



**GREATER
CAMBRIDGE
PARTNERSHIP**

Growing and sharing prosperity
— Delivering our City Deal —



Cambourne to Cambridge Public Transport Route

14 November 2018



Key City Deal Commitment

- 10-15% reduction in vehicles from 2011 figure
- Equivalent to a 24% reduction today
- Continued growth increases the challenge

CPIER Recommendation #7

A package of transport and other infrastructure projects to alleviate the growing pains of Greater Cambridge should be considered the single most important infrastructure priority [...] in the short to medium term.

Strategic Case



8,000 new homes
by 2031



Generating 44,000
new jobs



1 million houses in the
Oxford to Cambridge arc by 2050



Need to provide scheme to
connect homes to employment
and services



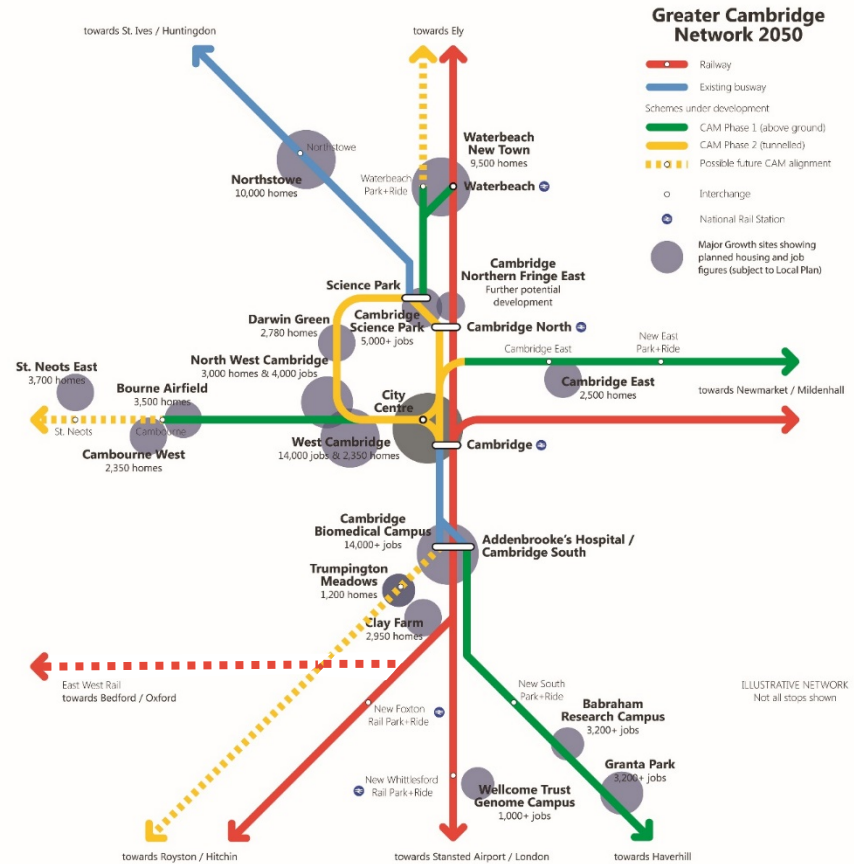
Increasing population has led to
congestion along the A428/A1303
making it unsustainable



More demand for a modal shift
from cars to public transport,
walking and cycling

A world class public transport system for Greater Cambridge will:

- Offer a genuinely competitive alternative to the car
- Quicker, reliable and, where possible, segregated from other vehicles
- Integrate bus, rail, mass transit, walking and cycling both physically and through timetabling, ticketing, and information
- Focus on better serving employment clusters outside the city centre, with a wider journey to work geography
- Be feasible to deliver, and can be sustained



Cambridgeshire & Peterborough Combined Authority

The Cambourne to Cambridge scheme **must align with CAM proposals** and be future-proofed



30 January 2018

Cambridgeshire and Peterborough Combined Authority agrees development of the Cambridgeshire Autonomous Metro (CAM).



8 February 2018

GCP formally adopts CAM



May 2018

Combined Authority requests halt to work and independent review



31 October 2018

Combined Authority Review evidence confirms off-road as optimal solution. CA Board agrees scheme to advance at pace. Confirms route as essential first phase of CAM



January 2019

Combined Authority Board will review the Strategic Outline Business Case for the CA Metro, prepared by consultants Steer

Project elements

Phase 1

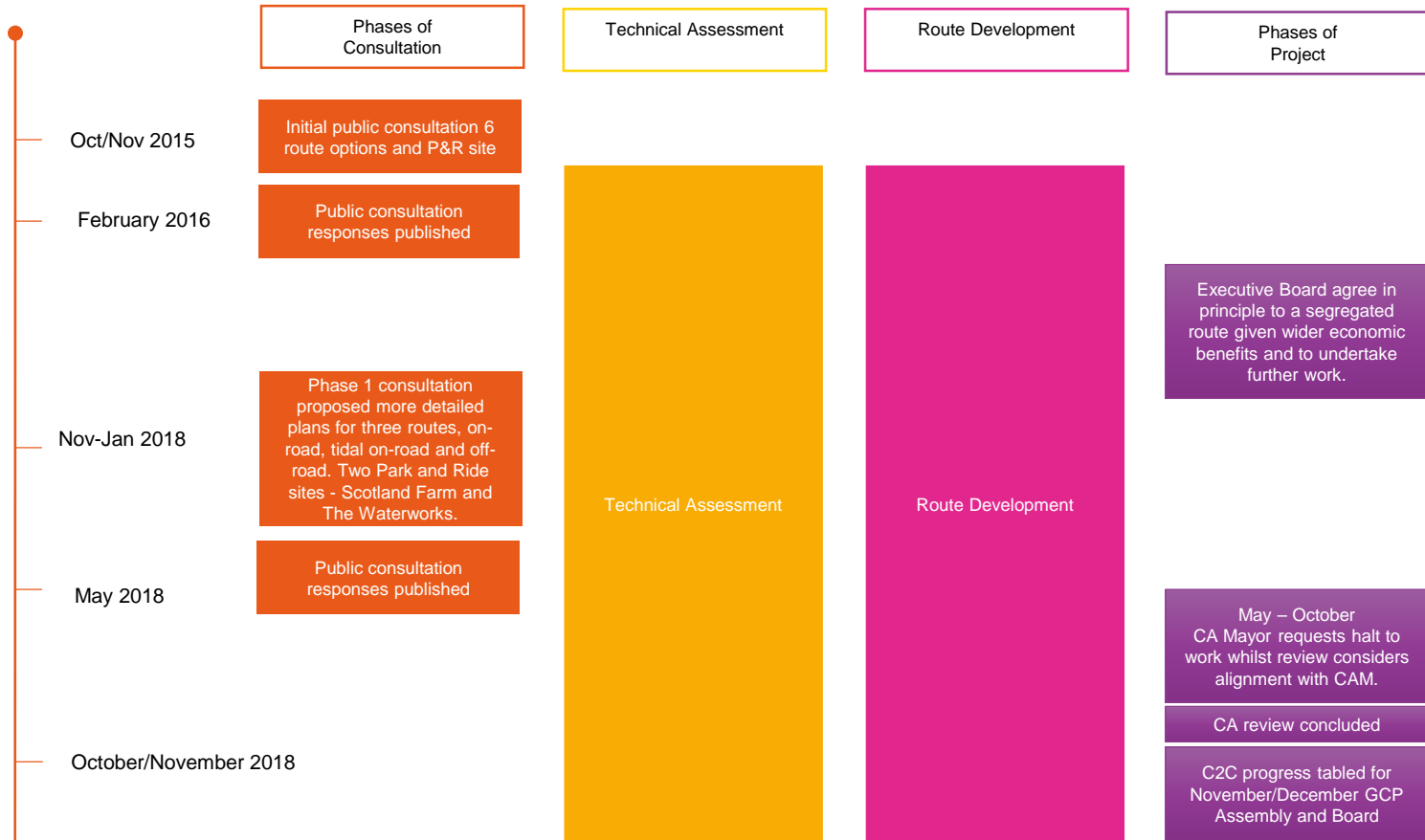
East from
Madingley Mulch
roundabout to
Cambridge city –
prioritised as a key
area of congestion.

Phase 2

West from
Madingley Mulch
roundabout, via
P&R site, to Bourn
Airfield and
continuing to
Cambourne

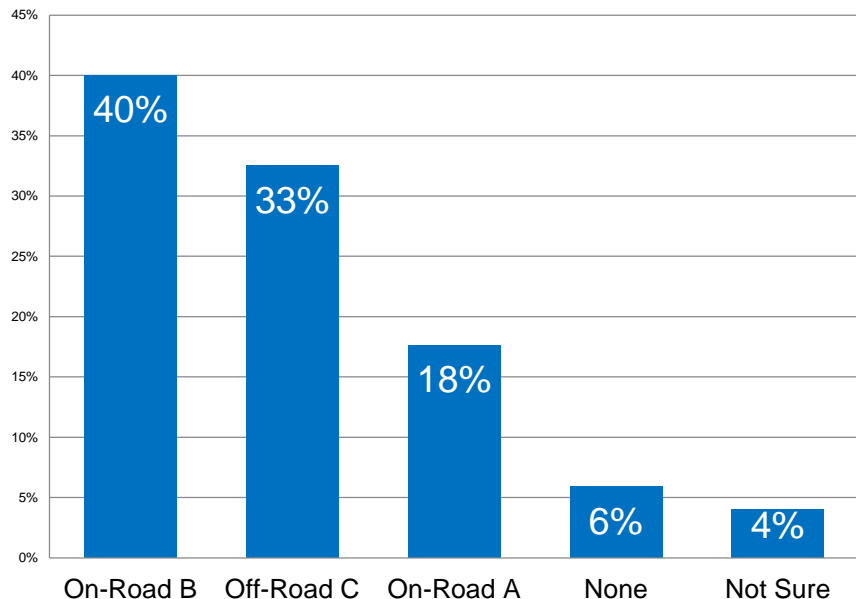
New Park & Ride site at Waterworks or
Scotland Farm

Progress



Public Consultation Results

Q. Please indicate which overall route would be your preferred choice?



2,049 complete responses

Off-Road Option
This off-line route option appears to be sufficiently distanced from designated sites and therefore unlikely to have any adverse impact on these.

On-Road Option
Options A and B are located in close proximity to this (Madingley Wood SSSI) nationally designated site and proposals could have an adverse impact, through direct and indirect effects, on the notified features of the ancient woodland.

Natural England Consultation Response

Off-Road Option
We consider that the harm associated with either of the options for Route C could be minimised or avoided subject to a robust mitigation strategy.

On-Road Option
The proposal by reason of the proximity to the cemetery and loss of verge would result in irreversible, adverse impacts upon the approach, setting and layout of the cemetery site.

Historic England Consultation Response



Jo Baker

Mott MacDonald

C2C Project Director



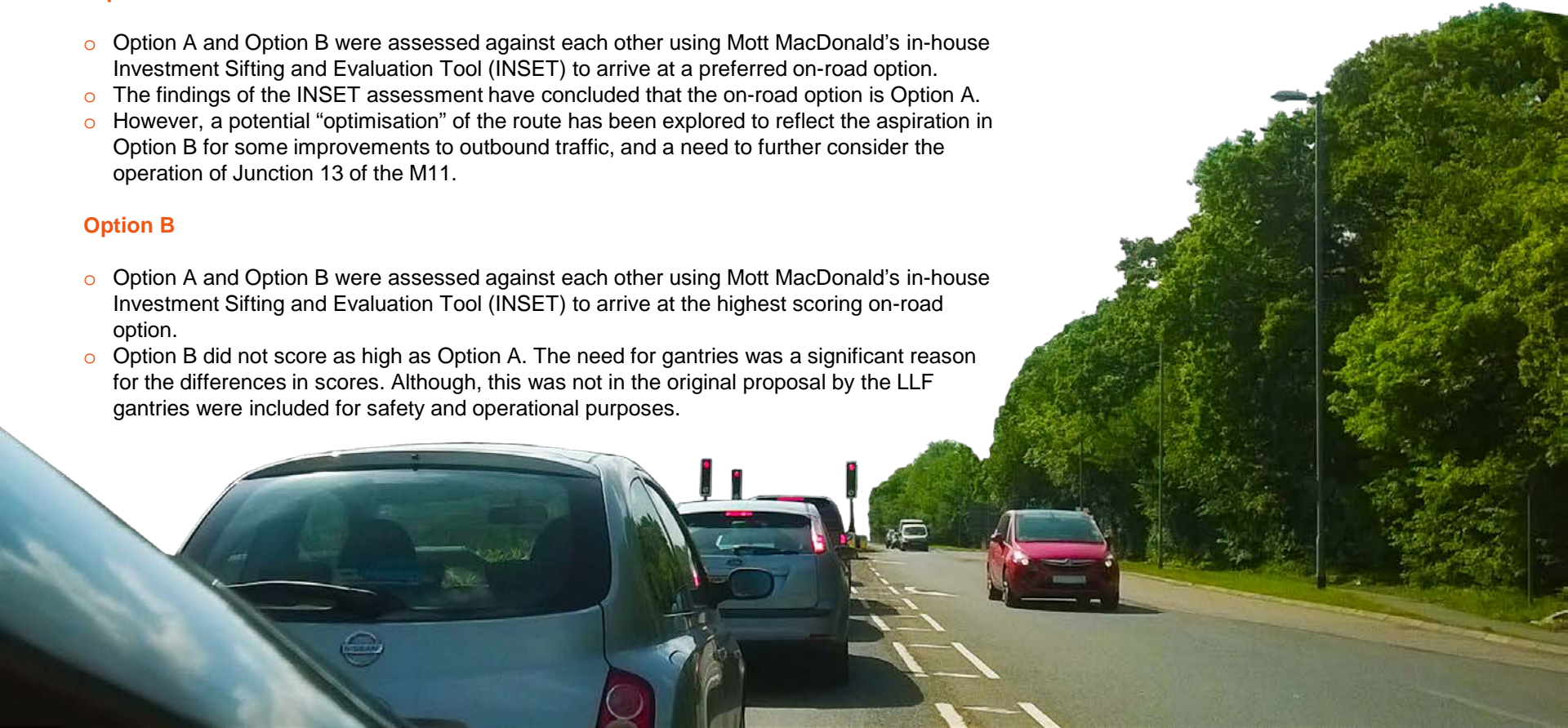
Strategic and Technical Assessment – On road

Option A

- Option A and Option B were assessed against each other using Mott MacDonald's in-house Investment Sifting and Evaluation Tool (INSET) to arrive at a preferred on-road option.
- The findings of the INSET assessment have concluded that the on-road option is Option A.
- However, a potential “optimisation” of the route has been explored to reflect the aspiration in Option B for some improvements to outbound traffic, and a need to further consider the operation of Junction 13 of the M11.

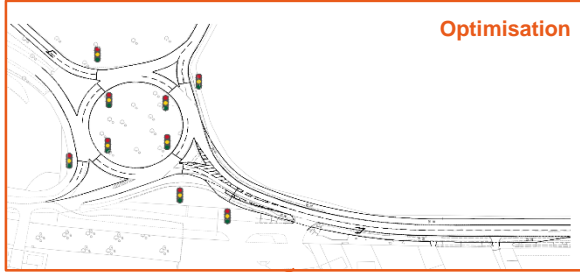
Option B

- Option A and Option B were assessed against each other using Mott MacDonald's in-house Investment Sifting and Evaluation Tool (INSET) to arrive at the highest scoring on-road option.
- Option B did not score as high as Option A. The need for gantries was a significant reason for the differences in scores. Although, this was not in the original proposal by the LLF gantries were included for safety and operational purposes.



One of the main outcomes of the consultation was the development of an “Optimised” on-road option. This would include both inbound and outbound public transport priority, without the need for gantry structures and within the highway boundary.

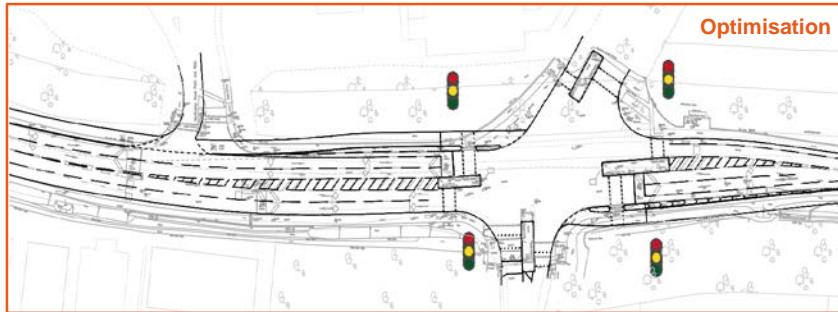
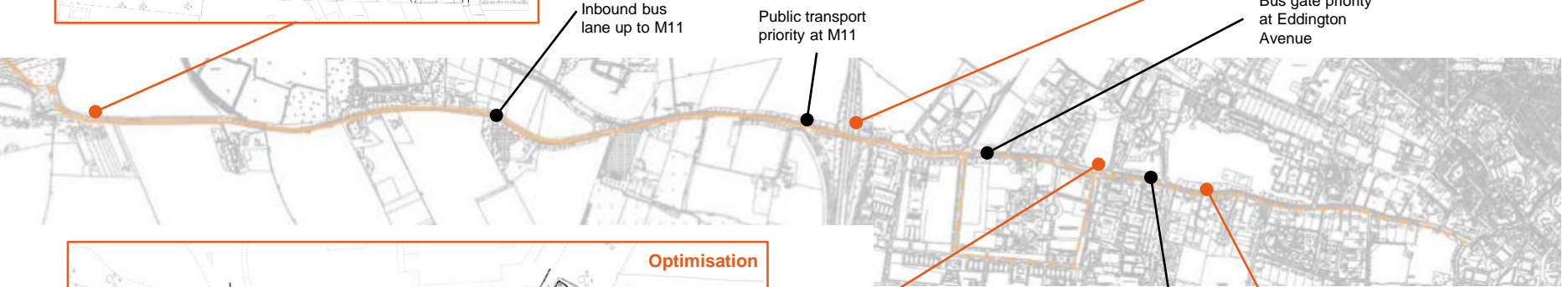
Optimised On-Road Option



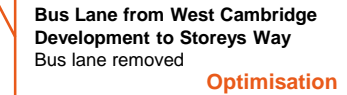
Optimisation of Madingley Mulch Roundabout
Carriageway Widening for 200m of west bound bus lane added.



Optimisation of M11 Junction 13
Change to M11 to allow two right turn lanes from off-slip



High Cross Junction
Park and Ride access relocated to Eddington Avenue, additional eastbound and westbound bus lane and bus gate at approach to junction.



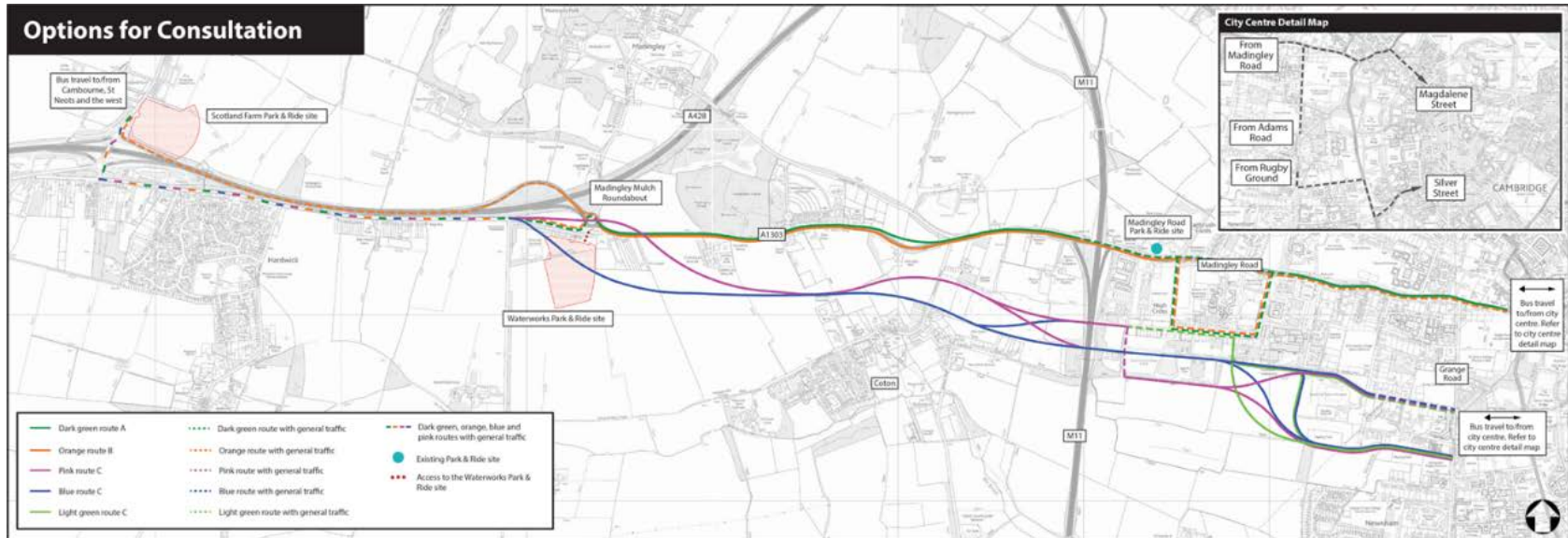
Bus Lane from West Cambridge Development to Storeys Way
Bus lane removed

Buses share with general traffic from junction with Eddington Avenue / High Cross

Strategic and technical assessment – Off-road

Option C

- Option C was split into the pink, blue and (through West Cambridge) development light green routes. These represented different alignment routes for Option C.
- The route was broken down into five areas and assessed using INSET to arrive at a recommended Specific Route Alignment.
- The recommended off-road specific route alignment is the “Blue” route through Madingley Mulch, and adjacent to Coton village and the light green route through West Cambridge, and the Rugby Ground connection to Grange Road.



Option Assessment

Off-road and On-road options were subject to financial review including wider scheme benefits and BCR.

Level 1 = Conventional Transport Benefits

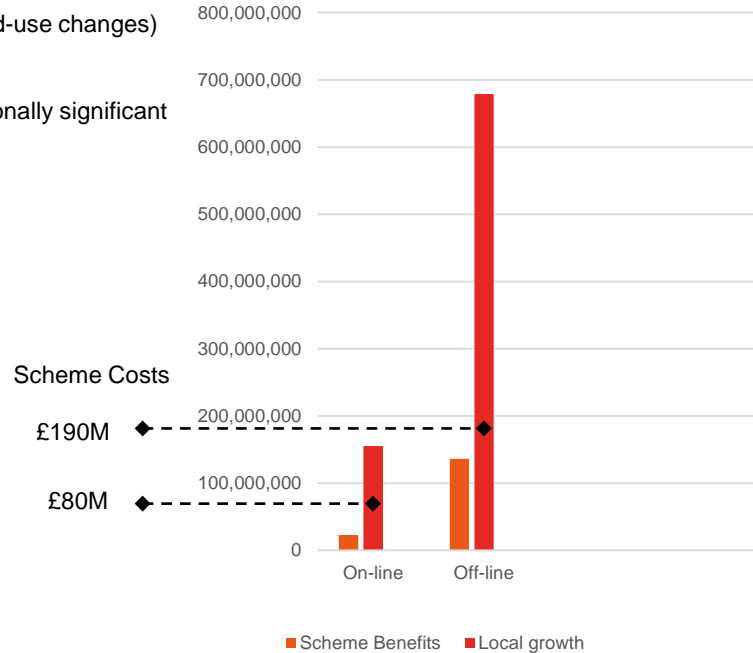
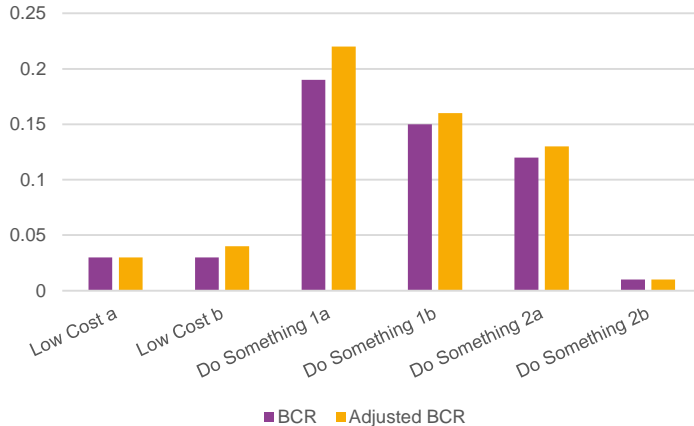
>> Provides BCR

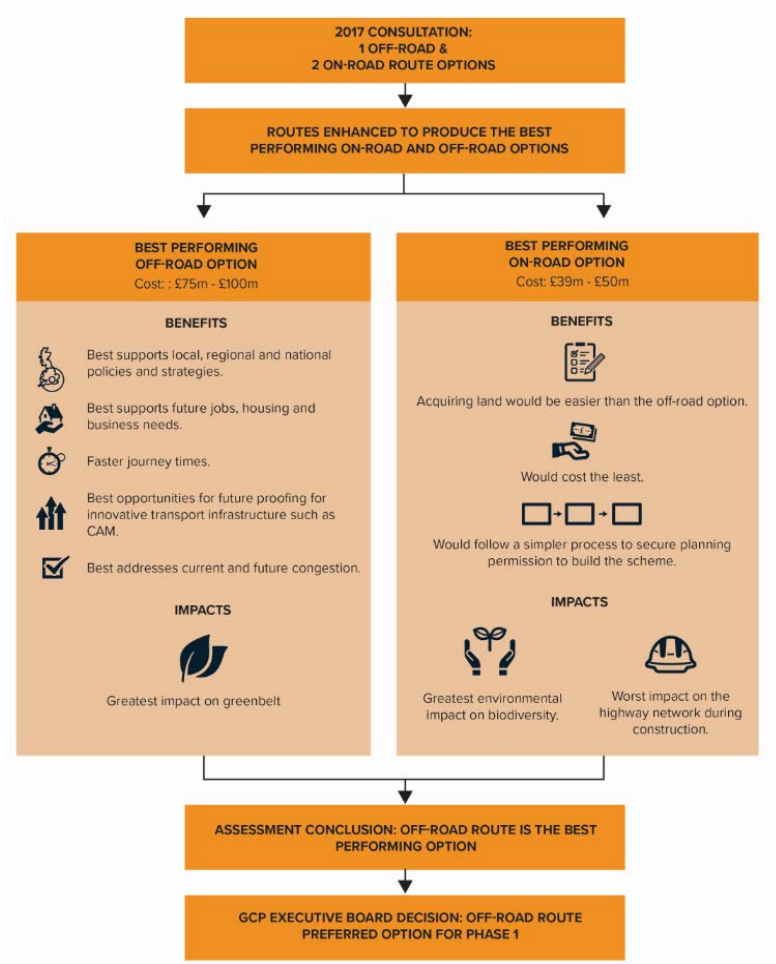
Level 2 = Wider Economic Benefits related to transport scheme (i.e. not land-use changes)

>> Provides Adjusted BCR

Level 3 = Wider Economic Benefits associated with land-use changes. Nationally significant

>> Provides Local Growth Benefits





Option Assessment results

Multi-criteria assessment tool results

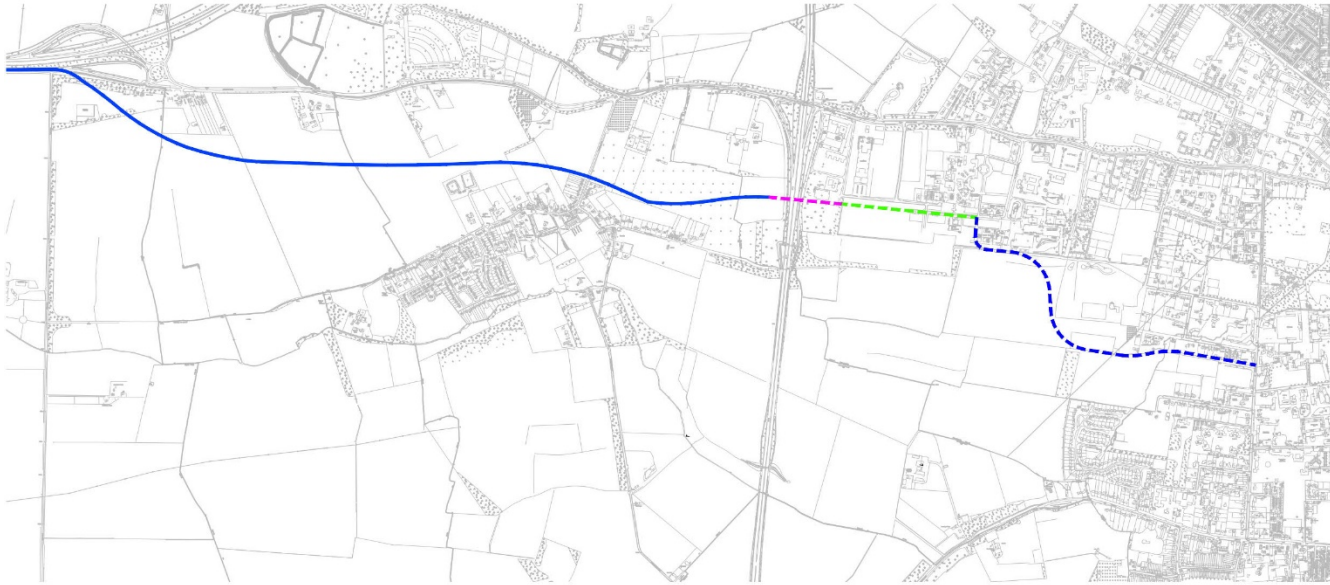
Key findings from the assessment Off-Road

- Aligns better with transport policy
- More reliable journey
- Less disruption to existing roads
- Future proofing – Aligns better with aspiration for CAM (Cambridge Autonomous Metro)
- Better in terms of heritage and biodiversity

Key findings from the assessment On-Road

- Has less impact on green belt
- Lower cost

Specific Route Alignment



Project team continues to welcome views and contributions from stakeholders throughout the continuing development of plans for Phase 1 of the route, in conjunction with Phase 2 consultation and planning, working to deliver a single route option for GCP Board decision in late 2019.

Next Steps

Jan 19

Strategic Outline
Business Case for
the CAM Metro to
Combined Authority
Board

Feb 19

Phase 2 public
consultation - tbc
pending December
Board decision

Mar-Oct 19


Ongoing technical
assessment and
route development

Consultation results
published and
considered in
ongoing planning.
Assessment and
mitigation design
continues.

Oct 19

Specific Route
Alignment Decision.

Present a final
option in the outline
business case.
Expected late 2019.

The slide features a white background with two large orange triangles. One triangle is in the top-left corner, and the other is in the bottom-right corner. The text "Q & A" is centered in the middle of the slide.

Q & A

1. LLF Technical Group

The LLF technical Group is very disappointed with Mott McDonald's recommendation (report dated November 2018) in favour of an off-road bus-road solution on this alignment. After having spent many hours with Mott MacDonald, we note that virtually none of our concerns have been addressed.

This scheme still does not stand up to scrutiny:

It offers poorer connectivity to, and longer onward journey times into, the City than an on-road alignment

(ii) It offers poorer connectivity to the Cambridge Biomedical Campus and the Science Park than an on-road alignment

(iii) It costs £154 million to construct; between £2-47* million for on-road alignment

(iv) It has a Benefit Cost Ratio of 0.17- 0.2 - one tenth of what is required for public sector investments

Will the Transport Director please explain why a scheme with such major deficiencies is still preferred?

Will he agree to work with the LLF to address our concerns, and be open to developing alternative off-road and on-road solutions?

2. Steve Jones, Convenor of the Coalition of 23 Parish Council:

Why does GCP continue to push an off-road busway scheme which, at huge cost, will not deliver the people Cambourne and the proposed Bourn Airfield to where they want to go. We in the Coalition have undertaken extensive traffic surveys which tell us that only a very small proportion of people can possibly benefit.

What do you propose to do for the majority of residents of Greater Cambourne who will still need to drive to work?

What modal split between cars and buses have you assumed in your analysis of demand to justify the cost of this busway?

3. Philip Allen, District Councillor Comberton and Harston Ward:

Given that the Mayor and the Combined Authority, as strategic transport authority, have placed the condition on the C2C that it is CAM compliant, will the GCP now work up fully a comparative CAM compliant option of a northern route including the Girton interchange?

4.1. Stephen Coates, Save West Fields

It is very clear that the route from Grange Road to Drummer Street simply does not work. Given that no evidence has been provided, how can you proceed? We previously saw documents talking about a bus interchange on Queen's Green, the Backs. How can Officers seriously claim such an interchange would not be built if this plan goes ahead?

4.2. Ellen Khmelnitski, Gough way Residents' Association

Grange Road is not where people want to go and it is too narrow and too congested without Cambourne buses. You must know very well that Silver St is even narrower and that modest gains in journey times will be completely lost on the way to the City Centre. Why are you avoiding clarifying this crucial problem?

5. James Littlewood, Cambridge CPPF

With reference to the Arup report (Appendix 2, page 10 JA papers), there is a cursory rejection of the alternative off-road proposal put forward by us, the LLF and others - that it is less attractive in terms of programme, planning and environmental constraints, as well as journey time. There is no information provided which decision makers can refer to in order come to a position, for example:

- Has the fact that Girton will undergo significant upgrade to become four-ways as a result of it becoming part of the Oxford-Cambridge expressway, and incorporating the CAM into this work would enable pooling of resources (eg Highways Agency), been considered in the assessment?
- This route would provide access to other communities (not just those from the West) who as a result would have access to the CAM and reduced journey times. ie others would benefit. Has this been considered as part of the assessment?
- There may be no requirement to cross the M11 and the length is the same or shorter than the preferred option. Has this been incorporated into the assessment?
- What environmental assessments have been undertaken to reach the conclusion in the assessment?

No information or evidence has been provided to date. Can the Assembly ask that this information is made available to both the public and the Board before they make a decision to discount this option?

6. Pauline Joslin, Hardwick Parish Council:

Will the Greenways Comberton to Grange Rd route be aligned/adjacent to the express bus route?

7. Markus Gehring, Ward Councillor, Newnham:

In the 2015 consultation: almost 70% of respondents preferred an on-road bus lane in bound from Madingley Mulch roundabout into the city centre

In the Dec 2017-Jan 2018 consultation:

40% of respondents preferred Option B, an On-Road tidal Public Transport lane

40% of respondents preferred Option A, an On-Road tidal eastbound Public Transport lane”

= 80% preference for on-road

In Mar 2018, the Mott MacDonald report concludes: No clear preference was shown.

How can Mott MacDonald conclude this? The latest plans have been developed with no changes despite such a clear message.

What is the purpose of public consultation, and what value do GCP place on it?

8. Stephen Coates, Save the West Fields

Why does the preferred alignment include a hugely destructive leg from the West Cambridge Site to Grange Road, harming the West Fields, when the metro scheme would have a tunnel from the West Cambridge Site into town? Why do so much damage for something that would not be required if the metro goes ahead?

Why do the documents claim that the Rifle Range leg would be temporary when officers have told Save the West Fields this week it would be permanent? If it is temporary why not run the buses down Madingley Road until the metro is built?

It is clear that there is a clear legal challenge in choosing the Rifle Range leg based on harm to the purposes of the Greenbelt. Why are Assembly and Board members being asked to make a decision without proper disclosure of the legal evidence this route is workable. The claim that it increases pedestrian and cycle access does not work when you consider that the Comberton Greenways project can deliver the same benefits without a new road?

8.1. Mark Abbott, Coton Parish Council:

Of all the possible routes and alignments, GCP has chosen the one that inflicts the most harm to the residential houses, school and landscape setting of Coton Village. Why have you done this?

8.2. James Littlewood, Cambridge CPPF:

The Arup and officers reports refer to avoiding adverse impacts in the “West Fields” and cotton village. However the greatest impact of significance would actually be on Madingley Hill (ie the section between Madingley Mulch and the M11). This does not seem to be reflected in the summary assessment of Route Options, which scores Route A as “positive” in this respect. Nor is it reflected in the proposed mitigation options – for which it appears that only the section next to the village would be mitigated.

Please can the Assembly ask why the length of route with potentially the greatest landscape impact, which is covenanted by the National Trust, does not appear to register in the constraints or mitigation?

8.3 Ellen Khmelnitski, Gough way Residents' Association:

In Table 4 you claim that the off-road option will have no negative effect on flood risk. How can you be so sure? Is it really possible to build a road 20 m wide in a flood plane and maintain that it will not increase flood risk?

8.4 Pauline Joslin, Hardwick Parish Council:

Has the GCP route given due consideration to any stray bullets from Barton Rifle Range?

9 Philip Allen, District Councillor Comberton and Harston Ward:

Given the time it will take for plans for the CAM to be sufficiently advanced and financing found, and the recently adopted new Local Plan for South Cambridgeshire that requires high-quality public transport from Cambourne to Cambridge, quite possibly in a shorter time frame than the CAM could bring, can the GCP put in a temporary inbound bus lane on Madingley Hill as an interim measure?

10.1 Stephen Coates, Save West Fields:

Why has the GCP chosen a route through the West Fields which would assist St John's and Jesus' development plans? St John's said in its Local Plan appeal:

“It is entirely appropriate that any proposed development at Grange Farm should exploit the opportunity [of the Cambourne to Cambridge busway] to connect into the corridor and better enhance its sustainable qualities. The plan is therefore illustrative but acknowledges that a route through the St John's College land at Grange Farm enables connectivity to new proposed residential development on the edge of the City”

By choosing to cross Jesus College and St John's College land this route assists their development plans. The GCP has said that it needs some developer contributions to pay for the busway - why should we not assume the GCP has decided to put “a temporary route” across the West Fields to make development easier in the future. We already have documents where some of the landowners have said development of the West Fields could part pay for the busway.

10.2 Ellen Khmelnitski, Gough way Residents' Association:

In Table 8 you claim that the developer of the scheme will contribute £38,000,000. It's a huge sum of money. Where does it come from?