

# Transport for the North Board Agenda

|                        |                                |
|------------------------|--------------------------------|
| <b>Date of Meeting</b> | <b>Wednesday 24 March 2021</b> |
| <b>Time of Meeting</b> | <b>1.30 pm</b>                 |
| <b>Venue</b>           | <b>Virtual</b>                 |

### Filming and broadcast of the meeting

Meetings of the Transport for the North Board are 'webcast'. These meetings are filmed and broadcast live on the Internet. If you attend this meeting you should be aware that you might be filmed and included in that transmission.

| Item No.   | Agenda Item   | Page     |
|------------|---|----------|
| <b>1.0</b> | <p><b>Welcome &amp; Apologies</b></p> <p>The Chairman to welcome members and the public to the meeting.</p>   |          |
| <b>2.0</b> | <p><b>Declarations of Interest</b></p> <p>Members are required to declare any personal, prejudicial or disclosable pecuniary interest they may have relating to items on the agenda and state the nature of such interest.</p>                |          |
| <b>3.0</b> | <p><b>Minutes of the Previous Meeting</b></p> <p>To consider the approval and signature of the minutes of the meeting held on 18 February 2021 as a correct record and to consider any requests for updates on matters contained therein.</p> | 5 - 14   |
| <b>4.0</b> | <p><b>Business Plan</b></p> <p>Members are asked to consider the report from the Finance Director.</p>  | 15 - 54  |
| <b>5.0</b> | <p><b>Budget</b></p> <p>Members are asked to consider the report from the Finance Director.</p>   | 55 - 128 |

|             |  |           |
|-------------|--|-----------|
| <b>6.0</b>  | <b>Corporate Risk Register</b><br><br>Members are asked to consider the report from the Finance Director.  | 129 - 166 |
| <b>7.0</b>  | <b>Decarbonisation Strategy Approval</b><br><br>Members are asked to consider the report from the Programme and Strategy Director.   | 167 - 286 |
| <b>8.0</b>  | <b>Governance Report</b><br><br>Members are asked to consider the report from the Head of Legal.   | 287 - 298 |
| <b>9.0</b>  | <b>Any Business Which the Chair is Satisfied is Urgent</b><br><br>Any business which the Chair is satisfied is urgent by reason of special circumstances pursuant to section 100B 4 (b) of the Local Government Act 1972.  |           |
| <b>10.0</b> | <b>Exclusion of Press and Public</b><br><br>To resolve that the public be excluded from the meeting during consideration of Items 11 and 12 on the grounds that:<br><br>(1) It is likely, in view of the nature of the business to be transacted or the nature of the proceedings, that if members of the public were present during such item(s), confidential information as defined in S100A(2) of the Local Government Act 1972 (as amended) would be disclosed to them in breach of the obligation of confidence; and/or<br><br>(2) it / they involve(s) the likely disclosure of exempt information as set out in the Paragraphs [where necessary listed below] of Schedule 12A of the Local Government Act 1972 (as amended) and that the public interest in maintaining the exemption outweighs the public interest in disclosing the information. |           |
| <b>11.0</b> | <b>Part 2 Minutes of the Previous Meeting</b><br><br>To consider the approval and signature of the private minutes of the meeting held on 18 February 2021 as a correct record and to consider any requests for updates on matters contained therein.  | 299 - 304 |

|             |   |  |
|-------------|---|--|
| <b>12.0</b> | <b>Any Business Which the Chair is Satisfied is Urgent</b><br><br>Any business which the Chair is satisfied is urgent by reason of special circumstances pursuant to section 100B 4 (b) of the Local Government Act 1972. |  |
|-------------|---|--|

This page is intentionally left blank

# Transport for the North Board Minutes

**Thursday 18 February 2021**

**Present:**

John Cridland (Chairman)

**Attendee**

CLlr Phil Riley  
CLlr Craig Browne  
CLlr Karen Shore  
CLlr Matthews  
Mayor Andy Burnham

CLlr Daren Hale  
Michael Green  
Mayor Steve Rotheram  
CLlr Carl Marshall  
CLlr Nick Forbes  
CLlr Carl Les  
Mayor Dan Jarvis  
CLlr Heather Scott  
CLlr Hans Mundry  
CLlr Judith Blake  
CLlr Andy D'Agorne

**Local Authority**

Blackburn with Darwen;  
Cheshire East;  
Cheshire West & Chester;  
East Riding of Yorkshire;  
Greater Manchester Combined  
Authority;  
Hull;  
Lancashire;  
Liverpool City Region;  
North Yorkshire;  
North of Tyne Combined Authority;  
North Yorkshire;  
Sheffield City Region;  
Tees Valley;  
Warrington;  
West Yorkshire Combined Authority;  
York;

**Rail North Authorities Attendees**

Councillor Trevor Ainsworth  
Councillor Chris Brewis  
Councillor John Ogle  
Councillor David Williams

Derbyshire  
Lincolnshire  
Nottinghamshire  
Staffordshire

**Local Enterprise Partnership (LEP) Attendees**

Roy Newton  
Steve Curl  
Kishor Tailor  
Mark Rawstron  
Mark Roberts  
Lucy Winskell  
Matthew Lamb  
Peter Kennan

Cheshire & Warrington LEP  
Cumbria LEP  
Hull and Humber LEP  
Lancashire LEP  
Leeds LEP  
North East LEP  
North Yorkshire LEP  
Sheffield City Region LEP

**Partners in Attendance:**

|               |                          |
|---------------|--------------------------|
| Nick Bisson   | Department for Transport |
| Ben Smith     | Department for Transport |
| Nick Harris   | Highways England         |
| Lorna Pimlott | HS2                      |
| Graham Botham | Network Rail             |

**Officers in Attendance:**

| <b>Name</b>    | <b>Job Title</b>                      |
|----------------|---------------------------------------|
| Barry White    | Chief Executive                       |
| Gary Rich      | Democratic Services Officer           |
| Dawn Madin     | Director of Business Capabilities     |
| Iain Craven    | Finance Director                      |
| Julie Openshaw | Head of Legal                         |
| Tim Foster     | Interim Strategy & Programme Director |
| Rosemary Lyon  | Legal and Democratic Services Officer |
| Jeremy Acklam  | IST Director                          |
| Peter Molyneux | Major Roads Director                  |
| Tim Wood       | Northern Powerhouse Rail Director     |
| David Hoggarth | Strategic Rail Director               |
| Deborah Dimock | Solicitor                             |

**Item No: Item**

**1. Welcome & Apologies**

- 1.1 The Chairman welcomed Members and apologies were noted.
- 1.2 The Chairman informed Members that this would be Cllr Blake's final Transport for the North (TfN) Board meeting before taking up her seat in the House of Lords. He thanked Cllr Blake for all her hard work as a member of TfN Board.
- 1.3 Cllr Blake thanked the Chairman and stated that she would remain an advocate for the North in the Lords and will watch the progress of TfN. She stated that she is looking forward to continuing her relationship with TfN once she has taken her seat in the Lords.

**2. Declarations of Interest**

- 2.1 There were no Declarations of Interest.

**3. Minutes of the Previous Meeting**

- 3.1 The minutes of the meeting of the Transport for the North Board held on 14 January 2021 were considered.

- 3.2 The Chairman updated Members on actions following the previous Board Meeting. In relation to the Rail Needs Assessment he explained that the Chief Executive together with Members had sent a letter to the Secretary of State expressing the Board's strong views on it. Members were informed that these were then discussed with the Secretary of State and Andrew Stephenson MP on 3 February, with follow up meetings set up between Members and the Minister during the following week. Members were also informed that the Chief Executive had also sent a letter to the Secretary of State on the Transpennine Tunnel and the Yorkshire Cross Pennine Route.
- 3.3 The deadline for applications for the Chief Executive post has now passed, with a positive response being received. A sift meeting will take place on Friday 18 February 2021.

**Resolved:**

That the minutes of the Transport for the North Board held on 14 January 2021 be approved as a correct record.

**4. IST Programme**

- 4.1 The report of the IST Director was received by Members. The Chairman expressed his thanks to the IST team for their work in bringing Phases one and two of the programme to full successful fruition.
- 4.2 The IST Director explained that the programme was introduced to improve passenger experience across the North. This was achieved with Phase one, with an 80% adoption of smart rail season ticket holders. The flexi season capability was also delivered across the North rail network focussing on products for less frequent commuter travel which will be essential part of the post Covid recovery. He explained that the second Phase has delivered a Disruption Information system for bus, light rail and ferry. He explained that these were brought together in the spending review to extend further but to date none of the £33 million funding requested has been secured. The DfT has stated that contactless on rail would be delivered as part of the rail reform programme.

Members were informed that DfT has been approached from a number of angles in order to try to secure some funding which has so far has been unsuccessful. Consequently, this report seeks the Board's agreement to wind down the programme. The impact of this on partners, the North of England and the return of customers in the short term were highlighted.

- 4.3 Concerns were raised about the cancellation of the IST Programme. Members believed that cancelling the programme would hinder the recovery out of the pandemic at a time when it may prove difficult to attract passengers back on to public transport. They also believed that this decision would impact on differential pricing structures and lead to a loss of valuable knowledge in this area.

- 4.4 Cllr Blake was disappointed that the project couldn't be broken into smaller pilot projects and believed that this may be worth pursuing.
- 4.5 Members discussed potential next steps in order to prevent the closure of the IST Programme and suggested that the Treasury be approached. Cllr Blake suggested that this could be done in conjunction with Midlands Connect. Cllr Forbes suggested that the recommendations within the paper be put on hold until after the budget.
- 4.6 Mayor Jarvis hoped that some money could be included in the business planning process in order to retain some of this programme.
- 4.7 The IST Director stated explained that had the programme continued the focus would have been on digitisation which is seen as the future of modal change. He stated that there is focus on how knowledge can be shared and maintained. He stated that the current funding envelope runs until the end of March 2021 and that there is no flexibility in the current envelope for this to run beyond the end of March. He explained that conversations would continue with the Treasury and highlighted the opportunity to work with Midlands Connect to look at a more rounded approach. Members were informed that work had been taking place in trying to reverse the decision and that work would continue on this matter.
- 4.8 Mr. Ben Smith recognised Members' disappointment and thanked them and TfN for their work on Smart ticketing. He explained that the spending review only covered one year and that there was an expectation that there would be a further spending review in the coming year.
- 4.9 The Chairman reiterated to Mr. Smith that this is about developments in individual city regions and asked that Mr. Smith bring this to the attention of the Department.

**Resolved:**

- 1) That the report be noted;
- 2) That the cessation of funding for the IST Programme be noted;
- 3) That the winding down of the IST Programme noting the closure plan is being finalised;
- 4) That it be noted that the winding down process will continue into 2021/22 and that DfT will provide funding to cover the cost of winding down the programmes;
- 5) That it be note that the business plan report to TfN's March Board will set out any proposal to retain an IST capability funded from TfN's core budget;
- 6) That the Chief Executive and IST Director make a final effort with the Treasury to obtain more funding before taking the action to cease the IST Programme.

## **5. 2021/22 Funding Update & Draft Business Planning**

- 5.1 The report of the Finance Director and the Interim Programme and Strategy Director was received by Members. The Finance Director highlighted key areas of the report and explained that since its publication, business planning has continued and operational and support team plans will be completed by 5 March in time for a report to be produced for the Board by the 16th. Members were also informed that a draft budget is being developed. The Finance Director highlighted that there is slippage in the budget due to ongoing current uncertainties and Covid 19 and it was proposed to slip this funding into the next year so that the budget envelope would be increased from £8-£8.5 million. He also confirmed that no further funding had been made available for the IST Programme, as outlined in the previous report.

Members' attention was also drawn to the Integrated Rail Plan (IRP) and the potential impact that this may have on the NPR business planning. He explained that business planning assumptions have been based on uncertainty over the first couple of quarters of the next financial year. However, he also stated that the IRP could also have consequential impact on the NPR business plan as well as the wider TfN plan.

- 5.2 The Chief Executive highlighted the work of the Finance Director with the Department in agreeing some cost allocations which has mitigated some of the elements of the of the funding cuts leaving TfN in a better position than initially anticipated.

The key points of the letter from Unison that TfN and Members had received were outlined. Unison requested that there be Voluntary redundancy, redeployment and an external recruitment freeze. The Chief Executive explained that these would be considered and that Unison and affected staff would be kept informed. The Chief Executive asked Members to reconfirm their decision from the January Board to continue with the recruitment process for the new Chief Executive as this was also an issue raised by Unison.

- 5.3 Mayor Burnham supported the vacancy freeze with the caveat that the recruitment of the new Chief Executive be excluded from this. He explained that the organisation needs strong leadership and a clear direction.

- 5.4 The Chairman welcomed the letter from the Trade Unions.

- 5.5 Cllr Green expressed concerns about paragraph 4.26 of the report. He explained that it is of critical importance that partners are able to access the extensive knowledge base that is available through TfN staff and should this be lost a significant gap will be left moving forward.

- 5.6 The Chairman commented that this is not a good situation but some progress has been made since the last Board following the reallocation of some costs which has reduced the impact.

**Resolved:**

- 1) That the report be noted;
- 2) That Board approves the funding envelope set out in paragraphs 3.4 – 3.9, and in particular the proposed use of reserves;
- 3) That Board notes and approves the use of reserves as noted in paragraph 3.2;
- 4) That Board agrees the priorities and emerging proposals for the core operational teams, NPR and IST set out in Section 4, noting the feedback from the Member Working Group;
- 5) That Board notes the steps required in Section 5 to conclude business planning activity in time to agree the business plan at the meeting of the Board in March;
- 6) That, subject to appropriate break clauses being agreed, TfN confirms the Investment Programme Benefits Analysis (IPBA) support contract to allow the mobilisation of resources prior to the start of the new financial year.

**6. Any Business Which the Chair is Satisfied is Urgent**

**6a & b) Northern Powerhouse Rail Strategic Outline Case Timing**

- 6.1 The report of the Northern Powerhouse (NPR) Director was received by Members.
- 6.2 The Chief Executive apologised to Members for the supplemental report on this item. He explained that the Government has requested the rephrasing of the Strategic Outline Case (SOC) until after the publication of the IRP.

The benefits to the North of the Co-Clienting arrangement were highlighted; he explained that the DfT has additional responsibility due to being the funder as well. He explained that following the request the only practical way forward would be to agree to the rephrasing of the SOC.

The IRP will also allow for a greater understanding of the Government's plans for HS2 and how it integrates with NPR; however a delay to the SOC creates uncertainty with business planning for the coming financial year. The recommendations of the IRP will be of vital importance.

- 6.3 Members expressed concern that they were being silenced on this issue and believed that they and TfN would not be given a fair say or be able to comment on this matter until after decisions had been made.

- 6.4 Whilst understanding the rationale behind delaying the SOC Cllr Mundry believed that Northern Leaders would ultimately find themselves commenting on a completed document.
- 6.5 Mayor Rotheram stated that the SOC should inform the IRP rather than the other way round and requested that other options be explored.
- 6.6 Mayor Jarvis requested that TfN seek assurances on the need for ongoing engagement with Government on the development of the IRP and the role that TfN has to play in its development. He hoped that the IRP will use TfN's work to inform it.

He expressed disappointment that there hasn't been the same co-clienting arrangements on this as there was on NPR. This arrangement involved working with Government to ensure that Northern priorities would be delivered by Northern Leaders.

- 6.7 Mayor Burnham stated that big decisions are in front of Members that will define the North of England for the rest of this and the next century. He highlighted what is happening to TfN and stated that he believed that the voice of the North is being marginalised and the ambitions downgraded at the same time.

He raised concern about TfN waiting for the IRP before submitting the SOC and highlighted the fact that the IRP is predicated on funding HS2 fully in the South whilst cutting back in the North. Mayor Burnham stated that he would be uncomfortable drifting into a *fait accompli* where ambitions are downgraded without challenge. He stated that if TfN goes quiet the people of the North would not forgive this.

- 6.8 Cllr Blake explained that Members of the Board are representing their constituents as well as stakeholders in their areas. She highlighted the importance of transport which will be vital to the recovery as well as economic aspirations of the North. Cllr Blake stated that it is the responsibility of TfN to come up with stronger long-term vision which isn't influenced by the changing political landscape. She stated that the leaders of the North can't stay quiet on this and if the ambition can't be met then it's for Government to explain why so that Leaders can then explain to the people they represent.

- 6.9 In response to Mayor Rotheram the Chairman highlighted two key corridors where big capital investment programmes would be needed; Leeds to Manchester with the important link with Bradford, and Manchester to Liverpool with the important link with Warrington. On both these corridors big choices will need to be made in order to get the best transformational ambition for the North. He informed Members that he believes the SOC will be stronger where an agreement can be reached on these two corridors and other issues. He stated that it could be positive for TfN to wait for the IRP before making a decision. The Chairman reminded Members that the SOC can only proceed if both parties agree

with it being a co-cliented project; however he stated that TfN can provide statutory advice to Government.

- 6.10 Mr. Peter Kennan highlighted stakeholders' concerns of not proceeding with the SOC and stated that the public are pushing for TfN to deliver the SOC.
- 6.11 Mr. Kishor Tailor highlighted the role that businesses will play in the recovery and the levelling up agenda.
- 6.12 Cllr Shore stated that Members are the democratically elected voice of the North who want Government to listen to their views and the views of the communities they represent.
- 6.13 Mr. Mark Rawstron believed that TfN will need to accept the delay to submitting the SOC. However, he stated that whilst accepting the delay, the Board's concerns should be expressed in the strongest terms to the Government.
- 6.14 Mr. Mark Roberts explained that business across the North needs to hear the TfN ambition and be given more certainty about future infrastructure plans allowing them to make investment decisions. He supported the Chairman's view that if the SOC is unable to be submitted then statutory advice should be given within a short timescale.
- 6.15 Mayor Rotherham stated that the statutory advice needs to state that whichever option is decided TfN will not accept the minimal viable option.

The Chairman stated that he would be disappointed if the SOC is not completed within the shortest possible time. He explained that if TfN is pleased with the IRP it may be able to make progress on the key corridors as quickly as possible.

- 6.16 Mayor Burnham requested that the statutory advice be robust and list the options that are unacceptable to the Board. He stated that the "non-negotiables" be set out as part of the statutory advice and that this is made public in advance of the IRP.
- 6.17 The Chief Executive confirmed that the statutory advice can be expressed in strong terms. He explained that due to the level of detail in the statutory advice this would need to be in private but TfN will also look to produce a higher level document that will make the ambition clear to the public.
- 6.18 Mr. Nick Bisson informed Members that the most important thing is that the SOC and IRP are aligned. He stated that Andrew Stephenson MP intends to hold a meeting with leaders of the North in the coming week.

**Resolved:**

- 1) That it be noted that the Transport Secretary has stated that DfT wishes that the submission of the NPR Strategic Outline Case (SOC) be delayed so that it can be preceded by the Integrated Rail Plan (IRP).
- 2) That Members have agreed the request to delay the submission of the SOC until after the publication of the IRP. Statutory advice will also be issued to Government and a high level public statement made.

**6c) Updated Corporate Risk Register**

The Chairman deferred this item and encouraged Members to contact the Finance Director should they wish to make any comments.

**7. Exclusion of Press and Public**

**Resolved:** That the public be excluded from the meeting during consideration of Items [8 & 9] on the grounds that

- (1) It is likely, in view of the nature of the business to be transacted or the nature of the proceedings, that if members of the public were present during such item(s), confidential information as defined in S100A(2) of the Local Government Act 1972 (as amended) would be disclosed to them in breach of the obligation of confidence; and/or
- (2) it / they involve(s) the likely disclosure of exempt information as set out in the Paragraphs [where necessary listed below] of Schedule 12A of the Local Government Act 1972 (as amended) and that the public interest in maintaining the exemption outweighs the public interest in disclosing the information.

**8. Part 2 Minutes of the Previous Meeting**

- 8.1 The private minutes of the meeting of the Transport for the North Board held on 14 January 2021 were considered.

**Resolved:**

That the private minutes of the Transport for the North Board held on 14 January 2021 be approved as a correct record.

**9. Northern Powerhouse Rail Preferred Way Forward**

- 9.1 The report was received by Members and they were invited to ask questions and make comments.

**Resolved:**

- 1) That the report from the NPR Director be noted.
- 2) That the discussed recommendations be agreed.



---

## Transport for the North Board

**Subject:** 2021/22 Business Plan

**Author:** Iain Craven, Finance Director  
Tim Foster, Interim Programme and Strategy Director

**Sponsor:** Barry White, Chief Executive

**Meeting Date:** Wednesday 24 March 2021

### 1. Executive Summary:

- 1.1 Transport for the North ("TfN") produces an annual Business Plan which sets out its objectives for the coming year and how they will be delivered. This plan then provides the basis for the TfN budget. The budget is covered in a separate report, but a high level the total committed net budget for 2021/22 is £60.18m, approximately 9% lower than the net budget for this year, but 2% higher than the forecast outturn.
- 1.2 Given the late notice of funding on the 4 January, the reductions in core funding and the absence of future IST funding to take the programme forward, a rapid business planning process had to be undertaken prioritising tasks for the year ahead. Funding and Business Planning Reports were presented to the TfN Board on 14 January and 18 February and to the Scrutiny Committee on 4 March. In addition, following the 14 January Board meeting, a Member Working Group was established, and two rounds of meetings were held. This allowed TfN officers to consult with members in greater detail regarding the development of the Draft Business Plan prior to reports being brought to the Board for consideration and approval.
- 1.3 The key elements of the Business Plan are:
- Rebuilding passenger numbers on the railway as Covid restrictions are lifted;
  - Working with train operators, DfT and Network Rail to get clarity on future rail investment while improving reliability on the railway given the historic infrastructure constraints;
  - Completing and submitting the NPR SOC, following the publication of the Government's Integrated Rail Plan;
  - Agreeing with DfT the governance for NPR as it moves into the next phase of development;
  - Pursuing the Economic Recovery Plan with DfT's Acceleration Unit;
  - Carrying out the Investment Programme Benefits Analysis, assessing how investment affects inclusivity and sustainability as well as economic activity;

- 
- Progressing the advanced prioritisation mechanisms and independent assurance arrangements set out in the Northern Transport Charter; and
  - Consulting on and completing our Decarbonisation Strategy ready for publication before COP26.

A plain version of the current Draft Business Plan for 2021/22 can be found at Appendix 4.1.

## **2. Recommendation:**

- 2.1 That the Board approve the 2021/22 Business Plan, subject to delegating to the Chief Executive responsibility for the finalisation of the document as required.

## **3. Discussion:**

- 3.1 An exercise was undertaken as part of the 2021/22 business planning process which identified TfN's key strategic priorities and identified a common 'golden thread' from strategy to delivery that was maintained throughout the process. The 'Golden Thread' ensures that when detailed individual departmental plans are being designed and objectives set, there is a common and coordinated approach to delivery across the organisation. The high-level outcomes and objectives, and the key themes was approved by the Board on 14 January.
- 3.2 Subsequent to that meeting, officers developed further proposals that were discussed with the Member Working Group prior to being presented in the form of Key Priorities to the Board on 18 February, where these were approved. Further refinement of the plan was then undertaken, including an iterative process in conjunction with the development of the budget, supported by a further round of member Working Group meetings.
- 3.4 The activity that Transport for the North will undertake in 2020/21, and the associated KPIs for the coming year are set out in Appendices 4.1 and 4.2 respectively.
- 3.5 TfN has produced a Budget for 2021/22 to support the Business Plan, that allows it to deliver its activity within the constraints under which it operates. Funding sources available to TfN in 2021/22 are set out both in Appendix 4.1, and in the 2020/21 Budget Report at Item 5. TfN will seek to achieve a balance between efficiency, effectiveness and sustainability in the decisions that it makes in relation to delivering activity, with the overarching objective of delivering Value for Money. Any significant changes in the year, for example in relation to the

---

outcome of the IRP, will be reflected in the normal budget revision process.

**4. Appendices:**

- 4.1 Appendix 4.1 – Draft Business Plan 2021/22
- 4.2 Appendix 4.2 – KPIs for 2021/22

---

**List of Background Documents**
**Required Considerations**

Please confirm using the yes/no options whether or not the following considerations are of relevance to this report.

**Equalities:**

|                         |     |           |
|-------------------------|-----|-----------|
| Age                     | Yes | <b>No</b> |
| Disability              | Yes | <b>No</b> |
| Gender Reassignment     | Yes | <b>No</b> |
| Pregnancy and Maternity | Yes | <b>No</b> |
| Race                    | Yes | <b>No</b> |
| Religion or Belief      | Yes | <b>No</b> |
| Sex                     | Yes | <b>No</b> |
| Sexual Orientation      | Yes | <b>No</b> |

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Equalities           | A full Impact assessment has not been carried out because the subject matter of the report has no Equalities impact. |                            | Iain Craven     |

**Environment and Sustainability**

|     |           |
|-----|-----------|
| Yes | <b>No</b> |
|-----|-----------|

| <b>Consideration</b>         | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|------------------------------|---|----------------------------|-----------------|
| Sustainability / Environment | A full impact assessment has not been carried out because the report has no direct sustainability or environmental impacts. |                            | Iain Craven     |

**Legal**

|     |           |
|-----|-----------|
| Yes | <b>No</b> |
|-----|-----------|

| <b>Consideration</b> | <b>Comment</b>                                    | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Legal                | Legal implications are covered within the report. | Julie Openshaw             | Dawn Madin      |

### **Finance**

|            |    |
|------------|----|
| <b>Yes</b> | No |
|------------|----|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Finance              | The financial implications have been considered and are included in the report. | Paul Kelly                 | Iain Craven     |

### **Resource**

|            |    |
|------------|----|
| <b>Yes</b> | No |
|------------|----|

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Resource             | The resource implications have been considered and are included in the report. | Stephen Hipwell            | Iain Craven     |

### **Risk**

|     |           |
|-----|-----------|
| Yes | <b>No</b> |
|-----|-----------|

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Risk                 | There are no specific risk issues associated with this report. | Haddy Njie                 | Iain Craven     |

### **Consultation**

|     |           |
|-----|-----------|
| Yes | <b>No</b> |
|-----|-----------|

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Consultation         | A consultation process has not been carried out as it is not required for this report. |                            | Iain Craven     |

## Transport for the North Business Plan – 2021/22

Section headers in **BLUE**

Design notes in **PINK**

**01**

**Front cover**

**02-03**

**Contents**

**04-05**

**Chairman's welcome**

**John Cridland CBE  
Chairman**

The last year has delivered unprecedented challenges few could have predicted. The North's people and businesses have been rocked by the effects of the global pandemic and our transport network has formed part of an altogether different landscape due to prolonged restrictions.

Trains, once crowded and congested, fell quiet as they carried only key workers, with a strong focus on safety for passengers and train staff alike. Focus on walking and cycling infrastructure heightened as people explored different ways to stay local and active.

Throughout the last year, we've stayed on track to deliver on the priorities of the North's civic and business leaders. A pragmatic partner to Government, we've spoken with one voice on a wide range of issues affecting our communities today and tomorrow. From ensuring rail services responded and the wheels kept turning for those who needed them; to making strong, evidence-based cases for investment in our infrastructure, we have continued to deliver for the North's 15 million people.

Transport for the North's shared vision remains as resolute and relevant as ever as the nation looks to recovery. There has been excellent progress this year, with committed investment in some of our priorities and TfN being on the front foot of putting forward schemes that could be accelerated as part of our Economic Recovery Plan.

We now have the opportunity to reset and recover. This Business Plan details how delivering on our 30-year blueprint for investment in our infrastructure will be central to the national mission to level-up the UK and build back better than what has come before.

We're buoyed by the Government's commitments to levelling up. For us, that means securing investment in transformational schemes that will deliver more opportunities and better quality of life for our communities. In the year ahead, that will include not only providing the evidence for projects that deliver an economic boost, but highlighting the many ways that they can deliver social change; drive decarbonisation at pace; improve how freight is moved across the North and make our transport networks inclusive and accessible.

That must include a better rail network for the North, with Northern Powerhouse Rail at the heart of a long-term, committed infrastructure pipeline. Our work this year will include further development of the network following the Integrated Rail Plan to ensure both commitment and progression to construction as soon as possible.

We'll also ensure the running of our railway is shaped by local knowledge and decisions, whilst providing the innovative analysis and technical evidence that put forward a compelling case for the Government to invest in our networks. The result must be incremental and sustained changes that make our networks greener on the path to net zero.

We've made excellent progress to date, however there is much more still to be done. Our solid partnership and dedicated team will continue to deliver on our shared mission of a thriving North brimming with opportunities. We remain steadfast in our vision that better connectivity is essential to supporting our people, businesses and economy.

**06-07**

### **Vice Chairs' forewords**

#### **Cllr Louise Gittins Leader of Cheshire West and Chester Council**

Despite the immense challenges brought about by the Coronavirus pandemic, Northern leaders through the Transport for the North Board have retained a strong and united voice, ensuring that our vital transport systems continue to operate for those who rely on them most. Thanks to the ongoing work of the Rail North Committee and the North of England Contingency Group, we have helped to ensure the region's network has continued to operate for our key workers through this difficult time; however, we must ensure that this solidarity over the past 12 months remains as we continue to plan for a better future for the North's 15 million people.

We've seen HS2 Phase 2a receive Royal Assent up to Crewe, which will provide much improved regional connectivity. However, we need to integrate this and the remaining Phase 2b section with an ambitious Northern Powerhouse Rail programme that delivers real transformative change in order to cut journey times, deliver increased capacity, and create up to 73,000 new jobs. As Northern leaders, we've submitted our statutory advice to deliver the best route options for our region. The ball is now in the Government's court for them to show whether they match our ambition for the North.

It is also paramount over the next year that we push ahead with the vitally important Northern Transport Charter, so the North is able to truly build back better, and not just back to the way things have always been. If the North is to grasp its true potential, we cannot be made to accept devolution solely decided in Westminster.

The pandemic has focused our minds on the environment and decarbonisation, with surges in demand for active travel within our towns and cities. Following our submission to the Government's transport decarbonisation strategy, Transport for the North will publish our own plan for the region, setting out the scenarios we need to see to deliver a greener North of England. Transport decarbonisation on a regional scale will be largely achieved through a vastly improved rail network. With changes to the Treasury Green Book, we expect that transport appraisal processes will now wholly appreciate the health and environmental benefits that green infrastructure can deliver here in the North. In addition, we will also be bringing forward an updated freight strategy to account for how we can best transport commodities around our region, whilst considering how we can improve our major freight hubs.

Following a year of tough restrictions and economic challenges, it is more important than ever for us to turn our attention to the future potential of the region and deliver new opportunities for people in the North.

**Mayor Ben Houchen**  
**Mayor of the Tees Valley**

There is no doubt that the current Coronavirus pandemic has impacted the way we live our lives. It has come at a time when the North of England is on the cusp of seeing itself really drive forward into the 21st century and beyond, but I'm sure I speak for everyone when I say that we can't and won't let this hold us back.

The Government is keen to Build Back Better, and this is very much aligned with the ethos of what Transport for the North and Northern leaders, including myself, want to see. The recent announcements in this year's Budget have highlighted the value the region has to offer, from being home to the UK's largest Freeport and the fact that Darlington was chosen as the location for Treasury North which will be home to 750 senior Civil Servants from the Government's most important and powerful department.

Transport for the North has played its role in articulating to the Government what the region needs in order to see its potential realised. An Economic Recovery Plan was submitted to the Government demonstrating the opportunities across the North where investment can make a difference now and in the future. Importantly, this plan wasn't just about isolated schemes, it was about schemes that piece together and connect the whole region better.

Last year when I wrote a foreword for the 2020/21 Business Plan, I said I wanted to see work progress at Middlesbrough and Darlington stations, which I'm happy to say has happened. It is small steps like this that show that things

are still moving in the right direction, step by step, but with a coordinated understanding of how the jigsaw fits together.

I also remember saying last year that the next 12 months will be important for the North, and that remains the case. The Transport for the North Board has been clear in its recommendations for Northern Powerhouse Rail and coming together with a preferred route. The fact that such a large, important project has arrived at an agreement is a testament to the willingness of all of the individual areas to come together, and a recognition that the North really can be greater than the sum of its parts. Over the next year, we will progress with the vitally important Northern Transport Charter, so our region is not always looking to Westminster. We will also move forward with our decarbonisation and freight strategies - these pieces of work are three important agendas not just for the North, but for the UK as a whole.

The path out of the pandemic has almost been cleared thanks to the hard work of so many people in our country. Transport for the North must make sure it follows it to ensure we see the delivery of the investment and schemes we need.

**08-09**

## **Introduction**

The last year has been unlike any other in recent history. With the global pandemic sending shockwaves across the UK, the North's communities, economy and transport networks faced incredible challenges.

Now, as the nation looks to recovery, our mission to create a prosperous North through strategic transport investment is more important than ever. That mission will be a central pillar of the Government's objective to level up, addressing historic imbalances in UK productivity.

But it must also ensure that recovery is greener, fairer and builds back better than what has gone before.

The North's civic and business leaders that form our Board are clear in their vision for the future, and the value of the collaboration that Transport for the North facilitates. Having adopted the Strategic Transport Plan - the first pan-Northern plan of its kind - and spoken repeatedly with one voice on transport issues including navigating the timetable crisis; Transport for the North is now embarking on its next chapter.

Already, Transport for the North has demonstrated it can be an effective and pragmatic partner to Government, submitting an Economic Recovery Plan outlining quick win priority infrastructure schemes to underpin growth in the years to come.

The year ahead will be one of rebuilding and recovery, 'building back better', but for the North it is also about catching up on decades of under investment, which, if pledges that have been made become commitments, greater investment in the north can become a key element 'levelling up'. This Business Plan outlines the

vision of securing inclusive and sustainable growth and a better quality of life, and how our activity for the year ahead, will support these ambitions. Our prime activities for 2021/22 are:

- Rebuilding rail passenger numbers in the north as Covid restrictions are lifted;
- Working with train operators, DfT and Network Rail to get clarity on future rail investment while improving reliability on the railway working within the historic infrastructure constraints;
- Completing and submitting the NPR SOC, following the publication of the Government's Integrated Rail Plan;
- Agreeing with DfT the governance for NPR as it moves into the next phase of development;
- Pursuing the Economic Recovery Plan with DfT's Acceleration Unit;
- Carrying out the Investment Programme Benefits Analysis, assessing how investment affects inclusivity and sustainability as well as economic activity;
- Progressing the advanced prioritisation mechanisms and independent assurance arrangements set out in the Northern Transport Charter; and
- Consulting on and completing our Decarbonisation Strategy ready for publication before COP26.

It should be noted, however, that uncertainties lie ahead. Firstly, a reduction in funding allocations year-on-year means the organisation has and will face challenges in achieving all of its ambitions in 2021/22. As such, in preparing this Business Plan, TfN has worked closely with the Board to agree the priority areas that will see the furthest strides made against our objectives for a more prosperous, better connected North.

Given the current context of short-term funding commitment and constraints, it will be important to make the case for re-establishment of multi-year funding to match ambition levels at the anticipated Spending Review in later 2021.

Likewise, there remain unknowns at a national level. Several key Government policy decisions could significantly impact our work during the coming 12 months, shifting the context against which we operate. These include the anticipated publication of the Integrated Rail Plan for the North and Midlands; the Williams Review of the Railways; and a Devolution White Paper, all of which may have a bearing on our vision and role.

Despite these challenges, the North's leaders are committed to their pan-Northern objectives; continued collaboration; and securing a proactive and increased role in decision-making over the North's transport networks, whether through investment priorities or oversight of project delivery.

## **10-11**

### **About Transport for the North**

Transport for the North (TfN) enables our region to speak with one voice on our transport needs.

We became England’s first Sub-national Transport Body (STB) in April 2018, with a Board made up of our region’s 20 Local Transport Authorities (LTAs) and 11 Local Enterprise Partnerships (LEPs). Together, they represent the people and businesses of the North of England on transport matters, providing statutory advice to the Department for Transport (DfT) and working with delivery partners including Highways England and Network Rail, as well as train operating companies.

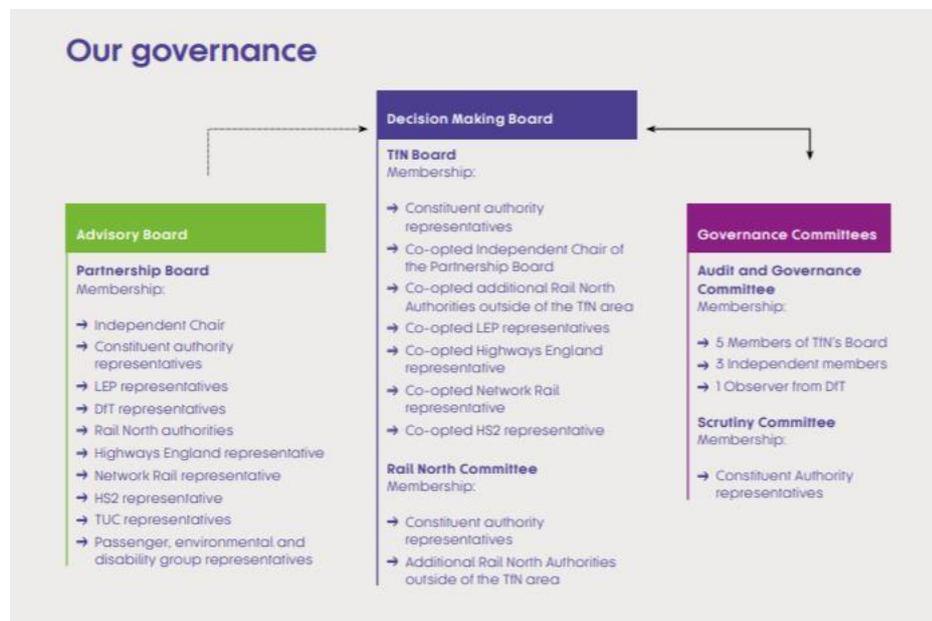
Since our inception, our advisory Partnership Board has expanded to represent further important interests, including those of trade unions and passenger, environmental, and disability representatives.

This collaborative work supports the ambitions of the North by advocating for infrastructure investment to unlock inclusive and sustainable transformative economic growth.

Our first-of-its-kind Strategic Transport Plan (STP) and accompanying Investment Programme were approved in February 2019 to identify the transport projects which should be funded to deliver the step-change required to rebalance decades of underinvestment in our region.

## Governance structure

[INSERT CHART AS BELOW – TO BE UPDATED IN NEW TFN STYLE]



12-13

## Strategic Transport Plan

[STP journey infographic to be included as full page]

Our adopted STP and accompanying Investment Programme outline our vision for a future transport network that would enable sustainable economic growth across the whole of our region.

The STP was developed with three core drivers at the fore:

1. Pursuing greater economic prosperity and wellbeing for those who live and work in the North
2. Connecting the key economic areas of the North will drive growth, improve access to jobs, and ensure the North is a great place in which to invest and live
3. Identifying, making decisions on, and planning the strategic transport infrastructure required to deliver an economic step change for the North

Approval of the STP saw Transport for the North fulfil one of our key functions under our statutory powers, marking a pivotal moment for our region and paving the way for other STBs to set out their plans.

The STP is a blueprint for our region, and over the past two years we have used it as such to drive forward our plans and continue to develop our recommendations to Government. This has included, but not been limited to, the Economic Recovery Plan, set out in summer 2020, that explored an infrastructure pipeline for the North and the shorter-term priorities that could not only deliver on the STP objectives, but underpin the North's economy bounce back from the effects of Covid-19.

Building on the STP as a strong foundation, we're now embarking on the next chapter with the Northern Transport Charter, a roadmap towards long-term devolution based on the North's priorities.

**14-15**

## **Our vision and objectives**

Our vision remains resolute, one of "a thriving North of England where world-class transport supports sustainable economic growth, excellent quality of life and improved opportunities for all." **[pull-out quote]**

Since the STP was adopted, the mission to level-up the UK has become even more prominent in national discourse. It has been formally recognised as a national objective by the Government and referenced in key policies and guidance documents including the National Infrastructure Strategy; review of the Green Book; and most recently the Plan for Growth.

TfN's vision and objectives are entirely in step and supporting of the levelling-up agenda, with transformational infrastructure investment widely accepted as a cornerstone in closing the economic and productivity divide.

## **What is the Northern Transport Charter?**

The Northern Transport Charter provides a clear blueprint setting out the ambition for the future role of TfN. The Charter was adopted by TfN Board in September 2020 and sets out a roadmap toward further, long-term devolution around four areas:

- ***Putting passengers at the heart of the railways***
- ***Leading Northern strategic scheme planning and delivery***
- ***Managing a long-term Northern funding settlement***
- ***Championing an inclusive and sustainable North***

Throughout the last year we worked to agree the Charter with the TfN Board and begin practical steps to support the direction of travel, in particular ensuring an even greater focus on sustainability in our recommendations, as well as making the case for an enhanced role on the North's major programmes through our statutory advice to Government.

### **How will the Charter shape our work this year?**

We have already made significant strides in embedding the Charter's long-term goals into our everyday work. We have worked to put passengers first and introduce a focus on local decision-making by implementing actions from the Bake Jones Review of the Rail North Partnership. Likewise, we have proactively developed freight and rail strategies to address the key priority for our Members of addressing climate change.

As the first full year since the Charter's adoption, 2021/22 will see us embed the objectives within our programmes and services. Initially, this will focus on activities that add value and accelerate investment, while at the same time building the capability and evidence for increased pan-Northern devolved powers over time.

Our activities will include:

- Co-managing, with DfT, the North's two train operating contracts with a focus on rebuilding passenger numbers over time and improving reliability.
- Providing evidence-based statutory advice on rail investment and passenger services in the North, including the difficult trade-offs required to deliver reliable train services through central Manchester.
- Responding to the Williams Review and further developing an enhanced role for TfN in overseeing and inputting into the operation of the North's railways.
- Providing statutory advice on the approach to prioritise roads investment for the next Roads Investment Strategy (RIS3).
- Consulting on and adopting a Decarbonisation Strategy for the North, championing a sustainable future for our region that delivers a zero-carbon network.
- Developing and adopting our innovative analytical tools to target investments that, as well as supporting economic growth, address the need to deliver environmental, social and health benefits.
- Taking forward a developed Northern Investment Programme to lead strategic planning for the North, underpinned by compelling evidence.
- Developing how an Investment Committee would work, including what would be retained as Board investment decisions and which steps in the investment process could be delegated.

- Forming an Independent Assurance Group, initially in shadow form to support Board decision-making.
- Continuing to co-sponsor transformational investment programmes for the North of England, including Northern Powerhouse Rail.
- Making a submission to the Spending Review to secure a multi-year funding settlement for TfN that supports future ambitions.
- Scoping out the methodology and possible areas or questions for a Citizen's Assembly to support decision-making on key strategic issues.

A Members Working Group will be formed to guide the development of elements of the Charter workstreams, testing recommendations before being brought to TfN Board. The Rail North Committee will continue to lead in relation to the rail elements of the Charter.

## **16-17 Northern Investment Programme**

Our significant evidence base was compiled to form the Northern Investment Programme (NIP) – a 30-year investment plan of infrastructure projects to underpin green Northern growth, first set out in the STP.

TfN has led work with our partners on completing qualitative sequencing of the NIP, this prioritised transport interventions which could be brought forward for earlier delivery.

As a first step, in 2020, TfN set out in more detail the first part of our pipeline with the Economic Recovery Plan (ERP) – a £5 billion pipeline of rail, road, active travel and smart ticketing proposals to help the economy 'build back better' after the Covid-19 pandemic. Submitted to Government, the plan set out the first tranche of more than 160 projects that could help create job opportunities in the North and set us on the path for growth.

In the past year, TfN has also worked as a pragmatic partner to Government on this pipeline. This included engagement with the Department for Transport's Acceleration Unit to share evidence to support work on speeding-up delivery of schemes.

The year ahead will see work continue to develop the NIP as our evidence base grows and the needs of our people and business communities change. We will progress work on the NIP's Benefits Analysis, with the aim of completing the work by summer 2022. This will provide a quantified understanding of the pipeline's social, environmental and economic benefits and support TfN Board in recommending policy and investment priorities, as statutory advice to the Secretary of State for Transport.

This work will build the evidence to support several of the Northern Transport Charter's focus areas, notably leading Northern strategy planning and delivery. This work will cement the North's strategic priorities and ensure that investment decisions take broad account of sustainability and inclusivity benefits as well as economic benefits.

**Putting passengers first: A better railway for the North**

Prior to the Covid-19 crisis, levels of train travel in the North had seen 20 years of significant increase. During this time, the North saw demand treble, yet reliability decline as investment in our creaking infrastructure failed to keep pace.

Transport for the North has a key role to play in addressing these issues, particularly in providing essential local knowledge to underpin decisions that put passengers first. This will be challenging, with difficult decisions ahead, as a result of creaking and underinvested in infrastructure causing the potential for temporary service reductions needed to increase overall reliability. Local input to rebuilding passenger numbers at the right time will be a key element in persuading people to return to, or to swap to, rail.

Rail forms the backbone of our STP and Northern Investment Programme. The following pages detail:

- The current picture, including outstanding national decisions
- The Rail North Partnership – putting passengers first and overseeing the two largest operators in the region
- The Strategic Rail programme – securing investment for our long-term strategic vision and providing TfN’s input to the Rail North Partnership
- The Northern Powerhouse Rail programme – delivering a transformational network to support growth in the future

While there is much to do to improve the railways further, it is worth reflecting on the enormous progress made in the past three years which have seen £1 billion of investment in new rolling stock. The last Pacer train was taken out of service in 2020 and looking across the platforms at a major station today, you would see a transformed modern fleet of trains compared to just three years ago. Much of that improvement was secured by local input and local knowledge when the franchises were being tendered.

**The impact of Covid-19**

The national lockdown of March 2020 changed travel patterns and behaviours overnight. By assembling and facilitating the North of England Contingency Group and working with the Rail North Partnership, TfN worked quickly with the industry to ensure emergency timetables could support those key workers who still needed to commute.

As the weeks and months went on, this partnership approach continued to work effectively, using local knowledge to shape the industry response and keep essential services operating. Northern had already moved to the Operator of Last Resort at the beginning of March 2020, and later that month TransPennine Express (TPE) moved to an emergency measures arrangement, as did operators across the country. Significant financial support for the operators remains in place at the time of publication.

A year on from the start of the global pandemic, the rail industry is now in a very different place. Despite some respite from full lockdown, the North of England has largely been in an “essential travel only” situation since March 2020, and the long-term effects on the rail industry and how to rebuild are being considered.

We continue to work through the challenges and in 2021/22 will play a key role in encouraging passengers back to rail when the time is right. This will require a huge collaborative effort between TfN, DfT, Northern, TransPennine Express, Network Rail and LTAs to attract passengers back to public transport and to encourage new passengers to swap to public transport as part of a greener future.

### **The regional and national context**

It’s important to note that the landscape of rail investment and operation continues to shift, with published and anticipated policies expected to set the future direction of our network.

- **The Joint Review of the Rail North Partnership (Blake Jones Review):** The co-authored report was published in summer 2019 and built around the principle of ‘putting passengers first’. It set out short and longer-term recommendations for changes in the North, seeking to give our leaders more visibility and say over industry decisions and greater local oversight. We subsequently implemented an action plan to deliver on the early wins, including improved relationships with industry and a re-structured Rail North Committee as the focus for Northern leaders to input to decision-making. We continue to work with Government to appropriately fund and agree the longer-term measures identified including our ambition for further devolution.
- **The Williams Review:** This national review of the railways led by Keith Williams looks at widescale reform and increasing accountability in the interest of passengers, including alternatives to the franchise system, as well as fares and ticketing. TfN has engaged with the review team over the past two years, communicating our Members’ priorities and making the case for the models that will ensure those running the railway are more accountable to our Northern leaders – and therefore closer to the passengers. It’s anticipated the Williams Review will be published in 2021.
- **Integrated Rail Plan (IRP):** The Integrated Rail Plan for the Midlands and the North will detail the Government’s long-term vision for rail investment, including the integrated delivery of Northern Powerhouse Rail; HS2; and the Transpennine Route Upgrade, among other projects. Expected to be published shortly, TfN has engaged extensively and submitted statutory advice on the North’s preferred options ahead of publication. The delay in publishing the IRP has affected the completion of the NPR Strategic Outline Case (SOC), which has now been rephased until after the IRP is published.

## Rail North Partnership

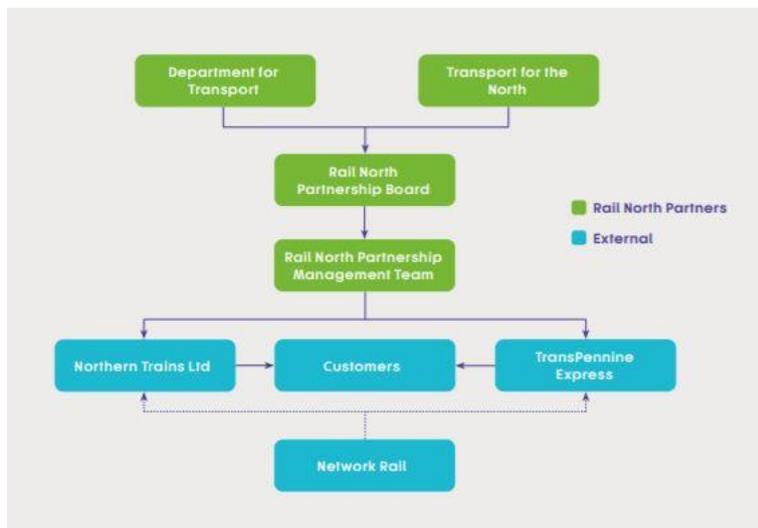
The arrangements established prior to gaining statutory status gave TfN an important, but limited, role in making decisions regarding operational railways in the North of England. Notably, we co-manage two rail service contracts (Northern and TransPennine Express), jointly with the Department for Transport, through the Rail North Partnership (RNP).

The RNP allows TfN to work closely with DfT to address the many challenges on our rail network and there is very strong partnership working. DfT remains the budget holder and has the final decision-making powers on most matters.

Over the past few years the RNP has demonstrated its value and effectiveness on a number of critical issues, from the 2018 timetable chaos, to securing investment in new rolling stock, and most recently in navigating the impact of the Covid-19 pandemic.

The structure of the partnership is shown below.

**[INSERT CHART AS BELOW – TO BE UPDATED IN NEW TFN STYLE]**



**22-23**

## Strategic Rail

TfN's Strategic Rail team has two main functions:

- Working with Members on the Rail North Committee and Local Transport Authorities to provide TfN oversight of the Rail North Partnership and key decision-making in managing the rail service contracts (Northern and TransPennine Express).
- Assessing and advising on TfN's priorities for investment into the rail network.

Our overarching aim will be to use our existing powers to the greatest extent possible to ensure customers are at the heart of the re-building of demand and

services after the pandemic, as well as securing investment that supports reliable services in the future.

### **Long-Term Rail Strategy**

The Long-Term Rail Strategy (LTRS) outlines the investment required right across the network, covering both tracks and trains. It sets expectations for minimum standards for rail in the region – standards aimed at enhancing connectivity, reducing journey times, and improving capacity and reliability. The strategy also sets out ambitions for access to stations, and for promoting electrification and innovation as part of a wider decarbonisation and sustainability programme.

### **Infrastructure investment**

Before the Covid-19 pandemic hit, many of our region's hubs were creaking under the strain of increasing passenger numbers. Congestion was rife, with knock-on effects causing delays across the North on a regular basis. The network is much quieter now but, as a key element in attracting passengers back to rail at the right time, we must have the commitment for investment to bolster the network and make it fit for use once more.

TfN continues to work with the DfT and Network Rail to identify and make the case for the right long-term infrastructure to solve the biggest bottleneck on the network – central Manchester. As the full suite of schemes necessary is going to take several years to develop and deliver, short-term changes are being considered to improve reliability.

Last year we:

- Supported the industry and Rail North Partnership in the response to Covid-19, including a strong focus on the needs of passengers and businesses together with the short-term investment and changes needed. We then developed a detailed 'roadmap to recovery' setting out how demand can be re-built to help restore the finances.
- Supported the launch of the Manchester Recovery Taskforce Consultation in partnership with DfT and Network Rail, seeking views on proposed service changes to address network congestion.
- Continued to support our partner authorities on a range of local and strategic projects including the Energy Coast Rail Upgrade (Cumbria), new station proposals in West Yorkshire, and station upgrades at Middlesbrough and Darlington. May 2020 saw the opening of Horden Station in County Durham and TfN was pleased to help secure a more cost-effective method of construction of the station.
- Implemented the Blake Jones Review recommendations including the case for further devolution, as well as further developing a response to the Williams Review on rail reform and more accountability to the North.

- Improved communication with partners and stakeholders and hosted a virtual rail user group and community rail event to ensure input from local communities.
- Commenced and proved a process for journey time improvements on key sample lines, to be further developed in 2021/22.
- Employed a reliability officer to work with the industry on a delivery plan to improve the reliability of trains across the North which will be essential in winning passengers back to rail after the pandemic.
- Shaped rail industry plans and policies to the benefit of passengers and freight in the North through input to Network Rail's strategic planning process and the DfT's Rail Network Enhancement Programme – using our statutory powers to advise on the investment plans as required.

In 2021/22 we will:

- Help re-build demand and confidence in rail services through regular monitoring, and work through the Rail North Committee with operators and DfT on timetable plans for May 21, December 21 and May 22. This will build on successes including the North of England Contingency Group and make use of local knowledge and insight.
- Take a proactive role in encouraging passengers back to rail including showcasing the benefits of investment in new trains.
- Through the Rail North Partnership promote improvements to personal safety for passengers both when travelling on trains and when in, and around, stations.
- Following publication of the IRP, work with the NPR team and RNP to define the future service specification to integrate with the classic network.
- Refresh the LTRS in line with current economic recovery plans, Covid-19, and refreshed strategies, including continuing developing and implementing delivery plans including fares reform and planning for growth.
- Make the case for continued and enhanced investment in the North's rail services as part of the 'building back better' agenda, including providing statutory advice to shape infrastructure development and proactively develop rail schemes in the investment pipeline.
- Commence delivery of a line speed improvement programme to improve reliability, produce journey time improvements, and other benefits.
- Respond to the Williams Review when published, guided by the aspirations in the Northern Transport Charter.
- Seek to secure the best outcomes for North from the transition from the old franchises to the DfT's planned new contractual arrangements – using our role in the Rail North Partnership.
- Fully embed the Blake Jones Action Plan and seek to secure appropriate resources to ensure passengers are central to decision-making.
- Drive the industry to deliver improved passenger and freight customer satisfaction.
- Formalise and enhance collaboration with Network Rail including seeking an agreed programme of joint work.
- Use TfN's influence, including statutory advice as appropriate, to secure and shape infrastructure development to support the LTRS.

- Secure greater levels of investment and smarter delivery of projects to support Transport for the North's Strategic Transport Plan and continue to support partners' development and delivery of schemes.
- Embed smart ticketing and fares reform capacity into the team following closure of the IST programme, supporting the case for future funding bids.

## 24-25

### Northern Powerhouse Rail

Northern Powerhouse Rail (NPR) is an ambitious programme to transform the region's rail network. Co-sponsored by TfN and DfT, it will transform connectivity right across our region, bringing our towns and cities closer together.

Stretching from Liverpool to Hull, and from Sheffield to the North East, it will deliver a step-change for rail connectivity and help decarbonise how we travel.

NPR is a mix of new and existing lines that will improve journey times and reliability, and is integrated with HS2 (sharing track and links to various HS2 stations whenever possible). It will create the fast, modern network that our region's people and businesses need.

The full network is a vital part of our region's future, enabling people to travel further afield for work, education and leisure opportunities, and giving businesses the confidence they need to invest in and locate to the North, knowing that they can access the labour markets that will allow them to grow.

Northern Powerhouse Rail will:

- Bring millions more people 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 of multiple economic centres.
- Help treble the number of businesses able to access four or more cities or Manchester Airport within 90 minutes, from 70,000 today to 260,000.
- Deliver significant benefits to the North's economy and rebalance the UK by closing the productivity gap between the North and the rest of the country.
- Contribute around £14.4 billion in annual gross value added (GVA) to the UK economy by 2060.
- Create up to 74,000 new jobs in the North by 2060.
- Ensure that growth is delivered sustainably, building the market for rail travel by around four times the level seen today and taking up to 58,000 daily car trips off the road.

The NPR network and the significant economic opportunity it presents have only happened because the programme has been co-cliented and developed locally. Central to the North's vision is local decision-making over investment decisions, and that includes a continued co-sponsorship role in the development and delivery of Northern Powerhouse Rail.

Last year we:

- Completed the sifting process and shortlisted the options for infrastructure on each NPR corridor.

- Agreed a single preferred way forward and indicative phasing plan for NPR.
- Engaged with partners throughout the drafting of the Strategic Outline Case for NPR (previously referred to as the SOBC).
- In light of the delay to the SOC, submitted statutory advice to the DfT ahead of the publication of the IRP, on TfN's preferred network and way forward.
- Continued to ensure that NPR is integrated into other major rail programmes, creating a joined-up network for the North – including adapting to HS2 plans, as well as alignment of TfN's Long-Term Rail Strategy and High Speed North.
- Commenced work on the ground, surveying the Leeds-Hull line to better inform the next stage of design and development.

Earlier this year, the DfT requested that the completion and submission of the SOC for NPR be delayed until after publication of the Integrated Rail Plan. Its content is likely to have an impact on the way forward for the NPT programme, including the scope and timescales of work delivered. It is important to note that, dependent on the content of the IRP, it is likely that the Business Plan and budget will need to be revisited to reflect the confirmed position.

Subject to the policy and funding framework set in the IRP, in 2021/22 we plan to:

- Finalise and submit the SOC following the publication of the IRP.
- Undertake targeted studies to inform further narrowing of the shortlist of conceptual route and station choices for NPR.
- Further refine the delivery model options for NPR to support decision-making and develop a transition plan to a new delivery model, setting out the required capabilities, capacity and programme operation and governance structures.
- Agree a co-sponsorship role with DfT going forward.
- Continue to develop a strong client challenge function in the NPR programme to drive improved value for money and performance from delivery partners.
- Develop project businesses cases for some of the stations and upgraded lines forming the NPR network in preparation for Tranche 1 of construction from the mid-2020s.
- Set procurements in place or planned as required to support NPR objectives.
- Negotiate with Government and DfT multi-year Departmental Expenditure Limits for both resource and capital budgets in the next Government Spending Review.

## **26-27**

### **Major Roads**

Roads are a vital part of a multi-modal transport network. They support the first and last miles of all journeys – providing footpaths and cycleways, ensuring public transport routes are efficient and reliable, and supporting local deliveries and emergency services.

We all rely on a well-functioning road network to access jobs, education, leisure, goods and services, so ongoing investment in our roads is vital for economic recovery and growth.

Decades of underinvestment in the North's road network has led to slow journey times and poor reliability, leaving our cities and towns struggling to stay connected. East-West road connectivity is particularly poor, with only one motorway or dual carriageway route linking the two sides of the country between Stoke-on-Trent and Glasgow; a stretch of 250 miles.

Through our clear vision and objectives, as set out in the STP and Investment Programme, we can drive forward new and improved roads that will support communities by providing access to housing, education, jobs and leisure facilities.

Our work on the future investment strategy on our roads will also be critical when it comes to decarbonising the North. Emerging technologies such as connected and autonomous vehicles, electric and hydrogen powered vehicles, and a new era of digitally connected networks, will all support the path to net zero. With the hydrogen transport hub being set up in Tees Valley, the North being a leading hydrogen producer already, and with a global leader in hydrogen technology based in South Yorkshire, there is a really strong foundation for the North to be a hydrogen powerhouse, creating many green jobs.

Last year we:

- Updated a Major Roads Report, to be finalised and published following work on TfN's Decarbonisation Strategy.
- Continued work with partners on promoting improvements to connectivity and reliability for all road users. Successes include further investment in the Major Road Network (MRN), including MRN programme entry for schemes in Cheshire East, Cumbria, York and North Yorkshire; and funding for development to OBC for schemes in Lancashire, Stockport, Transport North East, Tees Valley and Liverpool. We also engaged with Highways England on supporting development and delivery of the RIS programme, for example the A66 dualling.
- Undertook analysis of journey time reliability, types of journey and geographical distribution of traffic using the MRN in 2019. This is the first time 24/7 year-round data has been collected across all MRN routes in the North, and provides a pre-pandemic baseline, which can be accessed by our transport and highway authority partners.
- Engaged with the DfT and Highways England on influencing initial work on route strategies for future road investment.
- Continued to represent the North's position on the development of business cases for the A66 dualling, Manchester North West Quadrant (MNWQ) and Trans-Pennine Tunnel (TPT) Strategic Road Studies. Worked with partners in the Central Pennines on progressing work on options for improving east-west road connectivity, M6 – A1(M).
- Monitored the impact on travel patterns from restrictions resulting from the Covid-19 pandemic, sharing data with partners.

In 2021/22 we will:

- Publish an updated Major Roads Report, taking into account the strategic importance of the road network to businesses and communities and the need for the rapid decarbonisation of road transport.
- Develop, and share with partners, the 2020 dataset for the performance monitoring of the MRN for the North using mobile phone data, supporting the prioritisation of future interventions.
- Work with DfT, Highways England and the Office of Rail and Road to represent the North's position regarding the delivery of the RIS2 programme, the development of the Highways England Route Strategies, and the RIS3 pipeline.
- Engage with DfT on options for further development work on road connectivity improvements in the Southern and Central Pennines, subject to funding.
- Represent the North's position in relation to the development and delivery of the A66 dualling, and input to further work on MNWQ and TPT.
- Support decarbonisation of road transport by building on TfN's Future Travel Scenarios and take forward short to medium term pan-Northern actions. This will include scoping with partners how TfN can best support plans for an integrated electric vehicle and hydrogen infrastructure network, supporting all communities in the adoption of low and zero emission vehicles.
- Continue working with DfT and partners to provide oversight to the development and delivery of MRN/Large Local Major (LLM) schemes submitted to DfT for MRN funding, as they are approved.
- Maintain positive working relationships and collaborations with other STBs to work together on integrated transport strategy issues including freight, decarbonisation, rural connectivity, and alternative fuel including electric vehicles.
- Provide advice and technical input to support NPR and the IRP in delivery of rail schemes and integration with the highways network.

**28-29**

### **Integrated & Smart Travel**

The Integrated & Smart Travel (IST) programme was created to make travelling by public transport easier, quicker and more cost-effective, encouraging more people to use trains, trams and buses in the North.

Split into four phases, the programme's first two phases have driven improvements by implementing smartcards for rail travel in the North, including seasons and flexi tickets, as well as providing better quality information to customers through open-source data.

Plans to develop a region-wide account-based travel solution were re-focused on delivering pay-as-you-go travel on rail (Phase 3) and supporting local smart ticketing by working with LTA partners (Phase 4).

In January 2021, TfN received a funding letter from DfT which stated that no ongoing funding would be available for the IST programme for 2021/22. In

February 2021, the TfN Board reluctantly agreed to wind down the programme, and that process will run into 2021/22.

### **Changing the North's travel experience**

We are proud of the achievements of the IST team, including successfully delivering 'Smartcards on Rail' and working with train companies Northern Rail, TransPennine Express and Merseyrail to introduce smart season tickets for customers. Around 80% of rail season ticket holders had converted to smartcard seasons prior to the onset of the Covid-19 pandemic.

This was followed by successful delivery of flexi-season capability across parts of the North's rail network, featuring rail products more focused on the less-frequent commuter - an essential product for a post-Covid world.

The programme also successfully created an open-data-driven approach to customer information, including newly-available disruption information for bus, light rail and ferry. This data is made available to passengers through mobile apps and websites and commercial third parties such as Moovit, Citymapper and shortly, Google. These successful systems help passengers stay informed about their travel plans and provide greater choice about the journey they choose to take.

Connected to the above, a core part of the National Bus Open Data programme was delivered by IST and handed over as planned to DfT in December 2020.

All of these successful deliveries from the TfN IST team represent Northern exemplars for national uptake and are supported by an archive of instructive documentation.

A new role, funded from TfN's core budget, focused on smart travel and linked to digital fares strategy will be created to enable TfN to help shape and link into national initiatives and to support building business cases for future funding requests. DfT has indicated that they see national rail reform as the vehicle to deliver smart ticketing on rail and the platform to link into other modes. As a result this new post, retaining a limited but important smart travel capability, will be created within our Strategic Rail team.

## **30-31**

### **Strategy, Policy, Economics and Research**

It's essential that all our plans are underpinned by robust evidence and a compelling strategy. As has now been acknowledged by Government, reversing decades of underinvestment in the North will require significant and sustained investment. TfN must evidence the link between investment in transport infrastructure and the economic prize on offer.

Our core teams that drive forward this coordinated, evidence-led approach are:

- Strategy and Policy
- Economics and Research
- Technical Assurance, Modelling and Economics (TAME)

## **Strategy and Policy**

Our Strategy and Policy team focuses on key, cross-cutting policy issues; the development and implementation of the Strategic Transport Plan; and the Northern Transport Charter.

Our Policy team will agree priority areas for policy development, with associated implementation plans in the year ahead, aligning closely to the principles agreed with TfN Board.

Last year we:

- Completed work with Members to develop the Northern Transport Charter, endorsed by TfN Board in September 2020.
- Coordinated pan-Northern responses to a number of high-profile government consultations including the Union Connectivity Review; MHCLG Planning for the Future Consultation; the National Infrastructure Commission's (NIC) Rail Needs Assessment; DfT's Decarbonising Transport: Setting the Challenge policy position paper; and Her Majesty Treasury's (HMT) Green Book Review.
- Developed and presented the draft Freight and Logistics Strategy to Board and agreed to consult more widely on the content. This sets out the strategy for developing business cases for interventions that will add value to the road and rail networks for both transport users and the freight industry.
- Supported the establishment of the West and Wales Transport Forum, chaired by Lord Hunt and Lord Jones, to bring together senior officials from DfT, Welsh Government, TfN and local authority leaders to improve cross-boundary strategic transport planning.
- Began to develop a roadmap and programme to a revised Strategic Transport Plan to be published in February 2024.
- Prepared and agreed TfN's Decarbonisation Strategy with partners, for public consultation during 2021/22, including a pan-Northern trajectory for surface transport and greenhouse gas inventory for the region.

In 2021/22, we will:

- Complete and agree the roadmap to the Strategic Transport Plan in 2024.
- Consult with the public on the decarbonisation and freight strategies before they are recommended to Board for adoption.
- Start detailed scoping and delivery of TfN's priority decarbonisation actions as defined within the TfN Decarbonisation Strategy, including active engagement with activities such as the North of England Hydrogen Forum; supporting a range of Decarbon8 research projects and establishing a new working group to co-ordinate and manage activities.
- Following the adoption of the Decarbonisation strategy, we will develop and deliver TfN's inputs to COP26 in Glasgow, alongside the NP11 and DecarboN8.

- Implement TfN’s policy/assurance framework to manage STP inputs.
- Develop and agree TfN’s role in active travel, spatial planning and masterplanning beyond the high-level policy positions in the Strategic Transport Plan.
- Manage ongoing stakeholder engagement activity and strategy/research work with partners via the Strategic Oversight Group, Analytical Advisory Group, and the Northern Evidence Academic Forum.
- Continue to build links with devolved administrations and pan-Northern bodies, as well as with central Government departments.
- Coordinate TfN responses to the Union Connectivity Review, the Integrated Rail Plan, and other Government reports and consultations.

## 32-33

### **Economics and Research**

Our Economics and Research team manages a programme of strategic research and analysis to ensure there is a robust and comprehensive evidence base to inform policy making and business case development.

The team also leads on developing and implementing a consistent approach to Monitoring & Evaluation (M&E), making sure TfN can measure progress towards strategic and programme objectives and embed a cycle of evidence-based policy-making across everything we do.

Last year we:

- Commissioned research on the visitor economy and transport in the North with our partners, the first study of its relationship with transport networks carried out at a pan-Northern scale.
- Commissioned the third phase of our User Insight research programme, to support further development of our evidence base on the transport-related behaviours and attitudes of Northern businesses.
- Commissioned research into Transport-Related Social Exclusion (TRSE) in the North to further develop the evidence base underpinning STP objectives to improve inclusivity and access to opportunities for all.
- Developed a TfN Monitoring & Evaluation Strategy which sets out the objectives for M&E in the TfN context and a set of processes to achieve a rigorous system of M&E for TfN and our partner organisations.
- Completed Phase 3 of the development of the TfN Monitoring & Evaluation Framework, identifying indicators and data sources which will be used to monitor progress towards STP objectives and gathering baseline data.
- Launched the Northern Evidence Hub and Northern Evidence Academic Forum to support the development of a pan-Northern evidence base for a range of policy areas, and to support collaboration and knowledge sharing with Northern partners and stakeholders across local government, academia and think tanks.

In 2021/22 we will:

- Complete and share the ongoing research projects on Transport-Related Social Exclusion (TRSE), Visitor Economy and User Insight Phase 3.
- Commission new research on the health and wellbeing impacts of transport to inform the development of the Strategic Transport Plan.
- Plan for further work on transport-related social exclusion – looking at case studies in specific local areas.
- Scope, agree and commence a new Northern Powerhouse Independent Economic Review, subject to agreement with partners and other Northern bodies.
- Continue to support wider efforts to build the evidence base including the funding and maintenance of the Northern Evidence Hub, co-management of the Analytical Advisory Group, and continued co-ordination of the Northern Evidence Academic Forum.

## 34-35

### **Technical Assurance, Modelling and Economics (TAME)**

The Technical Assurance, Modelling and Economics (TAME) team provides the evidence base for TfN's long-term plans to use transport to connect the towns and cities of the North to create a more productive economic area. TAME is a team of analysts, data scientists and transport modellers who develop innovative data analytics and modelling tools and apply these in our programmes and business cases to show how transport could enable this economic transformation. The team is at the heart of making the strongest possible case for investment to Government.

This work is centred on the creation of the TfN Analytical Framework: a suite of industry-leading analytical tools, models and data, which together will ensure a single, robust evidence base for scheme development and evaluation across the North. These tools capture a more comprehensive and rounded picture of economic benefits, looking beyond time savings and productivity to estimate improvements in economic prosperity, wellbeing and other benefits for people and places across the North and beyond.

Last year we:

- Provided the modelling, appraisal and economic analysis to underpin the Northern Powerhouse Rail Strategic Outline Case.
- Developed the new Future Travel Scenarios for application in the Analytical Framework across TfN programmes, and supported publication of the Future Travel Scenarios report.
- Provided the modelling and analysis for TfN's Decarbonisation Strategy, developing innovative new carbon modelling tools that can be used across TfN programmes and by our partners.
- Finalised the first iteration of our new open-source travel demand model, to represent detailed travel patterns across the region, both now and in the future.

- Completed a new Northern Highway Assignment Model (NoHAM) to model and appraise our Investment Programme.
- Enhanced the Northern Rail Modelling System (NoRMS) and laid the groundwork for multi-modal integration with NoHAM.
- Enhanced our Northern Economy and Land-Use Model (NELUM) and developed a new open-source Wider Impacts Calculator to estimate impacts like agglomeration and land-value uplift.
- Worked with partners to assemble a Development Log database of spatial plans across the region and put this into an interactive dashboard for partners to use.
- Undertook trials of sharing Analytical Framework tools with partners and stakeholders and established a roadmap for more comprehensive sharing.

In 2021/22 we will:

- Provide modelling and appraisal for the Investment Programme Benefits Analysis to underpin investment cases across our portfolios including, for example, an Electric Vehicle Charging Plan.
- Improve the Analytical Framework, including further improvements to NoRMS and demand modelling tools in response to recommendations from DfT and peer reviewers.
- Support the NPR programme by using our tools to build the economic case for NPR; providing enhanced economic analysis; and establishing a new station analysis work programme.
- Support the Strategic Rail programme by developing business cases for station hub delivery plans and using our tools to estimate the benefits and impacts of various studies.
- Support the Strategy team on, amongst other priorities, the development of a new Northern appraisal framework aligned to the Northern Transport Charter.
- Maintain, refine and deploy the Analytical Framework across TfN programmes.
- Open-up the Analytical Framework by publishing data and tools and finding cost-effective opportunities for sharing models with partners, maximising the wider benefits of investment in the North's analytical capability.
- Provide insight and evidence to support the development of the STP and the Northern Transport Charter by providing in-house analytical services that offer creative analysis, research and data visualisation.

## **36-37**

### **Our one voice**

Strategic engagement and communications from TfN have ensured that investment in the region's infrastructure – as a tangible measure of the mission to level up – has remained at the top of the national agenda.

Going forward, the Stakeholder Engagement and Communications Team (SECT) will remain critical to delivering the organisation's primary mission to provide and amplify the one voice to help secure additional transport investment. We'll

do this by building on the success of existing channels and creating new opportunities to profile our work, digitally, in the media and in person as social restrictions begin to lift.

This will build on a successful launch and embedding of the Strategic Transport Plan as a first-of-its-kind plan for the North, and the subsequent Economic Recovery Plan, which outlined shorter-term investment priorities, such as the promotion of TfN Board interventions.

Activity will be aligned with the future long-term vision outlined in the Northern Transport Charter, including: promoting and securing input into TfN's emerging Decarbonisation Strategy to create a greener North; encouraging commuters back to rail at the right time; and outlining the enhanced role of Northern leaders in investment decision-making. We will agree and deliver impactful communications across these aims.

As a public body, the team will continue to play a role in bringing TfN's evidence-based strategies, policies and plans to life in ways that are accessible to the public, enabling decisions to be transparent. Central to the service will also be proactively engaging and involving a patchwork of local, regional and national stakeholders to increase awareness of TfN's work and secure buy-in to our continued progress. The team will continue to provide strategic engagement advice corporately across other departments.

Given the shared mission to make the North a more prosperous place, TfN will continue to work closely with its Member authorities to assemble the evidence to demonstrate and communicate the added value of greater devolved decision-making in the North of England.

### **A best practice employer**

TeamTfN is made up of the bright minds we attract and retain from right across the North. We are proud of and value our workforce.

We continue to strive to be a best practice employer. In the last year we've demonstrated this through accreditations as a Living Wage Employer; a Disability Confident Employer; and a member of the Chartered Institution of Highways & Transportation's Diversity and Inclusion Charter.

This is backed-up in practice by championing our employee voice, for example via our established Employee Forum, as well as the establishment of active Diversity & Inclusion and Climate Change groups.

In 2020, our good practices were recognised as we became one of the first full members of the Greater Manchester Good Employment Charter.

With the swift move to full remote working in March 2020, the health and wellbeing of TeamTfN was the priority. We worked quickly to ensure a comprehensive wellbeing programme was in place to support TeamTfN through challenging times, whilst agreeing our longer-term flexible Ways of Working model, based on employee feedback, ahead of a future return to the office. This

has been supported with robust internal communications initiatives to keep our teams engaged, informed and supported throughout.

We are also committed to investing in TeamTfN. As well as offering regular training and professional development, last year we ran a Leadership Programme for our senior managers. From our current leaders to the leaders of tomorrow, we continue to be proud of our apprentices and their achievements at TfN. As of 31 March 2021, 3.5% of our workforce are undertaking apprenticeships, above the Government's public sector target of 2.3%. Our track record shows our apprentices have successfully gone on to secure permanent roles with us, which we expect will continue this year.

**38-39**

## **Our values and behaviours**

Developed with our employees, our values and behaviours underpin our unique culture and ways of working. They influence how we operate as individuals and as an organisation.

**We make a difference**  
**We do the right thing**  
**We are driven to succeed**  
**We collaborate**

We're proud to be a values-based organisation. This year we've introduced the Values In Practice (VIP) recognition scheme, a quarterly programme that celebrates and rewards those who are demonstrating our values day-to-day.

Our values are underpinned by our core behaviours:

- **Cultivate innovation** - Creating new and better ways for the organisation to be successful.
- **Ensure accountability** - Holding self and others accountable to achieve results, even under challenging circumstances.
- **Collaborate** - Building partnerships and working collaboratively with others to meet shared objectives.
- **Instil trust** - Gaining the confidence and trust of others through honesty, integrity and authenticity.
- **Financial acumen** - Interpreting and applying understanding of key financial indicators to make better business decisions.

## **Health and safety**

Health and safety continues to be the cornerstone of TfN's strategy for improving the wellbeing of staff. This area of activity offers an enhanced level of resilience in providing a suitable, fit for purpose facility and associated facilities management advisory and support service.

Our approach fulfils our statutory objectives by effectively providing a framework for securing the wellbeing of our employees and others who could be affected by our actions. The appointment of a 'competent person' combined with a

contracted support service offering means that the majority of health and safety matters, training programmes for employees and contractors, and proactive risk management, can be effectively managed/delivered flexibly to recognised standards in-house.

This approach provides the right level of engagement across a variety of stakeholders, creating knowledge and awareness of health and safety risks, and encouraging behavioural change through assessments and direct interventions including inspections and investigations, but we must continue to evolve our approach to face fresh challenges or to address existing problems in new ways such as those presented as a result of the Covid-19 pandemic.

## **40-41-42-43**

### **Our people and finances**

TfN is funded almost wholly by Government. In 2020/21 the uncertainty over future funding, along with the impact of Covid and prioritisation of NPR modelling, caused some TfN activity to slow down or be rescheduled. Therefore, much of last years planned recruitment was put on hold. As a result, TfN's staff numbers varied between 130-141 in the second half of the year, averaging 30 vacant posts.

Following the Spending Review in 2020, TfN received notice of in-year budget reductions and reduced core funding for 2021/22. This context of reduced resources has shaped our approach to the business planning process, ensuring we continue to progress and organise ourselves to best meet our organisational objectives, which are directed and approved by TfN's Board.

Our approach to people resourcing reflects these financial constraints, with a circa 15% reduction in our established posts. We have sought to manage this reduction, from 166 posts in 2020/21 to 142 posts in 2021/22, through removal of vacant posts where possible.

Furthermore, we continue to resource the NPR programme predominantly through service-based consultants, due to the nature of the one-year funding constraints, with potential for approximately 100 contractors working on the programme by the end of next year.

We will continue with this integrated approach to resourcing while only short-term funding commitment is available.

This Business Plan outlines how TfN will mitigate the challenges on resourcing, while meeting the ambitions of our partnership. While this may not be at the full scope we would have hoped, it illustrates the pressing need to work closely with Government in 2021/22 to re-establish a multi-year funding settlement to support TfN's progression ahead of the next Spending Review, anticipated for late-2021.

### **Funding**

Transport for the North is almost entirely funded by grants from the Department for Transport. In January 2021, Transport for the North was advised by the DfT that its Core funding allocation for 2021/22 would be reduced from £10 million to £6 million. In addition, we were advised that the Integrated and Smart Travel programme would no longer be funded (excluding the costs of completing the phases that were already underway and the subsequent wind down of activity). At the same time, the allocation of Northern Powerhouse Rail funding was increased from £59 million to £67 million, although the exact amount that will be draw down will be contingent on the timing and substance of the Integrated Rail Plan and the normal detailed departmental control over commitments. The funding that we are able to draw on during the year to pay for our budgeted expenditure is therefore as follows:

| <b>Resource</b>                                       | <b>£million</b> |  |
|---|-----------------|--|
| Core grant  | 6.00            | Flexible grant to fund Transport for the North activity. To be paid in two instalments during the year as required.            |
| Core grant reserve brought forward                    | 2.54            | Carry forward of core grant from prior years.  |
| Rail North grant, contracted income and contributions | 1.65            | Ringfenced to support Rail North and other rail activity, to be paid at the start of the financial year.                       |
| IST grant   | 1.52            | Ringfenced to resource the wind down of Integrated and Smart Travel activity, to be drawn as needed by agreement with the DfT. |
| Transport Development Fund                            | 67.00           | Ringfenced to support Northern Powerhouse Rail activity, to be drawn as needed by agreement with the DfT.                      |
| <b>Total</b>  | <b>78.70</b>    |  |

### **Reserves strategy**

All local government bodies – including Transport for the North – are required to operate to a locally defined reserves strategy that ensures the organisation always holds a prudent level of reserves. A prudent reserve strategy is particularly important to us as an organisation as we have few other levers to mitigate financial risk. We cannot access credit for short-term cash flow management or long-term investment, nor can we levy or precept upon a local tax base to underwrite our operations.

As noted above, most of our programme funding can only be drawn down as and when it is required, while most is ringfenced for the purpose for which it has been allocated. This means that our reserve strategy must be managed in

conjunction with the use of the annual core grant allocations, as core grant is the only discretionary resource, we hold that can fund any and all expenditure.

We have forecast a 2020/21 year-end total reserve balance of £6.54m. Of this value, £0.50m is currently earmarked for future work around the devolution of further powers to TfN. It is further proposed that £2.54m of the reserve is drawn down in 2021/22 to help fund one-off development work (including the Investment Programme Benefits Analysis, the development of the electric vehicle/hydrogen vehicle strategy, and the scheme development for the North's railways) and support in-year expenditure. These proposals would reduce reserve levels to £4.00m by the end of 2021/22, with further draws of circa £1.00m per annum forecast in the medium-term. This approach allows us to match reserves to key pieces of activity whilst ensuring available resource does not fall below a 'floor' level of £2.00m.

We will revisit the reserve strategy, including the minimum reserve level, in light of the outcome of the Spending Review that is expected to take place in the second half of 2021.

### **Value for money**

We recognise the absolute requirement to deliver our programme of works efficiently and effectively. The procurement of goods and services from external suppliers represents a major element of our expenditure. In order to ensure value for money, we have implemented a procurement framework which requires that the procurement of goods or services includes a competitive process that is appropriate to the value and complexity of the services/products and also minimises barriers for suppliers to participate in such exercises.

### **Expenditure**

In order to deliver the activities set out in the Business Plan, we have total budgeted expenditure for 2021/22 of £78.70m. This includes £50.90m of underlying programme expenditure and £18.52m of programme contingency, bringing total programme resource to £69.42m. This is supplemented by £3.16m of expenditure on our Rail Operations functions and £6.13m net expenditure on our core operations. As a Sub-national Transport Body, we are unable to recover VAT on our purchases of goods and services.

In 2021/22 it is expected that there will be three elements of the programme budget. Programme budgets include contingency held to manage risk and exploit opportunities that may arise over the course of the year:

| <b>Programme</b>  | <b>£million</b> |
|---|-----------------|
| Northern Powerhouse Rail  | 67.00           |
| Investment Programme Benefits Analysis                                  | 0.89            |
| Integrated and Smart Travel - Complete in-progress phases and wind-down | 1.52            |
| <b>Total programme expenditure</b>                                      | <b>69.42</b>    |

The Rail Operations functions enable TfN to deliver on its statutory obligations towards the management and oversight of the North's rail franchises:

| <b>Rail Operations</b>                   | <b>£million</b> |
|--|-----------------|
| Strategic Rail Team                      | 1.80            |
| Rail North Partnership                   | 1.36            |
| <b>Total Rail Operations expenditure</b> | <b>3.16</b>     |

The operational budget covers the functions of the back, middle and front office of the organisation along with the business infrastructure. We are subject to the same regulatory environment as local and combined authorities and must discharge our responsibilities as an autonomous body. We must also act in accordance with the Memorandum of Understanding that we have with the DfT.

Accordingly, the activity carried out within these areas represents the required enabling functions familiar to all public sector organisations, but also the teams that develop and deliver upon much of our aspirations. The total value of the operational budget is £6.13m with expenditure falling as follows:

| <b>Core Operations</b>         | <b>£million</b> |
|--------------------------------|-----------------|
| Leadership                     | 0.31            |
| Finance, Procurement & Risk    | 1.01            |
| Business Capabilities          | 3.09            |
| Strategy and Policy (inc. PMO) | 2.50            |
| Major Roads                    | 0.75            |
| <b>Gross total</b>             | <b>7.67</b>     |
| Recharges to NPR programme     | (1.54)          |
| <b>Net total</b>               | <b>6.13</b>     |

## **Risk management**

We have developed risk management processes through which we identify and address the risks associated with each programme of activity. We have adopted a Risk Management Strategy using industry best practice to create a framework within which risks are identified and evaluated prior to mitigation plans being put in place. Programme and corporate risks are monitored regularly - risk is a standing item on the Audit and Governance Committee agenda, and the Corporate Risk Register is provided twice each year to the Transport for the North Board.

**44-45**

## **Measuring success: KPIs**

Our Key Performance Indicator (KPI) framework monitors and measures our progress and performance and ensures that we provide value for money. There are four measures used to monitor the performance of our programme delivery:

- project scope
- meeting programme objectives
- milestone delivery
- budget

These are reported to our boards, committees and externally through the Monthly Operating Report to demonstrate progress achieved.

The KPIs that we have adopted for 2021/22 are set out below.

**[SET OUT IN NEXT APPENDIX]**

**46-47**

**48**

**Back cover**

## KPIs for 2021/22

| Area           | KPI | Detail  | Deliver         | Responsible             |
|----------------|-----|---|-----------------|-------------------------|
| Strategic Rail | 1   | Demonstrate clear northern input in supporting and developing return to rail initiatives across the North to rebuild passenger numbers and aid economic recovery.   | Mar-22          | Strategic Rail Director |
| Strategic Rail | 2   | Deliver plans for rail hub enhancements around two major stations to maximise the potential of the network.   | Oct-21 / Feb-22 | Strategic Rail Director |
| Strategic Rail | 3   | Demonstrate meaningful and beneficial engagement for the North on rail reform within three months of publication of the Williams White Paper.   | Sep-21          | Strategic Rail Director |
| Strategic Rail | 4   | Further embed the TfN rail journey time improvement initiative with Network Rail to deliver better reliability on at least two rail routes during 2021/22.  | Mar-22          | Strategic Rail Director |
| Strategic Rail | 5   | Pursue the digital transformation of fares, ticketing and information through collaboration and the development of business cases across the North and/or through national rail reform.   | Mar-22          | Strategic Rail Director |
| Strategic Rail | 6   | Continue to use TfN's existing powers and role in Rail North Partnership to deliver the best outcomes for passengers, within the financial and legacy infrastructure constraints, by influencing train operators and major programmes including TRU and Central Manchester. | Mar-22          | Strategic Rail Director |

|                          |    |  |              |                                   |
|--------------------------|----|--|--------------|-----------------------------------|
| Northern Powerhouse Rail | 7  | Completion and submission of the Strategic Outline Case, timescale to be agreed following publication of the Government's Integrated Rail Plan.  | tbc post IRP | Northern Powerhouse Rail Director |
| Northern Powerhouse Rail | 8  | Reconfirm NPR phasing plan in response to Government's Integrated Rail Plan.   | tbc post IRP | Northern Powerhouse Rail Director |
| Northern Powerhouse Rail | 9  | Complete initial survey work and commence OBC on early accelerated projects to start construction in FY 2024/2025.   | Sep-21       | Northern Powerhouse Rail Director |
| Northern Powerhouse Rail | 10 | Initiate additional survey work and commence Outline Business Case on early accelerated projects to enable delivery partners to start construction in FY 2024/2025.  | Jan-22       | Northern Powerhouse Rail Director |
| Corporate                | 11 | Agree governance arrangements with DfT as programme transitions to the next stage.   | tbc post IRP | Chief Executive                   |
| Major Roads              | 12 | Commission the Investment Programme Benefit Analysis work and deliver the programme up to the Gateway Review.  | Sep-21       | Major Roads Director              |
| Major Roads              | 13 | Subject to gateway Review complete work on the Investment Programme Benefit Analysis which will be used as the evidence base for the next STP.   | Mar-22       | Major Roads Director              |
| Major Roads              | 14 | Produce a robust evidence base monitoring performance and types of journey on the MRN. This will support analysis of the impacts of COVID-19 to monitor and evaluate outcomes including changes in travel patterns and behaviours. | Oct-21       | Major Roads Director              |
| Major Roads              | 15 | Publish the updated Major Roads Report, following DfT publication of the national Transport Decarbonisation Plan and TfN Decarbonisation Strategy.   | Oct-21       | Major Roads Director              |

|                               |    |  |        |                                 |
|-------------------------------|----|--|--------|---------------------------------|
| Major Roads                   | 16 | Using our evidence base we will work with Highways England and DfT to identify TfN's priorities to be considered as part of DfT's Road Investment Strategy 3.  | Mar-22 | Major Roads Director            |
| Major Roads                   | 17 | Work with our partners and DfT to scope out how TfN can best support plans for an integrated electric vehicle and/or hydrogen charging infrastructure network, supporting all communities in the adoption of low and zero emission vehicles. | Mar-22 | Major Roads Director            |
| Major Roads                   | 18 | Continue to work with DfT's Acceleration Unit to ensure their awareness of the schemes identified in TfN's Economic Recovery Plan for their consideration of accelerating delivery.  | Mar-22 | Major Roads Director            |
| Strategy, Policy and Research | 19 | Consult on the draft Decarbonisation Strategy and seek adoption by the TfN Board before COP26.   | Oct-21 | Strategy and Programme Director |
| Strategy, Policy and Research | 20 | Agree a plan to adopt a new Strategic Transport Plan by 2024, and commence a new NPIER programme as a first step.  | Oct-21 | Strategy and Programme Director |
| Strategy, Policy and Research | 21 | Progress the advanced prioritisation mechanisms set out in the Northern Transport Charter, including analytical tools to allow prioritisation on a wider basis (economic, social, & decarbonisation) and independent assurance arrangements. | Mar-22 | Strategy and Programme Director |
| Strategy, Policy and Research | 22 | Consult and adopt the TfN Freight Strategy and work with the industry to agree implementation arrangements.  | Dec-21 | Strategy and Programme Director |
| Strategy, Policy and Research | 23 | Provide input into the final stages of the Union Connectivity Review and respond on its publication.   | Sep-21 | Strategy and Programme Director |

|           |    |  |  |                                |
|-----------|----|--|--|--------------------------------|
| Corporate | 24 | Develop and provide a Comprehensive Spending Review submission to Government.  | In line with timetable set by Government | Finance Director               |
| Corporate | 25 | Feed into emerging procurement practice as the UK's current 'EU style' regime is updated and look at opportunities to further increase social value.                               | Mar-22                                   | Finance Director               |
| Corporate | 26 | Implement and further develop the agreed new ways of working, to include physical office design, office and remote working, corporate and constitutional meetings and IT strategy. | Within 3 months of return to office      | Business Capabilities Director |

## Transport for the North Board

**Subject:** TfN Budget and Reserve Strategy 2021/22

**Author:** Paul Kelly, Financial Controller

**Sponsor:** Iain Craven, Finance Director

**Meeting Date:** Wednesday 24 March 2021

### 1. Executive Summary:

- 1.1 Financial year 2021/22 represents the fourth budgetary period over which Transport for the North (TfN) has existed as a statutory sub-national transport body (STB), and this paper sets out that:
- The proposed gross budget (i.e. including contingencies) for 2021/22 is £78.70m, £9.35m (11%) lower than the £88.05m set for 2020/21.
  - The proposed committed net budget (i.e. excluding contingencies) of £60.18m is £5.60m (9%) lower than the £65.78m 2020/21 net budget. This is 2% higher than the forecast outturn for 2020/21 of £58.77m.
- 1.2 As previously reported to the Transport for the North Board, TfN received a letter from the Department for Transport ("DfT") on 4 January that set out a reduced funding envelope for 2021/22 compared to TfN's CSR submission, including a 40% cut to its Core funding allocation from £10m to £6m, and the cessation of funding for the IST programme. At the same time the funding allocation for the Northern Powerhouse Rail programme was increased from £59m to £67m, although the conditionality attached to this funding (arising both from the current uncertainties regarding the IRP and the normal departmental approvals required for any commitment) means that it is not at this stage possible to be certain as to the full extent of the draw down.
- 1.3 Following the funding announcement, Transport for the North officers engaged with departmental officials to identify means of mitigating the cut to Core funding. This resulted in DfT agreeing to allow TfN the flexibility to charge £2.5m of direct and allocated costs that had previously been resourced from the Core allocation into the NPR programme. In addition, the 18 February Board agreed to a release of general fund reserves of £2.60m (subsequently refined to £2.54m) for 2021/22, allowing TfN to set a Core budget envelope of £8.6m. The following table compares the core expenditure and its associated funding on a like-for-like basis (both net and gross of programme

allocations and recharges) across the proposed 2020/21 and 2021/22 budgets.

| Comparison of Core expenditure |  | 2021/22      | 2020/21      | Var           |
|--------------------------------|--|--------------|--------------|---------------|
|                                |  | £m           | £m           | £m            |
| <b>Expenditure:</b>            |  |              |              |               |
| Core Budget (Gross)            |  | 11.03        | 12.32        | (1.29)        |
| Less: Charges and Recharges    |  | (2.49)       | (1.00)       | (1.49)        |
| <b>Core Budget (Net)</b>       |  | <b>8.54</b>  | <b>11.32</b> | <b>(2.78)</b> |
| <b>Funded by:</b>              |  |              |              |               |
| Core Funding                   |  | 6.00         | 10.00        | (4.00)        |
| Reserves                       |  | 2.54         | 1.32         | 1.22          |
| <b>Core Funding (Net)</b>      |  | <b>8.54</b>  | <b>11.32</b> | <b>(2.78)</b> |
| Direct Charge to NPR           |  | 0.95         | 0.00         | 0.95          |
| Recharges                      |  | 1.54         | 1.00         | 0.54          |
| <b>Core Funding (Gross)</b>    |  | <b>11.03</b> | <b>12.32</b> | <b>(1.29)</b> |

- 1.4 This report notes a balanced gross budget proposal for the year of up to £78.70m consisting of:

| TfN Expenditure                | £m           | %          |
|--------------------------------|--------------|------------|
| <b>Programmes:</b>             |              |            |
| Revenue Programmes             | 50.60        | 64%        |
| Capital Programmes             | 0.30         | 0%         |
| Programme Contingency          | 18.52        | 24%        |
|                                | <b>69.42</b> | <b>88%</b> |
| <b>Rail Operations</b>         |              |            |
|                                | <b>3.16</b>  | <b>4%</b>  |
| <b>Operational Areas (net)</b> |              |            |
|                                | <b>6.13</b>  | <b>8%</b>  |
| <b>Total</b>                   | <b>78.70</b> |            |

- 1.5 This expenditure will be fully funded from grants, contributions, contracted income, and brought forward reserves as follows:

| TfN Funding                            | 2021/22      | %   |
|--|--------------|-----|
|  | £m           |     |
| Core Grant                             | 6.00         | 8%  |
| Integrated & Smart Ticketing Grant     | 1.52         | 2%  |
| Transport Development Fund - NPR       | 67.00        | 85% |
| Rail Operations Grants & Contributions | 1.65         | 2%  |
| Use of Reserves                        | 2.54         | 3%  |
| <b>Total Resource</b>                  | <b>78.70</b> |     |

- 
- 1.6 As in previous years, some elements of TfN funding, principally Transport Development Funding for NPR, are dependent on Departmental approvals to release funds. Where such processes are delayed, the expenditure profiles will be managed accordingly.
- 1.7 This report sets out TfN's financial operating environment, and the budgets that will support delivery of the TfN business plan for 2021/22 and beyond. These budgets are underpinned by a reserve strategy, which serves as TfN's back-stop mitigation against financial risk.
- 1.8 As in the prior years, the budgets set out in this report have been informed by a business planning process. That process identified TfN's key strategic priorities and identified a common 'golden thread' from strategy to delivery that was maintained throughout the process. The 'golden thread' ensured that when detailed individual departmental plans were being designed and objectives set, there was a common and coordinated approach to delivery across the organisation. These common goals are what underpin the expenditure profile and budget for 2021/22.
- 1.9 The delayed funding announcement in January 2021 compressed the normal business planning and budget cycle. Based on the reduced timeline, the board established a Members Working Group ("MWG") which allowed officers to consult with Transport for the North Members regarding the development of the business plan and budget prior to reports being brought to the Board for consideration and approval. Input received from the MWG and comments from those meetings have been reflected in this report.
- 1.10 TfN will put in place specific monitoring arrangements that allow potential underspends to be identified and resources transferred between priorities (subject to grant conditions) more quickly to ensure that momentum in delivering the objectives set out in the business plan is maintained.
- 2. Recommendations:**  
It is recommended that:
- 2.1 TfN Board approves the revenue budget and capital programme as presented in this paper and Appendix 5.1.
- 2.2 TfN Board approves the reserve strategy as presented in this report.
- 2.3 TfN Board notes the Outturn Report included at Appendix 5.2.
- 2.4 TfN Board approves the Annual Treasury Management Strategy as presented in Appendix 5.3 & 5.4.

### 3. Budget 2021/22 Background and Summary

- 3.1 TfN has conducted a business planning process designed to deliver upon the objectives and key priorities that have previously been agreed with Board. These were reconfirmed and refined at the Board meetings on 14 January and 18 February 2021. Whilst the business planning process commenced in October 2020, it was significantly revised following the receipt of the funding allocation letter in January.
- 3.2 The business plan includes the programmes of activity that will deliver the key priorities, but also the role of the organisation: what it will do, and how it will do it. That business plan in turn drives the resourcing and financial plans for the organisation, resulting in the annual budget.
- 3.3 Following an iterative process, a draft budget is proposed that aligns resource to key priorities. The budget itself is differentiated between costs incurred in the delivery of programmes of activity, and the costs incurred in running the operations of TfN and meeting broader aspirations. The expenditure incurred in delivering Rail Operations functions is also presented separately, reflecting the different governance arrangements around that activity and its high profile.
- 3.4 TfN proposes a gross budget for the year of £78.70m, inclusive of expenditure slipped from 2020/21 of c.£0.6m. This represents a reduction of c.£9.35m (11%) on the gross budget adopted for financial year 2020/21. Once the budget comparators are adjusted for contingency envelopes (net budgets), TfN is proposing a decrease of £5.60m (9%) on the prior year budget excluding contingency:

| Year-on-Year Comparison         | 2021/22<br>£m | 2020/21<br>£m | Var<br>£m     | Var<br>%     |
|---------------------------------|---------------|---------------|---------------|--------------|
| <b>Programmes:</b>              |               |               |               |              |
| IST                             | 1.52          | 15.78         | (14.26)       | (90%)        |
| NPR                             | 67.00         | 59.95         | 7.05          | 12%          |
| Strategic Development Corridors | 0.89          | 1.15          | (0.26)        | (22%)        |
|                                 | 69.42         | 76.89         | (7.47)        | (10%)        |
| <b>Rail Operations</b>          | 3.16          | 2.98          | 0.18          | 6%           |
| <b>Operational Areas</b>        | 6.13          | 8.19          | (2.06)        | (25%)        |
| <b>Gross Budget</b>             | <b>78.70</b>  | <b>88.05</b>  | <b>(9.35)</b> | <b>(11%)</b> |
| Contingency Envelopes           | 18.52         | 22.27         | (3.75)        | (17%)        |
| <b>Net Budget</b>               | <b>60.18</b>  | <b>65.78</b>  | <b>(5.60)</b> | <b>(9%)</b>  |

- 3.5 The following table compares the proposed 2021/22 net budget to the forecasted outturn for 2020/21. This shows that excluding any expenditure from contingency, plans for 2021/22 show a 2% increase over this year's forecast outturn spend. Expenditure levels for 2020/21

were negatively impacted by a number of key factors, as set out in Appendix 5.2.

|                    | 21/22<br>£m  | 20/21<br>Outturn<br>£m | Var<br>£m   | Var<br>%  |
|--------------------|--------------|------------------------|-------------|-----------|
| <b>Programmes:</b> |              |                        |             |           |
| IST                | 1.52         | 8.71                   | (7.19)      | (83%)     |
| NPR                | 48.48        | 42.02                  | 6.46        | 15%       |
| IPBA               | 0.89         | 0.06                   | 0.83        | 1327%     |
|                    | 50.90        | 50.79                  | 0.10        | 0%        |
| Rail Operations    | 3.16         | 2.30                   | 0.86        | 37%       |
| Operational Areas  | 6.13         | 5.68                   | 0.45        | 8%        |
| <b>Total</b>       | <b>60.18</b> | <b>58.77</b>           | <b>1.41</b> | <b>2%</b> |

- 3.6 It should be noted that that the total budget envelope is elevated by both contingency values held to manage programme risk and meet emerging priorities, and by VAT costs that cannot be recovered (as is the case in TfN partner bodies). Irrecoverable VAT accounts for £8.30m of the net budget of £60.18m.
- 3.7 Contingency will only be drawn on if required, and currently stands at £18.52m, solely within the NPR programme. This is a flexible in-budget reserve which will be fed into the budget as certainty on requirements and costs emerge.
- 3.8 The main increase on the prior year budget principally relates to growth in the NPR programme, with a small increase in activity in the Rail Operations area.
- 3.9 In the funding letter of 4 January 2021, DfT provided an NPR allocation of £75m, of which £67m was subsequently agreed for NPR activities that would be managed by TfN (the balance of £8m will be allocated to HS2).
- 3.10 Work is ongoing between TfN, its key delivery partners (principally Network Rail) and the DfT (as co-client) to determine the NPR scope of work for 2021/22 and the associated cost. At the time of writing, budget plans had been formulated (and agreed with DfT) to a value of c.£48.48m. These plans represent work in train and new work that will require Departmental approval before it progresses. The balance of the TDF allocation of £18.52m is, for now, held in reserve reflecting that some contingency is required to manage inherent risk in the contracting, whilst a material amount of resource is required to manage likely emerging priorities that are either contingent on future events or require further development before being committed to the budget.

- 3.11 As previously noted, significant uncertainty exists in relation to the NPR programme as a result of the delayed Integrated Rail Plan announcement that is expected within the next three months. This may have a significant impact on the work that needs to be undertaken. Whilst the co-clients have adopted an approach to planning that has tried to identify work that will be consistently required across a range of IRP outcomes, there may be a requirement for a rework of both the programme business plan and budget once the IRP has been released and its implications understood. Given the scale of the programme this may have consequential impacts upon the wider organisation. More detail on the NPR budget is set out in Section 6 of Appendix 5.1.
- 3.12 The net Rail operations budget is broadly similar to the 2020/21 budget, although movements within that total are set out in Section 8 of Appendix 5.1. Discussions are ongoing with DfT to materially increase the RNP team which, if agreed, would be funded from incremental grant. As this had not been formally agreed at the time of writing, the budget has been prepared on the basis of the funded position. Any required changes will be addressed as budget revisions during the year.
- 3.13 Significant reductions on the 2020/21 budget can be seen within the IST programme and operational areas.
- 3.14 In the January funding allocation, the DfT did not award any allocation for the IST programme for 2021/22 and future years. It acknowledged that current projects would need to be completed and closed in a structured and controlled manner and agreed to fund these costs. The budget of £1.52m represents the estimated costs to conclude the individual phases of the IST programme and then close the programme down. Funding will only be requested for actual costs incurred.
- 3.15 Overall operational area expenditure is proposed at £6.13m, 25% less than last year's budget, but also 8% higher than the forecast outturn for this year. Operational area expenditure is impacted by two movements. Gross expenditure has fallen by £1.52m despite the absorption of pay inflation pressures, largely due to Covid, delayed national initiatives, the prioritisation of NPR activity and funding uncertainty leading to rescheduled work and not filling established posts. The overall saving is further increased by assigning attributable costs to the NPR programme of £1.54m (there was of £1m to the IST programme in 2020/21). This overall net decrease of £2.06m allows TfN to operate within its funding envelope. Further detail on operational expenditure is set out in Section 9 of Appendix 5.1.

- 3.16 TfN's activity will be funded from a mixture of grant, local contributions, contracted income, and brought forward reserves:

| Funding                    | 2021/22      |            |
|----------------------------|--------------|------------|
|                            | £m           | %          |
| Core Grant                 | 6.00         | 8%         |
| IST Grant                  | 1.52         | 2%         |
| NPR - TDF Grant            | 67.00        | 85%        |
| Rail Operations Grants:    | 1.65         | 2%         |
| <b>Total In-Year Grant</b> | <b>76.17</b> | <b>97%</b> |
| Use of Reserves            | 2.54         | 3%         |
| <b>Total Resource</b>      | <b>78.70</b> |            |

- 3.17 In common with previous years, the majority of TfN expenditure is dependent on the receipt of funding from the DfT, either through the formal sign-off of business cases, or the release of development or other general resource funding. TfN will only commit itself to expenditure where appropriate commitments have in turn been received from the Department.
- 3.18 The proposed draw from reserves for the year ahead is £2.54m. The drawdowns initially budgeted for 2020/21 were not thought to be required, given the impact on operational expenditure due to the Covid-19 pandemic, cost control measures adopted in response to funding uncertainty, and the prioritisation of NPR over certain Core funded TAME activity. However, the £3m in-year cut to TfN's Core funding in January resulted in a draw on the general reserve in 2020/21 that is likely to be £0.4m.
- 3.19 TfN's reserves were created from Core grant underspends in prior years when TfN was building its capacity and capability and are drawn upon in line with the reserve strategy adopted by TfN each year. The Core funding reduction announcement in January 2021 has led to an amendment of TfN's reserves policy (Section 4), but reaffirmed the need to utilise reserves to deliver a balanced budget.
- 3.20 That strategy will see a planned draw on reserves to deliver a funded budget which includes material one-off costs, including the Investment Programme Benefits Analysis, but also supports ongoing activity levels. This approach will result in general reserves of approximately £3.5m, excluding earmarked reserves, at the end of the 2021/22 financial year and is set out in more detail in Section 4.
- 3.21 As in previous years, underspends that accrue during the year may mitigate the need to draw on reserves to the extent currently forecast. In addition, in the longer term the reserves strategy, and in particular the minimum reserve level, will need to be considered against the outcome of the next CSR process, expected in the second half of 2021.

- 3.22 In preparing this budget, officers are mindful that many of the operational challenges that led to reduced Core expenditure levels in 2020/21 still remain. These include the continuing effects of Covid-19 pandemic, the lack of funding certainty beyond the year end, and the risk that key resources within TfN may be required to support emerging issues in the NPR programme. TfN will therefore put in place specific monitoring arrangements that will allow potential underspends to be identified and resources transferred between priorities to ensure that momentum in delivering the objectives set out in the business plan is maintained.

#### **4. Medium-Term Financial Strategy & Reserve Strategy**

- 4.1 Under statute, all local government bodies – including TfN – are required to operate to a locally defined reserves strategy that ensures that the organisation always holds a prudent level of reserves.
- 4.2 Such reserves enable the organisation to operate with a degree of flexibility and guard against financial shock.
- 4.3 A prudent reserve strategy is particularly important to TfN as it has few other levers to mitigate financial risk. As previously noted, unlike other northern partners TfN cannot access credit for short-term cash flow management and long-term investment, nor can it levy or precept upon a local tax-base to underwrite its operations.
- 4.4 TfN’s approach to managing financial risk therefore has to rest on two pillars:
- a) A prudent risk culture that ensures TfN limits its exposure to financial risk arising from contracting and business operations; and
  - b) A prudent reserve strategy that ensures TfN always holds a level of cash at bank to guard against residual financial shock.

Practically, this means that TfN must work in collaboration with DfT and partners when entering into multi-year and high-risk transactions to ensure that the right balance of risk share is achieved.

- 4.5 It also means that TfN’s reserve strategy must be managed in conjunction with the use of the annual Core grant allocations. As Core grant is the only discretionary resource TfN holds that can fund expenditure, it follows that financial risk must primarily be managed through this resource.
- 4.6 Following discussions with the DfT when TfN was established as a statutory body, it was been agreed that TfN would target a core cash balance of *no less than* £2m to be held as a cash reserve in any given year.

- 4.7 The minimum of £2m was considered sufficient to allow for modest draws to be made in-year to meet un-budgeted opportunities that may arise, whilst also ensuring cash remained at bank to meet both unexpected costs and cash flow fluctuations.
- 4.8 From year to year, this reserve may be drawn upon in-year, or contributions made from surpluses, with adjustments being made in following years to replenish it. TfN accumulated General Reserves significantly in excess of this value during the period when it was being set up and mobilised as a statutory body.
- 4.9 During 2020/21 the Covid-19 pandemic, displacement of activity as a result of prioritising support for NPR and cost control measures put in place to address funding uncertainty meant that instead of declining by £1.4m to £5.1m as originally budgeted, TfN's forecast year-end General Reserves would have increased by the year-end to £9.5m. However, the in-year reduction in grant of £3m means that the total reserves (including the ear marked devolution reserve) will be £6.5m.
- 4.10 As a result of the pressures set out in 4.9, TfN is therefore faced with a significant quantum of activity that has had to be reprogrammed from 2020/21 into future years, principally in relation to the IPBA work that was delayed in Q1 of 2020/21 to allow the TAME team to focus on the NPR programme, but also in relation to work that has slipped from the final quarter of 2020/21 into 2021/22. This equates to £1.5m in total that will be funded from retained reserves.
- 4.11 In addition, the 40% cut to TfN's Core funding has created a significant challenge in relation to the delivery of ongoing activity, even when the mitigations set out above have been taken into account. The current high level of retained reserves in relation to the agreed minimum level provides TfN with the ability to sustain a run rate at levels above its Core funding allocation in the short- to medium-term. It was therefore agreed by the Board on 18 February that it would release £1.0m of reserves to support the delivery of TfN's ongoing activity in 2021/22.
- 4.12 These two reserve releases are still forecast to leave TfN with total Core Grant Reserves of £3.50m by the end of 2021/22, of which £3.50m will be General Reserve. At this level the Core Grant Reserves and the General Reserve equate to 66% and 58% of current annual Core funding respectively.
- 4.13 By the end of 2021/22, TfN should be able to assess its reserves strategy, including the required minimum, in the light of longer-term certainty as to its funding (through the expected 2021 CSR) and role.
- 4.14 This approach to TfN's medium-term financial strategy is predicated on the following approach to programme expenditure:

- a. Material programme activity will be resourced from specific grants
  - b. Activity levels will be tailored to the funding available and any grant restrictions thereon
  - c. Within each major grant allocation, an element will be held as 'contingency' to mitigate inherent risk
- 4.15 The principal variables to manage through the medium-term financial strategy are therefore around the Core grant activity, and in particular how to align the reserve strategy with business plans to allow key priorities to be resourced whilst managing inflationary pressures.
- 4.16 Transport for the North has previously created a Devolved Powers Reserve, an additional £0.5m of earmarked reserves, to support the development of future devolution proposals. This is likely to be a significant piece of work but is not sufficiently developed at this stage to be included in the budget proposals.
- 4.17 TfN proposes to draw £2.54m from the General Reserve in financial year 2021/22, based on a brought forward Core Grant Reserve balance of £6.54m. The following table highlights forecast core grant requirements, resource, and the associated requirements for reserve support:

| Reserves                         | 2020/21     | 2021/22     | 2022/23     | 2023/24     |
|----------------------------------|-------------|-------------|-------------|-------------|
|                                  | £m          | £m          | £m          | £m          |
| <b>General Reserve</b>           |             |             |             |             |
| Balance b/f                      | 6.46        | 6.04        | 3.50        | 2.50        |
| Draw                             | (0.42)      | (2.54)      | (1.00)      | (1.00)      |
| Contribution                     | 0.00        | 0.00        | 0.00        | 0.00        |
| <b>Balance c/d</b>               | <b>6.04</b> | <b>3.50</b> | <b>2.50</b> | <b>1.50</b> |
| <b>Earmarked Devolved Powers</b> |             |             |             |             |
| Balance b/f                      | 0.50        | 0.50        | 0.50        | 0.50        |
| Draw                             | 0.00        | 0.00        | 0.00        | 0.00        |
| Contribution                     | 0.00        | 0.00        | 0.00        | 0.00        |
| <b>Balance c/d</b>               | <b>0.50</b> | <b>0.50</b> | <b>0.50</b> | <b>0.50</b> |
| <b>Total Core Grant Reserves</b> |             |             |             |             |
| <b>Balance b/f</b>               | <b>6.96</b> | <b>6.54</b> | <b>4.00</b> | <b>3.00</b> |
| Draw                             | (0.42)      | (2.54)      | (1.00)      | (1.00)      |
| Contribution                     | 0.00        | 0.00        | 0.00        | 0.00        |
| <b>Balance c/d</b>               | <b>6.54</b> | <b>4.00</b> | <b>3.00</b> | <b>2.00</b> |

- 4.18 Future year draws on the reserve may be affected by assumed pay and price inflation and also by one-off or cyclical development activity may be required.

- 4.19 On this current trajectory, TfN will encounter sustainability issues in the medium-term as the ability of the brought forward reserve to accommodate ongoing activity is placed under pressure. However, as noted in paragraph 3.20, TfN will perform a review of its expenditure and its reserves strategy once it has clarity with regard to its long-term funding settlement through the CSR.

**5. Options Considered:**

- 5.1 This budget is informed by the TfN 2021/22 Business Plan. Amendments to the budget would require adjustments to the Business Plan.

**6. Considerations:**

- 6.1 This draft budget report contains proposals on how to fund the 2021/22 Business Plan whilst maintaining financial stability.
- 6.2 The draft proposals include draws upon TfN's reserves.
- 6.3 This report asserts that the draft budget proposals are a prudent means of resourcing Business Plan priorities.

**7. Appendices:**

- 7.1 5.1 – 2021-22 Budget Supporting Paper  
5.2 – Forecast Financial Position at 2020/21 Outturn  
5.3 – Annual Treasury Management Strategy Report  
5.4 – Annual Treasury Management Strategy

---

**List of Background Documents**
**Required Considerations**

Please confirm using the yes/no options whether or not the following considerations are of relevance to this report.

**Equalities:**

|                         |     |           |
|-------------------------|-----|-----------|
| Age                     | Yes | <b>No</b> |
| Disability              | Yes | <b>No</b> |
| o/=Gender Reassignment  | Yes | <b>No</b> |
| Pregnancy and Maternity | Yes | <b>No</b> |
| Race                    | Yes | <b>No</b> |
| Religion or Belief      | Yes | <b>No</b> |
| Sex                     | Yes | <b>No</b> |
| Sexual Orientation      | Yes | <b>No</b> |

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Equalities           | A full impact assessment has not been carried out because it is not considered necessary for this report | Paul Kelly                 | Iain Craven     |

**Environment and Sustainability**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b>         | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|------------------------------|--|----------------------------|-----------------|
| Sustainability / Environment | A full impact assessment has not been carried out because it is not considered necessary for this report. Financial sustainability considerations are highlighted throughout the report. | Paul Kelly                 | Iain Craven     |

**Legal**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>                                    | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Legal                | Legal implications are covered within the report. |                            | Julie Openshaw  |

### **Finance**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Finance              | The financial implications have been considered and are included in the report. | Paul Kelly                 | Iain Craven     |

### **Resource**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Resource             | Resource Planning is an integral element of the annual business planning process and resource plans for all business areas have been identified and agreed as part of this process. The net impact of the TfN's allocated budget for FY2021/22 and outcome of the business planning process is a reduction of 24 established posts (circa 15% reduction). | Stephen Hipwell            | Dawn Madin      |

### **Risk**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Risk                 | A risk assessment has been carried out and the key risks are included in the report. | Haddy Njie                 | Iain Craven     |

**Consultation**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Consultation         | A consultation has not been carried out because it is not considered necessary for this report. | Paul Kelly                 | Iain Craven     |

# Transport for the North Board

**Subject:** Appendix 5.1: TfN Budget and Reserve Strategy 2021/22

**Author:** Paul Kelly, Financial Controller

**Sponsor:** Iain Craven, Finance Director

**Meeting Date:** Wednesday 24 March 2021

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

1.1 This appendix provides a more detailed analysis of the proposed draft 2021/22 budget.

## **2. Operating Environment**

2.1 TfN's financial affairs are shaped by its operating environment. Parameters are set by the way in which the organisation is funded, and the practical consequences of certain limitations that are not common to local and combined authorities.

2.2 These limitations affect the organisation's approach and ability to access funds to manage risk. Unlike most partner authorities, TfN cannot access credit in the form of loans for capital investment and overdrafts to manage short-term cash flow fluctuations. In addition, it cannot levy or precept upon local tax bases to manage longer-term requirements as a council or local transport authority would.

2.3 These limitations mean that careful management is required in order to avoid insolvency risk: that is, ensuring TfN maintains sufficient cash and the resource to meet liabilities. The need for careful management is increased by TfN's inability to recover VAT, which means that it is exposed to higher costs without an associated increase in its resources.

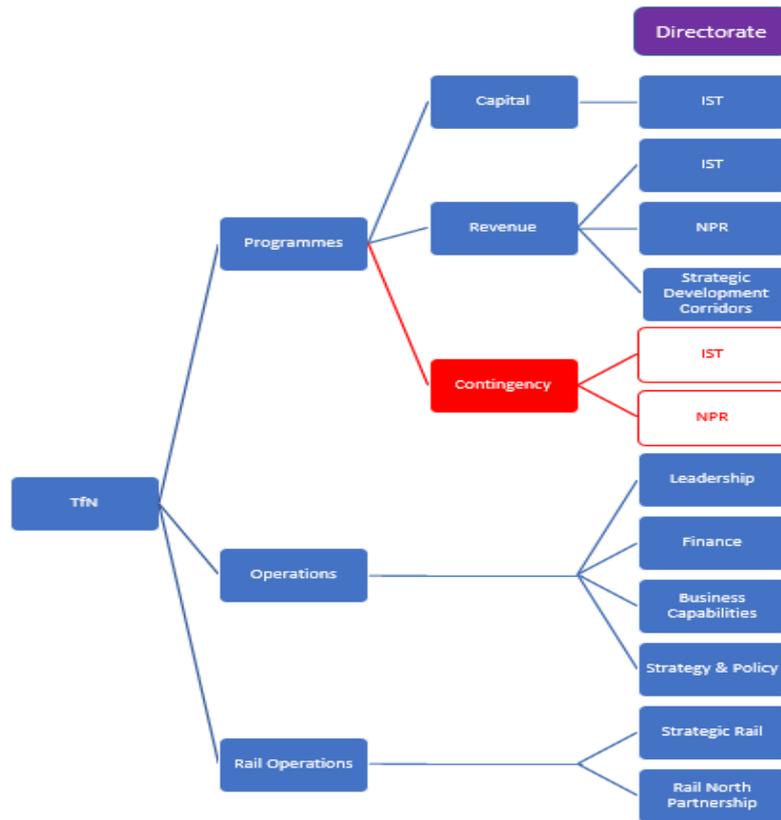
2.4 These issues emphasise the importance of risk management when developing budgets, particularly the need for focused cost transparency, and alignment of costs to funding streams. In particular, it underscores the importance of managing resource to ensure TfN protects funding streams which afford TfN flexibility.

2.5 Due to the conditions placed upon the discrete grants which fund programme activity, discretionary resource is limited to TfN's annual Core grant (reduced to £6m in 2021/22), reallocation of attributable costs to programmes and the deployment of the reserve created from underspends against this grant in prior years. This grant, and the reserves that flow from it, must also be used to mitigate the insolvency risk to which TfN could otherwise be exposed.

- 2.6 This approach is complemented by the manner in which TfN manages its discrete grant streams. 'Discrete' grant streams refer to funding which is restricted to certain activity. For high value and sensitive programmes, TfN allocates part of its grant envelopes as 'contingency'. Contingency is budgeted for separately, but not monitored against in the programme budgets. As calls are made by the programmes on contingency, resource is drawn down through budget variations and then reported and monitored against. This allows TfN to manage risk in its programmes through in-year grant, ensuring that resource is not overcommitted.

### **Budget Structure**

- 2.7 TfN's budgets consist of its body of capital and revenue delivery programmes and its core operations. For budgetary purposes, a differentiation is drawn between operational and programme costs, based upon the scale of the activity and its funding source. Rail Operations activity is also separately identified to reflect the different governance and funding arrangements for that area, and its high profile.
- 2.8 Programme expenditure is in support of discrete areas of capital and revenue activity that often attract ring-fenced funding. The programmes are generally materially larger than the underlying cost base of the wider organisation which supports them. Contingency held to manage programme activity risk and support emerging priorities is held discretely, to avoid distorting budget forecasts.
- 2.9 Organisational operational expenditure consists of those costs incurred in the delivery of the ongoing business of TfN, the infrastructure required of any public body, and the supporting functions that enable TfN to deliver upon its programmes of activity and broader aspirations.
- 2.10 'Rail Operations' activity reflects the work of the Rail North Partnership team who manage the northern rail franchises on behalf of the Secretary of State and who are hosted by TfN, and TfN's Strategic Rail team which advises the Rail North Committee on franchise matters.
- 2.11 Broadly, the budgetary structure of the organisation can be presented as follows:



- 2.12 Drawing a differentiation between operations and programmes in this manner assists TfN in the management of its financial affairs for three principal reasons.
- 2.13 Primarily, the distinction allows for better cost transparency. It is important for the organisation to see the true costs of running programmes of activity to allow it to both understand and manage those costs.
- 2.14 In addition, the scale of the NPR programme is sufficiently large that if reported without distinction to the operational costs it could affect the visibility of important issues within the operations element of the budget. That is, a relatively immaterial variance of 1% in the programme area would be equivalent to a material variance of c.10% in the operational area.
- 2.15 Finally, the budget structure reflects how the areas of activity are funded. Programmes of activity are principally funded by discrete grant awarded by DfT. That grant is awarded for pre-approved activity and is drawn down on a need basis. Conversely, the varied business functions of TfN within the operations element of the budget structure must be funded from the finite £6m Core grant, over which TfN has discretion on its application, its historic reserves, and the ability to assign attributable costs to programmes.

- 
- 2.16 There is a fundamental assumption that the current business infrastructure of TfN has been established to deliver both operational and programme activity. Any material reduction to the scope of work within this assumption could require significant changes to the business infrastructure.
- 2.17 TfN has also opted to separately identify the Rail Operations budgets from other activity to recognise the discrete governance and funding arrangements around that activity.

### **3. Budget 2021/22 Development**

- 3.1 The 2021/22 draft budget is driven by the Business Plan.
- 3.2 As set out in the Business Plan Report to this meeting, the proposed activity reflects a number of changes arising from the 2021/22 funding allocation. Whilst it is broadly consistent in its objectives and key themes with prior years' activity it has been shaped by the cessation of IST funding and the impact of Core funding cuts.
- 3.3 The 2021/22 draft budget was derived following a number of year-on-year issues that aggregate to a wider sustainability challenge, notably:
- a) Core funding allocation for 2020/21 was reduced in January from £10m to £7m, and the 2021/22 allocation reduced to £6m;
  - b) How to deploy "single use" carried forward reserves to give the most beneficial impact on TfN's objectives, whilst managing the underlying cost base in the context of the reduced Core funding allocation;
  - c) How to fund programme development, principally IPBA, costs not resourced from discrete funding; and,
  - d) How to balance basic organisational requirements with the need to target resource at emerging key development objectives such as sustainable development, carbon reduction, and the climate crisis.
- 3.4 These issues contribute to cost pressures across the organisation that are not met by the movement in the Core grant allocation for 2021/22.
- 3.5 To mitigate this issue TfN has adopted processes for identifying where new costs are incremental to the growth of programme activity, enabling those costs to be recharged into discrete grant streams (where grant conditions allow). Recharging costs in this manner is consistent with existing accounting policies and allows TfN to properly resource programme activity and also see the true cost of delivery. This process has now been extended to cover the NPR Programme, including both direct and overhead costs that can be attributed to it.
- 3.6 As part of the annual budget exercise, TfN also isolates 'one-off' non-repeating costs and activity that will fall out of the budget once

completed. This allows TfN to better see its underlying structural cost-base, allowing for clearer medium-term planning.

- 3.7 Recharges of costs into discrete grants and the isolation of non-repeating expenditure allows TfN to propose a balanced 2021/22 budget.
- 3.8 This report proposes that the budget is resourced through a mixture of in-year grant, local contributions, contracted income, and brought forward reserves.
- 3.9 In-year grant reflects existing commitments made by the Department for Transport, commitments that we forecast may be made, and grant that will be made available to TfN contingent on meeting funding criteria. Where contingent grant is not made available, or assumed grant is not forthcoming, activity will not ordinarily be undertaken with costs being deferred or removed.
- 3.10 Use of brought forward reserves recognises that TfN's cost-base retains a number of one-off or time limited costs that will not repeat into the future. In addition, TfN intends to use an element of its brought forward reserves to fund ongoing activity in the short- to medium-term as set out in Section 4 of the main report. Using reserves is sustainable in the short-term and allows the organisation to protect key elements of TfN's approach to quality evidenced-based decision-making and resource the delivery of organisational objectives.

#### **4. Programme Budgets**

- 4.1 The programme budgets include the discrete areas of activity where projects are reaching their conclusion (in the case of IST) or working towards business case submission and/or approval.
- 4.2 The 2021/22 budget includes three thematic elements of the programme budget:
  - a) Completion and wind down costs of Integrated & Smart Ticketing (IST);
  - b) Northern Powerhouse Rail (NPR); and
  - c) Investment Programme Benefits Analysis.
- 4.3 Activity can be further broken into revenue and capital programmes. It is TfN's policy to capitalise expenditure on programmes that are past outline business case and for which there is a reasonable assumption that the programme of activity will go on to deliver assets (either intangible or tangible) which will provide economic benefit over a period greater than one year.

- 4.4 IST intangible assets are expected to be transferred out of TfN's accounts to their eventual end user in 2021/22. This will be addressed within the 2021/22 Statutory Accounts.
- 4.5 Programme costs are presented at the committed level, and then the committed plus contingency level. The committed level reflects the current view on the level of effort and associated cost required to deliver the activity. The contingency reflects the adjustments that are made in line with governmental guidelines on managing risk in innovative projects, or programme funding set aside to address emerging priorities. The differentiation between the two is drawn simply because adding contingency into general budgets when there are no current plans to draw upon it risks distorting financial reporting, leading to a misalignment between financial planning and business planning.
- 4.6 Committed gross programme expenditure for 2021/22 totals £69.42m, which equates to 88% of TfN's overall draft proposed budget:

| 2021/22 | Expenditure | Committed    | Cont'y       | Total Budget |
|---------|-------------|--------------|--------------|--------------|
|         | Type        | £m           | £m           | £m           |
| IST     | Revenue     | 1.22         | 0.00         | 1.22         |
|         | Capital     | 0.30         | 0.00         | 0.30         |
|         |             | <b>1.52</b>  | <b>0.00</b>  | <b>1.52</b>  |
| NPR     | Revenue     | 48.48        | 18.52        | 67.00        |
| IPBA    | Revenue     | 0.89         | 0.00         | 0.89         |
|         |             | <b>50.90</b> | <b>18.52</b> | <b>69.42</b> |

- 4.7 The NPR programme includes a contingency of £18.52m. Contingency is required to mitigate against the risk of activity costing more than forecast and to allow the programmes to react to opportunities that arise. This is particularly pertinent for expansive projects such as NPR where there are likely to be both requirements to flex development work to react to events and opportunities and for resource to manage contractual risk.
- 4.8 The level of NPR contingency held is developed and agreed in collaboration with DfT through the co-client budget arrangements. Within the NPR budget, a material amount of available in-year grant is held uncommitted to reflect that the opportunity may arise to accelerate certain priority workstreams. Uncommitted resource is earmarked to this activity to ensure that should approvals for the activity be forthcoming, the resource is available to deploy without displacing in-train activity.
- 4.9 Year-on-year the programme areas have seen significant internal changes, but at an aggregated level the total level of net expenditure (exclusive of contingency envelopes) decreased by 7% as reductions in

IST and Investment Programme Benefits Analysis expenditure offset the increase in NPR activity:

| TfN Programmes         | 2021/22<br>£m | 2020/21<br>£m | Var<br>£m     | Var<br>%    |
|------------------------|---------------|---------------|---------------|-------------|
| IST                    | 1.52          | 9.69          | (8.17)        | (84%)       |
| NPR                    | 48.48         | 43.78         | 4.70          | 11%         |
| IPBA                   | 0.89          | 1.88          | (0.99)        | (52%)       |
| <b>Net Expenditure</b> | <b>50.90</b>  | <b>55.35</b>  | <b>(4.45)</b> | <b>(8%)</b> |

- 4.10 IST and NPR programmes will be funded from discrete grants, whilst the IPBA will be funded from brought forward reserves that have arisen from prior year underspends on Core grant funded activity.
- 4.11 The proposed use of reserves reflects an opportunity to match this one-off source of revenue against one-off costs, notably the development work in relation to the Investment Programme Benefits Analysis work, as well as the decision in the short- to medium-term to use TfN's accumulated reserves to support ongoing activity.
- 4.12 The table usefully highlights that the programme areas are almost entirely funded from discrete grant. This reflects that TfN has relatively little flexible resource, relying upon earmarked resource to fund major programmes of activity.

## 5. Integrated & Smart Travel (IST)

- 5.1 In the 4 January 2021 funding allocation, TfN was not awarded any allocation for IST programmes for 2021/22 and future years. DfT has acknowledged that current programmes would need to be wound down in a structured and controlled manner and agreed to fund these costs. The budget of £1.52m represents the estimated costs to conclude the individual phases of the IST programme and includes an estimate for closure costs. Funding will only be requested for actual costs incurred.
- 5.2 The IST budget comprises both revenue and capital activity. Revenue activity consists of activity that cannot be capitalised, such as marketing, non-apportionable staffing costs, and revenue grants that are provided to third parties to support their operations. Capital activity consists of grant awards to third parties for their asset purchases and development, and asset purchases and development where TfN will retain control (at least in the short term) of those underlying assets. IST assets are expected to be under the control of TfN at 31 March 2021, but to be transferred to future owners during the course of 2021/22.
- 5.3 All these costs are charged into discrete IST grant awarded by DfT. This grant comprises revenue and capital allocations reflecting the different types of expenditure.

- 5.4 The IST programme's cost can be shown by the individual phases of activity. The table below shows the forecast cost of activity per phase:

| IST Programme         | 2021/22     |     |
|-----------------------|-------------|-----|
|                       | £m          | %   |
| Phase 1               | 0.48        | 32% |
| Phase 2               | 0.20        | 13% |
| IST Programme Support | 0.84        | 55% |
|                       | <b>1.52</b> |     |

- 5.5 These costs can then be split between revenue and capital expenditure designations:

| IST Programme (No Contingency) | Revenue     | Capital     | Total       |
|--------------------------------|-------------|-------------|-------------|
| Phase 1                        | 0.19        | 0.29        | 0.48        |
| Phase 2                        | 0.20        | 0.01        | 0.20        |
| IST Programme Support          | 0.84        | 0.00        | 0.84        |
|                                | <b>1.22</b> | <b>0.30</b> | <b>1.52</b> |

- 5.6 Phase 1 – The project is largely delivered, but there are some residual items that will be delivered in 2021/22. These include:
- Agreed software updates for ticket gates and a mobile solution whilst this is being implemented;
  - Final payments for PVals and the associated civils work; and
  - Contracted operational payments.
- 5.7 Phase 2 – The budget includes licences and support costs until TfN has transferred the assets to their ultimate owner.
- 5.8 Programme support costs include the following items:
- Part of the Leeds office lease until 30 September 2021
  - Staff costs to deliver the programme activities and an estimate of the costs of closing the programme.

## 6. Northern Powerhouse Rail (NPR)

- 6.1 The resource made available to NPR from the DfT reflects a significant increase from earlier years: rising from £59m in 2020/21 to £67m in 2021/22, although the actual amount drawn down in 2020/21 is likely to be c.£42m.
- 6.2 TfN receives this resource as Transport Development Fund (TDF) grant, with the use of the resource being managed through a co-client mechanism. Under this mechanism there is a budget holder function performed by the Department, with line item level expenditure being approved via funding letters. TfN cannot access TDF grant without

---

prior approval of all expenditure requests from the Departmental budget holder.

- 6.3 For budgeting purposes, it has been assumed that £67m will be made available to TfN. TfN's NPR aspirations are further supported by TDF resource of £8m that the department will directly disburse to HS2 in 2021/22 for related activity. TfN does not control or receive that resource, so it is not included in this budget.
- 6.4 A significant change in the 2021/22 budget, with the agreement of the department, has allowed TfN to allocate to the NPR Programme costs that were previously resourced from Core funding. These include the £0.95m core grant contribution made in 2020/21 towards the NPR management team and an attributable share of central overhead costs of £1.54m.
- 6.5 For budget planning purposes, the NPR budget is split between items that will be committed to the budget (subject to 6.7) and a sum of resource that will be held in contingency as an effective uncommitted reserve. Within that reserve, resource will, in some cases, be earmarked to known issues and aspirations. This arrangement reflects the nature of the co-clienting arrangement in relation to the NPR programme, and the need to agree and fund activity as the year progresses.
- 6.6 Retaining a significant amount of resource as uncommitted reserve at this stage is both prudent (noting the inherent risk in some of the major contracting and the opportunities that may emerge for acceleration of activity) but also reflects the reality of decision making in the co-client arrangement.
- 6.7 In particular, it is considered prudent to hold resources in reserve whilst the co-clients consider the wider programme once the outcome of the IRP is fully understood. As previously noted, significant uncertainty exists in relation to the NPR programme as a result of the delayed Integrated Rail Plan announcement that is expected within the next three months. This may have a significant impact on the work that needs to be undertaken. Whilst the co-clients have adopted an approach to planning that has tried to identify work that will be consistently required across a range of IRP outcomes, there may be a requirement for a rework of both the programme business plan and budget once the IRP has been released and its implications understood.
- 6.8 Earmarking contingency to expected issues in this manner set out below helps to ensure that the co-clients do not overcommit resource at the expense of emerging issues that are deemed likely to arise, but around which there is insufficient certainty at this stage to include in the committed budget.

- 6.9 The NPR budget is accordingly presented in terms of committed budget around thematic workstreams and the uncommitted contingency that is held to opportunity and manage risk:

| NPR                                | 2021/22<br>£m |
|------------------------------------|---------------|
| <b>Committed Budget:</b>           |               |
| Programme Development              | £13.61        |
| Network Rail Studies               | £28.80        |
| Programme Support                  | £4.69         |
| Core Team                          | £1.38         |
|                                    | <b>£48.48</b> |
| <b>Uncommitted Contingency:</b>    |               |
| <u>Earmarked Resource</u>          |               |
| Network Rail                       | £6.84         |
| Infrastructure Development Partner | £0.48         |
|                                    | <b>£7.32</b>  |
|                                    |               |
| Unearmarked Resource               | <b>£11.20</b> |
|                                    |               |
|                                    | <b>£67.00</b> |

- 6.10 Should requirements for the deployment of contingency emerge, the budget will be flexed at the normal re-forecast Revision points. However, should the co-clients be able to deliver the Business Plan outputs within the assumed £67m TDF envelope, resource will be redeployed at the Department's discretion. This reflects both TfN's commitment to delivering on its aspirations in the most cost-effective manner and the budget control the department holds over the application of the resource.
- 6.11 Unlike previous years, the TDF programme is not supplemented with Core grant resource of £0.95m. In 2021/22 this cost has been directly budgeted within the TDF funded programme, freeing up this resource to support other activity.
- 6.12 The pace at which the co-clients can determine the work-packages for the coming year will determine how quickly activity can be delivered.

## **7. Investment Programme Benefits Analysis (IPBA)**

- 7.1 The IPBA work will provide a quantified understanding of the Investment Programme's social, environmental and economic benefits and support TfN Board in recommending policy and investment priorities, as statutory advice to the Secretary of State for Transport.

- 7.2 This activity was originally intended to be delivered within the 2020/21 business plan. However, during the year a decision was taken to defer this activity into 2021/22.
- 7.3 The IPBA work does not attract discrete development funding at this time, and so serves as a good example of TfN's need to maintain the ability to draw upon its Core grant funding to resource material development costs.
- 7.4 For 2021/22, it is proposed that the activity is resourced from brought forward reserves that have arisen from prior year underspends on Core grant funded activity.

## 8. Rail Operations:

- 8.1 Rail Operations activity consists of the work undertaken by the Strategic Rail team and the Rail North Partnership team in collaboration with DfT. The Strategic Rail Team has included provision for a senior role, supported by a consultancy budget, to support Smart Travel and Fares Strategy. This will allow TfN to retain an element of both capability and capacity in relation to Integrated and SMART Travel after the closure of the IST programme.
- 8.2 This work is centred on discharging TfN's statutory obligations towards the oversight and advice provided to the Secretary of State for Transport on the northern rail franchises (currently managed via OLR / ERMA's).
- 8.3 The Rail Operations budget has seen year-on-year increases as additional resource has been recruited to support these functions. Discussions are ongoing with DfT to materially increase the RNP team which, if agreed, would be funded from an incremental grant. As this had not been formally agreed at the time of writing, the budget has been prepared on the basis of the funded position. Any required changes will be addressed as budget revisions during the year.
- 8.4 Expenditure has been budgeted at £3.16m, representing an increase of £0.18m, or 6% on the prior year:

|                             | 2021/22     | 2020/21     | Var         | Var       |
|-----------------------------|-------------|-------------|-------------|-----------|
| Rail Operations             | £m          | £m          | £m          | %         |
| Strategic Rail Team         | 1.80        | 1.39        | 0.41        | 30%       |
| Rail North Partnership Team | 1.36        | 1.59        | (0.23)      | (14%)     |
|                             | <b>3.16</b> | <b>2.98</b> | <b>0.18</b> | <b>6%</b> |

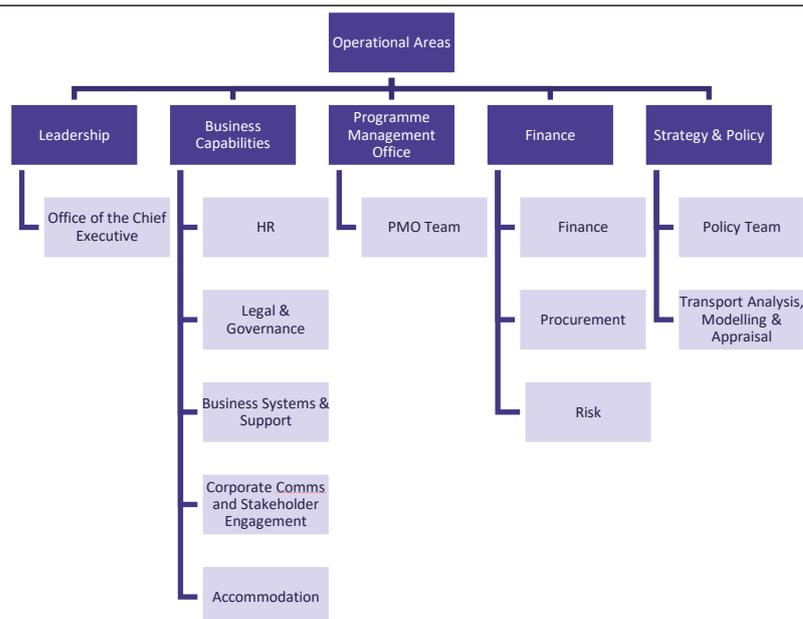
- 8.5 Rail Operations activity is funded from a combination of DfT grant award, local contributions from TfN partners, contracted income, and TfN Core Grant contributions.

| Rail Operations     | 2021/22<br>£m | 2020/21<br>£m | Var<br>£m   | Var<br>%  |
|---------------------|---------------|---------------|-------------|-----------|
| DfT Grant           | 0.69          | 0.98          | (0.29)      | (30%)     |
| Local Contributions | 0.63          | 0.64          | (0.01)      | (2%)      |
| Core Grant          | 1.51          | 1.00          | 0.51        | 52%       |
| Contracted Income   | 0.33          | 0.36          | (0.03)      | (9%)      |
|                     | <b>3.16</b>   | <b>2.98</b>   | <b>0.18</b> | <b>6%</b> |

- 8.6 The variance in the DfT Grant line above reflects the Blake Jones posts that were included in the budget but not funded by the department and therefore not subsequently recruited. The increase in TfN Core grant support reflects the additional resources required in year to deliver business plan aspirations, including scheme development and the response to the Williams Review.
- 8.7 Contracted income relates to the billable time of TfN officers recruited to deliver work on behalf of North Yorkshire County Council for the Esk Valley line reopening, and those officers who will be funded via a contract-for-services with Network Rail for TRU activity.

## 9. Operational Areas

- 9.1 The operational budget covers the functions of the back, middle, and front office of the organisation along with the business infrastructure.
- 9.2 TfN is subject to the same regulatory environment as local and combined authorities and must discharge its responsibilities as an autonomous body. It must also act in accordance with the TfN/DfT Memorandum of Understanding and its Grant Funding Agreements.
- 9.3 Accordingly, the activity carried out within these areas represents the required enabling-functions familiar to all public-sector organisations, but also the teams that develop and deliver upon many of TfN's aspirations. This includes the Policy team that defines TfN's strategic vision; the Corporate Communications and Stakeholder Engagement team that supports the North's ability to speak with one voice; and the Transport Analysis, Modelling and Economics (TAME) team that underpins TfN's commitment to evidenced-based decision-making.
- 9.4 The operational area budget structure can be shown as follows:



9.5 In response to the reduction in core grant funding, all budget holders were asked to critically review their business plans and associated cost base. The outcome of this process has resulted in gross expenditure proposed for the operational areas of £7.67m, of which £1.54m will be recharged into the NPR programme. This represents a reduction in gross expenditure of £1.52m (16%) and a reduction in net expenditure after programme recharges of £2.06m.

9.6 A budget provision of £0.14m has been incorporated within the Finance directorate to provide for risks that may emerge during the year. As the likelihood and probability of risks diminish with time the provision will be considered to fund emerging opportunities.

| Operational Areas        | 2021/22<br>£m | 2020/21<br>£m | Var<br>£m     | Var<br>%     |
|--------------------------|---------------|---------------|---------------|--------------|
| Leadership               | 0.31          | 0.32          | (0.01)        | (2%)         |
| Finance                  | 1.01          | 1.35          | (0.34)        | (25%)        |
| Business Capabilities    | 3.09          | 3.78          | (0.69)        | (18%)        |
| Strategy & Policy        | 2.51          | 3.02          | (0.52)        | (17%)        |
| Major Roads              | 0.75          | 0.73          | 0.03          | 3%           |
| <b>Total Expenditure</b> | <b>7.67</b>   | <b>9.19</b>   | <b>(1.52)</b> | <b>(17%)</b> |
| Recharges to Programmes  | (1.54)        | (1.00)        | (0.54)        | 54%          |
| <b>Net Expenditure</b>   | <b>6.13</b>   | <b>8.19</b>   | <b>(2.06)</b> | <b>(25%)</b> |

9.7 The Finance Directorate budget has been reduced by £0.34m, reflecting the removal of a provision for development activity associated with the ERP system (£0.26m) and a reduced requirement for external professional services.

- 9.8 The Business Capabilities budget has fallen by £0.69m. This is mainly due to reductions within Stakeholder Engagement and Human Resources (£0.33m and £0.23m respectively), partly reflecting new ways of working. In addition, expected external events expenditure within Stakeholder Engagement has reduced by £0.1m and the requirement for external communications and design has similarly reduced by £0.1m as a result of work being brought inhouse. Staff and staff related expenditure is reduced by £0.15m within Human Resources, mainly reflecting lower recruitment fees.
- 9.9 Within the Strategy and Programmes Directorate there has been a £0.52m reduction in budgeted gross expenditure, the majority of which is within the modelling team. This in part reflects the focus on NPR and the IPBA, and that the resource and costs associated with supporting NPR are directly assigned to the programme.
- 9.10 The lower expenditure requirement within Programme Management Office (£0.18m reduction) predominantly reflects the removal of two posts.

| Strategy and Policy Directorate | 2021/22<br>£m | 2020/21<br>£m | Var<br>£m     | Var<br>%     |
|---------------------------------|---------------|---------------|---------------|--------------|
| Policy Team                     | 0.89          | 0.92          | (0.03)        | (3%)         |
| Modelling Team                  | 0.74          | 1.04          | (0.30)        | (29%)        |
| Economic Appraisal Team         | 0.74          | 0.75          | (0.01)        | (1%)         |
| Programme Management Office     | 0.14          | 0.32          | (0.18)        | (55%)        |
|                                 | <b>2.51</b>   | <b>3.02</b>   | <b>(0.52)</b> | <b>(17%)</b> |

- 9.11 As the NPR Programme continues to develop and grow in both complexity and basic metrics such as headcount and funding, the operational areas will need to adjust their levels of service to ensure they can continue to offer the required level of support
- 9.12 The increase in recharges in 2021/22 over the prior year reflects the net position arising from the wind down of the IST programme, to which £1m of recharges were allocated in 2020/21, and the recharge of attributable costs to the NPR programme.

## Transport for the North Board

**Subject:** Appendix 5.2: Forecast Financial Position at 2020/21  
Outturn

**Author:** Paul Kelly, Financial Controller

**Sponsor:** Iain Craven, Finance Director

**Meeting Date:** Wednesday 24 March 2021

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

1.1 This appendix provides a brief summary of the forecast financial position of TfN as at the outturn of financial year 2020/21.

### **2. Executive Summary:**

2.1 TfN forecasts that over the course of financial year 2020/21 it will have incurred expenditure of £58.77m set against an opening committed budget (i.e. excl. contingency) of £65.78m, generating a £7.01m underspend.

2.2 TfN's performance against budget has been affected by four major factors in the year:

- i. the Covid-19 pandemic;
- ii. the funding uncertainty caused by the postponement of the original spending review and the subsequent late notification of its funding allocation for 2021/22;
- iii. delays to IST business case approvals and the subsequent decision to cease funding and therefore close down the IST programme; and
- iv. the need to focus TfN modelling resources on the NPR programme.

### **3. Budget Summary:**

3.1 TfN's gross budget for financial year 2020/21 was £88.05m, of which £22.27m was contingency. TfN monitors financial performance against the net budget – that is, the budget excluding contingency envelopes. The net budget for 2020/21 was £65.78m.

3.2 Over the course of the year TfN has formally revised its budget twice: after quarter 1, and again after quarter 2. A reforecast was also completed at the end of quarter 3, although that was not submitted for approval due to the timing and substance of the of the funding letter

received from DfT in January. A further reforecasting exercise was conducted in parallel to the 2021/22 budgeting exercise.

- 3.3 TfN's performance against budget has been affected by four major factors in the year:
- i. the Covid-19 pandemic;
  - ii. the funding uncertainty caused by the postponement of the original spending review and the subsequent late notification of its funding allocation for 2021/22;
  - iii. delays to IST business case approvals and the subsequent the decision to cease funding and therefore close down the IST programme; and
  - iv. the need to focus TfN modelling resources on the NPR programme
- 3.4 The move to full remote working shortly before the beginning of the financial year has directly driven cost reductions in several areas, including travel and stakeholder engagement. The pandemic has had a further impact on expenditure in a number of other areas, notably policy development and modelling and analysis where it has impacted on our ability to usefully undertake activity (for example work surveying travel patterns and customer experience has been deferred). Budget Revision 1 assumed a return to the office in the second half of the year. However, by Revision 2 it was accepted that this was unlikely until the new financial year.
- 3.5 TfN is constituted, and is required to function, as a standalone statutory entity. As members will be aware, TfN has no revenue raising powers, and is almost entirely funded by grants from DfT. Prior to the funding letter that was received at the beginning of January, TfN had very limited certainty with regard to its funding for the 2021/22 budget year. This impacted particularly on core funded activity, where TfN instituted a regime of cost control which reined back on commitments that ran into next year. In addition, a vacancy management process was put in place which resulted in c.15% of TfN posts being vacant by the end of the year.
- 3.6 The original budget included £1.15m for the completion in year of what is now the IPBA. This work was removed from Revision 1 as the decision was made that the TAME resources needed to deliver the assignment should focus on the modelling required to support the NPR programme.

3.7 The following table highlights these movements:

|   | Base<br>£m   | Forecast 1<br>£m | Forecast 2<br>£m | Outturn<br>£m |
|---|--------------|------------------|------------------|---------------|
| Core Operations                         | 8.19         | 8.51             | 7.21             | 5.68          |
| Rail Operations                         | 2.98         | 2.82             | 2.46             | 2.30          |
| Strategic Development<br>Corridors      | 1.15         | 0.07             | 0.06             | 0.06          |
| NPR                                     | 43.78        | 47.31            | 47.62            | 42.02         |
| IST                                     | 9.69         | 9.73             | 9.77             | 8.71          |
| <b>Net total (excl<br/>contingency)</b> | <b>65.78</b> | <b>68.44</b>     | <b>67.12</b>     | <b>58.77</b>  |
| Contingency                             | 22.27        | 18.06            | 9.05             | 0.00          |
| <b>Total</b>                            | <b>88.05</b> | <b>86.50</b>     | <b>76.17</b>     | <b>58.77</b>  |

- 3.8 The estimated net outturn of £58.77m is a shortfall of £7.01m compared to the original budget. This was caused by a number of underspends across Core activity (£2.43m), NPR (£1.76m), SDCs (£1.09m), IST (£0.97m) and Rail Operations (£0.67m). It is notable (as set out above) that the impact of Covid 19, funding uncertainty, and the need to focus on NPR fell most heavily on Core funded activity (including the SDC work).
- 3.9 At a gross level (i.e. including contingency), the reduction of £10.33m between Revision 1 and Revision 2 was principally due to the deferral of £8.50m of NPR expenditure into 2021/22 that was previously identified as specific contingency for activity that was intended to be carried out in 2020/21. This includes amounts for ground investigation works (£3.60m), NR Gap Analysis / Sequencing activity (£4.25m) and modelling (£0.65m). Whilst there was a marginal increase in committed NPR work, this was offset by reductions in the IST forecast as a result of delays to business case approvals.
- 3.10 The further gross reduction of £17.40m between the Revision 2 total and the estimated outturn position of £58.77m was also largely driven by NPR where, in addition to the removal of £3.83m of unrequired contingency there was also a £5.60m reduction in the committed budget for the work required (principally by NR) to deliver the SOC. This effect was exacerbated by further shortfalls of £1.45m in Core expenditure and £6.28m in IST, including £5.22m of contingency.
- 3.11 Changes to expenditure forecasts affect TfN's funding position. In the majority of cases, where TfN underspends against its budget its funding position is simply corrected by drawing down on less government grant. However, when underspend was due to be funded from TfN's Core Grant underspend will flow through to reserves. These reserves are then available for future deployment, being matched against slipped activity or deployed to meet anticipated shortfalls

between core expenditure (net of recharge to programmes) and funding allocations.

#### 4.0 Periods 1-10 Financial Performance

4.1 TfN's financial performance up to the end of January, measured against the original budget, is detailed below:

|                                 | Actuals       | Budget        | Variance     | Variance   |
|---------------------------------|---------------|---------------|--------------|------------|
|                                 | £m            | £m            | £m           | %          |
| Integrated and Smart Ticketing  | £8.20         | £8.76         | £0.55        | 6%         |
| Northern Powerhouse Rail        | £34.00        | £35.60        | £1.61        | 5%         |
| Strategic Development Corridors | £0.04         | £0.70         | £0.66        | 94%        |
| <b>Programmes</b>               | <b>£42.24</b> | <b>£45.05</b> | <b>£2.81</b> | <b>6%</b>  |
| Rail Operations                 | £1.99         | £2.51         | £0.52        | 21%        |
| Operational Areas               | £4.37         | £6.44         | £2.07        | 32%        |
|                                 | <b>£48.60</b> | <b>£54.01</b> | <b>£5.41</b> | <b>10%</b> |

4.2 Over the year to-date a number of issues have been prevalent. These include:

- Underspend on the IST programme due to delays to business case approvals and the subsequent decision to wind down the programme.
- Underspend on the NPR programme with revised forecasts from Network Rail received and a level of uncertainty pending the publication of the Integrated Rail Plan.
- The deferral of the IPBA work.
- A number of areas of savings and slippage in operational areas both as a result of the on-going pandemic and funding uncertainty following the postponement of the comprehensive spending review.

#### 5.0 Forecast Financial Position to Outturn

5.1 TfN forecasts that it will incur expenditure totalling £58.77m to the end of financial year 2021/22.

5.2 Set against the opening base net budget, exclusive of contingency, this represents an underspend of £7.01m:

5.3

|                                 | Outturn<br>£m | Base<br>£m   | Variance<br>£m | Variance<br>% |
|---------------------------------|---------------|--------------|----------------|---------------|
| <b>Programmes:</b>              |               |              |                |               |
| IST                             | 8.71          | 9.69         | (0.97)         | (10%)         |
| NPR                             | 42.02         | 43.78        | (1.76)         | (4%)          |
| Strategic Development Corridors | 0.06          | 1.15         | (1.09)         | (95%)         |
|                                 | 50.79         | 54.62        | (3.82)         | (7%)          |
| Rail Operations                 | 2.30          | 2.98         | (0.68)         | (23%)         |
| Operational Areas               | 5.68          | 8.19         | (2.51)         | (31%)         |
| <b>Total</b>                    | <b>58.77</b>  | <b>65.78</b> | <b>(7.01)</b>  | <b>(11%)</b>  |

#### **Integrated and Smart Programme**

5.4

|   | Outturn<br>£m | Base<br>£m  | Variance<br>£m | Variance<br>% |
|---|---------------|-------------|----------------|---------------|
| <b>Integrated &amp; Smart Ticketing</b> |               |             |                |               |
| Phase 1                                 | 4.76          | 3.49        | 1.27           | 36%           |
| Phase 2                                 | 1.94          | 2.66        | (0.72)         | (27%)         |
| Phase 3                                 | 0.12          | 0.94        | (0.82)         | (87%)         |
| Phase 4                                 | 0.22          | 0.93        | (0.71)         | (76%)         |
| IST Programme Support                   | 1.67          | 1.66        | 0.01           | 1%            |
|   | <b>8.71</b>   | <b>9.69</b> | <b>(0.97)</b>  | <b>(10%)</b>  |

5.5 The IST programme's base budget, excluding contingency, was set at £9.69m. This comprised £4.04m of capital activity - for the completion of Phases 1 and 2 - and £5.64m of revenue activity. Revenue activity included operational costs in relation to Phases 1 and 2, IST programme support and the development of Phases 3 and 4 to progress to Department for Transport business case gateway approval. Forecasts to outturn indicate expenditure of £8.71m on the programme, generating an underspend of £0.97m.

5.6 Phase 1 overspend reflects slippage of costs from the previous financial year, notably as a result of delays to the installation of platform validators in support of the ITSO on Rail scheme. This was reflected by an increase in the Phase 1 budget at Revision 1. Although delivery is substantially complete, some residual activity will complete in the first quarter of financial year 2021/22.

5.7 Phase 2 underspend has been driven by savings in the development of the Fares and Disruption Messaging tools and the Open Data Hub. Further enhancements to these tools were proposed as part of TfN's

spending review submission. However, these will not be taken forward as a result of the withdrawal of funding for the programme.

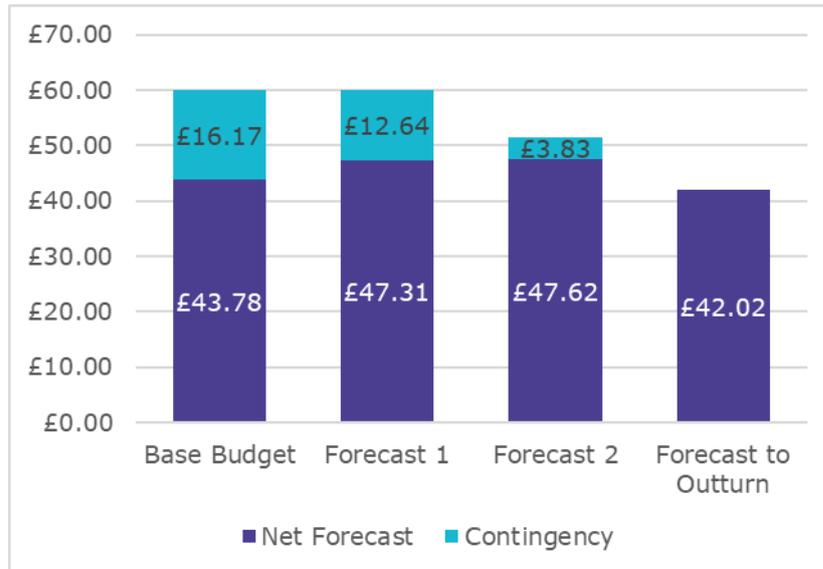
- 5.8 Phase 3 and 4 underspends reflect delays and uncertainty in the progress of these projects. Although business cases were prepared in quarter 1, their review at IPDC was initially postponed until after the planned spending review. Ultimately the absence of any future funding led to the wind down of this activity.
- 5.9 Expenditure on IST programme support is marginally over budget as the pause and subsequent wind down of Phases 3 and 4 has meant a reduced allocation of programme resources to these phases.

### **NPR Programme**

5.10

| <b>Northern Powerhouse Rail</b> | <b>Outturn</b> | <b>Budget</b> | <b>Variance</b> | <b>Variance</b> |
|---------------------------------|----------------|---------------|-----------------|-----------------|
|                                 | <b>£m</b>      | <b>£m</b>     | <b>£m</b>       | <b>%</b>        |
| NPR Team                        | 3.41           | 3.59          | (0.18)          | (5%)            |
| NPR Stakeholder Engagement      | 0.03           | 0.34          | (0.30)          | (90%)           |
| Modelling & Economic Appraisal  | 4.02           | 5.68          | (1.66)          | (29%)           |
| Rail Studies                    | 34.56          | 34.17         | 0.38            | 1%              |
|                                 | <b>42.02</b>   | <b>43.78</b>  | <b>(1.76)</b>   | <b>(4%)</b>     |

- 5.11 The NPR Programme started the year with a total allocation of £59.95m, which included a base budget of £43.78m, supplemented with additional uncommitted contingency of £16.17m, both to manage inherent contracting risk and to respond to emerging priorities. The outturn forecast indicates that the programme will incur total expenditure of £42.02m, generating an underspend of £1.76m.
- 5.12 Funding made available for the NPR Programme consisted of £0.95m of TfN Core grant and a £59m allocation from the Transport Development Fund (TDF). TDF funding is subject to prior departmental budget holder approval of all expenditure requests by TfN.



- 5.13 At Revision 1 the budget was flexed to reflect the latest Network Rail forecast, using capacity from the uncommitted contingency.
- 5.14 The £8.50m reduction in the gross total between Revision 1 and Revision 2 was principally due to the deferral expenditure into 2021/22 that was previously identified as specific contingency for activity that was intended to be carried out in 2020/21. This included amounts for ground investigation works (£3.60m), NR Gap Analysis / Sequencing activity (£4.25m) and modelling (£0.65m). At the same time, the committed budget was increased in line with estimates for the work required for the completion of the SOC.
- 5.15 The further reduction of £9.43m between the Revision 2 total and the estimated outturn position of £42.02m was due to the removal of unrequired contingency as well as significant reduction in the work required by NR in order to deliver the SOC.
- 5.16 Revised forecasts received from Network Rail after the submission of Revision 2 reflected a reduced level of expenditure. Modelling expenditure has also been impacted by the on-going pandemic, with the Northern Rail Travel Survey and Customer Experience work being deferred. Limited commitment was received from the department to support the delivery of communication activity.
- 5.17 TfN communicated revised NPR forecasts to DfT at mid-year and has provided revised outturn forecasts through NPR Programme board reporting and quarterly funding letters, allowing surplus funding to be redeployed at the Department's discretion in-year.

### **Strategic Development Corridor Programme**

- 5.18 The reduced outturn position reflects the delay of IPBA activity into 2021/2022. This was the result of a prioritisation decision taken to allow the TAME team to focus on providing support to the NPR programme.

### **Rail Operations**

| 5.19 | <b>Rail Operations</b>      | <b>Outturn</b> | <b>Base</b> | <b>Variance</b> | <b>Variance</b> |
|------|-----------------------------|----------------|-------------|-----------------|-----------------|
|      |                             | <b>£m</b>      | <b>£m</b>   | <b>£m</b>       | <b>%</b>        |
|      | Strategic Rail Team         | 1.02           | 1.39        | (0.36)          | (26%)           |
|      | Rail North Partnership Team | 1.27           | 1.59        | (0.31)          | (20%)           |
|      |                             | <b>2.30</b>    | <b>2.98</b> | <b>(0.68)</b>   | <b>(23%)</b>    |

5.20 The base budget for Rail Operations included additional resources to deliver the Blake Jones recommendations across both teams. These roles were subject to additional funding that was not forthcoming in 2020/21. This resulted in underspends of £0.2m in Rail North Partnership and £0.07m Strategic Rail as incremental resource was not funded and therefore not recruited. The remaining variances reflect vacant roles in the current team structure.

### **Core Operations**

5.21 TfN's core operations areas cover the back, front, and middle office teams familiar to any public body. They include the teams that allow TfN to discharge on its statutory obligations in relation to good governance and the sound-stewardship of public funds, along with the policy and strategy teams that help shape TfN's activity and its commitment to evidence-based decision making, and the communications and engagement teams that allow TfN to speak with one voice on behalf of the North.

5.22 The opening base budget for these teams stood at £8.19m (net) for the year after forecast recharges into programmes of £1.00m.

5.23 Savings have been made over the course of the year because of Covid-19 and the uncertainty around funding. Staff and staff related costs are down £1.0m against base budget (predominantly due to unfilled vacancies) and savings have been made on travel (£0.14m), stakeholder engagement activities (£0.22m) and building maintenance/ICT upgrades (£0.1m) as a consequence of remote working. A number of research projects were delayed and reduced in scope (£0.2m budget reduction) plus expenditure on system development has not been incurred (£0.3m).

- 5.24 It is now forecast that the Operations areas will incur net expenditure of £5.70m, generating an underspend of £2.49m against base budget:

| <b>Operational Areas</b>    | <b>Outturn<br/>£m</b> | <b>Base<br/>£m</b> | <b>Variance<br/>£m</b> | <b>Variance<br/>%</b> |
|-----------------------------|-----------------------|--------------------|------------------------|-----------------------|
| Leadership                  | 0.30                  | 0.32               | (0.02)                 | (5%)                  |
| Finance                     | 0.87                  | 1.35               | (0.47)                 | (35%)                 |
| Business Capabilities       | 2.62                  | 3.78               | (1.16)                 | (31%)                 |
| Programme Management Office | 0.16                  | 0.32               | (0.17)                 | (51%)                 |
| Strategy & Policy           | 2.26                  | 2.70               | (0.44)                 | (16%)                 |
| Major Roads                 | 0.49                  | 0.73               | (0.24)                 | (33%)                 |
| <b>Total Expenditure</b>    | <b>6.70</b>           | <b>9.19</b>        | <b>(2.49)</b>          | <b>(27%)</b>          |
| Recharges to Programmes     | (1.00)                | (1.00)             | 0.00                   | (0%)                  |
| <b>Net Expenditure</b>      | <b>5.70</b>           | <b>8.19</b>        | <b>(2.49)</b>          | <b>(30%)</b>          |

Underspends are apparent across all of TfN's operational areas driven by the factors set out above.

- 5.25 The underspend within Finance (£0.47m) predominantly relates to proposed development of the Enterprise Resource Planning (ERP) system. This work was intended to enable both the provision of improved management information and enhanced functionality to support growing programmes. This work was put on hold in light of uncertainties around IST and TfN funding more widely during the year. A further £0.1m relates to savings made on the flexitime module.
- 5.26 Much of the underspend in Business Capabilities reflects savings made this year from the change in working practices (as a result of Covid restrictions) and reduced recruitment activity (due to vacancy management). This is mainly seen within HR (£0.3m – predominantly savings on recruitment fees and staff travel passes) and Stakeholder Engagement (£0.3m – representing reduced physical events and two unfilled posts). In addition, there were Accommodation cost savings of £0.2m from one unfilled post and reduced premises costs, and deferred costs of £0.1m for IT infrastructure upgrades and enhancements.
- 5.27 The underspend in Programme Management Office represents unfilled posts, principally the Head of the function.
- 5.28 There has been less activity within Strategy & Policy, with projects delayed or reduced in scope due to Covid restrictions (external consultancy expenditure was £0.2m lower than base budget). In addition, the prioritisation of the NPR SOC work has meant deferral of costs allocated to support Rail North activities (£0.2m) and led to the postponement of the IPBA. The Head of Modelling role has remained unfilled for part of the year, contributing £0.08m to the underspend.
- 5.29 The Major Roads underspend primarily relates to procurement delays of Mobile Device Data, resulting in slippage of £0.14m into 2021/22, and a

provision of £0.06m to work with Highways England that was not used. The remaining variance is due to a slippage of costs (£0.05m) associated with production of the updated Major Roads report (completion delayed awaiting sign off of TfN's Decarbonisation Strategy and the publication of the Government's Transport Decarbonisation strategy).

## 6.0 Funding

6.1 TfN will resource its forecast expenditure of £58.77m from a mixture of grant, contributions, and contracted income.

6.2 Variances between the planned use of resources compared to forecast outturn partly reflects the variances in expenditure. However, the reduction in Core funding and wind down of IST activities has also impacted on expenditure:

6.3

| <b>Funding</b>                  | <b>Outturn<br/>£m</b> | <b>Base<br/>£m</b> | <b>Variance<br/>£m</b> | <b>Variance<br/>%</b> |
|---------------------------------|-----------------------|--------------------|------------------------|-----------------------|
| IST Grant                       | 8.71                  | 9.69               | (0.97)                 | (10%)                 |
| TDF Grant (NPR)                 | 41.07                 | 42.83              | (1.76)                 | (4%)                  |
| Core Grant                      | 7.00                  | 10.00              | (3.00)                 | (30%)                 |
| Rail North Grant & Contribution | 1.30                  | 1.62               | (0.32)                 | (20%)                 |
| Contracted Income               | 0.26                  | 0.36               | (0.09)                 | (26%)                 |
| Reserves                        | 0.42                  | 1.29               | (0.87)                 | (67%)                 |
|                                 | <b>58.77</b>          | <b>65.78</b>       | <b>(7.02)</b>          | <b>(11%)</b>          |

6.4 The implications of underspend against grant envelopes varies by funding stream are as follows:

- IST grant will be used to fund the wind down of the programme and the residue returned to the department.
- TDF grant is made available on an annual basis and awarded on a "need" basis with unused allocations being redeployed at the Department's discretion in-year.
- Rail North grant is received in full by TfN each year with unused amount held for future use as grant-unapplied.
- Core grant is received in full by TfN each year with unused resource flowing through to the Core Grant Reserve.

6.5 The budgeted and actual movements in TfN's Core reserves in year are as follows with underspends described above:

| <b>Core Grant Reserves</b> | <b>Outturn<br/>£m</b> | <b>Base<br/>£m</b> | <b>Variance<br/>£m</b> |
|----------------------------|-----------------------|--------------------|------------------------|
| Reserve b/f                | 6.96                  | 6.47               | 0.49                   |
| Draw                       | (0.42)                | (1.29)             | 0.87                   |
| Contribution               | 0.00                  | 0.00               | 0.00                   |
| <b>Reserve c/d</b>         | <b>6.54</b>           | <b>5.18</b>        | <b>1.36</b>            |

**7.0 Recommendation:**

7.1 That the TfN Board notes the estimated outturn position for 2020/21.

This page is intentionally left blank

# Transport for the North Board

**Subject:** Appendix 5.3: Treasury Management Strategy 2021/22

**Author:** Paul Kelly, Financial Controller

**Sponsor:** Iain Craven, Finance Director

**Meeting Date:** Wednesday 24 March 2021

## **1. Executive Summary:**

- 1.1 Under section 21 of the Local Government Act 2003, Local Authorities (including TfN) are required to have regard to the CIPFA Code of Practice - Treasury Management in the Public Services 2017 edition and to adopt a Treasury Management Strategy (TMS). The parameters within which this strategy is developed are informed by operational practicalities and statutory obligations.
- 1.2 The TfN TMS is attached as Appendix 5.4. This document is inherently technical, so a summary of the considerations underpinning the strategy and its key features are set out in section 3 below.
- 1.3 The 2021/22 Treasury Management Strategy report was considered and approved by the TfN Audit & Governance Committee at its meeting on 18 February 2021.

## **2. Recommendation:**

- 2.1 To approve the proposed Treasury Management Strategy for 2021/22.

## **3. Issues:**

- 3.1 Whilst the concept of a TMS that governs approaches to investments and debt management will be familiar to northern partners, the circumstances of TfN's operating environment may not be.
- 3.2 TfN cannot access external credit, whether this be in the form of bank overdrafts to manage short-term cash-flow fluctuations, or capital loans to support long-term investment aspirations.
- 3.3 This removes TfN's need for a policy towards debt management, but does shape the requirements of a cash-management (investment) strategy. Such a strategy is further informed by the way in which TfN is funded.

- 
- 3.4 Without access to revenue raising powers, TfN is reliant upon grant received from the DfT to resource its activity. This grant comes in the form of an annual 'core' grant over which TfN has discretion, and discrete grants for programme and development activity. The latter grants require pre-approval from the Department and are paid to TfN as required.
- 3.5 Accordingly, TfN's operating environment exposes it to insolvency risk which cannot be mitigated through the normal options open to a local or combined authority: cash-flow loans, and the effective underwrite which access to a local tax-base provides.
- 3.6 Instead, TfN must mitigate its risk by managing its cash-flows in a particularly prudent manner. This factor promotes the dovetailing of a managed risk-culture within TfN, with a prudent reserve strategy, and an effective approach to cash-management. These strategies would be underpinned by the basic operating assertion that TfN must always have access to an appropriate balance of accessible cash on any given day to guard against financial shock.
- 3.7 A managed risk culture involves TfN working collaboratively with other organisations (including DfT, northern partners, national agencies and suppliers) to structure contracts and financial relationships to ensure that its exposure to financial risk is proportionate to its ability to manage that risk.
- 3.8 The reserve strategy that is proposed as part of TfN's 2021/22 budget supports risk mitigation by, at any point in time, holding *no less than* £2m of cash in reserve. Such cash would be held on deposit in an appropriate bank or other financial institution, serving as a cash-buffer against financial shock.
- 3.9 Finally, a cash management strategy must deliver upon the most basic requirement: that TfN will always have comfort that cash held on deposit is invested with only the most secure of counterparties and is accessible in a timely manner.
- 3.10 This approach aligns with the priorities common to public-sector bodies that cash investment decisions must be made with due regard to the following hierarchy of considerations:
- a) Security of the investment partner (creditworthiness);
  - b) Liquidity of the investment (accessibility);
  - c) Yield of the investment (financial return).

### **Annual Investment Strategy**

- 3.11 CIPFA defines treasury management as:
- "The management of the local authority's investments and cash flows, its banking, money market and capital market transactions; the

---

effective control of the risks associated with those activities; and the pursuit of optimum performance consistent with those risks.”

- 3.12 The extent of TfN’s treasury management activity will be limited to its cash management. This covers its banking arrangements, and its policies towards the safeguarding of its cash balances.
- 3.13 TfN will report on its cash management strategy throughout the year. This will come in the form of a Treasury Management Strategy document which is proposed for adoption on an annual basis; a mid-year review of performance against this strategy; and, an annual Treasury Management Report at the end of the year which highlights overall performance and offers lessons learnt.
- 3.14 Noting the serious risks around cash-management, TfN is required to adequately resource this activity through the provision of internal capacity supplemented by expert and independent third-party support.
- 3.15 Consistent with the approach adopted by northern partners, TfN has procured a Treasury Advisor – Link Asset Services. The Treasury Advisor assists TfN in maintaining market intelligence and ensuring that the cash-management strategy remains appropriate throughout the year.
- 3.16 TfN recognises, however, that it cannot place undue reliance on external support, and must maintain internal skills and capacity.
- 3.17 Treasury Management activity will continue to fall under the operating purview of the Finance Director and the Financial Controller.
- 3.18 Finance officers and those members charged with oversight of TfN’s affairs will also be offered both internal and external training where appropriate.

#### **Core Funds and Expected Investment Balances**

- 3.19 TfN receives its funding from the Department for Transport (DfT) in the form of grant allocations. This grant can be differentiated between discrete funding for pre-approved programme activity, and general ‘core’ grant over which TfN has discretion – subject to the parameters set by TfN’s objectives and TfN-DfT funding agreements.
- 3.20 How TfN is funded shapes the level of cash balances to be held. There are two principal factors:
  - a) Discrete funding is awarded on a ‘need’ basis, generally meaning that DfT will release cash to TfN in advance of need; and TfN requires cash in hand at sufficient levels to guard against financial shock, noting its inability to access overdrafts, or raise revenues from a local tax base.

- b) Being funded on a 'need' basis means that generally the programmes operate on a cash-neutral basis. That is, the cash outflows associated with payments will always be met by the cash inflows associated with the grant received.
- 3.21 To that end (and subject to TfN receiving appropriate assurances from DfT prior to entering into long term financial commitments), the cash flow implication of receiving grant in this manner is simply associated with the timing differences between receiving grant and spending it. As programme grant is generally awarded monthly or quarterly, this will generally mean that those variances will be corrected at worst within three months.
- 3.22 Similarly, being funded on a need basis means that TfN should not build up cash balances when its activity associated with core grant falls below forecast generating underspend. When such underspends do occur, they will be treated in the context of the proposed reserve strategy.
- 3.23 TfN's reserve strategy ensures that over a rolling three-year period cash balances held in reserve will not fall below £2m. However, cash balances may be higher than this in any given year if there is an agreed plan to draw down upon that cash to support the business plan.
- 3.24 This reserve strategy affords TfN a degree of flexibility in that it can use cash balances over its minimum threshold (£2m) to support expenditure plans that are higher than the in-year available resource. That is, TfN can supplement its annual grant from draws on available reserves where it is prudent to do so.
- 3.25 The reserve strategy also allows the DfT to fund TfN in an efficient manner. Working to a target reserve cash balance means that DfT does not unnecessarily draw down on funds from HM Treasury before they are required by TfN.
- 3.26 Although cash balances will likely fluctuate in-year as timing differences arise between cash being received and payments being made, it is expected that TfN's underlying cash position will reflect its reserve strategy profile.

### **Investment Policy**

- 3.27 The intention of the investment strategy is to provide security of investment and minimisation of risk. This ensures TfN will not chase yield at the expense of the security of investments, and not prejudice TfN's risk mitigation priorities. The strategy also enables TfN to operate a diversified investment portfolio to avoid an over concentration of risk.

- 
- 3.28 With the low yield environment, in some cases marginally negative, TfN has chosen to position the majority of its excess funds with DMADF which has a lowest downside risk profile.
- 3.29 TfN's investment policy has regard to the government's Guidance on Local Government Investments ("the Guidance") and the 2011 revised CIPFA Treasury Management in Public Services Code of Practice and Cross Sectoral Guidance Notes ("the CIPFA TM Code").
- 3.30 In accordance with the above guidance from MHCLG and CIPFA, and in order to minimise the risk to investments, TfN will only invest with the most creditworthy of counterparties, and for durations that reflect TfN's need for timely access to its cash. TfN will also limit its overall exposure to individual institutions by adopting limits to the amount of cash it will place with any one bank or fund.
- 3.31 TfN has adjusted its investment strategy, particularly around creditworthiness following the adoption of the Link Asset Services system.
- 3.32 The Link Asset Services system ensures that TfN does not place too much reliance on aged information provided by credit rating agencies. Instead, whilst using the credit ratings from the three main agencies the system also uses credit watches and credit outlooks to ensure it is informed of future forecasts, whilst also using real-time market opinion in the form of credit-default swaps (the cost the market places on insuring transactions with counterparties). These factors are entered into a weighted scoring system which gives an indication on the relative creditworthiness of counterparties.

### **Length of Investments**

- 3.33 TfN will favour short-term liquid investments which give it ready access to its cash:
- a) Individual investments will not be placed for longer-than 3 months
  - b) At any point, at least £1m will be held in same-day access funds or accounts.

### **Counterparty Credit Ratings**

- 3.34 TfN will use the Link Asset Services creditworthiness system. This system uses a variety of data sources to make real time dynamic judgements on a counterparty's relative creditworthiness. This system is outlined in more detail in Appendix 5.4 but typically, TfN will not invest with counterparties with a long-term Fitch rating of less than 'A-'.

### **Country Sovereign Ratings**

- 3.35 Recognising the support that individual nations and central banks offer to banking institutions, TfN will:

- a) Invest with counterparties from countries with a minimum sovereign credit rating of 'AA-' from Fitch.

#### **Investment Classes**

- 3.36 TfN will limit investments to the following Sterling denominated classes:
  - a) Term deposits with financial institutions and public bodies;
  - b) Redeemable share purchases in same-day access AAA rated constant and low volatility net-asset value money market funds.

#### **Investment Values**

- 3.37 TfN will limit its exposure to individual institutions by:
  - a) Investing no more than £5m in individual institutions and funds;
  - b) The sole caveats to this are necessary investments with TfN's own bank and investments with the DMADF.

#### **Investment Returns**

- 3.38 Noting the relative considerations and requirement for liquidity, TfN will benchmark its investment returns against 7-day LIBID.

### **4. Options Considered:**

- 4.1 This report proposes a Treasury Management Strategy that is designed to support TfN's approach to cash management risk. This Strategy is supported by the Link Asset Services approach to creditworthiness.

### **5. Considerations:**

- 5.1 This report is formed from considerations around cash management risk.

### **6. Preferred Option:**

- 6.1 This paper proposes a Treasury Management Strategy for adoption.

---

**List of Background Documents**
**Required Considerations**
**Equalities:**

|                         |     |    |
|-------------------------|-----|----|
| Age                     | Yes | No |
| Disability              | Yes | No |
| Gender Reassignment     | Yes | No |
| Pregnancy and Maternity | Yes | No |
| Race                    | Yes | No |
| Religion or Belief      | Yes | No |
| Sex                     | Yes | No |
| Sexual Orientation      | Yes | No |

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Equalities           | A full Impact assessment has not been carried out because it is not considered necessary for this report | Paul Kelly                 | Iain Craven     |

**Environment and Sustainability**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b>         | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|------------------------------|---|----------------------------|-----------------|
| Sustainability / Environment | A full impact assessment has not been carried out because it is not considered necessary for this report. | Paul Kelly                 | Iain Craven     |

**Legal**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>                                     | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Legal                | Legal implications are addressed within the report | Julie Openshaw             | Dawn Madin      |

**Finance**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Finance              | The financial implications have been considered and are included in the report. | Paul Kelly                 | Iain Craven     |

### **Resource**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Resource             | There are no resource implications within this report. | Paul Kelly                 | Iain Craven     |

### **Risk**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Risk                 | There are no material risks to be considered within this report. | Haddy Njie                 | Iain Craven     |

### **Consultation**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Consultation         | A consultation has not been carried out because it is not considered necessary for this report. | Paul Kelly                 | Iain Craven     |

# **Transport for the North Board Item 5 – Appendix 4**

## **Treasury Management Strategy Statement**

Annual Investment Strategy

---

2021/22

# 1.INTRODUCTION

## 1.1 Background

Transport for the North is required to operate a balanced budget, which broadly means that cash raised during the year will meet cash expenditure. Part of the treasury management operation is to ensure that this cash flow is adequately planned, with cash being available when it is needed. Surplus monies are invested in low risk counterparties or instruments commensurate with Transport for the North's low risk appetite, providing adequate liquidity initially before considering investment return.

The second main function of the treasury management service is the funding of Transport for the North's capital plans. As Transport for the North does not have the power to raise short or long-term credit, this activity is limited to ensuring grant drawdowns are aligned to expenditure plans.

The contribution the treasury management function makes to Transport for the North is critical to ensure liquidity and the ability to meet spending commitments as they fall due, either on day-to-day revenue or for larger capital projects. Since cash balances generally result from reserves and balances, it is paramount to ensure adequate security of the sums invested, as a loss of principal will in effect result in a loss to Transport for the North.

CIPFA defines treasury management as:

*"The management of the local authority's borrowing, investments and cash flows, its banking, money market and capital market transactions; the effective control of the risks associated with those activities; and the pursuit of optimum performance consistent with those risks."*

Transport for the North has not engaged in any commercial investments and has no non-treasury investments.

## 1.2 Reporting requirements

### 1.2.1 Capital Strategy

A capital strategy report is designed to show how local authorities will finance and fund long-term investment plans. They are designed to evidence that investment plans are both affordable in the short-term and sustainable in the long-term.

Transport for the North has no powers to enter into credit liabilities, so cannot borrow to finance investment. Transport for the North also owns no assets which could be disposed of to generate capital receipts. Finally, Transport for the North has no revenue raising powers, which could be used to raise cash for capital investment.

Instead, Transport for the North is an entirely grant funded organisation. All capital investments are grant funded, with no additional financing or funding issues.

Transport for the North's capital expenditure profiles are outlined later in this appendix.

### 1.2.2 Treasury Management reporting

Transport for the North Board is currently required to receive and approve, as a minimum, three main treasury reports each year, which incorporate a variety of policies, estimates and actuals.

- a. **Prudential and treasury indicators and treasury strategy** (this report) - The first, and most important report is forward looking and covers the aspects relevant to Transport for the North – notably management of cash and investments:
  - the capital plans, (including prudential indicators);
  - the treasury management strategy, (how the investments are to be organised), including treasury indicators; and
  - an investment strategy, (the parameters on how investments are to be managed).
- b. **A mid-year treasury management report** – This is primarily a progress report and will update members on the capital position, amending prudential indicators as necessary, and whether any policies require revision
- c. **An annual treasury report** – This is a backward looking review document and provides details of a selection of actual prudential and treasury indicators and actual treasury operations compared to the estimates within the strategy.

### Scrutiny

The following bodies within TfN's governance receive Treasury Management Reporting:

- The Scrutiny Committee;
- The Audit & Governance Committee;
- The Executive Board; and,
- The TfN Board.

### 1.3 Treasury Management Strategy for 2020/21

The strategy for 2021/22 covers two main areas:

#### Capital issues

- the capital expenditure plans and the associated prudential indicators.

#### Treasury management issues

- the current treasury position;
- treasury indicators which limit the treasury risk and activities of Transport for the North;
- prospects for interest rates;
- the investment strategy;
- creditworthiness policy; and
- the policy on use of external service providers.

These elements cover the requirements of the Local Government Act 2003, the CIPFA Prudential Code, the CIPFA Treasury Management Code and MHCLG Investment Guidance.

#### **1.4 Training**

The CIPFA Code requires the responsible officer to ensure that members with responsibility for treasury management receive adequate training in treasury management. Transport for the North will review training requirements for members in the new financial year.

The training needs of finance officers involved in treasury management are periodically reviewed.

#### **1.5 Treasury management consultants**

Transport for the North uses Link Asset Services, Treasury solutions as its external treasury management advisors.

Transport for the North recognises that responsibility for treasury management decisions remains with the organisation at all times and will ensure that undue reliance is not placed upon the services of our external service providers. All decisions will be undertaken with regards to all available information, including, but not solely, our treasury advisers.

It also recognises that there is value in employing external providers of treasury management services in order to acquire access to specialist skills and resources. Transport for the North will ensure that the terms of their appointment and the methods by which their value will be assessed are properly agreed and documented and subjected to regular review.

## 2 THE CAPITAL PRUDENTIAL INDICATORS 2020/21 – 2022/23

Regulation requires Transport for the North to present its capital prudential indicators. This reflects that, for most authorities, capital expenditure plans are a key driver of treasury management activity. This is principally because those plans will be underpinned by financing strategies that use debt or cash balances to finance activity.

Transport for the North's statutory position means that it is not able to raise credit, and its funding environment means that it is unlikely to generate significant long-term cash surpluses. Instead, Transport for the North's capital investment plans will be funded from grant awards.

These factors mean the capital prudential indicators are largely insignificant, though they do reflect the parameters in which Transport for the North operates.

### 2.1 Capital expenditure

This is a summary of Transport for the North's capital expenditure plans, both those agreed previously, and those forming part of this budget cycle. Members are asked to note the capital expenditure forecasts:

| Capital expenditure<br>£m | 2019/20<br>Actual | 2020/21<br>Estimate | 2021/22<br>Estimate | 2022/23<br>Estimate | 2023/24<br>Estimate |
|---------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|
|                           | £m                | £m                  | £m                  | £m                  | £m                  |
| <b>Total</b>              | 4.55m             | £6.14m              | £0.00m              | £0.00m              | £0.00m              |

The table below summarises the above capital expenditure plans and how these plans are being financed by capital or revenue resources.

| Financing of capital<br>expenditure £m     | 2019/20<br>Actual | 2020/21<br>Estimate | 2021/22<br>Estimate | 2022/23<br>Estimate | 2023/24<br>Estimate |
|--|-------------------|---------------------|---------------------|---------------------|---------------------|
| Grants                                     | 4.55m             | £6.14m              | £0.00m              | £0.00m              | £m                  |
| <b>Net financing need<br/>for the year</b> | £0m               | £0m                 | £0m                 | £0m                 | £0.00m              |

The reduction in capital expenditure reflects movements in TfN's Integrated and Smart Ticketing ("IST") programme. That programme consisted of three phases of activity:

1. ITSO on Rail
2. Customer Information
3. Accounts Based Back Office

Phases 1 and 2 of the programme are due to conclude their capital delivery activity in financial year 2020/21.

The previously planned capital delivery activity for Phase 3 has been withdrawn following the shortfall in bus-operator support for the planned delivery model.

### 2.2 Core funds and expected investment balances

Transport for the North's cash balances are largely determined by its reserve strategy and working capital fluctuations. Transport for the North is funded on a needs basis, so only draws upon grant it requires to meet its expenditure plans. It does, however, hold cash in reserve to guard against financial shock. In the table

below working capital broadly represents cash owed to creditors held from one accounting period to the next:

| Year End Resources<br>£m    | 2019/20<br>Actual | 2020/21<br>Estimate | 2021/22<br>Estimate | 2022/23<br>Estimate | 2023/24<br>Estimate |
|-----------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|
| Fund balances / reserves    | £6.48m            | £5.2m               | £3.2m               | £2.2m               | £2.0m               |
| <b>Total core funds</b>     | £6.48m            | £5.2m               | £3.2m               | £2.2m               | £2.0m               |
| Working capital*            | £12.83m           | £8.9m               | £5.5m               | £5.5m               | £5.5m               |
| <b>Expected investments</b> | £19.31m           | £14.1m              | £8.7m               | £7.7m               | £7.5m               |

\*Working capital balances shown are estimated year-end; these may be higher mid-year

### 2.3 Prospects for interest rates

TfN has appointed Link Asset Services as its treasury advisor in part to assist in formulating a view on interest rates. The following table gives Link's central view.

| Link Group Interest Rate View 9.11.20  |        |        |        |        |        |        |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| These Link forecasts have been amended for the reduction in PWLB margins by 1.0% from 26.11.20 |        |        |        |        |        |        |        |        |        |        |        |        |        |
|  | Mar-21 | Jun-21 | Sep-21 | Dec-21 | Mar-22 | Jun-22 | Sep-22 | Dec-22 | Mar-23 | Jun-23 | Sep-23 | Dec-23 | Mar-24 |
| BANK RATE  | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   |
| 3 month ave earnings   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   |
| 6 month ave earnings   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   | 0.10   |
| 12 month ave earnings  | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   |
| 5 yr PWLB  | 0.80   | 0.80   | 0.80   | 0.80   | 0.90   | 0.90   | 0.90   | 0.90   | 0.90   | 1.00   | 1.00   | 1.00   | 1.00   |
| 10 yr PWLB   | 1.10   | 1.10   | 1.10   | 1.10   | 1.20   | 1.20   | 1.20   | 1.20   | 1.20   | 1.30   | 1.30   | 1.30   | 1.30   |
| 25 yr PWLB   | 1.50   | 1.60   | 1.60   | 1.60   | 1.60   | 1.70   | 1.70   | 1.70   | 1.70   | 1.80   | 1.80   | 1.80   | 1.80   |
| 50 yr PWLB   | 1.30   | 1.40   | 1.40   | 1.40   | 1.40   | 1.50   | 1.50   | 1.50   | 1.50   | 1.60   | 1.60   | 1.60   | 1.60   |

The coronavirus outbreak has done huge economic damage to the UK and economies around the world. After the Bank of England took emergency action in March to cut Bank Rate to first 0.25%, and then to 0.10%, it left Bank Rate unchanged at its subsequent meetings to 16<sup>th</sup> December, although some forecasters had suggested that a cut into negative territory could happen. However, the Governor of the Bank of England has made it clear that he currently thinks that such a move would do more damage than good and that more quantitative easing is the favoured tool if further action becomes necessary. As shown in the forecast table above, no increase in Bank Rate is expected in the near-term as economic recovery is expected to be only gradual and, therefore, prolonged. These forecasts were based on an assumption that a Brexit trade deal would be agreed by 31.12.20: as this has now occurred, these forecasts do not need to be revised.

### Investment and borrowing rates

- Investment returns are likely to remain exceptionally low during 2020/21 with little increase in the following two years.

## 3 ANNUAL INVESTMENT STRATEGY

### 3.1 Investment policy – management of risk

Transport for the North's investment policy has regard to the following: -

- MHCLG's Guidance on Local Government Investments ("the Guidance")
- CIPFA Treasury Management in Public Services Code of Practice and Cross Sectoral Guidance Notes 2017 ("the Code")
- CIPFA Treasury Management Guidance Notes 2018

Transport for the North's investment priorities will be security first, portfolio liquidity second and then yield, (return).

The above guidance from the MHCLG and CIPFA place a high priority on the management of risk. Transport for the North has adopted a prudent approach to managing risk and defines its risk appetite by the following means: -

1. Minimum acceptable **credit criteria** are applied in order to generate a list of highly creditworthy counterparties. This also enables diversification and thus avoidance of concentration risk. The key ratings used to monitor counterparties are the short term and long-term ratings.
2. **Other information:** ratings will not be the sole determinant of the quality of an institution; it is important to continually assess and monitor the financial sector on both a micro and macro basis and in relation to the economic and political environments in which institutions operate. The assessment will also take account of information that reflects the opinion of the markets. To achieve this consideration Transport for the North will engage with its advisors to maintain a monitor on market pricing such as "**credit default swaps**" and overlay that information on top of the credit ratings.
3. **Other information sources** used will include the financial press, share price and other such information pertaining to the banking sector in order to establish the most robust scrutiny process on the suitability of potential investment counterparties.
4. Transport for the North has defined the list of **types of investment instruments** that the treasury management team are authorised to use. There are two lists in appendix 5.4 under the categories of 'specified' and 'non-specified' investments.
  - **Specified investments** are those with a high level of credit quality and subject to a maturity limit of one year.
  - **Non-specified investments** are those with less high credit quality, may be for periods in excess of one year, and/or are more complex instruments which require greater consideration by members and officers before being authorised for use. Transport for the North will not use these investment categories.
5. **Non-specified investments limit.** Transport for the North has determined that it will not invest in any non-specified investment categories.
6. **Lending limits**, (amounts and maturity), for each counterparty will be set through applying the matrix table in paragraph 3.3.
7. **Transaction limits** are set for each type of investment in paragraph 3.3.

8. Transport for the North will set a limit for the amount of its investments which are invested for **longer than 365 days**, (see paragraph 4.1).
9. Investments will only be placed with counterparties from countries with a specified minimum **sovereign rating**, (see paragraph 3.2).
10. Transport for the North has engaged **external consultants**, (see paragraph 1.5), to provide expert advice on how to optimise an appropriate balance of security, liquidity and yield, given the risk appetite of Transport for the North in the context of the expected level of cash balances and need for liquidity throughout the year.
11. All investments will be denominated in **sterling**.
12. As a result of the change in accounting standards for 2018/19 under **IFRS 9**, Transport for the North will consider the implications of investment instruments which could result in an adverse movement in the value of the amount invested and resultant charges at the end of the year to the General Fund. (In November 2018, the Ministry of Housing, Communities and Local Government, [MHCLG], concluded a consultation for a temporary override to allow English local authorities time to adjust their portfolio of all pooled investments by announcing a statutory override to delay implementation of IFRS 9 for five years commencing from 1.4.18.)

However, Transport for the North will also pursue **value for money** in treasury management and will monitor the yield from investment income against appropriate benchmarks for investment performance, (see paragraph 4.2). Regular monitoring of investment performance will be carried out during the year.

### **3.2 Changes in risk management policy from last year.**

There have been no changes in Treasury Management policy over the last year.

### **3.3 Creditworthiness policy**

Transport for the North applies the creditworthiness service provided by Link Asset Services. This service employs a sophisticated modelling approach utilising credit ratings from the three main credit rating agencies - Fitch, Moody's, and Standard & Poor's. The credit ratings of counterparties are supplemented with the following overlays:

- credit watches and credit outlooks from credit rating agencies;
- CDS spreads to give early warning of likely changes in credit ratings;
- sovereign ratings to select counterparties from only the most creditworthy countries.

This modelling approach combines credit ratings, credit Watches and credit Outlooks in a weighted scoring system which is then combined with an overlay of CDS spreads for which the end product is a series of colour coded bands which indicate the relative creditworthiness of counterparties. These colour codes are used by Transport for the North to determine the suggested duration for investments.

This approach is then tempered by Transport for the North's funding environment, and in particular its funding relationship with the Department for Transport. This environment sees Transport for the North directly funded every quarter for activity, and thus negates the need for, and the possibility of, running up significant cash balances over a long duration.

Transport for the North will therefore use counterparties within the following durational bands:

- Yellow 3 months
- Dark pink 3 months
- Light pink 3 months
- Purple 3 months
- Blue 3 months
- Orange 3 months
- Red 3 months
- Green 1 month
- No colour not to be used

The Link Asset Services' creditworthiness service uses a wider array of information other than just primary ratings. Furthermore, by using a risk weighted scoring system, it does not give undue preponderance to just one agency's ratings.

Before consideration of underlying sovereign rating, typically the minimum credit ratings criteria Transport for the North use will be a Short Term rating (Fitch or equivalents) of F1 and a Long Term rating of A-. There may be occasions when the counterparty ratings from one rating agency are marginally lower than these ratings but may still be used. In these instances, consideration will be given to the whole range of ratings available, or other topical market information, to support their use.

All credit ratings will be monitored weekly. Transport for the North is alerted to changes to ratings of all three agencies through its use of the Link Asset Services' creditworthiness service.

- if a downgrade results in the counterparty / investment scheme no longer meeting Transport for the North's minimum criteria, its further use as a new investment will be withdrawn immediately.
- in addition to the use of credit ratings Transport for the North will be advised of information in movements in credit default swap spreads against the iTraxx benchmark and other market data on a daily basis via its Passport website, provided exclusively to it by Link Asset Services. Extreme market movements may result in downgrade of an institution or removal from Transport for the North's lending list.

Sole reliance will not be placed on the use of this external service. In addition Transport for the North will also use market data and market information, information on any external support for banks to help support its decision-making process.

|            |            |            |            |           |           |             |               |           |
|------------|------------|------------|------------|-----------|-----------|-------------|---------------|-----------|
| Y          | Pi1        | Pi2        | P          | B         | O         | R           | G             | N/C       |
| 1          | 1.25       | 1.5        | 2          | 3         | 4         | 5           | 6             | 7         |
| Up to 5yrs | Up to 5yrs | Up to 5yrs | Up to 2yrs | Up to 1yr | Up to 1yr | Up to 6mths | Up to 100days | No Colour |

| <i>See Appendix 4.7 for an indicative counterparty list</i> | Colour (and long term rating where applicable) | Money and/or % Limit | Transaction limit | Time Limit      |
|---|--|----------------------|-------------------|-----------------|
| <b>Banks *</b>  | <b>yellow</b>                                  | <b>100%</b>          | <b>£5m</b>        | <b>3 months</b> |
| <b>Banks</b>  | <b>purple</b>                                  | <b>100%</b>          | <b>£5m</b>        | <b>3 months</b> |

|   |                            |                             |             |                   |
|---|----------------------------|-----------------------------|-------------|-------------------|
| <b>Banks</b>                            | <b>orange</b>              | <b>100%</b>                 | <b>£5m</b>  | <b>3 months</b>   |
| <b>Banks – part nationalised</b>        | <b>blue</b>                | <b>100%</b>                 | <b>£5m</b>  | <b>3 months</b>   |
| <b>Banks</b>                            | <b>red</b>                 | <b>100%</b>                 | <b>£5m</b>  | <b>3 months</b>   |
| <b>Banks</b>                            | <b>green</b>               | <b>100%</b>                 | <b>£5m</b>  | <b>1 month</b>    |
| <b>Banks</b>                            | <b>No colour</b>           | <b>Not to be used</b>       | <b>£0m</b>  | <b>-</b>          |
| <b>Limit 3 category – TfN's banker^</b> | <b>n/a</b>                 | <b>100%</b>                 | <b>n/a</b>  | <b>3 days</b>     |
| <b>DMADF</b>                            | <b>UK sovereign rating</b> | <b>unlimited</b>            | <b>n/a</b>  | <b>3 months</b>   |
| <b>Local authorities</b>                | <b>n/a</b>                 | <b>100%</b>                 | <b>£5m</b>  | <b>3 months</b>   |
|   | <b>Fund rating</b>         | <b>Money and/or % Limit</b> |             | <b>Time Limit</b> |
| <b>Money Market Funds CNAV</b>          | <b>AAA</b>                 | <b>100%</b>                 | <b>£5m</b>  | <b>liquid</b>     |
| <b>Money Market Funds LVNAV</b>         | <b>AAA</b>                 | <b>100%</b>                 | <b>£5bm</b> | <b>liquid</b>     |

\* Please note: the yellow colour category is for UK Government debt, or its equivalent, money market funds and collateralised deposits where the collateral is UK Government debt – see appendix 5.4.

^ Transport for the North retains the ability to directly invest its cash surpluses with its own bank above the defined transaction limit where necessary. This includes managing unexpected cash flows, dealing with urgent matters, or where other options are not available.

### **UK banks – ring fencing**

The largest UK banks, (those with more than £25bn of retail / Small and Medium-sized Enterprise (SME) deposits), are required, by UK law, to separate core retail banking services from their investment and international banking activities by 1st January 2019. This is known as “ring-fencing”. Whilst smaller banks with less than £25bn in deposits are exempt, they can choose to opt up. Several banks are very close to the threshold already and so may come into scope in the future regardless.

Ring-fencing is a regulatory initiative created in response to the global financial crisis. It mandates the separation of retail and SME deposits from investment banking, in order to improve the resilience and resolvability of banks by changing their structure. In general, simpler, activities offered from within a ring-fenced bank, (RFB), will be focused on lower risk, day-to-day core transactions, whilst more complex and “riskier” activities are required to be housed in a separate entity, a non-ring-fenced bank, (NRFB). This is intended to ensure that an entity’s core activities are not adversely affected by the acts or omissions of other members of its group.

While the structure of the banks included within this process may have changed, the fundamentals of credit assessment have not. Transport for the North will continue to assess the new-formed entities in the same way that it does others and those with sufficiently high ratings, (and any other metrics considered), will be considered for investment purposes.

### 3.4 Country limits

Due care will be taken to consider the exposure of Transport for the North's total investment portfolio to non-specified investments, countries, groups and sectors.

- a) **Non-specified investment limit.** Transport for the North has determined that it will not use non-specified investment products.
- b) **Country limit.** Transport for the North has determined that it will only use approved counterparties from the UK and from countries with a **minimum sovereign credit rating of AA-** from Fitch. The list of countries that qualify using this credit criteria as at the date of this report are shown in Appendix 4.4. This list will be added to, or deducted from, by officers should ratings change in accordance with this policy.

### 3.5 Investment strategy

#### Investment Durations

Transport for the North's approach to investments is influenced by its funding environment. Transport for the North has no revenue raising powers, nor ability to raise credit. This limits its ability to raise surplus cash unilaterally, and also obviates the need for retaining significant amounts of cash to pay down debt obligations.

Transport for the North is funded on a needs basis from the Department for Transport, receiving periodical grants to meet its cash requirements. This funding arrangement is supplemented by a reserve strategy that enables Transport for the North to retain cash balances from its flexible Core Grant to mitigate against financial shock.

These arrangements mean that it is unlikely Transport for the North will have significant amounts of surplus cash that does not have a short-term call upon it. This in turn engenders a short-term view on investments, with the primacy of consideration being on security and liquidity.

Transport for the North considers that it will not invest for time-periods beyond 3 months.

#### Investment returns expectations.

Bank Rate is unlikely to rise from 0.10% for a considerable period. It is very difficult to say when it may start rising so it may be best to assume that investment earnings from money market-related instruments will be sub 0.50% for the foreseeable future.

The suggested budgeted investment earnings rates for returns on investments placed for periods up to about three months during each financial year are as follows:

|             |       |
|-------------|-------|
| 2020/21     | 0.10% |
| 2021/22     | 0.10% |
| 2022/23     | 0.10% |
| 2023/24     | 0.10% |
| 2024/25     | 0.25% |
| Later years | 2.00% |

- The overall balance of risks to economic growth in the UK is probably now skewed to the upside but is subject to major uncertainty due to the virus and how quickly

successful vaccines may become available and widely administered to the population.

- There is relatively little UK domestic risk of increases or decreases in Bank Rate and significant changes in shorter term PWLB rates. The Bank of England has effectively ruled out the use of negative interest rates in the near term and increases in Bank Rate are likely to be some years away given the underlying economic expectations. However, it is always possible that safe haven flows, due to unexpected domestic developments and those in other major economies, or a return of investor confidence in equities, could impact gilt yields, (and so PWLB rates), in the UK.

**Investment treasury indicator and limit** - total principal funds invested for greater than 365 days. These limits are set with regard to Transport for the North's liquidity requirements and to reduce the need for early sale of an investment and are based on the availability of funds after each year-end. Transport for the North's funding environment is such that it will limit itself to investments of periods not greater than 3 months.

Transport for the North is asked to approve the following treasury indicator and limit:

| <b>Upper limit for principal sums invested for longer than 365 days</b>      |                |                |                |
|--|----------------|----------------|----------------|
| <b>£m</b>  | <b>2020/21</b> | <b>2021/22</b> | <b>2022/23</b> |
| Principal sums invested for longer than 365 days                             | £0m            | £0m            | £0m            |
| Current investments as at 15.01.19 in excess of 1 year maturing in each year | £0m            | £0m            | £0m            |

### 3.6 Investment risk benchmarking

These benchmarks are simple guides to maximum risk, so they may be breached from time to time, depending on movements in interest rates and counterparty criteria. The purpose of the benchmark is that officers will monitor the current and trend position and amend the operational strategy to manage risk as conditions change. Any breach of the benchmarks will be reported, with supporting reasons in the mid-year or Annual Report.

Security – Transport for the North has opted for a particularly prudent approach to security  
Liquidity – in respect of this area Transport for the North seeks to maintain:

- Liquid short-term deposits of at least £1m available with a day's notice in its own bank.
- Weighted average life benchmark is expected to be no greater than 3 months.

Yield - local measures of yield benchmarks are:

- Investments – internal returns above the 7-day LIBID rate

### 3.7 End of year investment report

At the end of the financial year, Transport for the North will report on its investment activity as part of its Annual Treasury Report.

## 4 APPENDICES

1. Prudential and treasury indicators and MRP statement
2. Economic background and interest rate forecasts
3. Treasury management practice 1 – credit and counterparty risk management (option 1)
4. Treasury management practice 1 – credit and counterparty risk management  
Approved countries for investments
5. Treasury management scheme of delegation
6. The treasury management role of the section 151 officer
7. Indicative counterparty list

#### 4.1 THE CAPITAL PRUDENTIAL AND TREASURY INDICATORS 2020/20 – 2023/24 AND MRP STATEMENT

Transport for the North's capital expenditure plans are the key driver of treasury management activity. The output of the capital expenditure plans is reflected in the prudential indicators, which are designed to assist members' overview and confirm capital expenditure plans.

##### 4.1.1 Capital expenditure

| Capital expenditure<br>£m                 | 2019/20<br>Actual | 2020/21<br>Estimate | 2021/22<br>Estimate | 2022/23<br>Estimate | 2023/24<br>Estimate |
|---|-------------------|---------------------|---------------------|---------------------|---------------------|
| Integrated & Smart<br>Ticketing Programme | £4.55m            | £6.14m              | £0.00m              | £0.00m              | £0.00m              |
| <b>Total</b>                              | <b>£4.55m</b>     | <b>£6.14m</b>       | <b>£0.00m</b>       | <b>£0.00m</b>       | <b>£0.00m</b>       |

##### 4.1.2 Affordability prudential indicators

###### Ratio of financing costs to net revenue stream

This indicator identifies the trend in the cost of capital, (borrowing and other long-term obligation costs net of investment income), against the net revenue stream. Transport for the North does not have powers to raise credit, so has no costs of capital.

| %            | 2019/20<br>Actual | 2020/21<br>Estimate | 2021/22<br>Estimate | 2022/23<br>Estimate | 2023/24<br>Estimate |
|--------------|-------------------|---------------------|---------------------|---------------------|---------------------|
| <b>Total</b> | 0%                | 0%                  | 0%                  | 0%                  | 0%                  |

## 4.2 ECONOMIC BACKGROUND

- **UK.** The key quarterly meeting of the Bank of England Monetary Policy Committee kept **Bank Rate** unchanged on 5.11.20. However, it revised its economic forecasts to take account of a second national lockdown from 5.11.20 to 2.12.20 which is obviously going to put back economic recovery and do further damage to the economy. It therefore decided to do a further tranche of **quantitative easing (QE) of £150bn**, to start in January when the current programme of £300bn of QE, announced in March to June, runs out. It did this so that “announcing further asset purchases now should support the economy and help to ensure the unavoidable near-term slowdown in activity was not amplified by a tightening in monetary conditions that could slow the return of inflation to the target”.
- Its forecasts appeared, at that time, to be rather optimistic in terms of three areas:
  - The economy would recover to reach its pre-pandemic level in Q1 2022
  - The Bank also expected there to be excess demand in the economy by Q4 2022.
  - CPI inflation was therefore projected to be a bit above its 2% target by the start of 2023 and the “inflation risks were judged to be balanced”.
- Significantly, there was no mention of **negative interest rates** in the minutes or Monetary Policy Report, suggesting that the MPC remains some way from being persuaded of the case for such a policy, at least for the next 6 -12 months. However, rather than saying that it “stands ready to adjust monetary policy”, the MPC this time said that it will take “whatever additional action was necessary to achieve its remit”. The latter seems stronger and wider and may indicate the Bank’s willingness to embrace new tools.
- One key addition to **the Bank’s forward guidance in August** was a new phrase in the policy statement, namely that “it does not intend to tighten monetary policy until there is clear evidence that significant progress is being made in eliminating spare capacity and achieving the 2% target sustainably”. That seems designed to say, in effect, that even if inflation rises to 2% in a couple of years’ time, do not expect any action from the MPC to raise Bank Rate – until they can clearly see that level of inflation is going to be persistently above target if it takes no action to raise Bank Rate. Our Bank Rate forecast currently shows no increase, (or decrease), through to quarter 1 2024 but there could well be no increase during the next five years as it will take some years to eliminate spare capacity in the economy, and therefore for inflationary pressures to rise to cause the MPC concern. Inflation is expected to briefly peak at just over 2% towards the end of 2021, but this is a temporary short-lived factor due to base effects from twelve months ago falling out of the calculation, and so is not a concern. Looking further ahead, it is also unlikely to be a problem for some years as it will take a prolonged time for spare capacity in the economy, created by this downturn, to be used up.
- **Public borrowing** was forecast in November by the Office for Budget Responsibility (the OBR) to reach £394bn in the current financial year, the highest ever peace time deficit and equivalent to 19% of GDP. In normal times, such an increase in total gilt issuance would lead to a rise in gilt yields, and so PWLB rates. However, the QE done by the Bank of England has depressed gilt yields to historic low levels, (as has similarly occurred with QE and debt issued in the US, the EU and Japan). This means that new UK debt being issued, and this is being done across the whole yield curve in all maturities, is locking in those historic low levels through until maturity. In addition, the UK has one of the longest average maturities

for its entire debt portfolio, of any country in the world. Overall, this means that the total interest bill paid by the Government is manageable despite the huge increase in the total amount of debt. The OBR was also forecasting that the government will still be running a budget deficit of £102bn (3.9% of GDP) by 2025/26. However, initial impressions are that they have taken a pessimistic view of the impact that vaccines could make in the speed of economic recovery.

- Overall, **the pace of recovery** was not expected to be in the form of a rapid V shape, but a more elongated and prolonged one. The initial recovery was sharp after quarter 1 saw growth at -3.0% followed by -18.8% in quarter 2 and then an upswing of +16.0% in quarter 3; this still left the economy 8.6% smaller than in Q4 2019. While the one month second national lockdown that started on 5<sup>th</sup> November caused a further contraction of 5.7% m/m in November, this was much better than had been feared and showed that the economy is adapting to new ways of working. This left the economy 'only' 8.6% below the pre-crisis level.
- **Vaccines – the game changer.** The Pfizer announcement on 9<sup>th</sup> November of a successful vaccine has been followed by approval of the Oxford University/AstraZeneca and Moderna vaccines. The Government has set a target to vaccinate 14 million people in the most at risk sectors of the population by 15<sup>th</sup> February; as of mid-January, it has made good, and accelerating progress in hitting that target. The aim is to vaccinate all adults by September. This means that the national lockdown starting in early January, could be replaced by regional tiers of lighter restrictions, beginning possibly in Q2. At that point, there would be less reason to fear that hospitals could become overwhelmed any more. Effective vaccines have radically improved the economic outlook so that it may now be possible for GDP to recover to its pre-virus level as early as Q1 2022. These vaccines have enormously boosted confidence that **life could largely return to normal during the second half of 2021**. With the household saving rate having been exceptionally high since the first lockdown in March, there is plenty of pent-up demand and purchasing power stored up for when life returns to normal.
- Provided that both monetary and fiscal policy are kept loose for a few years yet, then it is still possible that in the second half of this decade, the economy may be no smaller than it would have been if COVID-19 never happened. The significant risk is if another mutation of COVID-19 appears that defeats the current batch of vaccines. However, now that science and technology have caught up with understanding this virus, new vaccines ought to be able to be developed more quickly to counter such a development, and vaccine production facilities are being ramped up around the world.
- There will still be some **painful longer term adjustments** as e.g. office space and travel by planes, trains and buses may not recover to their previous level of use for several years, or possibly ever, even if vaccines are fully successful in overcoming the current virus. There is also likely to be a **reversal of globalisation** as this crisis has exposed how vulnerable long-distance supply chains are. On the other hand, **digital services** are one area that has already seen huge growth.
- **Brexit.** The final agreement of a trade deal on 24.12.20 has eliminated a significant downside risk for the UK economy. The initial agreement only covers trade so there is further work to be done on the services sector where temporary equivalence has been granted in both directions between the UK and EU; that now needs to be formalised on a permanent basis. As the forecasts in this report were based on an assumption of a Brexit agreement being reached, there is no need to amend these forecasts.

- **Monetary Policy Committee meeting of 17 December.** All nine Committee members voted to keep interest rates on hold at +0.10% and the Quantitative Easing (QE) target at £895bn. The MPC commented that the successful rollout of vaccines had reduced the downside risks to the economy that it had highlighted in November. But this was caveated by it saying, “Although all members agreed that this would reduce downside risks, they placed different weights on the degree to which this was also expected to lead to stronger GDP growth in the central case.” So, while vaccines are a positive development, in the eyes of the MPC at least, the economy is far from out of the woods in the shorter term. The MPC, therefore, voted to extend the availability of the Term Funding Scheme, (cheap borrowing), with additional incentives for small and medium size enterprises for six months from 30.4.21 until 31.10.21. (The MPC had assumed that a Brexit deal would be agreed.)
- **Fiscal policy.** In the same week as the MPC meeting, the Chancellor made a series of announcements to provide further support to the economy: -

  - An extension of the COVID-19 loan schemes from the end of January 2021 to the end of March.
  - The furlough scheme was lengthened from the end of March to the end of April.
  - The Budget on 3.3.21 will lay out the “next phase of the plan to tackle the virus and protect jobs”. This does not sound like tax rises are imminent, (which could hold back the speed of economic recovery).
- The **Financial Policy Committee** (FPC) report on 6.8.20 revised down their expected credit losses for the banking sector to “somewhat less than £80bn”. It stated that in its assessment, “banks have buffers of capital more than sufficient to absorb the losses that are likely to arise under the MPC’s central projection”. The FPC stated that for real stress in the sector, the economic output would need to be twice as bad as the MPC’s projection, with unemployment rising to above 15%.
- **US.** The Democrats gained the presidency and a majority in the House of Representatives in the November elections: after winning two key Senate seats in Georgia in elections in early January, they now also have a very slim majority in the Senate due to the vice president’s casting vote. President Biden will consequently have a much easier path to implement his election manifesto. However, he will not have a completely free hand as more radical Democrat plans may not be supported by all Democrat senators. His initial radical plan for a fiscal stimulus of \$1.9trn, (9% of GDP), is therefore likely to be toned down in order to get through both houses.
- **The economy** had been recovering quite strongly from its contraction in 2020 of 10.2% due to the pandemic with GDP only 3.5% below its pre-pandemic level and the unemployment rate dropping below 7%. However, the rise in new cases during quarter 4, to the highest level since mid-August, suggests that the US could be in the early stages of a fourth wave. The latest upturn poses a threat that the recovery in the economy could stall. This is **the single biggest downside risk** to the shorter-term outlook – a more widespread and severe wave of infections over the winter months, which is compounded by the impact of the regular flu season and, as a consequence, threatens to overwhelm health care facilities. Under those circumstances, individual states might feel it necessary to return to more draconian lockdowns.

- The restrictions imposed to control the spread of the virus are once again weighing on the economy with employment growth slowing sharply in November and declining in December, and retail sales dropping back. The economy is set for further weakness into the spring. **GDP growth** is expected to rebound markedly from the second quarter of 2021 onwards as vaccines are rolled out on a widespread basis and restrictions are loosened.
- After Chair Jerome Powell unveiled the **Fed's adoption of a flexible average inflation target** in his Jackson Hole speech in late August 2020, the mid-September meeting of the Fed agreed by a majority to a toned down version of the new inflation target in his speech - that *"it would likely be appropriate to maintain the current target range until labour market conditions were judged to be consistent with the Committee's assessments of maximum employment and inflation had risen to 2% and was on track to moderately exceed 2% for some time."* This change was aimed to provide more stimulus for economic growth and higher levels of employment and to avoid the danger of getting caught in a deflationary "trap" like Japan. It is to be noted that inflation has actually been under-shooting the 2% target significantly for most of the last decade, (and this year), so financial markets took note that higher levels of inflation are likely to be in the pipeline; long-term bond yields duly rose after the meeting. The FOMC's updated economic and rate projections in mid-September showed that officials expect to leave the fed funds rate at near-zero until at least end-2023 and probably for another year or two beyond that. There is now some expectation that where the Fed has led in changing its inflation target, other major central banks will follow. The increase in tension over the last year between the US and China is likely to lead to a lack of momentum in progressing the initial positive moves to agree a phase one trade deal.
- The Fed's meeting on **5 November** was unremarkable - but at a politically sensitive time around the elections. At its **16 December** meeting the Fed tweaked the guidance for its monthly asset quantitative easing purchases with the new language implying those purchases could continue for longer than previously believed. Nevertheless, with officials still projecting that **inflation** will only get back to 2.0% in 2023, the vast majority expect the Fed funds rate to be still at near-zero until 2024 or later. Furthermore, officials think the balance of risks surrounding that median inflation forecast are firmly skewed to the downside. The key message is still that policy will remain unusually accommodative – with near-zero rates and asset purchases – continuing for several more years. This is likely to result in keeping Treasury yields low – which will also have an influence on gilt yields in this country.
- **EU.** In early December, the figures for Q3 GDP confirmed that the economy staged a rapid rebound from the first lockdowns. This provides grounds for optimism about growth prospects for next year. In Q2, GDP was 15% below its pre-pandemic level. But in Q3 the economy grew by 12.5% q/q leaving GDP down by "only" 4.4%. That was much better than had been expected earlier in the year. However, growth is likely to stagnate during Q4 and in Q1 of 2021, as a second wave of the virus has seriously affected many countries. The €750bn fiscal support package eventually agreed by the EU after prolonged disagreement between various countries, is unlikely to provide significant support, and quickly enough, to make an appreciable difference in the countries most affected by the first wave.
- With **inflation** expected to be unlikely to get much above 1% over the next two years, **the ECB** has been struggling to get inflation up to its 2% target. It is currently

unlikely that it will cut its central rate even further into negative territory from -0.5%, although the ECB has stated that it retains this as a possible tool to use. The ECB's December meeting added a further €500bn to the PEPP scheme, (purchase of government and other bonds), and extended the duration of the programme to March 2022 and re-investing maturities for an additional year until December 2023. Three additional tranches of TLTRO, (cheap loans to banks), were approved, indicating that support will last beyond the impact of the pandemic, implying indirect yield curve control for government bonds for some time ahead. The Bank's forecast for a return to pre-virus activity levels was pushed back to the end of 2021, but stronger growth is projected in 2022. The total PEPP scheme of €1,850bn of QE which started in March 2020 is providing protection to the sovereign bond yields of weaker countries like Italy. There is therefore unlikely to be a euro crisis while the ECB is able to maintain this level of support. However, as in the UK and the US, the advent of highly effective vaccines will be a game changer, although growth will struggle before later in quarter 2 of 2021.

- **China.** After a concerted effort to get on top of the virus outbreak in Q1, economic recovery was strong in Q2 and then into Q3 and Q4; this has enabled China to recover all of the contraction in Q1. Policy makers have both quashed the virus and implemented a programme of monetary and fiscal support that has been particularly effective at stimulating short-term growth. At the same time, China's economy has benefited from the shift towards online spending by consumers in developed markets. These factors help to explain its comparative outperformance compared to western economies. However, this was achieved by major central government funding of yet more infrastructure spending. After years of growth having been focused on this same area, any further spending in this area is likely to lead to increasingly weaker economic returns in the longer term. This could, therefore, lead to a further misallocation of resources which will weigh on growth in future years.
- **Japan.** A third round of fiscal stimulus in early December took total fresh fiscal spending this year in response to the virus close to 12% of pre-virus GDP. That's huge by past standards, and one of the largest national fiscal responses. The budget deficit is now likely to reach 16% of GDP this year. Coupled with Japan's relative success in containing the virus without draconian measures so far, and the likelihood of effective vaccines being available in the coming months, the government's latest fiscal effort should help ensure a strong recovery and to get back to pre-virus levels by Q3 2021 – around the same time as the US and much sooner than the Eurozone.
- **World growth.** World growth will have been in recession in 2020 and this is likely to continue into the first half of 2021 before recovery in the second half. Inflation is unlikely to be a problem for some years due to the creation of excess production capacity and depressed demand caused by the coronavirus crisis.

## INTEREST RATE FORECASTS

**Brexit.** The interest rate forecasts provided by Link in paragraph 3.3 were predicated on an assumption of a reasonable agreement being reached on trade negotiations between the UK and the EU by 31.12.20. There is therefore no need to revise these forecasts now that a trade deal has been agreed. Brexit may reduce the economy's potential growth rate in the long run. However, much of that drag is now likely to be offset by an acceleration of productivity growth triggered by the digital revolution brought about by the COVID crisis.

**The balance of risks to the UK**

- The overall balance of risks to economic growth in the UK is probably now skewed to the upside, but is still subject to some uncertainty due to the virus and the effect of any mutations, and how quick vaccines are in enabling a relaxation of restrictions.
- There is relatively little UK domestic risk of increases or decreases in Bank Rate and significant changes in shorter term PWLB rates. The Bank of England has effectively ruled out the use of negative interest rates in the near term and increases in Bank Rate are likely to be some years away given the underlying economic expectations. However, it is always possible that safe haven flows, due to unexpected domestic developments and those in other major economies, could impact gilt yields, (and so PWLB rates), in the UK.

### 4.3 TREASURY MANAGEMENT PRACTICE (TMP1) – CREDIT AND COUNTERPARTY RISK MANAGEMENT OPTION 1

**SPECIFIED INVESTMENTS:** All such investments will be sterling denominated, with **maturities up to maximum of 3 months**, meeting the minimum 'high' quality criteria where applicable.

**NON-SPECIFIED INVESTMENTS:** These are any investments which do not meet the specified investment criteria. Transport for the North will not use investment classes that fall under this category.

|   | Minimum credit criteria / colour band       | Max % of total investments/ | Max. maturity period                                       |
|---|---|-----------------------------|--|
| <b>DMADF – UK Government</b>                    | UK sovereign rating                         | <b>100%</b>                 | <b>3 months</b>  |
| UK Government gilts                             | UK sovereign rating                         | 100%                        | 3 months   |
| UK Government Treasury bills                    | UK sovereign rating                         | 100%                        | 3 months   |
| Bonds issued by multilateral development banks  | AAA (or state your criteria if different)   | 100%                        | 3 months   |
| Money Market Funds CNAV                         | AAA   | 100%                        | Liquid   |
| Money Market Funds LNNAV                        | AAA   | 100%                        | Liquid   |
| Local authorities                               | N/A   | 100%                        | 3 months   |
| Term deposits with banks and building societies | Blue<br>Orange<br>Red<br>Green<br>No Colour |                             | 3 months<br>3 months<br>3 months<br>1 month<br>Not for use |

**Accounting treatment of investments.** The accounting treatment may differ from the underlying cash transactions arising from investment decisions made by Transport for the North. To ensure that Transport for the North is protected from any adverse revenue impact, which may arise from these differences, we will review the accounting implications of new transactions before they are undertaken.

#### 4.4 APPROVED COUNTRIES FOR INVESTMENTS

*Based on lowest available rating*

AAA

- Australia
- Canada
- Denmark
- Germany
- Luxembourg
- Netherlands
- Norway
- Singapore
- Sweden
- Switzerland

AA+

- Finland
- U.S.A.

AA

- Abu Dhabi (UAE)
- France
- Hong Kong
- U.K.

AA-

- Belgium
- Qatar

## **4.5 TREASURY MANAGEMENT SCHEME OF DELEGATION**

### **(i) Transport for the North Board**

- receiving and reviewing reports on treasury management policies, practices and activities;
- approval of annual strategy.
- approval of/amendments to the organisation's adopted clauses, treasury management policy statement and treasury management practices;
- budget consideration and approval;
- approval of the division of responsibilities;
- receiving and reviewing regular monitoring reports and acting on recommendations;

### **(ii) Scrutiny Committee**

- reviewing the treasury management policy and procedures and making recommendations to the responsible body.

### **(iii) Audit and Governance Committee**

- reviewing the treasury management policy and procedures and making recommendations to the responsible body.

#### **4.6 THE TREASURY MANAGEMENT ROLE OF THE SECTION 151 OFFICER**

##### **The S151 (responsible) officer (Transport for the North Finance Director)**

- recommending clauses, treasury management policy/practices for approval, reviewing the same regularly, and monitoring compliance;
- submitting regular treasury management policy reports;
- submitting budgets and budget variations;
- receiving and reviewing management information reports;
- reviewing the performance of the treasury management function;
- ensuring the adequacy of treasury management resources and skills, and the effective division of responsibilities within the treasury management function;
- ensuring the adequacy of internal audit, and liaising with external audit;
- recommending the appointment of external service providers.



This page is intentionally left blank

---

## Transport for the North Board – Item 6

**Subject:** Corporate Risk Register Report

**Author:** Haddy Njie, Risk Manager

**Sponsor:** Iain Craven, Finance Director

**Meeting Date:** Wednesday 24 March 2021

### **1. Background:**

- 1.1 Transport for the North has updated the Corporate Risk Register (“CRR”) to continue to reflect the Key Performance Indicators (KPIs) and business objectives outlined in the Business Plan for Financial Year 2020/21. The update of the CRR includes the identification of new risks, re-assessments of risk impact scores and highlighting issues resulting from the reduced funding envelope announced on 4 January 2021. In addition to the principal risks and issues associated with the organisation’s KPIs, the business continues to manage the impacts of the coronavirus pandemic and associated lockdown arrangements on programme delivery and business operations.
- 1.2 This report provides the Board with an update on the organisational risks and issues relating to the business KPIs/objectives which can be found in the Corporate Risk Register.
- 1.3 The CRR was presented at the Audit and Governance Committee on 18 February 2021 for feedback and approval. It has subsequently been updated to reflect changes that have occurred since that meeting. In addition, that Committee considered a new report format which is intended to improve the utility of the CRR to its users. This format will be used at subsequent board meetings. The CRR was an agenda item at February’s Board Meeting but was deferred to this meeting due to pressures of time.
- 1.4 The terms of reference for the Audit and Governance Committee includes the requirement for the committee to “monitor Transport for the North’s risk and performance management arrangements including review of the risk register, and progress with mitigating action”.
- 1.5 Transport for the North’s corporate risks stem from the agreed KPIs and from a range of other sources, some of which are beyond Transport for the North’s direct control. The challenges and uncertainty faced by Transport for the North create both threats that

---

need to be addressed, and opportunities that can potentially be exploited. Transport for the North's Corporate Risk Register is presented at Appendix 6.1

**2. Consideration:**

- 3.1 Transport for the North's approach to managing risk is described in its Risk Management Strategy ("RMS") which sets out guidance for how risks are identified, assessed, managed and reported. The RMS has been applied in updating the Corporate Risk Register.
- 3.2 It is essential that Transport for the North and its programme teams recognise, understand and manage the risks that could negatively impact on its ability to achieve its objectives and priorities.
- 3.3 Board is asked to consider the internal and external corporate risks that the organisation is facing.

**4. Recommendation:**

- 4.1 Board is invited to:
  - a) Consider the report and appendix;
  - b) Discuss the risk and issue information provided in the Corporate Risk Register; and
  - c) Subject to any required amendments arising from discussion, approve the content of the Corporate Risk Register as a reflection of the current position.

**5. Appendices:**

- 5.1 Appendix 6.1 – Transport for the North's Corporate Risk Register.

## Required Considerations

### **Equalities:**

|                         |     |    |
|-------------------------|-----|----|
| Age                     | Yes | No |
| Disability              | Yes | No |
| Gender Reassignment     | Yes | No |
| Pregnancy and Maternity | Yes | No |
| Race                    | Yes | No |
| Religion or Belief      | Yes | No |
| Sex                     | Yes | No |
| Sexual Orientation      | Yes | No |

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Equalities           | A full impact assessment has not been carried out because it is not required for this report. | Haddy Njie                 | Iain Craven     |

### **Environment and Sustainability**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b>  | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|---|---|----------------------------|-----------------|
| Sustainability / Environment – including considerations regarding Active Travel and Wellbeing | A full impact assessment has not been carried out because it is not required for this report. | Haddy Njie                 | Iain Craven     |

### **Legal**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Legal                | Legal risks to Transport for the North are identified in the Corporate Risk Register and there are no new | Julie Openshaw             | Dawn Madin      |

|  |  |  |  |
|--|--|--|--|
|  | legal implications as a result of this report. |  |  |
|--|--|--|--|

### **Finance**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Finance              | The Finance Team has reviewed this report and confirmed that the financial implications are included within the report. | Paul Kelly                 | Iain Craven     |

### **Resource**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Resource             | The HR Team has reviewed this report and confirmed the resourcing implications are captured within Risk Register. | Stephen Hipwell            | Dawn Madin      |

### **Risk**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Risk                 | A full corporate risk assessment activity took place which can be found in Item 6.1. | Haddy Njie                 | Iain Craven     |

### **Consultation**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b> | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|----------------|----------------------------|-----------------|
|                      |                |                            |                 |

|              |   |            |             |
|--------------|---|------------|-------------|
| Consultation | A consultation has not been carried out because it is not required for this report. | Haddy Njie | Iain Craven |
|--------------|---|------------|-------------|

This page is intentionally left blank

# Draft Transport for the North Corporate Risk Register

## Financial Year 2020/21

Updated: 12/03/21



## Introduction to Transport for the North's Corporate Level Risks

It is essential that Transport for the North (TfN) recognises, understands and manages the range of risks that could negatively impact on its ability to achieve the objectives set out in the 2020/2021 Business Plan. TfN's approach to managing risk is set out in its Risk Management Strategy which provides guidance for how risks are identified, assessed, managed and reported. Each programme and corporate function within TfN has its own risk register that is updated on either a monthly or fortnightly cycle, with clear reporting in line with governance arrangements. At the apex of these arrangements is the half-yearly reporting of the corporate level risks to the TfN Board.

TfN uses programme information to identify cross cutting risk themes that are sufficiently significant, either in their own right or in aggregate, to be reported to and discussed by the Board as risks requiring corporate focus. TfN's corporate risks stem from a range of sources, some of which are beyond TfN's direct control. The challenges and uncertainty faced by TfN create both threats that need to be addressed, and opportunities that can potentially be exploited.

The 2020/21 corporate risk register presents the corporate risks that might directly have an impact on TfN's business plan objectives. To ensure effective management of risks, the report provides information regarding the proximity of the risk, potential consequences for TfN's objectives and priorities, and the mitigation measures in place to manage the downside risks.

**Table 1** summarises TfN's corporate level risks and the senior owner or owners (whilst each individual risk can only have one owner, the aggregation of risks into corporate level themes can result in corporate risk categories that include risks with more than one owner). **Table 2** outlines TfN's defined Probability Impact Criteria to undertake the qualitative assessment of the risks in order to produce a risk exposure score for each risk. **Table 3** provides guidance regarding the assessment and classification of TfN's level of control on the proposed mitigation risk plans. **Table 4** provides a detailed analysis of each risk theme, the mitigating actions that have been adopted, and the mitigation level of controllability. The last of these provides the user with information to help understand the extent to which TfN is able to influence or control the risk outcomes.

**Table 1: Summary of TfN’s Corporate Risk Themes, Probability / Impact Assessments and Ownerships**

| <b>Corporate Risk Theme</b>   | <b>Risk Probability</b> | <b>Nature of Risk Impact</b>   | <b>Current Risk Impact</b> | <b>Post Mitigation Risk Impact</b> | <b>Risk and Mitigation Strategy Owner</b>  |
|---|-------------------------|--|----------------------------|------------------------------------|--|
| The Covid-19 Pandemic prevents or delays TfN from delivering its objectives | <b>Medium</b>           | <ul style="list-style-type: none"> <li>Business deliverables may not be completed on time if:                             <ul style="list-style-type: none"> <li>(i) a significant number of staff within TfN or its supply chain are affected by COVID-19.</li> <li>(ii) TfN engagement, decision making / governance processes are impacted by the availability of Constituent Authority or departmental colleagues.</li> <li>(iii) Covid-19 related uncertainty causes wider policy announcements to be delayed.</li> </ul> </li> <li>There is the potential for additional costs to be incurred through the measures that might be put in place to address the issues caused by Covid-19.</li> </ul>                 | <b>High</b>                | <b>Medium</b>                      | <p><b>TfN Chief Executive</b><br/>(Barry White)</p>                                  |
| TfN Reputational and Political Engagement                                   | <b>An Issue</b>         | <ul style="list-style-type: none"> <li>The issue arises from reduced core funding (mitigated partly by DfT agreeing cost allocations into the NPR programme) and no funding for the IST programme, this means:                             <ul style="list-style-type: none"> <li>(i) TfN will no longer be able to deliver its IST (smart travel) aspirations as set out in its CSR submission.</li> <li>(ii) TfN’s ability to deliver in line with member aspirations will be reduced.</li> </ul> </li> <li>The future role of Sub-national Transport Bodies (STBs) such as TfN needs greater clarity otherwise TfN’s ability to deliver the economic, social and sustainability benefits could be reduced.</li> </ul> | <b>An Issue</b>            | <b>An Issue</b>                    | <p><b>TfN Chief Executive / Finance Director</b><br/>(Barry White / Iain Craven)</p> |

| <b>Corporate Risk Theme</b>   | <b>Risk Probability</b> | <b>Nature of Risk Impact</b>   | <b>Current Risk Impact</b> | <b>Post Mitigation Risk Impact</b> | <b>Risk and Mitigation Strategy Owner</b>   |
|---|-------------------------|--|----------------------------|------------------------------------|---|
| Embedding the Strategic Transport Plan across Programmes (STP)              | <b>Low</b>              | <ul style="list-style-type: none"> <li>Programmes of work develop in a way that does not contribute to, or runs counter to, the overall objectives and plan set out in the STP, resulting in the failure to achieve the aims of the STP.</li> </ul>  | <b>High</b>                | <b>Medium</b>                      | <b>Strategy and Programme Director</b><br>(Tim Foster)  |
| Delivery of Robust and Compelling Evidence to Support Investment Programmes | <b>Medium</b>           | <ul style="list-style-type: none"> <li>An insufficiently compelling evidence base, particularly around the programme level economic case, may delay or prevent strategic transport infrastructure investments being made, with consequential impacts on TfN's ability to deliver its objectives and maintain support from its partners.</li> </ul>                   | <b>Medium</b>              | <b>Low</b>                         | <b>Strategy and Programme Director / TfN Programme Directors</b><br>(Tim Foster / Tim Wood, Peter Molyneux, David Hoggarth) |
| Transport Decarbonisation and Climate Change Emergencies                    | <b>Medium</b>           | <ul style="list-style-type: none"> <li>If TfN fails to develop appropriate and timely policy positions to support decarbonisation of transport, and thereby fails to integrate them into its strategic transport development plans, this would potentially result in an investment programme that is misaligned to partner / central government policies.</li> </ul> | <b>Medium</b>              | <b>Low</b>                         | <b>Strategy and Programme Director</b><br>(Tim Foster)  |
| TfN Operations  | <b>An Issue</b>         | <ul style="list-style-type: none"> <li>Funding reductions may, and will in the case of IST, mean that TfN is unable to deliver the full range of its members aspirations.</li> <li>Failure to recruit and retain the right people with the right skills could negatively impact on TfN's ability to deliver its objectives.</li> </ul>                               | <b>An Issue</b>            | <b>High</b>                        | <b>Finance Director / Business Capabilities Director</b>  |

| Corporate Risk Theme  | Risk Probability | Nature of Risk Impact  | Current Risk Impact | Post Mitigation Risk Impact | Risk and Mitigation Strategy Owner  |
|---|------------------|--|---------------------|-----------------------------|---|
|   |                  |  |                     |                             | (Iain Craven / Dawn Madin)  |
| TfN Compliance with Relevant Laws and Regulations                             | Low              | <ul style="list-style-type: none"> <li>Potential reputational impacts with both stakeholders and the public.</li> <li>Financial impact including fines or other penalties for breach of statutory obligations such as Data Protection, Freedom of Information or Health and Safety legislation.</li> <li>There is also a potential financial impact including fines costs and/or other penalties for breach of regulatory laws such as Data Protection, Freedom of Information, Health and Safety or Procurement.</li> </ul> | High                | Medium                      | <b>Business Capabilities Director / Head of Legal Services</b><br>(Dawn Madin / Julie Openshaw) |
| Revised Framework - Delivery of Contactless on Rail and Local Smart Ticketing | An Issue         | <ul style="list-style-type: none"> <li>As set out in the report to 18 February Board, TfN will complete Phases 1 &amp; 2. No further programme activity will therefore be delivered beyond that point.</li> <li>This risk will now be removed from the Corporate Risk Register.</li> </ul>   | An Issue            | An Issue                    | <b>IST Programme Director</b><br>(Jeremy Acklam)  |
| The Northern Powerhouse Business Case Delivery and Programme Development      | Very High        | <ul style="list-style-type: none"> <li>DfT's request for the publication of the IRP to precede the SOC submission could impact on the future scope of the Strategic Outline Case.</li> <li>The outcome of the IRP may influence the Northern Powerhouse Rail programme, the timing of submission of SOC, the next sequence of delivery and the OBC.</li> <li>This may cause delays to proposed programme activity for FY2021/22, including</li> </ul>  | Very High           | High                        | <b>NPR Programme Director</b><br>(Tim Wood)   |

| <b>Corporate Risk Theme</b>                           | <b>Risk Probability</b> | <b>Nature of Risk Impact</b>   | <b>Current Risk Impact</b> | <b>Post Mitigation Risk Impact</b> | <b>Risk and Mitigation Strategy Owner</b>                            |
|---|-------------------------|--|----------------------------|------------------------------------|--|
|   |                         | <p>the impacts of commissioning and mobilising programme teams</p> <ul style="list-style-type: none"> <li>The outcome of the IRP may include conclusions relating to the TRU solution which may not align with TfN's position.</li> </ul>  |                            |                                    |  |
| Rail Operations (Franchise Management and Investment) | <b>Very High</b>        | <ul style="list-style-type: none"> <li>Less investment in services and infrastructure as a result of weaker business cases resulting from reduced passenger numbers.</li> <li>Lower passenger numbers post COVID-19 could reduce the viability of some existing services.</li> </ul> | <b>Very High</b>           | <b>Very High</b>                   | <p><b>Strategic Rail Programme Director</b><br/>(David Hoggarth)</p> |

## Table 2: Transport for the North's Probability Impact Scoring Criteria

TfN's Probability Impact Criteria, as illustrated below, is a risk management tool that enables the risk likelihood and impact to be calculated to produce an aggregated risk severity and exposure for each risk. The corporate risks are plotted according to the probability of occurrence and the impact upon an activity should the risk happen.

The risk ranking score is generated by performing a qualitative assessment across the risk theme as a whole, informed by multiplying the scoring for each risk.

| Rating Number | Probability (%)                                | Rating           | Impact Rating Definition   |
|---------------|--|------------------|--|
| 5             | 100% likelihood that the risk will materialise | <b>An Issue</b>  | One or more of the implications will have an effect on business plan objectives.   |
| 4             | 81-100   | <b>Very High</b> | <ul style="list-style-type: none"> <li>Financial Implication: <b>£&gt;2m</b></li> <li>Schedule Implication: <b>&gt; 12 (months)</b></li> <li>National long-term negative media coverage, significant loss of trust and credibility</li> <li>Severe relationship issues with partners and/or third parties (such as Local Authorities, public)</li> </ul> |
| 3             | 51-80  | <b>High</b>      | <ul style="list-style-type: none"> <li>Financial Implication: <b>£1m - £2m</b></li> <li>Schedule Implication: <b>9 - 12 (months)</b></li> <li>National short-term negative media coverage</li> <li>There is evidence of relationship issues with partners/or and third parties (such as Local Authorities, public)</li> </ul>                            |
| 2             | 21-50  | <b>Medium</b>    | <ul style="list-style-type: none"> <li>Financial Implication: <b>£500K - £1m</b></li> <li>Schedule Implication: <b>3 - 9 (months)</b></li> <li>Local media damage</li> <li>No or minor strained relationship with partners and/or third parties (such as Local Authorities, public)</li> </ul>   |
| 1             | < = 20   | <b>Low</b>       | <ul style="list-style-type: none"> <li>Financial Implication: <b>£0 - £500K</b></li> <li>Schedule / Time delay Implication: <b>0 - 3 (months)</b></li> <li>Local media attention quickly remedied</li> <li>No strain relationship with partners and/or third parties (such as Local Authorities, public)</li> </ul>                                      |

## Table 3: Qualitative Assessment of the Levels of Controllability on the Mitigation Action Plans

In order to assist the user to understand how TfN's key risks are impacted by the mitigation activities set out in this document, TfN has assessed the level of control on the mitigation risk action plans and the extent to which TfN is able to influence or control those risk outcomes.

The following corporate risks have been subject to an evaluation by identifying the:

- **Controllable Mitigations:** these are mitigation strategies that TfN has the power / ability to implement and as a result, contribute to the successful mitigation of the associated risk.
- **Dependency Mitigations (Controllable):** The identified mitigations require a collaborative effort with relevant partners or other stakeholders in order to be successful in the management of the action plans. Although, the mitigations are deemed as dependency, TfN may be able to deploy additional resources to increase its ability to influence risk outcomes.
- **Dependency Mitigations (Limited Control):** The identified mitigations must be a collaboration with the relevant internal and external parties and requires a buy-in. For example, national and local political buy-in. Without joint involvement, the likelihood of the risk materialising increases. Whilst TfN can attempt to influence the factors impacting on these risks, it has a low level of control over if/how these mitigations are implemented.

### Guideline: Level of Mitigation Controllability

| Mitigation Control Level                 | Mitigation Control Level Assessment |
|--|-------------------------------------|
| Controllable Mitigations                 | High                                |
| Dependency Mitigations (Controllable)    | Medium                              |
| Dependency Mitigations (Limited Control) | Low                                 |

## Table 4: Qualitative Risk Analysis of TfN’s Corporate Level Risks

**Risk ID: TCR01**  
**Risk: The COVID-19 Pandemic Prevents or Delays TfN from Delivering its Objectives**

|   |  |
|---|--|
| <b>Risk Description</b>                           | <p>The coronavirus pandemic continues to be a threat that is directly impacting upon the delivery of TfN’s programmes and Business Plan Key Performance Indicators (KPIs). The lockdowns and associated measures to prevent the disease from spreading have extended homeworking across the entire organisation (as well as the country as a whole including significant supply chains). This has created and sustained four key risks for Transport for the North (TfN) business operations:</p> <p>1) There is still a potential, albeit reduced from earlier in the pandemic, for a significant number of staff within TfN or its supply chain being affected by the coronavirus, or by steps taken by suppliers to respond to the economic pressures caused by the pandemic;</p> <p>2) TfN engagement, decision making / governance processes might be impacted by the availability of Constituent Authority or departmental colleagues;</p> <p>3) The COVID-19 related uncertainty causes wider policy announcements to be delayed; and</p> <p>4) The pandemic reduces the efficiency with which certain activities can be delivered and therefore increases the costs associated with delivering them.</p> |
| <b>Risk Proximity</b>                             | Short-Term to Medium-Term  |
| <b>Risk Probability</b>                           | (1) <span style="background-color: #90EE90;">Low</span> (2) <span style="background-color: #FFFF00;">Medium</span> (3) <span style="background-color: #808080;">An Issue</span> (4) <span style="background-color: #90EE90;">Low</span>  |
| <b>Assessed Risk Impact</b>                       | (1) <span style="background-color: #FF0000;">High</span> (2) <span style="background-color: #FF0000;">High</span> (3) <span style="background-color: #FF0000;">High</span> (4) <span style="background-color: #FFFF00;">Medium</span>  |
| <b>Potential Impact (Qualitative Description)</b> | <ul style="list-style-type: none"> <li>TfN’s key programme and business deliverables may not be completed on time if the number of staff / suppliers affected by the COVID-19 is significant.</li> <li>In addition, TfN’s ability to take forward its programmes will be affected if partner officers and other stakeholders are unable to fully engage in Client Reference groups and other TfN governance processes.</li> <li>Impacts on central government decision-making in key areas such as the Integrated Rail Plan, the Environment Bill, and the Williams Review will also impact upon TfN’s ability to drive programmes.</li> </ul>   |

## Mitigation Action Plans and Level of Controllability

| Mitigation No. | Mitigation Strategies / Action Plans  | Mitigation Control Level Assessment | Mitigation Control Level                 |
|----------------|---|-------------------------------------|--|
| 1              | Organisational and Individual Directorate Contingency Plans have been developed and are now in place. These are further underpinned by TfN Corporate Business Continuity Plan (BCP). This includes identification of a core Crisis Management Team to coordinate all business-critical activities should these plans need to be instigated, and to maintain effective communication with employees. | High                                | Controllable Mitigations                 |
| 2              | Programme and policy teams have identified and focused on the critical organisational outputs and deployed available resources in the achievement of those priorities.  | High                                | Controllable Mitigations                 |
| 3              | Programme teams continue to re-programme delivery plans and communicate changes to partners. They also continue to work with consultants and partners and where possible provide support.   | High                                | Dependency Mitigations (controllable)    |
| 4              | TfN continues to deliver its Business Plan where possible so as to minimise delays in delivering outputs and allow activity to be expedited once policy decisions by central Government have been communicated.   | High                                | Dependency Mitigations (Limited Control) |

|   |   |
|---|---|
| <b>Corporate Risk and Mitigation Owner(s)</b> | Risk Owner (Barry White)<br>Mitigation Ownership (Heads of Services) – Departmental Contingency Plans |
|---|---|

**Risk ID: TCR02****Risk Theme: Transport for the North’s Reputational and Political Engagement**

|   |   |
|---|---|
| <b>Risk Description</b>                           | <p>(1) Central Government’s intention with regard to the future role of Sub-national Transport Bodies (STBs) is unclear. This uncertainty disrupts TfN’s ability to recruit and retain talented staff and may prevent the organisation from fulfilling its objectives and delivering its programme of works. DfT’s preference is for STBs to give their views in private rather than in public. Clarity on this position is required and DfT has indicated that it is considering proposing changes to the Communications MoU and/or Partnership Agreement.</p> <p>(2) On 4 January, Transport for the North received funding notification from the department that indicated a cessation of IST funding and a 40% reduction in the current level of Core funding from £10m to £6m. The cessation of the programme has been confirmed and the team has commenced on the activities relating to the closure of the programme. Further, TfN’s ability to deliver in line with member aspirations will be reduced. This latter impact has been ameliorated by the agreement with DfT to allow £2.5m of expenditure previously charged to Core funding to be met from programme funding. The full position in this regard is set out in the Business Plan and Budget Reports to this meeting.</p> <p>(3) There is a mismatch between the expectations placed upon TfN regarding its ability to deliver improvements to the Northern transport system in the short to medium term, and the limited extent of its statutory powers and functions that focus on the provision of strategic advice rather than infrastructure delivery.</p> |
| <b>Risk Proximity</b>                             | Short to Medium term  |
| <b>Risk Probability</b>                           | (1) <b>Very High</b> (2) <b>An Issue</b> (3) <b>Very High</b>   |
| <b>Assessed Risk Impact</b>                       | (1) <b>Very High</b> (2) <b>An Issue</b> (3) <b>Very High</b>   |
| <b>Potential Impact (Qualitative Description)</b> | <ul style="list-style-type: none"> <li>• TfN could lack the powers or the influence to deliver the economic, social and sustainability benefits to the North that it set out in the Strategic Transport Plan.</li> <li>• The reduced Core funding and no funding for the IST programme makes it more difficult for TfN to develop transformational transport initiatives to achieve the levelling up agenda and improve transport connectivity for the North’s passengers.</li> <li>• Failure to make timely decisions with regard to projects and programmes, and could delay or prevent the benefits of strategic transport infrastructure from being delivered.</li> <li>• TfN’s credibility could be negatively impacted by being unable to deliver across an “expectation gap” between its actual statutory responsibilities and powers and its perceived role.</li> </ul>   |

## Mitigation Action Plans and Level of Controllability

| Mitigation No. | Mitigation Strategies / Action Plans   | Mitigation Control Level Assessment | Mitigation Control Level                 |
|----------------|--|-------------------------------------|--|
| 1              | TfN aspirations in relation to its future role and associated powers have been set out in the Northern Transport Charter. TfN's 2021/22 Business Plan will include activity to develop capability and additional evidence on investment plans aligned with the Northern Transport Charter proposals. | Medium                              | Dependency Mitigations (Controllable)    |
| 2              | Engagement with Members and constituent authorities at a political and officer level, stakeholders and partners, to continue to represent 'One Voice' for the North.   | Medium                              | Dependency Mitigations (Limited Control) |
| 3              | Structured engagement with central government officials and decision-makers and responding to any DfT proposals to update the Communications MoU/Partnership Agreement once seen.  | Medium                              | Dependency Mitigations (Limited Control) |
| 4              | TfN to focus on contributing to the recovery phase of the Covid-19 pandemic by ensuring we have on-going dialogue with DfT, including the DfT acceleration unit and with NTAC on the Economic Recovery Plan proposals.   | Medium                              | Dependency Mitigations (Limited Control) |
| 5              | TfN to highlight where necessary the limits of its powers and when directed to seek to extend its influence for greater decision making.   | Medium                              | Dependency Mitigations (Limited Control) |
| 6              | The TfN has undertaken a business planning and budgeting process that focuses its available resources on key Member priorities.  | High                                | Controllable Mitigations                 |

|   |   |
|---|---|
| <b>Corporate Risk and Mitigation Owner(s)</b> | Iain Craven (Funding risks) / Barry White (Political and Reputational risk) |
|---|---|

**Risk ID: TCR03****Risk Theme: Embedding the Strategic Transport Plan (STP) across programmes**

|   |  |
|---|--|
| <b>Risk Description</b>                           | The Strategic Transport Plan (STP) was adopted by TfN in February 2019. It sets out the “Why, What and How” of TfN’s approach to facilitating inclusive and sustainable transformational economic growth across the North. If TfN programmes (and research) are not aligned with the STP, it would prove difficult to contribute to the delivery of the STP. In addition, it could impact on the development of additional detailed policy positions resulting in sub-optimal outputs from investments when measured against TfN’s overarching objectives. |
| <b>Risk Proximity</b>                             | On-going   |
| <b>Risk Probability</b>                           | Low  |
| <b>Assessed Risk Impact</b>                       | High   |
| <b>Potential Impact (Qualitative Description)</b> | Programmes of work developed in a way that does not contribute to, or runs counter to, the overall objectives and plans set out in the STP, resulting in the failure to achieve the aims of the STP and/or leads to sub-optimal impacts from transport investments.  |

## Mitigation Action Plans and Level of Controllability

| Mitigation No. | Mitigation Strategies / Action Plans   | Mitigation Control Level Assessment | Mitigation Control Level |
|----------------|--|-------------------------------------|--------------------------|
| 1              | Co-ordination mechanisms have been established within TfN and with partners (such as the Strategic Oversight Group) to facilitate the co-ordination of programmes of work.   | High                                | Controllable Mitigations |
| 2              | An assurance framework is in place which will allow the organisation to manage changes in the investment programme consistent with the vision of the STP. This will be further developed as required to support TfN's role in any future investment process. | High                                | Controllable Mitigations |
| 3              | A robust benefits realisation framework is being developed to enable the evaluation of programme KPIs and allow the assessment of outcomes in relation to STP objectives.  | High                                | Controllable Mitigations |

|   |            |
|---|------------|
| <b>Corporate Risk and Mitigation Owner(s)</b> | Tim Foster |
|---|------------|

**Risk ID: TCR04****Risk Theme: Delivery of Robust & Compelling Evidence to Support Investment**

|   |   |
|---|---|
| <b>Risk Description</b>                           | <p>One of the objectives of developing the Analytical Framework (AF) is to allow the capture of the economic, social and environmental impacts of transformational transport schemes. Further developments are underway to ensure robust evidence of economic transformation can be captured and quantified or qualified through the Analytical Framework.</p> <p>There is a risk that TfN might be unable to make a timely, robust, credible, evidence-based case to support NPR and the wider Investment Programme. This risk could lead to either delays to the delivery of business cases or limited ability to represent transformational benefits which could thus be discounted by decision makers due to a reduction in the quality and assurance rating of the analysis. This could limit TfN's ability to deliver agreed outputs outlined in the Strategic Transport Plan (STP). In addition, the full requirements for TAME's contribution to the NPR programme in 2021/22 will remain uncertain until the publication of the Integrated Rail Plan (IRP). This uncertainty is likely to create a resourcing risk and required support to other TfN programmes.</p> |
| <b>Risk Proximity</b>                             | Short and Medium Term   |
| <b>Risk Probability</b>                           | Medium  |
| <b>Assessed Risk Impact</b>                       | High  |
| <b>Potential Impact (Qualitative Description)</b> | <ul style="list-style-type: none"> <li>• An insufficiently compelling evidence base, particularly around the programme level economic case may delay or prevent strategic transport infrastructure investments being made, with consequential impacts on TfN's ability to deliver its objectives.</li> <li>• The inability to make a transformational case could damage TfN's reputation with partners as an organisation who's key objective is to take a leadership role in delivering innovative business cases to secure investments.</li> </ul>  |

## Mitigation Action Plans and Level of Controllability

| Mitigation No.                                | Mitigation Strategies / Action Plans   | Mitigation Control Level Assessment | Mitigation Control Level                 |
|---|--|-------------------------------------|--|
| 1   | TAME staff are working closely with DfT officials to build confidence in the robustness of Analytical Framework tools, dedicating resources to responding to requests for information in a professional and timely manner. Independent peer reviews of Analytical Framework tools are being commissioned through TAME's new Expert Panel, helping to provide evidence of quality to DfT. | Medium                              | Controllable Mitigations                 |
| 2   | Programme timescales have been adjusted where it is sensible to make those adjustments without significantly impacting delivery against TfN's core objectives.   | High                                | Controllable Mitigations                 |
| 3   | Scope is being managed in consultation with DfT, TfN Partners and Peer Reviewers to ensure essential functionality for robustly representing transformation is prioritised and "added value" functionality is deprioritised where appropriate. This will ensure that the approach is proportionate for the stage of scheme development.  | Medium                              | Dependency Mitigations (Limited Control) |
| 4   | Added value work will be brought into programmes at a later stage in the form of sensitivity analysis, ensuring that work undertaken to date can still provide value to TfN programmes.  | High                                | Controllable Mitigations                 |
| 5   | The TAME team structure was revised and additional senior resources were introduced with improved engagement with TfN programmes to ensure Analytical Framework development and application activities meet the needs of the programmes.   | High                                | Controllable Mitigations                 |
| 6.  | The team is undertaking scenario planning for different outcomes of the IRP. Additionally, the team has developed flexible professional services contracts, which can be scaled up and down to meet different levels of NPR resource requirements, thereby, providing a control mechanism to protect TAME's resources that are committed to other programmes.                            | High                                | Controllable Mitigations                 |
| <b>Corporate Risk and Mitigation Owner(s)</b> | Tim Foster   |                                     |  |

**Risk ID: TCR05****Risk Theme: Transport Decarbonisation and Climate Change Emergencies**

|   |   |
|---|---|
| <b>Risk Description</b>                           | <p>The UK government has set a climate change ambition that the UK will have net zero greenhouse gas emissions by 2050. This is an ambitious target, which moves from the previous government position of 80% reduction. Within the Strategic Transport Plan (STP), TfN has committed to develop a “Pathway to 2050” which will manifest itself within a decarbonisation strategy outlining how net zero emissions can be delivered within the North and the trajectory for change. The impact of the Covid-19 pandemic has been accounted for within our Future Travel Scenarios.</p> <p>In order to deliver on this ambition, TfN needs to collaborate with, and gain consensus from, partners to identify targets / policies for TfN to accelerate carbon reductions from the transport sector. There is a risk that TfN falls behind in developing appropriate and timely policy positions to support decarbonisation of transport, and thereby fails to deliver on the decarbonisation commitment made in the STP This would potentially result in an investment programme that is misaligned to partner / central government policies.</p>  |
| <b>Risk Proximity</b>                             | Long-Term   |
| <b>Risk Probability</b>                           | Medium  |
| <b>Assessed Risk Impact</b>                       | Medium (Reputation), Medium (Time), High (Relationship)   |
| <b>Potential Impact (Qualitative Description)</b> | <ul style="list-style-type: none"> <li>• There is a risk that TfN falls behind in developing appropriate and timely policy positions to support decarbonisation of transport, and thereby fails to integrate them into its strategic transport development plans. This would potentially result in an investment programme that is misaligned to partner / central government policies.</li> <li>• Failure to develop relevant policy positions adversely impacts on TfN credibility and influence as a Sub-National Transport Body.</li> <li>• In the absence of an agreed policy framework with regard to decarbonisation and sustainability, TfN’s programmes may not be adequately addressing decarbonisation and climate change issues. This would adversely impact upon TfN’s ability to deliver successful business cases.</li> <li>• In the absence of an agreed decarbonisation and sustainability policy frameworks, TfN’s programmes may not be adequately addressing decarbonisation and climate change issues. In the medium to long term, this might contribute towards an excess of agreed global temperature rise (as defined by the Paris Agreement) and climate change which might impact upon the resilience of the North’s transport infrastructure.</li> </ul> |

## Mitigation Action Plans and Level of Controllability

| Mitigation No. | Mitigation Strategies / Action Plans  | Mitigation Control Level Assessment | Mitigation Control Level |
|----------------|---|-------------------------------------|--------------------------|
| 1              | The carbon pathways, which forms part of the decarbonisation strategy has been developed.   | High                                | Controllable Mitigations |
| 2              | TfN has appointed an Environmental and Sustainability Officer responsible for developing the environmental policy; and to ensure the integration of the work into the development of TfN's transport strategies.  | High                                | Controllable Mitigations |
| 3              | To ensure that the decarbonisation and broader sustainability / environmental policies that are developed by TfN are properly reflected in both strategic and project level decision making, including through the IPBA process, and therefore appropriately weighted within TfN decision making processes. | High                                | Controllable Mitigations |

|   |            |
|---|------------|
| <b>Corporate Risk and Mitigation Owner(s)</b> | Tim Foster |
|---|------------|

**Risk ID: TCR06****Risk Theme: Transport for the North's Business Operations**

|   |  |
|---|--|
| <b>Risk Description</b>                           | <p>(1) There is an ongoing risk of the failure to deliver programmes' outputs in a way that achieves VfM in TfN expenditure;</p> <p>(2) TfN was informed by the department that the funding for both its Core operations and the IST programme would be cut, in the case of the latter in its entirety. TfN has prepared a business plan and budget year for 2021/22 that will be presented to this Board for approval. In addition to these cuts, TfN faces uncertainty in relation to post-IRP arrangements and funding in future years. This short- to medium- term uncertainty will impact on TfN's ability to manage / deliver multi-year activity and may also negatively impact on its ability to recruit and retain suitably qualified staff.</p> <p>(3) The Chief Executive Officer (CEO) is departing TfN, effective mid-April 2021. Should a timely replacement (or interim cover arrangements) not be secured, it is likely to impact on TfN's leadership capabilities, alongside having a potential impact on the delivery of TfN's strategic objectives and priorities.</p> <p>Although unrelated, it should also be noted that the CEO's resignation (alongside the resignation of the Strategy &amp; Programme Director) occurred at a time when TfN has been subject to funding cuts, notably the cessation of the IST programme, and continues to face significant uncertainties (IRP, Williams, Devolution White Paper) which all have the potential to impact on wider employee morale and confidence.</p> |
| <b>Risk Proximity</b>                             | (1) On-going (2) On-going (3) Medium-Long Term   |
| <b>Risk Probability</b>                           | (1) Low (2) An Issue (3) Medium  |
| <b>Assessed Risk Impact</b>                       | (1) High (2) An Issue (3) High, Relationship High  |
| <b>Potential Impact (Qualitative Description)</b> | <ul style="list-style-type: none"> <li>• Failure to achieve Value for Money could impact on TfN's ability to access funding in the future.</li> <li>• Funding reductions may (will in the case of IST) mean that TfN is unable to deliver the full range of its members' aspirations.</li> <li>• Failure to recruit and retain the right people with the right skills could negatively impact on TfN's ability to deliver its objectives and priorities.</li> </ul>  |

## Mitigation Action Plans and Level of Controllability

| Mitigation No.                                | Mitigation Strategies / Action Plans   | Mitigation Control Level Assessment | Mitigation Control Level                 |
|---|--|-------------------------------------|--|
| 1   | Clear and well documented processes and procedures are in place. VfM and governance to be undertaken by both internal and external audits.   | High                                | Controllable Mitigations                 |
| 2   | Commissioning processes include OBT sign-off of expenditure, and explicit approval for expenditure against a schedule of delegations.  | High                                | Controllable Mitigations                 |
| 3   | Engagement with stakeholders to ensure the case for TfN's funding is supported by members, business and in Parliament.   | High                                | Controllable Mitigations                 |
| 4   | TfN continues, where funding conditions / certainty allows, to hire suitable qualified officers in all senior positions in a timely manner, but also including critical programme and back office roles. There is on-going training and communication across the organisation.                           | Medium                              | Dependency Mitigations (Limited Control) |
| 5   | A comprehensive People Strategy has been developed and is in place covering reward, workforce/skills planning, succession planning, recruitment and selection, talent and performance management.  | High                                | Controllable Mitigations                 |
| 6   | A leadership programme is being delivered in the final two quarters of FY 2020/21 to further support the leadership capability within the organisation.  | High                                | Controllable Mitigations                 |
| 7   | To continue to brief and update staff through the monthly updates, regular bulletins, employee forum and SMT meetings with regards to budget setting, IRP, Williams and other current uncertainties TfN is facing to keep them fully apprised and address any questions or concerns in a timely fashion. | High                                | Controllable Mitigations                 |
| 8   | The recruitment search of a replacement for the CEO position is progressing to enable TfN to complete an appointment (and/or any interim cover arrangements) prior to the current CEO's departure.   | High                                | Controllable Mitigations                 |
| <b>Corporate Risk and Mitigation Owner(s)</b> | Iain Craven (Funding risks) / Dawn Madin (HR related risks)  |                                     |  |

**Risk ID: TCR07****Risk Theme: Compliance with the Relevant Laws and Regulations**

|   |  |
|---|--|
| <b>Risk Description</b>                           | Transport for the North is a statutory body with limited statutory powers and duties. There is a risk that in carrying out its functions, TfN fails to comply with applicable law or exceed its powers.  |
| <b>Risk Proximity</b>                             | On-going   |
| <b>Risk Probability</b>                           | Low  |
| <b>Assessed Risk Impact</b>                       | Financial (Medium) Reputation (High)   |
| <b>Potential Impact (Qualitative Description)</b> | <ul style="list-style-type: none"> <li>• If TfN fails to adhere to applicable law, or acts outside its powers, there could be reputational impacts with both stakeholders and the public, which may impact its ability to meet its objectives and/or legal proceedings against TfN.</li> <li>• There is also a potential financial impact including fines costs and/or other penalties for breach of regulatory laws such as Data Protection, Freedom of Information, Health and Safety or Procurement.</li> <li>• The ICO may issue a decision notice or the HSE may issue an enforcement notice if it found that TfN was in breach of information or health and safety legislation.</li> <li>• TfN could be subject to substantial financial damages for breach of the Public Contracts Regulations.</li> <li>• Important work may be delayed by a failure to comply with necessary obligations such as statutory consultation.</li> </ul> |

## Mitigation Action Plans and Level of Controllability

| Mitigation No. | Mitigation Strategies / Action Plans   | Mitigation Control Level Assessment | Mitigation Control Level |
|----------------|--|-------------------------------------|--------------------------|
| 1              | TfN has suitably qualified officers in all senior positions, particularly the HoPS, S151 and Monitoring officer. In addition, TfN has employed an in-house legal team. | High                                | Controllable Mitigations |
| 2              | TfN ensures there are clear and well documented processes and procedures in place.   | High                                | Controllable Mitigations |
| 3              | Ongoing training on laws and legislations and communication across the organisation.   | High                                | Controllable Mitigations |
| 4              | To ensure that there is continuous legal review to TfN's Boards and Committees.  | High                                | Controllable Mitigations |
| 5              | TfN employs in house legal and procurement specialists and regularly procures external legal advice on commissioning and procurement.                                  | High                                | Controllable Mitigations |

|   |                             |
|---|-----------------------------|
| <b>Corporate Risk and Mitigation Owner(s)</b> | Dawn Madin / Julie Openshaw |
|---|-----------------------------|

**Risk ID: TCR08****Risk Theme: Revised Framework - Delivery of Contactless on Rail and Local Smart Ticketing**

|   |   |
|---|---|
| <b>Risk Description</b>                           | The Department for Transport has confirmed to TfN that there will be no funding allocation for the continuation of the IST). This means that the programme is winding down and there will be no progress in bringing forward Phase 3 (contactless on rail) Phase 4 (proposal to provide support to local schemes). TfN will therefore no longer be able to pursue the IST Programme objectives as set out in its CSR submission and previously shared with the Board. This risk will be removed from the Corporate Risk Register. |
| <b>Risk Proximity</b>                             | Short-Term  |
| <b>Risk Probability</b>                           | An Issue  |
| <b>Assessed Risk Impact</b>                       | An Issue  |
| <b>Potential Impact (Qualitative Description)</b> | As set out in the report to 18 February Board, TfN will complete Phases 1 & 2 of the IST programme and wind down the programme  |

## Mitigation Action Plans and Level of Controllability

| Mitigation No. | Mitigation Strategies / Action Plans  | Mitigation Control Level Assessment | Mitigation Control Level |
|----------------|---|-------------------------------------|--------------------------|
| 1              | In order that TfN is able to retain an element of IST capability / capacity the business plan for 2021/22 includes a new Smart role within the Strategic Rail team. This will embed Smart activity and help the delivery of digital fares going forward. It is proposed that this will be supported by an allocation of core budget and that whilst established in the rail team it will work across modes. | Medium                              | Dependency Mitigation    |

|   |               |
|---|---------------|
| <b>Corporate Risk and Mitigation Owner(s)</b> | Jeremy Acklam |
|---|---------------|

|                                |   |
|--------------------------------|---|
| <p><b>Risk Description</b></p> | <p>Northern Powerhouse Rail is a high-profile programme that involves Northern partners, DfT, NR and HS2. TfN is planning to submit a Strategic Outline Case (SOC) for NPR, which includes reduced options from those at Strategic Outline Business Case (SOBC), phasing scenarios and a preferred NPR network, following the publication of the IRP which due in March 2021.</p> <p>In addition, NPR has secured partner endorsement for four (4) phasing scenarios for the SOC and obtained agreement to sifting outputs as well as collective agreement to a preferred network. In February 2021, TfN Board adopted a preferred NPR network. However, it was not possible to submit the Strategic Outline Case due to the continued delay to the publication of the IRP and the SoS request that TfN/DfT, as co-clients, delay the submission of the SOC from March 2021 to allow the IRP to be published first. Subsequently, TfN Board has endorsed the option to delay submission of the SOC until after the IRP has been published.</p> <p>The below were issues relating to the delivery of the SOC. However, for this period, these have been re-assessed and deemed as closed issues.</p> <p><b><u>Closed Issues with Reasons for Closure</u></b></p> <p><b>Infrastructure costs</b> - Network Rail's initial assured costs for the NPR preferred network had increased to £45bn (Q1 2015 including 66% optimum bias), which was an increase of 15% from the SOBC level. A review of the assured costs has now been completed by TfN (supported by MACE), and Network Rail, which has resulted in preferred network assured costs of £42.2bn which is used to generate the BCRs for the SOC. In addition, a programme generated (not NR assured) of £37.4bn has been identified as an alternative cost for NPR which represents an opportunity of further cost reduction of circa £5bn, which will be explored in FY 21/22. An agreement was reached with DfT to include both cost values in the Strategic Outline Case.</p> <p><b>Benefit and Cost Ratios (BCRs)</b> - The development of the programme since the 2019 SOBC identified first a risk and then an issue in regarding reduced BCRs in relation to the transformational network. This would have made the SOC much more reliant on the Strategic Case. However, the current BCRs numbers</p> |
|--------------------------------|---|

are at or near to SOBC level. The final iteration of NoRMS, iteration 2 will include a 2018 demand uplift and therefore will increase the overall benefits.

**Partner Engagement to support decision-making** - The risk relating to engagement focused on Partner engagement to support SOC submission was successfully mitigated leading up to the previously scheduled March submission date. However, and as discussed above, Partners have endorsed the option to delay the submission of the SOC until the publication of the IRP with its implications on the programme analysed.

For this period, the significant risks associated to the Business Case Delivery and Programme Development are listed below:

**Key Significant Risks**

**1. Integrated Rail Plan (IRP) Conclusions:** The IRP was due to be published by the government in December 2020. However, this did not occur, and its publication is not expected in March 2021. The IRP and its conclusions carry the following risks:

- (a) The conclusions of the Integrated Rail Plan (IRP) could have consequences to the SOC if its recommendations on funding envelope, phasing and/or specifying route options are different to those agreed by TfN Board. This could result in delays to next stage of the NPR programme both in terms of funding available for 2021/22 and scope of works (additions/removals) on permitted development. Furthermore, the NPR network may be decided by the government as a consequence of the IRP, which could result in the lack of partner agreement relating to the network.
- (b) There is no certainty that the IRP will be published in March. The later the IRP is made available to TfN, the less time it will have to understand the impacts of the review on the work done to date, address the conclusions, manage the consequential impacts and/or update the SOC if appropriate.

**2. Co-client agreement of 2021/22 Scope** - Due to the delay to the IRP publication and the continued uncertainty of when it will be published, TfN may be unable to agree as co-clients the activity for FY2021/22 which is planned to start from April 2021. This is likely to cause delays to proposed programme activity for FY2021/22, including the impacts of commissioning and mobilising programme teams.

**3. TRU Integration** - The outcome of the IPR may include conclusions relating to the TRU solution which might create a misalignment with the TRU Programme. If there is a lack of engagement between NPR &

|   |  |
|---|--|
|   | TRU programmes (i.e. TfN, DfT, NR), it is therefore likely to result impact on TfN's credibility and reputational with our Partners and the public.  |
| <b>Risk Proximity</b>                             | Short to Medium Term   |
| <b>Risk Probability</b>                           | (1) <b>Very High</b> (2) <b>High</b> (3) <b>High</b>   |
| <b>Assessed Risk Impact</b>                       | (1) <b>Very High</b> (2) <b>Very High</b> (3) <b>Very High</b>   |
| <b>Potential Impact (Qualitative Description)</b> | <ul style="list-style-type: none"> <li>• Following SoS advice for the publication of the IRP to precede the SOC submission, this could impact on the future scope of the Strategic Outline Case.</li> <li>• The outcome of the IRP may influence the Northern Powerhouse Rail programme, the timing of submission of SOC, the next sequence of delivery and the OBC.</li> <li>• This is may cause delays to proposed programme activity for 2021/22, including the impacts of commissioning and mobilising programme teams</li> <li>• The outcome of the IPR may include conclusions relating to the TRU solution which might create a misalignment with the TRU Programme.</li> </ul> |

## Mitigation Action Plans and Level of Controllability

| Mitigation No. | Mitigation Strategies / Action Plans   | Mitigation Control Level Assessment | Mitigation Control Level                 |
|----------------|--|-------------------------------------|--|
| 1              | <p><b>Integrated Rail Plan Mitigation:</b> TfN to continue to liaise with DfT to seek confirmation of the publication date. A dedicated team has been established within the NPR Programme to review and respond to the IRP once available.</p> <p>Following the publication of the IRP, an assessment exercise is to take place on how the conclusions of the IRP differs to those presented in the SOC and how acceptable they might be to Partners. In addition, the team will ensure that there is robust Partner engagement to support the understanding and positioning of the IRP and what it means for the Strategic Outline Case.</p> | Medium                              | Dependency Mitigations (Limited Control) |
| 2              | <p><b>Co-client agreement of 2021/22 Scope Mitigation:</b> A Scope activity paper was submitted to NPR Programme Board in February 2021 for endorsement to proceed on the majority of scope activities. Discussions are continuing on areas impacted by the IRP, including Liverpool - Manchester and Manchester – Leeds.</p>  | Medium                              | Dependency Mitigations (Limited Control) |
| 3              | <p><b>TRU Integration:</b> Integration meetings at working level are in place and further senior forums and sessions between NR, DfT and TfN will take place following the publication of the IRP and understanding its implications on TRU and NPR.</p>   | Medium                              | Dependency Mitigations                   |

|   |                             |
|---|-----------------------------|
| <b>Corporate Risk and Mitigation Owner(s)</b> | Tim Wood / Tim Foster (IRP) |
|---|-----------------------------|

**Risk ID: TCR10****Risk Theme: Rail Operations – Franchise and Delivery**

|   |  |
|---|--|
| <b>Description</b>                                | <p>Following a change in guidance to work from home where possible, and the subsequent lockdown since January 2021, there has been a significant drop in demand for rail services. The effects of the coronavirus pandemic and changing work practices on demand may take many years to recover to previous levels which could lead to the following risks:</p> <ol style="list-style-type: none"> <li>(1) There remains a risk that the passenger enhancements (such as the completion of new train programmes and additional services) will be delayed as driver training takes longer due to new working practices.</li> <li>(2) There is a risk that the current services could be cut due to the increased subsidy that is being covered by the Treasury. In addition, the reduced current services could further impact future schemes, making schemes less viable as they have to be assessed against lower demand forecasts.</li> <li>(3) DfT Re-prioritisation and the Williams Review: The coronavirus pandemic has meant DfT had to prioritise its focus and resources in responding to the pandemic. This has led to the delay in the publication of the Williams Review. In addition, the government may choose to focus on centrally deliverable initiatives such as franchise delivery and focus less on devolution. As a result, this may not align with the strategy of Members and would require a wider response from TfN.</li> </ol> |
| <b>Risk Proximity</b>                             | Short, Medium and Long-term  |
| <b>Risk Probability</b>                           | (1) <b>Very High</b> (2) <b>Very High</b> (3) <b>Very High</b>   |
| <b>Assessed Risk Impact</b>                       | <p>(1) <b>Very High</b> (2) <b>Very High</b> (3) <b>Very High</b></p> <p><b>Note:</b> The post-mitigation risk assessment is rated Very High (VH) following the adoption of some of the identified mitigations. This is the same rating as the current risk assessment as TfN does not have the full range of levers within its current powers and responsibilities to implement the mitigations i.e. in order to effectively carry out the mitigations. The avoidance and reduction of the assessed impacts are contingent on partners and members taking further actions.</p>  |
| <b>Potential Impact (Qualitative Description)</b> | <ul style="list-style-type: none"> <li>• If there is a delay in investment and delayed rolling stock, passenger frustration will continue to be frustrated and experience poor quality services. Severe adverse reputational impact and pressure from partners.</li> <li>• Less investment in services and infrastructure as a result of weaker business cases.</li> <li>• It could affect TfN's reputation by impacting on a significant part of its rail transformational programmes and overall agenda.</li> </ul>  |

|  |   |
|--|---|
|  | <ul style="list-style-type: none"> <li>• The franchise system is being replaced by service contracts directly funded by HMT, potentially diminishing TfN's role and influence over operations.</li> <li>• Low passenger numbers post Covid could reduce viability of some existing services.</li> </ul> |
|--|---|

## Mitigation Action Plans and Level of Controllability

| Mitigation No.                                | Mitigation Strategies / Action Plans   | Mitigation Control Level Assessment | Mitigation Control Level                 |
|---|--|-------------------------------------|--|
| 1   | To continue to use our influence in the monthly Rail North Partnership Board, Rail North Committee and North of England Contingency Group to shape the re-introduction of services, new rolling stock and infrastructure developments and re-build passenger confidence. | Medium                              | Dependency Mitigations (Limited Control) |
| 2   | To continue with the close working relationship and communication with TfN member authorities on deliverables and risks - feeding back information through TfN governance structures.  | Medium                              | Dependency Mitigations (Limited Control) |
| 3   | To continue to track train service performance and delivery via regular reporting dashboards.  | Medium                              | Dependency Mitigations (Limited Control) |
| 4   | Strategic Rail and Rail North Partnership (RNP) to work together to support Network Rail and Operators in producing recovery plans that meet passengers' needs and rebuild confidence.   | Medium                              | Dependency Mitigations (Limited Control) |
| 5   | To implement Blake Jones action plan to provide greater focus on passengers and ensure transparency with members as the COVID19 restrictions ease.   | Medium                              | Dependency Mitigations (Limited Control) |
| 6   | TfN will continue to make the case for reform that supports the North's ambitions and will respond to the Williams White Paper once published.   | High                                | Controllable Mitigations                 |
| <b>Corporate Risk and Mitigation Owner(s)</b> | David Hoggarth   |                                     |  |



Transport for the North  
2nd Floor  
4 Piccadilly Place  
Manchester  
M1 3BN



Transport for the North  
Ground Floor  
West Gate  
Grace Street  
Leeds  
LS1 2RP



0161 244 0888



[engagement@transportforthenorth.com](mailto:engagement@transportforthenorth.com)



This page is intentionally left blank

---

## Transport for the North Board

**Subject:** TfN Decarbonisation Strategy

**Author:** Peter Cole, Principal Environmental and Sustainability Officer

**Sponsor:** Tim Foster, Interim Strategy and Programme Director

**Meeting Date:** Wednesday 24th March 2021

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

- 1.1 This report presents the draft TfN Decarbonisation Strategy and our recommendation for a regional Decarbonisation Trajectory.
- 1.2 The Board is asked to agree the approach to the Decarbonisation Strategy and TfN's approach to defining a Decarbonisation Trajectory.
- 1.3 This report seeks the agreement of the Strategy and proposed Decarbonisation Trajectory from the Board. 2021.
- 1.4 Further to this, the report seeks agreement from the Board for TfN to now finalise the design of the document and make preparations for a public consultation on the Strategy, proposed for Summer

### **2. Executive Summary:**

- 2.1 Building on the commitment to develop a decarbonisation pathway to 2050, TfN has prepared a Decarbonisation Strategy for agreement, consultation and publication during 2021.
- 2.2 The Strategy illustrates existing emissions from surface transport in the North, a number of future plausible emissions scenarios and a regional Decarbonisation Trajectory. The strategy document then presents a policy analysis to understand the strength of policy commitment needed and the types and mix of measures that could be used for the region to bridge the policy gap.
- 2.3 The proposed regional Decarbonisation Trajectory, against which TfN can benchmark its projects and programmes, reflects recent carbon budget analysis by the Tyndall Centre for Climate Change Research. It proposes a 95% reduction in emissions from surface transport in the North by 2040, and a close to zero emissions date of 2045.
- 2.4 The Strategy document will also include chapters on embodied carbon and climate change resilience and adaptation, as well as identifying a number of activities that TfN proposes to undertake in the short term,

---

up to 2025. As part of the latter, we have undertaken a high-level review of the key opportunities for TfN to support clean growth opportunities and LEP strategies in the North, in relation to the decarbonisation of our transport system.

- 2.5 Engagement with Partner officers, industry, academia (in particular the DecarboN8 network) and other Sub National Transport Bodies, has been instrumental in the development of the Strategy.
- 2.6 The paper recommends that the Board agree the Strategy and the proposed Decarbonisation Trajectory, incorporating a close to zero date of 2045, and for TfN to now finalise the design of the document and commence preparations for a public consultation during the summer of 2021.
- 2.7 A full version of the Strategy document is included within Appendix 1 for information. Please note that the document is an undesigned version and as such, some Tracked Changes and Comments have been retained to signpost where design elements need to be implemented within the document.
- 2.8 Appendix 2 includes a 'designed-up' version of a previous draft of Chapters 1 to 3. The content is illustrative and is included solely to allow partners a preview of the design style proposed for the document.

### **3. Consideration:**

- 3.1 TfN's Strategic Transport Plan committed to the development of a 'Decarbonisation Pathway to 2050' so that a zero-carbon transport network is at the heart of public policy making and future investment decisions in the North. The Strategy has now been prepared by TfN officers for agreement with members at the TfN Board.
- 3.2 A key element of the strategy will be an agreed end date for the whole of the North to achieve net zero emissions on surface transport. The Board have previously agreed that this should be earlier than the government's stated date of 2050.

#### **Developing the Strategy**

- 3.3 The Decarbonisation Strategy builds on the Strategic Transport Plan commitments with a holistic, pan-Northern approach to achieving net zero. Our development work has helped us define and prioritise the key areas for focus, and engagement with Partners, DecarboN8 and other STBs. The strategy is based on the following key elements.
- 3.4 Firstly, the strategy introduces TfN's Decarbonisation Trajectory, defining:
  - what is included within the trajectory the rationale for the agreed end date and how TfN intends to use the trajectory.

- An illustration and breakdown of the region’s current emissions from surface transport, and an introduction to TfN’s Future Travel Scenarios. These have been combined to provide a series of plausible future baseline emission scenarios.
- 3.5 Secondly the strategy defines the ‘policy gap’ between each future scenario and TfN’s agreed Decarbonisation Trajectory, including:
- Which existing policy commitments will need to be strengthened at both a national and local level to bridge the policy gap between a number of our plausible future travel scenarios and our required trajectory.
  - What combination of new policy measures, at both a local and national level, will be needed to achieve the demand and vehicle emissions intensity objectives defined within our decarbonisation pathway under each future travel scenario.
- 3.6 Within the policy section, we also consider a number of other important elements:
- The potential co-benefits and also unintended adverse consequences associated with the main transport decarbonisation policy levers.
  - TfN’s approach to embodied carbon and how it will be considered within our decision making at both a strategic level and at a project level.
  - Climate change adaptation, resilience and the consideration of the impacts of climate change within our business case development including a light touch review of relevant national and local guidance.
- 3.7 Finally, the decarbonisation strategy draws together the proposed priority actions for TfN to undertake in the next few years. TfN will focus on those actions best taken at a pan-northern level that will help our Partners along their decarbonisation journey through the provision of evidence, data and implementation strategies.
- 3.8 Alongside the agreed actions for TfN will be a number of indicators to be incorporated into TfN’s evolving Monitoring and Evaluation Framework, through which we can measure:
- The regions progress in terms of decarbonisation of surface transport.
  - The success of specific measures and actions committed to within the Decarbonisation Strategy.

- 3.9 A full, but undesigned, version of the Strategy document is included as Appendix 1 to this report.

### **Consideration of Clean Growth Opportunities within the North**

- 3.10 An area of focus during the development of the Strategy was to understand compatibility of the main decarbonisation policy areas with LEP strategic plans, including Local Industrial Strategies.
- 3.11 As part of this process we also carried out an initial high-level review of clean growth opportunities in the North, identifying the key areas and ways in which TfN can best support those opportunities.
- 3.12 It is important that our Decarbonisation Strategy is cognisant of, and where possible supports, the wide range of clean growth initiatives and opportunities that already exist in the North.

### **Engagement**

- 3.13 Engagement with Partners, industry, other STBs and DecarboN8 have been essential in terms of shaping the Strategy, and in particular the subsequent priority actions for TfN, being developed currently. A workshop was held with Partner officers in late November to help define these actions.
- 3.14 TfN has also engaged actively with those Partners who are currently developing their own place-based trajectories and policy measures to ensure that proposed actions are complementary and to understand how best TfN can support those Partners in achieving their objectives.
- 3.15 The DecarboN8 network has also played an important role in helping us to define TfN's role in terms of decarbonisation, peer reviewing our evidence base and progressing early research in several areas.
- 3.16 In addition, the contents and intent of the Strategy has been informed by the substantive discussion, with Partner officers and elected members, that helped shape TfN's response to DfT's Transport Decarbonisation: Setting the Challenge consultation.

### **Defining the Trajectory**

- 3.17 This paper presents a high-level consideration of two potential decarbonisation trajectory options to Partners, both of which achieve close to zero surface transport emissions by 2050 or before. One option is recommended for agreement by TfN Board.
- 3.18 Local Authorities across the North have adopted whole economy net zero targets ranging from 2030 to 2050, with some authorities yet to develop or adopt targets. The 'starting point' for decarbonisation for different places in the North in terms of per capita emissions from transport, is similarly varied.

- 3.19 The adopted targets, costs of action, mix of solutions and pace of change in relation to the decarbonisation of transport will show significant variance between different places. A regional trajectory needs to reflect this variation and ensure it supports all our Partners.
- 3.20 The different high-level trajectory options considered in forming our recommendation include:
- Option 1 achieves a close to zero date by 2050 and assumes a Climate Change Committee consistent trajectory.
- Option 2, the more ambitious trajectory, achieves an approximate 95% reduction by 2040 and a close to zero date of 2045. It reflects recent carbon budget analysis by the Tyndall Centre for Climate Change Research.
- 3.21 The Northern Transport Charter defines the requirement for a 'close to zero' emissions date, earlier than 2050. We are asking the Board to agree to our recommendation of adopting a trajectory for surface transport emissions, in line with **Option 2**. This would effectively mean that all areas of the North would need to have managed to reduce their emissions to close to zero by **2045**.
- 3.22 We believe that Option 2 reflects an appropriate level of ambition whilst also being inclusive of all our Partners across the North and mindful of the varying pace of change which each can achieve.
- 3.23 It is expected that different places will have different decarbonisation trajectories and that these would be accommodated within the Northern trajectory. For example, it would be possible to reflect earlier dates (e.g. 2038) set locally in some largely urban areas.
- 3.24 Our Decarbonisation Trajectory and pathways analysis will:
- Act as a benchmark for TfN's projects and programmes, allowing us to make more informed and better decisions.
  - Allow us to form evidenced based policy positions, particularly in terms of the level of national support needed.
  - Allow us to account for longer distance journeys (that typically may be considered 'through traffic' at smaller spatial governance scales).
  - Enables us a better understanding of how best we can support Partners in achieving their own ambitions – through focussing our research, evidence gathering and lobbying.

### **Next Steps**

- 3.25 Subject to the Board's agreement of the Strategy, TfN proposes to complete the design of the document during April 2021. In parallel, we shall commence production of public consultation materials.
- 3.26 With the timetable for local elections now confirmed, TfN proposes to launch a public consultation on the Strategy in late May/early June 2021, to run for 12 weeks.
- 3.27 Another key consideration for next steps, is the expected publication of Government's Transport Decarbonisation Plan (TDP), now due in Spring 2021. Once this is published, we will review our trajectory and pathway in light of any new/changed recommendations or assumptions.
- 3.28 We will ensure that members and partner officers have the opportunity to review consultation materials in advance of the public consultation. This version would also incorporate any late changes as a result of late publication of the governments TDP.
- 3.29 Following the public consultation, we would expect to bring the final Strategy to a Board meeting in the autumn of 2021 for formal adoption.

**4. Conclusion**

- 4.1 This paper sets out the structure and content of our Decarbonisation Strategy and provides the rationale for a recommended regional provisional Decarbonisation Trajectory, with a close to zero date of 2045.
- 4.2 The final Decarbonisation Strategy, incorporating TfN's Decarbonisation Trajectory, as included in Appendix 1, is presented to TfN Board for final agreement. Should the Strategy be agreed, it will be followed by consultation version of the document which will be presented for review.

**5. Recommendation:**

- 5.1 It is recommended that the Board agree TfN's Decarbonisation Strategy, utilising the recommended Decarbonisation Trajectory, incorporating a close to zero date of 2045.

**6. Appendices:**

- 6.1 Appendix 1 – TfN Decarbonisation Strategy document (undesigned).
- 6.2 Appendix 2 – Proposed design style (illustrative).

**List of Background Documents:**

There are no background papers to this report.

**Equalities:**

|                         |     |    |
|-------------------------|-----|----|
| Age                     | Yes | No |
| Disability              | Yes | No |
| Gender Reassignment     | Yes | No |
| Pregnancy and Maternity | Yes | No |
| Race                    | Yes | No |
| Religion or Belief      | Yes | No |
| Sex                     | Yes | No |
| Sexual Orientation      | Yes | No |

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Equalities           | A full Impact assessment has not been carried out because the report concerns the preparation of a Strategy, rather than endorsement of a final Strategy document. Note that the Strategy will include a commitment for further action in relation to avoiding Transport Related Social Exclusion as a result of transport decarbonisation policies. | Peter Cole                 | Tim Foster      |

**Environment and Sustainability**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b>   | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|--|--|----------------------------|-----------------|
| Sustainability / Environment – including considerations regarding Active | A full impact assessment has not been carried out because the report is not concerned with a subject that requires | Peter Cole                 | Tim Foster      |

|                      |  |  |  |
|----------------------|--|--|--|
| Travel and Wellbeing | development consent (thus EIA is not required), and the Strategy is not likely to lead to any significant adverse effects not anticipated by the Strategic Transport Plan and the SEA that accompanied it. |  |  |
|----------------------|--|--|--|

### **Legal**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Legal                | There are no obvious legal implications other than any addressed within the report. |                            |                 |

### **Finance**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Finance              | The activities required to progress the strategy in 2021/22 are captured in the relevant business areas. | Paul Kelly                 | Iain Craven     |

### **Resource**

|     |           |
|-----|-----------|
| Yes | <b>No</b> |
|-----|-----------|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b>                   |
|----------------------|---|----------------------------|-----------------------------------|
| Resource             | The HR Team has confirmed there are no direct resourcing implications as result of this update. | Head of HR                 | Director of Business Capabilities |
|                      |   |                            |                                   |

**Risk**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| Consideration | Comment   | Responsible Officer | Director    |
|---------------|---|---------------------|-------------|
| Risk          | For the purpose of this paper, a risk assessment is not required. However, risks relating to decarbonisation can be found in the Corporate Risk Register. | Haddy Njie          | Iain Craven |

**Consultation**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| Consideration | Comment  | Responsible Officer | Director   |
|---------------|--|---------------------|------------|
| Consultation  | <b>Either</b> A suitable consultation has been carried and the results [show <i>[to be completed by the report author]</i> ] [are included in the report].       |                     |            |
| Consultation  | A consultation has not been carried out but is scheduled to be undertaken during the summer of 2021 following sign off of the Consultation Version by TfN Board. | Peter Cole          | Tim Foster |

# Decarbonisation Strategy – March TfN Board

## Transport for the North

### Contents

|            |   |
|------------|---|
| Chapter 1  | Introduction                                  |
| Chapter 2  | TfN’s Decarbonisation Trajectory              |
| Chapter 3  | Estimating current and future emissions       |
| Chapter 4  | Decarbonisation Pathways                      |
| Chapter 5  | Policy analysis                               |
| Chapter 6  | Consideration of embodied carbon              |
| Chapter 7  | Climate change adaptation and resilience      |
| Chapter 8  | Stimulating Clean Growth in the North         |
| Chapter 9  | TfN’s priority actions to 2025                |
| Chapter 10 | Internal assurance, monitoring and evaluation |
| Annex A    | Detailed Policy Recommendations               |
| Appendix 1 | Decarbonisation Modelling Methodology         |

### Acknowledgements

This Strategy document has been informed by policy analysis support provided by Element Energy and Systra, as well as research undertaken on behalf of TfN by Arcadis, into opportunities to aid clean growth in the North.

We would also like to extend our thanks to the DecarboN8 network and in particular Professor Greg Marsden of the Institute of Transport Studies at the University of Leeds for his general advice and his review of both the Strategy document and TfN’s No-Carb tool.

### Chapter 1 - Introduction

The science is conclusive - the world is facing a climate emergency.

In the UK, transport is the largest contributing sector to greenhouse gas emissions, accounting for 22% of all emissions in 2019<sup>1</sup>, of which more than 95% are from road transport. Furthermore, transport emissions have actually grown overall since 2013, despite modest falls in the last few years<sup>2</sup>.

Whilst it is possible that 2020 figures will show a drop in emissions due to reduced levels of travel during the COVID-19 lockdown, this is likely to be temporary, with demand for car travel rebounding more quickly than public transport, approaching pre-pandemic levels.

In our Strategic Transport Plan, published in 2019, Transport for the North (TfN) committed to scoping, developing and implementing a ‘Pathway to 2050’ in line with the then UK law of achieving an 80% reduction in national emissions by 2050 (now superseded by the current UK Government

---

<sup>1</sup> This relates to surface transport and does not include emissions from aviation and shipping.

<sup>2</sup> <https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-to-2019>

commitment to achieve net zero emissions by 2050). For the surface transport sector, this meant that road transport emissions would need to be near-zero and rail would need to be decarbonised by 2050.

TfN and our partners believe that an acceleration towards a zero-carbon transport network must be at the heart of public policy making and investment decisions. Our ambition for the North is to travel faster and further than national policy and maximise the clean growth opportunities that decarbonisation can provide for the North. Through this Decarbonisation Strategy, TfN and our partners are committing to a regional near-zero carbon surface transport network by 2045.

The achievement of TfN's vision of a thriving North of England, where world class transport supports sustainable economic growth, excellent quality of life and improved opportunities for all, is contingent on how we can reduce our greenhouse gas emissions across everything that we do, and then, making the right decisions at the right time.

### **The Role of TfN**

Through its statutory powers, TfN acts as 'one voice' for the North, communicating pan-Northern priorities to the Secretary of State for Transport. We have a clear remit to identify the transport infrastructure required to support transformational economic growth in the North, and to prioritise that investment. This places TfN and partners in a strategic position to identify the transport infrastructure and policy measures that are required to achieve the North's decarbonisation ambitions.

When prioritising transport infrastructure delivery in the region, TfN must make decisions based on a knowledge of how those projects and programmes are likely to support or challenge the region's decarbonisation objectives. This Decarbonisation Strategy provides a tool to robustly consider how our Investment Programme is performing in this respect. It will also provide guidance to support an appropriate sequencing of those investments and the mitigation actions that may be needed to deliver transformational economic growth in line with decarbonisation ambitions.

While most of the responsibility for policy implementation lies with national and local government, TfN operates at a geographical and institutional level that allows us to facilitate a regional approach to decarbonisation measures and research, for example, developing a pan-regional electric vehicle charging infrastructure framework. Indeed, a high proportion of the emissions from private road vehicles is generated by longer distance regional-level trips, with our analysis indicating that around 60% of road transport emissions in the North originate from trips on the Major Road Network. This means TfN has both an opportunity and a responsibility to help reduce this significant share of road transport emissions.

TfN is also uniquely placed to assist our partners in the development of place-based solutions by analysing emissions at a more disaggregate level and providing enhanced evidence, data platforms and intelligence to inform bespoke local and regional strategies. This can in turn support national policies to take account of spatial and social variation.

At a project level, TfN has a responsibility to ensure that the design and construction of our projects and programmes reduce lifecycle carbon and to encourage partners to adopt similarly ambitious policies.

The North is also extremely well placed to support the testing and trialling of many emerging technologies that will be crucial to transport decarbonisation in the UK, including through existing initiatives such as the UK’s first Hydrogen Transport Hub in the Tees Valley, Zero Carbon Humber and HyNet North West. Through partnerships and co-working with Local Authorities, Local Enterprise Partnerships, transport providers and regional academic and industry players, TfN is committed to promoting the North as hub for innovation, research and the testing of emerging technologies.

(STP INNOVATION DIAGRAM HERE)

Finally, TfN needs to lead by example. Whilst the focus of this strategy is upon understanding, measuring and reducing the emissions from surface transport in the North and the construction and operation of the proposed schemes within our Investment Programme; it is important that we look to reduce the emissions resulting from TfN directly as a result of our everyday business. These are called our ‘organisational emissions’.

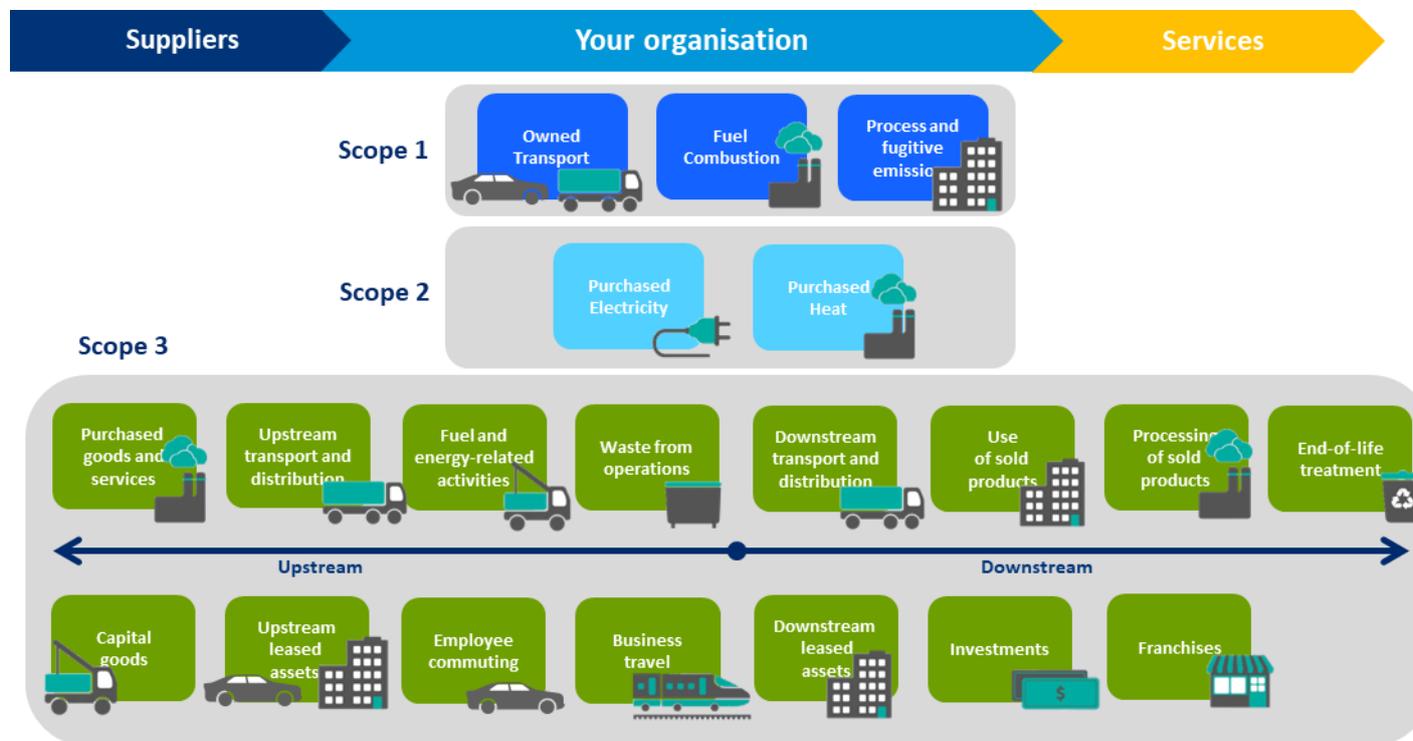


Figure XXX, Carbon Footprinting – Organisational Boundaries<sup>3</sup>

The full range of activities and goods, through which an organisation might generate greenhouse gas emissions is illustrated in Figure XXX. These emissions sources are split into three types – known as Scope 1, 2 and 3. Different emissions sources will be of relevance to different types of organisations, particularly in relation to Scope 3. For TfN, these organisational emissions are likely to include:

- Scope 1 emissions, which are direct emissions resulting from activities that TfN can control, such as the gas used to heat our offices.
- Scope 2 emissions, which are indirect emissions resulting from the generation of any power that we use within our offices.

<sup>3</sup> Image sourced from Carbon Trust and The Greenhouse Gas Protocol, ‘A Corporate Accounting and Reporting Standard, Revised Edition’ (2004).

- Scope 3 emissions, which cover indirect emissions as a result of our operations that are outside of TfN's direct control, albeit we can influence them through our working practices. This includes things like the emissions from the manufacture and transport of goods we use, like stationery and IT equipment, and also services we purchase, like cleaning and catering. It also includes emissions generated by our employees commuting and business travel, along with those generated by the disposal of our waste and our water consumption.

TfN is committed, by 2022, to understanding the carbon footprint of its organisational Scope 1 and 2 emissions and agreeing a target date for reducing these emissions to net-zero.

In the same timeframe, TfN will also develop a suitable carbon footprint scope for measuring its organisational Scope 3 emissions. This will reflect data availability, our environmental goals and the sources we can influence.

Emissions generated from the design, construction and operation of schemes within our Investment Programme, along with changes to the emissions generated by surface transport in the North as a result of TfN activity, are the main focus of this strategy document. Our approach to measuring these emissions and our Decarbonisation Trajectory are covered within Chapters 2 to 6.

### **Why a Decarbonisation Strategy?**

To achieve a near-zero emissions surface transport network in the North by 2045, there must be a clear understanding of the policies and measures required to bridge the gap between future emissions projections and future emissions targets. TfN's Decarbonisation Strategy reflects work undertaken to define four plausible baseline emissions trajectories, based on our Future Travel Scenarios, and to identify and assess the gap between each trajectory and TfN's Decarbonisation Trajectory.

We have also undertaken a policy analysis to understand the policy ambition and suite of policy measures that could fill the policy gap for each scenario. This provides insights into the key, low-regret policy measures required under all scenarios, as well as the areas where TfN and partners are likely to require additional national support to achieve decarbonisation ambitions.

In terms of local action, this policy analysis provides tested, evidence based packages of measures that can be used by our partners and other organisations across our region, when developing their own plans.

Building upon these findings, this strategy lays out the North's minimum expectations in relation to both local and national decarbonisation policy ambitions. It is intended to provide an overarching framework for our partners and other organisations across the region to meet their decarbonisation responsibilities and ambitions.

The Strategy also recognises the importance of considering embodied carbon and climate change adaptation and resilience, drawing on the experience of our delivery partners, Highways England and Network Rail in these areas.

Finally, this strategy outlines TfN's key commitments to enabling the decarbonisation of surface transport in the North. Developed through research and engagement with partners, regional research bodies and industry, these relate to activities that would benefit from coordination at the regional level and can be most effectively undertaken by TfN. As part of this analysis, a key consideration for TfN, has been how the decarbonisation of transport can support our partners' economic growth ambitions, championing clean growth opportunities across our region. Cross-

sectoral co-operation and planning will be essential if the North is to deliver both a decarbonised transport system and capitalise on the possibilities from green industrial revolution, especially with the energy generation and distribution sector.

The timeline for undertaking these activities is outlined within Chapter 9, Priority Actions to 2025.

This strategy builds upon the four objectives in TfN's Strategic Transport Plan:

1. **Transforming economic performance:** We want to understand the full range of clean growth opportunities within the North as a result of transport decarbonisation.
2. **Increasing efficiency, reliability, integration and resilience in the transport system:** We want to integrate decarbonisation measures into existing and future programmes and projects in order to maximise efficiency and reliability gains (such as the electrification of our railway network). We also need to ensure that climate change adaptation and resilience is a key consideration in policy and project development.
3. **Improving inclusivity, health and access to opportunities for all:** The decarbonisation of transport in the North provides an important opportunity for reducing transport-related social exclusion. We want to ensure that decarbonisation measures optimise co-benefits relating to physical health, improved air quality and increasing levels of mobility for all communities and areas in the North.
4. **Promoting and enhancing the built, historic and natural environment:** While environmental conservation is the ultimate driver for decarbonisation, we need to consider the localised impacts of decarbonisation policies and measures. For example, local air quality, reduced noise levels, and the environmental impact of new infrastructure and operations required as part of the decarbonisation agenda (e.g. electrification infrastructure).

## Chapter 2 - TfN's Decarbonisation Trajectory

### What is TfN's Decarbonisation Trajectory?

Our route to a decarbonised transport system is illustrated by a measurable, evidence based and time-bound carbon emissions reduction curve, which starts with 'where we are now' and travels towards alignment with the objectives of the Paris Agreement, i.e. deep emissions reductions over the coming decades towards a zero-emissions transport system before 2050.

That journey is called our Decarbonisation Trajectory, with the shape of the curve being dictated by a series of interim emissions reduction milestones that ensure a rate of progress aligned to the Climate Change Committee's Carbon Budgets as a minimum.

Our agreed Decarbonisation Trajectory is shown in Fig X, with the headlines being:

- A 55% reduction in emissions from 2018 to 2030, achieved mostly through mode-shift and demand reduction.
- An 95% reduction in emissions from 2018 to 2040, reflecting longer-term decarbonisation measures, such as a high proportion of zero-emissions vehicles in the vehicle fleet.
- A close to zero date of 2045 for carbon emissions from surface transport in the North. This is a challenging benchmark reflecting the ambition of our partners and their desire to push further and faster than current national policy.

The scope of the emissions included within the trajectory is described below.

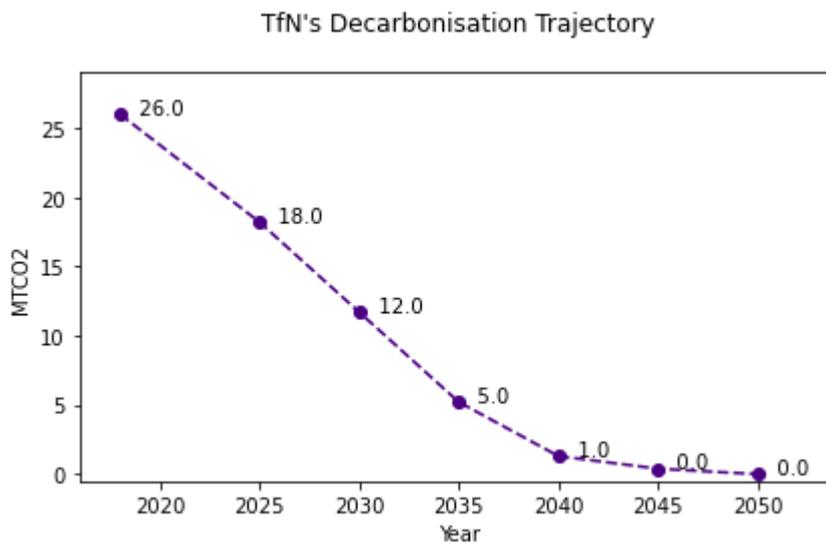


Figure X: TfN's Decarbonisation Trajectory

### Why 2045?

A decarbonisation trajectory set at a regional scale is, by its nature, a compromise between areas that have set different decarbonisation timescales and have different geographies, demographics and patterns of passenger and freight demand.

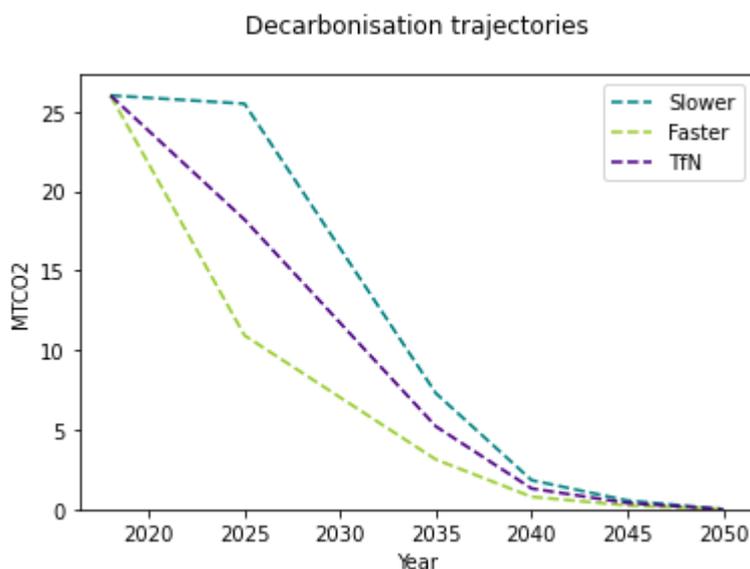
A number of our partners have set ambitious, economy-wide decarbonisation targets with net-zero dates pre-2040 for their authority areas. The contribution of transport emissions reductions to these economy-wide targets will depend on progress in other sectors and the assumed availability of negative emissions measures, but it is clear that these authorities are aiming for transport emissions close to zero by 2040.

In preparing a Decarbonisation Trajectory, TfN seeks to achieve a compromise by moving faster than current national policy and the Climate Change Committee’s advised trajectory, while being mindful of the varying levels of progress that our partners have made in terms of their own climate change responses. In this way, TfN’s Decarbonisation Trajectory considers the ambitions of the whole region, but does not override or specify local place-based targets.

Indeed, the deep emissions reductions achieved by our most ambitious partners over shorter timescales will be needed if the region is to align itself, as a whole, with the level of reductions suggested by TfN’s Decarbonisation Trajectory.

The **interim points** along our trajectory effectively represent an average for the region, with some areas’ local transport systems decarbonising more quickly, while some may decarbonise slightly slower. The **end point** of our Decarbonisation Trajectory means that by 2045, emissions from surface transport in the North will need to be close to zero.

**Figure X** illustrates how different places within the North may move ahead with different trajectories, helping to achieve an average regional trajectory, but with all places reaching close to zero by the agreed end date.



**Figure X:** TfN’s Decarbonisation Trajectory reflects an average across local authorities that can decarbonise slightly slower or slightly faster.

Aligned to this, the programmes and projects that together make up TfN’s Investment Programme should collectively emit close to zero carbon dioxide emissions by 2045. It is also true that many of these projects and programmes may actively help reduce emissions in the longer term, for example, rail schemes may lead to a reduction in car vehicle and road freight mileage. This consideration will be important as we look to benchmark ourselves against our trajectory over the coming decades.

### What is included in our trajectory and why

TfN's Decarbonisation Trajectory comprises emissions from surface transport sources. This includes cars, vans and Heavy Goods Vehicles (HGVs), as well as bus and rail.

In recognition of TfN's remit, the Decarbonisation Trajectory relates to emissions from vehicle mileage that takes place on the transport network within the North, including through trips (e.g. Scotland to the South of England), as illustrated by the orange roads in **Figure X**.



**Figure X:** Map of the Northern boundary in which TfN operates. The blue section represents the areas that TfN covers and the orange roads represent the key roads within this boundary.

Other forms of transport with significant emissions profiles include aviation and shipping (both domestic and international), which together accounted for 11% of the UK's total emissions in 2019 (compared to 22% from surface transport sources). Eight percent of this was generated from aviation, of which 96% was from international aviation<sup>1</sup>.

As these modes lie outside of TfN's jurisdiction, emissions from aviation and shipping are not accounted for within TfN's Decarbonisation Trajectory. Nevertheless, we recognise the need for aviation and shipping to be included in national targets and for strong national strategy in this area which aligns the UK aviation strategy with the Paris Agreement.

TfN believes that the emissions from all flights from airports in the North need to be fully aligned with the requirements of the Paris Agreement. This means operating within a defined carbon budget for UK aviation as part of a wider international budget.

EXAMPLE BOX: Manchester Airports Group has pledged to become a net-zero airport by 2038, and in 2020 launched a competition for the first airline to operate a zero-emission commercial flight from one of its airports. The contest, an industry first, will see the successful carrier win five years' free landing fees<sup>2</sup>.

Some residual emissions from aviation and shipping are assumed within the current Government target of net-zero emissions, for the whole economy, by 2050. It is important to note that by

---

<sup>1</sup> <https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-to-2019>

<sup>2</sup> [MAG launches zero-emission flight competition worth over £1million \(magairports.com\)](https://www.magairports.com/news/mag-launches-zero-emission-flight-competition-worth-over-1-million)

excluding aviation and shipping from our trajectory, surface transport emissions will need to be zero by 2050.

As the vehicle fleet transitions to electric propulsion there will be an increasing demand for electricity, ultimately from zero carbon sources. Indirect emissions associated with electricity are not included within our Decarbonisation Trajectory, but we are planning to analyse how the demand will grow over time as part of a future phase of work. The CCC's Sixth Carbon Budget analysis sets out that electricity carbon intensity will need to fall by as much as 75% between now and 2030 and be close to zero by 2040, suggesting that indirect emissions will be small in the medium to long term.

TfN's Decarbonisation Trajectory, set at a regional level, also recognises the importance of scale when attributing longer distance journeys against decarbonisation budgets of smaller areas of spatial governance. For example, some authorities with relatively small populations may be assigned relatively large emissions because they happen to have a segment of motorway that passes through their boundary, or a large source of traffic, such as a seaport. If through traffic dominates local traffic, the ability of that authority to influence the carbon outcomes are low<sup>3</sup>.

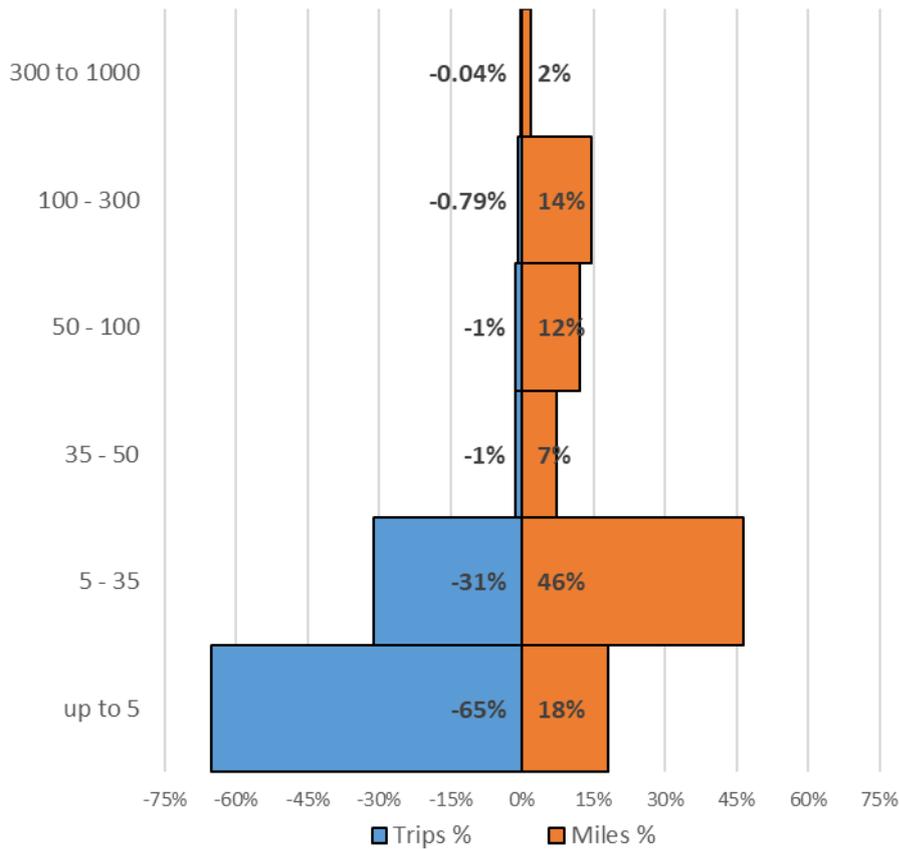
Similarly, a smaller authority may choose to discount emissions from through traffic from their decarbonisation plans, resulting in the responsibility for considering those emissions slipping between the gaps of different areas and levels of spatial governance.

Figure X, compiled from National Travel Survey data, demonstrates that although approximately 95% of passenger trips (all modes) occur at a spatial scale that would suit consideration by a district, county or combined authority, these trips only account for about 65% of all miles travelled.

The remaining 35% of total miles travelled occur on journeys over 35 miles in distance, and whilst some of the longest trips would extend even outside of a pan-Northern focus, the majority of trips over 35 miles will be best considered at a pan-Northern level.

---

<sup>3</sup> Marsden, G. (2020), The Role of Sub-National Transport Bodies in Carbon Governance, DecarboN8 working paper 3.1



**Figure X:** Percentage of trips (all modes) and percentage of all miles, by trip length<sup>4</sup>

### How we use our trajectory

#### Providing guidance

To understand the impact of our Investment Plan in terms of carbon emissions, we need to understand a number of things:

- Where are we likely to be living and working in the future, and what will our travel habits and patterns look like?
- What national and local transport policy is likely to be in place that may affect the carbon emissions of transport?

Once we understand the answers to these two questions, we can work out the approximate carbon emissions from surface transport at a number of set points in the future. These are our future baseline emissions, and when you join these points together, it forms our baseline trajectory.

Of course, the future is not certain, and for that reason TfN has created and modelled a number of [Future Travel Scenarios](#). These scenarios have given us the ability to calculate transport emissions change by scenario and area type - providing four plausible baseline emission trajectories. The scenarios were finalised in late 2020, and their underlying assumptions account

<sup>4</sup> Source: Addel, M. Wadud, Z. and Anable, J. 'An exploratory analysis of long distance travel in England', 99<sup>th</sup> Annual Meeting of the Transportation Research Board (TRB), Jan 2020, Washington DC.

for both the economic shock due to the pandemic and a range of plausible outcomes for longer-term behavioural trends that could be affected by COVID-19, such as remote working. We will add to these any increase or reduction of emissions stimulated by our projects and programmes within our Investment Programme at any given point. Chapter 3 explains more about the characteristics of each Future Travel Scenario and how they have been used.

If our baseline trajectories, plus any emissions changes as a result of our Investment Programme, exceed our Decarbonisation Trajectory at any point in the future, the gap between the two is known as the **Policy Gap**. As part of the preparation of this strategy, TfN has modelled the Policy Gap for a number of interim points along the Decarbonisation Trajectory.

This Decarbonisation Strategy sets out how these Policy Gaps may be addressed through three main areas:

- Identification of additional local policy commitment required to achieve the Decarbonisation Trajectory.
- Identification of additional national policy commitment required to achieve the Decarbonisation Trajectory.
- Identification of actions that TfN could take to support our local partners and national government in developing and implementing their own measures.

The identification of required additional policy commitment is important as it helps TfN and its partners evidence and illustrate the additional support required from national government to achieve our decarbonisation ambitions as a region. This support could be in the form of additional national policy or Government provision of more devolved funding or powers. Chapter 4 sets out the change in policy commitment that we believe is required to bridge the policy gap found in each Future Travel Scenario, and Chapter 5 identifies and provides qualitative guidance on the measures that are likely to be required to achieve those policy commitments.

### *Making the right decisions*

At a strategic level, we need to understand how TfN's Investment Programme (IP) affects the future projected emissions from surface transport in the North.

A number of Intervention Sequencing Strategies, which could deliver our IP, are due to be appraised against a number of environmental, social and economic criteria, to understand the full range of benefits that could be delivered by each Sequencing Strategy. As part of this process, changes to surface transport emissions generated in the North, as a result of these schemes will be modelled so that we understand what local and national decarbonisation policy commitment will be required at different points in the future to allow the schemes to be delivered within the parameters of TfN's Decarbonisation Trajectory. Ultimately, we will be asking the question: *'what needs to be true, if the North is to effectively decarbonise its surface transport as well as enjoy the significant connectivity, economic and environmental benefits that our IP will deliver?'*

Recognising that the development of local and national policy is ultimately the responsibility of our partners and national government respectively, and that our actual future travel habits may occur differently from the four plausible Future Travel Scenarios we have modelled, TfN will

embed consideration of our Decarbonisation Trajectory within the business case development process for individual projects within our Investment Programme.

This means that when the time comes to start to develop each individual project, over the next 30 years, we shall assess whether the carbon impact of the project is consistent with the Decarbonisation Trajectory, given the prevailing external policy context, travel habits and patterns. Recognising the detailed, and sometimes extended, consenting and design processes that precede the construction of major infrastructure projects, we shall assess the carbon impact of the project at both the concept / early design stage and then again once the detailed design is known, pre-construction.

In relation to the early design stage assessment, where a project may not deliver operational emissions in line with our Decarbonisation Trajectory, TfN will require mitigation measures to be developed as part of the project. Mitigation could take the form of fundamental design changes, influencing national government for further policy support or implementation of further local transport decarbonisation policy measures.

Following detailed design and before the start of construction, we will model the expected changes to surface transport emissions in the North during the expected year of opening to understand the potential success of any mitigation measures employed. If those changes to emissions are not consistent with our decarbonisation trajectory, we shall consider additional mitigation measures such as investigating further options to provide the same transport outcomes, through to employing carbon sequestration measures such as integrating tree planting into schemes or investigating the feasibility of using innovative carbon 'absorbing' construction materials.

If it is not possible to mitigate the project's impact upon emissions, the delivery of the project may be re-sequenced within the Investment Programme to a date when the future travel context enables the project to operate within the Decarbonisation Trajectory. For example, a particular road project may be re-scheduled to a point when the majority of additional traffic generated is by zero emission vehicles.

Our approach to incorporating the consideration of our Decarbonisation Trajectory within our decision making at both a strategic and project level is illustrated in [Figure X](#).

# Making Better Decisions

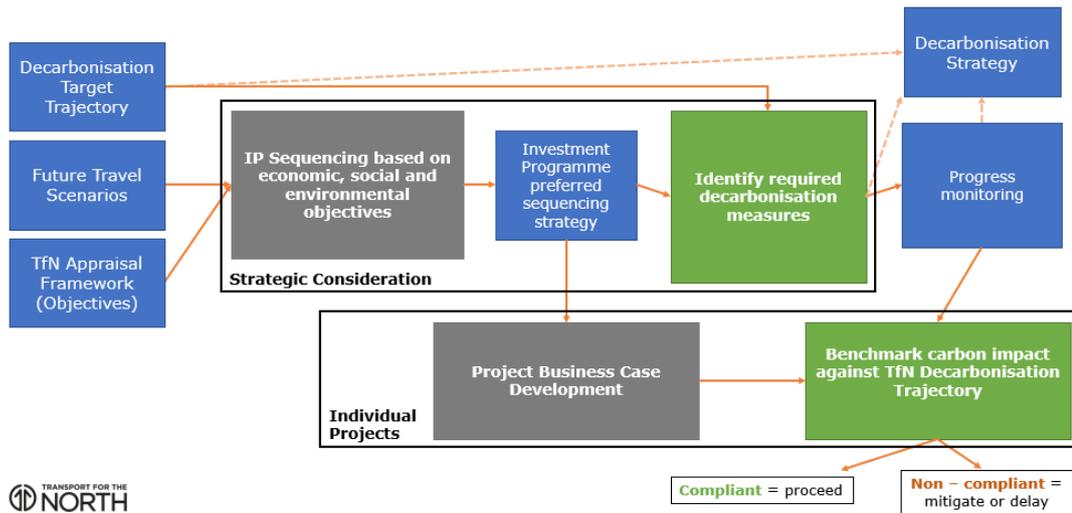


Figure X: Framework for assessing a project against TfN's Decarbonisation Trajectory

### Chapter 3 - Estimating current and future emissions

Estimating current and future emissions is key to identifying the policy gap between baseline and decarbonisation trajectories. TfN's Northern Carbon Modelling Tool, NoCarb, was developed for this purpose, taking in historic demand, fleet and emissions data as well as those associated with TfN's Future Travel Scenarios.

This chapter outlines the context and rationale behind TfN's Future Travel Scenarios, and how they have been used through our Decarbonisation Pathway work as a tool for exploring plausible futures for which emissions can be estimated. As the starting point for all four Future Travel Scenarios, the chapter goes on to outline baseline emissions estimates for 2018, before presenting the unique emissions trajectory of each Future Travel Scenario.

#### Future Travel Scenarios

TfN's Future Travel Scenarios explore how trends in society, the economy and national policy could influence the level and distribution of travel demand in the future. By using a series of different Future Travel Scenarios, we aim to future-proof our decision-making as much as possible, making it resilient to wide-ranging and cross-sector uncertainties.

The Future Travel Scenarios represent factors<sup>1</sup> that are external to TfN's direct control, acting as 'reference cases' to test the performance of TfN strategies and policies against objectives. They form the starting point for TfN's Decarbonisation Pathways.

In each scenario, the level of national government ambition and support for decarbonisation in the North is different, as is the level and distribution of travel demand<sup>2</sup>.

Assessing the decarbonisation 'policy gap' - that is, the gap between each Future Travel Scenario's emissions trajectory and the decarbonisation trajectory - will allow TfN to develop a resilient Decarbonisation Strategy that can adapt to different future circumstances. The policies and measures that are likely to bridge this policy gap are captured in TfN's Decarbonisation Pathways, which address the different levels of additional action required under each of TfN's four Future Travel Scenarios. This recognises that the same action applied in different scenarios will result in different levels of efficacy in terms of the emissions reductions required.

The Future Travel Scenarios were developed in partnership with Local Authority partners, national delivery partners and academic experts and informed by local strategies and priorities. The scenarios represent uncertainty across the following five external factors:

1. Growth in the population and economy;
2. Spatial planning policy and economic distribution;
3. National policy on environment and sustainability;
4. Technological change and advancement; and
5. Social and behavioural change.

The key elements of the scenarios can be summarised using the following set of 'what if' questions:

---

<sup>1</sup> A list of travel-related development, policies and measures under each Future Travel Scenario can be found in the [Future Transport Measures and Solutions Annex](#).

<sup>2</sup> Key national policy changes up to December 2020 are reflected within the Scenarios.

- **Scenario 1: Just About Managing** - What if society keeps developing broadly following existing trends? What if there is a gradual shift in lifestyles and travel, public and political behaviours do not alter, and we don't give up certain 'luxuries', leaving major developments and change to be shaped by market forces.
- **Scenario 2: Prioritised Places** – What if society becomes focused on quality of life, place-making and community, rather than primarily economic growth? This scenario is led by a change in priorities, with its biggest driver being the push for a fairer redistribution of economic prosperity.
- **Scenario 3: Digitally Distributed** – What if Northern Powerhouse ambitions<sup>3</sup> are realised by using technology solutions to create connections and agglomeration across towns and cities? This scenario is led by technology and some policy influence, as we fully embrace technological change, work remotely, and use an accessible service-based transport system with connected and autonomous shared mobility options.
- **Scenario 4: Urban Zero Carbon** – What if society achieves Northern Powerhouse ambitions by using policy interventions to maximise energy efficient city growth and urban densification? This scenario is led by public and political attitudes to climate action and urban place-making, with the biggest drivers being strong Government policy, resulting in fast action on zero-emission transport systems and places, with integrated planning across energy, spatial and other sectors.

TfN's [Future Travel Scenarios Report](#) provides a comprehensive overview of the process undertaken to develop the new Future Travel Scenarios. It also delves into the contextual factors underlying each scenario and the expected implications on transport.

### Modelling carbon emissions in the North

Over the past two years, TfN's Technical Assurance, Modelling and Economics (TAME) team has been developing and refining the Analytical Framework; a consistent set of data, modelling tools and appraisal approaches designed for TfN's programmes of transport strategy and business case development. TfN's NoCarb model forms part of the Analytical Framework and draws on other framework elements and data sources to estimate future vehicle emissions. These inputs relate to:

1. The composition of the vehicle fleet by size and fuel type;
2. The distribution of travel demand;
3. Emissions per kilometre travelled for each distinct type of vehicle.

Using these inputs, NoCarb carries out two core functions:

1. Projecting the make-up of future fleets using sales scenarios; and
2. Calculating emissions using fleet, emissions and demand inputs.

The first step involves projecting the make-up of the vehicle fleet under each of TfN's Future Travel Scenarios, while the second step estimates emissions based on the composition of the fleet and distance travelled in a given year. Estimates of kilometres travelled by each vehicle type under each of the Future Travel Scenarios were produced using TfN's travel demand modelling tools. Further information on NoCarb and these travel demand modelling tools is provided in [Annex B](#).

---

<sup>3</sup> As set out in the [Northern Powerhouse Independent Economic Review](#).

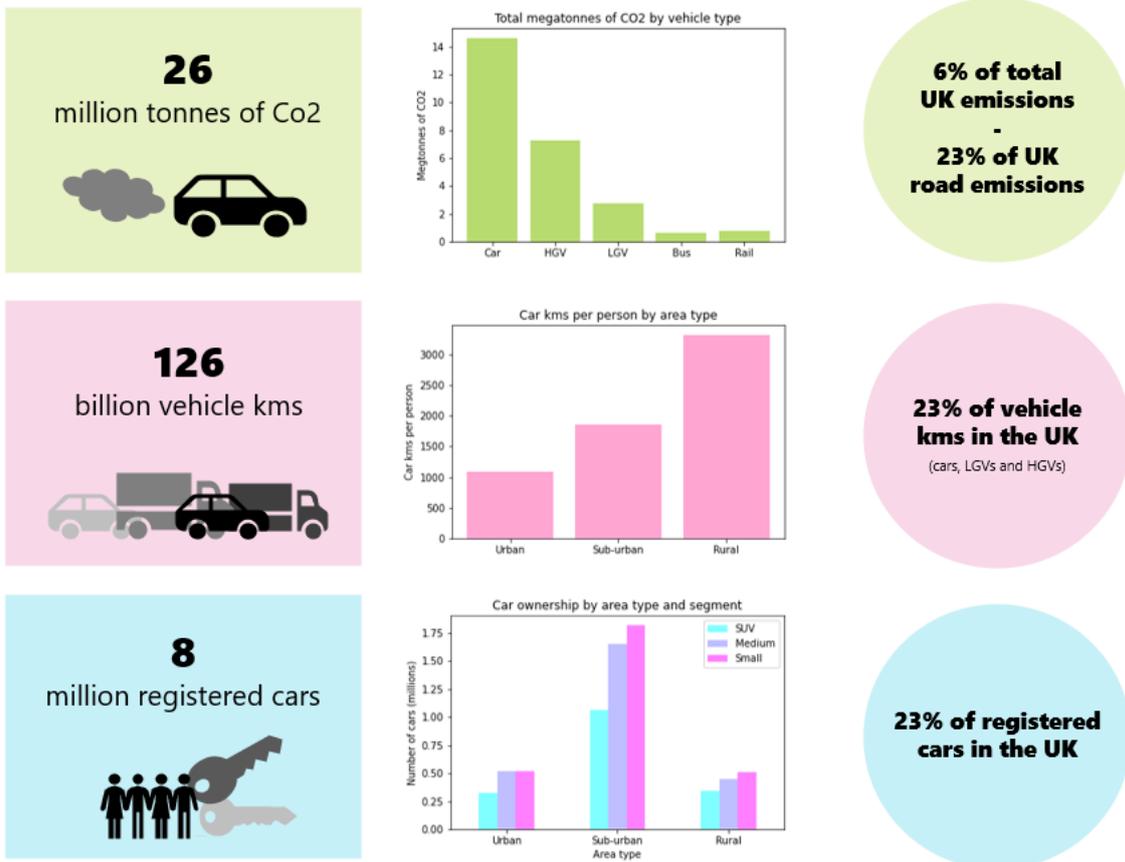
### Baseline emissions in the North

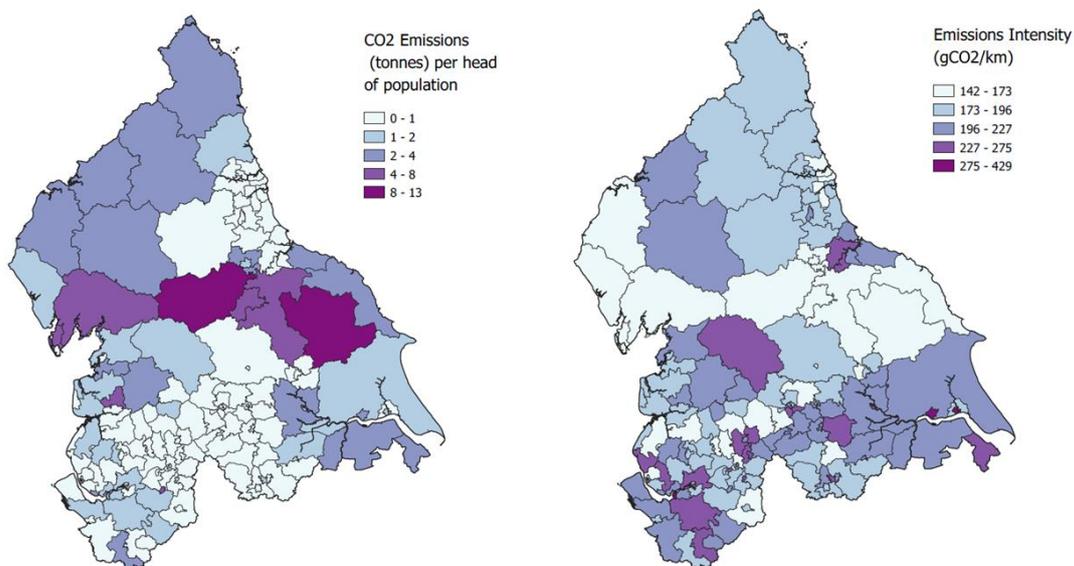
Figure X provides headline figures related to baseline surface transport emissions in the North. At 26 mega-tonnes of CO<sub>2</sub>, surface transport emissions in the North represent nearly one quarter of UK road emissions and 6% of total UK emissions. Over half of those emissions were generated by cars, with HGVs and vans producing 28% and 11% of surface transport emissions respectively. Bus and rail, on the other hand, represent just 5% of emissions.

A total of 126 billion kilometres were travelled in the North in 2018, representing 23% of vehicle kilometres travelled in the UK. The majority of the North's travel was through sub-urban areas, though distance per head was much higher for those in rural areas.

The North had 8 million registered cars in 2018. Large and SUV cars, which typically have higher emissions intensity, made up nearly one quarter of those cars and just under one third of new car sales in that year. This reflects a national trend over the last two decades, which has seen a gradual increase in the purchase of larger cars.

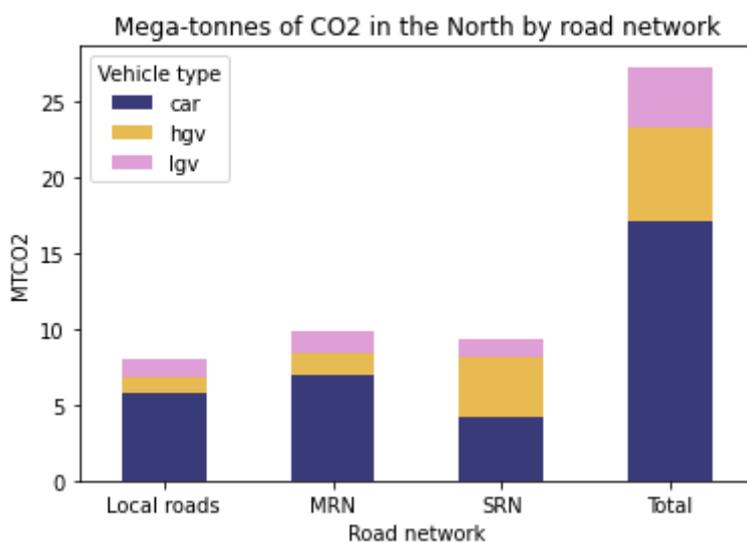
Urban areas typically showed lower CO<sub>2</sub> intensity and emissions per head of population than rural areas. However, there was some variation within area types, with coastal areas having slightly more fuel-efficient cars.





**Figure X:** Headline figures related to surface transport emissions in the North in 2018

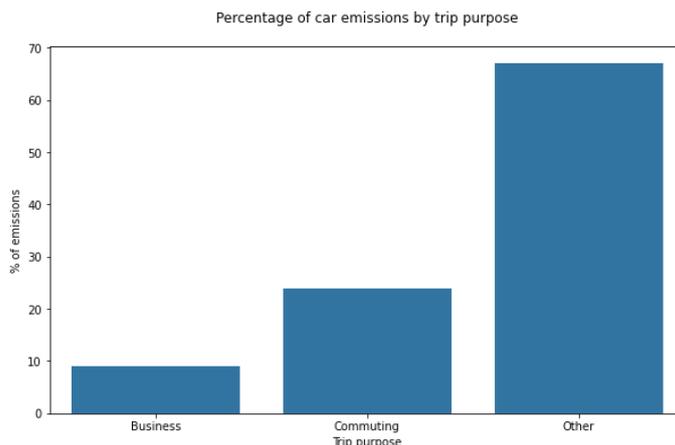
70% of emissions in the North were on the Major and Strategic Road networks, indicating that a high proportion of emissions from private road vehicles is generated by longer distance regional-level trips.



The next two sections show how emissions vary by travel type and traveller type in the North of England at a regional level. We have used disaggregate trip data from the National Travel Survey to carry out this illustrative analysis, as some of the parameters are not currently included within NoCarb.

**Emissions by trip purpose and distance**

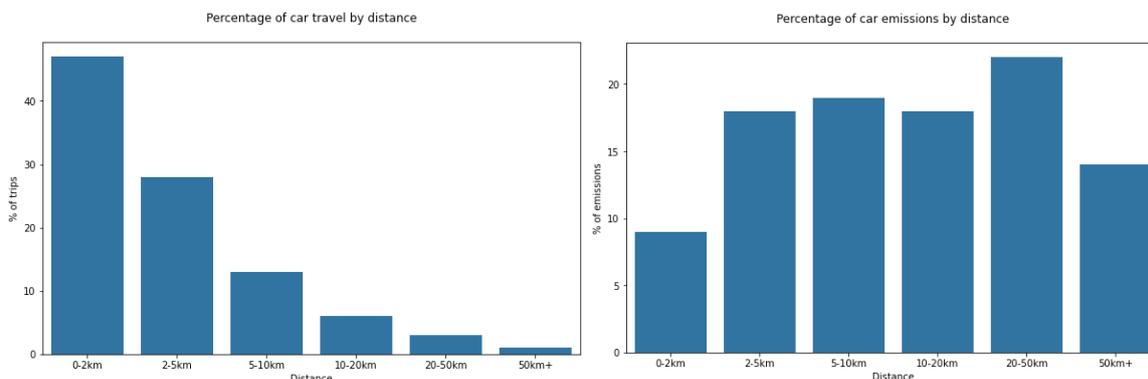
The majority of car emissions in the North related to non-employment related travel, with 67% generated by ‘other’ travel, 24% by commuting and the remaining 9% by business travel.



**Figure X:** Percentage of car emissions in the North in 2017 by trip purpose.

Through an increase in remote working and social distancing measures, the pandemic has demonstrated the potential for car emissions to be reduced across trip purposes. In the short-term, as we wait for a greater proportion of the vehicle fleet to be replaced by zero-emissions vehicles, reducing car travel will play a vital role in meeting decarbonisation targets.<sup>4</sup>

Three-quarters of car trips in the North were under 5 kilometres, and just under 90% under 10 kilometres. Given their short distance, a notable proportion of these trips could be switched to walking, cycling, e-bikes, or public transport. Medium and long-distance trips, on the other hand, made up the majority of car emissions, with trips over 10 kilometres generating 54% of car emissions. Trips over 50 kilometres, while only representing 1% of car trips, were responsible for 14% of emissions. The difficulty of shifting these trips to cleaner modes demonstrates the importance of decarbonising the vehicle fleet in order to meet decarbonisation targets in the medium and long-term.



**Figures X and X:** Percentage of car trips by distance (left) and percentage of emissions by distance (right)

**Distributional impacts**

<sup>4</sup> The CCC estimates that 36% of mitigation will come from “demand reduction” (which includes mode-shift) in the period to 2025.

*Distribution of emissions by employment group<sup>5</sup>*

Different sections of the community produce varying rates of emissions. Our analysis<sup>6</sup> suggests that individuals in managerial and professional occupations produced the highest car and van emissions per capita out of all employment groups (Figure X), representing around half of car and van emissions in 2018. Alternatively, non-working individuals produced the lowest car and van emissions per capita (less than 2% of emissions in 2018).

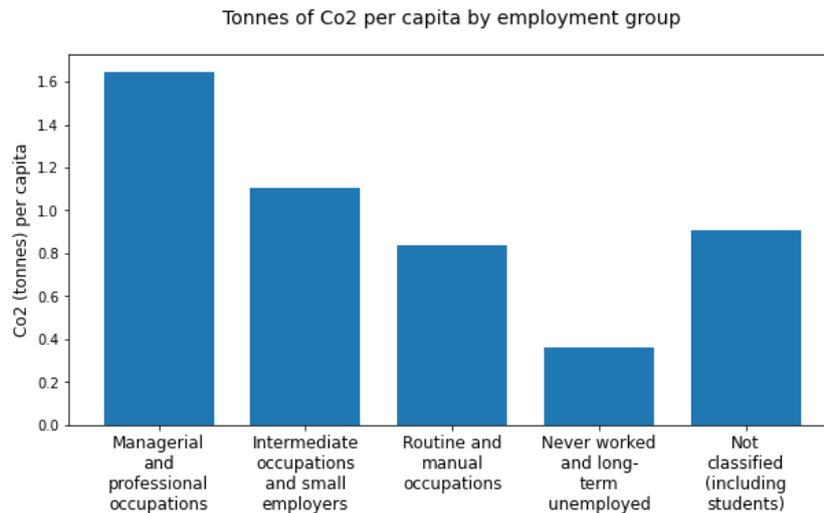


Figure X: Tonnes of CO<sub>2</sub> per capita by employment group.

Individuals in managerial and professional occupations were similarly responsible for the majority of rail emissions, making up over 60% of the total distance travelled by rail.

With the lowest total emissions of all modes, bus travel was slightly skewed towards those in routine and manual occupations and unclassified individuals (representing 38% and 15% of bus emissions respectively). Individuals in managerial and professional occupations, on the other hand, represented just 22% of bus emissions in 2018. These figures align with evidence that lower income groups are more likely to use buses than those on higher incomes, as the cost of bus travel is lower than trains and cars.<sup>7</sup> This highlights that, to effectively reduce surface transport emissions, proportionately greater focus will be needed on transport decarbonisation measures that are likely to affect higher-income groups.

*Distribution of emissions by gender*

<sup>5</sup> These employment groups relate to the Office for National Statistics' [Socio-economic classifications \(NS-SEC\)](#).

<sup>6</sup> This analysis was derived from the National Travel Survey 2017, filtered to only include trips that took place in the North. The share of emissions was assumed to be equivalent to the share of car, van and taxi kilometres travelled by each group. For the purpose of this analysis, it was not possible to isolate unique trips, so there may be some instances where trips were counted more than once (i.e. where people from the same household travelled together). Looking exclusively at trips undertaken by car/van drivers (or taxi passengers over 16 years old), the trends explained in this section are even more extreme. For example, the share of emissions increases from 50% to 54% for individuals in managerial and professional occupations and increases from 52% to 60% for men. The share of car and van emissions does not reflect the type and age of vehicles, meaning that newer, lower-emitting cars may slightly offset some of the emissions by higher-income groups.

<sup>7</sup> [Gates, Shivonne et al. Transport and inequality: An evidence review for the Department for Transport. NatCen Social Research. 2019.](#)

Responsible for 52% of car and van travel in the North, men produce slightly higher car and van emissions per capita than women (Figure X). This is equivalent to the gender split of drivers, with 52% of trips recorded as having a man as the main driver. Trips taken by men also have slightly lower car occupancies, with an average of 1.93 people in a car or van compared to 2 for women.

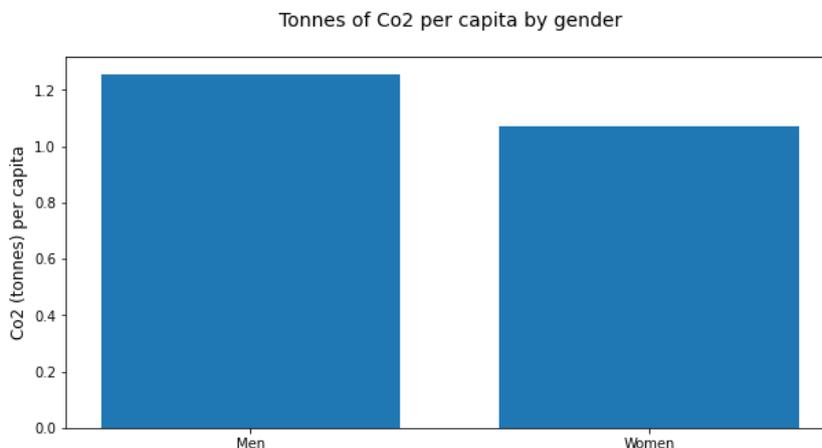


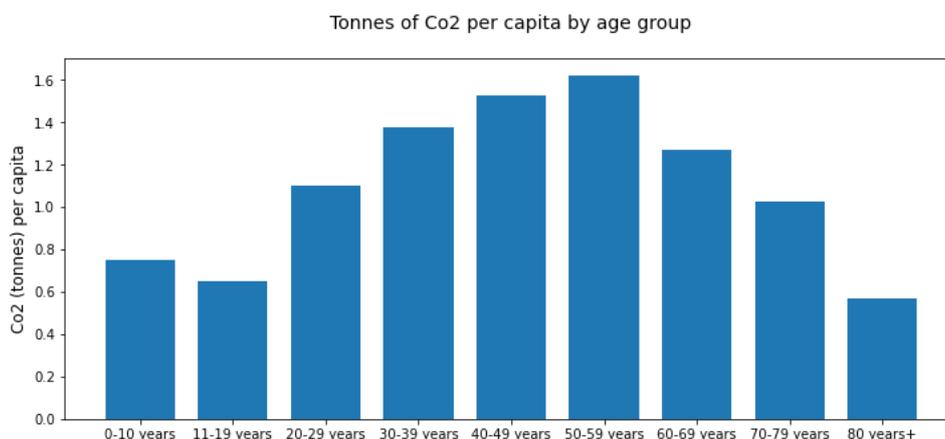
Figure X: Tonnes of CO<sub>2</sub> per capita by gender.

Men represent just over half of rail emissions, making up 55% of rail travel in the North. The opposite is true for bus travel, with 55% of emissions produced by women.

*Distribution of emissions by age*

Over 50% of car and van emissions, and 60% of rail emissions, were produced by people aged 30-60 years old. Covering most of the working age population, this likely reflects more commuting, business and escort<sup>8</sup> trips.

50-60 year-olds had the highest share of car and van emissions per capita out of all age groups (Figure X), while children, teenagers and people over 80 had the lowest per capita emissions.



<sup>8</sup> Such as driving children to school or other activities.

Figure X: Tonnes of CO<sub>2</sub> per capita by age group.<sup>9</sup>

Bus travel was weighted more towards groups outside of the typical working age. 11-19 year-olds represented the highest share of bus emissions at 22%, and 60-69 and 70-79 year-olds together represented 29% of bus emissions.

*What this means for decarbonisation*

While this section provides a high-level overview of how emissions can vary across groups, it is not an exhaustive list; nor does it capture the complex relationships between income, gender, age, disability, location (to name a few) and carbon consumption. For example, research suggests that low-income individuals in rural areas experience the worst effects of transport poverty, with high transport costs and low public transport access.<sup>10</sup> Nevertheless, emissions intensity and emissions per head is often higher in rural areas compared to urban and sub-urban areas. This means that these individuals could be disproportionately disadvantaged by targeted decarbonisation measures, such as emissions-based fees for road-use charging.

Considering the impact of decarbonisation methods on different groups is critical to ensuring that the gap between disadvantaged and privileged groups is narrowed rather than widened. This is discussed further in Chapter 5.

**Future emissions estimates**

**Scenario 1: Just About Managing**

Under Just About Managing, economic growth continues at a moderate rate and is largely market-driven, consumption-led and unequal (both geographically and socially). While there is global climate change awareness, as people become more conscious of regular disasters, the policies introduced under this scenario are not radical enough to meet the UK carbon budgets and the net-zero target of 2050.

The main consequence of this scenario is that highway networks become increasingly congested, and public transport levels remain similar to today. This is also reflected at the global scale, meaning that extreme weather events become more common in the UK, leading to frequent disruption to transport networks.

| Mode                    | Demand growth 2018-2050 | CO <sub>2</sub> emissions in 2030 (mega-tonnes) | CO <sub>2</sub> emissions in 2050 (mega-tonnes) |
|-------------------------|-------------------------|---|---|
| Rail                    | 83%                     | 0.6   | 0.4   |
| Bus and shared mobility | -3%                     | 0.3   | 0.0   |
| Car                     | 28%                     | 10.9  | 0.0   |
| Van                     | 47%                     | 1.7   | 0.0   |
| HGV                     | 6%                      | 8.0   | 7.0   |
| Active travel           | 4%                      | 0.0   | 0.0   |

<sup>9</sup> Emissions have been assigned to passengers as well as drivers.

<sup>10</sup> Gates, Shivonne et al.

**What if society continues to develop in line with existing trends?**

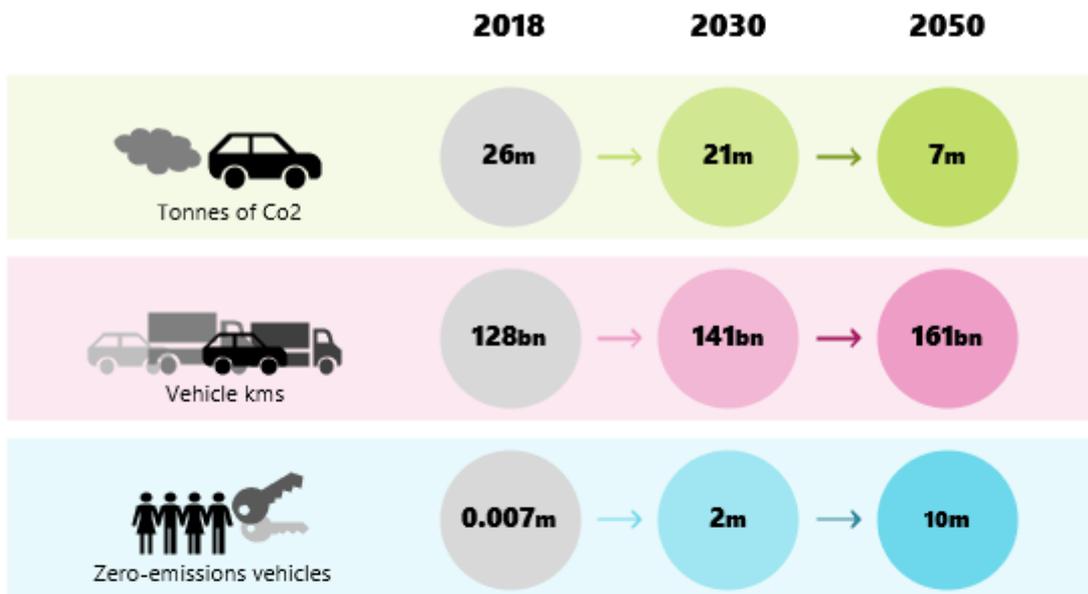
- Existing trend of urbanisation and growth distribution continues. Little change in demographics and from travel behaviour seen today.
- No transformation in level of economic growth. Reactive political direction results in a rigid economy, lacking agility and vulnerable to economic shocks.
- Net Zero 2050 target not met – climate change and travel disruption becomes more extreme.
- Technology uptake driven by existing policy; Electric Vehicle (EV) uptake at slowest rate of all four scenarios and some autonomy. Continuation of shared transit and public transport use as seen pre-2020.
- Continued trends of active travel, with increases experienced during 2020, although any further step-change increase would require a continued and committed impetus.
- Moderate growth in remote working. Continuation of freight transportation as seen today.

| Area type | Population in 2050 (millions) | Vehicle kilometres in 2050 (billions) | CO <sub>2</sub> emissions in 2050 (mega-tonnes) |
|-----------|-------------------------------|---------------------------------------|---|
| Urban     | 3.9                           | 21.9                                  | 0.8   |
| Sub-urban | 9.8                           | 90.0                                  | 4.8   |
| Rural     | 2.3                           | 49.0                                  | 1.5   |

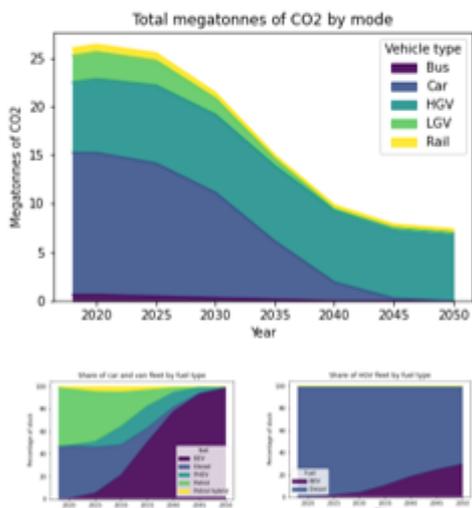
Increases in car and van demand are largely offset by a growing share of zero-emissions vehicles. However, due to the higher costs associated with zero-emissions HGVs, most continue to be run on diesel. This makes up almost all residual emissions in 2050, which stand at just under 25% of 2018 levels.

| Vehicle type | Fuel type | Share |
|--------------|-----------|-------|
| Car          | BEV       | 99%   |
| Car          | PHEV      | 1%    |
| Van          | BEV       | 98%   |
| Van          | PHEV      | 2%    |
| HGV          | BEV       | 27%   |
| HGV          | Diesel    | 73%   |

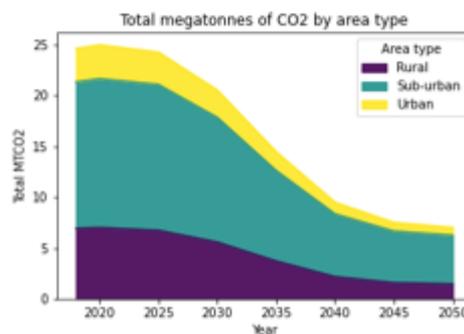
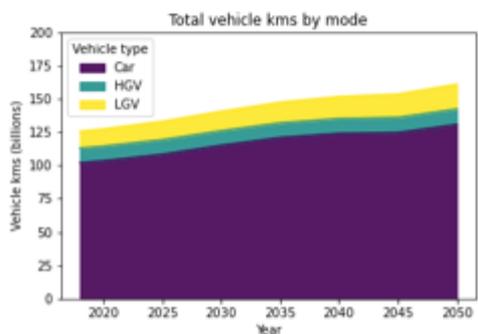
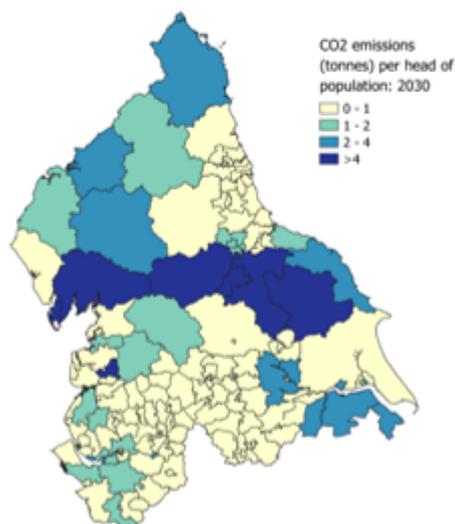
## Just About Managing



**Mode and fuel breakdown**



**Area breakdown**



## Scenario 2: Prioritised Places

Prioritised Places sees a focus on work-life balance and social equity within and between places. This involves a shift in the UK's political and economic direction to ensure that no place is left behind. Every area, including cities, towns and rural and coastal areas, has a bespoke local economic strategy, supported by investment in local assets and economic and social infrastructure. This scenario is led by a change in priorities, with the biggest driver being the push for a fairer redistribution of economic prosperity.

Although an emphasis on localising activity and use of public transport helps to reduce emissions at a more rapid rate, a failure to sufficiently embrace technology sees continued private mobility ownership and a struggle to realise a fully zero-emission transport network before 2050.

| Mode                    | Demand growth 2018-2050 | CO <sub>2</sub> emissions in 2030 (megatonnes) | CO <sub>2</sub> emissions in 2050 (megatonnes) |
|-------------------------|-------------------------|--|--|
| Rail                    | 122%                    | 0.6  | 0.4  |
| Bus and shared mobility | 19%                     | 0.3  | 0.0  |
| Car                     | 30%                     | 10.0   | 0.0  |
| Van                     | 47%                     | 1.6  | 0.0  |
| HGV                     | 1%                      | 7.6  | 6.7  |
| Active travel           | 13%                     | 0.0  | 0.0  |

### ***What if society becomes more focused on place, place-making and community than growth or connectivity?***

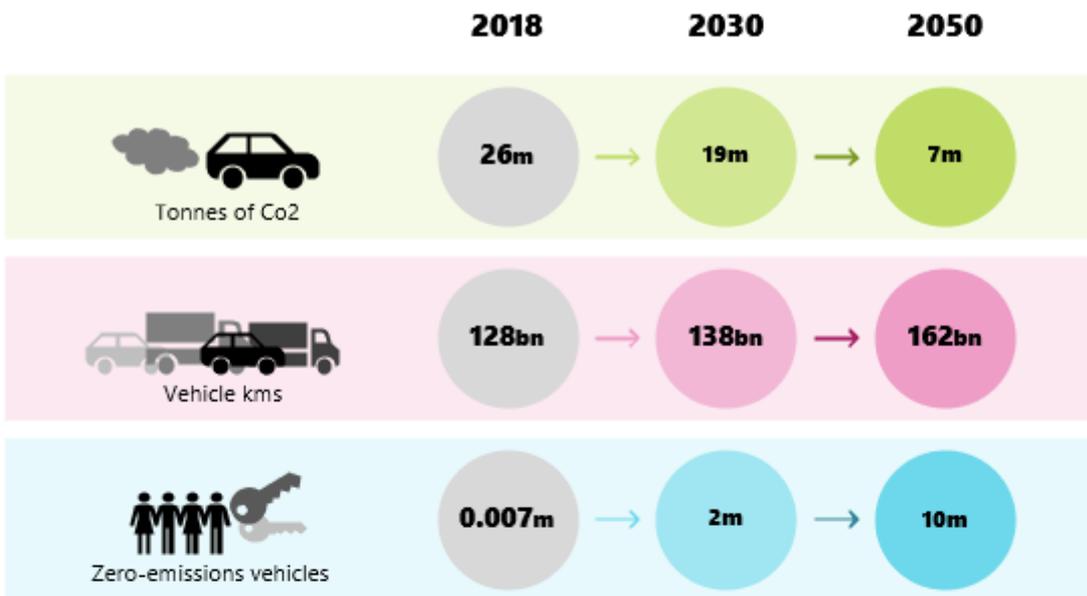
- Bespoke local strategies, focusing on quality of life, place-making and community, rather than primarily economic growth. Slower growth in cities, more in towns and rural/coastal areas.
- No transformation in level of economic growth, but society is more equitable and there is a fairer distribution of prosperity across the region.
- Moderate growth in electric vehicles and some autonomy, especially in cities. Realisation of benefits for vulnerable groups, people with disabilities and extending Autonomous Vehicle (AV) networks to more isolated areas.
- Continued private mobility ownership sees a struggle to realise a zero-emission transport network.
- More active and public transport within communities. People value face-to-face interaction.
- Focus on work-life balance and social equity within and between places.

| Area type | Population in 2050 (millions) | Vehicle kilometres in 2050 (billions) | CO <sub>2</sub> emissions in 2050 (megatonnes) |
|-----------|-------------------------------|---------------------------------------|--|
| Urban     | 3.8                           | 20.7                                  | 0.7  |
| Sub-urban | 9.6                           | 87.8                                  | 4.5  |
| Rural     | 2.7                           | 53.4                                  | 1.4  |

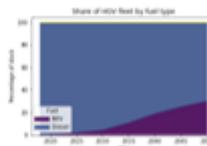
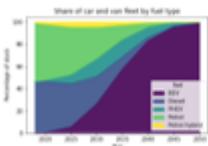
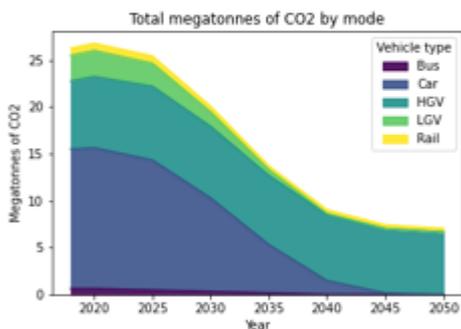
Similar to Just About Managing, increases in car and van demand are largely offset by a growing share of zero-emissions vehicles. Most HGVs also continue to run on diesel, though only a marginal increase in demand means that the emissions are slightly lower.

| <b>Vehicle type</b> | <b>Fuel type</b> | <b>Share</b> |
|---------------------|------------------|--------------|
| Car                 | BEV              | 99%          |
| Car                 | PHEV             | 1%           |
| Van                 | BEV              | 99%          |
| Van                 | PHEV             | 1%           |
| HGV                 | BEV              | 27%          |
| HGV                 | Diesel           | 73%          |

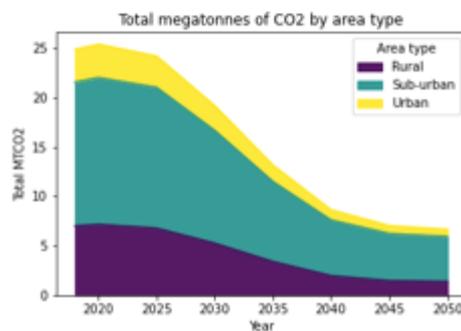
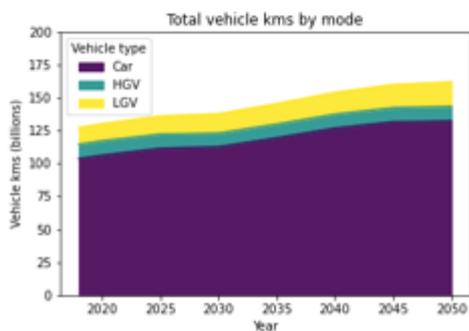
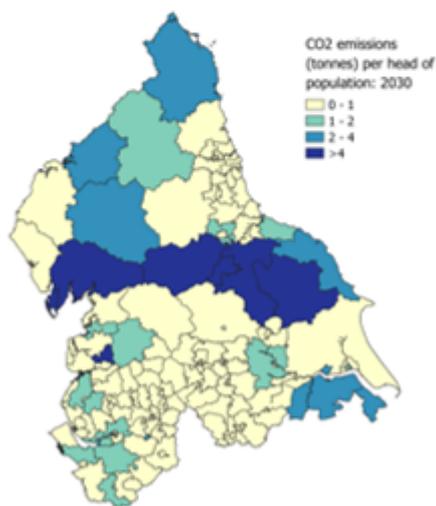
## Prioritised Places



Mode and fuel breakdown



Area breakdown



### Scenario 3: Digitally Distributed

This scenario sees a future where digital and technological advances accelerate, transforming how we work, travel and live. In general, we embrace these technological changes and the move towards a distributed, service-based transport system, with the biggest drivers being technical advances and a willingness to embrace mobility-as-a-service and shared mobility.

Long-term climate change targets are met, but there is slow progress in the short-term due to a general preference for individualised mobility over traditional public transport.

| Mode                    | Demand growth 2018-2050 | CO <sub>2</sub> emissions in 2030 (megatonnes) | CO <sub>2</sub> emissions in 2050 (megatonnes) |
|-------------------------|-------------------------|--|--|
| Rail                    | 78%                     | 0.6  | 0.0  |
| Bus and shared mobility | 11%                     | 0.3  | 0.0  |
| Car                     | 44%                     | 9.6  | 0.0  |
| Van                     | 74%                     | 1.6  | 0.0  |
| HGV                     | 4%                      | 7.9  | 1.2  |
| Active travel           | 6%                      | 0.0  | 0.0  |

**What if society achieves Northern Powerhouse Independent Economic Review (NPIER) outcomes by using technological solutions to create connection and agglomeration across towns and cities?**

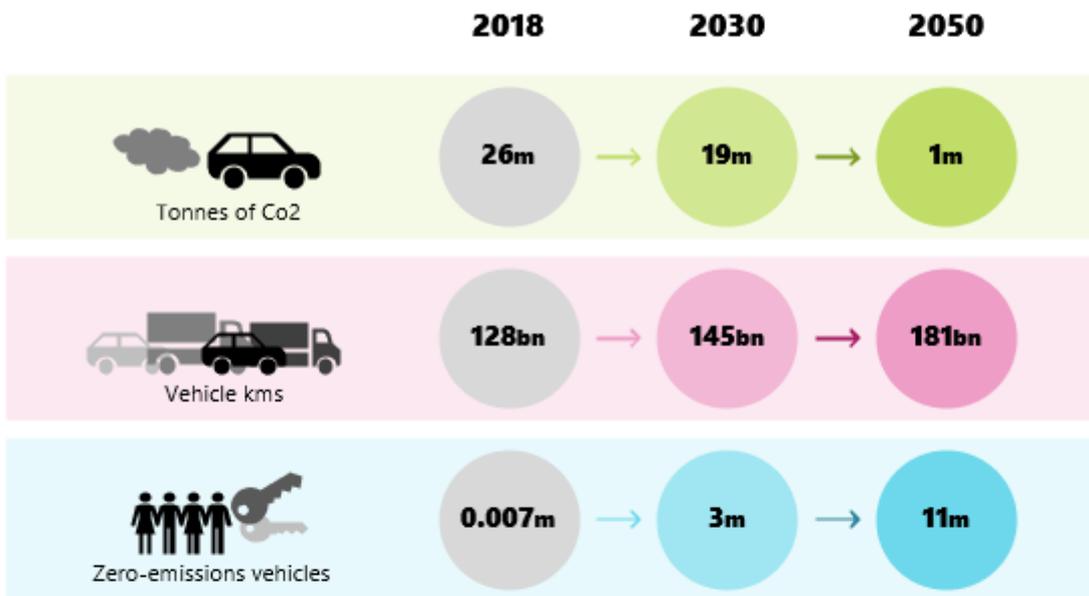
- Growth dispersed between cities and towns and less city-centric.
- High uptake of EV, Ultra Low Emissions Vehicles (ULEVs), Zero Emissions Vehicles (ZEVs) and driverless vehicles means zero emissions before 2050 (but slow progress in short-term). Some fiscal and regulatory action to influence technology use, but congestion persists in places due to availability of transport options. Increased digital remote working and dispersed employment means trip lengths are longer but less often.
- General willingness to embrace Mobility-as-a-Service (MaaS) and shared mobility - through technology acceptance which supports increased efficiency and use of road capacity.
- Freight warehousing, distribution and logistics centres are distributed.
- Transformational economic growth as towns and cities see polycentric agglomeration and become more interdependent, due to better skills-matching within geographical areas.

| Area type | Population in 2050 (millions) | Vehicle kilometres in 2050 (billions) | CO <sub>2</sub> emissions in 2050 (megatonnes) |
|-----------|-------------------------------|---------------------------------------|--|
| Urban     | 4.0                           | 24.4                                  | 0.1  |
| Sub-urban | 10.6                          | 101.4                                 | 0.8  |
| Rural     | 2.6                           | 54.9                                  | 0.3  |

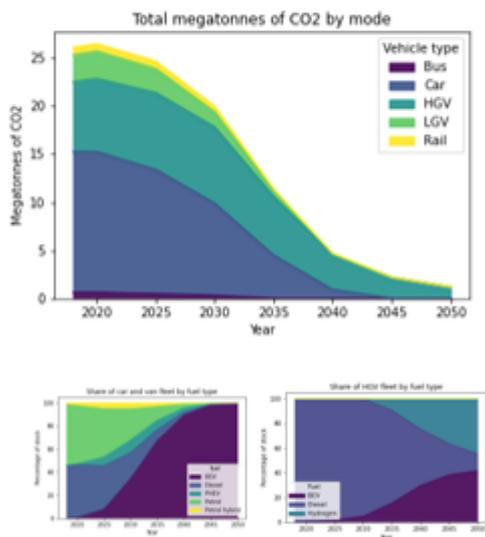
With just under 1 MTCO<sub>2</sub> of residual emissions in 2050, this scenario sees the benefits of decarbonising HGVs earlier, with over 85% running on hydrogen or battery electric fuel cells.

| Vehicle type | Fuel type | Share |
|--------------|-----------|-------|
| Car          | BEV       | 100%  |
| Van          | BEV       | 100%  |
| HGV          | BEV       | 38%   |
| HGV          | Diesel    | 14%   |
| HGV          | Hydrogen  | 47%   |

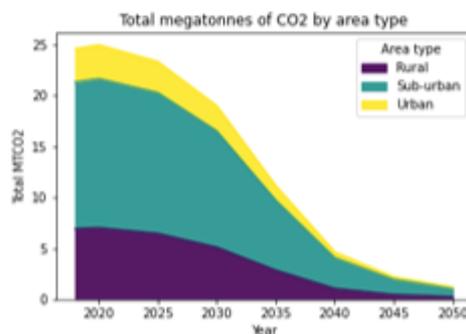
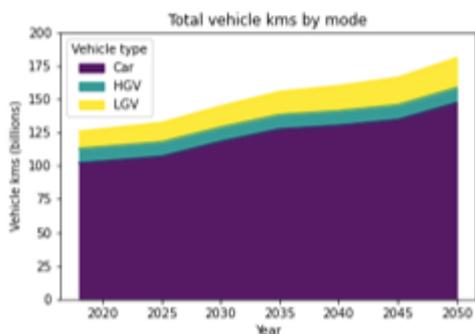
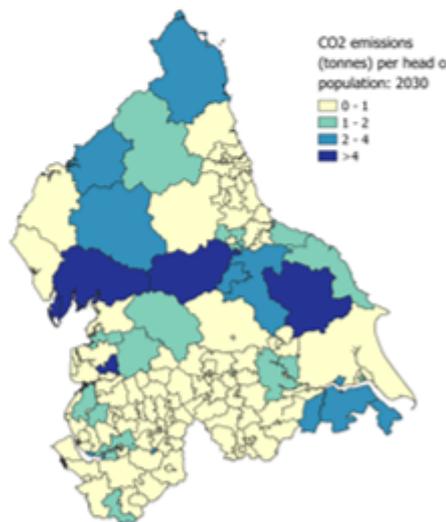
## Digitally Distributed



Mode and fuel breakdown



Area breakdown



## Scenario 4: Urban Zero Carbon

This scenario sees a significant shift in public attitudes towards action on climate change, and a strong government response to meet it. Transport and energy planning and systems are adapted and integrated to deliver effective clean networks. All road transport is powered by electric drivetrains ahead of 2050, with an increasing supply of low-carbon hydrogen available for some vehicles.

This scenario is led by attitudes to climate action and urban placemaking, with the biggest drivers being strong government policy and urban densification.

| Mode                    | Demand growth 2018-2050 | CO <sub>2</sub> emissions in 2030 (megatonnes) | CO <sub>2</sub> emissions in 2050 (megatonnes) |
|-------------------------|-------------------------|--|--|
| Rail                    | 193%                    | 0.6  | 0.0  |
| Bus and shared mobility | 21%                     | 0.3  | 0.0  |
| Car                     | 10%                     | 7.1  | 0.0  |
| Van                     | 50%                     | 1.2  | 0.0  |
| HGV                     | -3%                     | 7.6  | 1.1  |
| Active travel           | 30%                     | 0.0  | 0.0  |

### ***What if society achieves NPIER outcomes by using policy intervention to maximise energy-efficient city growth?***

- Cities and large towns become more dense but attractive places to live. Large rural settlements may benefit, others will see reduction in population and employment without support of national policy.
- Transformational economic growth primarily through urban agglomeration and place-making.
- Strong fiscal and regulatory action set us on a pathway to zero carbon before 2050. Increased devolution leads to integrated transport and energy systems which deliver clean networks.
- Urban living reduces remote working and increases urban freight consolidation centres.
- Increased public and active transport, including shared mobility, as public and private travel becomes blurred.
- All new vehicles have a high level of autonomy, but are not fully autonomous by 2050. Shared AVs are well integrated into urban transport systems to complement public transport, but this doesn't extend to rural areas or small towns. Opportunities are not available to all, both geographically and due to attitudes and abilities with technology, sharing and data use.

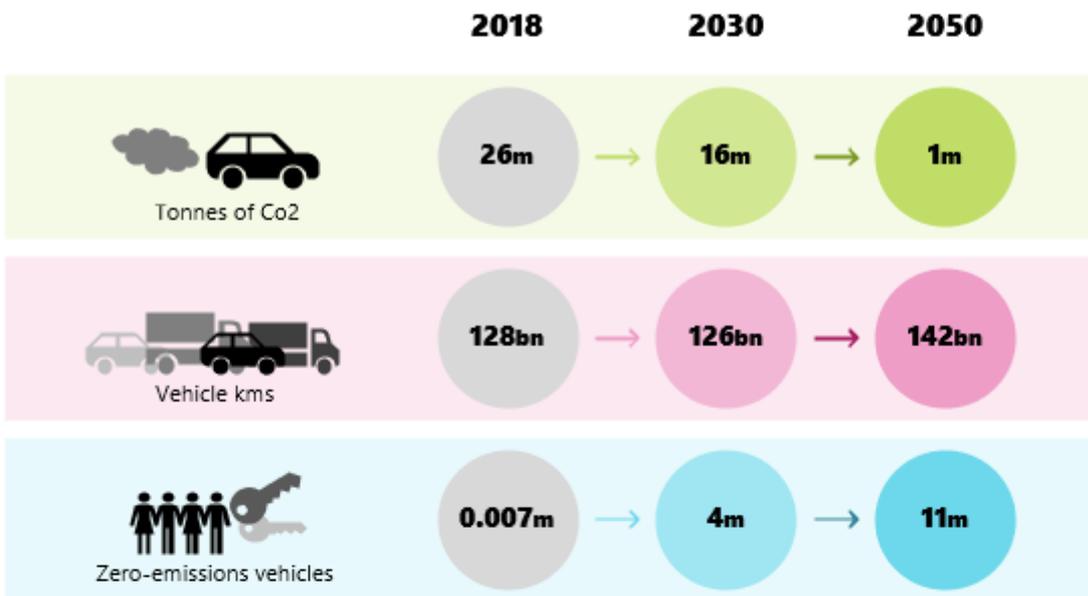
| Area type | Population in 2050 (millions) | Vehicle kilometres in 2050 (billions) | CO <sub>2</sub> emissions in 2050 (megatonnes) |
|-----------|-------------------------------|---------------------------------------|--|
| Urban     | 4.9                           | 20.6                                  | 0.1  |
| Sub-urban | 10.0                          | 78.8                                  | 0.8  |
| Rural     | 2.3                           | 42.4                                  | 0.2  |

This scenario sees increased demand across public transport and active modes, with a decrease in HGV demand. Consequently, it sees the lowest residual emissions (attributed to a small number of diesel HGVs) in 2050 at just over 1 MT CO<sub>2</sub>.

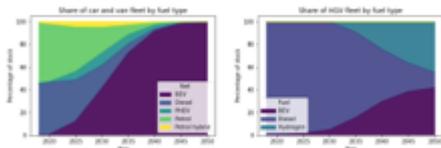
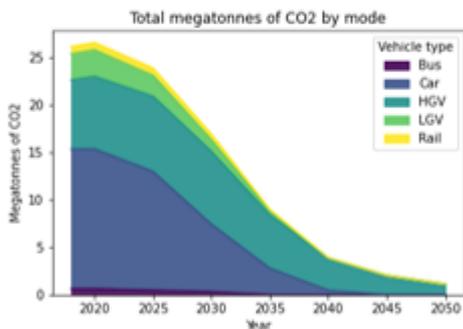
| Vehicle type | Fuel type | Share |
|--------------|-----------|-------|
| Car          | BEV       | 100%  |
| Van          | BEV       | 100%  |

|     |          |     |
|-----|----------|-----|
| HGV | BEV      | 38% |
| HGV | Diesel   | 14% |
| HGV | Hydrogen | 47% |

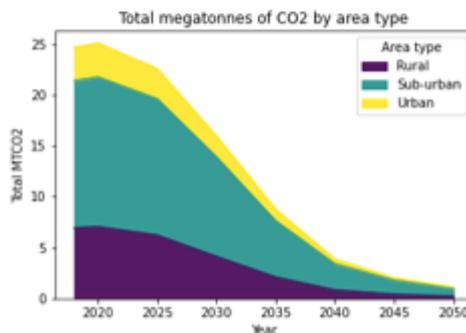
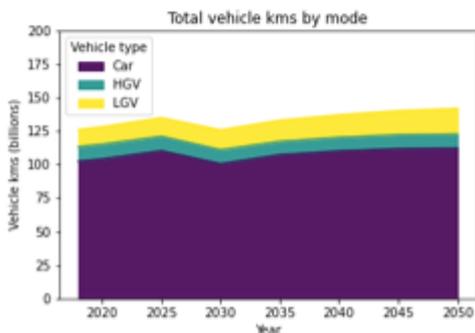
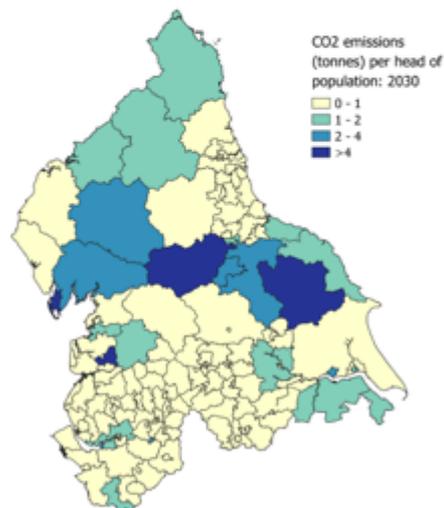
## Urban Zero Carbon



**Mode and fuel breakdown**



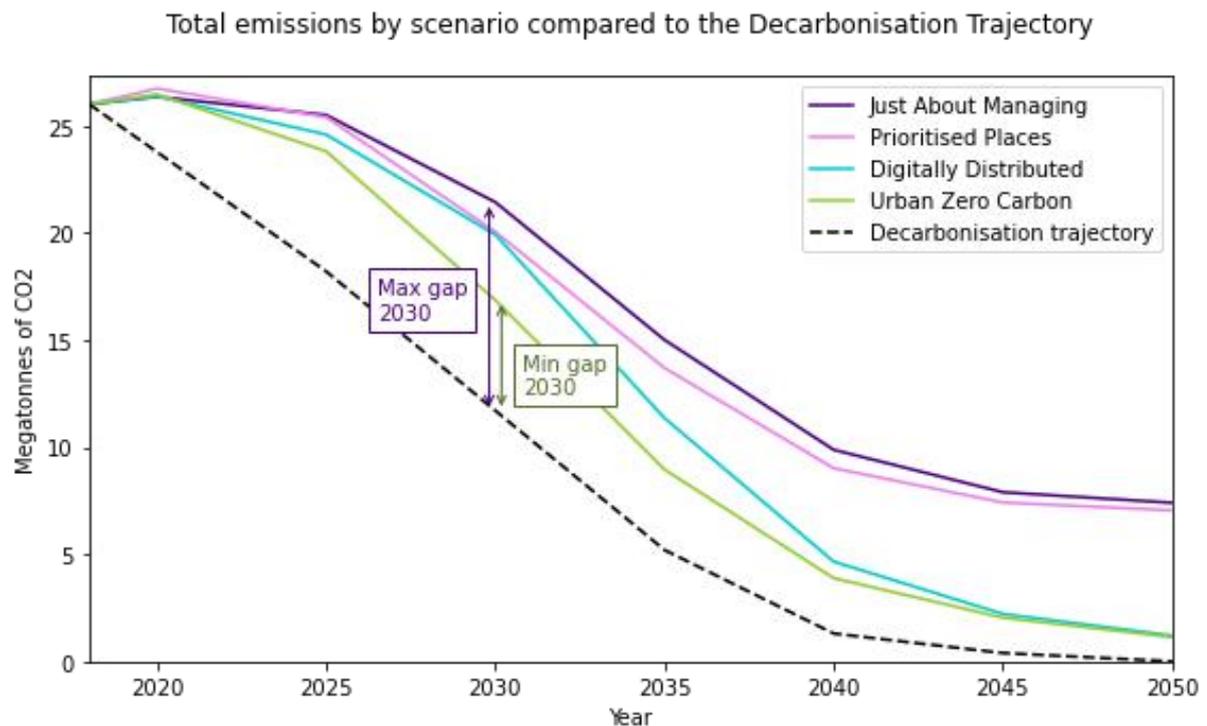
**Area breakdown**



## Chapter 4 – Decarbonisation Pathways

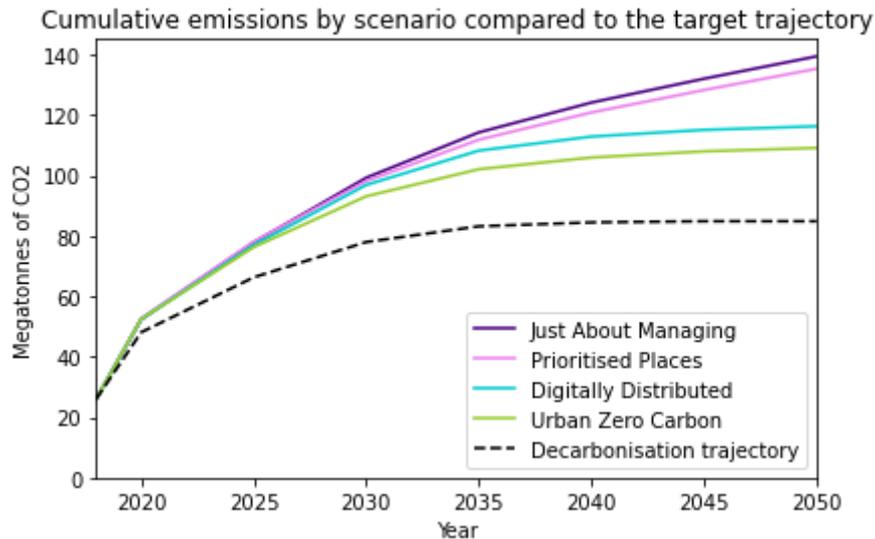
Chapter 2 set out TfN’s Decarbonisation Trajectory and Chapter 3 introduced the Future Travel Scenarios, which show varying levels of progress towards that trajectory as a result of background trends and the different plausible policy approaches that national government might take. In this chapter we examine the ‘policy gap’ that could exist between these baseline scenarios and the trajectory, establishing the broad Decarbonisation Pathways that TfN and partners could seek to follow to close the gap in the coming decades.

**Figure X** shows the Decarbonisation Trajectory alongside the four baseline trajectories, with our estimated minimum and maximum scale of the policy gap in 2030 shown as an example.



**Figure X:** Total emissions under each Future Travel Scenario compared to the Decarbonisation Trajectory, demonstrating the policy gap that needs to be filled between each scenario.

The Decarbonisation Trajectory sets a total carbon budget of 85 mega-tonnes of CO<sub>2</sub> to 2050. All scenarios exceed this budget by 2030 (see Figure X), despite Urban Zero Carbon and Digitally Distributed achieving close-to-zero emissions by 2050. This demonstrates the importance of rapidly reducing emissions in both the short and long term.



**Figure X:** Cumulative emissions under each Future Travel Scenario compared to the Decarbonisation Trajectory.

| Table X shows how the policy gap varies every 5 years from now until 2045, both in absolute terms and cumulatively.<br>Year | Absolute gap (mega-tonnes CO <sub>2</sub> ) |     | Cumulative gap (mega-tonnes of CO <sub>2</sub> ) |     |
|---|---|-----|--|-----|
|   | Max   | Min | Max  | Min |
| 2025  | 9   | 7   | 12   | 10  |
| 2030  | 11  | 6   | 21   | 15  |
| 2035  | 9   | 2   | 31   | 19  |
| 2040  | 7   | 1   | 40   | 21  |
| 2045  | 7   | 2   | 47   | 23  |
| 2050  | 7   | 1   | 55   | 24  |

A number of key messages can be drawn from this table:

- **In the short term**, there is a large absolute policy gap across all four scenarios, which exhausts the entire carbon budget to 2050. It will be challenging to bridge this gap with policies that take time to have an effect, such as vehicle fleet policies that only tend to affect new vehicles, or infrastructure that takes time to plan and construct. Demand-management and mode-shift policies that can be implemented quickly will be key.
- **In the longer term**, recent policy announcements have significantly reduced the uncertainty around emissions from light duty vehicles, meaning the absolute policy gap could be relatively small in some scenarios. However, significant uncertainty remains in relation to larger HGV emissions, with a requirement to find a zero-emission solution that can start to be rolled out during the 2030s.

Bridging the gap will involve a combination of policies and regulations that target vehicle sales, mode-shift, demand reduction and improved fuel efficiency. As a first step in assessing how the gap

can be closed, we have established some broad-brush ‘rules of thumb’ on the scale of change needed in the vehicle fleet and in road transport demand – we refer to these as our Decarbonisation Pathways. In Chapter 5, we set out a more detailed analysis of the policies that might be needed to achieve the required scale of change. This policy analysis forms the building blocks of our Decarbonisation Strategy.

Each of the Future Travel Scenarios reflect the Government’s ban on the sale of new petrol and diesel vehicles from 2030 and new hybrid vehicles by 2035, though the timing and potential for decarbonisation of HGVs is still largely uncertain. While the 2030 ban is a significant reform, rapidly increasing zero-emissions vehicle sales and shifting towards smaller, less polluting vehicles sales in the period to 2025 will be crucial and further policy commitment will likely be needed.<sup>1</sup>

In addition to a change in fleet composition, policies that shift demand to active and public transport modes, reduce demand overall and improve fuel efficiency will be necessary in both the short and long-term. These policies are especially important in the short-term as fleet composition changes and infrastructure developments take time to implement.

**Table X:** Broad measures that must be put in place (relative to a given year) in order to reduce emissions in line with the Decarbonisation Trajectory.

|  |      | 2025 | 2030  | 2035  | 2040  | 2045  |
|--|------|------|-------|-------|-------|-------|
| <b>Zero-emissions share of sales<sup>2</sup></b>             | Cars | 55%  | 100%  | 100%  | 100%  | 100%  |
|  | Vans | 40%  | 100%  | 100%  | 100%  | 100%  |
|  | HGVs | 26%  | 44%   | 72%   | 100%  | 100%  |
| <b>BEV high mileage CO<sub>2</sub> reduction</b>             | Cars | 20%  | 20%   | 20%   | 20%   | 20%   |
| <b>Public transport CO<sub>2</sub> reduction on baseline</b> | Bus  | 15%  | 40%   | 70%   | 90%   | 100%  |
|  | Rail | 0%   | 25%   | 75%   | 100%  | 100%  |
| <b>Reduction in distance travelled</b>                       | Cars | 1-7% | 3-14% | 3-14% | 3-14% | 3-14% |

<sup>1</sup> In line with CCC analysis (Fifth Carbon Budget), vehicle efficiency improvements (as defined by planned EU/UK new vehicle regulations) have been reflected in all Future Travel Scenarios.

<sup>2</sup> All of the measures outlined in this table are relative to the baseline in a given year (they are not cumulative or related to 2018). For example, the BEV high mileage CO<sub>2</sub> reduction in 2030 relates to emissions that have been projected in 2030 under each scenario.

|   |                         |      |        |       |       |       |
|---|-------------------------|------|--------|-------|-------|-------|
| <b>relative to baseline growth</b>  | Vans <sup>3</sup>       | 5%   | 10%    | 10%   | 10%   | 10%   |
|   | HGVs                    | 3-5% | 11-15% | 6-15% | 6-15% | 6-15% |
| <b>Conventional vehicle efficiency CO<sub>2</sub> reduction<sup>4</sup></b> | Cars and vans           | 3.6% | 3.6%   | 3.6%  | 3.6%  | 3.6%  |
|   | Artic HGVs              | 22%  | 22%    | 22%   | 22%   | 22%   |
|   | Rigid HGVs              | 13%  | 13%    | 13%   | 13%   | 13%   |
| <b>Share of car sales</b>   | Large cars <sup>5</sup> | 27%  | 22%    | 17%   | 10%   | 10%   |

**Table X** outlines the broad pathways to bridge the policy gap in all Future Travel Scenarios. The measures demonstrate the significant scale of change required in both the short and long-term, requiring over half of car sales, and 40% of van sales, to be zero-emissions in the next four years. This also requires a reversal of recent trends favouring the purchase of larger cars – from 32% of car sales in 2018 to 20% in 2025, and 10% from 2030.

As we wait for zero-emissions vehicles to make up a larger proportion of the vehicle fleet, car demand (i.e. the total vehicle kilometres projected to be travelled in a given year) will need to be reduced by 1% to 4% in 2025<sup>6</sup> and 3% to 14% in 2030<sup>7</sup> to bridge the residual emissions gap. Van and HGV demand reduction will also be required, achieved through a combination of operational and logistics efficiencies and freight mode-shift where possible.

Finally, improving the fuel-efficiency of conventional vehicles is an essential component to emissions reductions. Recent evidence from the Climate Change Committee suggests that eco-driver training and enforcement of 70mph speed limits could improve conventional car efficiency by 3.6%, and that improved aero-dynamic designs and drag reduction, in combination with driver training, could improve artic and rigid HGV efficiency by 22% and 13% respectively. To support rapid emissions reduction in the short-term, the maximum improvement in conventional vehicle efficiency will be required by 2025.

The scale of change identified in this section is indicative of the difficulty of the decarbonisation challenge which is faced everywhere. The changes shown here are not policies set in stone but show that rapid action will be required across mode-shift, technological change and demand reduction on a significant scale.

<sup>3</sup> The next stage of analysis will consider scenario-specific variation in van demand. However, it is worth noting that van emissions are notably smaller than cars and HGVs, meaning that a variation in van reduction across scenarios would have a small effect on overall emissions.

<sup>4</sup> Relative to the baseline in a given year. This means that the efficiency measures will have a decreasing effect on absolute emissions as the fleet transitions to ZEV vehicles, where efficiencies will translate to less demand on the electricity grid.

<sup>5</sup> Large cars are defined as a collection of the Euro Car Segments categorisation, which can be found here: [https://en.wikipedia.org/wiki/Euro\\_Car\\_Segment](https://en.wikipedia.org/wiki/Euro_Car_Segment). This is used to allow a mapping to the categorisation used in COPERT for speed-emission curves. While these measures seek to target conventional vehicles in the short-term, smaller electric vehicles also support reduced demand on for electricity in the medium and long-term.

<sup>6</sup> This would bring 2025 demand to around a 4%-5% increase on total vehicle kilometres travelled in 2018.

<sup>7</sup> This would bring 2030 demand to anywhere between -5% and +1% of 2018 levels.

## Chapter 5 – Policy analysis

Within the previous chapters, we have:

1. introduced our four Future Travel Scenarios;
2. explained how they have been used to estimate future emissions (our baseline trajectories);
3. identified the difference between future emissions under each scenario and those that would be required under our Decarbonisation Trajectory (known as the Policy Gap);
4. identified the broad-brush level of policy commitment required (our Decarbonisation Pathways) to bridge those Policy Gaps and achieve our Decarbonisation Trajectory.

This chapter provides further detail about the measures required to deliver on these policy commitments and the relevant roles and responsibilities of government, our Partners and TfN in implementing them. The measures are grouped into the following themes:

1. Zero Emission Vehicles (ZEVs)
2. Demand Management
3. Improvements to conventional vehicle efficiency

Each theme is accompanied by a high-level summary of policies and actions that our evidence suggests will help achieve the changes set out in Table X in chapter 4. This includes high-level analysis of the broad scale of policy commitment required under each theme, covering quantified and costed policies where possible. It also includes some high-level narrative on the distribution of responsibility across the themes:

1. **TfN:** Measures that could be effectively undertaken at a regional scale or a Sub-national Transport Body level of governance and therefore led or facilitated by TfN.
2. **Government:** Actions required by national government that should be brought forward in the Transport Decarbonisation Plan, including additional national policies and appropriate devolution of funding and powers.
3. **TfN Partners:** Measures that might be employed by our partners, subject to receiving sufficient national funding, recognising that each place within our region will have different decarbonisation timescales and different geographies, demographics and patterns of passenger and freight demand that require a bespoke place-based approach.

Further details of these packages of policies is provided in Annex A – Detailed policy recommendations.

It's important to note that the measures identified for consideration at a local level are intended as guidance for our partners to aid their consideration of the most effective mix of measures and actions, applicable to their individual places. We recognise that local policy makers are best placed to understand what will and won't work, for the communities within their own areas.

In recognition of the unique landscapes underlying each scenario, the magnitude of change varies across scenarios. This is especially the case for demand reduction, but applies across most other measures, where the gap between baseline projections and required decarbonisation changes (such as ZEV sales) is larger in some scenarios than others. This means our analysis has allowed us to develop supporting policy recommendations that can be adapted and implemented differently, depending on the evolution of future travel trends.

## 1. Zero Emission Vehicles (ZEVs)

|   |      | 2025 | 2030 | 2035 | 2040 | 2045 |
|---|------|------|------|------|------|------|
| <b>ZEV share of sales</b>                         | Cars | 55%  | 100% | 100% | 100% | 100% |
|   | Vans | 40%  | 100% | 100% | 100% | 100% |
|   | HGVs | 26%  | 44%  | 72%  | 100% | 100% |
| <b>BEV high mileage Co2 reduction</b>             | Cars | 20%  | 20%  | 20%  | 20%  | 20%  |
| <b>Public transport Co2 reduction on baseline</b> | Bus  | 15%  | 40%  | 70%  | 90%  | 100% |
|   | Rail | 0%   | 25%  | 75%  | 100% | 100% |

As long as vehicles use fossil fuels, it will not be possible to achieve near-zero emissions in the North's surface transport network. The typical life of a car is around 15 years, with some lasting longer in the fleet, meaning it will take roughly this long for ZEV vehicles tip the balance and deliver the deep emissions reductions required to meet decarbonisation targets. It is therefore critical to introduce policies that will rapidly increase ZEV uptake as soon as possible.

This section describes the policies required to meet the ambitious targets outlined above.

### ZEV cars and vans

In November 2020, the Government announced the phase-out of the sale of new petrol and diesel cars and vans by 2030, and hybrid cars and vans by 2035. Our analysis suggests that we need to go further, with a ban on petrol, diesel and hybrid car and van sales by 2030 and an ambitious uptake of ZEV cars (55% of sales) and vans (40% of sales) by 2025.

In order to achieve this, all consumers must have sufficient access to charging infrastructure. This will require a significant increase in the provision of public charging, including rapid charging hubs. Consumers will also need to be discouraged from purchasing internal combustion engine vehicles (ICE) cars and vans. From the mid-2020s, zero-emission cars and vans are expected to reach cost parity with ICE vehicles<sup>1</sup>, at which point fiscal policy should shift towards substantially increasing the cost of buying and using ICE vehicles. In addition, policies that can encourage the uptake of ZEVs for high mileage applications, such as taxis, could result in around a 20% reduction in car CO<sub>2</sub>.

### ZEV HGVs

While the technology for ZEV cars is well advanced, there is more uncertainty about the optimal technology for ZEV HGVs, making it a challenge to meet our ambitious sales targets for ZEV HGVs.

Technology demonstration projects would provide essential evidence for the feasibility of different HGV technologies and the necessary infrastructure to support them. Off the back of this evidence, there is an opportunity to leverage regional partnerships in the North to purchase ZEV HGVs in bulk.

<sup>1</sup> Kate Palmer, James E. Tate, Zia Wadud, John Nellthorp, Total cost of ownership and market share for hybrid and electric vehicles in the UK, US and Japan, Applied Energy, Volume 209, 2018, Pages 108-119, ISSN 0306-2619, <https://doi.org/10.1016/j.apenergy.2017.10.089>.

This would help draw significant numbers of vehicles into the region (with potential cost savings) and send a message to original equipment manufacturers (OEMs) that the demand is there.

## ZEV buses

Electric buses are increasingly being trialled and rolled out across towns and cities, spurred on by the need to improve air quality as well as reduce carbon emissions. In general, these buses are being used for shorter routes where buses have more recharging opportunities, and longer routes will likely require technological improvements for electric buses, or hydrogen options.

## Decarbonising rail

Route electrification is the most efficient way of reducing rail emissions in the long-term. Not only does it remove tailpipe emissions on those routes, but it supports the use of bi-mode trains on other routes. Overhead electrification also helps to improve rail journey times and reliability, making rail a more attractive mode of transport and encouraging mode shift. Improvements to rail services are covered in more detail in the Demand Management section below.

Building on Network Rail's Traction Network Decarbonisation Strategy (TNDS)<sup>2</sup>, a regional plan should be formulated laying out the order and timing in which higher-density routes will be electrified and identifying routes where alternative technology is a permanent solution. The current rail fleet in the North is of mixed vintage. There is scope to develop a plan that cascades rolling stock as electrification develops to push out the worst polluters. Electric-only trains are a known quantity and low-risk, but other ZEV technologies (battery-electric, battery and hydrogen) will need further testing to understand their viability<sup>2</sup>:

1. Battery technology is emerging rapidly, but range is constrained, and it requires charging infrastructure.
2. Hydrogen presents risks around the quantity needed and the knock-on impacts on operational costs (fuelling time and capacity to carry fuel needed).

**ZEV policy in action:** In 2020, Norway became the first country in the world to see the sale of electric cars overtake those of petrol, diesel and hybrid vehicles. Battery electric vehicles (BEVs) sales made up over 54 per cent of all new cars sold in 2020, up from over 42 per cent in 2019. Norway is currently leading the way in EV ownership in Europe. By 2025, the country aims to ban the sale of all fossil fuel cars. Oslo launched its first municipal EV charging infrastructure program in 2008, providing incentives including free parking for EVs, exemption from a congestion tax, and exemptions from Low Emission Zone (LEZ) fees. Only zero tailpipe emission taxis will be able to operate in the city from 2023. The city is deploying fossil free public transport from 2020 and is considering a ban on petrol and diesel cars within the city centre by 2024

**ZEV policy in action:** In Sweden, an increase in EV usage can be traced to the government's recently adjusted incentive scheme that sees a tax increase for vehicles with high emissions. In addition, cars with low CO<sub>2</sub> emissions can receive up to €5,700 as a grant.

---

<sup>2</sup> Traction Decarbonisation Network Strategy, Interim Programme Business Case, Network Rail (2020)

## Quantifying the policy commitment – ZEVs

Global action to build new markets for Electric Vehicles, as well as wider investment in battery technology and manufacturing processes, has led to significant reductions in the costs of ZEV cars and vans. However, to achieve the ambitious levels of uptake in our pathway, further policy commitment will be required in the 2020s. As noted above, a combination of policies that help to differentiate the upfront costs of new ZEV and ICE vehicles will be required, as well as a coherent and comprehensive approach to the electric chargepoint network, involving a mixture of public and private investment. ZEV HGVs will require a similar combination of investment in vehicles and infrastructure, with public funding required to accelerate the transition. Decarbonising rail will require primarily public investment and infrastructure and rolling stock, but there are significant wider public benefits to these investments that offset some of these costs. Table X summarises our high-level quantification of the policy commitments and investments required for the North to 2030.

| Area                      | High-level quantification of policy commitment for the North (2020 prices)   | Notes on implementation and public/private investment split  |
|---------------------------|--|--|
| <b>ZEV cars and vans</b>  | <p>To reach our 2025 pathway, grants or equivalent tax differentials for new ZEVs need to continue until around 2022, totalling around £210m in 2021 and £590m in 2022 for the Northern car and van fleet<sup>3</sup>.</p> <p>Around £230m annual investment in Northern charging infrastructure is needed by 2025, and around £350m by 2030<sup>4</sup>. This will deliver around 2.4 million installed chargepoints across the region by 2030.</p> | <p>Support for vehicles could be focused on taxation (e.g. VED), with minimal or modest additional grant funding.</p> <p>Some public investment is needed for charging infrastructure, but a proportion could be delivered by private investment if the Government develops new markets and innovative regulatory regimes.</p> |
| <b>ZEV HGVs</b>           | <p>Grants or equivalent tax differentials for ZEV HGVs need to be introduced in the next few years, ramping up to a total of around £2m in 2025 and £50m in 2030 for the Northern HGV fleet<sup>5</sup>.</p> <p>Around £110m cumulative investment in Northern HGV charging and refuelling infrastructure is needed by 2030<sup>6</sup>.</p>   | <p>More significant public investment in vehicles and infrastructure likely to be needed initially, but private investment could take over in the 2030s. An even fleet share of electric and hydrogen fuelled ZEV HGVs is assumed in these costing estimates, in line with CCC assumptions.</p>                                |
| <b>Decarbonising rail</b> | <p>The Network Rail TDNS interim business case suggests that a zero-emission rail network by 2040 could have a net present value ranging from a £4.4bn net cost to a £480m net benefit, with much of this wide range due to uncertain technology costs. This is a whole UK figure as Network Rail did not split these costs out by region. TfN</p>   | <p>Mostly public investment required, but there are also significant wider public benefits, such as faster, more reliable journeys.</p>  |

<sup>3</sup> Cost outputs are developed using Element Energy's car and van choice model ECCo, developed for DfT

<sup>4</sup> Calculated by Element Energy for TfN using a method developed by the ICCT, which can be found here: <https://theicct.org/publications/charging-gap-UK-2020>

<sup>5</sup> Cost outputs are developed using Element Energy's truck choice model, developed for CCC

<sup>6</sup> Data taken from Ricardo analysis for the CCC and scaled to match TfN area, available at: : <https://www.theccc.org.uk/publication/zero-emission-hgv-infrastructure-requirements/>

|  |   |  |
|--|---|--|
|  | will work with Network Rail to estimate Northern figures in a future phase of work. |  |
|--|---|--|

### Scenario-specific considerations

Our Future Travel Scenarios allow us to consider how policy should respond to different outcomes in society and the economy that would affect decarbonisation progress. The considerations below help us to plan for an uncertain future, whether society ends up closer to one of the scenarios or somewhere within the range of the scenario outcomes.

| Scenario                     | Scenario considerations for implementation of key areas   | Secondary measures (more detail picked up in local measures below)  |
|------------------------------|---|---|
| <b>Just About Managing</b>   | Population more urbanised. People less embracing of technological and societal change.  | Stronger taxation and subsidy signals may be needed to incentivise the purchase of ZEVs, given the resistance to change.  |
| <b>Prioritised Places</b>    | Population less urbanised. People embrace societal change but are less receptive to technological change. Additional policy levers may be needed to stimulate ZEV vehicle uptake.           | Increased population in rural areas will need to be factored into the regional charging infrastructure strategy. For example, support should be introduced to help car parks in remote locations to provide more reserved EV parking spaces over time.  |
| <b>Digitally Distributed</b> | Population more suburbanised. Population embraces technological change and are receptive to using a shared service-based transport system, although are less receptive to societal changes. | More suburban living could allow more people to charge vehicles at home off-street, altering the requirement for public chargepoints. Charging needs to be integrated with emerging use-models for Autonomous Vehicles, which are adopted more rapidly in this scenario. Growth in out-of-town employment will need to be supported with appropriate charging infrastructure. |
| <b>Urban Zero Carbon</b>     | Population significantly more urbanised. Population receptive to both technological and societal change.  | Very few people will have on-street parking for overnight re-charging, so strategy needs to be more focussed on rapid re-charging. Electric car-clubs may be a more viable choice for many.   |

### Recommendations

This section sets out our headline recommendations on ZEVs.

Firstly, we focus on what TfN can do. As these proposed actions and activities have been identified through our analysis of policies likely to be needed to bridge the *policy gap* between our baseline scenarios and Decarbonisation Trajectory, they have been categorised as 'Policy Gap Actions' (PGAs).

We have then turned to the areas the Government should prioritise in its Transport Decarbonisation Plan and subsequent actions, and finally look at recommendations for our partners to consider. Further detail is provided in Annex A – Detailed Policy Recommendations.

### **TfN – What actions should we prioritise?**

#### **Road vehicles**

**PGA1:** Develop a pan-northern ZEV infrastructure plan to ensure trans-boundary road trips are considered, factoring in interoperability across the region and optimal locations for high-power charging hubs on the Major Road Network, with input from Local Authorities and the Distribution Network Operators (DNOs).

**PGA2:** Work with Local Authority partners and Highways England to facilitate large ZEV truck trials in high traffic corridors in the North.

**PGA3:** Work with Local Authorities and freight stakeholders to help aggregate large orders of ZEV vans and trucks across the North and overcome demand shortages.

#### **Rail**

**PGA4:** Through the Northern Powerhouse Rail programme, support the government and Network Rail in identifying appropriate routes for electrification and associated implementation.

**PGA5:** Work with Network Rail and train operating companies to ensure service patterns are based around the progression of electrification and minimising the use of diesel-only trains.

**PGA6:** Influence Government to trial alternative technology freight locomotives in the North.

**PGA7:** Work with Network Rail to ensure there is sufficient capacity to allow freight traffic to run directly and with minimal dwell times, reducing emissions from existing diesels.

### **National Government – What actions are needed in the Transport Decarbonisation Plans and Subsequent Actions?**

#### **Road vehicles**

1. Strengthen the existing policy to phase-out ICE car and van sales by 2030 to include hybrids.
2. Increase taxes on new ICE vehicles from the early 2020s, with rates escalating in line with emissions intensity.
3. Develop a coherent and comprehensive strategy for charging infrastructure, defining a role for local and regional bodies, providing public funding where appropriate and developing a regulatory regime that enables the private sector to invest and ensure interoperability.
4. As more ZEV HGV models become available in the 2020s, introduce a system of strong grants and tax incentives.
5. Fund large ZEV HGV trials in high-traffic corridors.
6. Implement measures to rapidly increase supply of ZEV models. This could include measures that stimulate domestic manufacture, which also have the potential to drive green growth in the North (see Chapter 8).

#### **Rail**

1. In partnership with Network Rail, identify and fund a core network for electrification with the highest traffic density, then prioritise secondary, lower density routes where alternative technology will be the permanent solution.
2. For routes where alternative technology is the long-term solution, provide funding to procure new rolling stock.

3. In partnership with delivery bodies, work with freight operating companies to understand the need for incremental electrification of freight.
4. Support freight operating companies and rolling stock builders in the development of alternative technology freight locomotives.

Local Partners – Where should local action be prioritised?

**General**

1. Develop a model for delivery and maintenance of electric vehicle charging infrastructure, covering rapid hubs, on-street charging, public parking spaces, and council fleets. Initially proactive bidding for Government funds will be needed, but over time private sector investment will support this, subject to an effective national and local regulatory regime.
2. Implement a common procurement framework for infrastructure across administrative areas to encourage economies of scale and interoperability across the region.
3. Carry out community engagement to increase understanding of EVs and EV infrastructure.
4. Implement policies to prioritise ZEV shared transport, such as car share and car clubs.
5. Collectively adopt taxi licensing policies that require new vehicles to be zero-emission. This will need to be coupled with provision of charging infrastructure at taxi ranks.
6. Aggregate purchases of ZEV vans and trucks across the North (supported by TfN).
7. Engage with bus operators to set targets and standards for rapid roll-out of ZEV buses.

**In smaller towns, villages and dispersed communities:**

8. Incentivise EV uptake (including electric bikes) and development of home charging infrastructure through direct funding and awareness raising (e.g. telematic tests, EV trials).
9. Develop charging infrastructure at rural tourist spots to counter range anxiety. These should be developed in such a way to avoid unsustainable traffic levels within protected rural areas (e.g. National Park park & ride schemes).

**2. Demand management**

|  |      | 2025 | 2030   | 2035  | 2040  | 2045  |
|--|------|------|--------|-------|-------|-------|
| <b>Reduction in distance travelled relative to baseline growth</b> | Cars | 1-7% | 3-14%  | 3-14% | 3-14% | 3-14% |
|  | Vans | 5%   | 10%    | 10%   | 10%   | 10%   |
|  | HGVs | 3-5% | 11-15% | 6-15% | 6-15% | 6-15% |

As it will take time for new ZEV vehicle sales to translate into a substantial proportion of the fleet, it is essential to shift journeys away from private cars to sustainable modes and find ways to avoid journeys. In the long term, as the fleet becomes predominantly electrified, even if running on energy generated through renewable sources, a ZEV will still have a significant carbon footprint through the emissions embodied in its manufacture.

Travel demand reduction also provides a range of other co-benefits, even with a predominantly electrified fleet, such as improving local air quality and safety whilst reducing congestion and avoiding potential transport related social exclusion issues. A shift to active travel also has the potential to improve the physical and mental wellbeing of users. These demand reductions will require significant behavioural change – from a culture focused on personal car use to one that

embraces shared mobility and active travel – and a comprehensive set of policies and supporting infrastructure to facilitate it.

There is a large and growing evidence base on the policies required to achieve this behaviour change<sup>7</sup>. Here we summarise the key areas:

1. Encouraging mode shift to walking, cycling, micro-mobility and public transport
2. Disincentivising car use and avoiding travel
3. Encouraging the uptake of shared mobility
4. Improving freight efficiency
5. Ensuring transport and land-use planning processes encourage sustainable choices

### **Encouraging mode shift to walking, cycling, micro-mobility and public transport**

To achieve significant mode shift, investment will be required in bus, rail and cycling infrastructure to improve journey times and quality and ensuring these networks are accessible and affordable to all. Funding must be made available for bus and rail, including: investment to deliver improved journey times and reliability; targeted reduction and flexibility in fares; network expansions; and fleet improvements. Marketing and engagement must also be used to rebuild public confidence in the safety and value of public transport following the pandemic. Increasing uptake in active travel will require policies and investments that promote comfort, safety and convenience. Local planning policies can play a role, for example by protecting pedestrian use of pavements and supporting active commuting by requiring workplaces to provide appropriate facilities. Policies should also promote safe and accessible use of e-bikes and scooters for longer distance trips.

Both local and national planning policy should place greater emphasis on the location of new development in relation to existing and proposed public transport hubs. New developments without easy access to public transport should consider how appropriate alternatives are incorporated (e.g. shared transport solutions). A related approach is to remove the need to travel long distances by creating ‘15- or 20-minute neighbourhoods’, where residents can meet most needs within a short walk or cycle and use public transport to access other services.

### **Disincentivising car use and avoiding travel**

In addition to making alternative options more attractive, policies that make car travel less attractive or encourage people to avoid travel altogether should be part of the mix. These policies can also generate revenue that can be reinvested in sustainable transport solutions. These measures will be particularly important given the low running costs of Electric Vehicles, which will lead to significant demand growth and make mode shift more difficult if appropriate price signals are not introduced.

Road user charging could be one option to manage demand as a complement to and eventual replacement for fuel duty. This could include measures such as congestion charging and road tolls. Smart technology solutions should be used to target charges at the most congested times of day, the most polluting vehicles and at discretionary car trips, rather than essential travel, for example by key workers. Time-of-day and emissions-based pricing would have the added benefits of improving network efficiency and incentivising the purchase of ZEVs.

Parking policy is another important tool to manage demand for car travel. This can include reducing parking supply in urban centres and introducing schemes like a Workplace Parking Levy (see **example**)

---

<sup>7</sup> See for example:

- <https://www.gov.uk/government/publications/switching-to-sustainable-transport-a-rapid-evidence-assessment>
- <https://www.transportforqualityoflife.com/policyresearch/>
- <https://www.local.gov.uk/decarbonising-transport>

box X). City centre land occupied by parking is often valuable and can be repurposed, for example as cycling infrastructure or green space. Related policies that restrict car access, such as Low Traffic Neighbourhoods, can also be effective at reducing car use and car ownership.

Working from home has become a necessity for many during 2020, and this has been linked to a decrease in car traffic. Ongoing home-working after the pandemic will lead to fewer commuter trips, but evidence is mixed on the net carbon impact of this trend due to travel activities that can replace commuting or using more energy per person in the home setting compared to the office. On balance, evidence suggests there is likely to be an energy saving in most circumstances<sup>8</sup> and home-working should be supported, particularly where it provides other benefits to quality of life.

### **Encouraging the uptake of shared mobility**

Shared mobility refers to a number of different services that make low or zero emission vehicles accessible to people. They can involve lift sharing, car hire, car clubs, demand-responsive bus services, taxis, and cycle and e-scooter hire schemes. Widespread availability of such services can reduce the need to own a car, and lower car ownership is strongly correlated with lower car use<sup>9</sup>.

Use of shared vehicles can be encouraged through the provision of dedicated car club parking spaces combined with stringent parking standards for new development. The use of planning obligations and the Community Infrastructure Levy can fund shared vehicle provision in new developments. Similar approaches can be adopted with cycle hire schemes, and the UK e-scooter trial offers an opportunity to increase the impact of such schemes by incorporating new forms of mobility.

Demand-responsive bus services are more convenient for many travellers than traditional bus services in that they are not bound to a fixed route or timetable. Supporting the provision of these services would help reduce car dependency and complement established public transport networks. This may be particularly important in settings with lower population density, where traditional public transport services need to be heavily subsidised.

Mobility-as-a-Service (MaaS) can encompass the benefits of all these modes, providing a platform to access different mobility solutions. Such services offer reduced cost, low-carbon options in areas with low EV home-charging potential, linking public transport and improving accessibility and reliability. 'Mobility Credits' could be used as an incentive to trade older, more polluting private cars for public transport or shared vehicle use.

### **Improving freight efficiency**

Freight operators are already strongly incentivised towards efficiency, as it helps them to increase their competitiveness. However, some opportunities are not being taken due to market failures, such as a lack of information, an inability to coordinate between operators, or a consumer willingness to pay for fast deliveries at the expense of energy efficient outcomes. These barriers can be overcome through a number of policies described below.

Road-user charging is one way to incentivise operators to use vehicles more efficiently. By increasing the unit cost per mile, there will be an additional incentive to reduce vehicles running empty which will improve vehicle efficiency and make rail a more financially competitive option. This would be complemented by other freight efficiency measures, where information and technology alternatives help prevent policy costs being passed on to consumers.

---

<sup>8</sup> A systematic review of the energy and climate impacts of teleworking. Hook et, al, ERL (2020)

<sup>9</sup> <https://www.creds.ac.uk/shared-mobility-where-now-where-next/>

‘Just-in-time’ deliveries and next day deliveries can significantly reduce opportunities for freight consolidation. A campaign to encourage shippers to offer a green shipping option as standard could demonstrate best practice, whilst lower prices for, and the provision of information about, green shipping options could influence consumer behaviour. Other ‘green’ shipping practices include deliveries in low traffic periods and encouraging consumer uptake of local community drop off/pick up points, reducing emissions due to congestion and improving last-mile delivery efficiency.

Accurate and sharable data on goods and vehicles could allow optimisation between companies that reduces empty running of vehicles. Data formats and sharing protocols must be designed to allow this sharing without risk of prosecution under anti-collusion regulation. This sharing would also enable government and local planning bodies to track freight data to make evidence-based decisions about freight optimisation and consolidation centre planning.

### **Ensuring transport and land-use planning processes encourage sustainable choices**

The transport and land-use planning process can have a substantial impact on the relative investment in car use versus more sustainable modes. Several of the policies outlined above are determined by this process but in this section, we focus on the processes themselves.

Augmented project appraisal processes could encourage a reduction in demand through a stronger focus on projects’ environmental impacts. This would see a more rigorous assessment of a transport project’s impact on carbon, air quality and the urban realm, as well as the whole life carbon impacts of infrastructure development and of manufacturing cars. There is also an opportunity to improve integration between public health and transport. Health providers could disseminate resources to encourage physical activity to replace short car trips, and land-use planning could be integrated with behavioural change programmes to reduce carbon.

### **Scenario-specific considerations**

| <b>Scenario</b>              | <b>Scenario considerations for implementation of key areas</b>   | <b>Secondary measures (more detail picked up in local measures below)</b>   |
|------------------------------|--|---|
| <b>Just About Managing</b>   | Population more urbanised. People less embracing of technological and societal change.   | Slow progress in ZEV and public transport uptake may mean more restrictive additional measures on car travel.   |
| <b>Prioritised Places</b>    | Population less urbanised. People embrace societal change but are less receptive to technological change.  | Regulation to support rural on-demand MaaS services. Enabling home-working in remote areas by ensuring full fibre internet access. Implement planning policy to support localisation of travel needs. Direct mobility credit schemes at communities in smaller towns with fewer public transport options, and at those living in areas of low EV home-charging capability.                  |
| <b>Digitally Distributed</b> | Population more sub-urbanised. Population embraces technological change and are receptive to using a shared service-based transport system, although are less receptive to societal changes. | With a more distributed population, e-bikes in particular, may be an effective way to increase the uptake of active travel modes for those living in more dispersed communities. Supporting strategic park-and-ride to avoid CAVs congesting urban areas. Implement policies to promote CAVs in a way that increases the coverage of MaaS systems, particularly to connect town and cities. |

|                          |   |   |
|--------------------------|---|---|
| <b>Urban Zero Carbon</b> | Population significantly more urbanised.<br>Population receptive to both technological and societal change. | Micro-mobility options, such as e-scooters and e-bikes, could play an important role in last mile journeys for those living in areas of with low parking provision. Implement planning policy to support localisation of travel needs. Supporting strategic park-and-ride to enable sustainable access for rural communities into growing cities. |
|--------------------------|---|---|

**Demand Management policy in action:** Nottingham’s Workplace Parking Levy (WPL), introduced in October 2011, is an annual charge of £415 levied on all employers within Nottingham City Council’s administrative boundary which provide 11 or more liable workplace parking bays. Since 2012 £64 million has been generated which has been reinvested in public and sustainable transport.

Nottingham implemented the UK’s first bus lane that also allows access by ULEVs. For this scheme an ‘Ultra Low Emissions Vehicle’ (ULEV), is a vehicle that emits less than 75g of carbon dioxide (CO2) per kilometre travelled, with a capability of travelling a minimum range of 10 miles with zero CO2 emissions. This is based on the HM Treasury Company Car Tax definition.

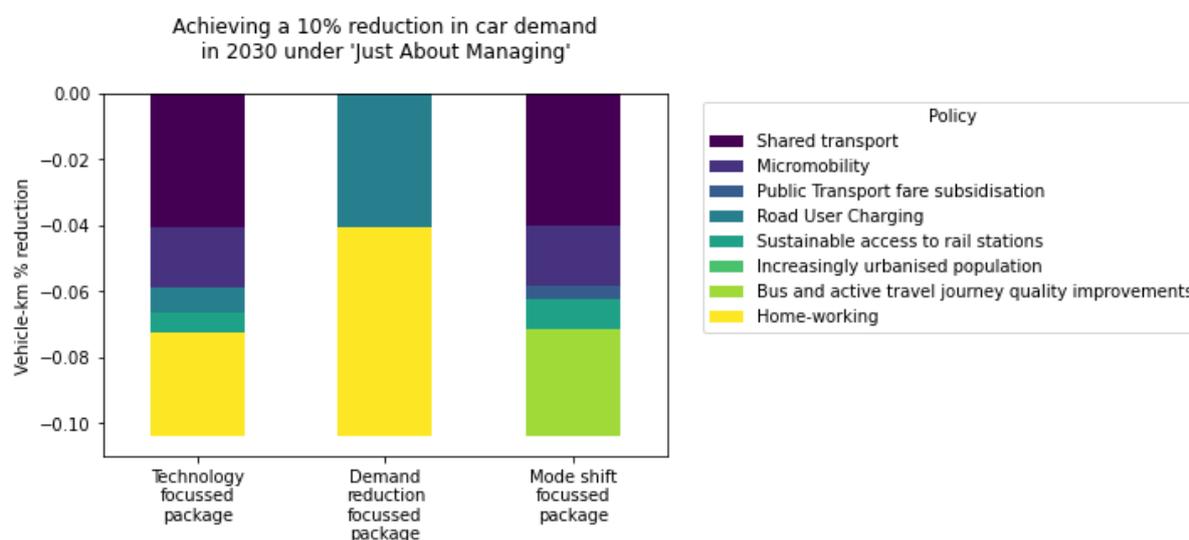
Nottingham’s ‘try before you buy’ scheme aimed at Nottingham’s taxi drivers has contributed to Nottingham having the biggest fleet of ULEV hackney taxis outside London.

### Quantifying the policy commitment – Demand management

Our analysis suggests that between a 3% and a 14% reduction in car distance travelled is required relative to baseline growth. This range is due to the fact the baseline varies between each Future Travel Scenario. To understand what scale of intervention might be needed to achieve such a reduction, we have modelled three illustrative policy packages to bridge the gap in the *Just About Managing* scenario, which requires around a 10% reduction by 2030. The results are shown in Table X and Figure X below.

| Policy                              | Technology focussed package  | Demand reduction focussed package | Mode shift focussed package  |
|-------------------------------------|--|-----------------------------------|--|
| Shared transport                    | There is bus and shared transport connectivity across all flow types                               | No change                         | There is bus and shared transport connectivity across all flow types                               |
| Micro-mobility                      | Micro-mobility represents 20% of all active travel with an average speed of 20 kilometres per hour | No change                         | Micro-mobility represents 20% of all active travel with an average speed of 20 kilometres per hour |
| Public Transport fare subsidisation | No change  | No change                         | 20% lower fares for intra-sector trips and 10% lower fares for other flow types                    |

|  |  |  |  |
|--|--|--|--|
| Road User Charging                                 | An average additional pence per km charge of 0.1ppkm across all zone pairs   | An average additional pence per km charge of 0.5ppkm across all zone pairs   | No change  |
| Sustainable access to rail stations                | 20% lower perceived costs for access and egress  | No change  | 30% lower perceived costs for access/egress  |
| Increasingly urbanised population                  | Most growth in urban and sub-urban areas   | Most growth in urban and sub-urban areas   | Most growth in urban and sub-urban areas   |
| Bus and active travel journey quality improvements | No change  | No change  | 20% lower bus generalised journey time (GJT) for intra-sector trips and 20% lower GJT for walk and cycle trips |
| Home-working                                       | Individuals work from home 2 days a week (in occupations where it is possible) and there is a 10% reduction in intra-sector business trips | Individuals work from home 3 days a week (in occupations where it is possible) and there is a 20% reduction in intra-sector business trips | Individuals work from home 1 day a week (in occupations where it is possible)                                  |



This analysis shows that policy changes of a significant scale will be required to achieve the scale of demand reduction in our pathway. Choices are available to policy makers who prefer different types of intervention but leaving out any particular policy lever will mean the need to implement more radical policies in other areas. Our view is that a balanced approach that implements policies in all of these areas will be most likely to succeed.

**The carbon impacts of Northern Powerhouse Rail:** Northern Powerhouse Rail (NPR) is a large-scale programme of investment in the North’s rail network between six major cities, the North’s largest airport and other significant economic centres. NPR is a key element of TfN’s Investment Programme, delivering substantial changes in journey time and frequency using fully electrified rail services. We estimate NPR will remove around 58,000 car trips per day from the road, or around 590 million car kilometres per year. The impact of this mode shift on carbon will vary depending uptake of ZEV cars when NPR is fully open in around 2040. Taking mode shift and electrification together, we estimate that NPR could reduce Northern car and rail emissions by around 1-2% in 2040, depending on the scenario.

| Impacts in 2040   | Carbon reductions as a result of NPR (tonnes CO <sub>2</sub> ) |                   |
|---|--|-------------------|
|   | Just About Managing  | Urban Zero Carbon |
| Reductions from mode shift                              | -9,000   | -3,000            |
| Reductions from rail electrification                    | -20,000  | -20,000           |
| <b>Total reductions</b>                                 | -29,000  | -22,000           |
| <b>Total annual North car and rail emissions (2040)</b> | 17,000,000   | 2,500,000         |
| <b>Percentage reduction in emissions due to NPR</b>     | -1.2%  | -2.1%             |

Further reductions could be possible, given that NPR will encourage more housing and commercial development in highly accessible areas next to rail hubs, but more work is needed to quantify these impacts. Further work is also needed to quantify the embodied emissions of NPR infrastructure, which will offset some of these reductions.

## Recommendations

This section sets out our headline recommendations on Demand Management.

Firstly, we focus on what TfN can do, then turn to the areas the Government should prioritise in its Transport Decarbonisation Plan and subsequent actions, and finally look at recommendations for our partners to consider. Further detail is provided in Annex X – Detailed Policy Recommendations.

### TfN – What actions should we prioritise?

#### Mode-shift

**PGA8:** Develop and implement comprehensive plans for the regional public transport network, such as Northern Powerhouse Rail and wider improvements to the rail network.

#### Reducing car travel

**PGA9:** Develop an evidence base on the extent to which less work-related travel has a detrimental effect on productivity and agglomeration to understand whether home-working can be consistent with TfN’s vision for a transformed Northern economy.

#### Shared mobility

**PGA10:** Use our role on within the Rail North Partnership to promote shared mobility at train stations, including car share, car club, cycle hire and e-scooter schemes.

**PGA11:** Provide evidence and strategic support to partners to identify opportunities for shared mobility.

### **Freight efficiency**

**PGA12:** Work with Government to support regional coordination of measures to improve logistics efficiency, including consolidation centres, mode shift to rail and information democratisation schemes.

### **Planning policies**

**PGA13:** Influence government to develop appraisal guidance that includes the full impacts of transport projects on carbon.

### *National Government – What actions are needed in the Transport Decarbonisation Plans?*

#### **Mode-shift**

1. Work with train operating companies to implement a targeted reduction in rail fares and increase integration and flexibility of ticketing systems.
2. Provide a substantial and consistent funding stream to Local Authorities to improve public transport and active travel networks.

#### **Reducing car travel**

3. Develop a coherent plan for taxing and pricing car travel that accounts for reduced Fuel Duty revenues and incentivises key outcomes such as reduced overall car travel, more efficient road network operation and uptake of ZEVs.
4. Support employers to roll-out home working, flexible working and remote working hubs.

#### **Shared mobility**

5. Ensure Local Authority funding and planning regimes support share mobility solutions alongside traditional public transport options.
6. Require employers to report on emissions from all employee travel to encourage a shift towards vehicle sharing.

#### **Freight efficiency**

7. Require shippers to provide consumers with information on emissions from different shipping options and encourage uptake through information and pricing.
8. Fund a project to develop common data collection methods, formats and sharing platforms that overcome competition and privacy barriers, and enforce data reporting to government.
9. Establish a framework for consolidation centre planning as well as funding and support for Local Authorities to perform local area assessments.
10. Support the licensing of high capacity vehicles on specific roads (major motorways) for specific users where the benefits are clear.

#### **Planning policies**

11. Use the National Planning Framework to promote '15/20-minute neighbourhoods'.
12. Develop appraisal guidance that includes the full impacts of transport projects on carbon.

### *Local Partners – Where should local action be prioritised?*

### Mode-shift

1. Use marketing policies to re-build confidence in the safety and value of public transport.
2. Subject to Government funding, invest in bus and light rail networks to and offer improved journey quality, accessibility and cheaper fares to passengers.
3. Implement policies to enhance dedicated cycle networks, low-traffic neighbourhoods, and activities to promote behaviour change.
4. Implement policies to promote safe and accessible use of e-bikes and e-scooters.

### Reducing car travel

5. Roll out parking policies to reduce congestion and make space for sustainable infrastructure.
6. Consider charging policies such as clean air zones or congestion charging, particularly where and when sustainable transport modes are a viable alternative option.

### Shared mobility

7. Utilise planning contributions from new developments to enable shared vehicle provision.
8. Develop mobility-as-a-service (MaaS) platforms and mobility credit systems, to link public transport journey stages and improve accessibility and reliability.
9. Support the provision of demand-responsive bus services to complement existing networks.
10. Trial and roll out cycle hire / e-scooter sharing schemes.

### Planning policies

11. Use local planning policy to promote '15/20-minute neighbourhoods', prioritise development close to public transport hubs and encourage car-free or car-lite development.
12. Consider introducing a Workplace Parking Levy, utilising lessons learnt from Nottingham.
13. Support and facilitate the roll out of car-free zones and streets.
14. Develop park-and-ride sites with integrated EV charging infrastructure and cycle parking.
15. Implement planning policies that support the development of freight consolidation centres.

## 3. Improvements to conventional vehicle efficiency

|   |               | 2025 | 2030 | 2035 | 2040 | 2045 |
|---|---------------|------|------|------|------|------|
| Conventional vehicle efficiency Co2 reduction | Cars and vans | 3.6% | 3.6% | 3.6% | 3.6% | 3.6% |
|   | Artic HGVs    | 22%  | 22%  | 22%  | 22%  | 22%  |
|   | Rigid HGVs    | 13%  | 13%  | 13%  | 13%  | 13%  |
| Share of car sales                            | Large cars    | 27%  | 22%  | 17%  | 10%  | 10%  |

In their Sixth Carbon Budget, the Climate Change Committee (CCC) lay out several measures that can reduce emissions from ICE vehicles. Our analysis suggests that these measures must be taken up to maximum effect from 2025.

### Cars and vans

The CCC estimated that full enforcement of 70mph speeds limits would reduce overall fuel consumption by 2% and 60mph speed limits by 7%. Given the journey time disbenefits and associated political difficulties in reducing speed limits, we have opted to include only the 2% from speed limit enforcement in our pathways. Fuel-efficient driving styles, supported by eco-driver

training, can improve fuel efficiency by 8% for up to 20% of drivers who adopt them.<sup>10</sup> Taken together, enforcing speed limits and eco-driving could reduce car and van emissions by 3.6%.

### **Shifting to smaller ICE cars**

Large cars now make up nearly one third of new car sales in the North. As emissions intensity for these vehicles is higher than smaller cars, there is an opportunity to reduce emissions by discouraging the purchase of large ICE vehicles in the short-term. This can be achieved through changes to taxation on new vehicles, such as Vehicle Excise Duty, which the Government is considering restructuring to increase the upfront costs on the most polluting vehicles<sup>11</sup>.

### **HGVs**

More fuel-efficient driving can also support CO<sub>2</sub> reductions in HGVs. Alongside more aerodynamic designs and retrofitting of drag reduction devices, these measures can offer efficiency savings up to 13% for a rigid HGVs and 22% for articulated HGVs.

### **Scenario-specific considerations - Improvements to conventional vehicle efficiency**

The roll out of measures to improve conventional vehicle efficiency will be similar in all scenarios, with the main differences being driven by the extent to which Autonomous Vehicles improve the energy efficiency of driving styles, which could vary between scenarios.

### **Quantifying the policy commitment – Improvements to conventional vehicle efficiency**

We have not quantified the policy commitments required in this area due to a lack of available data or analytical tools to undertake these calculations, particularly at the regional level. We will consider further analysis of this area in a future phase of work.

### **Recommendations**

This section sets out our headline recommendations on improving conventional vehicle fuel efficiency. Further detail is provided in Annex A – Detailed Policy Recommendations.

#### **TfN – What actions should we prioritise?**

**PGA14:** Work with partners to increase public awareness of fuel-efficient driving styles and the associated environmental and financial benefits.

#### **National Government – What actions are needed in the Transport Decarbonisation Plans?**

1. Ensure an ambitious post-Brexit regulatory regime on new vehicle CO<sub>2</sub> emissions, aligned to UK carbon budget commitments.
2. As per the recommendations above, ensure Benefit-in-Kind and Vehicle Excise Duty rates on all ICE vehicles escalate in line with emissions intensity.
3. Roll out nationally funded eco-driving training schemes, implemented through workplaces in relation to freight operators or organisations with large company car fleets.
4. Support smaller freight operators to implement other efficiency technologies, such as aerodynamic attachments.
5. Ensure new vehicle regulations use technology solutions to support efficient driving styles.

#### **Local Partners – Where should local action be prioritised?**

---

<sup>10</sup> In addition to more fuel-efficient driving, other benefits of eco-driver training include reduced mechanical wear on vehicles and fewer road accidents.

<sup>11</sup> <https://www.gov.uk/government/publications/vehicle-excise-duty-call-for-evidence>

1. Extend existing demand management and pollution abatement measures (e.g. Ultra Low Emission Zones) to consider fuel efficiency of private cars, so as to tackle the trend towards driving larger, heavier private vehicles (e.g. SUVs).

## Co-Benefits and Potential Adverse Consequences

Whilst measures that decarbonise transport will help to reduce the level of climate change and the effects of global warming on both our global and local environment, it is important to understand how those measures might affect our local environment and local communities in other ways. The co-benefits and also potential adverse consequences of these measures are important considerations when developing the policy mix and timescales relevant to the different place typologies in the North.

Alongside identifying the baskets of policy measures that partners might employ within their own action plans, Annex A – Detailed Policy Recommendations, also provides commentary around the potential for unintended or secondary effects, both beneficial and adverse, that are associated with each of the main transport decarbonisation policy levers. These are summarised within Table X.

**Table X: Summary of risks and co-benefits associated with key transport decarbonisation policy levers**

| Policy Area                        | Overarching Policy Lever               | Potential Co-Benefits  | Potential Adverse Consequences   |
|------------------------------------|--|--|--|
| <b>Low Emission Vehicle Uptake</b> | Policies to encourage ZEV/CAV take up. | <p>Local air quality benefits initially.</p> <p>Noise benefits.</p> <p>Lower operating costs benefitting particularly those leasing vehicles.</p> <p>Trade and investment benefits (clean growth opportunities).</p> <p><b>In relation to Connected and Autonomous Vehicles (CAVs):</b></p> <p>Accessibility benefits for those unable to drive.</p> <p>Increased productive time for those previously driving.</p> <p>Potential to reduce congestion through traffic flow optimisation and re-routing.</p> <p>Increased potential for ride-sharing.</p> | <p>May perpetuate long term local air quality issues if EVs are chosen over shared and active modes.</p> <p>Maintains congestion levels.</p> <p>Potential to increase TRSE for those areas with low home charging potential and higher purchase price means low income groups may be less able to purchase new EVs and enjoy incentives in the short term.</p> <p>Potential impacts upon urban realm/rural landscapes from charging infrastructure and refuelling hubs.</p> <p>Local grid network capacity issues.</p> <p>Increased embedded carbon in vehicles than ICE vehicles in the short term.</p> <p>Reduced revenues from Vehicle Excise Duty and Fuel Duty.</p> <p><b>In relation to CAVs:</b></p> <p>May increase ridership, making private mobility accessible to a larger section of society.</p> <p>Increases in city/town centre congestion levels.</p> <p>Loss of employment from service providers that would be in competition with CAV services (e.g. taxi drivers).</p> |
| <b>Demand Management</b>           | Encouraging uptake of shared mobility. | <p>Reduced TRSE especially if focussed in low income residential areas and areas of low home charging capability.</p> <p>Reduced congestion.</p> <p>Reduced embodied carbon if it stimulates lower car ownership.</p>  | <p>People requiring mobility assistance are likely to be unable to be use these services.</p>  |

|                                     |   |  |   |
|-------------------------------------|---|--|---|
|                                     |   | Local air quality benefits.<br>Decreased spending on new transport infrastructure through integration of existing network.   |   |
|                                     | Encouraging modal shift to public transport                 | Reduced congestion.<br>Local air quality benefits.<br>Increased accessibility and potential to reduce TRSE.  | Can encourage modal shift away from active modes.   |
|                                     | Encouraging modal shift to active travel and micro-mobility | Improvements in physical and mental health.<br>Local air quality and noise benefits.<br>Reduced congestion.<br><br>In relation to e-bikes/e-scooters:<br>Increased accessibility.  | Safety (potential to increase RTAs involving cyclists).<br><br>In relation to e-bikes/e-scooters:<br>Higher levels of embodied and operational carbon than non-motorised bikes.<br>May attract modal share.<br>Potential for conflict with other road users and pedestrians.                      |
|                                     | Digitalisation, working from home and localisation          | Local air quality and noise benefits.<br>Reduced congestion.<br>Improved access to community services and facilities.<br>Higher local spending and more investment in local areas.   | Potential adverse impacts upon mental health.<br>Potential to increase TRSE if policies reduce access to transport solutions for those who need to travel.<br>Shifting of emissions to different sectors (e.g. energy sector)<br>Impact upon viability and productivity of city and town centres. |
|                                     | Disincentivising car use                                    | Potential to ring-fence revenues for active travel/PT schemes.<br>Reduced congestion.<br>Local air quality and noise benefits.<br>Associated health benefits if mode shift to active travel.   | Potential to exacerbate TRSE for with less/no alternatives to private car use.<br>Levies can create inequitable impacts upon businesses where employees and customers have few other mode choices.  |
|                                     |   |  |   |
| <b>Improving Freight Efficiency</b> | Planning for Urban Consolidation Centres                    | Local air quality and noise benefits.<br>Reduced congestion with associated economic and safety benefits.<br>Financial benefits from economies of scale.<br>Can reduce cargo handling and improve security, reduce damage and loss of goods. | Depending on location, potential to blight particular areas with elevated level of HGV and delivery vehicle traffic.  |
|                                     | Local community drop off/pick up and green shipping options | Local air quality and noise benefits.<br>Reduced pavement parking by delivery vehicles.<br>Potential for an increase in local spending within community centres.   | Higher costs for 'just in time' or next day deliveries may disproportionately affect lower income groups and smaller businesses.  |
|                                     | Fuel efficient driving / aerodynamics                       | Cost savings on fuel.<br>Local air quality benefits.   |   |
|                                     | Shifting freight from road to rail                          | Local air quality and noise benefits.<br>Labour market opportunities in relation to manufacture and installation of electrification infrastructure.  | Labour market changes as more freight moved by rail, disproportionately affecting those with low to middle levels of education.   |

## Transport Related Social Exclusion and Distributional Impacts

It will be important that policy makers at both a local and national level both understand and take actions to mitigate the risk of adverse consequences arising as a result of decarbonisation policy and measures.

Examining the relationship between Transport Related Social Exclusion (TRSE) and transport decarbonisation measures is the subject of one of TfN's priority actions to 2025, further details of which are included in Chapter 9. The evidence and data generated through this research can be used by our Partners to help identify where transport decarbonisation policy measures may need to be altered to avoid exacerbating existing TRSE issues and to maximise the opportunities to reduce TRSE.

Chapter 3 of this Strategy provided a high-level overview of how emissions vary across different groups in the North, by gender, age and employment type. TfN's Analytical Framework will allow us to provide more detailed spatially disaggregated socio-economic data to partners, to help ensure local decarbonisation measures avoid disproportionately affecting more disadvantaged groups.

When looking at average carbon intensity for specific occupations and education levels, people with low and middle levels of education (those with education up to A levels) tend to be employed in jobs with a higher average carbon intensity than more highly educated employees (degree level and upwards), with many of the former being classed as 'process plant and machine workers' with a high propensity to work in the transport and storage industry<sup>12</sup>.

These workers may be more exposed to labour market changes as a result of a net-zero transition, both in terms of direct changes to the transport system (e.g. a future scenario where more rail is moved by freight), or indirectly through changes in the vehicle manufacturing industry or energy generation sectors. Labour market changes as a result of the net-zero transition may also provide opportunities for these groups, particularly in electrification (rail electrification and grid upgrades of EV infrastructure) and the manufacture of ZEVs and their components (e.g. gigafactories).

The use of cars by lower income groups is often driven by accessibility and affordability challenges:

- The need to travel to work 'out of hour' shifts (e.g. cleaners, post office workers, warehouse workers).
- Due to disabilities that means using shared modes of transport or active modes is not possible.
- Those who live or work in areas of low public transport accessibility, which can be exacerbated by the correlation between high access and high house prices.
- Public transport costs for some journeys can be prohibitive and therefore private car travel offers a cost-effective alternative.

For these groups, demand management measures which increase the cost of car use and decrease the convenience, may experience increased levels of TRSE. Similarly, the higher purchase price of ZEVs may mean that policies to increase the speed of uptake may lead to uneven distributional impacts on lower income groups who are least able to afford them.

Public transport and shared transport modes can be essential for groups who have no access to private vehicles for financial or accessibility reasons (for example, those living in flats or terraced housing with no parking facilities). Whilst these groups may benefit from policies to enhance public transport provision; policies to encourage the uptake of ZEVs have the potential to impact upon

---

<sup>12</sup> HM Treasury, Net-Zero Review: Interim Report (2020)

public transport provision (e.g. use of bus lanes by ZEVs and other shared modes, increased congestion in low emission zones).

**Managing the distributional impacts of decarbonisation:** In their Net Zero Review: Interim Report (2020), the Treasury propose a series of measures to manage these effects, including:

- the ongoing burden of a policy can be increased or reduced for different groups, or some can be excluded from paying altogether (e.g. surcharges, exemptions or targeted reliefs);
- targeted support can be provided to cover the capital and/or running costs caused by a policy (e.g. targeted scrappage schemes coupled with low-emission zones);
- the funds raised by a levy or tax can be redistributed to a particular group to offset the primary impact (e.g. road-user charging);
- the general tax and welfare system can be used to compensate those who are affected (e.g. targeted tax cuts or higher welfare payments); and
- progressive redistribution can also be a co-product of policies with other explicit aims (e.g. taxes on air travel).

## Chapter 6 - Consideration of embodied carbon

### What is embodied carbon?

The 'embodied carbon' component of a project refers to the emissions of greenhouse gases arising from:

- the sourcing and extraction of the raw materials needed to build the project;
- the energy needed to process those raw materials in construction components (i.e. the manufacturing stage);
- the transporting of those building materials; and
- the construction activities themselves from construction plant, through to worker accommodation and transport.

Embodied carbon is often referred to as supply chain carbon, or construction carbon, and is sometimes considered separately from operational emissions that refer to the emissions of greenhouse gases arising as a result of the operation of a development.

For example, the embodied emissions associated with a new road might include consideration of the emissions associated with sourcing and processing raw materials, transport of materials and the construction of the road itself, whilst the operational emissions would include those generated by the vehicles that end up using the scheme throughout its operational life (including maintenance related emissions).

**EXAMPLE BOX:** The Rail Safety and Standards Board (RSSB) estimates that in the reporting year 2019/2020, the UK rail industry generates approx. 3.5 million ktCO<sub>2</sub>e in relation to traction energy (i.e. operational emissions) but that its embodied carbon emissions are closer to 5.2 million ktCO<sub>2</sub>e - 48% higher<sup>1</sup>.

Every infrastructure development will use embodied carbon; however, many will stimulate behaviours or facilitate technologies that reduce greenhouse gas emissions, from a 'business as usual' state, during their operation. For example, a new electrified railway can encourage a reduction in private car vehicle mileage, substantially reducing passenger travel carbon intensity. The amount of time that is needed to recoup the embodied carbon of a project, through the reductions in emissions realised as a result of its operation, is often called the 'payback period'.

Where payback periods are unacceptably long, **carbon sequestration** may be an option to reduce the overall net balance of embodied carbon within a scheme. Carbon sequestration is a term used to describe actions that absorb and store carbon dioxide from the atmosphere. Carbon sequestration activities that may be incorporated within our major infrastructure projects broadly fall into two categories: natural processes such as tree planting and peatland restoration; and the use of innovative construction materials such as carbon 'absorbing' cement and concrete. Whilst sequestration may play a part in reducing net emissions associated with schemes, and maximising sequestration is a worthwhile goal, it is unlikely to offset more than a small proportion of the embodied carbon across a scheme and needs to be considered and utilised in that context.

Another term, commonly used, is 'Whole Life Carbon'. In the context of major transport infrastructure, it is used to describe the emissions associated with project from 'cradle to grave'. This means its embodied emissions, plus those emissions generated through the operation of the scheme

---

<sup>1</sup> RSSB DECARB: Carbon Measurements (T1197) <https://www.rssb.co.uk/en/research-catalogue/CatalogueItem/T1197>

and finally its 'end of life' profile (i.e. those emissions associated with decommissioning and demolition). For the purposes of this Strategy, both embodied carbon and operational emissions have been considered, albeit separately.

### **How TfN is considering embodied carbon**

The accounting principles for carbon mean that embodied emissions from constructing transport projects do not count as 'transport emissions' but as part of industrial emissions.. It is for this reason that the Government has suggested that carbon from the construction of transport schemes is outside of the scope of the Transport Decarbonisation Plan.

It is also difficult to robustly calculate the likely embodied carbon footprint of major infrastructure developments at a conceptual level of design or when the scheduled design and construction of the infrastructure is many years or decades in the future. Equally, it can be problematic to forecast the extent to which embodied carbon may be reduced on future schemes through careful design, responsible sourcing of construction materials, and innovative construction techniques.

For these reasons, the consideration of embodied carbon is outside of the scope of our decarbonisation trajectory and pathways, however, it is not outside the scope of this strategy. TfN is clear on the significance of embodied carbon in the North's future transport system and across the projects that make up TfN's Investment Programme (IP). Alongside our partners, we are committed to developing a carbon reduction culture, permeating every stage of the project development lifecycle.

It is inevitable that, as a region, the North will have to 'spend' some carbon to develop a truly sustainable multi-modal transport system. Whilst the programme of physical infrastructure projects that make up our IP will be expected to pay back its embodied carbon eventually through the operation of those projects, in the short term, carbon sequestration is expected to play some part in achieving our decarbonisation ambitions.

#### *What we are doing at a strategic level:*

TfN has agency to influence the embodied emissions associated with the scale, nature and design of the portfolio of projects within its IP.

We want to better understand the level of emissions likely to be generated by the construction of the schemes included in our IP and also explore how we can start reducing that profile at the earliest point. We'd also like to understand the relative carbon pay-back period of the projects and programmes within our IP.

TfN is collaborating with DecarboN8, a network led by the eight most research-intensive universities in the North working with industry and government to facilitate zero emission transport systems, to explore the embodied emissions associated with the multi-modal corridors proposed within our Strategic Development Corridors (SDCs).

A pilot study was initiated in September 2020, focusing on the Tyne and Wear – South Northumberland sub-corridor within the 'Connecting Energy Coasts' and 'East Coast' corridors, being a sub-corridor example with a good mix of road and rail schemes. This pilot study is scheduled for

completion in 2021, and the outputs will be assessed as to whether and how they might be used within the appraisal and sequencing of schemes within TfN's IP.

The result of this study will also form a baseline for further work addressing the questions of if and how embodied emissions can start to be mitigated at this strategic level.

*What we are doing at a project level:*

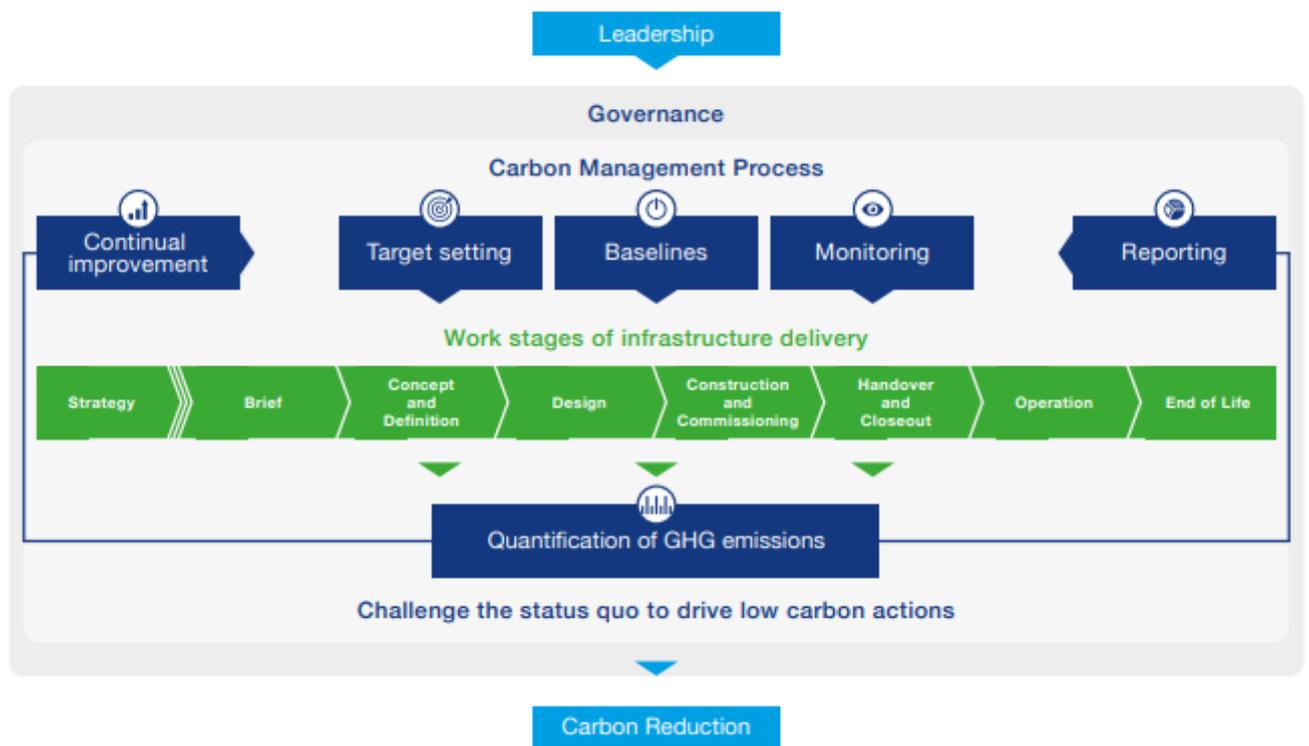
TfN will set a supply chain carbon reduction target for each TfN-led major infrastructure project.

To do this we will:

- **Embed the consideration of embodied carbon within our upstream project appraisal processes**, so that we understand the relative carbon intensity related to different design options and the particular aspects within our schemes generating the highest amount of embodied carbon emissions. It is during the initial concept design stages where the opportunity to reduce carbon is greatest.
- **Develop an embodied carbon project information repository** for major transport infrastructure developments as one of TfN's planned activities to 2025. This could be used by both TfN and our partners to ensure consistency in baselining embodied carbon during the initial design stages of development projects.
- **Set a supply chain carbon baseline for each TfN-led project**, based on early carbon foot-printing work carried out during the upstream project appraisal and TfN's embodied carbon project information repository. It's against these baselines that we can set and pursue our supply chain carbon reduction commitments.
- **Use a Carbon Management Process** to achieve our supply chain carbon reduction target, through the adoption of PAS 2080 on TfN-led projects. PAS 2080: 2016 *Carbon Management in Infrastructure* (launched in May 2016) is a voluntary carbon management framework designed by the UK Green Construction Board. The use of PAS 2080 will help us to establish a common understanding and approach for managing the whole-life carbon of our projects. The framework, as illustrated in **Figure X**, assigns roles and responsibilities to those leading, designing, constructing, maintaining and operating the transport infrastructure, in playing their part to drive low carbon actions. For those schemes within our IP that are not TfN-led, we shall encourage our delivery partners to align to the same standard or other recognised similar standard or specification.
- **Optimise opportunities for carbon sequestration** through both enhancing natural processes and the use of innovative construction materials, using our Carbon Management Process to ensure this objective is understood and implemented throughout the design and construction of TfN-led schemes.

For Northern Powerhouse Rail (NPR) we will set a supply chain carbon baseline and corresponding carbon reduction target by the end of 2021, for use and implementation during both the design and construction stages of the project.

Figure **X**: PAS 2080 Carbon Management Process, Source: PAS2080:2016 – Carbon Management in Infrastructure



## Chapter 7 – Climate change adaptation and resilience

Changes to global climate, as a result of the release of carbon dioxide and other Greenhouse Gases into the atmosphere, are already happening and are visible through the increased prevalence of heatwaves, floods, droughts and fires.

Less visible effects, but equally as worrying, include damage to marine ecosystems leading to fisheries failing, sea level rise, increased risk to water supplies and a rise in global food insecurity, as well as an unprecedented loss of biodiversity.

Although we can't be certain of what our future climate will be in the North, it's important that we understand the potential changes that may occur within the limits of uncertainty and how these changes might affect the viability of our transport systems and how our transport infrastructure might exacerbate or reduce the effects of climate change on other people.

### Factoring in the effects of climate change

The latest climate predictions (UKCP18<sup>1</sup>) predict progressively hotter, dryer summers and warmer, wetter winters, with increasing frequency of extreme weather events such as storm events and heat waves.

The Environment Agency's 'Climate Impacts Tool: Understanding the risks and impacts from a changing climate' (2019), provides a starting point to help us understand an upper limit on possible change across three timescales: today's climate, the 2050s and the 2080s, consistent with a 4°C rise in global mean temperature by the end of the century. **Figure X** is based on national England averages, taken from the Environment Agency Climate Impact Tool. It starts to give us some idea around the magnitude of changes that we might expect in a 4°C rise scenario.

---

<sup>1</sup> <https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/download-data>

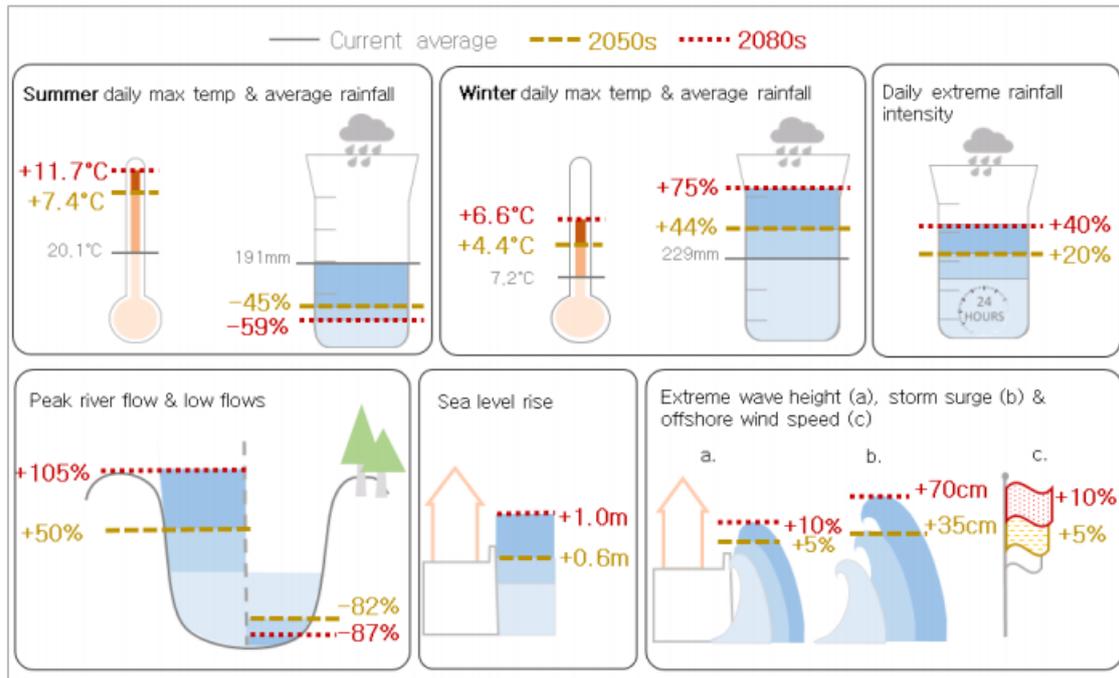
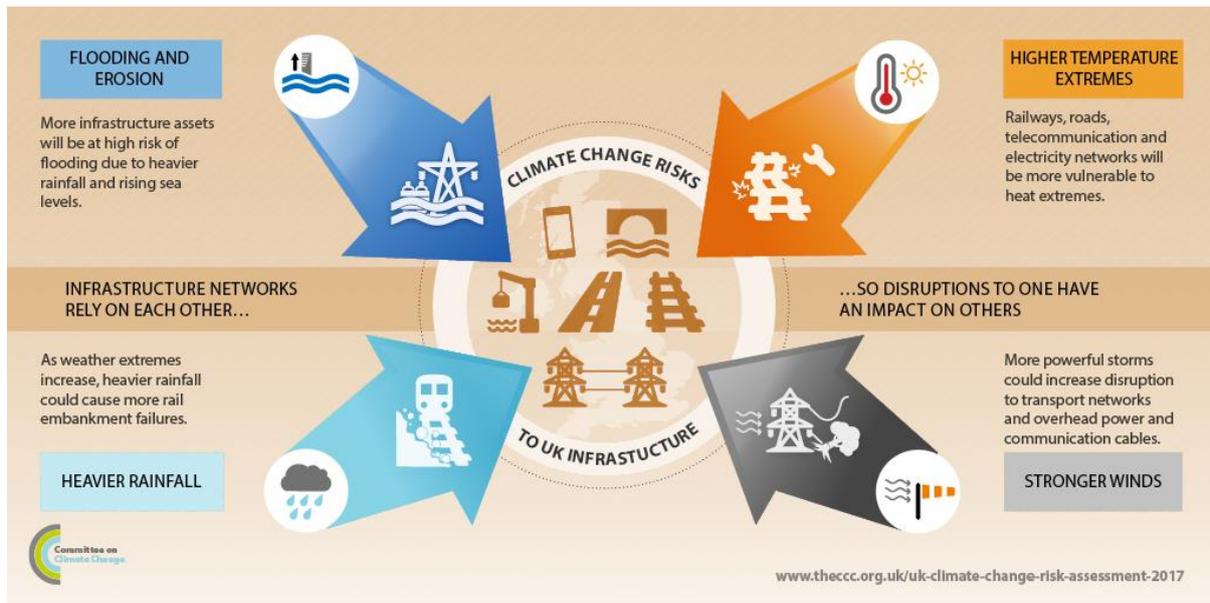


Figure X: Environment Agency's Climate Change Tool (2019).

Whilst the UK is committed to reducing its emissions in alignment with the goals of the Paris Agreement, i.e. limiting global temperature rises to well below 2°C on pre-industrial averages, global emissions trends are set to exceed the threshold levels required in the future to achieve these goals. For this reason, we need to understand the potential climate change effects resulting from greater global temperature rises when determining the resilience of our current and planned transport infrastructure.

The latest UK Climate Change Risk Assessment (UKCCRA)<sup>2</sup> identifies a number of risks to transport infrastructure, which are illustrated in Figure X.

<sup>2</sup> <https://www.theccc.org.uk/uk-climate-change-risk-assessment-2017/>



**Figure X:** Key risks to infrastructure from climate change.

The Committee on Climate Change (CCC) notes that the most significant climate change risk to UK infrastructure is increased frequency of flooding from all sources<sup>3</sup>, with the number of infrastructure assets exposed to this risk, set to double by the 2080s. This can be seen most clearly in relation to the highway network, where currently 1% of UK roads are at risk of flooding, however, this rises to over 40% in the event of a 2°C rise in global temperatures. Our rail network already experiences significant disruption from various seasonal weather-related factors from flooding to leaf-fall through to rails buckling from heat during the summer. The disruption associated with these events is likely to get worse.

Other climatic aspects which should be considered within our planning for transport infrastructure include those associated with extreme weather events such as stronger wind, more frequent lightning strikes, high and low temperature extremes, as well as increased fog and high humidity events.

#### *Climate change adaptation themes*

Whilst climate change **mitigation**, the main focus of this strategy, refers to those measures that reduce greenhouse gas emissions, climate change **adaptation** measures are those that reduce or avoid the potential for harm caused by a changing climate, as well as those measures that seek to exploit the potential opportunities presented.

A review of national and local policies and guidance, including that of our delivery partners, identifies a number of main themes within which adaptation measures related to transport infrastructure can be categorised. These represent the immediate priorities for climate resilience.

**Flood risk management.** Predictions of increased extreme rainfall events and warmer, wetter winters means that increased flooding from rivers and groundwater will be a key consideration for our transport systems in the North. Transport infrastructure situated near rivers will be more susceptible to direct flooding as well as ground movements caused by bankside erosion.

<sup>3</sup> The second UK Climate Change Risk Assessment, CCC (2017).

Storm surges and rising sea levels are likely to increasingly effect transport infrastructure near our coasts, estuaries and tidal reaches of our rivers.

There is a need to ensure both new and existing transport infrastructure is resilient to floods based upon current climate projections.

Both the regularity and intensity of flooding can be reduced by identifying problem locations and regularly monitoring existing drainage systems. Scheme promoters need to understand and mitigate any increased flood risk on third parties as a result of new transport infrastructure.

**Geotechnical change management.** For both existing and proposed infrastructure, asset owners need to identify areas where ground conditions could be affected by increased rainfall and groundwater levels (e.g. soil saturation or slippage).

**Improve service resilience in infrastructure.** Scheme promoters will need to understand the links and interdependencies between stakeholders and assets in other sectors (e.g. telecommunications and power generation) so we understand the full potential for disruption and the increased costs of delivering infrastructure that is resilient to that disruption.

**Adoption of green and blue infrastructure.** Designers should look at opportunities within their projects to adopt green and blue infrastructure as a way to combat overheating and excess water run-off.

**Heatwave planning and management.** The predicted increase in extreme weather events may also lead to periods of extreme heat, on top of already higher average summer temperatures. The materials used to build our transport infrastructure and the vehicles that operate on it will need to be resilient to these weather episodes, not only ensuring continued operation but also maintaining passenger comfort. There is a need to identify how existing assets can be upgraded as well, such as employing cooling technologies and alternative insulation for our rail stations and the removal of jointed track and obsolete fastenings to make our rail tracks more resilient.<sup>4</sup>

**Increasing the resilience of active modes.** Focus shouldn't just be on major transport infrastructure, but also our active travel infrastructure, and how we can make sure it is resilient and convenient to use in all types of weather.

**Knowledge sharing and employee awareness.** Many of our partners, including delivery authorities such as Network Rail and Highways England have made significant progress in how they build in climate change adaptation measures to their new developments. TfN will ask all partners to identify adaptation and resilience 'champions' within their organisations to share latest practice and advice with other partners and internally within their own organisations. Themes relating to effective longer-term planning and implementation of climate adaptation and resilience measures include:

**Targeted investment for resilience measures.** There needs to be proactive investment in resilient materials and adaptation measures. The costs and benefits of adaptation need to be integrated into asset management, investment strategies, economic appraisals and decision-making. The Climate Risk Assessment Process provides a process and platform with which to do this.

**Policy, indicators and monitoring.** Where they haven't already, transport authorities and delivery bodies should develop specific policy in response to climate risks and adaptation priorities, along with mechanisms for ongoing monitoring of risks and progress against objectives.

---

<sup>4</sup> NR South East Route CP6 Weather Resilience and Climate Change Adaptation Plan (2019-24).

**Continuous improvement.** Tracking the development of innovative technologies and approaches to the development of climate resilient transport infrastructure and systems.

#### *Co-benefits of climate change adaptation*

The benefits of developing climate change adaptation measures, particularly **nature based solutions**, are often not limited to increased resilience to climate change effects. If planned and delivered in the right way, potential co-benefits include:

- Ecological enhancements
- Flood and coastal resilience
- Improved water quality
- Improved air quality
- Improved physical and mental human health
- Reduced need for mechanical cooling
- Increased uptake of active travel
- Creation of green jobs

We can achieve nature based solutions through forming partnerships between scheme promoters and landowners, farmers, environmental groups and local communities<sup>5</sup>, making space for excess water in other places, and using tree planting and sustainable drainage systems to store and slow down runoff from intense rainfall events. These green spaces can deliver co-benefits of providing valuable habitats for native wildlife, as well as accessible green spaces for promoting wellbeing.

For example, the creation and use of ecologically rich pond and wetland habitat to attenuate and filter rainwater runoff from major transport infrastructure can provide valuable habitats for native wildlife, as well as recreational space and educational opportunities for local communities.

#### *How we are increasing the resilience of our projects*

Our principal delivery partners, Network Rail, Highways England and HS2, have taken a lead in planning for the resilience of the transport systems they promote and maintain. TfN's role, however, in developing an investment programme for the North's transport system means that as an organisation, we need to understand the implications of climate change on that system.

By undertaking a Climate Risk Assessment, we are able to identify and assess the climate change risks for our major transport infrastructure programmes and for any other projects with elements that could be affected by the weather and effects of climate change.

Guidance on when to undertake a Climate Risk Assessment and the assumptions to use in terms of global temperature rise is given within the Supplementary Green Book Guidance 'Accounting for the Effects of Climate Change' (DEFRA, 2020). Where a project, policy or programme is likely to have a lifespan that goes beyond 2035, the guidance recommends that it should be considered in the context of at least two future climate scenarios aligned with both a 2°C and 4°C rise in global temperatures.

---

<sup>5</sup> National Flood and Coastal Erosion Risk Management Strategy, Environment Agency (2020)

We will undertake a Climate Risk Assessment for all TfN-led major infrastructure projects. By doing this we will be able to:

- Re-develop and refine early designs to improve resilience to future climate change
- Incorporate climate scenarios within our appraisal of costs and benefits
- Identify no or low regret adaptation actions
- Develop adaptive management processes that allow a project to adapt to changing risk over time, given the high uncertainty over the future impacts of climate change
- Prioritise green infrastructure solutions which can deliver a wide range of co-benefits

Through our projects, we will also develop a strong collaborative relationship with the Environment Agency (EA) to stay abreast of major issues in relation to flood risk and geotechnical change, and discuss mitigation strategies.

For those schemes within our IP that are not TfN-led, we shall encourage our delivery partners to align to the same or a similar process for identifying climate change risks and opportunities.

## Chapter 8 – Stimulating Clean Growth In the North

Financial profit is now not the only driver of growth, as we recognise that positive outcomes for people and the environment are also essential to achieve sustainable long-term growth. Transport is a key enabler to achieve the **Triple Bottom Line**.

### INSERT DIAGRAM SHOWING TRIPLE BOTTOM LINE

Whilst the ultimate stated aim of transport decarbonisation is to limit and eventually eliminate greenhouse gas emissions as a result of our travel, the potential opportunities it can provide in terms of driving economic growth and social value are significant.

TfN has a strategic objective to facilitate transformational economic growth. This underlying theme drives our Decarbonisation Strategy. Our policy analysis has allowed us to understand ‘what needs to be true’ in terms of transport decarbonisation policy, to allow the North to benefit from the significant economic and connectivity outcomes which would result from the schemes within our Investment Programme, at the same time as achieving our decarbonisation commitments.

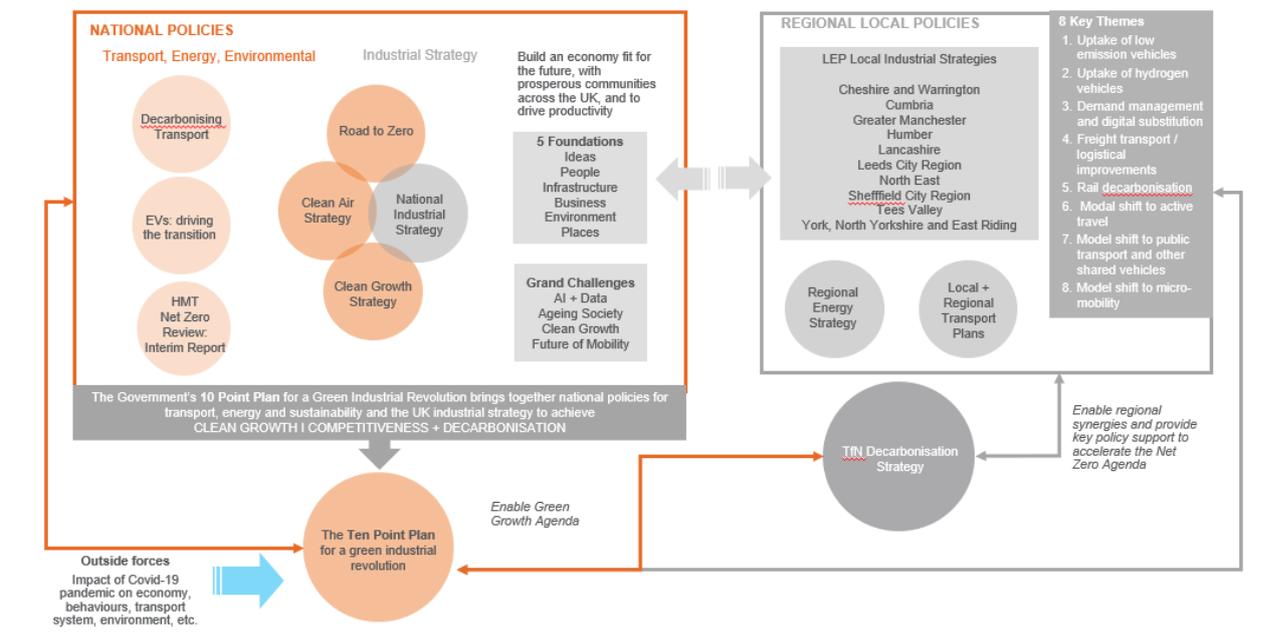
At the same time, it’s important that we understand the opportunities for transformational economic growth that can be **driven** by the decarbonisation of transport itself. Economic growth that is achieved at the same time as cutting greenhouse gas emissions is often referred to as ‘clean growth’.

During the preparation of this Strategy, we explored the existing clean growth opportunities and initiatives already identified by our LEP partners and other business/industrial groupings. We wanted to understand how TfN could support these opportunities and initiatives, as well as understanding any opportunities that remain relatively unexplored and which of these exhibits the most potential for the North.

The key outcomes from this work are presented in this chapter, along with some analysis of where we feel TfN can play a meaningful role in supporting clean growth opportunities in the North.

Figure X, frames our Decarbonisation Strategy within relevant national and regional strategies which are aimed at setting the UK on a sustainable clean growth path, conceptualising the interdependencies between Northern Local Industrial Strategies (LIS) and national strategies. Our work included a high-level review of this policy framework focussed around eight key transport decarbonisation themes.

Figure X: Clean Growth Policy Framework



The findings of our clean growth opportunities review are presented around the identified key transport decarbonisation themes.

## Zero Emission Vehicles and Charging Infrastructure

***Zero Emission Vehicles are a necessity to achieve full decarbonisation of transportation and significant growth opportunity for the North***

Regional Strengths:

- Proximity to industry and expertise in the chemical, automotive and aerospace sectors, particularly in Cheshire and Warrington, Greater Manchester, Humber and Tees Valley.
- Strategic locations for test bed applications, for example, for rural ZEV infrastructure and operation using the Lake District National Park.

EXAMPLE BOX: Project Charge (2019 -2022) runs across Merseyside, Cheshire, North Shropshire, North & Mid Wales. The project merges transport and electricity network planning to create an overarching map of where EV charge points will be required and where they can be best accommodated by the electricity grid.

EXAMPLE BOX: The City of York’s Public Electric Vehicle Charging Strategy 2020-2025 outlines the city’s plans to:

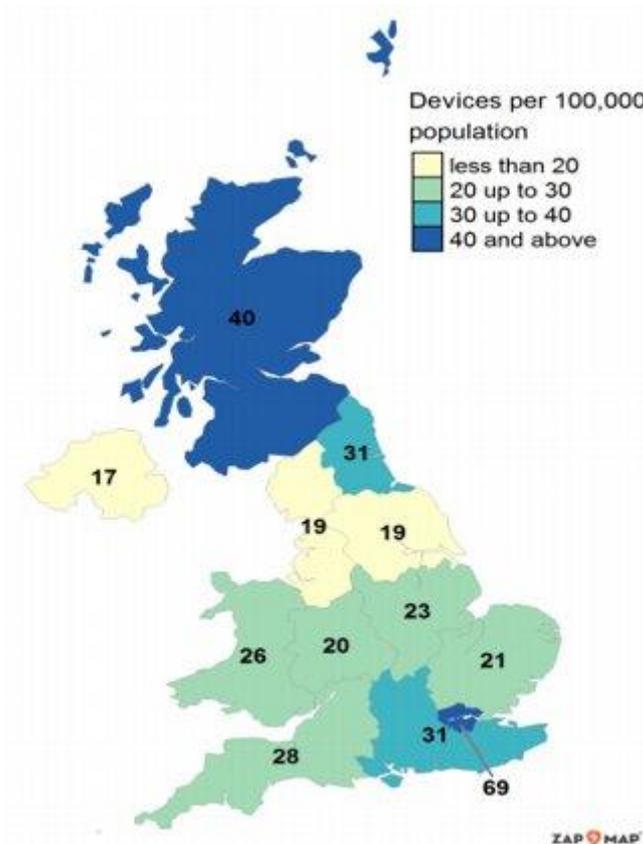
- install fast chargers at 5 per cent of parking bays within their own long-stay car parks
- use funding from the UK Office for Low Emission Vehicles and the European Commission to install ultra-rapid chargers in hyperhubsat strategic locations around York

- provide competitive tariffs to minimise the costs of using an EV for local residents and businesses.

#### Regional Challenges:

- Relatively high proportion of rural areas and terraced housing which pose challenges to the installation of effective ZEV charging infrastructure and ZEV operation.
- Uneven capabilities in relation to accessing grants and funding for ULEV infrastructure.
- Most charging infrastructure provision is market led to some extent and this has led to an uneven geographical distribution of existing charging devices within the UK.

**Map X** Public Charging Devices per 100,000 of population by UK region<sup>1</sup>



#### Regional Opportunities:

***The widespread adoption of ZEVs will need to be supported by the provision of adequate charging infrastructure that caters to road trips that occur with the region as a whole and not just the places within it.***

- Northern LEPs are well placed to support and host giga-factories (for manufacturing ULEV batteries and parts) with OEM vehicle supply being a critical factor in the achieving the UKs decarbonisation targets. The UK Government has identified up to £1bn of spending on an automotive transformation fund, although has yet to decide on exact funding allocations.

<sup>1</sup> Sourced from DfT, Electric Vehicle Charging Device Statistics, January 2021

Zap-Map, Office for National Statistics licensed under the Open Government Licence v.3.0  
Contains OS data © Crown copyright and database right 2021

- Scaling up the supply chain can achieve economies of scale and reduced cost across the ZEV value chain.
- Testing and trials of innovative ZEV charging technologies focussed on delivering rural and on-street ZEV charging solutions.
- Exploring the potential of multi-modal mobility hubs, including ZEV charging infrastructure, to stimulate urban regeneration, both by creating an additional incentive to visit and support local businesses and by improving access to affordable sustainable mobility.

Potential TfN Activity:

***A catalyst for ZEV uptake and charging infrastructure deployment.***

- Engage with and support partners to access funding, technical expertise and co-ordination with the Distribution Network Operators (DNOs). Facilitating cross boundary teams amongst partners to deliver strong and **effective bidding propositions** for ZEV funding and trials.
- Engage with partners to support programmes and campaigns to **build awareness** in our communities via strong messaging around the financial and environmental benefits of ZEVs (relative to the use of equivalent ICE vehicles).
- Develop a **coherent, data driven, regional ZEV Charging Infrastructure plan**, including an assessment of provision of charging infrastructure, **on-street and in rural and remote areas**. Coupled with this, TfN could look to influence government to alter the competitive bidding process into a more **outcomes-driven allocation** based on evidence and data.

**CGA1:** Develop a **regional EV charging Infrastructure Study** – laying the foundations for an outcomes driven approach to the delivery of charging infrastructure in the North, ensuring our network caters for the full range of journeys being made to, from and within our region.

**CGA2: Supporting local partners** in the development of local ZEV infrastructure charging plans and the pursuit of funding opportunities, through the provision of data and evidence.

## **Hydrogen Vehicles and Refuelling Infrastructure**

***The North has competitive advantage in hydrogen production, but a strong business case for hydrogen transport applications is yet to emerge.***

Regional Strengths:

- Existing clusters of hydrogen producing industry located around Liverpool, Cheshire and Warrington, the Humber estuary and Tees Valley.
- Existing hydrogen clean growth opportunity partnerships, for example HyNet North West (supported by Manchester, Liverpool and Cheshire and Warrington LEPs), the North West Hydrogen Alliance, and Zero Carbon Humber.

- Liverpool City Region, through HyMotion, deploying hydrogen buses and refuelling systems as well as becoming the first public hydrogen refuelling station in the North West.

EXAMPLE BOX: UK H2Mobility brings together industry (fuel cell technology, energy & gas utilities, fuel retail, car and train manufacturers, government and Devolved Administrations) to support the development of hydrogen as a transport fuel and further the commercial roll-out of hydrogen mobility technology. A roadmap details how the UK can build a hydrogen refuelling infrastructure to support the introduction of Fuel Cell Electric Vehicles (FCEVs), with the initial focus on developing infrastructure serving metropolitan areas and the major routes which link them. Infrastructure development to date has been a public-private partnership with national and local governments, and fuel cell, industrial gases, energy, and vehicle manufacturers.

EXAMPLE BOX: The HyNet North West partnership is to create the UK's first CCUS infrastructure including a hydrogen pipeline.

EXAMPLE BOX: The Nordic Hydrogen Partnership consists of regional clusters involving major and small industries, research institutions, and local, regional and national authorities. The national bodies covering Norway, Sweden, Iceland and Finland act as NHP coordinators. Most hydrogen installations are meant to serve fuel cell buses, as well as cars. Activities are based on collaboration across the borders and are backed with strong public and private support in terms of funding, financial tax exemption schemes and investments. ([www.nordichydrogenpartnership.com](http://www.nordichydrogenpartnership.com))

#### Regional Challenges:

- Despite a strong focus on hydrogen in the region, the development, testing and uptake of hydrogen vehicles is not a strong priority, at present, for the region in general.
- Viability of hydrogen as a fuel source is likely to depend on the deployment of Carbon Capture, Use and Storage (CCUS) in the short and medium term.
- Competition for hydrogen from high-priority hard decarbonise industrial uses and government strategic priority to utilise hydrogen for domestic heat.
- Current absence of Europe-wide strategy for low-carbon HGV. Investment in infrastructure will be at risk until established.
- Lack of certainty within supply chain around future supply/demand dynamics.
- Industrialisation of electrolyzers, fuel cells and hydrogen tank manufacturing – and linked to this, the current high production cost of hydrogen which will be important for fuel-intensive transport uses.

#### Regional Opportunities:

***Increased certainty around future hydrogen transport applications will allow a scale-up of the supply chain, necessary to support viable deployment of the technology.***

- Hydrogen as a fuel source could contribute significantly to the decarbonisation of ports and shipping.
- Much of the hydrogen production in the region is still based on fossil fuels, supporting our industrial ports to start the shift to a green hydrogen supply would drive down overall costs through scale and enable the deep decarbonisation of 'first mile' freight transport that utilise our ports (e.g. shipping and HGVs).
- Job creation in energy-intensive industrial regions (e.g. Humber and Tees Valley) to offset and exceed any expected job losses due to step changes in the decarbonisation agenda.
- Potential for the development of low carbon hydrogen (blue hydrogen) from gas reforming combined with Carbon Capture and Storage (CCS) alongside the scaling up of green hydrogen production.

Potential TfN Activity:

***There is no short-term policy that will allow an accelerated deployment of hydrogen in transport, but taking action to ready the supply chain in priority sectors will build the foundations for the future.***

- Apply a 'look ahead' in systems planning and **supporting the supply chain** by assessing future infrastructure requirements (e.g. refuelling networks) to expedite and encourage uptake once the technology becomes ready to enter the mainstream market.
- Encourage collaboration with other regions (e.g. Scotland and Wales) and other sub-national transport bodies, mirroring the success of initiatives such as the Nordic Hydrogen Partnership.
- Encourage and support our LEPs to develop a green hydrogen strategy for the North's industrial ports. Our ports are ideally placed to scale up the use of clean hydrogen, achieve scale in CCUS and decarbonise the 'first mile' of freight transport from ports.
- Work with Tees Valley to make the region **the testbed home for hydrogen mobility**, leveraging the existing capability around Tees Valley Net Zero Innovation Centre and the Tees Hydrogen Transport Hub.
- Engage with HyNet North West to identify actions to form supply-chain cluster to include hydrogen transport applications and to pool resources and share knowledge around the adoption of hydrogen fuels for transport.

**CGA3:** Undertake or support a **pan-northern hydrogen transport refuelling study**. Provide confidence to users about the future path of the technology, in particularly with regards to priority application, e.g. hard to electrify rail services and long-haul HGVs.

**CGA4: Supply chain support for future hydrogen infrastructure solutions** for both first and last mile hydrogen applications. TfN to engage in emerging hydrogen partnerships in the North to support the development of a viable business case for hydrogen and provide confidence to the supply chain.

## **Demand Management, Digitalisation and Modal Shift**

***Embracing new technologies and providing access to alternative modes of travel is essential to achieving our decarbonisation objectives, especially in the short term***

### Regional Strengths:

- Strong support for both MaaS and digital substitution within LEP strategies.
- Strong pipeline of existing proposals to help make the region a world leader in digitalisation. This includes Greater Manchester's ambition to become a top five city-region for the digital economy in Europe, with full fibre broadband and 5G coverage, and, the Borderlands Inclusive Growth Deal proposal that seeks to complete the roll-out of super-fast broadband to properties that do not yet have access in Cumbria.
- Strong regional support for modal shift to public transport.
- Significant support for rail investments, including Northern Powerhouse Rail.
- Ambitions in many city regions (e.g. Sheffield and Liverpool) to deliver zero-carbon public transport networks.
- Existing programmes piloting demand-responsive transport and community-based initiatives as a solution to the problem of accessibility in rural areas in the Tees Valley.

### Regional Challenges:

- Despite some areas experiencing world-class digital connectivity, some areas of the region still have limited broadband connectivity which needs to be addressed to allow for effective employment of MaaS systems, improved customer experience on public transport and digital substitution, in a way that meet the needs of the North's often dispersed populations, labour force and economy.
- Continued investment needed to expand 4G mobile data coverage and to support the transition to 5G.
- The North's topography and climate, especially in more rural areas, act as a barrier to active travel uptake.
- Local bus services are often considered unreliable and expensive.
- Some existing industrial employment centres are poorly serviced by public transport and in some areas there are no direct rail alternatives for passenger or freight movements which creates reliance on the Strategic Road Network (SRN) for both local and regional journeys.

### Regional Opportunities:

***Capturing and optimising the economic, social and environmental benefits from digitalisation and cleaner, greener travel.***

- Development and updating of LEP Digital Infrastructure Plans, where needed, to support the transition towards 5G.

- Proliferation of 5G innovation opportunities / programmes in the Tees Valley.
- Development of a Mobility Hub concept, which integrates public transport services with shared mobility services and ZEV charging infrastructure. Hubs can act as a focus for economic growth by creating an additional incentive to visit community and commercial centres.  
EXAMPLE BOX: Plymouth City Council has secured £6M to build 50 mobility hubs. This is to be established by 2023 and are to include electric vehicle charging infrastructure, an e-car club, e-bikes and digital information boards. Additionally, an integrated MaaS platform will be developed to enable travel.
- To become a leader in the development of rural public and active transport solutions. Exploring how new technologies can transform rural travel and incentivise the use of public transport and other forms of greener, shared and active mobility, and, how these solutions can stimulate return-investment in our rural communities.
- Given the aspirations for zero-carbon public transport networks existing across the North's city-regions, aggregating orders for ultra-low emission buses from cities across the North could draw significant investment from the OEM vehicle supply industry into the region.
- Championing the consideration of social and environmental value on an equal basis to economic return on investment when competing for government funding for active travel and public transport infrastructure.

Potential TfN Activity:

***Creating a narrative for sustainable future travel in the North***

- Supporting and encouraging programmes such as the Made Smarter Tees Valley Pilot; 5G Testbed and Trials Programme and Future Mobility Zones, **to make the Tees Valley a leader for tests and trials using 5G technology in rural areas.**
- Supporting and engaging LEPs in the development or updating of **Digital Infrastructure Plans**, to deliver strong messaging around the benefits of MaaS and digital substitution and also robust timelines in relation to the delivery of the enabling technology.
- To influence government for continued investment to expand the **North's 4G mobile data coverage and support the transition towards 5G** as both an economic stimulator and a key bedrock of an effective, digitally enabled, integrated transport system.
- To facilitate alongside partners, where feasible, the **aggregation of large orders of ultra-low emission buses from across the North's city regions** to attract inward investment and ensure supply.
- As we move towards the decarbonisation of road vehicles, public perception of road investment being the environmentally least friendly option may shift, particularly in rural areas where demand for road investment may increase. There is an opportunity to co-

ordinate, with partners, in **the delivery of strong messaging around the benefits of MaaS, public transport and active travel** and also robust timelines in relation to the delivery of supporting infrastructure and enhanced services. It is essential that the region can provide this parallel narrative to **build back confidence in public transport after the COVID-19 pandemic and create a demand for ‘Liveable Places’**.

**CGA5:** TfN to support a narrative for the North, utilising its Future Travel Scenarios, combining the advantages of demand management, active travel, micro-mobility and public transport into the evolving lifestyle choices of its citizens. The objective would be to **create a vocal demand for ‘Liveable Places’ across the various geographies of the North**.

**CGA6:** Supporting our local partners with **data and evidence to analyse potential locations for mobility hubs** and to access funding sources. The hubs should act as stimulators of urban and rural economic growth.

## **Freight Decarbonisation and Ports**

***Tailored solutions to deliver deep-decarbonisation of freight transport, recognising the diversity of supply chain and stakeholder needs***

Regional Strengths:

- Established freight networks and world leading ports.
- With the UK Government ambition, through its Maritime 2050 Strategy and Clean Maritime Plan, to lead the way in transitioning to a future of zero emission shipping. The North’s ports are well placed to support this ambition through the formation of ‘clean maritime’ clusters.

EXAMPLE BOX: The Port of Rotterdam in the Netherlands, one of Europe’s largest port and energy hub, is positioning itself as a hydrogen leader, working with various partners to make the port area an international hub for hydrogen production, import, application and transport to other countries in Europe. For example, the “H-vision” project brings together industry, the port and R&D partners to investigate the switch to blue hydrogen, which can be achieved with significant public and private investment in new infrastructure. The conversion of existing installations to transport hydrogen to the industrial companies and deliver captured CO2 to empty fields underneath the North Sea. According to the Port, the focus on large-scale hydrogen infrastructure will strengthen its international competitive position and attract new businesses that focus on sustainability (source: [www.h-vision.nl/en](http://www.h-vision.nl/en)).

- Three of our ports have been confirmed as freeport locations candidates, including Liverpool City Region, Teesside and Humber (including Immingham), and are expected to attract investment in manufacturing and logistics infrastructure through tax incentives and customs freedoms. This will make them excellent locations for clean and green transport infrastructure investment. A number of other candidate locations, including, Tyne and Wear and Barrow/Workington also play a valuable role in overall picture for maritime industry and freight transfer within the North.

### Regional Challenges:

- Low or zero carbon technology in both maritime and freight sectors is at a relatively low maturity level. Technology selections should ideally be made when the options are mature, so any investment choices made now (e.g. liquid natural gas as a fuel for shipping) will have a long-term impact that is hard to re-frame.
- The North's sizeable freight and logistics sector exacerbates road traffic congestion hot-points, as well as the emissions associated with ports and airports.
- The need for a coherent regional strategy to enhance the North's competitive strength and develop supply chains in relation to the green maritime agenda.
- European cooperation is required to develop compatible solutions for the decarbonisation of freight, recognising the significant number of cross-border trips (by HGVs, shipping and aviation).

**EXAMPLE BOX:** The European Technology Platform ALICE is set-up to develop a comprehensive strategy for research, innovation and market deployment of logistics and supply chain management innovation in Europe. In 2019, ALICE published its '*Roadmap Towards Zero Emission Logistics in 2050*', looking at the radical changes needed to deliver fully competitive low emissions vehicles, trains, barges, ships and airplanes. (source: Roadmap Towards Zero Emissions Logistics 2050, ALICE (2019), [www.etp-logistics.eu](http://www.etp-logistics.eu))

### Regional Opportunities:

***Green and competitive ports need a bold vision that combines a roadmap of lowering GHG emissions from shipping and pollution in maritime areas, with integration of other sustainable transport modes***

- To lead the way in data collation and democratisation, mapping goods to vehicles in common formats, allowing the North's freight operators, both large and small to benefit from information on efficiency schemes and measures, and the latest technologies.
- TfN's Investment Programme will provide significant additional rail capacity in the region, providing an opportunity to move freight transport from road to rail
- Rail freight is one of the most carbon-efficient means of moving goods, however heavy freight loads typically require overhead electrification (as the zero carbon alternative to diesel traction). The infrastructure works required to achieve coverage of the regions main freight corridors represent an opportunity to invest further in the regions rail manufacturing capability.
- The Government has committed to a £20million investment in the Clean Maritime Demonstration Programme, and that a hydrogen refuelling port will be launched in Teesside.
- There is potential for our partners (ports, local authorities and delivery authorities) to work together to deliver effective 'port to port' hydrogen or electric refuelling corridors across our region. Many of these corridors are identified within the Strategic Development Corridors defined within TfN's Strategic Transport Plan.

**EXAMPLE BOX:** The Port of Gothenburg, in Sweden, is collaborating with Volvo Group, Scania and Stena Line to accelerate the transition to fossil-free fuels in the transport sector and cut emissions linked to the port by 70% by 2030. The collaboration focuses on the electrification of sea transport. Gothenburg Port Authority will produce the necessary infrastructure and access to fossil-free fuels for heavy vehicles, including electric power, biogas, and hydrogen gas. The freight transporters and Stena Line will have a key role to play by ensuring new fossil-free trucks and vessels are brought into service by 2030.

Potential TfN Activity:

***Providing data and evidence to expedite the development of a decarbonisation pathway for shipping and freight***

- **Supporting the sector by assessing future infrastructure requirements** for hydrogen or electric refuelling, to expedite and encourage uptake once the technology becomes ready to enter the mainstream market. Supporting the formation of partnerships to consider ‘port to port’ zero carbon freight corridors.
- Using TfN’s analytical framework to **build a better understanding of freight and logistics movements and the effects of efficiency measures and technologies**. Making this data available for to all.
- Supporting the region in becoming of a **centre of excellence for zero carbon ports or shipping** in the region.
- **Encouraging and supporting our cities to develop Sustainable Urban Logistics Plans** through the provision of data and research and developing a structured approach to sharing knowledge through our Northern Evidence Hub.

**CGA7:** Developing and **supporting partnerships to consider port-to-port, multi-modal, zero carbon freight corridors**, optimising the economic benefits that our freeports and clean maritime clusters can generate for our region.

## **Rail Decarbonisation**

Regional Strengths:

- The North possesses strong rail manufacturing capability and the region is well placed to benefit from a nationwide acceleration of rail electrification programmes, as well as the potential to lead on innovative new clean transport technologies (e.g. hydrogen-powered passenger trains).

Regional Challenges:

- Many of the North’s dispersed communities have poor access to rail services and there is a perception that the existing rail infrastructure needs improvement and better maintenance before investment in decarbonisation programmes.

#### Regional Opportunities:

- To increase the North's access to both UK and international markets in relation to green rail infrastructure and rolling stock.

#### Potential TfN Activity:

- Work with government and Network Rail to ensure new rail schemes within our Investment Programme are electrified, including NPR, providing future market certainty to the supply chain and allowing development of further skills and capability in this sector within the North.
- Work with partners, Network Rail and Train Operating Companies (TOCs) **to bid for the testing and trialling of new low emission train technologies in the region.** This should serve as sign of our intent to employ these technologies in the future and attract further investment from the rail manufacturing sector into our region.

**CGA8: Supporting our partners to attract testing and pilots of new low emission train technologies** in the region.

Our Clean Growth Opportunity Summary Matrix, Figure X, allows us to consider the identified priority Clean Growth Actions relative to each other in relation to their potential to stimulate economic growth and positive health outcomes.

All identified potential Clean Growth Actions have modest to strong potential to stimulate growth in either jobs or skills within our region. The strongest actions in this respect are likely to be those in relation to expediting the effective development of ZEV charging infrastructure and increased uptake of ZEVs in the region, and in doing so, demonstrating significant regional demand to the supply chain.

There is also significant economic growth potential in relation to proving a market for hydrogen fuels for first mile freight journeys, however, this also a greater level of uncertainty around these outcomes which is related to the relative immaturity of technology in this area.

Stronger, 'all-round' performers include actions around supporting demand management and modal shift, which may see increased health benefits and more potential to simulate growth in a more equitable way.

All eight of the identified potential Clean Growth Actions are taken forward into Chapter 9, where TfN's priority activities to 2025 are considered.

Figure X: TfN Clean Growth Opportunity Matrix

**Definition: Socio - Economic Factors**

|        |  |
|--------|--|
| Jobs   | <ul style="list-style-type: none"> <li>Potential to support job growth directly through design, manufacturing and construction opportunities, and also in the wider job market by improving connectivity and resilience</li> </ul> |
| Skills | <ul style="list-style-type: none"> <li>Potential to increase the skills base within our communities and the demand for skilled labour to support business growth and new mobility infrastructure.</li> </ul>                       |
| Health | <ul style="list-style-type: none"> <li>Potential to improve the health and well being of our communities.</li> </ul>   |

**Definition: Impact**

|               |  |
|---------------|--|
| <b>Strong</b> | <p>Strong potential to deliver socio-economic benefits of jobs, skills and health. Policy is very likely to induce private sector investment and support a high level of job creation in innovative and future industries, requiring an increased level of skilled workers.</p> <p>Strong potential to support the health agenda, encouraging an active lifestyle, and reducing pollution.</p> |
| <b>Medium</b> | <p>Those opportunities where there is a more modest potential to deliver socio-economic targets of jobs, skills and health, or where the potential is <b>strong</b> but uncertainty is high. Some potential to support the health agenda, encouraging an active lifestyle, and reducing pollution.</p>   |
| <b>Low</b>    | <p>Weaker potential to deliver socio-economic targets of jobs, skills or health. Policy may not strong outcomes in all three socio-economic areas, or, only over the long-term horizon.</p>  |

| Clean Growth Actions  | Potential for Beneficial Socio - Economic Impact |        |        | Justification  |
|---|--|--------|--------|--|
|   | Jobs   | Skills | Health |  |
| Action 1: Develop a regional EV Charging Strategy   | Strong   | Strong | Low    | Effective ZEV infrastructure resulting in higher ZEV uptake leading to a stronger supply chain. Jobs and skills benefits from the manufacture and installation of infrastructure and investment in the region from OEMs. Health benefits less clear due to risks associated with increased uptake of private vehicles and persistent local air quality emissions along with potential to exacerbate TRSE.  |
| Action 2: Supporting local partners in the development of local EV Charging Infrastructure                | Strong   | Strong | Medium | Effective ZEV infrastructure resulting in higher ZEV uptake leading to a stronger supply chain. Jobs and skills benefits from the manufacture and installation of infrastructure and investment in the region from OEMs. Provision of data in relation to distributional impact and transport related social exclusion may help obviate adverse potential health impacts.  |
| Action 3: Undertake or support a pan-northern hydrogen transport refuelling study                         | Medium   | Medium | Medium | The hydrogen economy presents significant opportunities for jobs and growth in the North and developing a market in hydrogen for transport would further stimulate this. Medium ratings reflect a significant uncertainty that persists around the viability of hydrogen as a fuel relative to other technologies.   |
| Action 4: Supply chain support for future hydrogen infrastructure solutions                               | Medium   | Medium | Medium | The hydrogen economy presents significant opportunities for jobs and growth in the North and developing a market in hydrogen for transport would further stimulate this. Medium ratings reflect a significant uncertainty that persists around the viability of hydrogen as a fuel relative to other technologies.   |
| Action 5: Supporting a demand management narrative for the North  | Medium   | Low    | Strong | This activity in itself is unlikely to lead to direct significant growth in jobs and skills, however, a shift away from private vehicle use and any uptake in active travel is likely to lead to health and wellbeing benefits. A more effective, integrated and comprehensive public/shared/active transport system is ultimately likely to be a more equitable transport system, allowing a broader spectrum of our communities access more jobs.                |
| Action 6: Supporting local partners in the development of mobility hubs                                   | Medium   | Medium | Medium | Mobility hubs may principally encourage healthier and greener mobility choices, improving air quality and tackling TRSE. Dependent on location and integration into spatial planning, they also provide an opportunity to accelerate commercial regeneration and localisation concepts.  |
| Action 7: Developing and supporting partnerships to consider zero carbon, port-to-port freight corridors. | Strong   | Medium | Medium | Using the strong connection between our ports, airports and intermodal terminals to both stimulate the transition to clean fuels and create substantial economic investment opportunities in our ports and their hinterlands. The use of hydrogen as a fuel for first mile journeys, would stimulate the maximum opportunity for our region, however, significant uncertainties persist around the viability of hydrogen as a fuel relative to other technologies. |
| Action 8: Supporting our partners to attract testing and pilots of new low emission train technologies    | Strong   | Medium | Low    | Given existing strong rail manufacturing base in the North, it is well placed to deliver the materials needed to decarbonise railways/locomotives. Health benefits relatively low next to other actions given the limited portion of air quality / carbon emissions generated from existing railways.  |

Our work has identified a number of other significant clean growth opportunities for the North. Transport is not the key driver of these opportunities, but it can play an important enabling function.

## Advancing Offshore Wind

Substantial installed offshore wind energy generation can be found off much of the North's coasts, with Cumbria being home to the largest offshore windfarm in Europe. The supply chains, research and development activities and deployment of offshore wind farms are significant benefit to many of our existing coastal areas.

Whilst offshore wind and the activities that support it are a relatively mature industry in the North, any opportunities to strengthen the transport infrastructure that supports the industry, should be explored. For example, the UK Government's 10 Point Plan committed to investing £160m into modern ports and manufacturing industries to further boost the UK's offshore wind energy generation capacity.

Further to this, some high-value components are still being imported. Transport links will be important if the region is to attract the appropriate skills base and inward investment to fill these manufacturing gaps.

The energy generated by offshore wind farms could also be used a source of renewable energy to power the electrolysis process required to produce green hydrogen, to be used for transport applications.

### *Potential TfN Activity*

- Preparation of pan-northern hydrogen refuelling network strategy has been proposed as a potential priority activity for TfN (alongside industry stakeholders) before 2025. Any strategy should consider the contribution that offshore wind energy could play in the electrolysis process to produce green hydrogen and understand how the spatial characteristics of a refuelling network might optimise this potential.
- Supporting coastal LEPs (e.g. Humber and Liverpool) to access government funds which would unlock increased investments in the North's port infrastructure, including the formation of clean maritime clusters.

## Investing in Carbon Capture, Usage and Storage (CCUS)

The North already leads the country in CCUS research and development, with the region's ambitions being driven by the need to decarbonise the North's heavy industrial clusters, including those in the Humber, Tees Valley and Merseyside. The UK Government's 10 Point Plan pledges significant investment to support the establishment of SuperPlaces: industrial clusters pioneering hydrogen production and carbon capture, returning the latter to under the North Sea. Given its location, the North is perfectly placed to host these clean growth clusters and utilise the hydrogen they produce.

The majority of decarbonisation pathways, including those presented by the Climate Change Committee, rely on an element of CCUS to achieve their decarbonisation trajectories. It is also true that the effective and rapid development of CCUS in the North will be an essential component within the hydrogen supply chain (before green hydrogen production sufficiently develops) if it is to be chosen as a viable fuel source for zero or low emission HGVs. **Without CCUS, it is likely that the decarbonisation pathways for our HGVs would need to pivot to alternative fuel sources (e.g. battery electric). Given the North's potential in relation to the development of CCUS and hydrogen production/use, this would represent a missed growth opportunity for the region.**

The scale of major infrastructure planned through our Investment Programme will also mean that the region's ability to scale CCUS activity, particularly in relation to industries producing construction materials (e.g. steel), is likely to be an important component in mitigating our embodied carbon emissions.

## Chapter 9 – TfN’s Priority Decarbonisation Actions

We believe that TfN has an important role to play in achieving transport decarbonisation in the North.

**Demonstrating:** Evidence-building, running pilots and collating and sharing best practice.

**Facilitating:** Working for consensus, ensuring consistency, co-ordinating cross-sectoral partnerships and teams, as well as representing our partners as a single, strong unified voice in national forums.

**Supporting:** Developing regional strategy to support local objectives and provide a basis for effective and co-ordinated influencing of government.

Our policy analysis work has revealed those areas of policy through which the most challenging emissions reductions must be achieved. These provide a focus for our proposed research, data and evidence-building activities in the short-term to 2025. Specific activities generated by this analysis are signposted as ‘Policy Gap Actions’ (PGAs).

Alongside the policy analysis, our exploration of those activities which can provide the greatest potential for clean, green growth in the North has identified eight ‘Clean Growth Actions’ (CGAs).

Finally, a number of additional activities have been identified as priorities and refined through engagement with our partners, industry, research networks such as DecarboN8 and other Sub-national Transport Bodies, and these are highlighted as ‘Stakeholder Driven Action’ (SDAs).

Taken altogether, these represent TfN’s proposed Priority Decarbonisation Actions.

Given the enormity of the decarbonisation challenge and the risks associated with failing to achieve what is needed, the majority of activities around decarbonisation would justifiably be classed as ‘high priority’. TfN’s proposed Priority Actions, are those activities which we believe need to happen in the short-term (i.e. up to 2025) and that are most effectively delivered at a pan-Northern level.

They typically:

- recognise the transboundary nature of our surface transport system and tackle those challenges and emissions that fall between the gaps when employing a county or combined authority governance approach;
- generate evidence that can be applied usefully across a range of places by our partners (i.e. are not ‘place specific’);
- reflect preferences expressed by our partners and other stakeholders.

### ***TfN's Proposed Activities to 2025***

Table X defines TfN's proposed Priority Decarbonisation Actions by policy area. The urgency of the climate crises requires us to address all of these actions in the short term, up to 2025. There are a number of actions, typically where TfN can play an ongoing support function to others, where we envisage that support as being 'continuous', or, as and when required. Other actions are likely to have specific outputs which will require further definition and which should be delivered up to 2025.

The activities within this list present differing levels of opportunity for TfN influence, however, the role that TfN can play in delivering these activities and the relative priority assigned to actions will change over time and therefore this list will be reviewed, with our partners, on an annual basis.

| Policy Area              | TfN Role                     | TfN Decarbonisation Action   | Scope   | Timeframe |
|--------------------------|------------------------------|--|---|-----------|
| Decarbonisation Strategy | Demonstrating and Supporting | SD1: Regional route-map for transport decarbonisation  | Disaggregating baseline emissions for a number of place typologies that typify the North.<br>Assessing against a regional trajectory to develop place-specific policy baskets and to understand the optimum timing and resource use profiles for each typology, in order to achieve regional decarbonisation. | Pre-2025  |
|                          | Demonstrating and Supporting | SD2: Developing place-based decarbonisation pathways for rural typologies.   | Similar to the work proposed under the 'regional roadmap' action, although focused predominantly on the challenges and opportunities of decarbonising rural transport systems. Including development of appropriate policy baskets.   | Pre-2025  |
|                          | Facilitating                 | SD3: Formation of a decarbonisation working group with TfN partners  | Working group to help scope and guide the implementation of the Decarbonisation Strategy.   | Pre-2025  |
|                          | Demonstrating                | SD4: Exploring the relationship between transport decarbonisation and transport-related social exclusion (TRSE) (inclusive of PGA11) | Understanding the geography of TRSE in the North and the potential effects on TRSE, by place, of different transport decarbonisation policy measures.<br>Providing evidence and strategic support (including in relation to transport-related social exclusion) to local partners to identify                 | Pre-2025  |

|                                       |                              |  |   |            |
|---------------------------------------|------------------------------|--|---|------------|
|                                       |                              |  | locations where cycle hire and e-scooter schemes would deliver maximum environmental benefit alongside wider social, health and economic benefits.  |            |
|                                       | Demonstrating                | SD5: Research into embodied carbon analysis for strategic transport infrastructure programmes    | Partnering with research bodies to investigate the requirements and feasibility of carrying out embodied carbon assessments of strategic multimodal transport infrastructure corridor proposals. We shall use a selection of schemes from TfN's existing Strategic Development Corridors for this task.                   | Pre-2025   |
|                                       | Demonstrating and Supporting | SD6: Programmatic assessment of Investment Programme (IP) against TfN Decarbonisation Trajectory | Assessment of modelled emissions as a result IP Intervention Sequencing Strategy, against TfN's Decarbonisation Trajectory to identify any additional decarbonisation policy required, and potential adjustments to IP.   | Pre-2025   |
| Electric Vehicles and Fuel Efficiency | Demonstrating                | CGA1: Develop a regional ZEV charging strategy (inclusive of PGA1)                               | Identifying those facets of a low carbon charging system that are best approached at a pan-Northern level, including coverage of the Major Road Network (MRN), consistency and interoperability of technology and payment systems, procurement principles, future proofing and consideration of future grid requirements. | Pre-2025   |
|                                       | Supporting                   | CGA2: Supporting local partners in the development of local ZEV Charging Infrastructure          | Supporting local partners in the development of local ZEV infrastructure charging plans and the pursual of funding opportunities, through the provision of data and evidence.   | Pre-2025   |
|                                       | Facilitating and Supporting  | PGA14: Increase awareness of fuel-efficient driving styles                                       | Through the policy positions we adopt and our communication and engagement activities, work with partners to increase public awareness of fuel-efficient driving styles and the associated environmental and financial benefits.  | Continuous |
| Hydrogen                              | Demonstrating                | CGA3: Undertake or support a pan-northern hydrogen transport refuelling study                    | Understanding the potential of the North's hydrogen generation/CCS potential to decarbonise transport. Mapping hydrogen network against the Strategic Road Network (SRN)/MRN and rail network (and freight depots) to identify strategic locations for investment in refuelling depots/stations.                          | Pre-2025   |

|                   |                                |   |  |                              |
|-------------------|--------------------------------|---|--|------------------------------|
|                   | Supporting                     | CGA4: Supply chain support for future hydrogen infrastructure solutions   | Engaging with emerging hydrogen partnerships in the North to support the development of a viable business case for hydrogen (for both first and last mile freight applications) and provide confidence to the supply chain.  | Continuous                   |
| Demand Management | Supporting                     | SD7: Supporting the development of scalable digital solutions for incentivising greener, shared and active mobility in rural areas. | Supporting partners, through provision of evidence and data, in understanding the key requirements of an effective rural MaaS system.  | Continuous                   |
|                   | Facilitating and Supporting    | CGA5: Supporting a Demand Management Narrative for the North  | Utilising TfN's Future Travel Scenarios, combining the advantages of demand management, active travel, micro-mobility and public transport into the evolving lifestyle choices of its citizens. The objective would be to create a vocal demand for 'Liveable Places' across the various geographies of the North. | Pre-2025                     |
|                   | Demonstrating and Supporting   | CGA6: Supporting local partners in the development of Mobility Hubs   | Provision of data and evidence to facilitate analysis into potential locations for mobility hubs, in both rural and urban areas, and to access funding sources.  | Pre-2025                     |
|                   | Demonstrating and Facilitating | PGA10: Consider role of micro-mobility/shared mobility in the first and last mile journeys at train stations                        | Use our role within the Rail North Partnership to facilitate a consideration of how shared mobility, including cycle hire and e-scooter schemes, can be encouraged for first and last mile journeys at train stations.   | Pre-2025                     |
|                   | Demonstrating and Facilitating | PGA8: Develop schemes and infrastructure to improve regional public transport network, e.g. Northern Powerhouse Rail                | Develop and implement comprehensive plans for the regional public transport network, such as Northern Powerhouse Rail and wider improvements to the rail network.  | Continuous (and beyond 2025) |
|                   | Demonstrating                  | PGA9: Research on the effects of home-working upon productivity and agglomeration.  | Develop an evidence base on the extent to which less work-related travel has a detrimental effect on productivity and agglomeration to understand whether home-working can be consistent with TfN's vision for a transformed Northern economy.   | Pre-2025                     |
| Freight           | Demonstrating and Facilitating | SD8: Low carbon urban freight scenarios   | Research on appropriate place-based, low carbon, urban freight (last-mile) solutions in the North.   | Pre-2025                     |

|      |                              |   |   |            |
|------|------------------------------|---|---|------------|
|      | Facilitating and Supporting  | CGA7: Developing and supporting partnerships to consider zero carbon, port to port freight corridors  | Exploring the potential for our partners (ports, local authorities and delivery authorities) to work together to deliver effective 'port to port', multi-modal, hydrogen and/or electric refuelling corridors across our region. Many of these corridors are identified within the Strategic Development Corridors defined within TfN's Strategic Transport Plan. | Pre-2025   |
|      | Supporting                   | PGA2: Facilitating large ZEV truck trials in the North  | Work with local authority partners and Highways England to facilitate large ZEV truck trials in high traffic corridors in the North.  | Continuous |
|      | Facilitating and Supporting  | PGA3: Support partners to aggregate large orders of ZEV vans, truck and buses across the North  | Current ZEV production will not meet the demand required to hit our targets. By helping to aggregate demand from stakeholders across the North, significant numbers of vehicles would be drawn to the region and would signal to manufacturers that the regional demand is present.   | Continuous |
|      | Supporting                   | PGA12: Supporting freight information democratisation schemes   | Working with and influencing government to support information democratisation schemes that make the latest information on the best efficiency schemes and technology, available to everyone.   | Continuous |
| Rail | Supporting                   | CGA8: Supporting our partners to attract testing and pilots of new low emission train technologies. Inclusive of PGA6                                       | Work with partners, Network Rail and Train Operating Companies (TOCs) to bid for the testing and trialling of new low emission train technologies in the region. =  | Continuous |
|      | Demonstrating and Supporting | PGA4: Identify appropriate routes for electrification   | Support the Government and Network Rail, and utilising the NPR project, in identifying appropriate routes for electrification and associated implementation.  | Pre-2025   |
|      | Facilitating                 | PGA5: Work with Train Operating Companies (TOCs) and Freight Operating Companies (FOCs) to exploit operational efficiency opportunities. Incorporating PGA7 | Work with train operating companies to: <ul style="list-style-type: none"> <li>a. Revise service patterns based around the progression of electrification to minimise the use of diesel-only trains before they are phased out;</li> <li>b. Optimise timetables to maximise benefits of frequency and reduce flighting of services.</li> </ul>                    | Continuous |

|                       |                             |   |  |            |
|-----------------------|-----------------------------|---|--|------------|
|                       |                             |   | c. Work with freight and train operating companies and Network Rail to ensure there is sufficient capacity to allow freight traffic to run directly and with minimal dwell times, reducing emissions from existing diesels.  |            |
| Project-level Carbon  | Demonstrating               | SD9: Developing an embodied carbon database for major infrastructure developments | Development of a project information repository to assist partners in baselining embodied carbon for major infrastructure development projects. This will include consideration of recent work by Network Rail and RSSB in this area.  | Pre-2025   |
|                       | Supporting                  | PGA13: Influence government to seek augmented DFT appraisal guidance              | Influence government to seek DfT augmented Appraisal guidance on how to include for the impacts of transport projects on carbon, air quality and urban realm, and the full environmental impacts of cars.  | Continuous |
| Awareness Raising and | Facilitating and Supporting | SD10: Engagement and awareness-raising activities                                 | To be defined alongside partners, to understand what activities might be best undertaken at a pan-Northern level. Building on, and learning from, existing initiatives like the Leeds Climate Citizens Jury and the Lancaster district People's Jury, e.g. Leeds Act Together. | Continuous |
|                       | Facilitating                | SD11: Behaviour change research   | Development of a research depository and gap analysis to understand areas for further research effort.   | Pre-2025   |

## Chapter 10 - Internal assurance, monitoring and evaluation

### Internal assurance

Through our internal policy framework, we shall consider the carbon implications of all our projects and programmes at their inception, to ensure we understand the implications and where appropriate, take actions to mitigate the impacts. These processes also ensure that TfN's activities are informed by the growing evidence base on the impacts of transport interventions in the North of England across a range of domains – including impacts on carbon emissions.

We also need to grasp the opportunities to achieve carbon reductions wherever we can. We expect these opportunities to occur in our development projects and through our policy-making, but also when making corporate decisions around aspects such as our ways of working, procurement activities and staff benefits.

Our internal assurance process will require the owners of TfN projects, programmes and processes to understand TfN's Decarbonisation Trajectory and assess whether their proposals are supportive of this direction of travel. **Figure X** in Chapter 2 illustrates how we intend to benchmark our Investment Programme against our Decarbonisation Trajectory, both at a strategic level and also when embarking on the development of the individual business cases of the schemes within it.

Where proposals are in relation to infrastructure development, or the procurement of supply chain services, they will also need to align with TfN's targets in relation to reducing supply chain and construction carbon.

### Monitoring and evaluating our progress

When it comes to decarbonisation, the time for strategising is short and the time for delivering on our commitments is now.

Rigorous monitoring and evaluation processes will ensure that progress towards TfN's decarbonisation commitments is clearly measured, that reductions in carbon can be attributed to specific causes, and that any unforeseen consequences of this are properly analysed. These processes are vital to shaping and updating our strategies and actions over the coming decades to ensure the maximum benefits are derived, and any negative externalities are minimised.

TfN is currently developing a Monitoring and Evaluation (M&E) Strategy and Framework, which is scheduled for completion in 2021. The M&E Strategy sets out the processes necessary for a rigorous system of M&E within TfN, including how the outputs of monitoring and evaluation should inform the development and appraisal of TfN projects. Alongside this, the M&E Framework sets out the indicators by which TfN will measure progress towards the four objectives set out in the Strategic Transport Plan. Decarbonisation connects to all of

these objectives, but falls most directly within objective four: “Promoting and enhancing the built, historical and natural environment”.

Tables X and Y highlight those indicators that we have developed in relation to decarbonisation. These indicators will allow us to understand:

- The North’s progress in terms of the decarbonisation of our surface transport, allowing us to benchmark this progress against our Decarbonisation Trajectory. This is measured by the set of indicators detailed in Table Y.
- The success of the specific measures and actions committed to within this Decarbonisation Strategy (Table X).

It will be important to take stock at each milestone along our Decarbonisation Trajectory, the next being in 2025, to allow us to adjust our focus and strengthen our approach where needed.

**Table X: Indicators to measure the success of TfN’s Decarbonisation Strategy**

| <b>Impact:</b> Reduce emissions from the Major Road Network in the North.  |  |  |
|--|--|--|
| <b>Measure:</b> Annual estimates from TfN NoCarb model.  |  |  |
| <b>Outcomes</b>  | <b>Outputs</b>   | <b>Activities</b>  |
| <p>Rollout of sufficient low carbon charging network to meet trajectory.<br/>(M: To be set based on the infrastructure plan).</p> <p>Rollout of sufficient hydrogen refuelling network to meet trajectory.<br/>(M: To be set based on the infrastructure plan).</p> <p>Modal shift away from private car travel, towards active travel and public transport.<br/>(M: NTS, and datasets on MaaS uptake where these are developed).</p> <p>Increased occupancy levels among car users for journeys in and through the North.<br/>(M: DfT statistics).</p> <p>PGA14: Increasing fuel efficiency among drivers<br/>(M: To be developed).</p> | <p>SD1: Regional route-map for transport decarbonisation<br/>(M: Route-map signed off by stakeholders)</p> <p>SD2: Place-based decarbonisation pathways for rural typologies.<br/>(M: Pathways signed off by stakeholders)</p> <p>CGA1 &amp; PGA1: A regional ZEV charging strategy<br/>(M: Strategy signed off by stakeholders)</p> <p>CGA5: A Demand Management Narrative for the North<br/>(M: Narrative signed off by stakeholders)</p> <p>PGA8: Develop schemes and infrastructure to improve regional public transport networks, e.g. Northern Powerhouse Rail.<br/>(M: Delivery of schemes identified at the planning stage).</p> | <p>SD3: Formation of a decarbonisation working group with TfN partners.</p> <p>SD4 &amp; PGA11: Research on the relationship between transport decarbonisation and transport-related social exclusion (TRSE).</p> <p>SD6: Assessment of Investment Programme (IP) against TfN Decarbonisation Trajectory.</p> <p>SD10: Engagement and awareness-raising activities with the public.</p> <p>CGA2: Research and evidence to support the development of local ZEV Charging Infrastructure.</p> <p>CGA3: Research and evidence to support pan-northern hydrogen transport refuelling study.</p> <p>SD7: Research and evidence to support the development of scalable digital solutions for incentivising greener, shared and active mobility in rural areas.</p> |

|  |  |   |
|--|--|---|
|  |  | <p>CGA6: Research and evidence to support local partners in the development of Mobility Hubs.</p> <p>PGA9: Research and evidence on the effects of home-working upon productivity and agglomeration.</p> <p>PGA10: Research and evidence to consider role of micro-mobility/shared mobility in the first and last mile journeys at train stations.</p> <p>SD11: Research and evidence on behaviour change and transport user insights.</p> <p>PGA8: Develop and implement comprehensive plans for the regional public transport network, such as Northern Powerhouse Rail and wider improvements to the rail network.</p> |
|--|--|---|

| <b>Impact:</b> Reduce emissions from land freight transportation in the North.  |   |  |
|---|---|--|
| <b>Measure:</b> Annual estimates from TfN NoCarb model.   |   |  |
| <b>Outcome</b>  | <b>Output</b>   | <b>Activity</b>  |
| <p>Rollout of sufficient low carbon charging network to meet trajectory.<br/>(M: To be set based on the infrastructure plan).</p> <p>Rollout of sufficient hydrogen refuelling network to meet trajectory.<br/>(M: To be set based on the infrastructure plan).</p> <p>Modal shift towards rail freight<br/>(M: Great Britain Freight Model).</p> <p>Increasing fuel efficiency among drivers<br/>(M: To be developed).</p> | <p>SD1: Regional route-map for transport decarbonisation.<br/>(M: Route-map signed off by stakeholders)</p> <p>CGA1 &amp; PGA1: A regional ZEV charging strategy.<br/>(M: Strategy signed off by stakeholders)</p> <p>PGA3: Aggregated large orders of ZEV vans, truck and buses across the North.<br/>(M: Number of ZEV units ordered through aggregated partnerships)</p> | <p>SD3: Formation of a decarbonisation working group with TfN partners.</p> <p>SD8: Research and evidence to inform appropriate place-based, low carbon, urban freight (last-mile) solutions in the North.</p> <p>CGA7: Developing and supporting partnerships to consider zero carbon, port to port freight corridors.</p> <p>CGA3: Research and evidence to support a pan-northern hydrogen transport refuelling study.</p> <p>PGA2: Facilitating large ZEV truck trials in the North.</p> <p>PGA12: Supporting freight information democratisation schemes.</p> |

| <b>Impact:</b> Reduce operational emissions from the North's rail network   |  |  |
|---|--|--|
| <b>Measure:</b> Annual estimates from TfN NoCarb model.   |  |  |
| <b>Outcome</b>  | <b>Output</b>  | <b>TfN action</b>  |
| <p>Rollout of sufficient hydrogen refuelling network to meet trajectory.<br/>(M: To be set based on the infrastructure plan).</p> <p>Upgrades to conventionally powered trains to reduce emissions.<br/>(M: Estimated emissions reductions achieved through upgrades).</p> <p>Increased electrification of the rail network.<br/>(M: Proportion of the network electrified).</p> <p>Increased operational efficiency of the rail network.<br/>(M: To be developed based on linked area of research)</p> | <p>SD1: Regional Road Map for Decarbonisation.<br/>(M: Road map agreed by key stakeholders).</p> <p>CGA3: Pan-Northern hydrogen refuelling network infrastructure plan.<br/>(M: Plan agreed by key stakeholders.)</p> <p>National regulatory and legislative changes.<br/>(M: Register of policy changes in key identified areas).</p> | <p>SD3: Formation of a decarbonisation working group with TfN partners.</p> <p>PGA4: Identify appropriate routes for electrification and associated implementation.</p> <p>PGA5 &amp; PGA7: Work with Train Operating Companies (TOCs) and Freight Operating Companies (FOCs) to identify operational efficiency opportunities.</p> <p>CG8: Supporting our partners to attract testing and pilots of new low emission train technologies</p> |

**Impact:** Reducing supply chain and construction carbon linked to transport in the North.

**Measure:** Use of PAS 2080 Carbon Management Framework.

| <b>Outcome</b>  | <b>Output</b>  | <b>TfN action</b>  |
|---|--|--|
| <p>Reduction in supply chain/construction carbon on TfN-led schemes.<br/>(M: Use of PAS 2080 Carbon Management Framework on TfN-led schemes).</p> | <p>SD9: An embodied Carbon Database for Major Infrastructure Developments.<br/>(M: Database developed and subject to peer review)</p> <p>National regulatory and legislative changes.<br/>(M: Register of policy changes in key identified areas).</p> | <p>SD3: Formation of a decarbonisation Working Group.</p> <p>PGA13: Increased efforts to influence national appraisal guidance, national regulatory and legislative changes, and effective policymaking.</p> <p>SD9: Research on challenges and opportunities for carbon reduction in the construction sector.</p> |

**Table Y, Decarbonisation related indicators within TfNs Monitoring and Evaluation Framework.**

| Indicator   | Baseline          | Data source       | Update frequency |
|---|-------------------|-------------------|------------------|
| Millions of tonnes of CO2 emitted by cars per year                      | 14.6326<br>(2018) | TAME NoCarb model | 5 years          |
| Millions of tonnes of CO2 emitted by HGVs per year                      | 7.2467<br>(2018)  | TAME NoCarb model | 5 years          |
| Millions of tonnes of CO2 emitted by LGVs per year                      | 2.7403<br>(2018)  | TAME NoCarb model | 5 years          |
| Millions of tonnes of CO2 emitted by buses per year                     | 0.6279<br>(2018)  | TAME NoCarb model | 5 years          |
| Millions of tonnes of CO2 emitted by rail per year                      | 0.7659<br>(2018)  | TAME NoCarb model | 5 years          |
| The proportion of vehicle kilometres travelled by battery electric cars | 0.08%<br>(2018)   | TAME NoCarb model | 5 years          |

# Decarbonisation Strategy

February 2021

# Contents

- 3 \_ Chapter 1: Introduction
- 8 \_ Chapter 2: TfN's Decarbonisation Trajectory
- 14 \_ Chapter 3: Estimating current and future emissions
- 32 \_ Chapter 4: Decarbonisation Pathways
- 34 \_ Chapter 5: Policy analysis (in progress)
- 36 \_ Chapter 6: Consideration of embodied carbon
- 40 \_ Chapter 7: Climate change adaptation and resilience
- 48 \_ Chapter 8: Clean growth opportunities (in progress)
- 50 \_ Chapter 9: TfN's priority actions to 2025
- 62 \_ Chapter 10: Internal assurance, monitoring and evaluation



# Introduction

**The science is conclusive - the world is facing a climate emergency.**

In the UK, transport is the largest contributing sector to greenhouse gas emissions, accounting for 22% of all emissions in 2019<sup>1</sup>, of which more than 95% are from road transport. Furthermore, transport emissions have continued to grow since 2013.

Whilst it is possible that 2020 figures will show a drop in emissions due to reduced levels of travel during the COVID-19 lockdown, this is likely to be temporary, with demand for car travel rebounding more quickly than public transport, approaching pre-pandemic levels.

In our Strategic Transport Plan, published in 2019, Transport for the North (TfN) committed to scoping, developing and implementing a 'Pathway to 2050' in line with the then UK law of achieving an 80% reduction in national emissions by 2050 (now superseded by the current UK Government commitment to achieve net zero emissions by 2050). For the surface transport sector, this meant that road transport emissions would need to be near-zero and rail would need to be decarbonised by 2050.

TfN and our partners believe that an acceleration towards a zero-carbon transport network must be at the heart of public policy-making and investment decisions. Our ambition for the North is to travel faster and further than national policy and maximise the clean growth opportunities that decarbonisation can provide for the North. Through this Decarbonisation Strategy, TfN and our partners are committing to a regional near-zero carbon surface transport network by 2045.

The achievement of TfN's vision of a thriving North of England, where world class transport supports sustainable economic growth, excellent quality of life and improved opportunities for all, is contingent on how we can reduce our greenhouse gas emissions across everything that we do, and then, making the right decisions at the right time.

## 22%

Transport sector's contribution to greenhouse gases in 2019

## 95%

of greenhouse gases come from road transport

<sup>1</sup>This relates to surface transport and does not include emissions from aviation and international shipping.

# The Role of TfN

Through its statutory powers, TfN acts as 'one voice' for the North, communicating pan-Northern priorities to the Secretary of State for Transport. We have a clear remit to identify the transport infrastructure required to support transformational economic growth in the North, and to prioritise that investment. This places TfN and partners in a strategic position to identify the transport infrastructure and policy measures that are required to achieve the North's decarbonisation ambitions.

When prioritising transport infrastructure delivery in the region, TfN must make decisions based on a knowledge of how those projects and programmes are likely to support or challenge the region's decarbonisation objectives. This Decarbonisation Strategy provides a tool to robustly consider how our Investment Programme is performing in this respect. It will also provide guidance to support an appropriate sequencing of those investments and the mitigation actions that may be needed to deliver transformational economic growth in line with decarbonisation ambitions.

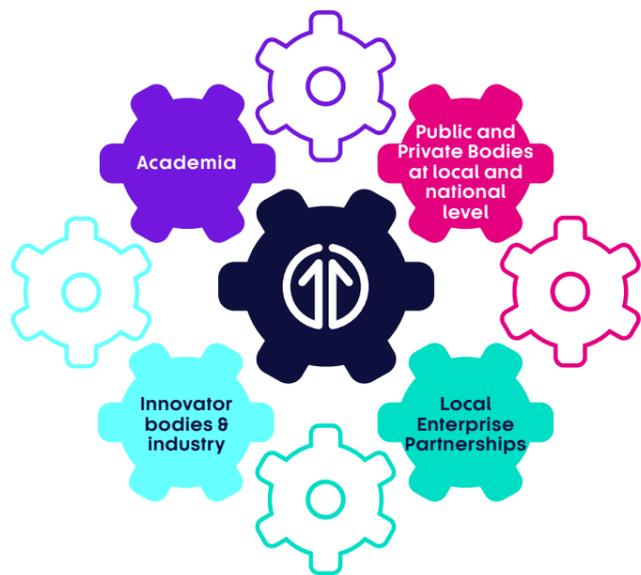
While most of the responsibility for policy implementation lies with national and local government, TfN operates at a geographical and institutional level that allows us to facilitate a regional approach to decarbonisation measures and research, for example, developing a series of pan-regional low-emission vehicle charging network principles. Indeed, a high proportion of the emissions from private road vehicles is generated by longer distance regional-level trips, with our analysis indicating that around 60% of road transport emissions in the North originate from trips on the Major Road Network. This means TfN has both an opportunity and a responsibility to help reduce this significant share of road transport emissions.

TfN is also uniquely placed to assist our partners in the development of place-based solutions by analysing emissions at a more disaggregate level and providing enhanced evidence, data platforms and intelligence to inform bespoke local and regional strategies. This can, in turn, support national policies to take account of spatial and social variation.

At a project level, TfN has a responsibility to ensure that the design and construction of our projects and programmes reduce lifecycle carbon and to encourage partners to adopt similarly ambitious policies.

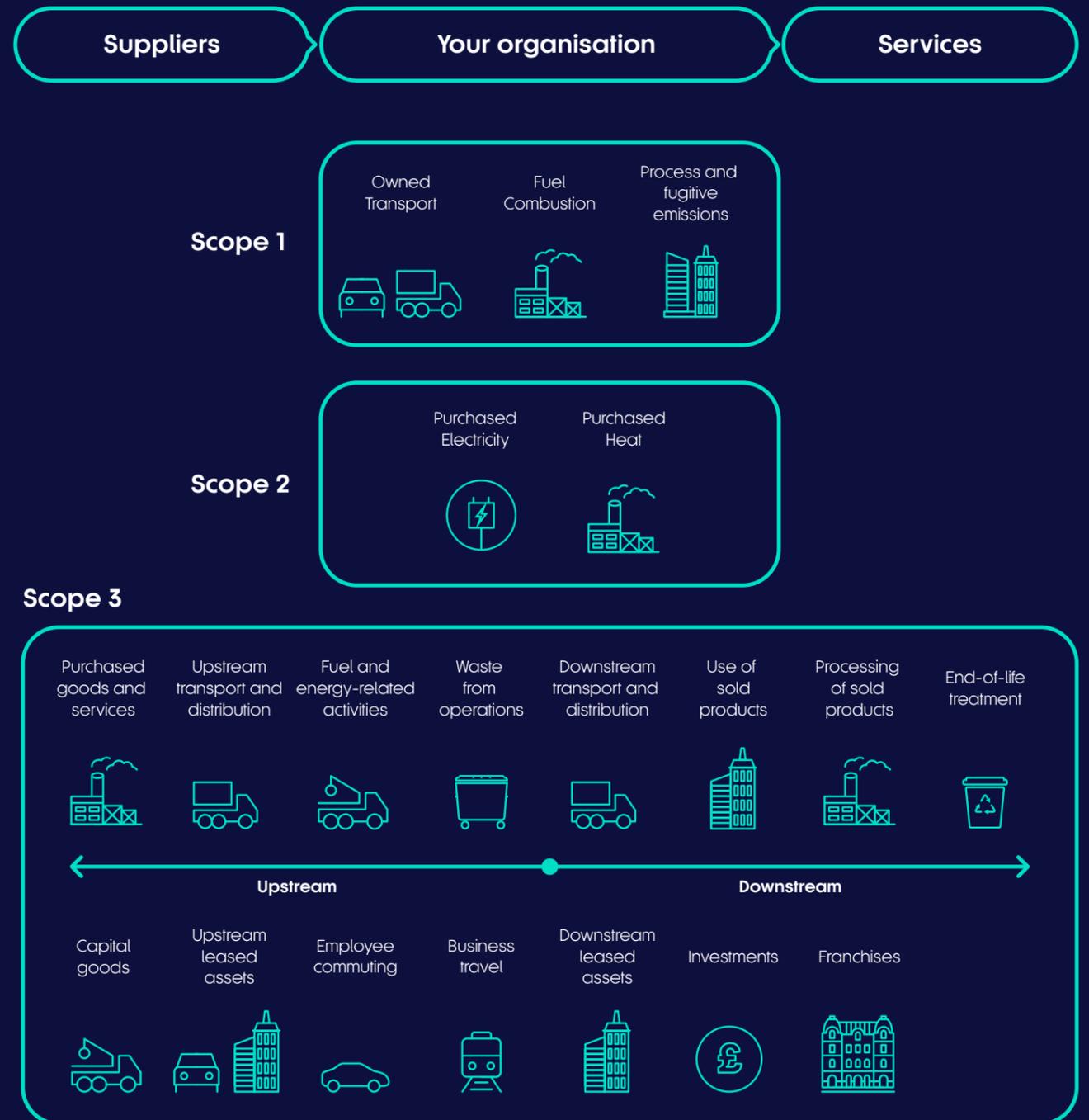
The North is also extremely well placed to support the testing and trialling of many emerging technologies that will be crucial to transport decarbonisation in the UK, including through existing initiatives such as the UK's first Hydrogen Transport Hub in the Tees Valley, Zero Carbon Humber, and HyNet North West. Through partnerships and co-working with Local Authorities, Local Enterprise Partnerships, transport providers and regional academic and industry players, TfN is committed to promoting the North as hub for innovation, research and the testing of emerging technologies.

Finally, TfN needs to lead by example. Whilst the focus of this strategy is upon understanding, measuring and reducing the emissions from surface transport in the North, and the construction and operation of the proposed schemes within our Investment Programme; it is important that we look to reduce the emissions resulting from TfN directly as a result of our everyday business. These are called our 'organisational emissions'.



Page 271

Figure XXX, Carbon Footprinting – Organisational Barriers<sup>2</sup>



<sup>2</sup> Image sourced from Carbon Trust and The Greenhouse Gas Protocol, 'A Corporate Accounting and Reporting Standard, Revised Edition' (2004).

## The Role of TfN

The full range of activities and goods, through which an organisation might generate greenhouse gas emissions, is illustrated in **Figure XXX**. These emissions sources are split into three types – known as Scope 1, 2 and 3. Different emissions sources will be of relevance to different types of organisations, particularly in relation to Scope 3. For TfN, these organisational emissions are likely to include:

- Scope 1 emissions, which are direct emissions resulting from activities that TfN can control, such as the gas used to heat our offices.
- Scope 2 emissions, which are indirect emissions resulting from the generation of any power that we use within our offices.
- Scope 3 emissions, which cover indirect emissions as a result of our operations that are outside of TfN's direct control. This includes things like the emissions from the manufacture and transport of goods we use, like stationery and IT equipment, and also services we purchase, like cleaning and catering. It also includes emissions generated by our employees' commuting and business travel, along with those generated by the disposal of our waste and our water consumption.

TfN is committed, by 2022, to understanding the carbon footprint of its organisational Scope 1 and 2 emissions and agreeing a target date for reducing these emissions to net-zero.

In the same timeframe, TfN will also develop a suitable carbon footprint scope for measuring its organisational Scope 3 emissions. This will reflect data availability, our environmental goals and the sources we can influence.

Emissions generated from the design, construction and operation of schemes within our Investment Programme, along with changes to the emissions generated by surface transport in the North as a result of TfN activity, are the main focus of this strategy document. Our approach to measuring these emissions and our Decarbonisation Trajectory are covered within Chapters 2 to 6.

## Why a Decarbonisation Strategy?

To achieve a near-zero emissions surface transport network in the North by 2045, there must be a clear understanding of the policies and measures required to bridge the gap between future emissions projections and future emissions targets. TfN's Decarbonisation Strategy reflects work undertaken to define four plausible baseline emissions trajectories, based on our Future Travel Scenarios, and to identify and assess the gap between each trajectory and TfN's Decarbonisation Trajectory.

We have also undertaken a policy analysis to understand the policy ambition and suite of policy measures that could fill the policy gap for each scenario. This provides insights into the key, low-regret policy measures required under all scenarios, as well as the areas where TfN and partners are likely to require additional national support to achieve decarbonisation ambitions.

It is hoped that this guidance is of use to our partners and other organisations across our region.

Building upon these findings, this strategy lays out the North's minimum expectations in relation to both local and national decarbonisation policy ambitions. It is intended to provide an overarching framework for our partners and other organisations across the region to meet their decarbonisation responsibilities and ambitions.

The Strategy also recognises the importance of considering embodied carbon and climate change adaptation and resilience, drawing on the experience of our delivery partners, Highways England and Network Rail, in these areas.

Finally, this strategy outlines TfN's key commitments to enabling the decarbonisation of surface transport in the North. Developed through research and engagement with partners, regional research bodies and industry, these relate to activities that would benefit from coordination at the regional level and can be most effectively undertaken by TfN. As part of this analysis, a key consideration for TfN has been how the decarbonisation of transport can support our partners' economic growth ambitions, championing clean growth opportunities across our region. Cross-sectoral co-operation and planning will be essential if the North is to deliver both a decarbonised transport system and capitalise on the possibilities from green industrial revolution, especially with the energy generation and distribution sector.

The timeline for undertaking these activities is outlined within Chapter 9, Priority Actions to 2025.

### This strategy builds upon the four objectives in TfN's Strategic Transport Plan:

- **Transforming economic performance:** We want to understand the full range of clean growth opportunities within the North as a result of transport decarbonisation.
- **Improving inclusivity, health and access to opportunities for all:** The decarbonisation of transport in the North provides an important opportunity for reducing transport-related social exclusion. We want to ensure that decarbonisation measures optimise co-benefits relating to physical health, improved air quality and increasing levels of mobility for all communities and areas in the North.
- **Increasing efficiency, reliability, integration and resilience in the transport system:** We want to integrate decarbonisation measures into existing and future programmes and projects in order to maximise efficiency and reliability gains (such as the electrification of our railway network). We also need to ensure that climate change adaptation and resilience is a key consideration in policy and project development.
- **Promoting and enhancing the built, historic and natural environment:** While environmental conservation is the ultimate driver for decarbonisation, we need to consider the localised impacts of decarbonisation policies and measures. For example, local air quality, reduced noise levels, and the environmental impact of new infrastructure and operations required as part of the decarbonisation agenda (e.g. electrification infrastructure).



# TfN's Decarbonisation Trajectory

## What is TfN's Decarbonisation Trajectory?

Our route to a decarbonised transport system is illustrated by a measurable, evidence based and time-bound carbon emissions reduction curve, which starts with 'where we are now' and travels towards alignment with the objectives of the Paris Agreement, i.e. deep emissions reductions over the coming decades towards a zero-emissions transport system before 2050.

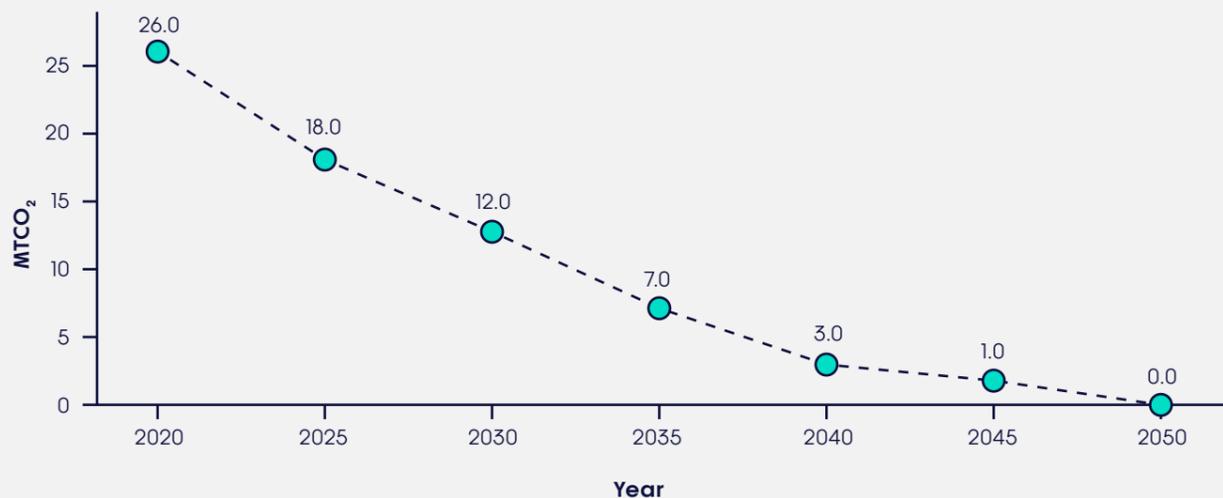
That journey is called our Decarbonisation Trajectory, with the shape of the curve being dictated by a series of interim emissions reduction milestones that ensure a rate of progress aligned to the Climate Change Committee's Carbon Budgets as a minimum.

Our agreed Decarbonisation Trajectory is shown in Fig X, with the headlines being:

- A 55% reduction in emissions from 2018 to 2030, achieved mostly through mode-shift and demand reduction.
- An 90% reduction in emissions from 2018 to 2040, reflecting longer-term decarbonisation measures, such as a high proportion of zero-emissions vehicles in the vehicle fleet.
- A close to zero date of 2045 for carbon emissions from surface transport in the North. This is a challenging benchmark reflecting the ambition of our partners and their desire to push further and faster than current national policy.

The scope of the emissions included within the trajectory is described below.

Figure X: TfN's Decarbonisation Trajectory



Page 273

## Why 2045?

A decarbonisation trajectory set at a regional scale is, by its nature, a compromise between areas that have set different decarbonisation timescales and have different geographies, demographics and patterns of passenger and freight demand.

A number of our partners have set ambitious, economy-wide decarbonisation targets with net-zero dates pre-2040 for their authority areas. The contribution of transport emissions reductions to these economy-wide targets will depend on progress in other sectors and the assumed availability of negative emissions measures, but it is clear that these authorities are aiming for transport emissions close to zero by 2040.

In preparing a Decarbonisation Trajectory, TfN seeks to achieve a compromise by moving faster than current national policy and the Climate Change Committee's advised trajectory, while being mindful of the varying levels of progress that our partners have made in terms of their own climate change responses. In this way, TfN's Decarbonisation Trajectory considers the ambitions of the whole region, but does not override or specify local place-based targets.

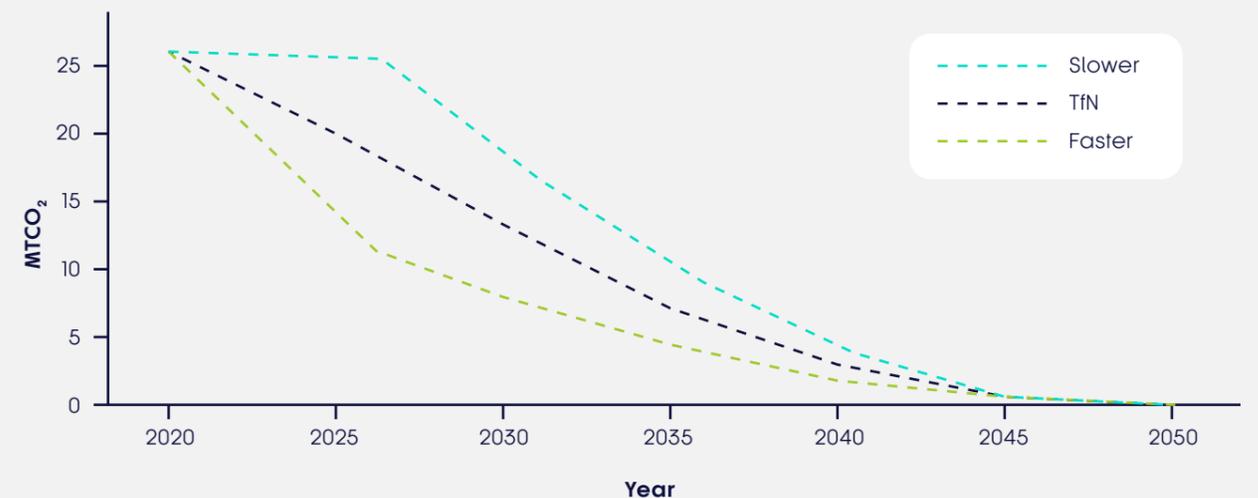
Indeed, the deep emissions reductions achieved by our most ambitious partners over shorter timescales will be needed if the region is to align itself, as a whole, with the level of reductions suggested by TfN's Decarbonisation Trajectory.

The interim points along our trajectory effectively represent an average for the region, with some areas' local transport systems decarbonising more quickly, while some may decarbonise slightly slower. The end point of our Decarbonisation Trajectory means that by 2045, emissions from surface transport in the North will need to be close to zero.

Figure X illustrates how different places within the North may move ahead with different trajectories, helping to achieve an average regional trajectory, but with all places reaching close to zero by the agreed end date.

Aligned to this, the programmes and projects that together make up TfN's Investment Programme should collectively emit close to zero carbon dioxide emissions by 2045. It is also true that many of these projects and programmes may actively help reduce emissions in the short term, for example, rail schemes may lead to a reduction in car vehicle and road freight mileage. This consideration will be important as we look to benchmark ourselves against our trajectory over the coming decades.

Figure X: TfN's Decarbonisation Trajectory reflects an average across local authorities that can decarbonise slightly slower or slightly faster



# What is included in our trajectory and why

TfN's Decarbonisation Trajectory comprises emissions from surface transport sources. This includes cars, vans and Heavy Goods Vehicles (HGVs), as well as bus and rail.

In recognition of TfN's remit, the Decarbonisation Trajectory relates to emissions from vehicle mileage that takes place on the transport network within the North, including through trips (e.g. Scotland to the South of England), as illustrated by the orange roads in **Figure X**.

Other forms of transport with significant emissions profiles include aviation and shipping (both domestic and international), which together accounted for 10% of the UK's total emissions in 2018 (compared to 23% from surface transport sources). Seven percent of this was generated from aviation, of which 93% was from international aviation.

As these modes lie outside of TfN's jurisdiction, emissions from aviation and shipping are not accounted for within TfN's Decarbonisation Trajectory. Nevertheless, we recognise the need for aviation and shipping to be included in national targets and for strong national strategy in this area which aligns the UK aviation strategy with the Paris Agreement.

TfN believes that the emissions from all flights from airports in the North need to be fully aligned with the requirements of the Paris Agreement. This means operating within a defined carbon budget for UK aviation as part of a wider international budget.

Some residual emissions from aviation and shipping are assumed within the current Government target of net-zero emissions, for the whole economy, by 2050. It is important to note that by excluding aviation and shipping from our trajectory, surface transport emissions will need to be zero by 2050.

TfN's Decarbonisation Trajectory, set at a regional level, also recognises the importance of scale when attributing longer distance journeys against decarbonisation budgets of smaller areas of spatial governance. For example, some authorities with relatively small populations may be assigned relatively large emissions because they happen to have a segment of motorway that passes through their boundary, or a large source of traffic, such as a seaport. If through traffic dominates local traffic, the ability of that authority to influence the carbon outcomes are low.

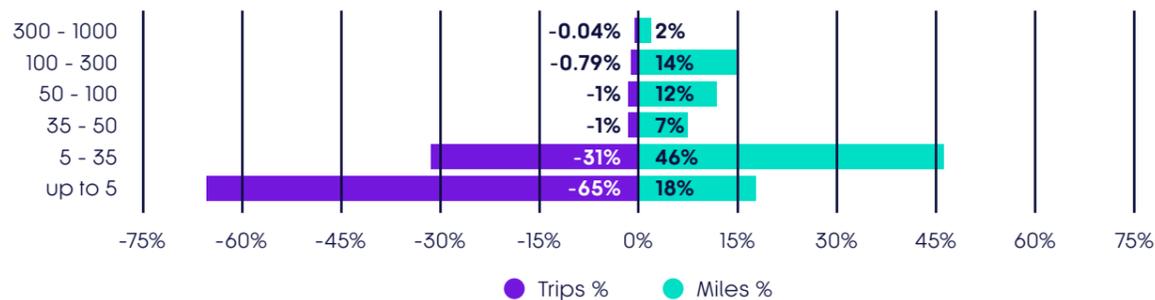
Similarly, a smaller authority may choose to discount emissions from through traffic from their decarbonisation plans, resulting in the responsibility for considering those emissions slipping between the gaps of different areas and levels of spatial governance.

**Figure X**, compiled from National Travel Survey data, demonstrates that although approximately 95% of passenger trips (all modes) occur at a spatial scale that would suit consideration by a district, county or combined authority, these trips only account for about 65% of all miles travelled.

The remaining 35% of total miles travelled occur on journeys over 35 miles in distance, and whilst some of the longest trips would extend even outside of a pan-Northern focus, the majority of trips over 35 miles will be best considered at a pan-Northern level.

Page 274

**Figure X: Percentage of trips (all modes) and percentage of all miles, by trip length<sup>1</sup>**



<sup>1</sup> Source: Addel, M. Wadud, Z. and Anable, J. 'An exploratory analysis of long distance travel in England', 99th Annual Meeting of the Transportation Research Board (TRB), Jan 2020, Washington DC.

**Figure X: Map of the Northern boundary in which TfN operates. The white section represents the areas that TfN covers and the orange roads represent the key roads within this boundary.**



# How we use our trajectory

## Providing guidance

To understand the impact of our Investment Plan in terms of carbon emissions, we need to understand a number of things:

- Where are we likely to be living and working in the future, and what will our travel habits and patterns look like?
- What national and local transport policy is likely to be in place that may affect the carbon emissions of transport?

Once we understand the answers to these two questions, we can work out the approximate carbon emissions from surface transport at a number of set points in the future. These are our future baseline emissions, and when you join these points together, it forms our baseline trajectory.

Of course, the future is not certain, and for that reason TfN has created and modelled a number of Future Travel Scenarios. These scenarios have given us the ability to calculate transport emissions change by scenario and area type - providing four plausible baseline emission trajectories. We will add to these any increase or reduction of emissions stimulated by our projects and programmes within our Investment Programme at any given point. Chapter 3 explains more about the characteristics of each Future Travel Scenario and how they have been used.

If our baseline trajectories, plus any emissions changes as a result of our Investment Programme, exceed our Decarbonisation Trajectory at any point in the future, the gap between the two is known as the Policy Gap. As part of the preparation of this strategy, TfN has modelled the Policy Gap for a number of interim points along the Decarbonisation Trajectory.

This Decarbonisation Strategy sets out how these Policy Gaps may be addressed through two main areas:

- Identification of additional local policy commitment required to achieve the Decarbonisation Trajectory.
- Identification of additional national policy commitment required to achieve the Decarbonisation Trajectory.

The identification of required additional policy commitment is important as it helps TfN and its partners evidence and illustrate the additional support required from national government to achieve our decarbonisation ambitions as a region.

This support could be in the form of additional national policy or Government provision of more devolved funding or powers. Chapter 4 sets out the change in policy commitment that we believe is required to bridge the policy gap found in each Future Travel Scenario, and Chapter 5 identifies and provides qualitative guidance on the measures that are likely to be required to achieve those policy commitments.

## Making the right decisions

At a strategic level, we need to understand how TfN's Investment Programme affects the future projected emissions from surface transport in the North.

The Investment Programme is due to be appraised against a number of environmental, social and economic objectives to arrive at a preferred mix of schemes. Changes to surface transport emissions generated in the North, as a result of these schemes will be modelled so that we understand what local and national decarbonisation policy commitment will be required at different points in the future to allow the schemes to be delivered within the parameters of TfN's Decarbonisation Trajectory. Ultimately, we will be asking the question: 'what needs to be true, if the North is to effectively decarbonise its surface transport as well as enjoy the significant connectivity, economic and environmental benefits that our IP will deliver?'

Recognising that the development of local and national policy is ultimately the responsibility of our partners and national government respectively, and that our actual future travel habits may occur differently from the four plausible Future Travel Scenarios we have modelled, TfN will embed consideration of our Decarbonisation Trajectory within the business case development process for individual projects within our Investment Programme.

This means that when the time comes to start to develop each individual project, over the next 30 years, we shall assess whether the carbon impact of the project is consistent with the Decarbonisation Trajectory, given the prevailing external policy context, travel habits and patterns. Recognising the detailed, and sometimes extended, consenting and design processes that precede the construction of major infrastructure projects, we shall assess the carbon impact of the project at both the concept / early design stage and then again once the detailed design is known, pre-construction.

In relation to the early design stage assessment, where a project may not deliver operational emissions in line with our Decarbonisation Trajectory, TfN will require mitigation measures to be developed as part of the project. Mitigation could take the form of fundamental design changes, influencing national government for further policy support or implementation of further local transport decarbonisation policy measures.

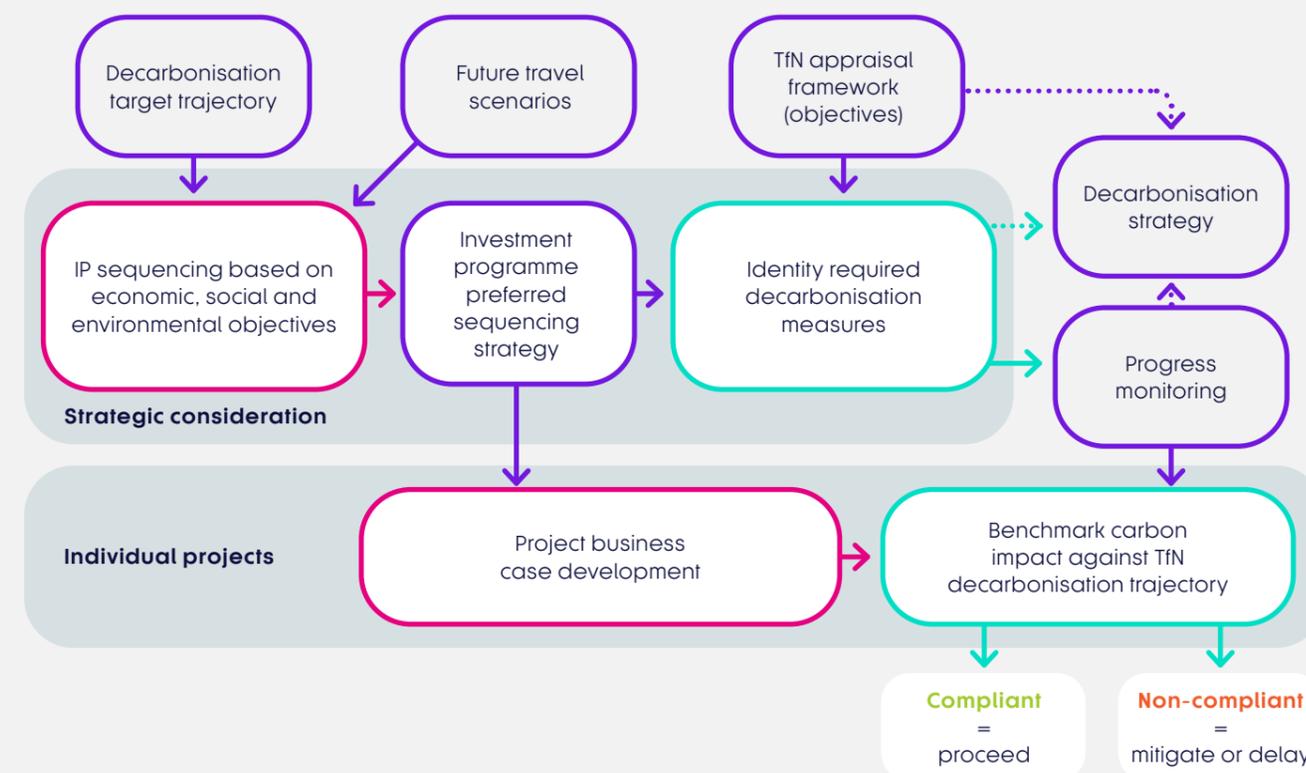
Following detailed design and before the start of construction, we will model the expected changes to surface transport emissions in the North during the expected year of opening to understand the potential success of any mitigation measures employed.

If those changes to emissions are not consistent with our decarbonisation trajectory, we shall consider additional mitigation measures such as investigating further options to provide the same transport outcomes, through to employing carbon sequestration measures such as integrating tree planting into schemes or investigating the feasibility of using innovative carbon 'absorbing' construction materials.

If it is not possible to mitigate the project's impact upon emissions, the delivery of the project may be re-sequenced within the Investment Programme to a date when the future travel context enables the project to operate within the Decarbonisation Trajectory. For example, a particular road project may be re-scheduled to a point when the majority of additional traffic generated is by zero emission vehicles.

Our approach to incorporating the consideration of our Decarbonisation Trajectory within our decision making at both a strategic and project level is illustrated in Figure X.

Figure X: Framework for assessing a project against TfN's Decarbonisation Trajectory



# Estimating current and future emissions

Estimating current and future emissions is key to identifying the policy gap between baseline and decarbonisation trajectories. TfN's Northern Carbon Modelling Tool, NoCarb, was developed for this purpose, taking in historic demand, fleet and emissions data as well as those associated with TfN's Future Travel Scenarios.

This chapter outlines the context and rationale behind TfN's Future Travel Scenarios, and how they have been used through our Decarbonisation Pathway work as a tool for exploring plausible futures for which emissions can be estimated. As the starting point for all four Future Travel Scenarios, the chapter goes on to outline baseline emissions estimates for 2018, before presenting the unique emissions trajectory of each Future Travel Scenario.



## Future Travel Scenarios

TfN's Future Travel Scenarios explore how trends in society, the economy and national policy could influence the level and distribution of travel demand in the future. By using a series of different Future Travel Scenarios, we aim to future-proof our decision-making as much as possible, making it resilient to wide-ranging and cross-sector uncertainties.

The Future Travel Scenarios represent factors<sup>1</sup> that are external to TfN's direct control, acting as 'reference cases' to test the performance of TfN strategies and policies against objectives. They form the starting point for TfN's Decarbonisation Pathways.

In each scenario, the level of national government ambition and support for decarbonisation in the North is different, as is the level and distribution of travel demand<sup>2</sup>.

Assessing the decarbonisation 'policy gap' - that is, the gap between each Future Travel Scenario's emissions trajectory and the decarbonisation trajectory - will allow TfN to develop a resilient Decarbonisation Strategy that can adapt to different future circumstances. The policies and measures that are likely to bridge this policy gap are captured in TfN's Decarbonisation Pathway, which address the different levels of additional action required under each of TfN's four Future Travel Scenarios, recognising that the same action applied in different scenarios will result in different levels of efficacy in terms of the emissions reductions required.

The Future Travel Scenarios were developed in partnership with Local Authority partners, national delivery partners and academic experts and informed by local strategies and priorities. The scenarios represent uncertainty across the following five external factors:

1. Growth in the population and economy;
2. Spatial planning policy and economic distribution;
3. National policy on environment and sustainability;
4. Technological change and advancement; and
5. Social and behavioural change.

The key elements of the scenarios can be summarised using the following set of 'what if' questions:

- **Scenario 1: Just About Managing** - What if society keeps developing broadly following existing trends? What if there is a gradual shift in lifestyles and travel, public and political behaviours do not alter, and we don't give up certain 'luxuries', leaving major developments and change to be shaped by market forces.
- **Scenario 2: Prioritised Places** - What if society becomes focused on quality of life, place-making and community, rather than primarily economic growth? This scenario is led by a change in priorities, with its biggest driver being the push for a fairer redistribution of economic prosperity.
- **Scenario 3: Digitally Distributed** - What if Northern Powerhouse ambitions<sup>3</sup> are realised by using technology solutions to create connections and agglomeration across towns and cities? This scenario is led by technology and some policy influence, as we fully embrace technological change, work remotely, and use an accessible service-based transport system with connected and autonomous shared mobility options.
- **Scenario 4: Urban Zero Carbon** - What if society achieves Northern Powerhouse ambitions by using policy interventions to maximise energy efficient city growth and urban densification? This scenario is led by public and political attitudes to climate action and urban place-making, with the biggest drivers being strong government policy, resulting in fast action on zero-emission transport systems and places, with integrated planning across energy, spatial and other sectors.

TfN's Future Travel Scenarios Report provides a comprehensive overview of the process undertaken to develop the new Future Travel Scenarios. It also delves into the contextual factors underlying each scenario and the expected implications on transport.

<sup>1</sup> A list of travel-related development, policies and measures under each Future Travel Scenario can be found in the Future Transport Measures and Solutions Annex.

<sup>2</sup> Key national policy changes up to December 2020 are reflected within the scenarios.

<sup>3</sup> As set out in the [Northern Powerhouse Independent Economic Review](#).

# Modelling carbon emissions in the North

Over the past two years, TfN's Technical Assurance, Modelling and Economics (TAME) team has been developing and refining the Analytical Framework; a consistent set of data, modelling tools and appraisal approaches designed for TfN's programmes of transport strategy and business case development. TfN's NoCarb model forms part of the Analytical Framework and draws on other framework elements and data sources to estimate future vehicle emissions. These inputs relate to:

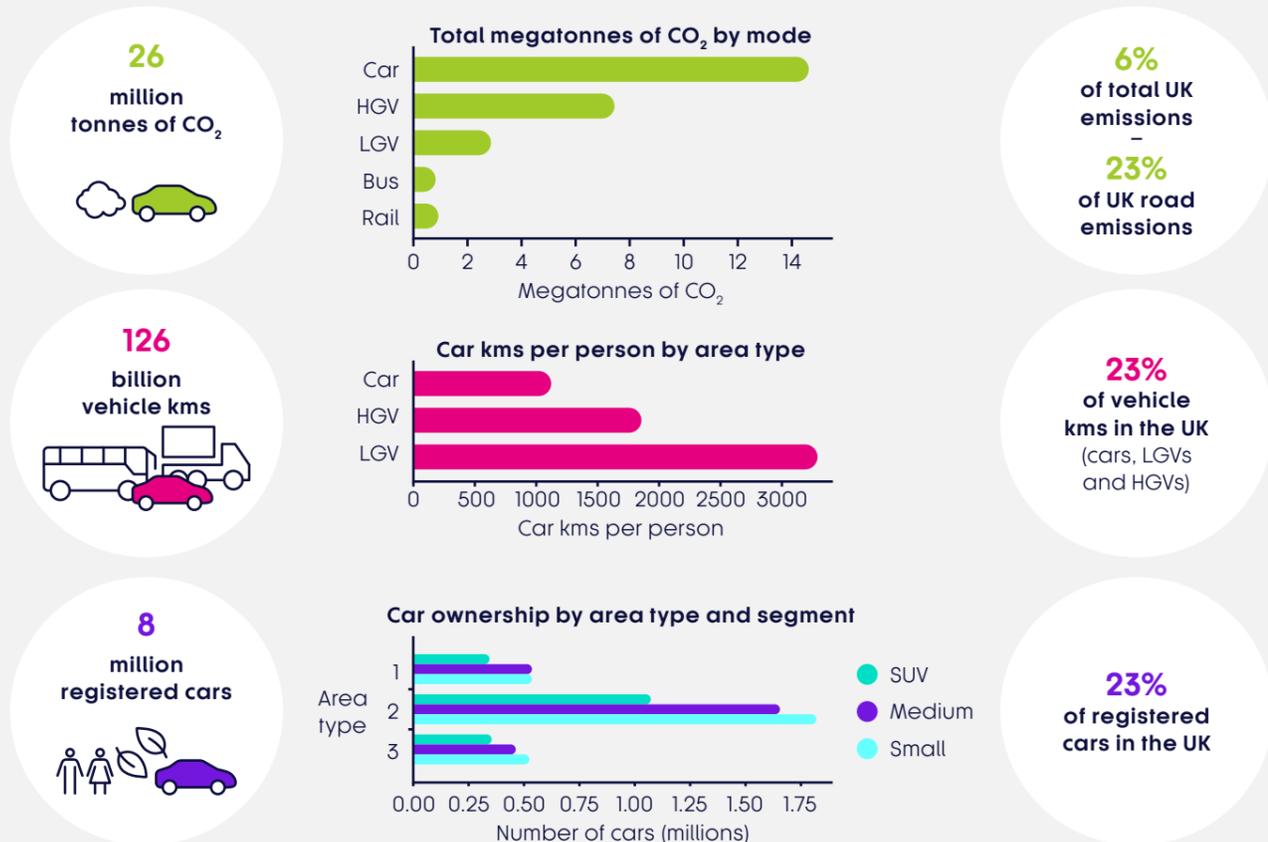
1. The composition of the vehicle fleet by size and fuel type;
2. The distribution of travel demand;
3. Emissions per kilometre travelled for each distinct type of vehicle.

Using these inputs, NoCarb carries out two core functions:

1. Projecting the make-up of future fleets using sales scenarios; and
2. Calculating emissions using fleet, emissions and demand inputs.

The first step involves projecting the make-up of the vehicle fleet under each of TfN's Future Travel Scenarios, while the second step estimates emissions based on the composition of the fleet and distance travelled in a given year. Estimates of kilometres travelled by each vehicle type under each of the Future Travel Scenarios were produced using TfN's travel demand modelling tools. Further information on NoCarb and these travel demand modelling tools is provided in [Annex X](#).

Figure X: Headline figures related to surface transport emissions in the North in 2018.



# Baseline emissions in the North

Figure X provides headline figures related to baseline surface transport emissions in the North. At 26 mega-tonnes of CO<sub>2</sub>, surface transport emissions in the North represent nearly one quarter of UK road emissions and 6% of total UK emissions. Over half of those emissions were generated by cars, with HGVs and vans producing 28% and 11% of surface transport emissions respectively. Bus and rail, on the other hand, represent just 5% of emissions.

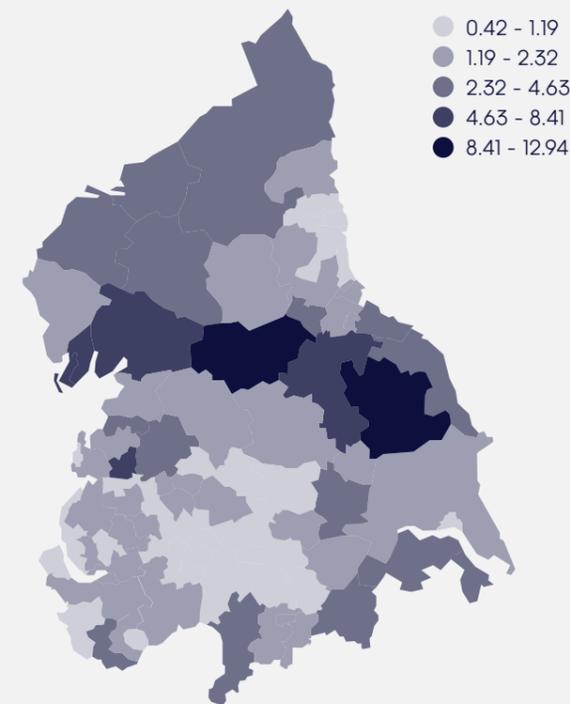
A total of 126 billion kilometres were travelled in the North in 2018, representing 23% of vehicle kilometres travelled in the UK. The majority of the North's travel was through sub-urban areas, though distance per head was much higher for those in rural areas.

The North had 8 million registered cars in 2018. Large and SUV cars, which typically have higher emissions intensity, made up nearly one quarter of those cars. This reflects a national trend over the last two decades, which has seen a gradual increase in the purchase of larger cars.

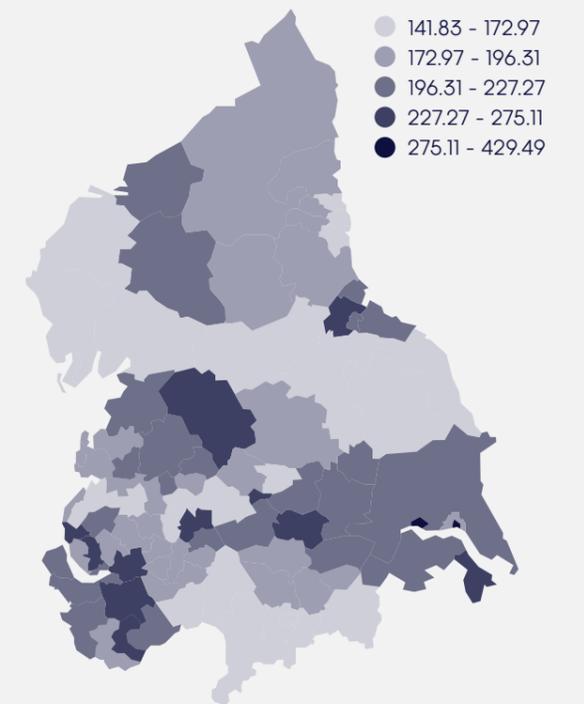
Urban areas typically showed lower CO<sub>2</sub> intensity and emissions per head of population than rural areas. However, there was some variation within area types, with coastal areas having slightly more fuel-efficient cars.

The next two sections show how emissions vary by travel type and traveller type in the North of England at a regional level. We have used disaggregate trip data from the National Travel Survey to carry out this illustrative analysis, as some of the parameters are not currently included within NoCarb.

CO<sub>2</sub> Emissions (tonnes) per head of population



Emissions Intensity (gCO<sub>2</sub>/km)



# Emissions by trip purpose and distance

The majority of car emissions in the North related to discretionary travel, with 67% generated by 'other' travel, 24% by commuting and the remaining 9% by business travel.

Through an increase in remote working and social distancing measures, the pandemic has demonstrated the potential for car emissions to be reduced across trip purposes. In the short-term, as we wait for a greater proportion of the vehicle fleet to be replaced by zero-emissions vehicles, reducing car travel will play a vital role in meeting decarbonisation targets.

Three-quarters of car trips in the North were under 5 kilometres, and just under 90% under 10 kilometres. Given their short distance, a notable proportion of these trips could be switched to walking, cycling, e-bikes, or public transport. Medium and long-distance trips, on the other hand, made up the majority of car emissions, with trips over 10 kilometres generating 54% of car emissions. Trips over 50 kilometres, while only representing 1% of car trips, were responsible for 14% of emissions. The difficulty of shifting these trips to cleaner modes demonstrates the importance of decarbonising the vehicle fleet in order to meet decarbonisation targets in the medium and long-term.

Figure X: Percentage of car emissions in the North in 2017 by trip purpose

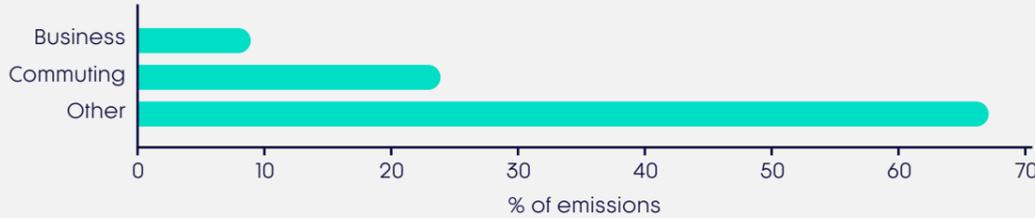


Figure X: Percentage of car trips by distance

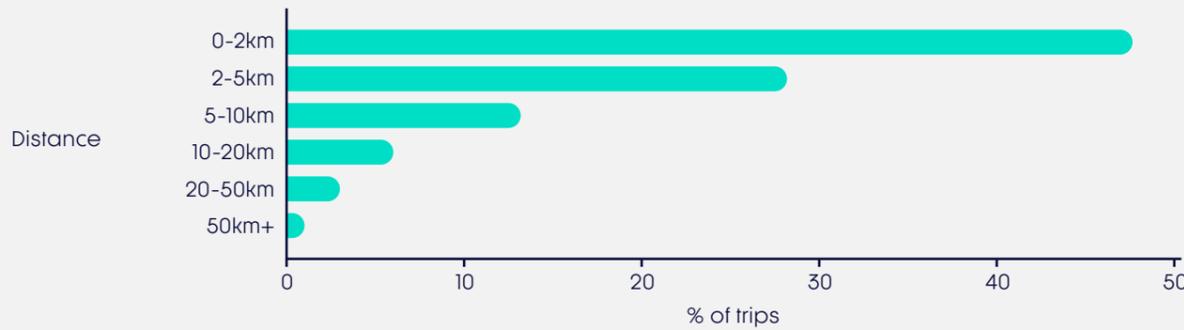
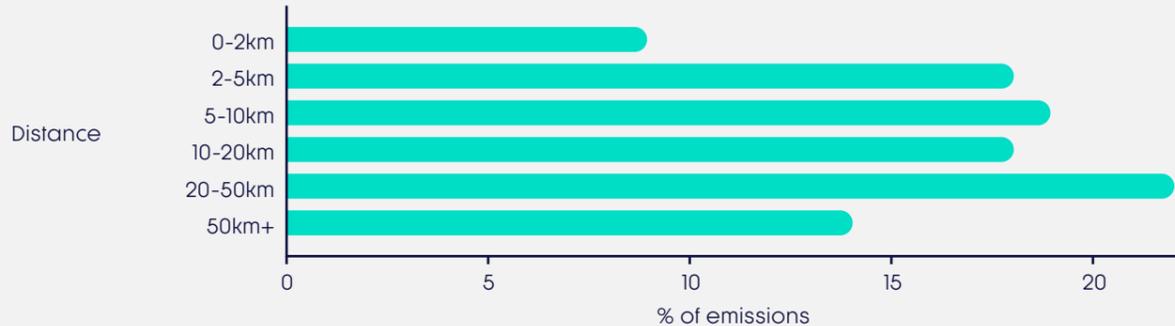


Figure X: Percentage of car emissions by distance



# Distributional impacts

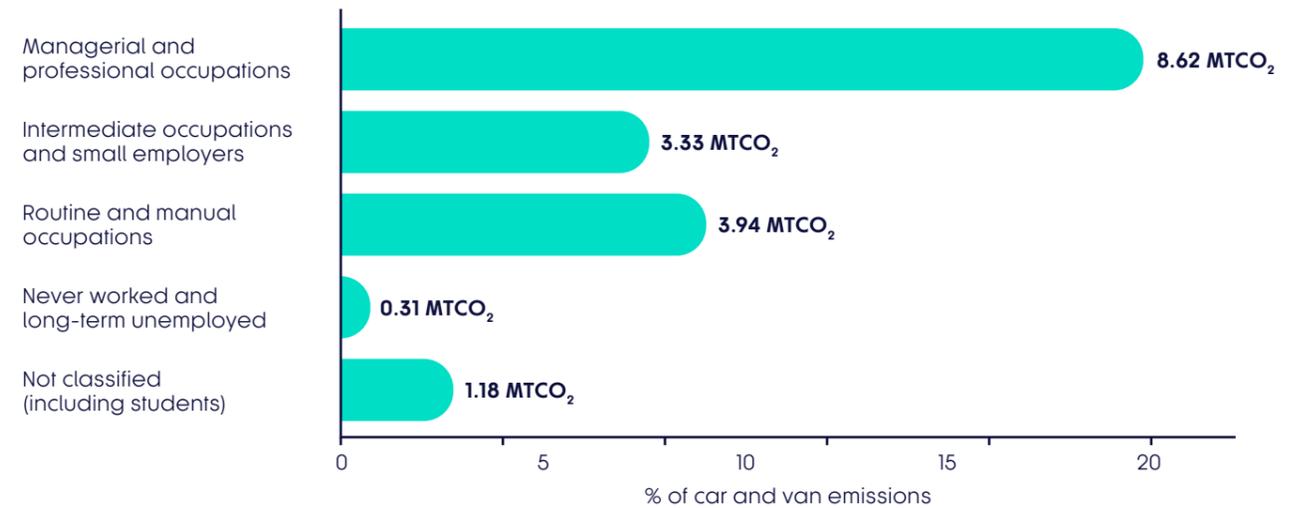
## Distribution of emissions by employment group<sup>4</sup>

Different sections of the community produce varying rates of emissions. Our analysis<sup>5</sup> suggests that around half of car and van emissions in the North are generated by individuals in managerial and professional occupations, as opposed to less than 2% by non-working individuals (Figure X). Individuals in managerial and professional occupations are also responsible for the majority of rail emissions, making up over 60% of the total distance travelled by rail.

These figures align with evidence that lower income groups are more likely to use buses than those on higher incomes, as the cost of bus travel is lower than trains and cars.<sup>6</sup> This highlights that, to effectively reduce surface transport emissions, proportionately greater focus will be needed on transport decarbonisation measures that are likely to affect higher-income groups.

With the lowest total emissions of all modes, bus travel sees a more balanced distribution across income groups. Just under 40% of bus emissions are produced by individuals working in routine and manual occupations, while those who are long-term unemployed and unclassified take up a notably larger share compared to cars, vans and rail.

Figure X: Percentage of car and van emissions by employment group



<sup>4</sup> These employment groups relate to the Office for National Statistics' [Socio-economic classifications \(NS-SEC\)](#).  
<sup>5</sup> This analysis was derived from the National Travel Survey 2017, filtered to only include trips that took place in the North. The share of emissions was assumed to be equivalent to the share of car, van and taxi kilometres travelled by each group. For the purpose of this analysis, it was not possible to isolate unique trips, so there may be some instances where trips were counted more than once (i.e. where people from the same household travelled together). Looking exclusively at trips undertaken by car/van drivers (or taxi passengers over 16 years old), the trends explained in this section are even more extreme. For example, the share of emissions increases from 50% to 54% for individuals in managerial and professional occupations and increases from 52% to 60% for men. The share of car and van emissions does not reflect the type and age of vehicles, meaning that newer, lower-emitting cars may slightly offset some of the emissions by higher-income groups.  
<sup>6</sup> [Gates, Shvonne et al. Transport and inequality. An evidence review for the Department for Transport. NatCen Social Research, 2019.](#)

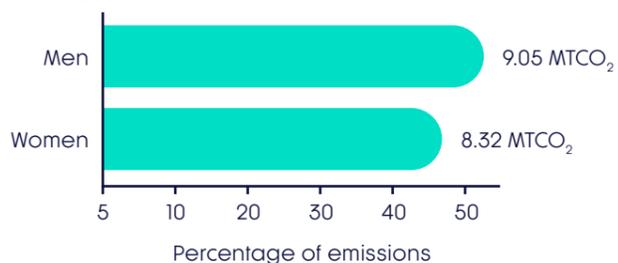
# Distributional impacts

## Distribution of emissions by gender

Responsible for 52% of car travel in the North, men produce slightly higher emissions than women (Figure X). This is equivalent to the gender split of drivers, with 48% of trips recorded as having a woman as the main driver. Trips taken by men also have slightly lower car occupancies, with an average of 1.93 people in a car or van compared to 2 for women.

Men represent just over half of rail emissions, making up 55% of rail travel in the North. The opposite is true for bus travel, with 55% of emissions produced by women.

Figure X: Percentage of emissions by gender



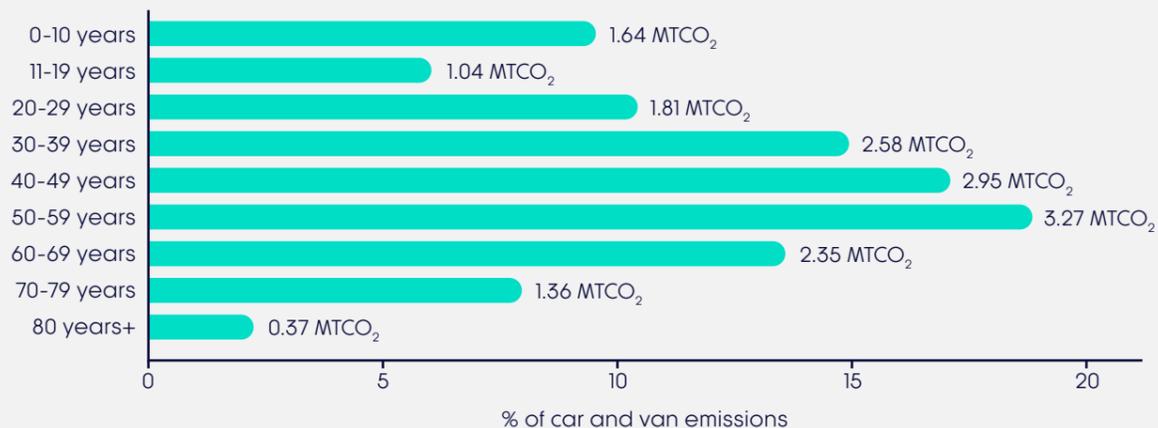
## Distribution of emissions by age

Over 50% of car and van emissions, and 60% of rail emissions, were produced by people aged 30-60 years old. Covering most of the working age population, this likely reflects more commuting, business and escort<sup>7</sup> trips.

Bus travel is weighted more towards groups outside of the typical working age. 11-19 year-olds represent the highest share of bus emissions at 22%, and 60-69 and 70-79 year-olds together represent 29% of bus emissions.

50-60 year-olds have the highest share of car and van emissions out of all age groups (19%), while 40-49 year-olds produce the highest share of rail emissions (23%).

Figure X: Percentage of car and van emissions by age group



<sup>7</sup>Such as driving children to school or other activities.

## What this means for decarbonisation

While this section provides a high-level overview of how emissions can vary across groups, it is not an exhaustive list; nor does it capture the complex relationships between income, gender, age, disability, location (to name a few) and carbon consumption. For example, research suggests that low-income individuals in rural areas experience the worst effects of transport poverty, with high transport costs and low public transport access.<sup>8</sup>

Nevertheless, emissions intensity and emissions per head is often higher in rural areas compared to urban and sub-urban areas. This means that these individuals could be disproportionately disadvantaged by targeted decarbonisation measures, such as road-user charging.

Considering the impact of decarbonisation methods on different groups is critical to ensuring that the gap between disadvantaged and privileged groups is narrowed rather than widened. This is discussed further in Chapter 5.



<sup>8</sup>Gates, Shivonne et al.

Future emissions estimates

# Scenario 1: Just About Managing

Under Just About Managing, economic growth continues at a moderate rate and is largely market-driven, consumption-led and unequal (both geographically and socially). While there is global climate change awareness, as people become more conscious of regular disasters, the policies introduced under this scenario are not radical enough to meet the UK carbon budgets and the net zero target of 2050.

The main consequence of this scenario is that highway networks become increasingly congested, and public transport levels remain similar to today. This is also reflected at the global scale, meaning that extreme weather events become more common in the UK, leading to frequent disruption to transport networks.

| Mode                    | Demand growth 2018-2050 | CO <sub>2</sub> emissions in 2030 (mega-tonnes) | CO <sub>2</sub> emissions in 2050 (mega-tonnes) |
|-------------------------|-------------------------|---|---|
| Rail                    | 83%                     | 0.6   | 0.4   |
| Bus and shared mobility | -3%                     | 0.3   | 0.0   |
| Car                     | 28%                     | 10.8  | 0.0   |
| Van                     | 47%                     | 1.7   | 0.0   |
| HGV                     | 6%                      | 8.0   | 7.0   |
| Active travel           | 4%                      | 0.0   | 0.0   |

What if society continues to develop in line with existing trends?

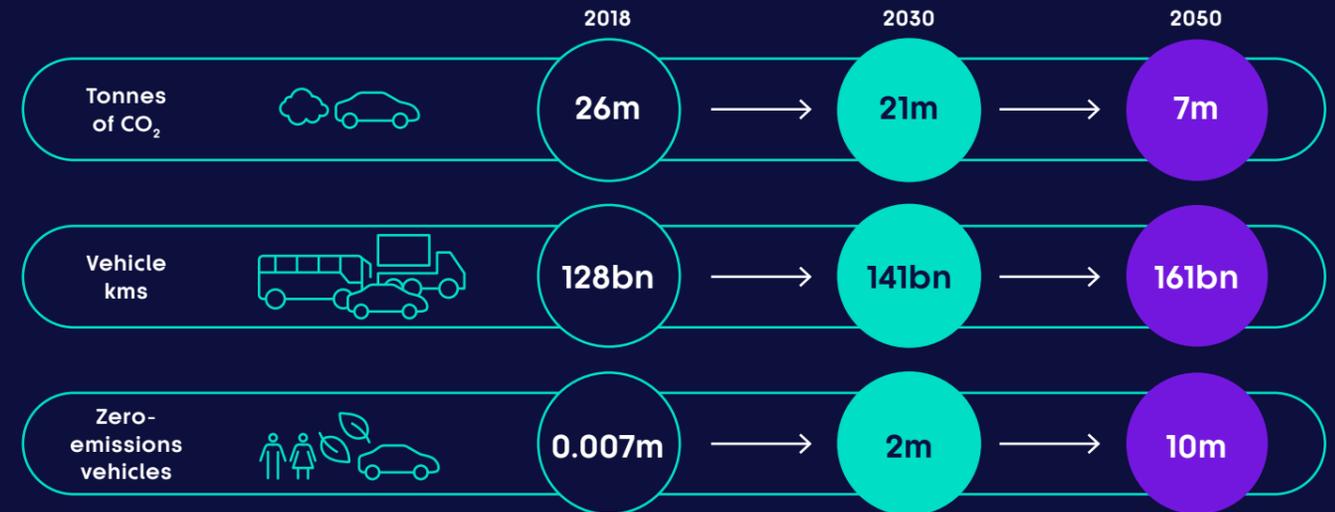
- Existing trend of urbanisation and growth distribution continues. Little change in demographics and from travel behaviour seen today.
- No transformation in level of economic growth. Reactive political direction results in a rigid economy, lacking agility and vulnerable to economic shocks.
- Net Zero 2050 target not met – climate change and travel disruption becomes more extreme.
- Technology uptake driven by existing policy; Electric Vehicle (EV) uptake at slowest rate of all four scenarios and some autonomy. Continuation of shared transit and public transport use as seen pre-2020.
- Continued trends of active travel, with increases experienced during 2020, although any further step-change increase would require a continued and committed impetus.
- Moderate growth in remote working. Continuation of freight transportation as seen today.

| Area type | Population in 2050 (millions) | Vehicle kilometres in 2050 (billions) | CO <sub>2</sub> emissions in 2050 (mega-tonnes) |
|-----------|-------------------------------|---------------------------------------|---|
| Urban     | 3.9                           | 21.9                                  | 0.8   |
| Sub-urban | 9.8                           | 90.0                                  | 4.8   |
| Rural     | 2.3                           | 49.0                                  | 1.5   |

Increases in car and van demand are largely offset by a growing share of zero-emissions vehicles. However, due to the higher costs associated with zero-emissions HGVs, most continue to be run on diesel. This makes up almost all residual emissions in 2050, which stand at just under 25% of 2018 levels.

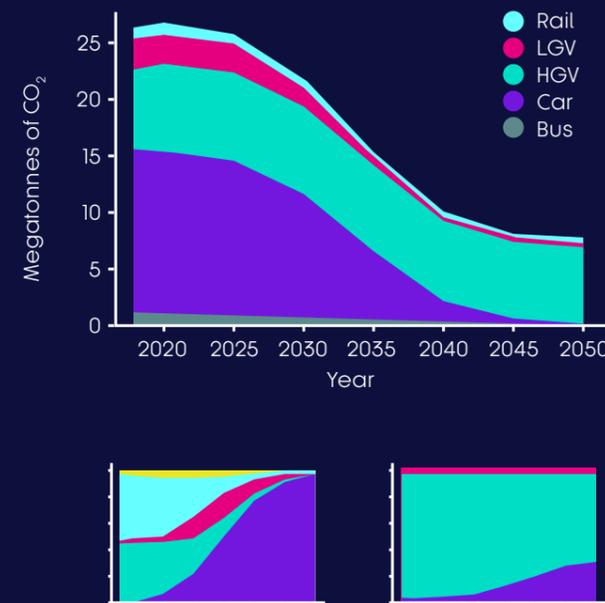
| Vehicle type | Fuel type | Share |
|--------------|-----------|-------|
| Car          | BEV       | 99%   |
| Car          | PHEV      | 1%    |
| Van          | BEV       | 98%   |
| Van          | PHEV      | 2%    |
| HGV          | BEV       | 27%   |
| HGV          | Diesel    | 73%   |

Page 280



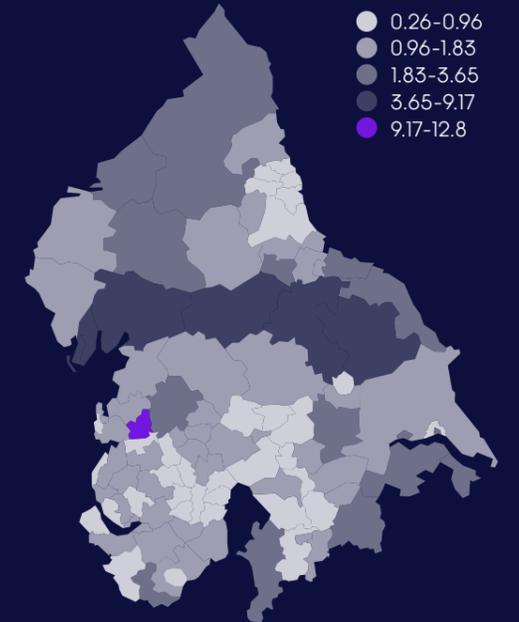
Mode and fuel breakdown

Total megatonnes of CO<sub>2</sub> by mode

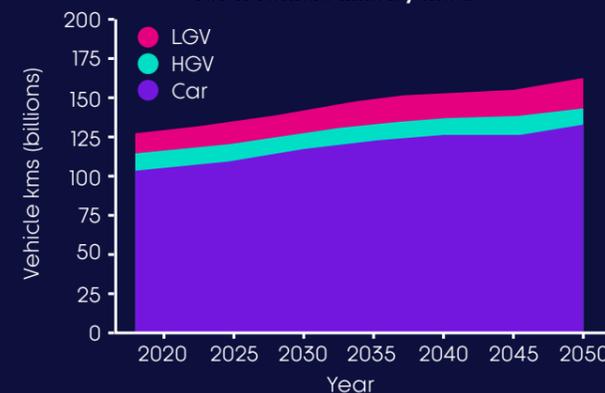


Area breakdown

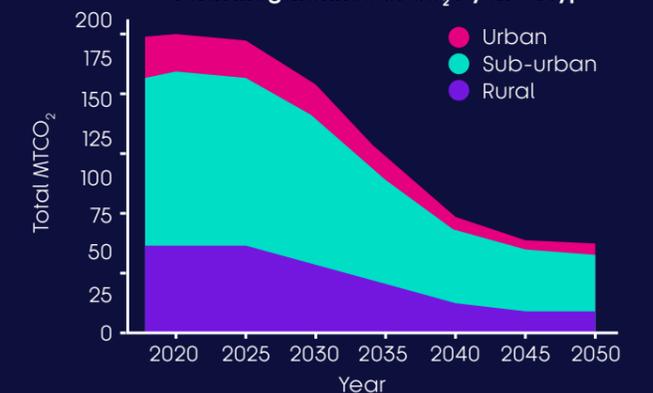
CO<sub>2</sub> emissions (tonnes) per head of population: 2030



Total vehicle kms by mode



Total megatonnes of CO<sub>2</sub> by area type



Future emissions estimates

# Scenario 2: Prioritised Places

Prioritised Places sees a focus on work-life balance and social equity within and between places. This involves a shift in the UK's political and economic direction to ensure that no place is left behind. Every area, including cities, towns and rural and coastal areas, has a bespoke local economic strategy, supported by investment in local assets and economic and social infrastructure.

This scenario is led by a change in priorities, with the biggest driver being the push for a fairer redistribution of economic prosperity. Although an emphasis on localising activity and use of public transport helps to reduce emissions at a more rapid rate, a failure to sufficiently embrace technology sees continued private mobility ownership and a struggle to realise a fully zero-emission transport network before 2050.

| Mode                    | Demand growth 2018-2050 | CO <sub>2</sub> emissions in 2030 (mega-tonnes) | CO <sub>2</sub> emissions in 2050 (mega-tonnes) |
|-------------------------|-------------------------|---|---|
| Rail                    | 122%                    | 0.6   | 0.4   |
| Bus and shared mobility | 19%                     | 0.3   | 0.0   |
| Car                     | 28%                     | 10.0  | 0.0   |
| Van                     | 47%                     | 1.6   | 0.0   |
| HGV                     | 1%                      | 7.6   | 6.7   |
| Active travel           | 13%                     | 0.0   | 0.0   |

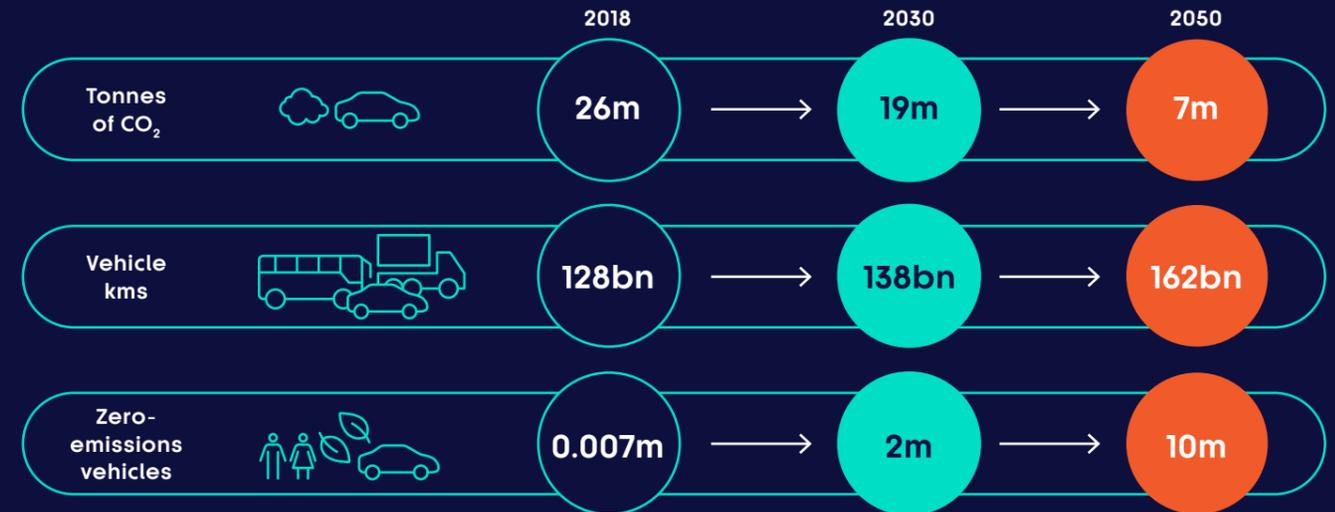
**What if society becomes more focused on place, place-making and community than growth or connectivity?**

- Bespoke local strategies, focusing on quality of life, place-making and community, rather than primarily economic growth. Slower growth in cities, more in towns and rural/coastal areas.
- No transformation in level of economic growth, but society is more equitable and there is a fairer distribution of prosperity across the region.
- Moderate growth in electric vehicles and some autonomy, especially in cities. Realisation of benefits for vulnerable groups, people with disabilities and extending Autonomous Vehicle (AV) networks to more isolated areas.
- Continued private mobility ownership sees a struggle to realise a zero-emission transport network.
- More active and public transport within communities. People value face-to-face interaction.
- Focus on work-life balance and social equity within and between places.

| Area type | Population in 2050 (millions) | Vehicle kilometres in 2050 (billions) | CO <sub>2</sub> emissions in 2050 (mega-tonnes) |
|-----------|-------------------------------|---------------------------------------|---|
| Urban     | 3.8                           | 20.7                                  | 0.7   |
| Sub-urban | 9.6                           | 87.8                                  | 4.5   |
| Rural     | 2.7                           | 53.4                                  | 1.4   |

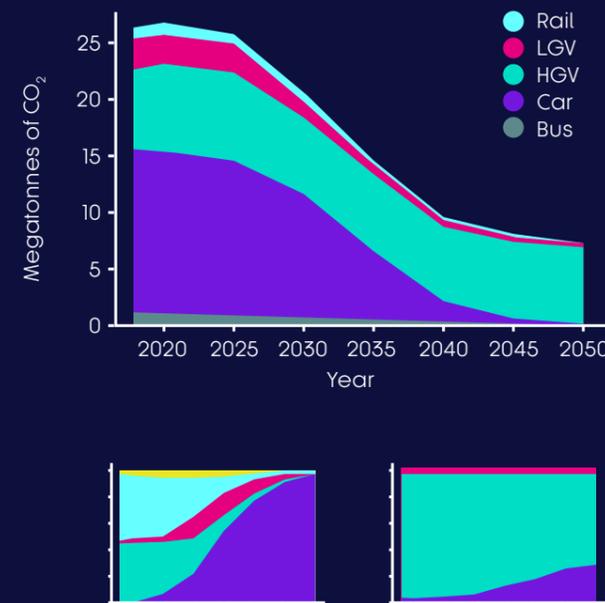
Similar to Just About Managing, increases in car and van demand are largely offset by a growing share of zero-emissions vehicles. Most HGVs also continue to run on diesel, though only a marginal increase in demand means that the emissions are slightly lower.

| Vehicle type | Fuel type | Share |
|--------------|-----------|-------|
| Car          | BEV       | 99%   |
| Car          | PHEV      | 1%    |
| Van          | BEV       | 99%   |
| Van          | PHEV      | 1%    |
| HGV          | BEV       | 27%   |
| HGV          | Diesel    | 73%   |



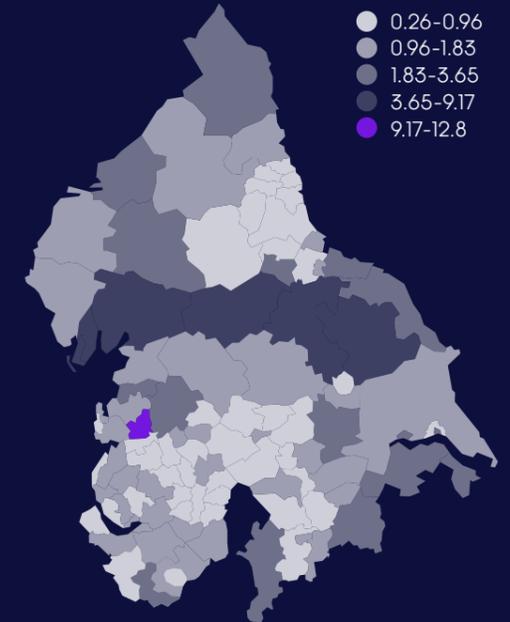
Mode and fuel breakdown

Total megatonnes of CO<sub>2</sub> by mode



Area breakdown

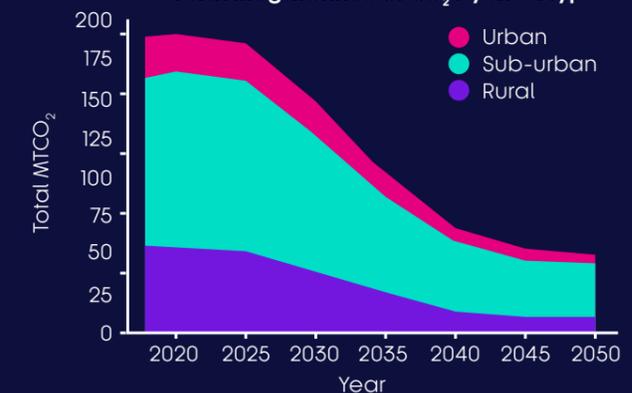
CO<sub>2</sub> emissions (tonnes) per head of population: 2030



Total vehicle kms by mode



Total megatonnes of CO<sub>2</sub> by area type



Future emissions estimates

# Scenario 3: Digitally Distributed

This scenario sees a future where digital and technological advances accelerate, transforming how we work, travel and live. In general, we embrace these technological changes and the move towards a distributed, service-based transport system, with the biggest drivers being technical

advances and a willingness to embrace mobility-as-a-service and shared mobility. Long-term climate change targets are met, but there is slow progress in the short-term due to a general preference for individualised mobility over traditional public transport.

| Mode                    | Demand growth 2018-2050 | CO <sub>2</sub> emissions in 2030 (mega-tonnes) | CO <sub>2</sub> emissions in 2050 (mega-tonnes) |
|-------------------------|-------------------------|---|---|
| Rail                    | 78%                     | 0.6   | 0.0   |
| Bus and shared mobility | 11%                     | 0.3   | 0.0   |
| Car                     | 44%                     | 9.6   | 0.0   |
| Van                     | 74%                     | 1.6   | 0.0   |
| HGV                     | 4%                      | 7.9   | 1.2   |
| Active travel           | 6%                      | 0.0   | 0.0   |

Page 282

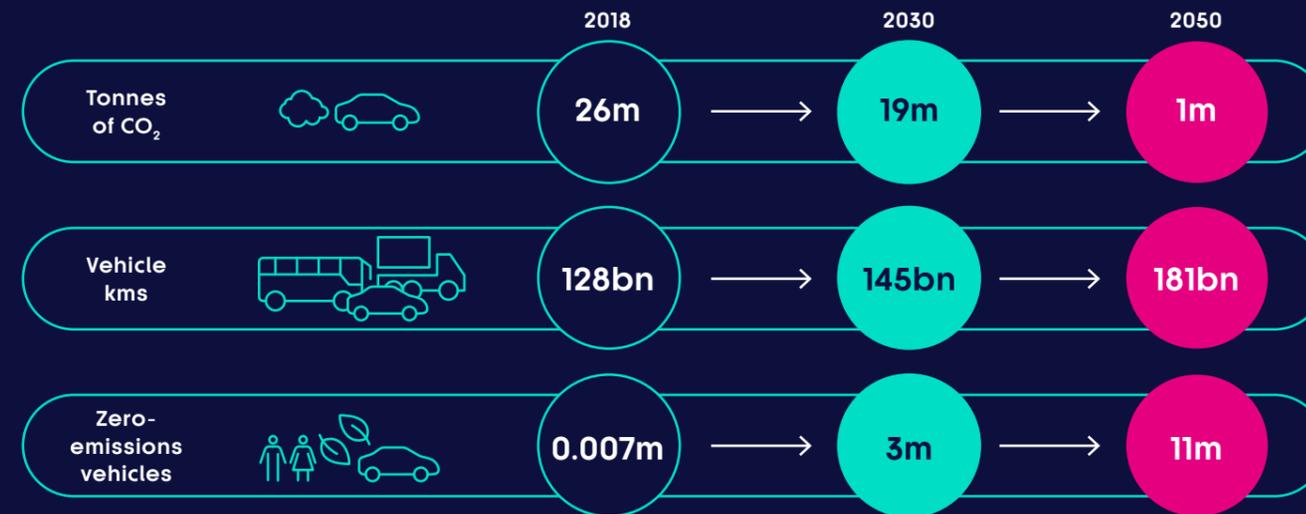
### What if society achieves Northern Powerhouse Independent Economic Review (NPIER) outcomes by using technological solutions to create connection and agglomeration across towns and cities?

- Growth dispersed between cities and towns and less city-centric.
- High uptake of EV, Ultra Low Emissions Vehicles (ULEVs), Zero Emissions Vehicles (ZEVs) and driverless vehicles means zero emissions before 2050 (but slow progress in short-term). Some fiscal and regulatory action to influence technology use, but congestion persists in places due to availability of transport options. Increased digital remote working and dispersed employment means trip lengths are longer but less often.
- General willingness to embrace Mobility-as-a-Service (MaaS) and shared mobility - through technology acceptance which supports increased efficiency and use of road capacity.
- Freight warehousing, distribution and logistics centres are distributed.
- Transformational economic growth as towns and cities see polycentric agglomeration and become more interdependent, due to better skills-matching within geographical areas.

| Area type | Population in 2050 (millions) | Vehicle kilometres in 2050 (billions) | CO <sub>2</sub> emissions in 2050 (mega-tonnes) |
|-----------|-------------------------------|---------------------------------------|---|
| Urban     | 4.0                           | 24.4                                  | 0.1   |
| Sub-urban | 10.6                          | 101.4                                 | 0.8   |
| Rural     | 2.6                           | 54.9                                  | 0.3   |

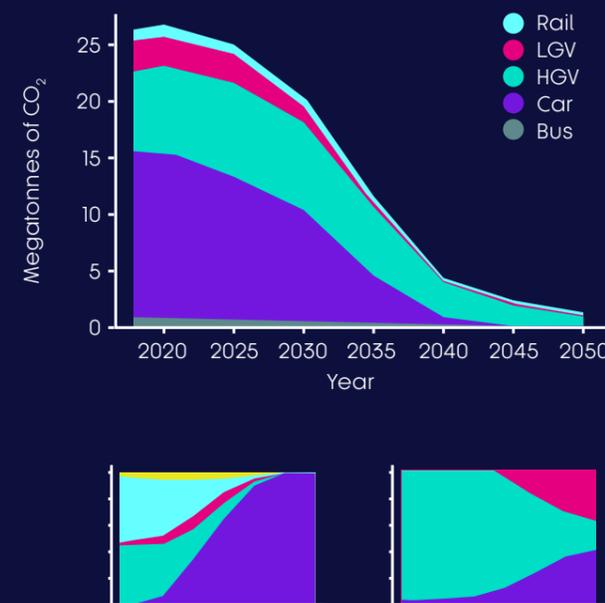
With just under 1 MTCO<sub>2</sub> of residual emissions in 2050, this scenario sees the benefits of decarbonising HGVs earlier, with over 85% running on hydrogen or battery electric fuel cells.

| Vehicle type | Fuel type | Share |
|--------------|-----------|-------|
| Car          | BEV       | 99%   |
| Car          | PHEV      | 1%    |
| Van          | BEV       | 99%   |
| Van          | PHEV      | 1%    |
| HGV          | BEV       | 27%   |
| HGV          | Diesel    | 73%   |
| HGV          | Hydrogen  | 47%   |



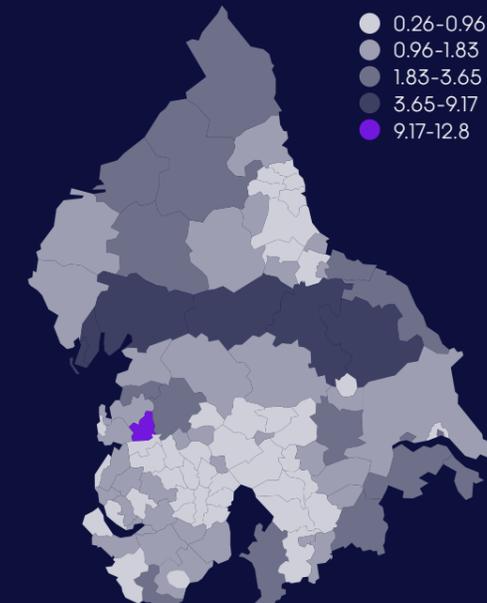
### Mode and fuel breakdown

Total megatonnes of CO<sub>2</sub> by mode

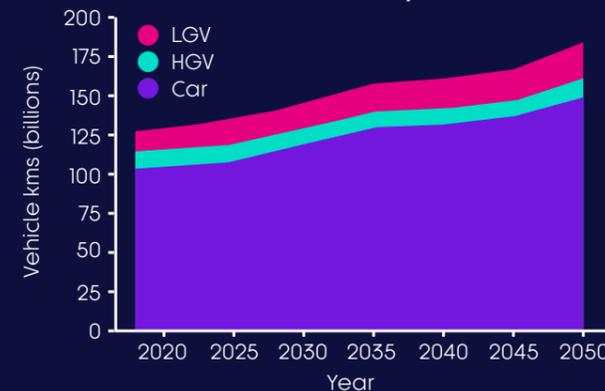


### Area breakdown

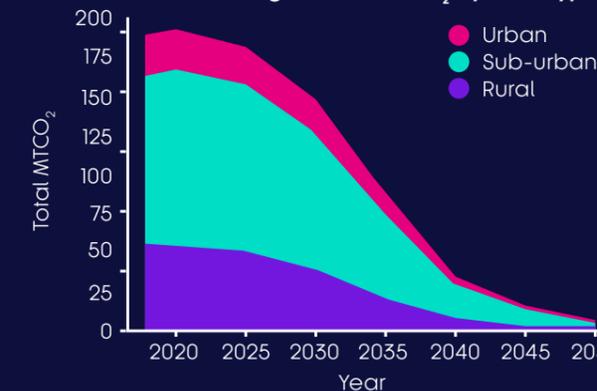
CO<sub>2</sub> emissions (tonnes) per head of population: 2030



### Total vehicle kms by mode



### Total megatonnes of CO<sub>2</sub> by area type



Future emissions estimates

# Scenario 4: Urban Zero Carbon

This scenario sees a significant shift in public attitudes towards action on climate change, and a strong government response to meet it. Transport and energy planning and systems are adapted and integrated to deliver effective clean networks. All road transport is powered by electric

drivetrains ahead of 2050, with an increasing supply of low-carbon hydrogen available for some vehicles. This scenario is led by attitudes to climate action and urban placemaking, with the biggest drivers being strong government policy and urban densification.

| Mode                    | Demand growth 2018-2050 | CO <sub>2</sub> emissions in 2030 (mega-tonnes) | CO <sub>2</sub> emissions in 2050 (mega-tonnes) |
|-------------------------|-------------------------|---|---|
| Rail                    | 193%                    | 0.6   | 0.0   |
| Bus and shared mobility | 21%                     | 0.3   | 0.0   |
| Car                     | 9%                      | 7.1   | 0.0   |
| Van                     | 50%                     | 1.2   | 0.0   |
| HGV                     | -3%                     | 7.6   | 1.1   |
| Active travel           | 30%                     | 0.0   | 0.0   |

Page 283

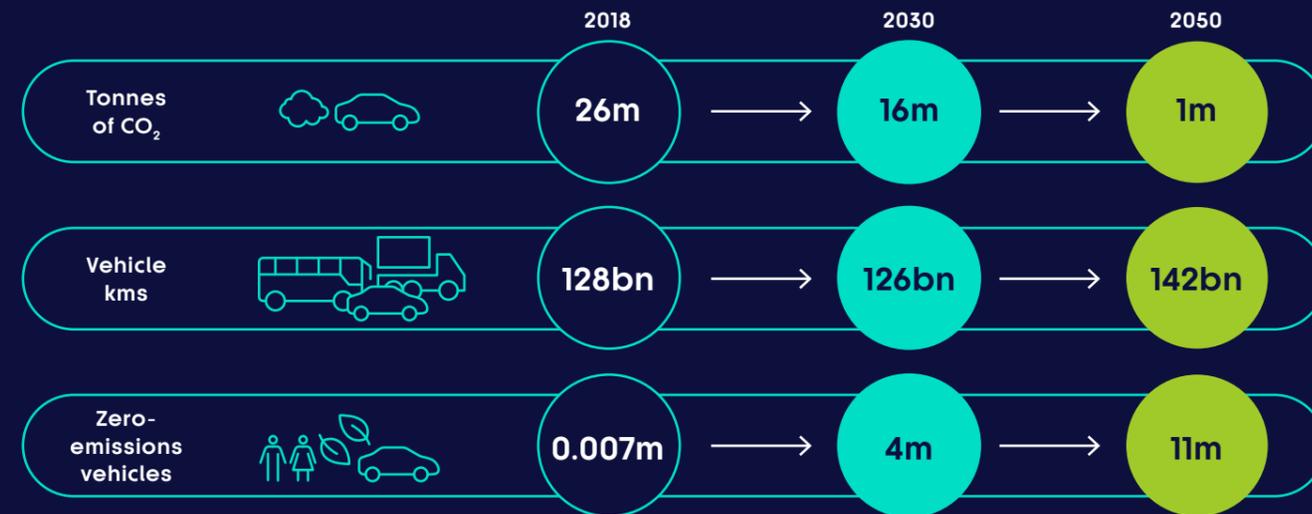
What if society achieves NPIER outcomes by using policy intervention to maximise energy-efficient city growth?

- Cities and large towns become more dense but attractive places to live. Large rural settlements may benefit, others will see reduction in population and employment without support of national policy.
- Transformational economic growth primarily through urban agglomeration and place-making.
- Strong fiscal and regulatory action set us on a pathway to zero carbon before 2050. Increased devolution leads to integrated transport and energy systems which deliver clean networks.
- Urban living reduces remote working and increases urban freight consolidation centres.
- Increased public and active transport, including shared mobility, as public and private travel becomes blurred.
- All new vehicles have a high level of autonomy, but are not fully autonomous by 2050. Shared AVs are well integrated into urban transport systems to complement public transport, but this doesn't extend to rural areas or small towns. Opportunities are not available to all, both geographically and due to attitudes and abilities with technology, sharing and data use.

| Area type | Population in 2050 (millions) | Vehicle kilometres in 2050 (billions) | CO <sub>2</sub> emissions in 2050 (mega-tonnes) |
|-----------|-------------------------------|---------------------------------------|---|
| Urban     | 4.9                           | 20.6                                  | 0.1   |
| Sub-urban | 10.0                          | 78.8                                  | 0.8   |
| Rural     | 2.3                           | 42.4                                  | 0.2   |

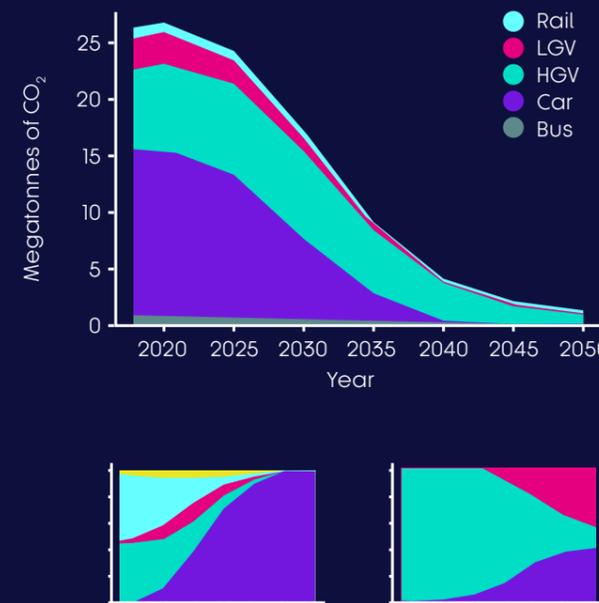
This scenario sees increased demand across public transport and active modes, with a decrease in HGV demand. Consequently, it sees the lowest residual emissions (attributed to a small number of diesel HGVs) in 2050 at just over 1 MTCO<sub>2</sub>.

| Vehicle type | Fuel type | Share |
|--------------|-----------|-------|
| Car          | BEV       | 100%  |
| Car          | PHEV      | 0%    |
| Van          | BEV       | 100%  |
| Van          | PHEV      | 0%    |
| HGV          | BEV       | 38%   |
| HGV          | Diesel    | 14%   |
| HGV          | Hydrogen  | 47%   |



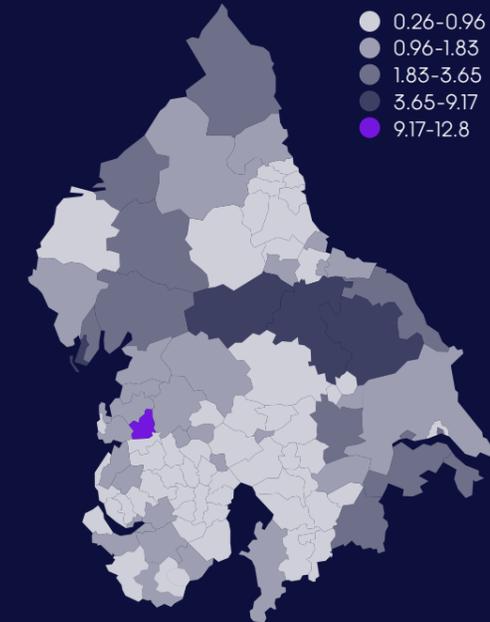
Mode and fuel breakdown

Total megatonnes of CO<sub>2</sub> by mode



Area breakdown

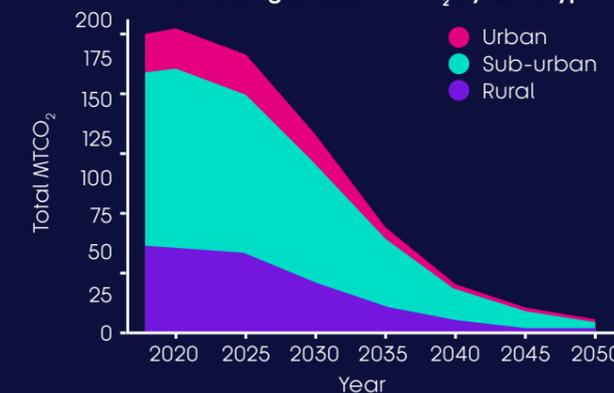
CO<sub>2</sub> emissions (tonnes) per head of population: 2030



Total vehicle kms by mode



Total megatonnes of CO<sub>2</sub> by area type

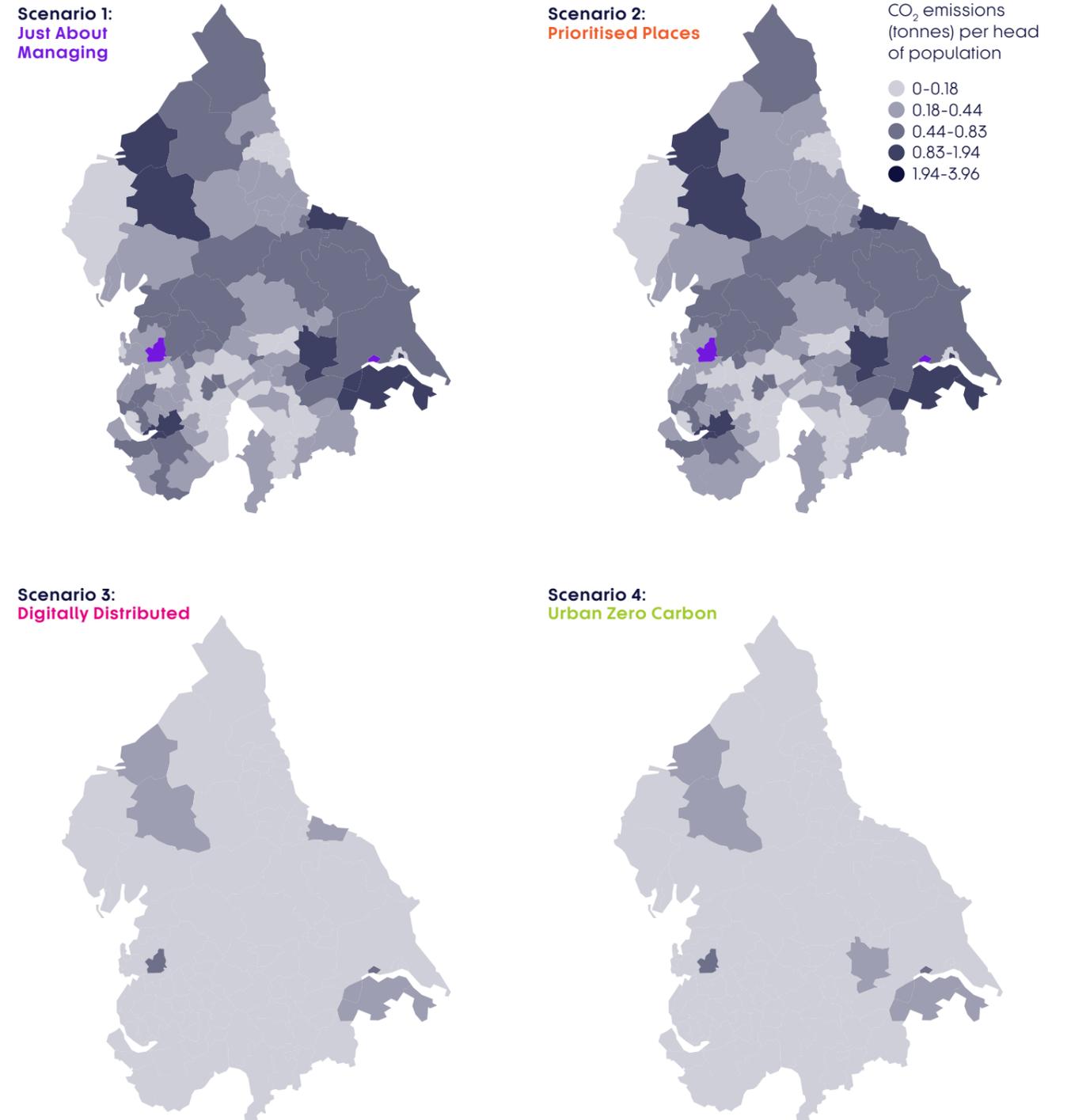


# Future Travel Scenarios compared

Placeholder: Explain how the distribution of emissions is different between scenarios – related to densification, economic growth etc. Include some of the scenario comparison from the Future Travel Scenarios report. Ximo iure ipsuntincias es minumqu iassequi utem vendisi commodit opta volorumqui tem alique quam volesse quis et laut unt apedit, ut ullamet hillabo. Olendic iissuntota volorer itius, audi qui a platiunt dolecab oreium doluptur? Toria doluptas vendis il ipsam conecerume volorro omnihic tempora estiis

aut hil ent ea volessunt omnim re nobis aut lis apis et ut lit aut am, temquat aut la cum rectus aut int landucidunt, nonsedic tem consequet conet quasimi lignatium ipsum facit inusae invel et eturi volore pla sundus quide volesci mincturero iur? Olorenis excepel enditiincturi accus eos di dolorum quassequati aspid maximporum, cum debita vel incimintist que del idellup tatibus dit id quatur rerum faccatur alicide dolecae in corum doluptatiis cus rent. Eprat. Aceatem aut inum in eictaetur aut ari commiendant.

Figure 7: CO<sub>2</sub> emissions per person (tonnes) in 2050 under each Future Travel Scenario, broken down by TfN's geographic zones.





2nd Floor  
4 Piccadilly Place  
Manchester  
M1 3BN

Ground Floor  
West Gate  
Grace Street  
Leeds  
LS1 2RP



0161 244 0888



[engagement@transportforthenorth.com](mailto:engagement@transportforthenorth.com)



This page is intentionally left blank

---

## Transport for the North Board

**Subject:** Governance Report

**Author:** Deborah Dimock, Solicitor

**Sponsor:** Julie Openshaw, Head of Legal

**Meeting Date:** Wednesday 24 March 2021

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

- 1.1 The purpose of this report is for Members to consider the following matters:
- a) Renewal of the appointments of the Independent Members of Audit and Governance Committee;
  - b) A review of the General Purposes Committee, and
  - c) A review of the current position in relation to Virtual Meetings.

### **2. Executive Summary:**

- 2.1 The initial 3-year term of appointment of the three Independent Members of the Audit and Governance Committee is about to end and it is recommended that this be renewed with a further recommendation that the number of Independent Members be increased to four to enable existing members to be replaced more gradually so that existing expertise is retained until new members have gained experience of Transport for the North.
- 2.2 On 7 January Cllr Gittins requested that a review of the General Purposes Committee be carried out. Paragraph 3.7 of the 14 January Board report on appointment of the Chief Executive noted that Board may wish to review the GPC's role at a future meeting.
- 2.3 During the Covid 19 pandemic Transport for the North has been able to hold its Board and Committee meetings virtually under emergency provisions. These are due to expire on 7 May 2021 and Transport for the North needs to review how it will conduct its meetings in future.

### **3.0 Renewal of the Appointment of Independent Members to the Audit and Governance Committee**

- 3.1 When Transport for the North adopted its Constitution it agreed to appoint three Independent Members to the Audit and Governance

---

Committee. These members were recruited by public advertisement and were selected on the basis of their skills and experience.

- 3.2 Initially the appointment was made for three years from 2018 until 31 March 2021 and so the position now needs to be reviewed.
- 3.3 The period since Transport for the North's Inaugural Meeting in 2018 has been a period during which Transport for the North's systems and processes have been developing and embedding and the Audit and Governance Committee has been establishing itself. The Independent Members on the Committee have now gained significant experience in how Transport for the North operates and for Transport for the North to lose these members now would adversely impact the operational efficiency of the Audit and Governance Committee. It is proposed that the appointments of the current Independent Members should be each renewed for a further 3-year period and an open recruitment exercise (similar to that which was undertaken for the existing members) should be undertaken for a fourth Independent Member, also for a 3-year term from appointment, who would sit alongside the current Independent Members to gain experience so that in time the Committee can move away from the current situation of the expiry of the term of all members occurring at the same time.
- 3.4 The current Independent Members have been consulted and are agreeable to their appointments being extended as outlined.
- 3.5 The Constitution will need to be amended to allow for four Independent Members to be appointed to the Audit and Governance Committee.

#### **4.0 Review of the General Purposes Committee**

- 4.1 This item has been brought forward at the request of Cllr Louise Gittins who has requested a review of the General Purposes Committee. This Committee was set up within the Constitution as part of the review of the Constitution which was carried out during 2018/19 but no nominations have been made to it, and it has not yet met.
- 4.2 The purpose behind the creation of the General Purposes Committee was expressed as follows in the report considered by Board in June 2019:  
*"The Constitution provides for the establishment of the Rail North Committee to deal with any issues arising in relation to rail franchise management issues. The issues which have arisen since the May 2018 timetable change have demonstrated the importance of a smaller Committee of elected Members with detailed oversight able to give direction in relation to operational matters. It is therefore proposed that a similar Committee of Constituent Authority Members (the General Purposes Committee) should be established to deal with any issues which may arise in relation to any of the other work*

---

*programmes which require more detailed Member oversight and political direction."*

- 4.3 The membership of the General Purposes Committee as established in the Constitution mirrors that of the Rail North Committee with the Committee being made up of 10 Members who are TfN Board or Substitute Board Members who each represent a Regional Group within the Transport for the North geographical area.
- 4.4 The voting rights would be the weighted votes based on population and Members representing a Regional Group would be entitled to cast the weighted votes of the other Members in the Regional Group.
- 4.5 The Terms of Reference for the Committee are that *"The General Purposes Committee shall determine any matter which is not reserved to the Transport for the North Board, nor delegated to the Rail North Committee and which is not decided by the Chief Executive under his delegated authority."*
- 4.6 The intention was that the Terms of Reference were drawn wide enough to encompass any decision which might need to be taken other than those which must be taken by the Board such as an amendment of the Budget, the Constitution or the Strategic Transport Plan, or decisions within the remit of the Rail North Committee.
- 4.7 The membership of the Committee was never appointed and subsequently concerns were raised by the Executive Board as to whether appointment on the basis of Regional Groups was an appropriate mechanism for representation on the Committee; calling a meeting of the Committee has been held in abeyance.
- 4.8 As part of the Northern Transport Charter discussions it was identified that there would need to be changes to the governance arrangements of TfN if it were to take on greater responsibility for investment decision making and it was proposed in those circumstances that an Investment Committee would need to be set up to make decisions on schemes as they moved through the various stages of the development process, with key decision points retained at TfN Board.
- 4.9 The current recruitment of a new Chief Executive and the appointment of an ad hoc Appointments Panel has also highlighted the need for Transport for the North to consider whether it needs to establish a smaller decision making body to take decisions on procedural or more routine matters in circumstances where a full Board Meeting may not be the best use of Board Members time but it is not appropriate for a decision to be taken by the Chief Executive. Most Local Authorities will for example have a standing Appointments Committee to advise on the appointment of and employment issues relating to the statutory officers. If virtual meetings are allowed to continue beyond May 2021, (see paragraph 5 below), there is also the option of programming a

---

shorter virtual TfN Board in the months between the currently scheduled bi-monthly cycle.

4.10 The concerns raised by the Executive Board about the suitability of appointment to the General Purposes Committee on the basis of Regional Groups has raised the question of what is the most appropriate way to appoint Members to Committees of TfN which ensures representation of all geographical areas and representation of both urban and rural communities.

4.11 In preparation for this report the issue was raised with the Executive Board. The Monitoring Officer has consulted the legal officers of all the Constituent Authorities and the responses received are set out in Appendix 1. The responses received reflected the concern expressed by Executive Board about representation through Regional Groups and relative voting rights.

4.12 Since there are clearly differences of opinion across Transport for the North as to the decision-making structures that will be needed by the organisation going forward it is proposed that this matter should be referred to a Members Working Group for discussion and a report be brought back to a future meeting. As part of the consideration, a consultation exercise will be carried out to gain the views of Board Members on the function and membership of future decision-making structures for Transport for the North.

## **5.0 Virtual Meetings**

5.1 The Local Authorities and Police and Crime Panels (Coronavirus) (Flexibility of Local Authority and Police and Crime Panel Meetings) (England and Wales) Regulations 2020 made provision for remote or virtual attendance at all Transport for the North Board and Committee meetings to be held on or before 7 May 2021.

5.2 Since March 2020 TfN has of necessity operated remotely and all Board and Committee Meetings have been held virtually. Like many organisations TfN has experienced many benefits from remote meetings with Members and officers making considerable time and cost savings from not having to travel to meetings. Public attendance at virtual meetings has also increased significantly from very low attendance before lockdown to several hundred members of the public watching the TfN Board meeting live. Across Local Government similar benefits have been experienced and a request has been made to the government for legislation permitting virtual meetings to be made permanent. An application has also been made to the courts for a declaration that remote attendance at meetings is legitimate under existing legislation.

- 
- 5.3 At the time of writing this report, there has been no new legislation to continue the holding of virtual meetings and the application to the courts has not been heard. This means that unless there is any change to the current legal position TfN is likely to need to make arrangements to revert to personal attendance by Members at all Committee and Board Meetings from the 7th May 2021. However, this may be reviewed if there is any change in the legal position and members will be kept promptly informed.
- 5.4 There may be practical issues for some Members and staff to attend any such meeting in person, including protecting their health and wellbeing, especially for those not vaccinated. We will continue to review this practical position alongside the legal position set out above.

## **6. Recommendations:**

- 6.1 The Board agrees to:
- a) Extend the appointment of the Independent Members of the Audit and Governance Committee for further 3 years;
  - b) To increase the number of Independent Members of the Audit and Governance Committee to 4 and make the appropriate Constitutional amendments;
  - c) To recruit a new Independent Member of the Committee with a 3-year term.
- 6.2 The Board receives the report on the General Purposes Committee and in accordance with Part 4 of the report agrees to the consultation exercise with Board Members on future decision making structures and to set up a Members' Working Group to review the arrangements for the Committee with a view to recommendations being reported to a future Board meeting for approval.
- 6.3 The Board notes the position in relation to virtual Board and Committee meetings and requests that the position be kept under review and a further report be brought to a future meeting should the legal position change.

## **7. Appendices:**

- 7.1 Schedule of Consultation responses

---

**List of Background Documents:**

The Constitution

**Required Considerations**
**Equalities:**

|                                |    |
|--------------------------------|----|
| Age                            | No |
| Disability                     | No |
| Gender Reassignment            | No |
| Pregnancy and Maternity        | No |
| Race                           | No |
| Religion or Belief             | No |
| Marriage and Civil Partnership | No |
| Sex                            | No |
| Sexual Orientation             | No |

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Equalities           | A full Impact assessment has not been carried out because the report does not propose any new strategy or service provision | Deborah Dimock             | Julie Openshaw  |

**Environment and Sustainability**

|     |    |
|-----|----|
| Yes | No |
|-----|----|

| <b>Consideration</b>  | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|---|---|----------------------------|-----------------|
| Sustainability / Environment – including considerations regarding Active Travel and Wellbeing | A full impact assessment has not been carried out because the report does not propose any new strategy or service provision | Deborah Dimock             | Julie Openshaw  |

**Legal**

|     |
|-----|
| Yes |
|-----|

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Legal                | There are no new legal implications as a result of this report | Deborah Dimock             | Julie Openshaw  |

**Finance**

|    |
|----|
| No |
|----|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Finance              | TfN Finance Team has confirmed there are no new financial implications. | Paul Kelly                 | Iain Craven     |

**Resource**

|    |
|----|
| No |
|----|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Resource             | TfN HR Team has confirmed there are no new resource implications. | Stephen Hipwell            | Dawn Madin      |

**Risk**

|    |
|----|
| No |
|----|

| <b>Consideration</b> | <b>Comment</b>  | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|---|----------------------------|-----------------|
| Risk                 | There are no new risks identified as a result of this report. | Haddy Njie                 | Iain Craven     |

---

**Consultation**

|     |
|-----|
| Yes |
|-----|

| <b>Consideration</b> | <b>Comment</b>   | <b>Responsible Officer</b> | <b>Director</b> |
|----------------------|--|----------------------------|-----------------|
| Consultation         | No consultation has been carried since no new policies are being proposed. | Deborah Dimock             | Julie Openshaw  |

**APPENDIX 1**  
**Schedule of Consultation Responses**

|       |  |
|-------|--|
| NEXUS | <p>Thank you for copying me into your email discussing the General Purposes Committee. I am responding on behalf of the representatives of both the North of Tyne Combined Authority and the North East Combined Authority, and I have copied in colleagues from both CAs to this reply.</p> <p>We continue to be strong supporters of Transport for the North, and we value the opportunity that it provides to bring together political and business leaders from across the North to discuss shared priorities and objectives for connectivity to grow the North’s economy.</p> <p>Our joint view is that over the longer-term, there should be a review of all of the arrangements for decision-making in Transport for the North, in particular the Board and the Partnership Board and how they inter-relate. Whilst we have an open mind as to what any future arrangements should look like, we note that:</p> <ul style="list-style-type: none"> <li>• The current Board structure and consequent approach is somewhat unwieldy, with decision-making shared across a very wide array of members</li> <li>• The relationship between the Board and the Partnership Board is a somewhat unclear; we believe that a clearer separation between the two may be helpful</li> <li>• It may be helpful to further distinguish between matters of high level strategic importance, and more operational or delivery-focused issues</li> </ul> <p>Given that such a review is likely to take some time, we would support the establishment of the General Purposes Committee as a stop-gap measure to deal with matters of an operational</p> |
|-------|--|

|                           |   |
|---------------------------|---|
|                           | <p>nature. This is in the expectation that it meets virtually using video-conferencing facilities; if there was a need for this committee to meet physically in-person we would be concerned about the time commitment required (particularly travel time given the geographic location of our area) for our members on top of the existing requirements of TfN Board, Partnership Board and Rail North Committee. We would be willing to accept the principal of one nomination (and one alternate) to cover our two Combined Authority areas, whether by means of a Regional Group or another mechanism.</p> <p>We do not have a strong view in relation to a future Appointments Committee, other than to note that if the General Purposes Committee is established then it might be appropriate for it to carry out this role.</p> <p>I hope that this is helpful, please feel free to contact me if you have any follow-up questions.</p> |
| Cumbria County Council    | <p>We have consulted with the relevant member of the authority and he is comfortable with the idea of regional representation on the General Purposes Committee but would suggest that voting should be by reference to mileage of track (in line with the Rail North Approach) and not population.</p>   |
| Lancashire County Council | <p>Thank you for your email of 21 January about The General Purposes Committee of TfN. You may recall that Lancashire County Council has previously not supported the establishment of the Committee when this was raised last year.</p> <p>Our concern is twofold:</p> <ul style="list-style-type: none"> <li>• The proposal from TfN was for one member to represent Lancashire, Cumbria, Blackpool and Blackburn. This could mean that we</li> </ul>   |

|      |  |
|------|--|
|      | <p>were under represented when decisions go to the Committee. Given the wide scope of issues that could be considered by the Committee, this is a concern.</p> <ul style="list-style-type: none"> <li>• Our other concern relates to the need for the Committee. We question why the other meetings (eg Board) could not deal with matters. TfN doesn't have a wide range of functions like a local authority, and we would question the need for a 'general' committee, particularly given the membership deficit.</li> </ul> <p>Please feel free to contact me if you require clarification.</p>   |
| TFGM | <p>Noting that the General Purposes Committee (<b>GPC</b>) was introduced into the TfN Constitution as part of the review of the Constitution in 2019, I just have a few observations.</p> <p>I note that the Terms of Reference for the GPC, as set out at para 22.1 of the TfN Constitution, are to 'determine any matter which is not reserved to the TfN Board nor delegated to the Rail North Committee and which is not decided by the Chief Executive under this delegated authority'. In the light of this, please could you clarify the following:</p> <ol style="list-style-type: none"> <li>1. taking into account the three 'decision-making areas' that are reserved to other forums or individuals, are you please able to provide examples of the kind of decisions that might be taken by the GPC? I ask this partly because of the wide-ranging power delegated to the Chief Executive under para 18.8(e) of the Constitution (to take any action required as a matter of urgency in the interests of TfN), and noting that rail franchise matters are to be dealt with by the Rail North Committee; and</li> <li>2. if (as you mention below) the intent is for the GPC to make urgent decisions outside of</li> </ol> |

the three-monthly board cycle, please could you highlight in the Constitution where the frequency of GPC meetings is set out (and how the decision to be made by the GPC would be distinct from the wide-ranging power of the Chief Executive (as highlighted above))? If the frequency of the meetings is not specified, is it therefore intended please that meetings of the GPC can be convened as often as considered necessary (provided that the quorum requirements are met)?

In specific response to your question about the mechanism of referring to 'Regional Groups', I note that where there is not a consensus when making a decision, Greater Manchester would have 16% of the weighted vote on GPC voting. This compares to 22% of the weighted vote on matters concerning the Rail North Committee. Can I clarify please why Greater Manchester's weighted vote share is lower, in the case of the GPC?

Finally, are you able to clarify please whether the specific individuals who would act as the member or substitute member of the TfN Board, would be the same individuals in the case of the GPC (para 21.4 of the TfN Constitution seems to confirm this, but I am merely seeking confirmation that my interpretation is correct)?

Document is Restricted

This page is intentionally left blank