



NORTHERN RAIL PRIORITIES STATEMENT

FIVE PRIORITIES FOR IMMEDIATE
ACTION AND INVESTMENT

March 2012
© IPPR North 2012

Foreword

The Northern Economic Futures Commission is developing a medium-term strategy for sustainable economic development in the North of England. This is a sizeable challenge, yet one which needs to be taken on if the North is to be at the vanguard of the UK's recovery and able to compete in the global economy. Alongside skills and innovation, transport infrastructure is crucial for ensuring that the northern economy is the driver of national prosperity that it has the potential to be.

Our work in the area of transport continues to develop the Northern Way Transport Compact's previous consideration of what the strategic transport priorities for the North of England should be.¹ But the urgency is now far greater. Infrastructure investment can give an immediate boost to struggling local economies as well as providing a basis for sustainable economic growth. Given the paucity of investment in the North's railways, a sustained programme of investment is necessary not only to address the backlog but also, critically, to unlock efficiencies in the future. The forthcoming budget, and publication of the HLOS2 and SoFA, provide opportunities not only to enhance infrastructure investment in the North of England but also to ensure that the limited pot of money is targeted on those projects that will bring maximum benefit to the wider national economy.

The Northern Economic Futures Commission has considered carefully the range of options available and calls upon the chancellor and transport secretary to approve immediately five priorities for urgent action and investment. We will provide a further analysis of infrastructure investment in the commission's final report in the autumn.



Geoff Muirhead

Chair, Northern Economic Futures Commission

What is HLOS2?

The High Level Output Specification (HLOS2) is the government's statement work planned for the national rail network between 2014 and 2019. It will be published in July 2012 along with a Statement of Funds Available (SoFA).

1. Transport investment in the North is critical to national prosperity

The link between better transport infrastructure and regional economic growth is well documented. Not only does immediate investment create local jobs and multiplier effects, improved transport results in time savings to journeys and greater economic dynamism. The case for improvements in transport infrastructure is especially acute in the North of England:

- **Investment now will provide the environment for future growth:** Forthcoming OECD research has identified that improving infrastructure is among the top two factors in driving growth in intermediate regions, after investment

in skills.² Rail investment will provide the platform for sustainable growth for the northern regions. More specifically, investment in infrastructure priorities that make rail franchises cheaper to run reduce long-term subsidies, increasing productivity and making growth more sustainable.

- **The economic interdependence of the North's eight city-regions will only increase:** Much economic growth over the coming years will be driven by the expansion of knowledge-based sectors that increasingly rely on larger employment catchment areas. To ensure that growth is not constrained, transport provision will need to be improved and better joined up between and within the city regions. A report by LSE's Spatial Economics Research Centre (SERC) established that sub-standard transport connections meant that the number of commuting journeys between the Manchester and Leeds city regions is about 40% lower than would be expected given the physical proximity of the two cities. SERC found that reducing travel times would have pan-northern economic benefits.³
- **National transport policy has not served the North well:** For too long, critical economic development policies have been spatially blind or biased towards the south of England. Autumn's updated National Infrastructure Plan⁴ revealed that 18 major transport projects have already started in London and the south-east as part of successive governments' infrastructure spending plans, compared to four in the three northern regions combined. It also showed that transport infrastructure spending per capita is heavily skewed towards the greater south-east.⁵ Furthermore the main rail franchise for the North, Northern, has been twice let on a 'no-growth' basis, a decision which has failed to capture the benefits of record growth in demand over the last decade.⁶ Investment is now needed both to address the backlog of improvements and to unlock the efficiencies inherent in a more modern railway, such as through electrification.

2. Maximising the potential of HS2

High speed rail will greatly improve rail capacity and has the potential to accelerate significantly the economic development of northern cities, if it is configured correctly. However, the huge capital costs involved (£32.7 billion) show that the benefit-costs ratio (BCR) of 2:1 is relatively modest when compared to other infrastructure projects. HS2 is not without risks. Many are concerned that the intended Y-shape will not be completed. To ensure its BCR is maximised, HS2 cannot be taken to Birmingham and no further. The business community in the North is particularly interested in enhancing journey times not just to London, Paris and Brussels but also to Birmingham and the Midlands.

But the greatest risk is the potential for 'leaking by linking', whereby sources of jobs and growth choose London over Birmingham or other cities to (re)locate, in the knowledge that they can draw upon labour markets from these other cities more easily. This is exacerbated by the fact that the timescale for implementing the full Y-shape is protracted and the North risks losing business to the south and to a better-connected Midlands while it waits for the sections to Manchester and Leeds to be completed. In order to mitigate these risks two things must happen:

- The timescale for the consultation and construction of the Y-shape should be brought forward.
- A number of other key rail priorities must be put in place well ahead of the completion of the London-Birmingham section in order to minimise leakage and maximise northern benefit in the shorter term. These priorities are included among those listed below.

3. Rail priorities to boost growth, reduce subsidy, and maximise the benefits of HS2

3.1 Northern Hub

This is a series of proposed improvements across the North of England to upgrade the rail network, address congestion and capacity issues through central Manchester, and stimulate economic growth right across the North of England, with benefits reaching much further afield. The project builds on last year's much welcomed approval of the Ordsall Chord link between Manchester Piccadilly and Manchester Victoria and includes two new platforms at Manchester Piccadilly, up to 700 more trains per day, and shorter journey times between major towns and cities in the North. The services and economic benefits run as far as Newcastle and Hull in the east and to Chester, Liverpool, Blackpool and Cumbria in the west. They would also help to spread the benefits of HS2 to these areas.

The project would cost £560 million (£85 million of which is already committed to Ordsall Chord) and provide a £4 boost to the economy for every £1 spent.⁷ Journey times between Leeds and Manchester would be reduced by 10 minutes, and between Liverpool and Manchester by 10–15 minutes.⁸ KPMG analysis suggests the improved timetable could support 23,000–28,000 extra jobs across the North and that there could be an increase in productivity of around £300 million per year in 2021 (in 2007 prices) in the region.⁹

A commitment is required to deliver all of the hub's outcomes within the next rail spending period (CP5) to make sure these benefits are realised and that these improvements are in place well before HS's maiden journey.

3.2 HS2–Midland Mainline Connection (Birmingham–Derby)

Greengauge 21 and the West Yorkshire ITA, among others, have advocated connecting the existing Birmingham–Derby/Midland Mainline to the London–Birmingham high-speed line. HS2 trains would cross the West Coast main line near Lichfield Trent Valley station and join the Midland main line north-west of the town. It would allow the East Midlands, Sheffield, Leeds and Newcastle to benefit from the completion of the London–Birmingham HS2 as soon as it opens in 2026, and help to reduce the magnitude of any 'leaking by linking'. The short link would cost around £30 million and mean substantially faster journey times to London. For instance, services from Sheffield and Derby to London would be cut by half an hour. The modest price of the connection combined with its capacity to spread the benefits of HS2 phase one to the North East would improve the cost–benefit business case for HS2 by 20–25%.¹⁰ The regional economic benefits of this proposal would be sizeable and substantially enhance connectivity between the some of the UK's largest cities.

3.3 Extending the TransPennine electrification scheme

The Commission welcomed the announcement of the TransPennine Electrification between York and Manchester but there is a strong case for this electrification programme to be extended to Middlesbrough, Scarborough and Hull, accompanied by electrification of the Stockton Cut and Bowesfield Junctions to Sunderland.¹¹ While this can improve journey times – for instance, from Newcastle and Middlesbrough to Manchester Airport or London to Hull – extended electrification also brings capacity increases, cost reductions and environmental improvements further afield. The Network Rail Electrification RUS rated two of these three schemes as tier 2 priorities, in terms of passenger vehicle miles, and with a substantial part of the northern cross-Pennine track already approved, these additions may even save money over the 60-year appraisal period, once all costs have been netted off. In other words, they will pay for themselves. Electrification of the route would provide an attractive alternative to the M62 motorway, increasing viable commuting distances for those

living in East Yorkshire. The cost of these improvements is estimated to be £85–110 million.¹²

3.4 Improvements in rolling stock

Line electrification drives the need and opportunity for improvements to rolling stock. Electric service rolling stock improves cost efficiencies compared with diesel, with savings of up to 50 per cent on fuel and 33 per cent on maintenance costs. It also uses 20–30 per cent less carbon.¹³ At present, the 87 per cent of the Northern Rail franchise's rolling stock was manufactured in the 1980s or earlier, and operates some of the slowest routes in the country. By contrast, 64 per cent of Southern's rolling stock and 53 per cent of Southeastern's was manufactured in the 2000s. Poor rolling stock is a key reason why the Northern Rail franchise has been rated by passengers as one of the worst in the country.¹⁴ Perhaps most importantly, given record growth in rail demand, rolling stock improvements are a vital way to increase capacity with passenger vehicle units and electrical multiple units typically being considerably larger than diesel alternatives. Alongside the direct benefits, improvements to rolling stock can also be a clear signal and driver for wider business investment, and rolling stock manufacture can bring jobs and additional benefit to the economy.

At present there is no clear estimate of what the rolling stock requirements for northern rail improvement should be. This matter is complicated by the possibility of northern franchises receiving vehicles 'cascaded' from other franchises. For this reason – and the fact that rolling stock is not normally considered in the same way as other rail infrastructure – there is no immediate cost estimate for this priority. Nevertheless, the commission would urge that a detailed study of rolling stock requirements in the North is carried out as a matter of urgency.

3.5 Capacity upgrades at Leeds, Sheffield and Liverpool stations

Northern rail services frequently receive the worst customer satisfaction rates in the country, and a key part of this can be attributed to customer experience in stations. The following investments will help to solve longstanding capacity issues in three of the busiest stations in the North as well as bringing much wider regeneration benefits. In a recent study by Steer Davis Gleave it was noted that station improvements can drive up employment levels and increase property values by as much as 30 per cent.¹⁵

Liverpool Lime Street Station is constrained by the number and length of trains admissible, their associated layovers, the capacity of the station 'throat' and congestion on its approaches. The station layout and throat should therefore be remodelled to create more platforms to meet anticipated passenger growth and increase the number of routes offered. The upgrade would cost £38–45 million.

Leeds Station capacity needs to be expanded to deal with a long-term trend in passenger growth in the Yorkshire area, thereby enabling the operation of additional services and longer trains on local and inter-regional services. Additional and/or longer platforms at Leeds Station will be necessary to accommodate longer trains. On current projections, capacity at Leeds station is expected to become increasingly critical even with the interventions presently proposed for the 2014–2019 control period. The upgrade would cost £49–57 million.

Sheffield Station is a hub station which, despite some excellent sculptural installations, has been historically devoid of strategic investment. The station's layout and approaches need to be remodelled to meet anticipated passenger and freight growth and to improve route and station capability in terms of capacity, performance and operational flexibility. Improvements would also ease crowding on local, regional and long-distance services by allowing longer trains to operate to/from Sheffield, making best use of track capacity. The upgrade would cost £19–21 million.¹⁶

4. Funding future investment

Government investment is critical to the success of the rail priorities listed above. The total cost of the proposed schemes is £810 million, just 2.5 per cent of the HS2 proposals or 3.2 per cent of current investment in Crossrail, Thameslink and London Underground improvements – all of which have significantly lower BCR values.

However, in an environment of constrained financial resources, greater consideration is required of future funding options and how they might suit different projects. The commission wishes to highlight three key issues in this regard:

1. Funding future priorities will entail not only making the best use of public money but also looking harder for opportunities to attract private finance. It will no doubt necessitate coming up with unconventional and innovative approaches. Alongside government investment, the North's transport authorities need to explore means of raising external capital and revenue streams to service that capital. One solution would be establishing a Local Authority Mutual Bank into which the city regions would deposit their reserves, which could then be loaned for transport projects in the region.¹⁷ Another option would be to equip a new regional investment body or fund with the capitalisation and remit to invest in cross-city-region transport and infrastructure priorities. Bodies such as the Nordic Investment Bank have invested in infrastructure projects with great success over the past decades, generating employment, tax receipts and profit for private investors. Both of these ideas are currently being considered by the Northern Economic Futures Commission but either would be significantly bolstered by a government commitment to significant investment in the priorities set out above.
2. HM Treasury's Green Book and the accompanying Department for Transport New Approach to Appraisal (NATA) guidelines¹⁸ set out how potential investments should be evaluated. The NATA process measures the benefits of a transport project principally as a function of the number of individuals making savings due to shorter journey times, and takes into account the average wage for the region when attributing a value to the time saved. This skews investment decisions heavily in favour of London and the greater south-east, with their higher population density and higher average wages, and it diminishes the importance of a project's wider economic impact. Large-scale strategic transport improvements such as rail schemes create substantial changes in both accessibility and agglomeration. There is consequently a strong case for taking far more seriously agglomeration-related productivity effects in cost-benefit analyses. Detailed work has been carried out in this regard but this now needs to be translated into effective national policy.¹⁹
3. Finally, consideration should be given to significant devolution of transport infrastructure funding as a block grant, enabling local, sub-regional and pan-northern decisions to be taken using more devolved appraisal methodologies. The Single Assessment Framework (SAF) used by Greater Manchester, for example, allows it to make a robust assessment of the predicted impact of projects and whether they provide value for money in outcomes delivered and returns generated. It looks at expected GVA benefits, how the project fits in with the conurbation's wider strategic vision, the impact on unemployment, and environmental factors. A pan-northern version of the SAF may be beneficial in ensuring that transport priorities, particularly rail, are as efficiently planned and as coherent as possible where funding is devolved. Such a step would not negate the need for a similar broadening of approach at a national level.

The Northern Economic Futures Commission will bring forward further recommendations about these ideas in its final report in the autumn.

5. Summary

Investing in rail now will save the exchequer in the long run by driving efficiencies, reducing subsidies and stimulating wider economic benefits. Investment in the rail network today will help ensure that the North's city-regions provide an engine of economic growth leading to greater prosperity for the UK as a whole. Failure to provide the necessary investment will stack the odds against the North being able to provide a strong boost to the national economic recovery. The North is home to nearly a quarter of the working-age population, and its economy is twice the size of Scotland's – the scale and potential of the northern economy means that as a nation we cannot afford to ignore it. Northern prosperity is truly vital to sustaining national prosperity, and investing in these five northern rail priorities will put economic recovery firmly on track. Government must act decisively and fast.

Notes

- 1 The Northern Way (2010) *Meeting the Economic Challenge: Delivering the Northern Way's Transport Priorities*, February 2010, Leeds. <http://www.thenorthernway.co.uk/document.asp?id=902>
- 2 Garcilazo E (forthcoming) *Promoting Growth in all Regions*, OECD
- 3 Spatial Economic Research Centre (2009) *Strengthening Economic Linkages between Leeds and Manchester: Feasibility and Implications*, Leeds: The Northern Way. <http://www.thenorthernway.co.uk/downloadaddoc.asp?id=724>
- 4 Greater Manchester Passenger Transport Executive (2010) *Network Rail Northern Hub Rail Study*, report to Greater Manchester Integrated Transport Authority Policy And Resources Committee (GMPTA now Transport for Greater Manchester)
- 5 Cox E and Schmucker K (2011) *On the wrong track: An analysis of the autumn statement announcements on transport infrastructure*, Newcastle: IPPR North. <http://www.ippr.org/publications/55/8411/on-the-wrong-track-an-analysis-of-the-autumn-statement-announcements-on-transport-infrastructure>
- 6 Passenger kilometres and real revenue in the 'regional sector' are projected to grow by 3.1 per cent and 4.7 per cent respectively during the CP5 period (2013/14–18/19), significantly higher than in the London and South East sector. Network Rail (2011) *Initial Industry Plan*: <http://www.networkrail.co.uk/WorkArea/DownloadAsset.aspx?id=30064778713>
- 7 Network Rail (2010) *Manchester Hub Rail Study*
- 8 Network Rail (2010) *Northern Hub*, webpage: <http://www.networkrail.co.uk/aspx/6472.aspx>
- 9 See note 4
- 10 Greengauge21 (2011) *HS2 Consultation – Supplementary Response*
- 11 Network Rail (2009) *Network RUS, Electrification*: http://www.networkrail.co.uk/browse%20documents/rus%20documents/route%20utilisation%20strategies/network/working%20group%204%20-%20electrification%20strategy/networkrus_electrification.pdf
- 12 Network Rail has not yet developed a detailed business case for these lines for evaluation, but these costs are estimated on the same basis used in the Electrification RUS of £500,000–650,000 per single track kilometre (based on Department for Transport (2007) *T633: Study on Future Electrification of the UK Railway*).
- 13 See note 11
- 14 Fifth-worst on national passenger survey satisfaction scores from Passenger Focus: <http://www.passengerfocus.org.uk/news-and-publications/document-search/document.asp?dsid=5356>
- 15 Steer Davis Gleave (2011) *The Value of Station Investment: Research on Regenerative Impacts*. http://www.steerdavisgleave.com/sites/default/files/newsandinsights/Station_Investment_Report.pdf
- 16 Arup (2011) *The Case for Upgrading and Electrifying the Midland Main Line*
- 17 The Northern Way (2010) *Review of Transport Funding Options*
- 18 Department for Transport (2009) *NATA Refresh: Appraisal for a Sustainable Transport System*, incorporated into the Transport Analysis Guidance (WebTAG): <http://www.dft.gov.uk/webtag/>
- 19 Gibbons S, Lyytikäinen T, Overman H and Sanchis-Guarner R (2010) *Productivity and employment impacts of agglomeration: evidence from transport improvements*, SERC/LSE/UKTRC working paper

IPPR North

3rd Floor, 20 Collingwood Street, Newcastle Upon Tyne, NE1 1JF
T: +44 (0)191 233 9050 \ E: north@ippr.org \ www.ippr.org/north
Registered charity no. 800065

This paper was first published in March 2012. © 2012
The contents and opinions expressed in this paper are those of the authors only.

PRIORITY 1: NORTHERN HUB CAPACITY BOOST

What would the Northern Hub mean?

- Up to **700** more trains per day
- Space for **44 million** more people to travel by train each year
- **Two** new fast trains per hour between Manchester Victoria and Liverpool
- **Six** fast trains per hour between Leeds and Manchester, up from four currently
- A new direct service through Manchester city centre to Manchester Airport

PRIORITY 5: STATION CAPACITY IMPROVEMENTS



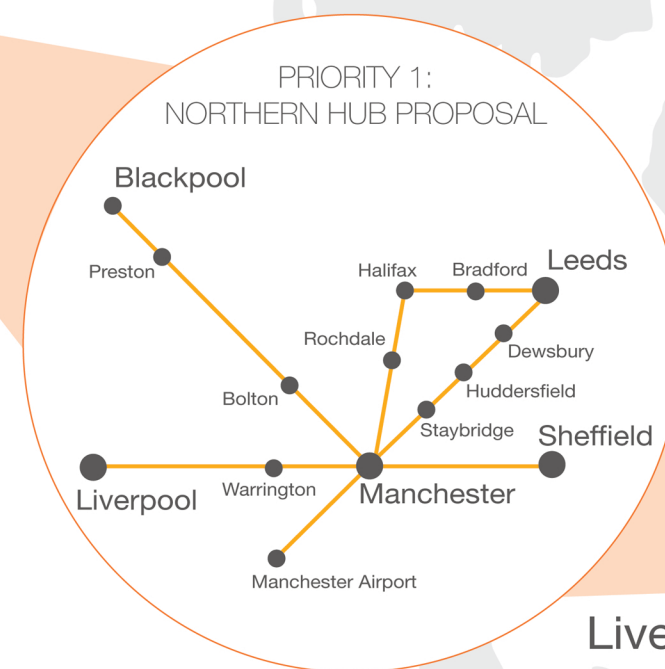
Sheffield Station



Liverpool Lime Street Station



Leeds Station



SUMMARY: BENEFITS AND COSTS

Priority	Main benefits	Cost	Benefit:Cost ratio	Status
1 Northern Hub	<ul style="list-style-type: none"> Reduces travel times between Liverpool, Manchester, Leeds, Sheffield and Newcastle Increases capacity at Manchester Piccadilly 	£560m (£85m already approved)	4:1	Detailed specifications and analysis completed. Ordsall Chord already approved
2 HS2–Midland Mainline Connection	<ul style="list-style-type: none"> Immediate benefit from HS2 Phase 1 to East Midlands, East Yorkshire and North East Reduces travel times between Newcastle, Sheffield, Derby 	£30m	Existing HS2 benefits increased by 20–25%	Initial plans developed by Greengauge21 and West Yorkshire ITA
3 Extending Transpennine electrification	<ul style="list-style-type: none"> Maximises benefit of Manchester–York upgrade by connecting to Middlesbrough, Scarborough and Hull Reduces travel times between Newcastle–Manchester Airport, Hull–London Reduces congestion on M62 	£85–110m (upper estimate)	Could pay for itself over its lifetime	We recommend that DfT and Network Rail draw up proposals for these schemes
4 Improved rolling stock	<ul style="list-style-type: none"> Enhances capacity and customer experience; increases cost efficiency and lowers carbon emissions Maximises benefit of Transpennine electrification Creates jobs associated with manufacture 	NA	NA	Urgent need for a study and strategy
5 Station improvements in Liverpool, Leeds and Sheffield	<ul style="list-style-type: none"> Increases capacity at all stations, both passenger numbers and train journeys Increases modal shift between road and rail 	£110m	Previous upgrades to Sheffield and Manchester stations generated GVA impacts of between 5 and 7 times those derived using conventional appraisal benefits.	
Total cost		£810m (£85m already approved)		

PRIORITY 4: IMPROVED ROLLING STOCK

