



**GREATER
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Delivering our City Deal



Cambourne to Cambridge Local Liaison Forum

27/01/2020



Cambourne to Cambridge Project

C2C Vision - To connect existing and new communities along the A428/A1303 to places of employment, study and key services to enable the sustainable growth for Greater Cambridge.

Delivered through three elements:

- a high-quality public transport link and services
- a new Park & Ride facility off the A428/A1303
- new cycling and walking facilities

Strategic case

- The Strategic Case recognises pressure on transport system from Local Plan and CPIER growth and proposes infrastructure to address this
- Specifically C2C responds to local development pressures such as Cambourne West, Bourn Airfield, West Cambridge, St Neots
- Emerging planning policy such as Bourn Airfield SPD is reflected
- The OBC reflects potential transport investment: CAM, EWR, etc. but, in line with Government guidance, considers C2C as a free-standing investment



Cambourne to Cambridge corridor



• Current A1303 conditions include:



- Increasing congestion and long delays in morning peak and evening, particularly approaching M11 junction (AM peak hour average speeds 75% slower than night time)
- Significant journey time variability



• House price to earnings ratio of around 13:1 in Cambridge - demand for housing in locations like Cambourne and St Neots continues to grow.



• Cambourne to Cambridge corridor - 11,500 additional homes planned in Cambourne West, Bourn Airfield, and North West Cambridge



• Development estimated to support 13,400 additional jobs



• Existing car mode share and car ownership within A428/A1303 corridor is high



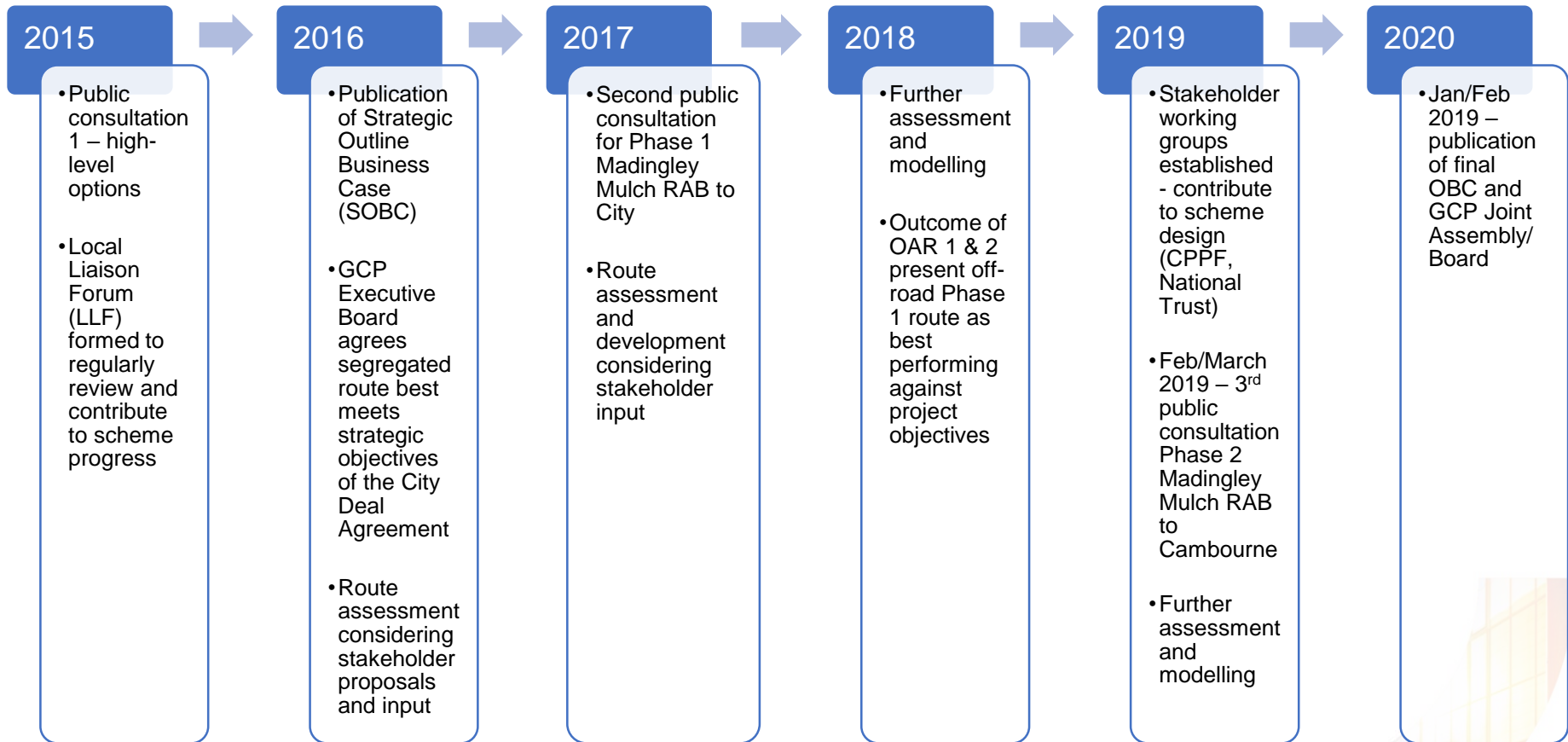
• Future growth expected to generate additional demand - 14% AM Peak hour, 82% Inter-peak period and, 37% PM Peak period



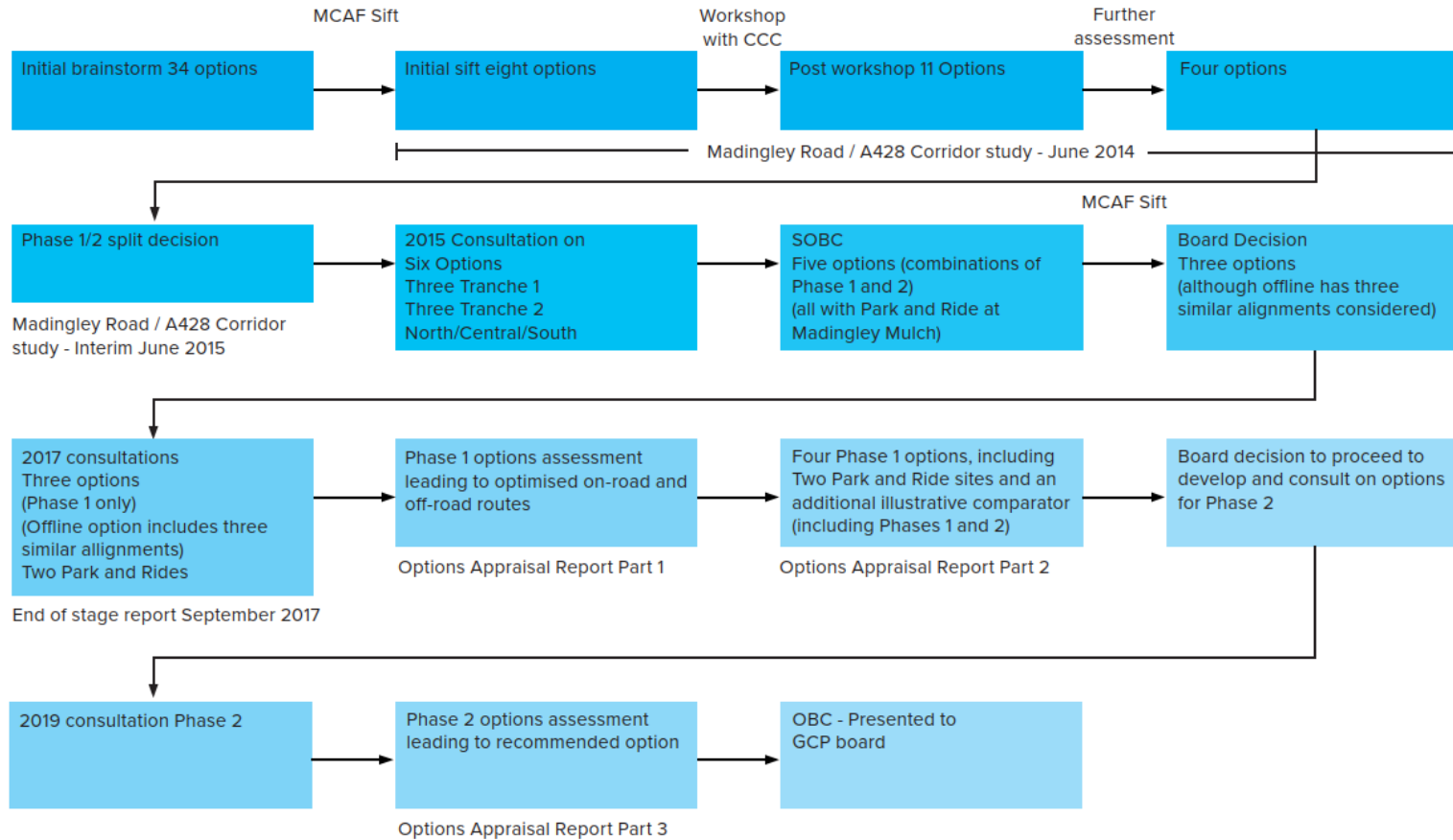
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Project development



Assessing alternatives



Assessing alternatives

- Prior to July 2017 – wide variety of options north, south and along A428/A1303 assessed and consulted on in 2015
- July 2017 - GCP Executive Board updated on development of an LLF's recommended on-road option (Option 6). Subsequently LLF alternative included in 2017 Consultation
- During 2018, as part of continuing option assessment, alternative versions of an on-road and off-road route for Phase 1 were developed and compared.
- Two technical notes published in May 2019 to -
 - Explore 'quick win' options along Madingley Hill.
 - Provide further clarification on why a northern alignment via Girton was previously discounted.
- October 2019 - further work to review a hybrid (on and off-road) option, avoiding Coton, proposed by a Technical Sub-Group of the LLF.

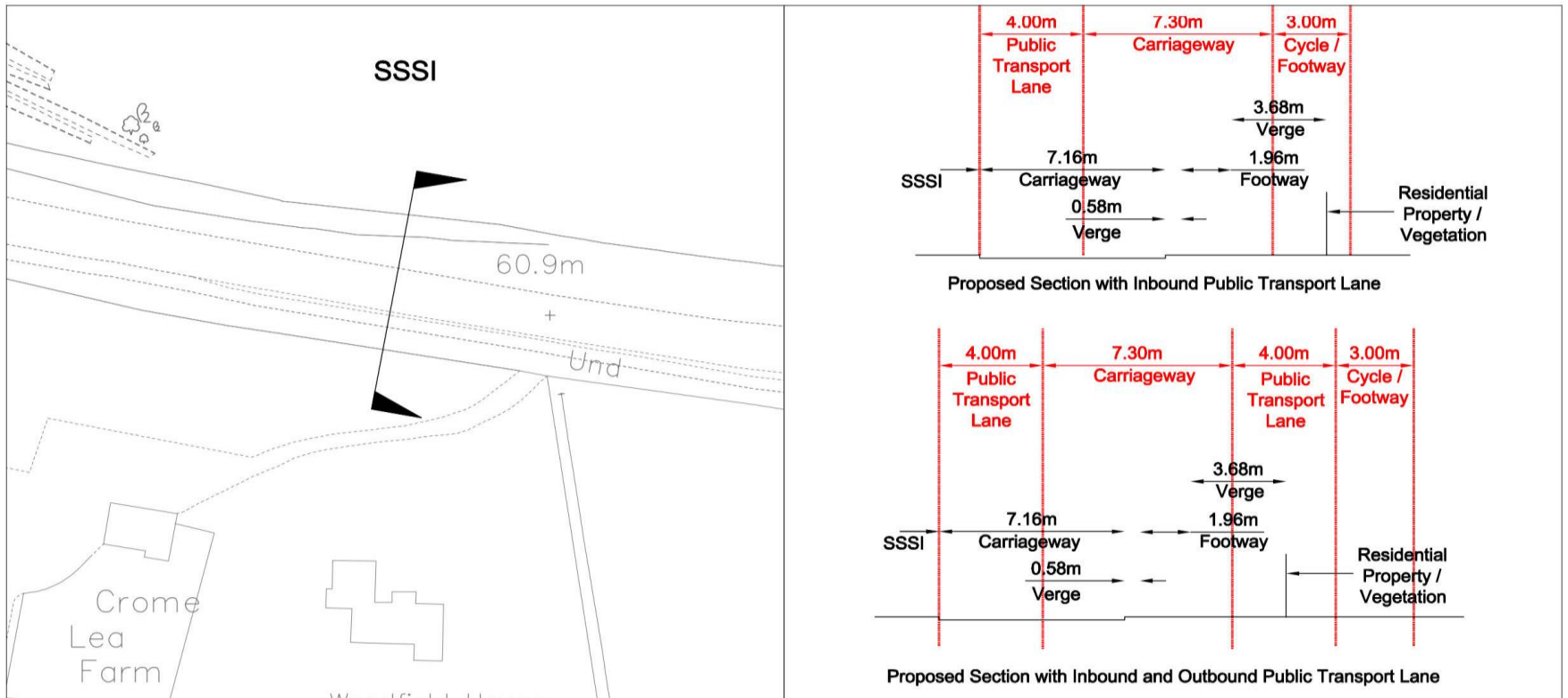
On-road limitations

On-road option not pursued further because:

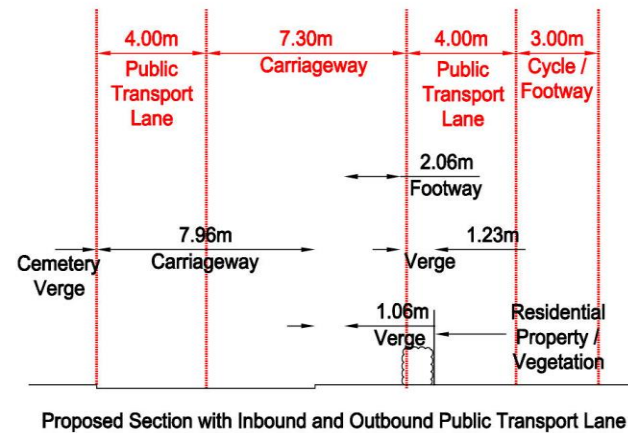
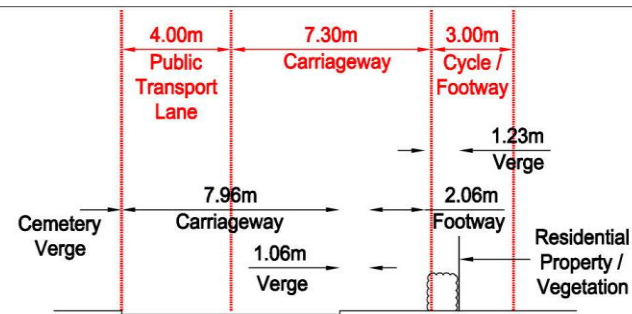
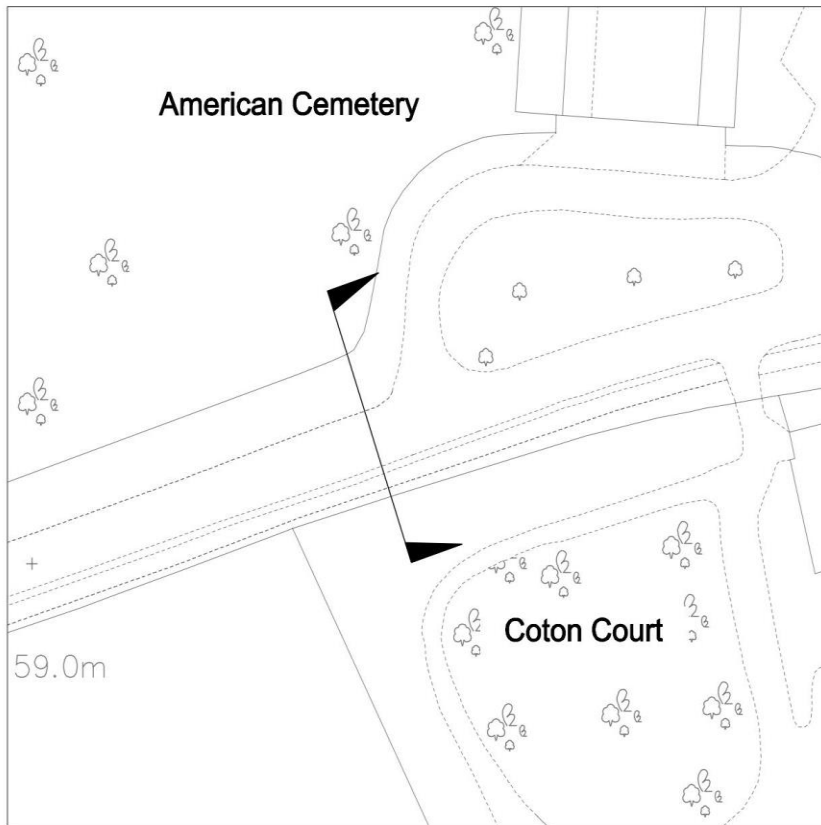
- Fails to address most congested section of scheme (around M11 J13)
- Greatest impact on most environmentally sensitive section of the corridor constrained by limited road space, along Madingley Road past the SSSI and American Cemetery sites.



Developing alignment – Section at SSSI



Developing alignment – Section at American Cemetery



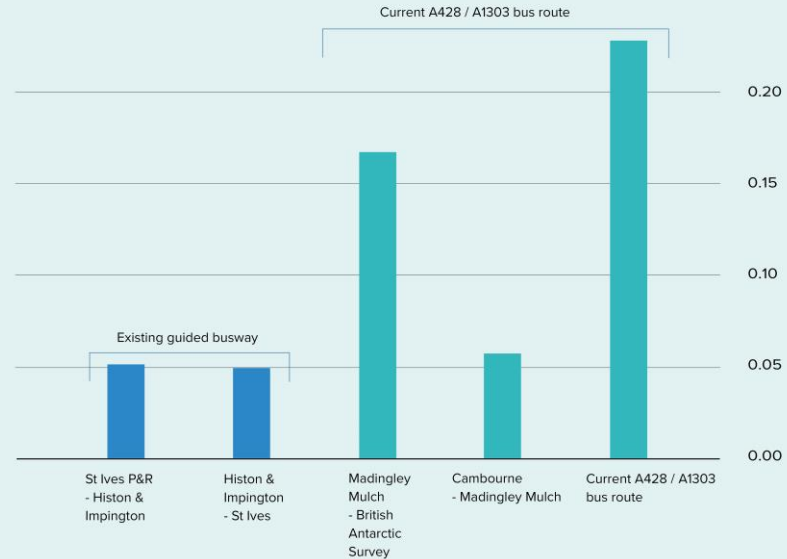
Reliability ratios



Reliability

Reliability Ratios which are based on a statistical analysis of historic journey time data show that the existing Cambridge Busway performs better than non-busway routes, meaning that the segregated infrastructure is delivering journey times that are more consistent.

Two sections of the A428/A1303, from Maddingley Mulch to Drummer Street, are among the worst performing sections comparing fully segregated busways, to where there are bus lanes or buses running on highway.



Stakeholder Engagement

- Three public consultations and consultation focus groups
- Local Liaison Forum and Technical Group workshops
- Regular presentation at Councils and Committees and hosting local community meetings, including significant and ongoing engagement with CamCycle & North Newnham Resident's Association re Adams Road
- Correspondence and meetings with landowners, including regular meetings with UoC representatives and Colleges
- Stakeholder and statutory agency Landscape, Heritage and Ecology (LHE) and Non-Motorised Users (NMU) working groups

Stakeholder Engagement

Working groups – scheme design principles

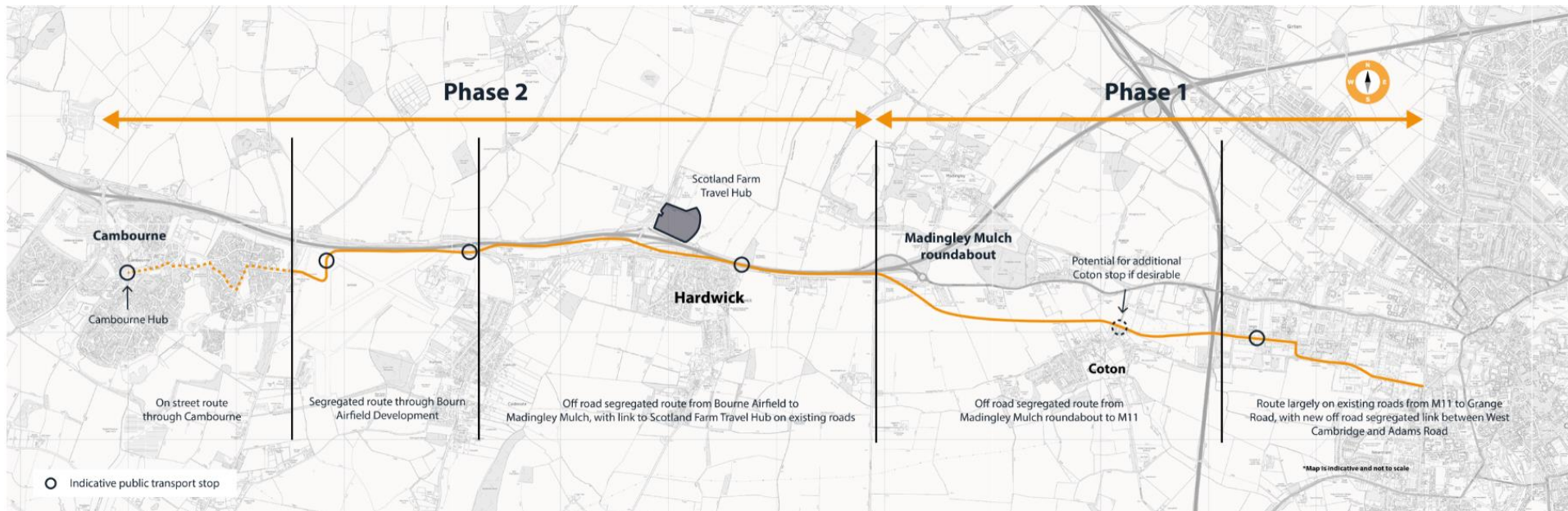
Landscape, Heritage & Ecology

1. Multiple benefits
2. Biodiversity gain
3. Creating connected habitats
4. Fitting into the landscape
5. Reducing noise and light pollution
6. Effective maintenance
7. Wider benefits to local communities

Non Motorised User

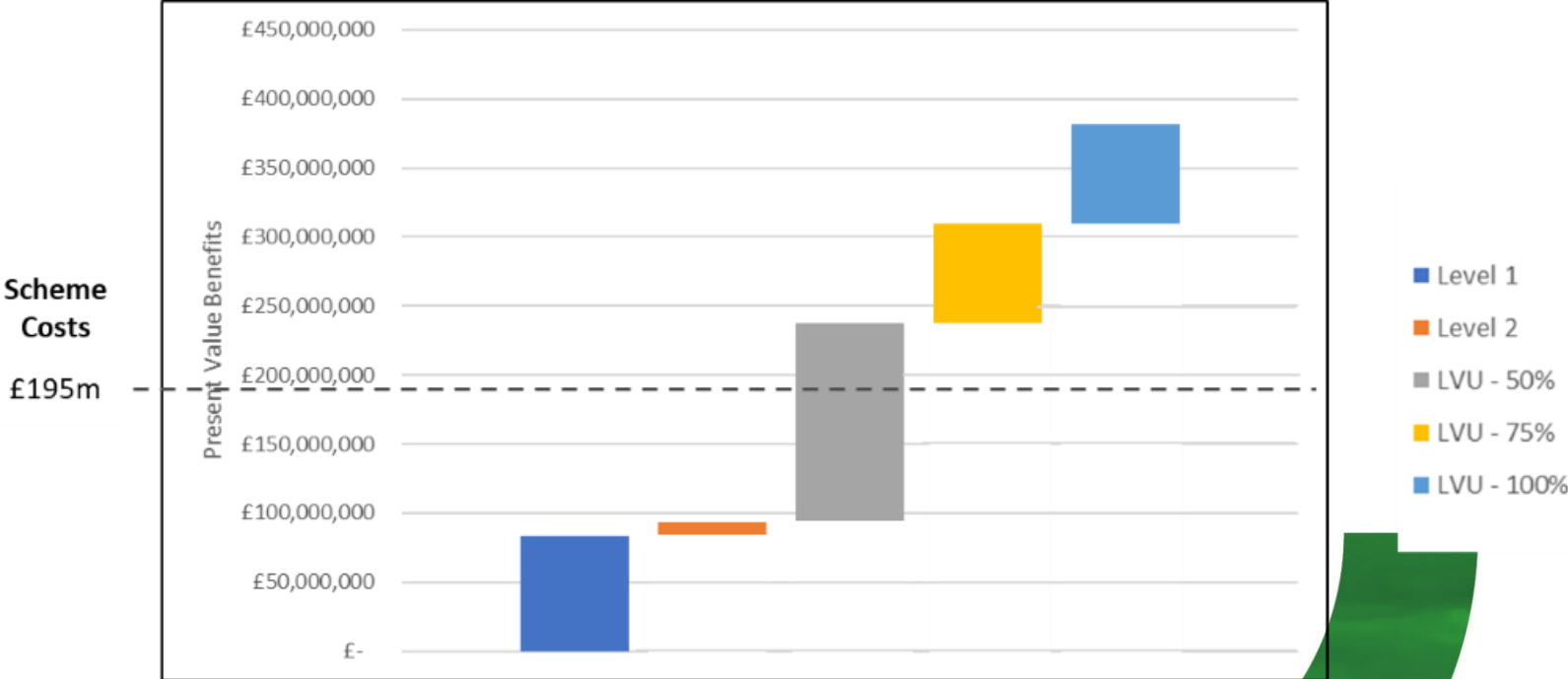
1. Non Motorised User
2. Creating connected networks
3. Ease of access and continuity
4. Safe to use
5. Effective maintenance
6. Lighting

Route proposal



Value for Money

C2C benefits build up



Scheme Benefits



Journey Times

(AM Peak Inbound 08:00-09:00)

- C2C Preferred Option - 31 minutes
- Do Minimum - 50 min.



Demand

(AM peak average hourly bus passengers two-way – East of Madingley Mulch)

- C2C Preferred Option - 863 passengers
- Do Minimum - 370 passengers



Wider Economic Benefits

- £458m in Land Value Uplift
- £102.8m additional GVA per annum
- £676.1m in additional GVA over 30 years



Capacity

(AM Peak 08:00-09:00, two way)

- C2C Preferred Option - 1,520 capacity
- Do Minimum - 570 capacity



Service Frequency

- C2C Preferred Option - 6 buses per hour - direct express service, plus 2 buses per hour local service
- Do Minimum - 3 bus per hour - non-express service



Value for money

- Total Local BCR of 3.48 (additional GVA over 30 years against scheme costs)

Benefits to residents

For those students who do not have access to a lift, or the financial support to take taxis, the lack of transport links between Cambourne and Cambridge shapes the decisions they make regarding their post 16 education.

As a school, we feel that whilst transport should be a consideration as part of the Post 16 transition, it should not be a leading consideration, and should definitely not be a barrier. At present many pupils have to travel over 3 hours per day to access opportunities in the City. This clearly impacts on their studies, and on their mental and social well-being.

Many of our students will benefit from better public transport links, increasing their educational opportunities, helping sustain attendance and ultimately supporting success at Post 16 institutions.

- Cambourne Village College

Benefits to employers

Sustainable access to the CBC is a key factor alongside affordable housing to ensure the Campus can attract and retain the best staff. Approximately 4500 staff access the Cambridge Biomedical Campus from the west of Cambridge each day.

- Cambridgeshire Biomedical Campus 2019

As someone who employs hundreds of people in Cambridge, I am hugely in favour of improving the transport links between Cambourne and Cambridge. I think the proposed scheme will transform the corridor between Cambourne and Cambridge in a positive way for everyone.

- Redgate Software CEO, Cambridge Business Park

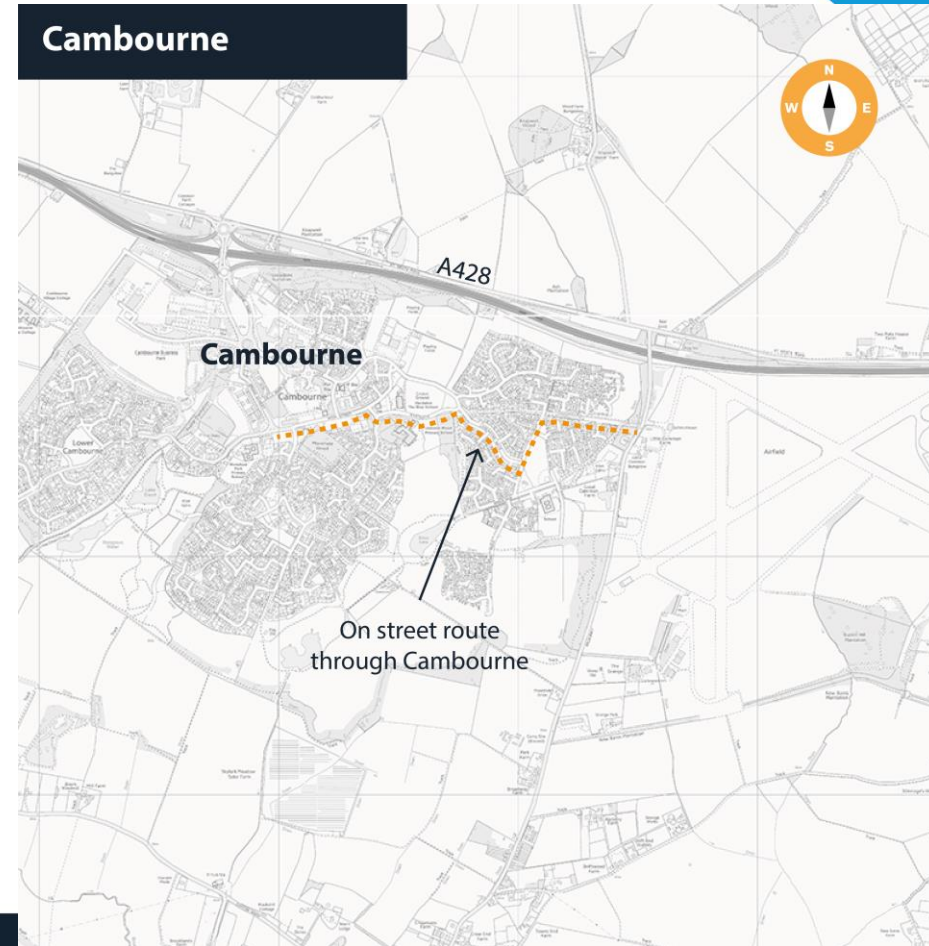
Cambourne Area

First section on-road through Cambourne. Should CAM require less maneuverable vehicles, a new route would be created.

Routes, including via Cambourne West, included in the traffic modelling assessments.

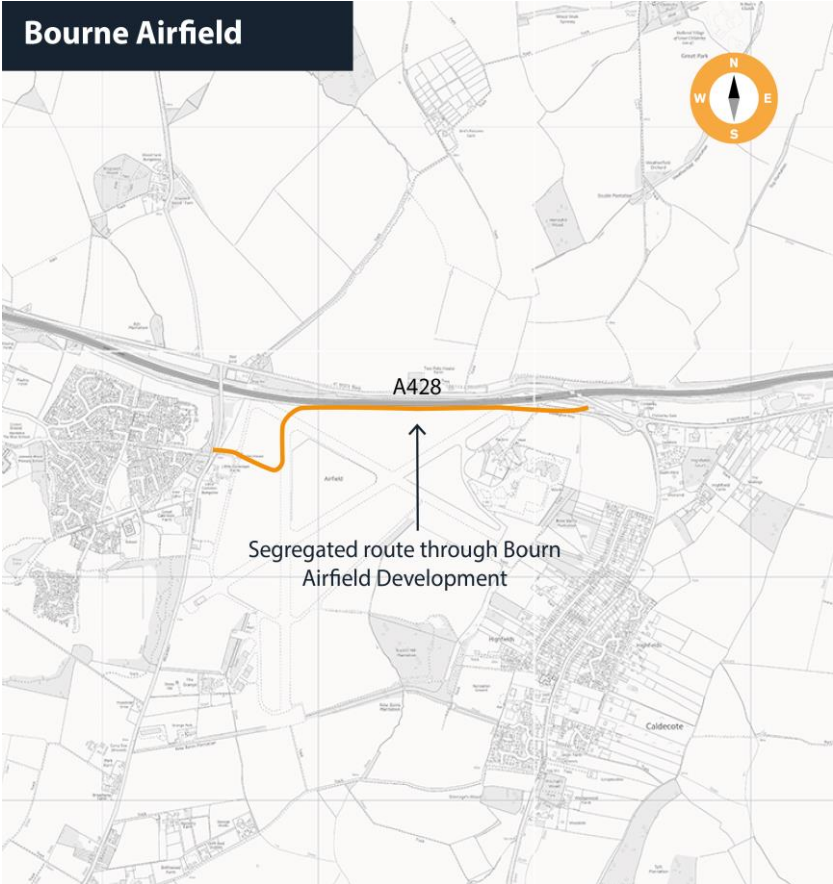
Work underway, liaising with South Cambs and Cambourne TC to investigate provision of a Travel Hub.

Cambourne Station as part of East-West rail may require station Travel Hub supported by C2C for last mile journeys



Bourn Airfield

- Corridor defined in SPD - agreed Oct 2019
- Two stops proposed



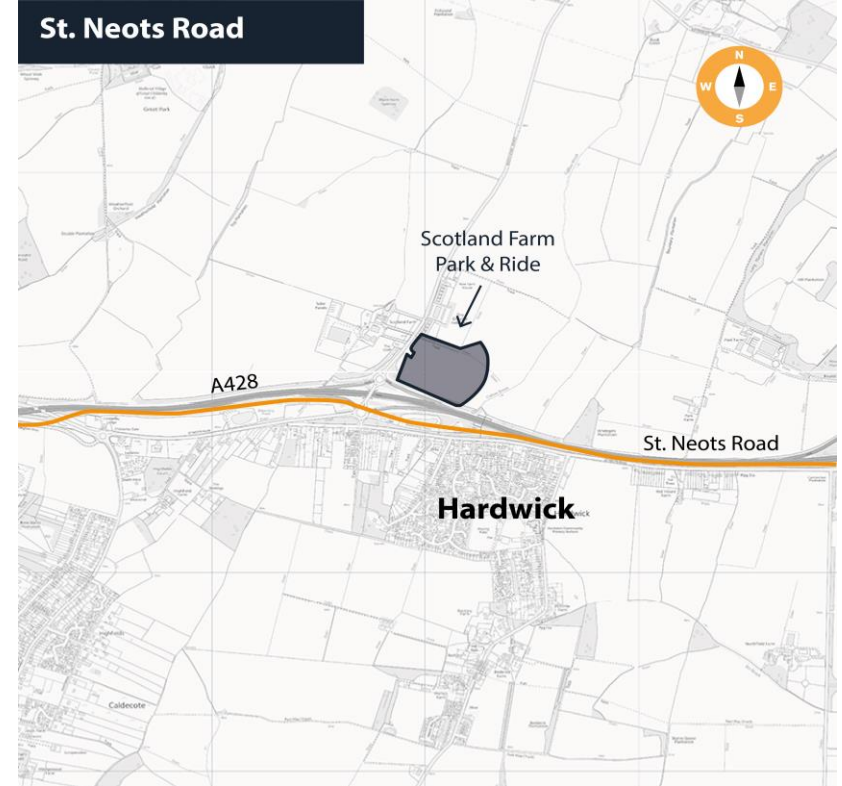
Scotland Farm Park & Ride

- Identified as preferred site at Public Consultation
- Following assessment, should Scotland Farm be taken forward, there is a commitment to investigate:
 - Traffic calming measures through Dry Drayton to avoid rat-running
 - Improved pedestrian and cycle access from Dry Drayton.



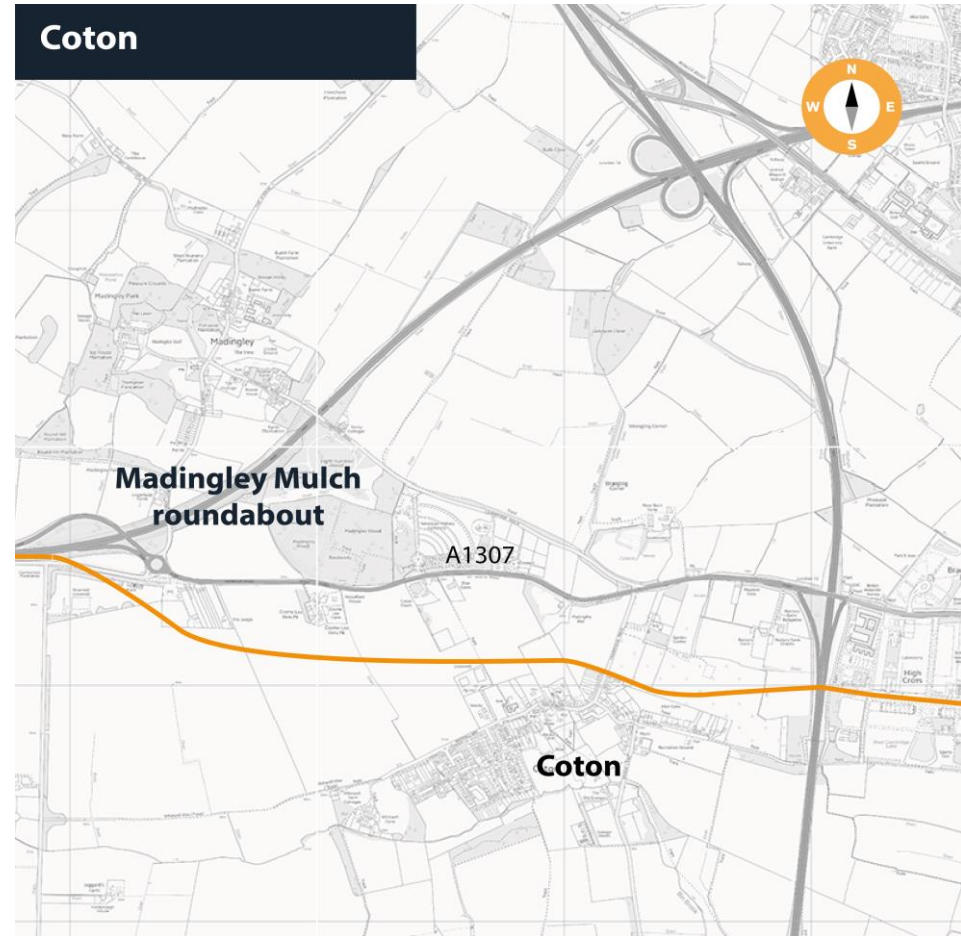
St Neots Road

- The route will continue from Scotland Road off-road in parallel to the St Neots Road
- Loss of trees and vegetation in this location but new planting will be provided to partially offset the impact
- Commitment to improve current A428 noise barrier which is poorly provided and in state of disrepair



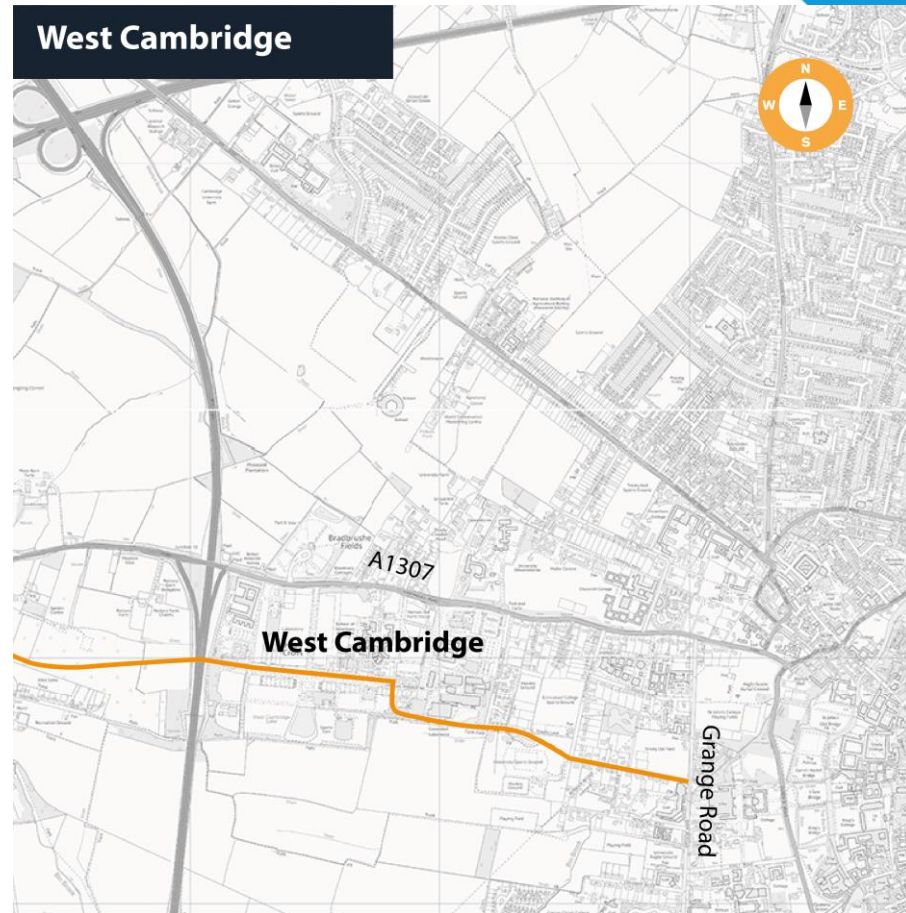
Coton Area

- From the Waterworks, crosses the A1303 north of water storage tanks on the edge of Coton where it crosses Cambridge Road.
- As a result of discussions with local residents, CPPF and the National Trust, the alignment north of Coton is proposed to move further 40-50 metres from the nearest houses
- Work will continue to refine the alignment and investigate bunding options
- Where fields are severed there will be an opportunity to retain more suitable areas of land for future use - such as the creation of new wildlife habitats.



West Cambridge

- Discussion with West Cambridge ongoing regarding route alignment through the development.
- OBC will show segregated carriageway (worst case in terms of cost and impact on the development) but work to continue alongside the University to identify best option.
- Discussions indicate signal control required to restrict general traffic on Charles Babbage Road to provide C2C a prioritised route



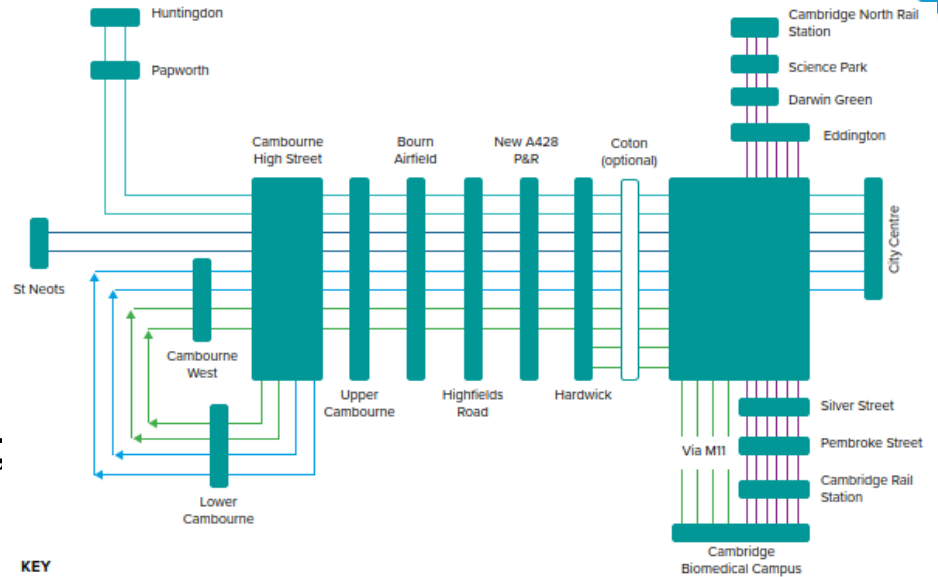
West Cambridge - Adams Road

- Rifle Range route recommendation reviewed due to:
 - Impact on Green Belt in West Fields
 - Landowner access issues
 - Cost savings and future-proofing
- Alternative, fully segregated provision via Rifle Range and Madingley Road cycling improvements and potentially Comberton Greenway
- Issues under discussion with community:
 - Cyclist and road safety – Wilberforce junction layout
 - Environmental Impacts – air quality assessment indicates negligible impact



Cambourne to Cambridge Bus Network Strategy

- Bus Strategy developed reflecting
- Established operating patterns
- Emerging City Centre Bus Strategy
- Other GCP schemes – i.e. CSETS
- Need to serve variety of destinations;
 - City Centre
 - Station
 - CBC
 - Science Park



KEY

— Huntingdon - Papworth - Cambourne - Cambridge City Centre (two buses per hour).

— St Neots - Cambourne - Cambridge City Centre (two buses per hour).

— Cambourne - Cambridge City Centre (two buses per hour).

The above routes combine to provide six buses per hour (10-minute headway) between Cambourne High Street and Cambridge City Centre.

— Cambourne - Cambridge Biomedical Campus (two buses per hour between Cambourne High Street and Cambridge City Centre).

— Planned enhancement of existing "universal" route Cambridge Biomedical Campus - Eddington (six buses per hour) with extension to Darwin Green, Cambridge Science Park and Cambridge North Rail Station (three buses per hour).



Environmental Consideration

- **Electric vehicles commitment** at earliest opportunity, aligned with the preferred mode for the CAM scheme. Interim mode minimum Euro VI standards or better
- A **biodiversity net gain** assessment will be completed once the preferred route is identified – commitment to deliver a minimum of 10% gain, with the objective of achieving 20% gain.
- Significant number of **environmental surveys and assessments** are available on the GCP website, covering wildlife habitats for animals including reptiles, bats, breeding and wintering birds, badgers, barn owls, reptiles, water voles and invertebrates.
- Further ecological surveys and baseline noise surveys will continue into 2020 to inform the emerging final scheme design, and to be used in the final **Environmental Impact Assessment**.
- **Initial air quality reports** for communities and villages in closer proximity to the route (Hardwick, Adams Road and Coton) propose a negligible impact on air quality.
- Potential to replace/upgrade A428 noise barriers in Hardwick to reduce net noise
- GCP continues to work with LHE and NMU stakeholder groups to develop scheme design

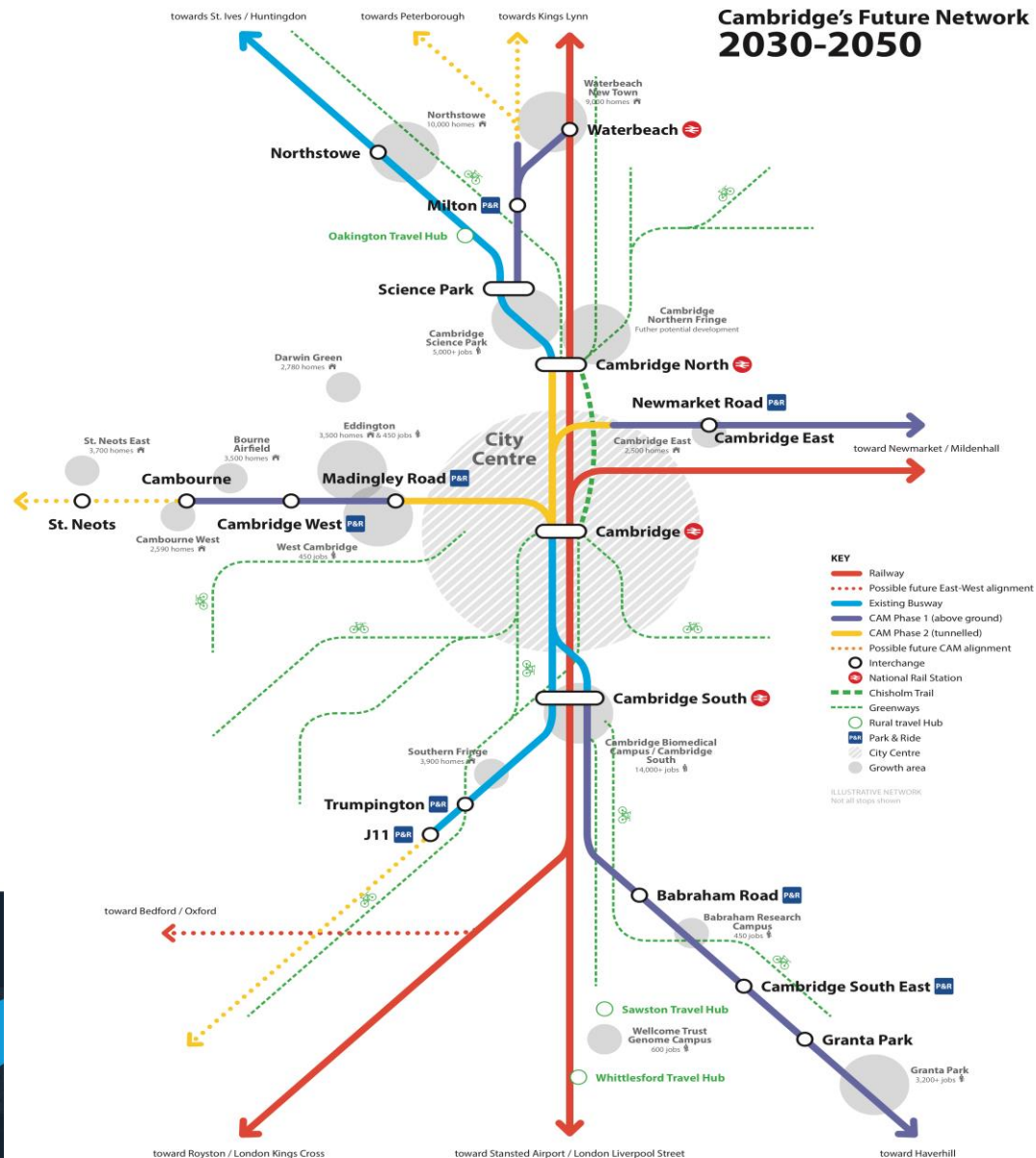


GCP Future Network

CAM phase 1 - viable public transport alternatives to key destinations with segregated cycling and pedestrian routes.

City Access - measures to reduce car reliance, free up road space and run better public transport services.

Cycling - Madingley Road and Comberton Greenway



Scheme Development – Next Steps (Subject to Executive Board approval)

Environmental Impact Assessment

- Agree Scope as immediate priority
- Ongoing data collection
- Refinement of design and mitigation

Consultation

- Selected stakeholders before local elections
- Public Consultation and wider stakeholders after local elections

Submit Transport and Works Act Order

- December 2020
- Timing thereafter depends on DfT and Planning Inspectorate
- Aim to open late 2024

Questions





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