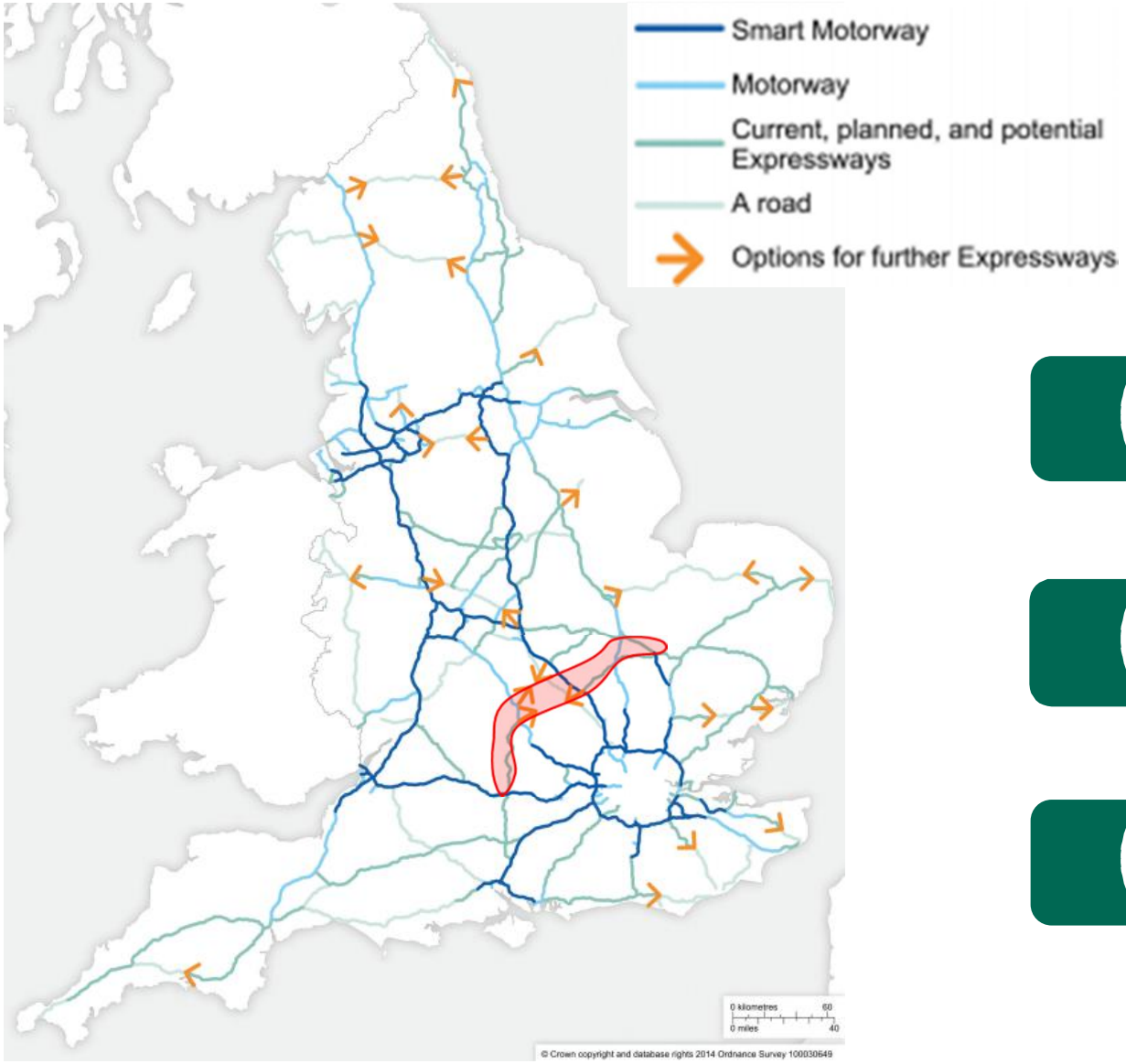
Department for Transport

Road Investment Strategy
Oxford to Cambridge Expressway – Stakeholder Reference Group

25 February 2016

Department for Transport

Oxford to Cambridge Expressway Study



- Filling 30 mile Oxford-Milton Keynes gap in SRN
- Supporting growth in other communities, e.g. Bicester
- Understand improvements to East-West Rail and A428

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Today's objectives

Part 1

- To inform the reference group about the emerging findings from task 1 of the study
- To seek comments on the emerging findings

Part 2

- To introduce task 2 of the study and seek initial views
- To inform the reference group about the next steps in the process

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The team today

highways england
driving forward

Alan Kirkdale – Project Manager

Yvonne Crossland – Project Support

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Paul Hersey – Senior Policy Lead, Roads Futures (Project SRO)

Shona Johnstone – Strategic Studies Programme Lead

David Bull – Regional Engager

WSP | Parsons Brinckerhoff | ch2m | TRL | steer davies gleave

Mike Batheram – Project Director

Adrian Hames – Project Manager

Helen Spackman –Modelling and Economics Lead

Ronan Finch – Engineering Lead

Matt Caygill – Stakeholder Engagement

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Agenda

Item	Topic	Timings
1	Session Opening; Networking opportunity	09:30 - 10:00
2	Welcome: Introductions	10:00 - 10:10
3	Objectives of the Session	10:10 - 10:15
4	Brief recap of last meeting	10:15 - 10:30
5	Overview of Task 1 evidence and findings	10:30 - 11:00
6	Q&A	11:00 - 11:15
Comfort Break		11:15 – 11:30
7	Introduction to Task 2	11:30 - 12:00
8	Break out session and feedback	12:00 – 13:00
9	Next steps and future timelines	13:00 - 13:10
10	Q&A	13:10 – 13:25
11	Round up and close	13:25 – 13:30

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Next steps

- Contributions from this morning will inform the stage 1 - once finalised the report will be published on Gov.uk
- Develop options – contributions from this meeting will inform the list
- Next stakeholder reference group meeting – late Spring / Summer

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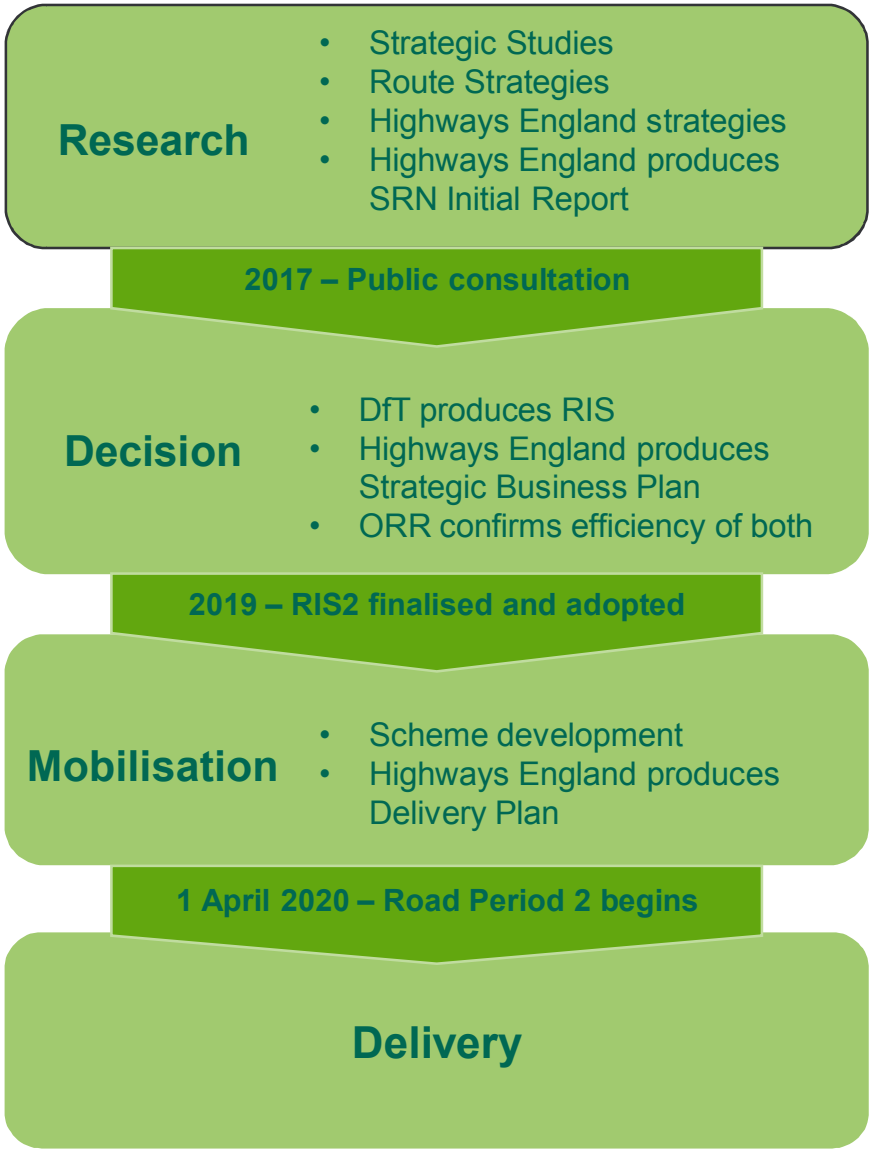
Wider Context – future planning



RIS2 is designed on the principle that the programme will go through distinct phases.

- The first stage consists of evidence-gathering and stakeholder engagement, trying to identify the factors and options that should shape RIS2.
- The decision phase consists of the formal negotiation of a RIS, in line with the Infrastructure Act and Highways England's licence
- Once the RIS is agreed, the process of mobilisation and delivery begins.

Each of these phases will have different needs and priorities. Key products in each stage need to be identified early, but practical development work may be able to wait until later point in the process, and allow us to focus on the items which are most urgently needed.

We will need to revisit this process to take account of the role and emerging operation of the new National Infrastructure Commission.

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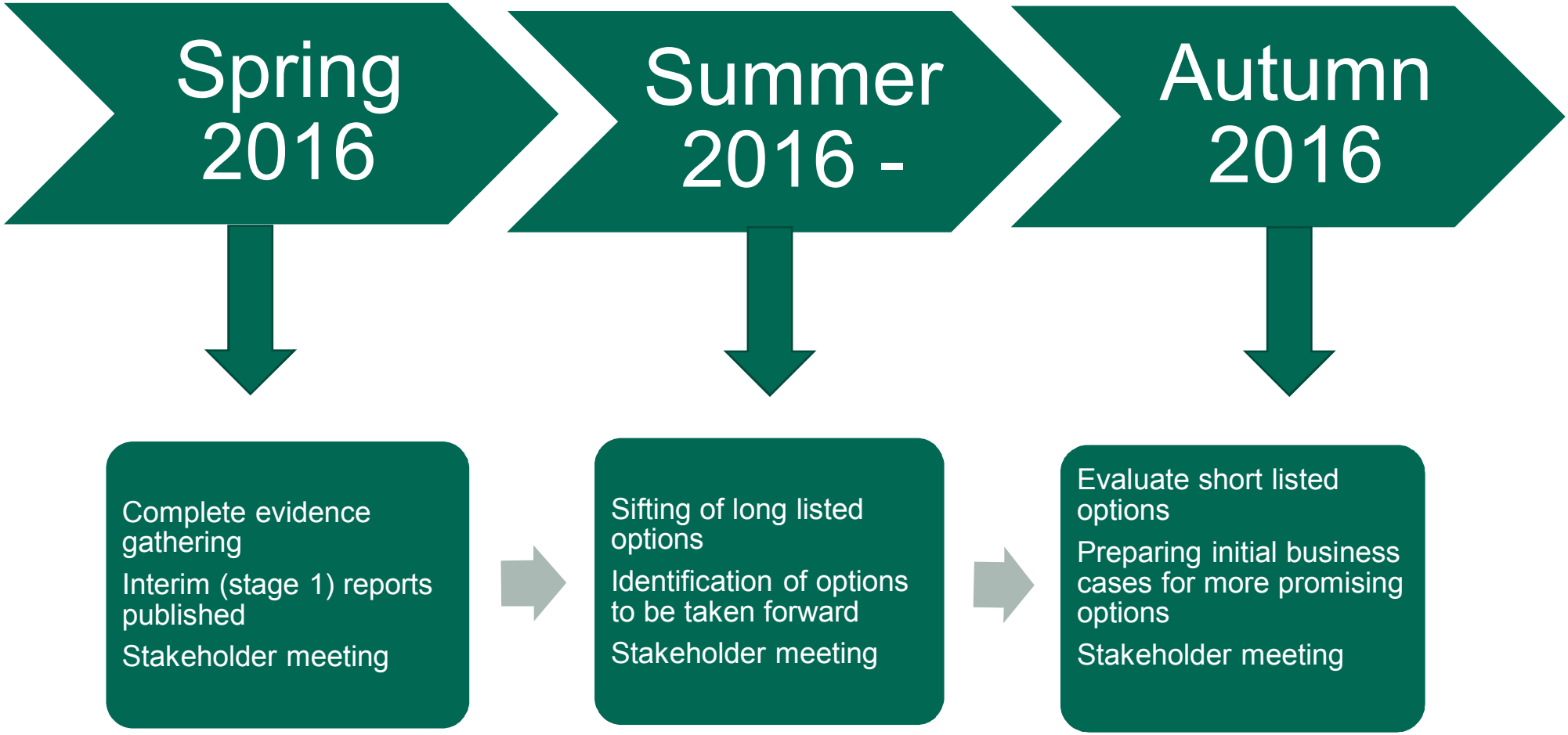
Timetable



Oxford to Cambridge Expressway Strategic Study

2nd Stakeholder Reference Group – Stage 1 Findings

25th February 2016

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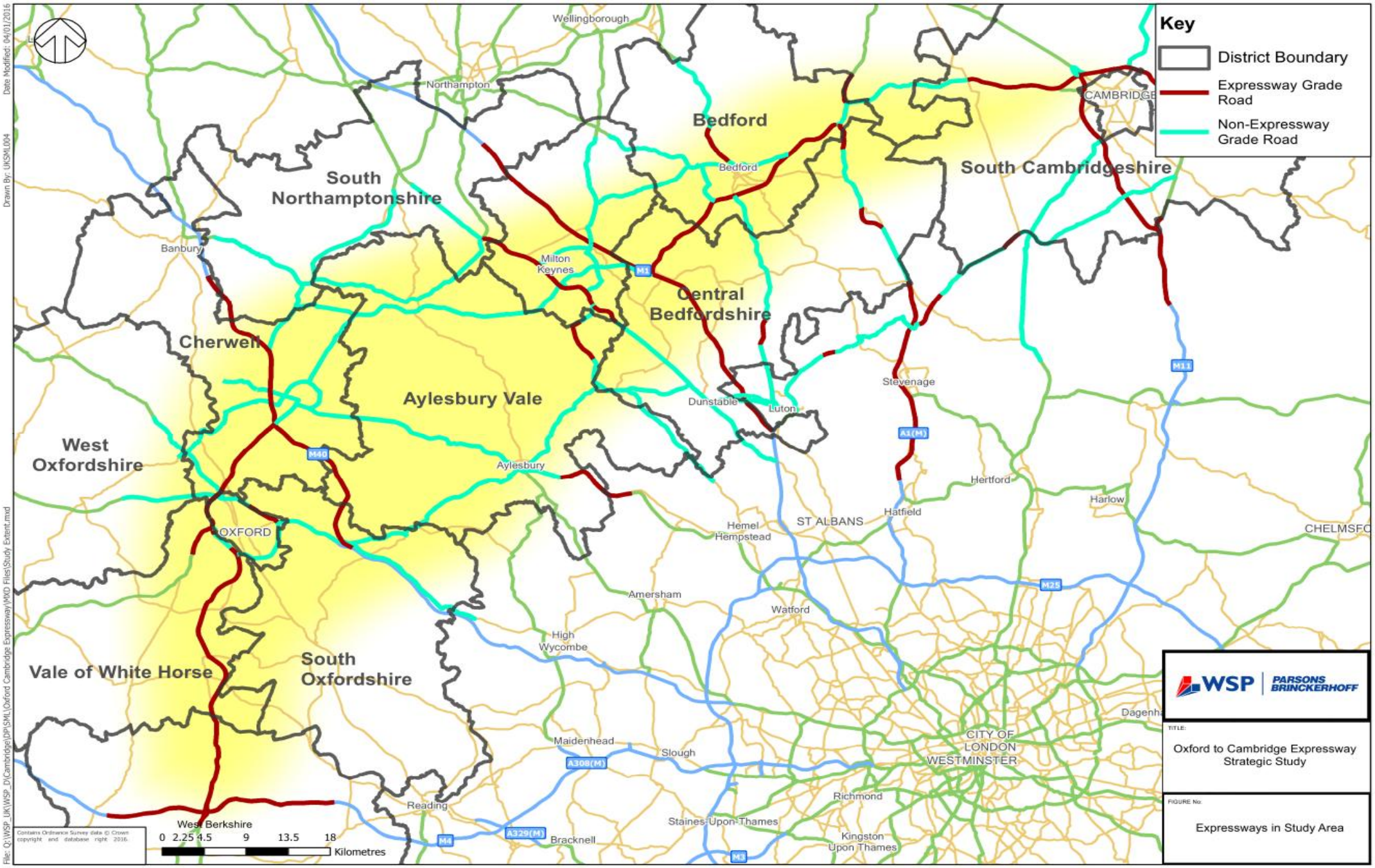
INTRODUCTION

- Brief re-cap on 1st Stakeholder Reference Group (SRG) workshop on 12th November 2015
- Overview of Evidence Base findings and potential need for O2C scheme (*questions*)
- Objectives for study (*questions*)
- Emerging concepts (*including workshop session that reviews objectives and examines any additions and comments as well as strengths and weaknesses of the emerging concepts*)
- Next steps (timescales, next SRG workshop, analytical approach)

O2C STUDY AREA



STUDY AREA

→ Scoping study area

- Geographic from the brief – focus on potential area for an expressway route *"the corridor"*
- Based on travel patterns in the corridor – but note role of other wider routes outside corridor (eg M25 and A43/A14)
- Demographics – changing shape of population
- Growth changes – locations of major change (Oxford, Milton Keynes and Cambridge and surrounding regions).
- Wider economy/socio-economics – zone of influence in relation to London, Airports and Ports as well as growth changes in the corridor and role of Cambridge, Milton Keynes and Oxford

PROGRESS SINCE LAST SRG

- Study team commenced on 1st Nov
- Reviewing existing data and reports and feedback from 12th Nov SRG – key routes discussion of SRN
- Gathering extensive evidence base
- Assessing planned (and beyond) growth
- Discussions with LEPs and local authorities
- Analysing evidence base, including travel data and socio-economics
- Developing concepts – considering all modes
- Defining objectives

PROGRAMME

- Stage 1 – gain and understanding of the current and future situation in the study area. Complete by Spring 2016. **TODAYS SRG**
- Stage 2 – develop a long-list of potential interventions; sift the options against the intervention-specific objectives and produce a shortlist of options for more detailed assessment. Complete by Summer 2016.
- Stage 3 – produce Strategic Outline Business Cases (SOBCs) for the shortlisted option(s). Complete by end 2016.
- **Stakeholder Reference Group** meetings at each stage

FIRST SRG SUMMARY

→ Feedback on Economy, Environment, Safety and Resilience (part of our evidence)

Strengths	**Weaknesses**
Facilitating significant spatial and economic growth (and tourism) Maintain economic advantage – brain belt and unlock growth Growing population and strength of economies already in Cam, Oxford and MK Part of route at expressway standard (A421 and A428 sections between M1 and A1) Address local authority issues	Congestion on current routes – and poor JT reliability (e.g. A34 Oxford) Potential environmental impact through Bucks Risk of facilitating growth in wrong areas Route Safety issues with single carriageway sections At grade junctions through MK (15 roundabouts) Lack of east – west routes
Opportunities	**Threats**
Role with EWR (similar corridor) Links into settlements (role with local roads) Relief to other routes (inc M25) Wider measures (eg Park&Ride) Use of technology Improve freight access/safety Integration	How define benefits (versus other modes) Widening of study area (e.g. Luton) Role of freight (ports) Environmental impact (climate change) versus role of roads in delivering growth Modal choice and level playing field (case) How we predict 2041 traffic (common approach across studies)

Oxford to Cambridge Expressway Strategic Study

Evidence Base

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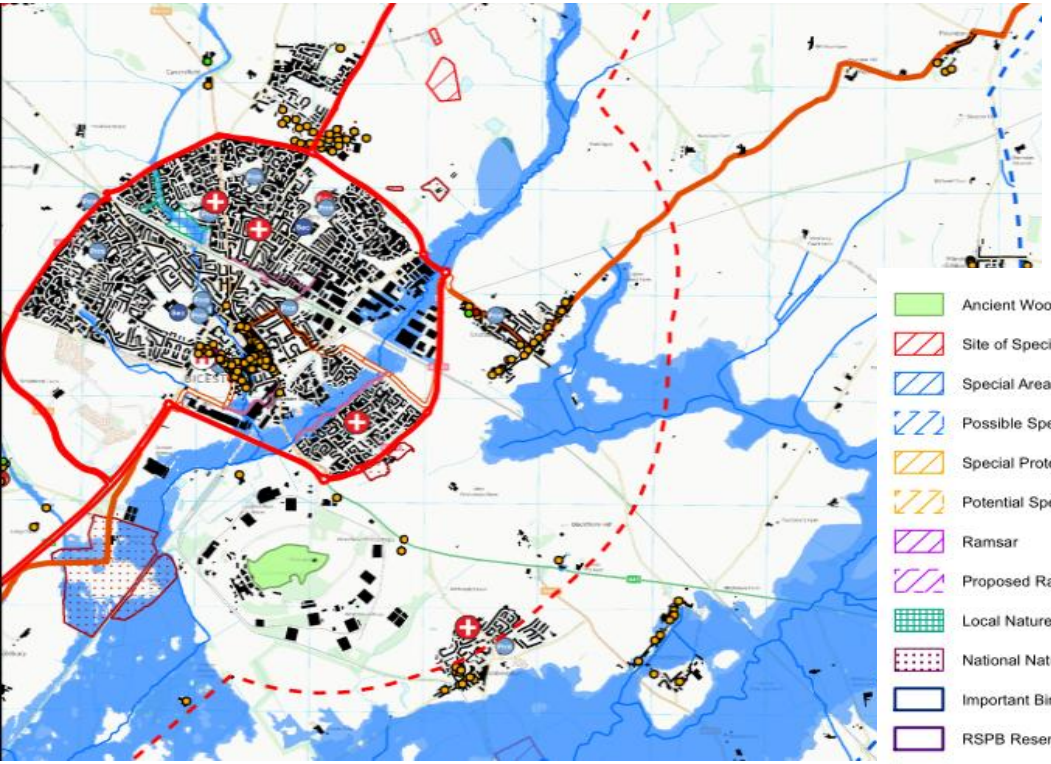
EVIDENCE BASE – SOURCES

- GIS Digital Mapping (environment, travel, physical constraints)
- Census 2011 and comparison to 2001
- Local Authority Data and Modelling (used proforma), TRADS
- Accidents
- East West Rail, SEPs, Local studies
- Environmental, heritage and historic
- Existing and planned infrastructure
- South East Regional Transport Model (SERTM) data inputs plus local models
- Previous Studies (eg A428 and A418 Bucks etc)
- TrafficMaster, X5 Bus journey times
- Review significant Local Economic Impact Areas (LEIAs) along the corridor

EVIDENCE BASE – ENVIRONMENT

→ **Assessment and mapping of whole study area to understand constraints**



- Ancient Woodland Inventory
- Site of Special Scientific Interest
- Special Area of Conservation
- Possible Special Area of Conservation
- Special Protection Area
- Potential Special Protection Area
- Ramsar
- Proposed Ramsar
- Local Nature Reserve
- National Nature Reserve
- Important Bird Areas
- RSPB Reserves
- Greenbelt
- Country Park
- National Park
- Proposed National Park
- Area of Outstanding Natural Beauty
- Parks and Gardens
- Scheduled Monument
- Conservation Areas

Listed Building

- Grade I
- Grade II
- Grade II*
- Registered Battlefields
- World Heritage Site
- Air Quality Management Area

No_2 Roadside Concentration

Annual Mean (µg m^{-3})

- 30 - 40
- > 40
- Noise Important Areas
- Main Rivers
- Water Courses
- Water Bodies
- Source Protection Zones
- Flood Zone 2
- Flood Zone 3
- Building Outlines
- National Trail

Sustrans National Route

- National Route (On Road)
- National Route (Off Road)

Sustrans National Cycle Network

- Local Route (off road)
- Local Route (on road)
- Regional Route (off road)
- Regional Route (on road)

Sustrans Regional Route

- Regional Route (on road)
- Regional Route (off road)

Sustrans Local Route

- Off Road
- On Road

Healthcare Services

- Hospital (A and E)
- Hospital (No A and E)
- GP Practice
- Walk-in centre

Education Services

- Nursery
- Primary
- Middle Deemed Primary
- Secondary
- Middle Deemed Secondary
- Further Education
- Other Educational Facility

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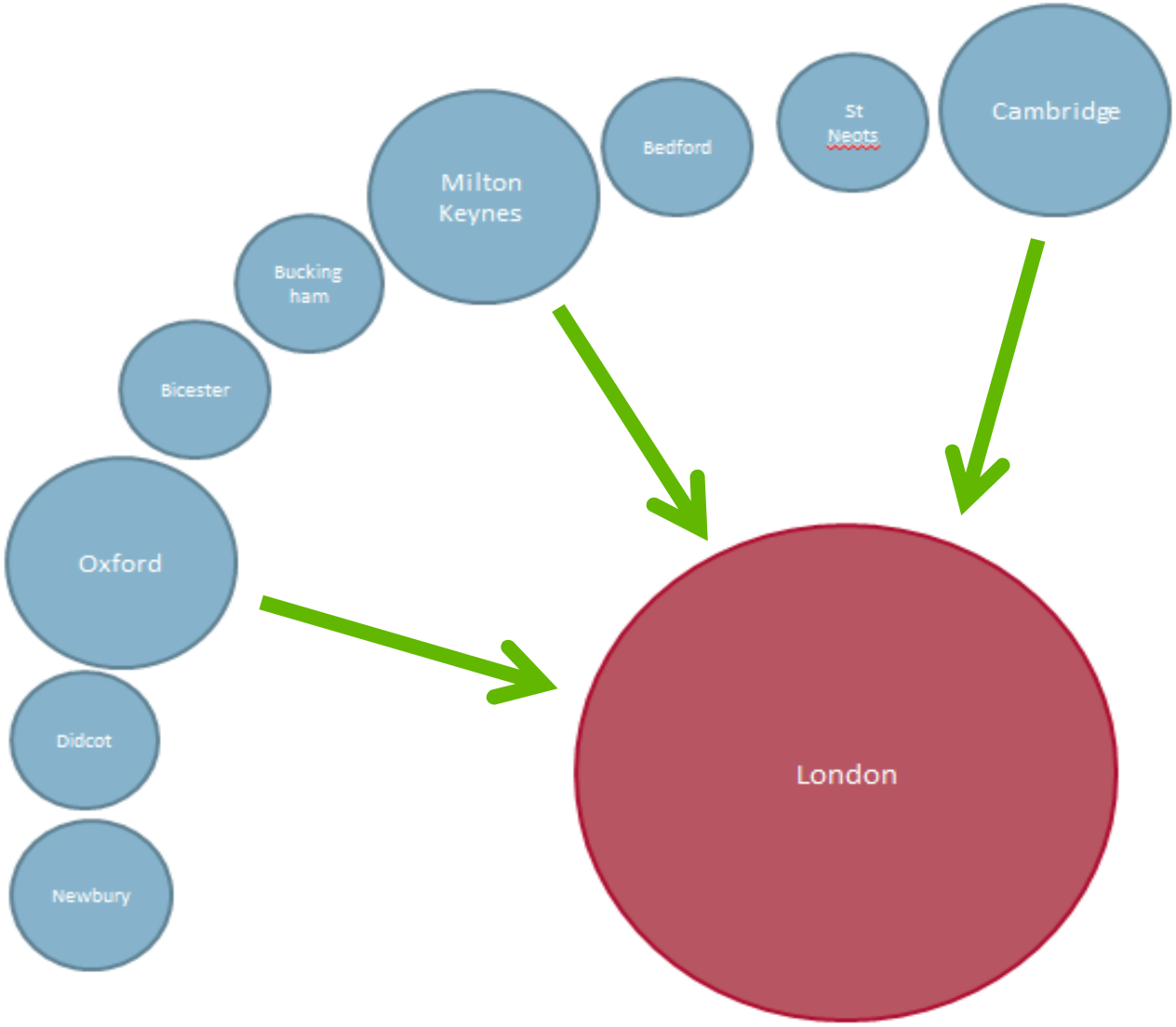
EVIDENCE BASE – ENVIRONMENT

- **Air Quality** - 7 AQMAs in study area corridor
- **Cultural Heritage** - Blenheim Palace World Heritage Site, 205 Scheduled Monuments, 48 Registered Parks and Gardens (no Registered Battlefields), 7,321 listed buildings, 144 Conservation Areas
- **Landscape** - North Wessex Downs and Chilterns AONB. There are no National Parks within the study area. Cambridge and Oxford Greenbelts and close to London Greenbelt
- **Nature** - seven Special Areas of Conservation (SAC) and no Special Protection Areas (SPA), 53 Sites of Special Scientific Interest (SSSI), one National Nature Reserve and 28 Local Nature Reserves, 1 RSPB and 626 sites of Ancient Woodland
- **Other aspects** – noise, communities, drainage, water, geology and soils

CORRIDOR EVIDENCE BASE

- Socio Economic
- Journey Patterns
- Current Travel Conditions
- Future Travel Conditions



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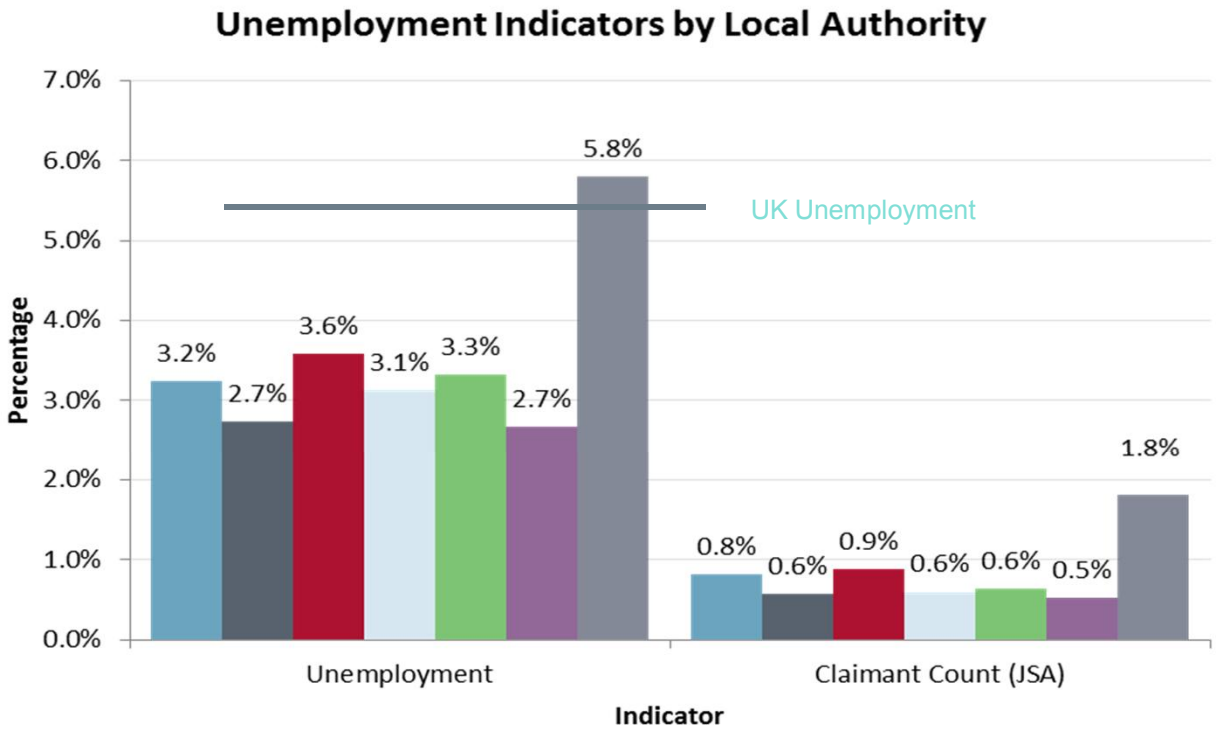
SOCIO ECONOMIC

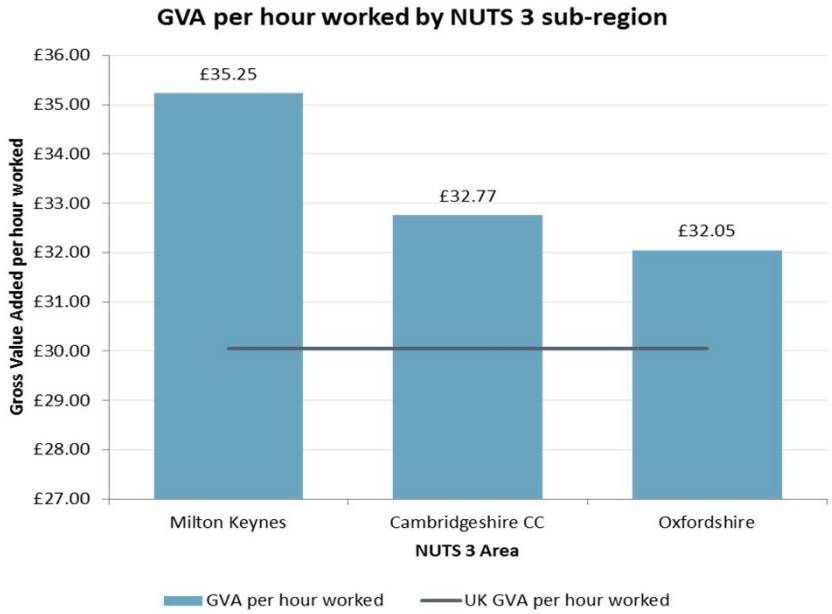
- → Weaker labour market in Milton Keynes
- → Surrounding rural areas have less unemployment



Oxford, Milton Keynes and Cambridge – forming a '*brain belt*' north-east of London – are:

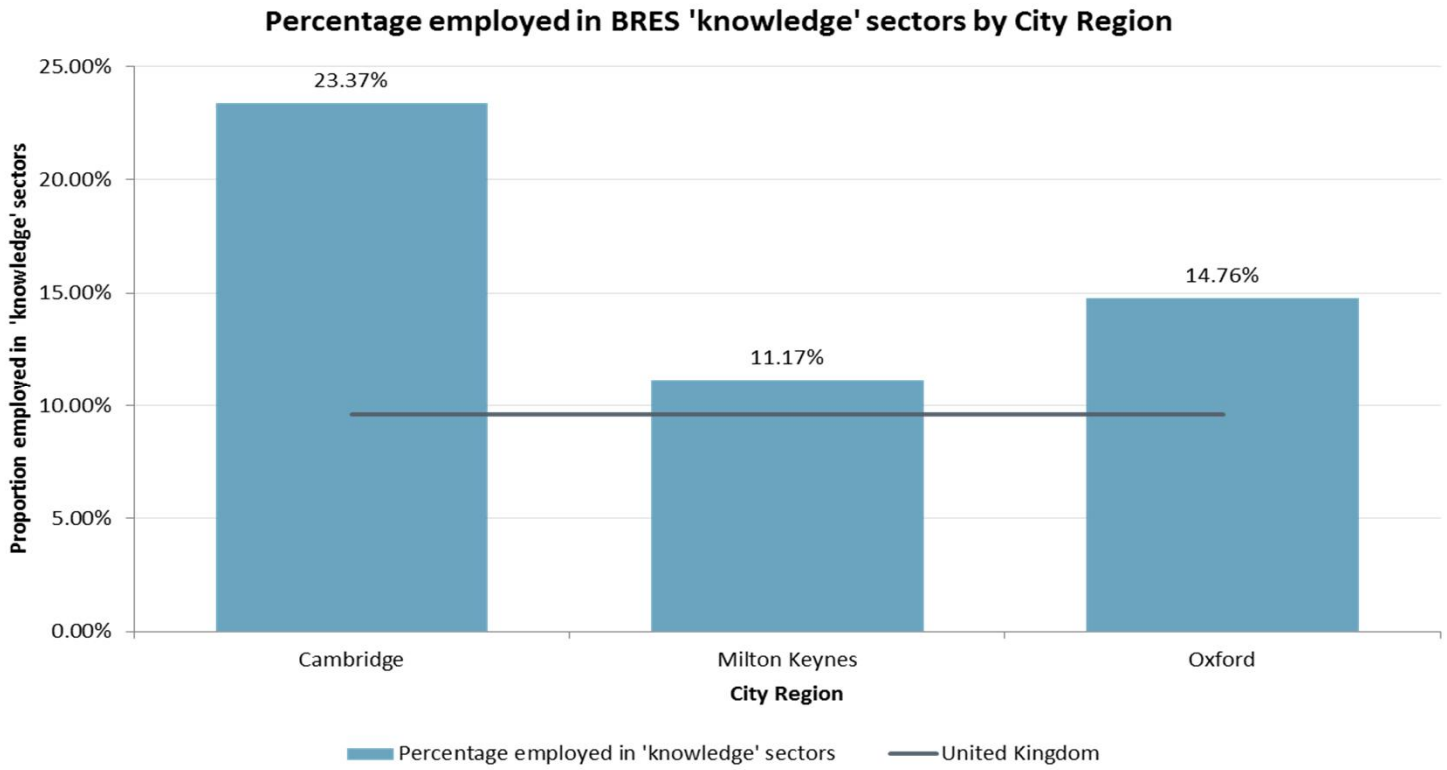
- → Economically strong and resilient
- → Centres of the 'knowledge economy'
- → Gateways for Foreign Direct Investment

But suffer from constraints on economic growth – transport, housing and skills



SOCIO ECONOMIC

→ All have key strengths in the 'knowledge economy' – focusing on high-value, high-skilled jobs in life sciences, advanced manufacturing and scientific research



SOCIO ECONOMIC KEY FINDINGS

- Constraints to Growth
- **Transport was identified as a potential barrier to growth**
  - Milton Keynes – improved transport infrastructure vital precursor to development
  - Cambridge – an expected 40% increase in travel demand by 2031
  - Oxford – local LEP describe the city's road network as "woefully outdated"
  - Longer journey times limit competitiveness and local economic growth.
- **Housing affordability is also identified as a key constraint**
  - Oxford is the 'least affordable place in England' relative to wages, in Cambridge house prices are 8.7 times average salaries, reflecting a lack of housing availability
  - Milton Keynes has a stronger track record of delivering housing growth, but continued efforts are needed to unlock housing investment to support expected population growth
  - Affordability pressures make it harder for firms to recruit and retain staff and access new markets in an age of international competition – hence cities lose out on investment?
  - Yet further housing construction places further pressure on transport networks ..
- **Skills are identified as a challenge**
  - Both Oxford and Cambridge have high proportions of residents with degree-level qualifications, but retain often-overlooked districts with high proportions of residents with little or no qualifications. Oxford has below-average educational attainment amongst young people in state schools.
  - Milton Keynes, and the wider South East Midlands, report business skills shortages across a range of sectors in both leadership and management, as well as more technical and basic skills.

JOURNEY PATTERNS

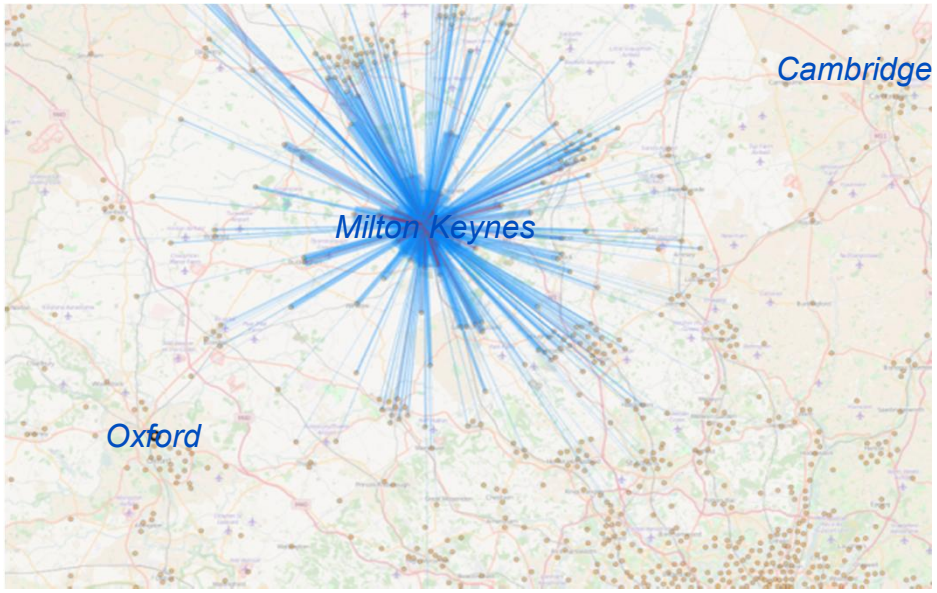
- Journey to Work (JtW) (Car Ownership 10% higher than national average)
- Largely by car (small mode share of rail and bus)
- Less than 1-2% is Strategic (whole corridor end to end) trips

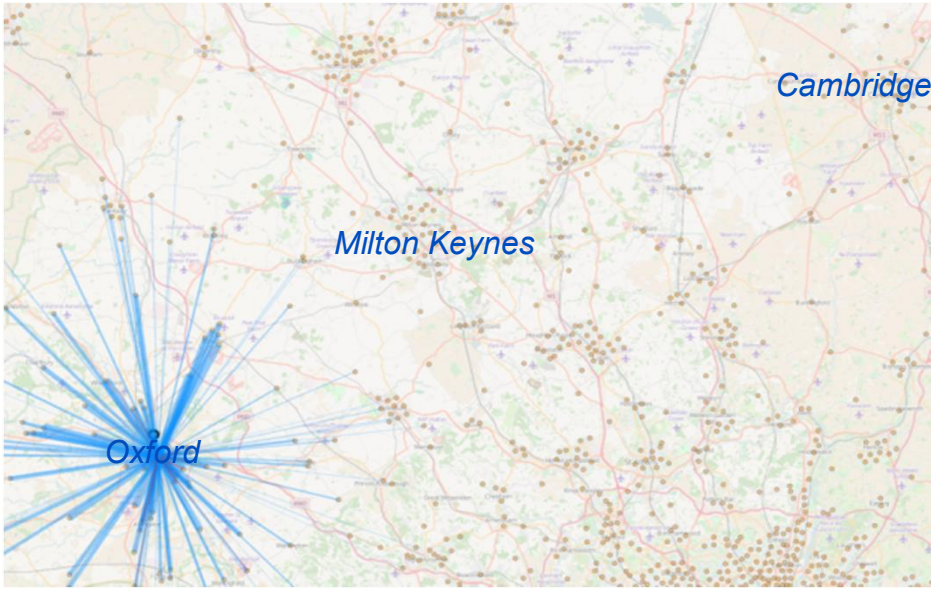
- Current key JtW movements are:
  - Abingdon and Bicester to Oxford
  - Bedford to Milton Keynes (and MK to Bedford)
  - Buckingham to Milton Keynes
  - St Neots to Cambridge (only 25% of Bedford to MK)
  - Milton Keynes to Oxford (less than 10% of Bicester to Oxford

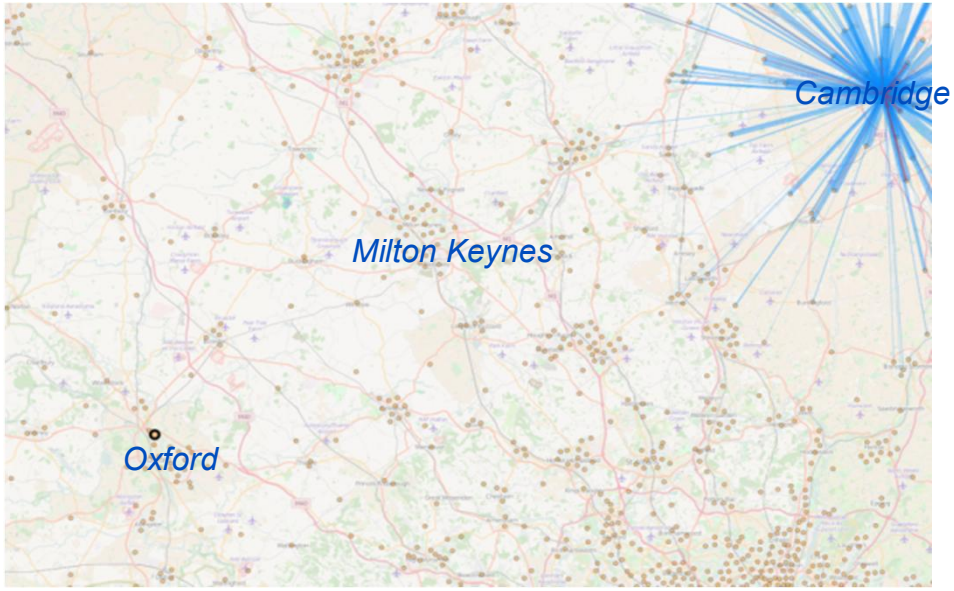
  - *Reflects distance and availability of connections*

COMMUTING BETWEEN LEIAS IN THE CORRIDOR

- Regular commuting between the economic centres is limited (note MK M1 and A421)
- Each economic centre has a clear commuting radius
- There is no evidence of a single, integrated labour market along the corridor. Improving accessibility along the corridor may improve matching between individuals and jobs, without the requirement for relocation of economic activity.







Inward car commute flows
Outward car commute flows

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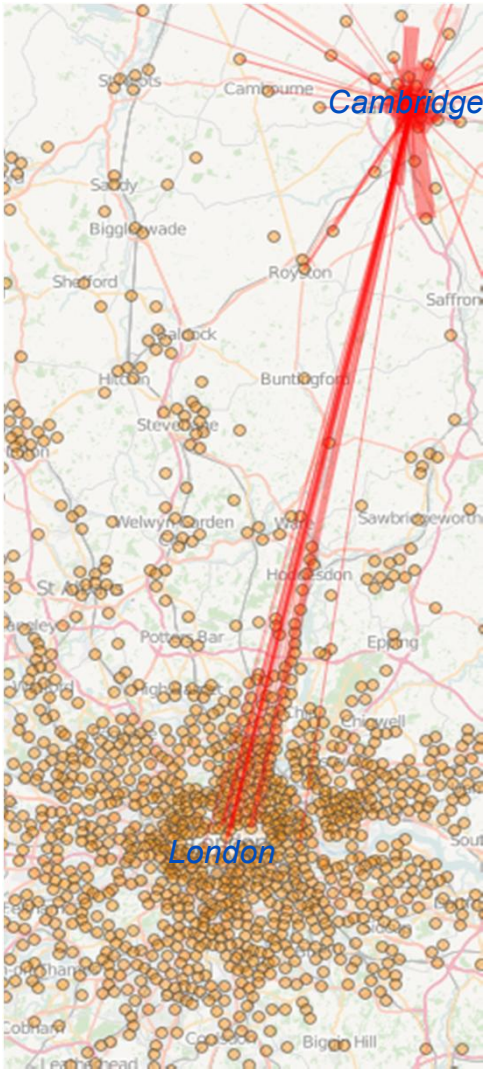
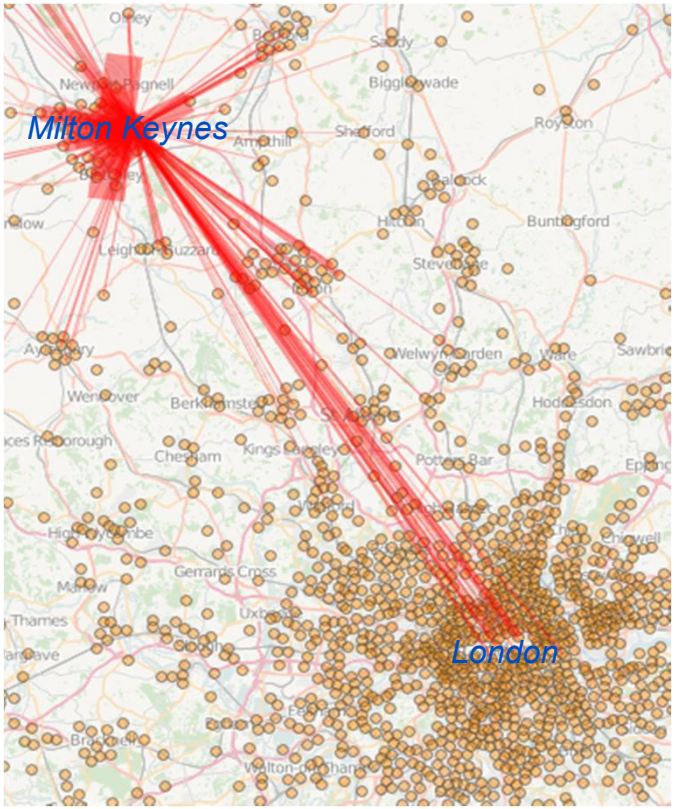
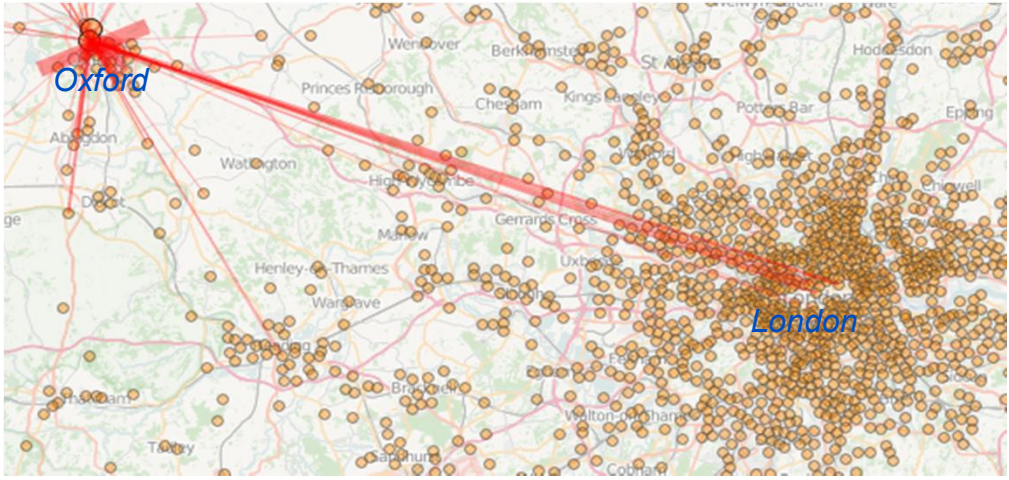
COMMUTING BETWEEN THE LEIAS ALONG THE CORRIDOR AND LONDON

- The economic centres also have significant out-commuting to London







Outward all modes commute flows

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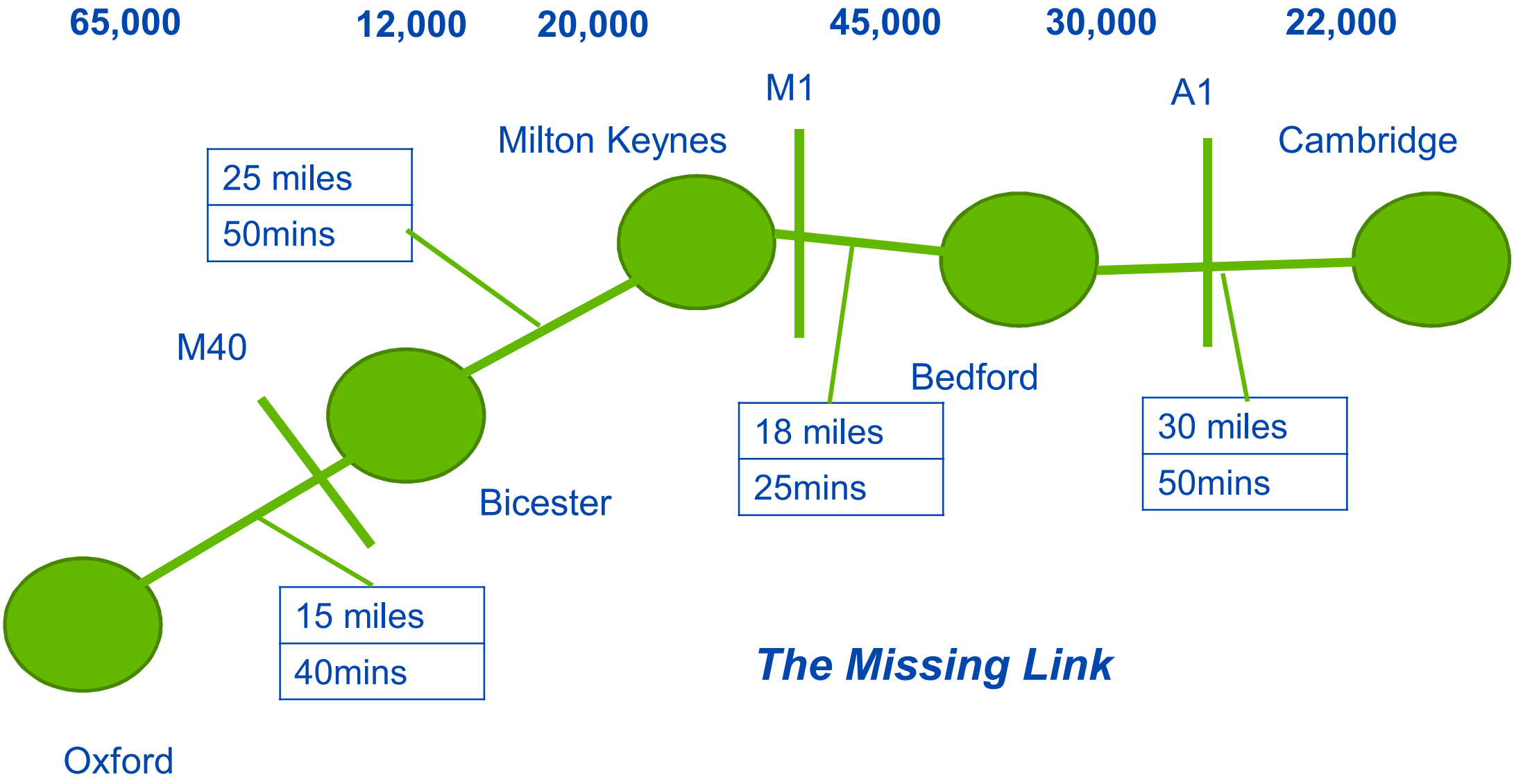
JOURNEY PATTERNS KEY FINDINGS

- There are low levels of commuting between the three main ares of Oxford, Milton Keynes and Cambridge;
- Within the study area there are important local commuter routes along the main east-west corridor including:
  - Into Oxford, from Didcot, Abingdon, Kidlington and Bicester;
  - From Bedford, to Milton Keynes and vice versa;
  - From Buckingham, to Milton Keynes and vice versa; and
  - From St Neots, into Cambridge.
- There are low levels of strategic long distance movements along the main east-west corridor within the study area, including between the main city regions of Oxford, Milton Keynes and Cambridge (>60,000 AADT on A34 versus circa 20,000 AADT near Milton Keynes)

CURRENT TRAVEL CONDITIONS - OVERVIEW



The Missing Link

AADT *and Peak JT*
2-10% HGV

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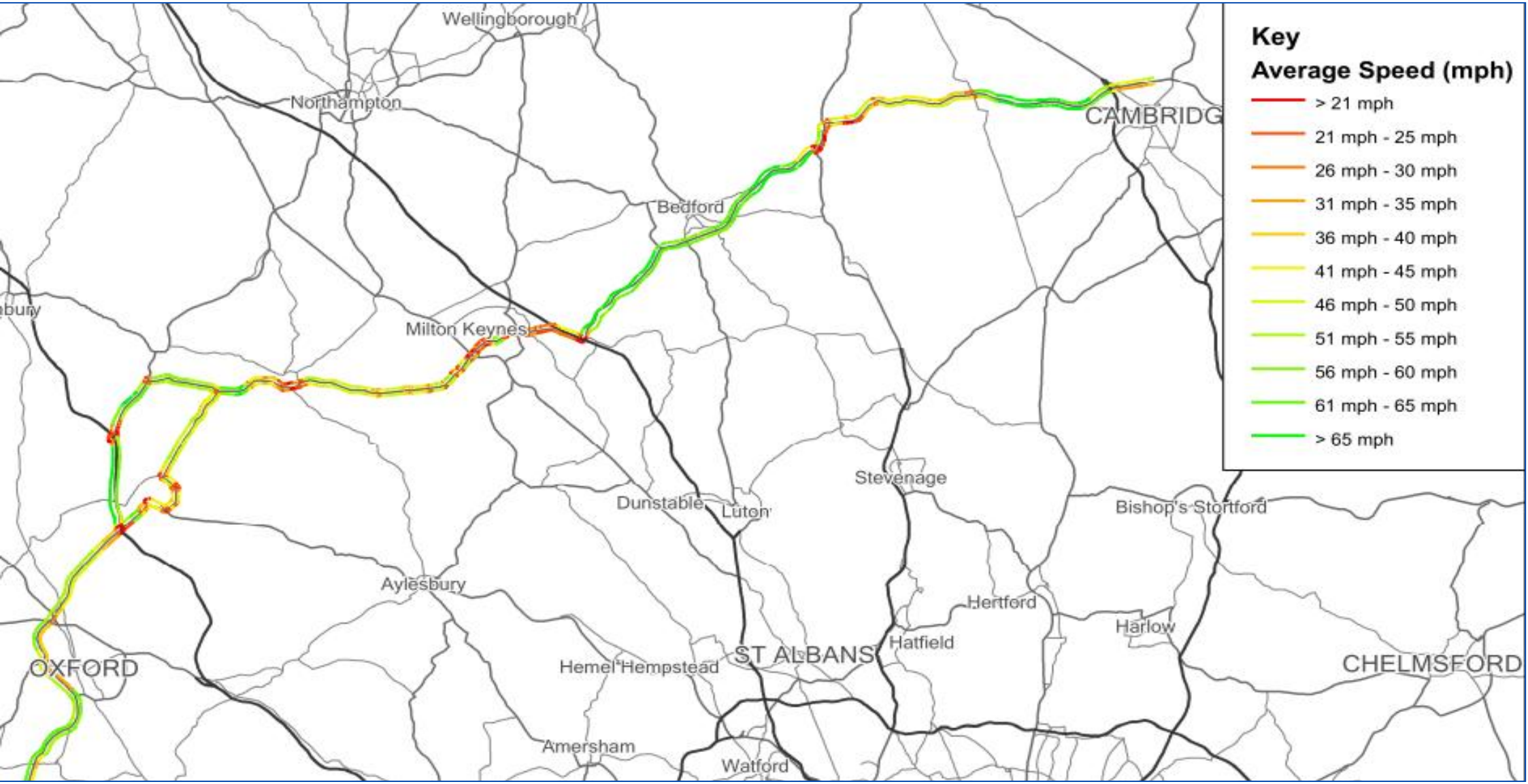
CURRENT VEHICLE JOURNEY TIMES

- M4/A34 junction to A428/M11/A14 junction
- Shows 30mins quicker overnight
- Longer if wanting to access City Centres – eg Oxford to Cambridge takes 2.5-3hrs

TIME PERIOD	EASTBOUND: M4 TO A14		WESTBOUND: A14 TO M4	
	ROUTE 1: VIA BICESTER	ROUTE 2: VIA M40	ROUTE 1: VIA BICESTER	ROUTE 2: VIA M40
AM Peak Hour (0800-0900)	02:23:22 43.0 mph	02:21:30 44.3 mph	02:25:00 42.4 mph	02:24:35 43.3 mph
PM Peak Hour (1700-1800)	02:23:14 43.0 mph	02:22:36 44.0 mph	02:16:20 45.1 mph	02:15:27 46.2 mph
Average Day (24 Hour)	02:08:40 47.9 mph	02:07:07 49.3 mph	02:07:00 48.4 mph	02:06:03 49.6 mph
Overnight (0000-0500)	01:54:22 53.9 mph	01:53:39 55.2 mph	01:56:31 52.8 mph	01:56:25 53.7 mph

CURRENT VEHICLE SPEEDS



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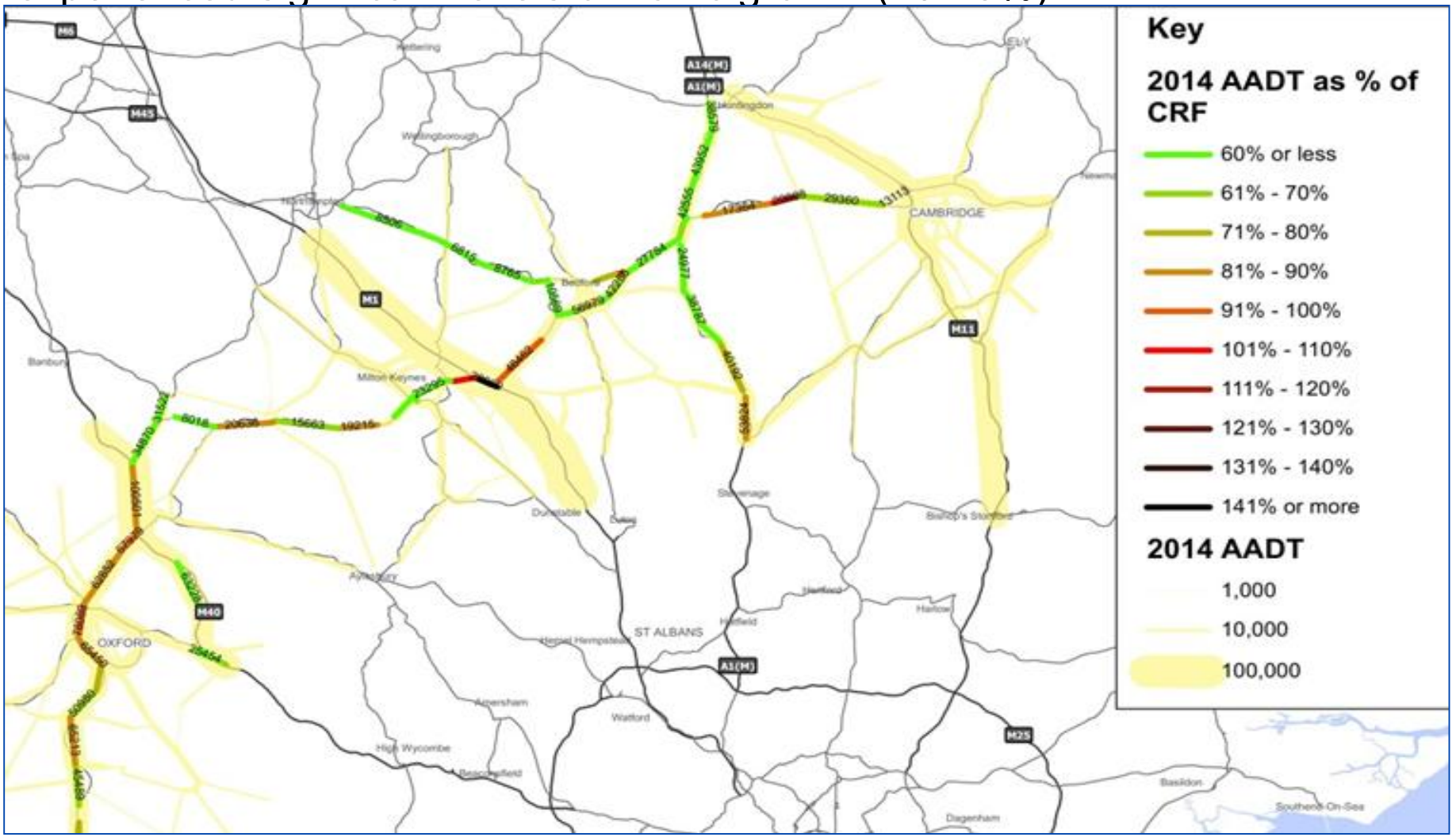
CURRENT VEHICLE JOURNEY TIMES

In the peak hours significant levels of delay occur at the following locations:

- **A34:** Tidal congestion inbound to Oxford in the morning and outbound in the evening, and between the Marcham and Milton interchanges;
- **A4421/A421 (A43 to M1)**: East and westbound delays on the single carriageway sections;
- **Black Cat Roundabout**: Congestion on the A421 and A1 approaches to the roundabout; and
- **A428 (A1 to A1198):** East and westbound delays on this single carriageway section including significant delays on approach to the Caxton Gibbet roundabout.

CURRENT VEHICLE JOURNEY RELIABILITY

- 75% of route is close to or exceeds congestion reference flow
- The A421 expressway has experienced significant levels of traffic growth (41%) between 2010-2014. The A421 (Milton Keynes to the A43), A428 expressway and A43 have also experienced significant levels of traffic growth (13-19%)



CURRENT RAIL

→ **Existing East-West Rail Average Peak Period Journey Time Matrix (mins)**
→ No direct East West Rail yet
→ Over 2.5hrs Oxford to Cambridge

* via Coventry (or Coventry & Rugby)
** via London
+ via Oxford Parkway & London
++ via Bletchley

ORIGIN/DESTINATION	OXFORD			MILTON KEYNES			BEDFORD		CAMBRIDGE	
OXFORD				80*	145**	155+	155**	160**	165**	180++
MILTON KEYNES	80*	150**	160+				55++		135**	
BEDFORD	160**		155**	60++					135**	
CAMBRIDGE	170**		175++	135**			145**			

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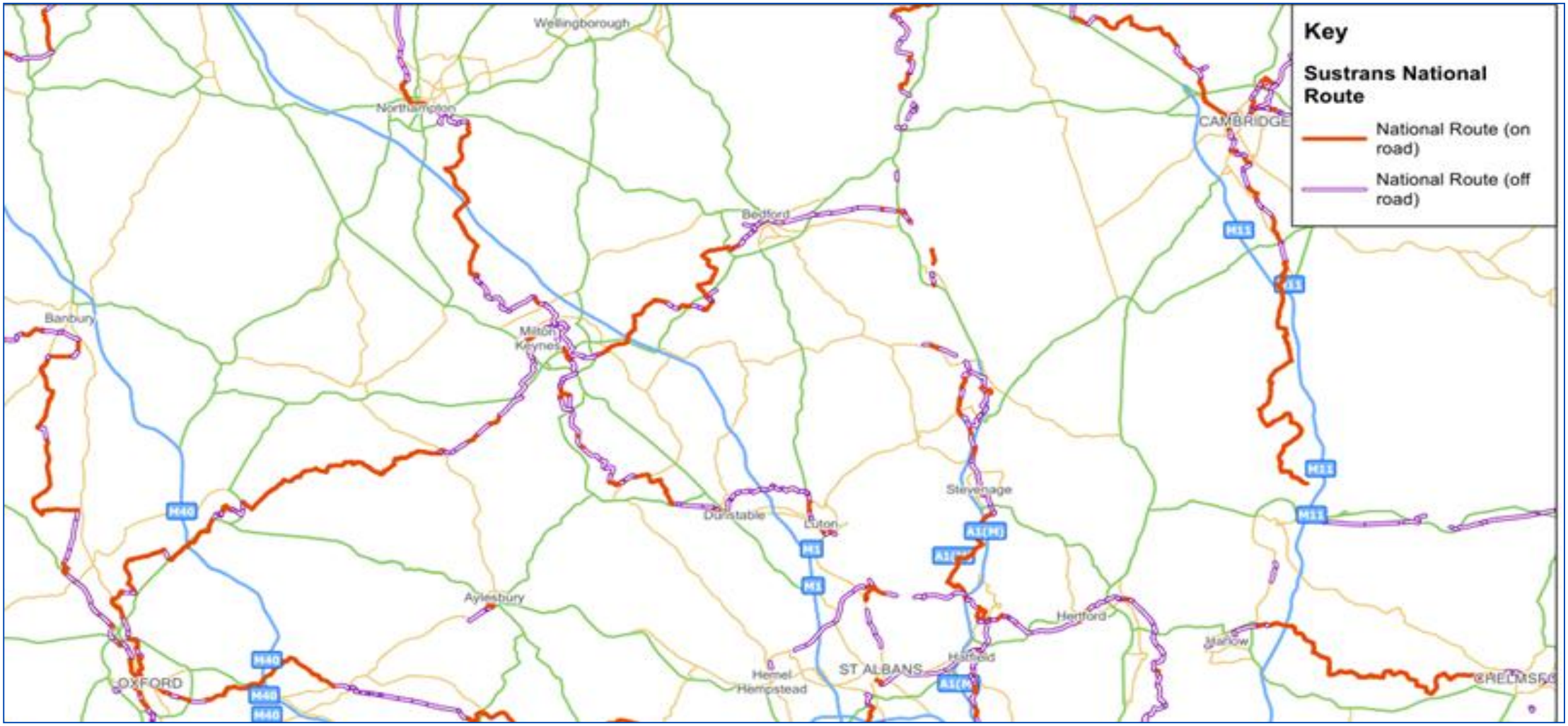
CURRENT BUS/COACH

→ X5 Stagecoach (relatively good interurban rather than end to end – over 3hrs Oxford to Cambridge)
→ Journey Times (peak delays can add 20-30mins)

ORIGIN/DESTINATION	OXFORD	MILTON KEYNES	BEDFORD	CAMBRIDGE
OXFORD		110	135	220
MILTON KEYNES	115		25	110
BEDFORD	135	30		75
CAMBRIDGE	215	110	70	

CYCLE ROUTES



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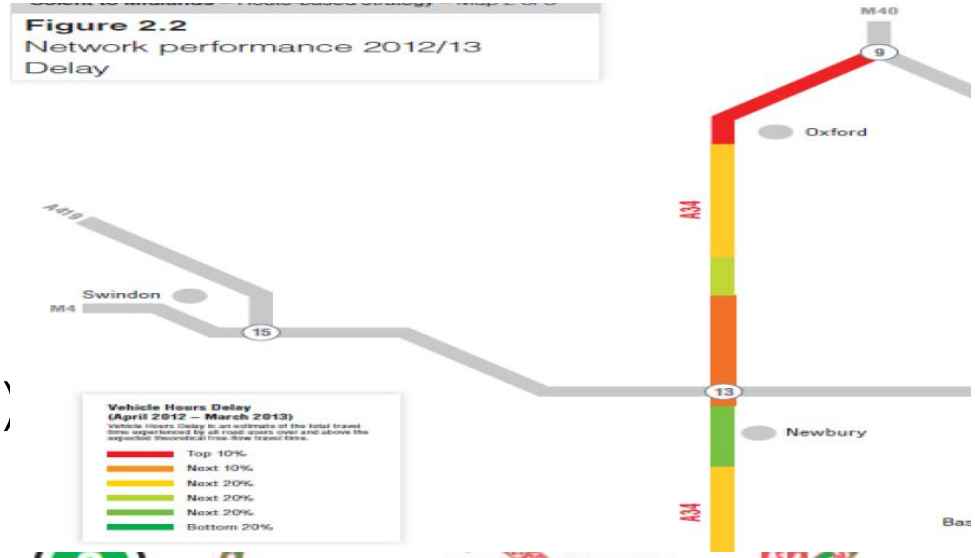
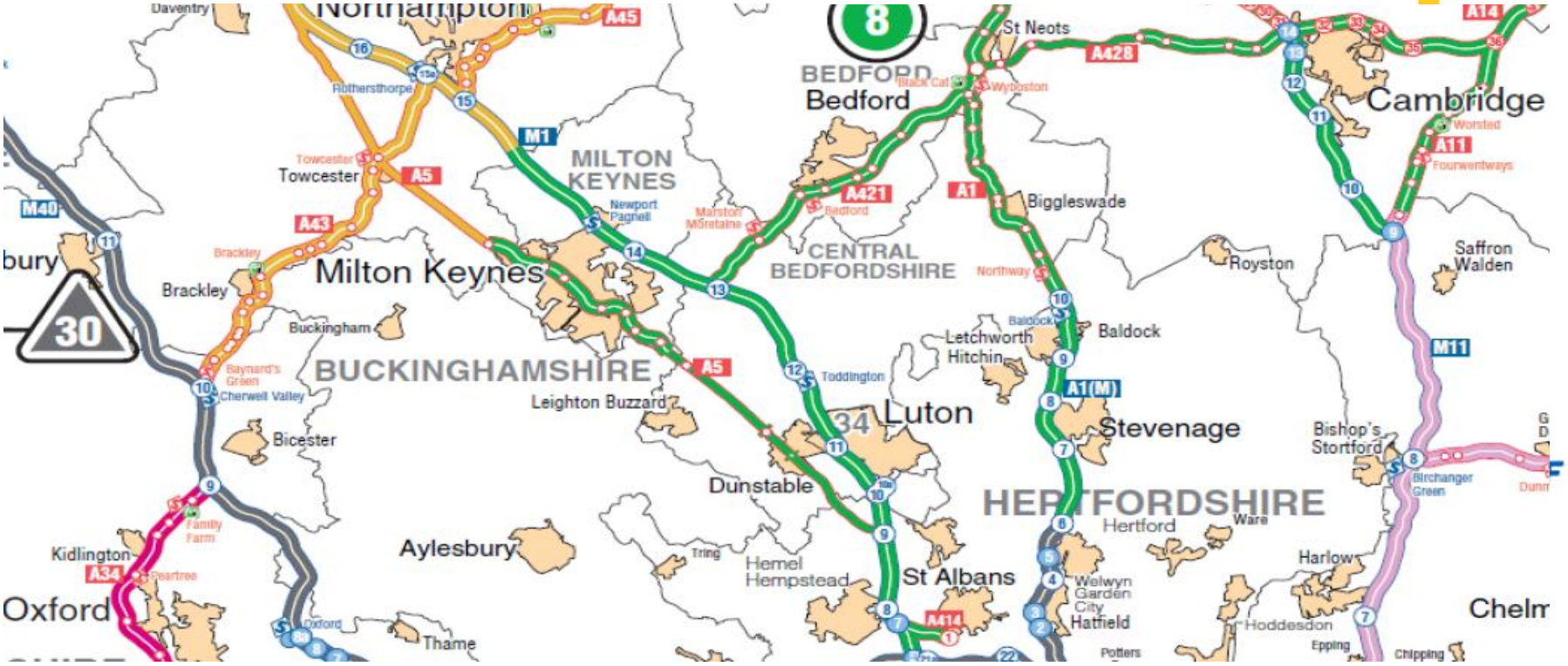
CHALLENGES (NOW)

- O2C 80 miles takes around 2.5hrs
- A34 performance and role around Oxford
- A428 Black Cat to Caxton Gibbet
- “Missing Link” between M40 and M1
- Mixed road standard and performance
- Many junctions and urban areas (congested)
- Lack of PT options





TRAVEL CONDITIONS KEY FINDINGS

- A34 section of the east-west route is a 'Comprehensive' TEN-T European freight route providing access to the southern ports – accommodates a high proportion of HGV movements
- The main gaps in expressway standard carriageway between Oxford and Cambridge are:
  - **A34**: A423 Eastern Bypass to the A420 and the Wytham southern access junction;
  - **A43**: M40 to the A421;
  - **A421**: A43 to the M1 (including the A43 and A4421); and
  - **A428**: A1 Black Cat Roundabout to the A1198.
- The east-west corridor provides interchange access to a number of national strategic roads including the M4, M40, M1, A1, A14 and M11; and
- The route passes through the urban area of Milton Keynes which has a high frequency of at-grade roundabout junctions.

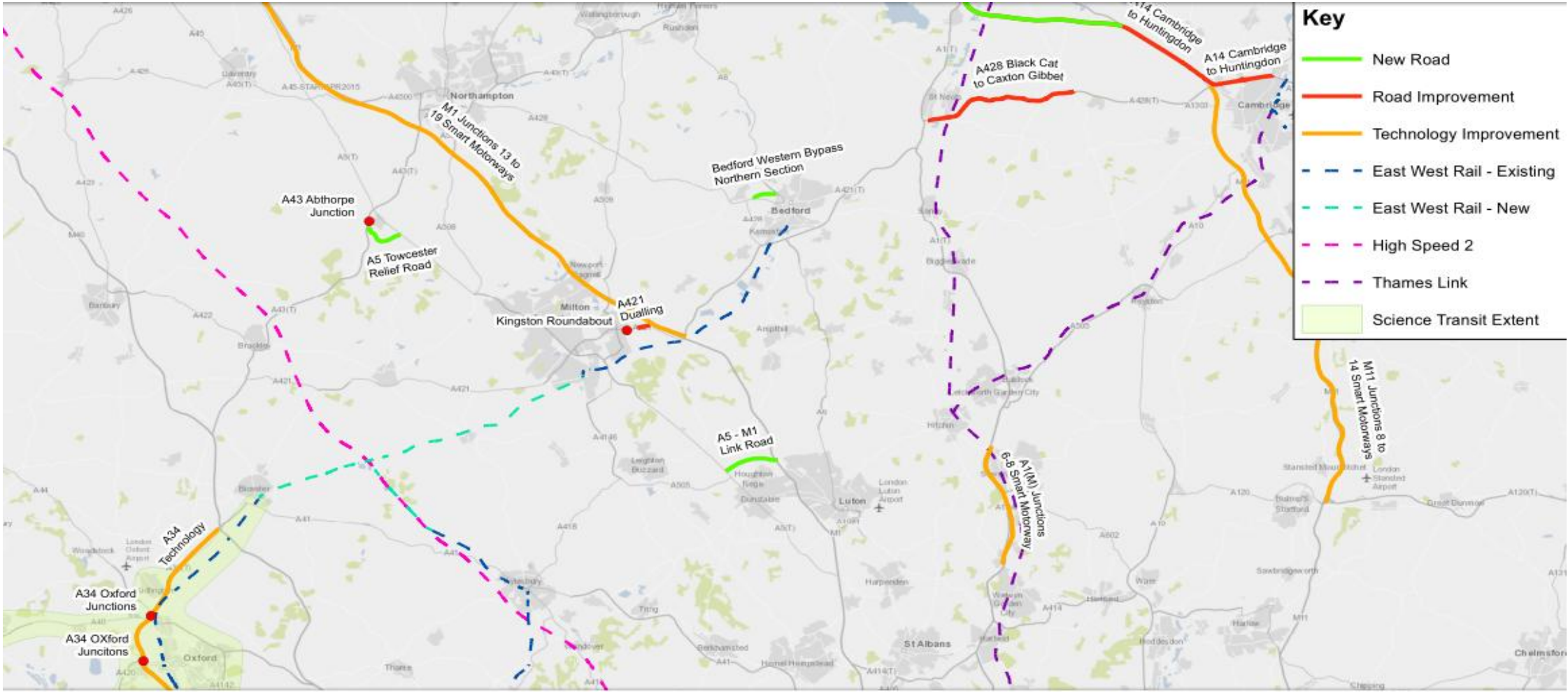
FUTURE TRAVEL CONDITIONS

- **Oxfordshire (OxLEP) LEP:** The local authorities that make up the OxLEP propose to deliver between 93,560 to 106,560 new homes by 2031;
- **South East Midlands (SEMLEP) LEP:** The 11 local authorities that form the SEMLEP have in place ambitious plans to deliver 86,700 new homes by 2020/21; and
- **Greater Cambridge/Greater Peterborough (GCGP) LEP:** The 12 local authorities that form the GCCP have in place ambitious plans to deliver 156,610 new homes by 2031.

- **Of the above, the study/corridor area expected to have over 250,000 new homes**

- **Significant population growth of around 35-40%**

FUTURE TRAVEL CONDITIONS - PROJECTS



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CHALLENGES (FUTURE)

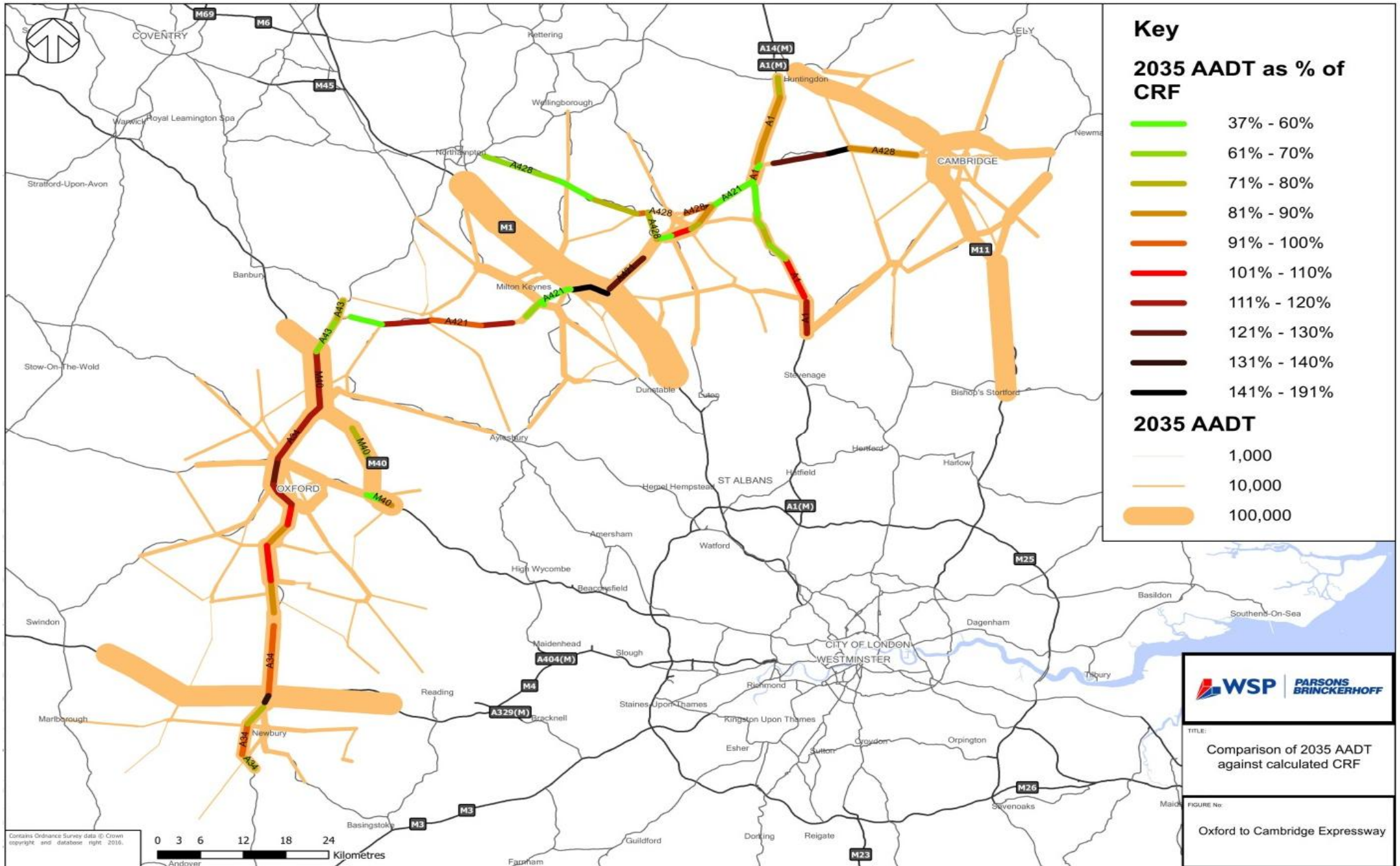
- **Even with current planned infrastructure**
  - Corresponding increases in journey times/congestion delay or reduced accessibility
  - Stress on local road network
  - Severance in communities and poor NMU conditions
  - Constrain strategic growth/economy
  - Climate change/flood risk

- **Over 20% increase in travel demand by 2041, up to 30% in key growth areas**

- **Without interventions (all modes) there will be significant challenges for travel, housing growth, access to jobs and associated impacts on communities**

- **Technology may have a role**

FUTURE TRAVEL CONDITIONS KEY FINDINGS



FUTURE TRAVEL CONDITIONS KEY FINDINGS

Significant sections of the routes under consideration are predicted to be operating overcapacity in 2041 with an AADT exceeding the CRF. On these links in peak hours there is likely to be a breakdown in traffic flows.

The following route sections are forecast to be operating overcapacity:

- A34, south of Oxford, around the western side of Oxford and to the M40;
- A421 single carriageway east of the A4421;
- A421 through Milton Keynes; and
- A428 single carriageway section.

EVIDENCE SUMMARY

- This is a strategic East – West corridor
- Key constraints: environment, existing infrastructure
- Planned infrastructure (HS2, EWR, other road improvements)
- Significant planned **housing and jobs growth**
- **Missing link in road and rail** network – no east-west strategic connections
- Significant **current and future congestion** (key links and junctions)
- **Network reliability worsening** over time
- **Poor access to labour** markets
- While low unemployment and high GVA there is a **lack of local skills** for type of employment
- **Lack of housing** and affordability
- **Negative impact on economic growth** (and reduction in contribution to UK economy)
- Local infrastructure challenges, eg **poor accessibility by all modes** into urban centres

QUESTIONS AND DISCUSSION

Oxford to Cambridge Expressway Strategic Study

Draft Objectives

25th February 2016

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OBJECTIVES

Aims of Study

- understand the strategic case for making improvements between the "*brain belt*" cities of Oxford and Cambridge;
- review previous study work, other relevant data, and current investment plans;
- identify the options for improving the connectivity between Oxford and Cambridge either by improving the current roads infrastructure or by building new roads. Understand the operational and technical feasibility, and user benefits and challenges, including environmental related impact of the different options;
- understand the benefits and impacts resulting from improving access to the strategic corridor in the region -including the benefits, resilience and impacts accruing on existing routes and local roads;
- understand the benefits and impacts resulting from additional capacity; and
- understand how options will impact the local and wider economy.

OBJECTIVES

Overarching Study Objectives
RIS and Strategic Studies Policy Objectives

- This study will investigate the case for linking existing roads and creating an Oxford to Cambridge Expressway, which would create a high-quality link between Oxford and Cambridge, via Bedford and Milton Keynes

- 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 and the broad ark to the North of London from Didcot – Oxford – Milton Keynes – Bedford – Cambridge

- The Oxford to Cambridge expressway strategic study will take into account the effects of the East-West rail link, HS2 amongst other transport plans, as well as the A1 East of England strategic study to ensure that the benefits are not double counted and are complementary

DRAFT OBJECTIVES FOR DISCUSSION

Objectives

1. Provide an additional East – West strategic route that delivers a faster, safer and more reliable connection along the corridor

2. Build on the ambition to unlock the economic potential in the corridor by facilitating strategic growth to the benefit of the UK economy

3. Promote wider socio-economic benefits that improve access to jobs, create wider employment opportunities for regional urban centres

4. To reduce through traffic on local roads to improve the environment for communities on current routes

Oxford to Cambridge Expressway Strategic Study

Emerging Concepts

25th February 2016

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STRENGTH OF THE STRATEGIC CASE

→ At three levels

1. **Strategic** - Remove trips from M25?

2. **Regional** - Significant growth planned along the corridor and two important UK cities at each end of corridor that contribute to UK (international) economy

3. **Local** - Sections of the route will have potential positive impacts in own right – access to labour markets

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)

OPPORTUNITIES AND CONSTRAINTS

- Limited commuting/interaction between Oxford and Cambridge (each has zone of influence) – expressway could address this

- Improved connectivity along the Oxford to Cambridge Expressway Corridor is likely to increase the number of people commuting between local areas and may lead to better matching between skills and employment opportunities

- Improved connectivity is likely to deliver increased economic interaction (with associated impacts on trade, specialisation, productivity etc.) between the local areas

- Understand potential environmental/land use impacts and likely costs

EMERGING CONCEPTS AND LONG LIST OF OPTIONS

- Developed from evidence base
- Covers all *typical* modes of travel (road based, rail etc) – **only concepts at this stage**
- Options could include measures for NMUs (eg cycle routes and bridleway bridges – with ecology function)
- Our work will consider a do-nothing and do-minimum scenarios as well as shortlisted option(s)
- At this stage they are concepts rather than detailed designs with mitigation

EMERGING CONCEPTS

Road

- Upgrade to current route
- Northern route (eg 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

EMERGING CONCEPTS

High Quality Passenger Transport

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

Behaviour Change

- Sustainable / 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

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DISCUSSION GROUPS

1. **Consider Draft objectives**

→ Views on current Draft Objectives
→ Are there any suggested amendments?

2. **Review emerging concepts**

→ Views on emerging concepts
→ Possible options

Oxford to Cambridge Expressway Strategic Study

Next Steps

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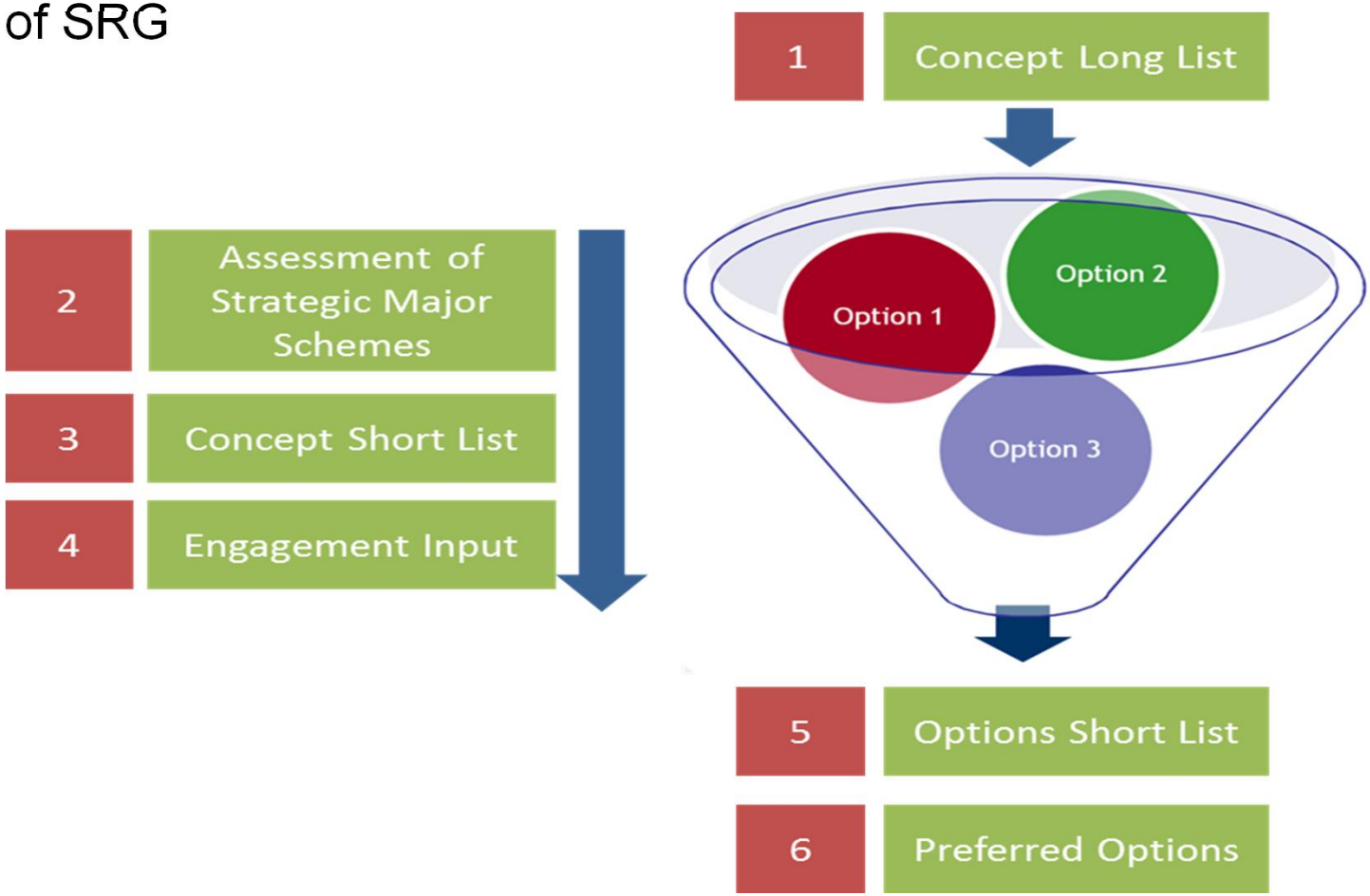
OPTION ASSESSMENT (USING EAST)

- Develop concepts into Long List of options
- Use Early Appraisal Sifting Tool (EAST) to determine short list of options for views of SRG



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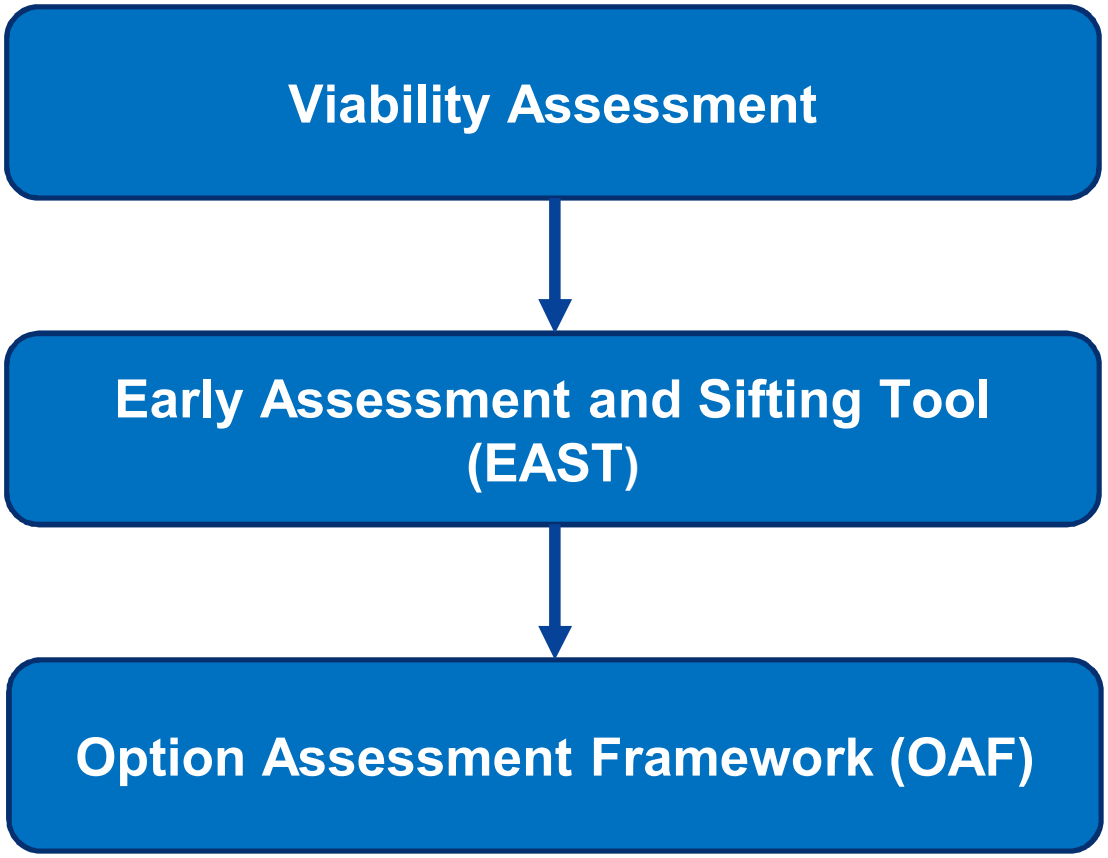
OPTION ASSESSMENT (USING EAST)



VIABILITY ASSESSMENT

The viability assessment will consist of two questions:

- Is the option located within the defined study area?
- Does the option fit the defined project scope and objectives of improving east-west links?

Option taken forward to EAST if the answer is "yes" to both

APPLICATION OF EAST

Score options against:

- EAST categories – strategic fit; economic impact; management; financial; commercial
- Intervention-specific objectives developed in response to the problems identified by this study
- Highways England Business Plan objectives

EXAMPLE OF EAST APPLICATION

Option	Strategic				Economic						Managerial				Financial			Commercial
	Scale of Impact	Fit with wider objectives	Fit with other objectives	Consensus over outcome	Economic Growth	Carbon Emissions	SDI & the Regions	Local Environment	Well being	Expected VfM Category	Implementation Timetable	Public Acceptability	Practical Feasibility	Quality of Evidence	Capital costs (£m)	Revenue Costs (£m)	Cost Risk	Flexibility of Option
Option 1	2	3	4	3	3	3	3	3	3	3	3	4	4	3	2	2	4	4
Option 2	2	3	4	3	2	3	3	3	3	5	4	4	3	3	3	2	3	4
Option 3 etc	4	2	5	3	3	3	3	3	3	3	3	4	4	3	2	2	4	3

Categorisation	1: Low	1. V High >4	3. 6-12 mo	1: Low	2. 0-5	1. None	1: High Risk	1: Static
	2	2. High 2-4	4. 1-2 yrs	2	3. 5-10	2. 0-5	2	2
	3	3. Med 1.5-2		3		3. 5-10	3	3
	4	4. Low 1-1.5		4		4. 10-25	4	4
	5: High	5. Poor <1		5: High		5. 25-50	5: Low Risk	5: Dynamic

OUTPUTS FROM EAST AND NEXT STEPS

→Output from EAST:

- Shortlisted options taken forward for further assessment
- Freight modelling and Technology review
- **SRG in Summer 2016 to consider Stage 2 work**

→Next steps:

- SERTM modelling and land use modelling
- Option Assessment Framework (OAF) to assess these options in more detail (from WebTAG)
- Strategic Outline Business Case (end 2016)