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2. Introduction

2.1 Purpose of this report

This report summarises the findings of the public consultation on TfN's Decarbonisation Strategy – draft for consultation. It sets out the responses received through the consultation exercise and identifies the key themes and sentiments emerging.

The consultation was run by TfN with the assistance of an independent consultancy team led by Traverse, a stakeholder engagement specialist who advised on the design of the response form, consultation website and managed the response channels. The Traverse team were then contracted to collect, process and provide a high-level analysis of the consultation responses. This independent high-level analysis has been used as the basis for this report.

The results of the consultation have primarily been used by TfN to refine and prioritise activities as they move forward from strategy to action. The responses from the consultation have been considered by TfN when updating and finalising the strategy, ahead of its adoption.

The Local Transport Act 2008 requires the Decarbonisation Strategy, as part of TfNs Transport Strategy to be subject to a public consultation. Through the consultation, TfN sought to understand the extent of support for, and any concerns around, TfNs proposed strategy and decarbonisation trajectory. TfN also intended to gain a better understanding of respondent's views on how TfN should move forward following the publication of the strategy. In particular views on short-term priorities (up to 2025) for both policy actions, and the role TfN should play in delivering these.

2.1.1 The role of TfN

Transport for the North are a Sub-National Transport Body, representing 20 transport authority members from across the North. TfN's work complements that of existing local transport authorities, and its powers are devolved down from central government, rather than up from local government.

While most of the responsibility for policy implementation lies with national and local government, TfN operates at a geographical and institutional level that allows them to facilitate a regional approach to decarbonisation measures and research. TfN's draft Decarbonisation Strategy sets out this role in more detail, identifying three key pillars to TfN's involvement:

- **Demonstrating**: Evidence-building, running pilots and collating and sharing best practice.
- **Facilitating**: Working for consensus, ensuring consistency, co-ordinating crosssectoral partnerships and representing TfN's 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.

2.1.2 TfN Decarbonisation Strategy

TfN is committed to developing and implementing a 'Pathway to 2050' within its Strategic Transport Plan, published in 2019. TfN's draft Decarbonisation Strategy, published in June

2021, identifies decarbonisation pathways to align with TfNs Decarbonisation Trajectory for surface transport in the North of England by exploring four future travel demand scenarios, considering climate resilience, embodied carbon and opportunities for clean growth.

In order to achieve the goal of aligning the North's surface transport emissions with the Decarbonisation Trajectory, TfN have proposed 30 potential priority decarbonisation activities that could be undertaken before 2025. These activities are listed within the draft Decarbonisation Strategy and typically, these actions;

- recognise the transboundary nature of the North's surface transport system and tackle those challenges and emissions that fall between the gaps when employing a local or combined authority governance approach;
- generate evidence that can be applied usefully across a range of places by TfN's partners (i.e. are not 'place specific');
- reflect preferences expressed by TfN's partners and other stakeholders.

It is these proposed future activities, upon which TfN were keen to gather stakeholders views during the consultation process.

TfN has committed to reviewing and updating the Strategy at each milestone along the Decarbonisation Trajectory, the next being in 2025. As part of this process, it will be important to re-model the North's transport carbon footprint **ahead** of each milestone to strengthen policy commitments or adjust focus. These changes will be incorporated into strategy updates. TfN will also review its list of priority decarbonisation activities **annually**, with its partners, as part of TfN's yearly business planning process.

2.2 Structure of this report

This report is structured as follows:

- Section 2 sets out the purpose of this report, the role of TfN and TfNs Decarbonisation Strategy.
- Section 3 covers the consultation process, including how the consultation was run, who responded and how responses were interpreted.
- Section 4 intends to help shape TfN's priorities for action and define TfN's policy focus in the near-term. It also identifies actions which are important for the government to undertake.
- Section 5 includes key themes that emerged from the open format responses and engagement events hosted by TfN in order to shape TfN's understanding.

3. The Consultation Process

3.1 Taking part in the consultation

Over the 12 months, prior to the launch of the public consultation, TfN engaged with its partners and key external stakeholders in reference to the general proposed content and structure of the strategy document. Stakeholders were invited to comment, and were involved in developing TfNs future scenarios, carbon modelling approach and agreed decarbonisation trajectory upon which the strategy could be based. Furthermore, a number of focused pre-consultation workshops were undertaken with partners to better define the proposed priority activity list presented within Chapter 9 of the draft Decarbonisation Strategy document.

This initial feedback helped the Strategy during its development. During the consultation, TfN managed a series of well-attended virtual public consultation webinars and targeted roundtables which complemented a dedicated virtual exhibition website developed and hosted by an independent communications consultancy.

The draft Decarbonisation Strategy consultation ran from the 7th June for 12 weeks, closing on the 31st August 2021. Taking part in the consultation could be done online via the dedicated consultation website and online response form. The form could also be downloaded and sent directly to TfN by email or submitted via freepost.

3.2 Who responded?

In total 240 responses were received. Of these, 140 were from members of the public reflecting the level of interest and awareness within local communities. 30% was fairly evenly split between Public bodies, Businesses and Environmental groups. The remaining 11% came from respondents categorised as 'Other', which reflected responses from stakeholder organisations, interest groups and professional bodies whose primary functions were not environmental, or business related. Figure 1 below shows the breakdown of the responses received by stakeholder type. A full list of stakeholder organisations can be found in Appendix 1.

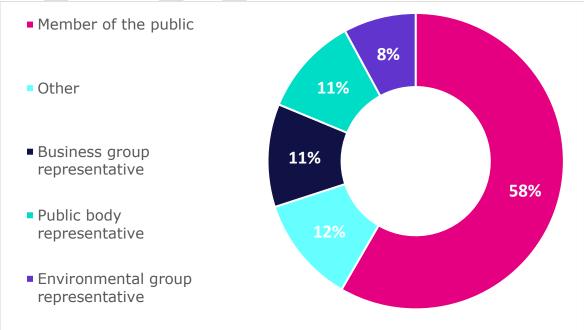


Figure 1: Overview of Respondents

3.3 What we asked?

- The consultation included several 'closed' and 'open' questions.
- In total there were nine 'closed' questions which allowed respondents to select answers from a set number of pre-defined options.
- Closed questions were posed by TfN, in order to understand:
 - The extent to which respondents agreed with TfNs Decarbonisation Trajectory.
 - Which urgent actions related to decarbonisation respondents felt TfN should prioritise.
 - Priorities for both local and national government in relation to a range of policies connected to modal shift, demand reduction and zero emission vehicles (ZEVs).
 - TfN's role in relation to a number of pre-defined activities (.i.e respondents able to express whether they think TfN should lead, or support an activity or whether an activity was not a role for TfN).
- 'Open' questions, which allowed participants to respond in their own words, were used to supplement these responses and understand respondents reasoning.
- Additionally, more than half of respondents chose not to use the online questionnaire and provided their responses in an open format. These responses were coded and used to identify key themes and augment the responses to the closed questions where appropriate.

3.4 Interpreting the consultation findings

While a consultation is a valuable way to gather opinions about a topic, there are several issues to consider when interpreting responses. Responses can never be representative of the population as a whole, as would be the case with a sample survey. When considering results, TfN were aware that the consultation was self-selecting and consequently certain types of people, with certain views were more likely to contribute than others.

Typically, there can be a tendency for responses to come from those motivated to express their views, often because they consider themselves affected. Responses also tend to be biased towards people who have particularly polarised views, in favour or opposition of the draft Decarbonisation Strategy. The consultation can only reflect the views and opinions of those organisations/individuals who have chosen to respond. This report can never express the full extent, and diversity, of opinions on the topic, nor the strength of a particular concern.

Furthermore, the consultation was used by the public to express their views on a wide variety of topics, that were considered outside of the scope of this particular consultation, by TfN. Where appropriate these responses have been collated and passed on to the relevant teams within TfN and other partner organisations, yet do not feature in this report.

This report draws out issues which were raised by a significant number of participants, but also aims to reveal single issues which are considered are of interest and value to the scope of the consultation. The report also acknowledges that responses were based on differing levels of knowledge and awareness across different stakeholder groups.

4. PRIORITIES FOR ACTION

4.1 Introduction

The primary focus of the consultation was to help shape TfN's priorities for action. Respondents were asked to prioritise, from a list of potential actions, which they felt TfN should focus on in the near-term (until 2025) and to help define TfNs policy focus throughout the Decarbonisation Strategy. Respondents were also asked to identify which actions were most important for government to undertake and express their views on responsibilities for the leadership of different policy actions. This will help TfN to further define their role and those of our key partners in developing a pan-northern approach to transport decarbonisation.

4.2 Priorities for TFN

There are three types of 'actions' identified that together represent TfNs proposed priority decarbonisation actions. These are shown in the table below.

Policy Gap Actions	Specific areas of policy generated by our policy analysis work, through which
(PGAs):	the most challenging emissions reductions must be achieved.
Clean Growth	Those activities which can provide the greatest potential for clean, green
Actions (CGAs):	growth in the North.
Stakeholder Driven	Activities identified as priorities and refined through engagement with
Actions (SDAs):	partners, industry, research networks and other sub-national transport
	bodies.

Table 1: Types of Priority 'Actions'

TfNs proposed priority actions are those activities which TfN believe need to happen in the short-term (i.e. up to 2025) and are most effectively delivered at a pan-Northern level. In total, there were 30 proposed policy actions spanning across eight key policy areas. Given the enormity of the decarbonisation challenge and the risks associated with failing to achieve the required emission reductions, most activities are classed as 'high priority'. The activities present different levels of opportunity for TfN influence, whether their role is to lead or support and whether this support is continuous or 'as and when' required.

4.2.1 Urgent Action & Taking the Lead

Chapter 9 of the Draft Decarbonisation Strategy proposed 30 potential activities that TfN could lead or support in the near-term up until 2025. Recognising that it will not be possible for TfN to undertake all these activities, TfN asked respondents to identify the three activities that they considered to be top priority for urgent action (up to 2025).

The four proposed activities most commonly selected by respondents for urgent prioritisation were:

- SD1: Developing a regional route map for transport decarbonisation (by place typology, including rural areas as a priority).
- PGA4: Supporting Government and Network Rail, utilising the Northern Powerhouse Rail (NPR) project, in identifying appropriate routes for electrification and associated implementation.
- PGA8: Develop schemes and infrastructure to improve the regional public transport network, e.g. (NPR).
- CGA1: Develop a regional EV charging infrastructure framework

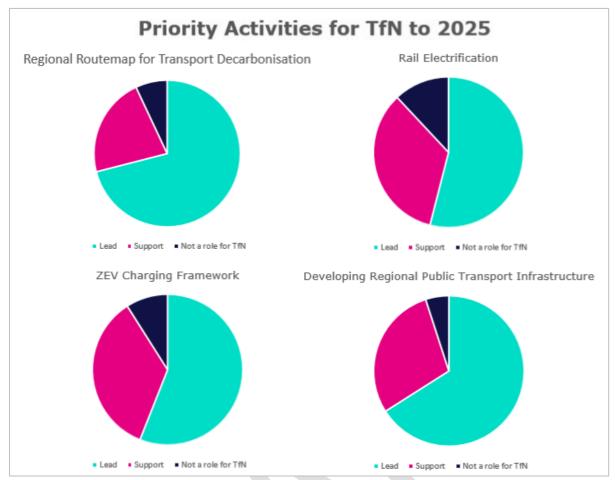


Figure 2: Priority Activities for TfN to 2025

All four activities received approximately twice the level of support than other proposed activities (37 to 40 preference votes). Additionally, over half of respondents thought TfN were best placed to lead these four priority activities, the majority of others believing TfN should act in a supporting capacity.

Notably, the two top priorities for public body stakeholders included PGA4 (rail electrification), but also SD2: <u>Developing place-based decarbonisation pathways for rural typologies</u>. The activities associated with SD2 comprise a subset of the activities that are connected to SD1 and give us some guidance as to where the focus SD1 activities.

"We are a member of TfN's EV Steering Group that is overseeing work on a range of actions to support EV roll-out across the north and will continue to share our experience and draw on the findings of work commissioned by TfN. Groups of this kind represent a practical demonstration of how TfN can use its pan-regional resource and remit to enhance the work of local partners and could provide a model for similar action in other policy areas."

Transport North East

Of those activities that received less support for respondents in terms of being a top priority for urgent action, a number were nonetheless highlighted by respondents as activities that TfN should **lead** (as opposed to 'support' or being identified as 'not a role for TfN'). Most notably, these included:

- SD3: Formation of decarbonisation working groups with Partners (9 preference votes).
- SD6: Programmatic assessment of TfN's Investment Programme against TfN's Decarbonisation Trajectory (8 preference votes).

• CGA5: Supporting Clean Mobility Visions for the North (16 preference votes).

Of those activities that received less support for respondents in terms of being a top priority for urgent action, but were highlighted by respondents as activities that TfN should **support or facilitate**, the most notable included:

- CGA2: Supporting local partners in the development of local ZEV charging infrastructure (17 preference votes).
- SD8: Supporting the development of scalable digital solutions for incentivising greener, shared and active mobility in rural areas (15 preference votes).
- CGA8: Supporting our partners to attract testing and pilots of new low emission train technologies (20 preference votes).
- CGA3: Undertake or support a pan-northern hydrogen transport refuelling study (19 preference votes).

Additionally, respondents identified a few activities where there was little support for TfN taking an active role in either lead or supporting those activities, including:

- PGA14: Increase awareness of fuel-efficient driving styles (6 preference votes).
- PGA9: Research on the effects of home-working upon productivity and agglomeration (4 preference votes).

4.2.2 Policy Focus

To achieve the reduction in car mileage, required under TfN's decarbonisation pathways, a number of different packages of policy interventions could be employed. Potential inventions fall into those related to accelerating technological change, reducing demand for car travel and those focussed on shifting car journeys to other, more sustainable, modes. TfN wanted to understand where respondents felt the focus should lie when packaging up policy interventions to achieve reduced car mileage.

Within the consultation questionnaire, respondents were asked: 'To achieve the required demand management targets, where do you feel the policy focus should lie?'. For each policy category (i.e. technology focused, demand reduction focused and mode-shift focused), respondents were asked to choose from five possible answers, ranging from 'Entirely focussed' to 'No focus'.

Modal shift was deemed the most popular policy focus. Over two thirds of respondents thought that policies intended to achieve the required demand management should be 'entirely focussed' or 'more focused' on modal shift. All stakeholder groups were generally supportive of a focus on modal shift policy measures.

"RTPI would therefore welcome a greater focus on demand reduction and mode-shifting, though we do acknowledge the importance of moving away from petrol and diesel fuels."

Royal Town and Planning Institute (RTPI)

"More modal choices would reduce rural and social isolation issues, provide opportunities for people to travel further and wider, increase worker mobility, help address access to education and training and other key services."

Cumbria County Council and Local Enterprise Partnership

Although less respondents supported an entirely demand reduction focused approach, 80% of respondents still supported a 'more focused' or balanced approach related to

demand reduction to achieve the required demand management targets. Public body representatives and environmental groups were most supportive of demand reduction measures, with those less supportive or not supportive coming primarily from business group representatives and members of the public. Demand reduction had the largest proportion of those not supportive overall but only 13% of respondents believed it should be less of a focus, and 7% believed it should not be a focus at all.

"We would like to see full consideration of the well-established toolbox of 'sticks', including parking charging, road and congestion pricing, clean air zones and other restrictions, as well as the 'carrots' of promotional campaigns and investment in excellent public transport and active travel options."

Manchester Friends of the Earth

The most popular response in reference to technology focused measures (i.e. policies focussed on stimulating the development and uptake of low and zero carbon vehicle, or fuel, emissions technologies), attracting over 45% of respondents was 'balanced'. Although technology was less likely to attract 'entirely focussed' or 'more focus' responses than modal shift or demand reduction, technology received less opposition ('less focus'/'no focus') than demand reduction too. The majority of respondents believed that technology was integral to whichever approach adopted but could not achieve the demand management targets independently. Business group representatives were most supportive of technology focused measures overall.

4.3 Priorities for government

As part of the preparation of the Strategy, TfN carried out an analysis of the packages of policy measures that were likely to be needed to achieve the policy commitments laid out within its decarbonisation pathways identified in Chapter 4. Recognising the limited powers that TfN is able to exercise in terms of policy development and implementation, these policy packages are expressed as recommendations for national government and guidance for local authorities. Although it is likely that the majority of these policy recommendations will ultimately be needed over time, TfN wanted to understand respondents' views on which recommendations should be prioritised by each level of government. Within the consultation questionnaire, respondents were asked to choose the three recommendations for national government, and the three recommendations for local government, that they felt were of the most importance.

4.3.1 Priorities for National Government

In terms of national policy prioritisation, respondents expressed strongest support for:

- the provision of a substantial and consistent funding stream to Local Authorities to improve public transport and active travel networks;
- and for national government to identify and fund a core network for rail electrification.

Other policy priorities with strong support included:

- developing a coherent plan for taxing and pricing car travel that accounts for reduced Fuel Duty and incentivises key outcomes;
- developing a comprehensive strategy for charging infrastructure, defining a role for local and regional bodies;

• and for national government to work with Train Operation companies to implement a targeted reduction in rail fares and an increase in the integration and flexibility of ticketing systems.

This was reflected in the responses from public body stakeholders, where the recommendations to government in relation to the need for a consistent funding stream for public transport and active travel, along with the need for government to develop a plan for taxing and pricing car travel more proportionately, were felt to be the two most important.

4.3.2 Priorities for Local Authorities

In terms of local policy prioritisation, respondents expressed strongest support for:

- local authorities to invest in bus and light rail networks (subject to government funding) to offer improved journey quality, accessibility and cheaper fares to passengers.
- the need to develop models for delivery and maintenance of local EV charging infrastructure, covering rapid hubs, on-street charging, public parking spaces and council fleets.

There was also strong support for local authorities to:

- engage with bus operators to set targets and standards for the rapid roll-out of ZEV buses.
- develop charging infrastructure servicing rural tourist spots to counter range anxiety.
- implement policies to enhance cycle networks and promote active travel.
- local authorities to use local planning policies to promote 15 or 20 minute neighbourhoods, prioritise development close to public transport hubs and encourage car-free or car-lite development.

This was reflected in the responses from public body stakeholders, where the recommendations for local authorities to in relation to the need to develop models for the delivery of local EV charging infrastructure, along with a focus on enhancing cycling infrastructure, were felt to be the two most important.

5. SHAPING TINS UNDERSTANDING

5.1 Introduction

Whilst TfN's Decarbonisation Strategy document represents the culmination of an intense period of evidence collation, data analysis and stakeholder engagement, in many ways the Strategy also marks the start of the decarbonisation challenge for TfN.

Evidence base and government policy will continue to evolve, and it will be important that TfN regularly updates its Strategy, strengthening and adjusting its focus where necessary. It is essential, however, that TfN now moves from strategising to implementing the actions within the Strategy, building capacity and capability within partner organisations, and asks for sufficient powers and resourcing from government to do this.

A key aim of the consultation on TfN's Decarbonisation Strategy was to draw on the valuable experience and opinions of their stakeholders and communities from across the North, to help shape TfN's immediate actions going forward and better inform TfN's recommendations to national government.

The following sections signpost the key themes emerging from the open format responses received through the consultation and the engagement events hosted by TfN. Within each theme, comments of support, concerns and suggestions are summarised. Quantifiers including few (0-20 respondents), some (21-100 respondents) and many (more than 100 respondents) have been used to provide an indication of the number of respondents whose comments express a specific sentiment. TfN will consider these key themes and the main sentiments expressed around them, when prioritising, and embarking on the more detailed scoping of its activities going forward.

5.2 Draft Strategy

The draft strategy was generally well received with support from a wide range of stakeholders taking part in the consultation. Many respondents from all the main stakeholder groups (members of the public, businesses, public bodies and environmental groups) expressed their support for the decarbonisation strategy, and the policies and actions proposed in it and welcomed the scope and depth of analysis brought together by TfN and its partners.

"The approach set out in the draft decarbonisation strategy represents a potential blueprint that could be adopted by other STBs to help them fulfil this role through the development of regional trajectories that can then be disaggregated to steer local action."

Transport for the South East

"TfN's plans align well with our own ambitions. We believe the strategy gives a good representation of the activities needed to support the decarbonisation of the North's transportation infrastructure and gives a good view as to where TfN believe they can deliver, support, and guide the different activities required."

Electricity North West

Overall, there was a recognition of the urgency of meeting net zero targets, with many respondents identifying the need to accelerate the implementation of the strategy in order to influence and direct investment at all levels. The extent to which the strategy seeks to

address both operational and embodied carbon impacts was also welcomed and a number of respondents highlighted the need to ensure that decarbonisation is a golden thread that runs through the delivery of wider national policy objectives, particularly the need to level-up areas across the North of England.

"We are particularly pleased to see the emphasis on embodied carbon within TfN's strategy document, and the recognition that it is not operational carbon alone which should be given consideration in any future infrastructure projects."

Royal Institute of Chartered Surveyors (RICS)

Within this, respondents highlighted a number of challenges for the strategy and its implementation. Many of these reflect the sheer scale and complexity associated with achieving net-zero as a society and the contribution that the decarbonisation of transport needs to make to this. They also reflect the extent to which it requires the development of a shared approach nationally which reflects the nuances of local geographies and communities.

"While the ambition to move faster is appreciated; it is important that acceleration is realistic. In particular decarbonisation will require significant investment from Treasury which will inevitably align to DfT's 2050 horizon and could compromise TfN's ability to realise its ambition."

Cumbria County Council and Cumbria Local Enterprise Partnership

The challenges expressed by respondents fell into three linked themes: coordination, capacity/resources, and effectiveness. "Is everybody joined-up" was a common message throughout the consultation, particularly at a national level in Government but also across local government, where different areas have set different trajectories and placed different emphasis on different interventions.

Whilst respondents recognise the role of TfN in demonstrating, facilitating and supporting decarbonisation, as well as providing strategic oversight, many felt the need for more direct intervention and mediation across partners and sectors to drive change, but were unclear where this might come from or whether this might require more formal compliance measures for example through the planning process or national legislation.

"Rather than aligning the TfN strategy with that of DfT we urge TfN to strengthen it, and continue to lobby for more powers, responsibility and resources with which to achieve it."

CPRE Peak District and South Yorkshire

The challenge of organisational capacity and capability was highlighted by many respondents, particularly in respect of the fiscal constraints under which local authorities are operating and the pressures arising from responding to the Covid-19 pandemic. Understanding the cost of decarbonisation is recognised as a major uncertainty across all the stakeholder groups consulted - costs to both individuals and to organisations - and how this would be met and from what sources.

In terms of effectiveness, the responses reflect the fact that practical and deliverable solutions to the decarbonisation of transport are for the most part in their early stages of development or are yet to be widely and consistently adopted by a critical mass of stakeholders. Within this context, the issue of solutions that can be applied in differing economic geographies, particularly the more rural areas, was a concern flagged during the consultation. The need for TfN to regularly review, monitor and evaluate decarbonisation

targets and outcomes presented in the strategy was also flagged, in order to ensure that the effectiveness of interventions is more widely understood.

Respondents to the consultation provided a range of suggestions and insights for further consideration by TfN and its partners. Many of these focused on the themes of engagement, knowledge sharing, inclusivity and empowerment, particularly at a local, community level.

"We see a valuable role for TfN in bringing together such areas to share best practice, support joint research and implement local pilot schemes - for example, the Decarbonisation Strategy suggests that TfN develop evidence and data to explore the case for Mobility as a Service provision and mobility hubs in rural areas."

Transport North East

The need for TfN to 'continue the conversation' was widely expressed, recognising that one of the biggest challenges for engagement around transport decarbonisation (and netzero in general) is the lack of a consistent and widely understood 'common language.' The combination of often highly technical terminology and low levels of general awareness will make it more difficult to empower communities to participate in the debate and develop local/place-based initiatives responsive to their specific needs.

Many respondents felt there needed to be a greater focus on behavioural change and less reliance on technology as a route to decarbonisation, and with that a focus on long term gains rather than unsustainable short term or quick-fix solutions.

5.3 Decarbonisation Trajectory

The development of a decarbonisation trajectory and associated scenarios as an evidence base to underpin the strategy was also well received during the consultation. When asked "To what extent do you agree with TfN's approach to developing a Decarbonisation Trajectory" over two-thirds of respondents agreed or strongly agreed, with many welcoming the addition of valuable data and analysis to support further debate and policy interventions at all levels. The development of scenarios was seen as particularly helpful as a means of assessing the potential impact of these interventions.

"The proposed strategy and its emissions reduction pathway to NetZero2045 is based on robust evidence from four modelled future travel scenarios, presents a credible quantified trajectory to 2045, emphasises the cumulative impacts of carbon emissions, demonstrates the profound policy gap necessary to meet that target and aims to monitor compliance." **CPRE Peak District and South Yorkshire**

Whilst some respondents, mainly individual members of the public, didn't agree with TfN's analytical approach, this tended to be linked to localised concerns that were not covered directly in the analysis – for example a specific road scheme or a particular geography. This also reinforces the point made in regard to the strategy as a whole in terms of the need to raise general awareness and support the development of a common language around the decarbonisation of transport.

Respondents provided a range of suggestions for strengthening and developing the analytical framework on which the strategy is based, including further analysis of the range of factors affecting transport related emissions and other areas for further focus. The need for consistency was a common theme, particularly across areas and sectors. Many respondents noted the importance of aligning climate change commitments across the

north of England and highlighted the disparity between some existing decarbonisation commitments - particularly specific timeframes for reaching net-zero.

A number of respondents highlighted the need for a core set of 'universally' agreed indicators for measuring decarbonisation that is agreed at all levels of Government and across all the different transport sectors, allowing a more equitable approach to determining policy interventions. This perhaps reflects a more general view that some areas and sectors are more advanced in their thinking/approach than others and that there needs to be a levelling up of recognition of the urgency of the situation and the need for coordinated actions.

Overall, there is support for developing the trajectory work further as a means of understanding the issues and directing and assessing the impact of policy interventions. Some interesting suggestions included analysing the direct link between emissions and particular patterns of travel behaviour, such as travel for leisure as well as business/commuting and for accessing education, as well as the impacts of specific congestion hotspots. As with the wider strategy the need to share and learn from international best practice was also highlighted in many of the responses.

5.4 Demand Management

Modal shift policies stood out as the most popular mechanism for achieving vehicle reduction targets, with public bodies and environmental groups more likely to favour these types of measures whilst business groups in general expressed a preference for a technology focused approach. Whilst there was still more support for demand reduction measures than against them, the proportion of respondents who felt it should have *less focus* was noticeably bigger than for the two other approaches, which may reflect a hesitance around the subject of road user charging. Many responses inferred fiscal measures such as road pricing would be more palatable if suitable alternatives were already in place.

Other measures, which a significant number of respondents supported, included those targeted at reducing car usage through a combination of road pricing and changes to car taxation. Another well-supported measure was to use parking levies to manage demand and reduce car use. Increases to fuel duty were highlighted by some respondents as an effective means to discourage car use, while also achieving the additional benefit of encouraging modal shift towards low emission vehicles. Finally, there was some support for proposals to reduce road space, for example through road space reallocation to other modes.

Most respondents were in favour of demand management and highlighted the need to reduce car use and ownership. Respondents suggested that there should be a strong focus on doing so. However, some members of the public were concerned that demand management would infringe upon their rights to choose their preferred mode of travel and effectively limit individual mobility. If suitable alternatives were put in place before the introduction of demand management measures respondents would feel more at ease. Otherwise respondents feared journeys would become more difficult and inconvenient.

Businesses in particular highlighted the potentially negative impacts on businesses as a result of parking levy proposals. They stressed the economic importance of tourist and leisure trips for many areas. Respondents thought rural areas where alternative options are limited could be negatively affected.

"We will not get away from the point that cars carry prestige and people are enthusiastic about them. People will not change behaviour in most cases but might change jobs if their existing journey becomes too onerous."

Sheffield Chamber of Commerce

Greater integration of transport with spatial planning was also considered by many respondents to be an effective means to manage demand, facilitating integrated initiatives such as 15/20-minute neighbourhoods. Many respondents encouraged the use of spatial planning and the planning process to guarantee that services are made accessible by public transport or active travel.

5.5 Public Transport

There was strong support for further electrification of the rail network and a number of specific rail corridors were identified where this was required such as the Durham Coast, Midland Main Line and Cumbrian Coast routes. Further commitment to electrification was considered to be integral to supporting decarbonisation, together with better and more frequent rail services as a means to encourage modal shift from road to rail.

There we a number of reasons given for supporting rail network improvements including the need to increase freight capacity to reduce road-based freight movements, as well as reducing commuter journeys by private car and supporting sustainable leisure travel options.

"TfN should clearly seek to shift longer journeys to rail, making rail the natural first choice for longer distance travel, using forward looking forecasts, ambitious targets and the infrastructure built to supports this."

High Speed Rail Group

Alongside this, the responses highlighted the need to consider energy efficiency when looking at fuel sources, such as utilising hybrid locomotives, converting lines to tram-train operation, and the expansion of existing tram networks.

Capacity concerns we raised by many respondents, mainly centred upon whether the rail network could accommodate additional trips shifted from the road network and the impact of additional services on existing capacity constraints which, could reduce the quality of services. A number of respondents made suggestions for new routes/services, such as Bradford to Sheffield and reopening the Colne to Skipton and Penrith to Keswick rail routes Some respondents added that they felt that existing services were a considerable barrier to rail use, including poor rolling stock, unreliable journey times, expensive rail fares, a confusing ticketing structure and inadequate services.

Along with rail, there was a wider recognition of the role of public transport in decarbonising the transport system, generally made by members of the public, and this inclusion within the draft strategy was welcomed by many respondents. Members of the public in particular expressed considerable support for prioritising bus and coach travel, and it was felt that a strong commitment in this area could help to deliver significant reduction in carbon emissions and have the added benefit of reducing congestion. However, many highlighted that public transport is not considered to be an appealing method of travel and does not respond effectively to people's transport goals.

"We were surprised and disappointed to see there was no mention of coach travel in the strategy. Coach is one of the most sustainable and environmentally friendly ways to travel, with one fully loaded coach able to remove 50 cars off the road."

Confederation of Passenger Transport UK

Others suggested that public transport may not be able to act as a realistic alternative to car use, particularly due to cost and reliability, highlight a culture of car use and ownership will make it difficult to encourage a major modal shift to public transport, suggesting more ambitious interventions will be necessary to encourage a step-change in the use of public transport

The most frequently suggested improvements needed to public transport were service frequency, reliability, accessibility and affordability and it was felt that these would need to be considered together to make public transport more appealing and encourage modal shift

5.6 Active Travel and Micro Mobility

Most respondents expressed support for the strategy's approach to active travel and micro mobility. They recognised the importance of active travel in reducing carbon emissions, improving public health and reducing reliance on car use.

However, some business group representatives, voiced concerns that active travel proposals could increase journey times for motorised vehicles by reducing road space, thus increasing emissions. Respondents thought freight would be negatively impacted by an increase in active travel infrastructure. Business group representatives were also more likely to stress the importance of L-category vehicles (such as motorcycles, electric bikes and e-cargo bikes) in encouraging modal shift, reducing congestion, and improving air quality.

Responses from members of the public tended to focus on the lack of adequate cycle infrastructure across the North of England and felt the strategy should focus more on cycling and prioritise active travel over road, and public transport. There was a call for more investment in cycling infrastructure and implementing measures which encourage cycling, such as inter urban cycle routes, safer infrastructure and stricter penalties for dangerous driving and promoting cycle to work schemes and road cycling courses.

"There is a very strong focus on shifting to Zero Emissions Vehicles (ZEVs) which includes the suggestion of incentives such as free parking for such vehicles to accelerate the transition to this mode of transportation. However, we would prefer to see a principal focus on delivering active travel networks, reducing congestion and thereby creating liveable streets."

Royal Town and Planning Institute (RTPI)

5.7 Zero Emissions Vehicles and Road Infrastructure

There was general support for the decarbonisation of road-based travel and most respondents recognised the value of electric vehicles (EVs) in reducing carbon emissions, and consequently supported plans to phase out internal combustion engine vehicles (ICEVs).

The main concern, across all stakeholder groups, relates to a perceived lack of charging infrastructure across the North of England. Respondents felt users' needs were not being met by current charge point provision, and that a substantial increase in charging

infrastructure would be required to facilitate the widespread adoption of EVs. Respondents expressed their reluctance to switch to an EV until a comprehensive network is established. They also raised concerns that current charge points could become obsolete, and outdated due to rapid technological advances.

".....EV charging infrastructure presenting a particular barrier. TfN can take a key role in addressing market failure in rural communities by working with the LTAs to establish and drive forward programmes of investment."

Cumbria County Council and Cumbria Local Enterprise Partnership

Affordability of EVs was also referred to frequently by respondents who felt high upfront costs prevented themselves, or others switching to an EV. They supported the use of grants and subsidies to encourage uptake of EVs, and the development of a second-hand market to benefit lower income households. Some respondents suggested the need for more general awareness raising to support EV uptake.

They also acknowledged that the shift to EVs needed to be considered in the context of the emissions associated with maintaining and improving the existing road network, suggesting that all new road plans should undergo a comprehensive assessment of potential embodied and operational carbon impacts before public investment decisions are made.

"Although the TfN strategy is explicitly clear about the contribution that road mode makes to transport emissions2 the strategy's principal weakness is that it does not disclose or analyse how it intends to deal with the issue of the pressures to expand road capacity."

Member of the public

5.8 Freight and Logistics

When respondents were given the opportunity to identify policy actions, recommendations and activities which should be considered, and could be delivered by TfN, freight featured frequently. Many respondents expressed concerns about freight, and more specifically HGV-related emissions. They thought that the strategy should focus more on decarbonising HGVs and limiting HGV access. Furthermore, respondents suggested that TfN should support the creation of more freight hubs and consolidation centres to reduce freight-related traffic. A few respondents expressed concern about the technological readiness of refuelling solutions and the ability to deliver the increased energy supply to commercial fleet premises, and hence the potential consequences of bringing forward non-zero carbon HGV sale phase out dates.

"Energy infrastructure, including costs connected to supplying increased power to commercial fleet premises, must be addressed before strengthening the existing policy to phase-out ICE car and van sales by 2030 to include hybrids...... Including hybrid vehicles in the 2030 new ICE car and van sales phase-out date could have negative impacts on the objectives of the proposals as many operators will simply retain older ICE vehicles for longer."

Logistics UK

On the other hand, some respondents felt that developing zero-emission HGVs could distract from more urgent actions which aim to switch road freight to alternative modes.

Respondents, across all stakeholder groups, expressed support for a shift of road freight to alternative modes such as rail, aviation and shipping to reduce congestion across the road network. They felt TfN could help facilitate these changes by supporting the expansion of freight infrastructure, improving facilities and introducing more freight rail terminals.

5.9 Clean Growth

Respondents generally supported the clean growth opportunities outlined in TfN's Decarbonisation Strategy. Respondents' expressed support for the inclusion of low carbon hydrogen vehicles, refuelling infrastructure, freight decarbonisation, and port expansion.

"Clean growth opportunities have the potential to help level up towns and cities across the region by providing new high skilled employment opportunities. This in turn have the potential to revitalise local communities and town and city centres."

ADEPT

A few respondents were keen to emphasise that that discussions around clean growth should be anchored in climate change science and that alternative economic models may be required to achieve decarbonisation objectives and a just transition.

Terminologies referencing 'clean growth' are problematic: an implication of the overriding 'imperative' of increasing GDP remains. Instead, an economic model that delivers social value, as agreed by involved communities, should be substituted.

Liverpool Friends of the Earth

Several respondents highlighted concerns about the use of hydrogen, including high production costs, safety and operational efficiency. Many respondents urged TfN to collaborate with the North of England Hydrogen Policy Forum, and raise awareness of hydrogen initiatives at a local, and national level.

Overall respondents praised the level of ambition the clean growth opportunities represent and generally actions related to these themes were well received. In fact, respondents from every stakeholder group, with the exception of members of the public, comment that there are no clean growth opportunities that TfN have failed to consider. Many of the suggestions made have already been addressed by TfN and included in the draft strategy. Others relate to carbon capture, offsetting, and microgeneration.

5.10 Aviation

Emissions from aviation were a concern for a few respondents, who suggested, and supported the intention to include it in TfNs baseline emission scenario and future baseline trajectories. Some Respondents felt that decarbonising aviation was not sufficiently addressed within the draft Decarbonisation strategy and thought that actual measures to decarbonise aviation needed further consideration. A few respondents were concerned about the high emissions currently being produced by aviation and believed that net zero was unattainable for this subdivision of transportation.

Whilst most respondents acknowledged TfN would not lead decarbonisation of the aviation sector, nor be able to influence emission reductions significantly, some respondents did identify a role for TfN in reducing emissions related to airport commuting and improving links to airports via sustainable modes. The role of TfN in relation to aviation and airports must be investigated further, and those actions which can be taken at a regional level

understood. Responses suggest the need for a national/international approach to decarbonising aviation, a suggestion which will be expressed by TfN on the behalf of stakeholders when engaging with partners and independent advisory groups.

We would encourage TfN to engage with UK Government's Jet Zero Council and UK Sustainable Aviation to identify any potential areas of support and collaboration. **Electricity North West**

5.11 Impacts, Risks & Benefits

Generally, respondents felt that they could support the strategy's impact on people, on the basis that it would accelerate the development of a more integrated and accessible transport system, which would enhance social equality. If correctly applied, it was felt that there should be no adverse impacts on the population.

Concerns were expressed as to whether the decarbonisation strategy could result in economic exclusion particularly in and amongst vulnerable groups. Some respondents felt low-income groups could be subjected to increased financial penalties unless concerted efforts were made to ensure low-emission vehicles are affordable and accessible charging options are in place.

Any additional taxation on internal combustion engine vehicles is likely to disproportionally impact low income groups who cannot afford to switch to a ZEV. Low income groups could be disproportionally impacted by demand management policies that disincentivise car travel.....

ADEPT

Concerns were also raised in relation to rural communities who often lack frequent public transport services and are more likely to suffer from a deficit of charge points in the short-term due to lower demand. Many groups including young people, women and people with disabilities were considered to be at risk of exclusion. For example, people with disabilities may be unable to travel by public transport, engage in active travel or make use of car sharing initiatives.

We consider it important that any measures adopted take account of the financial challenges faced by some groups, such as low-income car users in rural areas or small tradespeople who rely on cars/small vans for their business needs. Measures which are seen to drive up costs or penalise people on low incomes could result in a loss of support for essential action to address decarbonisation.

Transport North East

Members of the public made suggestions about how the impact of the strategy on certain population groups could be managed. This included carrying out detailed equality impact assessments to target resources at less advantaged communities, the elderly, and people with disabilities. A wider point made was that efforts should be made to reduce community severance, by providing infrastructure such as bridges and underpasses to link communities.

Respondents also reflected on what they considered to be the main benefits arising from transport decarbonisation more generally. This included improvements to health as a result of improved air quality, increased physical activity, safer roads as a result of fewer motorised vehicles and reduced noise pollution.

6. Further Development of Strategy

Whilst the results of the consultation have primarily been used by TfN to refine and prioritise its activities as TfN moves forward from strategy to action, the outcomes have also been considered when updating the Strategy document.

The majority of updates fall under the following three categories:

- Adding further detail / clarifications where requests to do so represented a common theme amongst respondents.
- The identification of those polices and activities of greatest priority to respondents.
- Where gaps in TfN's approach were identified, the actions needed to address these gaps ahead of the next Decarbonisation Strategy Update (2025) have been set out. This has led in some cases to the identification new priority activities within Chapter 9.

Responding to the consultation and wider engagement activities, the Strategy has been updated in the following areas:

Increased emphasis on the importance of reducing vehicle mileage

At several points in the document changes have been made or supplementary text added to increase the emphasis on the need to reduce private vehicle usage and the essential part that modal shift will play in decarbonising transport in the North, particularly in order to satisfy TfN's carbon budgets pre-2030.

Further clarity on TfN's approach to aviation and shipping

Initial findings and insights in relation to the North's emissions from aviation and shipping have been included. The Strategy now sets out in more detail than previously, how TfN intends to work with Partners and an independent expert advisory group to (1) agree TfN's role in relation to aviation and airports, (2) investigate the approach that could be taken as a region to reduce emissions from aviation (alongside what has been proposed by government within its Jet Zero Strategy consultation¹) and capture the economic benefits that net zero aviation could bring to the North.

Further clarity on TfN's approach to the appraisal of its Investment Programme (IP)

Text added to explain in more detail than previously, how TfN intends to use its analytical framework to model operational carbon emissions. Text related to the project level appraisal of carbon on schemes within the IP (where **not led** by TfN) has been removed, recognising that TfN is best placed to influence at the strategic level and will only be involved as a stakeholder when schemes come forward for delivery. The commitment to work with individual scheme sponsors to embed the consideration of the TfN's Decarbonisation Trajectory within the business case development processes for those projects has however been retained.

Introduced the need to understand the full costs of peoples travel choices and acknowledged the relationship between increased highways capacity and increased car use

Text introduced with the aim of initiating further discussion on how a fairer pricing system for public transport relative to car travel could be achieved. Text has also been added to acknowledge the need for appropriate scrutiny of schemes that increase or release

¹ https://www.gov.uk/government/consultations/achieving-net-zero-aviation-by-2050

highways capacity, cross referring to the Climate change Committees' recommendation that investment in roads needs to be accompanied by proportionate investment in EV charging infrastructure, active travel and public transport².

Support for the role of HS2 and NPR in achieving mode shift, and for shifting freight from road to rail

Reflecting sentiments picked up during the consultation, text has been added to acknowledge the role that rail could play in shifting long distance car trips and also the need to shift more road freight onto rail (cross-referring to TfN's upcoming Freight and Logistics Strategy in that respect).

Updated future baseline emissions trajectories

The future baseline trajectories presented within the Strategy have been updated to take into account the policy ambitions as set out in the Government's transport decarbonisation plan: 'Decarbonising transport: a better, greener Britain'³. The most notable impact of this is that the residual emissions have dropped to close to zero under all future baseline scenarios, by 2050. This is primarily due to the proposal of ambitious non-zero HGV sales phase out dates by the Government. Even with these new ambitious dates, the cumulative emissions accrued under all of TfN's baseline scenarios still exceed the maximum budget allowed by TfN's Decarbonisation Trajectory by 2030 or shortly after.

Commitment to a strategic embodied carbon footprint study of schemes within IP up to 2033

This commitment has been included as an additional TfN activity (**SD13**), with the aim of allowing TfN to benchmark the potential maximum and minimum embodied carbon footprints against TfN's Decarbonisation Trajectory.

Addition of new activity to work with LEPs to support SME's in their green transitions

Responding to the outcomes of the consultation, an additional stakeholder defined activity (**SD14**) has been included, to work with LEPs to consider how TfN can more directly support SMEs to both adopt and take advantage of the opportunities from, the transition to clean green transport.

Signposting of stakeholder priorities from consultation

Policy recommendations (national and local) and potential TfN activities that were identified by respondents through the consultation as the highest priority and most urgent have been signposted within the document.

No-Carb modelling updates

Where appropriate and feasible, the modelling approach taken and the assumptions used, have been updated to take into account both feedback from the public consultation and also the policies and aspirations of the Government's transport decarbonisation plan, which was published after TfN's draft Decarbonisation Strategy was launched for consultation.

Changes include:

NoCarb now factors in biofuel proportions in petrol and diesel.

² Progress in Reducing Emissions 2021 Report, Climate Change Committee, Jul 2021, Table A6

³ https://www.gov.uk/government/publications/transport-decarbonisation-plan

- Other greenhouse gases other than carbon dioxide are now included in the analysis, such as methane and nitrous oxide, and emissions are reflected as CO₂ equivalent, rather than just CO₂.
- The accuracy of the van and HGV analysis has been improved.
- Some input values to TfN's modelling have been updated, particularly around the phase out dates for sales of non-zero HGVs.
- Preliminary analysis on aviation and shipping emissions has been incorporated.



7. Appendix

Appendix 1: List of Stakeholder Organisations

Stakeholder Organisations
Selby and District Rail User Group
SPACE for Gosforth

HADRAG: The Halifax & District Rail Action Group

CONFEDERATION OF PASSENGER TRANSPORT UK

Yorkshire and the Humber Regional Green Party

North Yorkshire County Council

West Yorkshire Combined Authority

Sheffield Green Party Transport Policy Group

MAG

Peel NRE Limited

Association of Directors of Environment, Economy, Planning & Transport

Stagecoach

CPRE North Yorkshire (CPRENY)

York Civic Trust

Avanti West Coast, TPE and First Bus

(collated ideas)

Logistics UK

TravelWatch NorthWest

Network Rail

The CILT North West Region Policy Committee

Manchester Climate Change Agency

Anglo American

Royal Town Planning Institute (RTPI)

Warrington Borough Council

Grimsby West Objections

Skipton East Lancashire Rail Action Partnership (SELRAP)

Lake District National Park Authority

Liverpool Friends of The Earth c/o Faiths4Change

Jacobs

Institution of Civil Engineers Northern English Regions - North West

Campaign Group "Keep Bee Lane Rural"

Royal Mail Group

Powerhouse Energy

North West Leeds Transport Forum (representing 10 resident groups in north west Leeds)

The Wildlife Trust for Lancashire, Manchester & North Merseyside

CPRE Peak District and South Yorkshire

Mott MacDonald

Institution of Civil Engineers Northern English Regions - Yorkshire and Humber

Transport Action Network

Sheffield City Region Mayoral Combined Authority

Chartered Institute of Logistics & Transport

Community Rail Network

Hull Carbon Neutral 2030

Friends of the Lake District

Alstom UK and Ireland
City of Durham Trust
Keswick Town Council (KTC)
Northern Trains
Co-operative Executive Member for Climate Change, Environment and Transport, Sheffield City Council
DecarboN8
High Speed Rail Group
CrossCountry - XC Trains Limited
City of York Council
Allerdale Borough Council
Diocese of Sheffield
CPRE PDSY
Friends of the Earth Manchester
Airturb.com and Trailar.com
Sheffield Climate Alliance
Cumbria County Council and Cumbria LEP
Railfuture
Regional Network Strategy (North) Strategy & Planning Highways England
Zero Carbon Yorkshire
Hull City Council
Transport for the South East
Peak District National Park Authority
ConnectedCities Ltd
Rotherham Metropolitan Borough Council
Rimrose Valley Friends
Sheffield Chamber of Commerce
Motor Cycle Industry Association Ltd (MCIA)
Mineral Products Association Limited
Action for Yorkshire Transport
Zero Carbon Harrogate
Institution of Civil Engineers Northern English Regions - North East
Kendal Futures
Friends of Carrington Moss
The Friends of Reddish South Station
Royal Institution of Chartered Surveyors (RICS)
Ryze Hydrogen and Wrightbus
[Editor's note: anonymised at request of client]
Rock Rail Holdings Limited
Tees Valley Combined Authority
York and North Yorkshire Local Enterprise Partnership
CPRE Peak District and South Yorkshire
Transport North East
Institution of Civil Engineers - North East, North West and Yorkshire and Humber Regions
Penrith Town Council
Sustainable Brampton Cadent Gas Limited
Force Rail
Electricity North West



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