Supporting evidence/information

The development strategy depends on increased use of public transport, including buses, to reduce reliance on the private car.

The Local Plan's strategy is intended to locate growth so that sustainable/public transport is a natural choice, reduce reliance on the private car, and provide transport capacity through public-transport improvements. New settlements are therefore located in Cambourne near the Cambourne to Cambridge busway, in Waterbeach near the Waterbeach to Cambridge busway, in Northstowe near the Cambridgeshire Guided Busway and in Grange Farm, near the Cambridge South East Transport scheme (CSET) Phase 2 busway.

Specifically:

Development Strategy (Policy S/DS), paragraph 2.53(a) states that the preferred strategy is intended to:

> "locate development where active and public transport is the natural choice"

The Plan also says at paragraph 2.82 that its proposed strategy is "heavily informed by the location of existing and committed public transport schemes".

Existing motor traffic congestion causes substantial and unpredictable delays to bus services on the Cambridge road network.

Buses are already significantly affected by congestion in the Cambridge area, even before there is further growth in jobs and homes.

According to the Cambridgeshire & Peterborough Combined Authority Bus Service Improvement Plan 2024 Refresh "*in ongoing discussions over the years, bus operators have emphasised congestion and disruption to the network, either through planned or unplanned works, as the most significant challenge they face. This issue is particularly pronounced in the Cambridge area, where it significantly impacts service delivery, often resulting in journey times being doubled and journeys being missed*" (Cambridgeshire & Peterborough Combined Authority Bus Service Improvement Plan 2024 Refresh) (paragraph 4.5.2)

According to the Bus Service Improvement Plan for Cambridgeshire and Peterborough October 2021, "*the average speed on all major roads entering Cambridge during the 'rush hour' is less than 60% of the 'free flow' speed*." (Bus Service Improvement Plan for Cambridgeshire and Peterborough October 2021 p51)

Urban bus speeds in Cambridge are already among the lowest in the country (at 13.8mph, according to a report by Systra for the GCP; Agenda, GCP Executive Board Meeting, July 2017).

According to the GCP, on average, more than 20% of bus services across the region run late, mainly due to congestion (GCP Making Connections consultation brochure, available via the Internet Archive site Wayback Machine).

Prior to the pandemic, only 79% of buses departed their origin stops on time (Bus Service Improvement Plan for Cambridgeshire and Peterborough October 2021, p24) and

And further, average excess waiting times for frequent services tripled between 2008 and 2019 :

"*Data is also available on a longer timescale which demonstrates that the average excess waiting time for frequent services in Cambridgeshire (excluding Peterborough) has been steadily rising in the decade preceding 2020 with 0.7 minutes of excess waiting time in 2008/2009, rising to 2.1 minutes of excess waiting time in 2018/2019*". (GCP, Agenda Pack Executive Board Meeting, September 2023) (paragraph 2.6.98 on p162).

Additional development could then generate more motor traffic on an already congested network

Congestion is also forecast to worsen rapidly. The BBC has recently reported on confidential reports drawn up for the Cambridge Growth Company from March this year, which state:

"Under a 'do nothing' scenario, where no significant new transport interventions are introduced, the impacts of planned growth are severe." It forecasts traffic levels would increase by more than 30% in the next five years and "time spent in congestion is expected to more than double compared to current conditions".

The Greater Cambridge Local Plan's Transport Evidence Report also suggests that delays on Cambridge's roads due to high traffic volumes and congestion will increase substantially due to growth. The Transport Evidence Report suggests that the additional growth already planned in places such as Northstowe, Bourn Airfield and Waterbeach New Town (without adding the 2026 Local Plan's growth) will increase journey time delay on the road network in Greater Cambridge by between 41% in the AM peak and 61% in the PM peak in 2041 over the 2015 baseline (figure 30). This is the delay when this growth is mitigated by schemes the modelling assumed would be in place by 2041 but will actually not be (including City Access – the GCP's flagship City Access scheme was the Cambridge Sustainable Travel Zone road charge), so the actual delay is likely to be greater. The 2026 Local Plan's growth will then increase this delay further. (Transport Evidence Report, Parts 1 to 3).

Mitigating congestion necessary for bus travel to be a genuine option for more people

It is suggested that there is a direct correlation between bus operating speeds and bus patronage: if bus speeds are slower (e.g. due to the impacts of motor traffic congestion), the bus becomes less attractive for passengers, who are then less likely to use it, in particular if they have an alternative. This issue is explored in more detail in the sections below:

a) Impact of congestion on bus passengers and bus operators

Motor traffic congestion impacts bus passengers by:

- increasing the length of time a bus takes to travel a route
- increasing the time a passenger waits for a bus at a stop
- reducing the reliability of services

- Increasing the likelihood that buses will need to wait at stops before departing[1] outside peak times
- Reducing the frequency of services (because they are more expensive for operators to run)

Fast, reliable, frequent and predictable bus journeys are aspects of bus travel passengers value.

Motor traffic congestion impacts bus operators by:

- Increasing the costs of running bus services
- Making it very challenging to run a reliable service
- Reducing the pleasantness of the job of bus driver. (Cambridge Ahead, Bus Viability in Cambridge)

Professor David Begg talks about slower bus speeds (e.g. due to congestion) putting the bus sector in three vicious downward spirals:

- *"1. Slower speeds leading to higher costs, higher fares, fewer passengers, service decline, fewer passengers.*
- *2. Slower speeds leading to increased journey time, fewer passengers, service decline, fewer passengers.*
- *3. Slower speeds, punctuality and reliability decline, fewer passengers, service decline, fewer passengers.*"

Travel by bus takes longer than travelling to the same destination by car. For example (GCP, Agenda Pack, 25 June 2020 Executive Board meeting):

"I*n the absence of bus priority on the [A1307] corridor, congestion and delays mean bus journeys of around 18 miles between Haverhill and Cambridge take around 1 hour 10 minutes during interpeak hours, this is approximately 30 minutes longer than undertaking the same journey by car. During peak travel hours bus journey times can increase by a further 10 to 20 minutes*"

Journey time delays due to congestion for bus passengers therefore come on top of journeys that are already longer than the equivalent journey for car drivers.

b) Congestion reduces the speeds at which buses travel, which makes bus travel unattractive and reduces patronage

In his appearance before the Combined Authority's Transport Committee in June 2026 , Leon Daniels OBE emphasised the importance of bus speed for an attractive bus service, and pressed the point that passenger numbers fall when bus speeds decline. He referenced a study by Professor David Begg, which concludes that there is "*a direct correlation between operating speeds and patronage: a 10% decrease in speeds reduces patronage by at least 10%. The figure could yet be higher because congestion puts pressure on punctuality and*

[1] When an area has significant congestion, timetables are planned very conservatively to account for potential congestion so buses can operate reliably. This means that outside peak times (e.g. in school holidays when congestion is reduced) buses need to wait at stops until it is time to depart so as to stick to the timetable (E. Cameron CMILT, MD, Whippet Coaches, 2026, personal communication).

reliability which can increase waiting time at bus stops. Passengers place a value two to three times as high on waiting at a bus stop as they do for in-vehicle time".

There is local evidence that suggests bus journey times impact people's choice of travel mode.

- The Agenda Pack for the July 2018 GCP Executive Board Meeting states:

The [GCP's] Big Conversation travel survey last year, carried out by Travel for Cambridgeshire, found clearly that journey times (relative to car) were the single most important factor in people using cars rather than public transport. Analysis of the competitiveness of public transport to key employment locations bears this out and suggests that for some areas with significant commuter flows to Cambridge, only public transport journey time improvements and demand management in combination are likely to make public transport competitive with car [travel] (p53).

('Demand management' refers to a scheme that makes driving less attractive, e.g. parking charges, road (congestion) charging).

- *This study is reported on further in the Agenda Pack for the September 2023 GCP Executive Board Meeting:*

"40% of respondents to the study identified the lack of public transport services and the reliability of existing services as a 'big challenge' that impacted their modal choice. Furthermore, 40% of respondents from Cambridge and 56% of respondents from South Cambridgeshire indicated that 'significantly improving the public transport network in terms of availability, capacity, reliability and, as far as possible, affordability would be of great benefit to them" (paragraph 2.6.96)

- In the GCP's public consultation on a proposed Western Orbital bus link, 48.5% cited a need for faster journey times

- According to local bus operator Stagecoach East, when speeds were reduced on the Cambridgeshire Guided Busway (from around 50mph to 30mph) there was a significant drop-off in bus passenger numbers as people changed their travel patterns. Passenger numbers reportedly dropped by around a fifth in some weeks.

c) Congestion makes buses unreliable, which makes bus travel unattractive

In surveys, bus users report that bus services are often late and unreliable bus services, and this makes bus travel less attractive. 44% of all non P&R users surveyed (and 51% of non P&R users in Cambridge) said their services were late or unreliable. The worst thing about the bus for users in Cambridge and Huntingdon was unreliability. (Cambridgeshire Sustainable Travel Alliance, Survey of bus users in Cambridge)

A survey from Cambridgeshire suggests that reliability impacts people's choice of transport mode. In the GCP's Big Conversation (2018), reliability was most frequently cited as the

reason for the choice of travel mode (41 per cent). In addition, of those who do not use alternative modes to the car, the top three reasons were: speed, reliability and price of public transport. (primary source unavailable, as reported in Agenda, Greater Cambridge Partnership Executive Board Meeting, February 2020).

In the Making Connections 2022 consultation report, the most common theme when respondents were asked what other improvements they would like to see to bus services (beyond those set out in the Making Connections 2022 consultation) in order to make more of their journeys this way was to ensure that services were reliable and on time (3061), which respondents noted was currently an issue in open text responses as follows. "Reliability - no point in having a packed timetable if buses don't turn up. A big problem with Stagecoach is that buses simply don't turn up without any kind of warning." "Reliability is the most important thing for me. I would need to know that it would be there on time and also need to know what time it will [be] arriving at my destination."

Congestion also affects the financial sustainability and deliverability of the bus network.

Motor traffic congestion substantially increases bus operating costs. A Cambridge Ahead study suggests that if the road network were completely free-flowing, the costs of operating bus services could reduce by approximately 40%. Leon Daniels explained in his recent appearance at a meeting of Cambridgeshire and Peterborough Combined Authority's Transport Committee that, in the case of London: "if you removed the congestion, you would do what 9,000 buses currently do, with about 5,000 buses".

It is highly likely that franchising will have been implemented in the CPCA area by 2030, therefore nearly all bus services will be operated under contract to the Combined Authority, rather than commercially as at the current time. In order to be positively prepared and effective, the Plan should therefore set out how the Combined Authority will support the necessary bus routes and services financially.

This is particularly significant because there is currently a funding gap for buses in Cambridgeshire and Peterborough. Bus services cannot typically be supported by the revenue from fare-paying passengers alone. It is therefore to be expected that Cambridgeshire and Peterborough Combined Authority (the Transport Authority for Greater Cambridge) will need to provide financial support for the bus routes and services required for the new developments set out in the Local Plan (while developer contributions might support services on a temporary basis, they are usually used to support routes for 3 to 5 years, although sometimes up to 10 years). Funding is already insufficient for the region's current bus network, let alone for an expanded one. Around 88% of bus mileage is currently run on a commercial basis and approximately 12% of services are subsidised by Cambridgeshire and Peterborough Combined Authority. As of November 2025, The Combined Authority was having to draw on its reserves to fund the subsidised services, as its expenditure on them was greater than the funding available:

> "*The passenger transport service is reliant on draw-downs from reserve in both the current and next financial year, this indicates that the current suite of interventions is not affordable in the long-term*." (Agenda pack for Cambridgeshire & Peterborough Combined Authority's Transport Committee, 17 Nov 2025, p58

A recent report to CPCA's Transport Committee also predicted that unless solutions are found to close the funding gap that exists for buses, the bus network across Cambridgeshire and Peterborough could contract further, by more than a third by 2035 (Independent Review of Implementation Pathways for Bus Franchising).

Unless the Plan sets out measures to reduce congestion and cut the cost of operating bus services, it will be much more challenging for the Combined Authority to be able to afford to provide the bus routes and services needed to mitigate the growth set out in the 2018 Local Plans and 2026 Proposed Submission Plan.

The proposed busways and other public transport improvements do not demonstrate that the required end-to-end improvement in bus journey times and reliability will be achieved

Three busways are among the strategic transport infrastructure identified by the Local Plan to mitigate the impacts of growth on the transport network:

- The Cambourne to Cambridge busway
- The Waterbeach to Cambridge busway
- The CSET Phase 2 busway

These are presented as public transport corridors in the Local Plan (ie without specifying whether they are busways or light rail corridors), however the GCP, the body developing the schemes, is designing them as busways.

The busways do not provide continuous segregation across the entire journey into and through Cambridge:

- The Cambourne to Cambridge busway ends at Grange Road in Cambridge
- The Waterbeach to Cambridge busway will connect to the northern section of the existing Cambridgeshire Guided Busway next to Cambridge Regional College. The northern section of the existing Cambridgeshire Guided Busway terminates near Cambridge North station.
- The CSET Phase 2 busway will end at Francis Crick Avenue at the Cambridge Biomedical Campus.

In the Planning Inspectorate's Cambourne to Cambridge order report, published in September 2026, the inspectors write:

> "*We note that the Order Scheme [the Cambourne to Cambridge busway] would not do anything to relieve congestion and improve journey times to the east of Grange Road in the City Centre.*" (p149)

The Local Plan does identify plans to redesign some of Cambridge's main transport corridors, which will include improvements to boost bus priority and enable buses to move more freely. The impact of these measures will be minimal, however, as they are limited in scope. Cambridge Eastern Access phase 1, for example, only includes very short stretches of new bus lane.

While other bus priority measures are identified, they are vague. It is not possible to determine what these will consist of.

Project	Description	Cost (£ million)	Delivery Partner(s)	Prioritisation	Phasing	Location
A series of public transport improvements.	A series of public transport improvements are to be delivered to connect the development sites to the existing network. These may include: Route extensions Bus priority measures Timetable amendments to support staff shift patterns.	TBC	Public transport operator CPCA	Essential infrastructure	By 2030	District wide

(extract from Infrastructure Delivery Plan, Table 5-3 - Local Transport Measures, p60)

Confidential reports drawn up for the CGC from March this year, obtained by the BBC, state that incremental improvements of the type set out in the Local Plan will only offer marginal gains:

> *"Under a 'do nothing' scenario, where no significant new transport interventions are introduced, the impacts of planned growth are severe." It says a "do minimum" scenario "which assumes incremental improvements such as limited bus priority measures and junction upgrades, offers only marginal gains".*

The Transport Evidence Report recognises the scale of the problem

The Greater Cambridge Local Plan's Transport Evidence Report suggests that delays on Cambridge's roads due to high traffic volumes and congestion will increase substantially due to growth. The Transport Evidence Report suggests that the additional growth already planned in places such as Northstowe, Bourn Airfield and Waterbeach New Town (without adding the 2026 Local Plan's growth) will increase journey time delay on the road network in Greater Cambridge by between 41% in the AM peak and 61% in the PM peak in 2041 over the 2015 baseline (figure 30). This is the delay when this growth is mitigated by schemes the modelling assumed would be in place by 2041 but will actually not be (including City Access - the GCP's flagship City Access scheme was the Cambridge Sustainable Travel Zone road charge), so the actual delay is likely to be greater. The 2026 Local Plan's growth will then increase this delay further. (Transport Evidence Report, Parts 1 to 3)

City Access

The Greater Cambridge Local Plan's Transport Evidence Report (Part 4): Draft Plan Update concludes (p43) that 'mitigation commensurate with the city access proxy' is necessary for the Local Plan's growth to be accommodated on the transport network:

> *There is further work needed to refine the mitigation package, but there is nothing in the modelling results to suggest that the development locations and quantum included in the Emerging Preferred Development Strategy for Draft Plan cannot be accommodated on the transport network* ***providing mitigation commensurate with the city access proxy*** *within the model runs is delivered [our emphasis]*

City Access is a Greater Cambridge Partnership programme. While its exact programme has varied over the years, its cornerstones include a) an expanded bus network, made feasible

by bringing in measures to fund it on an ongoing basis (e.g. a road charge, workplace parking levy) and b) demand management measures to obtain space on Cambridge's roads so buses can run freely and more priority can be given to walking, wheeling and cycling (e.g. a circulation plan, traffic filters, a road charge).

For example, in 2021, when the Greater Cambridge Local Plan Transport Evidence Report: Preferred Option Update that mentions City Access was published, the GCP ran a public consultation under its City Access programme called Making Connections 2021. The measures consulted on included an expanded bus network, a zonal road charge and higher parking charges (Making Connections 2021 Consultation Report).

The following iteration of City Access was the Cambridge Sustainable Travel Zone road charge, which was predicted to provide £50 million per year to fund a transformed bus network and cut the number of car journeys in Cambridge by up to 50% (Making Connections 2022 consultation brochure p4; available via the Internet Archive site Wayback Machine).

'City access proxy' in the Transport Evidence Report therefore likely refers to a package of measures including a) a scheme to generate ongoing funding for an expanded bus network and services and b) demand management schemes which reduce the overall numbers of motor vehicles on Cambridge's streets.

The transport strategy available at the time of this Regulation 19 consultation is an interim Greater Cambridge Transport Strategy (GCTS)

The update on the Greater Cambridge Transport strategy provided to CPCA's Transport Committee indicates that the transport modelling in the GCTS is incomplete:

> *"Following consideration of this paper by [the] Transport Committee, the conclusion of the Greater Cambridge Local Plan consultation and* ***completion of the outstanding connectivity and transport modelling work,*** *the GCTS will be further refined to reflect the latest evidence, stakeholder feedback and emerging planning position. A final draft GCTS will be presented to Transport Committee in November 2026 for consideration and recommendation to the Combined Authority Board."* (Greater Cambridge Transport Strategy update, CPCA Transport Committee, 9 Sep 2026*, paragraph 3.6) [our emphasis in bold]*

The latest draft of the Greater Cambridge Transport Strategy states that further modelling work is ongoing/will be undertaken with the newer CPCA CaPCAM model to support the Local Plan.

> "*The Strategy will be complemented by further transport modelling in CaPCAM (Cambridgeshire and Peterborough Combined Authority Strategic Transport Model) to understand travel patterns, the number of trips by different modes and journey purposes, congestion and delay, and tailpipe carbon emissions. This will inform the next iteration of the Strategy and further support the tests of soundness for the emerging Local Plan"* (Draft Greater Cambridge Transport Strategy, p8).

Tim Bellamy, Assistant Director, Transport at Cambridgeshire and Peterborough Combined Authority, also confirmed that more transport modelling will be published in response to Cambridgeshire Sustainable Travel Alliance's public questions at the Combined Authority's Transport Committee meeting on 9 September 2026 (Webcast of 9 Sep 2026 CPCA Transport Committee Meeting,c 30").

Demand management schemes elsewhere have boosted bus travel

Evidence from other cities suggest that road charging is effective in congestion, thereby reducing bus journey times, making bus travel more attractive and boosting bus passenger numbers.

On introduction, the London Congestion Charge (a zonal road charge):

- "Reduced congestion by 30 per cent
- Boosted bus travel in central London by 33 per cent
- Enabled 10 per cent of journeys to switch to walking, cycling and public transport."

TFL's second monitoring report on the London Congestion Charge (a zonal road charge scheme) goes into more detail on the positive impact of the London Congestion Charge on public transport::

> "*Within the charging zone there were marked improvements in both the main indicators of bus service reliability: additional waiting time due to service irregularity fell by 30 percent; disruption due to traffic delays fell by 60 percent; Overall bus speeds within the charging zone improved by 6 percent; after allowing for time spent at bus stops, this is compatible with the improved speeds of general traffic within the charging zone. The improvement within the zone is greater than that observed in other areas of London*."

Following the introduction of a road charge in Stockholm, traffic congestion decreased by approximately 20% within the charging zone. Public transport operators reported that this directly resulted in better bus service and shorter travel times, as surface transit was no longer bogged down in gridlock (Perceptions of Congestion Charging: Lessons for U.S. Cities from London and Stockholm).

Evidence from New York City suggests that its zonal road charge has increased speeds inside the zone by 11%:

> "*The toll raised cordon-area speeds by 11%, with little effect on air quality, consumer spending, or foot traffic. Speeds also rose outside the cordon, especially on roads frequently traversed by cordon-bound drivers, making many unpriced trips faster. The magnitudes reflect steep congestion functions, where small volume reductions yield large speed gains*." (The Network-Wide Effects of Congestion Pricing: Evidence from New York City)

Oxford City's adopted Local Plan

Oxford City's adopted Local Plan supports measures including a road charging and a circulation plan that prioritises sustainable modes. There is therefore a precedent for a local plan to support measures of this nature. See the following (paragraph 7.9):

"*The following movement specific objectives are important to ensure people are provided with efficient, attractive and sustainable ways to move throughout the city:*

- *Supporting the existing movement hierarchy prioritising walking and cycling and use of public transport, and reallocating road space according to this hierarchy;*
- *Supporting the introduction of additional demand management measures alongside the existing measures, which may include traffic restrictions, road user charging and/or a workplace parking levy;*
- *Changing traffic management, which could include the re-allocation of road space, whereby road space would be dedicated for segregated cycle routes, bus priority and the provision of wider footways and an enhanced public realm;*
- *Allowing penetration of frequent public transport services and stops as close as possible to the city centre, district centres and employment and new residential sites, as well as improving interchange between modes;*

Optimising the capacity of the city centre and district centres for walking and cycling by creating a comprehensive and legible network and improved public realm;

- *Reducing congestion levels to ensure buses have minimum possible delay, to improve service to passengers, reduce pollution and remove the need for long schedule recovery times to provide a reliable city wide service;*
- *Enabling growth in public transport passenger numbers, through more efficient "rapid transit" operating principles, infrastructure and vehicles…"*

And further in Policy M1:

"The City Council will work with its partners to improve the ease and quality of access into and around Oxford by public transport, by:
i. ensuring that road space is managed efficiently to support public transport – including rapid transit - through initiatives such as bus priority measures, infrastructure and demand management…"