

**Chartered Institution of Highways & Transportation response to the National Infrastructure Commission consultation on The Second National Infrastructure Assessment: Baseline Report.**

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The Chartered Institution of Highways & Transportation (CIHT) provides strategic leadership and support to help our members develop, deliver and maintain sustainable solutions for highways, transport infrastructure and services.

CIHT is a chartered professional body for those working in highways and transportation.

We support our members throughout their careers by providing:

- industry-recognised training and qualifications
- professional standards
- research and business information
- leadership on key transportation related issues

We have members across the world, working in the public, private, academic, research and not-for-profit sectors.

CIHT is the only body to offer the full range of professional transportation qualifications including Chartered Engineer, Incorporated Engineer, Engineering Technician, Certificate of Competency in Road Safety and, uniquely, Chartered Transport Planning Professional.

These qualifications ensure that our members work to high professional standards on behalf of the societies we serve.

We have a network of valued partner organisations – representing the private, public, research and education sectors – that support and collaborate with us in our work and align to our values.

Our work is governed by our Royal Charter. Our object states that we exist:

“To advance for the public benefit the science and art associated with highways and transportation in all their aspects: and to promote education, training and research and development of the said science and art.”

In the response below, CIHT has focused on key questions relevant to transport. Overarching the response, CIHT would like the National Infrastructure Commission (NIC) to take account of the need for a National Transport Strategy (NTS), as this is lacking in England. This would help the government to provide a clear vision and strategy that sets out how transport will contribute to key policy areas. CIHT will work with government, other national bodies and sub-national transport groups to develop the vision and strategy.

The strategy should set a clear framework of requirements over a minimum 10-year period for all elements of our transportation networks. This strategy should include the strategic and local highway networks, rail, aviation and ports and set out how those networks integrate with one another.

It should include a pipeline of infrastructure investment that would encourage business to invest in the resources needed to deliver in a wide range of government policy areas – equality, health, sustainability and developing a prosperous economy.

Currently there is a lack of coordination of transport strategy at a spatial level across the UK. From local and central governments and regional transport partnerships implementing policies, to businesses and individuals taking account of their actions; the national strategy should set a long-term direction and urgent and immediate priorities. The benefits of a more coordinated strategy (and delivery plan) that covers all modes of transport are already being realised in Scotland and Wales, giving businesses the increased certainty, they need.

As part of an integrated transport strategy CIHT highlights the need to improve the links between planning and transport – too often we build first and then think about transport infrastructure afterwards. Our ‘Better Planning, Better Transport, Better Places’<sup>1</sup> advice highlights how this could be done.

The creation of a vision and strategy would give a clear focus for everyone involved in (and dependent upon) transport as to how to align planning and investment for the future. Without one there is a real risk of business not investing or investment being wasted in the development of approaches that are not required.

CIHT welcome the publication of the DfT Transport Decarbonisation Plan<sup>2</sup> and recommends that the NTS investment appraisal approach must demonstrate how it supports Net Zero.

***Challenge 5: Asset management and resilience – the Commission will consider how asset management can support resilience, barriers to investment, and the use of data and technology to improve the way assets are maintained.***

***Question 13: In what ways will current asset management practice need to improve to support better infrastructure resilience? Your response can cover any number of the Commission’s sectors.***

CIHT previously responded to the NIC consultation on congestion, capacity, carbon – priorities for national infrastructure in January 2018<sup>3</sup>. Within that response, CIHT called for:

- Shifting risk mitigation from events driven review of ‘system accidents’ to regular review and planning by asset owners,
- A formal review and commitment for asset and infrastructure resilience assessment to be made a statutory requirement,
- Regular reviews and strategic plans be the basis for funding bids linked to the national infrastructure agenda.

Since that response, asset management of key infrastructure assets is transforming within the UK with many advocating the use of an enterprise asset risk management framework. This framework, a risk-based assessment, allows organisations to manage and maintain their physical assets throughout the entire asset lifecycle against a set of key strategic objectives.

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<sup>1</sup> CIHT, 2019, Better planning, better transport, better places, [Better Planning, Better Transport, Better Places | CIHT](#)

<sup>2</sup> Department for Transport, 2021, Transport decarbonisation plan, [Transport decarbonisation plan - GOV.UK \(www.gov.uk\)](#)

<sup>3</sup> CIHT. 2018. CIHT response to NIC consultation on congestion, capacity and carbon. [2018\\_01\\_12\\_nic\\_consultation\\_response\\_submitted .pdf \(ciht.org.uk\)](#).

Through Government white papers such as National Infrastructure Strategy and most recently The Grand Challenges<sup>4</sup>, updated in January 2021, Local Authorities and government departments can determine decisions around development and local environment in a more consistent way. However, it is geared to be driven from a regional-up approach rather than top-down, and so multi-modal enterprise planning and risk management is largely missed from a UK joined up agenda.

CIHT believes developing a top-down objective would lead to more aligned decisions being made which affect the way in which we determine asset usage thereby allowing the impacts of climate change to be considered across the infrastructure stock. This cross-sectional feature recognises the fact that vulnerability is often characterised by geography where multiple asset owners maintain vulnerable assets around the same location and a mutual approach could prove beneficial.

Of particular note and current challenge is how we maintain network resilience and deal with vulnerability to climate change. Our assets are frequently faced with concerns of ageing, adverse weather conditions, emerging technological challenges, and pressure to reduce costs while ongoing maintenance is required.

Of the 245 local authorities (LAs) in the UK declaring a climate emergency, 60% of them have set targets of reaching zero emissions by 2030 or earlier<sup>5</sup>. In addition, the government has produced ambitious plans to tackle the climate crisis, through the decarbonisation plan, “Build Back Better” as well as active travel plans – LTN 1/20 and gear change.

These ongoing fast-paced changes and ambitious future targets, have the potential to create implications for asset management plans, processes, and systems; all due to the sense of urgency required to take action. Further, CIHT believes there is a need to improve the pipeline of programmed works; an enterprise framework, it would empower better planning around the resilience of transportation decision-making to be made, regardless of transport mode.

Asset management should be recognised as an important discipline for transportation and encouraged within career developments and at degree level. CIHT is in a position to work with government and the NIC to bridge the gap in asset management within industry and public sector through delivering learning modules.

CIHT calls for transport resilience assessments to be made a statutory requirement for all transport asset owners to identify vulnerable areas. CIHT calls for a central fund to be established to support the mitigation of such vulnerable areas<sup>6</sup>.

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***Challenge 8: Urban mobility and congestion – the Commission will examine how the development of “at scale” mass transit systems can support productivity in cities and city regions and consider the role of congestion charging and other demand management measures.***

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<sup>4</sup> Department for Business, Energy & Industrial Strategy. 2021. The Grand Challenges. [The Grand Challenges - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/the-grand-challenges).

<sup>5</sup> [United Kingdom: 60 per cent of Councils have declared a climate emergency - Climate Emergency Declaration](https://www.gov.uk/government/news/united-kingdom-60-per-cent-of-councils-have-declared-a-climate-emergency)

<sup>6</sup> CIHT has previously recommended a formal review and commitment for asset and infrastructure resilience assessment to be made a statutory requirement in its response to the Transport Resilience Review in 2014 as noted here: [NIA Process and Methodology consultation - Redacted responses all .pdf \(nic.org.uk\)](https://www.nic.org.uk/publications/nia-process-and-methodology-consultation-redacted-responses-all.pdf)

**Question 16:** *What evidence is there of the effectiveness in reducing congestion of different approaches to demand management used in cities around the world, including, but not limited to, congestion charging, and what are the different approaches used to build public consensus for such measures?*

CIHT has long called for an effective demand management model and has previously submitted evidence<sup>7</sup> to the Transport Committee when detailing its support for a fair road pricing strategy to be implemented. Evidence of demand management models can be seen in a variety of settings as well as different approaches. In cities, we can see examples of demand management in the forms of car park charging, low emission zones and park and ride facilities, as well as congestion charging.

Congestion charging has seen success globally, with Stockholm being a notable example with the city dramatically reducing congestion. Effective demand management has also been implemented through schemes such as park and ride, and car park charging. In the city of Oxford this has seen success, but when combining strategies (such as park and ride and on-street parking charges) costs need to be priced so that one is more appealing than the other.

Public opinion on congestion charging and other demand management can often be negative, however, to build consensus, it is key to demonstrate what is being done with the funds collected through congestion charging or, such as has been done in Stockholm. This will enable the public to see and understand that the funds collected through such schemes are being reinvested into infrastructure and should be ringfenced. This will prevent the opinion of such schemes as being “cash cows”; and means that the transport sector must ensure the delivery of a greater customer service-based model of operation.

In addition to public opinion, political opinion can be hard to garner. In order to build consensus here, the benefits of such schemes must be communicated in a way that reflects the improvement of health and wellbeing that these schemes will bring.

**Challenge 9: Interurban transport across modes – the Commission will consider relative priorities and long-term investment needs, including the role of new technologies, as part of a strategic multi-modal transport plan.**

**Question 17:** *What are the barriers to a decision-making framework on interurban transport that reflects a balanced approach across different transport modes?*

CIHT sees a need for a National Transport Strategy to be developed (as highlighted in our introductory comments) as this would provide a strategic framework by which to address this question.

Even though significant investment in interurban transportation requires a long-term planning horizon, it is susceptible to economic driver volatility (lack of cost and demand certainty). Therefore, there is a need for future-proofing to cater to rapid developments in technology and behavioural change such as online shopping, home working, etc. There is a clear conflict in priorities, thus an evaluation of the appropriate weighting of economic, environmental, and social considerations has to be conducted.

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<sup>7</sup> Written evidence submitted by the Chartered Institution of Highways and Transportation (CIHT) (EVP0064) <https://committees.parliament.uk/writtenevidence/22797/pdf/>

Another key barrier for a balanced approach to inter-urban transport is the cost and time it takes to deliver rail improvements in comparison with highway improvement schemes.

The NIC should investigate the need to establish a long-term investment pipeline and strategy, which is taken out of the political arena to prevent the current boom and bust approach. All interventions will be expected to contribute to inclusive, sustainable, transformational economic growth while also aligning with the other national transport objectives, which are all equally weighted, in order to increase opportunities and protect and enhance the environment in which they are located.

Currently, there is a siloed approach to allocation of funding with appraisal methodologies that tend to promote 'predict & provide', e.g., approach to traffic assessments for new development with emphasis on 'assuming the worst' on the need for new road capacity. At this stage, there is a lack of a national strategy for inter-urban buses, which could deliver benefits where rail is not an option.

These barriers may be improved, managed, and adapted for the future to support a sustainable economy by influencing travel behaviour, promoting higher-quality design, and adapting to emerging technology such as electric cars. This includes plans to invest in charging stations for electric cars, possibilities for transferring more freight from road to rail, and assistance for advancing future technologies like linked and autonomous vehicles.

The Commission should focus on future mobility as it will almost certainly be realised via a mix of technological trends such as shared mobility, automated and linked systems, and electrification (or other low-carbon energy alternatives), with an emphasis on energy systems, public transportation, and infrastructure integration.