

# National Infrastructure Commission call for evidence

## Connecting Northern cities

The National Infrastructure Commission is a new, independent body which will look at long term infrastructure needs and provide impartial advice to ministers and Parliament. Before next year's budget they will publish a report on *improving connectivity between cities in the north of England*, particularly identifying priorities for future investment in the north's strategic transport infrastructure to improve connectivity, especially east-west across the Pennines.

You are strongly encouraged to provide details of the evidence and data to support your arguments to enable the Commission to understand more fully the basis on which conclusions have been reached.

When answering these questions it may be particularly helpful to make reference to international experience and, where possible, data relating to transport accessibility, regional trade flows, and regional business networks. It would also be beneficial for respondents to indicate the available evidence to support points made, and also to highlight gaps in the evidence base.

<b>1. To what extent are weaknesses in transport connectivity holding back northern cities regions (specifically in terms of jobs, enterprise creation and growth, and housing)?</b>
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<p>A fundamental weakness is the extent by which the Northern Powerhouse is dependent on southern England ports. This dependency results in container freight bound for the northern powerhouse arriving in the south and then being transported by road causing congestion on the M1, M62 and M18. It also creates an imbalance and an unfulfilled opportunity in port and logistics sector growth in the north and a reduction in competitiveness due to increased transport costs.</p>
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<p>Whilst the Manchester and Liverpool City Regions have / are substantially investing in coastal and inland port infrastructure (including the Manchester Ship Canal) to fully exploit Atlantic Gateway connections, the opportunity in the Northern Powerhouse to take advantage of a similar strategic position in relation to the European Gateway is yet to be fully fulfilled, despite the Aire &amp; Calder Commercial Waterway having the potential to provide a similar strategic freight waterway in the east as the Manchester Ship Canal fulfils in the west.</p>
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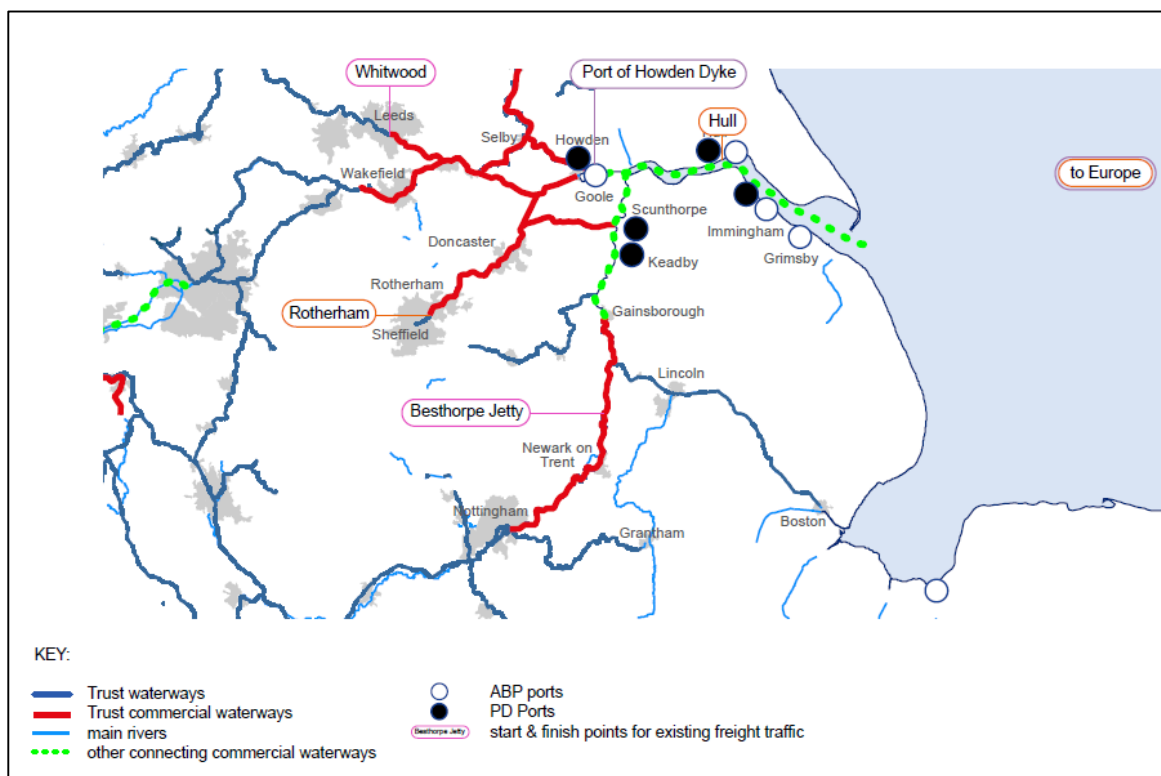
<p>The Humber region boasts the UK's largest development sites situated next to a deep water port with subsequent access to European markets. The connection between the north West, West Yorkshire and the Humber using the Aire &amp; Calder Navigation could support regional economic growth if the navigation was improved and supporting infrastructure such as inland ports (in Leeds and South Yorkshire) were established.</p>
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<p>At 484 hectares, the Humber has the largest Enterprise Zone in the country offering many businesses and their supply chains the opportunity to co-locate to make cost reductions on a major scale.</p>
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Land assembly and infrastructure works are already underway to allow fast development of sites, however historic lack of investment in water transport connectivity and the loss of inland port infrastructure and wharves with storage, equipment and onward freight forwarding facilities is holding back the growth of the ports and logistics sector.

**2. What cost-effective infrastructure investments in city-to-city connectivity could address these weaknesses? We are interested in all modes of transport.**

These weaknesses can be addressed and significant economic and environmental benefits delivered in the short term with relatively low level of investment in comparison to other transport infrastructure improvement projects. The Trust has a network of commercial and leisure waterways that connect Liverpool, Manchester, Leeds, Sheffield and Hull and believes that these could play a key role in improving connectivity between these cities.



In 2012 the Trust set up a Freight Advisory Group (FrAG) in order to stimulate the use of the commercial waterways and in 2014 this group recommended further investigation into 'Priority Freight Routes' (the designation of certain navigations in the North East that link to the Humber Estuary) where there is the opportunity for these waterways to be used for commercially viable and sustainable freight transport. For more information please see the link below to the FrAG report:-

<https://canalrivertrust.org.uk/media/original/6213.pdf>

In addition to the recommendations in 2014, a recent review of infrastructure studies and a consultation with barge operators and their trade association suggests that in principle the Aire & Calder Navigation could be improved to accommodate barges of Euro Class II to

navigate from the ABP ports of Hull, Grimsby, Immingham and Goole to a new inland port at Leeds for storage of goods and onward transportation to the North West of England.

Investment to construct new wharves, minor channel dredging, enhancements to Bulholme and Castleford Lock and improvements to air draft at a number of key bridges would create a new coherent, feasible, more viable and more resilient transport option between the northern cities, the Humber and Europe. Not only would the investment help increase the competitiveness and the resilience of the Northern Powerhouse with respect to transport but it would also stimulate the creation of new jobs in the freight and logistics sector and provide a feasible and financially viable alternative to imports and exports to and from southern ports, ultimately helping to improve air quality and congestion on the UK's south – north arterial road network.

A recent report produced on behalf of the Canal & River Trust by the consultant MDS Transmodal suggests that Euro Class II barges with dimensions of 61m length, 6.1m beam, 2.5m draft and 3.6m air draft which can be sourced from the continent could be used on the Aire & Calder Navigation with the obvious benefits of carrying capacity – 32 TEU / >650 tonne dry cargo.

Investment to upgrade the commercial waterways to accommodate Euro Barge Class II container barges must be supported by the creation of inland port facility(s) to service them, they are inter-dependent in delivering the economic and environmental benefits for the three City Regions. In our view, a moderate investment would demonstrate a quick win towards the ambitions of the Northern Powerhouse delivering value for money economic and environmental benefits.

The Canal & River Trust has already assembled the land and has planning permission in place to deliver an inland port in Leeds (Stourton) and has already received support at European Funding EOI stage. We have partners in place to help deliver and operate this infrastructure and the technical work on these proposed improvements scoped.

The Trust would like to work closely with the NIC team to promote the use of commercial waterways as part of an integrated infrastructure plan for connecting the northern cities.

### **Walking and Cycling**

The Trust also has a network of over 2000 miles of towpath across England and Wales. Many of these towpaths connect city centres and, with modest investment, these are able to provide safe, traffic free routes to work - connecting the Northern Cities, giving commuters the option to move away from cars and public transport and on to more sustainable forms of transport such as walking and cycling. These towpaths are highly legible and can be improved to help connect the wider city regions of Sheffield; Leeds; Manchester; Liverpool – linking city centres and towns within each city region.

The Trust is currently working closely with local authorities across the country to deliver improved towpaths for the benefit of all, (for example - our work in partnership with TfGM by upgrading the Ashton Canal as a sustainable transport route into Manchester City Centre as the first phase of a “blue route” network), but we see the establishment of the NIC as a way for further improvements to be made as part of an overall plan to provide the necessary infrastructure to connect the Northern Cities and we look forward to working closely with the NIC to facilitate this.

### Utility Corridors

Beneath many of the Trust's towpaths there are buried utilities such as fibre optic and high voltage electricity cables. These take advantage of direct and straightforward connections between major cities and within the cities themselves. The Trust believes that further development of these utility corridors could be undertaken to allow improved connectivity and asset resilience within the cities of the Northern Powerhouse.

### Energy Production

The water flowing through the Trust's 3200 kilometres of waterways which pass through most major cities in England contains enough thermal energy to produce approximately 640 MW of energy. This has attracted a number of businesses which now utilise this low carbon source to heat and cool their buildings. DECC to have acknowledged this potential in their Heat Map which includes a specific canal layer

<http://tools.decc.gov.uk/nationalheatmap/>. The energy is extracted using water sourced heat pumps which are very efficient compared to conventional forms of heating and cooling. These efficiency improvements will help reduce the electricity demand and assist in balancing electricity supply. In order to realise this benefit the Trust would urge the NIC to recommend that the renewable heat incentive (RHI) is retained so that this nascent technology can be deployed more widely.

### **3. Which city-to-city corridor(s) should be the priority for early phases of investment?**

The Trust would recommend prioritising the investment as follows

#### **Freight**

We would recommend investigating the freight potential of the following waterways;

- The Aire and Calder Main Line up to Leeds, together with a stub of the Wakefield Branch to Wakefield Europort (Whitwood)
- The Sheffield and South Yorkshire Navigation to Rotherham Lock
- The Ouse from Goole Railway Bridge to Barlby (Selby).

#### **Walking and Cycling**

Using canal towpaths for shared use, sustainable transport (cycling and walking) within and between Northern Powerhouse Core Cities not only provides transport benefits but can also improve the health and well-being of local communities. Every effort should be put into identifying how canal towpaths can be used to connect new and existing developments with places of work, leisure, community facilities and schools.

### **4. What are the key international connectivity needs likely to be in the next 20-30 years in the north of England (with a focus on ports and airports)? What is the most effective way to meet these needs, and what constraints on delivery are anticipated?**

The previous answers set out above will support the Humber's international connectivity with Europe.

**5. What form of governance would most effectively deliver transformative infrastructure in the north, how should this be funded and by whom, including appropriate local contributions?**

The Trust would prefer to work with a single organisation that could coordinate the delivery of infrastructure improvements. We have experience in working with infrastructure delivery bodies. We are a body with statutory powers (e.g. Permitted Development) and funding that can focus solely on delivery. We have a track record as an effective and reliable delivery partner in a range of engineering infrastructure projects of differing complexity and scale. In addition we have significant experience of working in partnership with a range of statutory, regional and local stakeholders and communities e.g. HS2, Crossrail, and London 2012.