Transport for the North reveals
£70 Billion Investment Plan

Andrew Dyson and Kath Aspinwall present an overview of Transport for the North's Strategic Transport Plan. Will the railways of the North be transformed by 2050?

11 February saw the official launch of the Transport for the North (TfN) Strategic Transport Plan, which outlines TfN's vision for transport investment in the North of England over the next 30 years. TfN is England's first sub-national transport body; it brings together 20 of the North's local transport authorities, business leaders, politicians, Network Rail, Highways England, and HS2 Ltd to work in partnership with Central Government. With offices in Manchester and Leeds, TfN has statutory status and a mandate to advise Government on transport priorities. It is dependent on the Government for its funds, expected to be £60–£70 billion by 2050.

The Plan outlines some of the problems the North of England faces. Its economy represents 19% of the UK total of around £343 billion, but its productivity is 18% below the national average. Transport links are inadequate. Despite a lack of investment, rail passenger numbers have increased substantially over the last 20 years and as a consequence, the network is suffering from severe congestion and overcrowding. Journey speeds are slow and punctuality poor. The network lacks the capacity for more growth.

The Strategic Plan has three core objectives:

- Connecting people – improving access to work opportunities, leisure and tourism.
- Connecting businesses – improving connections to enable collaboration and strengthen capabilities.
- Moving goods – supporting businesses to move freight and goods efficiently and across modes.

Long-Term Rail Strategy

Central to the Plan is the Long-Term Rail Strategy, which sets out TfN's guiding principles and defines how changes should be delivered; it aims to transform the North's rail network and is based around five key themes – the five "C"s:

- Connectivity – a step-change in connectivity including frequency and journey time improvements for both passenger services and freight, combined with better integration of services.
- Capacity – providing longer trains and additional services to meet existing and future passenger demand, with improvements to infrastructure and signalling capability to accommodate these additional services.
- Customer – a passenger network that is easy to navigate, accessible and predictable,

An upgrade of the Hope Valley line is called for. 150 223 arrives at Hope with the 10.45 Manchester Piccadilly–Sheffield on 3 February. **Robert Pritchard**

with consistent information available before and throughout journeys.

- Community – a railway that supports the social fabric of the communities it serves, providing journey opportunities which enable access to education, training and leisure opportunities as well as employment, and plays a full part in addressing transport poverty, isolation, and deprivation across the North.
- Cost effectiveness – growing revenue and minimising the unit cost of operating and maintaining the North's railway without compromising the quality of the services offered.

Minimum standards for the rail network have also been developed and more detailed delivery plans will be developed to determine how these standards can be met in the future.

TransPennine Route Upgrade

In the short-term, the most visible project will be the TransPennine Route Upgrade. Improvements will be concentrated on the corridor between Manchester and Leeds, where TfN expects to see the following achievements delivered within 5 years:

- Leeds to Manchester target journey time of 40 minutes.
- York to Manchester target journey time of 62 minutes.
- Capacity for six inter-urban services per hour for trains of 8-cars, and up to two local services per hour, in both directions.
- 92.5% of passenger trains to arrive within 5 minutes of the scheduled time.
- W10/W12 gauge clearance and provision of one freight path per hour (in each direction) for freight services.
- Upgrades to stations along the route.

TfN will also work in partnership with Network Rail to reduce the cost of the railway and make better use of the infrastructure. Reducing journey times by accelerating trains across the network is seen as a way of achieving this.

Northern Powerhouse Rail

Although the TransPennine Route Upgrade will bring much-needed improvements, the physical capacity for trains to run on the North's rail network is heavily constrained by a competing mix of traffic including fast inter-urban trains, local stopping services and freight services. Rail capacity is maximised when trains of the same speed can operate to the same stopping patterns. However, services sharing two-track railways on the North's network have very different speeds and stopping patterns, which limits the potential number of trains per hour that can be accommodated.

Thus, TfN believes a step-change in the level of rail connectivity between some of the North's largest cities and its largest airport is required. Northern Powerhouse Rail is a programme of rail investment intended to radically improve journey times and service frequencies between some of the major cities and economic areas in the North, unlocking capacity and delivering a much more effective rail network overall.

The highest-profile element of Northern Powerhouse Rail is the proposal to build a completely new line between Manchester and Leeds. Other specified objectives include:

- Improving the capacity and frequency of links between Liverpool and Manchester Piccadilly via Warrington and Manchester Airport using the HS2 infrastructure and a

new integrated Northern Powerhouse Rail/HS2 station.

• A new hub station at Manchester Piccadilly.
• Faster links between Manchester, Huddersfield, Bradford and Leeds.
• Significant upgrades along the corridor of the existing Hope Valley Line between Sheffield and Manchester (via Stockport).
• Leeds to Sheffield delivered through HS2 Phase 2b and upgrading the route from Sheffield to and from the North.
• Leeds to Newcastle via a junction off HS2 and significant upgrades to the ECML corridor (via York, Darlington and Durham).
• Significant upgrades to the existing lines from Leeds to Hull (via Selby) and Sheffield to Hull (via Doncaster).

TfN research shows that Northern Powerhouse Rail will bring millions more people and thousands of businesses within reach of each of the key economic centres of the North by public transport. By 2050, nearly 10 million people in the North will be within 90 minutes reach of multiple economic centres in the North.

High Speed Two (HS2)

TfN believes that HS2 will be a key piece of infrastructure, integral to the expansion of the existing rail network and regeneration of railway stations and their surrounding areas. It will support the delivery of Northern Powerhouse Rail, which in turn will free up much-needed capacity in a system that is struggling to perform. The whole HS2 programme is estimated to generate £17.6 billion of wider economic benefits.

HS2 will carry over 300 000 passengers a day, releasing capacity on the existing rail network for both passenger and freight services by allowing the existing WCML and ECML, and the Midland Main Line, to be used in different ways, growing the overall capability of the rail network to meet future need. How this released capacity can be used effectively to help the North's rail offer support the economy will be investigated through the Long-Term Rail Strategy and the development of Northern Powerhouse Rail as integral components of a modern, dependable and responsive rail network.

Future transport demand

Analysis of the North's labour markets indicates that the majority (61%) of the North's workers lived in the same local authority district in which they worked in 2015. TfN predicts that by transforming the transport network, the proportion of workers taking employment outside of their home district is expected to markedly increase by 2050.

Local and sustainable transport

TfN's primary focus is on the "identification of pan-Northern strategic transport interventions", which generally means longer distance trips between the key economic centres. However, TfN recognises the need for complementary and supporting investment at the local level to ensure that a "whole journey" and "total network" approach to improving transport is followed. This means targeting short trips that could be taken on public transport, cycling or walking, thereby reducing localised congestion and improving the environment.

Of particular importance to the "whole journey" approach will be smooth interchange between modes at rail stations, including provision of adequate parking and drop-off/pick-up facilities, bus access and secure cycle parking. TfN also acknowledges how local rail stations are managed to aid integration will be a key part of future rail franchises.

Integrated and Smart Travel

The Integrated and Smart Travel programme is a 4-year programme to introduce contactless payment for travel on public transport across all modes in the North. The programme is being delivered in three phases:

• Phase 1: Smartcard on rail – roll out smart ticketing across all rail travel.
• Phase 2: Customer information, collaboration and innovation – integrated customer information, disruption messaging and fare information to make journey planning quicker and easier.
• Phase 3: Account-based travel – allows passengers to travel using contactless bank card for payment and enjoy a fair price promise on multi-modal, multi-operator journeys across the North.

Phase 1 will involve the transfer of existing season tickets and similar products to a smartcard-based system and Phase 2 will see enhancement in the provision of information. The step change will arrive with Phase 3 whereupon price ceilings will be introduced for multiple journeys made within each locality, to ensure passengers pay the cheapest fare for their journey and never exceed the maximum daily fare.

On 23 February 158 787 waits in Hull's Platform 7 with the 13.30 to Scarborough. Alongside, in Platform 6, 142 039 awaits departure with the 12.32 Bridlington–Sheffield. **Ian Beardsley**

Inclusion and sustainable growth

Income, social and health inequalities are widely seen as one of the defining challenges of the 21st Century. TfN regards transport as social infrastructure which should provide opportunity for all potential users. Investment should ensure that communities are not disconnected or further isolated.

The North's transport network needs to be accessible, ensuring individuals have access to work and leisure. Furthermore, TfN fully supports the Government's Inclusive Transport Strategy, which aims to achieve equal access for disabled people using the transport system by 2030.

Working with Public Health England, TfN and partners will further explore how investment can have a positive impact on people's health. The National Institute for Health and Care Excellence recommends that active travel and use of public transport should be encouraged. TfN will also aim to minimise the impact of transport on the historic and natural environment, and where possible will seek to deliver environmental enhancements and biodiversity net gain.

Strategic Development Corridors

The Plan identifies seven Strategic Development Corridors, or "economic eco-systems" that reflect the economic links across the North, as well as links with its neighbours in Scotland, Wales and the Midlands. They are not traditional transport corridors and by no means where all future investment should be concentrated, but they do represent where the largest gaps between demand and performance currently exist, and also where there is likely to be the greatest economic potential over the lifetime of the Strategic Transport Plan.

Conclusions

TfN has concluded the North requires faster, more efficient, reliable and sustainable journeys on both road and rail networks. It has identified current failings in the rail network and set out key objectives to transform travel around the North with an ambitious programme of enhancements. The hard work – delivering those objectives – starts now!