



Department
for Transport

Northern Trans- Pennine Routes Strategic Study

*Stakeholder
Reference Group
12th July 2016*



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Welcome and Introductions Mark Wilson TfN



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STUDY OBJECTIVES - REFRESH

- Understand **current performance and constraints** of the existing road infrastructure
- Identify **options for a new strategic corridor** upgrading one or both of the A66 and A69 and making other improvements along their length
- Understand the **operational benefits and challenges** of constructing each of the options, also assessing the safety impacts on road users and on local communities
- Understand the **benefits and impacts** resulting from the provision of a new strategic corridor to inform the strategic and economic case for investment
- Understand the **interdependencies** between the potential options arising from the Trans-Pennine Tunnel and the Manchester North-West Quadrant studies

INTERVENTION SPECIFIC OBJECTIVES - REFRESH

Theme	Description
Economic Growth	Support the economic growth objectives of the Northern Powerhouse agenda.
	Improve access to regional economic centres and local growth sites served by the A66/A685 and A69.
Connectivity	Ensure the improvement and long-term development of the SRN through providing better national connectivity.
	Improve the A66/A685 and A69 as strategic connections for freight traffic.
	Maintain and improve access for tourism served by the A66/A685 and A69.
	Improve (and as a minimum maintain) access to services and jobs for all local road users.
Network Performance	Improve journey time reliability for road users.
	Reduce the number and seriousness of incidents involving road users, including Non-Motorised Users (NMUs).
	Improve the resilience of the routes to the impact of events such as roadworks and severe weather events.
Environment	Reduce the impact of the routes on severance for local communities.
	Minimise adverse impacts on the environment and where possible optimise environmental improvement opportunities.

The background of the slide is a photograph of a winding road through rolling hills. The road is a multi-lane highway that curves through the landscape. The hills are covered in green grass and some bare patches, suggesting a rural or semi-rural setting. The sky is clear and blue. A large blue rectangular overlay is positioned on the left side of the slide, partially covering the image.

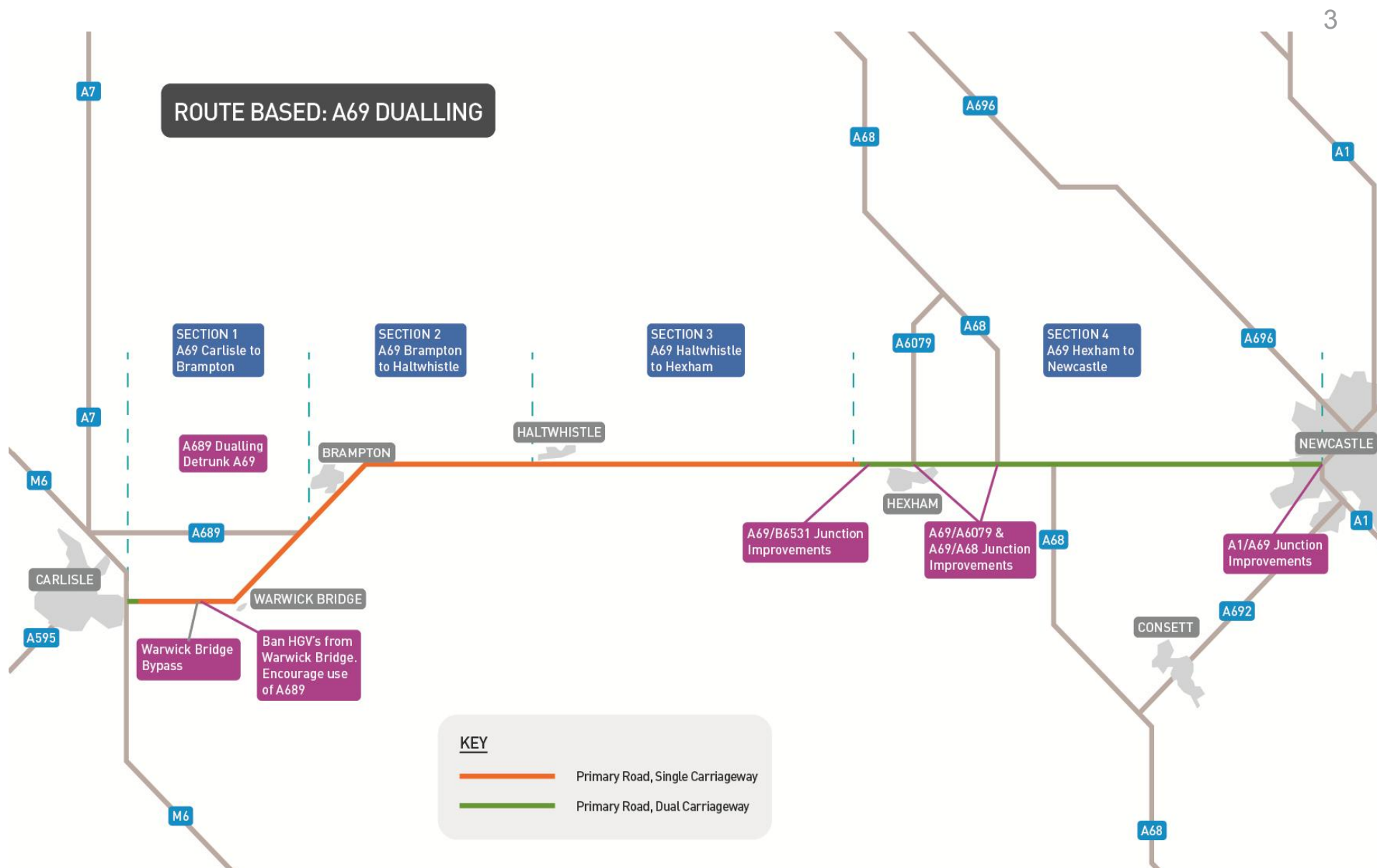
Northern Trans-Pennine Routes Strategic Study - Progress Update

Tim Lund



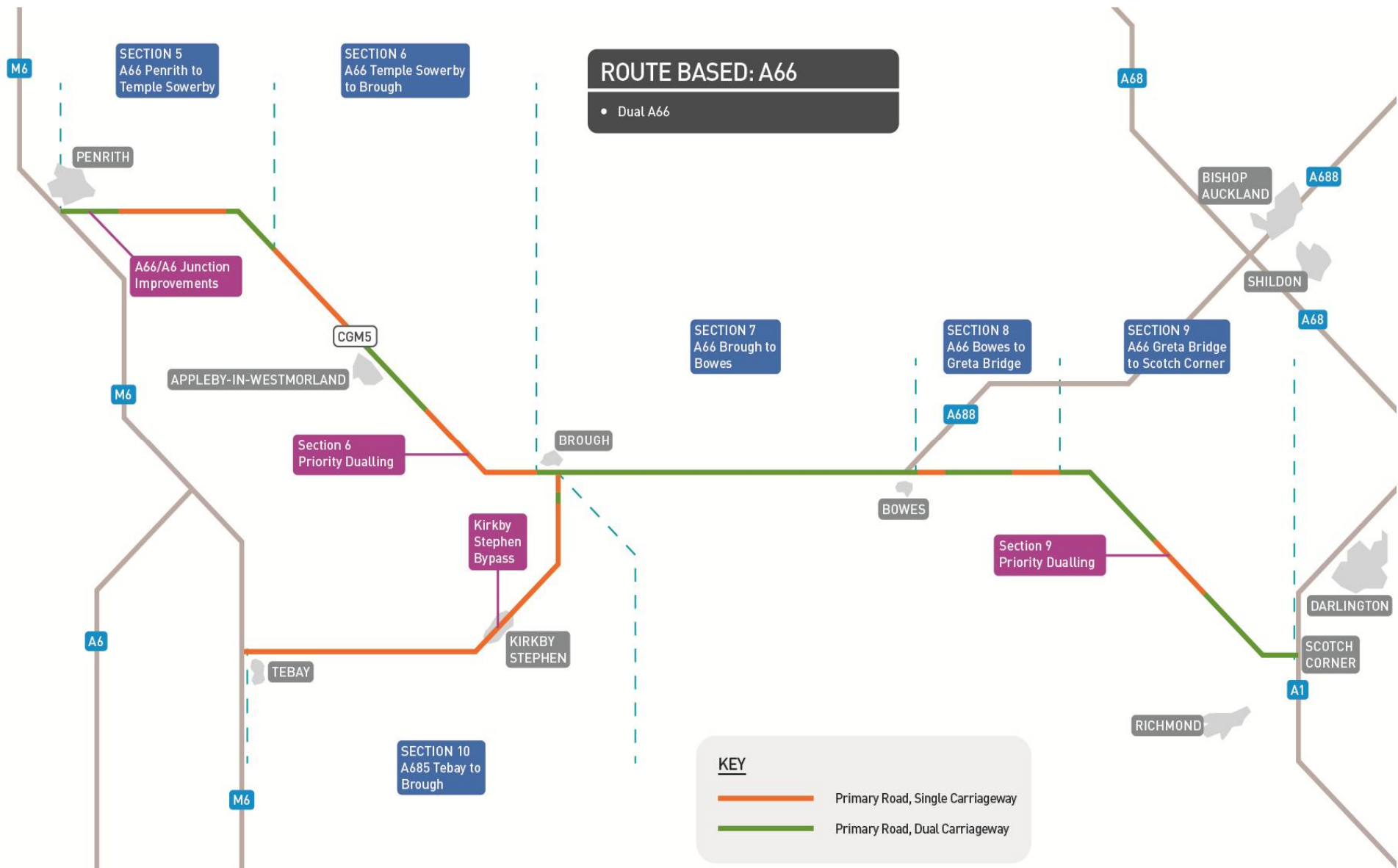
STRUCTURE OF THE PRESENTATION

- Summary of the shortlisted options taken forward to Stage 3 appraisal
- Potential benefits of shortlisted options
- Next steps



A69 – STAGE 3 OPTION APPRAISAL

ID	Option	Description
A69 1	A69 Dualling	<ul style="list-style-type: none"> • Dual all remaining single carriageway section • Includes Option 4 – Junction Improvement Package • Includes Option 2 or Option 3
A69 2	A689 Dualling	<ul style="list-style-type: none"> • In Stage 3 combined into one Warwick Bridge bypass option which has a variety of delivery options • Represents option to upgrade western end of A69 • Could be delivered in advance of full dualling option
A69 3	Warwick Bridge Bypass	
A69 4	Junction Improvements Package <ul style="list-style-type: none"> - A69/B6531 - A69/A6079 - A69/A68 	<ul style="list-style-type: none"> • Represents option to upgrade eastern end of A69 • Considered as stand alone scheme as well as part of full dualling option • Could be delivered in advance of full dualling option

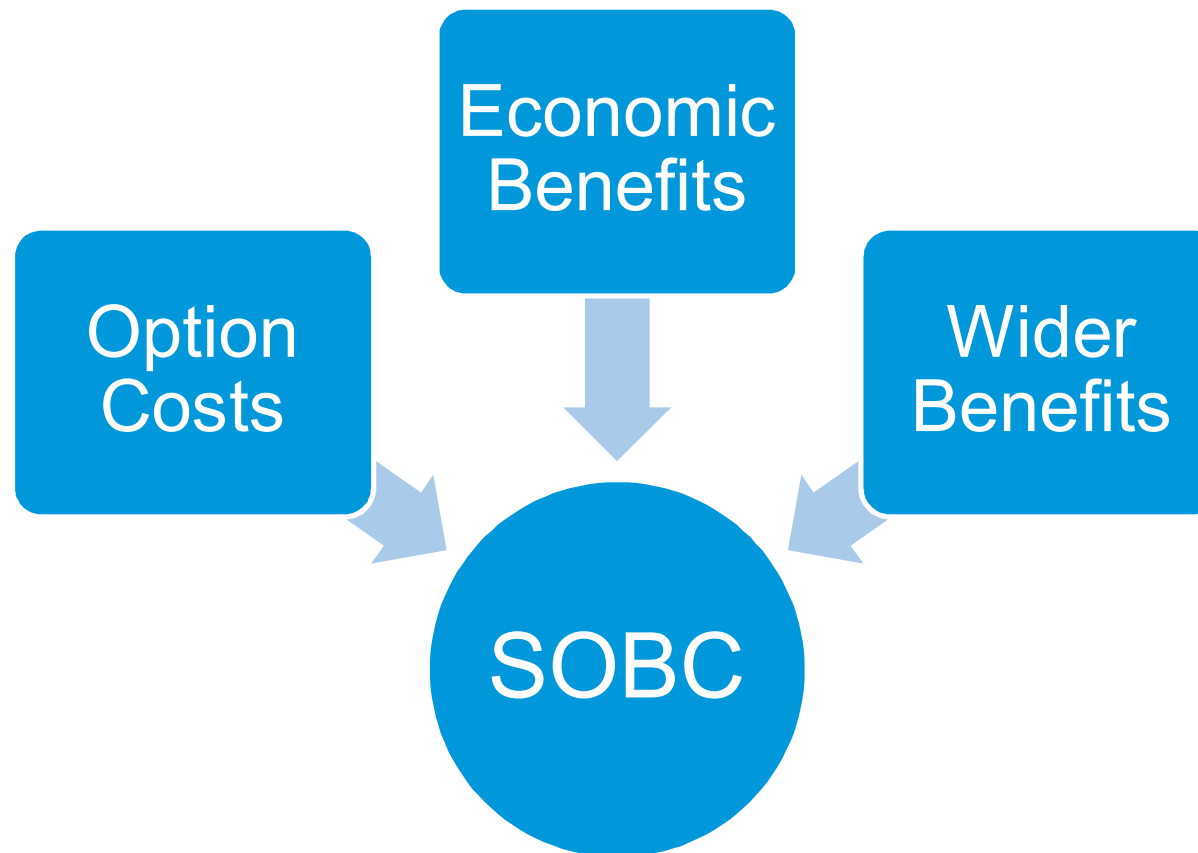


A66/A685 – STAGE 3 OPTION APPRAISAL

ID	Option	Description
A66 1	A66 Dualling	<ul style="list-style-type: none"> Dualling of all remaining single carriageway sections Includes Option 2 – A66/A6 Junction Upgrade
A66 2	A66 / A6 Junction Upgrade	<ul style="list-style-type: none"> Could be delivered as stand alone scheme or in conjunction with full dualling option
A66 3	Scotch Corner to Greta Bridge Dualling	<ul style="list-style-type: none"> Could be stand alone scheme or delivered as part of phasing of full dualling option
A66 4	Temple Sowerby to Brough Dualling	<ul style="list-style-type: none"> Could be stand alone scheme or delivered as part of phasing of full dualling option

ID	Option	Description
A685 1	Kirkby Stephen Bypass	<ul style="list-style-type: none"> Single carriageway bypass of Kirkby Stephen

STAGE 3 APPRAISAL PROCESS



OPTION APPRAISAL – POTENTIAL ECONOMIC BENEFITS

Benefit Type	Assessment Method
Journey time savings	Estimated reductions in journey times.
Junction delay reductions	Estimated reductions in delays at junctions.
Reliability improvements	Assessment of reduction in variability of journey times.
Accident benefits	Estimated reductions in accidents from safer roads.
Strategic Re-Assignment	Estimate of traffic transferring from other routes (principally M62) as a result of improved journey times on the A66/A685 or A69.
Wider economic impacts	Assessment of local development impacts arising from infrastructure improvements.

INITIAL APPRAISAL RESULTS (JOURNEY TIME SAVINGS ONLY)

- A69 dualling generates the largest journey time savings but will also be the most expensive option (32m length of single)
- Completion of A66 dualling will generate around half the journey time savings of the A69 dualling but will be less costly (15m length of single in total)
- Dualling of A66 section 6 (Temple Sowerby to Brough) would generate a high proportion of A66 dualling journey time savings – due to current speed limits; topography
- A685 by-pass of Kirkby Stephen would generate low journey time savings – due to low traffic volumes; single carriageway

POTENTIAL WIDER BENEFITS OF OPTIONS

- There are other wider benefits which are not fully or only partially covered in the economic appraisal

Full reliability and
resilience benefits

National impact of
improvements to
strategic road
network

Commercial
performance of
ports and airports

Efficiency of
freight operations

Tourism impacts

- Need to ensure that the narrative for the strategic case covers the full range of the potential benefits of options

NEXT STEPS

- Refinement of initial assessment of option impacts
- Estimation of wider economic impacts
- Estimation of option costs – mid to late July
- SOBC results at the end of July
- Draft report and appraisal results in August
- Report refinements, sign off and acceptance – Sep/Oct
- Further development of options, including public consultation, to follow

Questions & Answers



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Environmental Appraisal

Overview



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INTRODUCTION

- **Methodology**
- **Findings**
- **Challenges and Opportunities**

REPORTING STAGES

- **EAST – using env. EAST spreadsheet.**
 - Summarised in a single score for Environment.
- **Option Assessment Framework**
 - High level judgement of topic scores for each potential corridor option or group of options.
- **Final Report**
 - Webtag appraisal sheet for each topic and produce an AST for each option.

METHODOLOGY – COLLECTING DATA

→ Agreed data set for baseline.

- Keep it high level e.g. excluded species specific information.
- Readily available data only.

Heritage of historic resources	
Registered Battlefields.	www.data.gov.uk
Registered Parks and Gardens	WSP Parsons Brinckerhoff IGIS
Scheduled Monuments	WSP Parsons Brinckerhoff IGIS
World Heritage Sites	WSP Parsons Brinckerhoff IGIS
Highways England Cultural heritage asset data	Highways England EnvIS (Not used at Stage 1)
Listed Buildings	WSP Parsons Brinckerhoff IGIS
Conservation Areas	To be sourced from local authorities

→ Agree buffers.

Red	Amber	Green
<i>Geographical boundary or proposed route corridor of project:</i>		
<u>Wholly or partially within:</u> National Parks (including Proposed) AONBs Dark Sky Park	<u>Adjacent to and ≤1.5 km</u> AONBs National Parks (including Proposed) Dark Sky Park	<u>>1.5 km</u> AONBs National Parks (including Proposed) Dark Sky Park

BASELINE CONSTRAINTS INFORMED EAST

Technical Topic	Section			
	A69 Newcastle to Hexham	A69 Hexham to Haltwhistle	A69 Haltwhistle to Brampton	A69 Brampton to Carlisle
Air Quality & Greenhouse Gases				
Cultural Heritage				
Landscape				
Nature Conservation / Biodiversity				
Noise & Vibration*				
Road Drainage & Water Environment				
Peoples & Communities**				
Geology, Soils & Materials				

A66 & A685

Technical Topic	Section					
	A66 Scotch Corner to Greta Bridge	A66 Greta Bridge to Bowes	A66 Bowes to Brough	A66 Brough to Temple Sowerby	A66 Temple Sowerby to Penrith	A685 Brough to Tebay
Air Quality & Greenhouse Gases						
Cultural Heritage						
Landscape						
Nature Conservation / Biodiversity						
Noise & Vibration						
Road Drainage & Water Environment						
Peoples & Communities						
Geology, Soils & Materials						

COLLECTING DATA

→ A66

- Scheduled Monuments, 13 within 10 m
- Crosses SAC/SPA in 5 locations.
- Crosses or intersects Flood Plain 12 times

→ A685

- Substantial Part within National Park Extension
- Crosses SAC 3 times

→ A69

- Scheduled Monuments, 7 within 10m
- Crosses SAC twice
- Crosses or intersects Flood Plain 26 times
- Within or directly adjacent to World Heritage in several locations.

SCORING APPROACH – INTERVENTION SPECIFIC OBJECTIVES

→ Five point scoring scale:

Score	Description
5	Large positive impact
4	Moderate / slight positive impact
3	Minimal / no impact
2	Moderate / slight negative impact
1	Large negative impact

- Schemes scored independently rather than ranked in relation to each other
- Only one score across all topics – used worst case.

EAST FINDINGS

→ A69

Route	Ref	Option	Economic	
			Carbon Emissions	Local Environment
A69	1.1	Dual the whole of the A69 corridor.		
	1.2	Dual the A689 and de-trunk the A69 corridor (with weight restrictions implemented between Junction 43 and Brampton to force HGVs to use the A689 instead).		
	1.3	Construct a village by-pass around Warwick Bridge.		
	1.5	Introduction of an overtaking or climbing lane at Low Row.		
	1.20	Safety (Implement overtaking restrictions 1.7, review speed limits 1.9, improve enforcement and camera technology 1.11)		
	1.21	Route Management (Improved levels of signage 1.10, improved road user information 1.12, technology enhancements 1.14)		
	1.22	Public Transport Enhancements (Introduction of a Park & Ride/Park & Rail service between Hexham and Newcastle 1.13, rolling stock improvements and review station parking facilities 1.15)		
	1.8	A69/B6531 junction improvements.		
	1.16	Grade separation of the A69/A68 roundabout junction to the east of Corbridge.		
	1.17	Grade separation of the A69/A6079 roundabout at Hexham.		
	1.18	Upgrade the A1/A69 roundabout at Newcastle upon Tyne.		
	1.19	Link the NTPR Study with other complementary A1 studies.		

OAF RESULTS

(7 POINT SCALE)

Topic	Scheme			
	A69 - Dual the whole of the A69 corridor	A69 - Dual the A689 and de-trunk the A69 corridor between A689/A69 and M6/A69 junction	A69 - Construct a village by-pass around Warwick Bridge	A69 - Route Infrastructure Package - Junction Upgrades
Noise				
Air Quality				
Greenhouse Gases				
Landscape				
Townscape				
Historic Environment				
Biodiversity				
Water Environment				

CHALLENGES

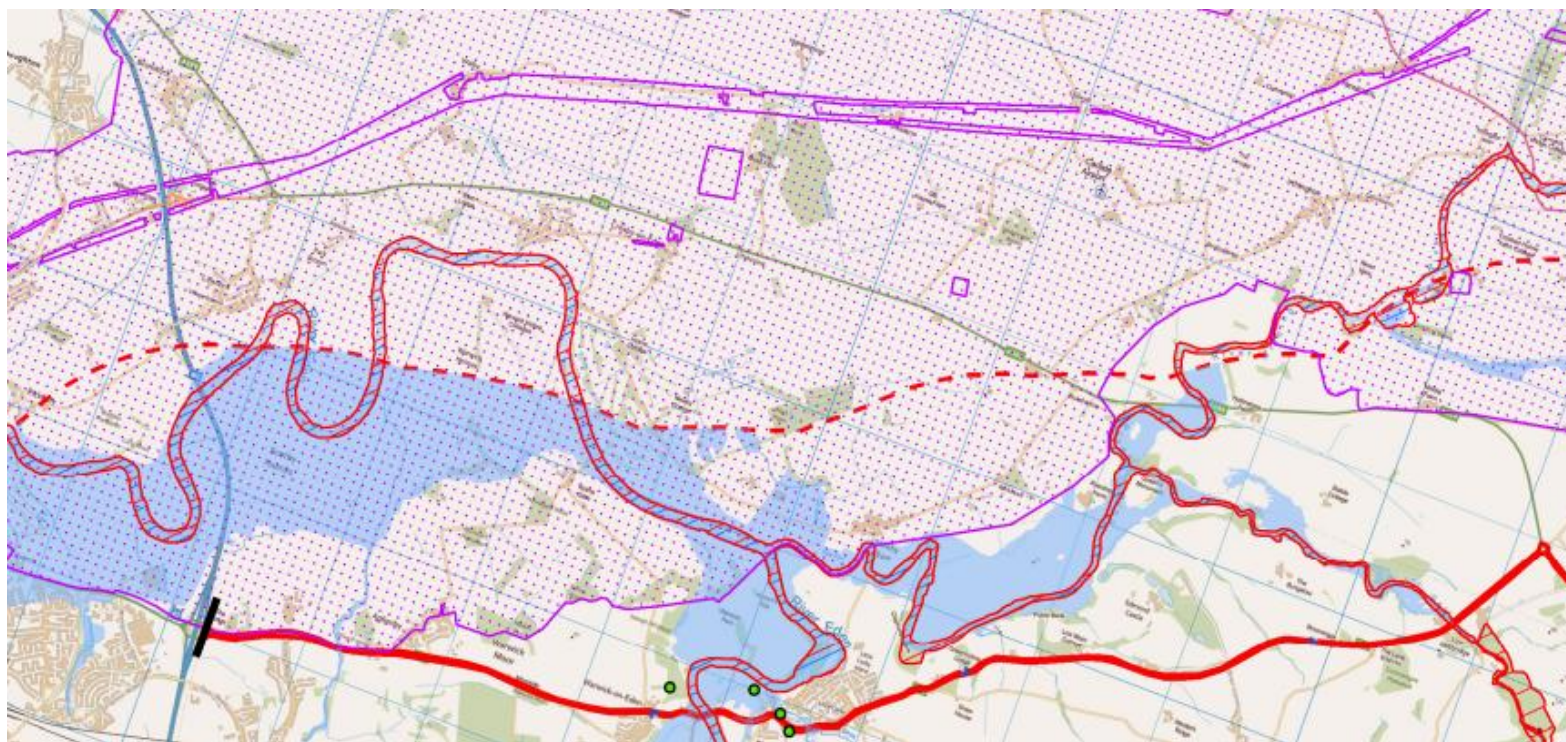
- A69 Example
- Option: Bypass for Warwick Bridge



CHALLENGES

Or

→ Option: HGV restriction through Warwick Bridge and improve A689.

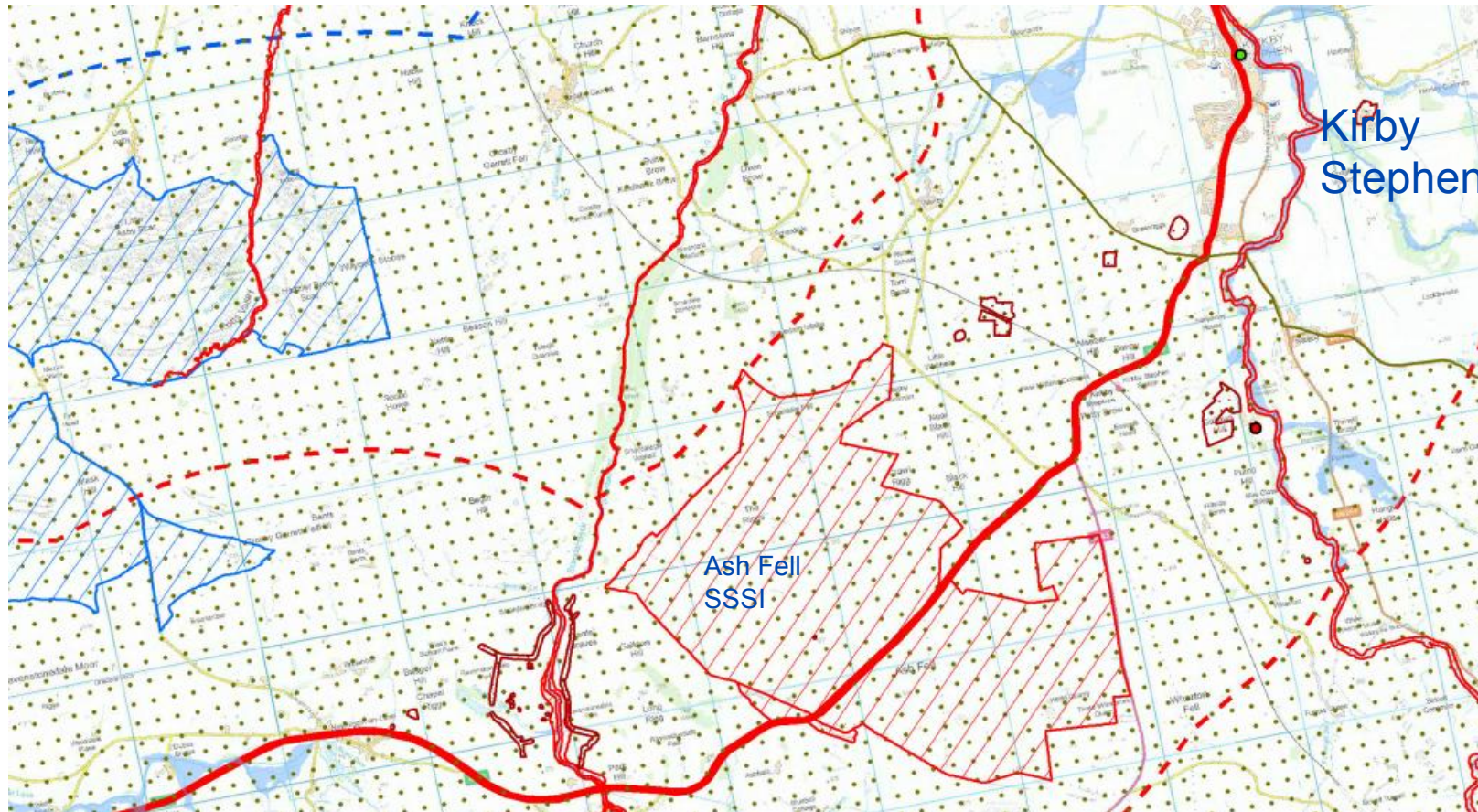


IMPROVE SETTING?

4.3 EFFECTIVE FALSE CUTTING



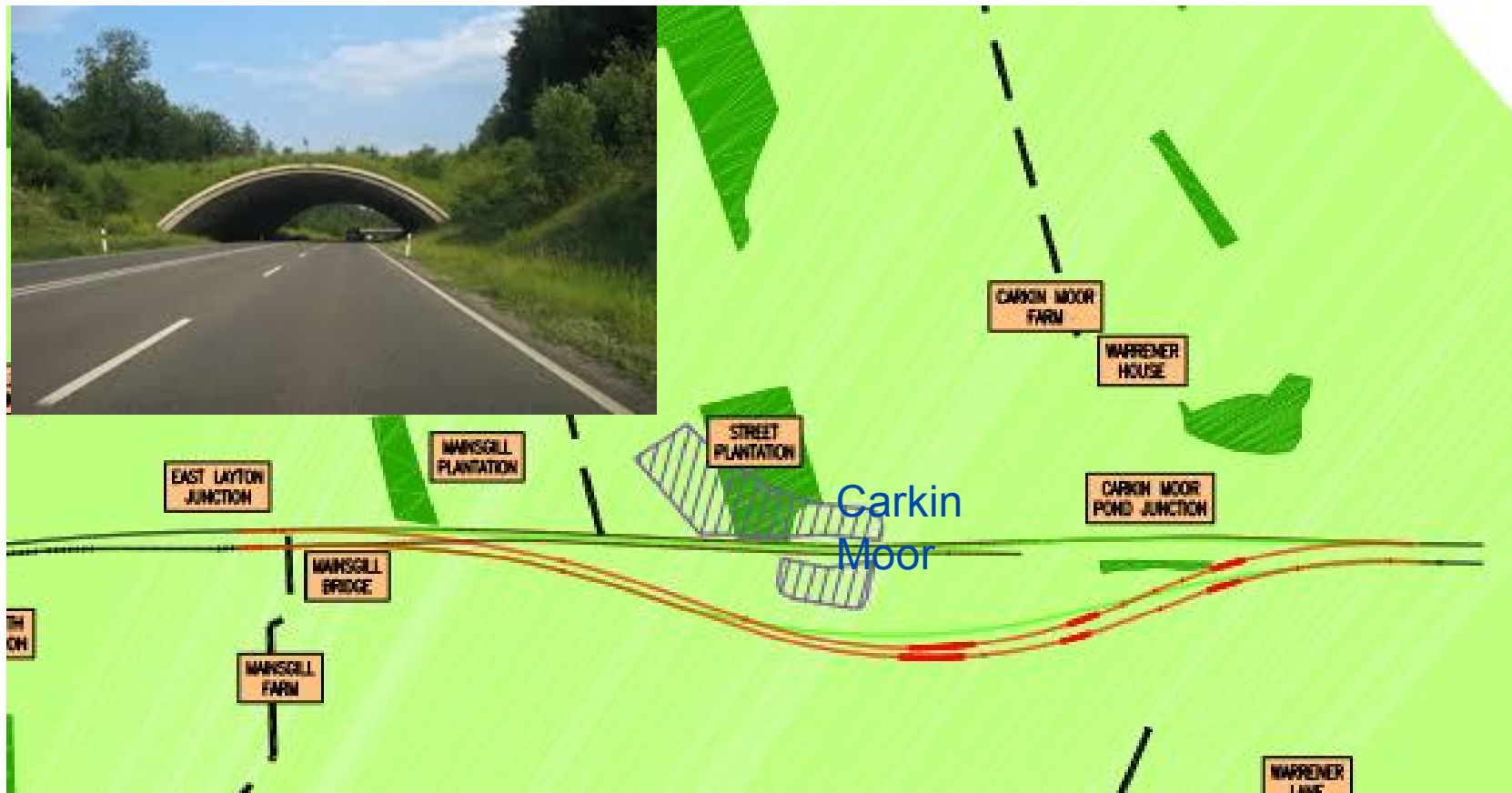
A685 KIRBY STEPHEN



OPPORTUNITIES

→ Remember constraints are also opportunities:

- A66 SAM example:



RIS SCHEME OVERVIEW

Chris Hardie – Highways England
July 2016

- Roads Investment Strategy
- Highways England
- Delivery Plan



Highways England
Delivery Plan
2015-2020

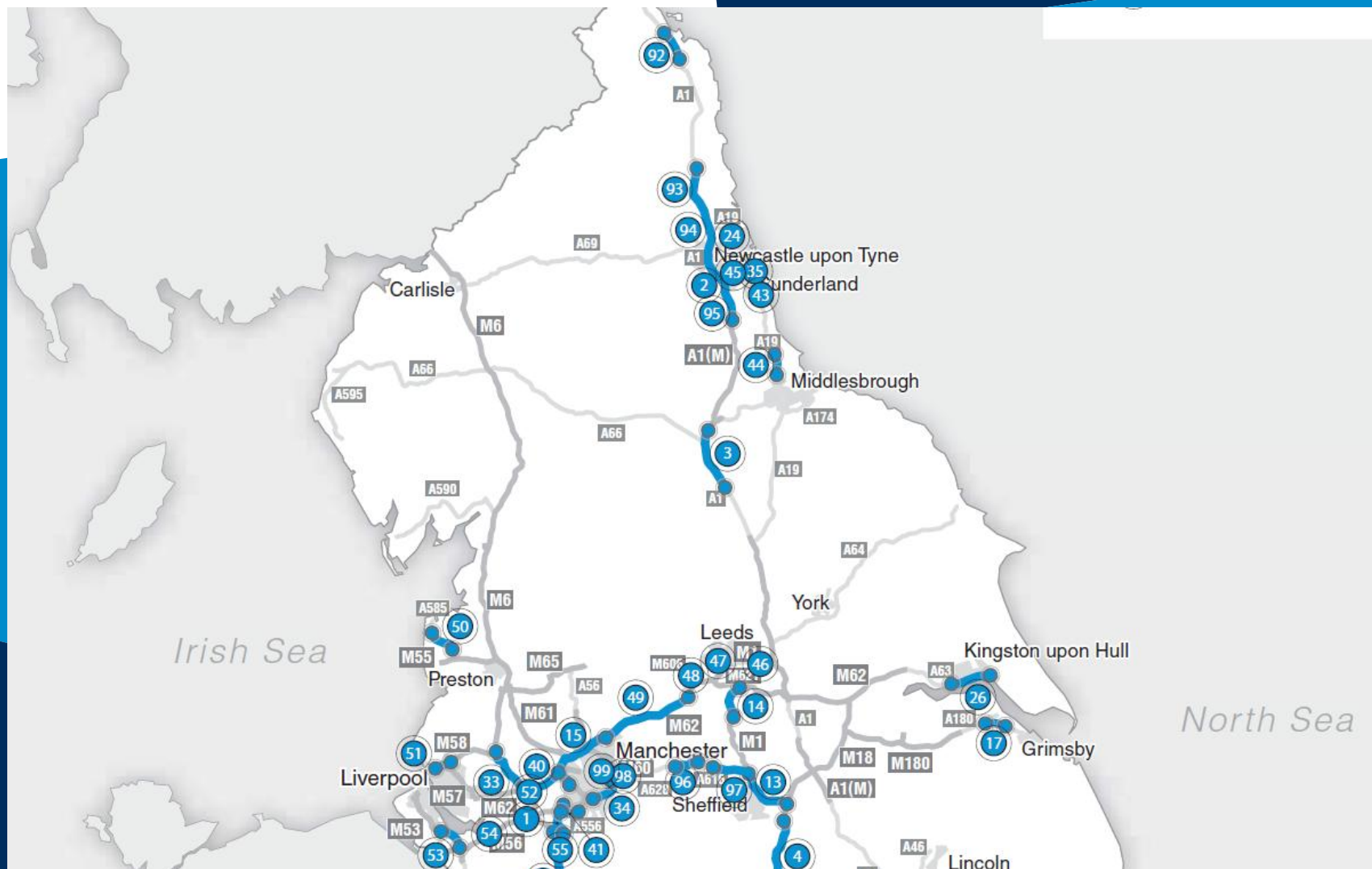


Road Investment Strategy:
for the 2015/16–2019/20
Road Period

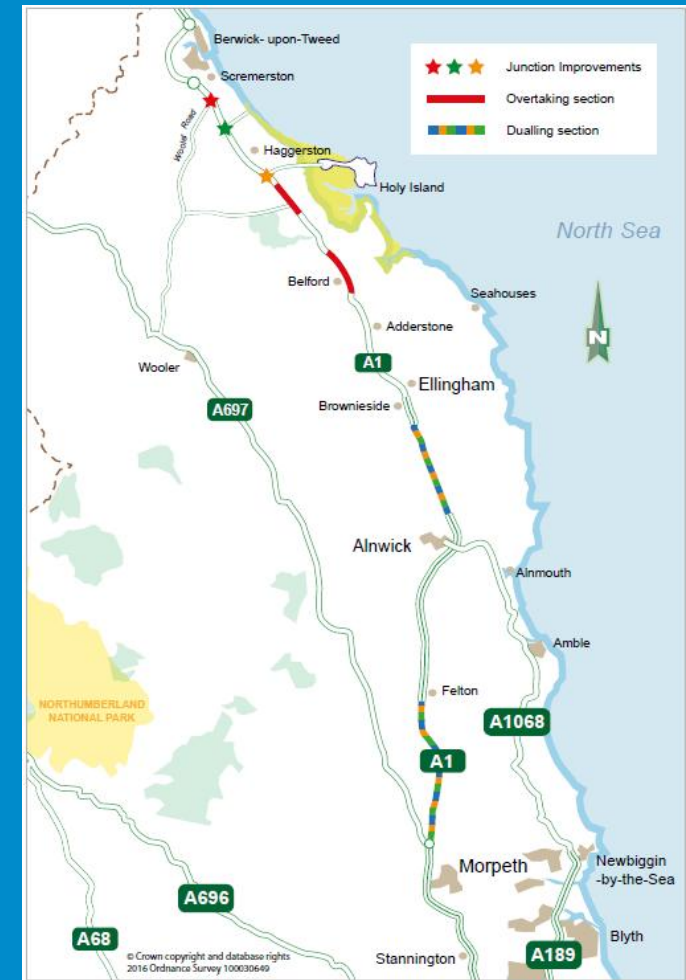


‘The geographic scope of the study will be the A66 and A69 sufficient to provide viable route options between the A1 and the M6 motorway. The study will also include the impact of scheme options on the wider east west and north south links from the M62 to the Scottish border’.

Schemes in Development

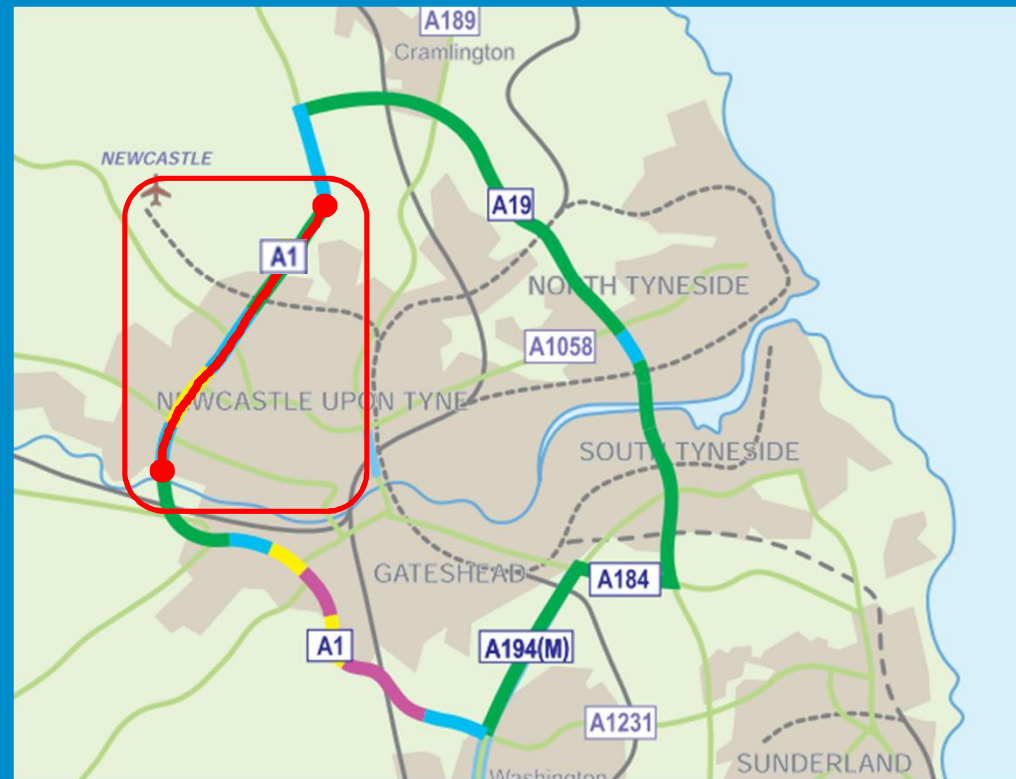


- Currently in early stages of development, now reviewing feedback from public awareness exhibitions in May 2016
- Morpeth to Felton and Alnwick to Ellingham dualling (SoW 2020)
- North of Ellingham enhancements (SoW 2018) overtaking lanes, NMU enhancements and junction improvements



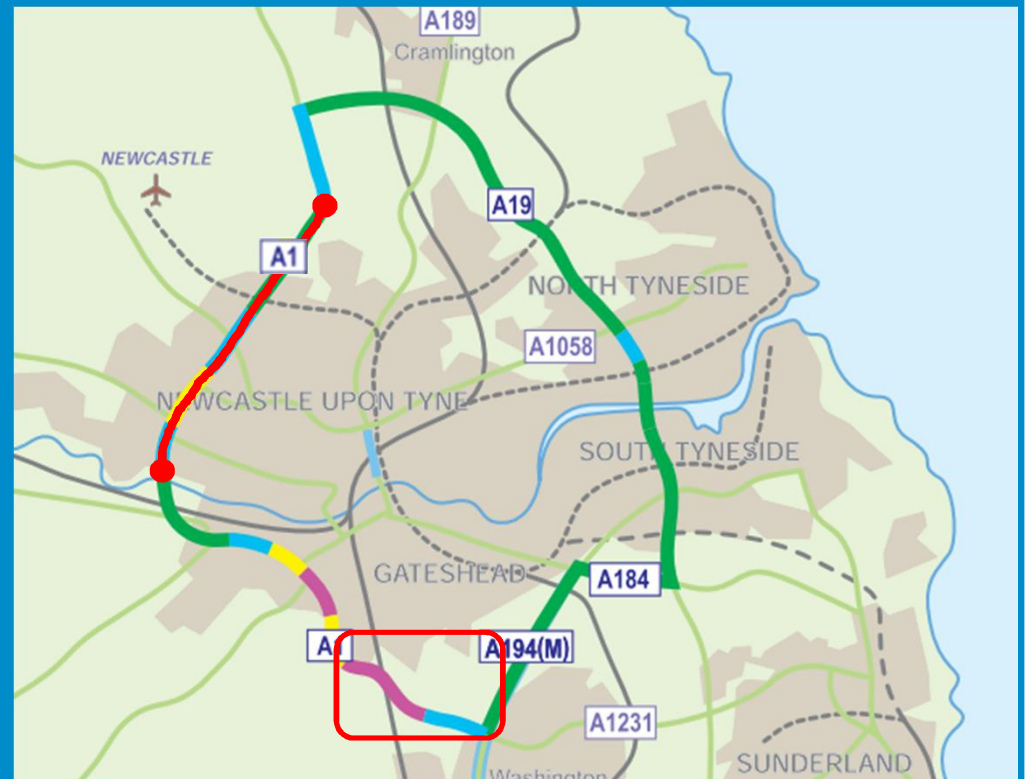
A1 Scotswood to North Brunton

- Increasing the capacity of the existing dual carriageway between J74 and J79 to three lanes.
- Start of Works planned for late 2019



A1 Birtley to Coalhouse

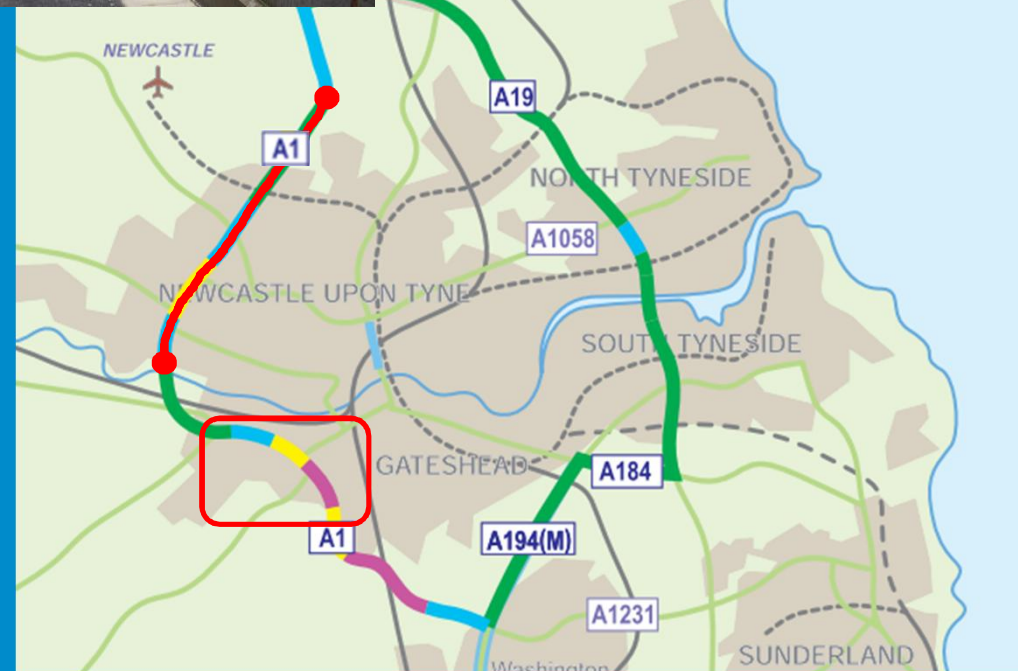
- Increasing the capacity of the existing dual carriageway between J65 and J67 to three lanes.
- Start of Works planned for early 2020



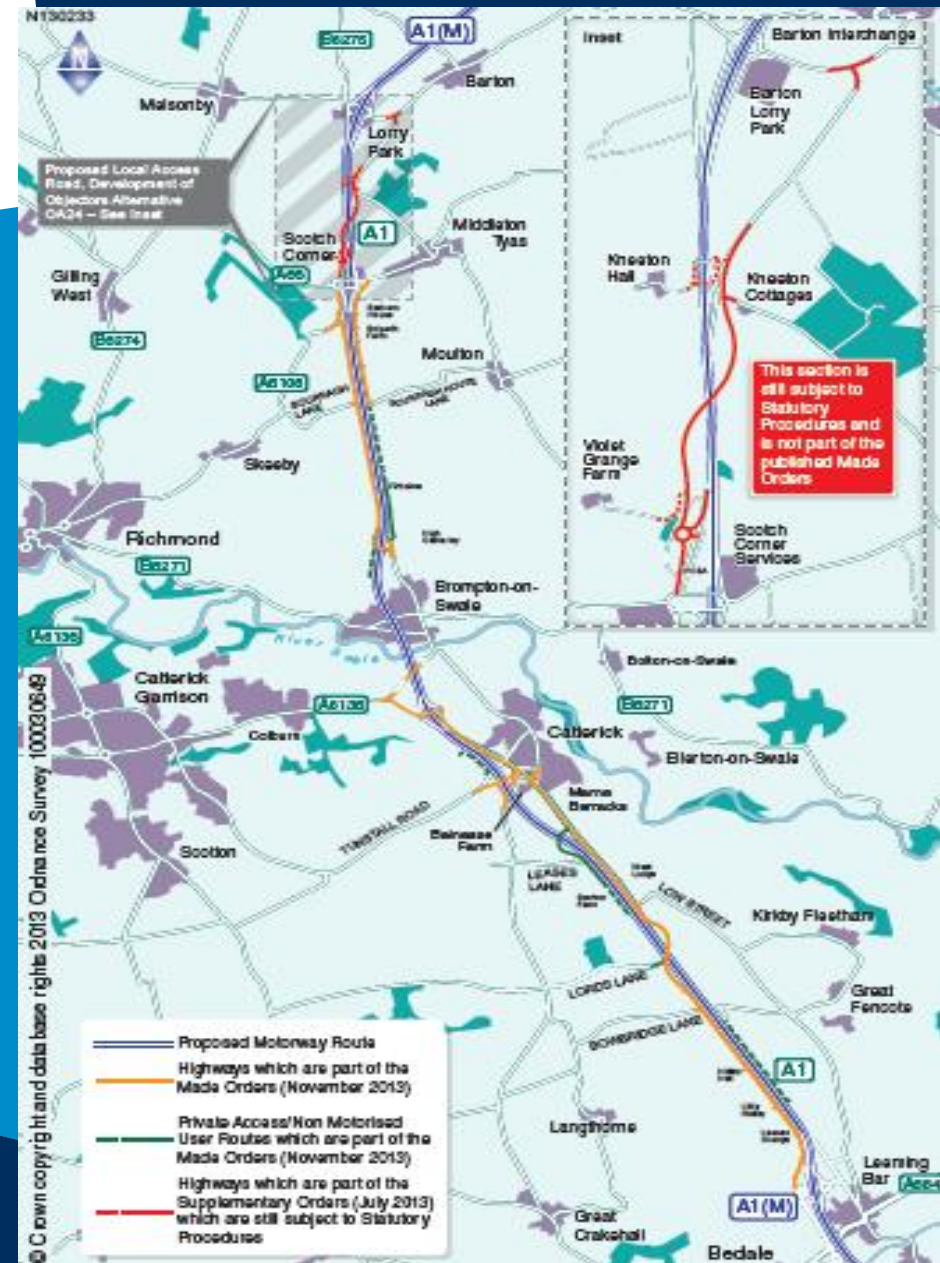
A1 Coalhouse to Metrocentre



- Increasing the capacity of the existing dual carriageway between J67 and J71 to three lanes.
- Open for Traffic 2016



- Upgrade the existing dual carriageway between J51 and J56 with a new three lane motorway to three lanes.
- Open for Traffic planned for Spring 2017



- **A19 / A1058 Coast Road – Start of Works June 2016.**
- **Schemes in Development:**
 - A19 Testos and Downhill Lane - Junction Improvements
 - A19 Norton to Wynyard – Capacity enhancement
 - A1 / A19 Technology Enhancements

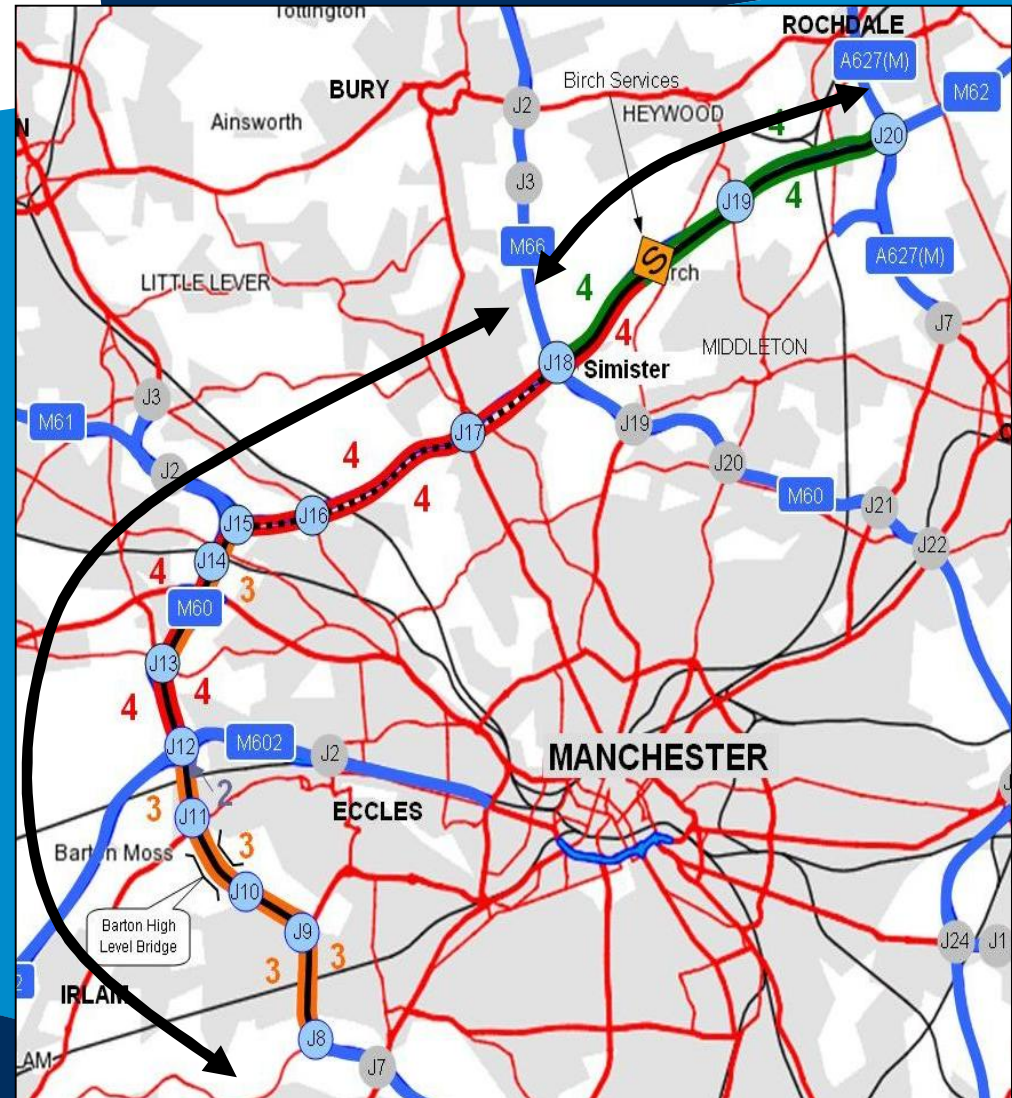


- **Provision of a slip road to provide a direct link from M62 westbound to M606 northbound to relieve congestion at M62 junction 26**
- **Start of Works planned for March 2020**

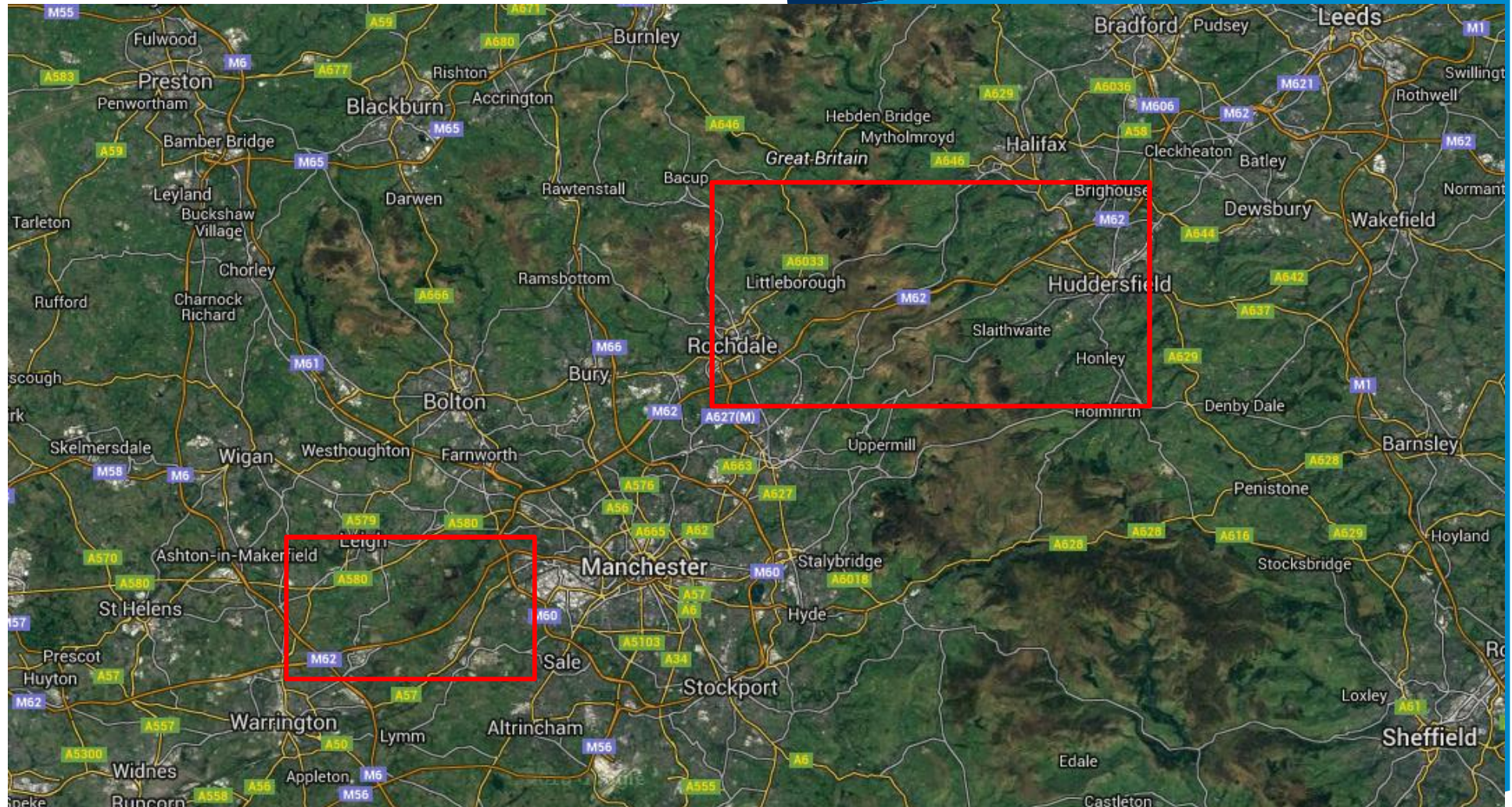


Manchester Smart Motorways

- **Introduce Smart Motorways on the M60 J8 – J18 and on the M62 between J18 - J20.**
- **Works Started in July 2014 - Phased Open for Traffic during 2017.**



M62 Smart Motorways



- **M1/M62 Lofthouse Interchange**
- **M60 Simister Island Interchange**
- **Route Strategies**

A66 & A689 Tees Valley Strategic Study



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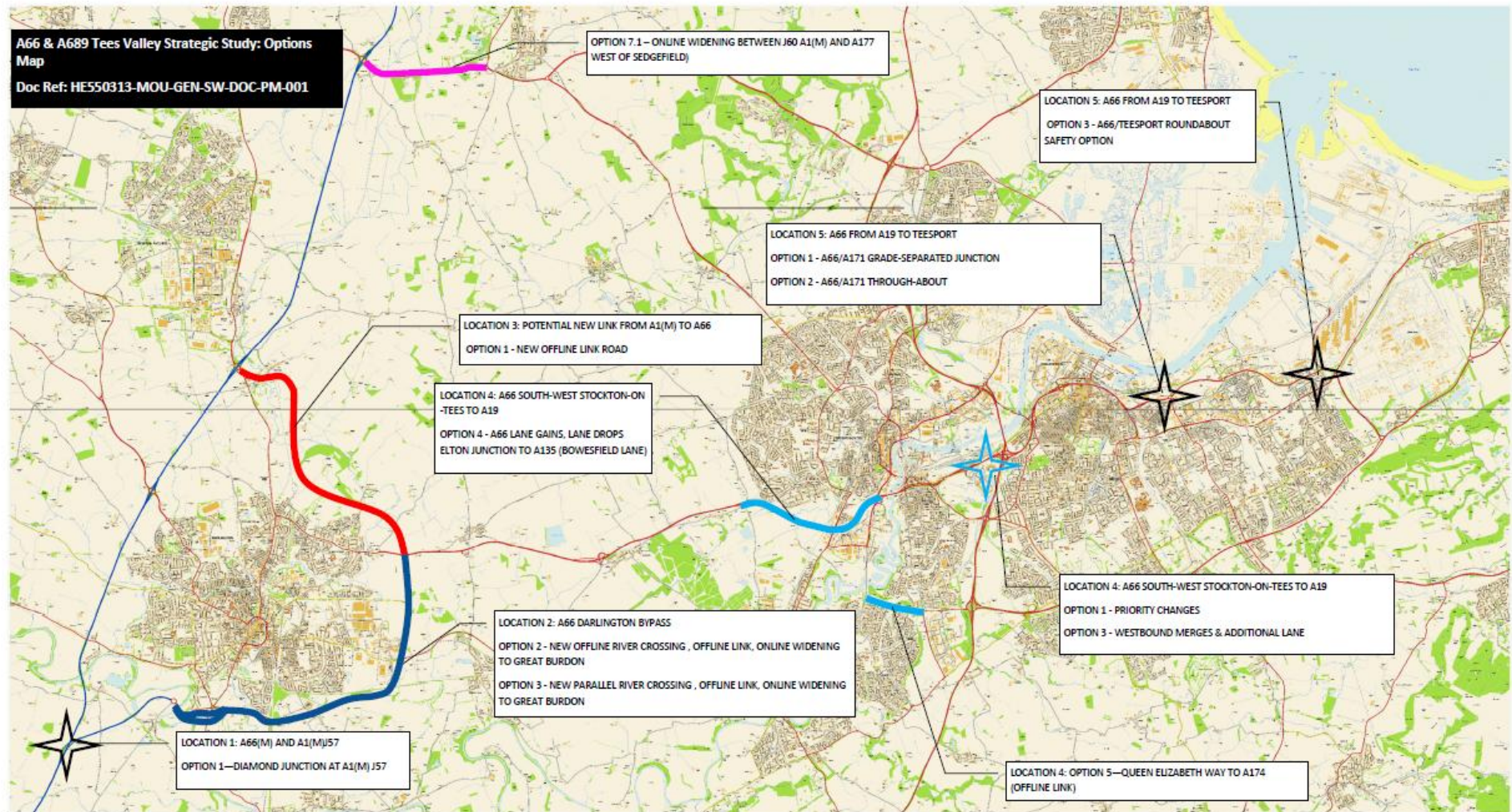
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- **Examine the issues and constraints associated with the A66 from Teesport to the A1(M) and on the A689 from the A19 to the A1(M)**
- **Identify opportunities and options for resolving them to:**
 - Improve links between the Tees Valley and the wider road network
 - Increase the economic competitiveness of the Tees Valley

INTERVENTIONS



NEXT STEPS

- **Further detailed modelling of preferred options**
- **Development of future delivery packages and their Strategic Outline Business Case**
- **Development of the Tees Valley Strategic Transport Plan**
- **Synergy with Northern Trans-Pennine Route Study**



West of M6 Study

*Cumbria County Council/ Cumbria
LEP/ Highways England*



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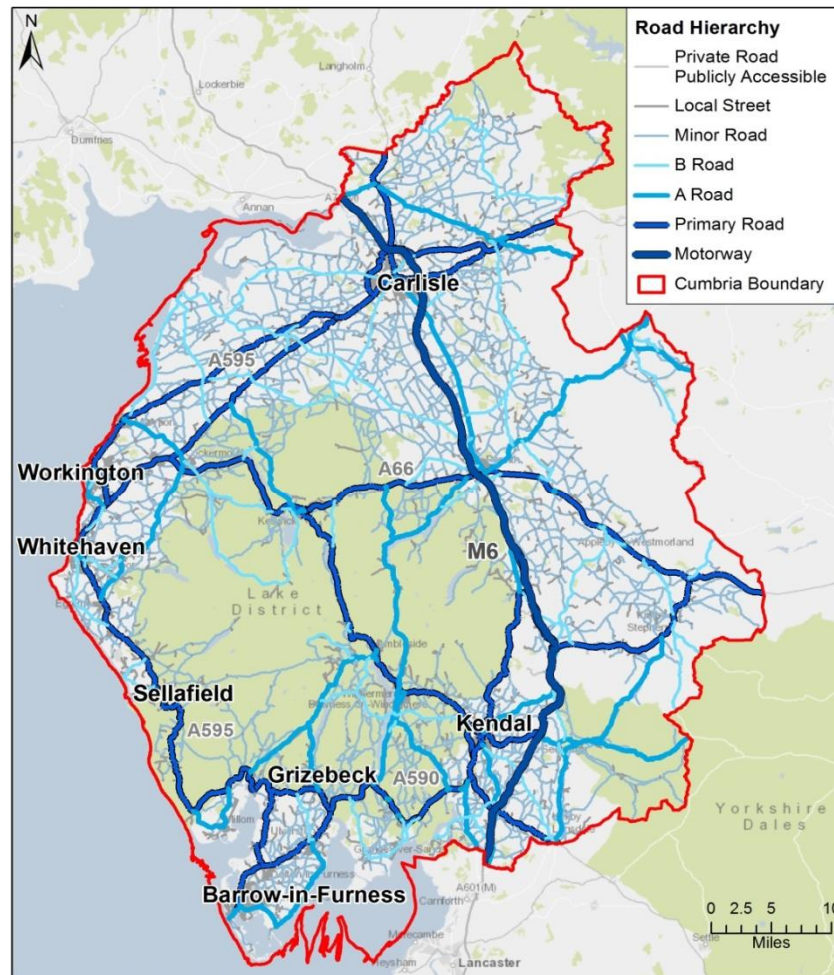
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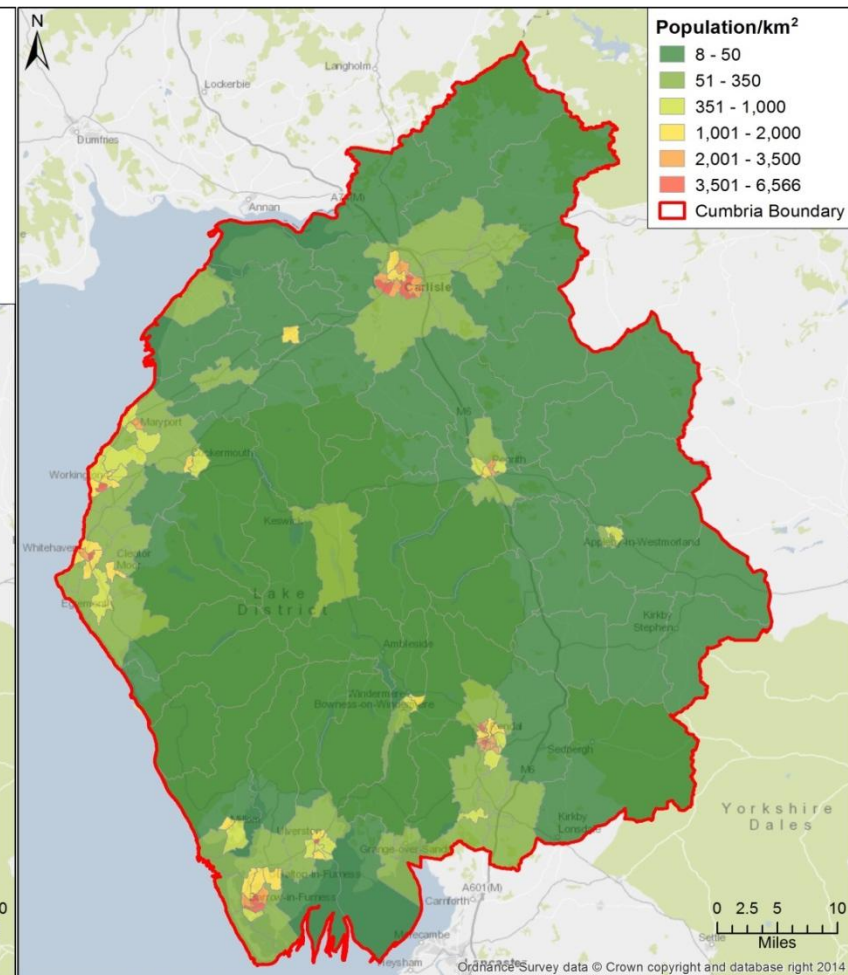


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STUDY AREA



Road Hierarchy



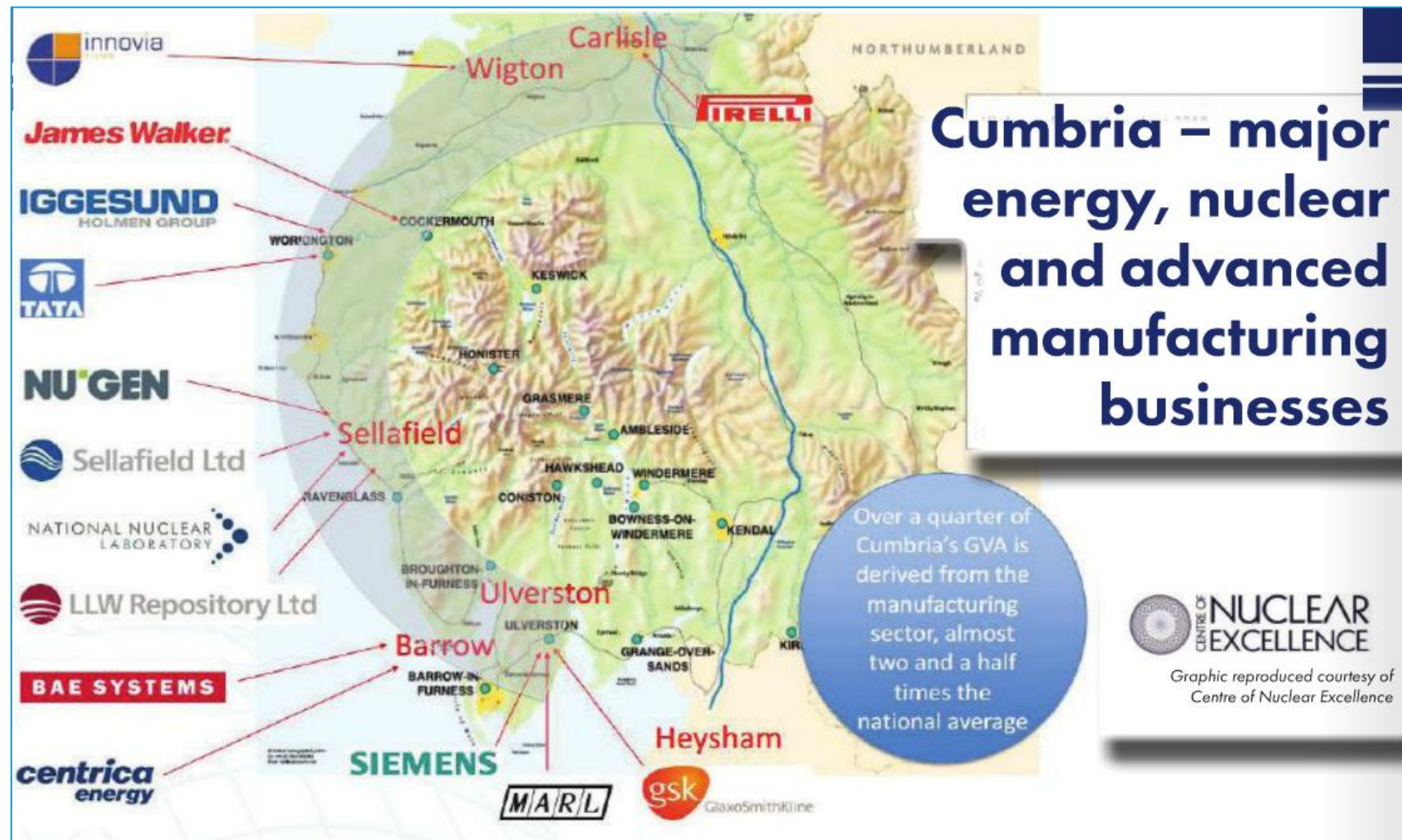
Population Density

PURPOSE OF THE STUDY

- To examine issues and constraints associated with strategic road connectivity:
 - Capability
 - Resilience
 - Reliability
- **Strengthen Connectivity & Improve Capacity**
- Supporting economic growth including Moorside and Sellafield
- Identification of schemes to mitigate impacts to feed into long list of schemes



FUTURE SITUATION



STUDY SPECIFIC OBJECTIVES

FIGURE 2 – WEST OF M6 STRATEGIC CONNECTIVITY STUDY OBJECTIVES



Cumbria's Strategic Economic Plan Themes - The Four Pronged Attack

1	Advanced manufacturing growth
2	Nuclear and energy excellence
3	Vibrant rural and visitor economy
4	Strategic Connectivity of the M6 Corridor

SEP Theme Alignment	WoM6 Study Theme	West of M6 Strategic Connectivity Study Objectives
	Economic Growth	Support the economic growth objectives of the Northern Powerhouse and Cumbria Growth agenda
		Improve access to regional economic centres and local growth sites served by the A590 / A66 / A595 / A5092
	Connectivity	Ensure the improvement, enhancement and long-term development of the SRN and West of M6 Strategic Routes through improved national connectivity across the wider network
		Improve the A590 / A66 / A595 / A5092 for access to strategic economic sites for freight traffic
		Maintain and improve access for tourism served by the A66 and A590
		Improve (and as a minimum maintain) access to services (including health) and jobs for all local road users
	Network Performance	Improve journey time reliability for road users
		Reduce the number and seriousness of incidents involving road users, including NMUs
		Improve the resilience of the routes to the impact of events such as severe weather events and roadworks including diversion routes
	Environment	Minimise adverse impacts on the environment and where possible optimise environmental improvement opportunities.
		Reduce the impact of the routes on severance for local communities

CONSISTENCY WITH OTHER STUDIES

- Northern Trans-Pennine Strategic Routes Study
- Moorside - Development Consent Order
- Cumbria Infrastructure Plan
- Network Rail Cumbrian Coast Feasibility Study
- A595 Junction Improvement Study
- Cumbria Infrastructure Recovery Plan



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STUDY PROCESS

- **Standard WebTag Approach**
- **Option Generation**
- **EAST Option Sifting**
- **Option Prioritisation/ Short Listing**
- **Detailed Appraisal**
- **Stakeholder Engagement (Engage/ Inform)**
- **Study due to report late July**



Transport for the North

Briefing on the TfN Integrated Transport Strategy and Development Programme

One Agenda, One Economy, One North

Questions & Answers



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Next Steps

Karen Wilkinson

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Closing Remarks

Mark Wilson

TfN



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