

Waterbeach to Cambridge



Better public transport and active travel

Have your say on the route options for the Waterbeach to Cambridge busway, related active travel links and potential sites for the new Waterbeach Park & Ride.

Waterbeach

Cambridge

HAVE YOUR SAY

Complete the survey online at www.greatercambridge.org.uk/waterbeach-cambridge-23

The consultation closes at midday on Friday 24 March 2023





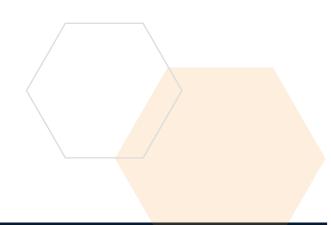
Scan here to find out more

Introduction

The Greater Cambridge Partnership (GCP) is working on an infrastructure programme to improve connectivity and quality of life for thousands of people.

The Greater Cambridge Partnership is the local delivery body for a City Deal with central Government, bringing powers and over £500m of investment to make vital improvements in infrastructure, supporting the creation of 44,000 new jobs, 33,500 new homes and over 400 additional apprenticeships.

The partnership of councils, business and academia works together with partners and local communities to grow and share prosperity and improve quality of life for the people of Greater Cambridge, now and in the future.



This consultation

This consultation document is in two sections.

Section

Route options for the Waterbeach to Cambridge busway and associated active travel improvements

Section



Options for a new Park & Ride site near to Waterbeach



Our vision

Working together to create wider prosperity and improve quality of life now and into the future.

The Greater Cambridge city region has achieved growth and success on an international scale, with an enviable status as a global hub of technology and innovation.

With the University of Cambridge at its heart, Greater Cambridge is a world-leading centre for research, innovation and technology which has led to the 'Cambridge Phenomenon' – a unique ecosystem of bright minds, commerce, and local investment.

The inward investment, brought by the 'Cambridge Phenomenon', has created jobs and prosperity in Greater Cambridge.

The lives of millions of people around the world have been transformed through innovations originating from Cambridge, from cancer-treating drugs to smartphones.

Greater Cambridge is one of only a handful of city regions that contribute to the UK economy. Its success brings jobs and opportunities for the whole region and beyond and when it succeeds, so does the whole of the UK.

Add to this the city's prominent position as a global tourist destination, steeped in history, and the area is seen as one of the most attractive to live in the UK.

GCP and Waterbeach to Cambridge corridor

The Waterbeach to Cambridge corridor is the key route into Cambridge from the north. The A10 road suffers from significant congestion during peak times, particularly at the Cambridge end. The railway between Waterbeach and Cambridge also suffers overcrowding at peak times.

The planned developments in the area, such as Waterbeach New Town and the north-east Cambridge expansion, will place considerable additional pressure on the network. Waterbeach New Town is planned to deliver 11,000 new homes.

The 2018 Ely to Cambridge A10 Transport Study identified that existing congestion problems experienced on the A10 will increase without suitable mitigation to address additional trips from all of the planned developments.

The GCP is therefore working on a number of projects to address the growing transport needs of the Waterbeach to Cambridge corridor. They include a new off-road busway linking the new town with the existing busway in north Cambridge; a new Park & Ride site near Waterbeach; the Waterbeach Greenway and a new railway station for Waterbeach.



What is the Waterbeach to Cambridge Busway?

The project aims to deliver:

- A new public transport link between
 Waterbeach New Town and Cambridge, linking to the existing Cambridgeshire Guided Busway
- New active travel provision
- A new Park & Ride near Waterbeach New Town (covered in section 2, page 17)

This consultation seeks your views on the route options for a new public transport route and accompanying active travel provision, as well as options for Park & Ride near Waterbeach New Town.

Provide better public transport links



walking, cycling, and other active travel links

Provide better



Connect homeswith places for
work or study



Reduce congestion and improve air quality



Secure future economic growth public transport links



Support the area's recovery from the impacts of Covid-19



New railway station for Waterbeach

Planning permission has been granted for a railway station at a site closer to the new town. The GCP will be talking to the local community as the detailed plans for the new station are developed. Once the new Waterbeach railway station is open, the old one will close. There will be a separate consultation about the closure of the existing Waterbeach railway station.

What is Active Travel?

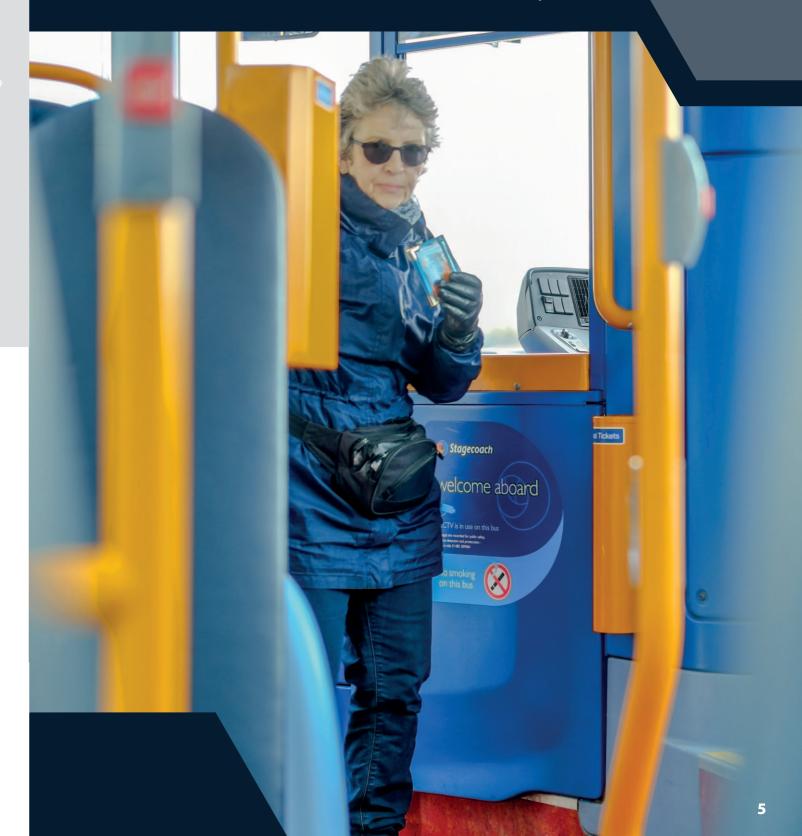
Active travel includes all forms of transport that require active use of the human body. This includes a variety of forms of transport such as walking, cycling, and horse riding.



Section



Waterbeach to Cambridge Busway



What are we proposing?

The Greater Cambridge Partnership is proposing a new dedicated off-road busway and active travel route between Waterbeach and Cambridge. It will be one of four new busways around the city linking Cambridge with the surrounding areas. All have a similar aim: to take buses off the road network to avoid congestion and enable more reliable journeys into and out of Cambridge, while also making improvements to walking and cycling infrastructure.

This consultation is seeking your views on two proposed route options for a new busway between Waterbeach and Cambridge: the Western Option and the Revised Central Option.



The new public transport route

The proposed new busway would provide a link from Waterbeach New Town via Landbeach to the existing Guided Busway in Cambridge. With onward links to the new Waterbeach railway station and Cambridge Research Park.

New route for Waterbeach New Town

Within Waterbeach New Town, the route is proposed to run along dedicated public transport infrastructure to connect to the New Waterbeach railway station. Connections will also be possible through the New Town to Cambridge Research Park and for journeys to continue north on the A10 towards Ely.

Serving Milton, Landbeach and Waterbeach villages

Both routes could have a stop around Landbeach and could also have a stop on Butt Lane. Buses will also serve Milton Park & Ride.

For both options the route would be mainly off road, only interacting with other traffic at junctions and a short section along Butt Lane, which would be upgraded. Junctions between existing roads and the new public transport route would be controlled by traffic lights, with bus priority built in.

Connections to the stops will be improved, where necessary, and integration with existing bus services enhanced so that buses could use part of the route and then, for example, leave it at one of the junctions to give additional services to Waterbeach village.

Connecting with Cambridge's bus network

Both options would connect with the existing Cambridgeshire Guided Busway near the A14. Buses using the new route would use the existing stops on the Cambridgeshire Guided Busway for Cambridge Regional College and Cambridge Science Park before then using Milton Road bus lanes to access the city centre. Priority bus connections could also be possible to Histon Road or to West Cambridge, through the Darwin Green development.

What happens next?

Winter 2023

Consultation on route options

Spring 2023

Analysis of the results of the consultation to produce an Outline Business Case

Summer/Autumn 2023

GCP Executive Board will make a decision on the Outline Business Case which will set out the recommended preferred route option and the preferred location for a new Park & Ride.

Autumn 2023

Begin preparation of detailed designs and Full Business Case

2024/25

Submission of the Transport and Works Act Order

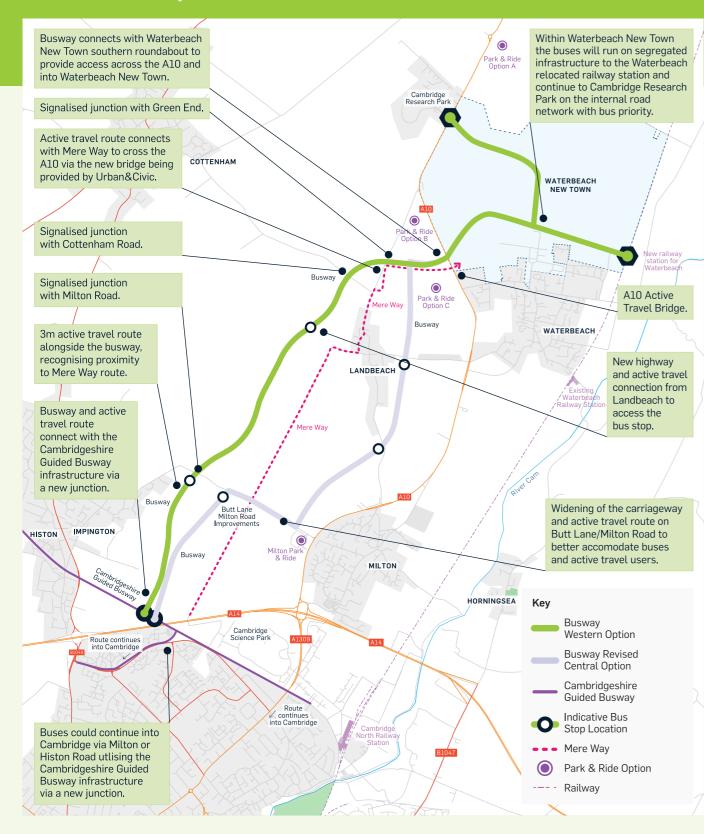
2025/26

Construction to start





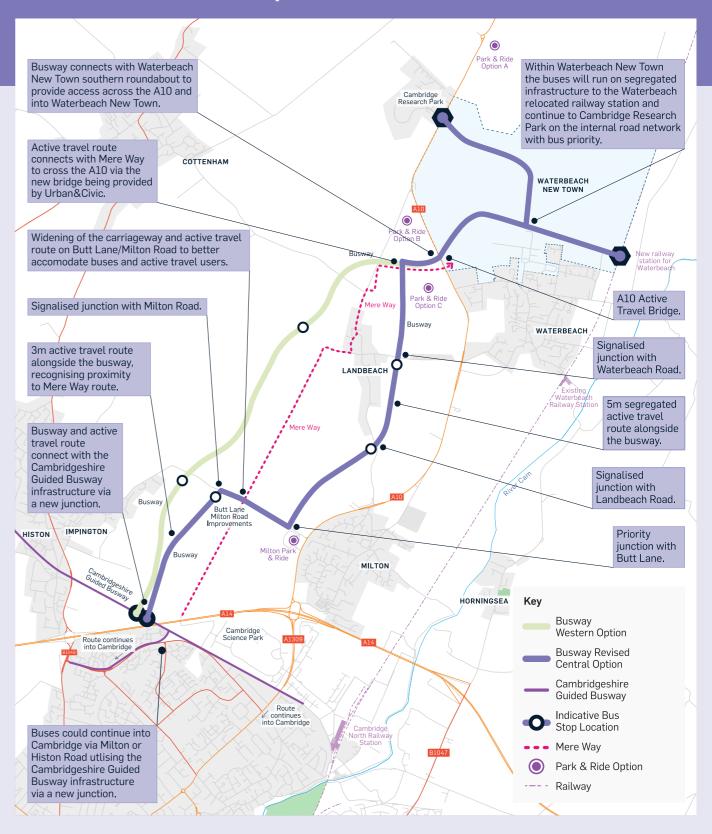
Western Option route



This option provides:

- Connection to Milton Park & Ride via an upgraded Butt Lane as a diversion from the main route;
- A fast link that would by-pass Landbeach village to the west;
- Shorter and more direct route for bus services that do not call at the Milton Road Park & Ride.

Revised Central Option route



This option provides:

- Effective connection to Milton Park & Ride via an upgraded Butt Lane;
- Accessibility for residents of Landbeach both on Landbeach Road and Waterbeach Road;
- Shorter and more direct route for buses and active travel users when serving Milton Road Park and Ride;
- Greater flexibility for other bus services within the A10 corridor to use the infrastructure due to the proximity to the A10 and connections to the existing road network.

How have you arrived at these routes?



We have been working on the idea of a new busway between Cambridge and Waterbeach since 2018. This has involved several steps to arrive at the preferred route that we are seeking your views on.



Step 1

Establishing a need for a new busway between Cambridge and Waterbeach

A study into the future of the A10 in 2018 found that:

- This road suffers from significant congestion during rush hours, particularly at the Cambridge end.
- This congestion will get worse when the new town at Waterbeach is built.
- Central to solving this congestion would be to build a new 'segregated public transport corridor' between Cambridge and Waterbeach.



Step 2

Coming up with a long list of options and public consultation

In 2019 we started work to come up with a long list of options for the new public transport corridor. We held workshops with stakeholders and a four-week online engagement period so that everyone could share their thoughts on the project at this early stage.

Together with technical work undertaken by transport consultant Atkins we identified a long list of possible routes for the new busway.

In October – December 2020 we ran a public consultation on four corridors for the route of the new busway. This highlighted four corridors that the busway could use.

A Western corridor: a Central corridor: an A10 corridor and an Eastern Corridor.

Step 3

Identifying a short list

Following consultation, over half of respondents supported the proposal to build a new busway between the new town at Waterbeach and Cambridge.

However, the route options that ran through Waterbeach village were strongly opposed due to proximity to housing and perceived impact on the local community.

In 2021, following the the public consultation and further technical work, the list of four corridor options was narrowed down to two corridors: the Western Option and a Revised Central Option which address the concerns raised about the original Central Option.

The Greater Cambridge Partnership Executive Board approved taking forward the Western Option and a Revised Central Option to the next stage of the project as well as approving the Strategic Outline Business Case for the whole project.

Step 4

Refining the options

In 2022 further work on routing options within two shortlisted corridors was undertaken. This included more technical studies and an additional round of stakeholder workshops.

Within both corridors specific route options were identified. These specific route options were then measured against a range of technical and environmental criteria including journey times, integration with the transport network, buildability, and flood risk.

The two best performing routes, one from the Western Corridor and one from the Revised Central Corridor are taken forward for consideration in this consultation.

The conclusion of all of this work identified the two route options set out on pages 12 and 13.



Route comparison

Journey times

between new Waterbeach relocated railway station and Cambridge City centre (Drummer Street)

Western Option







28-31 minutes not serving Milton Park & Ride

Revised Central Option





30-33 minutes serving Milton Park & Ride

Estimated cost

Western Option

Revised Central Option

£93 million

£90 million

The Western Option is estimated to be more expensive than the Revised Central Option due to the inclusion of Butt Lane/Milton Road improvements in addition to the straight line route, as well as higher levels of flood mitigation.

Both options will of private land and land owned by Cambridgeshire County Council.

Land take



require the purchase

Both routes cross the existing road network four times between the Cambridgeshire Guided Busway and Waterbeach New Town.

Journey reliability

Both options are segregated from general traffic for the majority of the route.

Reduction in private vehicle trips on the highway network reduces congestion and delay.

Modal shift

Likely reduction in daily private vehicle trips (2041)

Both options are predicted to lead to a **reduction** of approximately **2.200** people trips by car



Park & Ride plus bus use

Likely increase in daily bus and Park & Ride passengers (2041)



3500 people trips



Western Option

Revised Central Option

The Revised Central Option attracts more trips by bus and Park & Ride due to the direct connection to Milton Park & Ride without having to divert from its route, as well as its proximity to existing villages for onwards connections.



Active travel

Likely increase in daily Active Travel users (2041)



1500 people trips

Western Option

Revised Central Option

The Revised Central Option attracts more trips by walking and cycling due to its proximity and connectivity to existing villages along the corridor.





Connectivity to Milton Park & Ride

Western Option

Connectivity by diverting from the busway alignment along Butt Lane.

Revised Central Option

Better connectivity with short journey times. Connectivity with Milton and Waterbeach Village also possible.

Environment, potential impact and enhancements



Landscape



There would be an impact on the green belt. The design of the final scheme would ensure it is integrated into the existing landscape as much as possible to minimise the impact.

Noise



The use of electric vehicles is proposed which would reduce noise impacts along the route. As the design develops, noise impacts would be assessed and suitably landscaped noise barriers included where required.

Landscape and heritage



Both options will have an impact on landscape and heritage. The design of the scheme will minimise the impact by providing suitable landscape features in line with the existing landscape.

Construction



The majority of construction would be off-road. There would be some disruption at junctions and side roads and on Butt Lane. All construction impacts would be assessed and minimised through robust management plans.

Biodiversity



GCP is committed to ensuring the scheme delivers a minimum of 10% biodiversity net gain with a target of at least 20%.

Air quality



There is potential for an improvement in air quality in Cambridge and surrounding areas if quicker, more reliable and more frequent public transport services encourage more people to switch from private car. The use of electric vehicles would also improve air quality.

Flood risk



Both route options require development within the floodplain and therefore option development will include floodplain compensation based on hydraulic modelling.

Carbon emissions and net-zero



The scheme will reduce congestion, which will help reduce carbon emissions.

Sustainable construction methods will also be explored to help reduce emissions during construction.

Active travel infrastructure

A maintenance track will be provided alongside the busway where it runs off road. The track will also be used as an active travel route. As shown on page 16 there will be a strip of grass between the busway and the maintenance track to ensure it can be safely used by all active travel users.

At the northern end near to Waterbeach New Town the active travel route will merge with the upgraded Mere Way foot and cycleway and access the new town on a new bridge over the A10. At the southern end of the route a new 3m shared path will be installed along the south side of Butt Lane. This new path will be separated from the road by a 1.5m grass strip and is also shown on page 16.

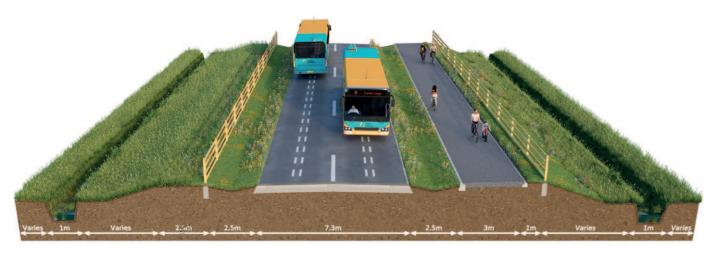


How the busway could serve existing villages

Scheme design would ensure that the proposed busway infrastructure is flexible to enable bus operators to route services at their own discretion when not on the proposed busway infrastructure. This approach has been successful on the existing Cambridgeshire Guided Busway. It will enable buses to turn onto and off the infrastructure at junctions with the existing highway network,

leading to flexibility in route choice but also enabling diversions of the busway services in the event of maintenance. For example, a future service from Cambridge to Waterbeach, via Landbeach, could utilise the busway infrastructure to Landbeach before turning onto the existing highway network through the village, accessing Waterbeach via Car Dyke Road.

What will the busway look like?



Indicative cross-section of the off-road section

This image shows a typical cross-section of the busway corridor. The busway will be separated from the active travel route by a verge. The extent of the slope and drainage infrastructure either side of the route will vary depending on the location within the corridor.



How the upgrade to Butt Lane could look

Butt Lane will be widened to allow easier bus movements, and a widened shared use path will provide improved journeys for active travel. A verge will also separate pedestrians and cyclists from the carriageway.





New Park & Ride for Waterbeach





Why are you planning a new Park & Ride for Waterbeach?

A new Park & Ride near Waterbeach would reduce traffic on the congested section of the A10 between Waterbeach New Town and Cambridge. It would increase options for Park & Ride users who currently use Milton Park & Ride and will also allow for sustainable trips to and from the site due to its proximity to Waterbeach.

Three options for the Park & Ride location have been identified: two of the sites, B and C, would connect with the busway route: Site A would use the A10 or infrastructure through Waterbeach New Town to access the busway. We are asking for your views on these Park & Ride locations, facilities that could be provided at them and access arrangements. We will ensure that a new Park & Ride is accessible by active travel modes as well as motor vehicles.



Will the Park & Ride site at Milton close?

The Park & Ride at Milton will remain open and the Waterbeach to Cambridge scheme will serve both Milton Park & Ride and the new Park & Ride near Waterbeach.

Milton Park & Ride plays a role in serving not only traffic from the A10 but also east-west traffic on the A14, and we believe that it will continue to play this role in the future. Its proximity to northeast Cambridge and the rest of the city also means that it has a role to play in Park & Cycle trips, particularly in combination with improved active travel connections to Cambridge from the A10 corridor.

What facilities will be included at the new Park & Ride site?

As the options for the Park & Ride site are developed we will be considering what facilities are included at the Park & Ride site, including:



Electric vehicle charging



Cycle parking



Cycle maintenance and hire



Ebike/scooter hire and charging









Refreshments



Click and collect

Recycling

We would like to hear your feedback on these facilities and any others that you would like to see at the Park & Ride site.

How have the options been developed?

To identify the site for the new Park & Ride we have undertaken a three-step approach.

Step 1

Three broad areas for the location for a new Park & Ride site were identified.

- East of the A10 near or within Waterbeach New Town
- Directly adjacent to the A10
 Cambridge Research Park and
 Waterbeach
- West of the A10 to the west of Green End and Cambridge Research Park.

These three area options were put through a high-level assessment looking at the impacts of operating a Park & Ride site would have on these areas. This work concluded that a site next to the A10 was the best solution.

Step 2

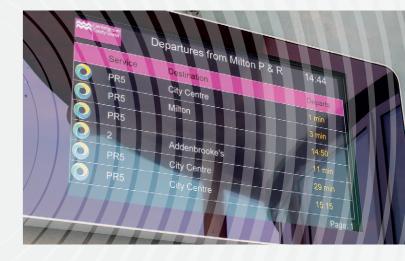
Six specific sites, broadly the same size as Milton Park & Ride, were identified within the option zones that were also adjacent to the A10 as the best locations.

Step 3

These six sites were then looked at in more detail. We reviewed factors such as green belt designation, flood risk and transport access.

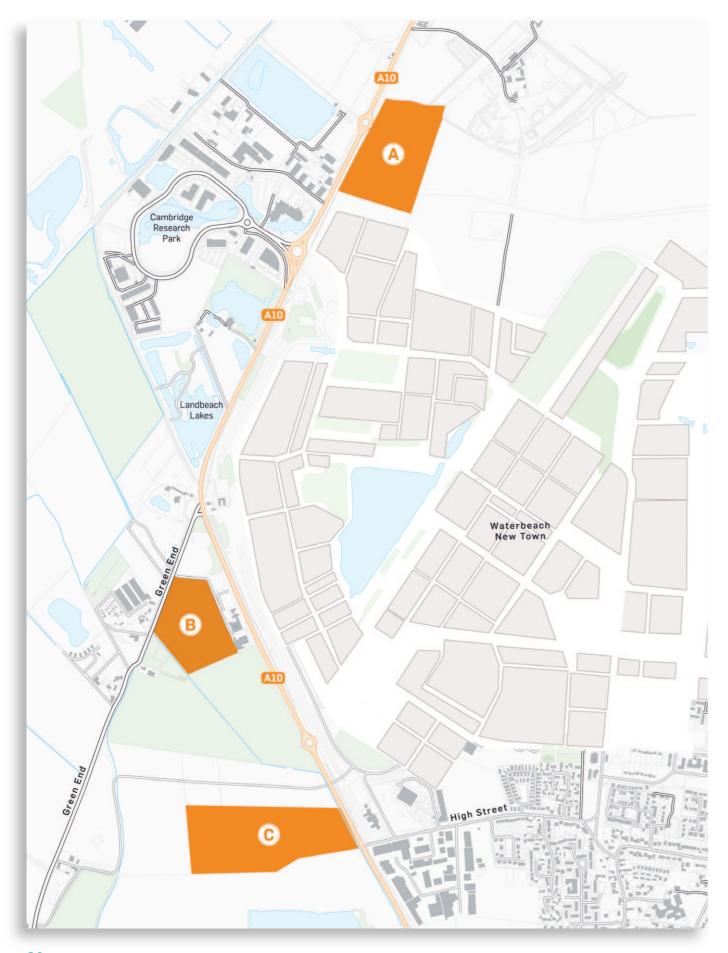
Following this we narrowed the options down to the best three. These are the ones that we are asking for your feedback on.







Waterbeach to Cambridge Park & Ride site options





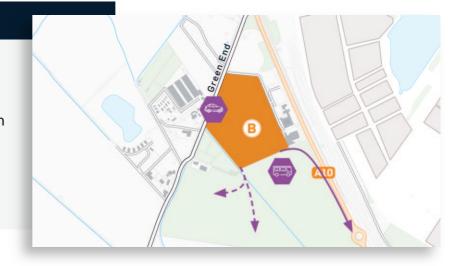
Site A

Park & Ride site A is located to the east of the A10, to the north of Waterbeach New Town. There are two potential access arrangements that could be explored further for this site.

- 1. Bus and car access via a new junction on the A10.
- 2. Car access via a new junction on the A10 and bus access from within Waterbeach new town.

Site B

Park & Ride site B is located to the west of the A10 and Waterbeach New Town and is accessed off Green End Road. Should this option be taken forward upgrades to the A10/Green End junction will be explored.



Site C

Park & Ride site C is located to the west of the A10 to the north of Denny End Road and west of Waterbeach new town. There are two potential access arrangements that could be explored further for this site.

- 1. All vehicles access the site via the new Waterbeach New Town southern roundabout.
- 2. Buses access the site via the new Waterbeach New Town southern roundabout and all other motor vehicles access the site via a fourth arm on the A10/Denny End Road junction.



Part of a wider network

A range of GCP schemes are underway to contribute to the development of a better, greener transport network for our busy region. The transport network map to the right shows how schemes currently in progress link with existing infrastructure.

GCP corridor schemes

The Waterbeach to Cambridge busway is one of four new public transport routes connecting key areas of growth with the city, complemented by travel hubs to encourage Park & Ride journeys, walking and cycling.

How does the Waterbeach to Cambridge scheme relate to the A10 upgrade?

Cambridgeshire County Council and the Cambridgeshire and Peterborough Combined Authority are looking at ideas to improve the A10 between Ely and Cambridge. This includes options to improve the sustainability and safety of the route, as well as enhancing capacity through either dualling, or junction improvements.

The Waterbeach to Cambridge project team has been talking to the A10 project team throughout the development of options to make sure that the two projects can work together, whichever options are selected.



How does the scheme relate to the Cambridgeshire and Peterborough Local Transport and Connectivity Plan?

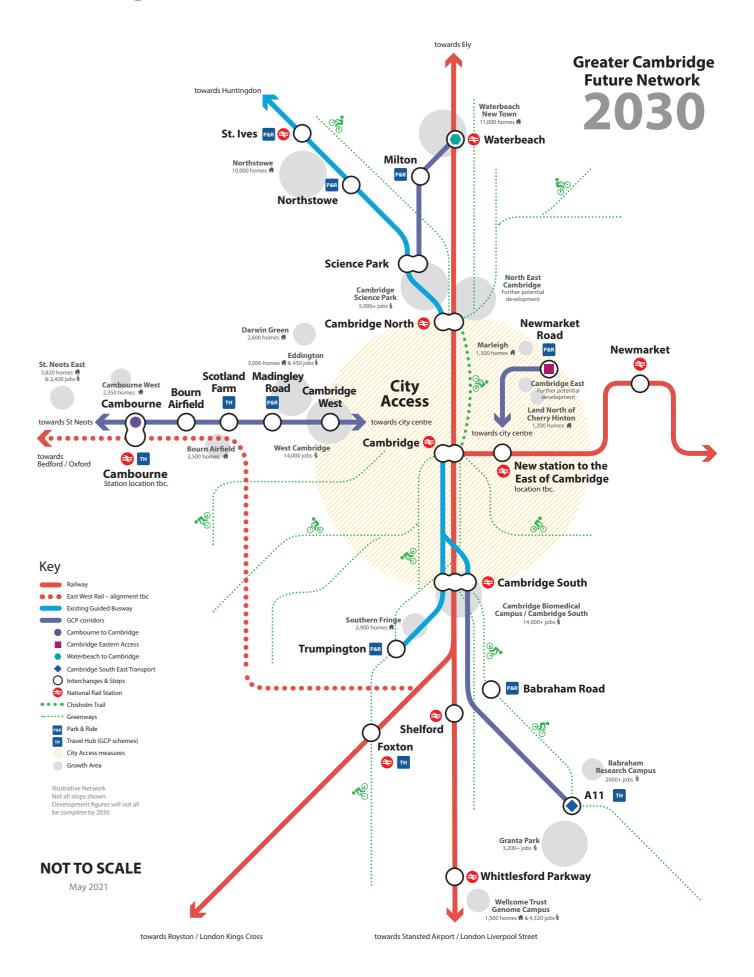
The Local Transport and Connectivity Plan (LTCP) is the Cambridgeshire and Peterborough Combined Authority's long-term strategy to improve transport in the region. It is currently in draft and is an update to the adopted 2020 Local Transport Plan.

It recognises that the A10 to the north of Cambridge is congested during peak periods, and this congestion badly impacts users of all transport modes. Part of the solution in the draft LTCP is a new high-quality segregated off-road facility for public transport and active travel users as well as a new Park & Ride provision. This project will form part of the strategic solution for improving transport infrastructure in the A10 corridor as identified in the LTCP.

How will the Making Connections proposals work with this scheme?

In the autumn of 2022, the GCP put forward a package to transform the region's bus network with cheap £1 and £2 bus journeys with longer operating hours to more locations, including more villages, alongside significant investment to improve walking and cycling routes, via a Sustainable Travel Zone with a road user charge. Like the plans for Waterbeach to Cambridge, the aim for these consultations is to develop plans to cut congestion, free up space for people and buses, and fund future network improvements. Currently the thousands of responses to the Making Connections proposals are being analysed and will form part of the intelligence which will feed into the development of future GCP schemes.

Making connections



Your views and next steps

There will be three in-person public exhibitions and three online webinars as part of this consultation.

8 Feb	11.30 – 14.00	Bradfield Centre, Cambridge Science Park
8 Feb	16:00 – 19:00	Landbeach Village Hall
9 Feb	18:00 – 19:30	Online meeting
13 Feb	18:00 – 19:30	Online meeting
21 Feb	16:30 – 19:30	St. Andrew's Centre, Histon
23 Feb	18:00 – 19:30	Online meeting
27 Feb	16:00 – 19:00	Waterbeach Baptist Church
7 Mar	17:30 – 20:30	Milton Community Centre
4		

To join one of the online meetings, please register in the key dates section of the consultation page via this link: www.greatercambridge.org.uk/waterbeach-cambridge-23





Scan here to find out more

Or contact us for more information:



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Email us at: consultations@greatercambridge.org.uk



Contact us on Facebook: Facebook.com/GreaterCambs



Contact us on Twitter: @GreaterCambs #WaterbeachtoCambridge



You can request a printed survey from us by contacting us on the details above



Telephone us: 01223 699906



We will also be holding live online events which will be advertised via our website, Facebook page and Twitter feed and through local community groups

The consultation closes at midday on Friday 24 March 2023.

If you would prefer a copy of the consultation leaflet in large print, Braille, audio tape or in another language please email consultations@greatercambridge.org.uk