consultancy engineering business environment

ACE Evidence: Improving Connectivity Between Cities in the North of England

ACE Response to the:

National Infrastructure Commission Call for Evidence

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About ACE

As the leading business association in the sector, ACE represents the interests of professional consultancy and engineering companies large and small in the UK. Many of our member companies have gained international recognition and acclaim and employ over 250,000 staff worldwide.

ACE members are at the heart of delivering, maintaining and upgrading our buildings, structures and infrastructure. They provide specialist services to a diverse range of sectors including water, transportation, housing and energy.

The ACE membership acts as the bridge between consultants, engineers and the wider construction sector who make an estimated contribution of £15bn to the nation's economy with the wider construction market contributing a further £90bn.

ACE's powerful representation and lobbying to government, major clients, the media and other key stakeholders, enables it to promote the critical contribution that engineers and consultants make to the nation's developing infrastructure.

Through our publications, market intelligence, events and networking, business guidance and personal contact, we provide a cohesive approach and direction for our members and the wider industry. In recognising the dynamics of our industry, we support and encourage our members in all aspects of their business, helping them to optimise performance and embrace opportunity.

Our fundamental purposes are to promote the worth of our industry and to give voice to our members. We do so with passion and vision, support and commitment, integrity and professionalism.

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Q1. To what extent are weaknesses in transport connectivity holding back northern city regions (specifically in terms of jobs, enterprise creation and growth, and housing)?

The paucity in the presence of high quality infrastructure to provide improved transport connectivity, as well as the general lack of public transport provision across The North, is well documented. Such weaknesses are considered to be a significant handicap and are holding back the economic and social development of the region and inhibiting inward investment.

Improving intra-regional connectivity through proposed improvements in speed, frequency and capacity has been the subject of a number of studies. In the recent past there have been research and publications such as the development agency led multi-modal studies, the DaSTS studies and the Northern Way's work on the Manchester Hub that eventually triggered the Northern Hub programme. The primary transportation objectives have not fundamentally changed, which are to improve:

- The trans-Pennine corridor linking Liverpool-Manchester-Leeds;
- The Leeds-Sheffield-Manchester Triangle; and
- North-South Links along WCML/ECML and the M6/M1 corridors.

As an example, the limited connectivity to Manchester and Liverpool could be a factor in the Sheffield City Region's struggle to diversify its economic base. The existing road and rail links between Sheffield and Manchester are so comparatively poor that it has been a barrier to economic growth between the two cities and as a consequence generated more air passenger leakage from Manchester airport to the London airports.

The mobility of the workforce and ability for labour to access opportunities and jobs is limited by the relative high cost of public transport, its general poor availability and journey times. This is particularly relevant for lower paid jobs for which transport by car may be required, but the resulting costs have a negative impact. Furthermore, the lack of provision of public transport at weekends and evenings increases the desire to purchase a car. These circumstances are perpetuating the use of cars and hence exacerbating the congestion on many of the North's trunk roads and motorways. The excessive delays and poor journey times in a typical working week result in poor productivity, limits the mobility of the workforce and reduces the effectiveness of the road network for core users, such as the logistics/manufacturing sectors.

Although a weakness is the lack of physical infrastructure, the function, interaction and operation of the various modes within the public transport offer may also be inhibiting mobility, enterprise and growth. The various authorities, operators and executives that exist on a regional scale, lead to too many and too confusing a set of offers for public

transport ticketing, often with anomalies. By contrast, in the South East there is a stronger regional offer and in the Rhine-Rhur area of Germany there is one passenger transport authority for an area of similar size and complexity to The North. Having ineffective coordination of public transport resources once again leads to car use that creates congestion and poor productivity. The need for improved connectivity is required at all scales with local solutions required to complement "city-to-city" proposals so as to improve the overall "door-to-door" travel experience.

The weaknesses that are present in the existing transport connectivity provision, are also having a direct impact on housing development. This is further compounded by the tendency for the relatively small scale of housing developments and the typically lower values per unit, both of which make the case for effective transport infrastructure more difficult. The resulting urban expansion is occurring with no improvement in choice for transportation. Although The North is less densely populated, a concerted effort for housing at hubs must be made rather than indirectly encouraging 'urban sprawl'. More must be done to aid release of housing sites at transport accessible locations and stop the sprawl of settlements with no offer or chance of real transport choice.

Q2. What cost-effective infrastructure investments in city-to-city connectivity could address these weaknesses? We are interested in all modes of transport.

A key factor in securing infrastructure investment is determining and demonstrating what constitutes "cost-effective". The impact of transformational change is likely to have much broader value and the impact of the "wider economic and social benefit" needs to be considered. Investment in infrastructure needs to be considered as an enabler for improvements in social, educational and health wellbeing: "cost-effective" may not capture the full "social value".

Rail provides significant opportunities to improve city-to-city connectivity, particularly through reductions in journey times thus achieving modal shift as the time savings in travel become more attractive. However, much can also be gained through the provision of regular, reliable and comfortable services with stops at the peripheries rather than faster services. Indeed, improving capacity can be achieved through longer trains requiring the obvious investment in both rolling stock and infrastructure.

- Example: a stop on the Cheshire Lines railway at Cornbrook to allow those travelling by train from the West to access Salford Quays/Trafford Park without going via the centre of Manchester. This would expand Salford Quay's catchment, reduce journey times by around 30 mins each way and potentially make it more attractive to travel by public transport than car (freeing up space on the M602, M62 and M60). Liverpool South Parkway is an example of where

a peripheral interchange has aided journeys and created a more comprehensive offer.

Although improving direct city-to-city corridors is important, there is also the need to link to orbital movements.

- Example: the Liverpool City Region Long Term Rail Strategy showed a Tarbock Interchange Station on the Cheshire Lines Railway. The aim was to intercept journeys from the M57 corridor into Manchester and similarly from the East towards Liverpool.

In the case of the ports improved road and rail access is required as is the opportunity to realise the potential of the Manchester Ship Canal.

- Example: within the Liverpool City Region, access from motorways to Port of Liverpool is constrained when port-related traffic reaches the M57/M58/A59 interchange and is funnelled onto the A5036 towards the port through residential areas. Numerous studies have been conducted on connectivity to Port of Liverpool and while improvements have been made the last 5 miles remain a problem.
- Example: improved rail and motorway link to Port Salford and maximise use of the Manchester Ship Canal.

Recent work on FARRRS demonstrates how local interventions can support growth and the Highways England studies on the proposed trans-Pennine Tunnel (Sheffield-Manchester) demonstrates how strategic interventions are being considered. Although, there is a case for more new build highways to increase capacity and improve connectivity, more could also be made of the existing network by managing networks better and switching users to public transport.

Returning to the wider social benefit, if the development of transport infrastructure creates employment opportunities, housing and educational development for a region, there is likely to be significant improvements in health and wellbeing of the population. Improvements to the accessibility of transport can facilitate the availability of local facilities that encourage a healthy lifestyle and improve access to healthcare services within cities. There are also implications for connectivity when considering the importance of transport in enabling interaction and reducing social exclusion, particularly for adults with mental health problems, people with disabilities or the isolated elderly.

As a final note and not related to the city-to-city query, future transport plans also need to take consideration of connectivity to other aspects of nationally significant infrastructure such as power stations (e.g Cumbrian coast).

Q3. Which city-to-city corridor(s) should be the priority for early phases of investment?

For many years the potential for growth and improved connections across the Pennines connecting the ports of Liverpool and Hull in a trans-Pennine corridor have been proposed. In general terms the Liverpool-Manchester-Leeds-Hull Corridor should be the priority for early phases of investment balanced across road and rail infrastructure. This would satisfy the needs of business travellers, residents, freight operators and international visitors. But, the overall aim should be to create a network of routes between locations similar to that present in the Rhine-Rhur region in Germany with each city in that region retaining its own local transport network.

However, it is difficult to advocate achieving construction of a major new road/rail scheme within the timescales of "early phases of investment" as there are significant physical and environmental challenges to improving trans-Pennine routes. The SMART motorway programme to enhance the M62 is welcome, but the absence of significant improvements on alternative trans-Pennine roads will still leave the major east-west motorway effectively running at capacity. Hence, there should be investment into the development and investigations of longer term schemes.

Focussing on the context of prioritisation for early phases of investment, this perhaps indicates a staged approach to investment and delivery rather than a "big-bang" approach. The latter is likely to meet the aspiration for a transformation of The North through large capital investments with associated lengthy delivery timescales and periods to achieve a return on investment (new build trans-Pennine). Whereas, the former staged approach may involve a series of interventions, with lower/incremental costs, shorter timescales, provide an earlier return and provide a platform for future phases. It is likely that improvements in road-rail-ports can be achieved within earlier phases where physical and environmental challenges are not as great.

Taking the above into account, particular focus should be given to improvements on certain city-to-city corridors as well as specific local investments that yield regional/national benefit:

- the Liverpool-Warrington-Manchester road/rail corridor has significant population within its catchment and is a key commuter route;
- local improvement and connections by rail to sea and air ports;
- local improvement in connectivity (tram-train).

Q4. 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?

As international connections and global trading becomes increasingly important, the United Kingdom needs to invest so that there is a more balanced offering that includes the capacity and competitiveness that is unlikely to be delivered by a continued concentration of growth in an increasingly constrained South East.

Acknowledging the uncertainties associated with future global geo-political situations, it remains likely that to be competitive there has to be increasing direct links to the emerging economies, including the Far East and China by air and sea.

In the UK at present most freight traffic, including that serving the north of England, uses the Eurotunnel to connect to Europe, which in turn creates predominantly north-south road traffic with associated air quality impacts and loading on the highways network. The ports in Liverpool and Hull are under-used, yet the Hull port complex is the fourth biggest in Europe and Liverpool is set to significantly increase its capacity.

Connections from Hull to Northern Europe and the Baltic for high frequency short sea shipping would provide resilience to the current UK provision. Better freight connections between Liverpool and Hull is much needed as existing rail and road routes are over capacity or have limited access/paths. Better connections between the two ports would enable transhipment and flexibility of container repositioning.

It is considered that the Northern airports have spare capacity yet suffer from loss of business to the South East airports. Creating more direct flights to other key hubs will increase European Connectivity and reduce over-reliance and use of airports in the South East. Whilst it is important that in Manchester Airport The North has a major international/global hub airport with good regional transport links, we need to make better use of the available regional capacity. Manchester is the most significant airport for the North, and its position will be strengthened by improvements to the rail network and HS2. But whilst Manchester's traffic has continued to bounce back after the recession, volume growth at other airports such as Leeds-Bradford and Liverpool has been lower. One of the factors behind the relatively slower growth of Leeds-Bradford and Liverpool is their poorer access in comparison to Manchester. Neither has a direct rail connection and road links to Leeds-Bradford are notoriously poor. Opportunities also exist for improving connectivity between the ECML and Newcastle airport and extending the HS2/classic compatible eastern routes.

If a more balanced approach to airport utilisation across The North is to be achieved, then rail access in particular needs to be improved as surface access connectivity to

regional airports in the north is generally substandard. This may be challenging, but a direct link to Leeds-Bradford is being considered and a rail alignment to Liverpool airport may difficult because of the development around the airport in recent years. However, the Liverpool South Parkway Station is relatively close and the focus could be on creating a high quality link between the parkway station and the airport. Air traffic at Robin Hood Airport Doncaster Sheffield has increased over the past year, and in addition to the new FARRRS link road to the A1, which will enhance accessibility, it is feasible to provide a new rail station on the adjacent rail line.

A concern is the difficulty in achieving a coherent UK aviation strategy. Delaying decisions on airport development in the South East is likely to impact on the strategy for the airports in The North, particularly as carriers are likely to choose other European hubs for routes to the Far East and elsewhere. The regional economic benefit of regional airports as commercial centres and key nodes to public transport, needs to be understood better. Decisions made in the public sector are often too disparate. A comprehensive approach is needed to airport development covering the planning, transport, and economic development spheres. This may influence decisions relating to the quantum/split of private and public sector funding for airport related connectivity schemes.

Q5. 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?

Although by UK standards The North is large on both geographical and population scales, by global standards, it is not. Having several bodies responsible for overseeing large capital investment programmes as well as the operation of a variety of modes of transport, makes integration challenging. Indeed, under current conditions such organisations are competing against each other for investment without ever realising the combined potential. This is a significant issue for the effective coordination of transportation resources. Benefits are likely to be realised through improved governance with an inherent long term plan that is linked to a national strategy.

Often, at a local level, there is a lack of evidence based objectivity, with ideas being generated and promoted without proper early consideration given to costs and benefits. Improved governance is required to prevent pursuing schemes that do not bring significant benefit, but which may be the preferred option based on a specific local or stakeholder preference. This would instead provide focus and investment on opportunities with a wider benefit.

Larger public transport areas would better reflect user journeys and reduce cross boundary problems relating to fares and ticketing. Benefit could be gained from a more regulated environment aiding coordination and make more effective use of limited

resources. Perhaps a pan-North organisation is needed to strategically deliver what is needed; indeed Transport for the North (TfN) is presumably designed to fill this requirement. Comparison can be made between The North and the Rhine-Rhur area in Germany where there is one public transport authority for an area of similar size and complexity.

A key factor is the economic analysis and formulation of demand models which support the business cases to release investment. The current package of road and rail schemes is probably underpinned by economic analysis from the previous decade. Indeed, the models themselves may well be based on a linear return on an investment rather than a transformational return that maybe realised in The North, but which may be difficult to model.

With the establishment of TfN and proposed decentralisation of government, decision making on which schemes to commit to, will be delivered locally. It is important that planning approvals and funding is also delivered locally to support the committed plan and thus provide long term certainty, which is so important in attracting private investment.

The breadth of transformational change in The North will involve both public and private sector investment and mechanisms to insulate funding from changes in national politics/events and “stop-start” cycles, need to be secured. UK Government has made commitments to support investment in The North and this will attract and provide a catalyst to private investors. Organisations such as Peel Holdings are directly involved in investments in infrastructure and development opportunities such as Ocean Gateway. Furthermore, the growing interest in overseas investment in the UK is likely to grow, particularly if global/continental transportation nodes are made more accessible.

References

1. Department for Transport (2015) General Aviation Strategy.
2. HS2 (2014) Rebalancing Britain.
3. 1North (2014) One North: A Proposition for an Interconnected North.
4. Steer Davies Gleave (2014) Transport Constraints and Opportunities in the North of England (Ref:227/3/65/01).
5. Transport for the North (2015) The Northern Powerhouse: One Agenda, One Economy, One North.
6. Transport for the North (2015) The Northern Transport Strategy: Autumn Report (Nov-15).