**Appendix A**

**LANCASHIRE TO NORTH AND WEST YORKSHIRE: 'CENTRAL' TRANS-PENNINE TRANSPORT CORRIDOR**

**EAST WEST CONNECTIVITY ECONOMIC STUDY BRIEF**

Background

The Lancashire Strategic Transport Prospectus, launched in February 2016, acknowledges that there is growing interest in the strategic east-west transport corridor linking Central and East Lancashire with North Yorkshire and the Leeds City Region. The North Yorkshire County Council Strategic Transport Prospectus likewise identifies improving east – west connectivity, including Trans-Pennine links, as a strategic transport priority.

This 'Central' Trans-Pennine Corridor comprises the M65/A56/A6068, A59 and A683/A687/A65 roads and parallel railways, including the Calder Valley line linking Preston, Blackburn and Burnley with Bradford and Leeds via Hebden Bridge and the line linking Lancaster with Leeds via Skipton. Several long-standing aspirations for improved connectivity in the corridor by both road and rail currently exist and a number of local schemes have been considered in the past. However, the corridor is not covered specifically by any of the Department for Transport led studies announced in the Road Investment Strategy in December 2014 and being taken forward in partnership with Transport for the North as none of the Trans-Pennine routes within it form part of the Strategic Road Network. Furthermore, work currently underway by Transport for the North as part of the development of the Northern Transport Strategy has to date focused principally on rail links between the North's core cities of Leeds, Liverpool, Manchester, Newcastle and Sheffield together with Hull and Manchester Airport, and the Strategic Road Network.

Road links between Lancashire and North and West Yorkshire tend to follow historic routes dictated by topography rather than travel demand; most are poorly aligned and unsuitable for carrying large volumes of traffic, particularly heavy goods vehicles. Main line rail links are likewise constrained by topography, with low line speeds, ageing infrastructure and capacity constraints having a significant impact on journey times and reliability. Both are of a much lower quality than those further south that link Liverpool and Manchester with Leeds, Sheffield and the Humber ports. Consequently, there is a strong perception locally that the transport network hinders the efficient movement of people and goods, and that this poor connectivity is having a negative impact on economic development and regeneration.

This brief has been prepared by a study group comprising Lancashire and North Yorkshire County Councils and the West Yorkshire Combined Authority in conjunction with the Lancashire, York-North Yorkshire-East Riding and Leeds City Region Local Enterprise Partnerships. It specifies the parameters and outputs for a shared analysis to identify the potential economic benefits that might arise across the North of England from improved transport links between Lancashire and North and West Yorkshire with the aim of strengthening the strategic case for intervention in terms of both rail and road improvements, thereby informing the development of future investment programmes.

Area of Interest

The study will focus principally on east-west Trans-Pennine transport links between Lancashire and North and West Yorkshire, set within the wider context of work already underway in other Trans-Pennine corridors. It covers that area roughly north of a line drawn between Preston and Leeds and south of a line drawn between Morecambe Bay and York, with the M6 / West Coast Main Line and M1/A1(M) / East Coast Main Line defining the western and eastern boundaries respectively. The Lancashire, York-North Yorkshire-East Riding and Leeds City Region Local Enterprise Partnership areas collectively have a resident population of almost 5 million and are home to some 170,000 businesses generating economic activity valued at over £100bn per annum, representing one third of the GVA created in the wider Northern Powerhouse.

Work Required

This commission will need to build upon work already undertaken to develop an understanding of the scale and nature of the wider economic benefits that could arise if transport connectivity and capacity in this 'central' Trans-Pennine corridor are significantly enhanced, particularly in terms of reduced centre to centre travel times by both rail and road. Such wider benefits could include increased agglomeration potential, enhanced productivity and ability to attract new growth sectors, improved access to labour markets and job creation, and hence GVA uplift. This will require a full understanding of the current level of interdependency / interaction and how this might change in the future in a 'Northern Powerhouse' context, including the extent to which existing transport networks may be constraining economic growth and therefore the potential for transformational change.

In undertaking the work, the consultant should:

* Consider the implications of Transport for the North's Independent Economic Review (IER) and make particular reference to the prime and enabling capabilities outlined therein and how these sectors will be impacted by improved east-west transport connectivity;
* Consider the implications of relevant Strategic Economic Plans and Growth Deals within the corridor together with other major growth initiatives of relevance such as the Preston, South Ribble and Lancashire City Deal and Local Plans;
* Identify specific strengths and weaknesses with regard to skills across the corridor in question, again with reference to (but not exclusively) IER capabilities, in order to demonstrate where potential transport connectivity enhancements can add value to industries and better enable access to skills and to employment and education/training opportunities;
* Identify sectorial clusters, innovation hubs, Enterprise Zones and other strategic development/housing locations and supply chains that could be developed further as a result of improved east-west transport connectivity; and
* Identify wider links to national and international markets that might benefit from enhanced transport connectivity to major cities both within and beyond the North, including London, international airports and major ports.

The study should also take account of other pan-Northern aspirations including, for example, freight and logistics and the visitor economy.

The study will need to clearly articulate the issues and barriers to economic growth currently evident as a result of existing transport connectivity. It should outline an overarching rationale for investing in transport in order to unlock productivity and agglomeration benefits associated with increased economic activity, whilst taking account of relevant environmental, sustainability and social / distributional factors.

Whilst specific schemes are not to be identified, the study should consider a range of transport investment scenarios in relation to employment and GVA growth such that the implications of each scenario can be fully articulated in economic growth terms. Such scenarios could include 'do nothing', improvements to highway infrastructure, improvements to rail infrastructure and improvements to both highway and rail infrastructure. Each scenario should establish an overall timescale for realising these outcomes, with opportunities identified to accelerate the delivery of potential growth benefits. The study should identify a recommended course of action based on the most cost efficient scenario relative to the potential for growth in productivity (GVA), agglomeration and employment. This will assist the client group in identifying specific potential interventions for further development.

In terms of rail, centre to centre considerations should build on existing study work undertaken to identify Conditional Outputs, including the East Lancashire Rail Connectivity Study and Burnley-Colne-Skipton Railway Conditional Outputs Statements and not be limited to those linked by a direct rail service. Indirect journey pairings, for example, Preston to Skipton and Skipton to Manchester should be incorporated. In terms of rail freight, the value of providing increased Trans-Pennine capacity and capability should be taken into account. For road, the focus could be on the wider economic benefits of reducing free-flow centre to centre journey times by, for example, a minimum of 10 minutes and by between 15 and 20 minutes for journeys in traffic, for both passenger vehicles and freight.

M65 Junctions 2 to 6

In addition to the above, the Lancashire Enterprise Partnership in conjunction with Lancashire County Council and Blackburn with Darwen Borough Council wish to understand whether there is a stand-alone wider economic case for upgrading the M65 between Junctions 2 and 6 to a full three lane motorway throughout. The predominantly two lane section between the M61 (Junction 2) and Whitebirk (Junction 6) is increasingly becoming a bottleneck, reducing the ability of the M65 to function as a key gateway for East Lancashire. Traffic has grown consistently by around 4% per annum since the motorway's completion in 1997, and evidence now suggests that the current level of demand, particularly at peak times, is causing congestion, with some junctions at or near capacity.

Note this piece of work to be priced separately.

Road Network

The Strategic Road Network in the corridor is limited, comprising part of the M65 together with the A56/M66 route linking East Lancashire with the M60/M62 north-east of Manchester. The M65 forms the economic spine of East Lancashire, connecting the towns of Blackburn, Accrington, Burnley, Nelson and Colne with the M6 and M61 motorways at Bamber Bridge near Preston. It plays an essential role in the local economy, connecting people and businesses internally as well as providing the primary means of access to the M6, particularly for freight. However, unlike most motorways, the M65 is not three lanes throughout, with reduced capacity on some sections, particularly between the M61 and Junction 6 at Whitebirk and between Junction 9 and its terminus at Colne.

The M65 ends abruptly at Colne, the continuation across the Pennines into North Yorkshire and the Leeds City Region provided by the A6068 and A56 routes linking with the A629 at Cross Hills in Airedale and the A59 at Broughton west of Skipton respectively. Neither of these routes are of a sufficient standard to function effectively as inter-regional routes; congestion in the North Valley area of Colne is a particular issue with standing traffic affecting local air quality and the route effectively severing the North Valley housing estate from all amenities in the town. However, taken together the A56/A59 and A6068 routes, which are only 8km apart, comprise the most heavily trafficked Trans-Pennine road corridor after the M62 with a combined traffic flow of around 26,000 vehicles per day.

The A6068 rises to an altitude of 270 metres where it crosses into North Yorkshire before passing through the communities of Cowling, Glusburn and Cross Hills in Craven District, where it meets the A629/A650 'Airedale' route. The 'Airedale' route itself has been progressively upgraded to dual carriageway standard for much of its length between Cross Hills and Cottingley. However, onward connectivity through Shipley to both Bradford and Leeds is along predominantly single carriageway urban roads.

The A56 heads in a northerly direction from the A6068 in Colne through the villages of Foulridge, Kelbrook and Earby before crossing into North Yorkshire at Thornton-in-Craven to meet the A59 at Broughton. Significant lengths of the poorly aligned single carriageway road are subject to a speed limit of 40 mph or less with limited opportunities for safe overtaking. In the villages, issues of road safety, noise, air quality and severance arise from the conflict between through traffic and the needs of the local communities.

East of Preston, the A59 is a former trunk road that runs generally in a north-easterly direction from the M6 at Junction 31 through the Ribble Valley to Whalley and Clitheroe before crossing into North Yorkshire, where it is joined by the A56 at Broughton. The route has been improved considerably in Lancashire over the last 30 years and for much of its length is a high standard single carriageway road with the effects of long inclines relieved by climbing lanes. There are short lengths of dual carriageway between the M6 and Samlesbury and at Barrow between Whalley and Clitheroe. Apart from Copster Green and Gisburn, all communities along the route have been bypassed. The Ribble Valley is an important source of high value labour for both Central and East Lancashire, with the Enterprise Zone site at Samlesbury accessed directly from the A59. There are increasing development pressures in Ribble Valley, particularly for new housing.

In its Strategic Transport Prospectus, North Yorkshire County Council is proposing an A59 east-west bypass of Harrogate and Knaresborough to improve connectivity and address congestion in the urban area together with additional overtaking lanes on the A59 between Harrogate and Skipton. A longer term aspiration is to upgrade the route between Harrogate, an improved interchange with the A1(M) at Junction 47 and York to a dual carriageway. The York, North Yorkshire and East Riding Strategic Economic Plan identifies the A59 as part of the priority east-west corridor across North Yorkshire (Scarborough / Hull to York, Harrogate and Skipton / Lancashire). The County Council considers that journey time reliability is the main issue to be addressed and has identified the potential for three additional climbing lanes between Harrogate and Skipton, including a major realignment at Kex Gill west of Blubberhouses.

The A65 is a former trunk road that still functions as an important inter-regional link between Cumbria and Yorkshire, including for freight. It runs in a south-easterly direction from the M6 at Junction 36 south of Kendal along the southern edge of the Yorkshire Dales National Park to Skipton before continuing through Ilkley towards Leeds. The A65 is a single carriageway throughout between the M6 and Skipton and in a number of locations is poorly aligned with sub-standard road widths. Whilst Settle has a bypass, the A65 still passes through the villages of Long Preston, Hellifield and Gargarve. Existing traffic flows are well within the capacity of the road, but subject to considerable seasonal variation given the route links the Leeds City Region with the Lake District National Park. The A683/A687 route links the M6 at Junction 34 east of Lancaster with the A65 near Ingleton in North Yorkshire and for much of its length is a poorly aligned single carriageway road with sub-standard road widths in a number of places. In Lancashire, the route passes through a number of villages in the Lune Valley.

In general, east-west travel times by road in the corridor are lengthy and can be unreliable, for example, the free-flow journey time for the 30 mile trip between Blackburn and Keighley is approximately 50 minutes, rising to 1 hour when typical traffic conditions are taken into account. Furthermore, it is, for example, usually quicker to travel between Preston and Leeds via the M62. Poor journey times, journey time reliability and resilience constrain access to labour markets across the corridor and do not encourage agglomeration between economies, especially in manufacturing, as well as hindering the effective and efficient transportation of freight.

Rail Network

Linking Preston, Blackburn, Accrington and Burnley with Halifax, Bradford and Leeds via Hebden Bridge, the 'Calder Valley' line is a twin track railway supporting a regular interval hourly cross-Pennine limited stop service between Blackpool North and York currently operated by Northern Rail. Other services operate on different sections of the route, for example, between Preston and Colne, Blackburn and Manchester Victoria via Burnley, Todmorden and Rochdale and Manchester Victoria and Leeds via Hebden Bridge, Halifax and Bradford. Service frequency on the latter will increase as a result of the new Northern franchise announced on 9th December 2015. The route is severely constrained in places by topography, with resulting low line speeds having a significant impact on journey times, typically over 70 minutes for the journey between Burnley and Leeds via Bradford. Capacity is also constrained by the mix of traffic and stopping patterns, and although freight traffic on the route between Blackburn and Todmorden is very limited, the new biomass flow between the Port of Liverpool and Drax Power Station near Selby travels via Rochdale and Hebden Bridge.

In Lancashire, the 'Calder Valley' line has benefited from a number of recent improvements, including an upgrade of Burnley Manchester Road station and the introduction of a new direct train service between Blackburn, Accrington, Rose Grove, Burnley (Manchester Road) and Manchester Victoria via Todmorden and Rochdale in May 2015. However, the East Lancashire Rail Connectivity Study identified a number of deficiencies, including:

* Slow journey times, especially on the 'Copy Pit' section between Burnley Manchester Road and Todmorden used by the train services between Blackpool North and York and the new service between Blackburn, Burnley and Manchester;
* Capacity constraints, with longer trains required to meet growing demand; and
* Low service frequencies and poor quality rolling stock.

All of the above make rail a less attractive mode of travel, particularly for business to business trips and for commuting from East Lancashire into Leeds. Furthermore, it is almost as quick to travel between Preston and Leeds with a change in Manchester as by the much more direct 'Calder Valley' through service.

The branch from Gannow Junction east of Rose Grove to Burnley Central, Nelson and Colne is single track and supports an hourly stopping service between Blackpool South and Colne via Preston currently operated predominantly by diesel powered 'Pacer' rail buses introduced in the mid-1980s. However, these will be replaced by 2020 with refurbished trains as part of the new Northern franchise. The branch previously continued to Skipton as a twin track through route, but passenger services ceased in January 1970 and the track was removed. The track bed remains more or less intact and is therefore not a barrier to reinstatement. This would enable services currently terminating at Colne to continue through to Skipton and possibly to Bradford or Leeds along the electrified Airedale Line, thereby significantly reducing travel times between Nelson and Colne and Bradford/Leeds. A group of local stakeholders, the Skipton-East Lancashire Rail Action Partnership (SELRAP) has been campaigning for the route between Colne and Skipton to be reopened for a number of years.

The Calder Valley line is the only direct east-west rail link in the corridor and is already heavily used, with the potential for the route to become increasingly congested in the future. The East Lancashire Rail Connectivity Study, completed in April 2015, concluded that in order to meet the conditional outputs it identified to enhance connectivity between East Lancashire and the Leeds City Region, in particular, increased service frequency and improved journey times, the potential impact on the capacity of the Calder Valley line between Todmorden and Leeds would need to be assessed. Should future economic circumstances dictate that connectivity between East Lancashire and Leeds be enhanced to the point where capacity on the Calder Valley line becomes a constraining factor, consideration of alternative options between Burnley and Leeds such as reinstatement of the line between Colne and Skipton and associated upgrade of the existing Colne branch may become necessary.

The full 'Calder Valley' route, including to Burnley and Preston, is included in the report of the North of England Electrification Task Force[[1]](#footnote-1) as a Tier One scheme with a recommendation for implementation in the next Rail Industry Control Period (CP6 2019 to 2024). Electrification would deliver a transformational change to city region connectivity in the corridor, and for East Lancashire in particular. The new Northern franchise includes a commitment to introduce brand new diesel trains on the Blackpool North to York service via Preston, Blackburn and Burnley Manchester Road as part of a wider 'Northern Connect' network.

Train services between Morecambe, Lancaster and Leeds currently operate on an infrequent basis with only five trains per day on weekdays and Saturdays reducing to four on Sundays. These services traverse a number of different routes, including the West Coast Main Line between Lancaster and Carnforth and the Carlisle-Settle-Leeds line between Settle Junction and Leeds. The twin-track 'Bentham' line between Carnforth and Settle connects the two. Rolling stock usually consists of diesel powered 'Pacer' rail buses that are common to most Lancashire branch lines, although these will be replaced by 2020 with refurbished trains as part of the new Northern franchise. The new franchise also includes a commitment to increase the number of services between Lancaster and Leeds to seven per day, with one extra train on Sundays.

The consultation draft Lancaster Highways and Transport Masterplan considers the 'Bentham' line to be a much underutilised asset and proposes that Lancashire County Council work with the rail industry, North Yorkshire County Council and local stakeholders to consider how the line can be improved in the future. An associated issue is the current inability to travel north from Carnforth on West Coast Main Line services into Cumbria/Lake District and on to Scotland.

Selected References

* Lancashire Strategic Economic Plan, Lancashire Enterprise Partnership, March 2014
* Lancaster Strategic Transport Prospectus, January 2016
* The York, North Yorkshire and East Riding Strategic Economic Plan, York, North Yorkshire and East Riding Local Enterprise Partnership, March 2014
* A Strategic Transport Prospectus for North Yorkshire, North Yorkshire County Council, 2015
* North Yorkshire Local Transport Plan Four 2016 – 2045 (LTP4)
* Central Lancashire Highways and Transport Masterplan, March 2013
* East Lancashire Highways and Transport Masterplan, February 2014
* Consultation Draft Lancaster Highways and Transport Masterplan, March 2015
* M65 to Yorkshire Corridor Study, September 2013
* Burnley-Pendle Growth Corridor Strategy, July 2014
* East Lancashire Rail Connectivity Study Stage 3 Report: Conditional Outputs Statement, April 2015
* Burnley – Colne – Skipton Railway Conditional Outputs Statement, March 2016
1. Northern Sparks, Report of the North of England Electrification Task Force, March 2015 [↑](#footnote-ref-1)