



## **Cambridgeshire & Peterborough Combined Authority Local Transport and Connectivity Plan Cambridge Connect response to consultation**

**04 Aug 2022**

Cambridge Connect has previously made a detailed submission to the Cambridgeshire and Peterborough Combined Authority on the draft Local Transport and Connectivity Plan (report submitted 11 Nov 2021). That submission set out in detail the case for improvements in public transport in the region, in particular by employing light rail as an important component of an integrated and multi-modal network. A model for a potential light rail scheme was set out in collaboration with Railfuture.

Our submission focuses on light rail aspects, although we fully recognise that this would work with other modes including heavy rail, buses, coaches, cycling, walking and indeed private vehicles. Light rail would provide a core backbone of mass transit with the attractiveness and capacity to make a transformative difference to transport in the Cambridgeshire region.

The basis of the case for light rail still stands as set out in our Nov 2021 submission (attached here for ease of reference). As such, this Cambridge Connect / Railfuture report remains our principal submission into the public consultation for the Combined Authority Local Transport and Connectivity Plan.

However, over the past year there have been several important new developments that are relevant to the LTCP and transport strategy for the region. The current submission will therefore supplement the earlier Nov 2021 report by focusing on those new developments, and adding further evidence and comments as appropriate. Both the earlier report and our current submission comprise our full submission to the consultation and should be taken as a whole.

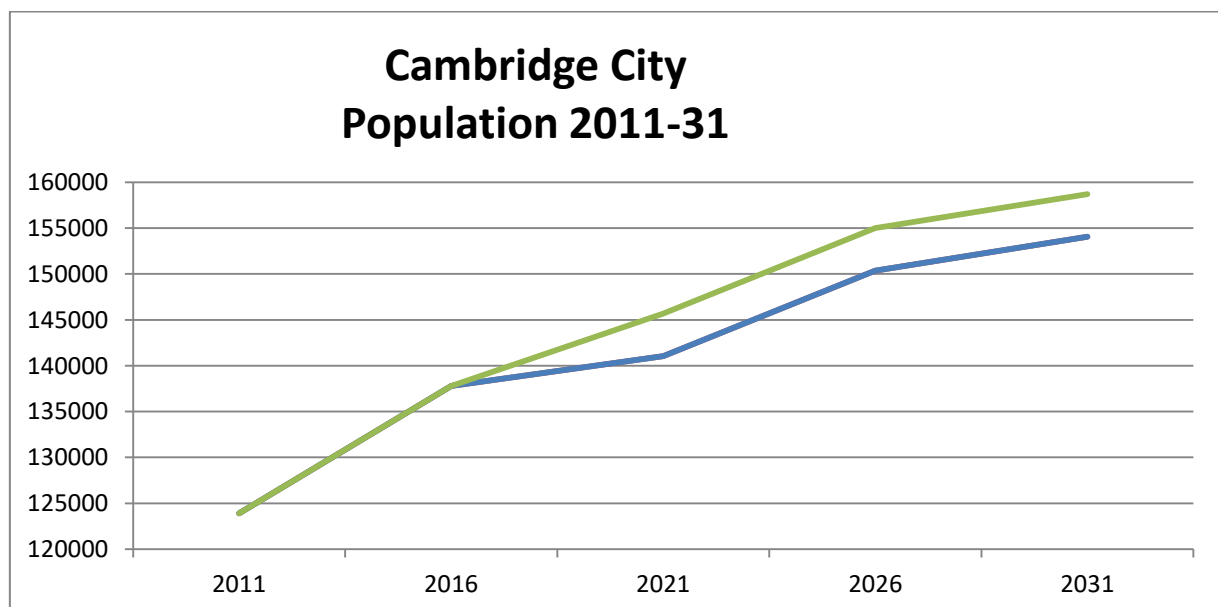
In particular, new 2021 Census data on population trends shows past projections have been wrong, and greatly underestimated the scale and pace of growth in this region. This is concerning because public policies and transport strategies have been predicated on those false assumptions. Moreover, new data have shown the Climate Emergency is worse than previously thought, and that we are not doing enough to address the scale of the problem. There is a need for a major reassessment of the direction of travel and the interventions needed to deal with these twin challenges of our times.



## Supplementary submission to the Draft LTCP consultation

### 1. Population and Census 2021

- 1.1. New data from the 2021 Census have been published that show population growth within Cambridge City over the decade from 2011-21 has been almost 18%. This is faster than was predicted. Earlier transport strategies were based on population projections made after the 2011 Census that predicted Cambridge City would not reach ~145K until 2031. A population of 145,700 has been reached in 2021, a decade earlier than was predicted. Projections made of the scale and pace of growth in Cambridge City have underestimated growth.
- 1.2. Figure 1 shows Cambridge City population growth, comparing growth predicted in 2018 (blue) against the actual population in 2021 and thence projected to 2031 (green). (The 2018 predictions were increased from those made in 2012). Taking into account the actual 2021 population of ~146K, the population of Cambridge City can be expected to grow by ~28% between 2011 and 2031. This level of growth demands more substantial intervention in public transport than is currently being proposed by the local authorities, and there is a need to provide the capacity to address the pressures.

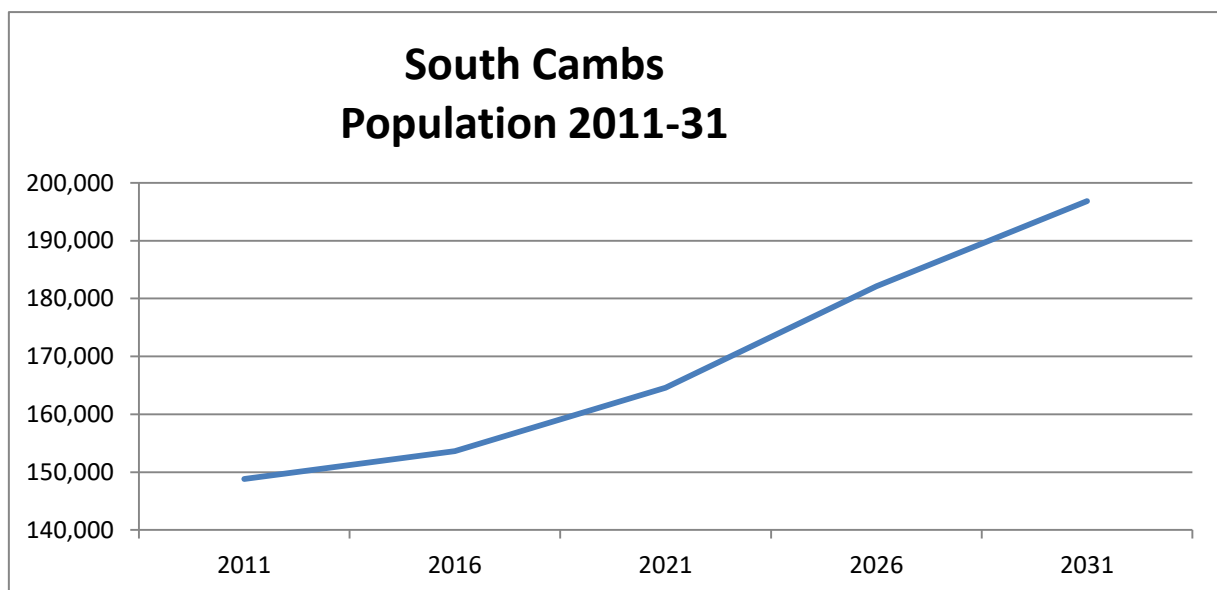


**Figure 1:** Cambridge City population

- 1.3. Population growth has also occurred at an unprecedented rate in other parts of Cambridgeshire, especially Peterborough which also saw ~17% growth, with ~32K new residents increasing the population from ~184K to ~216K over the same period.
- 1.4. The South Cambridgeshire population increased by almost 9%, from ~149K to 162K, or ~23K new residents from 2011-21. Projections made in 2018 indicate the population is likely to increase to ~200K by 2031, or a 32% increase since 2011 (Figure 2). In view of the scale of developments coming forward in Cambourne, Waterbeach, Northstowe, Darwin Green, Trumpington and east Cambridge this may also be an underestimate.



- 1.5. Combined, the South Cambridgeshire and Cambridge City population is anticipated to grow by 30% between 2011 and 2031.
- 1.6. The East of England had the largest population increase over the decade, growing by 8.3% or almost half a million more residents. This emphasises the importance of coordinated transport planning across the sub-regions.



**Figure 2:** South Cambridgeshire population

- 1.7. Population growth in the region is closely interlinked with economic, employment and business developments. Given the underestimates apparent in previous population projections it would seem likely that projections for these other factors – which are relevant to strategic transport planning – have been similarly wide of the mark. It is therefore important that transport interventions are reappraised in the light of the new data in order that a coherent transport strategy fit for the 2030s and beyond can be developed.
- 1.8. There is strong evidence that the scale and pace of growth will continue over the coming decade. This raises serious questions about the suitability of earlier proposals for busways to meet capacity needs in the 21<sup>st</sup> Century reality of Cambridge and its surrounding region.
- 1.9. Our light rail proposals have always made the case for enduring investments for the future, and ensuring that schemes brought forward have the capacity and attractiveness to meet the challenges coming forward. We recognise this needs more up-front investment, but in the longer term this approach has the best chance of success – evidence from numerous light rail schemes throughout the world support this conclusion.



## **2. The Climate Emergency**

- 2.1. New data on the scale and pace of the Climate Emergency suggest that the schemes being brought forward by the Greater Cambridge Partnership (GCP), which were conceived over a decade ago, will be inadequate to meet future needs to transform the nature of transport in Cambridgeshire at the scale required. These data suggest that modest interventions only in improving bus services are unlikely to achieve satisfactory results.
- 2.2. In particular, the interventions are unlikely to drive modal shift at the scale needed to make genuine and substantive differences to the choices people make about their use of private vehicles. When the pace and scale of growth noted above is taken into account, it is doubtful busway schemes will come close to achieving a target of 15% modal shift toward public transport.
- 2.3. Many cities throughout Europe with light rail systems in place routinely see public transport with a mode share of 25-30%. This is a distant and unachievable dream if we continue to do things in the same way as we have in the past. To address the Climate Emergency there is a need to adopt new ways that have greater prospects of driving the scale of change needed.
- 2.4. It is time to step up and make that investment in genuinely transformative change: we have a responsibility for the sake of future generations.

## **3. The Pandemic**

- 3.1. The pandemic has precipitated changes to working patterns and in commuter behaviour. Some of these changes are likely to be temporary, for example as many people return to workplaces. On the other hand, an increase in home-working is also likely to become permanent.
- 3.2. We believe these aspects need careful consideration against the scale and pace of growth occurring, and it should not be assumed that the impact of the pandemic will reduce or eliminate the need for excellent public transport in this region.
- 3.3. Commuting represents only a proportion of total journeys made and the impact of changing working patterns may not be as profound in this region as many think. Growth and demand for journeys to meet other needs may lessen the effect of changing working patterns as a result of the pandemic and technology in the wider overall context.

## **4. Mode share and modal shift**

- 4.1. The mode selected for the transport schemes is important: it affects the capability to drive change, and affects the attractiveness of taking an alternative to the private car. The mode also affects the practical capacity of the network to accommodate the demand as patterns of behaviour change.
- 4.2. Light Rail is demonstrably superior in most respects for mass transit delivery on the scale required, offering a superior passenger experience and a greater capacity to drive modal shift at the levels needed. Light Rail can work with interlinked bus services, which can extend reach and



flexibility. We consider Light Rail better suited to meet future mass transit needs in the Cambridge sub-region.

- 4.3. A 15% mode share target for public transport is insufficient in the context of a Climate Emergency – many cities in Europe with light rail / trams already achieve more like 20-30% of people using public transport. This level of mode share is unlikely to be achievable using buses and busways. The existing Cambridgeshire Guided Busway is a long way from achieving mode shares on this level.

## **5. Strategically important routes**

- 5.1. While the GCP busway schemes and Cambridge Connect light rail routes have many aspects in common (eg major residential and employment sites), there are important differences.
- 5.2. In particular, in principle and where practicable we advocate alignment of new public transport routes alongside existing major transport arteries and / or along former transport alignments such as disused railway lines. The reasons for this are two-fold: a) to leverage strategic advantages that come from linking closely with the existing transport infrastructure; and b) to avoid further destruction / fragmentation of the countryside and Green Belt (see below).
- 5.3. For example, the Cambridge Connect alternative route to the proposed C2C busway – instead of cutting across untouched Green Belt – would align with the A428 via the Girton Interchange and thence with the M11 to Eddington. This option was ruled out of scope early in the C2C process, and has never been sufficiently considered. We believe this route was wrongly screened out of consideration, and a high level professional assessment commissioned from i-Transport identified the route as a potentially viable option that would mitigate many of the concerns about impacts on landscape, the communities and on the historic setting of the American Cemetery. The independent review of the C2C busway scheme commissioned by the GCP also identified this route as potentially viable and possessing considerable merit.
- 5.4. The Girton Interchange is in a location of exceptionally high strategic importance, at the juncture of three of the most important roads in Cambridgeshire – M11, A14 and A428. This makes it a focal point for regional and national transport links. Our scheme proposals ensure that the light rail network would integrate with this key transport interchange for the future, with links to Cambourne, Eddington, West Campus, Bar Hill, Northstowe and the northwest of Cambridge all being future-proofed. The GCP C2C busway scheme fails to provide this strategic integration.

## **6. Green Belt, biodiversity and landscape values**

- 6.1. The very high and distinctive landscape values of the Green Belt surrounding Cambridge City in particular in the area surrounding Coton and the American Cemetery and the Gog Magog Hills, including associated historic values, are insufficiently taken into account in GCP busway schemes. These GCP schemes will increase landscape fragmentation by unnecessarily severing



Green Belt when they could avoid this by aligning routes alongside existing major transport arteries such as the A428, or re-using former rail lines such as the disused line to Haverhill.

- 6.2. The severance impacts on the landscape will be permanent and will further serve to carve up precious and diminishing Green Belt to transport roads unnecessarily. This will also have the effect of increasing pressure on the Green Belt for commercial and housing development. A priority should be placed on avoidance, and this can be done by fully utilising existing transport corridors, both on the existing roads themselves and/or alongside.
- 6.3. The increasing erosion of Green Belt surrounding Cambridge makes it especially important that alternatives are fully considered that would help avoid and / or mitigate impacts of transport interventions. This importance has not been given sufficient weight in transport plans to date.
- 6.4. The proposed new busways will unnecessarily damage untouched Green Belt when other viable alignments lying on existing transport corridors lie close by. These alternatives have not been sufficiently considered in current strategies.
- 6.5. Cambridge Connect urges the Combined Authority to reject the GCP busway schemes, conceived over a decade ago, and fully take into consideration alternative routes and modes that would avoid and mitigate the impacts of transport interventions on the Green Belt, biodiversity and the regional landscape to the maximum extent practicable.

## **7. GCP busways prejudicial to future**

- 7.1. Cambridge Connect is concerned that the GCP busway schemes are prejudicial to bringing forward more long-term and enduring transport interventions that are so badly needed in this region. We acknowledge this may necessitate additional resources to be achieved, although we consider the investment would result in more enduring positive outcomes for the communities, economy and environment of the region.
- 7.2. We recognise that some have suggested the busways could be converted to light rail in the future. However, we question whether that is a sensible strategy in light of the demonstrated needs already evident and being driven by growth and Climate Emergency. A transformative public transport network is needed sooner, not later. Converting the busways only a few years after they have been built would only serve to drive up overall costs, and place an even greater burden on taxpayers. Moreover, the alignments and widths of the proposed busways may not be ideal for light rail, and it is preferred that these are purpose-designed from the outset.
- 7.3. Most importantly, the imposition of busways only serves to defer grappling with the problem of poor infrastructure for future generations to deal with. Meanwhile, the pressures of growth and climate change are a reality today. It is time to approach things head on, and quit kicking the can down the road.
- 7.4. For example, by the GCPs own figures, the CSET busway will be operating at capacity from day one. This raises the question of whether this busway has the right capacity now, let alone in the future.



7.5. We are concerned whether the CSET busway is aligned appropriately for conversion to a future reinstated railway to Haverhill. It seems very likely it would not be feasible for both CSET and the reinstated railway to be built, so it is a matter of “either / or”. We strongly support the alternative of bringing forward reinstatement of the railway to Haverhill. This could operate as either heavy rail or light rail, or could blend both using Tram-Train technology. These options are prejudiced by CSET, and this is an important reason why we oppose CSET.

## **8. Financing, investment and delivery**

- 8.1. Finally, we recognise that the improvements required will need significant investment.
- 8.2. We encourage the Combined Authority to work to pool resources, including bringing together resources under both the City Deal and Devolution Deal, for there is much common ground. Combining resources can enable economies of scale, reduce duplication, and enable better coordination across the region. Combined resources might also enable schemes where the resources of one entity working alone might not be sufficient.
- 8.3. We encourage the Combined Authority actively to seek out new and increased investments, securing additional commitments from regional and central government in recognition of the scale of the challenges. Moreover, the strengths of the Cambridge economy can bring benefits to wider society through more employment, improved standards of living, and a better quality of life. Without the right supporting investment, however, those benefits are at risk.
- 8.4. We encourage the Combined Authority to consider private sector investment partnerships to bring forward and accelerate public transport improvements.
- 8.5. We recognise that schemes need to be practical, and this is an important reason why we advocate light rail, which is a well-proven, reliable and deliverable technology. Phased delivery can help to mitigate up-front investments required. Cambridge Connect opposes untried and untested, over-ambitious, schemes with little prospect of financing. Cambridge Connect supports bringing forward schemes that have the best potential to deliver improvements on the scale needed, and in making comparatively low-risk long-term investments with high potential for success. We believe light rail meets these criteria, while still offering scope for on-going innovation and improvements long into the future (eg driverless technologies, propulsion etc).
- 8.6. We encourage the Combined Authority to leverage the right scale of financing and investment to meet the scale of the challenges, especially from growth and the Climate Emergency, we as a society face. Transport affects every community and all aspects of our lives. As a sector it accounts for almost one third of harmful emissions. As such, it is a sector where investment can yield genuinely positive results both in terms of addressing the major challenges and in terms of improving the quality of people’s lives.

Dr Colin Harris  
Director, Cambridge Connect  
04 August 2022