical Core.
- General Clinical floorspace associated with the Hospital Expansion
- The completion of the buildout of the Phase 3 land and its associated commercial floorspace;
- The continued buildout of the Phase 4 land for commercial uses.

These changes and growth assumptions by 2040 would see 334,415m² of additional floorspace delivered beyond the 2035 total and the grand total at this stage for CBC would be 1,538,315m². Of the growth between 2035 and 2040 32,500m² would be delivered within the Phase 3 land and 169,000m² within the Phase 4 land. To support this growth a number of transport related measures are deemed to be necessary and appropriate.

These are documented on the following pages of this section of the report and include:

- **On Site Shared Infrastructure** – Deemed to be primary and critical infrastructure that relates to the Emerging Spatial Framework and can not be expected to be delivered through plot development
- **Other Transport Measures** – Other transport measures or management strategies deemed necessary to support growth, but which are not to be delivered by public bodies or considered to be primary physical infrastructure necessary to support the overarching principles of the Emerging Spatial Framework.

*The following section interprets the potential phasing of development and how a progressive, incremental approach to infrastructure delivery could support that growth. **The phasing is considered illustrative**, giving an early sense of when interventions may be needed. Actual sequencing will depend on further technical work, funding and partnership input, with a monitor-and-manage approach ensuring delivery remains flexible as the Spatial Framework and evidence base evolve. This is a first draft and will iterate further to inform the first full Infrastructure Delivery Plan.*

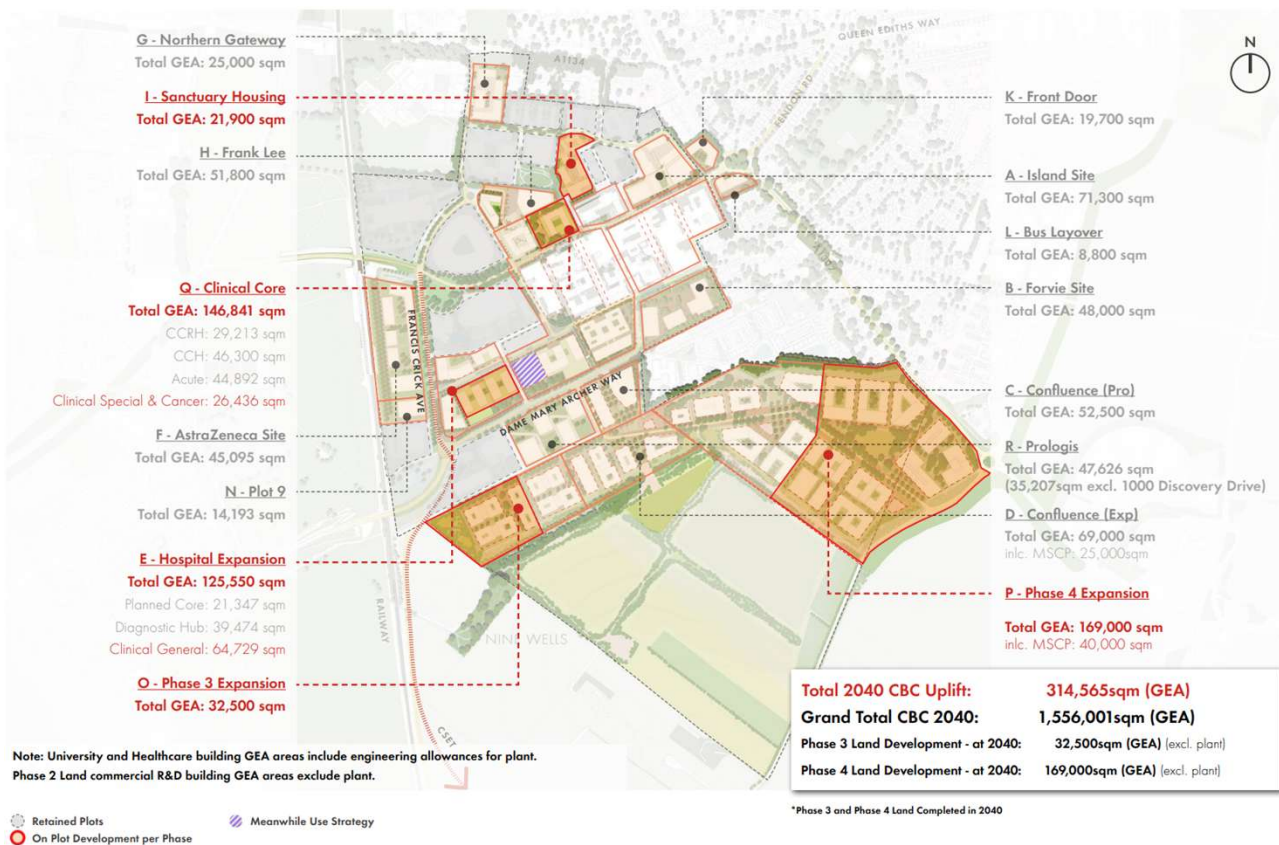


Figure 52: AAM 2040 Masterplan

Cambridge Biomedical Campus at 2040

The transport additions to be delivered by 2040 which will support and enable growth as envisaged by the Emerging Spatial Framework are shown below in Table 6.

The on-site shared infrastructure by 2040 is less significant given that most of the shared infrastructure has been delivered by 2035.

The Shared Infrastructure for 2040 is shown alongside and further detail on all measures contained in Table 6 in the remaining pages of this report.

| On Site Shared Infrastructure | Other Transport Measures |
|-------------------------------|--|
| 2no. Secondary mobility hubs | Consolidation of car parking through construction of MSCP in Phase 4 land |
| | P&R Travel Hub Expansions (as necessary) |
| | Bus Service Frequency increase |
| | Micro-Consolidation Centre in MSCP 4 |
| | Contribution to Addenbrookes Road to Shelford Tier 2 (LCWIP) active travel network |
| | Southern edge Trail (part of landscape/ soft edge) |
| | Babraham Road pedestrian / cycle connection |



Table 14: Transport Measures in Place by 2040

Figure 53: CBC at 2040 Shared Infrastructure

Transport Strategy to support Growth to 2040: On-site Shared Infrastructure

Consolidation of car parking through construction of MSCP 4 in Phase 4 land (CBC Transport Strategy – by 2040)

By 2040 it is envisaged that a further MSCP will be provided in the Phase 4 land. This will provide a spatially sensible location for car parking within Phase for and for the floor area proposed.

The inclusion of a MSCP as a parking typology is consistent with the principles of consolidating car parking into more singular locations and which limits the number of private vehicle routes through the Campus and thus reduces the number of potential conflict points between pedestrians, cyclists and public transport users.

Locating future MSCPs close to the Primary Street reduces circulation within the Campus heart. MSCPs will also be served by future on demand public transport services, offering local connectivity from these car parks into the main hospital areas.

(2no.) Secondary Mobility Hubs (CBC Transport Strategy)

Two further secondary mobility hubs will be located in the Phase 4 land and which will complement the other mobility hubs in campus.



Figure 55: Illustrative secondary mobility hub



Figure 56: Illustrative location of further 2 no. secondary Mobility Hubs (●)

Transport Strategy to support Growth to 2040: Other Transport Measures

P&R and Travel Hub expansions (Public Sector with CBC contributions) (CBC Transport Strategy – by 2040)

Whilst significant expansions and new provisions of P&R facilities are proposed close to CBC, the delivery of better cross city connections will enable CBC demand to be picked up on other corridors without drivers having to orientate their journeys to P&R's close to CBC.

The expansion possible future expansion of other and new P&R's subject to further modelling may be beneficial.

These P&R's should be accompanied by complementary feeder services and last mile connectivity to help address rural accessibility without the need to drive to the car park.

Bus Service Frequency Uplift or Privately Procured Coaches

Bus headways are relatively easy to increase with funding. Therefore, as required, bus services can be increased to accommodate additional demand originating at or terminating in the campus.

However, should clear failings exist in the bus network in 2040 then, much like existing schemes that currently operate to the south of the city, large employers may be required to run a bus or coach service for staff who do not have access to convenient and reliable public transport.

While this approach would be consistent with the wider sustainable growth strategy for the campus, such services undermine public services by abstracting patronage and therefore revenue. Therefore, and for this reason, the preferred approach at this stage is that the necessary subsidy

would be provided to support public services until which point, they are self sustaining are able to provide the necessary accessibility as part of a direct and reliable bus strategy for the campus.

Micro-consolidation and micro-distribution in MSCP 4 (CBC Transport Strategy – by 2035)

As stated previously, a strategy to reduce the impact of servicing trips and from the campus will be needed and this is proposed through the adoption of Micro-consolidation and micro-distribution.

In addition to a facility within MSCP 1, it is proposed that a further facility in the MSCP in the Phase 4 land would be provided given its southern gateway location.

Contribution to Addenbrookes Road to Shelford Tier 2 (LCWIP) active travel network

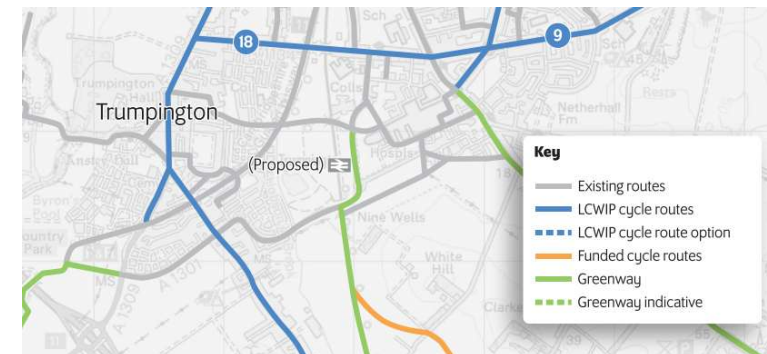
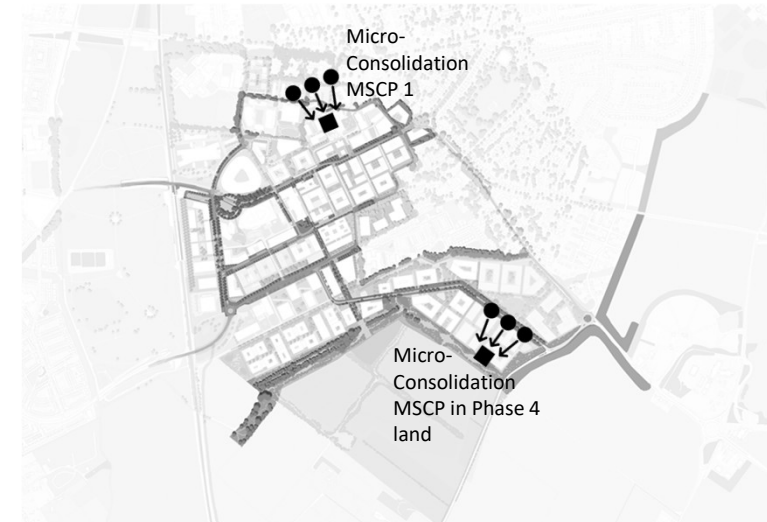
If not already delivered a contribution to assist in the delivery of this connection as set out in CCC's LCWIP would be appropriate.

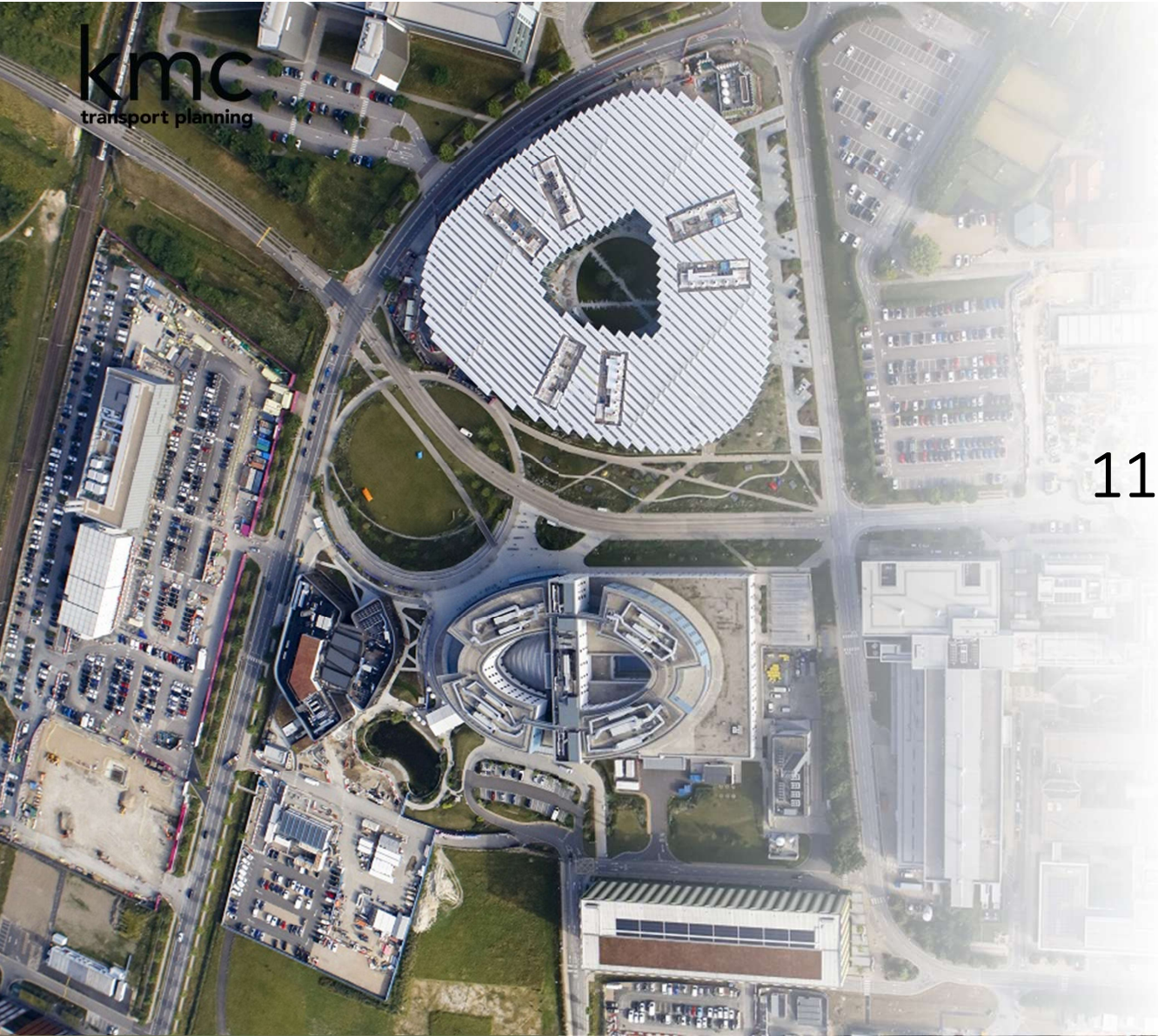
Southern edge Trail (part of landscape/ soft edge)

As part of green infrastructure strategy, a trail connecting Babraham Road with Worts Causeway and Limekiln Road.

Babraham Road Pedestrian / Cycle connection

A route through the Ph4 public realm to connect into Babraham Road and connect into green corridor through Newbury Farm. Toucan Crossing across Babraham Road.





11. Transport Strategy to Support Growth 2050

*The following section interprets the potential phasing of development and how a progressive, incremental approach to infrastructure delivery could support that growth. **The phasing is considered illustrative**, giving an early sense of when interventions may be needed. Actual sequencing will depend on further technical work, funding and partnership input, with a monitor-and-manage approach ensuring delivery remains flexible as the Spatial Framework and evidence base evolve. This is a first draft and will iterate further to inform the first full Infrastructure Delivery Plan.*

Cambridge Biomedical Campus at 2050

The AAM Emerging Spatial Framework has proposed that additional growth up to 2050 would relate to the redevelopment of the existing hospital land uses and would be as follows and as set out alongside:

- The development of the Sunken Garden
- The delivery of commercial uses within the Eastern Gateway
- Additional clinical special and cancer related services in the Clinical Core.

These changes and growth assumptions by 2050 would see 233,184m² of additional floorspace delivered beyond the 2040 total and the grand total at this stage for CBC would be 1,583,499m².

To support this growth a number of transport related measures are deemed to be necessary and appropriate. These are documented on the following pages of this section of the report and include:

- **On-Site Shared Infrastructure** – Deemed to be primary and critical infrastructure that relates to the Emerging Spatial Framework and can not be expected to be delivered through plot development
- **Other Transport Measures** – Other transport measures or management strategies deemed necessary to support growth, but which are not to be delivered by public bodies or considered to be primary physical infrastructure necessary to support the overarching principles of the Emerging Spatial Framework.

*The following section interprets the potential phasing of development and how a progressive, incremental approach to infrastructure delivery could support that growth. **The phasing is considered illustrative**, giving an early sense of when interventions may be needed. Actual sequencing will depend on further technical work, funding and partnership input, with a monitor-and-manage approach ensuring delivery remains flexible as the Spatial Framework and evidence base evolve. This is a first draft and will iterate further to inform the first full Infrastructure Delivery Plan.*



Figure 57: AAM 2050 Masterplan

Cambridge Biomedical Campus at 2050

The transport additions to be delivered by 2050 which will support and enable growth as envisaged by the Emerging Spatial Framework are shown below in Table 7.

The on-site shared infrastructure by 2050 is less significant given that most of the shared infrastructure has been delivered by 2035. The Shared Infrastructure for 2050 is shown alongside and further detail on all measures contained in Table 6 in the remaining pages of this report.

| On Site Shared Infrastructure | Other Transport Measures |
|-----------------------------------|--------------------------------|
| High Street Streetscape completed | Bus Service Frequency increase |
| 2no. Secondary mobility hubs | |

Table 15: Transport Measures in Place by 2050



Figure 58: CBC at 2050 Shared Infrastructure

Transport Strategy - Cambridge Biomedical Campus at 2050 – Full

Completion of East West High Street

Whilst the full East West High Street will have been delivered by 2035 in terms of connectivity, the streetscape for the element that abuts the CUH land as part of the existing hospital will not be completed until 2050.

In transport terms the interface between the new and the existing will need to be managed to ensure that no loss of service for pedestrians, cyclists and public transport would occur.

(2no.) Secondary Mobility Hubs (CBC Transport Strategy – by 2050)

Two further secondary mobility hubs will be located along the High Street and close to Robinson Way.

These additional hubs complement the other hubs within the campus and complete the mobility hub offering for 2050.

Bus Service Frequency Increase as required.

Further frequencies and services as necessary based on demand forecasting.



Figure 10: Cambridge Biomedical Campus at 2050 – Full



Transport Strategy - Cambridge Biomedical Campus at 2050 – Full Masterplan

The Full Strategy

Set out alongside are all of the components of the Transport Strategy set out through this document. It should be noted that these are indicative until which time modelling has been undertaken to full test for ability of these schemes to mitigate the impact of growth.

By 2030

| Public Sector Investments | On Site Shared Infrastructure | Other Transport Measures |
|--|---|--|
| Cambridge South Station (Network Rail) | Mobility Hub as part of Amenity building and west of high street bus interchange with CSET and Cambridge South | (3no.) Secondary Mobility Hubs |
| Cambridge Southeast Transport Study Phase 2 (CSET) (GCP) | Additional pedestrian cycle connection from Babraham Road south of Nine Wells (CBC) | Temporary parking strategies linked to infrastructure delivery |
| SWTH (GCP) | Tactical small scale mobility Improvements within the campus (Phase 1 Land) (CBC) | Encourage Work-from-Home practices |
| Foxton Travel Hub (GCP) | Initial interventions to Addenbrooke’s food-court (as a meanwhile use) to allow for east west public through route for pedestrians and cycles (CBC) | Bus pass subsidies for new / relocated staff |
| Planned On-Street Parking Controls (GCP) | Enhanced north south routes connecting Phase 2 into Phase 1 and western end of High Street | - |
| Sawston Greenway (GCP) | - | - |
| Cambourne to Cambridge (GCP) | - | - |
| Fendon Road Cycle Plus (GCP) | - | - |
| Hills Road Cycle Plus (GCP) | - | - |

By 2035

| Public Sector Investments | On Site Shared Infrastructure | Other Transport Measures |
|---|--|---|
| East West Rail (Network Rail/ East West Rail Company) | Full High Street delivered including Gateway from Hills Road along with east High Street Bus Stops (CBC) | Bus services from: <ul style="list-style-type: none"> - Newmarket – A11 P&R – Cambridge South - Babraham Park and Ride - Cambridge South – Cambridge Station – City Centre - Foxton Travel Hub - Cambridge SW Travel Hub – Trumpington P&R - Cambridge South – Cambridge East - Milton - Babraham Road P&R – Cambridge South – Trumpington P&R - SW Travel Hub - A11 P&R – Cambridge South – Cambridge East - DRT Service |
| | South section of Robinson Way downgraded. | Consolidation of car parking through construction of MSCP 3 and Phase 2 MSCP |
| | New Southern Gateway access only link plus bus, pedestrian, and cycle route from Granham’s Road /B’ham Rd | (3no.) Secondary Mobility Hubs |
| | Phase 4 Primary Street | Residential for key workers |
| | Puddicombe Way / Adrian Way Streetscape + infrastructure | Sensor and AI technology for Trip Budget Adherence and on-site priority and management |
| | Hospital Mid Street streetscape | Micro-Consolidation Centre in MSCP 1 |
| | Dame Mary Archer Way streetscape enhancements / infrastructure consistent with Francis Crick & Ph 4 Primary St | |
| | Segregated infrastructure of Addenbrookes Road | |



Transport Strategy - Cambridge Biomedical Campus at 2050 – Full Masterplan

The Full Strategy

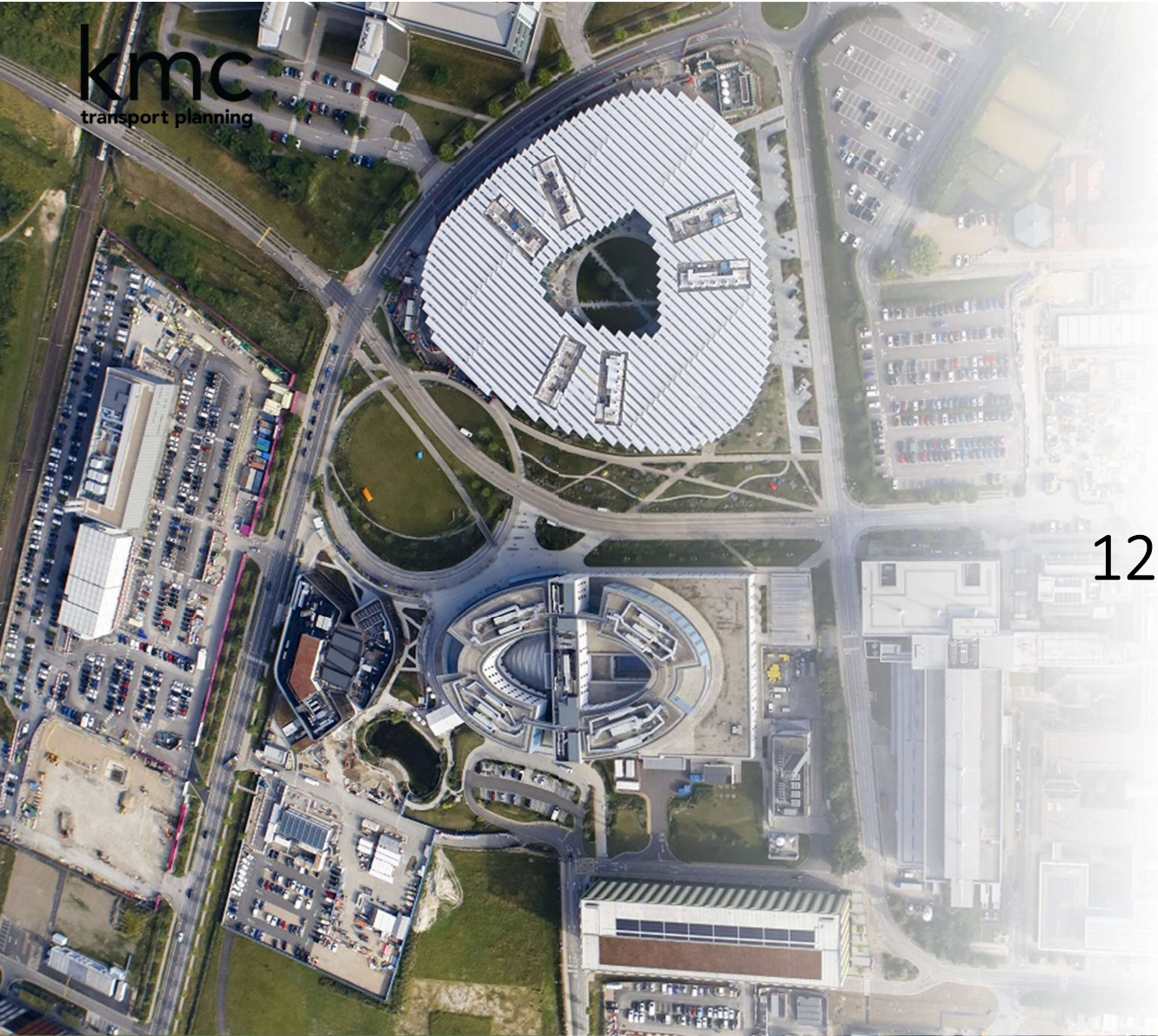
Set out alongside are all of the components of the Transport Strategy set out through this document. It should be noted that these are indicative until which time modelling has been undertaken to full test for ability of these schemes to mitigate the impact of growth.

By 2040

| Public Sector Investments | On Site Shared Infrastructure | Other Transport Measures |
|---------------------------|-------------------------------|---|
| - | 2no. Secondary mobility hubs | Consolidation of car parking through construction of MSCP in Phase 4 land |
| - | - | P&R Travel Hub Expansions (as necessary) |
| - | - | Bus Service Frequency increase |
| - | - | Micro-Consolidation Centre in MSCP 4 |

By 2050

| Public Sector Investments | On Site Shared Infrastructure | Other Transport Measures |
|---------------------------|-----------------------------------|--------------------------------|
| - | High Street Streetscape completed | Bus Service frequency increase |
| - | -2no. Secondary mobility hubs | - |
| | | |



12. Access & Movement Framework

Access and Movement Framework

The development of the masterplan and the transport strategy with key shared infrastructure interventions is predicated on an access and movement framework. This access and movement framework has been formulated to help achieve many of the stated objectives which underpin the vision for the campus. Of particular relevance are the below objectives:

- **Increased permeability and priority for selected user groups** – A hierarchy of users and connections will be reflected in designs and movement strategies. Sensible design responses to the car will allow increased granular connectivity for pedestrians, cyclists and improved reliability and penetration for public transport. Delivering east west public transport connectivity to connect into the north south corridors must be achieved.
- **Designing to reduce the dominance of the car** – Through sensibly located car parks and a hierarchy of routes that serve them. The blight of car traffic within the campus will be managed and designed for. The strategy for cars allows the strategy for other users to be successful.
- **Support and complement infrastructure investment** – Significant investment in and policy direction for sustainable transport infrastructure is being made. CBC cannot dictate the pace of delivery but will embrace it and will seek to maximise the effectiveness of it. Designs will seek to allow ease of interchange, increased integration with the campus environment, and incentivisation to use.
- **Conditional Support to City Wide and Regional Policies** – Longer term transport solutions are needed to support continued growth. CBC will continue to support the transport authorities in the Greater Cambridge area to deliver radical and sustainable change. Interventions need to be timely.

The following section of this report cover the ways in which the masterplan has developed to meet these objectives around the following principles:

- A Walkable Campus,
- Designing for Cycling
- Facilitating a Genuine Bus Network, and
- Reorganising the Primary Road Network.

The access and movement framework adheres to the key development 'connectivity and movement' principles outlined in the CBC SPD (2025), as detailed within **Section 1** of this report.

Connectivity – A Walkable Campus

Safe, connected walking routes are an essential part of any movement strategy as walking critically makes up the first and final part of every other journey and must therefore be planned for in this context.

The CUH masterplan provides a good basis for pedestrian movement and connections across the campus. This seeks to deliver more legible, less conflicted, and a much-expanded set of routes to connect surrounding communities and onsite businesses to Cambridge South Station and the CSETS project. This increased connectivity will help to realise the full benefit that these schemes offer but also help to deliver a more pleasant and prioritised walking environment.

The primary aspects of the CUH strategy are that **much improved east west pedestrian connectivity is achieved through the delivery of the ‘High Street’** that would connect Hills Road with Francis Crick Avenue (using Keith Day Road) and the forthcoming Cambridge South Station.

Additionally, **a new strategic north south connection** that would connect the Phase 2 land to the Frank Lee site would be provided.

These routes are retained in the Emerging Spatial Framework and are supported. The only proposed significant CUH connection where an amendment is proposed is Robinson Way. The CUH masterplan proposes that pedestrian connectivity would follow a newly formed street that connects into Francis Crick Avenue at its western end. Instead of this, it is proposed that pedestrians would pass through a series of public spaces to reach the same destination albeit with a slight weighting to the north to reflect the demand arising from Cambridge South station.

We are also proposing that **the Hills Road junction is redesigned** and configured to create a better gateway from the city alongside much safer walking and cycling conditions in this currently hostile location. This change would likely see the removal of the existing roundabout and it being replaced with a signal-controlled crossroads or roundabout with separate segregated outer ring for cyclists and single stage crossings for pedestrians subject to further design work and may be dependent on the removal of CBC traffic from this junction via the Phase 4 expansion land to facilitate this change.

The changes to the private vehicle network (summarised in 8.7) provide an opportunity to deliver a better and less conflicted route into the campus from Red Cross Lane. This high-quality segregated connection currently joins Robinson Way but provides little penetration from that point into the campus. The reduced conflict resultant from the changes to the private vehicle network in combination with the masterplan allow for a much stronger connection into the site for pedestrians from this eastern side of the campus.

However, **the most significant change relates to the inclusion of the Phase 3 and 4 Expansion land to the south of the existing campus. This presents an opportunity to better connect and integrate the Babraham Road Park and Ride with the campus and also to improve the utility of the existing Public Right of Way that connects Granham’s Road to Nine Wells Nature Reserve.**

The pedestrian movement strategy will deliver.

- Improved east west pedestrian connectivity is achieved through the delivery of the ‘High Street’
- A new strategic north south connection that would connect the Phase 2 land to the Frank Lee site
- Hills Road junction is redesigned and configured to create a better gateway from the city
- Expansion land presents an opportunity to better connect and integrate the Babraham Road Park and Ride with the campus (to a greater or lesser extent subject to Granham’s Road realignment or otherwise).
- Continuous footways across junctions will be provided.

Connectivity

Delivering the Change

'Designing for Cycling' - Cohesion, Directness, Safety, Comfort & Attractiveness



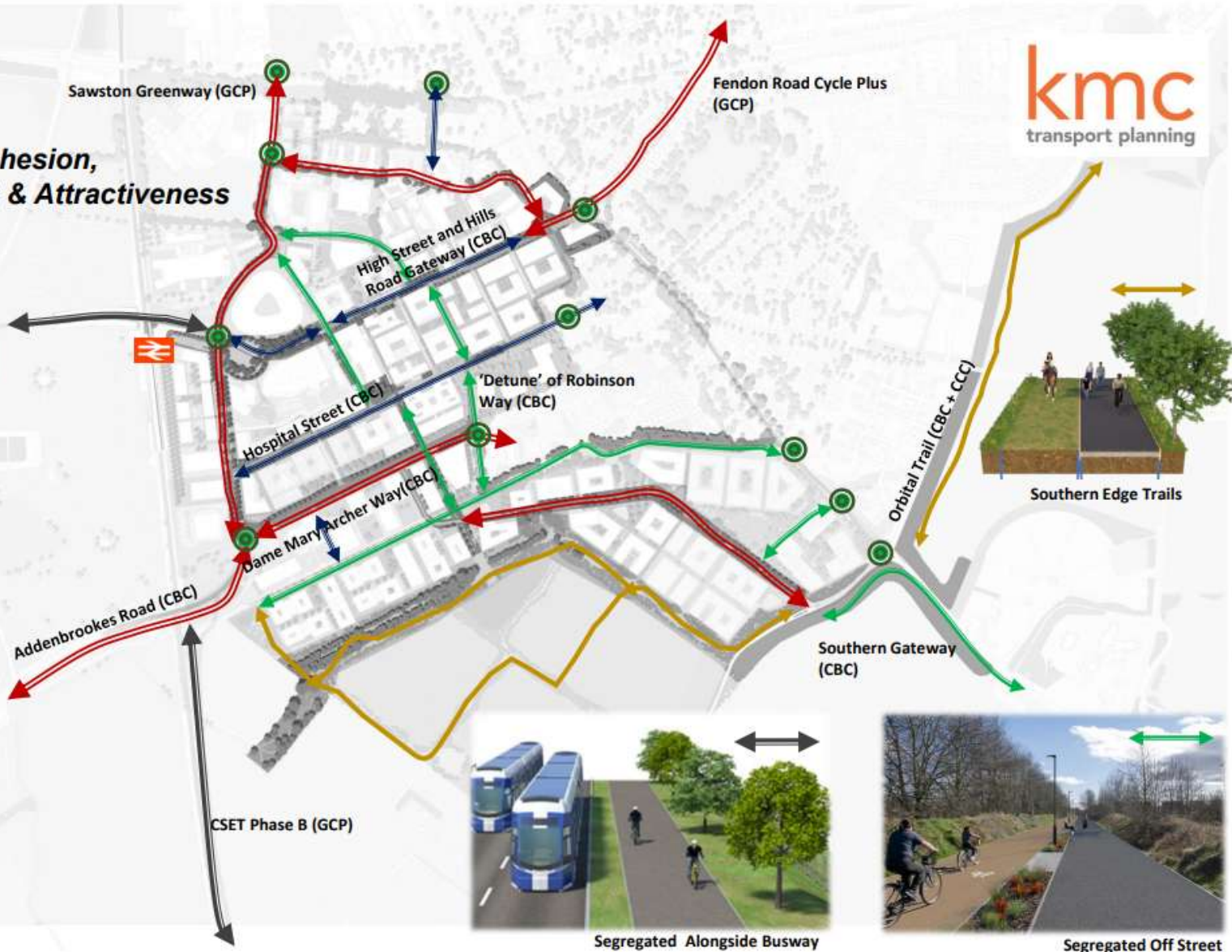
Segregated on street



Priority at junctions



Slow street environment / car lite street



Southern Edge Trails



Segregated Alongside Busway



Segregated Off Street

Connectivity – Designing for Cycling

The most well documented challenges for those arriving by bicycle including a lack of cycle parking availability around the busier buildings and that the legibility, quality, and security of routes within the Campus is sometimes lacking. Additionally, the gateways into the campus can feel hostile to cyclists – particularly the Hills Road junction and the Addenbrookes Road.

Again, our proposals support the CUH movement principles and network which are shown alongside. These prioritise a strategic east west connection along the High Street but also deliver a primary connection north south using Robinson Way and the route through the Phase 2 land.

The only substantial changes to these arrangements are those that are summarised in the pedestrian strategy. These include the expansion land being brought into the campus and with-it enhanced connectivity to the south and the changes to the western end of Robinson Way where connectivity to Francis Crick is afforded through public realm and spaces rather than as an extension of Robinson Way. Improvements to segregated cycling along Addenbrookes Road will be delivered.

All connections will seek to tie into existing and planned external enhancements to the cycle network such as CSET Phase 1 and 2, the access path alongside the Cambridge Guided Busway, and the Cross City cycle schemes delivered on Hills Road.

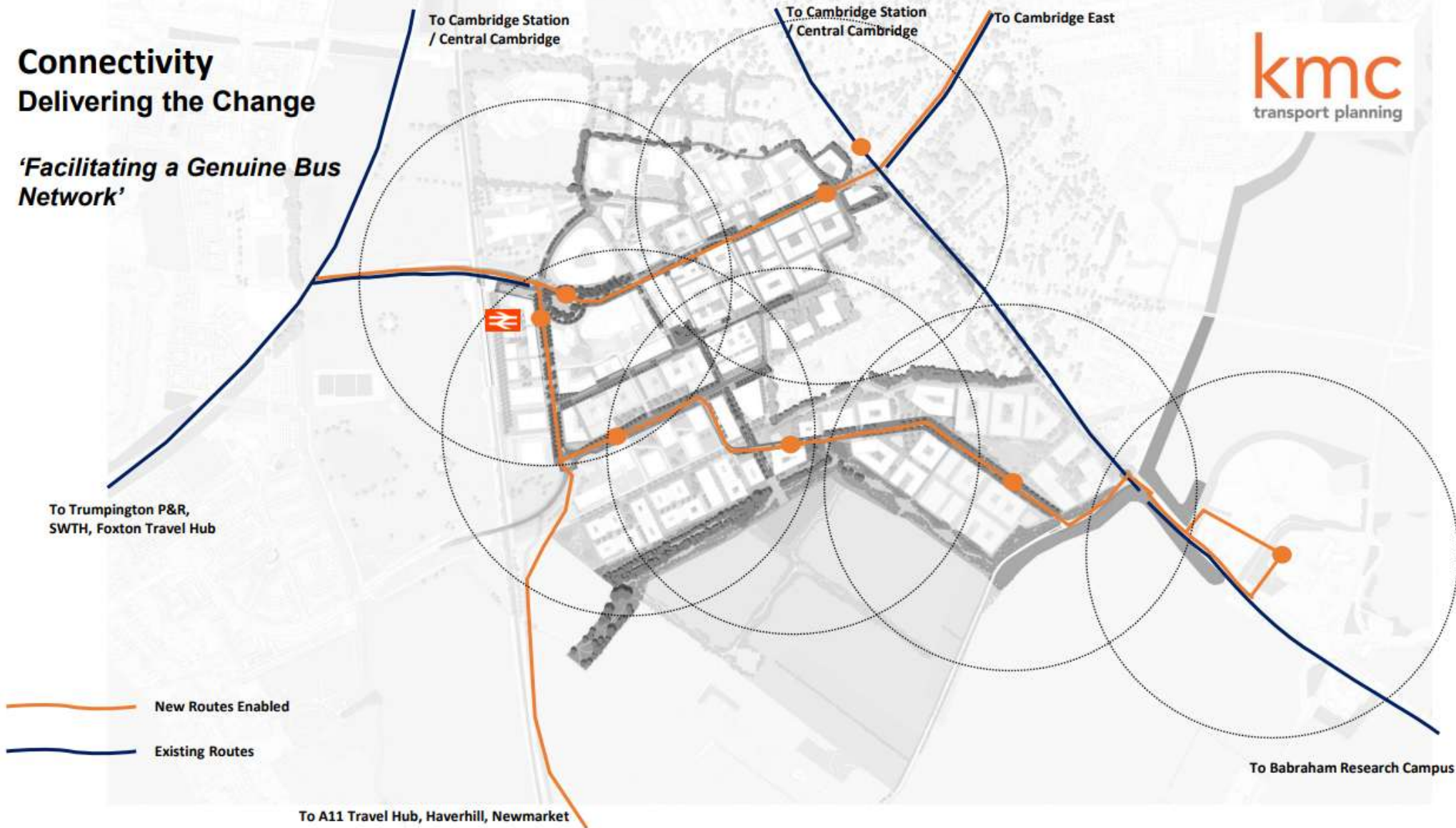
Additionally, to principles of the movement framework, **cycle parking will be plentiful**. As a principle, employee parking will be within secure, covered locations on-plot or at basement level within buildings. Visitor parking would be provided close to the building entrances and designed sympathetically into the public realm.

The cycle movement strategy movement strategy is summarised as follows:

- Prioritise a strategic east west connection along the High Street
- A primary connection north south using Robinson Way and the route through the Phase 2 land
- All connections will seek to tie into existing and planned external enhancements to the cycle network
- Cycle parking will be plentiful.
- Connections to Babraham Road will be enhanced (to a greater or lesser extent subject to Granham's Road options).

Connectivity Delivering the Change

'Facilitating a Genuine Bus Network'



Connectivity – Facilitating a Genuine Bus Network

The Campus will soon be served by a host of high-quality public transport services, with a new national rail station at Cambridge South (2025/26) and the Cambridge South East Transport Study (CSETS) (currently on pause). These investments are in addition to the existing guided busway and many other local bus services.

The Spatial Framework proposes that an east-west public transport spine is delivered. This would unlock the potential for direct and express services through the Campus that link to rail opportunities at Cambridge South, CSETS, but also provide interchange with the Guided Bus network. This delivers not only benefits to the campus but the wider city and bus network. This **east west connection helps to support connections from the east side of the city and potentially orbital connectivity to support further growth.** This is a hugely important connection that stakeholders will work together to deliver through further discussion on delivery mechanisms and timings.

It also seeks to embrace demand responsive transport by with the aim of providing seamless integration of key interchanges and arrival points within the Campus. Consistent with the CUH masterplan we are seeking to identify a number of pick-up and drop-off stops for DRT or community services and to provide effective coverage of the Campus and compliment the fixed route services. It is anticipated that these services will become autonomous which will reduce operating costs over time.

The integration of the expansion land to the south provides the opportunity for bus services to enter the campus from Babraham Road and avoid congestion on Babraham Road and Hills Road into the city. This connection allows services to serve the campus and then access the existing Cambridge Guided Busway via Cambridge South station.

This additional physical connectivity can also provide the basis for a high frequency 'P&R to P&R' service that could connect the SW Travel Hub with the Babraham Road P&R via the campus.

We propose to also remove the Hills Road bus station and replace it with stops on the eastern end of the 'High Street' and on Hills Road itself. The revised arrangement will delivery improved bus stopping efficiency and use of land around the junction.

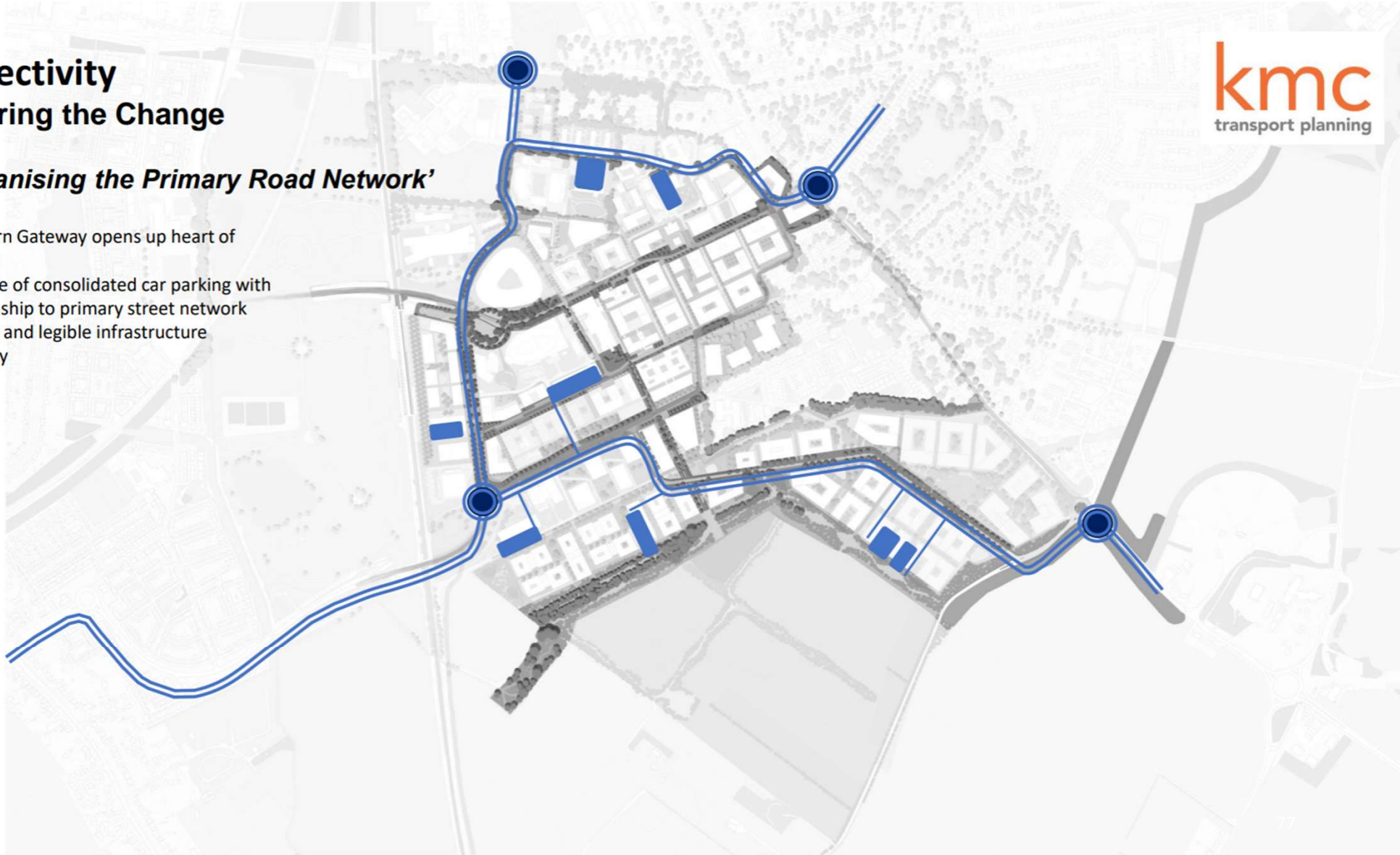
The proposals with an illustration of envisaged stops and interchanges are shown alongside.

- An east-west public transport spine along Keith Day Road.
- Embrace demand responsive transport (DRT).
- Identify a number of pick-up and drop-off stops for DRT or community services.
- Expansion land to the south provides the opportunity for services to enter the campus from Babraham Road

Connectivity Delivering the Change

'Reorganising the Primary Road Network'

- Southern Gateway opens up heart of campus
- Principle of consolidated car parking with relationship to primary street network
- Distinct and legible infrastructure typology



Connectivity – Reorganising the Primary Road Network

The approach to private vehicles is key to the success of many of the other elements of this movement strategy. Like the CUH masterplan, it is proposed **to minimise the volume of additional car parking available within the scheme** by capitalising on the opportunities generated by Cambridge South Station and CSETS and other demand management tools and reduce the overall volume of car parking per head for staff, providing alternatives such as electric pool cars for those where travel by car is essential.

Further to this vehicular access would be rationalised by providing **an orbital route around the campus** to allow vehicles to navigate to key destinations (e.g. MSCPs) but reducing the level of general vehicular access to buildings by identifying a small number of access routes for specific buildings for drop off and short stay facilities. This approach limits the number of private vehicle routes through the Campus and thus **reduces the number of potential conflict points between pedestrians, cyclists and public transport users**. Locating future MSCPs on the orbital road, reducing circulation within the Campus heart and reducing conflicts with pedestrians and cyclists along key central desire lines. These MSCPs will also be served by future on demand public transport services, offering local connectivity from these car parks into the main hospital areas.

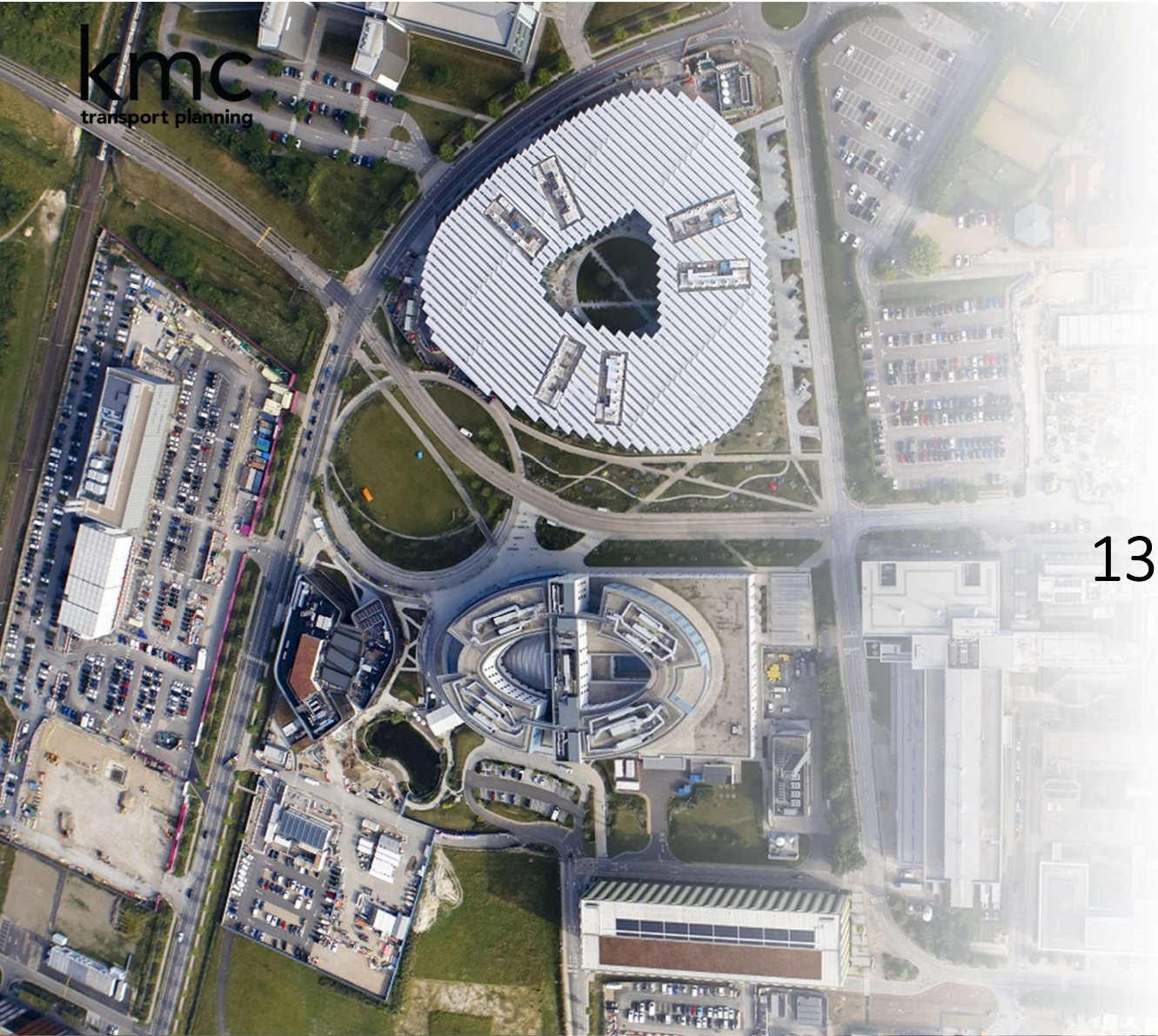
By restructuring the vehicular roads within the campus to provide an orbital route, it will allow vehicles to navigate to key destinations. Although vehicular access to some buildings will be reduced, by identifying a small number of access routes for these buildings, drop-off and short stay facilities can be provided to ensure that people can still travel to the buildings in question.

The primary changes between the CUH masterplan and our proposals relate to the removal of the eastern end of Robinson Way from the primary route network and the integration of the expansion land to the south. The expansion land means that additional access is provided and therefore a relief to the Babraham Road and Hills Road access north of Granham's Road. The traffic that currently enters the site at this point is now able to enter from the south which means that less pressure is applied at the this currently congested part of the network. It also allows for the re-configuration of the campus road network from what was proposed by the CUH proposals whereby the orbital route on south east of the campus including Robinson Way is removed. The provision of the Southern Gateway access road is essential to support the full development potential of the campus, including Phases 3 and 4 beyond the original Phase 3 allocation.

A signal junction from Graham's Road into the Phase 4 expansion land is proposed. The street through the development would form part of the campuses primary street network and would serve the car parking proposed within Phase 3 and 4. It would connect into Dame Mary Archer Way and would be controlled by the same ANPR protocols in place for the wider campus. It would provide segregated infrastructure and be designed to ensure a low-speed environment is managed throughout.

- Minimise the volume of additional car parking available within the scheme
- An orbital route around the campus to allow vehicles to navigate to key destinations
- Reducing the level of general vehicular access to buildings by identifying a small number of access routes for specific buildings for drop off and short stay facilities
- Additional southern access is provided as a result of the Phase 4 expansion land

In addition to the above, CBC acknowledges that through traffic continues to be a problem. Despite being prohibited, traffic which has no legitimate business on the campus is continuing to use the campus road network. CBC, as part of the spatial framework development is committed to working with the authorities to find a solution which allows effective enforcement or physically prohibits unauthorised traffic and it is anticipated that policy wording for the Local Plan reflects this position.



13. Revised Accessibility Analysis

Revised Accessibility Analysis accounting for Transport Strategy and Investments

The impact of the Transport Strategy in accessibility terms has been assessed using PODARIS software. From this assessment it is possible to see the difference between the percentages of existing CBC employees within the different time bands with the percentage of future CBC employees in the same time bands.

The existing accessibility analysis reported early in this report has used walk times in combination with bus and rail timetables, bus stops and existing railway stations. For the future accessibility analysis, the primary GCP segregated public transport corridors have been coded and which include:

- Cambourne to Cambridge
- CSET Phase B
- Waterbeach to Cambridge
- Eastern Access

In addition, Cambridge South Station and East West Rail are also coded into the future year assessment alongside separate bus services promoted through this Transport Strategy and resulting from the additional physical connectivity that the Phase 4 land provides.

Whilst comprehensive gravity modelling has not been undertaken to forecast robustly where new employees may live, growth areas in Greater Cambridge have been coded into the assessment to account for additional CBC staff that are likely to live in these new communities.

The changes that occur to the percentages of employees within the different time bands when compared to the existing assessment is shown in Table 11 alongside.

As with the base assessment, it should be noted that no P&R trips are picked up in this analysis due to the car trip to the P&R site. The inclusion of these trips would significantly increase the number of postcodes within the 60-minute time band given the new P&R's being proposed and the segregated links proposed to connect them.

The DRT provision touched upon earlier in this report is also not reflected in the accessibility analysis alongside but would be used to provide access to locations not served by fixed route public transport and would therefore add further benefit.

| Travel Time | Existing 2023 Travel Time | Future Travel Time (% increase/decrease) |
|-------------|---------------------------|--|
| 15-minutes | 6% | 6% (0%) |
| 30-minutes | 15% | 24% (+9%) |
| 45-minutes | 24% | 49% (+25%) |
| 60-minutes | 38% | 59% (+21%) |

Table 9: Existing and Future Staff Travel Times using Public Transport Comparison

From the analysis undertaken it is apparent that the change in percentages that live within a 60-minute public transport journey time is substantial. The application of the transport strategy sees 21% more employees now able to access the campus by public transport in up to 60 minutes with journey times for many others reducing substantially. The revised isochronal analysis is shown below. In real terms, it is likely this number will be greater again as new employees are more likely to be living in locations connected by new infrastructure (i.e. to the west) when compared to existing postcodes that have been used for this assessment.

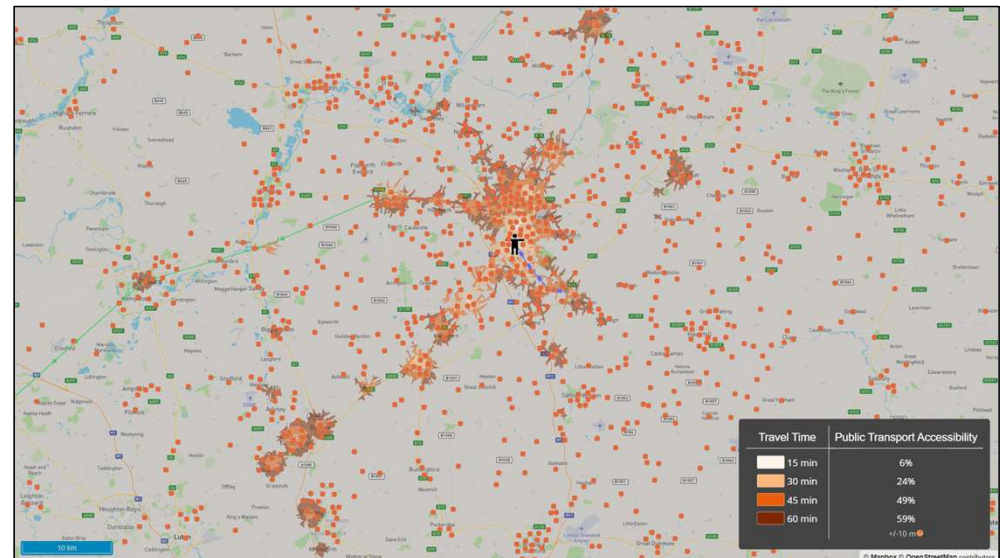
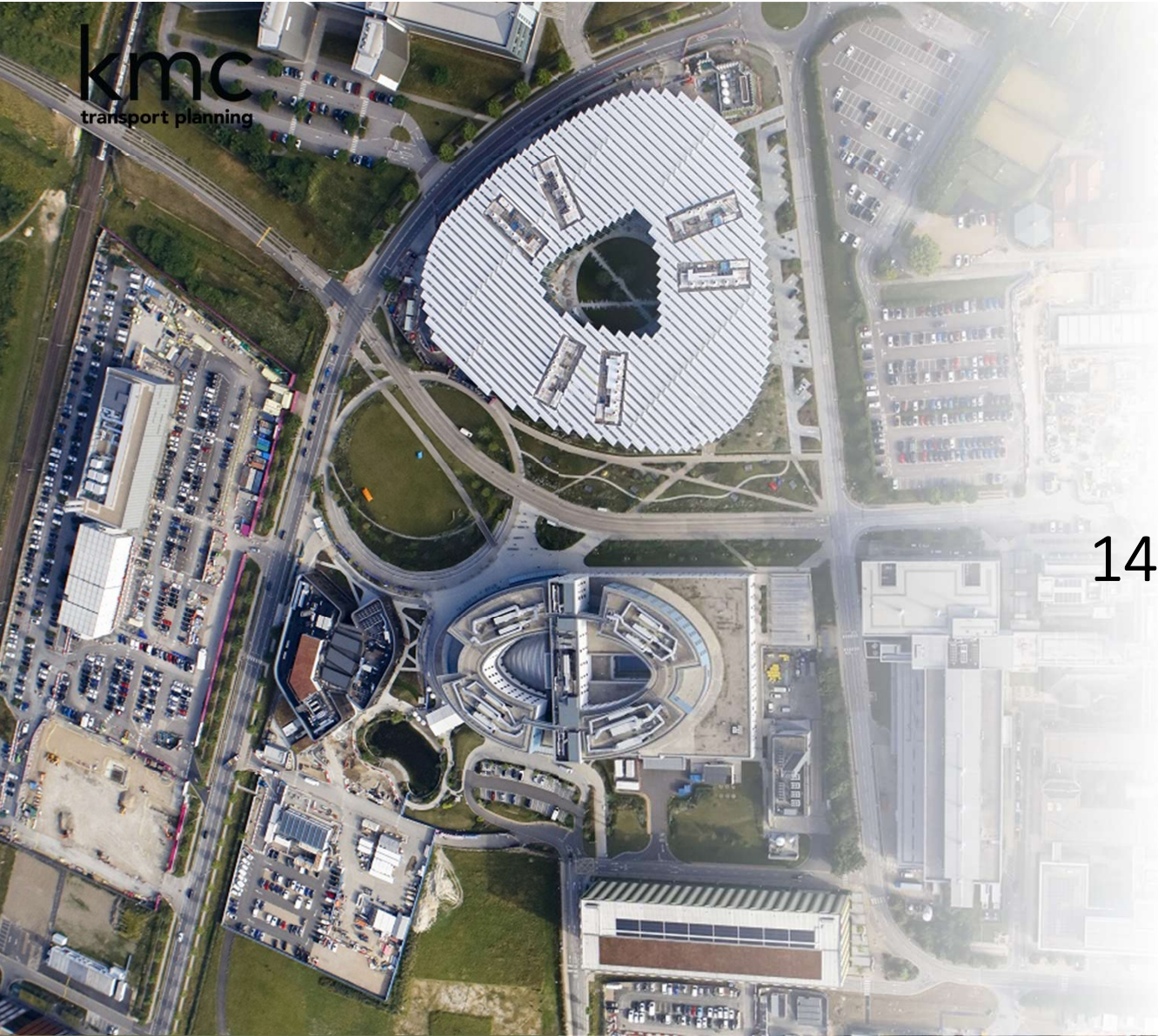


Figure 14: Bus, Rail, and Walking Accessibility up to 60-minutes for Staff Postcodes (Proposed) 80



14. Network Capacity Considerations

Network Capacity Considerations

The Transport Strategy for CBC has been developed through a multi-layered assessment framework. Part of this is that the principle of a trip budget has been accepted and has been reviewed to determine the extent to which the existing transport network can accommodate additional vehicle movements. This assessment confirms that the network has minimal residual capacity, and as such, no significant future traffic growth can be absorbed without changes to the wider network configuration. The trips associated with the Phase 2 consents and assessments are proposed to provide the trip budget for planning making and prior to planning application assessment work.

Notwithstanding this existing constraint and the acceptance of the principles of a trip budget to control impact, the introduction of the proposed Southern Gateway is anticipated to alter network performance on the Babraham Road corridor. Given the Southern Gateway is only proposed to be an access into CBC and not provide part of the wider highway network, it is anticipated that there will be minimal strategic impact or benefit from its introduction beyond the clear and obvious benefits to the site and the local corridor. To quantify the potential effects of this intervention at a strategic, network level, KMC understands that CCC has undertaken updated strategic transport modelling using the CRSM as part of the Transport Evidence Report and this will be further assessed as part of the Greater Cambridge Transport Strategy being prepared to support the Local Plan.

To understand the benefits of the Southern Gateway to the local network, operational modelling has been undertaken by KMC to test the performance of key junctions expected to be directly influenced by the Southern Gateway. The assessment junctions are as follows:

- Proposed Southern Gateway Roundabout (*as shown indicatively in Figure 42*); and
- Addenbrookes Roundabout.

The outputs of these assessments provide an evidence-based understanding of likely transport effects and inform the recommended transport mitigation and staging approach for this Transport Strategy and Spatial Framework Masterplan.

Further detail on the modelling inputs, assumptions, and results is provided overleaf.

The localised modelling presented demonstrates the local network will operate more efficiently with the southern gateway. Further work will be required through subsequent stages of the planning process. We understand that CBC and the forecast increase in jobs, and this associated transport strategy will be included in Greater Cambridge Transport Strategy (GCTS) Strategic Model runs. The strategic impacts of the proposed growth at CBC will be determined by the strategic modelling and we anticipate this will be available during the summer of 2026.

Network Capacity Considerations – Addenbrooke’s Roundabout

Methodology

This exercise is being undertaken to understand the localised benefits of the Southern Gateway on the Addenbrookes Roundabout. It is not a full modelling exercise to understand the impact of the Emerging Spatial Framework or any wider impacts of the Southern Gateway across the network. To understand the potential benefits and therefore opportunity at the Addenbrookes Roundabout, the assessment scenarios modelled are:

- **Scenario 1:** Base Model – Addenbrooke’s Roundabout improvements as part of the Fendon Road Cycling Plus scheme (supplied with flows from Atkins).
- **Scenario 2:** Future Base – Future scenario including the Southern Gateway with CBC traffic removed from the Babraham Road arm.

The movements between the Babraham Road and Main Drive (CBC) arms are associated with CBC staff, patients, and visitors. The Southern Gateway will allow vehicles entering and exiting CBC to do so via the Southern Gateway rather than Addenbrooke’s roundabout. Therefore, it has been assumed that CBC related vehicle movements between Babraham Road and Main Drive would reduce by 90%.

A standalone LinSig model has been produced to assess the roundabout in both scenarios. LinSig evaluates signalised junctions using Degree of Saturation (DoS), delay, and queue lengths. Theoretical capacity reflects the maximum traffic a junction can accommodate without significant delay. DoS is used as the key indicator, with values over 90% showing an approach operating at or beyond capacity. Signal timings have not been updated for Southern Gateway flows, so further capacity gains may be achievable with optimisation. However, the aim here is to illustrate the proposals’ relative impact, not to develop final signal timings.

Changes to Baseline Traffic

38% of vehicles travelling north along Babraham Road in the morning peak hour are turning left into CBC.

In the future year scenario with the addition of the Southern Gateway, this traffic has been reduced by 90% from the Addenbrooke’s roundabout. Table 3.1 summarises the changes in flows for each arm of the Addenbrooke’s roundabout with and without the Southern Gateway.

| Approach Arm | AM PEAK | | | PM Peak | | |
|------------------|----------------------|-----------------------|------------------|----------------------|-----------------------|-----------------|
| | W/O Southern Gateway | With Southern Gateway | Net Change | W/O Southern Gateway | With Southern Gateway | Net Change |
| Fendon Road | 538 | 538 | 0 (0.00%) | 464 | 464 | 0 (0.00%) |
| Babraham Road | 798 | 681 | -117.1 (14.67%) | 634 | 715 | 81 (12.78%) |
| Bus Station | 86 | 86 | 0 (0.00%) | 84 | 84 | 0 (0.00%) |
| Main Drive (CBC) | 353 | 135 | -217.7 (-61.67%) | 586 | 195 | -390.6 (66.66%) |
| Hills Road | 405 | 405 | 0 (0.00%) | 497 | 497 | 0 (0.00%) |
| Junction Total | 2180 | 1845 | -334.8 (-15.36%) | 2265 | 1955 | -309 (-13.67%) |

Table 10: Change in Flows with and without the Southern Gateway

Table 10 demonstrates that a 90% reduction of vehicle movements between Babraham Road and Main Drive will remove between 12%-39% of vehicle movements from each of these arms, and circa 15% of vehicle from the roundabout as a whole.

With the Southern Gateway and revised internal road network, the new MSCPs in Phases 2–4 will be directly accessible from this new access. As a result, three of the six MSCPs can be reached without using the Addenbrooke’s roundabout. It is therefore assumed that around 50% of traffic from Hills Road and Fendon Road will instead use Babraham Road and enter CBC via the Southern Gateway. This does not remove traffic from the roundabout but changes how vehicles route through it and into the campus.

Network Capacity Considerations – Addenbrooke’s Roundabout

Modelling Results

Atkins have provided KMC with the LINSG model used to assess the impact that the Fendon Road Cycling Plus improvements would have on Addenbrooke’s roundabout. These results for the Degree of Service (DoS), Physical Length of each link (in PCUs), the Mean Maximum Queue (MMQ), and the Practical Reserve Capacity (PRC) of the roundabout are provided in **Appendix B** for the AM and PM peak hours. For this comparative exercise, ‘Base’ is the junction with the currently being constructed GCP scheme in place and ‘Future’ includes for the addition of the Southern Gateway proposed as part of the Spatial Framework.

Comparing the future year scenario (with the southern gateway) against the base demonstrates that the DoS for arm 4 (Babraham Road) in the morning peak hour decreases from 77.30% to 72.40%, therefore releasing theoretical capacity within the arm as expected with the decrease in flows turning into CBC (see **Appendix B**). In the PM peak, the DoS for arm 2 improves from 94.1% in the base scenario (which is over the arms theoretical capacity) to 81.80% with the Southern Gateway delivered, and the MMQ reduces by 4.6 PCUs, which will also relieve the impacts of the blocking back from arm 2. **Table 11** highlights the arms and links which DoS and MMQs improve as a result of the reduction in traffic between Main Drive and Babraham Road.

Most of the DoS and MMQ improvements resulting from the Southern Gateway occur on the circulatory arms of the roundabout. The junction also experiences reduced total vehicle delay, with improvements of 6.37 PCU-hrs in the AM peak and 3.92 PCU-hrs in the PM peak. Overall, the Practical Reserve Capacity increases from 16.5% to 24.4% in the AM peak and from -4.6% to 0.6% in the PM peak.

Conclusions

In summary, the reduction in flows creates capacity “headroom” that can be reallocated to active travel improvements, while still achieving a level of operation consistent with the upgraded GCP scheme. The purpose of this exercise is not to improve vehicle journey times, but to demonstrate that the reduced junction demand could be used to deliver additional pedestrian and cycling improvements—potentially supported by land within CUH’s control—while maintaining acceptable traffic performance, including for buses.

In summary, the reduction in flows creates some further capacity or “headroom” that can be reallocated to active travel improvements, while still achieving a level of operation consistent with the upgraded GCP scheme.

| Model Link | AM Peak | | PM Peak | |
|---|----------------|----------------|----------------|----------------|
| | DoS Net Change | MMQ Net Change | DoS Net Change | MMQ Net Change |
| Eastern Circulatory Ahead | 4.40% | 13 | -12.30% | -4.6 |
| Eastern Circulatory Right Ahead | -23.50% | -6.1 | -13.20% | -1.8 |
| A1307 Hills Rd SE Entry, Left, & U-Turn | -4.90% | -0.3 | 14.10% | 7.7 |
| Southern Circulatory Ahead | -31.30% | -4.8 | -17.40% | -2.2 |
| Western Circulatory Left | 0.00% | -1.2 | 0.00% | -0.7 |
| Western Circulatory Right | 0.00% | -0.1 | 0.00% | -0.2 |
| Western Circulatory Right | -11.20% | -3.7 | -23.00% | -6.5 |
| Northern Circulatory Right | -4.50% | 0 | -11.60% | 0 |
| Main Dr SW Entry Left | -28.80% | -4.4 | -33.30% | -5.3 |
| Main Dr SW Entry Left | -25.80% | -3.3 | -48.00% | -6.3 |
| Left Ahead | 4.40% | 13 | -12.30% | -4.6 |

Table 11: Summary of Arm Improvements (Addenbrookes Roundabout)

Network Capacity Considerations – Southern Gateway Roundabout

Methodology

An operational junction model has been prepared by KMC and used to assess the Proposed Southern Gateway Roundabout (shown indicatively on **Figure 42** on this report). A standalone TRL Junctions 11 ARCADY model was produced to assess the forecast operation of the roundabout, which is industry standard software for priority roundabouts. This modelling has been undertaken for the AM and PM peak hours.

Forecast traffic flows from the approved Worts Causeway development (*planning application reference: 19/1168/OUT*) which is anticipated to be accessed from Babraham Road has been included.

Modelling Results

Table 12 provides a summary of the performance of the Southern Gateway Roundabout in the AM and PM peak hours, with the full output contained in **Appendix B**. **Table 12** indicates that the roundabout operates well within capacity with the forecast development flows, with a maximum RFC of 0.43 and 0.50 in the AM and PM peak hours respectively. A forecast LoS of A across all arms in the AM and PM peak hours is also highlighted, showing the junction is anticipated to perform well operationally. Forecast queue lengths (PCU) are also minimal, with a maximum queue of 1.0 PCUs across any arm in the AM and PM peak hours.

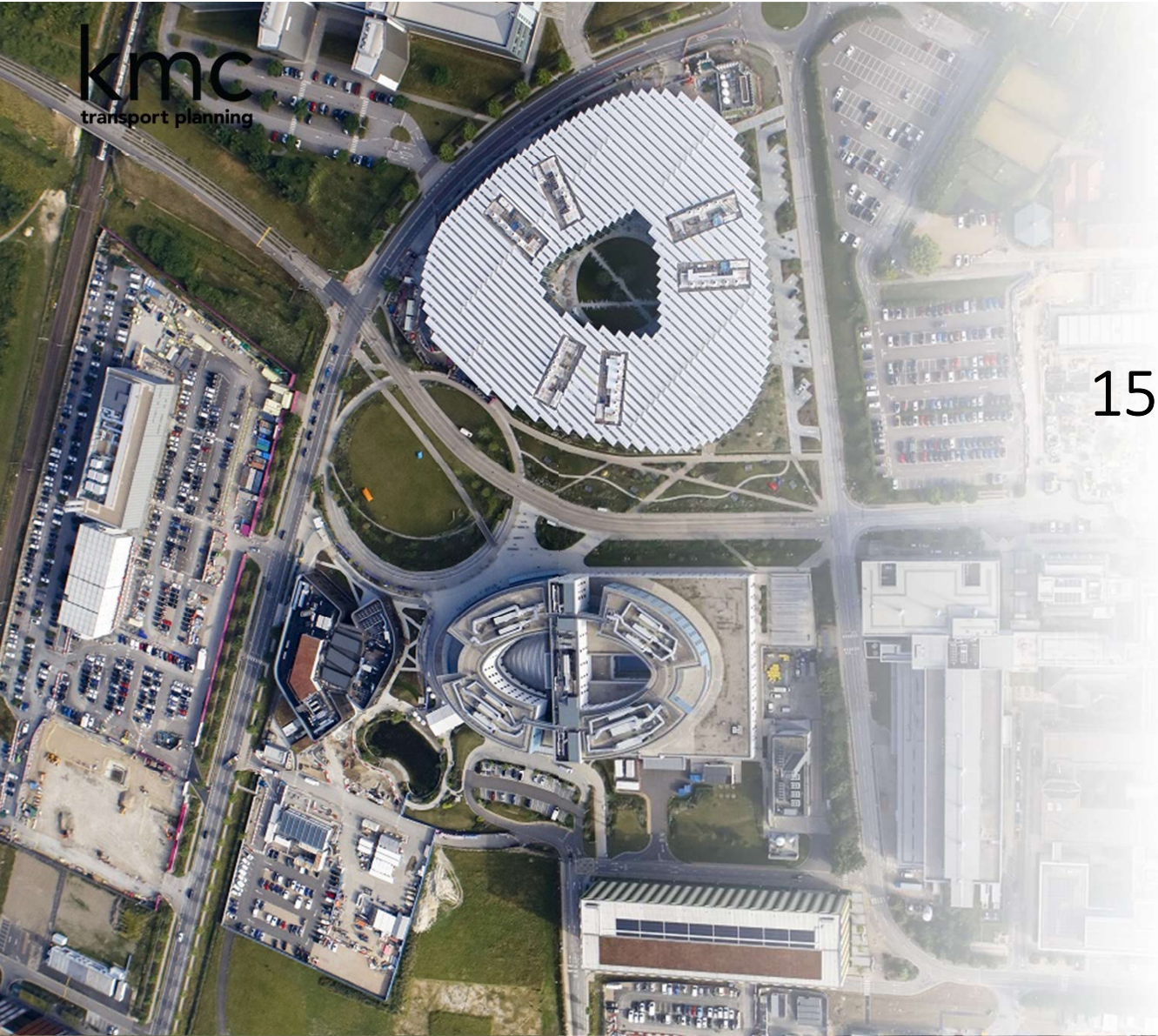
It is acknowledged that currently queuing back from the Hills Road roundabout would affect performance of the southern gateway, but it is anticipated that with the removal of the CBC traffic from the Hills Road junction, the internal circulatory queuing is reduced, and overall junction capacity is improved. This in turn will reduce the risk of queues extending through the Hills Road roundabout and back to the southern gateway.

Conclusions

The junction modelling undertaken at the Southern Gateway Roundabout indicative junction design is expected to operate within capacity in the AM and PM peak hours, with negligible delay and/or queuing.

| Arm | AM | | | | PM | | | |
|-----------------------------|-------------|-----------|------|-----|-------------|-----------|------|-----|
| | Queue (PCU) | Delay (s) | RFC | LoS | Queue (PCU) | Delay (s) | RFC | LoS |
| Arm 1 (Babraham Road South) | 0.7 | 3.05 | 0.40 | A | 0.6 | 2.93 | 0.36 | A |
| Arm 2 (Granhams Road) | 0.2 | 2.33 | 0.16 | A | 0.3 | 2.55 | 0.22 | A |
| Arm 3 (Babraham Road North) | 0.8 | 3.72 | 0.43 | A | 1.0 | 4.46 | 0.50 | A |
| Arm 4 (Worts Causeway) | 0.1 | 5.16 | 0.07 | A | 0.0 | 5.92 | 0.03 | A |

Table 11: Southern Gateway Roundabout – Operational Modelling Results



15. The Consequence of Not Allocating Land for Additional Growth

The Consequence of Not Allocating Land for Additional Growth

Should the Phase 4 land not be allocated as part of the Local Plan process, then the potential mitigation and improvement strategy as outlined in this report will be different. The difference will be in part due to the changed physical and spatial context but also the reduced ability of the commercial floorspace associated with Phase 4 to contribute to wider improvements. The resulting omissions from the transport strategy are shown below in Tables 10-13 as strikethroughs.

By 2030

| Public Sector Investments | On Site Shared Infrastructure | Other Transport Measures |
|--|--|--|
| Cambridge South Station (Network Rail) | Mobility Hub as part of Amenity building and west of high street bus interchange with CSET and Cambridge South | (3no.) Secondary Mobility Hubs |
| Cambridge Southeast Transport Study Phase 2 (CSET) (GCP) | Additional pedestrian cycle connection from Babraham Road south of Nine Wells (CBC) | Temporary parking strategies linked to infrastructure delivery |
| SWTH (GCP) | Tactical small scale mobility Improvements within the campus (Phase 1 Land) (CBC) | Encourage Work-from-Home practices |
| Foxton Travel Hub (GCP) | Initial interventions to Addenbrooke's food-court (as a meanwhile use) to allow for east-west public through route for pedestrians and cycles (CBC) | Bus pass subsidies for new / relocated staff |
| Planned On-Street Parking Controls (GCP) | Enhanced north south routes connecting Phase 2 into Phase 1 and western end of High Street | - |
| Sawston Greenway (GCP) | - | - |
| Cambourne to Cambridge (GCP) | - | - |
| Fendon Road Cycle Plus (GCP) | - | - |
| Hills Road Cycle Plus (GCP) | - | - |

By 2035

| Public Sector Investments | On Site Shared Infrastructure | Other Transport Measures |
|---|---|--|
| East West Rail (Network Rail/ East West Rail Company) | Full High Street delivered including Gateway from Hills Road along with east High Street Bus Stops (CBC) | Bus services from: <ul style="list-style-type: none"> - Newmarket – A11 P&R – Cambridge South - Babraham Park and Ride – Cambridge South – Cambridge Station – City Centre - Foxton Travel Hub – Cambridge SW Travel Hub – Trumpington P&R – Cambridge South – Cambridge East – Milton - Babraham Road P&R – Cambridge South – Trumpington P&R – SW Travel Hub - A11 P&R – Cambridge South – Cambridge East - DRT Service |
| | South section of Robinson Way downgraded. | Consolidation of car parking through construction of MSCP 3 and Phase 2 MSCP |
| | New Southern Gateway access only link plus bus, pedestrian, and cycle route from Granham's Road /B'ham Rd | (3no.) Secondary Mobility Hubs |
| | Phase 4 Primary Street | Residential for key workers |
| | Puddicombe Way / Adrian Way Streetscape + infrastructure | Sensor and AI technology for Trip Budget Adherence and on-site priority and management |
| | Hospital Mid Street streetscape | Micro-Consolidation Centre in MSCP 1 |
| | Dame Mary Archer Way streetscape enhancements / infrastructure consistent with Francis Crick & Ph 4 Primary St | |
| | Segregated infrastructure of Addenbrookes Road | |

The Consequence of Not Allocating Land for Additional Growth

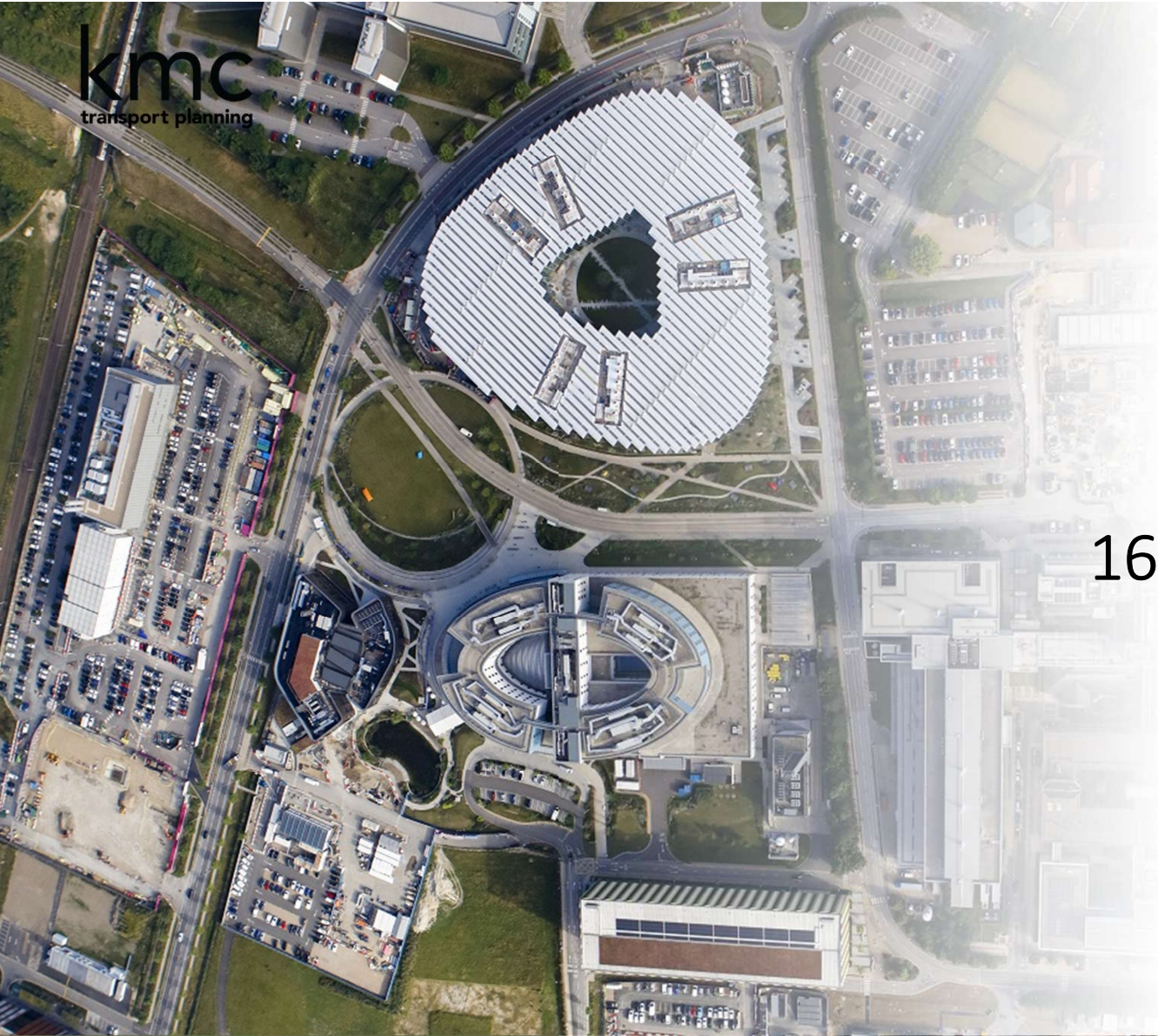
| By 2040 | Public Sector Investments | On Site Shared Infrastructure | Other Transport Measures |
|---------|---------------------------|--|--|
| | - | 2no. Secondary mobility hubs | Consolidation of car parking through construction of MSCP in Phase 4 land |
| | - | - | P&R Travel Hub Expansions (as necessary) |
| | - | - | Bus Service Frequency increase |
| | - | - | Micro Consolidation Centre in MSCP 4 |
| | | | Contribution to Addenbrookes Road to Shelford Tier 2 (LCWIP) active travel network |
| | | Southern edge Trail (part of landscape/ soft edge) | |
| | | Babraham Road pedestrian and cycle access | |
| By 2050 | Public Sector Investments | On Site Shared Infrastructure | Other Transport Measures |
| | - | High Street Streetscape completed | - |
| | - | 2no. Secondary mobility hubs | - |
| | | | Bus service frequency increase |

Whilst the comparative exercise undertaken is simplistic, it does demonstrate that the value of the Phase 4 land is significant from a transport perspective. Whether it's the additional transport services that can be both afforded or enabled, it is clear that without the Phase 4 land the transport solution for CBC becomes less effective for the campus and city.

This report has previously stated that two key moves strategic moves are deemed as central to the transport solution and access and movement framework. These are as follows and both of these key moves would fall away without the allocation of the Phase 4 land:

- i. An enhanced gateway from Hills Road coupled with an East West High Street would provide the opportunity for bus-based journeys to and from east Cambridge and the significant growth area at Cambridge Airport, through the campus via Cambridge South station and onwards to the southern Fringe and the Southwest Travel Hub.
- ii. A connection from Babraham Park and Ride to CBC, Cambridge South, and the Cambridge Guided Busway (S) provides the opportunity for buses to bypass congestion along Babraham Road and access the city centre via the existing segregation afforded by the CGB(S). Additionally, P&R to P&R services via CBC and Cambridge South station provide the potential for dedicated high frequency buses to link P&R sites and the campus.

The East West High Street cannot happen until the relocation of the food court which has been identified as shared infrastructure and therefore requiring support from the expansion land and floor space delivered. The connection from Babraham Park & Ride into the campus explicitly relates to the Southern Gateway and clearly without Phase 4 land, this connection is not achieved.



16. Transport Strategy Costs & Delivery

Transport Strategy Costs and Approach to Delivery

The infrastructure anticipated to support the Emerging Spatial Framework has been costed by AECOM. This only considers physical infrastructure and not wider contributions that could be expected to be paid through a S106 mechanism associated with a planning application which would, therefore, be additional.

Given the lack to specific detail around many items as part of an early design process, a number of assumptions have had to be made. For a full understanding of the cost process undertaken the 'CBC Landowners Vision 2050 Shared Infrastructure Capital Cost Order of Cost Estimate' report should be read.

The AECOM summary table is set out alongside. The infrastructure that has a relationship to access, movement and transport capacity and has been summarised in this report is highlighted in red.

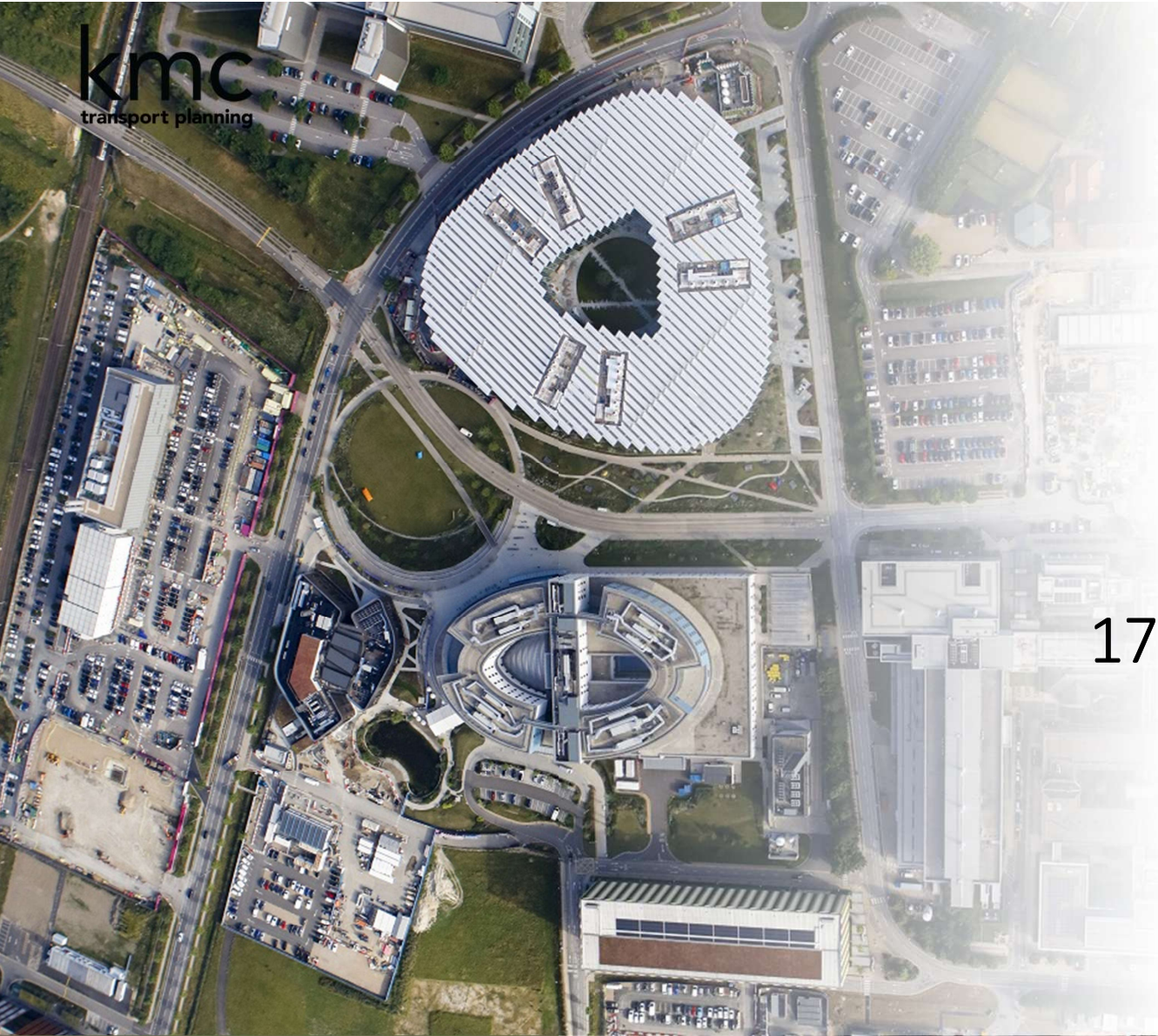
In addition to these development costs, which include access arrangements to be delivered through S278 processes, it has been estimated that wider transport strategy would cost the following through contributions or off site works:

2030 – TBC
2035 – TBC
2040 – TBC
2050 – TBC

Total – TBC

| Item | |
|-------------|---|
| 2030 | |
| 0.1 | Enabling Works |
| 0.2 | Multi-Phase/ Site Wide Works & Works Risk Allowances |
| 1.0 | Primary Mobility Hub, West High Street Bus Interchange |
| 2.0 | Pedestrian/Cycle Connection - Babraham Road / South of Nine Wells |
| 3.0 | Relocation of Addenbrooke's Foodcourt |
| 4.0 | Enhanced North South Routes connecting Phase 2 and 3 into Phase 1 |
| 5.0 | Tactical small scale mobility Improvements within the campus |
| 6.0 | Secondary Mobility Hubs |
| 7.0 | Temporary parking strategy |
| 8.0 | Sensor and AI technology for Trip Budget Adherence |
| 2035 | |
| 0.1 | Enabling Works |
| 0.2 | Multi-Phase/ Site Wide Works & Works Risk Allowances |
| 1.0 | Hills Road Entrance & High Street |
| 2.0 | Southern Section of Robinson Way Downgraded |
| 3.0 | Additional Southern Gateway to Babraham Road |
| 4.0 | BNG uplift of 60% achieved with Greenbelt Enhancement |
| 5.0 | Puddicombe Way and Adrian Way Street-scape |
| 6.0 | Mid Street street-scape connecting to Francis Crick Avenue |
| 7.0 | Dame Mary Archer Way street-scape enhancements |
| 8.0 | Segregated infrastructure on Addenbrookes Road |
| 9.0 | Construction of MSCP 3 |
| 10.0 | Secondary Mobility Hubs |
| 11.0 | Soft Green Edge |
| 12.0 | Landscape Bunds |
| 13.0 | Confluence Square Hard and Soft Landscaping |
| 14.0 | Phase 3 "Slow Street" (East/West between CSET and Confluence) |
| 2040 | |
| 0.1 | Enabling Works |
| 0.2 | Multi-Phase/ Site Wide Works & Works Risk Allowances |
| 1.0 | MSCP 4 in phase 4 land |
| 2.0 | Babraham Road pedestrian/cycle connection |
| 3.0 | Last Mile Servicing facility |
| 2050 | |
| 0.1 | Enabling Works |
| 0.2 | Multi-Phase/ Site Wide Works & Works Risk Allowances |
| 1.0 | High Street Streetscape Completed |
| 2.0 | Secondary Mobility Hubs |

NB: all figures above rounded UP to nearest £10,000.



17. Next Steps

Summary & Next Steps

Summary

This report sits alongside the Allies and Morrison Emerging Spatial Framework which makes the case for the future growth of CBC as part of the Greater Cambridge Local Plan process. The Emerging Spatial Framework is largely consistent with work undertaken by Hawkins Brown in 2022. The Transport Strategy therefore also reflects the strategy proposed in the 2022 report but has refined and further developed much of the previous thinking.

Significant assessment of the transport networks in and around CBC have previously been undertaken. The most significant of these studies is the CBC Transport Needs Study undertaken by Atkins in 2018 and refreshed in 2022. This study found that the CBC is set to benefit from significant and transformational investments between now and 2031.

However, despite these investments helping to make CBC the most connected part of Greater Cambridge, the withdrawal of the Cambridge Autonomous Metro (CAM) has meant that as reported by the 2022 Refresh, CBC is forecast not to achieve the target daily highway trip targets proposed by the Greater Cambridge Partnership. These targets are broadly commensurate with other ambitions that the GCP has committed to helping to achieve in the area and are consistent with daily traffic flows in 2017. The breach of these targets is because of committed growth to 2031 and does not therefore account for additional growth set out in this report and which would be realised as a result of improvements to the existing campus and critically the addition of the expansion land to the south of the campus.

This report has therefore considered what further indicative measures and interventions are needed to unlock further growth at the campus and help to support more sustainable travel patterns across the area. The phasing of transport infrastructure presented in this Transport Strategy is considered illustrative, providing a view of when interventions may be required and is subject to further technical work. A monitor-and-manage approach will be used, ensuring the phasing of infrastructure remains flexible. The impact of these schemes in combinations with commitments to work to the principles of a Trip Budget and managed through car parking supply has been forecast to be sufficient to reduce vehicular trip making (**Appendix A**) to a level that is in line with what has been suggested as an appropriate early Trip Budget.

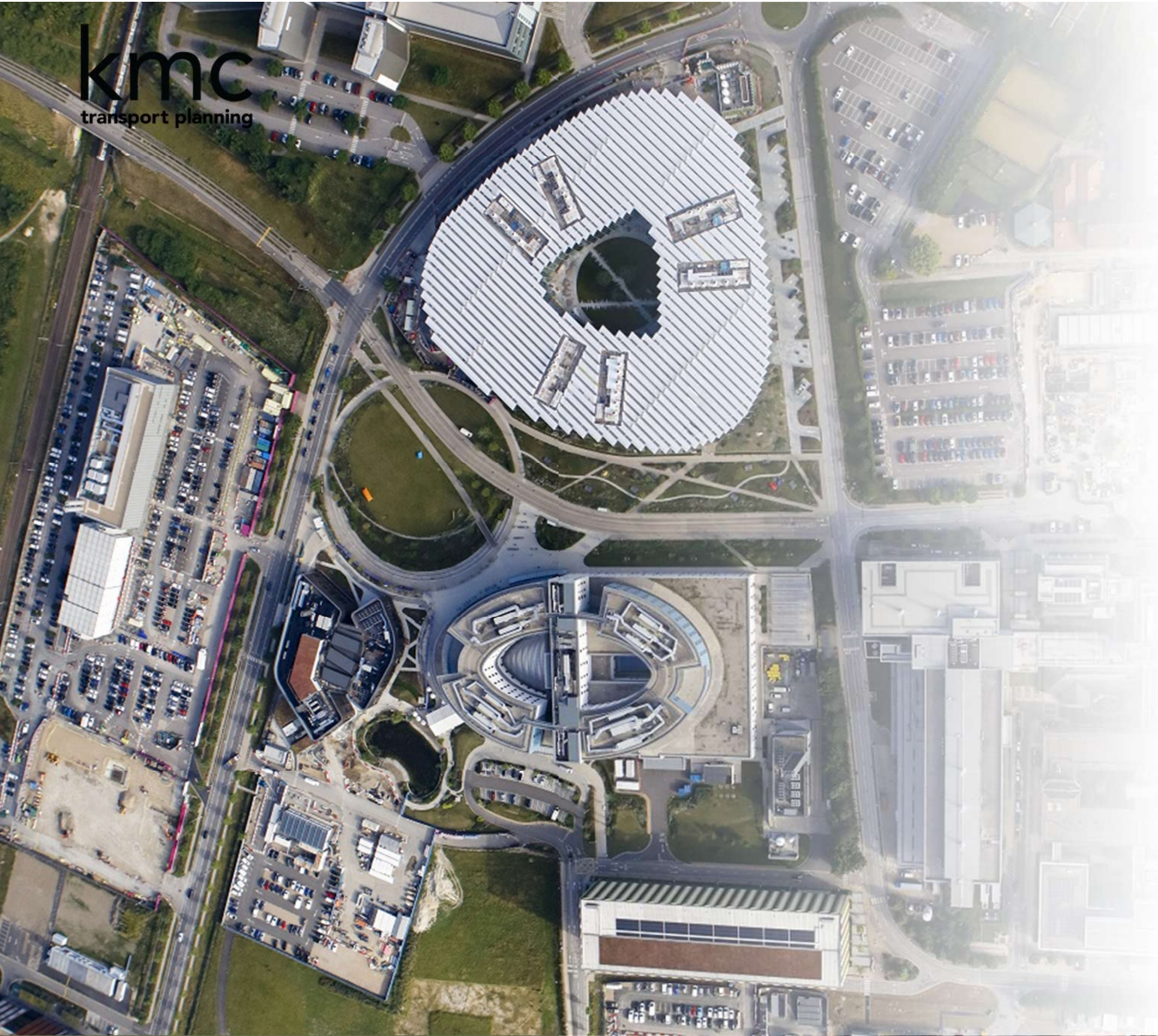
This Transport Strategy also adheres to the principles set out in the new CBC Supplementary Planning Document (2025).

Next Steps

As part of Greater Cambridge Local Plan process, KMC understands that CCC have now undertaken modelling of the additional jobs at CBC created as a result of the AAM Emerging Spatial Framework. It is understood that the GCTS will further assess these jobs as part of Local Plan evidence being prepared.

Prior to the GCTS, this Transport Strategy has been updated to ensure consistency with the CRSM modelling undertaken to date, alongside the inclusion of localised operational modelling to reflect the network changes proposed at the Southern Gateway.

Commitments have been made throughout this report of working to the controls of a Trip Budget. As a destination, car parking controls can provide the necessary confidence and control that this is adhered to but to maintain the appropriate levels of services and accessibility for the campus, the further measures put forward through this report require further refinement and development with public bodies. Going forward the Trip Budget will need to be refined through modelling and alongside this further and more detailed work, the car parking strategy can again be used provide confidence over delivery and adherence.

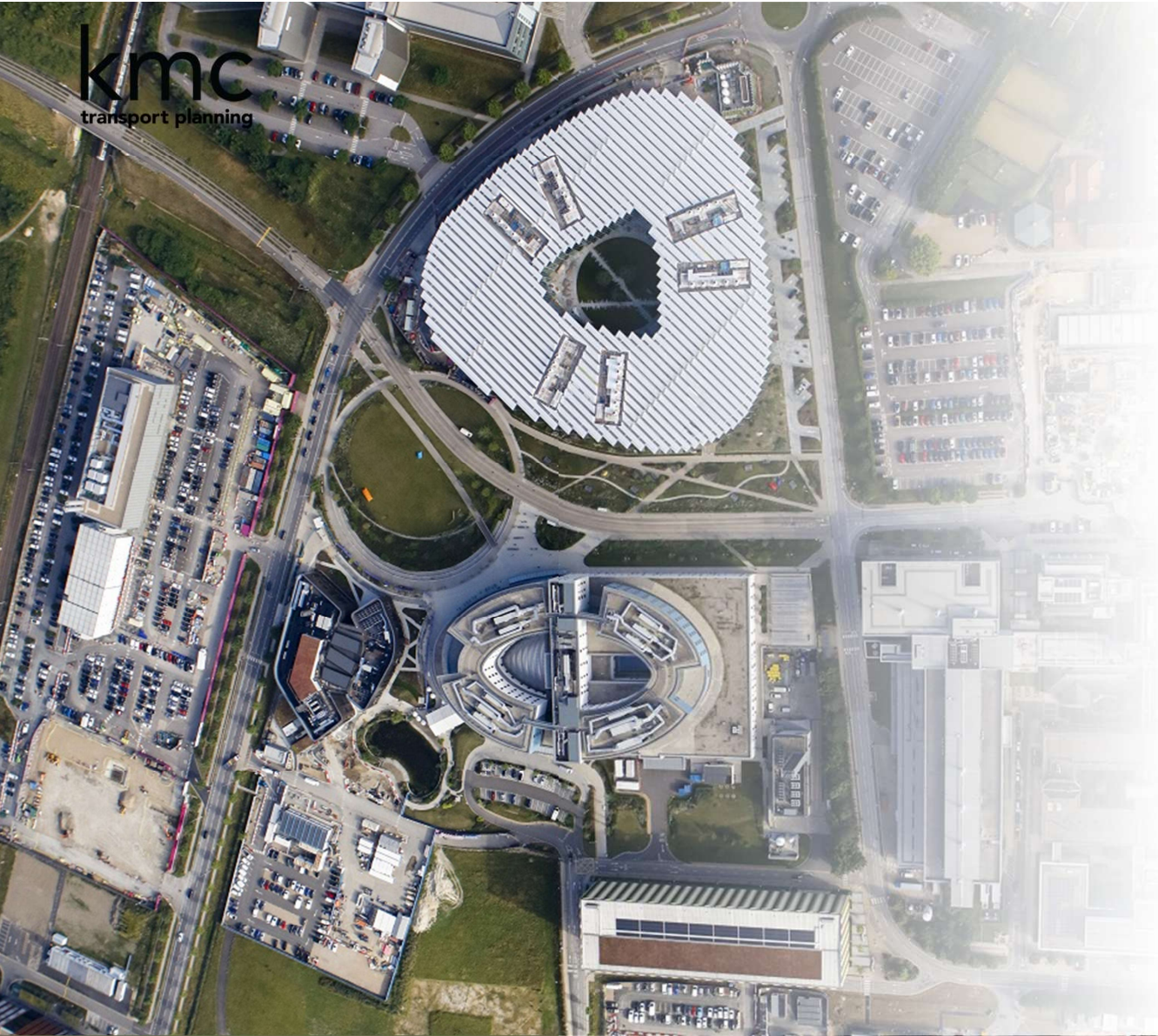


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transport planning



Appendices

Appendix A: Demand Forecasts



Appendices

Appendix B: Modelling Outputs