



Chartered Institution of Highways & Transportation response to the National Needs Assessment – Call for Evidence, 29 February 2016

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The Chartered Institution of Highways & Transportation (CIHT) is a membership organisation representing over 13,000 people who work in the highways and transportation sector. CIHT members plan, design, build, operate and maintain best-in-class transport systems and infrastructure, whilst respecting the imperatives of improving safety, ensuring economic competitiveness and minimising environmental impact.

CIHT welcomes the opportunity to respond to the ICE National Needs Assessment – call for evidence. CIHT has supported the National Infrastructure Commission's (NIC) role in advising the Government on the identification of the UK's long-term infrastructure needs. CIHT's response will have a focus on transportation.

CIHT call for National Transport Strategy

CIHT have consistently called for a National Transport Strategy, including in its published Manifesto¹. The benefits of a national strategy - one that sets out a long-term framework over a sustained period (with a 20-30 year time horizon) – are clear when it comes to determining infrastructure priorities in the context of the national economy. The establishment of the NIC and development of a National Needs Assessment will help take this forward but must take into account the following area;

Door-to-door journeys: the Infrastructure Commission must consider how National Infrastructure interfaces with other networks, particularly the Local Road Network (LRN)

It must include the Local Road Network (LRN) and set out how the Strategic Road Network (SRN), rail, aviation and ports networks integrate with one another. Nearly all journeys begin and end on the local highway network and therefore must be considered in any evaluation of connectivity. It should not just focus on the requirements for new infrastructure but the need to use existing infrastructure more effectively.

Resilience – invest to save/mitigate against disruption

Review the resilience of the UK's infrastructure and move the consideration of resilience from events-driven reviews (Quarmby Review in 2010² and the further review on the causes of vulnerability in 2014) to regular review and planning by asset owners themselves, as a fundamental part of maintaining an integrated transport network. 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 Review³ in 2014.

Skills – who will deliver infrastructure?

¹ [CIHT Making the Journey – A Manifesto for Transport](#)

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<http://webarchive.nationalarchives.gov.uk/20111014014059/http://transportwinterresilience.independent.gov.uk/>

³ <http://www.ciht.org.uk/en/document-summary/index.cfm/docid/FE7FEF4E-E237-45F7-8C526F39F890E407>

Include an increased focus around the delivery of jobs and to address the skills shortage. This includes an understanding of who is responsible for tackling the shortage and how we are going to fill the jobs that will be required to deliver the proposed infrastructure. The recruitment, development and retention of the next generation is vital to deliver these ambitious plans. In a recent survey of CIHT's Corporate Partners, 96% of respondents anticipated having a skills shortage in the next few years.⁴

A wide view of how infrastructure supports other policy agendas: housing, planning, health and education

Take account of other key policy areas such as planning, housing, health and education and how these policy areas work together to deliver the national needs.

1) Do you agree with our proposed vision and outcomes? What amendments would you propose?

CIHT do not fully agree with the vision and outcomes. The primary aim of infrastructure investment is to enhance the UK's position in the global economy; the objectives should be better aligned with the expectations of taxpayers who want better connectivity and accessibility, and transport that supports wider essential public services. CIHT would also emphasise the following points:

A strong spatial strategy and attention to planning

CIHT believes that an infrastructure strategy (including digital infrastructure), linked to a high-level spatial strategy is essential when carrying out a National Needs Assessment. There needs to be an integrated approach from Government (national, sub-national and local) and its agencies. This should extend beyond the electoral cycle to produce a long-term spatial strategy that links the future transport needs of the country.

CIHT's response to the National Planning Policy Framework⁵ highlighted the importance of effectively integrating planning and transport to ensure that the objective of delivering sustainable growth is realised. There is a need for changes to the National Planning Policy Framework in order to facilitate better/improved and timely delivery.

Questions such as how future housing requirements will be met must be clear in spatial terms. The Commission should recognise the challenges provided by the operation of the current housing market: the majority of housing availability sits within the current housing stock and locational choices are a trade-off between affordability and travel costs. This gives support to an argument for why a light touch spatial strategy is important (for example the devolved administrations have been preparing light touch spatial strategies)⁶.

The NIC should also consider when addressing the National Needs Assessment which existing corridors demand investment (particularly regarding public transport, including bus provision with walking and cycling).

Resilience – invest to save

⁴ [Routes to Diversity & Inclusion, CIHT 2015](#)

⁵ [CIHT response to the National Planning Policy Framework](#)

⁶ [CIHT response to the Transport Select Committee call for Evidence on Local Decision Making on Transport Expenditure.](#)



Resilient and reliable infrastructure is key to increasing confidence across the country and attracting private investment. Issues such as flood alleviation and asset maintenance are high profile across the country and highlight the need for funding certainty and commitment. Lack of both or this perception will stifle growth.

The Commission should ensure that Government takes an 'invest to save' approach as upfront investment will help reduce later costs from disruption. Such thinking should apply also to how transport networks support decarbonisation.

Security – the Commission needs to ensure that a security-minded approach is embedded across all Infrastructure Delivery

The National Needs Assessment should ensure that security and resilience issues are fully considered. The NIC should focus on the security aspects of infrastructure provision in terms of physical and cyber security. This is important when it comes to the potential security implications of moves towards open data and BIM models. It is recommended that PAS 119-5 2015 is strongly championed by the NIC to ensure such thinking is embedded within the infrastructure community.

You don't build an extension if your roof is leaking – the Commission must not lose sight of the importance of maintaining existing infrastructure

Maintenance and resilience of the existing asset, especially the Local Road Network, is too often overlooked with focus on the funding model for capital expenditure on highways maintenance given precedence. It is vital to recognise that the highway maintenance service in local authorities is also dependent on revenue funding from Department for Communities and Local Government (DCLG) and other sources.

Revenue funding is subject to significant economic pressures that affect the ability of local authorities to deliver their highway services. A number of reports have highlighted the need to consider both revenue and capital funding together to ensure an effective and efficient service delivery (NAO⁷, Transport Resilience Review⁸). Without considering the two elements together it is unclear how an effective and efficient service can be delivered.

Skills

The National Needs Assessment requires an increased focus around the delivery of jobs and to address the skills shortage. This includes an understanding of who is responsible for tackling the shortage and how we are going to fill the jobs that will be required to deliver the proposed infrastructure. The development of skills is a key area of concern and one that should be carefully considered when considering delivery of the national needs. The recruitment, development and retention of the next generation is vital to deliver these ambitious plans. In a recent survey of CIHT's Corporate Partners, 96% of respondents anticipated having a skills shortage in the next few years.⁹

The NIC has the ability to establish the certainty that would help industry invest in skills and secure the pipeline of skilled engineers and professionals for the future. CIHT welcomes the Departments for Transport Skills strategy.

⁷ [NAO report \(2014\) 'Maintaining strategic infrastructure: roads'](#)

⁸ [Transport Resilience Review \(2014\)](#)

⁹ [Routes to Diversity & Inclusion, CIHT 2015](#)

2) What will be the main drivers of demand for the UKs economic infrastructure over the next 35 years that we should consider in our assessment?

There will be a range of drivers, with three broad elements: economic growth (and in particularly the conditions in the global economy), population growth, and climate change.

There is a generational dimension with the priorities of younger people likely to change demand for transport in the future. This is partly being driven by technology and enabled by innovation and this is encouraging/enabling a shift from ownership of transport towards access to transport/connectivity: this is a fundamental shift in terms of attitude and expectations.

It is important when assessing the national needs that the process recognises the wider benefits of (transport) infrastructure. Improved and integrated infrastructure will help tackle some of the big societal changes, including the ageing population, rise in obesity and social exclusion that we face. The benefits of investing in a long-term infrastructure plan will have a positive impact on accessibility, education, protecting the environment and enhancing the quality and functionality of existing places as well as improvement in quality of life and climate change.

Connectivity

Improved connectivity is vital to enabling growth. Clarity and certainty in terms of strategic planning will produce greater confidence amongst investors, business and housing (developers). Cities, towns, villages and rural communities all contribute to the success of the UK economy, increasingly so as the implications of the new digital economy challenge the traditional 'agglomeration model' The CIHT Futures¹⁰ project will help set out the need to adopt a new approach to strategic planning, one that embraces a scenario based planning approach.

The weaknesses in connectivity is holding back much of the UKs regions in terms of jobs, enterprise creation, economic growth, and housing. It is therefore important that investment priorities in one area of the country are determined only having taken into account the relative benefit compared to investment made elsewhere.

3) What will be the main constraints on the UK's ability to provide sufficient UK national economic infrastructure assets and services over the period and what solutions or mitigations of those constraints should the UK adopt?

There are a number of constraints include a continuing lack of commitment to long-term forward planning; limited, if any coordination between government departments with ambiguity around roles and responsibilities; a reduction in client capability in the delivery of major programmes; skills shortage in supply chain combined with a lack of diversity and a shortage of younger people being attracted into infrastructure planning and construction. There is also a need for stability in the framework for strategic infrastructure planning.

Other constraints include:

¹⁰ [Future Uncertainty in Transport – Understanding and Responding to an Evolving Society, CIHT 2015 - 16](#)

- Resource availability - including finance, technical skills and land availability.
- Constraining local land use planning
- Lack of recognition of the importance of existing infrastructure maintenance and whole life management compared with new so called 'vanity' projects.
- Lack of money especially 'revenue' compared with 'capital'.

Some of the above issues could be addressed through greater cross-party consensus given to long term infrastructure decisions.

- The Commission should ensure the UK takes a strategic approach to land use planning.
- Another potential solution is to move the road network to more of a utilities model: leading to more of a pay as you go i.e. road pricing approach.

Public and private sector roles

A significant amount of investment will be private sector led (a view that HMT has articulated in the National Infrastructure Plan) – so CIHT recommends the need to make sure that public sector takes ownership of the problems but enables the private sector to respond by innovating with the solutions.

Sector needs certainty

Certainty, and continuity of investment over a sustained period is important if overall improvements to the network are to be delivered effectively and efficiently. This need for certainty applies both to the Government, “client” bodies and the wider supply chain of organisations working in the sector.

CIHT welcomed the establishment of Highways England and in particular to the greater longer term certainty of funding provided. This similar level of certainty exists for the rail network and would be useful to implement across the UK – through devolved administrations and on the local road network.

With regards to the forms of governance which would most effectively deliver transformative infrastructure, CIHT support the devolution of powers. The overriding aim of devolution should be to ensure infrastructure provision meets the needs of all users, from a personal and business perspective. However the full benefit can only be realised if there is successful connectivity, policy and collaboration between all the cities, regions and LEPs. This requires an equitable share on funding and infrastructure.

The NAO report ‘Delivering major projects in government: a briefing for the Committee of Public Accounts’¹¹ – states that a third of major government projects due to deliver in the next five years are rated as in doubt or unachievable unless action is taken to improve delivery. This further highlights the need for certainty.

4) What nationally significant investments in capacity or changes in policy and regulation should we prioritise to deliver these outcomes and deal with these drivers of demand?

¹¹ [Delivering major projects in government: a briefing for the Committee of Public Accounts \(National Audit Office \(2016\)\)](#)

CIHT will not provide detail of particular schemes but would recommend that the following process should be followed to prioritise an approach to investment:

- Identify the different classes of groups (customers) who are reliant on the network. As well as different users of the network, these customer groups could include amongst others, adjacent communities, non-users of the network, the environment, heritage and the highway asset itself.
- Identify the different purposes that the network is required to deliver to different customer groups
- Analysis to confirm how the network will best meet the different purposes identified and to identify what investment is required to meet those different purposes of all customers.
- Confirm the wider benefits that will arise from meeting the needs of all customer groups and thereby define the Value for Money of the investment.
- Identify areas where investment in other modes will better meet the needs of customers and identify the parties best able to deliver that investment.

Priorities in the transport sector should include investment to improve connectivity and resilience and higher funding in local roads which are essential part of the overall strategic road network.

5) In what areas can demand management or other forms of behavioural change make a significant impact? What are the blockers and enablers for realising these opportunities?

The NIC would be encouraged by CIHT to move away from a 'predict and provide' approach to one of more 'decide and provide'.

When considering the National Needs Assessment, consideration should also be given to what society wants the future to look like. CIHT would be pleased to share the findings of its CIHT Futures project that should provide more information and insight into issues such as uncertainty and forecasting.

Technology enabled solutions are making it possible for customers to have greater visibility of the cost of transport choices, in this sense the market will drive this trend in response to customers' expectations.

6) How can greater cross-sectoral decision making be encouraged?

There needs to be an integrated approach from Government; national, regional and local; agencies and across the political parties to produce a long-term plan that links the future infrastructure needs of the country.

There should also be consideration of how infrastructure decisions influence other policy agendas such as health (for instance with links to air quality).

7) What are the opportunities and challenges thrown up by devolution both nationally and regionally?

There is an opportunity to build on the emergence of sub-national groupings to encourage a more strategic focus to decision making. The emergence of statutory Sub-national Transport Bodies offers new opportunities to feed in local 'strategic' views into a national 'strategic' view. The National Needs Assessment should take advantage of this by working

with sub-national groupings to join thinking up across modes to meet locally determined needs. Other points include:

- Devolved governments in both Scotland and Wales have already demonstrated a more joined up approach in developing transport strategy. There is an opportunity to learn from their approach.
- London provides an example of how a Mayoral approach, with executive powers, can deliver positive change in terms of transport. The 1999 Greater London Act transferred responsibility for multi-year budgets to the London Mayor¹² - which has allowed for long term planning (for schemes such as Crossrail) and for focus on local networks that help improve health and wellbeing through the support given to walking and cycling.
- The devolution deals currently underway present great opportunities for a greater response to local needs but the number of transport authorities across the UK does present challenges in terms of consistency of approach, ineffective use of resources and differing governance standards.
- The move to devolution of greater agglomeration of transport operations, if structured (through governance/executive powers and funded for multi-year periods) correctly could deliver real benefits.
- More focus needs to be given on how we manage transport in all its forms across the country. The Rees Jeffrey work on the Major Road network, combined with the developing approach of Highways England and the creation of Transport for the North give the opportunity to consider carefully how transport should be managed. CIHT would be pleased to engage further in that discussion, building on work we have already carried out with ICE.
- The availability of funding for transport, especially at a local level will continue to be a concern moving forwards.

8) What new and emerging technologies and disruptive trends should be considered?

The important point here is as follows: the public sector should act as an enabler/facilitator for technology enabled innovation as the market will respond in ways that might not be envisaged. The public sector should provide leadership on the kind of place we are looking to achieve.

There are a huge range of emerging technologies – from increasingly autonomous vehicles, electric vehicles and wireless power technology. Print on demand (3D) and drones are just some examples of what might have a disruptive influence on supply chains and logistics.

The way in which technology changes behaviour and demand is one of the uncertain elements faced today – rather than trying to predict, the opportunity is to embrace uncertainty so trying to predict what technology will do is unlikely to be the right approach. If the question is turned around to say – What do the users of our transport networks need? Then there is the opportunity to map which factors affect and influence those needs. They can then be assessed;

- Which of those factors can be controlled and which cannot?
- Where can technology play a part in controlling those factors and who manages that technology?

¹² [Can Devolved Transport Overcome the Black Spots, Guardian Newspaper \(2015\)](#)

That approach will give a much clearer route to which bits of technology to focus on. Alongside that approach there is then a need to accept that there will be changes that were not predicted and how are these managed?

The Commission should also ensure that technology is tested from a security-minded perspective.

9) How do we improve public engagement in infrastructure decision making?

There should be strong engagement with the public listened to through a range of consultative mechanisms. With large scale infrastructure there will likely be a challenge of balancing local needs against those of the UK (from an economic, social and environmental perspective) – how this balance is achieved will rely on good public engagement and strong communications. The ability to influence budgets is also something that can be effective.

The experience of local community engagement on national strategic infrastructure projects could be used to develop an approach that is enabling of engagement but that still moves the decision making process forward.