
To: Greater Cambridge Partnership
Subject: Foxton Travel Hub consultation
Date: 17 September 2021
Contact: Edward Leigh / 01223 312 377 / edward@smartertransport.uk

Response to Foxton Travel Hub consultation

Executive Summary

The Greater Cambridge Partnership (GCP) has pushed on with this so-called “travel hub” scheme at Foxton without proper consideration of the fundamentals. It is based on a Park & Ride strategy that:

- Incentivises people to drive rather than take a bus from closer to home, thereby undermining rural bus services.
- By undermining rural bus services, discriminates against those who depend on them, exacerbating social inequalities.
- Achieves no reduction in carbon emissions from road transport, but incurs large additional carbon costs in construction, operation and maintenance.
- Sterilises huge tracts of land, reducing biodiversity that then requires mitigation.
- Increases traffic, congestion and toxic air pollution from motor vehicles in villages on roads leading to P&Rs, including in this instance, Foxton, Harston, Shepreth and Barrington.
- Increases, not decreases, the risks of road deaths and injuries.

Moreover:

- The demand modelling is flawed, underestimating long-term demand from London-bound commuters to use the Foxton car park.
- Foxton station’s short southbound platform does not have sufficient capacity for passengers disembarking in the evening peak.
- We understand GCP has not consulted with the train operator, Govia Thameslink Railway, about the implications of this new car park on Foxton station and services calling at it.

An alternative strategy that would reduce carbon emissions, minimise negative ecological impacts, improve public health and reduce social inequality exists:

1. Assist the Combined Authority with seed-funding a build-up of rural bus services.
2. Build a network of [travel hubs](#) (multi-modal interchanges, not large Park & Ride car parks), including at Foxton station.
3. Build an extensive network of cycleways, linking villages to travel hubs, including at Foxton station.

About Smarter Cambridge Transport

Smarter Cambridge Transport is a volunteer-run think tank and campaign group. It was formed in 2015 to advance sustainable, integrated and equitable transport for the Cambridge region. It is run by a team of around 30 people, with a wide range of expertise and interests, and led by Edward Leigh, a qualified transport economist. Its website is at www.smartertransport.uk.

Park & Ride strategy won't meet demand

Although the GCP does not have an explicit strategy around expanding Park & Ride capacity, most of its schemes include a new or expanded car park, providing an additional 7,000 parking spaces (see Table 1), not including the relocated and enlarged P&R planned for Newmarket Rd and a P&R proposed for Barton Rd.

The planned 2,150-space car park at Hauxton and the 500–950-space car park at Foxton may remove 6,000 car trips from the Cambridge side of Hauxton Rd. But that is just 17% of the 36,000-increase in motor vehicle trips forecast to be entering the Biomedical Campus in 2031 (see Table 3). The same report forecast that Cambridge South station will shift a little over 1,000 potential car trips to rail (see Table 4).

That still leaves 29,000 motor vehicle trips unaccounted for. Continued pursuit of GCP's P&R strategy would require a further 15,000 P&R parking spaces to be provided just to meet growth in demand to travel to the Biomedical Campus.

Reducing carbon emissions, air pollution and congestion in Cambridge will require large reductions in car traffic. Just to meet the GCP's own target of a 10–15% reduction in motor traffic in the city relative to 2011 will require between a reduction of 32,700 and 41,800 trips relative to 2019. That's equivalent to another 20,000 P&R parking spaces.

Now we're up to 35,000 car parking spaces, mostly in the Green Belt, before we've even considered growing demand to travel to other destinations in the city.

But it's not just in Cambridge where we need to reduce motor traffic: market towns and villages need clean air and safe streets. Park & Rides around Cambridge will do nothing to stem the growth in traffic elsewhere in the county.

Decarbonising road transport requires a large reduction in total vehicle-mileage if we are to keep carbon emissions within a carbon budget compatible with 1.5°C. That's because the vast majority of the vehicles on the road during this decade will be burning petrol and diesel (see Figure 1).

None of these objectives can be met by building more Park & Rides. It is dangerous to believe that doing something is better than doing nothing, when "something" is not only tokenistic, but actively counterproductive.

The correct strategy, to cope with planned growth and the climate emergency, is to expand and integrate provision of public transport and active travel to provide a viable alternative to driving for most people for most trips.

Park & Ride has high social costs

The operating cost of a P&R bus service may be less than the operating cost of a rural bus service of similar quality. But the direct and social costs of the car trip to the P&R are much higher than the equivalent trip by public transport alone: the cost of owning a car, the fuel to drive to the car park, and the associated carbon emissions, air pollution and risk of collisions are barely reduced compared with driving directly to a car park in Cambridge.

The catchment area for the Foxton car park will include Harston, Shepreth, Barrington, Orwell, the Eversdens, Harlton, Haslingfield, Newton, Thriplow and Fowlemere. The re-routing of some traffic to the Foxton car park will increase traffic levels on some roads, including through Foxton, Shepreth and Barrington. This will increase pollution levels and make walking and cycling in those villages less safe and therefore less attractive, undermining investment to promote active travel, including in the Greenways.

Furthermore, Park & Ride suppresses demand for rural bus services, undermining the viability of those services. The park-and-ride transport model is predicated on people having access to a car to reach a car park. Because the quality of service provided from a P&R is far superior to almost any rural bus services, anyone with access to a car will choose to use the P&R. The residual demand for rural bus services is then insufficient to support a frequency and duration of service that makes for a viable alternative to driving for most trips. That further suppresses demand, leaving the local authority to subsidise a skeleton social service that is completely useless for commuting or indeed most social and leisure travel.

Park & Ride discriminates in favour of those who have access to a car and against those who do not. By contrast, a comprehensive and reliable public transport service reduces the need for a car to access jobs and a social life. Not owning a car can save people thousands of pounds a year compared with using public transport; it also substantially reduces their carbon emissions and contribution to toxic air pollution.

Southbound commuting underestimated

The modelling of station demand indicates that the central scenario (number 3) could see commuting from Foxton to Cambridge stations grow from 36 to 402 people per day, i.e. an elevenfold increase. The same scenario sees the increase in commuting from Foxton to London grow from 144 to 149, i.e. just a 3.5% increase. This clearly shows a deficiency in the modelling, which has taken no account of induced demand.

Demand to commute to London is constrained in large part by the limited *availability* of parking at or near Cambridge, Royston, Meldreth, Shepreth and Foxton stations. As parking at Foxton is unlikely to be as expensive as at Cambridge or Royston car parks, price is unlikely to be a binding constraint on demand to commute to London.

Although the journey time to London King's Cross from Foxton (75 minutes, or 57 with a change at Letchworth) is slower than from Cambridge, people's choice to travel from Foxton is also determined by travel times to and from the station, ability to park, cost of parking and the

likelihood of getting a seat on the train. For many people, Foxton will be an attractive railhead for commuting to London.

It should be noted that people commute from Cambridge to London Liverpool St on a service that has similar journey times. It should also be noted that the train operating company has floated the possibility of running semi-fast services from Foxton (and other village stations), with fewer stops on the East Coast mainline and therefore faster journey times. This would make Foxton even more appealing as a railhead for journeys to London.

Over time, it is to be expected that residents currently living in nearby villages to take up jobs in London. It will also induce people who work in London to locate to Foxton and nearby villages.

With better cycle paths and more secure cycle parking, more people will cycle to Foxton station to travel in either direction, but it is expected that the car park will also fill up. The purpose, and core business-case benefit, of this car park is to facilitate commuting to Cambridge. Any spaces occupied by London-bound travellers effectively reduce the size of the car park for Cambridge-bound commuters, and reduce the corresponding business-case benefit.

The modelling considers only mode-shifting demand to travel into Cambridge amongst existing commuters (or rather those commuting at the time of the 2011 Census). It omits demand to travel to stations other than Cambridge and inner London. It fails to consider business, social and leisure trips to all destinations (which can start early in the morning, e.g. to travel to a London airport). And it fails to take into account induced demand for future residents to commute to London.

The long-term impact will be to create pressure to keep expanding the car park.

Pedestrian route unsatisfactory

The uncontrolled crossing of the A10 is unsatisfactory. Traffic flows at peak times are nearly continuous, making crossing difficult. The reduction in the speed limit will improve safety, but will not make it any easier to cross.

The traffic signals at the car park entrance will interrupt traffic, but not in both directions at the same time. As with all railway stations, pedestrian flows will be “peaky”. This could lead to dangerous overcrowding on the central island of the A10 crossing.

We understand that signalling the pedestrian crossing has been ruled out because it could cause traffic to back up onto the level crossing. However, if the pedestrian signals were responsive to the status of the level crossing, they would not stop traffic when the barriers are about to descend.

If this project proceeds as planned, we strongly urge GCP to explore how to install a light-controlled crossing of the A10 where the signal controls ‘listen’ to the railway signalling system, and have a safety fall-back in the event of a communication failure. This would promote safety without unduly reducing road capacity.

Foxton station under capacity

To date, only the Cambridge-bound platform has been extended to accommodate 8-car trains. Trains longer than four cars from Cambridge can only open doors at the front section. This is not a satisfactory, and possibly unsafe, arrangement when hundreds of people are expected to be disembarking at Foxton in the evening peak. Where is the plan and funding to extend the southbound platform?

We understand that GCP has not consulted with the station management company and train operator, Govia Thameslink Railway. This is surely long overdue?

Updated carbon costs

All transport schemes should be appraised using the latest carbon prices, as set out in the Department for Business, Energy & Industrial Strategy's policy paper [Valuation of greenhouse gas emissions: for policy appraisal and evaluation](#) (2 September 2021). GCP should be delivering only schemes that are compliant with the government's current whole-economy decarbonisation targets:

- [68% by 2030](#)
- [78% by 2035](#)
- [100% by 2050](#)

Rethink required

There are multiple transport problems and challenges to be addressed in this area:

- Huge increase forecast in demand to travel to the Biomedical Campus and other parts of Cambridge over the next two decades.
- Urgent requirement to reduce carbon emissions from road transport rapidly – to less than half by 2030.
- Potential routing of East West Rail between Harston and Foxton.
- Dangers and social costs of the high volume of traffic through Harston's high street.
- Increasing length of time that traffic on the A10 is held up at the Foxton level crossing.
- Difficulty of providing a segregated cycle route along the A10.

These require a much more ambitious plan than simply building two car parks and upgrading (again) the cycle route along the A10. We suggest the plan should include:

1. Assist the Combined Authority with seed-funding to build up the rural bus services, as set out in the GCP *Public Transport Improvements and City Access Strategy*, published for the [Joint Assembly on 9 September](#).
2. Build a network of [travel hubs](#) (multi-modal interchanges, not large Park & Ride car parks) throughout the region, on rail and express bus routes, including at Foxton railway station.
3. Build an extensive network of greenways for non-motorised users, linking villages to their nearest travel hubs, including at Foxton station.

Serious consideration should also be given to re-routing the A10 along the south-east side of the railway line between Foxton and London Rd. This would remove pressure on the Foxton level crossing, and would relieve Harston High St, making it a space for people rather than through-traffic. See pp5–6 of our [response to the East West Rail consultation](#).

Tables and illustrations

Table 1: Existing and planned Park & Ride car parks around Cambridge

Car park	2015 capacity	GCP expansion (max)
Cambridge		
Babraham Rd	1,458	159
Madingley Rd	930	
Milton Rd	792	
Newmarket Rd	873	<i>unspecified</i>
Trumpington	1,340	274
Longstanton	350	
St Ives	1,000	
Foxton		950
Hauxton		2,150
CSET		1,250
C2C		1,233
Waterbeach		1,000
Barton		<i>unspecified</i>
Total spaces	6,743	7,016

Table 2: Car parking demand at Foxton to Cambridge stations and inner London (from Foxton Park and Ride Travel Hub Initial Demand Forecasting §7.2 – Mott MacDonald, May 2018)

Destination	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Cambridge Station	25	76	153	229
Cambridge North	10	50	99	149
Existing Total	36	126	252	378
Cambridge South	22	75	150	225
Inner London	144 (Existing)	145 (87.5%)	149 (90%)	154 (92.5%)
Sensitivities	166	220	300	379
Existing + Sensitivities Total	201	347	552	757

Source: Mott MacDonald

Table 3: One-way daily person-trips entering CBC up to 2031 by mode* – from [CBC Transport Needs Review](#) Part 2, page 23 (Atkins, October 2018)

Person-trips to CBC	Baseline 2017 ²⁶	2022 Forecast	2031 Forecast
Car	28,475	35,600	46,400
Bus	4,313	5,400	7,000
Cycle	4,779	6,000	7,800
Pedestrian	3,820	4,800	6,200
Total	41,387	51,700	67,500
Percentage change from Baseline (Table 3)**		+25%	+63%

*includes through-trips

**numbers have been rounded so may not correspond directly with percentage change

Table 4: Travel demand at Cambridge South station in terms of return trips in 2031 – from [CBC Transport Needs Review](#) Part 3, page 27 (Atkins, December 2018)

Scenario	Destination Demand	Origin Demand
Demand to Cambridge South Station	4,700	1,100
Of which is Demand to CBC	3,142	539
CBC Demand Abstracted from Other Rail	1,000	172
New to Rail	2,142	367
Of which are abstracted from highway	557	189

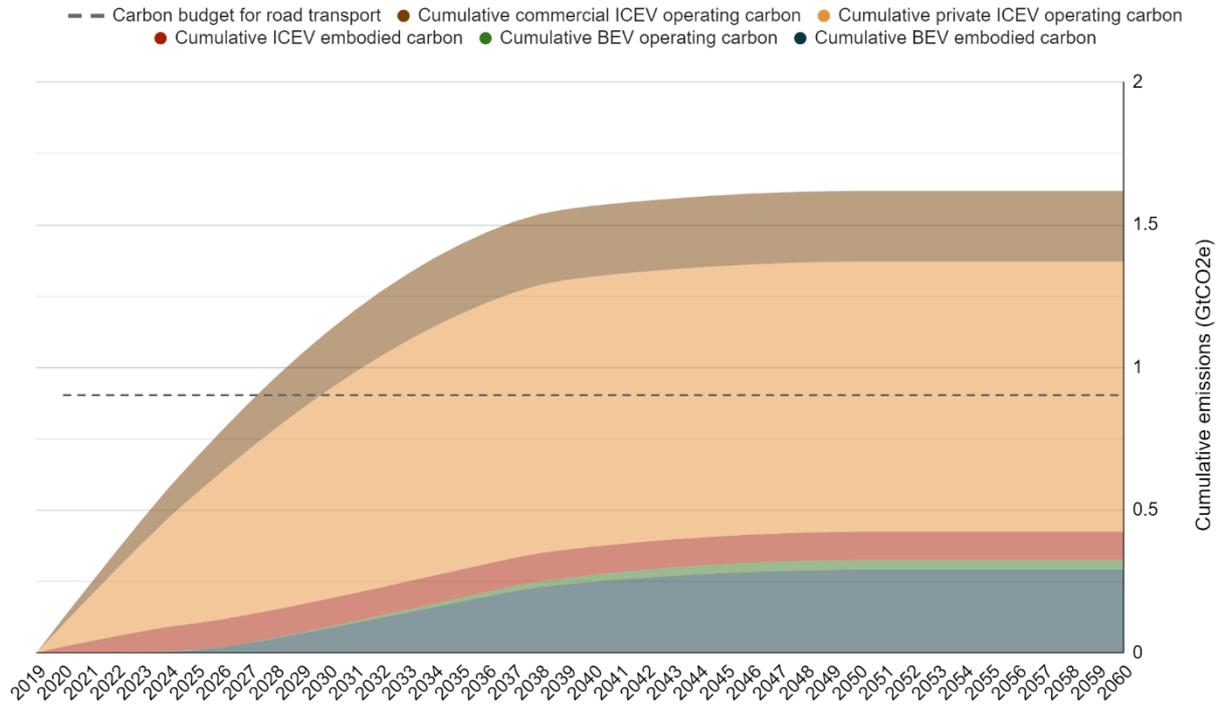


Figure 1: Cumulative carbon emissions from road transport in the UK, assuming all energy production is net-zero by 2050 and road transport evolves in accordance with the UK's [Sixth Carbon Budget](#)