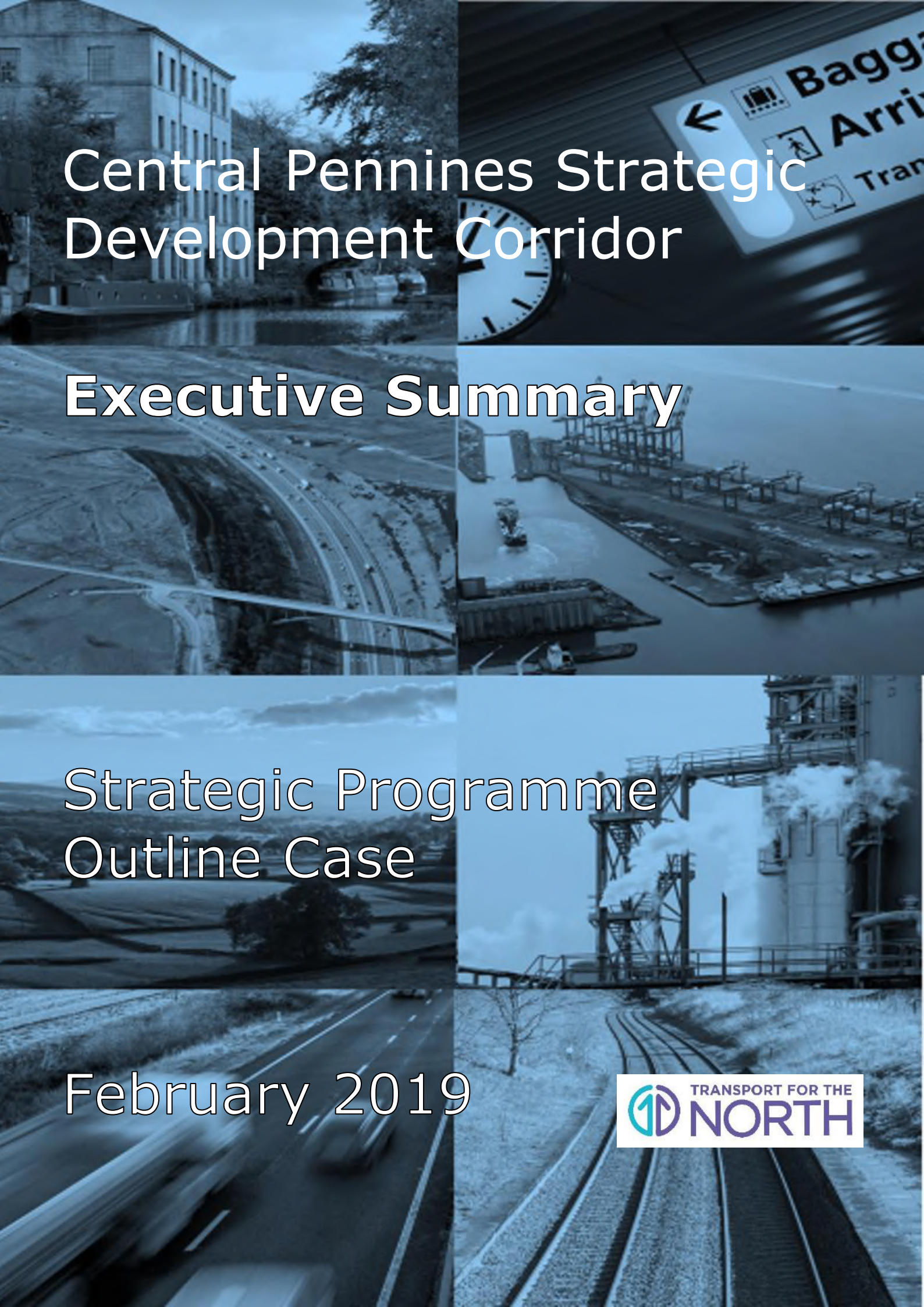


Central Pennines Strategic Development Corridor

Executive Summary

Strategic Programme Outline Case

February 2019

TRANSPORT FOR THE NORTH

Contents

Figures

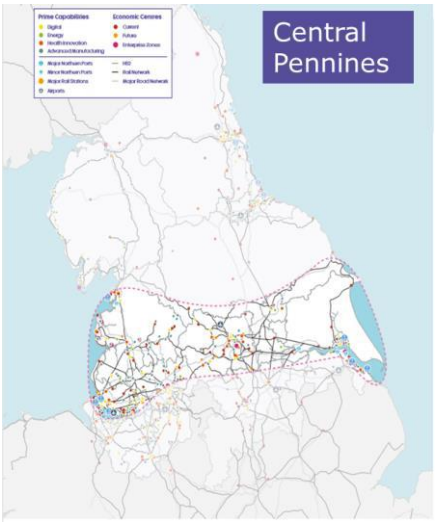
Tables

Background documents

Further detailed evidence is available on TfN's website at:
www.transportforthenorth.com

1 Executive Summary

Foreword



Dear reader,

I'm delighted to present this Executive Summary which explains the work that has contributed to the Central Pennines Strategic Development Corridor Report. The Strategic Development Corridors represent our approach to joining up the North like never before, better connecting businesses, improving access to jobs and leisure opportunities, and moving goods more efficiently. They are not traditional transport corridors, but economic eco-systems where supported by the right conditions, there are the greatest opportunities for re-balancing the economy, delivering a step-change in productivity and economic growth. They are fundamental to our Strategic Transport Plan, which you can read at: **www.transportforthenorth.com/onenorth**.

Central Pennines is one of seven corridors that aim to better connect the economic centres and natural assets of the North, improve links with our neighbours in Scotland, Wales and the Midlands, and enhance access to our international gateways. The reports we have produced are the first step in providing a compelling case for the North's Investment Programme. Further work will be required to refine this initial assessment, looking at how the economic case can be enhanced and exploring how delivery of the programme could be sequenced over time. Periodic reviews will also be required to keep the evidence up to date with changing economic and spatial plans, and emerging technologies.

This document is written for Northern citizens and businesses; as such it addresses the current bottlenecks, problems and constraints revealed by

our in-depth understanding of the region – as well as identifying the future transport interventions required to achieve our vision.

To accomplish this, we have built an understanding and evidence base of local spatial planning proposals and the future growth aspirations of businesses, and how they could be met through improved transport infrastructure. Consideration has also been given to how potential advances in innovation and technology could support new and improved ways of connecting people and moving goods.

Our Strategic Programme Outline Cases for each Corridor provide the evidence base behind Transport for the North's Strategic Transport Plan and Investment Programme – our list of potential interventions to deliver a step-change in Northern transport, drive transformational economic growth, and improve opportunities for all.

It is the culmination of 18 months of consultation and collaboration with partners, stakeholders, businesses and transport operators across the north.

I hope you will find it an interesting, useful and compelling document for investment in transport across the north.

Peter Molyneux

Major Roads Director

Transport for the North

Why: The Case for Change

TfN's Overall Context

1.1 The significant and widening performance gap between the North of England and the rest of the UK has become evident, and will continue to grow unless action is taken to reverse this trend. To support transformational growth in the North, and subsequently increase the potential for national economic growth and rebalance the economy, a step-change in strategic transport infrastructure investment is required.

1.2 As England's first Sub-National Transport Body, Transport for the North (TfN) was established to transform the transport system across the North of England. It has a clear remit to plan strategic transport infrastructure required to support sustainable transformational economic growth in the North.

TfN's Objectives

1.3 In its Strategic Transport Plan (STP), published in February 2019, TfN sets out its vision of "*a thriving North of England where world class transport supports sustainable economic growth, excellent quality of life and improved opportunities for all*". This vision is supported by four key Pan-Northern transport objectives:

Figure 1 TfN's Pan-Northern transport Objectives

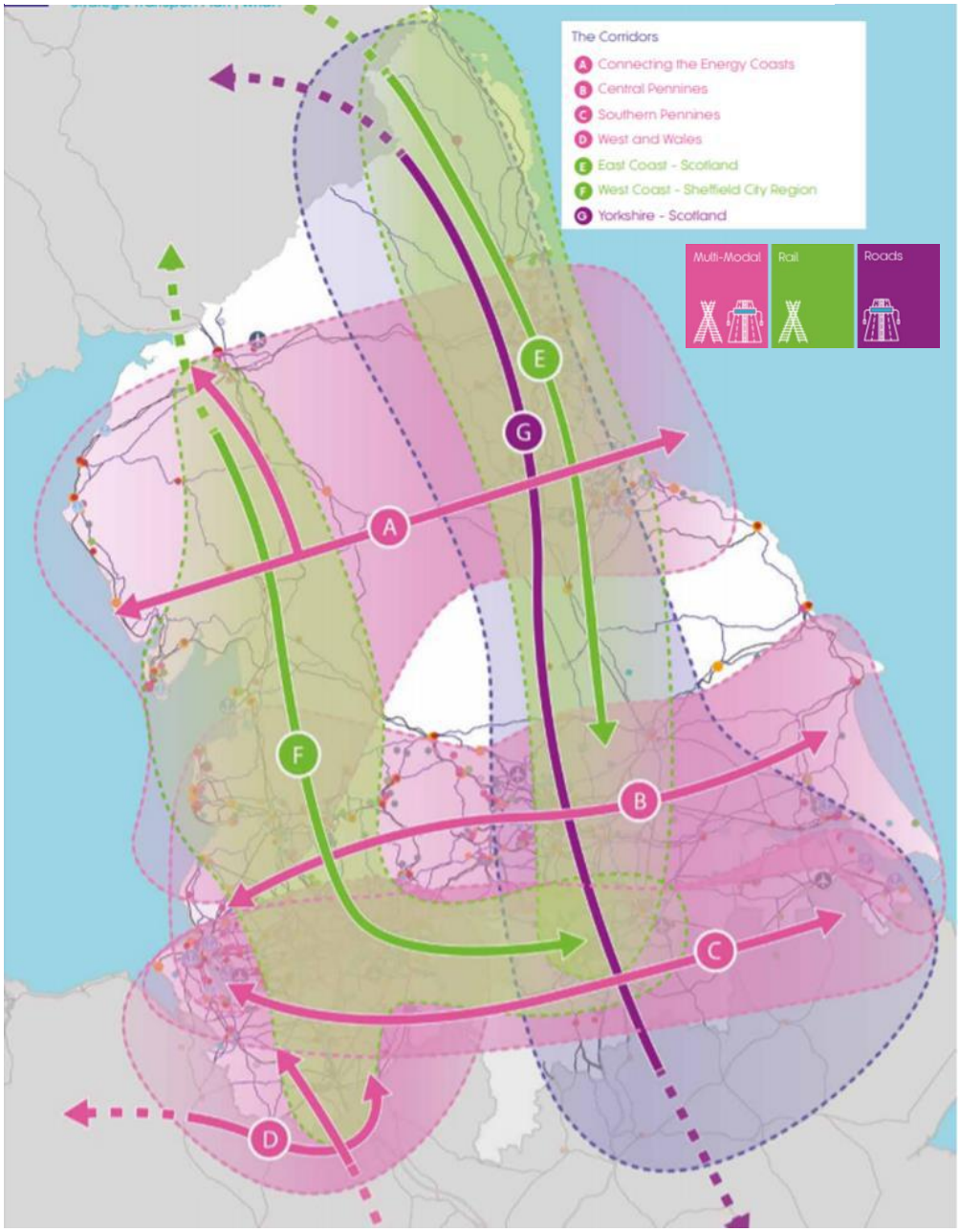
The Government is already funding a significant programme of transport interventions across the North. In addition, further investment is being planned by both central Government and local bodies. However, there is a need for a programme of further investments focusing on Pan-Northern connectivity priorities. This will realise the opportunities from major transformational infrastructure projects currently planned and being developed such as High Speed 2 (HS2) and Northern Powerhouse Rail

(NPR), achieving early benefits and ensuring that the wider programme maximises benefits to the whole of the North, and UK economy.

Strategic Development Corridors

1.4 Building on existing and proposed projects, the Strategic Development Corridors (SDCs) represent strategic geographical and economic areas with the strongest potential towards transformational growth in the North. Combining evidence from the 2017 Integrated Rail and Major Roads Reports, the STP identifies seven SDCs where evidence indicates that the delivery of transformational growth is dependent on bringing forward major road and rail investment.

Figure 2 - Strategic Development Corridors



Source: TfN Strategic Transport Plan – February 2019

1.5 The SDCs have been developed to represent where most of the largest gaps between demand and performance currently exist, and where there is likely to be the greatest economic potential for agglomeration between the prime and enabling capabilities[1] and the North's important Economic Centres[2].

1.6 TfN's remit is focused on the identification and recommendation of strategic transport interventions, which generally support longer distance trips and have a pan-northern impacts. TfN will also work with partners to support complementary investment at a local level to ensure that a 'whole journey' and 'total network' approach to improving transport is followed.

1.7 This document presents a summary of the Strategic Programme Outline Case (SPOC) for Pan-Northern transport interventions in the Central Pennines SDC.

Central Pennines Evidence Base

1.8 The Central Pennines SDC aims to support the overarching objectives set out in the Strategic Transport Plan, key to which is:

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

Strategic and Economic Context

1.9 This corridor has some of the North's key economic and population centres, with a diverse mix of strategic movements. It is home to approximately 8.7 million people, accommodating over 4 million jobs which generate between 40-50% of the North's economic output.

1.10 Economies within the Central Pennines corridor face a variety of challenges including:

- Low productivity attributed to, for example, a decline in manufacturing in historically important industrial areas such as Lancashire and West Yorkshire, and a reliance on primary industries in areas such as York, North Yorkshire and East Riding;
- An over-reliance on the public sector, for example in the Liverpool City Region and Hull & the Humber, and limited presence in high value sectors in some areas, including in York, North Yorkshire and East Riding; and

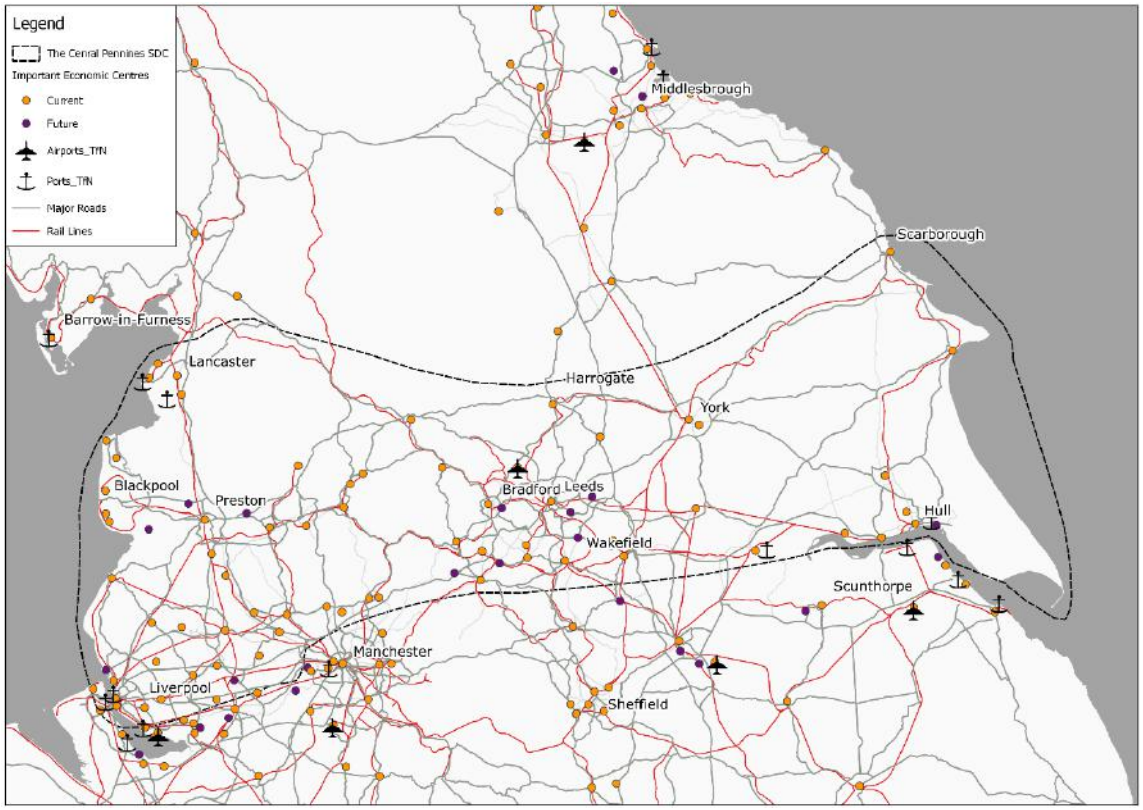
[1] The prime and enabling capabilities were identified in the Northern Powerhouse Independent Economic Review (2016). They have been identified as differentiated and distinctive at a Pan-Northern level, highly productive and able to compete at national and international scales. Prime and enabling capabilities are as follows: Advanced Manufacturing, Energy, Health Innovation, Digital, Financial and Professional Services, Logistics, and Education (primarily Higher Education)

[2] These are defined in TfN's Strategic Transport Plan

- Lower levels of business innovation and exporting, and lower proportions of higher-level occupations, as is the case in the Leeds City Region, despite its productivity performance faring above average compared to the rest of the North.

1.11 National, regional and local strategies, such as the Industrial Strategy, highlight the importance of enhanced strategic connectivity to release the significant economic growth potential. Addressing east-west connectivity is a priority and a failure to address current connectivity constraints would critically restrict the transformational growth potential of this corridor and the wider Northern economy. The role of key north-south links connecting into and between the east-west routes is also vital to a fully integrated and functional economic region.

Figure 3 Central Pennines SDC



1.12 This corridor is a major economic area of the North, and is home to globally significant businesses, supply chains and economic assets across all the North's prime and enabling capabilities. Delivering transformational growth is dependent on focussed investment in these prime capabilities and

infrastructure. The corridor has the largest aerospace cluster in the UK, including BAE Systems and Rolls Royce, with major sector representation and internationally competitive advantages in sectors such as automotive and other advanced manufacturing.

1.13 Enhanced connectivity can support complementary high-growth, high-value economic sectors and clusters and could attract new high-value business activity and inward investment to the corridor and the North. Freight and logistics are a key element of this corridor, connecting the Port of Liverpool with the Ports on the Humber. Leeds Bradford and Liverpool John Lennon Airport are situated within this corridor, providing important air connectivity which is enhanced by the catchment areas of other airports such as Manchester Airport.

1.14 The corridor's towns and cities also act as significant attractors to visitors, along with national parks, areas of outstanding natural beauty, seaside resorts and coastal attractions on the Fylde and North Yorkshire Coasts. Increasing the visitor economy will require easy and accessible transport connections so that national and international visitors can access these high-value economic assets.

Transport Context

1.15 The fundamental challenge for the North's economy is to improve the economic interaction between the key economic assets and clusters of the North to improve the sharing of knowledge, supply chains, resources, and innovation to drive agglomeration benefits and productivity.

1.16 Across the corridor there are both physical (such as transport connectivity, journey times and reliability) and economic barriers restricting trade and business interactions. Commuting between Manchester and Leeds is 40% lower than expected when comparing to city pairs that are similar distances apart in the UK, and similar polycentric regions in Europe.

1.17 It is the physical challenge of the Pennines which is regarded as the key barrier to east-west connectivity – although slight by European standards the topography of the Pennines remains a formidable barrier to movement. There is a pressing need to provide enhanced, additional road and rail capacity across the Pennines to provide alternatives to existing routes and to open up new opportunities.

1.18 The ability of northern stakeholders to work together as one and generate the benefits for the whole of the UK is currently heavily dependent on the successful operation of just one road, the M62 motorway; providing access to and from major ports, both coastal, and in the future inland; and major airports meaning that longer distance freight and regional freight distribution is a major component of the traffic mix. Other Trans Pennine road connections in the corridor are variable in quality, for example, the M65 terminates at Colne to the west of the Pennines, with onward connectivity to Yorkshire via a network of lower standard roads which lack coherence, capacity and resilience.

1.19 In North Yorkshire, East Riding, Hull and Lancashire there is an identified need to enhance the resilience and reliability of the road network and to improve journey time reliability on the A59, A63, A64, A1033, A1079 and A1237 road corridors. Such factors all lead to localised labour markets, narrow travel horizons and limited interaction with adjacent economies in the corridor.

1.20 The North of England's mixed-use, predominantly two-track railway presents capacity limitations which require trade-offs to be made between service frequencies, calling patterns, freight path provision and performance. Combined, these provide limited connectivity which serves to significantly increase the time penalty of travel to, from and between the corridor's population centres.

1.21 As elsewhere in the North of England, there is significant variance in rail passenger service frequencies and journey times across the corridor. Some sections of corridor (between York and Leeds, and between Preston and Blackpool, for example) are served by relatively high-frequency services, providing passengers with a 'turn up and go' style service. However, others are served hourly or less which limits the opportunities to travel.

1.22 East–west rail connectivity across the Pennines is particularly constrained, with low average speeds and frequencies on key routes providing connectivity between East Lancashire and West & North Yorkshire. Infrastructure capacity can be heavily utilised by the mix of traffic and stopping patterns which can present a barrier to service improvement.

1.23 There are also major capacity issues for rail freight travelling east-west. This is due to a combination of pathing constraints on the network, and the lack of appropriate gauge clearance for the largest freight wagons such as those used to transport intermodal container units (particularly refrigerated units where W12[3] clearance is required). Other barriers also exist in the form of inability to operate longer and heavier trains and inadequate infrastructure serving the North's major ports.

Environmental Assets

1.24 The corridor contains a number of important environmental assets which are highly valued at a local to international scale. These include but are not limited to: Yorkshire Dales National Park; Forest of Bowland, Nidderdale and Howardian Hill areas of outstanding natural beauty; and Saltaire World Heritage Site. In addition, throughout the corridor there are a number of sites designated at the International (European) or National (United Kingdom) level for nature conservation purposes. Many of the built-up areas within the corridor have identified air quality issues, directly linked to transport emissions. Promoting and supporting the natural environment and

[3] W12 is the largest gauge clearance specified for the GB Rail Network, it mainly relates to the transporting of 9'6" high x 2600mm wide containers (often refrigerated) on 945mm deck height wagons, and is recognised as being technically challenging to provide.

built environment with respect to sustainable travel options associated with the major transport networks will be a key opportunity and necessity of future transport initiatives.

Future Technologies and Societal Change

1.25 We are potentially at the start of profound change in how we move people, goods and services around. This is driven by innovation in engineering, technology and business models. The gathering pace of technological change through the delivery of higher speed and capacity digital networks, the connection and automation of vehicles, the adoption of robotics, zero emission propulsion, sharing of transport assets and new approaches to payment could transform the travel and the provision and management of infrastructure and services. Whilst uncertain, technology has the potential to reduce the demand for travel as well as enabling significant benefits to both those using the transport network and to network operators. Further work on transport interventions will need to take account of the potential impacts of technological and societal changes.

What Would Improvements Mean for People, Businesses and the Movement of Goods

1.26 Transport investment has been shown to be a key enabler for growth in the North's economy which will bring benefits to people, businesses and the movement of goods by:

- Connecting people – improving access to work opportunities, giving businesses access to a wider labour market, and improving access to leisure, education, training and tourism assets.
- Connecting businesses – improving connections, both nationally and internationally, to collaborators, clients and competitors, including those within the prime and enabling capabilities.
- Moving goods – supporting businesses to move freight and goods in efficient, multi-modal ways.

What: Identifying the Transport Interventions Required to Transform the Economy

Reference Case

1.27 Government is already funding a significant programme of transport interventions across the North. In addition, further investment is being planned both by central Government and local bodies. This includes road investment schemes put forward by Highways England, transport schemes developed by combined and local authorities across the North, Pan-Northern schemes such as NPR being developed by TfN, and HS2, led by Central Government. It is therefore expected that significant investment in new transport infrastructure will be delivered in the coming decades to address connectivity challenges of the current transport system.

1.28 In this context, a Reference Case, considered to be a 'do-minimum' scenario, has been developed by TfN which includes both committed schemes and non-committed strategic interventions that can be reasonably

expected to be delivered in the medium and long term and are necessary to achieve the North's economic growth aspirations.

1.29 Reference Case measures in this corridor include but are not limited to:

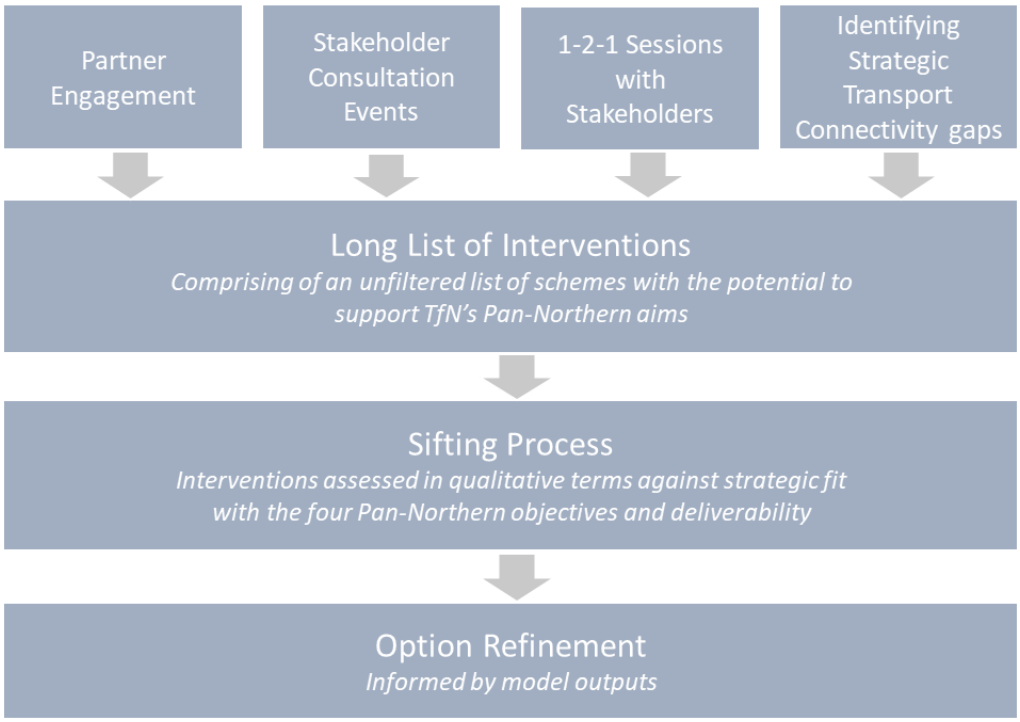
- **For Road:** Highways England's Roads Investment Strategy 1 schemes on the M6 and M62; M60/M62/M66 Simister Island; M62 Junctions 26 to 27; Manchester North West Quadrant Strategic Road Network (SRN) and multi-modal enhancements; A5036 Port of Liverpool Access; A63 Castle Street; A585 Windy Harbour to Skippool; A582 Preston Western Distributor; Leeds Bradford Airport Link Road; A1237 York Northern Outer Ring Road Phase 1; A64 Hopgrove Junction to Barton Hill; and A1079/ A164 Jock's Lodge junction.
- **For Passenger Rail:** Northern and TransPennine Express franchises, HS2 Phases 2a and 2b including all necessary station works to accommodate services at Preston station, Wigan North Western station and Lancaster station; Northern Powerhouse Rail; Transpennine Route Upgrade (including Intermediate Interventions); Liverpool City Region upgrades and Calder Valley Line upgrade.

1.30 The programme of interventions put forward within this corridor has been developed to maximise the overall benefits of the schemes in the Reference Case and to improve the distribution of benefits across the North.

Pan-Northern Scheme Identification

1.31 A staged approach has been taken to the identification of Pan-Northern transport schemes in the corridor as shown in Figure 4.

Figure 4 Staged Approach to Pan-Northern transport scheme identification



Partner Involvement & Governance

1.32 Transport for the North is the voice of the North of England for strategic transport. Reflecting TfN's governance arrangements, partners have been engaged and have contributed to the development of the Strategic Outline Programme (SOP) for this corridor throughout its lifecycle. This includes participation and approvals during scheme identification, objective setting, sifting, option refinement and economic appraisal processes.

1.33 The Programme Board includes representatives from the following organisations: combined authorities, local transport authorities and Local Enterprise Partnerships in the North, Department for Transport, Network Rail, Highways England, High Speed 2 Ltd.

Key Pan-Northern Transport Outcomes and Programme of Interventions

1.34 Aligned to TfN's Investment Programme the key Pan-Northern transport outcomes desirable within the corridor are:

- Ensuring the North is ready for HS2 to maximise the benefits of the national significant project;
- Enhance east-west strategic connections across the North to support UK competitiveness;
- Enhance north-south strategic connections across the North to support UK competitiveness;
- Enhance access to the North's international gateways in, or near, the corridor including Liverpool John Lennon Airport, Leeds Bradford Airport, Manchester Airport, Port of Liverpool, Port Salford and Port of Hull
- Ensure that the needs of freight operators can be met;
- Improve connectivity and resilience to tourism and economic clusters on the Fylde Coast;
- Improve connectivity and resilience around the Humber, Liverpool City Region, Greater Manchester City Region, Lancashire and Leeds City Region economic clusters;
- Facilitating significant private sector investment to support economic growth and UK competitiveness; and
- Facilitating the delivery of housing growth.

1.35 The programme of interventions which will deliver both improved passenger rail and highway outcomes contained within the corridor are summarised in Figures 5 & 6 below, and build on the Reference Case.

Figure 5 Strategic Outline Programme Proposal for Road

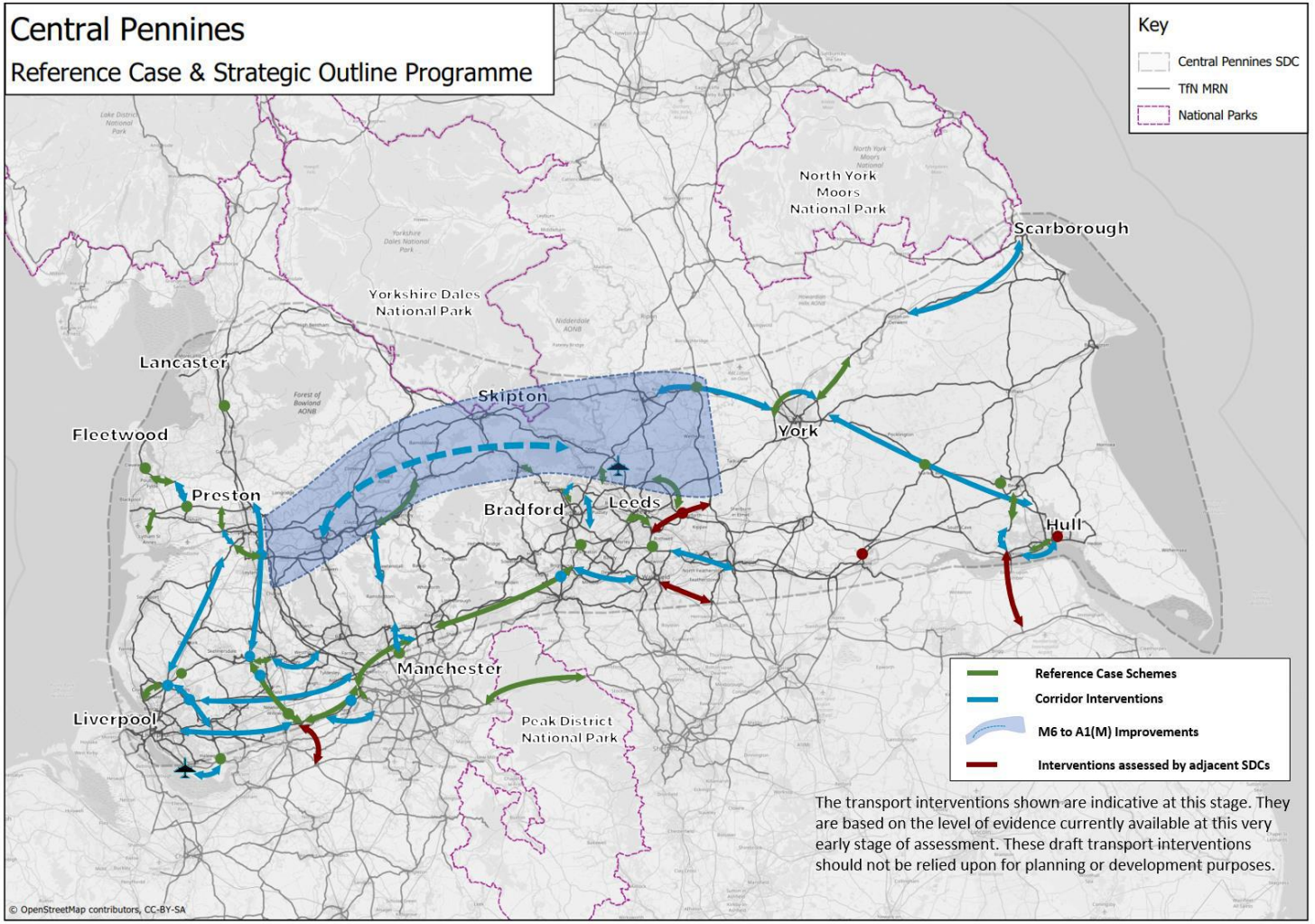
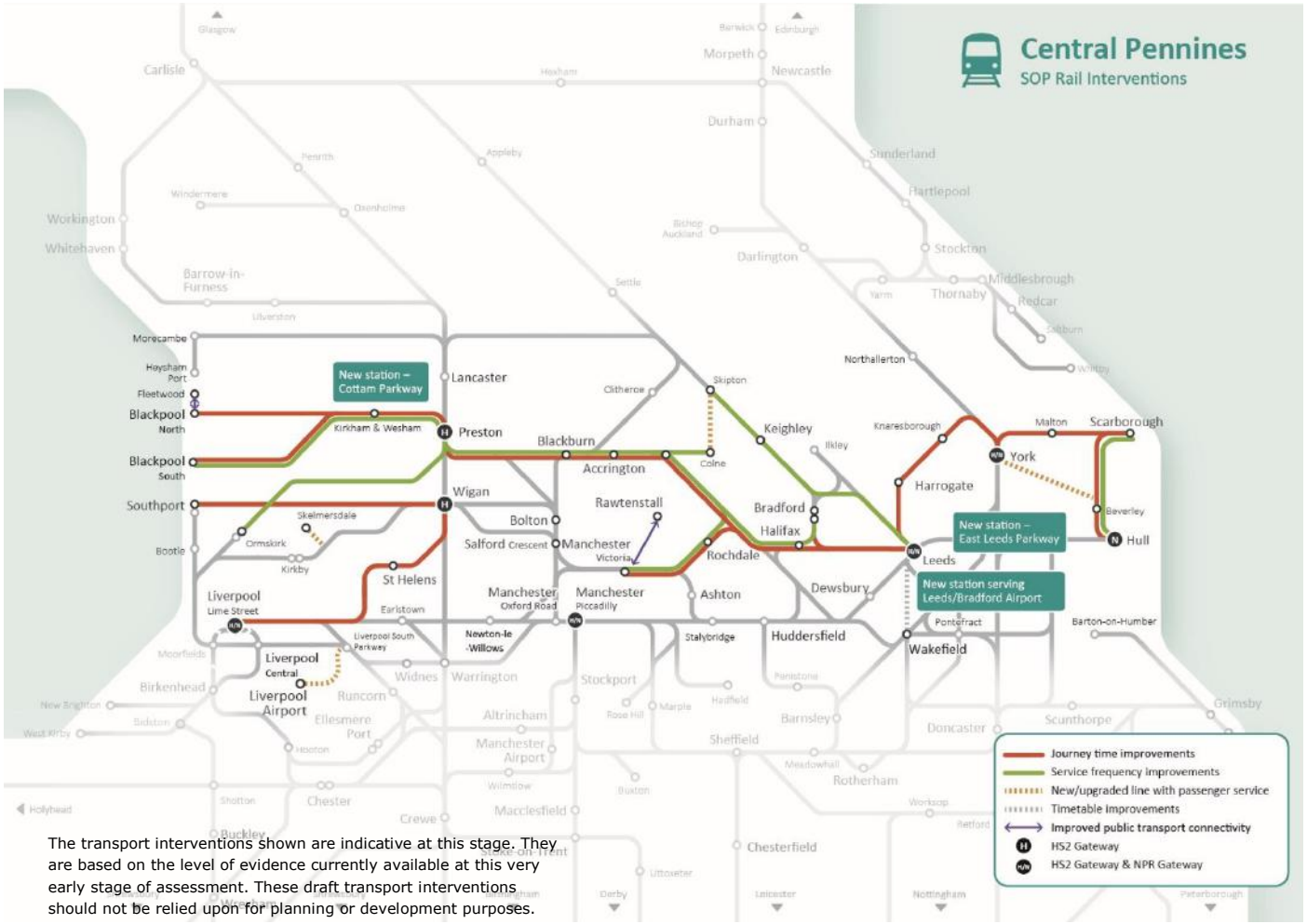


Figure 6 Strategic Outline Programme Proposal for Rail



The transport interventions shown are indicative at this stage. They are based on the level of evidence currently available at this very early stage of assessment. These draft transport interventions should not be relied upon for planning or development purposes.

1.36 The transport interventions shown are indicative at this stage. They are based on the level of evidence currently available at this very early stage of assessment. For many of the Reference Case schemes there remains a critical requirement to continue with the development of cases and to secure funding and TfN will work with partners to try and achieve that. It should also be pointed out that many of these interventions require further development and a positive funding decision before they can be delivered.

1.37 Delivery of these draft transport interventions should not be relied upon for planning and development purposes.

Value for Money Statement

1.38 The Value for Money (VfM) Assessment summarises the monetised and non-monetised impacts of the appraised corridor interventions. Highways, passenger rail and road & rail freight are shown separately.

Appraisal of Highway Interventions

1.39 The appraisal of highway interventions in the Central Pennines SDC is based on the Department for Transport's standard forecasts and completion of Reference Case interventions. These are initial results, which will be re-evaluated as TfN take forward further work on modelling and appraising the SDC programme.

Table 1 Summary of highway appraisal

Value for Money Assessment		
Established Monetised Impacts (journey times/operating costs):		
Established Monetised Impacts of appraised highway interventions £9,266m	Net Cost to the Transport Budget of appraised highway interventions £6,730m	Initial Ratio of Benefits to Costs 1.38
Initial Value for Money Category		Low
Evolving Monetised Impacts (plus wider economic impacts/reliability):		
Established + Evolving Monetised Impacts £14,294– 15,120m	Net Cost to the Transport Budget £6,730m	Provisional Ratio of Benefits to Costs 2.12 – 2.25
Provisional Value for Money Category		**Medium - High**
Non-monetised Impacts A fundamental aim of TfN and Partners is to protect and enhance, where possible, the natural and historical assets of the North. The Central Pennines SDC programme includes interventions that risk potential adverse impacts on environmental receptors, including designations of international to local value such as European designated wildlife sites, close or within National Parks and Areas of Outstanding Natural Beauty and heritage assets, amongst others. These impacts will be carefully considered in subsequent stages of work and TfN and partners will seek to protect and enhance natural and historic assets, where possible, through the individual scheme development process. There, however, remains the potential for residual adverse impacts.		

Provisional Value for Money Category	**Medium - High**
The environmental disbenefits of additional travel in terms of noise, air pollutant and carbon emissions from transport, will offset some of the economy benefits captured within the provisional categorisation. Accordingly, given that the lower end of the range is close to the category threshold, it is concluded that an appropriate prudent overall categorisation is **Medium Value for Money**, in which there can be commensurately higher certainty at this very early stage of scheme development.	
Adjusted Value for Money Category	Medium

Appraisal of Passenger Rail Interventions

1.40 The passenger rail economic appraisal is at a northern level, so includes costs and benefits of appraised rail interventions within the Central Pennines and within the other Strategic Development Corridors. Table 2 summarises the results of the rail appraisal.

Table 2 Summary of passenger rail economic appraisal

Established Monetised Impacts of appraised rail interventions	Net Cost to the Transport Budget of appraised rail interventions	Initial Ratio of Benefits to Costs
£464m	£424m	1.10[4]
Initial Value for Money Category		Low

Freight Benefits

The benefits of the programme of interventions for road and rail freight have been appraised using the Great Britain Freight Model and are reported at a GB and a Northern Level. The results, summarised in Table 3, provide a strong indication of the economic benefit of supporting freight growth in the North of England.

1.41 The freight scenarios that have been used include looking at the impact of larger ships, warehouse clustering and rail capacity. These scenarios cannot be aggregated together as they rely on particular economic conditions and private sector investment.

[4] Based on established monetised impacts only, which focuses on journey time savings to rail passengers, and evaluated using values from the May 2018 WebTAG databook.

Table 3 Summary of Freight Benefits of the Strategic Outline Programme

Freight Scenario	Present Value Benefits (£million 2010 prices)[5]		
	Allocated to the North	Allocated Elsewhere	Total
Benefits of Highways SOP for the North (freight vans)	£3,020	£170	£3,190
Benefits of Highways SOP for the North (heavy goods vehicles)	£844	£195	£1,039
Benefits of re-routing interventions (Based on 4 additional rail freight routes)	£2,213	£3,789	£6,002
Benefit of removing rail freight capacity limits	£1,683	£4,080	£5,763
Benefit of warehouse clustering	£1,886	£3,731	£5,597
Benefit of Port measures (larger ferries)	£761	£1,929	£2,690

1.42 The approach to assessing passenger rail and freight interventions is detailed further in their Strategic Outline Programme Case documents and additional technical reports.

Summary of VfM

1.43 The costs and benefits demonstrated above show that the transport interventions appraised identified in our SOP represent value for money based on the evidence currently available, giving a justified basis for progressing the case for investment in this corridor.

Funding Requirement

1.44 The illustrative Strategic Development Corridor funding requirement for appraised (within the economic appraisal) and non-appraised interventions[6] is shown in Table 4. The indicative costs which underline the funding requirements are based on high level benchmarked unit rate cost estimates appropriate to this early stage in the business case development cycle.

1.45 This represents an ambitious but realistic funding requirement for a long term programme of transport investment, building upon the reference case schemes, to be delivered over the period up to 2050.

[5] Benefits cannot be treated as cumulative or added directly to the assessment of highway and rail benefits

[6] TfN is developing the transport modelling tools to take forward further analysis and appraisal of the programme of transport interventions.

Table 4 Illustrative Funding Requirement (£ millions in 2017 prices)

SPOC	Appraised Programme	Non-Appraised Programme	Full Programme
Highway: Central Pennines	£7,144	£334	£7,478
Highway: Connecting the Energy Coasts	£2,158	£170	£2,328
Highway: Southern Pennines	£3,115	£583	£3,698
Highway: West and Wales	£3,281	£1,578	£4,859
Passenger Rail: North	£505	£6,100	£6,605
Sub Total[7]	£14,896	£8,575	£23,471
Programme Contingency (5%)			£1,174
Total Base Cost (including programme contingency)			**£24,645**
Illustrative Funding Requirement (allowing for inflation)	**£40,000 to £50,000[8]**		

How: Delivering the Interventions

1.46 Reflecting TfN's governance arrangements, TfN's local authority partners, Department for Transport, Network Rail, Highways England have been engaged with and have contributed to the development of the Central Pennines SDC throughout its lifecycle including participation in the option assessment and economic appraisal processes.

1.47 The SPOC for the corridor provides a key part of the evidence base for TfN's Strategic Transport Plan and Investment Programme, which sets out TfN's priorities for investment in transport across the North.

1.48 TfN is accountable for owning the vision for the proposed programme and integrating and aligning it with the wider TfN Strategic Transport Plan, the wider Northern Powerhouse agenda and key government policies and strategies.

1.49 TfN will provide the overall direction, governance and leadership, including chairing the Programme Board, further developing, refining and sequencing the package of interventions to facilitate the implementation of the proposed programme. TfN's role is overarching, in order to maintain a healthy alignment between the programme and wider Departmental and Government strategies, while engaging with HM Treasury, Cabinet Office, the National Infrastructure Commission, Infrastructure and Projects Authority and other key governmental stakeholders. TfN will also be

[7] Double counting of interventions in more than one SDC removed.

[8] Illustrative Funding Requirement - (most likely base cost 2017 prices)

responsible for managing the key strategic risks facing the programme and ensuring that the views of the local authority partners are represented.

How TfN Will Take Forward the Investment Proposals

1.50 TfN will lead on further business case development at the Pan-Northern/Strategic Development Corridor level, including seeking and prioritising funding for schemes. Beyond that stage, works and services will be procured by the appropriate delivery entity, yet to be determined. For example, this could include Highways England (for Strategic Road Network schemes), Network Rail and local transport authority partners.

1.51 The programme of interventions proposed for the Central Pennines corridor includes many schemes, which will likely be delivered over a number of years. The timing of the delivery of interventions provides an opportunity for scheme promoters to ensure suppliers offer the correct skillsets as new framework and term maintenance contracts are let. More detailed market analysis will be undertaken as part of the next stage of works and updated as technologies in construction and within the complementary industries develop.

Next Steps

1.52 The proposed programme of interventions across the Central Pennines SDC comprises multi-modal investments to be delivered over time. The delivery of these schemes will require a comprehensive plan that carefully phases investment to ensure affordability, whilst balancing disruption, mitigation and enhancement of environmental impact and the realisation of benefits to the residents and businesses of the North of England. The interdependencies with committed schemes such as HS2 and programmed road schemes are also a key factor to consider when developing the delivery plan.

1.53 It is envisaged that a number of early 'priorities for delivery' will be taken forward to Strategic Outline Business Case status in 2019/2020 and delivered between 2020-2027. Overall, a programme of short (up to 2027), medium (2027-2035) and long term (post 2035) interventions will be developed.

1.54 In the next year, TfN plans to update the Strategic Programme Outline Cases to inform an update of the Investment Programme. This will include work on reviewing the current SDCs and Investment Programme, including the sequencing of schemes. The next stage of modelling will include transformational NPIER[9] forecasts and the latest spatial planning information.

1.55 As in the first stage of the development of the SDCs, TfN will fully engage with DfT, local partners. national delivery bodies, transport operators and

[9] Northern Powerhouse Independent Economic Review

other key stakeholders. This will ensure that partners and stakeholders contributions inform and help shape our delivery programme.