REPORT FROM:	**NEIGHBOURHOOD SERVICES MANAGER**
TO:	**EXECUTIVE**
DATE:	**25 MAY 2017**

Report Author:	**Peter Atkinson**
Tel. No:	**661063**
E-mail:	**peter.atkinson@pendle.gov.uk**

EAST-WEST CONNECTIVITY STUDY

PURPOSE OF REPORT

1. To appraise the Executive of the Cushman & Wakefield/SYSTRA report to the Lancashire Enterprise Limited Board meeting on 28 March 2017.

2. To remind the Executive of the history of the east-west connectivity issues at Pendle down the years, including previous studies and Pendle's and Lancashire County Council's current scheme proposals.

RECOMMENDATION

(1) That the report be noted.

REASON FOR RECOMMENDATION

(1) To keep members updated in light of the publication of the report and the recent resolutions at Pendle and County Hall.

PENDLE'S STRATEGIC TRANSPORT POLICIES

1. Pendle's Local Plan Part 1 Core Strategy 2011–2030 Policy ENV4 "Promoting Sustainable Travel" reads:

   "The Council will support those strategic transport schemes as outlined in the most up-to-date versions of the Local Transport Plan and the East Lancashire Highways and Transport Masterplan. In addition, the Council will lobby for, and support the following strategic transport schemes:

   - Provision of a strategic road link towards Yorkshire (the A56 villages bypass).
   - Reinstatement of the Colne to Skipton railway line.

In supporting these schemes this policy will protect the route of the former Colne–Skipton railway for future transport use."

2. Minute 87 of the Executive on 14 November 2013 reads:

"The Head of Central and Regeneration Services submitted a report advising of the County Council's consultation on the draft East Lancashire Transport Masterplan. The Masterplan was subject to a 6-week public consultation exercise which would close on 6th December, 2013.

It set out various options for a future transport strategy for Blackburn with Darwen, Burnley, Hyndburn, Pendle, Ribble Valley and Rossendale to 2026 and beyond.

The consultation document covered three strands:

Connecting East Lancashire
Travel in East Lancashire
Local Travel

The key areas for consideration within Pendle focused around the Colne and Skipton Railway Line and the A65 Colne to Foulridge Bypass. The County Council had acknowledged that Colne was relatively isolated on the rail network. Therefore, the Masterplan indicated that the County Council would commission a Rail Connectivity Study with a particular focus on enhancing connectivity between East Lancashire and Manchester.

With regard to the A56 Colne to Foulridge Bypass the outcome of a study to see whether a bypass was still the most appropriate solution to the traffic problems in Colne was attached to the consultation. The County Council had indicated that their preferred option was the "Brown Option". It was acknowledged that further work was required to develop this option and take it forward as part of the Major Transport Schemes Programme.

RESOLVED

(1) That the draft East Lancashire Highways and Transport Masterplan issued for consultation by Lancashire County Council be noted.

(2) That the draft response to the questionnaire on the Masterplan, as shown at Appendix A attached to the report, be endorsed.

(3) That the Chief Executive, in consultation with the Leader, be granted delegated authority to agree a detailed response, subject to the response being circulated to Members of the Executive, before submission to the County Council on the issues for Pendle.

(4) That Council be recommended to endorse the County Council's preferred option (the "Brown Route") for the Colne to Foulridge Bypass as the Council's preferred option.

REASON

To ensure that the Council's views on the East Lancashire Transport Masterplan are submitted as part of the current consultation exercise."

3. This position was confirmed at the Full Council meeting on 19 December 2013.

4. News of the forthcoming East-West Connectivity Study report was starting to emerge and at Full Council on 23 March 2017 Pendle resolved:

"M65 Extension

Council notes the resolutions of several councils on both sides of the Pennines, including Lancashire County Council, calling for a 'strategic motorway route' linking East Lancashire with West Yorkshire, with such a route often described as 'an extension of the M65'.

Council notes that when such a proposal was previously tabled, it led to a quarter of a century of motorway blight in the Colne area and consequent decay, dereliction and demolition of properties along the route proposed at that time.

Council therefore resolves:

(1) To oppose proposals for such a strategic motorway route through or around Colne.

(2) To reaffirm support for local bypasses of Colne and communities along the A56 to relieve congestion within the foreseeable future; and

(3) The re-opening of a twin track rail route connecting Colne with Skipton."

LANCASHIRE COUNTY COUNCIL'S STRATEGIC TRANSPORT POLICY

5. Minute 6 of the LCC Full Council meeting on 23 February 2017 reads:

"Full Council resolves to write to the Department for Transport and Transport for the North calling for stronger East/West connectivity – improving key road and rail corridors, linking Lancashire with key economic centres in Yorkshire and the North East, as a complement to the Manchester to Leeds axis."

COLNE CONGESTION RELIEF PROPOSALS

6. There is £1.7m in the County Council's capital budget (Local Transport Plan funding) to deliver what is now called the "Colne Congestion Relief" project.

This is in three parts:

(i) implement the North Valley Route Management Strategy (NVRMS);

(ii) build up a detailed traffic model for the Colne area; and

(iii) develop the business case for the Colne–Foulridge Bypass.

7. The NVRMS relates to the corridor M65 Junction 14/A6068 Vivary Way, North Valley Road, Windsor Street and comprises:

- modernising and linking existing traffic signals using MOVA (Microprocessor Optimised Vehicle Actuation);
- modernising and upgrading existing pedestrian crossings;
- minor kerb realignments;
- improved road marking and signage, including Variable Message Signing (VMS); and
- introducing CCTV for an Urban Traffic Control (UTC) system.

ROAD BACKGROUND

8. This is set out in **Appendix 1** to this report.

RAIL BACKGROUND

9. This is set out in **Appendix 2** to this report.

TRANSPORT FOR THE NORTH (TfN)

10. Set out below is an extract from the document "Principles for Governing the Relationship between Transport for the North (TfN) and the Department for Transport (DfT) July 2015":

    "1. The Transport for the North Partnership is a unique arrangement that sees Government, Northern city regions and Local Enterprise Partnerships working together, along with Highways England, Network Rail and HS2 Ltd. The shared aim is to transform Northern growth by rebalancing the economy and establish the North as a global powerhouse.

    2. While Transport for the North (TfN) will evolve, currently the northern city regions are acting collectively as TfN, working with Government and the national agencies through the TfN Partnership Board to develop a Northern Transport Strategy, the first publication of which, 'The Northern Powerhouse: One Agenda, One Economy, One North', was issued in March 2015.

    3. The Department for Transport (the Department), as Government's representative on the TfN Partnership Board, will work with TfN to adopt a new approach that enables the North to take a lead in prioritising and planning transformative transport interventions, right across the North.

    4. The TfN Partnership Board will work together to present to Government a single, multi-modal programme of prioritised measures via its annual update of the Northern Transport Strategy. This programme will be a package of interventions selected from the options developed across all transport modes. It will reflect the preferred options for achieving the TfN vision, within budget parameters."

    TfN's Chairman is John Cridland CBE, the former Director-General of the CBI.

CENTRAL TRANS-PENNINE CORRIDOR EAST–WEST CONNECTIVITY: AN ECONOMIC STUDY

11. The study report by Cushman & Wakefield and SYSTRA (formerly JMP) dated March 2017 is attached as **Appendix 3**.

    It was commissioned by the Lancashire Enterprise Partnership together with the West Yorkshire Combined Authority and the York, North Yorkshire and East Riding LEP. Its purpose was to explore the potential economic benefits that might arise across the North of England from enhanced connectivity between Lancashire and North and West Yorkshire.

    This would help in the development of a "strategic economic narrative" to support the case for potential investment and intervention in road/rail-based connectivity across the three functional and connected economies comprising the Central Trans-Pennine Corridor.

12. The report is essentially an economic one. However, to pick up on transport issues specifically, the following is an extract from the study report:

- "Investment in both road and rail will be beneficial considering the wider economic impacts identified. Indeed, the difference between the modelled outputs from tests 1 & 2 (generalised cost reduction on both road and rail) and tests 3 & 4 (highways only) suggests that the scale of benefit from a reduction of generalised cost on rail is in the same order to that from road. The results of test 9 confirm that potentially significant benefits may accrue from investment in rail. In terms of distribution, investment in highways spreads the benefits across the study area, while rail provides significant benefits at key 'nodes' (those larger town and city centres with a rail service);

- This distribution is intuitive given the nature of the road and rail networks, but the fact that the scale of benefits from rail is similar to that from road is noteworthy, as the rail network is relatively limited in the corridor, suggesting there is 'more bang' in terms of wider economic impacts from a limited number of opportunities to improve rail travel. This is perhaps reflective of the very poor quality of rail services in East Lancashire at present, which presents a large opportunity for transformational change. One caveat on the difference between road and rail is that some benefits may have been lost, potentially significant in scale, as no account of entirely 'external' trips (starting and finishing outside the modelled area, for example, Blackpool to Scarborough) is taken within the modelling work. It is likely that this will affect the road element more than rail, as there are potentially significant numbers of long distance road trips in the corridor;

- There is little additional marginal economic benefit of increasing cross Pennine journey time savings from 10 minutes to 20 minutes. This is a function of the fact that in practical terms, reducing journey times by 20 minutes results in unrealistic average speeds for many road trips (i.e. in excess of legal limits). This also suggests that the main benefits are gained from shorter trips in the immediate cross-boundary area of the corridor;

- The reliability tests (tests 5 & 6) generate a relatively lower level of wider economic benefits than others, suggesting that many of the trips that are affected by poor reliability are relatively short trips. These results suggest that the main reliability benefits may be localised, not from 'end-to-end' or longer journeys. It may therefore be that investments in critical 'pinch point' resilience issues in the network may be the answer to this issue."

13. The Executive Summary in the report by LCC's Director of Economic Development to the Lancashire Enterprise Partnership Limited Board meeting on 28 March 2017 reads:

"This report updates the Board on the conclusions of the East-West Connectivity Economic Study commissioned through Transport for Lancashire on behalf of the LEP, in conjunction with partners in North and West Yorkshire. The purpose of the analysis is to provide an independent economic review of the potential economic benefits that might arise from enhanced connectivity between Lancashire and North and West Yorkshire, with a view to developing a strategic economic narrative to support the case for potential investment and intervention in road/rail based connectivity linking these three functional economies."

14. The key Conclusions in the report to the LEP are:

- There is likely to be a significant level of net additional economic benefit from wider economic impacts attributable to enhanced East-West transport connectivity across the Corridor;
- Investment in both road and rail will be beneficial considering the wider economic impacts identified. In terms of distribution, investment in highways spreads the benefits across the study area, while rail provides significant benefits at key 'nodes' (those larger town and city centres with a rail service);

- This distribution is intuitive given the nature of the road and rail networks, but the fact that the scale of benefits from rail is similar to that from road is noteworthy, as the rail network is relatively limited in the Corridor, suggesting there is ‘more bang’ in terms of wider economic impacts from a limited number of opportunities to improve rail travel. This is perhaps reflective of the very poor quality of rail services in East Lancashire at present, which presents a large opportunity for transformational change;
- Subject to LEP Board approval, there is much in this analysis which can be used to support the SEP refresh, including the opportunity to develop an enhanced vision for East Lancashire within a deeper understanding of Lancashire's wider East-West economic and connectivity relationships with neighbouring areas.

15. The report was accepted by the LEP Board.

IMPLICATIONS

Policy: As set out in the report.

Financial: As set out in the report.

Legal: None arising directly from the report.

Risk Management: None arising directly from the report.

Health and Safety: The Colne Congestion Relief proposals should lead to improved air quality in the North Valley corridor.

Sustainability: As set out in the report – Pendle’s Core Strategy Sustainable Transport policy.

Community Safety: None arising directly from the report.

Equality and Diversity: None arising directly from the report.

APPENDICES

Appendix 1: Road Background.
Appendix 2: Rail Background.
Appendix 3: Cushman & Wakefield and SYSTRA Study Report.

LIST OF BACKGROUND PAPERS

Appendix 1

Road Background

1. The history of improvement proposals to the A56 route north of Colne has been linked with the progressive construction over the last three decades of the M65 motorway, and the associated commercial and industrial revitalisation of North East Lancashire.

2. A route for the M65 was identified in the 1960s and construction took place in the 1980s and 1990s, concluding with the M65 Blackburn Southern Bypass in 1997. To the west of Burnley, the M65 is the responsibility of the Highways Agency (now Highways England) as it was a direct replacement of a trunk road (a Government responsibility), but to the east the motorway was promoted by the County Council in order to improve communication and stimulate regeneration between Burnley and Colne.

3. In the mid-1980s the LCC approved proposals for a link from the M65 terminal roundabout at Greenfield to North Valley Road and, secondly, a ***Colne–Foulridge Bypass*** on the M65. Together with a possible ***Easterly Extension of the M65***, these proposals were seen as the solution to the long-term dispersal of traffic arriving at Colne on the motorway network. The link to North Valley Road was subsequently completed in 1988 and named Vivary Way.

4. The Colne–Foulridge (and Kelbrook–Earby Bypasses) were included initially in the Lancashire Structure Plan for construction in the period beyond 1990, and re-affirmed in the approved Structure Plan 1991–2006. The Colne–Foulridge Bypass was included in the Pendle Local Plan 1991–2001 and Pendle Borough Council resolved that the extension of the scheme to bypass Kelbrook and Earby be included in the Local Plan Review. The Bypasses also featured in Pendle's Regeneration Strategy. Planning consent for the Colne–Foulridge Bypass was granted in February 1991 and renewed in February 1996.

   (At the time, the scheme was first priority in the County Council's former Transport Policies and Programme.)

5. In 1996 the County Council advertised the making of Side Road and Compulsory Purchase Orders for the Colne–Foulridge Bypass to which there were a considerable number of objections and the Secretary of State for Transport called for a public inquiry. However, before the inquiry could take place, changing circumstances dictated that the County Council reconsiders its strategy and the Orders were withdrawn in 1997. The circumstances leading to this decision included:

   (*a*) residents of Kelbrook and Sough objected to these communities not being bypassed at the same time at Colne and Foulridge;

   (*b*) the M65 Blackburn Southern Bypass was due to open at the end of 1997 and time was needed to monitor the effect on theM56 before committing the Bypass;

(*c*) more detailed ecological information was required;

(*d*) the traditional method of part-financing local bypass schemes by means of Government Transport Supplementary Grant was halted and local authorities were encouraged to explore Private Finance Initiatives (PFIs) as an alternative method of funding.

6. In order to be attractive to the private sector, it was necessary to maximise the capital value of the scheme and the Colne–Foulridge, Kelbrook–Earby, and Thornton-in-Craven Bypasses were therefore joined to create a single scheme. This also met the objection of Kelbrook and Sough.

A56 Villages Bypass

7. In 1999 a public consultation exercise was carried out on the A56 traffic corridor. The three options presented were:

(*a*) Do Nothing;

(*b*) No Bypass. (Modest engineering improvements to make the best use of the existing infrastructure); or

(*c*) ***A56 Villages Bypass***.

8. Traffic studies at the time showed that regarding through traffic in Colne, approximately two-thirds was travelling to and from North Yorkshire (the West Craven and Skipton direction) and one-third from West Yorkshire (the Keighley direction).

Prioritisation of Major Highway Schemes in Lancashire County Council's Local Transport Plan

9. In 2003 LCC carried out a Scrutiny Review of all major highway schemes across the county and "scored" them on a Benefit-Cost ratio (BCR).

10. The result was:

(*a*) M6–Heysham Link (Lancaster Bypass);

(*b*) Ormskirk Bypass; and

(*c*) A56 Villages Bypass.

11. Since this time, the M6–Heysham Link (part of the Trans European Network) has been built and the Ormskirk Bypass scheme has been rescinded (at a public inquiry, the inspector ruled that alternative public transport-related solutions were available).

12. LCC advised Pendle that once the design for the M6–Heysham Link was finalised, they would turn their attention to detailed design of the A56 Villages Bypass.

Pennine Lancashire Multi Area Agreement

13. In 2008 the A56 Villages Bypass was made second priority future transport scheme (behind widening of the M65 around Blackburn) in the Pennine Lancashire Multi Area Agreement.

Atkins Sub-Regional Transport Framework for Lancashire Report

14. In 2009 this “broad brush” report recommended the inclusion of the A56 Villages Bypass as part of a “Fylde Coast–Pennine Lancashire–Yorkshire and Humber” corridor.

Highways and Transport Masterplans

15. Although the Local Transport Plan process continues (another one is planned by LCC), to a large extent the process has been taken over by Highways and Transport Masterplans (East Lancashire in our case) and Local Enterprise Partnerships (and City Deals, etc).

16. As part of this process, LCC commissioned their consultant (Jacobs) to carry out an M65 to Yorkshire Corridor Study. A major part of its remit was to investigate whether a bypass of Colne remains an appropriate solution to Colne’s congestion problem and to accommodate potential development proposals.

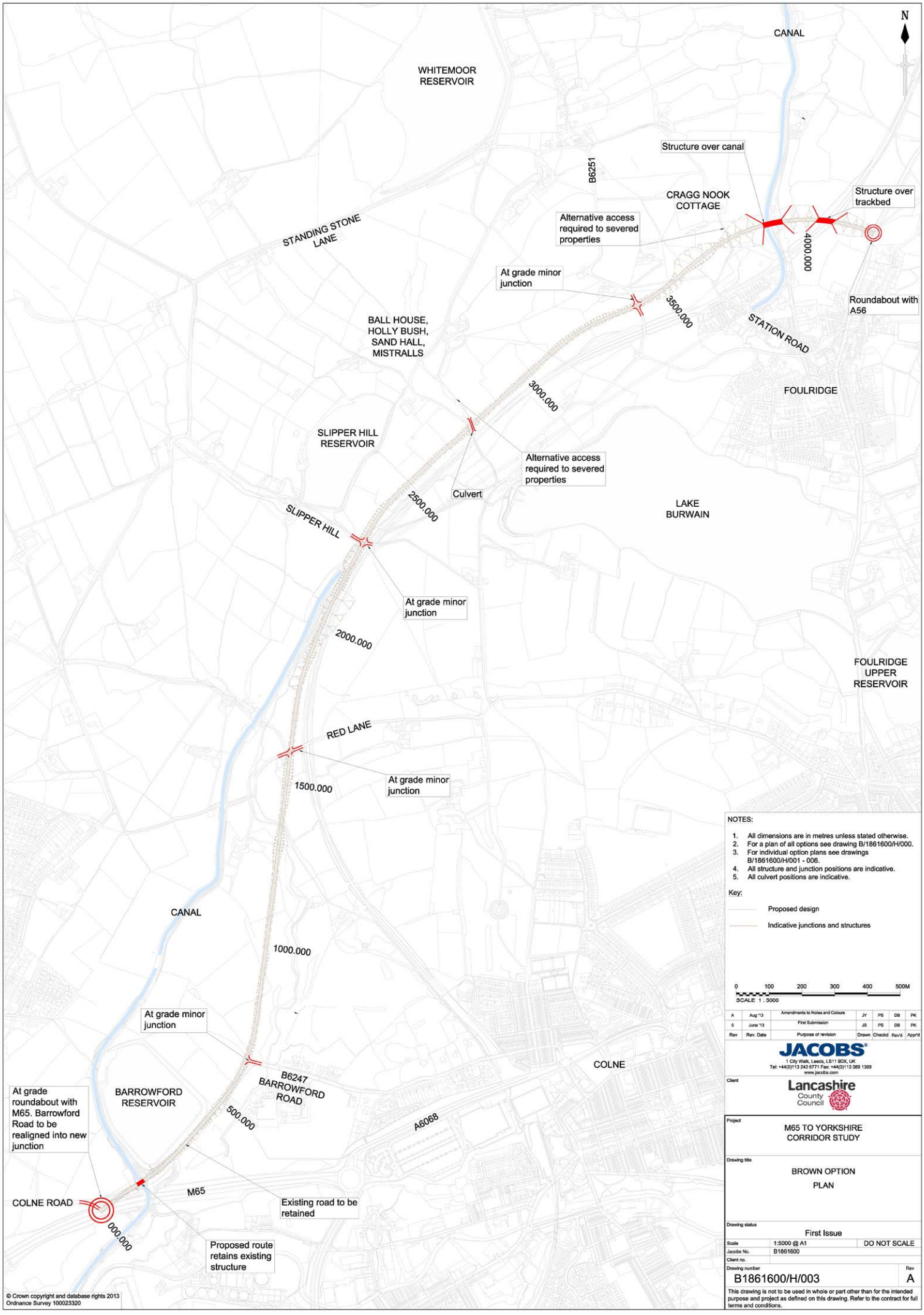
17. The study included a substantial traffic survey (counts, roadside interviews, etc).

18. At the end of the study (in 2014), the favourite one emerged as the Brown Route. The route is shown attached. The cost is approximately £34m (±40 per cent).

19. However, the traffic study showed a substantial shift in traffic demand over the last 15 years. Approximately 50 per cent of traffic in Colne was generated in Colne (origin or destination in Colne) and regarding through traffic, this was split equally between the north east (Skipton direction) and the east (Keighley direction).

East–West Connectivity Study

20. In 2016 Transport for Lancashire on behalf of the Lancashire LEP and in conjunction with North Yorkshire County Council and West Yorkshire Combined Authority commissioned an East–West Economic Transport Connectivity Study (more of later).



NOTES:

1. All dimensions are in metres unless stated otherwise.
2. For a plan of all options see drawing B/1861600/H/000.
3. For individual option plans see drawings B/1861600/H/001 - 006.
4. All structure and junction positions are indicative.
5. All culvert positions are indicative.

Key:

Proposed design

Indicative junctions and structures

0 100 200 300 400 500M
SCALE 1 : 5000

Rev	Rev. Date	Purpose of revision	Drawn	Checkd	Rev'd	Apprd
A	Aug '13	Amendments to Notes and Colours	JY	PS	DB	PK
0	June '13	First Submission	JS	PS	DB	PK

JACOBS
1 City Walk, Leeds, LS11 9DX, UK
Tel: +44(0)113 242 6771 Fax: +44(0)113 389 1389
www.jacobs.com

Client: Lancashire County Council

Project: M65 TO YORKSHIRE CORRIDOR STUDY

Drawing title: BROWN OPTION PLAN

Drawing status: First Issue

Scale	1:5000 @ A1	DO NOT SCALE
Jacobs No.	B1861600	
Client no.		

Drawing number: B1861600/H/003 Rev A

Appendix 2

Rail Background

SELRAP and Previous Rail Studies

1. The dual track railway from Colne to Skipton was closed in 1970.

2. In 2001 the pressure group SELRAP (Skipton East Lancashire Rail Action Partnership) was formed.

3. In 2001 SELRAP undertook their own study into the potential for re-introducing the route.

4. LCC and North Yorkshire County Council jointly commissioned a transport consultant (Steer Davies Gleave) to look at the future of the Skipton to Colne railway formation.

5. In 2003 SDG reported on the engineering issues and the business case for reinstating a single or double track railway.

6. In 2007 SELRAP commissioned a transport consultant (JMP) to look further at the feasibility of re-opening the railway.

7. In January 2008 Faber Maunsell/AECOM produced a report commissioned by Metro (West Yorkshire PTE), LCC and Burnley Borough Council into the “Roses Line” (Blackpool to York).

8. This concluded inter alia that reinstating the Colne to Skipton line merited future investigation.

Network Rail Route Utilisation Strategies (RUSs)

9. These set out the priorities for rail improvements and investments over of period of 30 years.

10. They identify options which provide value for money by improving capacity for passenger and freight to help support and grow the economy.

11. Their programmes are based around “Control Periods”. At present, we are in CP5 (2014–19). CP6 runs 2019–29.

12. In this part of the UK, there have been four:

    - Lancashire and Cumbria;
    - Yorkshire and Humber;
    - North West; and
    - Northern.

13. The only direct reference to the Colne to Skipton line was in the Lancashire and Cumbria RUS (August 2008):

> "In a scenario of high mode-shift from road to rail, additional sources of investment funds could become available, in which case the route between Colne and Skipton could be a candidate for addition to the network. As long as doing so is affordable, the alignment should be protected for future railway use."

East Lancashire Rail Connectivity Study

14. A key challenge for the East Lancashire Highways and Transport Masterplan was establishing the optimum balance between outward connectivity and internal accessibility to jobs, education and training. East Lancashire's rail network is relatively constrained in terms of connectivity, capacity, performance, journey quality, journey times and passenger facilities at many of the smaller stations. The network will continue to need significant investment if it is to support the local economy into the future; without such investment, the perception of East Lancashire as being poorly connected is likely to grow.

15. The East Lancashire Rail Connectivity Study (2015) examined this issue in depth, adopting a Conditional Outputs approach in accordance with standard rail industry practice and recognising that to deliver transformational change to East Lancashire's rail network will require the support of Network Rail, Rail North and the relevant Train Operating Companies. It concluded that in order to achieve the Conditional Outputs that would enhance connectivity between East Lancashire and Leeds, 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. Furthermore, 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.

16. The East Lancashire Rail Connectivity Study Conditional Outputs Statement was approved by LCC's Cabinet Member for Highways and Transport on 1 June 2015 as the County Council's adopted position in future discussions and negotiations with the Department for Transport, Rail North, the wider rail industry and adjacent transport authorities. In particular, with regard to the next rail industry investment period covering 2019–2029 (Control Period 6).

The Burnley–Colne–Skipton Railway Conditional Outputs Statement

17. Following a "summit" meeting held in Skipton on 6 January 2015 at the behest of the Department for Transport and SELRAP and at the Department for Transport's request, the County Council along with colleagues from North Yorkshire County Council and the West Yorkshire and Greater Manchester combined authorities agreed to establish a working group, chaired by Lancashire County Council and with representation from SELRAP and other

interested parties, to consider what purposes a rail link between Burnley, Colne and Skipton could potentially serve in order to place such a scheme in the correct context in transport planning terms. The working group adopted a Conditional Outputs approach to maintain consistency with standard rail industry practice. The report of the working group is now complete.

18. The Burnley–Colne–Skipton Railway Conditional Outputs Statement sets out a series of conditional outputs that could be relevant to the potential reopening of the Colne to Skipton railway line. These conditional outputs are a set of outcomes, in terms of linkages for both passenger and freight transport, to which the re-opened line could be relevant, and against which a potential scheme should be assessed together with alternative options to achieve the same outcomes. They have been developed without considering affordability, deliverability or specific infrastructure, nor do they imply a business case for any measures to fulfil them. It will be for subsequent stages of work to consider the design, operational feasibility and cost implications of fulfilling the conditional outputs, as well as undertaking demand and revenue forecasting work. There will also be a need to investigate the potential scale of wider economic, social and environmental benefits that fulfilling some or all of the conditional outputs might unlock.

19. The timing of this work is partly driven by the forthcoming Network Rail North of England Route Study, on which work is expected to commence later this year. It is intended that the findings of this Conditional Outputs Statement will inform the Route Study process, which could then take forward any recommendations implied by this work, as appropriate. The Statement will also be available to inform Transport for the North's developing strategies for future connectivity across the North.

20. Whilst the Conditional Outputs Statement is only intended to be the starting point for the development of a strategic case for improved rail connectivity in the Preston–Burnley–Colne–Skipton–Leeds corridor, the conditional outputs identified underline the wide variety of transport links to which re-opening the Colne to Skipton line could potentially be relevant. However, this does not necessarily mean that there is a strong case, either strategically or economically, for providing a specific rail link between Colne and Skipton, rather that when considering the case for doing so, options relevant to all of the conditional outputs should be considered.

21. The Statement concludes that further consideration of a re-opened rail link between Colne and Skipton should take place in the context of strategic as opposed to local transport planning in order to ensure that all of the conditional outputs identified are taken into account. This in turn means that it will be necessary to investigate all potential options that might fulfil these conditional outputs as opposed to considering the case for a re-opened railway between Colne and Skipton in isolation.

22. The authorities who have created the Statement are aware of the County Council's intention to use it in future engagement with the Department for

Transport, Transport for the North, Network Rail, the wider rail industry and other interested parties, and that the Statement will enter the public domain.

23. The Leader of the County Council approved the Conditional Outputs Statement report on 10 March 2016.

Appendix 3

CUSHMAN & WAKEFIELD

SYSTRA

Central Trans-Pennine Corridor East – West Connectivity

An Economic Study

ON BEHALF OF THE LANCASHIRE ENTERPRISE PARTNERSHIP

IN CONJUNCTION WITH THE WEST YORKSHIRE COMBINED

AUTHORITY AND THE YORK NORTH YORKSHIRE & EAST RIDING LEP

March 2017

FINAL REPORT

1.0 Executive Summary

Introduction and overview

1.1 Cushman & Wakefield (C&W) and SYSTRA have been commissioned by the Lancashire Enterprise Partnership, together with the West Yorkshire Combined Authority (WYCA) and the York, North Yorkshire and East Riding LEP to explore the potential economic benefits that might arise across the North of England from enhanced connectivity between Lancashire and North and West Yorkshire. The purpose of this is to develop a strategic economic narrative to support the case for potential investment and intervention in road/rail based connectivity across these three functional and connected economies comprising the Central Trans-Pennine Corridor. The study focus has been on a wider economic impact case to understand the likely impacts of enhanced connectivity on the "real" economy and an evidence based quantitative and qualitative assessment to support the economic case for improved connectivity has been set out.

1.2 In summary, this report identifies that:

- **The "Central Trans-Pennine Corridor" is already a major economic driver of the Northern Powerhouse and UK economies** - the three LEP areas together have a combined annual GVA output of around £100bn, representing around 7% of national GVA output and one third of the Northern Powerhouse economy GVA output[1]. They comprise around 8.5% of the national population[2] and are home to over 210,000 businesses. The defined 'Corridor' for the purposes of this study (see paragraph 2.8) is estimated to have an annual GVA output of around £70bn[3], representing around 22% of the overall Northern Powerhouse economy GVA output and circa 5% of national GVA output. It is therefore evident that this is already a Corridor of national economic significance and value.

- **The Corridor is home to globally significant businesses, supply chains and economic assets –** it is home to the largest aerospace cluster in the UK (BAE Systems, Rolls Royce etc), with major sector representation and internationally competitive advantages in sectors such as automotive and other advanced manufacturing, digital, health/life sciences and low carbon/energy. These fully align with the Northern Powerhouse's 'Prime Capabilities' as per the Northern Powerhouse Independent Economic Review (IER). It comprises a portfolio of economic assets and drivers that no other region in the UK can offer, including 14 nationally designated Enterprise Zone sites within or adjacent to the Corridor. It is home to world class businesses and industry clusters in key national priority sectors, world leading research-intensive Russell Group/N8 Group universities, growing and dynamic European cities and a quality of life and visitor economy offer that is second to none. There are wholly complementary sectoral strengths and existing economic activities across the Corridor and opportunities to both enhance the resilience of existing businesses and attract new inward investment in key sectors at all spatial scales.

- **There is significant ambition and 'untapped' economic growth potential** – this is a unique and diverse economy with major growth potential offered by its globally recognised economic assets, but which is currently constrained by the lack of east-west connectivity. The three LEP

---

[1] *Based on ONS GVA NUTS 3 data (2015 estimates)*

[2] *https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/latest*

[3] *Based on ONS GVA NUTS 3 data (2015 estimates) where applicable although in some instances (Harrogate/Craven/Calderdale) estimates are based on other local sources (such as the Regional Econometric Model) with assumptions applied as necessary as ONS data is not readily available at this spatial scale*

areas have ambitions to together deliver over circa 100,000 new jobs and over 100,000 homes within the next ten years. Improving connectivity would accelerate employment and housing delivery, increase the scale of the overall growth opportunity (jobs, homes and GVA) and improve additionality prospects. Economic output and productivity on a per head basis across the LEP areas is reported to be below the national average and there is a need to continue to seek to narrow this gap through productivity and output growth.

- **Investment in East-West physical connectivity could assist to deliver the IER's transformational economic growth scenario** – according to the IER, this is based on substantial improvements in the skills base, in innovation performance, and in transport connectivity, with GVA projected to be some 15% higher than a 'business as usual' projection. There has been an acknowledged lack of investment in strategic transport infrastructure in the Corridor and this is constraining its economic potential. There is no East-West Strategic Road Network link and the recent focus has been on HS2/NPR in the Core Cities and the M62 Corridor to the South. Without intervention, the Corridor will not reach its potential to deliver against TfN's transformational growth scenario as set out within the IER. There is an identified need to invest in both road and rail infrastructure at strategic and local levels.

  Improved connectivity could be highly likely to increase the size and quality of the labour market through enhanced accessibility; increase the efficiency of supply chains; increase the size of the customer base; promote increased Research & Development (R&D) activity and the commercialisation of intellectual property; reduce transport and overall costs of production; and increase overall business productivity through increased agglomeration. The travel to work analysis points to geographically proximate but economically detached/self-contained labour markets which is constraining the Corridor's economic potential. Economic benefits will be realised through better connecting economies and businesses/people within them – the evidence base for this is widely acknowledged. There are also distinct mismatches between areas of distinct socio-economic need (e.g. in parts of East Lancashire) and areas of economic opportunity (e.g. Enterprise Zone sites/key urban areas) which enhanced physical connectivity could address.

- **Enhancing the Corridor's economic potential fully aligns with Government policy** - this is an identified Corridor of unique opportunity with significant latent growth and output potential. Enhancing East West connectivity is a recognised key priority for all three LEPs as defined within the existing policy and strategy base and their respective SEPs, the Northern Powerhouse Strategy, TfN strategy and the Government's emerging Industrial Strategy and recent Housing White Paper. Addressing the existing East-West connectivity constraints will enable the Northern Powerhouse economy to achieve its growth ambitions in accordance with national Government agendas. Whilst this analysis has sought to capture *current* economic activity and *real* evidence of East-West inter-relationships where possible, it is imperative that the economic *potential* of the Corridor is acknowledged. It is considered that the current connectivity issues are restricting the realisation of the scale and extent of potential economic opportunities that exist.

1.3 Our analysis has explored both the quantitative and qualitative economic case for enhanced connectivity. Key headline messages are presented below from this analysis.

Qualitative case for enhanced connectivity

1.4 The qualitative case for investment in enhanced east-west connectivity is based around the following seven key potential benefits:

1. Supporting complementary high growth, high value economic sectors and clusters

Across the Central Corridor and the three functional LEP areas more generally, there are a number of key complementary economic sectors which are considered to be either existing or likely future significant drivers of economic output and productivity. Enhancing the potential for the increased agglomeration of business activity within and between these key existing and growth sectors through improved physical connectivity will undoubtedly offer the potential for enhanced overall economic output across the Central Corridor as well as promote increased innovation, supply chain development, knowledge transfer and overall operational efficiencies. The evidence base to support this relationship between improved physical connectivity and business agglomeration is widely accepted. The economic sectors where we consider there to be key current commonalities/complementarities and significant opportunities for growth across the Corridor based on current economic assets and activity and growth opportunities include the following, which include all four of the IER's identified 'Prime' capabilities:

- Advanced/High Value Manufacturing and Engineering (particularly aerospace, automotive and advanced/technical textiles)
- Health/Med-tech/Life Sciences
- Digital
- Low carbon/energy
- Logistics/distribution
- Food and drink

2. Unlocking the skills, R&D and innovation potential of Corridor economy

The Corridor is home to 9 Higher Education Institutions (HEIs) including a number which are ranked globally as leading institutions in particular taught and research areas. The Universities of York and Leeds form part of the 24 research-intensive, world-class universities that make up the Russell Group and the N8 Research Group includes these as well as Lancaster University. Through the recent Science and Innovation Audit (SIA) and the proposals for a Northern Powerhouse Advanced Manufacturing Corridor, there are plans to further enhance collaborations between the Lancashire and the Sheffield City Region economies including the planned new Advanced Manufacturing Research Centre (AMRC) on the Samlesbury Enterprise Zone site, linked to the existing highly successful operation in Rotherham. Improved Corridor connectivity could deliver increased opportunities for collaboration not only between the universities but also increased opportunities for University-business collaboration and for the Universities to work more closely with the FE sector, particularly in areas where there is no physical HEI presence, a key issue for a large part of the area. Enhanced connectivity could therefore also increase the attractiveness and accessibility of higher level skills development to learners which may have otherwise not been willing/able to consider skills development opportunities and also assist to enhance rates of graduate retention through improving access to employment opportunities, again a key issue for many areas. The Corridor's existing FE/HE offer has a strong focus on key IER and identified growth sectors including advanced manufacturing and Science, Technology, Engineering and Mathematics (STEM) based curriculums and this is evidenced through recent

and proposed initiatives for example in Lancashire such as the Blackpool Energy HQ facility on the Blackpool Airport Enterprise Zone.

3. **Supporting the growth potential of other key transport hubs**

Enhanced road and rail connectivity could deliver significant benefits to other modes of transport and established transport hubs within the Corridor and the wider North of England, including the following:

- Leeds Bradford International Airport (LBIA) – a rapidly expanding airport with plans to double passenger numbers to 7m per annum by 2030 and to explore freight opportunities.
- Manchester Airport – a nationally significant airport with the designated Airport City Enterprise Zone seeking to promote a global business destination including a MediPark focused on the life science sector opportunity.
- Leeds, Preston and York Rail Stations – all existing major rail hub stations with proposals for major expansion and connectivity enhancement at Leeds and Preston as proposed HS2 station hubs.
- Port of Heysham and other East/West coast ports outside of the Corridor (e.g. Liverpool, Hull, Immingham, Teesport).

4. **Supporting the needs and expansion of existing major employers and their supply chains**

The Corridor is home to a number of major, globally important businesses and employers, responsible for significant levels of employment and economic output. These are critical to the Northern economy, not only due to their direct employment and economic output but the wider supply chains that they create and support. It is also home to a number of major supply chains in key sectors which are key to the future economic growth of the Northern economy and increased mobility and connectivity across the North will be a key driver of the success of these supply chains and wider economic growth prospects.

With the uncertainty of what Brexit could mean for these businesses and wider global competition within the industry (particularly from lower cost base locations), there is a need to ensure that the local and regional physical infrastructure that these businesses require to meet their operational needs is adequate, otherwise this could be another push factor in favour of relocations to other locations globally. With increasing globalisation and overseas competition across a number of sectors, businesses are under significant pressure to enhance the efficiency of their supply chain operations. With an increasing focus on ‘just in time’ manufacturing strategy, ensuring supply chain efficiency is key. Supporting the needs of businesses and their supply chains to safeguard existing activity as well as supporting future investment/expansion activity is therefore critical particularly given the scale of operations in sectors such as aerospace and automotive and others in this Corridor. The Lancashire SEP identifies that the failure to deliver the transport infrastructure needed to support sustained business success, accounts for one-quarter of Lancashire's current economic performance gap with the rest of the UK.

5. **Attracting new high value business activity and inward investment to the Corridor and wider Northern Region**

There is also a case for investment to enhance east-west connectivity from the perspective of attracting new businesses and inward investment to the Corridor and the wider Northern region to strengthen existing clusters in key sectors. The quality and provision of transport infrastructure is likely to be a key factor accounted for by inward investors when assessing the merits of location

options as this can impact upon both labour supply and supply chain operations as well as the accessibility of the location to other company locations across the UK and internationally.

Place marketing and the promotion of wider quality of life is also an integral component of securing inward investment and transport connectivity is key to ensuring that people can live in attractive areas and commute to their workplaces efficiently and effectively on modern and reliable transport networks. Promoting accessibility to high quality cultural, leisure and visitor economy assets will also be important as part of this. For example, the Corridor links together a number of designated national parks, areas of outstanding natural beauty (e.g. the Forest of Bowland and Nidderdale) and coastlines with a number of highly popular coastal resorts such as Blackpool, Scarborough and Whitby which are key economic drivers in their own right. Ensuring that people can access these assets efficiently via road/rail will enhance the attractiveness of the Corridor and assist to drive levels of visits and associated net additional expenditure from both residents within the Corridor and those further afield.

6. Supporting housing and employment growth proposals and requirements

The Central Trans-Pennine Corridor as a whole is likely to experience significant population growth over the medium term in line with wider UK projections and local authorities are planning for this through allocating land for development in conjunction with key national drivers such as the Government's recent Housing and Planning Act (2016) and Housing White Paper (2017) and proposed Government interventions to drive housing supply. It is not only important that there are sufficient new homes and jobs to meet the needs of a growing population, but also that people can physically access employment opportunities. The delivery of transport infrastructure can also directly unlock housing and employment land for development through serving as critical enabling infrastructure.

It is essential that existing and proposed employment sites are supported with the necessary transport infrastructure to maximise their potential. It has already been identified that a number of businesses in the Corridor rely on east west movements as part of their business operations and with such significant growth planned, the emphasis on east west movement is only likely to increase.

It is also recognised that many of the proposed strategic housing and employment sites are located on the either side of the Corridor (i.e. around Leeds/Bradford/York/Harrogate and Preston/Lancaster). This is particularly evident with the locations of the 14 nationally important Enterprise Zone sites – these are all located on the fringes of the Corridor. This is reflective of the larger urban settlements on the fringes of the Corridor and the stronger North-South links in these areas. It is therefore critical that East-West connectivity is enhanced to enable people to access suitable and available employment opportunities, particularly from identified areas of socio-economic need which are concentrated in the heart of the Corridor (see below).

7. Addressing socio-economic inequalities

Parts of East Lancashire (e.g. Burnley, Pendle, Blackburn) and West Yorkshire (e.g. Bradford) represent some of the most deprived communities nationally, based on the 2015 Index of Multiple Deprivation (IMD). Enhanced East-West connectivity (in terms of journey times, cost and resilience) across the Corridor would assist to address the identified socio-economic inequalities and disparities and to enable people to access economic opportunities across the geography of the Corridor. It would enable increased cross boundary/cross county flows and movements and would provide increased opportunities to better connect people to employment and skills/learning and maximise the potential of the Corridor's economic asset and business base. There is no doubt

that the current physical connectivity issues on an East-West basis are restricting the horizons of people, particularly from a travel to work and business to business perspective. Given the relatively small point to point distances between key locations within the Corridor, the transport connectivity issue should not be as significant as it appears to be and needs to be addressed if the economic potential of the Corridor and wider Northern Powerhouse economy is to be fully realised and the productivity gap with the rest of the UK closed.

Quantitative case for enhanced connectivity

1.5 In addition to the above qualitative benefits of enhanced East West connectivity, a quantitative assessment, based on a bespoke wider economic impacts model was developed in accordance with the Department for Transport's (DfT) WebTAG.

1.6 The modelling work examines two key areas of potential benefit:

- Firstly "agglomeration" benefits – the benefits of businesses being located closer together and the associated increases in productivity that arise from this; and,

- Secondly the "employment" effects, which look at the benefits to the labour market of improvements in connectivity where employers and employees can be better matched increasing productivity and better matching skills. In turn this brings additional employees into the system who may not previously have been in work.

1.7 To provide an understanding of the potential wider economic impacts of future strategic transport investment across the area, nine "tests" have been conducted covering a range of scenarios reflecting improvements to road and rail, both separately and in combination across the defined study area. The tests also include consideration of the impacts of different scales of intervention. The tests avoid identifying and testing specific schemes. Instead the modelling has focused on what the overall output would be, in terms of generalised cost or journey time reduction. The outcomes of these scenario tests in terms of annual Gross Domestic Product (GDP) benefits are presented below in Figure 1.1:

Figure 1.1. Agglomeration and Employment Model £m GDP per annum

	Description	Agglomeration Model	Employment Model	Total	Rank
Test 1	10% GC Reduction	£30.16	£4.42	£34.58	3
Test 2	20% GC Reduction	£61.52	£9.77	£71.30	1
Test 3	10% GC Reduction (Highways)	£18.77	£3.62	£22.4	5
Test 4	20% GC Reduction (Highways)	£30.32	£8.30	£36.63	2
Test 5	Average to Minimum JT	£15.70	£2.08	£17.79	6
Test 6	Maximum to Average JT	£6.98	£2.09	£9.08	9
Test 7	10 minute Cross Pennine Reduction	£10.92	£0.90	£11.82	8
Test 8	20 minute Cross Pennine reduction	£11.25	£1.01	£12.26	7
Test 9	25% Rail GC Reduction	£30.75	£1.74	£32.49	4

1.8 The following key conclusions can be drawn from this:

- There is likely to be a significant level of net additional economic benefit from wider economic impacts attributable to enhanced East-West transport connectivity across the corridor;

- Investment in both road and rail will be beneficial considering the wider economic impacts identified. Indeed, the difference between the modelled outputs from tests 1 & 2 (generalised cost reduction on both road and rail) and tests 3 & 4 (highways only) suggests that the scale of benefit from a reduction of generalised cost on rail is in the same order to that from road. The results of test 9 confirm that potentially significant benefits may accrue from investment in rail. In terms of distribution, investment in highways spreads the benefits across the study area, while rail provides significant benefits at key 'nodes' (those larger town and city centres with a rail service);

- This distribution is intuitive given the nature of the road and rail networks, but the fact that the scale of benefits from rail is similar to that from road is noteworthy, as the rail network is relatively limited in the corridor, suggesting there is 'more bang' in terms of wider economic impacts from a limited number of opportunities to improve rail travel. This is perhaps reflective of the very poor quality of rail services in East Lancashire at present, which presents a large opportunity for transformational change. One caveat on the difference between road and rail is that some benefits may have been lost, potentially significant in scale, as no account of entirely 'external' trips (starting and finishing outside the modelled area, for example, Blackpool to Scarborough) is taken within the modelling work. It is likely that this will affect the road element more than rail, as there are potentially significant numbers of long distance road trips in the corridor;

- There is little additional marginal economic benefit of increasing cross Pennine journey time savings from 10 minutes to 20 minutes. This is a function of the fact that in practical terms, reducing journey times by 20 minutes results in unrealistic average speeds for many road trips (i.e. in excess of legal limits). This also suggests that the main benefits are gained from shorter trips in the immediate cross-boundary area of the corridor.

- The reliability tests (tests 5 & 6) generate a relatively lower level of wider economic benefits than others, suggesting that many of the trips that are affected by poor reliability are relatively short trips. These results suggest that the main reliability benefits may be localised, not from 'end-to-end' or longer journeys. It may therefore be that investments in critical 'pinch point' resilience issues in the network may be the answer to this issue;

- This point regarding local issues is reinforced by the finding that there are diminishing returns on highways improvements - a 20% generalised cost reduction doesn't double the wider economic benefits gained by a 10% generalised cost reduction on highways.

Summary

1.9 Overall, there is considered to be a robust and compelling quantitative and qualitative economic case for enhanced East-West Connectivity across the Central Corridor. Improved connectivity would not only address the economic challenges and ambitions of the Corridor itself but it could also enhance the wider economic prosperity of the North as a whole and enable the Corridor to provide a complementary route to the M62 corridor to provide additional resilience to Trans-Pennine connectivity more generally, a key pan-Northern objective in terms of road and rail, passenger and freight movements. A failure to improve East-West connectivity and address current connectivity constraints would be likely to critically restrict the growth potential of the Corridor economy, as a key driver of the wider Northern Powerhouse economy.

1.10 The analysis has demonstrated that there will naturally be significant economic benefits of investing

in both road and rail infrastructure and both modes are important to meeting current and future economic needs. An optimum investment strategy would require a comprehensive approach to developing and delivering a phased multi-modal investment programme to address both strategic transport connectivity and critical ‘pinch point’ resilience issues.

1.11 There is a limited rail network across the Corridor, particularly in East Lancashire and the provision of an enhanced rail network would need to be aligned with local demographic and business/economic need and growth opportunities. Rail flows are typically targeted at major settlements where there are more likely to be high value jobs, for example in the producer services and consumer services sectors, and rail networks can also significantly enhance accessibility to urban centres to improve the mobility of labour supply. The case for transport investment within the Corridor needs to relate to the current and future economic drivers of the Corridor and these are varied, although appear to focus significantly on advanced and innovative manufacturing based activity, which is likely to continue to be dependent upon an efficient road transport network, along with other key sectors such as logistics, food and drink and energy. However, other professional service based growth sectors such as digital and health/life sciences may be more reliant upon enhanced rail services to enhance their output and growth prospects, particularly through enhanced agglomeration and access to skilled labour.