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Open Letter to All Councillors

Cambridge City, South Cambridgeshire District, and Cambridgeshire County Councils

Dear Councillor,

Cambridge Connect and Railfuture have collaborated closely for over 7 years developing alternatives for enduring public transport in Cambridgeshire. In particular, we have proposed an integrated light rail scheme that would serve Cambridge city, South Cambridgeshire and beyond. Railfuture in particular has developed excellent proposals for reinstatement of railways to Wisbech and Haverhill, with which our light rail scheme would integrate. These could employ modern “Tram-Train” technology. Recently, we have concentrated effort on defining in more detail how our light rail scheme in Cambridge City and South Cambridgeshire could be delivered in a way that is both practical and financeable.

The purpose of this letter is to outline the main features of a possible **Phase One** of the scheme. In most cities where light rail has been adopted it has been delivered in phases, starting from a core and working outwards. Light rail does, however, need to connect with bus services, active travel, cars and other modes for reach and flexibility. When combined, this approach offers a very strong and enduring alternative to bus-only plans. A light rail scheme will:

- attract investment into Cambridgeshire, with permanent high-quality infrastructure;
- provide quality and capacity to support growing needs, is more reliable and will achieve greater modal shift;
- offer better environmental performance (energy efficiency, emissions) to help the region and UK towards Net Zero;
- bring lower long-term operating costs, including by driverless operation.

Sources of finance can accelerate and enhance what is possible, and we support equitable ways of raising finance to enhance public transport. For example, a combination of a “Cambridge Accommodation Supplement” (explained overleaf), parking charges (e.g. as successfully implemented in Nottingham for light rail), and other financial tools (e.g. Tax Increment Financing) could be employed. If concerns about the proposed Congestion Charge could be addressed, some variation of this scheme could also offer benefits should a genuinely attractive alternative for public transport be in place.

Phase One: Cambridgeshire Light Rail

Phase One (see map) would provide a rapid and seamless light rail link from the University West Campus to Addenbrookes and Trumpington. This core axis connects some of the most important employment, commercial, retail, research, education, healthcare and residential areas of Cambridge, and is connected with two National Rail stations and two Park & Rides. It is a model that keeps the city open for business, rather than imposing constraints on city access.

Over the last eight years there has been much discussion of transport plans. There has been substantial expenditure but little consensus or practical progress equal to Cambridge’s phenomenal success. Yet supporting the future success of Cambridgeshire is too important for this region and the UK to ignore, and needs sound long-term strategic investment. We believe our scheme would provide a solid foundation of public transport investment that would boost sustainable economic, social and environmental development. That investment would repay the region over time, and grow. With support given to longer-term investment in light rail, there remains every opportunity to deliver shorter-term improvements to bus services (e.g. bus lanes, bus priority and scheduling improvements) and active travel.

The scale of investment currently directed to busways is misplaced, and they are likely to need major upgrades in capacity to meet future needs even as they would be delivered. Moreover, it remains unclear how the anticipated major increase in bus frequency can be practically accommodated within the Cambridge City centre at the same time as maintaining an urban realm that is both pleasant and safe for cyclists and pedestrians. Our scheme addresses that problem up front using a short tunnel to facilitate mass transit. We hope you will give the proposals close consideration.

Yours sincerely

Dr Colin Harris
Cambridge Connect

PHASE ONE: CAMBRIDGESHIRE LIGHT RAIL

Phase One: main features at a glance:

- Overall cost = £632M (~£600M if light rail vehicles are leased)
- 2.6 km tunnel (e.g. 1x 8m diameter) – 2 portals: 1) Rail station carpark; 2) West Campus
- 1 full underground station in City Centre (@ £100M)
- 1 cut & cover station at Parkside (@ £50M)
- Overall distance 10.4 km, ~20 mins end to end
- 14 stops, including two at National Rail Stations and two at Park & Rides.
- Average distance between stops - ~1 km (industry standard)
- Time from Cambridge Central Rail Station to termini in each direction – ~10 mins.

Phase One: Strengths and benefits

- Manageable scale of capital investment
- Relatively fast to deliver – 50% of line is straightforward conversion of existing busway
- Tunnel boring quick – e.g. ~20 m/day (slower than CrossRail) = 4 to 5 months
- Tunnel avoids most surface disruption: spoil could be removed on railway rather than lorries
- ~£350M in potential funding for scheme already exists in City Deal, if re-purposed
- Directly linked into main rail network and Park & Rides from the start
- Strong commercial component to core
- Demand high with stations, P&R connections and tourist footfall
- Future-proofed for further extensions – eg Cambourne, Science Parks, Cambridge East
- Seamlessly connects all three University campuses and significant business activity
- Serves Sixth Form Colleges at Hills Road / Long Road.

Phase One: Weaknesses and costs

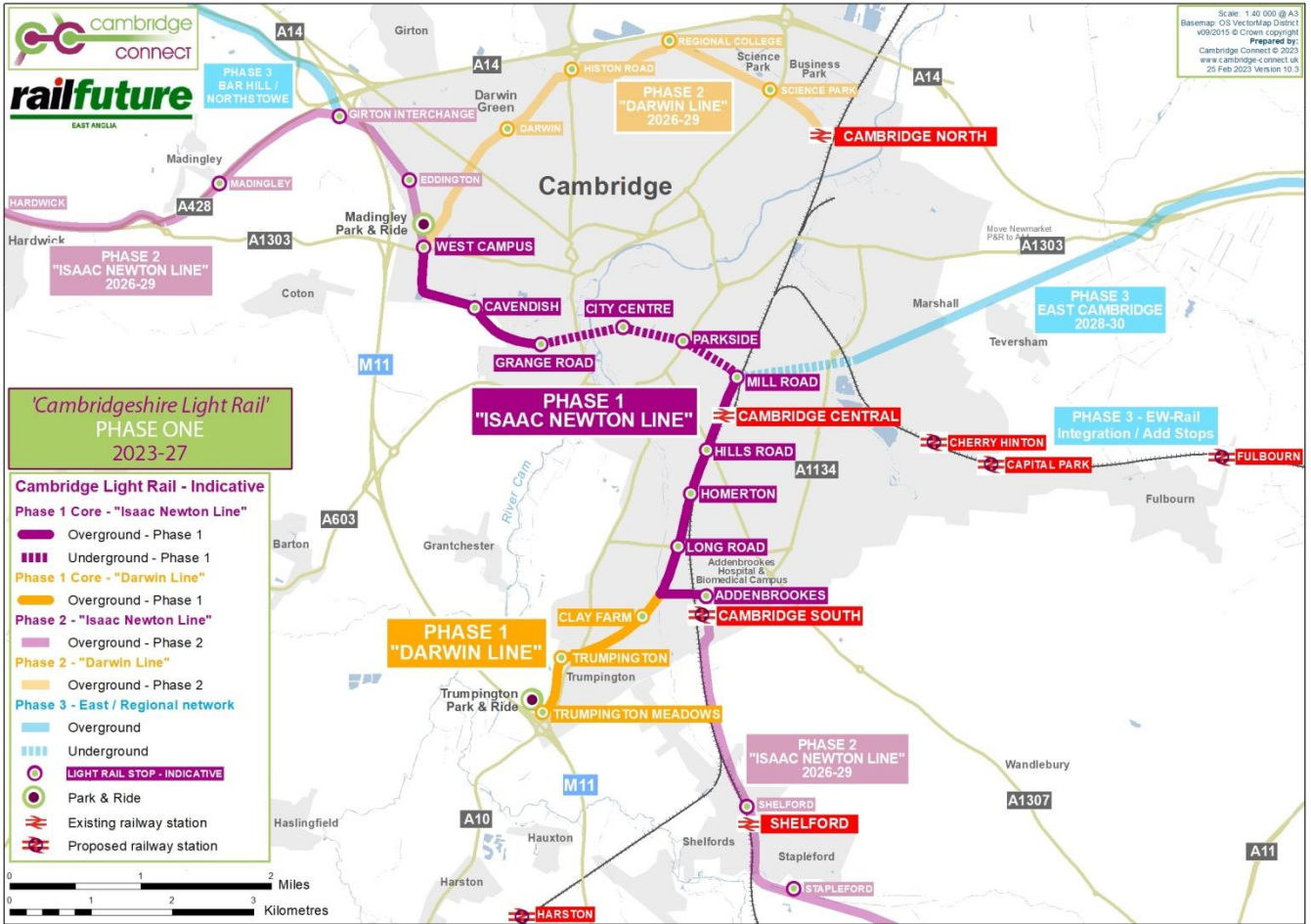
- Tunnel and central u/ground stations are expensive to finance up-front
- Average of £60M per km for Phase One, which is relatively high. However, this does mean the per km cost for Phase Two would be much reduced, making extensions attractive
- Reach into surrounding villages, north & east side of city and important Science parks (e.g. NW Cambridge, Granta Park) is deferred until Phase Two.

Phase One: Capex finance	£M
Existing City Deal repurposed: £100M of City Deal retained for buses / active travel	250
Existing Combined Authority Devolution Deal funds reallocated	100
Tax Increment Financing (or similar) on new developments	100
Local Business Rates retention for term of 10 years @ £5M pa (up-front)	50
Private sector investment (e.g. 'Cambridge Green Infrastructure Bond')	100
Central government investment to reflect Cambridge economic contribution / growth through to 2030 (e.g. National Infrastructure Bank) – investing in critical UK industries	100
Overall Capex finance	700

Phase One: Opex finance	£M pa
Farebox revenue: £10M pa (estimate is less than Nottingham NET)	10
Cambridge Accommodation Supplement*: ~£10M pa	10
Parking charges: ~£10M pa	10
Commercialisation / advertising revenue: £5M pa	5
Operating costs ~£25M pa (estimate is more than Nottingham NET)	-25
Overall Opex revenue per annum: £35M – costs £25M – Operating Surplus £10M pa	10

* **Cambridge Accommodation Supplement (CAS):** this could be a fairer, cheaper and more effective way to raise supplementary income. There were ~8M visitors to Cambridge pre-Covid, generating ~3M bednights pa (Visit England data on overseas visitors, avg 2014-16). A CAS at 5% (e.g. £5 on £100 per night) could raise ~£10M pa (allowing for exemptions). *More data are needed to verify potential revenue.* A percentage supplement ensures those in cheaper accommodation pay less, and the cost (~2 coffees) is small so would not burden the tourism industry. Similar schemes are successful in other cities, e.g. Berlin (see <https://www.jgh-hauptbahnhof.de/en/berlin-city-tax>).

Phase One: Cambridgeshire Light Rail



Cambridge Connect / Railfuture overall network graphic – Phase One and Phase Two

