

**Welcome to the
Oxford to Cambridge
Expressway
Strategic Study
Stakeholder Reference Group
7 July 2016**

AGENDA

Item	Topic	Lead	Start Time
1	Networking Opportunity	All	10:00
2	Welcome Introductions Agenda	Philip	10:30
3	Strategic Studies update	Paul	10:35
4	A1 East of England Strategic Study – from Long List to short list	Kieron	10:45
5	Breakout session to review/comment on short listed options	All	11:15
6	Feedback and Comments	All	12:00
7	Next steps	Paul	12:15
8	Lunch / Networking Opportunity	All	12:30
9	Welcome to those joining the afternoon session Introductions Agenda	Alan	13:00
10	Update on RIS1 A428 Black Cat to Caxton Gibbet and other schemes within the study vicinity	Dave/ Alan	13:05
11	Strategic Studies update	Paul	13:35
12	Oxford to Cambridge Expressway Strategic Study – from long list to short list	Adrian	13:45
13	Breakout session to review/comment on short listed options	All	14:15
14	Feedback and Comments	All	15:00
15	Next Steps	Paul	15:15
16	Event closure	Paul	15:30

A428 Black Cat to Caxton Gibbet improvement scheme

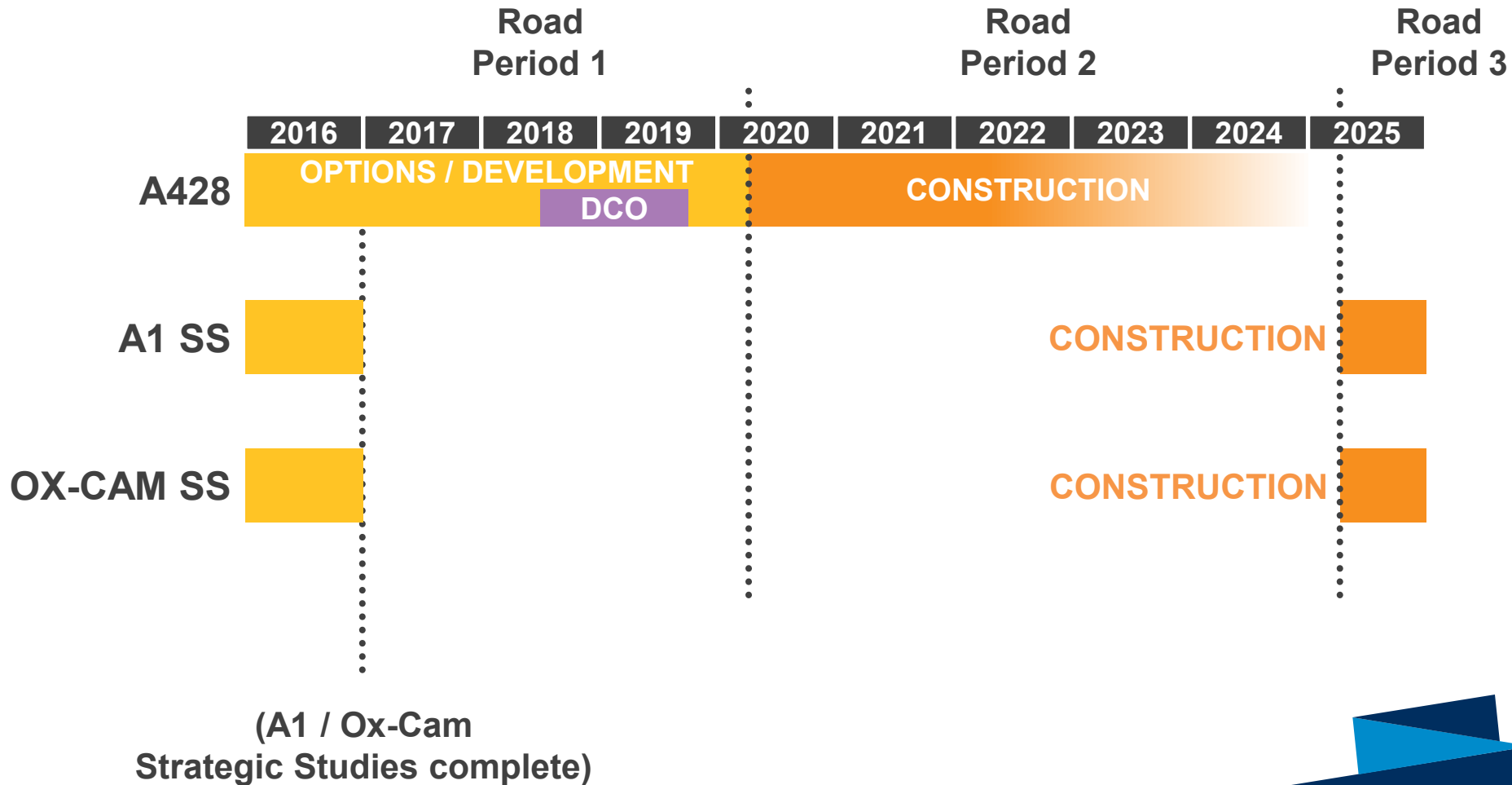
**A1 East of England and Oxford to Cambridge Expressway Study
Stakeholder Reference Group
7th July 2016**

Introductions / Agenda

- Andrew Kelly, Highways England, A428 Project Manager
- Ian Cook, Jacobs, A428 Project Manager

- A428-Strategic Studies Timing & Interfaces
- Background, Context & Challenges
- Progress to date
- Next Steps
- Questions

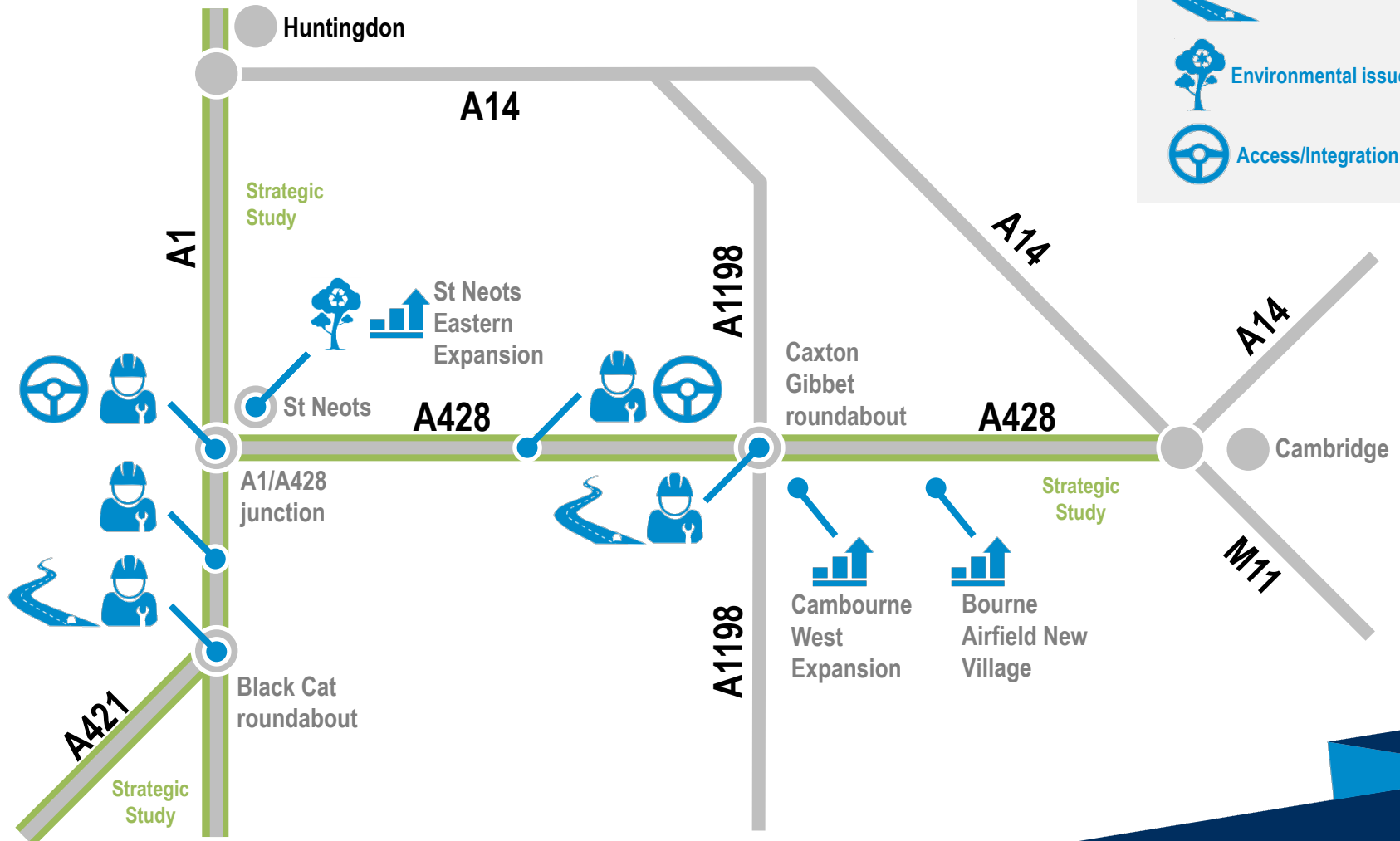
Timing & Interfaces



A1-A421 Black Cat Junction



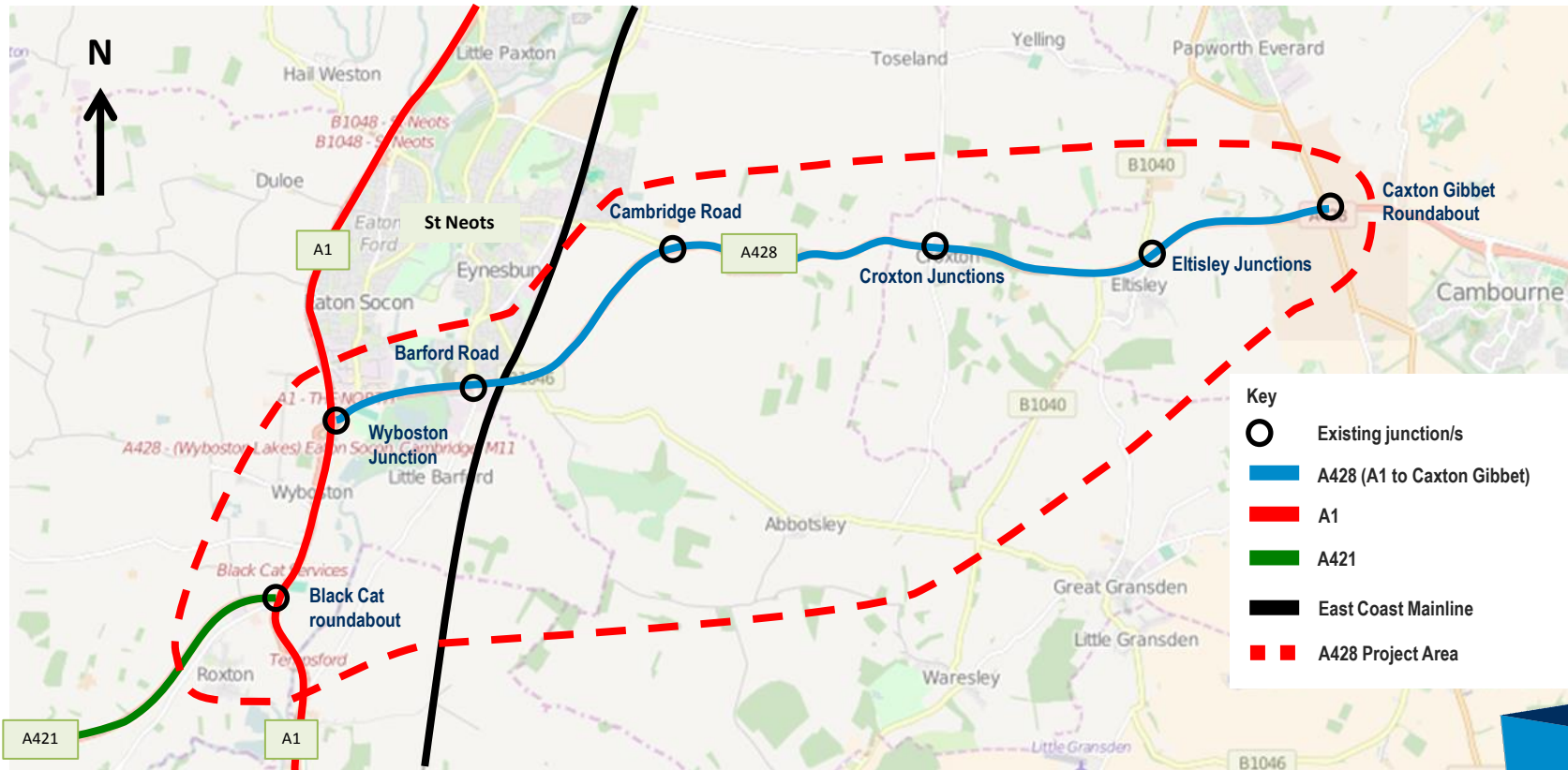
Challenges



- Planned future development
- Safety/Serviceability issues
- Congestion and delays
- Environmental issues
- Access/Integration issues

Road Investment Strategy Announcement

“improvement of the A428 near St Neots, linking the A421 to Milton Keynes with the existing dual carriageway section of the A428 to Cambridge, creating an Expressway standard link between the two cities via Bedford. The scheme is expected to include significant improvements to the Black Cat roundabout, where the A1 currently meets the A421.” Road Investment Strategy



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Progress To Date

April 2014



Previous route strategy studies completed

December 2014 - April 2015



Road Investment Strategy (RIS) published and commissioning of Strategy, Shaping and Prioritisation works

May 2015 – February 2016



Data gathering/review, scheme development, strategic outline business case development and early stakeholder events

March 2016 – to date



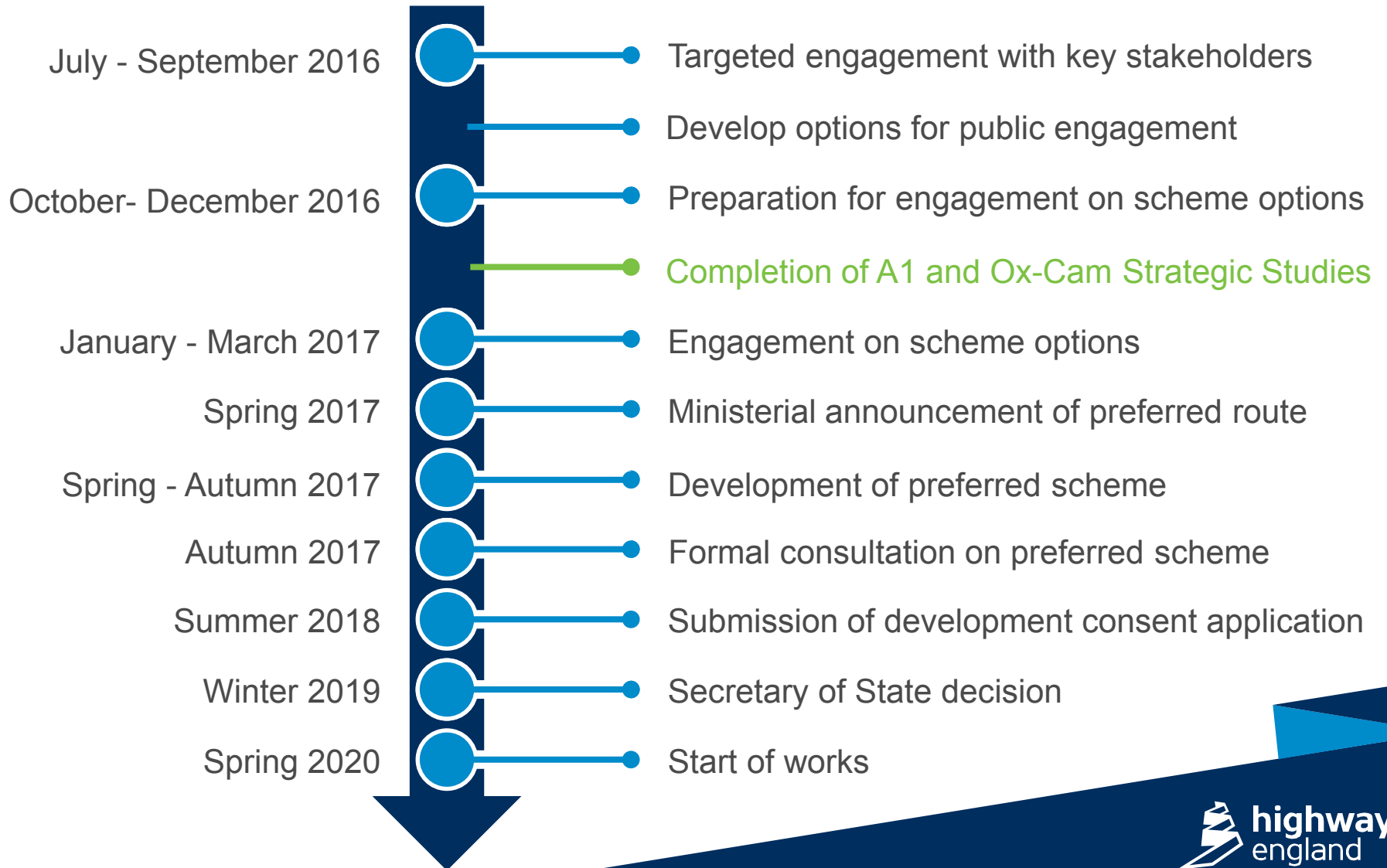
Options phase commenced and initiation of Options Identification

Initial engagement with key stakeholders

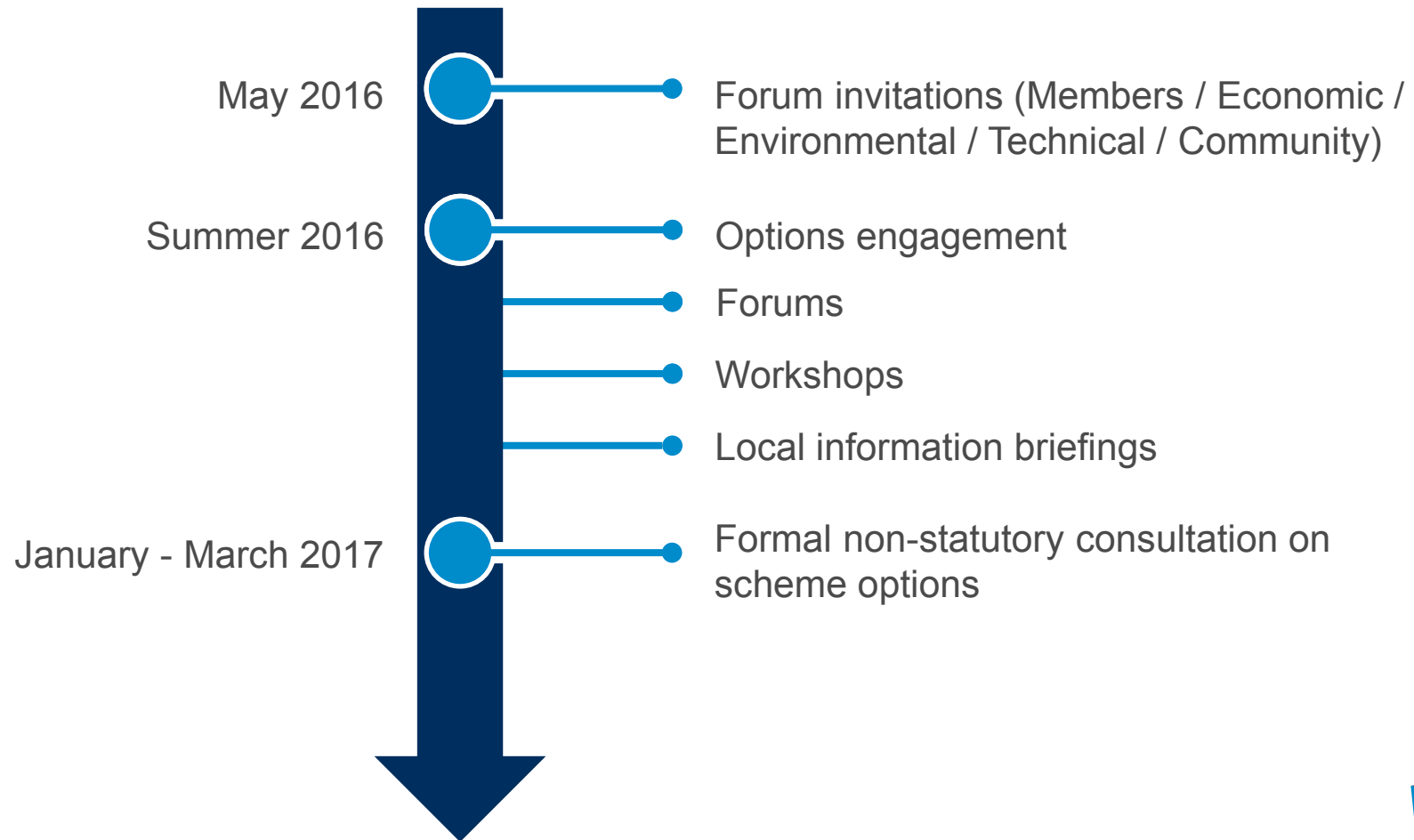
Surveys (incl. traffic & environmental surveys)

Traffic model development

Next Steps



Options Engagement Timeline



Other RIS 1 schemes within the vicinity of the study corridors

Highways England Schemes:

- A1 J6-8 Smart Motorway: Start of Works 2019
- A14 Huntingdon to Cambridge: Start of Works by December 2016
- A34 Technology Improvement: Start of Works 2017
- A34 Oxford Junction Improvement: Start of Works 2017
- A5 to M1 Link: Open for Traffic end of June 2017
- M11 J8-14 Technology: Start of Works March 2020

Other:

- A421 to M1 J13 to Milton Keynes (Eagle Farm): Completion subject to funding 2018/19



Department
for Transport

Item 11: Strategic studies update

Stakeholder Reference Group, 7 July 2016



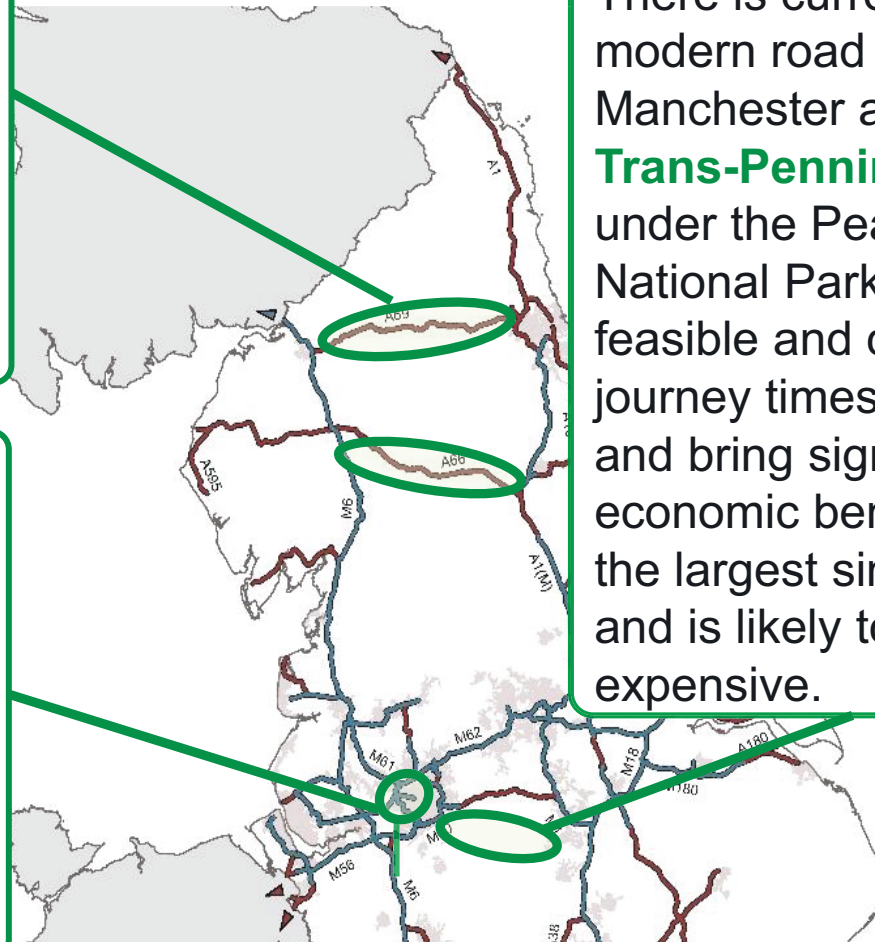


Trans-Pennine connectivity north of Manchester is poor; there is no complete east-west dual carriageway link before Edinburgh. Upgrading **Northern Trans-Pennine** routes, the A66 and A69, could bring significant benefits to freight.

Manchester's North West Quadrant is very congested and near capacity; additional capacity either on the road or nearby could support growth. Multimodal options are being considered to mitigate the environmental challenges.

Final reports published by the end of the year

There is currently no modern road linking Manchester and Sheffield. A **Trans-Pennine Tunnel** under the Peak District National Park is technically feasible and could reduce journey times by 30 minutes and bring significant wider economic benefits. This is the largest single project and is likely to prove very expensive.



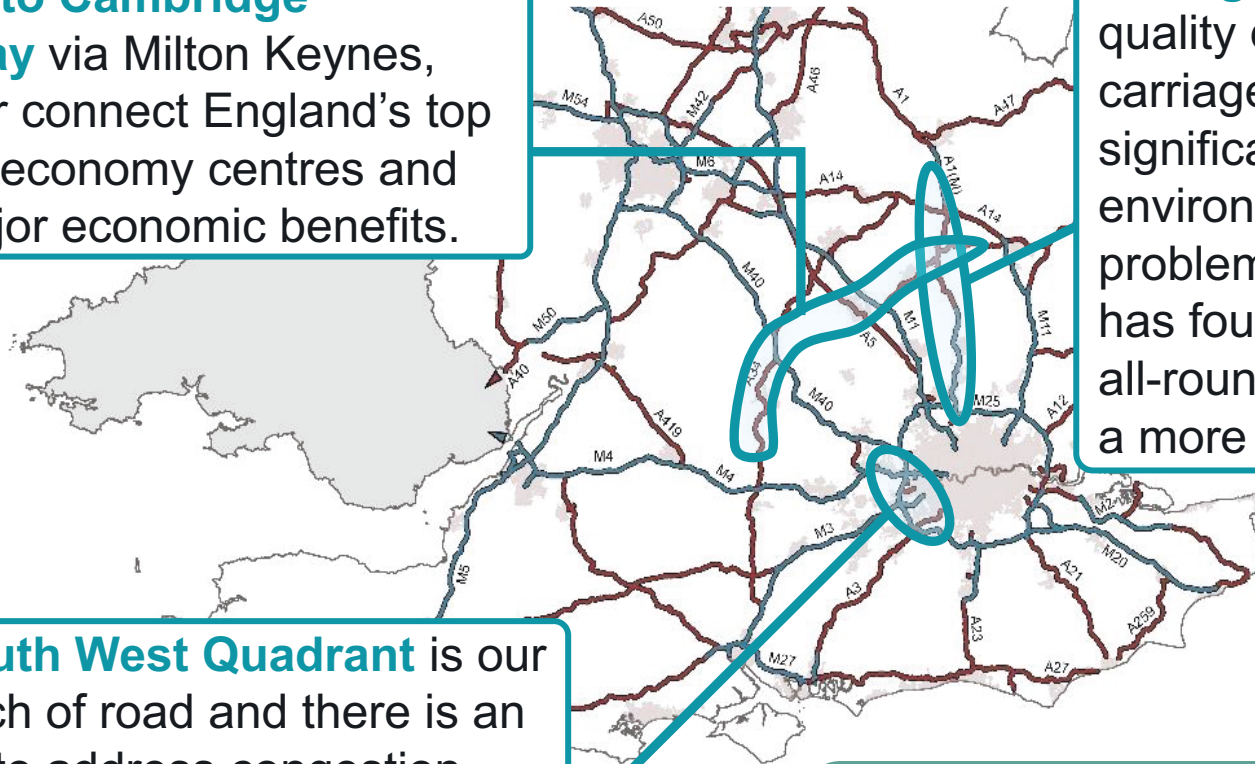


An **Oxford to Cambridge Expressway** via Milton Keynes, could better connect England's top knowledge economy centres and provide major economic benefits.

The **A1 in the East of England** is a poor quality dual carriageway with significant environmental problems. The study has found benefits all-round in providing a more modern link.

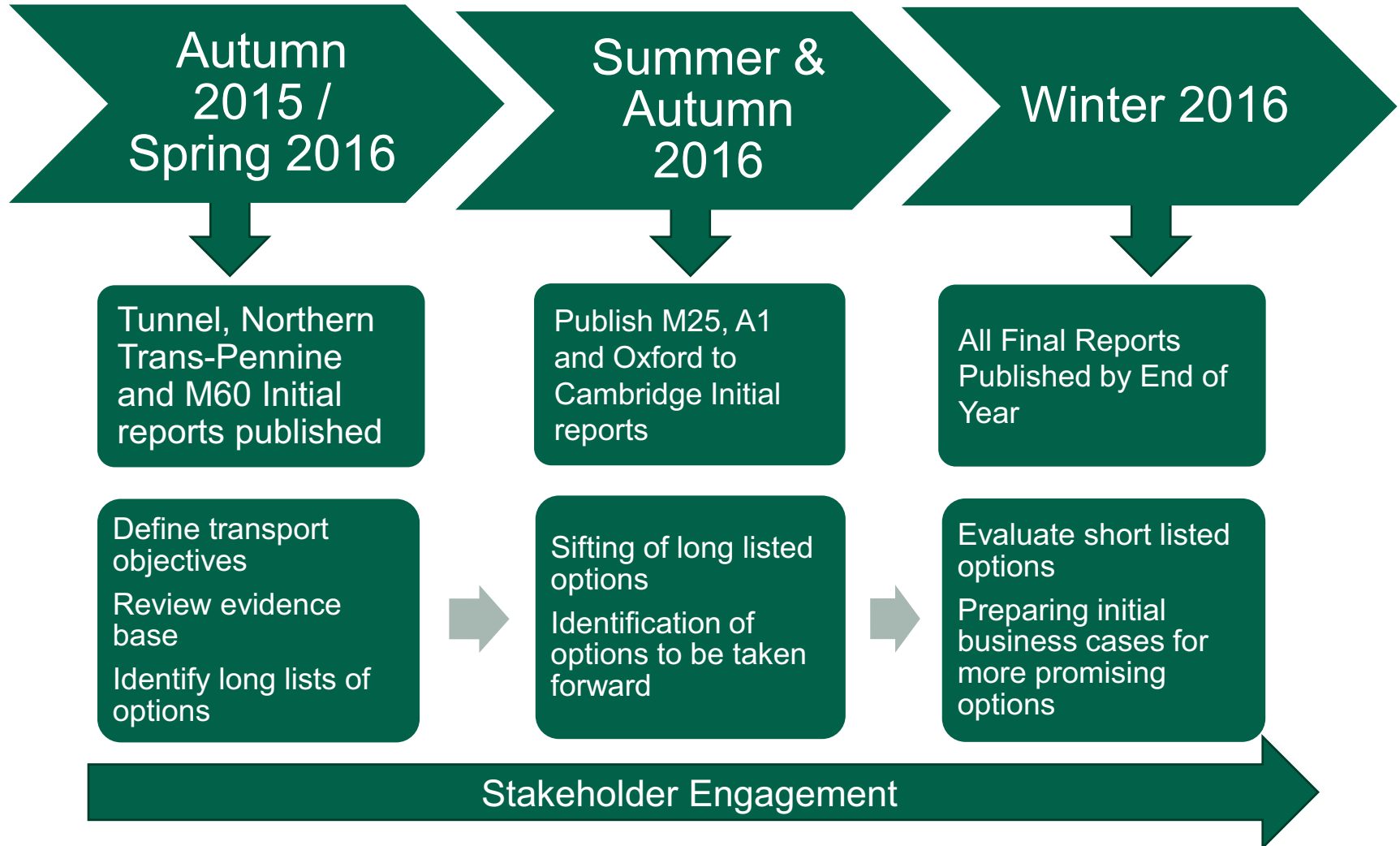
The **M25 South West Quadrant** is our busiest stretch of road and there is an urgent need to address congestion. Introducing extra capacity, multi-modal improvements or demand management would reduce this barrier to growth.

A1 and Oxford to C'bridge final reports published by the end of the year. M25 will report in early 2017.





Strategic Studies timeline - overview





The process of developing RIS2 is underway – evidence is being gathered from many sources

Why

The Road Investment Strategy process enables a more strategic process of setting investment.

Previously, ministers have had to choose from a set of historically-determined options.

Now, it is possible to set the agenda and build up an investment programme from the beginning.

What

There are four parts to the RIS:

- ▶ ***Strategic Vision***
- ▶ ***Investment Plan***
- ▶ ***Performance Specification***
- ▶ ***Statement of Funds Available***

When and how

Process published with Budget 2016:

- ▶ **Research phase** gathers evidence for potential priorities and investments; seeks the views of stakeholders. This is scheduled to last **until the end of 2017**.
- ▶ Formal **negotiations** with Treasury and Highways England would **start in 2018**. This would determine the funding available and set the performance specification.
- ▶ The **RIS will be formally published by March 2020**, with construction starting from 2020

Where are we now

- ▶ **Strategic Studies** are well advanced
- ▶ HE collecting evidence for **Route Strategies** through online mapping tool
- ▶ Process for gathering **evidence** and **stakeholder views** to inform the RIS underway



How do we currently think RIS2 will look?

1

RIS2 has five key aims ...

- a) Economy
- b) Network Capability
- c) Integration
- d) Environment
- e) Safety

2

It seeks to take account of a
changing world ...

- a) Devolution
- b) Growth & Economic
Change
- c) Population Growth &
Demographic Shifts
- d) Environment & Climate
Change
- e) Technology

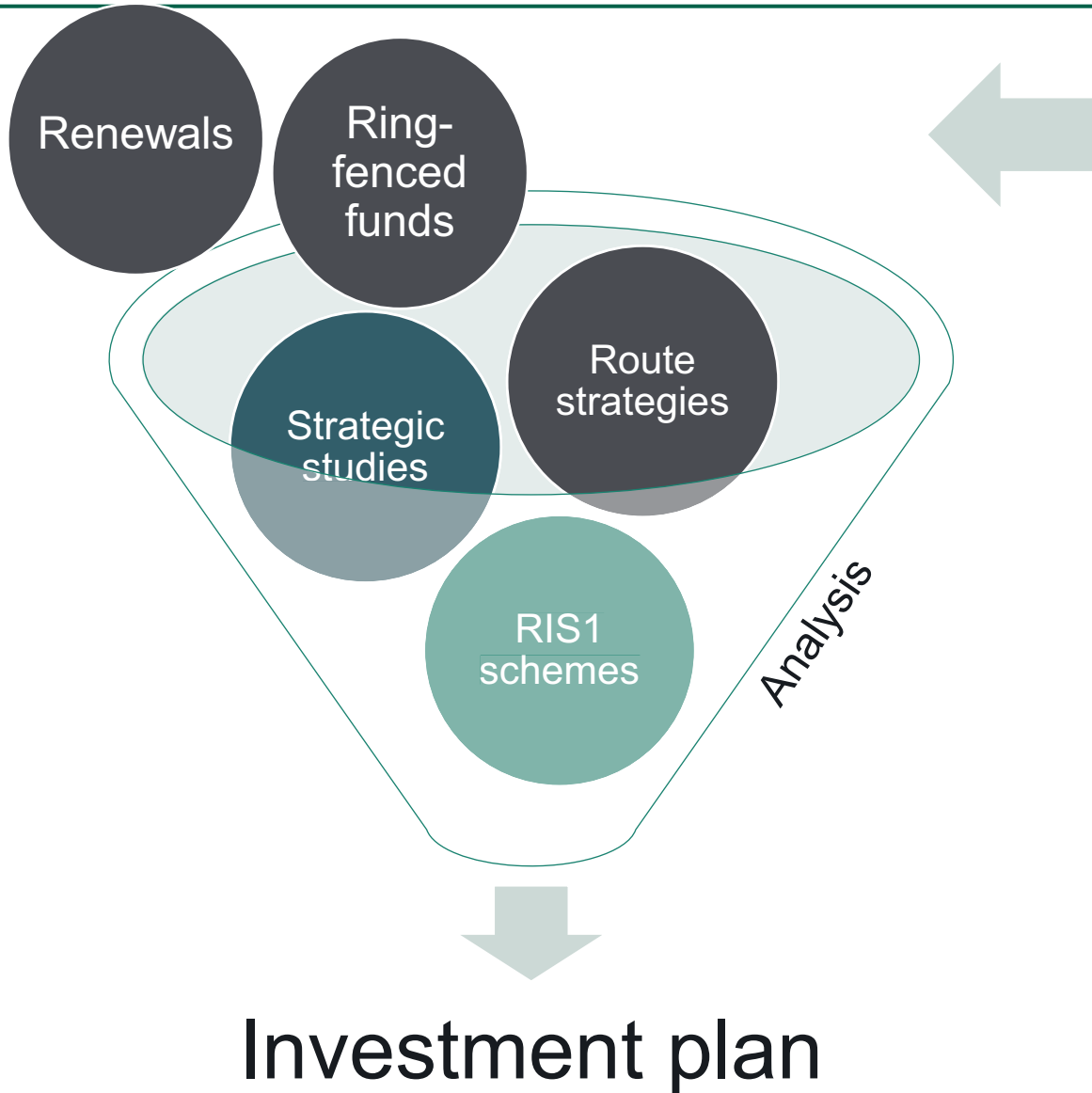
3

And will need to make
decisions about ...

- a) Shape of the Network
- b) Lessons from RIS1
- c) Linking up our work
with the National
Infrastructure
Commission
- d) National Roads Fund



How will the strategic studies be considered in the RIS?



Stakeholder / public engagement





- Queen's speech confirmed that the Commission will have a statutory and independent basis
- The Chancellor asked the commission to: *....make recommendations [to government] to maximise the potential of the Cambridge – Milton Keynes – Oxford corridor as a single, knowledge intensive cluster that competes on the global stage, whilst protecting the area's high quality environment and securing the homes and job the area needs*
- Call for evidence until 6 August
- The expressway strategic study is an input into the NIC study
- Interim report to be published by end of the year, final report 2017



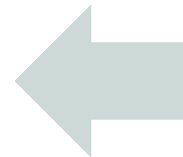


Road Investment Strategy: key dates

Research

- Strategic Studies
- Route Strategies
- Highways England publishes **Strategic Road Network Initial Report** on the state of the network and suggested priorities

Evidence used in drafting RIS2



until the end of 2017

Decision

- Department for Transport produces **Road Investment Strategy**
- Highways England produces **Strategic Business Plan**
- Office of Rail and Road advises Government on efficiency of both

RIS2 finalised and published



between 2018 and 2020


Mobilisation

- Scheme development
- Highways England publishes **Delivery Plan**

1 April 2020 – Road Period 2 begins

Delivery

This is also when the National Roads Fund comes on stream



Item 12: Oxford to Cambridge Expressway Strategic Study

Stakeholder Reference Group

7th July 2016



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BRINCKERHOFF

ch2m



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INTRODUCTION

→ Study Progress

→ Progress since the last SRG on 25th February

→ Option Development

→ Emerging shortlist

→ Next steps

→ Workshop session



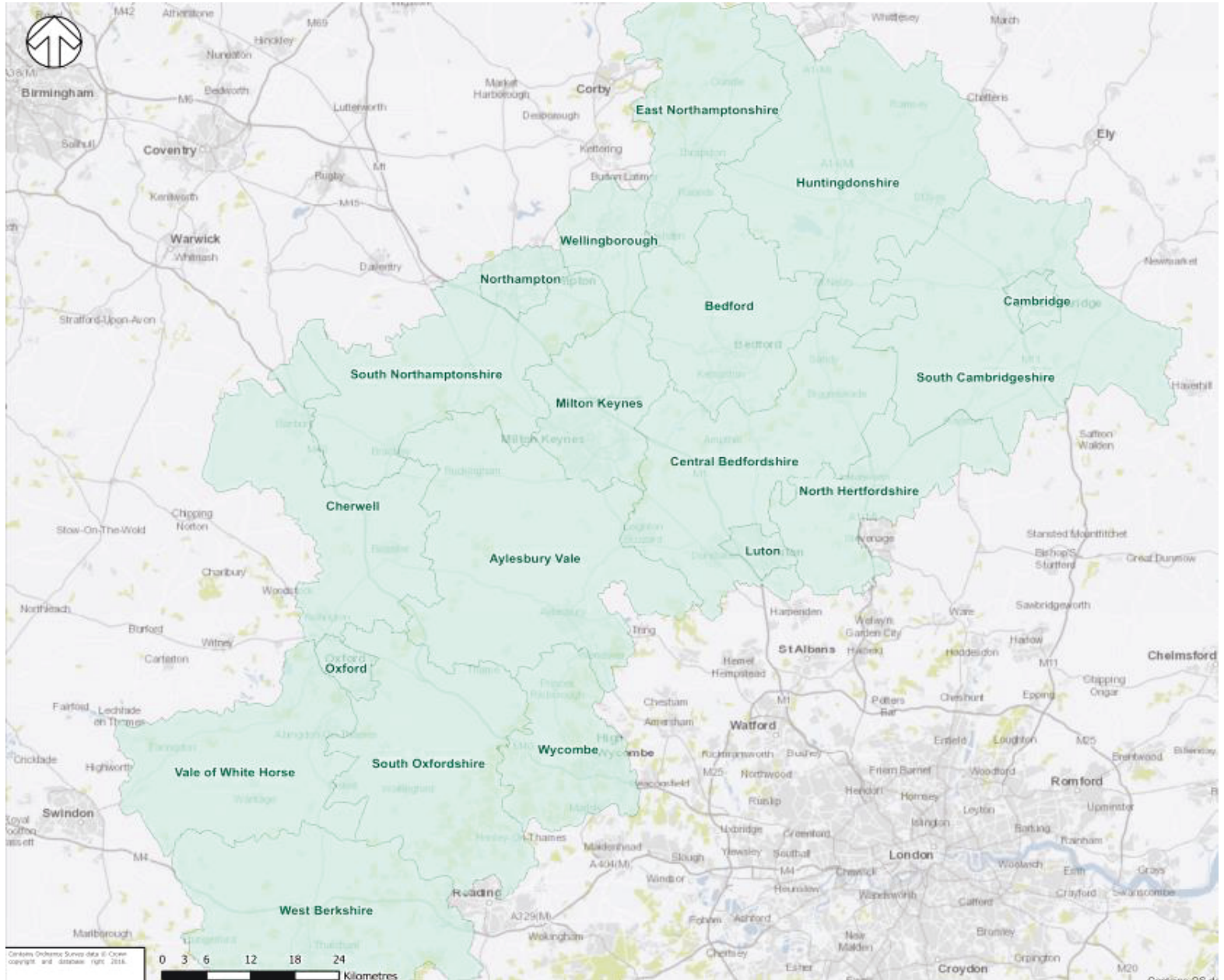
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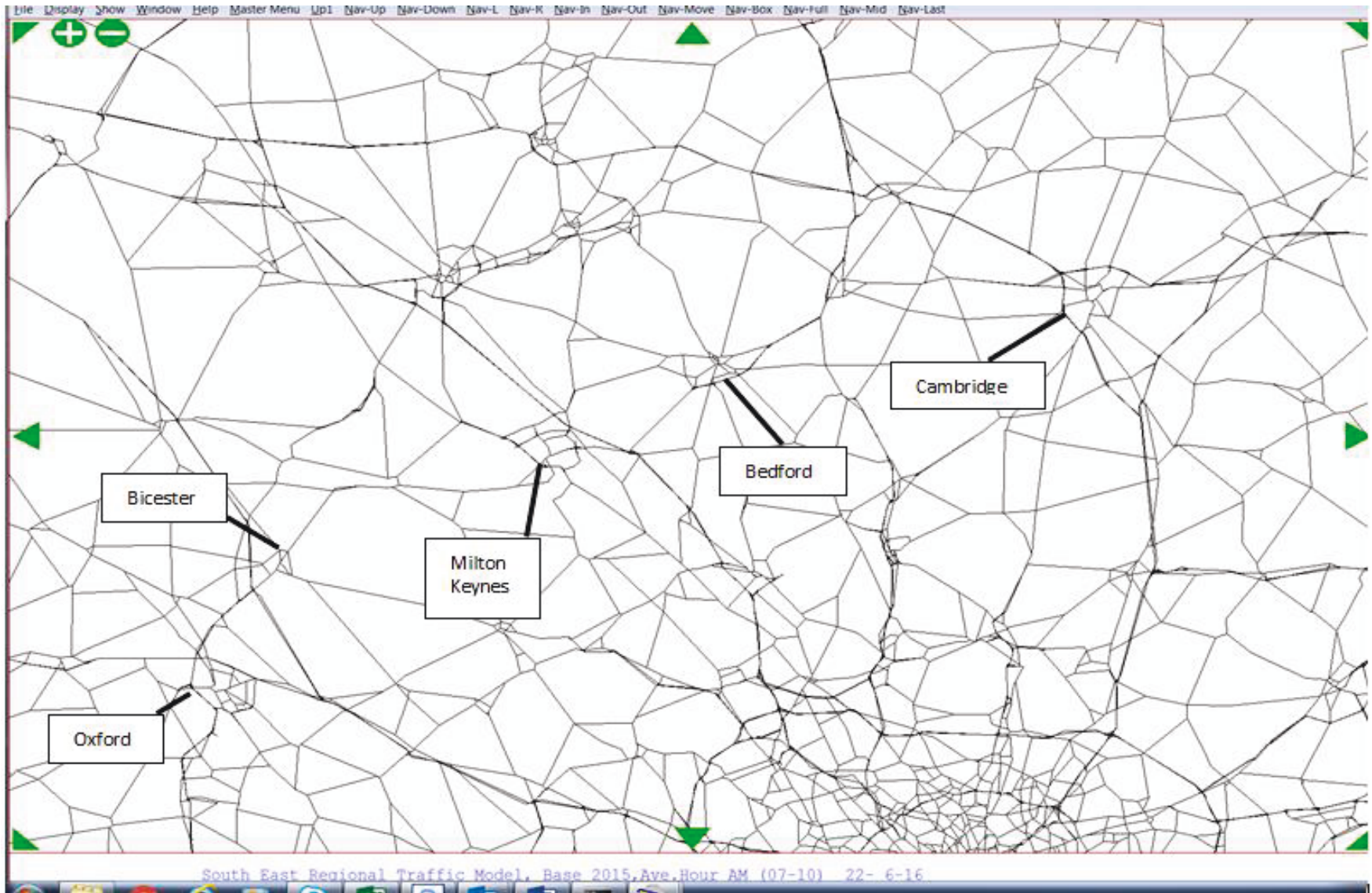
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STUDY AREA

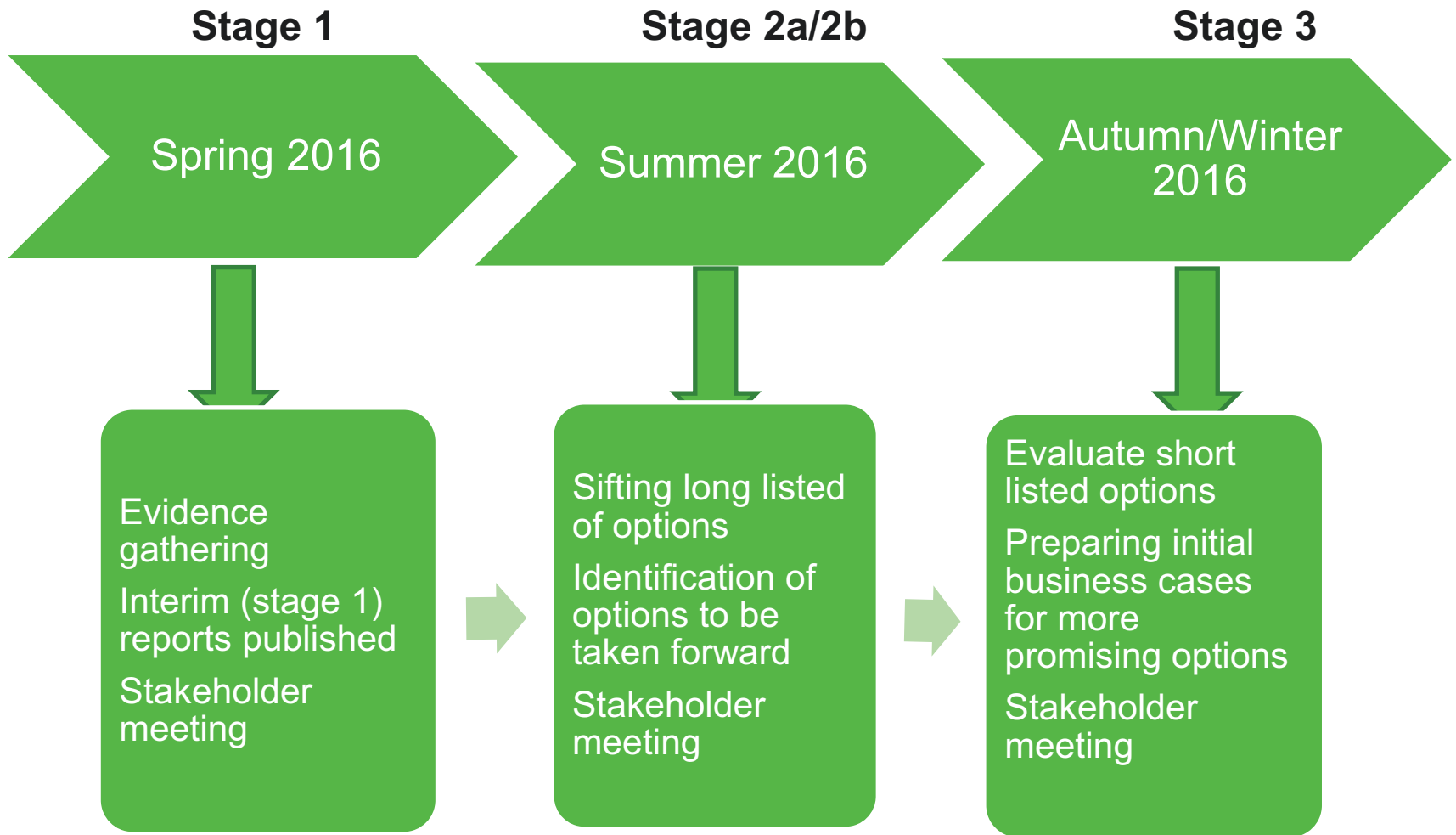


MODELLING

→ Model coverage (incorporate EWR assumptions)



STUDY STAGES AND PROGRAMME



- The strategic aim of this study is to investigate the case for linking existing roads and creating an Oxford to Cambridge Expressway, which would create a high-quality strategic east-west link between Oxford and Cambridge, via Bedford and Milton Keynes.
- The RIS Investment Plan describes the purpose of this study as follows:
 - *“...examine the case for creating an Expressway to connect the towns and cities of the ‘Brain Belt’ together. It will also look at other enhancements on existing roads along the route, including the A34 around Oxford.”*
- The study will identify options for a new strategic expressway corridor and upgrading existing routes, with the aim to improve east-west connectivity within the study area, build network resilience and support economic growth.
- The study will identify options that can feasibly be constructed and appraise the strategic, economic, safety, environmental, operational benefits and impacts for each of the options, making recommendations regarding a preferred option(s).

1. **CONNECTIVITY** Provide an East – West strategic transport package of measures that delivers enhanced connectivity through faster, safer and more reliable connections across the corridor in the broad arc from Oxford to Cambridge via Milton Keynes
2. **ECONOMIC GROWTH** Build on the ambition to unlock the economic potential in the corridor by facilitating strategic growth to the benefit of the UK economy through increased employment, housing & productivity
3. **SKILLS AND ACCESSIBILITY** Promote accessibility and wider socio-economic benefits, by improving access to job opportunities at key employment centres, developments, and at education, leisure, health & retail facilities whilst creating wider employment opportunities
4. **PLANNING FOR THE FUTURE** Reduce traffic on local roads to improve the environment for communities and contribute to better safety, security and health whilst promoting sustainable transport modes
5. **ENVIRONMENT** Reduce carbon emissions, improve quality of life and provide a healthy, natural environment by reducing transport emissions, providing sustainable travel modes and promoting equality and opportunity
6. **INNOVATION** Apply innovative technology wherever possible to support the sustainable planning, construction and operation of the transport measures

- Stage 1 report published in Summer 2016
- Stage 2 reports on Option Development and sifting being finalised
- Stage 3 Appraisal of better performing / shortlisted options commencing soon
- SOBC autumn / winter 2016
- Feeds into National Infrastructure Commission wider growth study for corridor over longer timescales

Last SRG

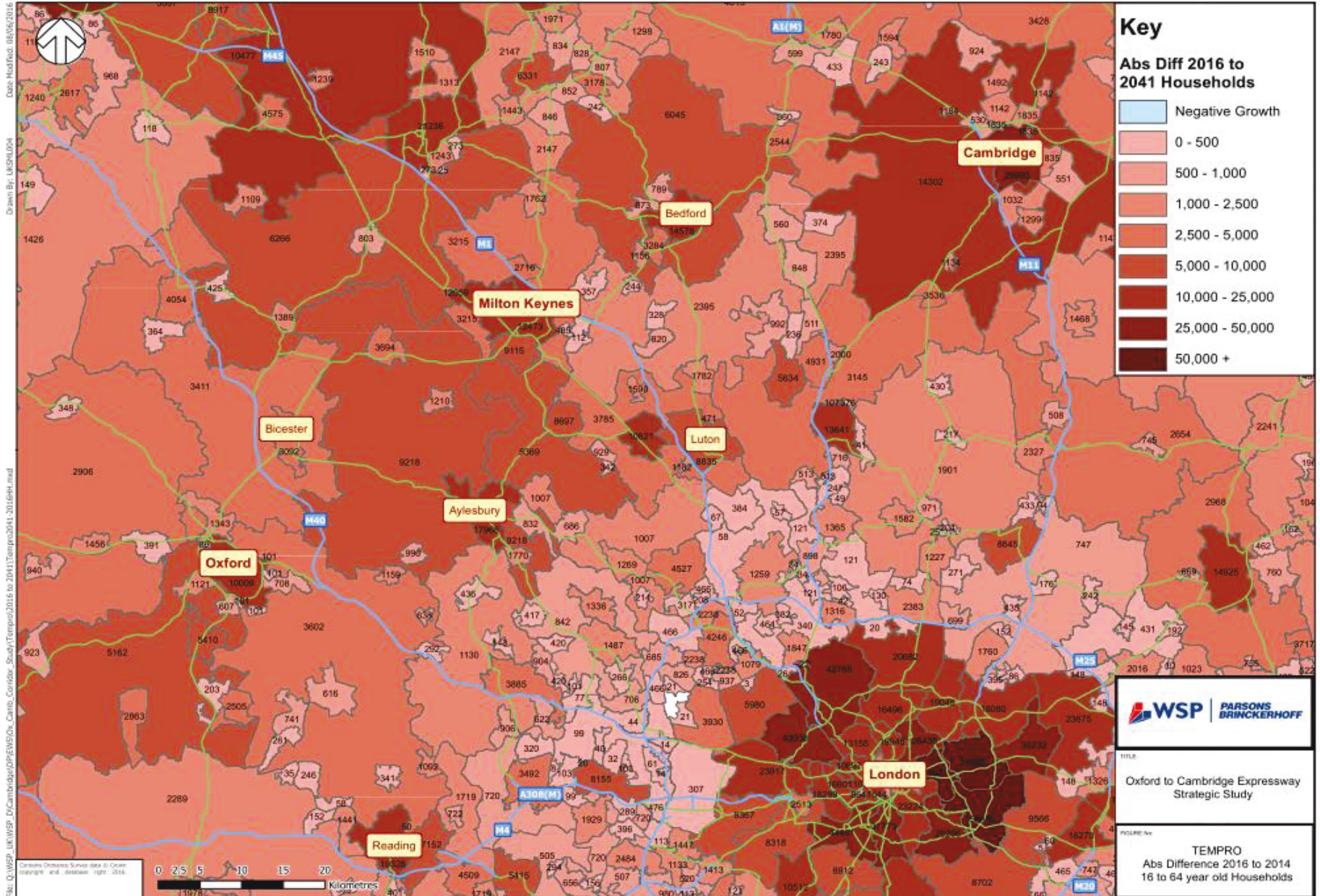


LAST SRG ON 25TH FEB

- Presented the Evidence Base – extended coverage following comments
- Revised Objectives based on feedback
- Demonstrated need and took on board further evidence
- Outline of the Strategic case
- Emerging concepts for long list informed by workshop

Challenges	Outline of Case
<p>250,000 homes 270,000 jobs 400,000 population</p> <p>Transport Pressures stalls growth</p> <p>Demand for journeys will grow by 40% by 2041. However, current infrastructure can only accommodate 25% of planned growth</p> <p>Increased demand for housing and declining affordability Skills shortages and residents with low skills levels</p> <p>Severe congestion due to lack of strategic road and rail connections</p>	<p>Fast growth cities</p> <p>Attractive corridor for growth</p> <p>Productivity Benefits</p> <p>Key is wider economy and differentiation from London</p> <p>Strategic influence of corridor</p> <p>Local connections</p> <p>MK to Oxford may be main beneficiary along corridor (largest reduction in JT) and matches industry functions</p> <p>Knowledge based economy</p>

GROWTH



KEY FINDINGS

Transport was identified as a potential barrier to growth

- Improved transport infrastructure vital precursor to **development**;
- Expected **40%** increase in travel demand by 2035; and
- Longer journey times limit competitiveness and local economic growth.

Housing affordability is also identified as a key constraint

- Affordability pressures make it harder for firms to **recruit/retain staff**.
- **Encourages** out-migration of young people from cities;
- Results in **increased** journey lengths;
- Housing development places further **pressure** on transport networks.

Skills are identified as a challenge

- business skills **shortages** across a range of sectors in both leadership and management, as well as more technical and basic skills.



SKILLS



Option Development



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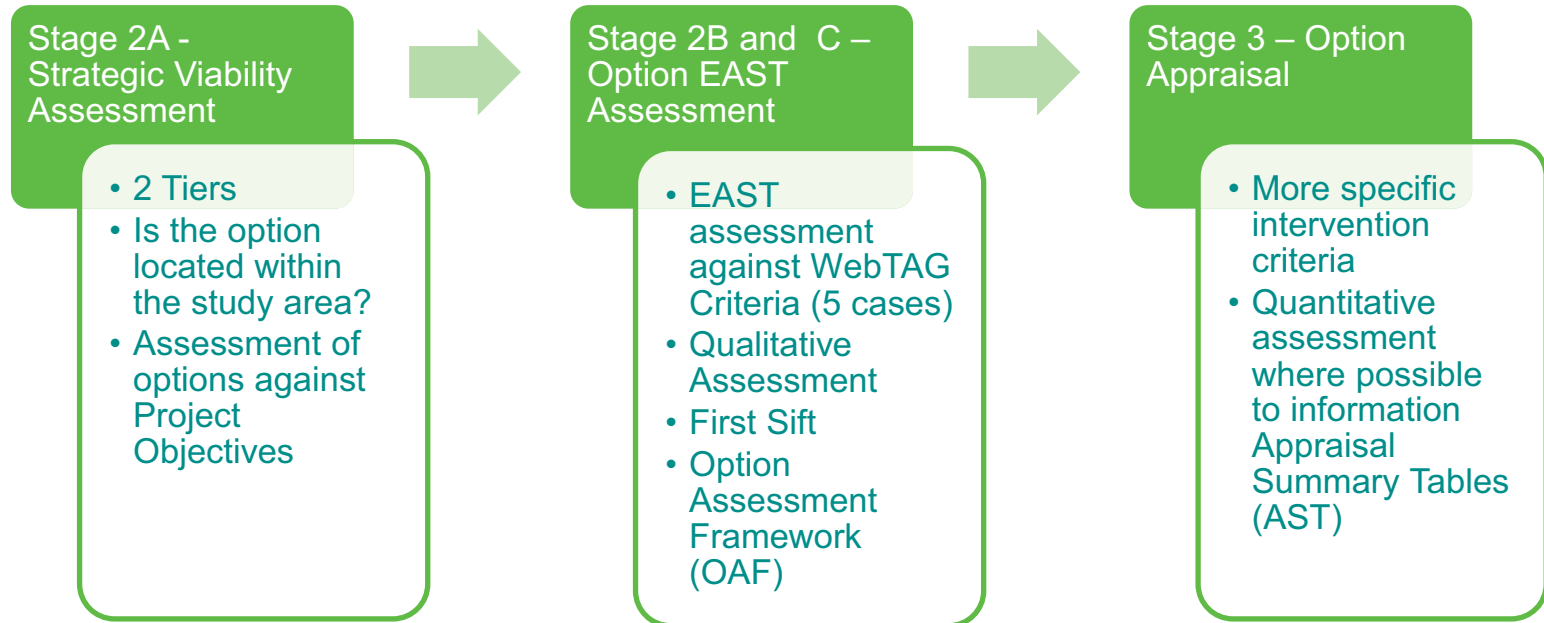
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OPTION DEVELOPMENT PROCESS

→ The initial option assessment will be qualitative with a descriptive analysis of the likely impacts of the intervention in the assessment area based upon the available evidence base and supporting information



Road

- Upgrade to current route
- Northern route (e.g. A43)
- Southern route via Aylesbury and north Luton
- Same corridor as East West Rail
- Variations and combinations of above



Rail

- East West Rail
- Wider rail connections



Local Access

- Tackle access to urban centres
- Homes to jobs (key skills, labour markets)
- Urban Mobility Plans
- City Access Strategies
- Accessibility for all modes
- Local connections, key road, rail and bus links



High Quality Passenger Transport

- Bus Rapid Transit (BRT)
- X5 / NEx priority measures
- Local BRT connections



Behaviour Change

- Sustainable travel / mode shift
- Urban Accessibility
- Travel Planning Measures



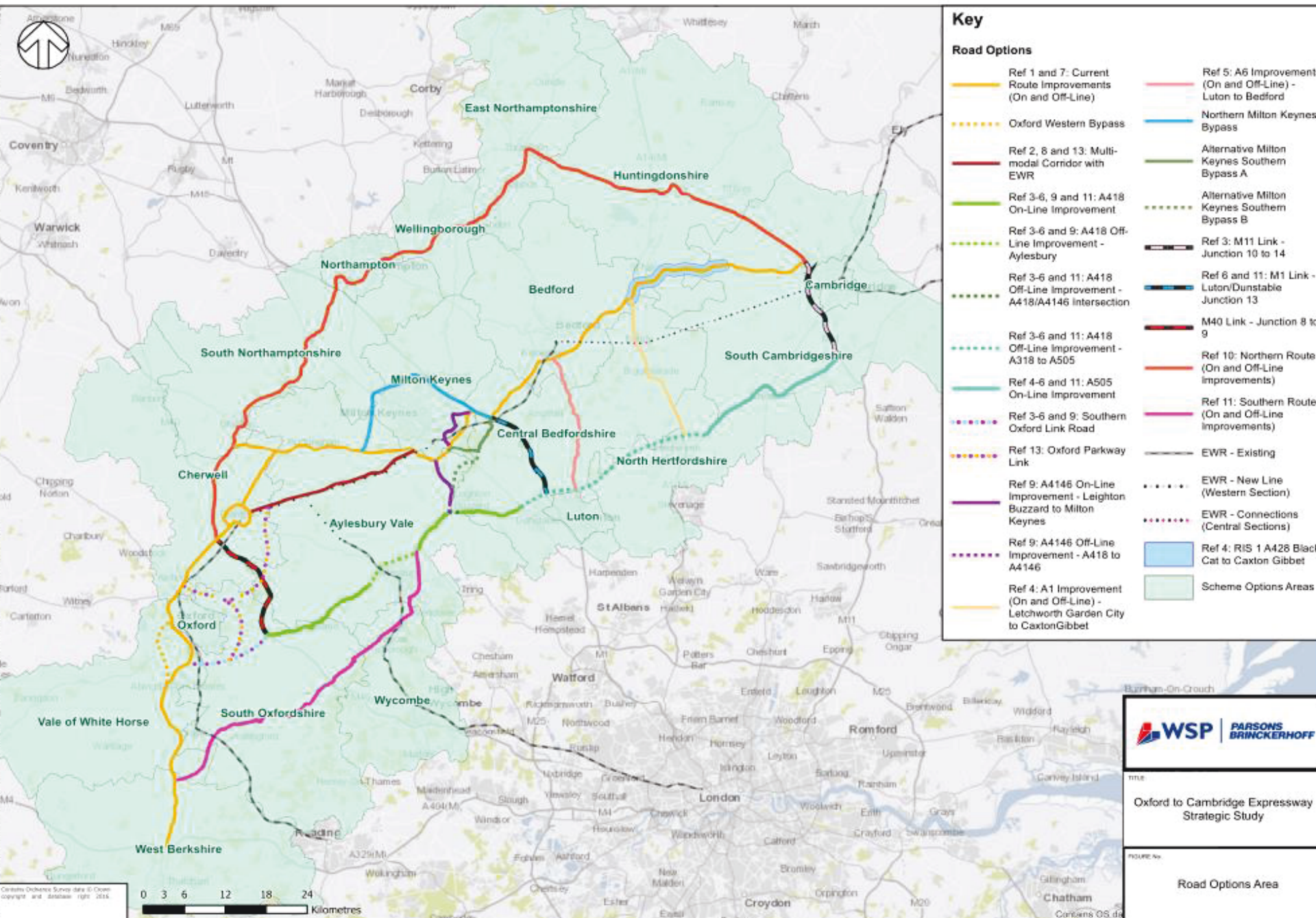
Technology

- Innovative ways to address corridor challenges
- Information Technology Systems
- Vehicles (inc power)
- Coordination – inter-urban connections
- Ticketing
- Data and Personal IT
- Integration



CONCEPTS TO OPTIONS

- 40 options in the long list
 - 15 road based
 - 4 rail based
 - 6 technology
 - 5 local access
 - 6 behaviour change
 - 4 high quality public transport



Key

Road Options

- Ref 1 and 7: Current Route Improvements (On and Off-Line)
- Oxford Western Bypass
- Ref 2, 8 and 13: Multi-modal Corridor with EWR
- Ref 3-6, 9 and 11: A418 On-Line Improvement
- Ref 3-6 and 9: A418 Off-Line Improvement - Aylesbury
- - - Ref 3-6 and 11: A418 Off-Line Improvement - A418/A4146 Intersection
- - - Ref 3-6 and 11: A418 Off-Line Improvement - A318 to A505
- Ref 4-6 and 11: A505 On-Line Improvement
- - - Ref 3-6 and 9: Southern Oxford Link Road
- - - Ref 13: Oxford Parkway Link
- Ref 9: A4146 On-Line Improvement - Leighton Buzzard to Milton Keynes
- - - Ref 9: A4146 Off-Line Improvement - A418 to A4146
- Ref 4: A1 Improvement (On and Off-Line) - Letchworth Garden City to Caxton/Gibbet
- Ref 5: A6 Improvement (On and Off-Line) - Luton to Bedford
- Northern Milton Keynes Bypass
- Alternative Milton Keynes Southern Bypass A
- - - Alternative Milton Keynes Southern Bypass B
- Ref 3: M11 Link - Junction 10 to 14
- Ref 6 and 11: M1 Link - Luton/Dunstable Junction 13
- M40 Link - Junction 8 to 9
- Ref 10: Northern Route (On and Off-Line Improvements)
- Ref 11: Southern Route (On and Off-Line Improvements)
- EWR - Existing
- - - EWR - New Line (Western Section)
- - - EWR - Connections (Central Sections)
- Ref 4: RIS 1 A428 Black Cat to Caxton/Gibbet
- Scheme Options Areas



Oxford to Cambridge Expressway Strategic Study

FIGURE 4
Road Options Area

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Contains OS data

EAST TOOL SIFTING

- Concepts to Long List
- EAST assessment:
 - Strategic and objectives
 - Economic and Environment
 - Managerial
 - Financial
 - Commercial

- Consideration of Environmental aspects and constraints

OPTION ASSESSMENT

- Performance of options against key criteria to help inform more detailed sifting
- Options outside study area/O2C corridor perform less well (but still included within EAST for robustness) in terms of likely positive impacts on corridor for growth and don't meet objectives
- Provides a focus for areas to develop refined criteria and shape methodology/approach assessment and future appraisal

LONG LIST OF OPTIONS

- Concepts to Long List
- EAST assessment:
 - Strategic and objectives
 - Economic and Environment
 - Managerial
 - Financial
 - Commercial

- Consideration of Environmental aspects and constraints
- Considering growth outside study area as well

EAST TOOL SIFTING

→ Wider Economic Indicators

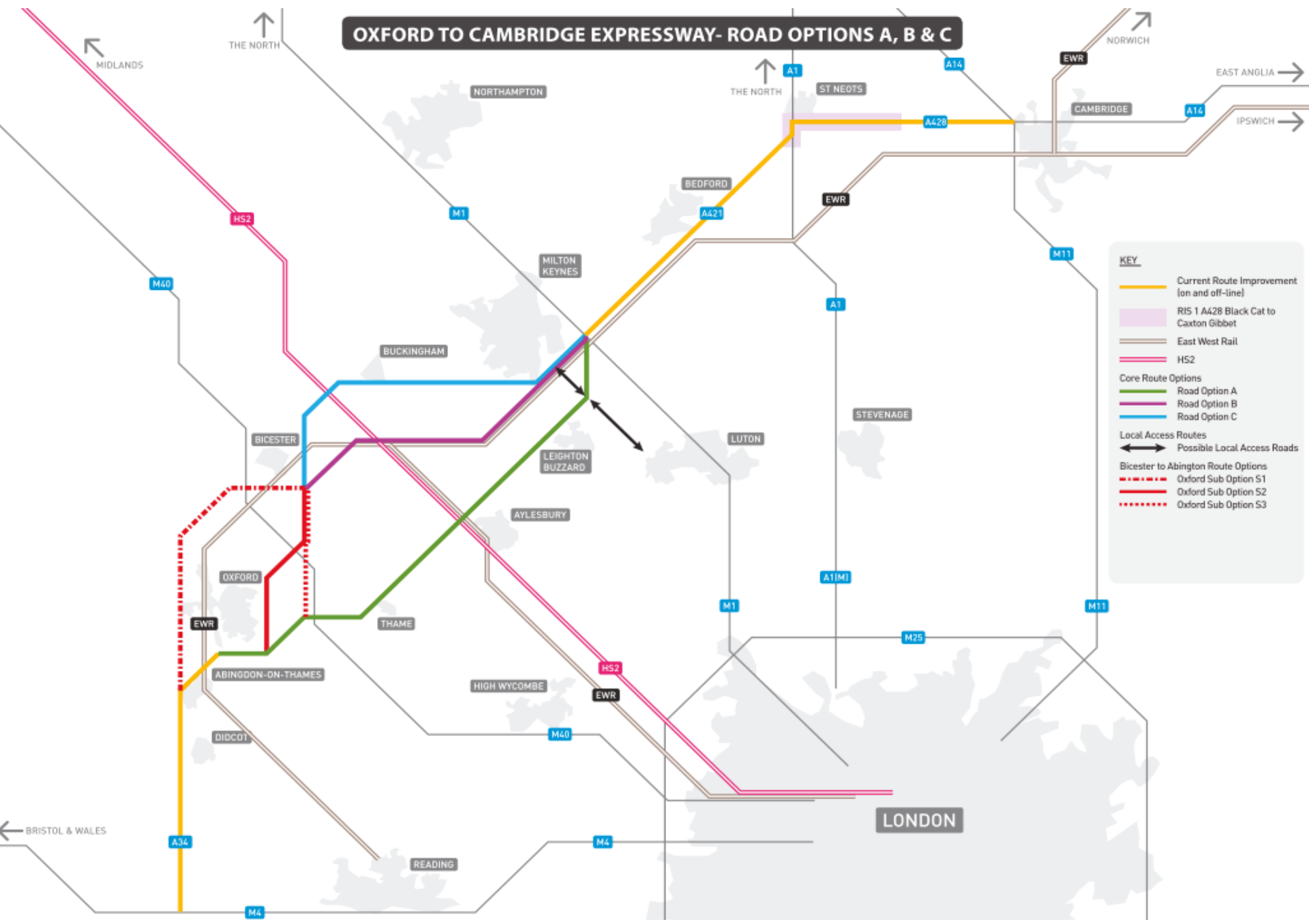
- Journey Times (including business to business)
- Population, jobs and Housing Growth

2011 to 2041			
Name	Total Pop	HHs	Jobs
Bedford	54660	34176	7158
Luton	28731	12765	16506
Mid Bedfordshire	28291	12352	4592
South Bedfordshire	55165	34834	3154
Cambridge	55845	33056	24232
Huntingdonshire	32893	20019	12597
South Cambridgeshire	59771	33142	22859
South Northamptonshire	21106	11045	7108
West Berkshire	24105	10835	15337
Aylesbury Vale	74806	48108	17791
Milton Keynes	98571	52637	32445
Cherwell	30279	17314	8339
Oxford	25422	13026	14135
South Oxfordshire	22864	14653	5076
Vale of White Horse	30849	19942	11930
West Oxfordshire	16664	7715	3697

SHORTLISTED OPTIONS

- 3 core expressway options
 - Sub-options around Oxford and Milton Keynes
- Local access roads, eg into main urban areas and along existing N-S, eg A5
 - Rail (EWR)
 - Technology
 - Local Access/Urban Mobility
 - NMU measures integrated as part of road options
- Develop packages

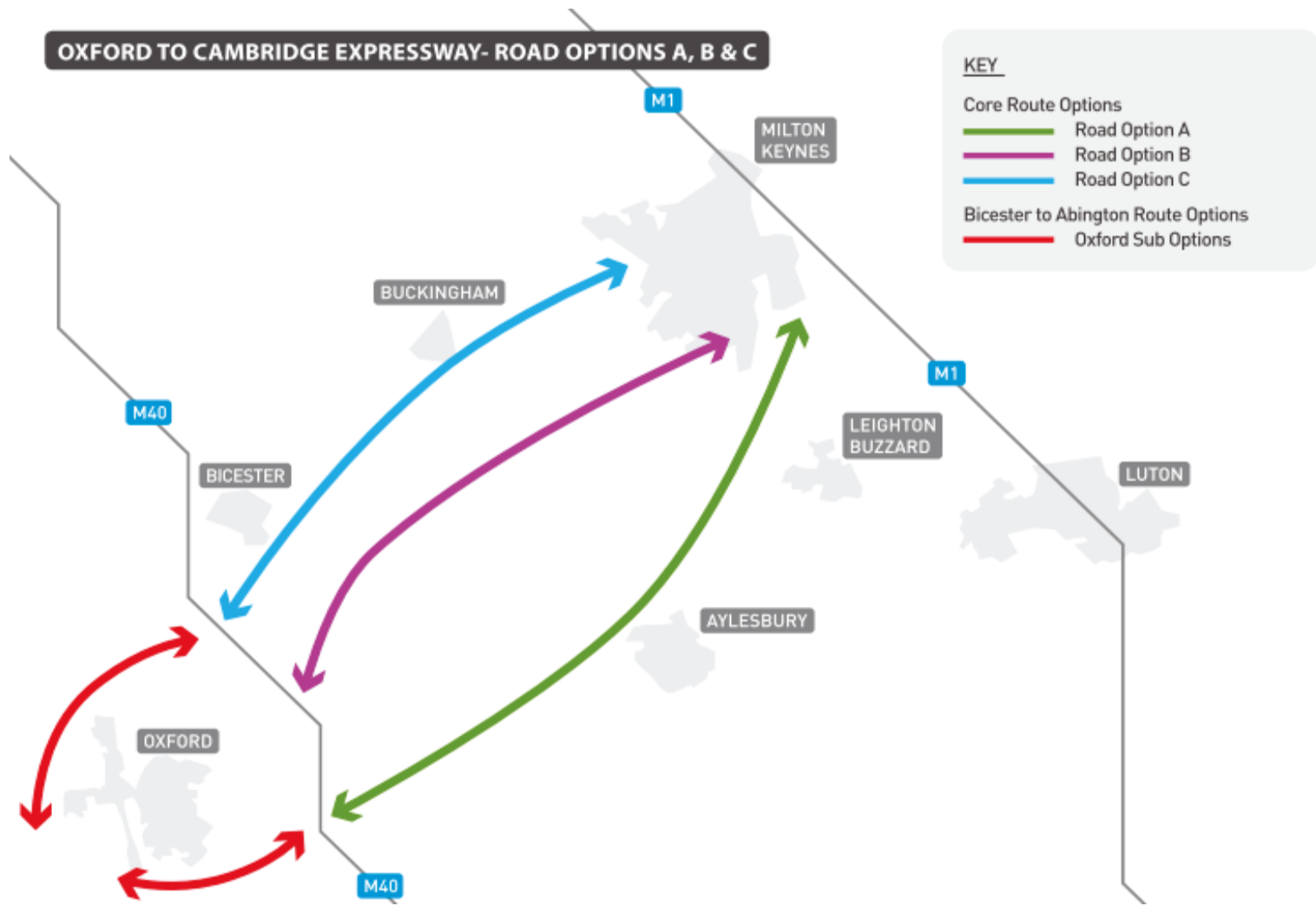
OXFORD TO CAMBRIDGE EXPRESSWAY- ROAD OPTIONS A, B & C



KEY

- Current Route Improvement (on and off-line)
- RIS 1 A428 Black Cat to Caxton Gibbet
- East West Rail
- HS2
- Core Route Options
 - Road Option A
 - Road Option B
 - Road Option C
- Local Access Routes
 - Possible Local Access Roads
- Bicester to Abingdon Route Options
 - Oxford Sub Option S1
 - Oxford Sub Option S2
 - Oxford Sub Option S3

EMERGING ROAD OPTIONS SHORTLIST



STRATEGIC CASE



- Connectivity (both rail and road) along the corridor is currently restricted, particularly between Oxford and Milton Keynes – missing link (and multi-modal aspect with East West Rail)
- Significant Population growth
- Freight movement across southern part of UK

OPTIONS - WIDER PACKAGES

Package A	Package B	Package C
Expressway Option A - Southern Route	Expressway Option B – central following EWR	Expressway Option C – Northern Route
East West Rail		
Technology		
Rail Integration		
Local access / mobility		
Non-motorised users		

Next Steps and Workshop



NEXT STEPS

- Stage 1 report published Summer 2016
- Finalise option shortlist and high level modelling (Stage 2)
- Progress modelling and appraisal (Stage 3)
- Strategic Outline Business Case (SOBC) end 2016
- Next SRG in Autumn 2016

NEXT STEPS

- Views today will help refine and further shape the options / packages
 - We have a break out session for you to gives us your views
- Minutes and presentation to be circulated
- Reports will be placed online as they get approved
- Final Stakeholder Reference Group meeting to disseminate the final findings and talk through the outcomes and recommendations

ITEM 13: WORKSHOP SESSION

- Your chance to help shape and inform the options / packages
- Divide into breakout groups, each with a facilitator
- Each group to consider options / packages

- 15 minutes per option / package – **timing will be strict**
 - But we would welcome your thoughts after the event if you feel you have more that you wish to say

- In each 15 minute slot each group has questions to consider
 - You can make bullet points or annotate maps

WORKSHOP SESSION

- Comments on Expressway route options A, B and C

- Comments on wider options (technology, urban access etc)

- Above in context of key questions
 - Views on East-West connectivity
 - Patterns of growth
 - Constraints/barriers to growth
 - Market failures and role of transport
 - Role of improved of transport in supporting economic growth