

The North's Road Freight Network

The Strategic Road Network (SRN) in the North of England covers many of the region's large economic centres. North-South routes are provided through the M6 between Carlisle and Rugby, providing a vital link through the west of the region, and the A1 (M) between Newcastle close to Doncaster through the east of the region. The M1 links Leeds to London and provides a key route into and out of the North.

East-West routes are provided primarily through the M62 as the central corridor between Liverpool in the west and close to Hull in the east.

Additional routes include:

- M56 between Manchester and the Welsh Border near Chester
- M58 between the M6 at Wigan to the north of Liverpool close to the Port;
- M57 links the M58 and M62 and provides an eastern bypass to Liverpool;
- M53 links Liverpool to the M56 via the Wirral;
- M60 forming the Manchester Ring Road;
- M65 between Preston and Colne;
- M18 links the M1 near Rotherham to the M62 to the west of Goole;
- M180 connects the M18 north of Doncaster to the A180 west of Grimsby and Immingham;
- A628/A616 is the main strategic freight route between South Yorkshire and Greater Manchester;
- A69 links Carlisle and Newcastle; and
- A66 provides a strategic route between Penrith (M6) to Scotch Corner on the A1 (M).

The North's Major Road Network



Whilst total traffic volumes are greatest on roads operated and managed by National Highways, known as the Strategic Road Network (SRN), this only accounts for 2% of the road network in the North. Almost all road journeys start and finish on local roads, including those first and last miles of a journey that can make all the difference as to whether goods or people make it in time and as efficiently as possible.

In response to this issue, TfN and its constituent Authority Partners have identified and mapped a Major Road Network for the North - a network consisting of the North's economically important roads. This network, which includes both the SRN and important local roads, represents about 7% (by distance) of the roads in the North, and links the North's important centres of economic activity, including the first and last miles to and from the SRN.

The North's important centres of economic activity include:

- Ports and airports, supporting imports, exports and the visitor economy.
- Clusters of the prime and enabling capabilities as defined in the Northern Powerhouse Independent Economic Review.
- Major population centres, which are generally over 50,000 residents.
- Enterprise zones, universities and other key employment sites.
- Major centres of tourism.

There is a direct link between better connectivity to these assets and enabling the North's economy to realise its potential.

The MRN¹ has a critical role in connecting people, businesses and communities, and, put simply, major roads are indispensable to supporting economic activity, access to services and our overall quality of life.

Road issues

The key considerations for the network include capacity to fit all the forecast growth on the network and any constraints this then highlights. The reliability and resilience of the network is also challenging with the ability to recover from planned and unplanned events critical to the economic success of the North as a whole.

Key areas of the highway network where constraints are forecast to impact road freight include the East West Trans-Pennine movement on the M62, A66 from Tees Valley to Penrith – particularly vulnerable to weather conditions and the subject of a major programme of investment led by National Highways. North-South connections on the M1 around Sheffield, A1 West of Doncaster, A1 Newcastle - Gateshead Western Bypass, the M6 in Cheshire and Warrington and the A19 in the Tees Valley and North East. The particular pinch point occurs at the Tees crossing which requires investment and has a clearly articulated and well understood Business Case.

Other areas of investment with significant freight benefits include access to 'constrained' ports for example the A5036 to the Port of Liverpool and A63 to the Port of Hull, both schemes within the Highway England RIS2

¹ It is important to note that the MRN defined by TfN and our partners differs from the Department for Transport's definition of the MRN, which is defined as being separate to the Strategic Road Network (SRN) and encompasses around 2% of roads in the North.

Programme; road and rail access to Parkside in St Helens and schemes being considered within the RIS3 Pipeline, for example A1 Doncaster – Darrington and M1/M62 Lofthouse interchange. In terms of freight connectivity, the access to and from Intermodal Terminals for example at Trafford Park, Leeds, Garston, Doncaster iPort Rail and Widnes and International Airports particularly Manchester and Newcastle also requires attention. Most of these areas are particular examples where a pan-Northern view on the investments needed are helpful in developing business cases for investment.

Linked to the topic of decarbonisation are the concerns around air quality in major urban centres. Clean Air Zones (CAZ) with targeted actions to improve air quality and reduce significant levels of air pollution have been proposed in Greater Manchester, Leeds, Bradford, Newcastle and Sheffield. There is a push to consider different ways of making deliveries in urban areas using e cargo bikes and zero emission vehicles as an example. This can be difficult as the road infrastructure needs to meet the needs of all vehicles. Where cities across Europe have embraced the benefits of more localised deliveries, it is built upon decades of policy change and spatial planning policy development that delivers infrastructure to maximise the benefits to the zero carbon road user rather than the petrol or diesel vehicle. It is also worth clarifying that there will always be a role for lorries and rail services to bring goods into city centres to restock shops and other establishments. One lorry can carry the equivalent of 20 van loads so bigger lorries can indeed be better in some circumstances.

Road will remain the main modal choice for freight due to the existing popularity of the network, ease of access, lack of rail capacity and the long timescales and high costs associated with creating new rail capacity. Having said this, we would expect that after 2040 a greater percentage share of freight will be carried by our rail network. Reflecting this, TfN's Decarbonisation Strategy has targeted rail traction decarbonisation in the North by 2040 (in line with Network Rail's Traction Network Decarbonisation Strategy).

Our Decarbonisation target of near zero emissions by 2045 means that the road fleet needs to be decarbonised by then too. The route to decarbonising our road freight vehicles is still unsure, although is likely to be a mix of hydrogen and battery electric solutions. TfN's Decarbonisation Strategy has laid out a number of recommendations to expedite the decarbonisation of our road freight, including the testing and trialling of new vehicle and refuelling technologies in the North, data democratisation (i.e. making fuel/driving efficiency data available to all) and the



aggregation of zero emission vehicle orders to prove a market for vehicle manufacturers in the North.