



West Coast to Sheffield City Region Strategic Development Corridor

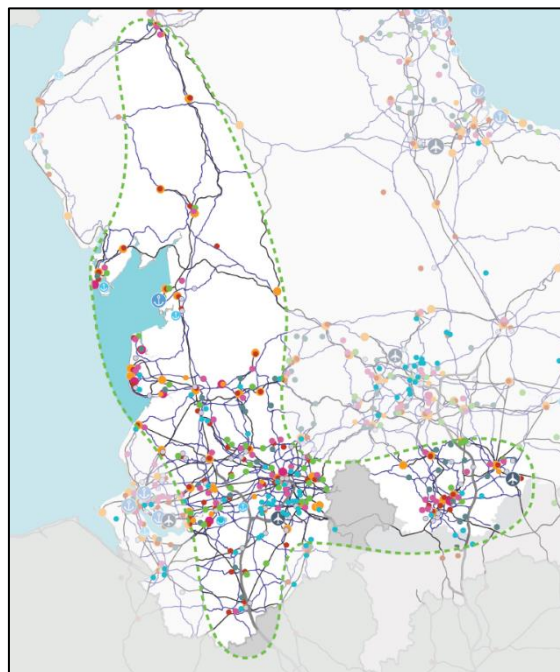


Position Statement

March 2019



Foreword



Dear reader,

I'm delighted to present this Position Statement which explains the work that has contributed to the West Coast to Sheffield City Region Strategic Development Corridor. 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.

West Coast to Sheffield City Region 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 develop this initial assessment, looking at how the economic case can be refined and exploring delivery of the programme. 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 beginning to identify the future transport interventions required to achieve our vision.

Together the Position Statements and 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 interventions to deliver a step-change in Northern transport, drive transformational economic growth, and improve opportunities for all.

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

1. Why: The Case for Change

Transport for the North’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.

Transport for the North’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:

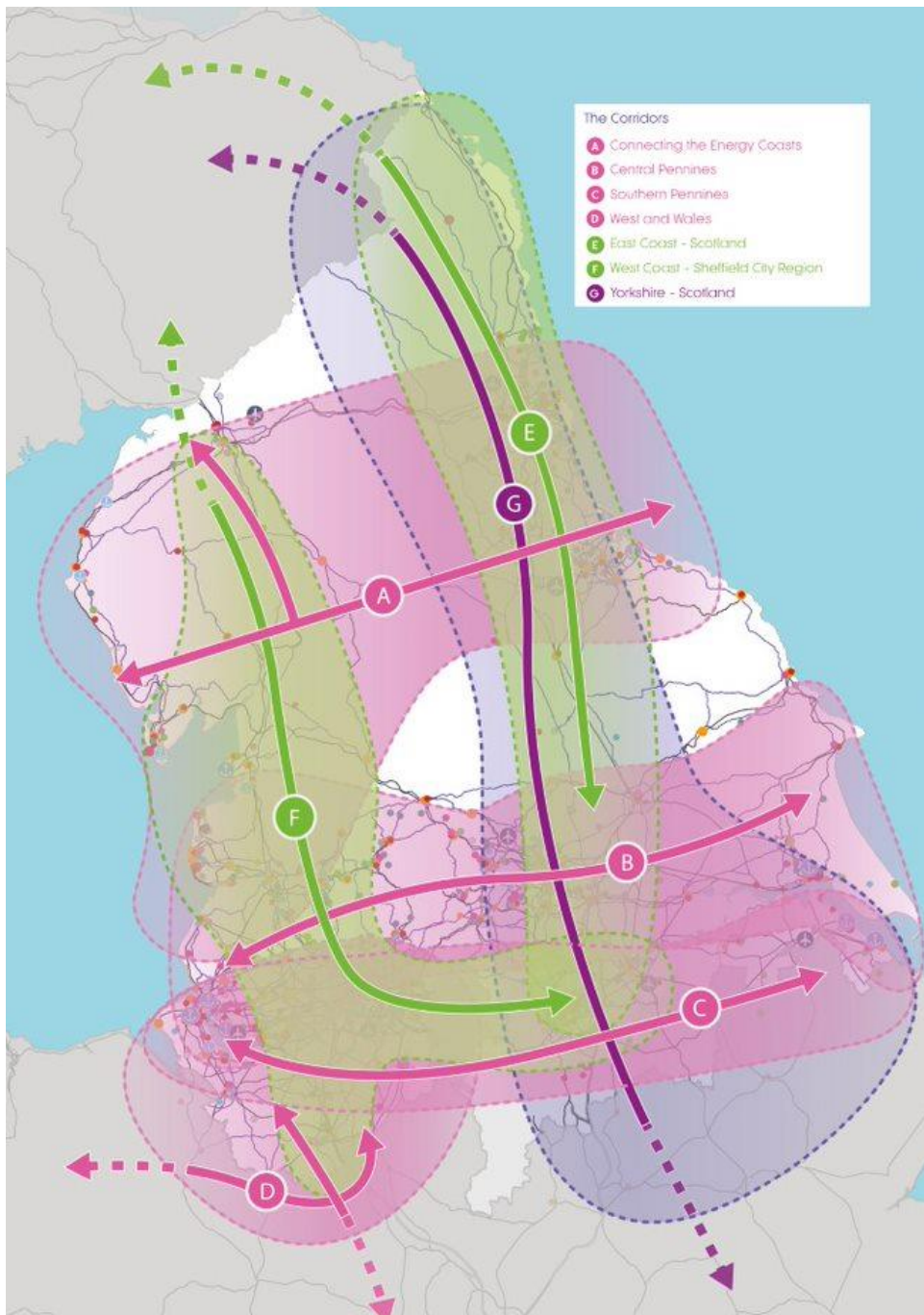
 <p>Transforming economic performance</p>	 <p>Improving inclusivity, health and access to opportunities for all</p>
 <p>Promoting and enhancing the built, historic and natural environment</p>	 <p>Increasing efficiency, reliability, integration, and resilience of the transport system</p>

- 1.4 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 maximise and 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 filling in gaps in TfN’s wider programme.

Strategic Development Corridors

1.5 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.



- 1.6 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 capabilities¹ and the North's important Economic Centres².
- 1.7 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.
- 1.8 This document presents a summary of the issues, and the Pan-Northern rail interventions that follow, in the West Coast to Sheffield City Region SDC.

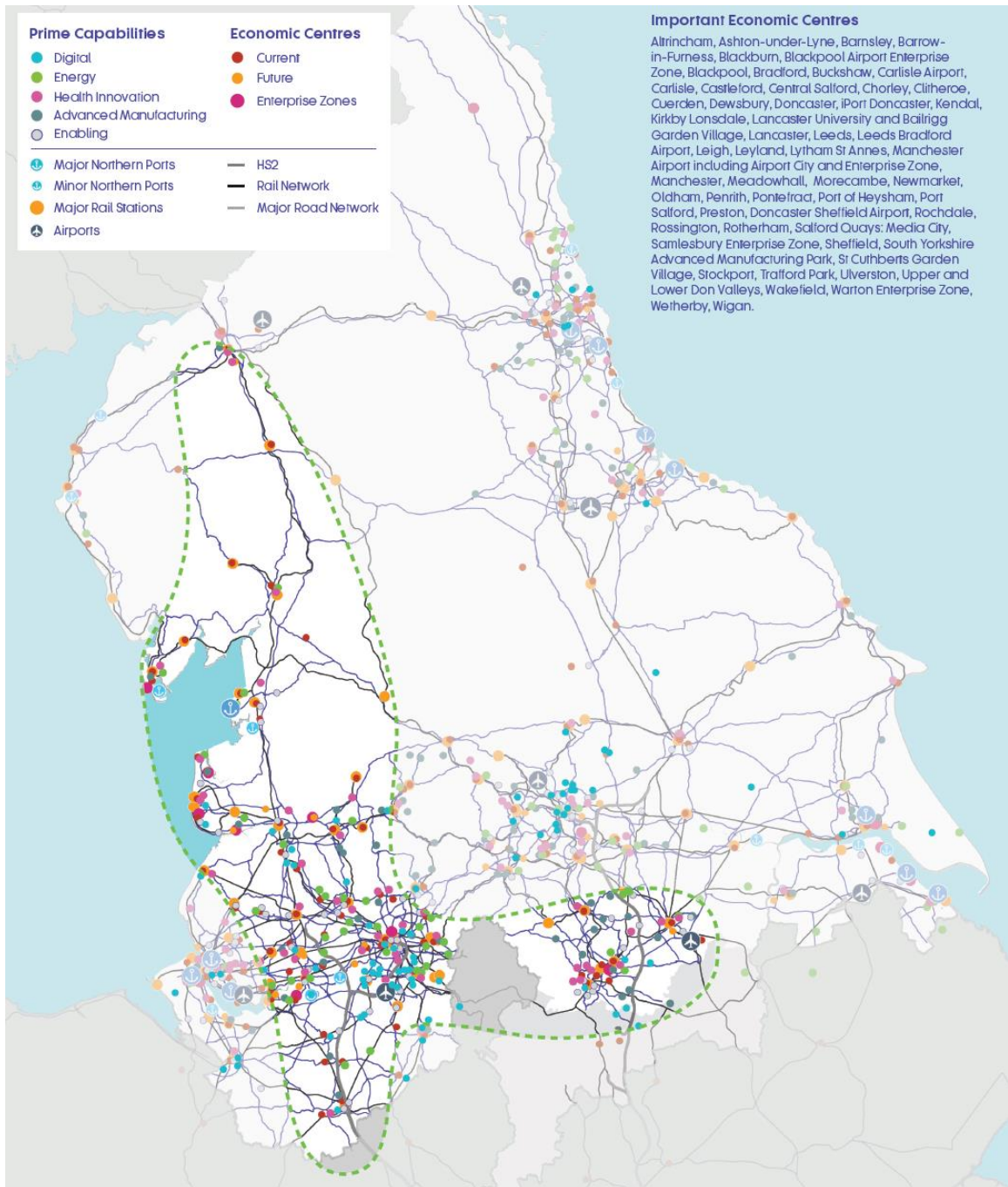
West Coast to Sheffield City Region: Strategic and Economic Context

- 1.9 The corridor is characterised by strong and growing assets in advanced manufacturing, health technology, digital businesses, and research centres in the Sheffield City Region, Lancashire and Cumbria.
- 1.10 These include the Sarncliffe Enterprise Zone; Blackpool Airport Enterprise Zone which is home to the National Energy College; the Sheffield City Region Advanced Manufacturing Park which is home to the Nuclear Catapult Research Centre; the subsea technologies, renewable energy, and marine, nuclear and materials engineering cluster in Barrow-in-Furness and Ulverston; the Doncaster National High Speed Rail College; and the established base for polymer science, nuclear and renewable energy on the Fylde Coast.
- 1.11 Additionally, the corridor hosts world-class higher education providers (for both teaching and research), technical colleges, and specialist institutions. In many cases these directly support the prime capabilities, such as the advanced manufacturing research partnership between the University of Sheffield and the University of Central Lancashire.
- 1.12 Greater Manchester sits between these two clusters and, in addition to forming part of the expertise in these sectors, it provides access to professional and financial services which support the prime capabilities. Bringing all these centres of research closer together by improving connectivity will increase productivity and support collaboration and innovation.

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

- 1.13 Further north the corridor provides direct connectivity to the Scottish Borders and Central Scotland, hosting important manufacturing, energy and professional and financial services assets with growing links to the North of England.
- 1.14 There is also a strong visitor and tourism offer from two of the UK’s national parks (with Cumbria alone receiving 50 million visitors per annum), as well as coastal towns featuring some of the highest quality beaches and seaside resorts (Blackpool being the largest in the UK). Growth of this sector is dependent on enhanced strategic connectivity and access to international gateways (including airports in Manchester, Sheffield, and Carlisle, and ports at Barrow and Heysham) across the North.



- 1.15 The fundamental challenge for the North’s economy is to improve the interaction between these key economic clusters and assets to improve the sharing of knowledge, supply chain resources, and innovation. This will act as a driver of agglomeration benefits and productivity.
- 1.16 This will involve connecting people, by improving accessibility for residents, improving access for visitors, supporting international connectivity and improving connectivity of businesses, economic assets and clusters along the corridor. Within this corridor, freight and logistics connectivity can continue to strengthen operations and investment at the corridor’s ports, airports and inland ports.
- 1.17 If achieved, this would transform the economy of the corridor – and the North – in terms of jobs and GVA.



West Coast to Sheffield City Region: Rail Context

- 1.18 The corridor has seen significant investment in recent years, in particular the North West Electrification Programme – consisting of over £400m of infrastructure improvements to improve journey times and enable use of new rolling stock, including between Manchester, Preston, and Blackpool. This will support improved connectivity from economic centres in Lancashire and Cumbria to Manchester, the wider rail network, and future high speed connections.
- 1.19 Building on evidence provided by partners, a number of strategic transport issues have been identified for the future. These need to be addressed in order to realise the strategic and economic opportunity of the corridor.
- 1.20 Geographic scope – more explicitly addressing the interface with Crewe and Scotland, to allow for a holistic consideration of local, regional, pan-Northern and national rail issues. This has resulted in a change in name and scope from the North West to Sheffield City Region in the Consultation Draft of the Strategic Transport Plan published in January 2018.
- 1.21 Multi-modal journeys – considering relevant multi-modal interventions identified in other SDCs, including those that improve access to rail gateways within this corridor.
- 1.22 Coordination with other SDCs – ensuring coordination with other corridor studies, given overlapping coverage, is crucial in order to confirm alignment and identify any interdependencies, avoid any duplication or omission,

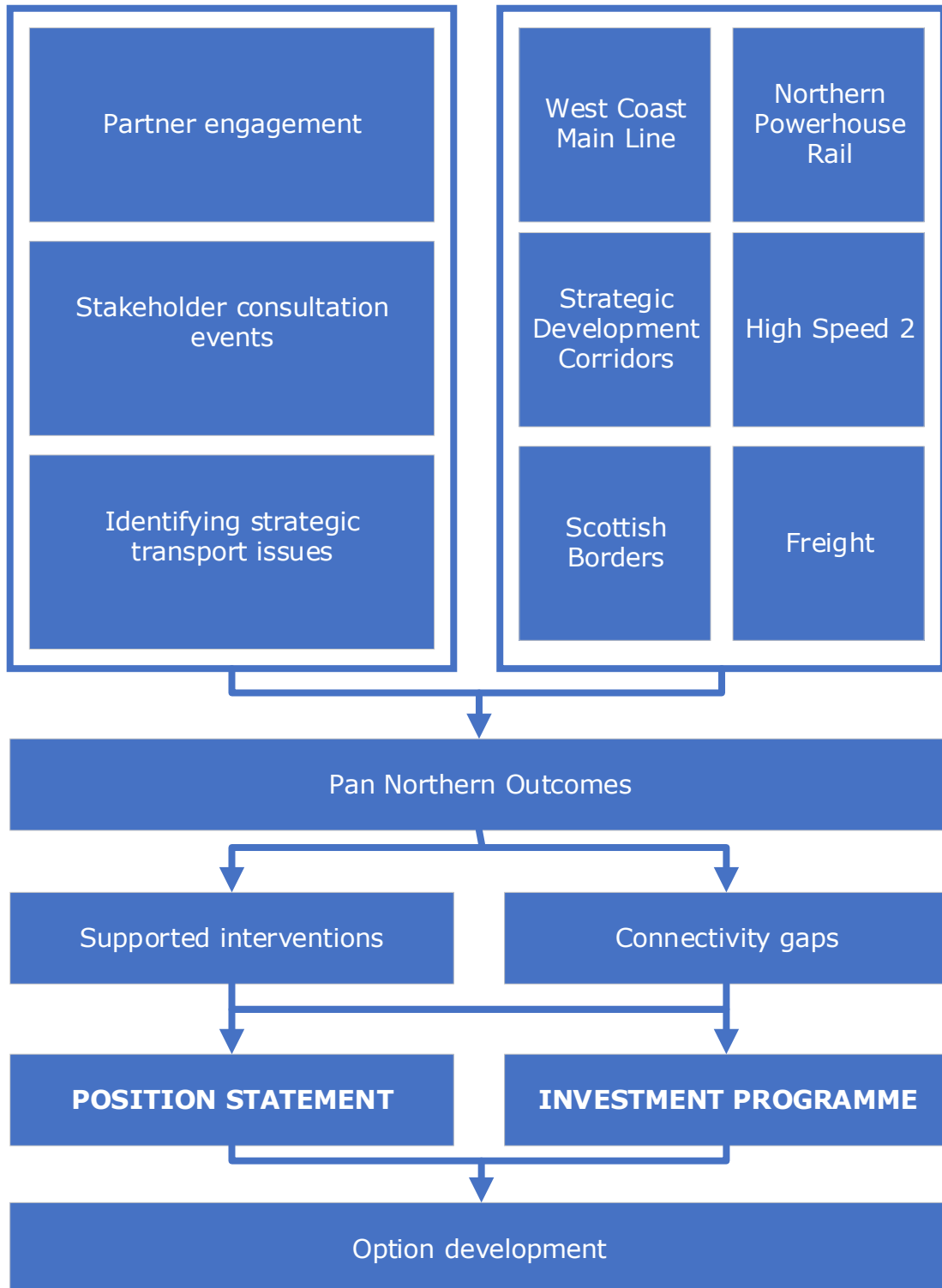
properly understand the interfaces between them, and ensure a holistic approach and narrative for this corridor.

- 1.23 Transformational growth – developing interventions that deliver the North’s aspirations which, as set out in the STP and related evidence, entail significant economic growth. This includes a potential fourfold increase in rail journeys by 2050 along this corridor, up to 5 more freight paths an hour on sections of the West Coast Main Line (WCML), and a significant improvement in journey times, catchment area, passenger satisfaction, frequency, direct connectivity, and freight performance as per the Long Term Rail Strategy.
- 1.24 Capacity and connectivity – recognising the need for increased capacity, and retaining and enhancing direct connectivity between economic centres, along the corridor for passenger and freight movements. This needs to reflect the important role the WCML plays connecting economic settlements within the corridor as well as its national role.
- 1.25 Integration and stations – maximising the opportunity for high speed rail (HS2, Northern Powerhouse Rail, and potential new Anglo-Scottish links) by taking a holistic approach that integrates across the wider network (existing services on local lines as well as the mainlines), brings together both track and train, and includes improvements to stations that are required to both accommodate increased services as well as drive economic growth.

2. What: Identifying the Transport Interventions Required to Transform the Economy

Pan-Northern Scheme Identification

2.1 A staged approach has been taken to the identification of Pan-Northern rail interventions in the corridor, as illustrated below:



Partner Involvement and Governance

- 2.2 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 this corridor throughout its lifecycle.
- 2.3 Representatives from the following organisations: combined and local transport authorities, Network Rail, High Speed 2 Ltd, Transport Scotland, and the Department for Transport have provided direction and evidence in order to establish a starting point for identifying relevant interventions. Assessing committed and proposed interventions along the corridor has allowed for an understanding of where these might fall short of the North's aspirations, and therefore what additional interventions might be required.

Key Pan-Northern Outcomes

The West Coast Main Line

- 2.4 Based on available evidence, an initial analysis has been undertaken of what the impact of HS2 Phase 2b might be on connectivity for the WCML once it is delivered in 2033. This has made a number of assumptions, the most significant of which would be a decision that HS2 services to Scotland would split, join, and crucially stop, at Carlisle, rather than merely split and join at Carstairs.
- 2.5 There is very limited capacity for additional paths between Weaver Junction and Preston, and north of Preston, once HS2 services, current services, and agreed franchise uplift services have been taken into account.
- 2.6 Current freight paths could be maintained, but that there is very little room for growth. A key constraint is the lack of, and inadequate length of existing, freight loops, as well as capacity approaching and through stations.
- 2.7 This analysis has showed a varying level of impact across the stations included. For example, it would result in improved connectivity to Crewe, Manchester Airport, and Manchester, as well as to Birmingham. However, there is the potential for reduced connectivity from Warrington northwards, and from Oxenholme and Penrith to London, that need to be considered.
- 2.8 To address these challenges, the Investment Programme includes a number of interventions related to integrating the WCML with HS2, including the need for journey time and capacity improvements between Wigan and Preston on to Scotland, as well as related improvements to stations at Preston, Carlisle, Warrington, Wigan, Lancaster, Oxenholme and Penrith, as well as Crewe Hub.
- 2.9 This recognises that infrastructure interventions may be required to prevent any loss of connectivity by retaining the ability to provide direct services to London, address capacity limitations (for example, junction enhancements, platform extensions and/or additions), and further improve generalised

journey times. HS2’s current proposals deliver the following journey times, which in some cases incorporate interchange:



- 2.10 The Investment Programme also specifies the need for Oxenholme-Windermere rolling stock and service improvements, which is relevant to connectivity to the Lake District.




Integration with lines feeding into the WCML

- 2.11 Other corridor studies have assessed proposed interventions, which have been used to shape the Investment Programme and are set out fully in the Strategic Programme Outline Cases for those corridors. This includes the Furness line, Lakes line, East Lancashire line, Fylde lines, and a possible Skipton-Colne link, and these outputs are reflected in the Investment Programme.
- 2.12 However, there is the possibility of an intervention to improve the Settle Carlisle line – in particular whether there is an opportunity to support north-south freight movements – that has not been assessed in the work of other corridor studies to date. This will need to consider the wider impact on freight movements, such as towards Farington Junction (which is included in the work on Skipton-Colne) and beyond.
- 2.13 The Investment Programme therefore includes the need for capacity improvements to address the West Coast rail freight enhancements, recognising both the constraints for freight growth once HS2 has been delivered as above (which may require additional and/or extended passing loops, or similar infrastructure), and the need to assess interventions on the Settle Carlisle line and beyond to provide alternative or additional strategic freight paths.

Onward connectivity to the Sheffield City Region

- 2.14 The Southern Pennines SDC, along with Northern Powerhouse Rail, is considering this area of the corridor, and work has been undertaken to strengthen the interface between these programmes and support these movements.
- 2.15 Additional frequencies between Manchester, Preston, and stations in Cumbria, have been tested as part of the appraisal process for both the Southern Pennines and Connecting the Energy Coasts SDC. The following scenarios, going beyond the current commitment for a one train an hour

from Manchester alternating between Barrow and Windermere, have been considered:

	Scenario 1: Committed services (alternating)	Scenario 2: Split and join at Preston	Scenario 3: Second train per hour
Generalised TPH Manchester to			
Windermere	0.5	1	1
Barrow	0.5	1	1
Preston	1	1	2

2.16 The case for Scenario 3 seeing a second train an hour requires further analysis, including the assessment of wider benefits and how this may drive agglomeration and economic growth. Ahead of this, Scenario 2 seeing services splitting and joining at Preston to serve both destinations and therefore allowing one train an hour to Manchester, is likely to be beneficial. As such as this has been included in the Strategic Programme Outline Case for the Connecting the Energy Coasts SDC.

2.17 An increase in direct services between stations in Lancashire and Cumbria, and Sheffield were also considered. While available evidence – currently based on “business as usual” growth – does not suggest a strong case for this, work is being undertaken into how the interchange at Manchester might be improved, or how such a through service could be delivered as an extension to existing or future service patterns (such as Northern Powerhouse Rail).

2.18 This includes benefits to generalised journey times. For example, analysis for the Strategic Outline Business Case for Northern Powerhouse Rail suggests journey time savings from the North West to South Yorkshire of up to 30 minutes. This includes journey time savings for the following example station pairs:



- 2.19 As such, the Investment Programme includes committed and proposed interventions delivering Manchester-Preston journey time improvements; cross Manchester capacity and reliability improvements; Preston-Sheffield(/York) journey time improvements; and Windermere and Barrow to Manchester Airport frequency and journey time improvements.

Connectivity with Scotland

- 2.20 Transport for the North is working closely with Transport Scotland, including on taking forward the recently completed Borders Transport Corridors Pre-appraisal Study. This is considering how the Scottish Borders is served by the strategic transport network in connecting to key markets (including Carlisle), including the possibility of an extension of the Borders line from Edinburgh which currently runs south to Tweedbank.
- 2.21 Other interventions, including improving journey times from the North to Glasgow and Edinburgh, are also being considered by Transport Scotland as well as the Borderlands Partnership, and Transport for the North is engaging with this work.
- 2.22 This is reflected in the Investment Programme, which specifies the need improved connectivity to Scotland, supported by cross-border working.

Programme of Interventions and Option Development

- 2.23 The programme of interventions, which will deliver these key pan-Northern outcomes, aligned to Transport for the North's Investment Programme are summarised in the following table:

Strategic Transport Issues	Key Pan Northern Outcomes within the West Coast to Sheffield City Region SDC	Rail Interventions	Options Development
<p>Need for sufficient West Coast Main Line paths</p> <p>Retain and improve connectivity from London to the Lakes, and Warrington northwards</p>	<p>Ensure that the West Coast Main Line can accommodate HS2 and Northern Powerhouse Rail</p>	<p>Journey time and capacity improvements</p> <p>Station improvements</p>	<p>Transformational growth modelling to support case for infrastructure enhancements</p> <p>Work with partners and on programmes such as Northern Powerhouse Rail on service pattern solutions</p>
<p>Provision for required freight growth</p> <p>Need for improvements to Settle Carlisle line and for onward connections</p>	<p>Ensure that the needs of freight operators can be met</p>	<p>West Coast rail freight enhancements</p> <p>Freight prioritised gauge cleared route across the Pennines</p>	<p>Freight workstream development</p> <p>Department for Transport strategic freight study</p>
<p>Need for improvements to lines feeding into the West Coast Main Line</p> <p>Increased frequencies Manchester to Lancashire and Cumbria</p> <p>Improved interchange at Manchester</p>	<p>Improve connectivity, capacity and resilience across Cumbria and Lancashire</p> <p>Support the visitor economy and enhance strategic connections across the North to support UK competitiveness</p>	<p>Furness line</p> <p>Lakes line (inc. Windermere station capacity improvements)</p> <p>East Lancashire line</p> <p>Fylde lines</p> <p>Skipton-Colne link (inc. Farington Jct)</p> <p>Manchester-Preston journey times</p> <p>Cross-Manchester capacity, reliability improvements</p> <p>Preston-Sheffield journey times</p> <p>Manchester Airport-Windermere/Barrow frequencies, journey times</p>	<p>SDC and NPR business case development</p>
<p>Improved cross-border connectivity</p>	<p>Accommodate services running north to Scotland</p>	<p>Borders railway capacity improvements</p>	<p>Borderlands Partnership proposals</p> <p>Transport Scotland Borders Corridor study</p>

- 2.24 As described above, there is a risk of potential loss of connectivity to the Lakes from London and for Warrington northwards. There may be infrastructure enhancements that mitigate this risk – for example, linespeed improvements, junction capacity increases, platform extensions and/or additions – and Transport for the North will continue to work with partners to develop these.
- 2.25 Making the case for such enhancements – as well as similar interventions elsewhere in the corridor, such as capacity improvements between Manchester and Preston and beyond – based on “business as usual” growth will be challenging. However, there is a need to undertake modelling to forecast demand along this corridor under a transformational growth scenario, which will support the case for investment.
- 2.26 This work will also be important in understanding the wider economic opportunities for the corridor, including the importance of the global visitor economy, the national role of the economic and transport assets, and connectivity between centres within the corridor.
- 2.27 Transport for the North will also work to develop service pattern proposals that, combined with improved journey times, ensure similar levels of current connectivity are retained. This will be done alongside partners, and will also need consideration as part of programmes such as Northern Powerhouse Rail.
- 2.28 As part of the freight workstream, the need for freight-specific interventions will also be considered. This will include potential enhancements to the Settle Carlisle line, and onward connections, as part of a piece of work led by the Department for Transport on strategic rail freight movements.
- 2.29 The Strategic Programme Outline Cases for the Southern Pennines and Connecting the Energy Coasts corridors will continue to be developed, which include identified interventions within the Manchester-Preston subcorridor, interchange improvements at Manchester, onward connectivity to the Sheffield City Region, other existing lines feeding the West Coast Main Line, and potential new links such as Skipton-Colne.
- 2.30 Transport for the North will continue to be actively involved in developing proposals to improve cross-border connectivity with Scotland, including through the emerging Borderlands Partnership, and the next stage of Transport Scotland’s Borders Corridor study.
- 2.31 Transport for the North will be undertaking modelling to forecast transformational growth along the corridor, which will support the case for investment.

3. How: Delivering the Interventions

- 3.1 Reflecting TfN's governance arrangements, TfN's local transport authority partners, Department for Transport, Network Rail, are engaging with and contributing to the development of the West Coast to Sheffield City Region SDC.
- 3.2 The Position Statement for the corridor summarises 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.
- 3.3 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.
- 3.4 TfN will provide the overall direction, governance and leadership, including 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 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

- 3.5 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 Network Rail and local transport authority partners.

Next Steps

- 3.6 The proposed programme of interventions across the West Coast to Sheffield City Region SDC comprises diverse 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 other programmed schemes are also a key factor to consider when developing the delivery plan.
- 3.7 In 2019/2020, TfN will complete a Strategic Programme Outline Case (SPOC) for the West Coast to Sheffield City Region SDC, and will update the SPOCs for all SDCs using transformational Northern Powerhouse

Independent Economic Review forecasts and the latest spatial planning information, to inform an updated and sequenced Investment Programme.

- 3.8 As in the first stage of development of the SDCs, TfN will fully engage with DfT, our local transport authority partners, national delivery bodies, transport operators and other key stakeholders. This will ensure that partners' and stakeholders' contributions inform and help shape our delivery programme.
- 3.9 Specifically, Network Rail are soon to begin work in earnest on module of continuous strategic planning focused on the West Coast Main Line. TfN will take an active role in this work to ensure that it addresses the outcomes and supports the interventions identified in this corridor.