

Infrastructure Commission – Northern Connectivity Consultation

Peter Mackie, Greg Marsden, Chris Nash, Simon Shepherd, Andrew Smith, Tony Whiteing and Tom Worsley

Institute for Transport Studies, University of Leeds

Contact address [content redacted]

Executive Summary

- **Transport for the North (TfN) should be given responsibility for preparing a Northern Infrastructure Plan comparable to the 2050 London Infrastructure Plan.**
- **Better inter-regional connectivity has a role to play within a broader plan, but this proposition needs to be much more securely evidence-based. The Commission should spell out what would constitute convincing evidence.**
- **The scheme ideas set out in the Nov 2015 TfN report all require consideration. They are long term in nature and need to be complemented by a medium term strategy which builds on what we have.**
- **The international transport infrastructure is adequate for the markets it serves.**
- **TfN should have a budget to enable it to promote additional regional transport investment and should have a seat at the table with national government and its agencies in the studies and deliberations which lead up to transport infrastructure decisions.**

Preamble

1. The questions in the consultation are challenging in themselves but need to be addressed in a broad strategic policy context which is even more challenging. This is, in essence, the nature of the national and regional problems which the Northern Powerhouse concept is designed to address. What are we trying to do?
2. We see a number of components to the answer
 - There is a longstanding productivity gap, which is at the heart of the North/South divide, the causes of which require analysis.
 - The marginal social cost of expanding the capacity of London and the SE in energy, waste management, water and transport infrastructure is very great and the constraints on land development for all uses are acute. This provides an opportunity for cost-effective policy interventions aimed at spatial rebalancing to happen.
 - There is a need to deal with a medium-term national population projection of more rapid growth than has been the norm.
3. We think this policy context needs spelling out clearly as an essential precursor to the downstream questions about the transport sector. Within the timescale of the Commission's report, a clear description of the issues and their underlying causes is required, possibly together with some high level 'cartoon' strategies for addressing them. We recognise this may be pushing the boundaries of the terms of reference, but the greatest value added the

Commission can offer in three months is to locate the potential contribution of connectivity within a secure overall analysis.

4. An indication of the constraints facing London and the South East is provided in the Mayor's 2050 London Infrastructure Plan. There is no comparable plan for the rest of the country which covers the infrastructure in all sectors that might be required to facilitate economic development and accommodate population growth. As part of the way forward, **we would like to see the Commission's report recommend that Transport for the North should be given responsibility for preparing such a Plan for the North of England.** This would have twin purposes—to address the substantive questions above and to provide a space for regional political leadership to engage in a dialogue.

Q1 Are weaknesses in transport connectivity holding back Northern city regions?

5. ***Better inter-regional connectivity has a role to play within a broader plan but this proposition needs to be much more securely evidence-based. The Commission should spell out what would constitute convincing evidence.***
6. The aim of the Northern Transport Strategy is to improve connectivity between the major cities of the region. The creation of a single economy across the north with cities specialising in what they do best and employees having access to a larger labour market will, the March 2015 Northern Powerhouse report suggests, achieve the objective of rebalancing the economy of the north (HMG/TfN Mar 2015)
7. Yet the evidence behind this claim is thin, relying largely on comparisons with other European city clusters rather than on analysis of the causes of differential regional growth in this country. And while the evidence on transport's role in boosting productivity through improving city centre connectivity is robust, there is a lack of regional trade data on which to base evidence of the impact of improved inter-city links on productivity growth through specialisation, economies of scale and gains from trade. Below, we suggest some elements of a work programme to help fill this crucial gap.
8. The impact of transport infrastructure on the economy will come about via the initial pathway of improved accessibility. Therefore a secure analysis of the accessibility problems and the contribution made by improved inter-city connectivity is a crucial component of the study. This is obvious to state but not easy to deliver and here we note a few points :
 - Intra-urban accessibility is very important. The urban networks have seen relatively little improvement since the introduction of urban traffic control and the LRT schemes in Sheffield, and Tyne and Wear. Manchester LRT is the exception which proves the rule. Much infrastructure is showing its age. The peak period has gradually spread to around 5 hours per day with urban peak car speeds around 10mph and peak bus speeds in Leeds and Manchester little better than 5mph. We would therefore argue that an essential priority is to invest in improving urban accessibility so as to make the cities (even) more attractive places for people to live and work. That involves big funding, governance and delivery challenges.
 - Most journeys are not city centre to city centre. There is a sense in which the door to door experience is only as good as the intra-urban networks. So, to take a random example, halving the journey time between Leeds City and Manchester Piccadilly

only reduces the journey time between Headingley and Manchester University by around a quarter. This has strong implications for the use of models such as PLANET Strategic --- even more than for HS2, the quality of the representation of the access legs of the journey and of the data describing the journey patterns are going to be crucial to the results.

- Accessibility improvements are not achieved by speed alone ; generalised cost is a combination of time, cost, service quality, reliability and the usability of the time spent in transit. The implication of that is that we should not jump too fast to the conclusion that the cost-effective solution is always to be found in big infrastructure. Particularly on rail, the blend of infrastructure and operations is key. We think the biggest medium term problem on the Transpennine rail line is shortage of capacity and overcrowding for which a significant remedy might be to increase train lengths enabling more people to sit down and work on the train. Recent announcements are a very welcome recognition of the priority of this. (Written Statement 9/12/15)
9. Next comes the question of the linkage between a given change in accessibility or connectivity and real economic performance. We think there are several needs here
- A good description of what the important linkages are (? Commuting, Employers Business travel, Logistics?) supported by an analysis of the size of the base flows in the context of the total markets.
 - A discussion of economic modelling approaches which have been tried relatively recently (eg the LSE's Spatial Economic Research Centre work for the Northern Way) and which could be used (SERC, 2009). Approaches to estimating static and dynamic agglomeration and land-use change in city centres and associated displacement effects would need to be covered, consistently with the recommendations of the TIEP Report and forthcoming draft guidance (DfT 2014). An important issue is the nature of city competition in the region and we have provided a paper to the Secretariat on simulating the effects of transport changes on competitive vs collaborative behaviour (Shepherd and Ballijepalli, 2015).
 - The above points might be addressed by the Commission in the next three months, at least by setting out the framework for follow up studies. But thirdly, we would like to see some microeconomic work of particular sectors which engage in regional trade either via the labour market through commuting or via the structure of firms through business travel and branch organisation or by the creation of larger markets. For example, suppose Leeds, Sheffield and Manchester were brought closer together. What difference would this make to the economic behaviour and performance of the University sector, financial and legal services, the tourism sector, sports, media, and high end manufacturing, biotechnology etc ? Which of these are there reasons to believe are subject to agglomeration economies and might yield *additional* benefits to the primary accessibility impacts?
10. Then a slightly different point is to note that the form of the Commission's question suggests a supply boost to demand response hypothesis ; improve the infrastructure and demand response will happen. Going back to our preamble, some of Britain's problems might better be viewed in opportunity terms. For example, how do we intend to deal with the population growth question, what opportunities does the transpennine corridor offer and how could better connectivity help? Just to take one example, could Huddersfield, located midway

between Leeds and Manchester on the main arteries, have an opportunity for very significant development well beyond an incremental planning approach?

Q2/3 What cost-effective infrastructure investments in city to city connectivity could address these weaknesses?

11. As observers and occasional consumers, we would say that the scheme ideas set out in the recent Transport for the North report all require consideration (HMG/TfN Nov 2015). It will not be possible to undertake full appraisal of all these options so some form of shortlisting or early stage assessment method will be needed perhaps relying on a combination of transport modelling and descriptive wider economy assessment. It is not a foregone conclusion that any or all of the schemes will turn out to represent social value for money.
12. We would specifically like to see a version of HS3 considered which is a physical extension of HS2 between Leeds City and Manchester Piccadilly, extending the reach of the line to include Nottingham, Sheffield and locations in the North-West including Manchester Airport.
13. Our appreciation is that ***the kind of infrastructure in the TfN report is long term in nature and needs to be complemented by a medium term strategy which builds on what we have***, for example
 - Completion of the Northern Hub
 - Reopening the second Standedge tunnel to increase overtaking opportunities and provide more train paths
 - Electrification of York to Manchester (including Micklefield to the ECML/Selby) and the Calder Valley line with delivery of suitable trains as already committed (Network Rail, Nov 2015)
 - Examination of opportunities for raising line speeds and relieving bottlenecks on existing transpennine routes
 - Completion of managed motorway M62 from the A1 to Manchester.
 - Completion of the Woodhead Study and consideration of medium term recommendations (DfT, 2015)
 - Final resolution of HS2 Station location in Leeds as proposed by Higgins (see also para 12 above) (HS2, Nov 2015)

Q4 What are the key international connectivity needs and how should they be met?

14. With few exceptions, international connectivity needs should be provided commercially through open markets. Government should provide a high level sense of direction which, together with the planning system, ensures that wasteful duplication of investment does not occur. Some public support for investment in surface access may be justified where there are benefits to local and regional as well as international traffic. However arguments that airport or port investment can be transformational should be treated with caution not least because of the two way road argument which particularly affects attempts to calculate UK GVA impacts. ***Our general perception is that the international transport infrastructure is adequate for the markets it serves.***

15. We think the overwhelming top priority is to ensure Manchester airport continues to perform its function as the northern international hub. Primarily this is a matter for private airlines to negotiate with MAG. An issue for Government in cases where bilateral agreements constrain the number of permitted aircraft movements is to ensure the interests of the North are fully represented. It is a structural weakness that Manchester has no based hub airline to argue the case and this may have held back route development. Terminal capacity at Manchester is clearly an issue for which there has been much planning.
16. The other airports should continue to provide the range of services associated with regional airports of various scales. At the upper end, ie Newcastle, Liverpool and Leeds/Bradford, these should continue to include connectivity through Heathrow, Schiphol and other international hubs to complement Manchester's offering, together with a market-determined range of point to point services.
17. As far as ports themselves are concerned capacity currently seems if anything to be running ahead of demand. However there are particular issues regarding freight train paths and some routeings are currently quite circuitous and time consuming. It has long been an aspiration that the Liverpool—Hull /Immingham corridor should have TEN-T status and the Commission might wish to consider whether that is a desirable goal and what practical difference it would make.

Q5 What form of governance is required and how should investment be funded?

18. These questions go to the heart of the likely success or failure of Transport for the North. The functioning of the governance model for city regions including Combined Authorities, LEPs, and District Authorities is only just beginning to settle down and the role of an elected Mayor for the city regions (and even at the time of writing their definition) will take time to define and settle. So we are not dealing with a very stable set of institutions in answering this question. Another point is that governance in these city regions is demanding because the regions are variegated and multi-centric in nature and have many proud cities and towns which will not willingly relinquish their powers in the area of strategic planning and are liable to view big choices as a zero sum game.
19. This background is both a problem and an opportunity for Transport for the North. It is just possible that a big picture organisation might be capable of persuading local interests that there are bigger prizes at stake if they can work together. An obvious first task is to agree on the fundamental problems and goals at the pan-region level and then to consider the criteria which TfN might wish to use to help determine its priorities. This in itself is no easy task since Manchester, Leeds and Sheffield have different criteria and will need to sink their differences.
20. Then there are issues of articulation. One unavoidable issue is that much of the strategic network such as the M1, M62, A1 and M60 together with as a minimum the WCML and ECML is bound to be viewed as being of national importance. So how the pan-regional interests and the national interests articulate is clearly an issue. A difficulty conceptually is the position of Highways England and Network Rail. Are these to be viewed both as representing the national interest at the planning table and the responsible agency at the delivery table? Ultimately TfN will need to acquire the credibility and status of a fully fledged representative of the regional interest whose priorities need to be reconciled with those of central government rather than subordinated.

21. Probably central to the resolution of these issues is the question of funding. Ultimately responsibility, power and finance have to be lined up together, but that is far down the road and quite possibly will depend on the creation of new revenue streams (eg road user charging). So far, devolution has meant local responsibility for a nationally funded pot, overseen by Central Government. CG has continued to require devolved authorities to meet its requirements for managing public money and meeting its value for money guidelines. As an interim position that is manageable but is unlikely to be a long-term solution capable of revolutionising the quality of city region governance.
22. For the foreseeable future we see the way forward being for Transport for the North to have a budget which enables it to promote and undertake additional regional investment in the regional interest, and in having a seat at the table with national government and its agencies in the studies and deliberations which lead up to decisions. That in itself would be a step forward. Our suggestion in Para 4 would provide an economic framework to help TfN fulfil that role.

18/12/15

REFERENCES

Department for Transport (Mar 2015) Transpennine Routes—Feasibility Study Summary

Department for Transport (Nov 2014) Transport Infrastructure and Economic Performance (TIEP)

HM Government/ Transport for the North (Mar 2015) The Northern Powerhouse : One Agenda, One Economy, One North. DfT Publications, London

HM Government/Transport for the North (Nov 2015) The Northern Transport Strategy Autumn Report

HS2 (Nov 2015) The Yorkshire Hub—an interim report on the redevelopment of Leeds Station.

Network Rail (Nov 2015) The Hendy Review—Replanning Network Rail's Investment Programme.

Shepherd S. and Ballijepalli C. (2015) A game of two cities : A toll setting game with experimental results . *Transport Policy* 38, pp 95-109

Spatial Economics Research Centre LSE (Nov 2009) Strengthening Economic Linkages between Leeds and Manchester—feasibility and implications. Report to Northern Way. See also Sept 2010 review by Laird and Mackie.

Written Statement (9/12/15) Rail Franchising : Northern and TransPennine Express franchises . Secretary of State for Transport. Gov.uk