

Manchester M60

North West Quadrant

Stakeholder Meeting



- TfN Introduction, Peter Molyneux
- Manchester M60 North West Quadrant Study Brief, Jeremy Bloom

31st October 2017

Page 1

Manchester M60 North West Quadrant Introduction by TfN

31st October 2017



Peter Molyneux
Major Roads Director
Transport for the North



Key Functions of a Sub-National Transport Body

- Transport Investment Strategy includes a list of the core functions of a STB, all enshrined in the draft constitution:
 - Prepare a pan-regional transport strategy to support economic growth and development in the region
 - Provide advice to the Secretary of State about the development and prioritisation of transport investments in their region
 - Co-ordinate the carrying out of transport functions that are exercisable by its constituent authorities, such as the implementation of smart ticketing initiatives
 - Potentially, to play a role in the investment and oversight of performance on major roads in their region (that are not part of the national network maintained by Highways England)

Pan-Northern Transport Objectives



Transforming economic performance



Improving opportunities across the North

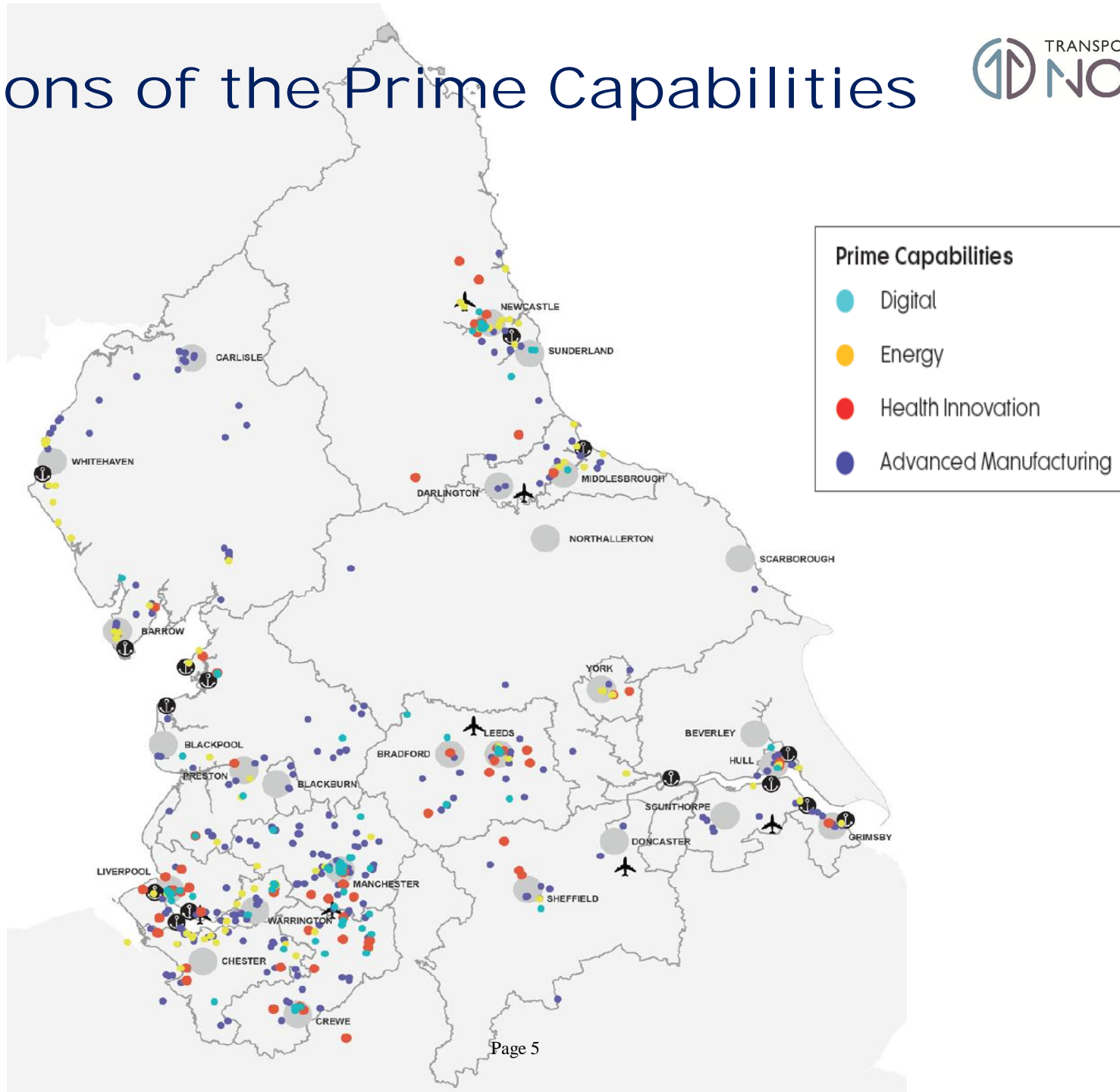


Promoting and supporting the built and natural environment



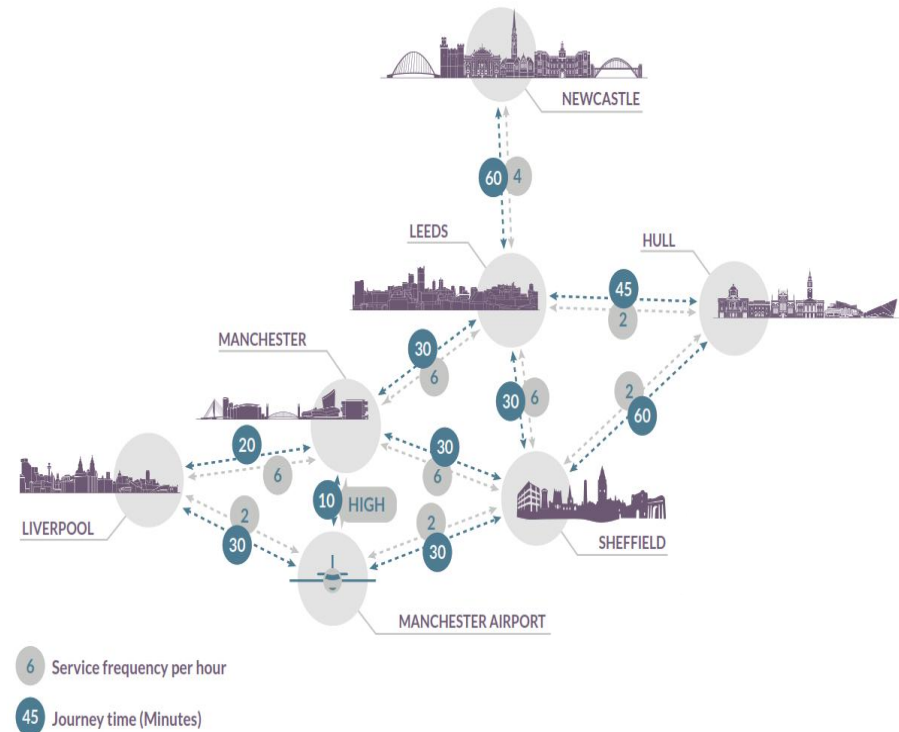
Increasing efficiency, reliability and resilience on the transport system

Locations of the Prime Capabilities

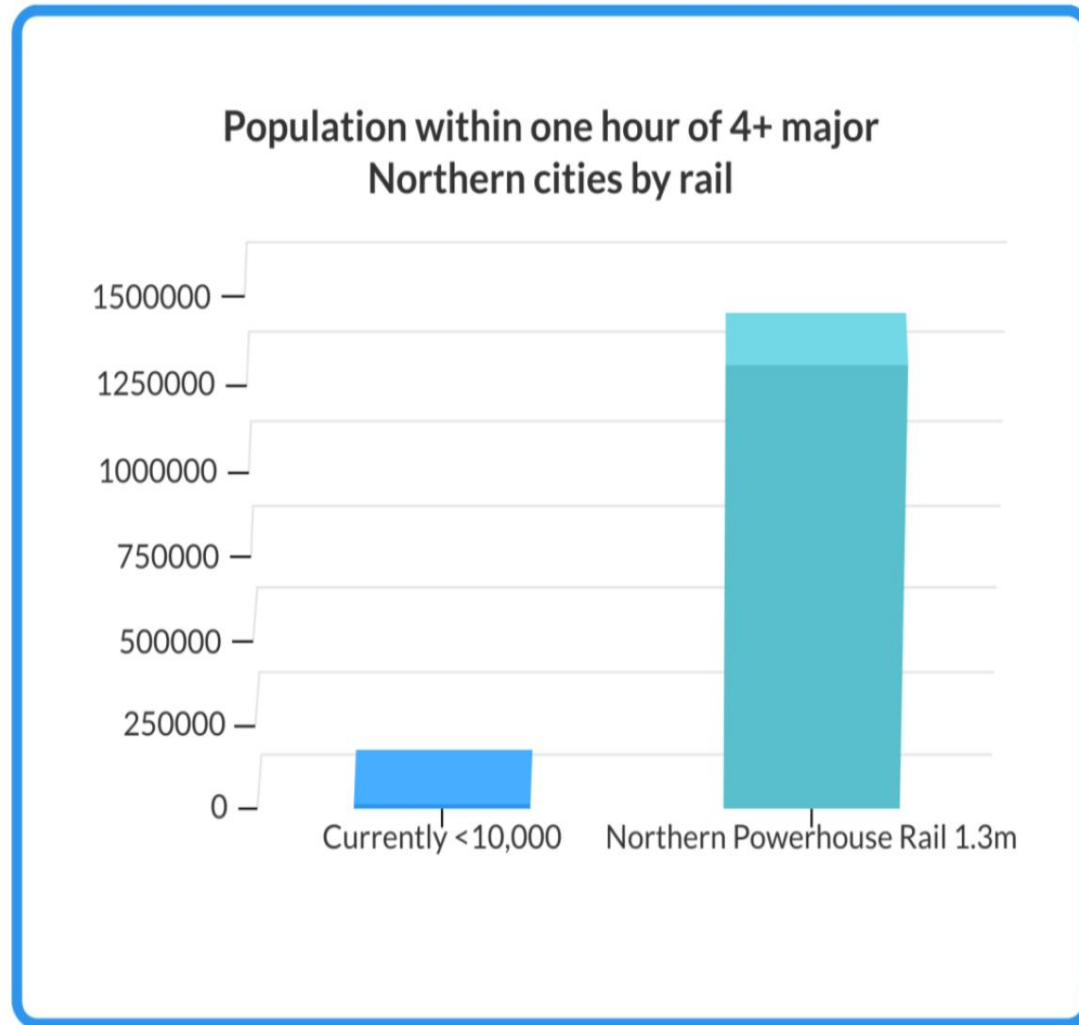


Northern Powerhouse Rail

- Provides transformational change in connectivity between the North's economic assets
- Will allow significant growth in labour markets and maximise benefits of HS2
- Builds on existing investment in Northern Hub and planned investment in Trans Pennine Route Upgrade
- Core spine of the Strategic Transport Plan and Investment Programme, but needs to be seen as a whole network

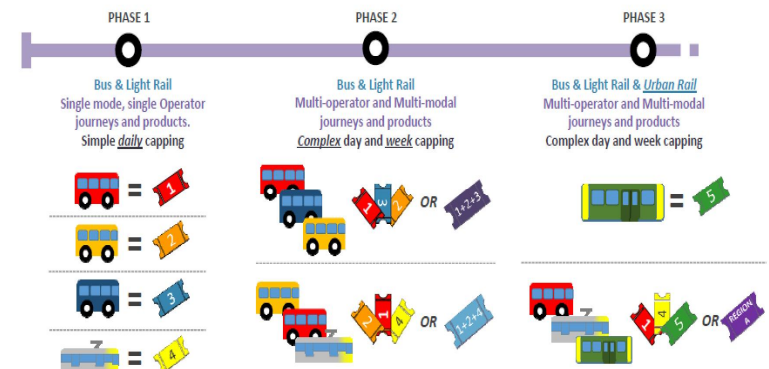
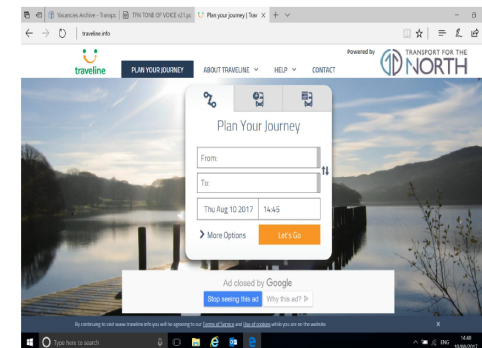


NPR Connecting People and Businesses

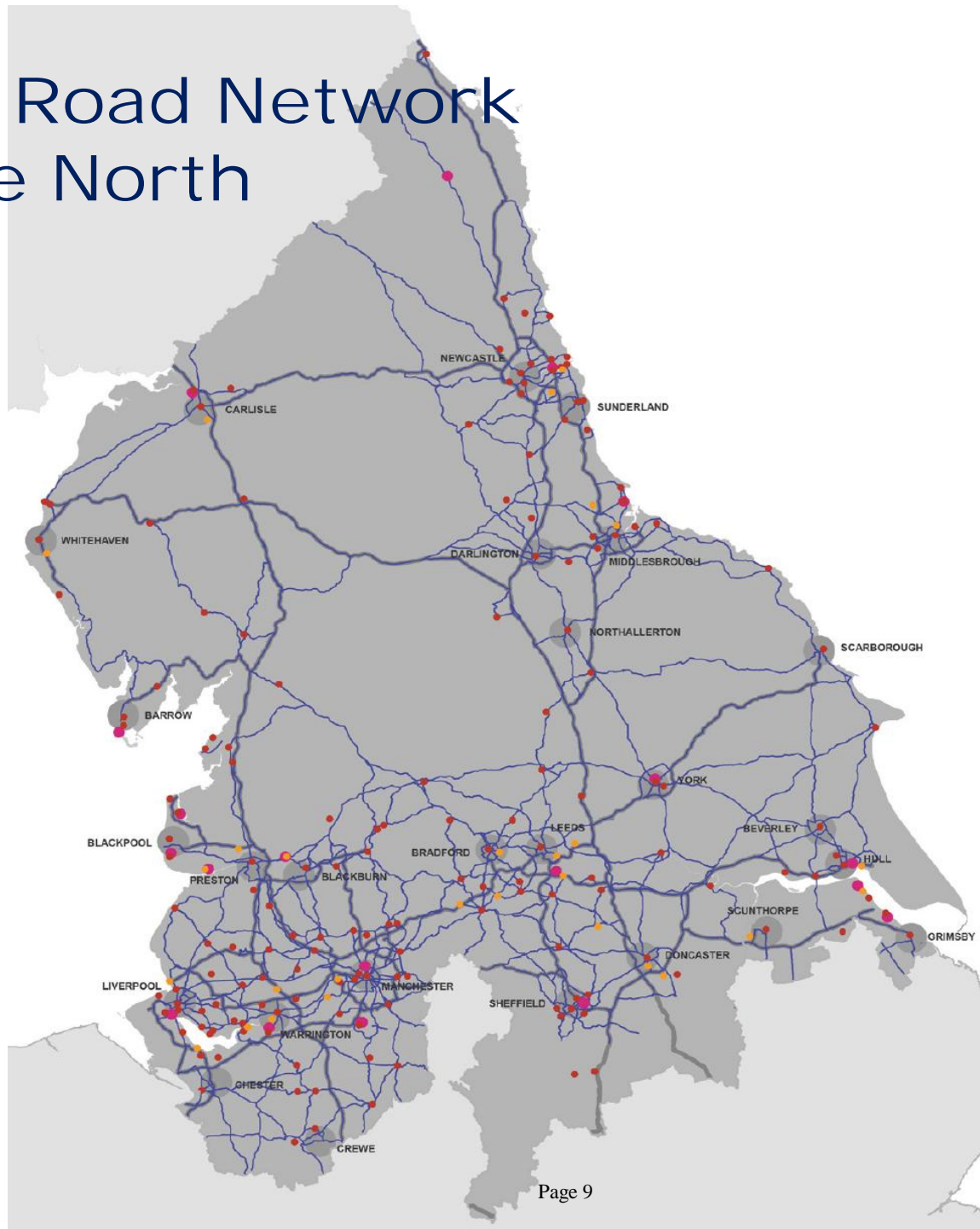


Integrated and Smart Travel

- Tranche 1 – ITSO on Rail
 - £18.5 million
 - Full Business Case submitted in June 2017
 - The default for all season tickets across the North
 - Progressively to be rolled out from East to West
- Tranche 2 – Customer Information
 - £6.5 million
 - Outline Business Case submitted in June 2017
 - Full Business Case submission in January 2018
 - Improving pre-journey decisions and choices
 - Progressively rolling out starting with pilots in West and South Yorkshire
- Tranche 3 – Account-based Ticketing
 - £110 million
 - Outline Business Case submission in October 2017
 - Simplifying payment and providing fair price promise
 - Progressively to be rolled out starting with the 5 key cities

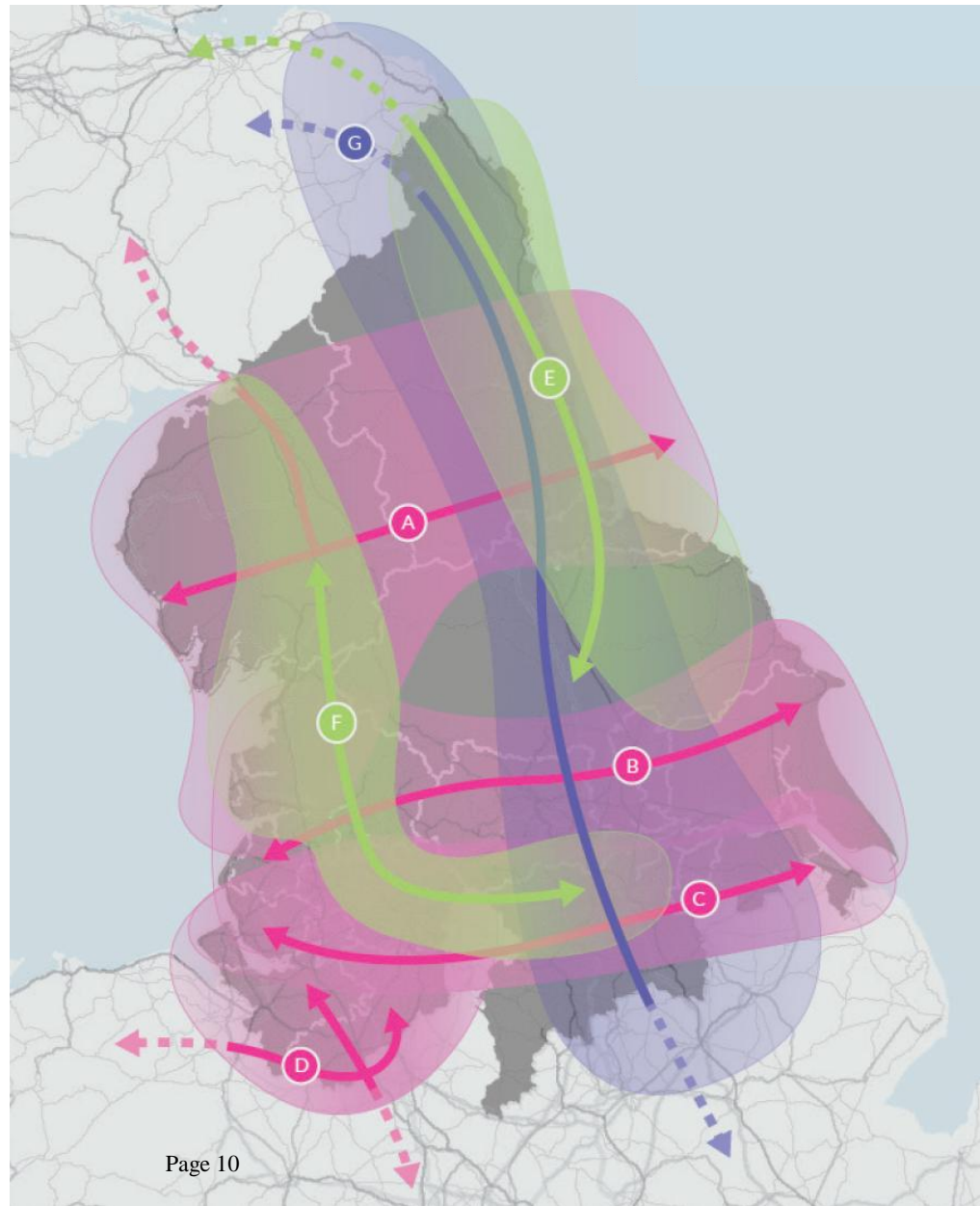


Major Road Network for the North



Strategic Development Corridors

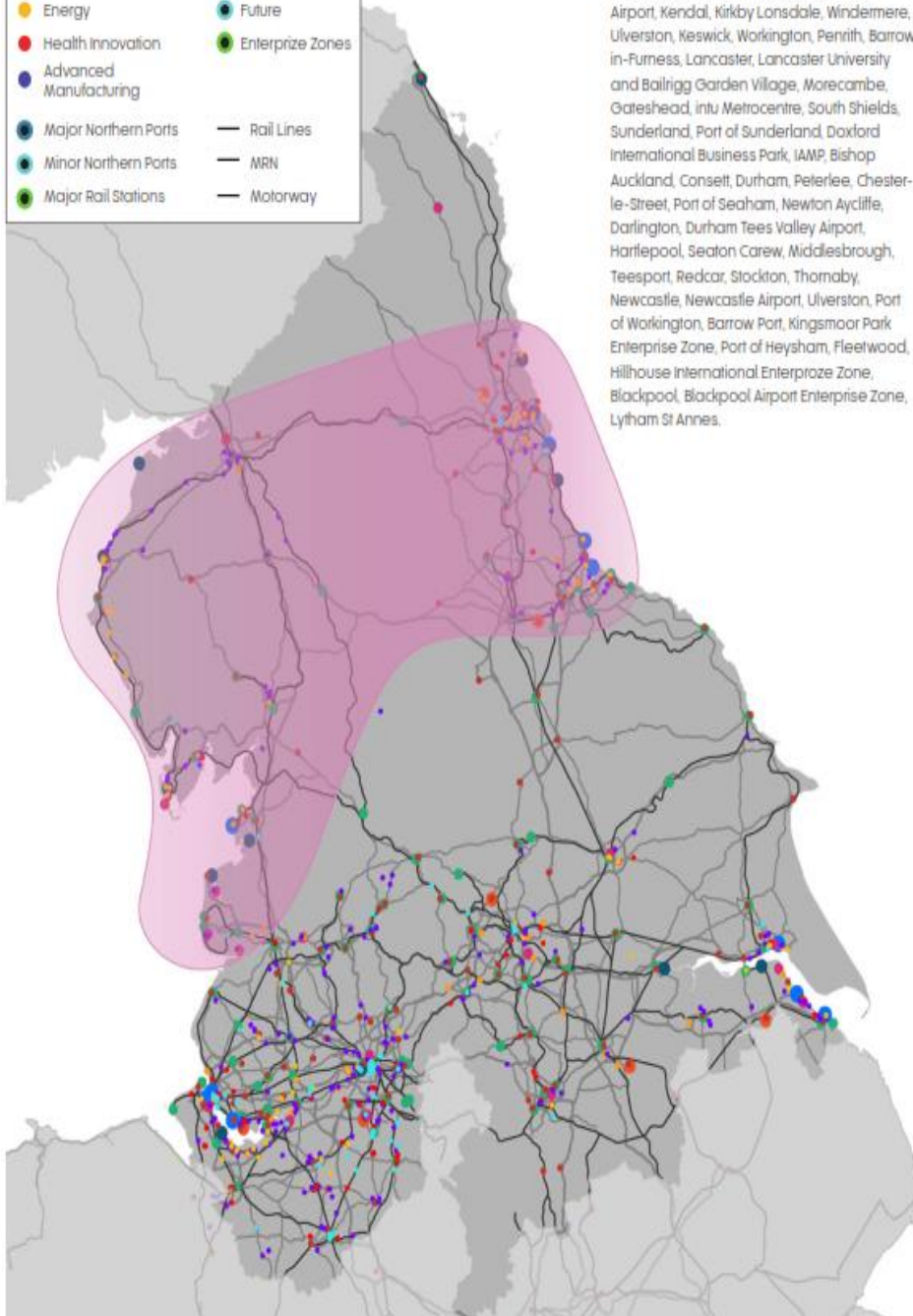
- A** Connecting the Energy Coasts
- B** Central Pennines
- C** Southern Pennines
- D** West and Wales
- E** East Coast to Scotland
- F** North West to Sheffield City Region
- G** Yorkshire to Scotland





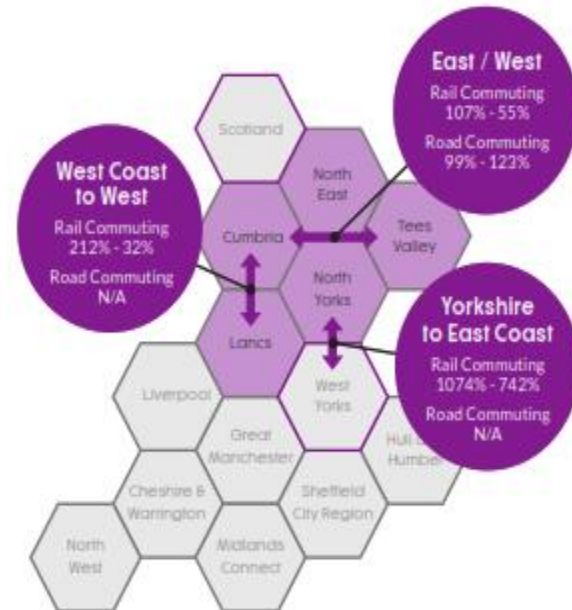
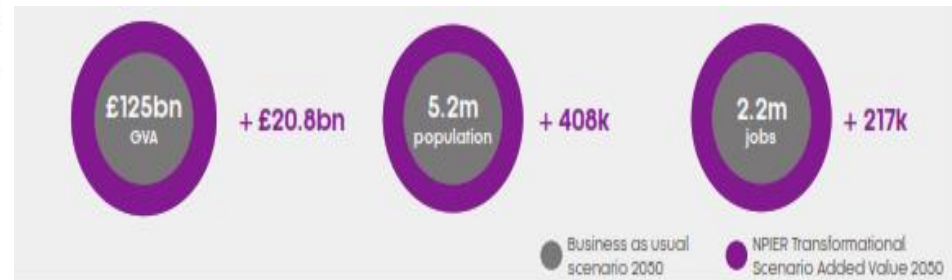
Important Economic Centres

Whitehaven, Sellafield including Moorside, Westlakes Science Park, Carlisle, Carlisle Airport, Kendal, Kirkby Lonsdale, Windermere, Ulverston, Keswick, Workington, Penrith, Barrow-in-Furness, Lancaster, Lancaster University and Bailrigg Garden Village, Morecambe, Gateshead, into Metrocentre, South Shields, Sunderland, Port of Sunderland, Daxford International Business Park, IAMP, Bishop Auckland, Consett, Durham, Peterlee, Chester-le-Street, Port of Seaham, Newton Aycliffe, Darlington, Durham Tees Valley Airport, Hartlepool, Seaton Carew, Middlesbrough, Teesport, Redcar, Stockton, Thornaby, Newcastle, Newcastle Airport, Ulverston, Port of Workington, Barrow Port, Kingsmoo Park Enterprise Zone, Port of Heysham, Fleetwood, Hillhouse International Enterprise Zone, Blackpool, Blackpool Airport Enterprise Zone, Lytham St Annes.



Connecting the Energy Coasts

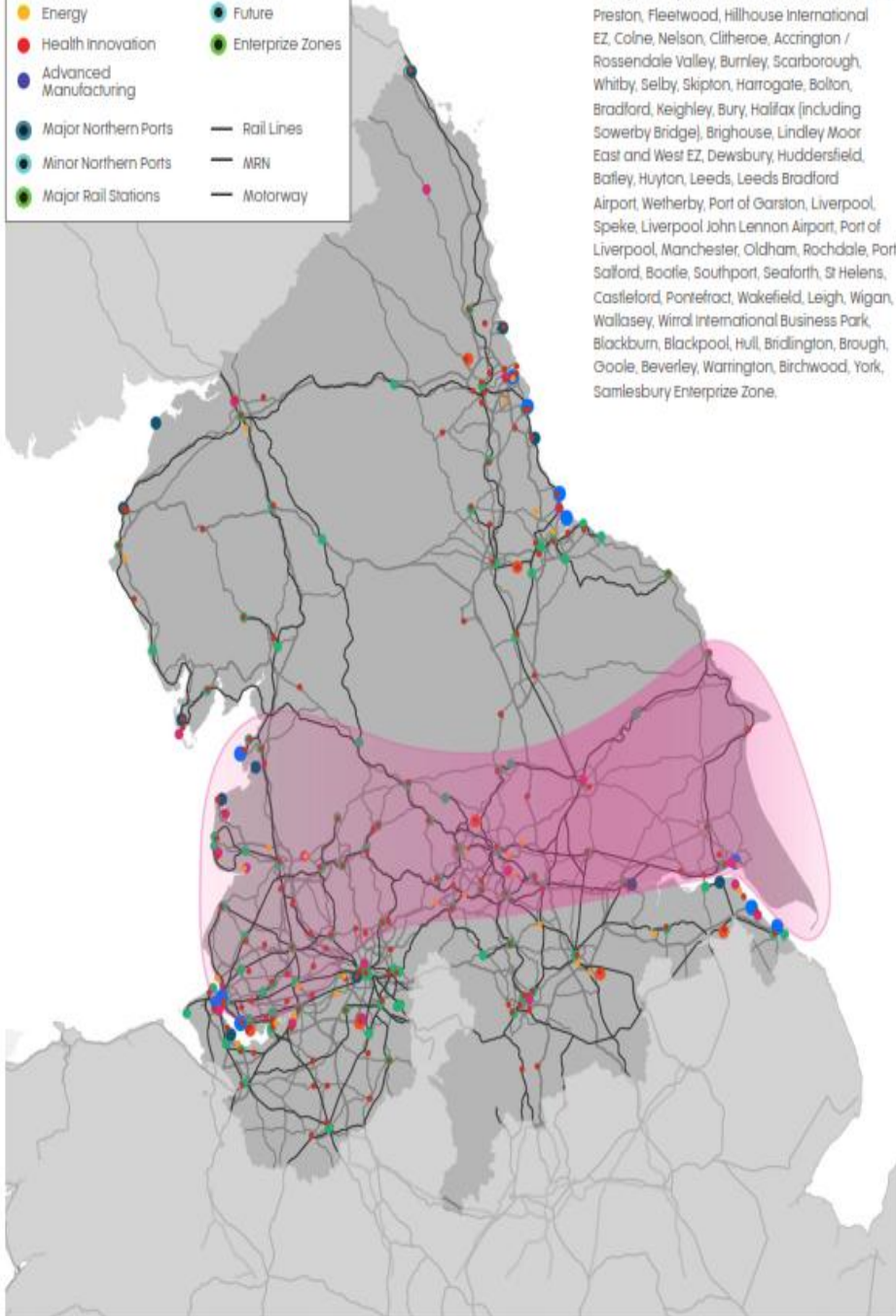
Improving connectivity for people and goods between the nationally significant non-carbon energy and research assets located in Cumbria, Lancashire, North Yorkshire, North East, and Tees Valley.





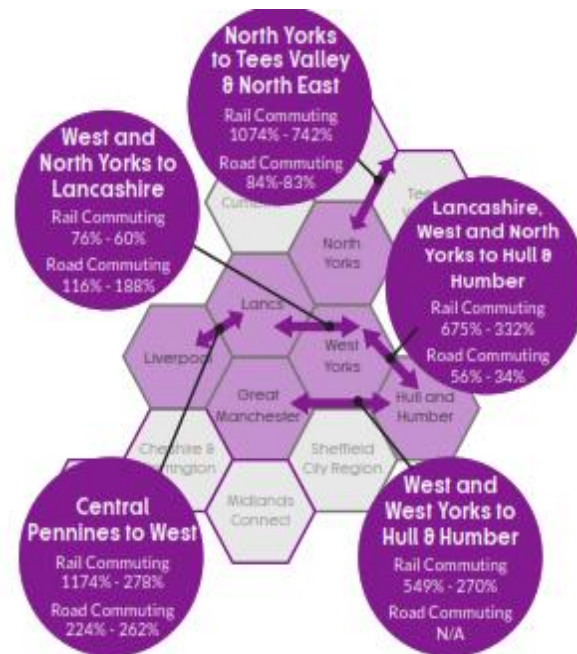
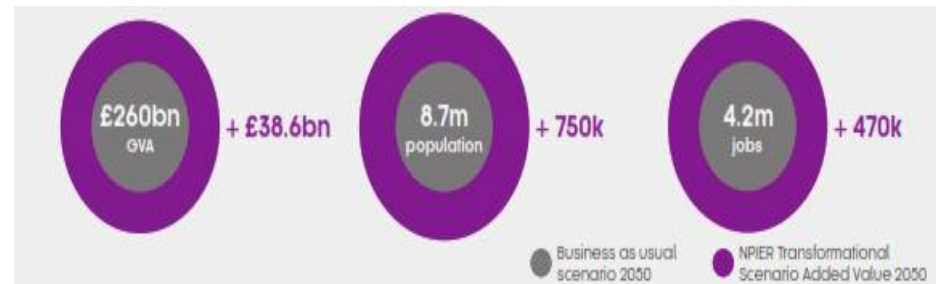
Important Economic Centres

Chorley, Cierden / Buckshaw, Samlesbury EZ, Blackpool Airport, Warton EZ, Preston, North West Preston, Fleetwood, Hillhouse International EZ, Colne, Nelson, Clitheroe, Accrington / Rossendale Valley, Burnley, Scarborough, Whitby, Selby, Skipton, Harrogate, Bolton, Bradford, Keighley, Bury, Halifax (including Sowerby Bridge), Brighouse, Lindley Moor East and West EZ, Dewsbury, Huddersfield, Batley, Huyton, Leeds, Leeds Bradford Airport, Wetherby, Port of Garston, Liverpool, Speke, Liverpool John Lennon Airport, Port of Liverpool, Manchester, Oldham, Rochdale, Port Salford, Bootle, Southport, Seaford, St Helens, Castleford, Pontefract, Wakefield, Leigh, Wigan, Wallasey, Wirral International Business Park, Blackburn, Blackpool, Hull, Bridlington, Brough, Goole, Beverley, Warrington, Birchwood, York, Samlesbury Enterprise Zone.



Central Pennines

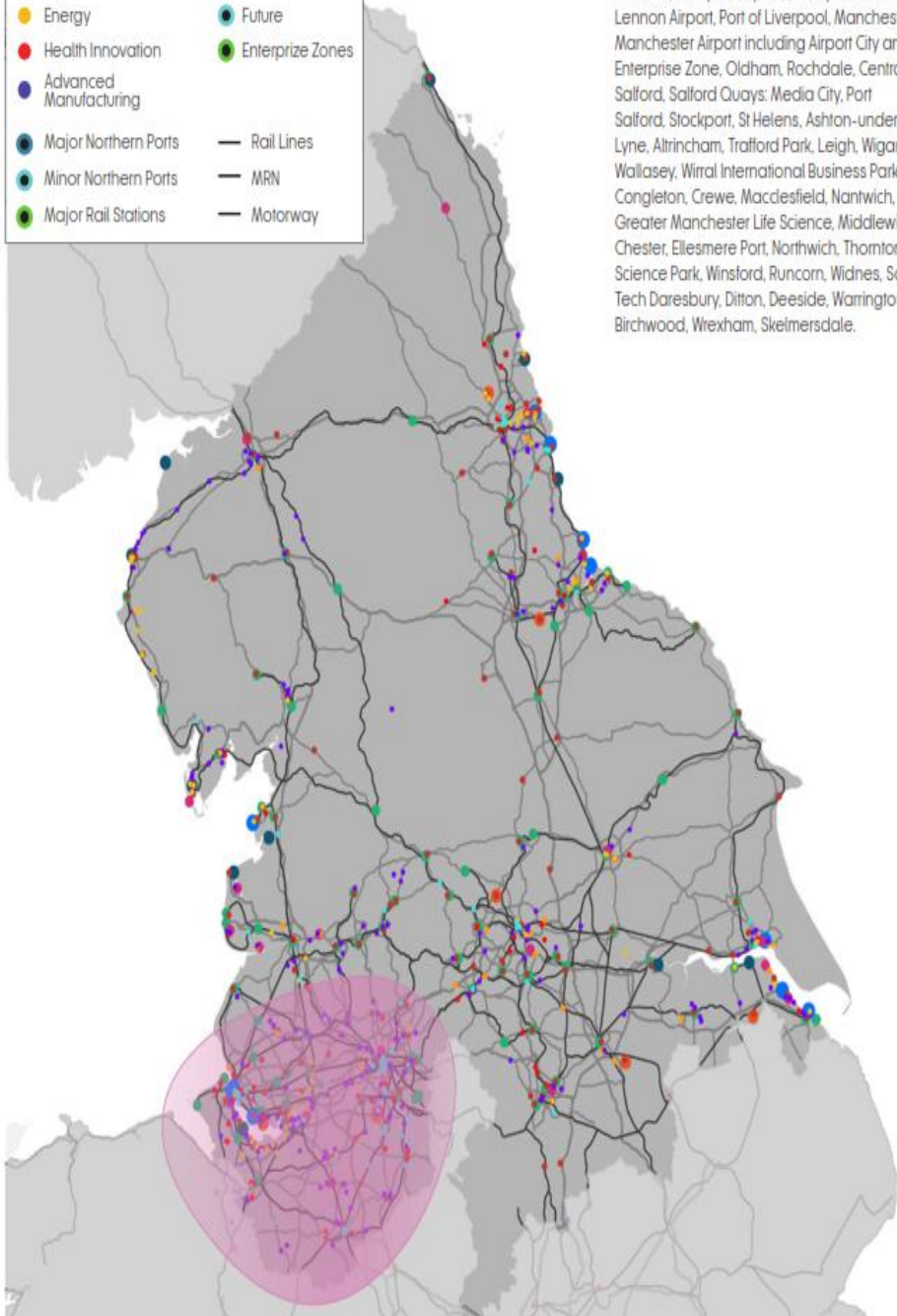
Improving strategic east-west connectivity for some of the North's important economic centres and assets in North Yorkshire, West Yorkshire, and Hull and Humber through to Greater Manchester, Lancashire and Liverpool City Region.



NPIER Capabilities	Economic Centres
● Digital	● Current
● Energy	● Future
● Health Innovation	● Enterprise Zones
● Advanced Manufacturing	— Rail Lines
● Major Northern Ports	— MRN
● Minor Northern Ports	— Motorway
● Major Rail Stations	

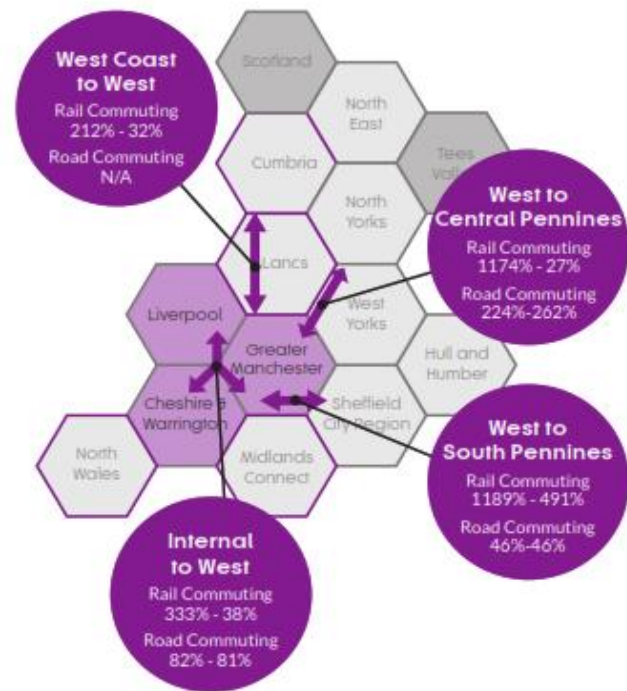
Important Economic Centres

Bolton, Bury, Huyton, Knowsley, Port of Garston, Liverpool, Speke, Liverpool John Lennon Airport, Port of Liverpool, Manchester, Manchester Airport including Airport City and Enterprise Zone, Oldham, Rochdale, Central Salford, Salford Quays: Media City, Port Salford, Stockport, St Helens, Ashton-under-Lyne, Altrincham, Trafford Park, Leigh, Wigan, Wallasey, Wirral International Business Park, Congleton, Crewe, Macclesfield, Nantwich, Greater Manchester Life Science, Middlewich, Chester, Ellesmere Port, Northwich, Thornton Science Park, Winstord, Runcorn, Widnes, Sci-Tech Daresbury, Ditton, Deeside, Warrington, Birchwood, Wrexham, Skelmersdale.



West and Wales

Improving connectivity, for people and goods, to, from and through the important economic centres and assets of Cheshire, Liverpool City Region and Greater Manchester, with strategic connectivity in to North Wales and the Midlands.



Strategic Development Corridors: delivery

- Project Boards for each corridor
 - Local Partners / Highways England/Network Rail/DfT
- Joint Technical Assurance Group
 - Highways England/Network Rail/DfT/ & some Partners
- Shared Analytical Framework
 - Economic modelling
 - Freight modelling
 - Northern Rail Modelling System
- All three SDC's using Regional Traffic Models

What Next?

Strategic Transport Plan

- Formal public consultation planned for a 13 week period, starting in early January 2018
- Final Strategic Transport Plan to be published in Summer 2018

Strategic Development Corridors

- Stakeholder workshops late November, February & Summer 2018
- Options Assessment Report early 2018
- Strategic Outline Case July 2018

Manchester M60 North West Quadrant Study Update



Jeremy Bloom
Network Planning Director
Highways England

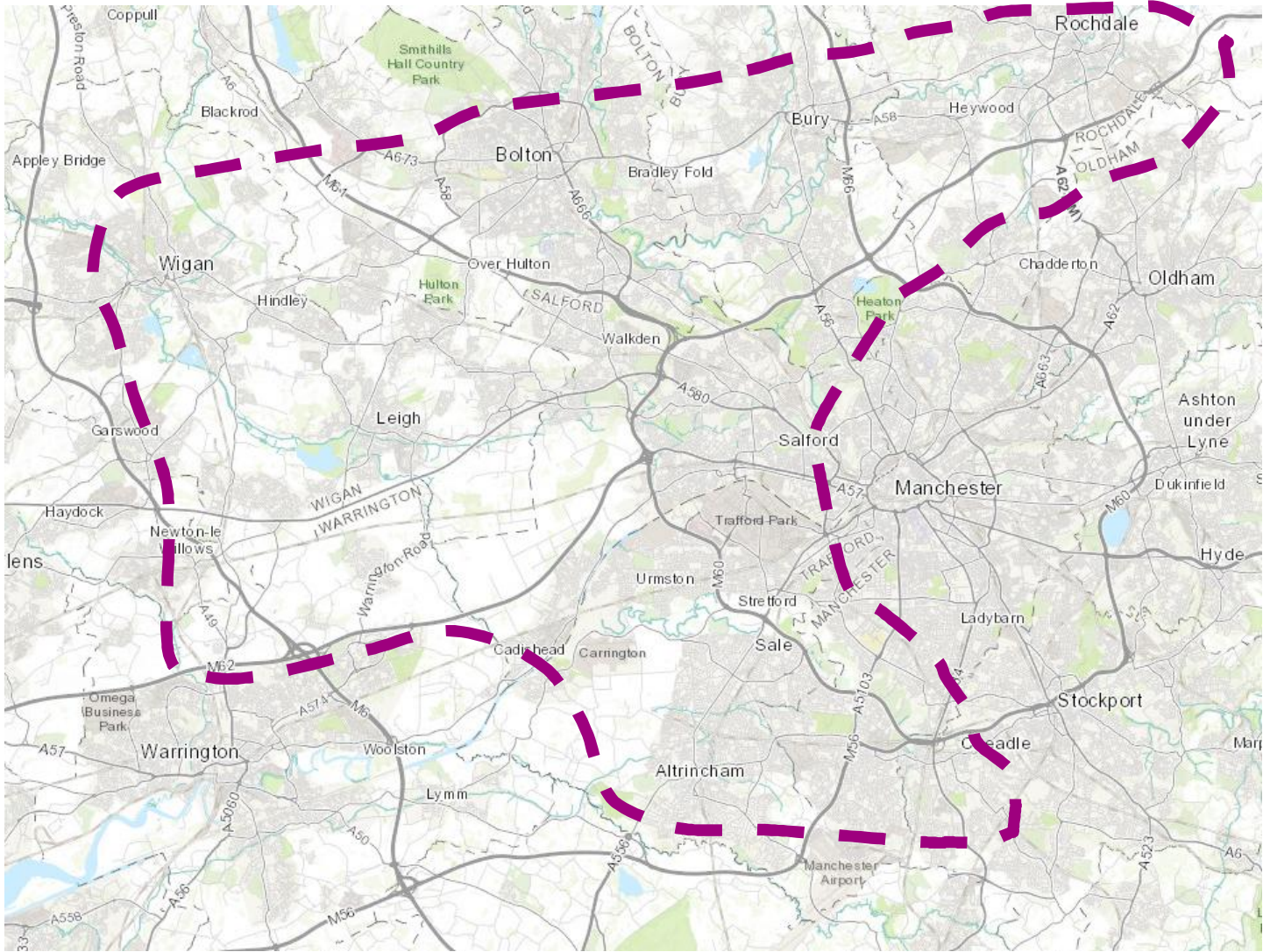
Stakeholder Briefing Content

- Background to the Study
- Study Objectives
- Project Process
- Initial Study Findings
- Current Phase of Work
- Emerging Findings
- Next Steps

Background to the Study

- DfT commissioned six Strategic Studies as part of its Road Investment Strategy
- The Manchester M60 North West Quadrant (NWQ) Study focused on M60 Junction 8 to Junction 18
- Initial study completed late 2016
- Follow on work now complete

Study Area



Evidence

- High vehicle usage in relation to **capacity**, exacerbated by high usage from freight vehicles
- Majority of the M60 (J8 to 18) within the worst 10% of national motorway links in terms of **journey time reliability**
- Low average **speeds** and high total vehicle hours delay
- Poor **safety**: high rates of collisions per 100 miles and casualties per billion vehicle miles
- Minimal network **resilience**
- Within a designated **Air Quality Management Area**
- Limited inter-city and intra-city business-to-business **connectivity** restricting the frequency and efficiency of business interactions
- **Economic growth** is limited by current transport barriers, as road congestion restricts connectivity

Case for Change

If the constraints on the network are not addressed:

- **Growth** across the region will be significantly constrained
- The aspirations of the **Northern Powerhouse** will be significantly harder to achieve
- Existing **congestion** will get even worse and extend onto other parts of the highway network
- **Journey times** will be more unreliable
- **Air quality** and **noise** will worsen
- **Performance targets** for the motorway network will not be met

Study Objectives

Growth

Facilitate and support the delivery of the Northern Powerhouse by ensuring the NWQ enables transformational growth in the employment, housing and the economic output of the North

Network Performance

Improve journey times, reliability, safety and resilience across the study area

Connectivity

Improve connectivity for all users so they are able to access education, employment, business and leisure opportunities

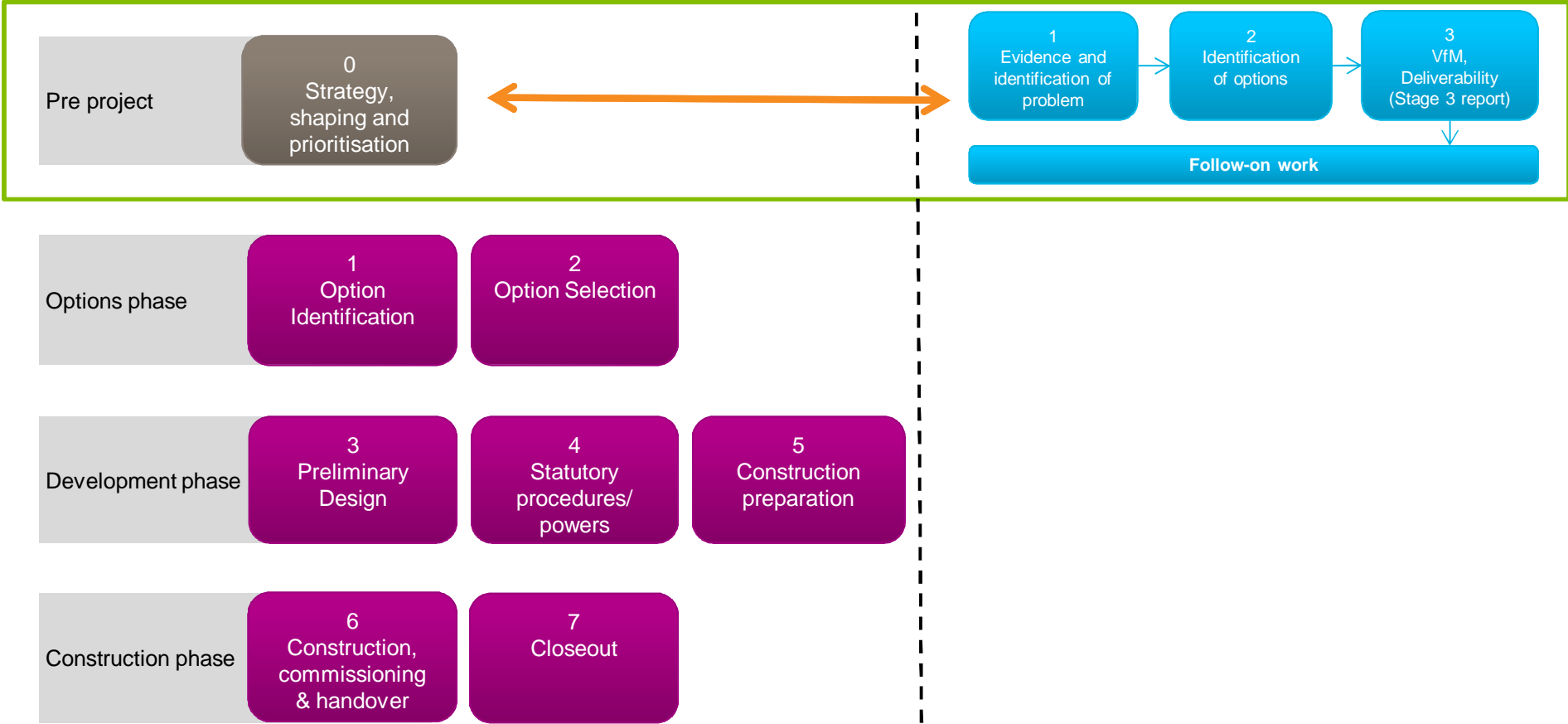
Environment

Minimise adverse impacts on the environment and maximise opportunities for a net improvement to the environment particularly to air quality and noise across the study area

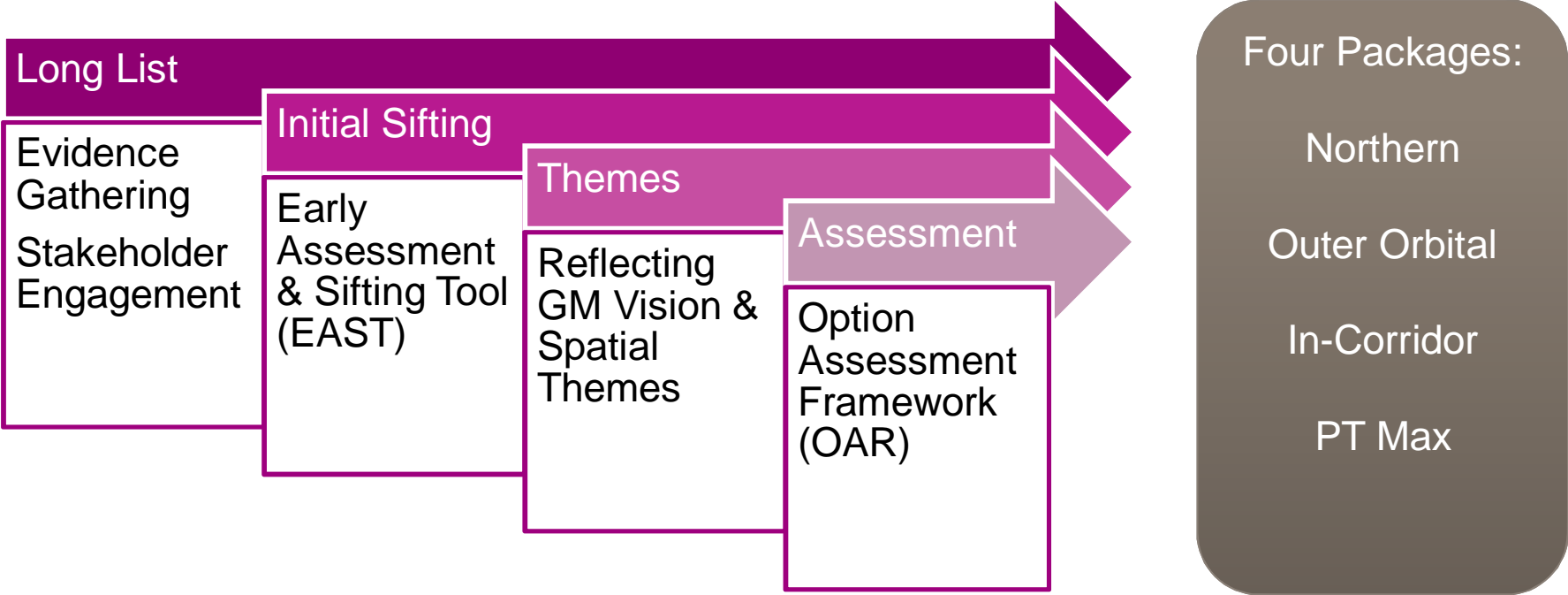
The Highways England Project Control Framework (PCF) and DfT Strategic Study Processes

Highways England PCF

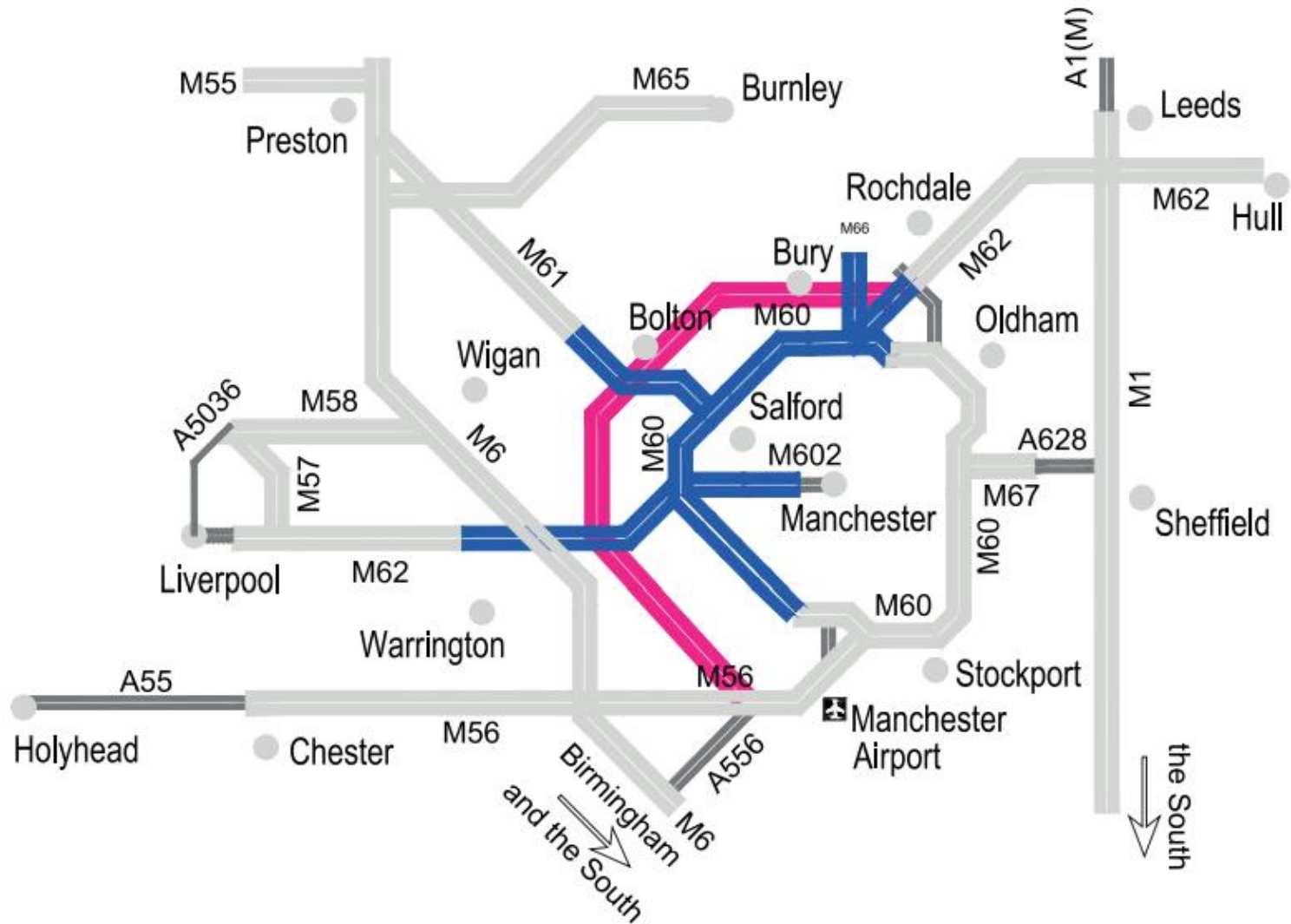
Department for Transport Strategic Studies



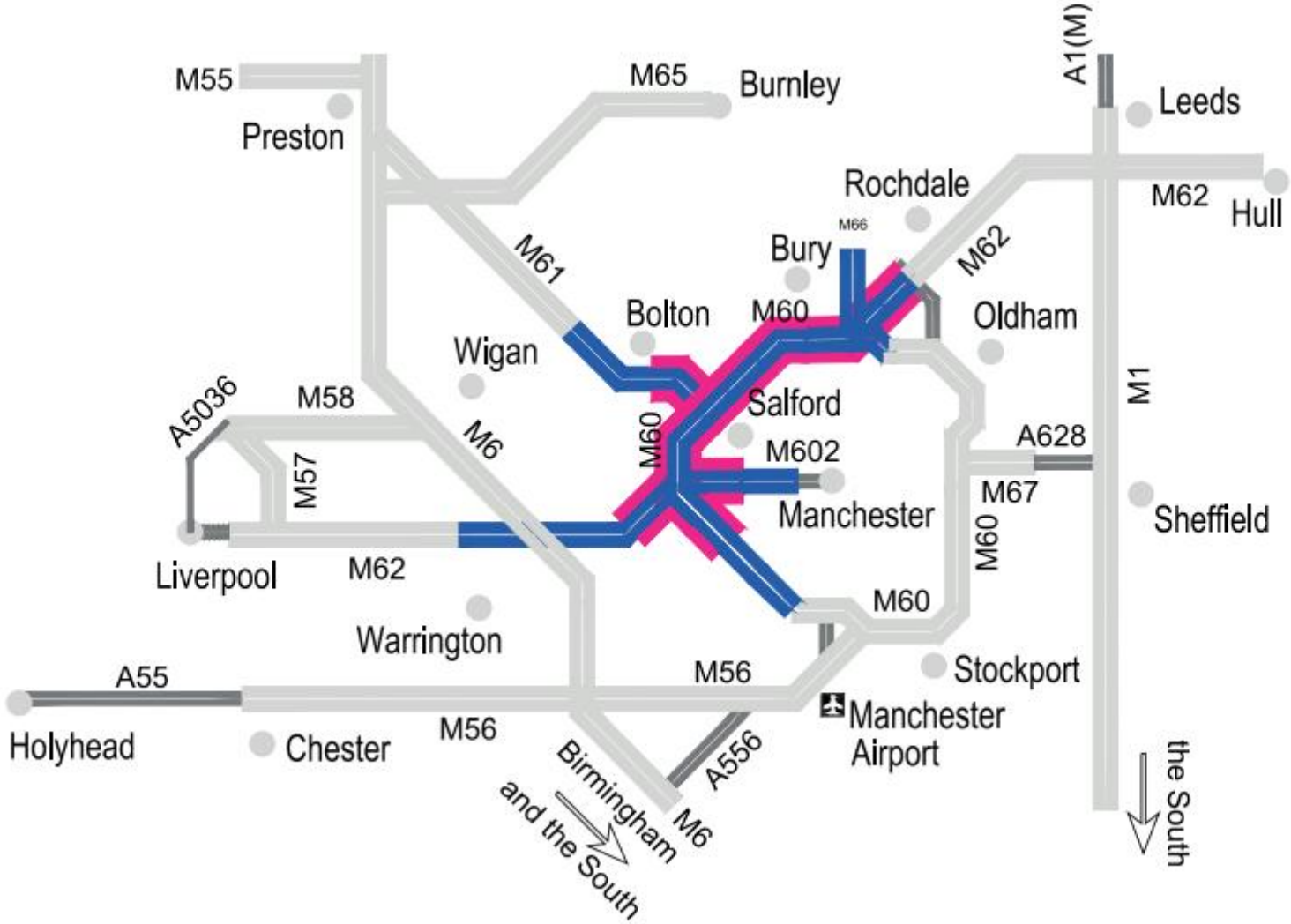
Initial Study Findings – Stage 0 Process



Initial Study Findings – Outer Orbital Corridor



Initial Study Findings – In Corridor



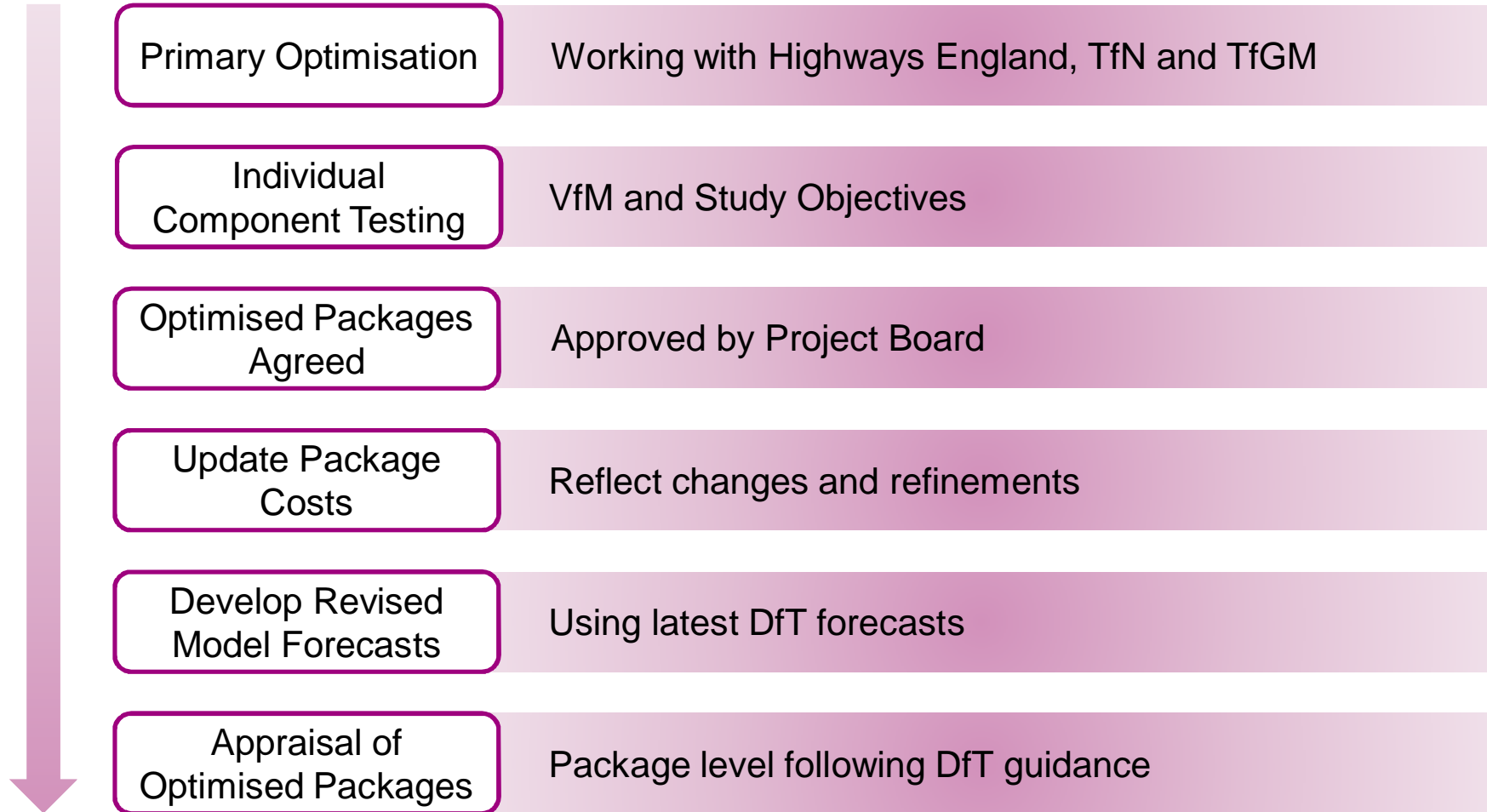
Initial Study Findings – Stage 0 Process

- Each of the four packages was assessed with regard to value for money considering:
 - § Traditional economic benefits such as journey time savings:
and
 - § Wider economic benefits such as improved economic activity.
- The PT Max Package did not perform sufficiently well on its own to be considered further
- However public transport elements were included in the other three packages

Current Phase of Work – Scope

- Investigate contribution of individual components within Outer Orbital, Northern Corridor and In Corridor Packages
- Seek to improve value for money whilst still meeting overall objectives
- Investigate alternative options for Outer Orbital corridor
- Liaise with local partners (in particular TfGM) to reflect local growth aspirations

Current Phase of Work



Current Phase of Work – Option Assessment

The individual components and package level assessment was undertaken against:

- Network Performance: impact on journey times and speeds for key strategic movements; and impact on flows on the M60 using the Greater Manchester models
- Growth and Connectivity: qualitative assessment against the objectives considering residential and employment (existing and future)
- Environment: assessment considering air quality, noise, cultural heritage, ecology and nature conservation, and water resources
- Value for money

Optimised Package Level Assessment

	In Corridor	Northern	Outer Orbital
Encourages Growth?	ü	ü	ü
Improves Network Performance?	Yes	Yes	Negligible
Enhances Connectivity?	ü	ü	ü
Environmental Impacts	Single Corridor	Multiple Corridors	Wide Area
High Level Cost*	£5.4bn	£5.3bn	£8.6bn

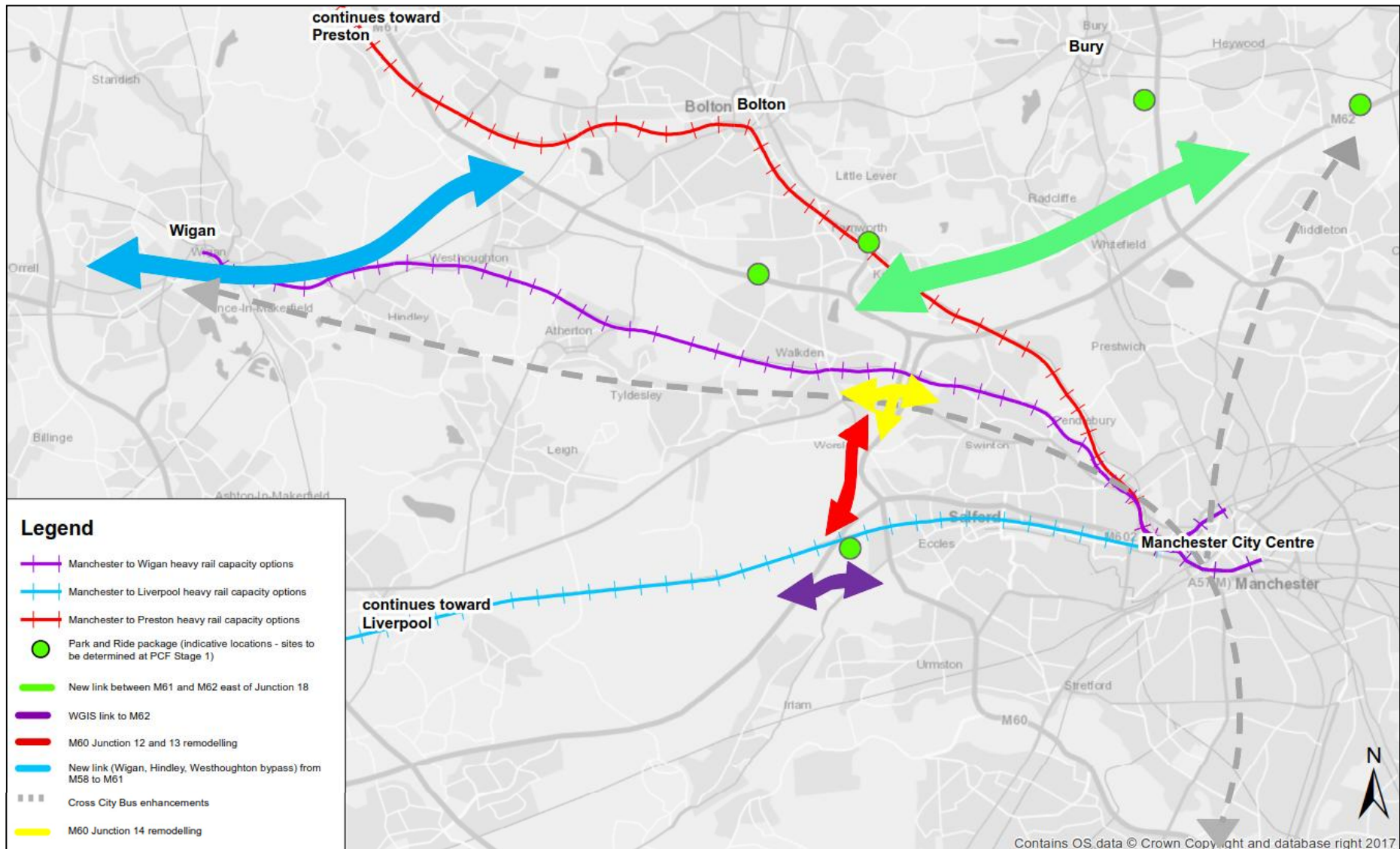
* developed using cost estimates in line with the Highways England Cost Estimating Manual for the highways interventions and by the study consultants for the public transport interventions based on published cost data. Includes allowance for risk and future inflation.

Optimisation Package Level Outcome

	In Corridor	Northern	Outer Orbital
Encourages Growth?	ü	ü	ü
Improves Network Performance?	Yes	Yes	Negligible
Enhances Connectivity?	ü	ü	ü
Environmental Impacts	Single Corridor	Multiple Corridors	Wide Area
High Level Cost*	£5.4bn	£5.3bn	£8.6bn

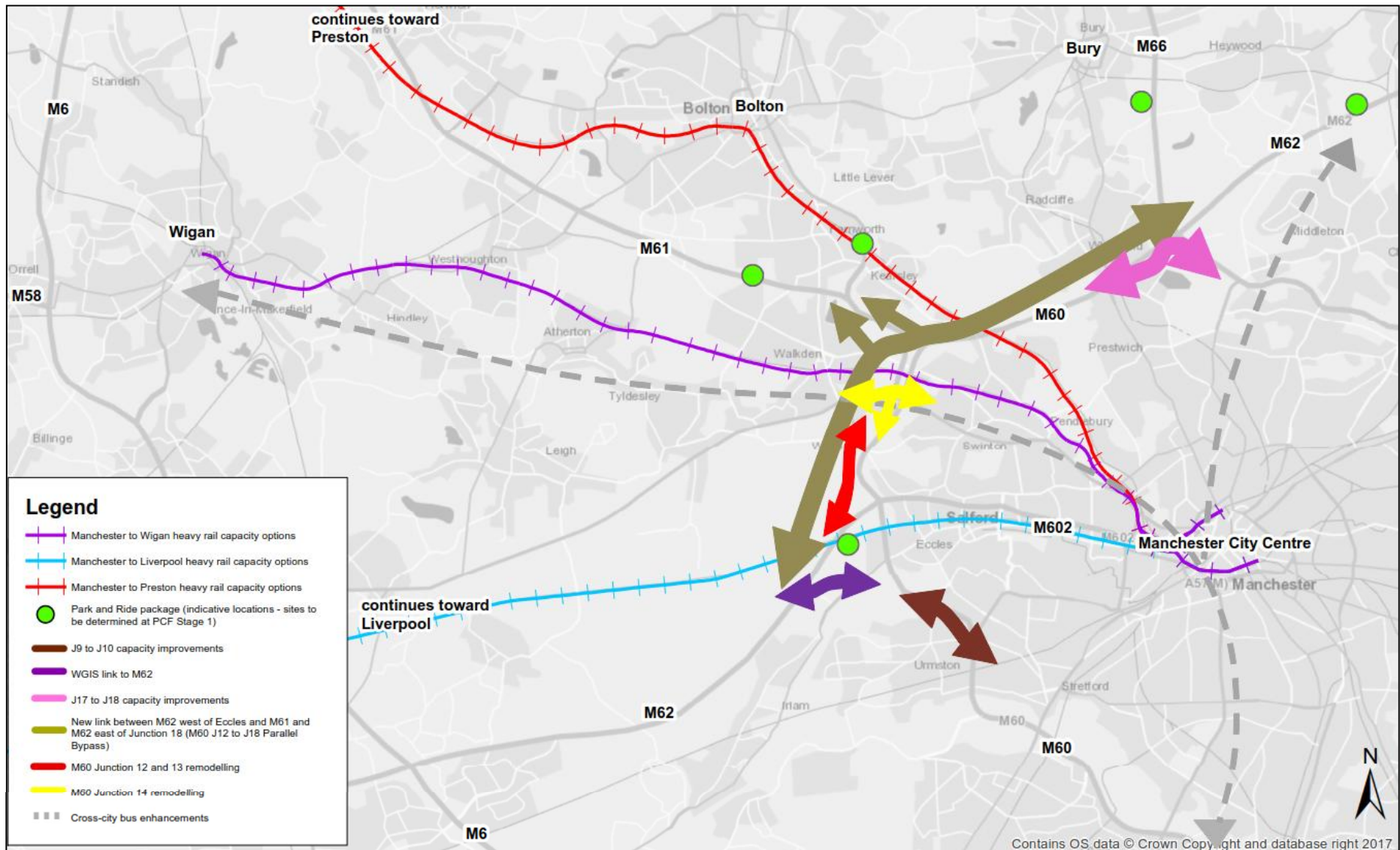
* developed using cost estimates in line with the Highways England Cost Estimating Manual for the highways interventions and by the study consultants for the public transport interventions based on published cost data. Includes allowance for risk and future inflation.

Optimised Northern Corridor Package



Illustrative purposes only

Optimised In Corridor Package



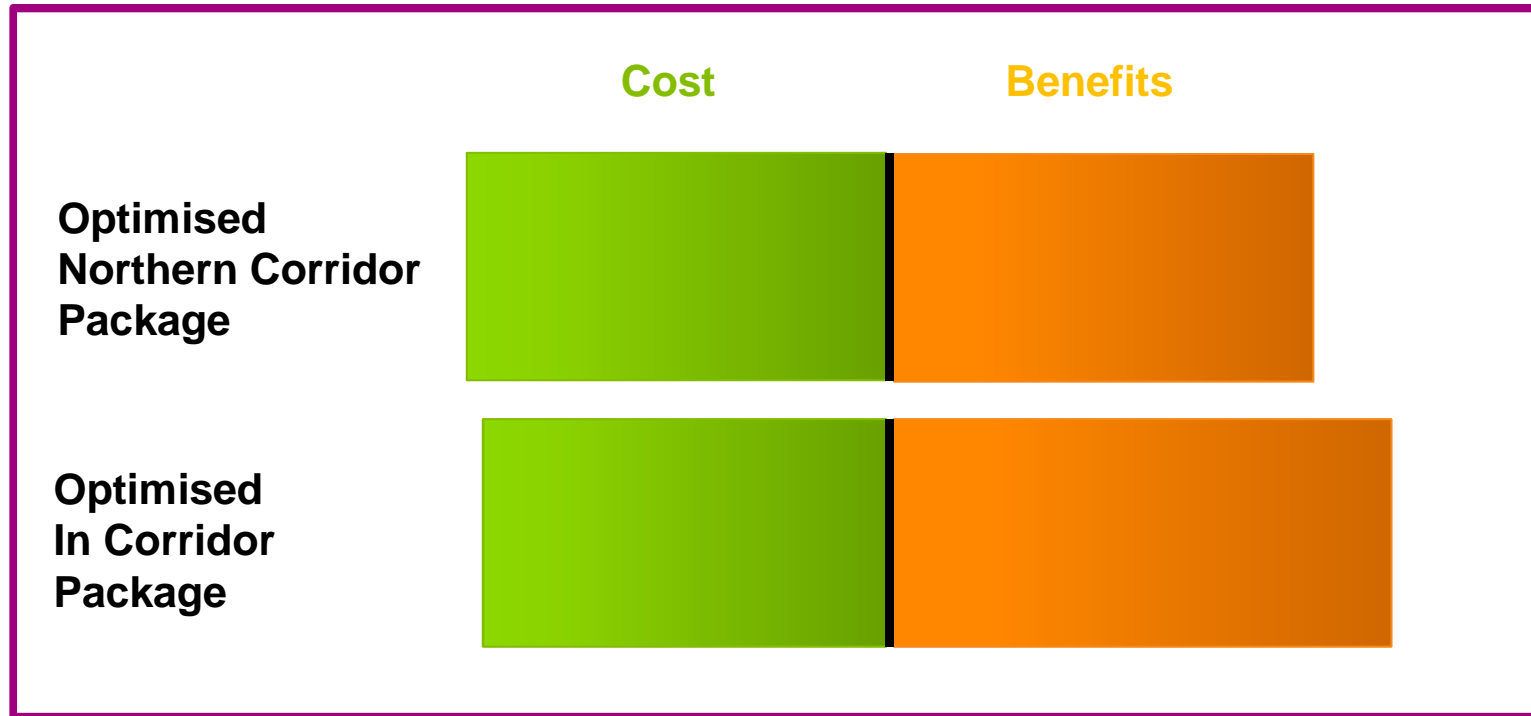
Illustrative purposes only

Optimised Package Benefits

Both packages offer:

- **quicker journeys** are experienced by users on long distance strategic movements; as well as for local movements
- additional **resilience** for east-west movements by separating longer distance traffic from more local traffic
- journey time **reliability** improvements
- improved **connectivity** for existing and future businesses and residents
- wider economic benefits derived from improved **productivity** experienced across Greater Manchester and the North

Illustrative Cost and Benefits



Illustrative purposes only – not to scale

Next Steps

- DfT in consultation with Highways England and TfN to consider which of the emerging optimised packages to take forward to the next stage as part of PCF Stage 1
- PCF Stage 1 will take in the order of 18 months
- PCF Stage 1 will consider the individual element options along with affordability, deliverability and delivery profile of the elements within the recommended package
- Feedback from stakeholder to inform PCF Stage 1 work
- Work with partners and stakeholders (in particular local partners such as TfGM) through PCF Stage 1

Summary

- Stage 3 report published in late 2016 identified four packages. The report concluded the PT Max Package did not perform sufficiently well on its own to be considered further
- Follow on work included investigation of the contribution of individual components within packages. This enhanced value for money whilst still meeting overall objectives
- Optimised In Corridor and Northern Corridor identified as emerging packages
- DfT in consultation with Highways England/TfN to consider which of the emerging optimised packages to take forward to the next stage as part of PCF Stage 1

Thank You

Any questions?

DfT, TfN and HE Panel