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**Meeting:** Transport for the North Board  
**Subject:** Road Investment Strategy (RIS) Recommendations  
**Author:** Owen Wilson, Head of Major Roads  
**Sponsor:** Darren Oldham, Director Rail and Road  
**Meeting Date:** Thursday 23 March 2023

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## **1. Purpose of the Report:**

1.1 To provide an update on Transport for the North's work to develop recommendations for investment in the Strategic Road Network (SRN) and seek comments from the Board on recommendations for the future RIS programme.

The report seeks specific feedback on:

- a) Key messages to National Highways and Department for Transport on the RIS Programme;
- b) The emerging list of location-based priorities on the SRN;
- c) Plans for further work on influencing preparation of the RIS Programme, including formal feedback on National Highways SRN Initial Report, Route Strategy reports and 'Connecting the Country' vision, expected to be published soon; and
- d) Plans to respond to consultation on the updated National Networks National Policy Statement (NNPS).

## **2. Recommendations:**

2.1 Board is asked to:

- a) Endorse Transport for the North's approach to preparing recommendations for RIS as set out in this report;
- b) Note comments from Scrutiny committee, reflected in this report;
- c) Delegate responsibility to the Board Chair and Vice Chair for signing-off Transport for the North's response to public consultation on the National Highways SRN Initial Report, Route Strategy reports and 'Connecting the Country' vision; and
- d) Delegate responsibility to the Board Chair and Vice Chair for signing-off Transport for the North's response to public consultation on the NNPS.

## **3. Main Issues:**

3.1 The Department for Transport (DfT) has set out six strategic objectives that it expects to underpin the next RIS (2025-2030). These are:

- Improving safety for all;
- Network performance to meet customer needs;
- Improved environmental outcomes;
- Growing the economy;
- Managing and planning the SRN for the future; and
- A technology-enabled and enabling network.

3.2 Transport for the North has been working collaboratively with National Highways to provide evidence on the North's requirements for investment in our strategic roads. Transport for the North has provided input into the development of the draft SRN Initial Report and NH Route Strategy reports. Both documents had

been expected to be published and consulted upon in autumn 2022; at time of writing, the reports are still to be published.

- 3.3 Current advice is that National Highways will publish a suite of documents for public consultation in Spring 2023, including the SRN Initial Report, Route Strategy reports and a new strategic document 'Connecting the Country', setting out a long-term vision to 2050, on the role of the SRN. Public consultation will last eight weeks, and it is proposed Transport for the North engages with Local Authority Officers through the Executive Board in developing and agreeing a response. Board Members might also wish to consider the option of holding a consultation call to discuss the response.
- 3.4 Funding for new interventions in the RIS3 period is likely to be severely constrained by the limits that apply to public sector funding more generally. Budget pressures are also arising from delay and cost inflation impacting on the current RIS Programme (RIS2).
- 3.5 For RIS2 schemes in the North still to progress through statutory planning, there is a significant risk that Government will review their funding alongside emerging priorities identified in RIS3. Consideration of RIS2 schemes is not in scope of the work described in this report, however partners' views on RIS2 schemes still within the development stages will be a necessary part of Transport for the North recommendations to Government.
- 3.6 The Government launched 12-week consultation on an updated National Networks National Policy Statement on 14 March 2023, this sets out a framework for new major road, rail, and rail freight schemes, which incorporates latest environmental standards. Deadline for response 6 June 2023.

#### **Proposed key messages in recommendations on the RIS**

- 3.7 Transport for the North's recent submission to the House of Commons Transport Select Committee included a suggestion that the National Highways Licence should be amended to reflect the statutory role of Transport for the North, and place a requirement placed on National Highways to formally seek the views of Transport for the North and to then report on how that advice has been reflected in RIS3. Transport for the North has been invited to attend the Committee to discuss its submission on 29 March 2023.
- 3.8 Transport for the North's submission to the Select Committee emphasised that early and ongoing engagement, collaboration and transparency in decision making with the key regional and local partners is vitally important; this should as a minimum include Transport for the North, Mayoral and Combined Authorities and Local Transport Authorities.
- 3.9 The SRN operates as part of the wider transport network and there is a need to ensure that the objectives set for RIS3 are grounded in the agreed outcomes for the North as set out in the statutory Strategic Transport Plan.
- 3.10 It takes significant time (10 or more years) for new technologies and major infrastructure to impact at scale. As the Transport for the North evidence base highlights, rapid concerted action is required now to reduce carbon emissions and to maximise the efficient use of the existing transport system. Investment on the SRN should therefore first seek to optimise the function of the existing road network as an important community asset, delivering safe and reliable journeys for road users, and making the most of opportunities to reduce carbon emissions, minimise severance, improve air quality and biodiversity.
- 3.11 Alternative options to new road capacity should be thoroughly considered as part of early options appraisal work. This should include appraisal of policies and investment which would reduce the need for travel by car, LGV or HGV, and go

beyond a basic assessment of a 'do minimum or business as usual' appraisal of the potential for planned investment in public transport and/or active travel to reduce vehicle trips on the SRN. Collaborative engagement with Transport for the North and with Local Transport Authorities continues to be critical to fully appraising all options to support greater use of more sustainable travel modes.

- 3.12 With the phasing out of internal combustion engines and full-scale adoption of in vehicle digital communications, the next RIS period will see a transformational shift in the nature of vehicles on our roads. Investment on the SRN and wider network will need to keep pace with demand for electric vehicle chargepoints, hydrogen re-fuelling and support improved digital connectivity on our roads. This in turn emphasises the importance of aligning investment in energy systems in order to realise desired outcomes for the North's transport system.
- 3.13 National Highways are working on developing an Active Travel Strategy, SRN investment should include an evidence-based focus on reducing severance impacts of the network, providing high quality road crossings and safe routes linked integrated with local active travel networks, for example developed through Local Walking and Infrastructure Plans (LCWIPs). Similarly, the SRN has a role in supporting local and national bus services, improved facilities for bus, for example bus priority at junctions should form a future part of RIS investment.
- 3.14 Eighty eight percent (88%) of freight movements are by road, with two thirds of freight miles taking place on the SRN. Appropriate facilities for HGV parking are critical to supporting the road haulage sector, improving driver safety and overnight security of freight loads. Transport for the North supports the need for increased provision of good quality, secure HGV parking, and recommend that National Highways work with partners including the private sector to improve freight parking facilities.
- 3.15 The DfT is due to publish new Local Transport Plan guidance in 2023. In planning for RIS3 National Highways will need to engage with Local Transport Authorities in considering the role of the SRN in supporting local transport plans and targets, with for example the monitoring and reduction in transport related carbon emissions, a new duty placed on local transport authorities.
- 3.16 To meet policy priorities, transport investment, including through the RIS Programme, must be grounded in the delivery of the strategic objectives and outcomes identified in the Strategic Transport Plan, and not predicated on more easily monetised Benefit Cost Ratio (BCR) calculations, particularly when based on a narrow 'predict and provide' model of how to adapt to traffic growth.
- 3.17 Investment in new road capacity for motorised traffic is still required, particularly to improve safety and resilience but capacity enhancements should only be taken forward where there is compelling evidence that options for reducing traffic levels have been fully considered and increased road capacity is required to deliver economic and social benefits. For example, the dualling of the A66 (A1(M) at Scotch Corner to junction 40 of the M6 at Penrith) is a primary example of a fundamental strategic need to provide a safer, more reliable, and resilient east-west route connecting Yorkshire and the Northeast to Cumbria and the West Coast of Scotland.
- 3.18 Plans for new road capacity should be accompanied by complementary policies to mitigate for unintended growth in 'induced' traffic. For example, where new road infrastructure is supporting growth in new housing and/or jobs the design of that infrastructure should seek to reduce the need for car-based travel. In most cases the Local Transport Authority will have the primary role in delivering complementary plans and policies, underlining the need for a collaborative approach and shared responsibility for meeting outcomes.

- 3.19 There is an opportunity for National Highways to build on lessons gained from the RIS2 Programme, and to work with Transport for the North and local partners to re-scope the approach to identifying and appraising potential solutions. Key to this would be to collaboratively agree a shared view on an integrated 'place-based' strategy, one that encompasses options for complementary policy, technology, and infrastructure interventions. For example, potential solutions on a rural part of the SRN, where good connectivity to more remote economic centres is a priority, could be very different to options on a heavily congested part of the urban network.
- 3.20 Government has recently indicated that funding for enhancements in the RIS3 period (2025-2030), will be highly constrained. It is essential that where there is a need for National Highways and DfT to consider the implications of cost pressures that have consequences for future investment periods, there is an effective mechanism for seeking the formal views of Transport for the North prior to a decision being made. This is particularly important where a reassessment of the scope of proposed works might enable a more efficient approach that represents better value for money once the wider benefits to local communities are considered.

### **Summary of approach to assessing SRN 'Levels of Service'**

- 3.21 Evidence from the Strategic Development Corridor (SDC) studies, which underpinned the 2019 Investment Programme, plus work on sequencing interventions agreed by Transport for the North Board in 2020 formed the basis of work on identifying locations on the SRN for assessment.
- 3.22 The SDC studies included extensive engagement with Transport for the North partners on the development of strategic objectives, the completion of 'Options Appraisal reports,' shortlisting and modelling of proposed transport schemes and completion of Strategic Programme Outline Business Cases<sup>1</sup> for each SDC corridor, available on Transport for the North's website.
- 3.23 The SDC studies focused on improving transport connectivity within seven strategic corridors across the North. Identifying the long-term programme of rail and road interventions needed to underpin the North's ambition for transformational Economic growth.
- 3.24 Building on the previous work and utilising the following evidence, the analysis is focused on identifying where the SRN is performing poorly and/or where there are substantial issues which need to be addressed by 2033:
- Transport for the North commissioned mobile phone data;
  - Transport for the North's Northern Highway Assignment Model (NoHAM);
  - Transport for the North's Development Log (jobs & housing);
  - Transport Related Social Exclusion (TRSE) evidence; and
  - Nationally available data on air quality, noise and safety.
- 3.25 The assessment is based on baseline performance (2018 & 2019 data) and outputs from NoHAM for 2033. See Appendix 2 for an overview of the metrics and data source for each level of service indicator.
- 3.26 The 2033 assessment has been completed for two future scenarios, Transport for the North's Urban Zero Carbon (UzC) scenario and the National Trip End Matrix (NTEM) scenario published by DfT.<sup>2</sup>

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<sup>1</sup> SDC Strategic Programme Outline Business Cases available here: <https://transportforthenorth.com/strategic-development-corridors/#:~:text=The%20corridor%20links%20advanced%20manufacturing,of%20the%20Government's%20Industrial%20Strategy.>

<sup>2</sup> NTEM shows a similar level of traffic growth to Transport for the North's 'Just About Managing' (JAM) scenario.

- 3.27 The Transport for the North future scenarios<sup>3</sup> were developed through collaboration with Transport for the North partners and identify four plausible future states based on a plausible mix of policy actions, societal and technological changes. The UZC scenario assumes the most national and local policy activity to reduce traffic levels, resulting in a lower overall road vehicle km growth up to 2050, than the 15% advised by the Climate Change Committee 6<sup>th</sup> Carbon Budget.
- 3.28 Use of the scenarios enables testing for uncertain future circumstances. For example, considering whether policy actions such as greater investment in active travel and public transport, a focus on compact urban rather than dispersed development combined with traffic demand management, mitigate for the need for new road capacity. It is important to note that the assessment of alternate scenarios provides a high-level indication and would need to be looked at in further detail should work on appraising options for specific SRN locations be taken forward.

### Level of Service

- 3.29 The assessment considers 'Levels of Service' across environmental, economic and social outcomes, summarised in figure 1.

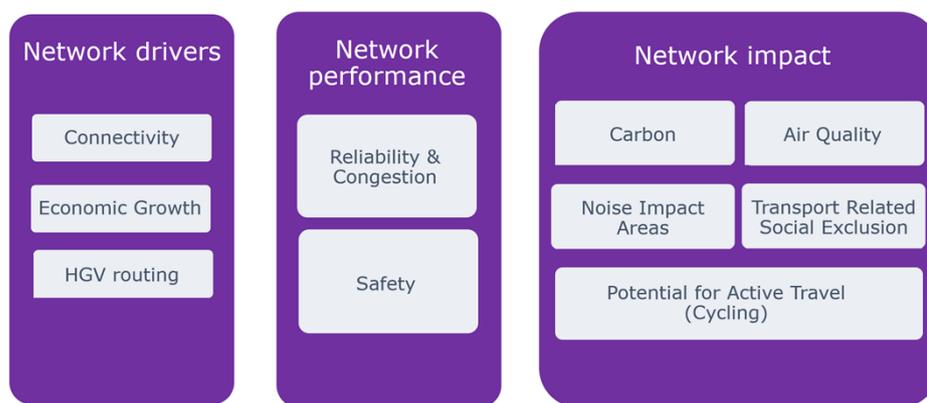


Figure 1 –Level of Service Indicators.

- 3.30 'Level of service' performance has been assessed using baseline evidence and 2033 data measures for the two future states (NTEM and UZC). The relative level of service performance has been categorised based upon an assessment across all the indicator measures, as shown in decreasing order below:
- Substantial number of 'levels of service' measures identified as performing poorly or presenting a substantial issue, across environmental, economic, and social outcome measures;
  - Significant number of 'levels of service' measures identified as performing poorly or presenting a substantial issue, across environmental, economic, and social outcome measures; and
  - Some 'level of service' measures identified as performing poorly or presenting a substantial issue.
- 3.31 The identification and categorisation of locations does not replace the need for detailed location specific options appraisal, or pre-judge potential solutions. For example, a road capacity enhancement, traffic management measure such as speed reductions and /or an increased focus on encouraging a shift to non-car transport modes. However, it does point to the need for National Highways to

<sup>3</sup> Transport for the North Transport for the North Future Travel Scenarios report 2020  
<https://transportforthenorth.com/future-travel-scenarios/>

work with Transport for the North and Local Authority partners on delivering improvements to the performance of the SRN at those locations.

- 3.32 The categorisation should be used as a guide as to where there are performance issues. Consideration of what type of intervention and on timescales for delivery must take account of the type of location (e.g., rural or urban), scale of a potential solution, alignment with regional and local strategies and local input on the need for and support for an intervention.

### **Deliverability and Affordability**

- 3.33 The sequencing work completed in 2020 considered deliverability and affordability of potential road schemes<sup>4</sup>. This has been used to consider the relative deliverability and affordability of potential new road infrastructure, but at this early stage of assessment should not be viewed as a preferred option.
- 3.34 The deliverability and affordability measures provide an initial view of the earliest likelihood an infrastructure scheme could be delivered. Appendix 2 outlines the levels of service findings for each location and gives an initial recommendation on timescales for work on delivering an intervention.
- 3.35 The Secretary of States written statement on 9 March 2023 places considerable uncertainty on the likelihood of available funding for the RIS3 programme, including investment on roads in the North. Transport for the North to reach a considered position on final recommendations the RIS programme it is essential that Government shares information on future funding for the RIS programme.

### **Not currently in scope**

- 3.36 The level of service measures do not include an assessment of embodied carbon associated with new infrastructure or the potential growth in induced motorised road traffic resulting from road capacity enhancements. Transport for the North has developed the analytical tools to complete a user carbon assessment of a proposed programme or programmes of transport interventions and can undertake this work when the level of RIS funding and therefore potential scale of any programme becomes clearer. An assessment of embodied carbon would need to take place at the options appraisal stage for proposed schemes, and it is now a requirement that all substantial transport schemes complete a whole life carbon assessment in accordance with PAS2080<sup>5</sup>.
- 3.37 Appraisal of a programme of RIS interventions. This is work Transport for the North could complete, following feedback and agreement on a proposed programme or programmes, and which would include an assessment of the impact on user carbon emissions and the socio-economic distributional impact of benefits. A clear indication of the RIS funding would be required to ensure further work is of most value.
- 3.38 This work does not include a consideration of RIS2 schemes still to be delivered.
- 3.39 Scrutiny Committee considered an earlier draft of this report on 2 March 2023; comments from Scrutiny were:
- a) Roads should be made more bus friendly if we are to achieve modal shift;
  - b) Roads are vitally important for freight, even with plans to put more freight on rail, we need to invest in improving road freight infrastructure;
  - c) Refuelling points will be needed on the network – hydrogen and Electric Vehicle Charge Points for all vehicle types;

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<sup>4</sup> Transport for the North Transport for the North commissioned WSP and Costain to review costs estimates and appraise technical challenges in delivering proposed interventions. The Qualitative Sequencing report provides an explanation of the approach taken, Transport for the North Transport for the North Board July 2020.

<sup>5</sup> PAS 2080 'carbon management in infrastructure' is a global specification for managing whole-life carbon in infrastructure.

- d) Speed restrictions should be considered to improve traffic flows;
- e) Transport for the North should avoid the narrative being viewed as anti-car, rural areas are particularly reliant on good road connectivity; and
- f) Poor air quality is a major issue, more needs to be done to reduce nitrous oxide and particulate pollution from vehicles.

#### **4. Corporate Considerations**

##### ***Financial Implications***

4.1 There are no financial implications from this report.

##### ***Resource Implications***

4.2 The Major Roads and Strategy Team will continue to engage with DfT and National Highways on the RIS Programme and undertake work to further develop Transport for the North's evidence base underpinning recommendations for the RIS.

##### ***Legal Implications***

4.3 There are no apparent significant legal implications other than referred to in this report.

##### ***Risk Management and Key Issues***

4.4 There are no risk implications resulting from this report.

##### ***Environmental Implications***

4.5 This report details proposed recommendations to National Highways and the DfT on the RIS Programme and does not constitute a plan or programme in its own right. It therefore, does not set the framework for future development consents of projects listed in the EIA Directive and therefore does not stimulate the need for Strategic Environmental Assessment (SEA) or Environmental Impact Assessment (EIA). All proposed infrastructure developments will be subject to screening for the need for EIA by the relevant development authority as part of the design development and consenting process.

4.6 Transport for the North's appraisal of strategic options has included consideration of user carbon, air quality, noise and safety. Further consideration of the impacts of induced traffic and also embodied carbon, are recommended through further appraisal.

##### ***Equality and Diversity***

4.7 There are no specific implications.

##### ***Consultations***

4.8 Executive Board has been consulted on Transport for the North's proposed recommendations.

#### **5. Background Papers**

5.1 Strategic Development Corridor Studies.

5.2 Qualitative Sequencing Report, July 2020.

#### **6. Appendices**

6.1 Appendix 1 - Level of service metrics and data sources.

6.2 Appendix 2 – Summary of initial recommendations for SRN interventions

<b>Glossary of terms, abbreviations and acronyms used.</b>
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a) <i>SRN – Strategic Road Network</i>
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**Glossary of terms, abbreviations and acronyms used.**

- b) *NoHAM – Northern Highway Assignment Model*
- c) *UZC – Urban Zero Carbon Future Scenario*
- d) *JAM – Just About Managing Future Scenario*
- e) *NTEM – National Trip End Matrix*
- f) *RIS – Road Investment Strategy*
- g) *DfT – Department for Transport*

## Appendix 1 – Level of Service Measures

### Network drivers

Level of service	Description	Assessment	Baseline TfN	Forecast TfN
Connectivity	Relative levels of connectivity to jobs by car – ranked.	The number of jobs that can be accessed in a 60-minute round trip (30 minutes to work in the morning peak plus 30 minutes to home in the evening peak)	NoHAM Base model skims and NorMITs TMS jobs data	NoHAM future year skims and <u>NorMITs</u> FTS jobs data
Socio-economic	Relative levels of Transport Related Social Exclusion	Based on ranking of LSOAs using TfN TRSE statistics, based on a combination of IMD and transport accessibility data.	Transport Related Social Exclusion (TRSE) analysis	N/A
Economic growth	Relative levels of planned housing and jobs growth.	Information available in the forecast housing and employment uncertainty logs for 2030.	N/A	Change in number of houses and jobs between Base and 2033 using TfN D-Log – <i>pending Legal approval for sharing</i>
HGV routing	HGV flows – relative role of the road in supporting HGV freight movements.	Identify where there are high levels of HGV traffic, including where on roads that are not typically expected to support high levels of heavy vehicle usage.	Magnitude of HGV flows in 2018 Base NoHAM (scaled by absolute vehicle volume).	Magnitude of NoHAM HGV flows in DM NTEM and UZC (scaled by absolute vehicle volume).

## Network performance

Level of service	Description	Assessment	Baseline TfN	Forecast TfN
Journey Time Reliability	Whether there are Journey time reliability issues – weekday peaks periods weekends	Mobile Network Data (2019) Congestion Efficiency - Median AM and PM speeds as a percentage of free-flow speeds (03.00-04.00), constrained to speed limit.  Base NoHAM V/C	Mobile Network Data comparison of AM and PM median speed with the 'off-peak' free-flow median speed.  Base NoHAM V/C percentage AM and PM.	N/A  Percentage point change in NoHAM Link V/C%. Baseline model compared to NTEM and UZC for AM and PM.
Safety	There are hotspots on the network with higher-than-average accident rates	STATS-19 Accident Data joined to the model network and an accident rate has been calculated for each level of severity (fatal, serious and slight).	<u>EuroRAP</u> (European Road Assessment Programme).	N/A

Network resilience would also be of interest for this pillar but information on this is limited.

## Network impact

Level of service	Description	Assessment	Baseline TfN	Forecast TfN
Carbon	Impact of the network on carbon emissions	Kg CO2 per veh km.  Potential to run NoCarb later for an agreed portfolio of interventions.	Calculate NoHAM link emissions from Base Year 12-hour flow.	Calculate NoHAM link emission from DM NTEM and UZC. 12 hour or AM/PM.
Air Quality Management Area (AQMA) & NO2 / PM2.5 data	Where AQMA areas are associated with the SRN. Modelled data on NO2 and PM2.5 levels	AQMA & NO2/PM2.5 data mapped against road links.	Outputs generated from national datasets <sup>1</sup>	N/A
Noise Impact Areas	Where NIA designated zones are associated with the SRN	Noise Important Areas were mapped and rationalised with road links.	Outputs generated from national datasets	N/A
Socio-economic	Relative levels of Transport Related Social Exclusion	Based on ranking of LSOAs using TfN TRSE statistics, based on a combination of IMD and transport accessibility data.	Transport Related Social Exclusion (TRSE) analysis	N/A
Potential for Active Travel	Based on % of residents able to access a major employer within 30 mins	Based on % of residents able to access a major employer within 30 mins, using DfT travel time data and data on location of employment	Potential for cycling to work	N/A

