Final Report
25 September 2018

The economic rationale for devolving to Yorkshire

Hull City Council, on behalf of 18 Yorkshire Councils
Our ref: 233-352-01

steer economic development

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The economic rationale for devolving to Yorkshire

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1 Executive Summary

1.1 This study was commissioned in Summer 2018 on behalf of the 18 Yorkshire Councils which work together under the banner of 'One Yorkshire'. The work was delivered by Steer Economic Development, supported by Les Newby Associates Ltd.

1.2 The work's intent was twofold, namely to:

- Assess the overall economic and strategic rationale for devolving (powers and budgets) to the Yorkshire-level; and
- Identify key opportunities and tangible benefits which could be secured by, and for, all people and businesses in the region's urban, rural, and coastal areas.

Headlines

1.3 Based on a wide range of data analyses, observations, document reviews, and business engagement, there is strong evidence that **Yorkshire (and Humber) is a *coherent and interconnected economic area.*** The overall geography includes several functional economic areas, which have strong interconnections, and similar/shared issues, priorities, and networks.

1.4 Currently, the region's GVA per head, at £20,678, is 27% below the UK average. The area's total GVA would rise to £144bn – £31bn more than currently – if it matched the UK average. The study investigated how far, and in what ways, devolution could contribute to reducing this gap. It concluded that:

- **Yorkshire-level devolution will create opportunities to reduce significantly the sizeable gaps in productivity and Gross Value Added (GVA) which exist between Yorkshire (and Humber) and the UK average**; and
- Depending on the levels of ambition and activity, **total GVA uplift from devolution at the Yorkshire-level could be as high as £9bn-£30bn a year** over a 20-year timeframe. This amounts to £1,600-£5,400 per head.

Raising GVA and performance in specific policy areas

1.5 The study took account of strategic issues and opportunities relevant across Yorkshire and assessed what could be done better/collaboratively through Yorkshire-level devolution to reduce GVA gaps in a mix of relevant policy areas such as Exports, Enterprise, and Skills – all of which are essential for the development of effective responses to inequality, slow pay growth, and the risks and opportunities associated with Brexit.

1.6 Table 1-2 presents findings for the contribution that each policy area might make to closing the GVA gap between Yorkshire and the UK, based on three scenarios – *cautious* (30%), *mid-range* (65%), or *ambitious* (100% closure). The results cannot be added together to produce a 'total' because of interrelationships and double-counting. However, subject to caveats and assumptions on the degree of devolution and levels of investment, illustrative figures for individual policy areas suggest that, over the long term, Yorkshire-level devolution could lead to:

- Uplift in export value, equivalent to GVA of £3.1bn-£10.4bn;
- Uplift in inward investment jobs, equivalent to GVA of £5.9m-£19.7m;
- Uplift in R&D investment of £0.4bn-£1.35bn, with additional long-term GVA spillovers;
- Improvement in skills to match the UK's skills profile could deliver GVA uplift of c.£1.56bn a year;
- Increases in the size of the business base and the number of rapidly growing 'Scale-Up' businesses, equivalent to a GVA increase of £4.6bn-£15.4bn; and
- Uplift in transport investment to the value of £39m-£130m (using latest year's spending data) or £0.5bn-£1.66bn (using data on the spending pipeline), with additional long-term GVA benefit.

Key findings across the research

1.7 The study investigated how far Yorkshire (and Humber) demonstrates internal coherence based on shared sector/industry specialisms, complementarities arising from economic variety, and sufficient distinctiveness from the UK to warrant devolution. Key elements and findings are as follows:

From the review of Strategic Economic Plans (SEPs) and Local Industrial Strategy . . .

- The four SEPs are similar in terms of the issues they address and approaches adopted.
- Five sector priorities are common to at least three LEP areas: Advanced Manufacturing; Energy/Low Carbon; Food and Drink/Agri-Food; Health and/or Care; and Digital/Creative – while other priority sectors are specific to certain LEP areas.
- There are good opportunities to present complementary offers at the Yorkshire-level which take advantage of shared strengths and distinctive assets as well as diversity.
- For some functions, e.g., local regeneration, the value of local proximity or distinctive need supports localised approaches, however, there are potential advantages in, joining-up activities across localities on 'higher level' functions, e.g., specialist business support.

From the Business Engagement consultations . . .

- There is strong business support for devolution of powers and budgets from central government – this is in and of itself *the* priority for many businesses.
- There is a range of views on the geography for devolution, but on balance, the majority support devolution to the Yorkshire-level, provided local needs can still be met.
- Reasons for supporting devolution include strong leadership, prioritisation, brand and international business, as well as issues including strategic transport and labour markets.
- Worries in relation to devolution include bureaucracy, uncertainty about functions to be undertaken, risks of smaller areas losing out to larger ones, and locally-specific issues (such as concerns about split governance in the Humber or a step-by-step approach to devolution in South Yorkshire).

On Sector and Specialisms analyses . . .

- There is a degree of coherence in terms of sectors and industries which provide significant employment in multiple local authority districts in Yorkshire, suggesting arrangements at this level could achieve economies-of-scale in supporting growth.
- Manufacturing is relatively pronounced across all Yorkshire sub-regions, but (as in the UK in general) only accounts for a modest proportion of overall jobs and GVA.
- Service industries are more significant for employment and GVA across Yorkshire, and 13 such industries provide at least 2,500 jobs in three districts or more.

On Business Start-ups, Deaths, Survivals, density and Scale up . . .

- Data on Business Density, Start-Ups, Survival Rates, and Scale-Ups suggest there is a significant entrepreneurial challenge in Yorkshire. But, there is clearly scope for Yorkshire to improve its Scale-Up performance, as Distribution, Manufacturing & Engineering, and Food & Drink Processing, in which it has clear specialisms, are delivering significant numbers of Scale-Ups elsewhere.
- Variations in business performance across LEP areas and local districts within Yorkshire point to opportunities for greater knowledge exchange/transfer, including on the challenges shared by multiple districts (such as responding to the impacts of automation).

On R&D, Innovation and Ideas . . .

- There is under-investment in R&D, and potential for greater innovation across the region.
- There will be value in identifying and utilising strategic innovation assets that support innovation across Yorkshire, working better with multi-national businesses, which act as entry points for firms to global supply chains, and capitalising on the extensive Higher Education provision and strengths across the region.

On International Trade and Investment . . .

- Yorkshire and Humber has the lowest proportionate export levels of any UK region.
- Devolution to the Yorkshire-level may improve the impact of efforts to promote exports and foreign investment through intensification of activity, utilising Yorkshire's positive profile/identity and developing ambition related to it; and by capitalising on complementary strategic assets, such as the Humber ports complex.

On Skills and Ambition . . .

- The significant gap between Yorkshire and Humber and the UK in the percentage of the workforce qualified to NVQ4 (or above) is acting as a drag on productivity and earnings.
- The coordination of effort on higher-level skills (including Degree-level Apprenticeships) at the level of Yorkshire can add value, and raise employers' use of universities.
- There is a need to improve attainment at NVQ3, but business engagement highlighted the importance of local arrangements for delivery of most vocational skills.

On the Yorkshire Identity . . .

- The Yorkshire 'brand' is well recognised.
- Research by the BBC shows that 75% of people in Yorkshire feel 'allegiance' to their county – more than anywhere else in England.
- Yorkshire identity is associated with positive values: straight-talking, hard-working, friendly, supportive.
- Yorkshire identity is considered an asset by many businesses, both in terms of local and national markets and in international/outward-focused activities, such as international trade and investment, and in sectors such as tourism, food and cultural industries.

On Transport and Connectivity . . .

- Commuting patterns in Yorkshire and Humber's four main sub-regions suggest that these areas are functional economic areas. However, there is significant commuting between sub-regions from some districts (e.g. Harrogate and Selby to Leeds) and a case that commuting levels between areas (e.g. Sheffield and Leeds) may be being suppressed by fare structures and service offers. These could be addressed effectively at regional level.

- Yorkshire has notable strategic transport assets, such as the Humber Ports. LEPs and SEPs tend to focus their attention on local assets, which limits the potential for wider promotion and development of strategic assets that are both regionally and nationally significant.

Conclusions

1.8 The study identified opportunities across six policy domains where devolution to Yorkshire could deliver significant economic impact (Table 1-2). However, the study does not present an 'all or nothing' case for Yorkshire-level devolution, suggesting some activities may be best-led more locally (e.g. employment, inclusion, and place-based regeneration), while others (notably strategic transport) are best covered at the wider Northern-level. But, there are potentially considerable advantages from devolution to the Yorkshire-level in a significant number of policy areas: higher-level economic functions such as Innovation, Exports, Higher-Level Skills, specialised Business Support to enable Scale-Ups, and specific elements of Transport, such as ports and ticketing. Table 1-1 summarises the key conclusions in relation to the main research questions.

Table 1-1: Summary of research findings

Over-arching research question	Findings
• Is Yorkshire an *economically coherent area?*	• There is strong evidence that Yorkshire (and Humber) is a coherent economic area, based on a range of data and observations • The region includes several functional economic areas, which have strong interconnections, and often similar or shared issues, priorities and networks • There is a strong degree of similarity in priorities at broad sector level • Strategic assets, e.g. ports, HE, rail/road routes, serve Yorkshire-wide needs • While each LEP area is functional, there are significant travel flows across sub-regional boundaries • Sizeable business and HE networks operate at Yorkshire-level, and many businesses believe that Yorkshire identity is an asset e.g. in branding
• Is the Yorkshire-level capable of maximising the opportunities and benefits of devolution?	• Reviews of SEPs and emerging Local Industrial Strategy priorities in the four LEP areas show similar overall priorities. All cover productivity, business growth and support, skills and employment, and infrastructure • There are locally distinctive (but not contradictory) variations in visions • Similar challenges are identified in the majority of LEP areas and key assets/strengths cited by LEPs tend to be locally specific not strategic – indicating the potential to deliver greater benefit from devolution
• How does and might Yorkshire fit within Northern Powerhouse arrangements?	• Key sectors identified by LEPs overlap with the prime capabilities at Northern level, but not with the 'enablers' (e.g. finance & professional) • There are similarities between opportunities and threats for wealth generation and employment in Yorkshire (and Humber) and across the North • However, while there are shared issues, there are in practice few mechanisms for dealing with these collectively across the North
• What might be the economic uplift from One Yorkshire Devolution?	• An illustrative total uplift figure would be in the region of £9bn to £30bn per year over a 20-year time frame, subject to caveats and assumptions, and based on three scenarios for closing gaps with the UK • This amounts to £1,600-£5,400 per head

Over-arching research question	Findings
• Is there a case to establish a directly-elected Mayor (as enabled under the Cities and Local Government Devolution Act 2016)?	• There are similarities in economic structure across Yorkshire (and Humber) and shared challenges/opportunities/ approaches present potential economies of scale in some (but not all) of these areas at Yorkshire-level • Yorkshire (and Humber) is different from the UK economy: it faces greater challenges on many economic indicators and its sectoral mix is different • Limited coordination of economic development activity because barriers often limit projects/activities to a single LEP area, even where there may be economies of scale/scope or greater impact from a coordinated approach

Table 1-2: Potential GVA uplift facilitated by Yorkshire level devolution by Policy Area

Strategic Case - what's the issue/opportunity?	Data/Baseline	How far is it a shared issue across LEP areas?	What could be done better/collaboratively via Yorkshire devolution?	Estimated Added Value/under-investment (based on extent to which gap to national average is closed)		
				Cautious 30%	Mid-range 65%	Ambitious 100%
Exports – are much lower than UK average per head	Yorkshire and Humber exports are £16.8bn, 5.1% of the UK total of £328bn A proportionate Y&H figure would be £27bn	All four LEPs identify exports as a priority and similar barriers exist in each LEP area	Better use of assets across Yorkshire (e.g. ports), capitalise on Yorkshire brand to raise ambitions and promote exports; more intensive and tailored promotion and business support	£3.1bn	£6.8bn	£10.4bn
Inward Investment – has improved but is below the UK average	4,600 Yorkshire and Humber FDI jobs in 2017 is 92% of the proportionate figure – a gap of 435 jobs This equates to GVA of £20m	Inward Investment is of interest to all LEPs and similar approaches are used – implying scope for joint work	Capitalise on strong and improving Yorkshire profile, intensify effort through further joint promotion and take advantage of international 'Yorkshire alumni' connections	£5.9m	£12.8m	£19.7m
Investment in R&D – per head is low: raising R&D and innovation will have a positive short-term impact and deliver long-term benefits	Yorkshire and Humber's R&D investment per person is £258 – only slightly more than 50% of the UK average A proportionate Yorkshire and Humber figure would be £2.75bn	All LEPs see innovation as important, there is a regional HE network, and there are shared issues and assets which could benefit from coordinated leadership	Better connections to global supply chains and global innovation networks; work through Yorkshire Universities HEI network; specialised business support and signposting, and pooling of effort and influence to attract new expertise and assets	£0.41bn R&D	£0.88bn R&D	£1.35bn R&D
High level skills – Yorkshire (and Humber) has a	Yorkshire and Humber's workforce is c. 2.5m a higher proportion has no or low	Skills are consistently highlighted as a significant issue by	Business engagement indicates lower-level and vocational skills are likely to be best addressed	£0.46bn	£1bn	£1.56bn

<table>
<tr><th>Strategic Case - what's the issue/opportunity?</th><th>Data/Baseline</th><th>How far is it a shared issue across LEP areas?</th><th>What could be done better/collaboratively via Yorkshire devolution?</th><th colspan="3">Estimated Added Value/under-investment
(based on extent to which gap to national average is closed)</th></tr>
<tr><th></th><th></th><th></th><th></th><th>Cautious 30%</th><th>Mid-range 65%</th><th>Ambitious 100%</th></tr>
<tr><td>relatively low proportion of its workforce qualified to NVQ4+ – which affects productivity and earnings</td><td>qualifications/skills and a concomitant lower proportion has higher level skills (see table).

<table><tr><th></th><th>Y&H%</th><th>UK%</th></tr><tr><td>No qualifications</td><td>7</td><td>2</td></tr><tr><td>NQF Level 1</td><td>17</td><td>8</td></tr><tr><td>NQF Level 2</td><td>22</td><td>25</td></tr><tr><td>NQF Level 3</td><td>20</td><td>23</td></tr><tr><td>NQF Level 4</td><td>27</td><td>32</td></tr><tr><td>NQF Level 5</td><td>8</td><td>10</td></tr></table>
Experian's Regional Economic Model shows an annual GVA gap of c. £1.56bn</td><td>businesses in all four LEPs
The low proportion of workers with NVQ4+ is a common issue faced in three LEP areas</td><td>at the local rather than regional level – except where niche specialisms are concerned
While, higher-level skills, requiring more specialised resources, are more likely to generate economies of scale and therefore benefit from pan-Yorkshire leadership and arrangements</td><td></td><td></td><td></td></tr>
</table>

Strategic Case - what's the issue/opportunity?	Data/Baseline	How far is it a shared issue across LEP areas?	What could be done better/collaboratively via Yorkshire devolution?	Estimated Added Value/under-investment (based on extent to which gap to national average is closed)		
				Cautious 30%	Mid-range 65%	Ambitious 100%
Business base and scale ups – Yorkshire and Humber has a relatively low business density which limits employment and the flow of scale-up businesses	Yorkshire and Humber has 7.3% of the UK business population A shortfall of 56,700 businesses Given average business size and GVA per employee (£45,200) this equates to a GVA gap of c.£15.4bn	While there is variation in LEPs' achievement in terms of business density and scale-ups, the issue is pan-regional	Supplement local support on enterprise formation with greater provision in relation to high-growth businesses, which may benefit from pan-Yorkshire leadership and coordination to spread understanding/best practice and provide expertise and specialisms that smaller geographies may be unable to provide	£4.6bn (17,000 businesses)	£10bn (36,900 businesses)	£15.4bn (56,700 businesses)
Transport – business consistently highlights transport as a barrier to growth, but investment per head is low	Based on the most recent year's spend, investment in Yorkshire and Humber is £130m below a proportionate level; this rises to £1.66bn based on analysis of future transport spending plans	LEP strategies and investments have focus on local transport issues; there is a need for strategic leadership to identify strategic assets and cross-LTA issues (other issues are covered at northern level)	Strategic leadership and coordination to identify an intra-regional road network, simplify/reduce cost for cross-LTA rail journeys; prioritise local public transport and rail in spending decisions, in response to current under-investment; greater shared use of the Humber Ports asset	£39m (£0.50bn using pipeline data)	£84.5m (£1.08bn using pipeline data)	£130m (£1.66bn using pipeline data)

2 Introduction

2.1 This study was commissioned by Hull City Council on behalf of the 18 Yorkshire Councils which work together under the banner of 'One Yorkshire'.[1] Its purpose is to:

- Assess the overall economic and strategic rationale for devolving (powers and budgets) to the Yorkshire level; and
- Identify key opportunities and tangible benefits which may be secured by and for all people and businesses in the region's urban, rural and coastal areas.

2.2 The study does not address in detail the issue of governance – but it does provide conclusions on the economic rationale for devolution to specific geographic configurations and the issues and opportunities that may be effectively addressed across Yorkshire. The study's findings will inform partners' development of the case for devolution to Yorkshire.[2]

Context

2.3 Yorkshire and the Humber is a polycentric area with a large and diverse economy – a population of 5.56m and a workforce of 2.5m. Current local governance arrangements for economic development reflect this diversity and complexity, for example, a number of local authority districts, currently, are in more than one Local Enterprise Partnership (LEP).

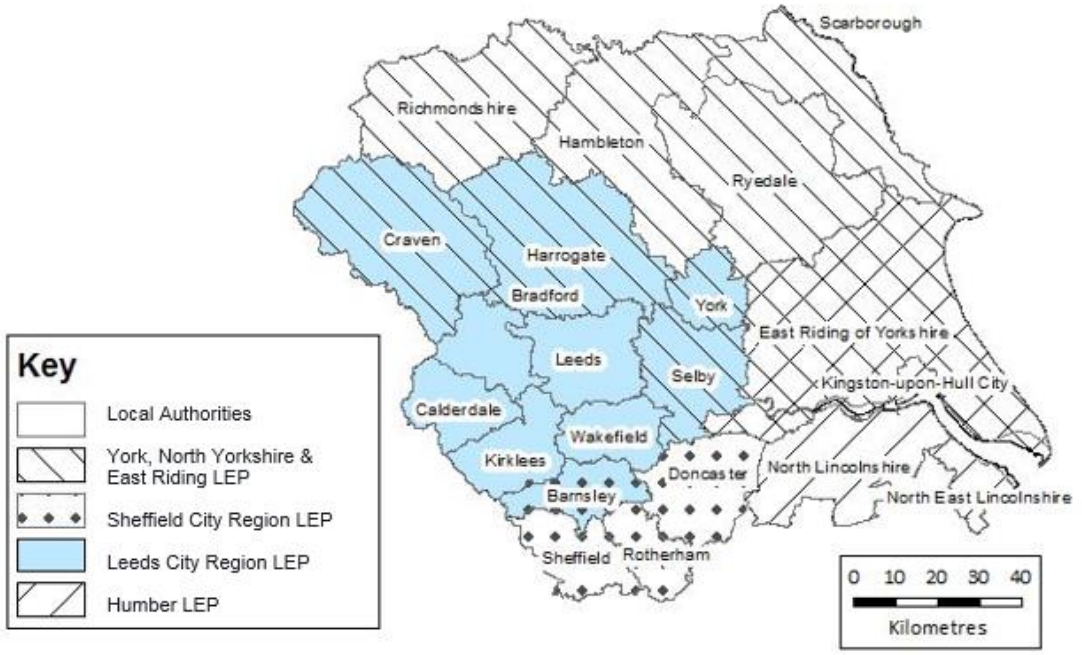
2.4 Figure 2-1 shows four local authority districts in both the Leeds City Region and the York, North Yorkshire, East Riding LEP, one in the Leeds City Region LEP and the Sheffield City Region LEP, one in the York, North Yorkshire, East Riding LEP and the Humber LEP, and two in both the Humber and Greater Lincolnshire LEPs.[3]

[1] Barnsley, Bradford, Calderdale, Craven, Doncaster, East Riding, Hambleton, Harrogate, Hull, Kirklees, Leeds, North Yorkshire, Richmondshire, Scarborough, Selby, Ryedale, Wakefield, and York.

[2] The study began with an inception meeting to agree scope, 12 June 2018. This meeting was followed by a presentation of the proposed approach to the Chief Executives Devolution Sub-Group, 27 June 2018 and to Leaders, 12 July 2018. There was a detailed progress report to the client in 25 July 2018. The Chief Executives Devolution Sub-Group received a presentation of findings 28 August 2018. A draft report was shared for comment 31 August 2018, and comments were received 10 September. This report takes account of the feedback received.

[3] During the study period, central government issued *Strengthened Local Enterprise Partnerships*, **https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728058/Strengthened_Local_Enterprise_Partnerships.pdf**, which among other things calls for LEPs to avoid multiple membership.

Figure 2-1: Yorkshire's Local Enterprise Partnerships Multiple Memberships



Source: Steer-ED

2.5 The complexity of interactions between Yorkshire's sub-regional economies and local political and administrative boundaries have stymied efforts to establish governance arrangements in Yorkshire that are as economic, efficient, and effective as they could be.

2.6 In Spring 2017, Yorkshire Council Leaders began to meet to discuss a range of shared issues and the potential for deeper regional collaboration, including options for devolution of powers and budgets. Eighteen of the 22 Yorkshire and Humber Council Leaders formed a cross-party coalition, 'One Yorkshire', which covers the administrative areas of Barnsley, Bradford, Calderdale, Craven, Doncaster, East Riding, Hambleton, Harrogate, Hull, Kirklees, Leeds, North Yorkshire, Richmondshire, Scarborough, Selby, Ryedale, Wakefield, and York.

2.7 The then Secretary of State for Housing, Communities and Local Government (the SoS) met Yorkshire Council Leaders, MPs, and other stakeholders at a meeting of the Yorkshire and Northern Lincolnshire All Party Parliamentary Group in February 2018. At the meeting, the SoS confirmed that the Government would not seek to prevent a One Yorkshire proposal (with a Yorkshire Mayor and a Combined Authority from 2020) provided:

- Proposals met statutory requirements;
- There was widespread support for proposals in the county; and
- Any or all South Yorkshire authorities were able to join the 'One Yorkshire' arrangements from their inception, if they so wished.

2.8 One Yorkshire Leaders subsequently submitted a proposition to the SoS in March 2018. This proposition outlined the potential scope of significant devolved powers including: adult skills; business growth; unemployment; careers information, advice and guidance; enterprise education; transport (including consolidated budgets and bus franchises); the power to levy a Supplementary Business Rate; powers to bring forward strategic sites; a Gainshare Fund to

support economic growth; a Housing Investment Fund; and Enterprise Zone/Tax Increment Financing for major sites/developments.

2.9 It should be noted, however, that a number of commentators, including Northern Powerhouse Partnership board member Sir Jim O'Neill,[4] have queried whether there is an economic case for devolution to the 'One Yorkshire' level beyond the benefits of the Yorkshire 'brand' and the lobbying and advocacy power of a large area.

2.10 In this report, we independently test the economic rationales for introducing devolved Yorkshire-level powers and budgets for the proposed policy areas of: enterprise and business support (including sectors, innovation and international trade and investment); employment and skills; and transport and connectivity – building on arguments based on Yorkshire's scale, brand recognition, and shared sense of identity, and analysing the available evidence.

Defining the study area

2.11 Given the possible geographies beyond the proposed One Yorkshire footprint, our analysis reviews three geographical configurations (Table 2-1):

- Group One covers the area of the 18 authorities operating under the auspices of 'One Yorkshire';
- Group Two includes the two additional South Yorkshire Authorities, Sheffield and Rotherham, in line with the proposal that all South Yorkshire authorities be able to join any Yorkshire-wide devolved arrangements from the start; and
- Group Three adds North Lincolnshire and North East Lincolnshire, to the list of areas in Group Two – these two districts form an integral part of the Humber Local Enterprise Partnership, and complete the statistical region of Yorkshire & the Humber – which for some economic data, such as exports and spending on R&D, is the level at which data are available.

2.12 Figure 2-2 provides a map of the different local authority districts in Yorkshire and Humber for ease of comparison. In the text we often refer to the 'study area' which refers to the primary One Yorkshire geography (Group One) but where appropriate, and available data permits, we draw distinctions between the three geographies.

[4] https://www.yorkshirepost.co.uk/news/yorkshire-needs-more-than-chest-beating-slogans-to-win-powers-northern-powerhouse-architect-says-1-9159364

Figure 2-2: Map of Local Authority Districts in Yorkshire and Humber

Source: Steer-ED

Table 2-1: The three geographical configurations reviewed

Group 1: ONE Yorkshire Signatories		Group 2: Yorkshire & Humber Minus N & NE Lincs		Group 3: Yorkshire & Humber (Including N & NE Lincs)	
Local Authority District	**Sub-Region**	**Local Authority District**	**Sub-Region**	**Local Authority District**	**Sub-Region**
East Riding of Yorkshire	Humber	East Riding of Yorkshire	Humber	East Riding of Yorkshire	Humber
Kingston upon Hull, City of	Humber	Kingston upon Hull, City of	Humber	Kingston upon Hull, City of	Humber
North Yorkshire County Council[5]	North Yorkshire	North Yorkshire County Council	North Yorkshire	North East Lincolnshire	Hull & Humber
Craven	North Yorkshire	Craven	North Yorkshire	North Lincolnshire	Hull & Humber
Hambleton	North Yorkshire	Hambleton	North Yorkshire	North Yorkshire County Council	North Yorkshire
Harrogate	North Yorkshire	Harrogate	North Yorkshire	Craven	North Yorkshire
Richmondshire	North Yorkshire	Richmondshire	North Yorkshire	Hambleton	North Yorkshire
Ryedale	North Yorkshire	Ryedale	North Yorkshire	Harrogate	North Yorkshire
Scarborough	North Yorkshire	Scarborough	North Yorkshire	Richmondshire	North Yorkshire
Selby	North Yorkshire	Selby	North Yorkshire	Ryedale	North Yorkshire
York	North Yorkshire	York	North Yorkshire	Scarborough	North Yorkshire
Barnsley	South Yorkshire	Barnsley	South Yorkshire	Selby	North Yorkshire
Doncaster	South Yorkshire	Doncaster	South Yorkshire	York	North Yorkshire
Bradford	West Yorkshire	Rotherham	South Yorkshire	Barnsley	South Yorkshire
Calderdale	West Yorkshire	Sheffield	South Yorkshire	Doncaster	South Yorkshire
Kirklees	West Yorkshire	Bradford	West Yorkshire	Rotherham	South Yorkshire
Leeds	West Yorkshire	Calderdale	West Yorkshire	Sheffield	South Yorkshire

[5] Note – where data allow, analysis for North Yorkshire is at the level of districts rather than the county.

Wakefield	West Yorkshire	Kirklees	West Yorkshire	Bradford	West Yorkshire
		Leeds	West Yorkshire	Calderdale	West Yorkshire
		Wakefield	West Yorkshire	Kirklees	West Yorkshire
				Leeds	West Yorkshire
				Wakefield	West Yorkshire

Methodology

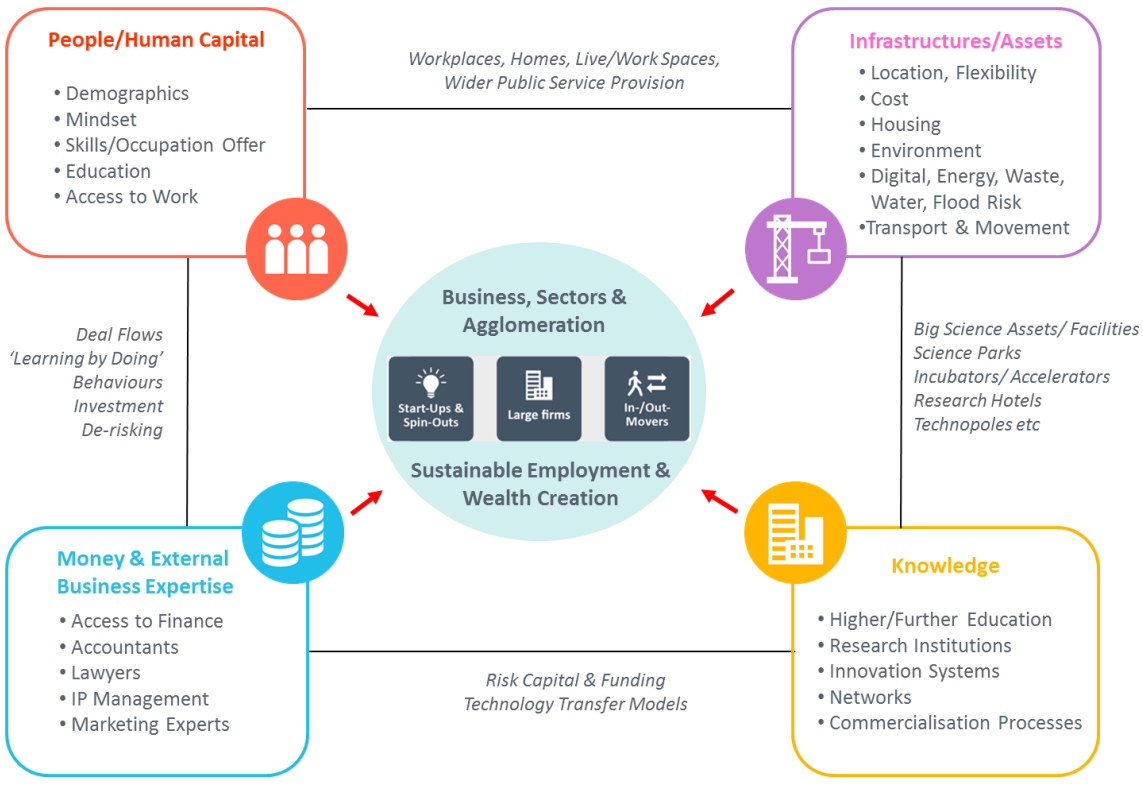
Research framework

2.2 Figure 2-3 summarises our approach to understanding economic development ecosystems. It shows the main components of the ecosystem grouped in terms of:

- **People/skills**, including qualitative factors, such as culture/mindsets, as well as quantitative factors, such as levels of qualification, and commuting patterns;
- **Infrastructure/assets**, including 'natural capital' associated with geography/location, as well as transport infrastructure and housing etc.;
- **Knowledge**, including businesses and research organisations generating ideas, plus 'innovation systems', which require effective connectivity within and beyond any given geography; and
- **Business environment**, in terms of the availability of resources and expertise with which to mobilise people, infrastructure, and knowledge to promote business clusters that generate agglomeration effects to drive sustainable employment and wealth creation.

2.3 In our depiction of an economic ecosystem, it is not only the quantity and quality of the different elements that are important for the delivery of sustainable employment and wealth creation, but the quantity and quality of the interactions and relationships between the different elements, and in turn their connectivity to the wider (national and international) economy. It is the function of economic leadership and its associated governance arrangements to enable and accelerate positive interactions between the different elements of the ecosystem, and mitigate the effects of negative interactions. It is the efficacy with which such leadership is carried out that informs our judgement on the most appropriate level for leadership and governance in the One Yorkshire area.

Figure 2-3: Components of a local/regional economic ecosystem



Source: Steer-ED

Defining our terms

2.4 Before going any further, it is important that we define our terms, in particular, the terms:

- Strategic Added Value (SAV);
- Functional Economic Market Area (FEMA); and
- Economically Coherent Area (ECA).

Strategic Added Value

2.5 The concept of SAV is useful in determining the rationale for, and assessing the effectiveness of, a strategic office/organisation (Table 2-2). It draws on the need to understand whether a strategic office, such as a Mayor, or strategic body, such as a Land Commission:

- Offers more economic, efficient, and effective means of gathering, sharing and interpreting information than alternative arrangements;
- Enables the economic, efficient, and effective coordination of the activities of multiple actors who each lack sufficient information about the potential or actual activities of other actors to make the most economic, efficient, and effective decisions; and
- Provides leadership and a vision.

Table 2-2: Strategic Added Value

SAV Category	SAV Definition
Strategic leadership & catalyst	Articulating and communicating development needs, opportunities and solutions to partners and stakeholders.
Strategic influence	Carrying-out or stimulating activity that gets strategic partners to commit to shared strategic objectives, and to allocate resources and behave accordingly.
Leverage	Providing/securing financial and other incentives to mobilise partner and stakeholder resources e.g. equipment and people, as well as funding.
Synergy	Using organisational capacity, knowledge and expertise to improve information exchange and knowledge transfer and coordination and/or integration of the design and delivery of activities between partners.
Engagement	Setting-up the mechanisms and incentives for the more effective and deliberative engagement of stakeholders in the design and delivery of organisational priorities.

Source: SDG Economic Development adapted from: DTI Occasional Paper 2: Evaluating the Impact England's Regional Development Agencies: Developing a Methodology and Evaluation Framework, 2006

2.6 Any rationale for devolution needs to demonstrate that the level to which powers and budgets are to be devolved offers the opportunities to reduce diseconomies of scale and/or scope associated with the 'transaction costs' of administering a given economic geography at a higher (e.g. national) level, while providing economies of scale and/or scope relative to operating those powers and budgets at a lower (local) level.

Functional Economic Market Area

'There is no universal approach to defining FEMAs (Functional Economic Market Areas)'.[6]

2.7 FEMAs may be determined using a number of different lenses, including:

- **Travel to Work Areas (TTWAs)**
  - TTWAS are relatively self-contained, internally contiguous labour market areas. A standard test to determine a TTWA is if at least 75 per cent of the resident economically active population work in the area and of all those working in the area at least 75 per cent also live in the area.
- **Housing Market Areas (HMAs)**
  - HMAs may be determined by mapping migration within and between local authority districts and house price information, to assess the relationship between household movement and housing sub-markets; TTWAs are then usually used to guide the course of sub-regional boundaries.
- **Supply Chains**
  - Supply chains determine the flow of goods, services, and information within and between sectors and across geographies – in some cases the supply chains span the globe, in others they operate within a given local or regional geography. Real-time data on supply chains are difficult to obtain, therefore, analysis tends to map sectors and then use (national level) input-output data to infer potential (rather than actual) flows of business within a given geography.
- **Service Markets**
  - Service Markets are estimated by how people access higher order services, such as major shopping centres, airports, concert halls and hospitals, and travel to learn patterns, i.e. catchment areas.
- **Transport networks**
  - The 2010 DCLG paper notes, 'transport data are not the best data sources for FEMA definitions', in part because transport networks are often driven by national rather than sub-regional priorities and in part because TTWA data (by definition) reflect current transport provision rather than (latent) demand/unserved need.

2.8 It is difficult to define a single FEMA in a given geography, in part, because:

- Local authority districts may fit into multiple FEMAs;
- Data are not always available at the appropriate scale or level of detail, making it difficult, for example, to assess the real flows of activity in supply chains as opposed to imputing theoretically possible flows of activity;
- Transport networks – often developed for national rather than sub-regional priorities – determine the scale and scope of transport flows that do not necessarily reflect (unmet) local need. The nature of these transport networks also means that there may

[6] Communities and Local Government, *Functional Economic Areas, 2010:* **https://www.researchonline.org.uk/sds/search/download.do%3Bjsessionid=63E45F7551F73DC325D66DE51C1362B3?ref=B15156**

simultaneously be strong links between two or more urban centres and only limited links between their respective hinterlands.

2.9 Furthermore, as DCLG's 2010 paper notes, strategies and services are developed and delivered within Administrative Boundaries, it suggests a process of 'best fitting' FEMA boundaries to local authority administrative areas as a pragmatic approach to fitting governance arrangements to FEMAs.

Economically Coherent Area

2.10 The brief does not ask for an assessment of the study area as a FEMA, nor does it seek to suggest that the sub-regions in the study area do not operate as FEMAs, rather it seeks to determine the extent to which the study area, with its diversity and complexity, may be considered an Economically Coherent Area (ECA), with a number of interlocking FEMAs, in the same manner as Scotland or Wales.

2.11 As such, we devised the following tests to identify an ECA:

- Are there shared sector specialisations within the study-area geography?
- Are the shared specialisations in the study area of sufficient scale to establish economic, efficient, and effective governance arrangements? In other words, are there potential economies of scale for governance arrangements?
- Is there sufficient economic diversity in the study area to offer economic resilience?
- Is the diversity of sufficient scale to establish economic, efficient, and effective governance arrangements? In other words, are there potential economies of scope for governance arrangements?
- Is the economic structure sufficiently different from that of the national economy to warrant different policy priorities and development activities in the study areas? In other words, does the operation of policy and strategy at national level lead to poor alignment with the priorities and needs of the study area?
- Are there significant barriers to the coordination of economic development activity at the level of the study area to warrant devolved governance arrangements?

Research questions and methods

2.12 Table 2-3 lists the key research questions posed by the brief, the questions we asked in order to test the rationale for devolving powers and budgets to the study-area geography, and the approaches and sources we used to gather and analyse the evidence.

Table 2-3: Research questions and methods

Over-arching Research Question	Economic Coherence Test	Research methods and data sources
• Is Yorkshire an *economically coherent area in terms of its sectoral mix and its economic inter-relationships*? – How do interlocking and overlapping city and county regions operate and interact with each other?	• Which are the study area's key economic sectors, in terms of employment and productivity (Gross Value Added)? • To what extent are these key sectors shared across the study area? • To what extent do areas with a unique specialism/asset provide a strategically important function to other areas in Yorkshire? • How far are there travel interlinkages between different parts of Yorkshire? • How far is there business networking and operation and preferences that relate to the Yorkshire level?	• Data analysis: Annual Business Survey, Employers Skills Survey, Higher Education Funding Council, Department for International Trade, HMRC data, Innovate UK, Annual Population Survey, and Index of Multiple Deprivation • Document review – including but not limited to, the Northern Powerhouse Independent Economic Review, LEP's Strategic Economic Plans, emerging Local Industrial Strategies, and relevant Science and Innovation Audits • Business engagement
• Is Yorkshire capable of maximising the opportunities and benefits of devolution for all its people and businesses?	• Which are the key opportunities to support sustainable employment and wealth creation in Yorkshire? – To what extent are these growth opportunities shared across Yorkshire? – To what extent are these growth opportunities specific to a single geography? • Which are the key threats to sustainable employment and wealth creation in Yorkshire? – To what extent are these threats shared across Yorkshire? – To what extent are these threats limited to a specific geography? – How do these threats relate to the wider Northern Powerhouse?	• Data analysis and mapping, as above, plus econometric forecasts using the Regional Economic Model • Document review • Business engagement

Over-arching Research Question	Economic Coherence Test	Research methods and data sources
	• Are there untapped resources, which could be better utilised at the level of the study area, e.g. through more effective use of information and coordination of activity?	
• How does and might Yorkshire fit within arrangements for the Northern Powerhouse?	• How do the key sectors in the study area relate to the wider Northern Powerhouse? • How do the key opportunities to support sustainable employment and wealth creation relate to the wider Northern Powerhouse? • How do the key threats to sustainable employment and wealth creation relate to the wider Northern Powerhouse?	• Document review, including*: The Northern Powerhouse: One Agenda, One Economy, One North* (2015); announcements regarding arrangements for the NP11; the LEP Review *Strengthened Local Enterprise Partnerships*; *Innovation North* for Innovate UK and the 11 Northern LEPs (2018); • Business/Stakeholder engagement
• What might be the economic uplift from One Yorkshire Devolution?	• What is the requirement to close the productivity gap with the UK? • What might more effective leadership and coordination in the study area be able to deliver from a bottom-up perspective?	• Top-down econometric forecasts • Bottom-up economic contribution analysis, based on identified areas for improvement and/or untapped opportunities and potential interventions
• Is there a case to establish a directly-elected Mayor (as enabled under the Cities and Local Government Devolution Act 2016)? – What is the economic case for devolving statutory economic, social and environmental powers and funding streams?	• Are there sufficient economies of scale – based on similarities in economic structure – to support devolved arrangements to the study area? • Are there sufficient economies of scope – based on differences in economic structure – to support the case for devolved arrangements to the study area? • Is there sufficient difference between the study area's economic structure and that of the national economy to warrant devolved governance arrangements? • Are there significant barriers to the coordination of economic development activity at the level of the study area to warrant devolved governance arrangements?	• Triangulation of evidence to determine whether there is an economic rationale for devolving statutory economic, social, and environmental powers and funding to the Yorkshire level

Source: Steer-ED

2.13 Given the economic focus of the study, there are other avenues of research to be pursued in assessing the case for devolution which are not pursued in this study – for example on the advantages/disadvantages of Yorkshire-level devolution in other policy areas, such as health and care, housing provision, service markets and catchment areas, flood prevention, green infrastructure, and natural capital. Likewise, the study does not explore in detail the policy priorities which may be pursued through devolved arrangements, e.g., policies to pursue sustainable and inclusive growth.

Structure of this Report

2.14 The Report has the following sections:

- **Section 3: Review of Strategic Economic Plans** – reports on the coherence/distinctiveness of local economic strategies and plans in the region;
- **Section 4: Findings from business engagement** – outlines views on devolution gathered from discussions with representative business organisations and individual businesses;
- **Section 5: What role might Yorkshire 'identity' play?** – provides an overview of evidence on the current and potential role of Yorkshire identity in driving economic performance;
- **Section 6: Perspectives on the economy** – discusses coherence/distinctiveness and implications for devolution in terms of: (a) Key Sectors and Industries; (b) Business Base – start-ups, survivals, and scaling; (c) Innovation and Ideas; International Trade and Investment; (d) Skills and Ambition; and (e) Transport and Connectivity.
- **Section 7: Closing the productivity gap** – discusses the outcome of 'top-down' econometric forecasts estimating the productivity gap with the UK, and bottom-up estimates of additional GVA which may be anticipated as a result of more effective leadership and coordination across Yorkshire, along with the additional resources and powers associated with devolution.
- **Section 8: Conclusions** – sets out our main conclusions, in relation to the research questions and tests of economic coherence, and outlines areas for further study.

3 Review of Strategic Economic Plans

What do Strategic Economic Plans and emerging Local Industrial Strategies say about the Yorkshire economy?

3.1 We reviewed the most recent Strategic Economic Plans (SEPs) of each LEP/Combined Authority as well as intelligence on preparatory work to develop Local Industrial Strategies, as far as this was available, to:

- Provide a strategic overview of each LEP area as a foundation for the study and to inform our overall analysis of the extent to which Yorkshire is a connected economy;
- Assess how far LEP areas have shared or complementary priorities, issues and approaches, and in which policy areas; and
- Provide a qualitative information source against which data-led analysis can be triangulated.

3.2 The review used the following reports and information sources:

- In the Humber: the 2014-2020 SEP, the July 2016 review of the SEP, the 2017 response to the Industrial Strategy, and the June 2018 Blueprint for a Humber LIS;
- In Leeds City Region: the 2016-2036 SEP and initial work on the Local Inclusive Industrial Strategy (2018);
- In Sheffield City Region: the 2015-2025 SEP and early work (2017) on the Local Inclusive Industrial Strategy;
- In York, North Yorkshire and East Riding: the 2014 SEP and the 2016 SEP Update (supplemented by a meeting with LEP officers as part of this study); and
- Collation of northern LEP Industrial Strategy Responses (2017) by WYCA.

3.3 The headlines from this review are summarised in Table 3-1. Appendix A provides a more detailed analysis. It should be noted, that most SEPs made little or no explicit reference to the Yorkshire level, but all of them show an openness to cross-border working on specific issues/opportunities, and all refer to working at the level of the North. It should also be noted that the YNYER SEP identified significant scope for working as Yorkshire, e.g., in relation to international trade and investment, sector growth, and R&D.

Table 3-1: Review of Strategic Economic Plans and associated documents

Aspect reviewed	Conclusions across the four LEP area SEPs/early LIS work
Overall Priorities	• The SEPs/emerging LIS priorities cover largely similar themes and objectives • The same three themes of business, skills and infrastructure are prominent in the SEPs of all four areas, while LIS work in all four areas focuses on business support/growth, skills (and employment), sectors, transport and productivity • Inclusive growth, innovation, trade and investment and energy are also picked up in multiple areas, although less often/less prominently • There are locally distinctive variations in visions and emphases (e.g. good/inclusive growth, Energy Estuary, a bigger private sector, the best place to grow a small business) • Energy and Environment/low carbon (potentially linked to bio-economy) and place-specific elements are prominent in some areas • *This variety offers the scope to share lessons and develop complementary strategies*
Key assets and Issues	• Broadly similar challenges are identified in the majority of LEP areas: raising GVA, productivity and the size and strength of the business base; the need for more and better paid jobs; better broadband; and reducing flood risk were all noted by three or more LEPs • Other challenges noted by two or more LEPs include transport, housing, and low median incomes • Emerging LIS priorities are also often shared – at least three LEP areas each highlight: Deprivation/Inclusion; Innovation/R&D; productivity, skills and the impact of Brexit/business uncertainty • Key assets and strengths brought out in LEP areas tend to be more locally specific and distinctive – e.g. the Humber Estuary, research Centres of Excellence or major investments • *There is potential to enhance the economic impact of strategic assets across a wider geography through better coordination of plans and investments*
Sector priorities	• There is strong overlap between SEP priorities at a broad sector level, with Advanced Manufacturing, Energy and/or Low Carbon, and Food and Drink/Agri-food common to three LEP areas, and Creative/Digital (increasingly as an enabler) and Health and/or Care significant across areas • As is to be expected, specialisms within broad sectors vary more by LEP area • There are potential opportunities to support more rapid growth through collaboration and complementary specialisms and assets • There are a number of more localised and distinctive sectors/niches, e.g. visitor economy, financial services, chemicals, bio-economy • *There is potential to develop complementary offers based on localised specialisms/niches*

Aspect reviewed	Conclusions across the four LEP area SEPs/early LIS work
Business growth, support and enterprise	• There are similar models in all areas, with a Growth Hub or equivalent central function, plus a range of (similar) types of support for businesses • Activity to foster and/or support New Starts is identified in all four areas, as is Access to Finance and Innovation • Supply Chains, Exports and Investment are cited as priorities in three SEPs • Distinctive elements include a focus on connection to business support providers and on leadership and management in YNYER, and on resource efficiency in Leeds City Region • *There are opportunities to exploit economies of scale and scope in the provision of enterprise and business support, e.g. access to finance, while ensuring local specialisms and requirements are served at the local level*
Innovation	• Overall, innovation in initial SEPs was often less prominent than in other parts of the North, however, most or all LEPs now recognise this gap and are looking to strengthen Innovation • There are strong connections between innovation, business growth and priority sectors in all LEP areas • The importance of connections with local universities is noted in all LEP areas, if little reference to the Yorkshire Universities grouping which brings HE together and suggests appetite for joint working at a Yorkshire level • *There may be opportunities to address information and coordination failures by developing complementarity offers and exploiting economies of scale in relation to innovation activity and use of innovation assets in key sectors – especially Advanced Manufacturing, Health/Care and Energy, plus potentially Food and Digital*
Transport & connectivity	• Transport and connectivity are prominent in all four SEPs • The need for improved Broadband/Digital provision is prominent in three SEPs; the absence of the issue in the fourth SEP is likely to be addressed in future LIS development • All SEPs include specific local transport schemes or mechanisms for them, for instance to connect people to jobs or provide access to sites • Three SEPs have an interest in High Speed Rail and its benefits • Airports are prominent in SCR, but SEPs treatment of this issue tend to have a local LEP-area focus, rather than a broader/strategic view • Sea Port content is only prominent in the Humber – which provides a national asset • All SEPs note transport schemes that cross LEP areas or Northern working • *There is potential to make the most of economies of scope to join up LEP activity in relation to strategic assets which provide national and international connectivity to make better use of existing assets and identify and coordinate responses to needs and opportunities that arise at a larger scale than LEPs currently consider*
Other Infrastructure	• There is a good degree of similarity in the way SEPs address issues affecting housing and employment sites; the quality of places, energy and flood protection are specifically raised in in three SEPs

Aspect reviewed	Conclusions across the four LEP area SEPs/early LIS work
	• Most Enterprise Zones and employment sites are local to one LEP area, but a good number are in dual LEP areas (e.g. in York, Selby, Barnsley) • Housing growth is important in all areas, and most areas also cite quality and affordability • Green infrastructure and/or environmental management is strong in two SEPs, linked to flood protection and cross-LEP catchments • *While many infrastructure issues present as local concerns, common themes emerge across LEPs, suggesting both the possibility of more effective sharing of information on 'what works' and greater coordination in relation to procurement and commissioning*
International trade & investment	• Overall, LEPs have adopted a very similar approach in relation to the promotion of international trade and investment • It is mainly at the level of emphasis and subtleties of detail that SEPs vary, rather than the types of activity or ambitions set • *There may be to opportunities to develop a collaborative approach as a means of generating economies of scale to generate greater impact, e.g., through increased utilisation of Yorkshire as a brand/identity*
Skills & employment	• Skills is an issue highlighted by all LEPs and there is much consistency in the areas to address and actions proposed • Core aspects include apprenticeships, employability, business skills needs (e.g. upskilling workforce, sector needs and skills shortages), and education-business links and related Careers Information, Advice and Guidance (IAG) • Issues noted in at least two areas, include, enterprise skills and the need to attract talent • One area has a strong focus on 'ambition' • Three areas have a broadly similar skills profile • YNYER and its high skills levels stands out; it has distinctive points on ambition, talent, coastal employment) but also highlights the same issues as other LEP • LCR has a distinctive 'more jobs, better jobs' strand to its activity; the 'inclusive growth' focus in Sheffield City Region Local Industrial Strategy work covers similar issues • *While many actions to address skills issues are best taken at the local level, the issues are common to all SEPs, furthermore, some LEP areas may be home to strategically significant provision that is not replicable in another LEP, which other LEPs need to ensure their residents can access*
Culture & tourism	• Culture, quality of place/life and tourism feature in most SEPs to some but not a great extent • The importance of culture to attracting and retaining skills and investment and expanding tourism is the driving rationale for activity • The issues figure most prominently in Humber and YNYER SEPs • Culture/place is becoming more prominent in strategy development; in 2017, Leeds City Region, with input from YNYER, undertook work related to the presentation of culture and quality of place at Yorkshire level

Aspect reviewed	Conclusions across the four LEP area SEPs/early LIS work
	• *The diversity of Yorkshire's places and visitor destinations and attractions points to the opportunity to exploit economies of scope as well as scale*
Other prominent themes	• Each SEP has a at least one additional theme that is usually quite distinctive, and often linked to its overall Vision • In the Humber this is the Energy Estuary; in Leeds City Region it is Good Growth; in Sheffield City Region it is a Bigger, Stronger Private Sector; and in YNYER it is Rural/Coastal economy and Quality of Life • Social Inclusion and Environment/Low Carbon/Natural Capital also feature in some SEPs/LIS work as either core or a cross cutting themes • Distinctive SEP/LIS themes are sometimes focused on place-specific geography, and are usually complementary rather than conflicting

Conclusions and key messages

3.4 The key findings and implications from our review of SEPs are grouped in terms of:

- Coherence relation to shared sectors;
- Coherence in relation to economic priories/opportunities/threats; and
- Relationship to pan-Northern working.

3.5 The Section ends with some general observations.

Coherence in relation to shared sectors

- The following broad sectors are common to at least three of the four LEP areas:
  - Advanced Manufacturing;
  - Energy/Low Carbon; and
  - Food and Drink/Agri-food.
- Digital/Creative and Health and/or Care are significant across all areas with Creative and Digital often cited as an enabler.
- The Visitor Economy, Financial Services, Med-Tech, Chemicals, and the Bio-economy are significant in one or two LEP areas.

Implications

- *There are potential economies of scale to be achieved in sector-based activity in Advanced Manufacturing, Energy/Low Carbon, and Food and Drink/Agri-food.*
- *There is potential to develop complementary 'offers', based on localised sector specialisms/niches, to build economic resilience, strengthen cluster and supply-chain development, and exploit potential economies of scope.*

Coherence in relation to priorities/opportunities/threats

- Priorities which are covered in every LEP area's SEP/LIS work (based on their understanding of the opportunities and threats that their areas face) are:
  - Business support/growth;
  - Skills (and employment);
  - Sectors;
  - Infrastructure/Transport/Connectivity; and
  - Productivity.
- Other priorities cited by two or three LEP areas in their SEPs/LIS work include:
  - Inclusive/good growth;
  - Providing the environment to support small business/private sector growth;
  - Innovation;
  - Trade and investment; and
  - Energy.

Implications

- *There is potential to identify shared opportunities and threats, e.g., in terms of AI, automation, develop common responses for sectors that are common among LEP areas and local responses for localised specialist/niches sectors;*
- *There is also potential for areas which have undertaken more research, e.g., in relation to innovation, to share their learning to raise awareness among other LEPs.*

Relationship to pan-Northern working

- The Northern Powerhouse Independent Economic Review (2016)[7] identified four Prime Capabilities where the North was world class (Advanced Manufacturing and Materials; Energy; Health Innovation; and Digital) and three 'Enabling Capabilities' (Financial and Professional Services, Logistics, and Education), with Quality Life identified as a cross-cutting enabling asset. Our review highlights Advanced Manufacturing and Energy as significant at the level of Yorkshire, along with Health (not just Health Innovation) and Digital/Creative.

Implications

- *Where arrangements for developing a sector, or tackling an issue, or seizing an opportunity already exist, the added value of establishing parallel Yorkshire-level arrangements needs to be tested to ensure it reduces rather than increases the transaction costs of pan-Northern working where that is taking place or is likely to (e.g. around transport).*

Overall observations

- Yorkshire is a coherent and interconnected economic area, if one that also has a number of interlocking and overlapping functional economies and distinctive places within it.
- The SEPs in Yorkshire have similarities in terms of the issues they address and approaches adopted. There are opportunities for, and potential advantages in, joining up activities across localities on higher level functions, as well as functions where the importance of local proximity or distinctive needs supports more localised approaches.
- There are good opportunities to present complementary offers at the Yorkshire level which take advantage of shared strengths and distinctive assets.

[7] **https://www.transportforthenorth.com/wp-content/uploads/Northern-Powerhouse-Independent-Economic-Review-Executive-Summary.pdf**

4 Findings from business engagement

Approach and Consultees

4.1 The business perspective on devolution at the Yorkshire level is important for a number of reasons, and specifically because it will help to identify:

- Whether businesses – as the key players in and drivers of the economy – see Yorkshire as a genuine, relevant and connected economy;
- Businesses' views on and preferences for devolution;
- The reasons for these preferences; and
- Potential advantages and disadvantages for business of Yorkshire-level devolution.

4.2 This study used a targeted consultation exercise to gain business perspectives, based on interviews with business representative organisations across all areas of Yorkshire, as well as a number of individual businesses nominated by business groups (chambers of commerce) and LEP contacts. This approach fitted with the study's needs and operational constraints and put onus on representative organisations – who are best able to present a balanced and informed view which takes into account views elicited through networks, member discussions and business surveys.

4.3 Representatives from the following organisations were consulted, either as representative groups or Chamber/LEP nominees, through individual interviews or a focus group:

- Confederation of British Industry (Yorkshire and Humber);
- Federation of Small Businesses (Yorkshire, the Humber and North East England);
- EEF (Yorkshire and Humber);
- NFU (North East region);
- Yorkshire Universities;
- Bradford Chamber of Commerce/Christeyns;
- West and North Yorkshire Chamber of Commerce;
- Doncaster Chamber of Commerce;
- Leeds Chamber of Commerce/Shulmans;
- Humber LEP;
- Addleshaw Goddard;
- WGN;
- Leeds Civic Trust;
- Carmel Harrison PR;
- Make it York;
- Harworth Group;
- Associated British Ports (ABP).

4.4 The discussions were semi-structured but focused on two questions:

- How far, if at all, is the Yorkshire level relevant to and preferred by a business audience? (compared to or in addition to other geographies)
- What, if any, business or economic advantages would there be from devolution at this level and how could these be maximised?

Additionally, two surveys of Chamber of Commerce members in different areas were discovered through the consultation:

- A survey of 847 member-businesses by West and North Yorkshire Chamber of Commerce; and
- A survey of 147 member-businesses by Doncaster Chamber of Commerce.

Here we set out the main points emerging in the interviews, backed by survey results where relevant.

Results

Overall support for the principle of greater devolution

4.5 There was strong support for devolution per se. Every interviewee who expressed an opinion was in support of moving more resources and powers from Whitehall toward a more local level, regardless of their geographic preferences for devolution. There was a strong sentiment that Yorkshire and areas within it were "being left behind" by not having a devolution deal and that "we just need to get on with it".

4.6 These pro-devolution views were echoed in survey results. West and North Yorkshire Chamber's survey showed 76% in favour of devolution (versus 12% against) and Doncaster Chamber's survey revealed 85% support (versus 12% against).

Geographic devolution preferences – Yorkshire or another level?

4.7 There were mixed views on whether Yorkshire was the best geography for devolution. The option had a number of strong advocates, and of the devolution options available, it was the most favoured overall amongst those who expressed a view. However, some businesses preferred other options or were uncertain about the optimum level, and some were clear that the geography was crucial in determining their position. For example, a large business expressed the desire to ensure that leadership and governance in the Humber was not split in two. It should be noted that because there is a range of views among business, the representative organisations we consulted tended to say they would work with whichever geography/geographies were eventually agreed.

4.8 The two Chamber surveys present a similar picture to the interviews, i.e., views are mixed, but with Yorkshire level devolution the most common preference. In the Doncaster Chamber survey, 52% said that working only for a Yorkshire devolution deal was their first preference (of four options) compared to 19% who's first preference was to focus only on securing Sheffield City Region (SCR) level devolution. The remainder favoured SCR devolution as a stepping stone to Yorkshire-level devolution (as did one of the businesses consulted) or no devolution deal at all (11%). In the West and North Yorkshire survey, 51% of businesses surveyed in West Yorkshire favoured Yorkshire-level devolution, compared to 30% who preferred the West Yorkshire level and 19% who preferred a Leeds City Region settlement. In North Yorkshire, 60% preferred Yorkshire-level devolution, with 19% favouring a YNYER level deal and 17% opting for North Yorkshire level.

4.9 The other key factor that emerged across many of the business interviews was pragmatism. For a good number of businesses and their representative organisation, the overriding priority is to get devolution of any sort – and quickly – first, with the details of geography to follow. These would generally prefer Yorkshire level if it was achievable and did not involve additional delay, but would accept devolution on a different basis if it provided certainty and would be achieved quicker.

Rationale, business benefits, and functions favoured for the Yorkshire Level

4.10 The reasons why businesses sought Yorkshire-level devolution often involved a combination of overall benefits, gaining powers and functions in specific policy areas, rationales as to why the Yorkshire level made sense, as well as, for some, a cultural affiliation to Yorkshire. The main points were based around Yorkshire-level arrangements offering:

- ***Strong leadership*** – it was suggested that a larger geographic footprint/electorate would attract high-quality candidates to be mayor, with high-calibre leadership further enhancing the area's profile, influence, economy and ability to get things done.
- ***A single voice, clear priorities and a large scale that heightens influence and impact*** – this line of argument emerged repeatedly, with businesses:
  - Supportive of the role of a Yorkshire mayor in agreeing common priorities that partners could unite behind;
  - Expectant that this would lead to more influence, more strategic prioritisation and the ability to pool resources to deliver large scale investments.
- ***A chance to build on Yorkshire identity/branding and its advantages for international business*** – the consensus view was that, driven by the work of Welcome to Yorkshire, the Yorkshire brand is now a powerful asset which "symbolises confidence, credibility and getting things done", as well as high quality of place. While this has so far been concentrated on tourism and events, consultees stressed its wider business value, especially in terms of attracting inward investment and growing exports. This was seen as especially important in a post Brexit-era when growing wider export markets will be crucial. The Yorkshire brand was also seen as more valuable to the food and drink and tourism sectors than city-regional or LEP area brands.
- ***More effective arrangements for transport*** – many of the businesses favouring Yorkshire-level devolution saw improved transport arrangements as one of its advantages. The reasons for this included the ability to deliver better ticketing arrangements that would allow Oyster Card-type solutions and smoother fares structures to avoid price spikes at sub-regional boundaries – thereby enhancing the efficiency of labour markets and generating agglomeration benefits. Others suggested it would enable better rail services and rolling stock and allow road and public transport investments to be focused on the most important schemes, with less sharing out of the spoils between areas.
- ***Improvements in skills and education provision*** – a number of businesses felt that key skills and education challenges – and many of the solutions to them – were common to many parts of Yorkshire and could be more effectively and efficiently addressed at this level. However, others noted the localised nature of much education provision. While others with an eye to the ongoing development of the apprenticeship offer suggested there may be benefits in identifying unmet need in one area and seek to match it to specialist provision in another area, e.g. specialist textile or food/catering training.
- ***More efficient and effective coordination and access to business support*** – Yorkshire-level devolution was seen as likely to be more cost-effective and lead to better coordination of business support than was available through (currently four) separate LEP

structures, which at times involve duplication. For example, large businesses with multiple sites in different LEP areas have to engage with more than one governance structure. Furthermore, high-level/specialised business support was cited as an example, where a larger geographic scale (and budget) would facilitate better quality and more specialised business support than a single LEP area could not sustain, e.g., in fields such as leadership and management development, exports, innovation, and access to finance.

- ***Capitalising on complementary assets across Yorkshire*** – Examples were given of assets in different parts of Yorkshire which are not fully capitalised upon by businesses outside the immediate area, but which could present a powerful complementary offer – for example the Humber Ports, Doncaster-Sheffield airport, Leeds City Centre and the AMRC in Sheffield/Rotherham. Others stressed how the Yorkshire level could bring together urban, rural and coastal assets to present a rounded offer and support business opportunity and quality of life.
- ***Potential to ensure a level playing fled for supplementary business rates*** – it was noted that devolution of the power to raise a supplementary business rate would avoid the risk of different business rates operating in neighbouring local authority areas in Yorkshire.

Reasons for not supporting Yorkshire level devolution

4.11 A number of reasons, which would need to be mitigated in any Yorkshire-wide devolution, were given either for favouring devolution on a different geography or being uncertain about the appropriateness of Yorkshire-level devolution. The main ones were:

- ***Too many (public sector) layers*** – some consultees felt that the combination of a Yorkshire level, a LEP level, plus local government structures would be confusing to business and could increase rather than reduce bureaucracy and trigger further restructuring.
- ***Lack of a well-defined role*** – some businesses felt that there were too few clear functions that would work best at Yorkshire level to warrant devolution. For example, some consultees argued that transport could be covered between local and Northern levels without a Yorkshire one too.
- ***Pooled budgets favouring big ticket investments and reducing local provision*** – some consultees feared that pooled budgets at the Yorkshire level, e.g. on transport, may lead to a concentration of resources on bigger projects, and as a result reduce investment in their local area and its needs
- ***Which geography?*** Some consultees expressed strong views on the geography to be covered, with particular concern expressed as to the economic risks associated with splitting governance arrangements covering the Humber.
- ***Potential risk that the value of other brands won't be maximised*** – while Yorkshire level activity was seen to potentially add value through offering a high level, umbrella brand, a case was made that local places/destinations were crucial to the visitor economy and that arrangements should reflect this. Similarly, should devolved arrangements cover the Humber, it was argued that the value of the Lincolnshire brand to some markets should not be lost.
- ***Sticking with the Sheffield City Region Deal and a step-by-step approach*** – one consultee saw advantages in Yorkshire as the best level for devolution in the long term, but felt that it was better to first follow through on the SCR deal, and to take the 'bird in the hand' option first.
- ***Potential to produce an uneven playing field with neighbouring economies if devolution results in a Yorkshire-wide supplementary business rate.***

Conclusions and key messages

4.12 Findings from business engagement point to the following:

- There is ***strong business support for the principle of the devolution*** of powers and budgets from central government to more local arrangements – provided this does not lead to an increase in bureaucracy;
- There are ***a range of views as to the most appropriate level for devolved arrangements*** – with evidence indicating on balance majority support for devolution to the Yorkshire level, provided concerns in relation to arrangements ensuring localised needs will still be met;
- While ***many consultees were agnostic with regard to the geography of devolved arrangements*** – with most business organisations consulted indicating that they would work with whichever geography was agreed – ***consultees in the Humber LEP expressed concern that any devolved arrangements should not split leadership and governance in the Humber***; and
- ***Some consultees suggested a step-by-step approach to devolution*** – accepting local deals where available building to Yorkshire level arrangements.

Overall observations

4.13 There is strong business support for devolution. Within the context of some mixed views about how that can best be achieved and an onus on pragmatism and pace, the Yorkshire level emerges as the most strongly supported first preference geography for devolution. Reasons for this include advantages around leadership, prioritisation, brand and international business, as well as issues including transport and labour markets.

5 What role might Yorkshire 'identity' play?

5.1 The study explored the extent to which the Yorkshire identity/brand may be relevant to the geography of devolution, for example in relation to economic coherence and benefits. In this respect, it assessed how far the Yorkshire identity is salient in the region and any values or perceptions that go with it; how far Yorkshire identity is used by and provides benefits to business; and whether there are any wider of specific areas where the brand provides benefits and/or opportunities.

Yorkshire identity and Values

5.2 The most statistically robust and recent evidence on county identity came through the 'The English Question' survey of 20,000 people commissioned by the BBC, conducted by YouGov, and reported in June 2018. As part of a wider survey on national identity it asked questions about the extent to which people felt 'allegiance' to their county. The results showed that three quarters of people in Yorkshire did, the highest for any English County. This does not necessarily imply an economic value, but it does point to the Yorkshire identity being salient, which may have implications for the levels of public and business support for leadership and governance structures at the Yorkshire level.

5.3 The same survey also explored which attributes or values were associated with which county identities. In Yorkshire's case, these were described as "straight-talking, plain-speaking, hard-working, friendly and supportive…the Yorkshire identity is rich with values of resilience and community." These perceptions point to brand values that potentially could be capitalised on in a business context and which may influence trading or locational decisions, for example by a potential inward investor looking to locate near a suitable workforce.

5.4 It is difficult to identify a notional economic value for the 'Yorkshire Identity' or 'Yorkshire Values', just as it is difficult to place a monetary value on Britishness. It is also difficult to identify how far these attributes are distinct from those of the North in general, or towns and cities or LEP areas in Yorkshire. Nevertheless, the evidence suggests Yorkshire has a particular and definable identity, which underpins its coherence as an entity, and which may be a business and economic asset.

Businesses and the Yorkshire Brand

5.5 A survey by Premier Business Care[8] looked at how frequently a county name formed part of business names across the UK. It found that 'entrepreneurs registered in Yorkshire cite their county more than any other region in the UK, with 5,313 companies including 'Yorkshire'

[8] http://www.londonlovesbusiness.com/business-news/britains-bizarre-business-naming-habits/19870.article

within their company name'. Comparison of how this compares to use of city, district or sub-regional brands was not undertaken, but as with the BBC survey of county-based identity across the population, the findings suggests that there is something about Yorkshire identity that people and businesses connect with, are proud of, and is more pronounced than in other English counties. It is beyond the remit of this study to quantify the economic return that the use of Yorkshire branding may yield. Some businesses may well use the brand simply because they like it, whereas others may realise a value from it in attracting or retaining customers, based on the perceptions or affiliations that go with it. An article in Your BusinessVoice in 2017 supports this by setting out five Yorkshire values that are good for business: 'straight talking, down to earth, proud, friendly and sensible with money'.[9]

Wider use and benefit from the Yorkshire Brand

5.6 The highest-profile use of Yorkshire branding in recent years has been through Welcome to Yorkshire and its work on tourism, profile raising and major events. The organisation's five-year strategy for how it would grow the Yorkshire brand (2012-2017) sought to 'take the Yorkshire brand to a new level, way beyond tourism' and to develop a strong international profile, leading to a step-change in inward investment and giving the County 'the strength it needs to punch well above its weight in an increasingly competitive global marketplace'. This points to the intent to gain value from Yorkshire branding in supporting international business.

5.7 It is not easy to quantify the scale of this potential benefit or to assess its realisation and causality with precision or certainty, however, there is some evidence of economic value from use of the Yorkshire brand by Welcome to Yorkshire:

- Sizeable increases in tourism, with a 14% increase (approx. £1 billion) in the value of tourism and its supply chain to the County's economy between 2011 and 2016;[10]
- The hosting of major events such as the Tour de France and Tour de Yorkshire, which have been broadcast to an international audience;
- Resulting press and PR activity for Yorkshire which has been valued at £124 million, much of it featuring local businesses and what they have to offer; and
- A major rise in foreign direct investment jobs of 56% between 2015/16 and 2017/18 compared to falls of 12% in England (excluding London) and of 28% in London.

5.8 It is not possible to quantify how far these results are due to the projection of Yorkshire as an entity and a brand, as opposed to other factors, but there is a certain logic whereby a higher and more positive profile for Yorkshire has made it a more attractive destination to visitors and businesses, which could in turn be expected to lead to greater tourism and inward investment, and higher GVA than would otherwise be the case. This triangulates with messages from the business consultation exercise, whereby many Yorkshire businesses appear to value a positive Yorkshire-wide brand as an asset in international trade. It also demonstrates the potential value of pooling resources to achieve a greater impact more efficiently through a single voice/operation.

5.9 Beyond the activities of Welcome to Yorkshire, a number of other sectors and organisations make explicit use of Yorkshire branding to further their economic objectives, including:

[9] **http://www.yourbusinessvoice.co.uk/5-yorkshire-values-that-are-good-for-business/**

[10] **https://industry.yorkshire.com/about/our-achievements**

- ***Screen Yorkshire*** – which champions the film, TV, games and digital industries in Yorkshire and the Humber and runs the £15m, ERDF-supported Yorkshire Content Fund. The scale and identity of the region are integral to its activity and success.
- ***Deliciously Yorkshire*** – promotes Yorkshire Food and Drink, and uses the region in its branding to build profile and appeal to customers in a way that would be hard to envisage with for example, LEP-area based brands.
- ***Culture, sport and creative industries*** – where work by Leeds City Region in 2017 (with the engagement of the YNYER LEP) highlighted the economic value of sport and culture, and the benefits of mapping and presenting a complementary offer of assets across Yorkshire.

5.10 Whilst it is not possible to be precise and definitive about the monetary or economic value of the Yorkshire brand, taken in the round, the evidence in this section supports the arguments that:

- Yorkshire is widely recognised as a coherent economic entity;
- The Yorkshire level can bring advantages of scale and critical mass that allow pooling of resources and more ambitious activity than would otherwise be possible; and
- The Yorkshire brand can have traction at national and international level among diverse audiences, including tourists and investors.

Conclusions and key messages

5.11 Our review of evidence on the potential role of Yorkshire identity suggests:

- The Yorkshire identity is well recognised inside and outside Yorkshire – which suggests a strong degree of coherence and identification at the level of individuals, communities, and businesses;
- The Yorkshire brand is considered a significant asset by business, both in terms of local and national markets and in international/outward-focused activities, such as international trade and investment, and in sectors such as tourism, food and cultural industries where place-based characteristics are important – which suggest the potential to develop further the positive effects of the Yorkshire brand in growing Yorkshire's profile and activity in international markets.

6 Perspectives on the economy

6.1 We reviewed data from a range of sources and a number of different perspectives to test two things:

- The degree of economic coherence in the three geographic groupings; and
- The extent to which there are distinct characteristics at the level of Yorkshire which might warrant devolution of powers and budgets from the national level to promote economic development in Yorkshire.

6.2 ***In seeking to establish the degree of coherence*** in the three geographies, ***we focus on data related to the degree of shared sector and industry specialisation.*** We also interrogated these data to identify economic diversity, and the extent to which some industries were specific to one or two districts, thereby suggesting that a pan-Yorkshire approach might be sub-optimal.[11] We then looked at LEP-level data on R&D and innovation, which is related to industrial structure.

6.3 ***In seeking to establish the degree of Yorkshire's distinctiveness from the national economy***, and therefore, the potential need for devolved leadership and governance to tackle particular issues at the level of Yorkshire ***we reviewed data on entrepreneurial activity, international trade and investment, and skills*** – key drivers of economic growth, which are likely to require intervention, if Yorkshire is to raise its rate of productivity and level of earnings.[12]

6.4 The chapter concludes with a discussion of transport and connectivity issues – a major concern highlighted by business that requires reflection on qualitative as well as quantitative data.

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[11] We did this in part because we believe that the main test of economic coherence at a pan-Yorkshire level is the extent to which there are shared economic specialisms in the geography – in line with the lessons learnt from the Northern Powerhouse Independent Economic Review. We acknowledge that our analysis would benefit from further, more detailed studies, particularly in relation to value/supply chains, but we believe that it provides a sufficient level of analysis to determine if there is a degree of coherence at the pan-Yorkshire level. We should, however, also acknowledge the role that data limitations play in our analysis. For example, some data, such as that on international trade and R&D expenditure, are only available at the level of Yorkshire and Humber, and therefore while they can be used to establish whether and how the Yorkshire economy is distinctive from the national economy, they cannot be used directly to test economic coherence within Yorkshire. Further analyses to map industrial structure and to estimate likely shares of exports or R&D spend would provide an additional level of granularity to the analysis.

[12] Our assessments are at a high level. Further research is required to identify the most significant factors driving performance in these policy domains, and the extent of local variation in Yorkshire.

Economic coherence and sector specialisation

How we identify key sectors

6.5 It has become increasingly common to assess patterns of industrial specialisation using a metric known as a 'location quotient' (LQ). This measure calculates the ratio of a particular industry's activity (e.g. employment, gross value added or any other relevant data) in a region over that region's share of total activity. Thus, a ratio above 1.0 tells us that the region is relatively specialised in a given industry, and a ratio below 1.0 that it is not. The higher the ratio above 1.0 the greater the degree of industrial specialisation.

6.6 These patterns of industrial specialisation have important implications for inter-region and intra-regional variations in employment and workforce participation, productivity, imports and exports and region-specific rates of economic growth.

6.7 The first part of the following analysis considers patterns of industrial specialisation based on employment LQs. The analysis then moves on to consider specialisation in both employment and GVA. This is followed by a more detailed assessment of Yorkshire and Humberside's distribution of employment at the detailed industry (3-digit SIC) and individual Local Authority level.

Testing for economic coherence on the basis of Employment Location Quotients

6.8 We calculated employment LQ coefficients for three groups identified in Table 2-1 together with each relevant Council area using 2016 ONS data. We also calculated a limited set of 'comparator' employment LQs at the 3-digit SIC level for London, Scotland, and Wales which have significant devolved powers, and the West Midlands, which is an English region of a similar scale to Yorkshire with a mayor. The main focus here is to consider LQ profiles from the perspective of cohesion in Yorkshire and Humber.

6.9 Figure 6-1 contains an overview of the correlations between employment LQs at the 2-digit SIC level. To re-cap on interpreting this metric, a correlation coefficient of 1.0 indicates a perfect match (industrial specialisation patterns are identical) and lower coefficients indicate proportionally lower alignment (i.e. increasingly different patterns of industrial specialisation between the regions being compared).[13] The results are colour coded to ease interpretation (green for higher correlations through yellow and then to red weaker or negative correlations). The data clearly show that the three Groups exhibit similar patterns of industrial specialisation with each other but are different from their comparators. For example, the West Midlands has correlations with the three Groups ranging from 0.153 to 0.281, with the strongest of these correlations being with Group 3 (Yorkshire & Humber (including N & NE Lincolnshire) – the broadest selection of districts.

6.10 *Our analysis of Employment LQ data suggest a degree of coherence within the geography and an economic distinctiveness from the comparator geographies – suggesting a prima facie case for Yorkshire-specific arrangements.*

[13] Negative correlation coefficients tell us the patterns of industrial specialisation are inversely related, i.e. one jurisdictions relative strengths are another's relative weaknesses.

Figure 6-1: Overview of correlations between employment LQs (2016)

	Group 1: ONE Yorkshire Signatories	Group 2: Yorkshire & Humber Minus N & NE Lincs	Group 3: Yorkshire & Humber (Including N & NE Lincs)	Wales	Scotland	London	West Midlands
Group 1: ONE Yorkshire Signatories		0.963	0.842	0.103	0.027	-0.306	0.153
Group 2: Yorkshire & Humber Minus N & NE Lincs			0.880	0.136	-0.047	-0.305	0.224
Group 3: Yorkshire & Humber (Including N & NE Lincs)				0.169	-0.054	-0.347	0.281
Wales					0.176	-0.377	-0.024
Scotland						-0.214	-0.336
London							-0.338

Source: Steer Economic Development calculations using ONS data

6.11 We also used employment LQs to test the degree of economic coherence at local authority district level. Figure 6-2 shows the diversity in patterns of industrial specialisation at the level of local authority districts.

6.12 *The economic diversity identified in our analysis reflects urban, rural, and coastal differences and points to potential economies of scope – and also points to the potential for strong economic resilience at the level of the whole geography, which could be enhanced if policy levers were in place to facilitate movement of workers between expanding and contracting sectors in the region.*

Figure 6-2: Detailed employment LQ correlations for Yorkshire & Humberside (2016)

One Yorkshire signatories in **bold**	East Riding of Yorkshire	Kingston upon Hull	North East Lincolnshire	North Lincolnshire	Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby	York	Barnsley	Doncaster	Rotherham	Sheffield	Bradford	Calderdale	Kirklees	Leeds	Wakefield
East Riding of Yorkshire		**0.065**	0.564	-0.040	**0.225**	**-0.017**	**0.342**	**-0.032**	**0.183**	**0.897**	**0.053**	**-0.172**	**0.104**	**0.024**	-0.011	-0.102	**-0.019**	**0.035**	**0.008**	**-0.173**	**0.024**
Kingston upon Hull, City of			0.199	-0.078	**0.681**	**0.129**	**-0.128**	**-0.113**	**-0.022**	**0.028**	**-0.076**	**-0.013**	**0.164**	**0.065**	0.099	0.007	**0.000**	**0.041**	**0.177**	**0.027**	**0.040**
North East Lincolnshire				0.177	0.072	0.257	0.201	-0.044	0.125	0.510	0.056	0.023	0.220	0.180	0.090	-0.002	0.152	0.178	0.046	0.004	0.185
North Lincolnshire					-0.073	-0.085	-0.075	-0.103	0.103	-0.051	-0.050	-0.172	0.024	0.058	0.249	0.081	-0.057	0.354	0.012	0.136	0.058
Craven						**0.117**	**0.184**	**0.004**	**0.236**	**0.299**	**-0.027**	**-0.045**	**-0.067**	**-0.080**	-0.096	-0.076	**0.012**	**0.116**	**0.235**	**-0.093**	**-0.044**
Hambleton							**0.456**	**0.346**	**0.446**	**0.083**	**0.403**	**0.289**	**0.241**	**0.230**	0.103	0.073	**0.135**	**0.079**	**0.051**	**-0.169**	**0.195**
Harrogate								**0.338**	**0.559**	**0.475**	**0.375**	**0.295**	**0.011**	**0.006**	0.021	0.050	**0.095**	**0.046**	**-0.045**	**0.026**	**0.139**
Richmondshire									**0.404**	**0.064**	**0.117**	**0.207**	**0.036**	**0.111**	-0.019	-0.018	**-0.014**	**-0.053**	**-0.042**	**-0.115**	**0.015**
Ryedale										**0.356**	**0.147**	**0.143**	**0.044**	**0.079**	0.296	0.298	**0.056**	**0.059**	**-0.043**	**-0.121**	**-0.063**
Scarborough											**0.058**	**-0.058**	**-0.037**	**-0.028**	-0.018	-0.041	**0.003**	**0.033**	**-0.058**	**-0.095**	**-0.014**
Selby												**-0.124**	**0.105**	**0.189**	0.053	-0.106	**0.141**	**0.075**	**0.022**	**-0.078**	**0.367**
York													**0.033**	**0.124**	-0.008	0.260	**0.011**	**-0.083**	**-0.115**	**0.141**	**0.000**
Barnsley														**0.618**	0.451	0.114	**0.298**	**0.364**	**0.248**	**-0.021**	**0.409**
Doncaster															0.536	0.322	**0.092**	**0.242**	**0.143**	**0.098**	**0.390**
Rotherham																0.611	0.164	0.250	0.134	0.210	0.242

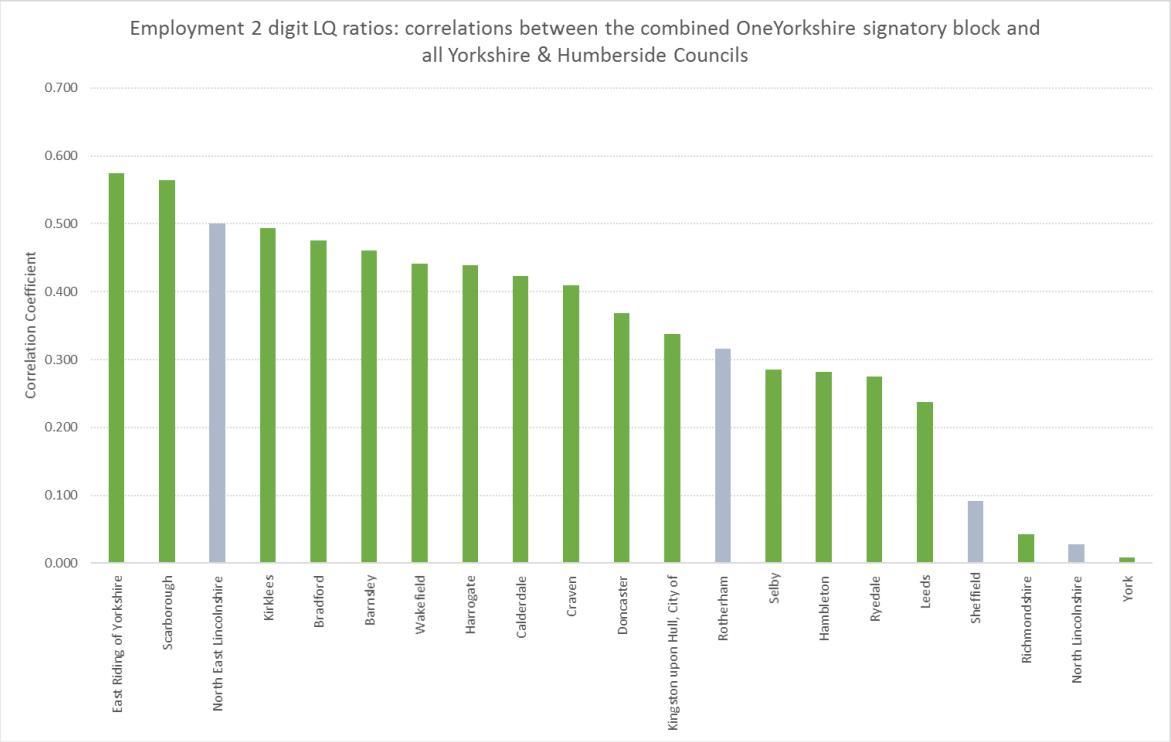
One Yorkshire signatories in **bold**	**East Riding of Yorkshire**	**Kingston upon Hull**	North East Lincolnshire	North Lincolnshire	**Craven**	**Hambleton**	**Harrogate**	**Richmondshire**	**Ryedale**	**Scarborough**	**Selby**	**York**	**Barnsley**	**Doncaster**	Rotherham	Sheffield	**Bradford**	**Calderdale**	**Kirklees**	**Leeds**	**Wakefield**
Sheffield																	0.035	0.132	0.039	0.220	-0.002
Bradford																		**0.248**	**0.369**	**0.083**	**0.159**
Calderdale																			**0.300**	**0.187**	**0.250**
Kirklees																				**0.083**	**0.215**
Leeds																					**0.098**
Wakefield																					

Source: Steer Economic Development calculations using ONS data

6.13 A clearer analysis of the overall complexity at the level of the region can be found in Figure 6-3. This graph ranks the industrial specialisation pattern correlations (based on employment LQs) between each Council and the One Yorkshire signatory Councils combined. The green bars identify the One Yorkshire signatories Councils and the red bars those that have not signed up to One Yorkshire. This graph tells us that North East Lincolnshire has the most closely aligned industrial structure to the combined profile of One Yorkshire signatories (on the basis of the employment LQ measure).[14]

6.14 It should be noted that in terms of establishing economic coherence, *Sheffield and North Lincolnshire exhibit particularly low degrees of alignment in terms of industrial specialisation – therefore arguments for their inclusion in devolved arrangements need to relate to economies of scope, the provision of support to diversify their economies (if so desired), and/or the strategic importance of their specialisms to the wider geography.*

Figure 6-3: Ranked employment LQ correlation coefficients for Yorkshire and Humber Councils (2016)



Source: Steer Economic Development calculations using ONS data

Adding GVA Location Quotients to the analysis

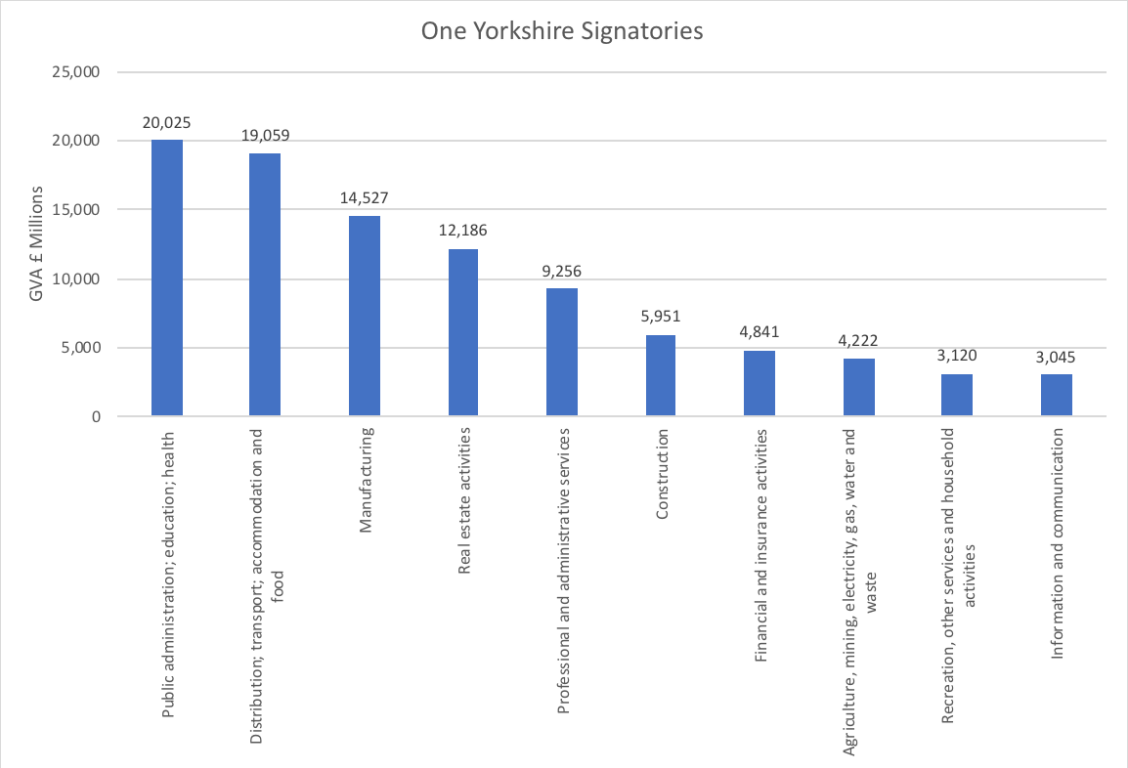
6.15 The ONS data for GVA published at the Local Authority level is far less granular than the employment data. Whereas the latter is published at the 2-digit SIC level, GVA data are only published at the 1 digit SIC level (i.e. for the manufacturing sector as a whole, not its

[14] York has a very low employment LQ correlation with the One Yorkshire signatory Councils combined due to an unusual relationship between York's employment LQ and GVA LQ profile. When measured in GVA LQ terms, and at the much higher level of sectoral groupings required for GVA LQs, York is far more closely aligned to the One Yorkshire signatory Councils combined. York's distinctiveness in this LQ context results from labour productivity-related factors related to place-based industrial specialisms that may warrant further investigation.

constituent industries). Consequently, the scope for carrying out analyses of the relationships between employment LQs and GVA LQs, and also for assessing details on industrial structure in GVA terms, is limited. However, what we can do is cross-refer our employment analysis with this higher-level GVA analysis to enrich the overall picture.

6.16 In order to put what follows into context, Figure 6-4 shows the ranked distribution of GVA for One Yorkshire signatories in 2016. It shows Public administration, education and health; Distribution, transport, accommodation and food; and Manufacturing as the top three sectors in terms of gross GVA contribution.

Figure 6-4: Ranked GVA for the One Yorkshire signatories in 2016



Source: Steer Economic Development calculations using ONS data

6.17 Figure 6-5 plots the relationship between employment LQs and GVA LQs at the 2-digit SIC level for the One Yorkshire area. The chart distinguishes places sectors in one of four categories:

- **'Balanced contributors'** – 1-digit sectors with both an employment LQ and a GVA LQ greater than 1.0;
- **'Job providers'** – 1-digit sectors with an employment LQ greater than 1.0 but a GVA LQ less than 1.0;
- **'GVA drivers'** – 1-digit sectors with a GVA LQ greater than 1.0 but an employment LQ less than 1.0; and
- **'Under-performers'** – 1-digit sectors with an employment LQ and also a GVA LQ less than 1.0.

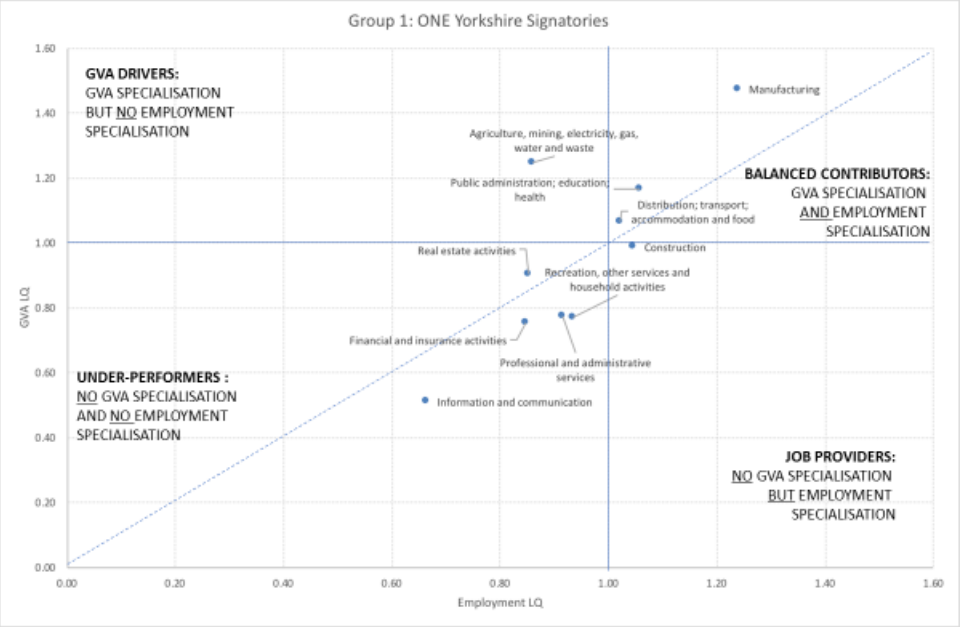
6.18 Figure 6-5 shows:

- The 'Balanced contributors' are: 'Manufacturing'; 'Public administration, education and health'; and 'Distribution, transport, accommodation and food' (these three sectors are the most significant contributors to Yorkshire's gross GVA);

- The only 'GVA driver' is 'Agriculture, mining, electricity, gas, water and waste';
- The only 'Job provider' is the 'Construction' sector – and this is very close to an LQ of 1; and
- The 'Under-performers' include: 'Information and communications', 'Professional and administrative services', 'Financial and Insurance activities', 'Recreation, other services and household activities' and 'Real Estate Services'.

6.19 In terms of the four non-signatories to One Yorkshire, the addition of North and North East Lincolnshire, moves 'Agriculture, mining, electricity, gas, water and waste' to the 'Balanced Contributor' category.

Figure 6-5: The relationship between employment LQ and GVA LQ for One Yorkshire signatories, 2016



Source: Steer Economic Development calculations using ONS data

6.20 *The challenge for policymakers is to ensure that strategies and programmes help maintain the leadership position in terms of sectors which are Balanced contributors. The One Yorkshire geography has relatively low LQs in employment and GVA for the 'Information and communication', 'Professional and administrative services', and Financial and Insurance activities'. As these sectors are vital elements to the wider economic development ecosystem, the challenge for policy makers is to identify ways to develop these sectors as strategic assets for the region.*

So which sectors are significant at the level of Yorkshire and Humber?

6.21 Given the limitations of GVA data at a Local Authority level, we carried out a detailed analysis of Yorkshire and Humberside's employment profiles to identify those industries with a significant and pervasive employment impact across all Local Authorities in the region (Appendix B). To strike a balance between significance and relevance, we identified all the sectors where employment reached 2,500 employees or more in a given local authority district and then sought to identify which sectors met this threshold in three or more local authority

districts as a test of whether it could be judged a local or a pan-Yorkshire concern. Twenty-five industries meet these criteria.

6.22 At the level of Yorkshire and Humber three (3-digit SIC) manufacturing industries met the threshold criteria: 'Manufacture of food products'; 'Manufacture of fabricated metal products, except machinery and equipment'; and 'Manufacture of machinery and equipment'. At the level of the 18 One Yorkshire signatories, the only manufacturing industry which meets the criteria is the 'Manufacture of food products'.[15]

6.23 This analysis seems to suggest limited scope for pan-Yorkshire – as opposed to local or LEP-level – activity in the majority of manufacturing industries; except if the industries are strategically important as suppliers to other industries in Yorkshire, or where the challenges to be addressed are common across industries, such as, promotion of STEM skills, management and leadership development, and adoption of innovation, for example, digital technologies. The analysis also raises the question as to the extent to which the 'right' balance is being struck between manufacturing and services in Yorkshire and Humber and, if this is an issue of concern, whether it is best addressed at the level of Yorkshire, as opposed to the LEP level.

6.24 On the other hand, our analysis highlights the importance of the service sector to the One Yorkshire region. Industries which provide significant employment in many districts include:

- Specialised construction activities;
- Wholesale and retail trade and repair of motor vehicles and motorcycles;
- Wholesale trade, except of motor vehicles and motorcycles;
- Retail trade, except of motor vehicles and motorcycles;
- Land transport and transport via pipelines;
- Warehousing and support activities for transportation;
- Food and beverage service activities;
- Employment activities;
- Public administration and defence; compulsory social security;
- Education;
- Human health activities;
- Residential care activities; and
- Social work activities without accommodation.

6.25 A point to note: Sheffield's inclusion would add the following to the list of significant industries: Construction of buildings, Activities auxiliary to financial services and insurance activities, Legal and accounting activities, service to building and landscape activities, Sports activities and amusement. The other three districts would not extend the list of industries.

6.26 *Many of the industries identified as significant to many areas are not unique to Yorkshire and Humber, but the question is, does the Yorkshire and Humber level offer economies of scale to address the drivers of change in these industries, without incurring significant diseconomies of scale?*

What does this mean for devolution to Yorkshire?

6.27 The main points arising from this analysis are:

[15] This approach maps current strengths and locations, it does not capture opportunities for sectors to grow in terms of either their geographic coverage or employment potential.

- Employment LQ data suggest a degree of coherence within the geography and an economic distinctiveness from the comparator geographies – suggesting a prima facie case for Yorkshire-specific arrangements.
- However, given the locally-specific nature of manufacturing industries, in order to add value, pan-Yorkshire activity on manufacturing would need to:
  - Address common challenges across the manufacturing sector, e.g., promotion of STEM skills, management and leadership development, and adoption of innovation rather than individual industries, which tend to be localised
  - Provide strategic leadership in favour of manufacturing as part of a wider effort to re-balance the economy.
- The economic diversity identified in our analysis reflects urban, rural, and coastal differences and points to potential economies of scope – and also points to the potential for strong economic resilience at the level of the whole geography, which could be enhanced if policy levers were in place to facilitate movement of workers between expanding and contracting sectors in the region.
- Sheffield and North Lincolnshire exhibit low degrees of alignment in terms of industrial specialisation – therefore arguments for their inclusion in devolved arrangements need to relate to economies of scope, the provision of support for diversification of their economies, and/or the strategic importance of their specialisms to the wider geography.
- The One Yorkshire geography has:
  - Only one sector, 'Distribution, transport, accommodation and food', with high LQs in employment and GVA.
    - The challenge for policymakers is to ensure that strategies and programmes help maintain this leadership position.
  - Low LQs in employment and GVA for the Information and communication sector, and relatively low LQs for 'Professional and administrative services'.
    - As these sectors are vital elements to the wider economic development ecosystem, the challenge for policy makers is to identify ways to develop these sectors as strategic assets for the region.
  - Relatively strong GVA specialisation in Manufacturing; Agriculture, mining, electricity, gas, water and waste; and Public administration, education and health.
    - The challenge for policy makers is can employment in these sectors be grown without reducing productivity?

What further research is required?

6.28 Further research is required to identify:

- Supply-chain linkages – both within the region and with national and global supply chains;
- The role of strategic assets and/or sectors serving the whole of Yorkshire from one or two locations; and
- Sector/industry gaps, where leadership at the level of Yorkshire might add value to efforts to re-balance the economy in terms of sectors as well as economic geography.

R&D, Innovation, and Ideas

6.29 In this section, we review data on R&D spending (which is only available at the full regional level – i.e. Group 3) and data on patents (provided by the IPO at LEP-level). We do this to provide a high-level snapshot of the region's performance relative to the UK, in order to determine if Yorkshire faces distinctive issues in relation to closing the productivity gap through innovation. Before reviewing these data, however, we provide a brief explanation of

what we mean by innovation and what makes for effective innovation processes. We conclude the section with a discussion on the need for pan-Yorkshire activity on innovation to focus on facilitating connected innovation – both within Yorkshire and between Yorkshire and the wider world.

What is Innovation?

6.30 There are different definitions of innovation and there are different lenses through which innovation activity and processes may be viewed, calibrated and assessed. For the purposes of this exercise, we draw on work that we recently completed for Innovate UK and the 11 Northern Powerhouse LEPs, which used the following definition of innovation:

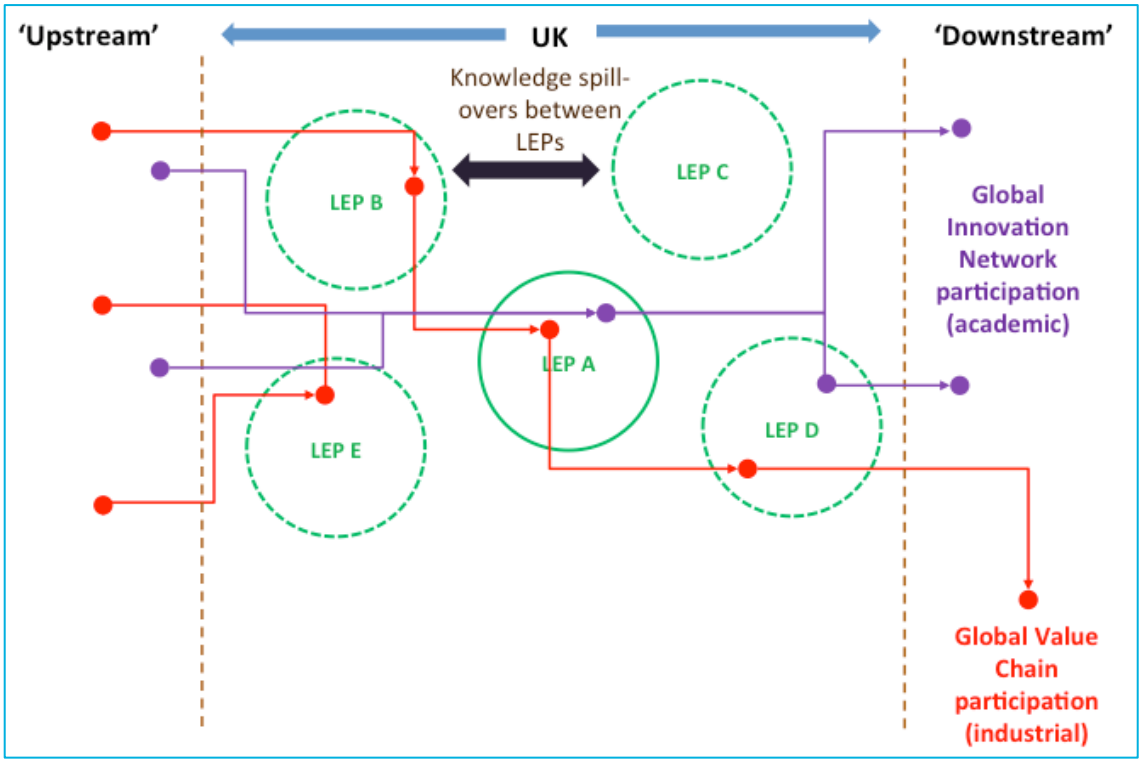
- Innovation is . . . the successful exploitation of new ideas, recognising that:
  - Innovation need not derive from an advance in science or technology . . . but radical innovation often does;
  - Innovation that does derive from an advance in the science and technology base needs more than this to achieve (commercial) success;
  - Innovation applies equally to product, process, service, and business models; and
  - Innovation is appropriate . . . and needed . . . equally in the private, public and community/voluntary sectors.

What makes for effective innovation?

6.31 In the report, *Innovation North* we argued that effective innovation in places is always connected to innovation in other places. Figure 6-6, illustrates this process of '*connected innovation*'. It shows how innovation capability and capacity in LEP areas is lubricated by knowledge spillovers within and between places, sectors, businesses and research institutions and connectivity to Global Innovation Networks (often driven by university networks) and participation in Global Value/Supply Chains (often driven by behaviours of large Tier 1 companies). In the report, we highlighted four different types of 'innovation ecosystem', which support, enable and promote innovation within and between sectors and places:

- **'Pragmatic' & 'Organised' Ecosystems**
  - Networks/governance arrangements with internal and external connectivity, such as the Northern Health Science Alliance, which has developed connectivity in the North, via Academic Health Science Networks and between the North and the outside world, trade missions etc.
- **Supporting Ecosystems**
  - Places/facilities with innovation skills, knowledge and expertise, and places with clusters of enabling services, for example, legal expertise in relation to IP, and finance and investment.
- **International 'Portals'**
  - Places/companies from which to access Global Supply Chains.
- **Emergent Ecosystems**
  - Technologies and markets with the potential for greater connectivity.

Figure 6-6: Conceptualising innovation connectivity in and across places



Source: Source: Steer Economic Development, 2018

What do the data say about Yorkshire and Humber's investment in R&D?

6.32 Table 6-1 provides a summary of data on R&D expenditure in Yorkshire and Humber against a number of key metrics:

- Total expenditure in R&D per person employed covers total public and private sector spending on R&D relative to the number of employees, on this indicator businesses and public sector employers in Yorkshire and Humber invests 48% less per worker than the UK average, and lags the West Midlands and London by a similar figure. It is also lags Scotland;
- Business R&D Expenditure per person employed measures just private sector spending on R&D, on this indicator Yorkshire and Humber businesses invest around 58% less per employee than the national average and lags all the comparators except Wales; and
- Business R&D expenditure per person employed in R&D allows a comparison of spending based only on those working in R&D. This indicator shows investment per employee working in R&D in Yorkshire is 29% below the national average – a smaller difference than for the other metrics, but on this indicator, Yorkshire lags all the comparator regions, including Wales.

6.33 These data look at the inputs into R&D in Yorkshire and Humber, rather than the outputs and outcomes which flow from it, but at a headline level, it would appear that the Yorkshire and Humber region is at a distinct disadvantage with regard to investment in R&D. Limiting not only ideas generation and adoption but the local economic impact of R&D spending. While this problem is not unique in the North, pan-Yorkshire arrangements or pan-Yorkshire arrangements as part of a pan-Northern approach to driving investment in R&D could make a difference in this area.

Table 6-1: Headline data on R&D expenditure, 2016

Indicator	Yorkshire & Humber	GB/UK	Wales	Scotland	West Midlands	London
Total R&D Expenditure (£ per person employed)	564	1075	519	920	1071	1087
Business R&D Expenditure (£ per person employed)	302	721	315	423	887	509
Business R&D Expenditure (£ per person employed in R&D)	75000	105,829	87,000	89,333	121,211	114,800

Source: BERD

What do the data say about R&D output in Yorkshire and Humber?

6.34 Data on patent applications provides one (imperfect but readily available and easily identifiable) indicator of innovation foci at a regional level. An analysis of UK patent applications therefore helps to draw-out how similar (or different) the various parts of Yorkshire and Humber are in this respect. The data presented here are based on UK patent data organised by LEP rather than Local Authority District. Whilst it is possible to provide a more granular profile this is both more complex and costly to do, and also increases the severity of the limitations of geo-located patent data (mainly because larger firms are active in many locations, while the patent application just uses one of these addresses).

6.35 Overall, significant patenting activity is concentrated in the Leeds and Sheffield City regions. This is highlighted in Table 6-2, which presents data on patent applications by LEP and technology field, but filters out average rates of patenting below 10 per year. The technology fields have been developed to provide an indication of industry sector, hence such data can be used to understand the industrial emphasis in regional patenting activity.

6.36 The areas of emphasis in patenting activity that stand out are in Civil engineering; Electrical machinery, apparatus and energy; Furniture & games; Handling; Mechanical elements; Medical technology; and Other consumer goods.

Table 6-2: Yorkshire & Humberside LEP UK patenting application activity above 10 patents per annum, 2005-2017

	Humber	Leeds City Region	Sheffield City Region	York, North Yorkshire and East Riding
Analysis of biological materials				
Audio-visual technology		127		
Basic communication processes				
Basic materials chemistry				
Biotechnology				
Chemical engineering		162		
Civil engineering		832	269	
Computer technology		157		
Control		134		
Digital communication				
Electrical machinery, apparatus, energy		216	193	
Engines, pumps, turbines		276		
Environmental technology				
Food chemistry				
Furniture, games		359	213	
Handling		414		
IT methods for management				
Machine tools		139	122	
Macromolecular chemistry, polymers				
Materials, metallurgy				
Measurement		167	133	
Mechanical elements		237	327	

	Humber	Leeds City Region	Sheffield City Region	York, North Yorkshire and East Riding
Medical technology		372	147	
Micro-structural and nano-technology				
Optics				
Organic fine chemistry				
Other consumer goods		295	140	
Other special machines		193	139	
Pharmaceuticals		122		
Semiconductors				
Surface technology, coating				
Telecommunications		140		
Textile and paper machines				
Thermal processes and apparatus		146		
Transport		232		

Source: Steer-ED analysis of IPO data, 2018

6.37 Table 6-3 provides the correlation coefficients between the four LEPs – this gives a better sense of how closely aligned patenting profiles are within Yorkshire and Humberside (note these correlations are based on all rather than filtered patenting above 10 per year on average). It shows relatively close correlation between Humber and Leeds and Leeds and Sheffield LEP areas, but weak correlation between Humber and Sheffield LEP areas, and between Humber and York, North Yorkshire and East Riding LEP areas; with a moderate correlation between Leeds and York, North Yorkshire and East Riding LEP areas.

Table 6-3: Correlations between patent application profiles, 2005-2017

	Humber	Leeds City Region	Sheffield City Region	York, North Yorkshire and East Riding
Humber				
Leeds City Region	0.77			
Sheffield City Region	0.54	0.74		
York, North Yorkshire and East Riding	0.58	0.65	0.73	

Source: SDG-ED analysis of IPO data, 2018

6.38 Overall, the average correlation between the patent profiles of these four LEPs (at 0.67) is the same as that between all English LEPs (0.66). This tells us that the *within geography cohesion* in patenting emphases is no different from that of England as a whole – which is itself fairly cohesive. For England as a whole, most LEPs have similar patenting profiles except for Greater Cambridge and Greater Peterborough, Thames Valley Berkshire and Coventry and

Warwickshire, which have more distinctive emphases resulting from their industrial and scientific specialisms.[16]

What does this mean for devolution to Yorkshire?

6.39 Headline data at the level of Yorkshire and Humber indicate significant under-investment in R&D, the short-term and straightforward implications of this situation are that the region is missing out on the local economic impact of R&D spending; but the long-term consequences are more significant, in that because the region is not punching its weight in terms of R&D and innovation activity it is not well-placed to reap the rewards of innovation and its firms are not well-placed to adopt innovations and maintain their competitiveness in national and international markets.

6.40 In developing interventions to promote innovation in and/or at the level of Yorkshire. Partners need to be aware of these wider networks and identify to what extent:

- Existing contributions from partners in Yorkshire to wider (e.g. pan-Northern networks) may be boosted;
- There are specific locations within Yorkshire which could acts strategic assets to support innovation across the geography or alternative locations to which businesses in Yorkshire need support to access in a timely and economic fashion;
- Multi-national businesses may act as entry points for firms to join global supply chains that will help to drive innovation; and
- Yorkshire has emergent ecosystems which require early-stage support.

What further study is required?

6.41 Further research is required to unpack the drivers of under-investment in R&D in Yorkshire and Humber (e.g., industrial structure, nature of the research base, relative to the research priorities of funders and investors, and access to risk capital) to inform the development of interventions and to determine their form and scale.

Headline data on GVA and earnings

Is Yorkshire different from the UK average in terms of GVA and earnings?

6.42 Table 6-4 shows that GVA per worker in each of the three geographic configurations is well behind the national average. It also shows that average weekly earnings in each of the three geographies is around 10 percentage points below the national average, and behind the comparators.

What does this mean for devolution to Yorkshire?

6.43 The headline data on GVA per employee, per head, and earnings suggest that Yorkshire needs to address relatively low productivity and earnings, if it and the Northern Powerhouse as a whole is to narrow the productivity gap with the UK.

What further research is required?

6.44 Further research is required to analyse:

[16] See Connected Innovation Strategies. Report prepared for the Smart Specialisation Hub by SDG Economic Development, 2018.

- How the factors that the drive individuals' and household earnings (and income) operate in Yorkshire; and
- The distribution of earnings (and income) in the region

6.45 To:

- To determine the extent to which the factors are national, regional, sub-regional, local or at the level of the individual/household
- Identify which, if any, interventions need to be established and where Yorkshire-level leadership and coordination would add value to existing arrangements.

Table 6-4: Headline data on GVA and average weekly earnings

Indicator	Group One: One Yorkshire Signatories	Group Two	Group Three/Y&H	GB/UK	Wales	Scotland	West Midlands	London
Total GVA	£m 89,253	£m 105,215	£m 112,195	£m 1,729,092	£m 59,586	£m 134,038	£m 126,591	£m 408,478
GVA per employee (£)	£ 45,764	£ 45,058	£ 45,200	£ 56,124	£ 43,200	£ 52,927	£ 48,732	£ 90,642
GVA per head	£ 20,959	£ 20,647	£ 20,678	£ 26,339	£ 19,140	£ 24,800	£ 21,823	£ 46,482
Average Weekly Earnings (£) residents	£ 500.4	£ 501.3	£ 500.3	£ 550.4	£ 505.9	£ 547.7	£ 517.4	£ 654.6
Average Weekly Earnings (£) workplace	£ 494.6	£ 495.9	£ 494.2	£ 550.4	£ 498.4	£ 547.3	£ 514.9	£ 692.5

Source: Yorkshire & Humber Regional Economic Model

International Trade and Investment

Current Position – Exports

6.46 Official statistics collate export data for goods at the Yorkshire and Humber level. Data for the region, as well as for Scotland, Wales and West Midlands comparators are presented in Table 6-5.

Table 6-5: UK, Yorkshire and Humber and comparator Exports 2015-2017

		Exports Value (£m)				
Area	% of UK population[17]	2015	2016	2017	% of UK exports	% change 2015-17
UK	100%	275,414	290,999	328,296	100%	19.2%
Y&H	8.3%	14,582	14,756	16,820	5.1%	15.3%
Scotland	8.2%	23,863	24,184	28681	8.7%	20.2%
Wales	4.7%	13,253	14630	16485	5.0%	24.4%
West Midlands	8.8%	26,400	29733	33455	10.2%	26.7%

Source: https://www.uktradeinfo.com/Statistics/RTS/Pages/default.aspx

6.47 Yorkshire and Humber exports have been growing sharply since 2015, buoyed by the reduced value of the pound since the Brexit vote. However, the region's export growth has been slower than the UK average and our comparator areas, and crucially, export levels are considerably below what would be expected based on Yorkshire and Humber's percentage of the UK population. Moreover, despite an economy that has a greater proportion of manufacturing than many other UK regions, Yorkshire and Humber has by far the lowest proportion of UK exports as a proportion of population of any UK region – the next lowest is 74% (in the South West).

6.48 Scotland, Wales and the West Midlands, each have a share of exports that is higher than their share of UK population (106%, 106% and 115% respectively). Yorkshire and Humber's exports, on the other hand, are currently only 62% of the level that they would be (£27,249 million), if its export share matched its share of the UK population – a shortfall of over £10 billion pa.

6.49 *Thus, comparative statistics on export activity by UK region and population share suggest that, despite a recent uplift in its export performance, Yorkshire and Humber is not achieving its full potential.*

Current position – Inward Investment

6.50 For inward investment (foreign direct investment), the available statistics[18] are only available at the Yorkshire and Humber level, with the most recent data shown in Table 6-6.

[17] https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2017

[18] https://www.gov.uk/government/statistics/department-for-international-trade-inward-investment-results-2017-to-2018

Table 6-6: Foreign Direct Investment data for Yorkshire and Humber and comparator areas

Area	% of UK population19	FDI Jobs 2017	% of UK FDI jobs
UK*	100%	60,939	
Y&H	8.3%	4,623	7.6%
Scotland	8.2%	4,148	6.8%
Wales	4.7%	3,107	5.1%
West Midlands	8.8%	9,424	15.5%

(*UK figure is total FDI jobs attributed to specific UK nations and English Region in the data tables)

6.51 Following recent improvements in its performance in FDI (compared to falls elsewhere), in 2017 the number of FDI jobs created in Yorkshire and Humber was above that of most English regions (except London, the West Midlands and the North East). The 4,623 jobs created in Yorkshire and Humber was 92% of what the region would have gained based on its share of the UK population, and if the impact of London (which gained nearly 30% of all UK FDI jobs in 2017) is excluded from the analysis, Yorkshire and Humber's performance would be more than a proportionate share of FDI jobs.

6.52 A case could be made that a higher profile for the region may have contributed to recent good performance – although the 'lumpiness' of FDI data (which can vary sharply year to year) means that it is difficult to draw firm conclusions in this regard.

6.53 *Thus, while Yorkshire and Humber's performance in attracting jobs from FDI is relatively strong, particularly given recent uncertainties associated with Brexit and a proliferation of trade restrictions in a number of major international markets, its share of employment related to FDI does not match its population share and is only 50% of the yield achieved by the West Midlands. Hence there is scope to improve Yorkshire and Humber's performance in attracting FDI.*

What does this mean for devolution to Yorkshire?

6.54 As exports and investment statistics are not broken down by LEP area, it is not possible to pinpoint how far exports and trade performance is similar or otherwise across different areas of Yorkshire. However, our review of SEPs/LISs shows that export performance is certainly an area of interest across multiple LEP areas: exports and inward investment are prominent within the SEPs and emerging LIS work in the Humber, Leeds City Region and Sheffield City Region as strands of activity to support business growth and productivity, and in YNYER export potential and internationalisation is covered in relation to the Agri-food and Bio-economy sectors and as part of business support. Based on this, it is clear that all LEP areas have a shared interest in improving performance in these areas, and hence a basis for potential collaboration at Yorkshire level.

6.55 The main current provision to support businesses in relation to international trade and investment is via the Department for International Trade (DIT, previously UKTI), which helps businesses export and grow into global markets, and overseas companies to locate and grow in the UK. This national scale allows specialism and provides access to over 1,200 staff outside

19 https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2017

the UK. However, within the UK, DIT has around 500 staff in its London and Glasgow headquarters, and 400 staff in its other 10 offices in Wales, Northern Ireland and the English regions (including a Barnsley office in Yorkshire). There is also export support through LEP-area Growth Hubs, which links to DIT, but this is not especially prominent.

6.56 The question that arises is; would devolution to the Yorkshire level, and associated collaborative approaches, improve the impact of work to promote exports and inward investment? There are a number of reasons why this might be the case:

- **Intensification for better impact.** Yorkshire and Humber's performance on exports is the worst in the UK by some way and current arrangements are not working well for the region and its areas. There is clearly potential to try something different and to intensify work to promote exports (which devolution could allow) and the case for this is magnified in a post-Brexit era. Devolution could seek a transfer and expansion of DIT resource within Yorkshire to enable local control, while still allowing access to UK specialist and overseas capacity, and signposting through LEP areas. Hence Yorkshire-level devolution could provide an opportunity for more intensive, better quality, and proactive promotion of, and support for, Yorkshire businesses on exporting.
- **Identity and Ambition.** While the external promotion of Yorkshire as an attractive destination and place to do business may be having a positive impact on international investors, there is no equivalent activity to promote export and internationalisation to businesses based in Yorkshire and Humber. Given that businesses tend to be very supportive of the ambition and positivity associated with Welcome to Yorkshire's campaigns, there may be potential to use the Yorkshire identity in new ways to raise the ambition of Yorkshire businesses and encourage them to export as part of a devolved approach. This could also enable good links between inward investment and export, including work to enhance perceptions of the region and its businesses abroad. Additionally, as Yorkshire is a better known 'place-based brand' than that of any given LEP-area, it will have advantages for profile building and inward investment.
- **Capitalising on complementary assets and networks.** There are assets and networks across the Yorkshire and Humber region that can support exporting activity, notably the Humber Ports, as well as airports and road and rail links, and representative business organisations. Some of these assets (e.g. the Humber Ports) are not always highlighted in SEPs, which tend to focus on activity within the LEP area rather than the importance of, and the opportunities generated by, connectivity to other LEP areas. Thus, there is potential to promote place-specific assets, such as ports and airports, which enable international trade and investment by business in the Yorkshire and Humber region.

What further study is required?

6.57 Further study is required:

- To understand how arrangements to promote international trade and investment in Yorkshire could improve upon – or extract more value from – current national and pan-Northern arrangements;
- On the potential to use the Yorkshire brand as a tool to engage business in exporting activities; and
- On the drivers of and barriers to businesses engaging in exports and/or international supply chains – as these not only link to exports but also to innovation (as noted above).

Skills and Ambition

Headline employment statistics

6.58 The data in Table 6-7 show little difference between the three geographies in terms of Working Age Population (WAP) as a percentage of total population: Group One is 62.3%, Group 2 is 62.7% and Group Three is 62.6%, which is not too dissimilar from the national average. To put these figures in perspective, London has the highest rate at 67.7% and the South West has the lowest rate at 60.6%.

6.59 There is also little variation between the three Groups in relation to the Economic Activity Rate[20] around 77.5%, which is just below the national average of 78.2%. Employment Rates[21] for the three geographies are also similar. These lag the national average by between 0.9 of a percentage point and 1.3 percentage points. The data suggest there is some room for improvement in Economic Activity and Employment Rates, particularly when compared to the best performing region (the South East), which has an Economic Activity Rate of 81.4% and an Employment Rate of 78.8%.

6.60 The number of jobs per head (job density) in the three geographies similar at 0.8, which is below the national average of 0.84 – suggesting there is room for improvement in job density, especially when the South East and South West have achieved 0.88 jobs per head.[22]

Headline education, qualifications and skills statistics

6.61 If the employment picture could be characterised as steady (if with room for improvement), the situation in relation to skills is much less rosy. The percentage of the population educated to NVQ4 or above is around 33%, which is more than five percentage points below the national average – around 10 percentage points below that achieved in Scotland. The figure for Yorkshire and Humber is below that of the North West (34.5%) and significantly below rates achieved in the South West (39%), South East (41%), and, of course, London (52%).

6.62 In relation to the proportion of the population with no qualifications, the region is in a worse position than the national average (of 8%), with around an additional 1.5% of the workforce in Yorkshire and Humber with no qualifications. The South West and South East have rates that are more than four percentage points better than the rate for Yorkshire and Humber – which shows what can be achieved at the level of a region.

6.63 Across Yorkshire and Humber, West Yorkshire, South Yorkshire and the Humber all have qualifications which vary by district, but are below national average overall – notably at NVQ Level 4+ (30%-33% compared to UK average of 38%). North Yorkshire has much better qualification levels (40% with NVQ level 4+), but still seeks to drive ambitions and skills higher.

6.64 In terms of graduate retention in the short term (i.e. within six months of graduation), the region lags Scotland, Wales and London, it also lags the North East (71% retention) and North West (72%) retention. Thus, there appears to be a region-wide graduate retention issue.

[20] Percentage of the WAP in or actively seeking work.

[21] Percentage of the WAP in work.

[22] The figure for London is 0.99.

6.65 Data from HEFCE[23] shows the longer-term position by LEP area. These data show that Humber LEP retains around 47% of its graduates, Leeds City Region 46%, Sheffield City Region 37%, and YNYER LEP 32%. To put these figures in context Greater Manchester retains 51%, the Black Country LEP retains 41% and the Greater Birmingham and Solihull LEP retains 36.5%.

What do the data say about skill gaps and hard-to-fill vacancies?

6.66 Businesses frequently identify skills (gaps and shortages) as major constraints on their ability to grow. The research on Scale-ups cited above reinforces this point, as do the findings from business engagement undertaken as part of this study.

6.67 The Employers' Skills Survey provides data on skills gaps and hard-to-fill vacancies; at the level of Yorkshire and Humber, it found around 6% of employees are reported to have skills gaps (i.e. do not have sufficient skills to do the job required). This figure is similar to the national average – and is not particularly different from the comparator regions. To put the figure in perspective, Northern Ireland has the lowest rate (3%) and the West Midlands and the South East have the highest rate (7%). In terms of businesses reporting hard-to-fill vacancies, the data show that Yorkshire and Humber (at 7%) is slightly below the national average (of 8%), but is three percentage points above the West Midlands – indicating some room for improvement in terms of overcoming this constraint.

What do the data say about employer perspectives on staff training and development?

6.68 The 2016 Employer Perspectives Survey provides a snapshot at LEP-level of employers' approaches to recruitment and staff development; in other words, employers' approaches to tackling skills shortages and skills gaps. Table 6-8 provides selected data from the survey. It shows employers in the four LEPS were:

- Less likely to have experienced a vacancy in the preceding 12 months than the England average;
- Less likely to have filled a vacancy than the national average;
- Less likely to have employed a young person; and
- Less likely to have employed an older worker.

6.69 Employers in the region are around the national average in terms of offering work experience and awareness of Government Traineeships – with Sheffield City Region the best performing of the four Yorkshire and Humber LEPs. This performance is also apparent in responses in relation to apprenticeships where Sheffield City Region's figures are significantly above the national average and the other three LEPs – suggesting there is potential for exchange of good practice between LEPs, provided an economic, efficient, and effective mechanism for this can be developed.

6.70 The data on staff development show relatively good performance with three of the four LEPs bettering the national average for offering training in the past 12 months. The data show a slightly greater propensity to use colleges of further education in Leeds, Sheffield and Humber LEP areas than the national average, and an average propensity to use universities to conduct training.

[23] http://www.hefce.ac.uk/analysis/maps/mobility/mobdata/

What does this mean for devolution to Yorkshire?

6.71 The significant gap between each of the three geographies and the national average in relation to the percentage of the workforce qualified to NVQ4 or above distinguishes the region from the national average – and will act as a drag on productivity and earnings. This gap needs to be closed if the productivity gap with the UK is to be reduced.

6.72 Coordination of effort at the level of Yorkshire for such higher-level skills – given provision is usually centralised and higher-skilled/higher-paid workers are more likely to travel long distances to work – may add value to current arrangements and raise employers' use of universities above the national average. Furthermore, the introduction of degree-level apprenticeships offers an opportunity for concerted and coordinated action to drive up skills across the region.

6.73 It should be noted, however, that the data on employers' responses to skills gaps and shortages does not suggest a particular 'Yorkshire-level issue', as opposed to a Northern or national issue in relation to employers' approach to skills and development. Furthermore, with a few exceptions associated with very specialist vocational training provision, most consultees highlighted the importance of local arrangements and provision for employers and staff alike, and were unsure as to the benefits of pan-Yorkshire arrangements on vocational skills.

6.74 One sign of concern to be noted from the data – given an ageing workforce and potential reductions in the availability of overseas workers as a result of Brexit – is that there may be call for Yorkshire-wide action to improve employers' ability to respond to labour market change – as workers require new skills either to work in new sectors as they are displaced from current industries undergoing automation or to work in the same industries applying new processes.

What further study is required?

6.75 Further study is required in the following areas:

- Future skill requirements which are significant and common across a range of key sectors/industries in the geography;
- How best to improve awareness of and access to significant specialist training assets, so that it is easier for employers and staff to find and access provision outside their area;
- Barriers to retraining, to test whether pan-Yorkshire interventions to tackle market failures (fear of skilled staff being poached by rivals, opportunity costs of releasing staff for training etc.) could add value to existing arrangements; and
- Identify where pan-Yorkshire leadership and coordination can build on the Northern Powerhouse research, *Educating the North* which highlighted:
  - The importance of early years, career pathways, and the opportunity to use devolved adult education and education budgets for those aged 16-18, to build world-leading degree and higher-level apprenticeships; and
  - The need to update the research in the Northern Powerhouse Independent Economic Review to assess skill requirements in the four Primes (Advanced Manufacturing and Materials, Energy, Health Innovation, and Digital) and the enabling sectors (Financial and Professional Services, Logistics, and Education).[24]

[24] http://www.northernpowerhousepartnership.co.uk/media/1208/npp-educating-the-north.pdf

Table 6-7: Headline data on employment, educational attainment and skills

Indicator	Group One: One Yorkshire Signatories	Group Two	Group Three	Yorkshire & Humber	GB/UK	Wales	Scotland	West Midlands	London
Working-age Population (WAP) (%)	62.34%	62.68%	62.56%		62.91%	61.52%	64.42%	62.05%	67.68%
Total employment	1,950,300	2,335,100	2,482,200		30,808,500	1,379,300	2,532,500	2,597,700	4,506,500
Economic Activity Rate (WAP)	77.6%	77.4%	77.3%		78.2%	76.0%	77.5%	76.4%	78.2%
Employment Rate (WAP)	73.8%	73.4%	73.4%		74.7%	72.4%	74.3%	72.4%	74.0%
Claimant Count (%)	2.5%	2.5%	2.5%		2.2%	2.3%	2.6%	2.8%	2.2%
Proportion of residents retired (Of Economically Inactive Population)	13.5%	12.9%	13.3%		13.1%	14.3%	15.3%	11.8%	6.3%
Jobs density	0.81	0.80	0.80		0.84	0.76	0.80	0.79	0.99
NVQ levels (% with L4+)	32.8%	33.5%	33.0%		38.4%	35.1%	43.9%	31.8%	51.8%
NVQ levels (% with no qualifications)	9.8%	9.6%	9.5%		8.0%	8.7%	8.7%	10.4%	6.8%
Employees with Skills Gaps (%)	-	-	-	6%	6%	6%	6%	7%	6%
Employers with Hard-to-Fill Vacancies (%)	-	-	-	7%	8%	7%	8%	4%	8%
% pupils at KS5 progressing into sustained education at an HE institution	-	-	-	51%	51%	-	-	52%	61%
Graduate retention rates (%)	-	-	-	65%	-	69%	85%	64%	80%
Residents employed in STEM subjects (Prof & Associate Prof %)	31.4%	31.7%	31.3%		34.5%	30.8%	34.3%	30.8%	43.0%

Sources: Annual Population Survey, 2o17; UKCES, Employer Skills Survey, 2015; ONS

Note: Date only available at the level of Yorkshire and Humber are provided in a separate column.

Table 6-8: Headline from Employer Perspectives Survey

Issue	England	Leeds City Region	Sheffield City Region	YNYER	Humber
Recruitment					
Had any vacancies for full or part-time staff in the past 12 months	53%	50%	*46%	49%	47%
Proportion citing that candidates having Maths and English GCSE to at least level 2 or GCSE A*-C is either a critical or significant factor when recruiting	56%	54%	59%	51%	51%
Recruited anyone in the last year	49%	*44%	*41%	45%	44%
Recruited any young person in the past 12 months	32%	31%	30%	30%	27%
Recruited anyone aged 50+ in the past 12 months	15%	14%	11%	15%	11%
Work experience					
Had anyone in on work experience in the last 12 months	38%	36%	39%	37%	36%
Aware of Government Traineeships	48%	44%	52%	45%	51%
People Development					
Whether offered any training in the last 12 months	73%	76%	76%	72%	76%
Proportion who had used FE Colleges to conduct their training	9%	10%	*12%	8%	11%
Proportion who had used HEIs to conduct their training	5%	4%	5%	5%	6%
Proportion who had used commercial organisations to conduct their training	44%	45%	44%	45%	42%
Whether the establishment has worked with another employer to develop skills or expertise in the workforce	14%	14%	14%	16%	18%
Offered vocational qualifications in the last 12 months	26%	27%	27%	29%	32%
Apprenticeships					
Whether have or offer apprenticeships	19%	20%	*25%	15%	20%

Issue	England	Leeds City Region	Sheffield City Region	YNYER	Humber
Whether are aware and have a good knowledge of apprenticeships / have or offer apprenticeships	46%	45%	*54%	*39%	45%
Whether plan to offer Apprenticeships in the future	31%	30%	33%	30%	32%
Whether plan to offer Apprenticeships in the future but don't currently	15%	14%	11%	18%	14%
Characteristics					
Whether agree that: The ability of our staff to do their job effectively is more important than them having formal qualifications	83%	83%	82%	*90%	*89%
Whether agree that: We are happy to pay towards staff training and development	63%	62%	63%	63%	*71%
Whether agree that: Investing in management and leadership skills is a top priority for the business	52%	52%	51%	46%	56%
Whether agree that: We are always looking for new ventures, developments or opportunities	56%	56%	56%	51%	57%

Source: Employer Perspectives Survey, 2016 (published 2017)

Business Start-ups, Deaths, Survival, Density, and Scale-up

Business start-ups, deaths and survival rates

6.76 Table 6-9 shows headline data on business start-ups, business deaths, and three-year survival rates for the three geographies. It shows all three geographical groupings have the same business start-up rate (14%) and death rate (11%) and that they lag the UK average by one percentage point in terms of business births, and have a business death rate that is one percentage point lower than the national average. Three-year business survival rates in the region are the same as, or close to, the national average and most of the comparator areas, with the exception of London, which has a lower three-year survival rate.

6.77 *Thus, at a headline level, there is little to suggest that business start-ups, deaths, and survival rates point to a distinctive set of concerns that need to be addressed at the Yorkshire level*.

Business density

6.78 Data on business density, i.e. the number of businesses per 10,000 adults, show Yorkshire and Humber has 953 businesses per 10,000 adults. While outperforming Scotland, Wales, the North East, and the North West, the region's average is well below that of England (1,119) and the UK (1,069).[25] It is also below the averages achieved in the East Midlands (962), West Midlands (964), East of England (1,155), South West (1,170), South East (1,272), and London (1,519).[26]

6.79 To put these figures in context, there were 5.674m businesses at the start of 2017, when the data were compiled, with 419,215 in Yorkshire and Humber, this is 7.3% of the UK business population; one percentage point below the region's population share, implying a shortfall of around 56,700 businesses.

6.80 *Thus, while business density varies within regions, as it does within LEP areas, there appears to be a need to raise the total business density at the level of Yorkshire and Humber to match the UK average.*

Table 6-9: Business base, births, deaths and survival rate, 2017

Indicator	Group One	Group Two	Group Three	GB/UK	Wales	Scotland	West Midlands	London
Business Birth Rate (business births as a proportion of active businesses)	14%	14%	14%	15%	12%	12%	16%	17%
Business Death Rate (business deaths as a	11%	11%	11%	12%	10%	12%	11%	14%

[25] http://njs.analysisoncbas.co.uk/business/data/bpe_graphs.html Note: These data cover the total business population, including firms not registered for VAT.

[26] Comparison of business population are affected by the share of businesses by size – the data show c. private sector 500 business in Yorkshire and Humber have >250 employees, around 7.8% of the UK total of 6,400 large-scale employers.

proportion of active businesses)								
Business Survival Rate (% after 3 years)	61%	61%	60%	61%	61%	62%	61%	58%

Source: Business Demography, ONS

Scale-ups

What are Scale-ups and why are they important?

6.81 Recent research has highlighted the importance of Scale-up businesses (i.e. business which achieve >20% annual growth in employee numbers and/or turnover in driving economic growth) with Scale-ups accounting for only 1% of businesses but 3% of employment creation.[27] Data are available on the distribution of Scale-up businesses, so it is possible to identify which areas generate significant numbers of Scale-up businesses and which do not.

How does Yorkshire perform in terms of generating Scale-ups?

6.82 A recent study by the Scale-up Institute found 31,440 Scale-ups in the UK, in 2015.[28] The study reported Yorkshire and Humber was the second lowest performing region, with just 4% of Scale-ups, (only Northern Ireland with 1% did worse). It analysed data by LEP area. It highlighted the Humber LEP as one of nine 'Scale-up cold spots' and the Leeds City Region as the fifth highest performer in the UK, with 144 Scale-ups. The city of Leeds itself was cited as the highest performing local authority district outside London, with 68 Scale-ups relative to 50 in Birmingham, the next best-performing non-London district.

Which sectors generate Scale-ups?

6.83 All sectors can generate Scale-ups but, in 2017, Property and Land Development produced the most Scale-ups (546), followed by Distribution (283), Miscellaneous Manufacturing and Engineering (277), Builders (255), Food and Drink Processes (219).[29]

What are the drivers of and barriers to Scale-ups' growth?

6.84 The Scale-up Institute's 2017 survey highlights the following top-five challenges:

- *Access to (homegrown and overseas) talent*, in terms, of both social and technical skills required to drive business growth;
- *Access to (UK and international) markets*, in particular, the requirements associated with the procurement process of both the public sector and large-scale multi-nationals – and linked to the first point access to people with the skills necessary to win work;
- *Business leadership capacity*,
- *Access to finance*, with 40% of Scale-ups planning to access equity finance as a means of driving growth; and
- *Infrastructure*, which is required as a complement to a supportive Scale-up ecosystem.

[27] http://www.scaleupinstitute.org.uk/research/octopus-high-growth-small-business-report-2018/

[28] http://www.scaleupinstitute.org.uk/wp-content/uploads/2017/11/ScaleUpInstitute_Review_2017_Chapter_1.pdf

[29] http://www.scaleupinstitute.org.uk/wp-content/uploads/2017/11/ScaleUpInstitute_Review_2017_Chapter_1.pdf

6.85 These themes chime with those highlighted by business as issues that could benefit from devolution to the Yorkshire level.

What does this mean for devolution to Yorkshire?

6.86 The data on business density, start-ups, three-year survival rates, and Scale-ups suggest there is a significant entrepreneurial challenge in Yorkshire. But, there is clearly scope for Yorkshire to improve its Scale-up performance, as Distribution, Manufacturing and Engineering, and Food & Drink Processing, in which it has clear specialisms, are delivering significant numbers of Scale-ups elsewhere.

6.87 The variation in the performance of LEPs and Local Authority Districts within Yorkshire regarding these performance metrics points to opportunities for knowledge exchange/transfer between LEPs – provided there is an economic, efficient, and effective means of doing so.

What further research is required?

6.88 Further research is required to:

- Map the main the characteristics of the region's business population (e.g. firm size, businesses' growth (by turnover and employment), legal structure/s, the patterns of domestic and overseas ownership, firms' involvement in international trade/supply/value chains, and the scale of business investment in capital); to establish a more detailed understanding of the drivers of and barriers to business growth and the extent to which these are shared across Yorkshire; and
- Understand the scale at which business support needs to be provided, e.g., start-up advice at the local level and access to equity finance at a pan-Yorkshire or pan-Northern level.

Transport and Connectivity

Headline data on commuting patterns

6.89 As noted in the Introduction to this report, Yorkshire and Humber is a polycentric region with diverse geography, which means there are a number of interlocking functional economic areas and LEP geographies, as well as multiple membership of TTWAs and (currently) LEPs. Table 6-10 shows that at a high level the four geographies of North, South, and West Yorkshire, along with the Humber are relatively self-contained. Of the journeys to work undertaken just under two-thirds are by car and the average commute is around 12.6km – to put these figures in perspective:

- The lowest percentage of travel to work by car is 28% (London) and the highest is 70% (Wales); and
- The longest average commute into a region 17.8km (London) and the shortest average commute is 11.7km (North East).

6.90 Table 6-11 provides a more fine-grained view of commuting flows. It contains data on travel from a home Local Authority District to a workplace Local Authority District for a selected number of locations – for example immediate neighbours as well as significant flows to commuter locations. It shows the importance of transport connections across the boundaries of different LEP areas and Passenger Transport Executives.

Table 6-10: Regional Commuting Flows

Local Authority	South Yorkshire Work	North Yorkshire Work	West Yorkshire Work	Humber Work	Outside Yorkshire and Humber
South Yorkshire Home	426,951 **85%**	3,859 1%	26,420 5%	5,438 1%	41,967 8%
North Yorkshire Home	2,129 1%	250,038 **79%**	34,253 11%	6,308 2%	23,126 7%
West Yorkshire Home	15,116 1.75%	23,850 3%	783,428 **91%**	2,349 0.25%	35,392 5%
Humber Home	5,361 1.5%	12,874 4%	5,487 1.5%	314,440 **89%**	15,090 4%

Source: ONS (2011), Location of usual residence and place of work by method of travel to work (MSOA level)

Table 6-11: Breakdown of Travel to Work patterns for selected boundary local authorities and transport hubs

Resident Local Authority	Travel to Work Patterns
Barnsley	Barnsley's most common commuting destinations are in the City Regions of Leeds and Sheffield: Sheffield (10%), Rotherham (9%), Wakefield (8%), Leeds (4%) and Doncaster (4%).
Bradford	Bradford has pronounced travel-to-work connections outward into Leeds (15%) with Calderdale (3%) and Craven (2%).
Craven	19% of residents in Craven work in Bradford. The second highest travel-to-work flow is Leeds (5%), even though Leeds is not an immediate neighbour.
Doncaster	Doncaster has strong commuter flows to Sheffield City Region, Leeds City Region and Humber LEP: 7% of Doncaster residents work in Rotherham, 4% in Sheffield, 3% in Wakefield, 2% in Leeds, 2% in Barnsley and 2% in North Lincolnshire.
Harrogate	Leeds is the greatest commuter destination from Harrogate (13%) with the next being Hambleton (3%) and York (3%).
Kirklees	Kirklees has the strongest commuter flows within Leeds City Region in Leeds (12%), Calderdale (6%), Bradford (5%), Wakefield (5%). Although Barnsley is a neighbouring local authority it only has 1% of commuter flows.
Leeds	Whilst Leeds has strong inward commuter flows from multiple destinations, its strongest outward flows are to Bradford (6%), Wakefield (4%), Kirklees (2%) and Harrogate (2%).
North East Lincolnshire	8% of commuter trips are to North Lincolnshire and 1% to East Riding of Yorkshire.
North Lincolnshire	North East Lincolnshire employs 6% of residents from North Lincolnshire. The second highest destination (4%) is Doncaster in the neighbouring LEP area.
Selby	Selby's most common commuting destinations are Leeds (18%), York (14%), Wakefield (9%) and East Riding of Yorkshire (5%).
Wakefield	There are strong commuter flows from Wakefield to Leeds (17%), Kirklees (5%), Barnsley (2%) and Selby (2%)
York	The largest travel to work connections from York are in York North Yorkshire & East Riding LEP and Leeds City Region LEP: Leeds (6%), Hambleton (3%) and Harrogate (3%).

Source: ONS (2011), Location of usual residence and place of work by method of travel to work (MSOA level)

What does this mean for devolution to Yorkshire?

6.91 The headline data on commuting within and between the four main sub regions suggest, at first glance, that the areas are relatively self-contained, and therefore may indicate there is little advantage in pan-Yorkshire arrangements. Data on commuting between local authority areas, however points to a greater degree of complexity in the patterns Furthermore, the relatively weak commuting levels between some geographies, illustrates potential barriers to cross-boundary commuting may be in operation. For example, commuter flows between Leeds and Sheffield are not particularly significant. A point of comparison: the fastest journey time between Leeds and Sheffield is 40 minutes and the trip costs £11.10 (the journey can be made for £6.50 but the journey time is around 1 hour), while the journey between Ealing Broadway and Liverpool Street in London takes around 40 minutes and costs £2.80 (off peak).

Headline data on transport spending per head

6.92 Two different sets of recent analysis on transport spending in England have found significant disparities in funding per head by region. The first analysis[30] provides a snapshot in time, which shows that while spending per head in Yorkshire and Humber (£335) sits between the extremes of London (£944) and the East Midlands (£220), it is less than 80% of the (mean) average for England. Looking at the breakdown by type of infrastructure the region appears to fare relatively well in terms of spending per head on local and national roads, but does not fare well in terms of spending on local public transport and rail (Table 6-12).

6.93 To put these figures in perspective, total transport spending in England in 2016/17 was £23.5bn and it was £1.82bn (7.75%) in Yorkshire and Humber. If the region had been allocated 8.3% of the budget – in line with population share – it would have received £1.95bn.

Table 6-12: Public expenditure per head on Transport by region, 2016/17

	NE	NW	Y&H	EM	WM	EoE	London	SE	SW	Eng
Total	291	370	**335**	220	314	333	944	370	305	425
National roads	50	62	**71**	52	61	64	3	93	42	55
Local roads	104	88	**96**	70	77	103	42	63	96	78
Local public transport	19	36	**22**	19	15	12	115	12	23	35
Rail	110	175	**137**	70	150	144	773	201	136	249
Other	8	9	**10**	9	12	9	10	1	7	8

Source: Tom Rutherford, Transport Spending by Region, House of Common Library, Briefing Paper No. 8130, February 2018

6.94 A separate analysis by IPPR North[31] has looked at the pipeline of future transport investment from 2016/17 onwards across England's regions. This puts total England transport investment at approximately £32.7 billion, with Yorkshire and Humber scheduled to receive approximately

[30] https://researchbriefings.parliament.uk/ResearchBriefing/Summary/CBP-8130#fullreport

[31] https://www.theguardian.com/uk-news/2017/feb/20/more-than-half-uk-investment-in-transport-is-in-london-says-study

£1.05 billion of this – 3.2% of the total (compared to its 8.3% of England's population). Yorkshire's share of expenditure is set against 54.2% of transport expenditure going to London and 15.1% to the North West. Under this analysis, Yorkshire and Humber's proportionate share of expenditure would have been £2.7 billion, £1.66 billion more than it is set to receive.

Strategic Connectivity – assets and interlinkages

6.95 All four LEP areas within Yorkshire and Humber identify transport and wider connectivity as a priority and cite specific assets and highlight improvements required. This section reviews the plans and priorities in each LEP area and the extent to which connectivity assets and priorities are shared and connected across Yorkshire and Humber.

6.96 The analysis is primarily based on connectivity within Yorkshire and Humber, but also considers how far assets are of importance to, and could be better utilised by, the whole of the North. Likewise, while the onus is on transport connectivity, broadband/digital connectivity is also considered.

6.97 The following subsections cover each main mode of transport, as well as digital connectivity, and include tables that set out relevant connectivity priorities in each LEP area, based on SEPs and/or emerging LIS content. Conclusions are drawn based upon this analysis, coupled with wider strategic and labour market travel analysis to highlight areas where there may be benefit from Yorkshire-level devolution.

Ports

Table 6-13: Ports – positioning and priorities in SEPs/emerging LIS content

Humber	Leeds City Region	Sheffield City Region	YNYER
Humber Port infrastructure noted as a national asset Want Government to explore how ports policy can help UK to be competitive post-Brexit, e.g. free trade zone designations	Not covered	Not covered	Not covered

6.98 The Humber Ports complex comprises the ports of Hull, Immingham, Grimsby and Goole. It is the UK's largest, multi-purpose ports complex, and supports 33,000 jobs, contributes £2.2 billion pa to the UK economy,[32] and handles more than 65 million tonnes of cargo. Immingham is currently the UK's largest port by volume and Hull is home to one of the UK's largest port developments; the £310 million Green Port Hull project with Siemens.

6.99 The Humber Ports were previously identified as a Yorkshire and Humber regional priority due to their role as a key gateway for trade, and seen as of value to businesses in all four Yorkshire areas. Our review of SEPs suggests that this level of prominence is no longer evident. Although the value of the Humber Ports was noted by some business consultees in this study (and not only in the Humber area), the ports are only a named as a priority in the Humber SEP and are not noted in a significant way in SEPs/emergent LIS work elsewhere.

[32] http://www.abports.co.uk/Our_Locations/Humber

6.100 A number of measures have been identified to enhance access to and value gained from the Humber Ports, including rail and road infrastructure improvements and policy measures. The Humber LEP makes the case for these well measures.

What does this mean for devolution to Yorkshire?

6.101 There is a case to be made that the added scale and influence of policy and advocacy work at the Yorkshire level may be more effective in securing required improvements and influence national policy than may be achieved by the (inevitably) local focus of current SEPs. The absence of Yorkshire-level activity on this issue in recent years, suggests there is cause to believe that devolution to the region could assist the Humber ports to secure infrastructure improvements and develop policies to support the Ports more generally, so that their value is realised by firms in Yorkshire and Humber and across the North more widely – provided the geography covers North and North East Lincolnshire.

Airports

Table 6-14: Assets, positioning and priorities in SEPs/ emerging LIS content

Humber	Leeds City Region	Sheffield City Region	YNYER
Humberside Airport potential for supporting growth.	Leeds Bradford airport role and improved connection to it, plus links to Manchester airport	More international connections at a growing Doncaster Sheffield Airport	Not covered

Source: Steer-ED review of Yorkshire and Humber Strategic Economic Plans, 2018

6.102 Yorkshire has two main passenger airports – Leeds-Bradford and Doncaster-Sheffield, as well as the (smaller-scale) Humberside airport in North Lincolnshire. Manchester airport is also a critically important asset, both because of its greater number of flights and destinations, and because it is fairly easily accessed from much of Yorkshire.

6.103 Assessment of SEP/LIS priorities suggests that LEP areas primarily focus on the airport in their area. Hence Leeds-Bradford airport and Doncaster-Sheffield airport are only prioritised in, and cited as valuable assets by, their respective SEPs. This is likely to reflect the fact that for the Yorkshire LEP areas with an airport, it is access to Manchester Airport rather than an airport in another Yorkshire LEP area that is likely to be the next highest priority for airport connectivity after their 'own'.

What does this mean for devolution to Yorkshire?

6.104 Given the position outlined above, the fact that some key access improvements have already been secured, and a degree of competition between airports in the region, it is questionable as to whether either Leeds-Bradford or Doncaster-Sheffield would become a widely supported Yorkshire-level priority under a Yorkshire devolution scenario. Hence, whilst there is in principle scope to plan and link air connectivity across Yorkshire more effectively, our conclusion is that Yorkshire-level devolution is unlikely to make a major difference to the growth of airports in the region, and that air connectivity planning may be more effectively undertaken at the Northern level, or within functional economic areas for more localised access improvements.

Rail

Table 6-15: Assets, positioning and priorities in SEPs/ emerging LIS content

Humber	Leeds City Region	Sheffield City Region	YNYER
Hull to East Coast rail via Selby electrification Hull to Leeds every 30 mins, with direct service to Manchester Airport South Humber Ports to Doncaster gauge enhancements Active participants in Transport for the North and Rail North	HS2 – connection to Sheffield, East Midlands, London and York Rail franchise and capacity improvements Trans-Pennine electrification Northern Powerhouse Rail – linking Liverpool, Manchester, Leeds, Sheffield, Hull, Newcastle	Maximise benefits of High Speed Rail and East Coast Mainline Devolution of existing rail network as proposed for the North Improve frequency and speed of travel between SCR and rest of the North, especially to Manchester and Leeds	Maximise High Speed Rail investment and benefits – including station improvements and better access Improve east west connectivity between towns and neighbouring cities – including Leeds-Harrogate-York, York-Scarborough, and Leeds-Selby-Hull corridors

Source: Steer-ED review of Yorkshire and Humber Strategic Economic Plans, 2018

6.105 The majority of rail priorities in each LEP area involve either improving cross LEP area or pan-northern linkages, or maximising the local benefit gained from key routes and improvements. Some of these are only included as priorities in one Yorkshire LEP area, but there are also a number of shared priorities, such as HS2 connections and benefits, and TransPennine rail (and wider East-West Connectivity). The East Coast Mainline is also a critical route for all four Yorkshire LEP areas.

What does this mean for devolution to Yorkshire?

6.106 While the degree to which key rail lines and proposed improvements cut across or are shared by multiple Yorkshire LEPs is clear and strong, the more complex question is how far Yorkshire devolution would confer benefits that could not be achieved through pan-northern structures (Transport for the North and the Rail North Partnership)? In this respect, pan-Northern structures are already leading on proposals for major route upgrades and new rail routes, and given that these connect cities across the North and not just in Yorkshire, devolution to Yorkshire is unlikely to bring additional benefits. The question therefore is which aspects of rail investment are large-scale enough to warrant coverage beyond a single Combined Authority or LEP area, but not so large that they are better served at Northern level? In this respect, three potential areas emerge most strongly from the combination of SEP and LEP area analysis, business engagement, and wider strategic analysis of the transport and connectivity context:

- **Ticketing** – public transport prices rise steeply once journeys extend beyond a single Combined Authority (Passenger Transport Executive) boundary, for example between West and South Yorkshire, or between Leeds and Bradford and neighbouring areas in North Yorkshire such as Harrogate, York, Craven and Selby. This 'cross-boundary premium' acts as a price deterrent to cross-LEP travel and undermines the efficient operation of labour markets. Yorkshire devolution would make it easier and quicker to smooth out ticket prices to address this barrier and hence widen employment options for individuals, help address business skills shortages/gaps, and reap economic advantages from agglomeration.

- **Drawing benefit from HS2 and other main routes** – there is shared priority around maximising local benefits from HS2, as well as other main routes such as the East Coast Mainline, for instance through connecting infrastructure and services to the main transport nodes. There may be potential to influence, shape, and deliver these with greater effect than at present by working at the Yorkshire level.
- **Smaller scale routes that cross LEP areas** – there are a number of smaller scale public transport connections that cross LEP areas, and which could potentially improve the operation of local economies and labour markets. Yorkshire-level devolution may make such enhancements more achievable as support for change will come from multiple areas within a single structure leadership and governance structure.

6.107 Some consultees suggested that rail services and rolling stock might be improved by Yorkshire-level devolution. However, many of the key rail routes for such services extend into other regions of the North of England, which may mean Yorkshire-level leadership and coordination should focus on adding value to the case for rail devolution at the level of the North.

Road

Table 6-16: Assets, positioning and priorities in SEPs/ emerging LIS content

Humber	Leeds City Region	Sheffield City Region	YNYER
A63 from M62-Port of Hull	Smart Motorways roll out	Strategic road network Manchester and Leeds	Improve east west connectivity, specifically the A64, A164, A1079, A1237 and A59 road corridors

Source: Steer-ED review of Yorkshire and Humber Strategic Economic Plans, 2018

6.108 Overall, LEP area strategies tend not to single out cross-LEP area road improvements as high priorities, other than at a fairly general level, with most schemes being local in nature. That may in part reflect existing transport structures (e.g. the West Yorkshire Plus Transport Fund) which only allow schemes within a single area. It will also reflect transport responsibilities at a higher level, and Highways England's role in the Strategic Road Network, which covers motorways and major roads, including key pan-LEP area corridors in Yorkshire around the M62, M1 and A1(M).

6.109 Transport for the North also has a role on highways proposals and studies, and it has mapped out a 'Major Road Network' for the North of England. This identifies the local and strategic roads which are vital for economic growth, and which will inform the Strategic Transport Plan for the North, including the development of Strategic Development Corridors.

What does this mean for devolution to Yorkshire?

6.110 Given the above, Yorkshire-level devolution on roads should not be expected to bring major changes to this area of activity. However, there may be a case for further study to test whether there is a network of roads which link LEP areas, and which might benefit from Yorkshire and Humber-level coordination and investment.

Broadband and Digital Connectivity

Table 6-17: Assets, positioning and priorities in SEPs/ emerging LIS content

Humber	Leeds City Region	Sheffield City Region	YNYER
Broadband connectivity	Digital infrastructure enhancement and take up in city region plus North Yorkshire link noted	Continued investment in digital connectivity	Widespread reliable telecoms and high-speed broadband government investment in rural mobile connectivity

Source: Steer-ED review of Yorkshire and Humber Strategic Economic Plans, 2018

6.111 All four SEPs highlight the importance of high quality digital connectivity and investment. Nationally, BDUK (part of the DCMS) leads on delivery of superfast broadband and local full fibre networks. The Government has also made statements about success in delivering Broadband in the Northern Powerhouse, although this is not specifically through northern-level structures or devolution.

What does this mean for devolution to Yorkshire?

6.112 Leeds City Region is currently developing a Digital Strategy (*Lives Transformed by Digital Tech*) which includes focus on digital infrastructure, as well as uptake by business, digital skills and wider issues. The same issues will be relevant in all parts of Yorkshire (and indeed most areas nationally) so there could be potential for collaboration at Yorkshire level that may be supported and advanced by devolution. However, this issue was relatively low key in consultation and discussions, and specific Yorkshire-wide solutions and benefits, as opposed to national or local are not proposed.

What further research is required?

6.113 Given the above findings, we suggest further research to:

- Support intra-regional connectivity, in particular:
  - Identification/specification of a road network to facilitate intra-Yorkshire travel between local authority areas; and
  - Simplified/cheaper ticketing for cross-LTA rail journeys; and
- Understand the importance of economic and efficient international connectivity as a driver of economic growth and what this means for policy makers in the region.

6.114 The next section, Section 7, sets out our findings in relation to closing the productivity gap, and Section 8 sets out our overall conclusions.

7 Closing the productivity gap

The Yorkshire and Humber Productivity Gap

7.1 There is a sizeable gap between productivity (and total GVA) in each of the four LEP areas in Yorkshire and the national average. All four LEPs highlight growth and productivity as issues in their existing and emerging strategic work, and given the Government's clear messages on a productivity focus through the LEP Review, this emphasis is likely to increase further in the future.

7.2 Table 7-1 shows the latest official data on GVA and GVA per head by national and NUTS region – for 2016.

Table 7-1: GVA for Yorkshire and Humber and comparator countries and regions, 2016

Area	Total GVA (£ millions)	Annual growth in total GVA (%)	GVA per head (£)	Annual growth in GVA per head (%)
UK	1,747,647	3.7	26,339	2.8
England	1,498,221	3.7	27,108	2.8
Yorkshire & Humber	112,194	2.1	20,678	1.4
Scotland	134,038	3.0	24,800	2.4
Wales	59,585	4.0	19,140	3.5
West Midlands	126,589	3.9	21,823	3.0

Source: https://www.ons.gov.uk/economy/grossvalueaddedgva/bulletins/regionalgrossvalueaddedbalanceduk/1998to2016

7.3 The table demonstrates the scale of the output gap in terms of GVA per head. The Yorkshire and Humber figure of £20,678 compares to a UK figure of £26,339 and an England figure of £27,108 – figures that are 27% and 31% higher than the Yorkshire and Humber figure respectively. The Yorkshire and Humber GVA per head figure is the second lowest of the English regions (only the North East is lower), higher than in Wales but lower than in Scotland. **If GVA per head in the region were the same as in the UK, that would equate to total GVA of approx. £142.9 billion – £30.7 billion higher than currently.**

7.4 The data for annual GVA growth also demonstrate significant challenges. Growth in total GVA of 2.1% in Yorkshire and Humber compares to a UK average of 3.7%, while growth in GVA per head of 1.4% in the region was considerably lower than for all the comparator areas (and for all other English regions apart from the North East) and only a half of the England and UK average growth rate of 2.8%. In short, the Yorkshire and Humber area has a sizeable GVA and productivity shortfall compared to UK average and this gap is growing.

7.5 Economic modelling using Experian's Regional Econometric Model, which covers Yorkshire and Humber, can provide both an estimate for regional GVA in 2018 and forecast how this may change in the future. Table 7-2 shows what this means at headline level for total GVA, employment (total FTE jobs), and productivity (output per employee) over the 20 years from 2018 to 2038. It compares a baseline scenario (i.e. what is currently forecast as Business-as-Usual) with a high growth scenario which would close the gap to national average by 2038.

Table 7-2: Forecast GVA, Jobs and Productivity in Yorkshire in baseline and high growth scenarios

	Baseline Scenario				High Growth Scenario			
	2018	2025	2030	2038	2018	2025	2030	2038
Total GVA (£ billions)	115.54	127.51	137.29	153.93	115.54	133.84	152.82	196.37
Employment (FTE jobs, millions)	2.14	2.17	2.19	2.21	2.14	2.18	2.23	2.32
Productivity (£/worker)	54,100	58,600	62,700	69,600	54,100	61,400	68,700	84,800

7.6 The forecasts show that, under the baseline scenario, Yorkshire's economy will have grown to produce GVA of £153.9 billion by 2038, up from £115.5 billion in 2018 (just above the ONS figure of 112.2 billion for 2016). However, it is the gap between the baseline and high growth scenarios that is of prime interest for this study. For each measure, this gap indicates the difference between Yorkshire's expected performance based on current trends, expectations and arrangements, and what it would have been achieved at a growth rate high enough to close the gap to (UK) national average by 2038.

7.7 The difference between the baseline and the high growth level is GVA of £42.4 billion by 2038. The equivalent gap for employment is 130,000 FTE jobs, and for productivity the gap is £15,200 per worker.[33]

7.8 The question is: How far, if at all might devolution at Yorkshire level help to close these gaps?

The Impact of Yorkshire and Humber devolution on the Productivity Gap

7.9 In Section 5 we provided commentary on six different perspectives on the economy: Sectors; R&D and Innovation; International Trade and Investment; Skills and Ambition; Business Base, Starts, Deaths, Survivals, and Scale-up; and Transport and Connectivity.

7.10 In this Section, we offer estimates of the current 'gap' for five of these perspectives. We have not attempted to model change in industrial structure – in part because attempts to influence industrial structure are a matter for policy makers, and beyond the scope of this study.

7.11 The estimates are provided as an indicative snapshot of the scale of the potential prize to be gained from Yorkshire-level devolution in different policy domains. The estimates:

- Are not forecasts;
- Do not take account of change over time; and
- Should not be treated as cumulative.

[33] Note: further study is required to understand the impact of regional price variation on this gap.

7.12 For each subsection, a summary table sets out:

- The nature of the issue/opportunity;
- Data on the baseline position;
- An outline of why it is a shared issue at the One Yorkshire/regional level;
- What might be done collaboratively to address the issue/take the opportunity; and
- The added value that may result – where possible an estimated GVA figure is provided, where this is not possible within the scope of this study an investment gap is provided.

7.13 As noted above, the GVA figures involve significant simplifying assumptions and are offered to provide an estimate of the scale of the gap/potential prize. Given this, we present a range of uplift figures from cautious to ambitious as a guide to their potential contribution to narrowing the productivity gap.

Table 7-3: Potential GVA uplift from improving export performance

Strategic Case - what's the issue/opportunity?	Data/Baseline	How far is it a shared issue across LEP areas?	What could be done better/collaboratively via Yorkshire devolution?	Estimated Added Value (based on extent to which gap to national average is closed)		
				Cautious 30%	Mid-range 65%	Ambitious 100%
• Exports are much lower than UK average per head • Exports are a key area for the health of the UK economy post-Brexit • An increase in the number of firms exporting is likely to boost GVA and not displace economic activity elsewhere in the UK	• Yorkshire and Humber's exports are £16.8bn, 5.1% of the UK total of £328.3bn • Based on its 8.3% of UK population, a proportionate Yorkshire and Humber figure would be £27.3bn • There is a gap of £10.4bn to close	• There are no LEP-area data available on exports, only data for Yorkshire and Humber • However, all four LEPs identify exports as a priority • Similar barriers exist in each LEP area, e.g. issues linked to culture, market awareness and access, availability of support, connectivity and logistics	• Better use of assets across Yorkshire and Humber (e.g. ports) • Capitalise on Yorkshire brand/profile to raise ambitions and promote exports • More intensive and tailored promotion and support for exporting businesses in Yorkshire and Humber	£3.1bn	£6.8bn	£10.4bn

Table 7-4: Potential GVA uplift from improved performance in Inward Investment

Strategic Case - what's the issue/opportunity?	Data/Baseline	How far is it a shared issue across LEP areas?	What could be done better/collaboratively via Yorkshire devolution?	Estimated Added Value (based on extent to which gap to national average is closed)		
				Cautious 30%	Mid-range 65%	Ambitious 100%
• Inward Investment had been low to 2015 but has improved in the period 2015-2017 • However, it remains below the UK average (and West Midlands and Wales comparators) • There is scope to improve performance further, building on the recent upward trend and the potential to develop use of the Yorkshire brand	• 4,623 Yorkshire and Humber FDI jobs in 2017 • 92% of the proportionate figure – 5,058 • A gap of 435 jobs • Equates to GVA of £19.7m (assuming current GVA per worker of £42,500)	• No LEP area data available, only data for Yorkshire and Humber • Inward Investment is of interest to all LEPs; and is prominent in three SEPs • A similar approach in LEP areas is proposed, implying scope for joint work	• Capitalise on strong and improving Yorkshire profile and brand • Build on recent improvement in results and intensify effort through further joint promotion • Take advantage of international 'Yorkshire alumni' connections	£5.9m	£12.8m	£19.7m

Table 7-5: Potential GVA uplift through improved performance in relation to R&D investment

Strategic Case - what's the issue / opportunity?	Data / Baseline	How far is it a shared issue across LEP areas?	What could be done better/ collaboratively via Yorkshire devolution?	Estimated Added Investment (based on extent to which gap to national average is closed)		
				Cautious 30%	Mid-range 65%	Ambitious 100%
• Investment in R&D per head is relatively low • This may be driven by a number of factors – including the level of firms' participation in global supply chains and global innovation networks • Raising investment in R&D and innovation will have a short-term impact in terms of stimulating local economic activity and a long-term impact in terms of the introduction of new assets, processes, and new products and services which will raise productivity	• Yorkshire and Humber's R&D spending per person is £258 – only slightly more than 50% of the UK average • Total R&D is £1.4bn • Based on its 8.3% of UK population, a proportionate Yorkshire and Humber figure would be £2.75bn • This implies an R&D investment gap of £1.35bn • *Given the complexity of assessing returns to R&D, no added GVA estimate is provided*	• LEP-area data on R&D investment is limited, most R&D spending data are at the Y&H level • All LEPs see R&D and innovation as important • In part the issues associated with low levels of investment in R&D are linked to industrial structure, the research base's strengths relative to research funding and investor priorities, culture and links to HE • There are shared issues and assets, which could benefit from coordinated leadership	• Better private sector connections to global supply chains (through major multinationals) and global innovation networks – (through HEIs) • Work with Yorkshire Universities, the only regional HEI network outside London, to promote innovation activity (from using research excellence to attract inward investment to supporting SMEs adopt new technologies and processes through Knowledge and Technology Transfer activity • Specialised business support and signposting • Pool effort and influence to attract new expertise and assets	£0.41bn R&D	£0.88bn R&D	£1.35bn R&D

Table 7-6: Skills and ambition

<table>
<tr><th>Strategic Case - what's the issue/opportunity?</th><th>Data / Baseline</th><th>How far is it a shared issue across LEP areas?</th><th>What could be done better/collaboratively via Yorkshire devolution?</th><th colspan="3">Projected Added NVQ4+ qualifications (based on extent to which gap to national average is closed)</th></tr>
<tr><th></th><th></th><th></th><th></th><th>Cautious
30% of gap</th><th>Mid-range
65% of gap</th><th>Ambitious
100% of gap</th></tr>
<tr><td>• Yorkshire and Humber underperforms in relation to the proportion of its workforce qualified to NVQ4+
• Higher level skills are a significant driver of productivity and earnings
• To close the productivity gap, Yorkshire and Humber needs to raise the proportion of its workforce qualified to NVQ4+</td><td>• Total Yorkshire and Humber workforce is c. 2.5m with a lower proportion of the workforce with higher level skills

<table><tr><th></th><th>Y&H</th><th>UK</th></tr><tr><td>No qualifications</td><td>7%</td><td>2%</td></tr><tr><td>NQF Level 1</td><td>17%</td><td>8%</td></tr><tr><td>NQF Level 2</td><td>22%</td><td>25%</td></tr><tr><td>NQF Level 3</td><td>20%</td><td>23%</td></tr><tr><td>NQF Level 4</td><td>27%</td><td>32%</td></tr><tr><td>NQF Level 5</td><td>8%</td><td>10%</td></tr></table>
Experian's Regional Economic Model shows an annual GVA gap of c. £1.56bn</td><td>• The relatively low proportion of workers qualified to NVQ4+ is a common issue faced in all four LEP areas
• Skills are consistently highlighted as a significant issue by businesses</td><td>• Business consultations indicate lower-level and vocational skills are likely to be best addressed at the local rather than regional level – except where niche specialisms are concerned
• While, higher-level skills, requiring more specialised resources, are more likely to generate economies of scale and therefore benefit from pan-Yorkshire leadership and arrangements</td><td>£0.46bn</td><td>£1bn</td><td>£1.56bn</td></tr>
</table>

Table 7-7: Business base

Strategic Case - what's the issue/opportunity?	Data / Baseline	How far is it a shared issue across LEP areas?	What could be done better/collaboratively via Yorkshire devolution?	Projected Added Value (based on extent to which gap to national average is closed)		
				Cautious 30%	Mid-range 65%	Ambitious 100%
• Yorkshire and Humber has a relatively low business density • This limits employment opportunity, competition and the flow of potential Scale-up businesses	• Yorkshire and Humber has 7.3% of the UK business population but 8.3% of the human population • This 1 percentage point gap amounts to a shortfall of 56,700 businesses • The average business size in the region is six employees (total employment divided by total businesses) • The average GVA per employee in Y&H is £45,200, implying an overall GVA gap arising from its relatively low business population of c.£15.4bn	• While there is variation in LEP's achievement in terms of business density and Scale-ups, the issue is pan-regional	• There is a need to promote entrepreneurship and enterprise formation, for which support is often best accessed and delivered locally • And there is a need to improve performance in relation to high-growth businesses, which may benefit from pan-Yorkshire leadership and coordination to spread understanding of how to develop support mechanisms for high-growth Scale-Up businesses and to provide the necessary expertise and support that smaller geographies may be unable to provide	£4.6bn (17,000 businesses	£10bn (36,900 businesses)	£15.4bn (56,700 businesses)

Table 7-8:Transport

Strategic Case - what's the issue/opportunity?	Data / Baseline	How far is it a shared issue across LEP areas?	What could be done better/collaboratively via Yorkshire devolution?	Projected Additional transport investment (based on extent to which gap to national average is closed)		
				Cautious 30%	Mid-range 65%	Ambitious 100%
• Businesses consistently highlight transport as a concern and as a barrier to their and the economy's growth • Efficient labour markets require the right people get to the right job/place-of-work at the right time – there are a number of barriers to this, including inadequate arrangements for cross-LEP/LTA journeys • The region suffers from a significant under-investment which limits partners' ability to address these issues; especially in local public transport and rail	• In 2016/17 total transport spending in England was £23.5bn • In Yorkshire and Humber, it was £1.82bn (7.75%) • If the region had been allocated 8.3% of the budget – in line with its population share – it would have received £1.95bn • IPPR analysis of future transport spending from 2016/17 onwards[34] reports a higher England total of £32.7 bn, and a lower Yorkshire and Humber share of £1.05 billion; resulting in a larger gap of £1.66 bn	• LEP strategies (and investments) in transport tend to focus on the local transport issues • There is a need for strategic leadership to identify strategic assets and cross-LEP/LTA issues	• Strategic leadership and coordination to identify significant roads as part of an intra-regional road network, and simplify/reduce cost for cross-LTA rail journeys • Prioritisation of local public transport and rail in spending decisions, in response to current under-investment	£39m p.a. (or £0.50 billion using IPPR spending pipeline data)	£84.5m p.a. (or £1.08 billion using spending pipeline data)	£130m p.a. (or £1.66 billion using pipeline data)

[34] https://www.theguardian.com/uk-news/2017/feb/20/more-than-half-uk-investment-in-transport-is-in-london-says-study

Conclusions and observations

7.14 Given the above, we offer the following conclusions and observations:

- Our analysis covers gaps in GVA outcomes in some policy domains, e.g., exports and inward investment, and spending gaps, for those areas for which it has not been possible to estimate long-term GVA impact, e.g., transport;
- Whether measured in terms of GVA or spending, there are significant gaps to close in each of the five policy domains;
- But where estimates of the potential GVA impact from improved leadership and coordination at the level of Yorkshire can be made the sums involved are potentially very large:
  - Improvements in the business base and scale-ups, based on an increase in the number of businesses) and employees with average productivity), could contribute £5bn-£15bn;
  - Improvements in export performance could contribute £3bn- £10bn;
  - Improvements in skills and qualifications could contribute £0.46-£12.56bn;
- Furthermore, while the GVA impact of improved performance in relation to transport and R&D and Innovation has not been estimated, it is clear that they would make a significant positive long-term contribution to economic performance;
- The above figures are based on the assumption that significant devolved powers and budgets are achieved that lead to additional investment, and that policy areas highlighted above are prioritised. If this is done, then the potential GVA uplift could deliver a significant reduction in the current GVA gap between Yorkshire and UK average.

What further study is required?

7.15 Further study is required in the following areas:

- The likely return on transport investment in GVA terms and the impact of this on the productivity gap, once specific proposals are available;
- Fuller and more detailed analysis of all the policy areas and perspectives considered, including their interrelationships with each other, the timeframes for their impacts to be felt, and the detail of the actions needed to take them forward;
- Analysis of how improvements in GVA and productivity would correlate to wider goals such as on employment, incomes, and inclusive growth, as well as wider social and environmental impacts; and
- Analysis of how application of interventions and impacts may vary in different areas/districts.

8 Conclusions

8.1 Table 8-1 provides a summary of our conclusions in relation to the main research questions. These conclusions are intentionally focused on exploring how far there is an economic case for devolution at Yorkshire level and the dividends that may flow from greater devolution.

8.2 The study's findings do not present an all or nothing case for which activities may be best led through Yorkshire-level devolution; the picture is more complex than that. Some activities and policy areas are best led and delivered at a local level (especially those that need to be close to communities and businesses, such as employment support, the more basic skills, social inclusion, and local regeneration and physical development), while others (specifically strategic transport issues) are best covered at Northern level. However, in a significant number of other policy areas our conclusion is that there are potentially considerable advantages from devolution to the Yorkshire level. These are often higher-level economic functions such as innovation, exports and international business, high-level skills, specialised aspects of business support to enable scale ups, and specific elements of transport such as ports and public transport ticketing. The economic benefits of these are hard to measure precisely, but scenario-based estimates grounded in logic chain rationales and data analysis suggest that these could be very sizeable, and of a scale to significantly reduce or even close the GVA gap between Yorkshire and the UK average over the long term.

Table 8-1: Key findings

Over-arching Research Question	Economic Coherence Test	Findings
• Is Yorkshire an *economically coherent area in terms of its sectoral mix and its economic inter-relationships*? – How do interlocking and overlapping city and county regions operate and interact with each other?	• Which are the study area's key economic sectors, in terms of employment and productivity (Gross Value Added)? • To what extent are these key sectors shared across study area? • To what extent do areas with a unique specialism/asset provide a strategically important function to other areas in Yorkshire? • How far are there travel interlinkages between different parts of Yorkshire? • How far is there business networking and operation and preferences that relate to the Yorkshire level?	• There is strong evidence that Yorkshire (and Humber) is a coherent economic area, based on a range of data and observations. • It includes within it a number of functional economic areas, which have strong interconnections, and often similar or shared issues, priorities and networks. • Manufacturing is pronounced in relative terms across all Yorkshire sub-regions, but (as in the UK) only accounts for a modest proportion of jobs and GVA. • Sub-sectors at 3-digit SIC sectors of significant scale tend to be limited to more localised areas; exceptions include manufacture of food products. It is shared issues across manufacturing (e.g. skills, innovation, exports) that are most relevant at Yorkshire level. • Service sectors are more significant for employment and GVA across Yorkshire, and 13 such sectors provide at least 2,500 jobs in three districts or more. • SEPs and emerging LIS work point to a strong degree of similarity in priorities at broad sector level – notably around advanced manufacturing; food and drink; and energy/low carbon; as well as creative and digital (increasingly as an enabler) and health and/or social care. • Business interviews and wider analysis points to a number of assets that are in one sub-region but are of value across Yorkshire – for example ports, key rail and road infrastructure, and universities. • While each LEP area is functional in its own right (with >75% of people living in the area also working there) there are significant travel flows across sub-regional

Over-arching Research Question	Economic Coherence Test	Findings
		boundaries, for example from Harrogate, Craven, Selby and York into West Yorkshire. • Businesses (and citizens) readily identify with the Yorkshire level, and more so than in other English Counties. Sizeable business networks, and business representative organisations operate at Yorkshire level, as do HE networks, and many businesses feel that Yorkshire identity is an asset.
• Is the Yorkshire level capable of maximising the opportunities and benefits of devolution for all its people and businesses?	• Which are the key opportunities to support sustainable employment and wealth creation in Yorkshire? – To what extent are these growth opportunities shared across Yorkshire? – To what extent are these growth opportunities specific to a single geography? • Which are the key challenges and threats to sustainable employment and wealth creation in Yorkshire? – To what extent are these threats shared across Yorkshire? – To what extent are these threats limited to a specific geography? – How do these threats relate to the wider Northern Powerhouse? • Are there untapped resources, which could be better utilised at the level of the study area, e.g. through more effective use of information and coordination of activity?	• Our review of SEPs and emerging Local Industrial Strategy priorities in the four LEP areas found similar overall priorities. All cover productivity, business growth and support, skills (and employment), and infrastructure. • There are locally distinctive (but complementary) variations in visions and emphases (e.g. good/inclusive growth, Energy Estuary, a bigger private sector, the best place to grow a small business). • Similar challenges are identified in the majority of LEP areas: raising GVA, productivity and the size/strength of the business base; more and better paid jobs; better broadband; and reducing flood risk were all noted by three or more LEPs. • Key assets and strengths brought out in LEP areas tend to be more locally specific and distinctive – e.g. the Humber Estuary, research Centres of Excellence or major investments. There is potential to enhance the economic impact of strategic assets across a wider geography through better coordination of plans and investments. • Some of these threats and opportunities are also issues across the North (or the UK) but most (except transport

Over-arching Research Question	Economic Coherence Test	Findings
		related ones) lack practical pan-Northern arrangements to address them.
• How does and might Yorkshire fit within arrangements for the Northern Powerhouse?	• How do the key sectors in the study area relate to the wider Northern Powerhouse? • How do the key opportunities for and threats to sustainable employment and wealth creation relate to the wider Northern Powerhouse?	• The key sectors identified by LEPs across Yorkshire overlap strongly with the Sectors/Prime Capabilities at Northern level, but not with the 'Enablers' of Finance & Professional, Logistics and Education. • There are strong similarities between opportunities and threats for wealth generation and employment in Yorkshire and across the North. • However, while there are shared issues, there are in practice few mechanisms for dealing with them collectively across the North. Hence action or coordination at Yorkshire level would strengthen not duplicate arrangements at the Northern level – except in relation to strategic transport (and possibly around innovation in the future).
• What might be the economic uplift from One Yorkshire Devolution?	• What is the requirement to close the productivity gap with the UK? • What might more effective leadership and coordination in the study area be able to deliver from a bottom-up perspective?	• Yorkshire and Humber GVA per head of £20,678 compares to £26,339 for the UK and £27,108 for England – 27% and 31% higher than Yorkshire and Humber respectively. • If GVA per head in the region were the same as in the UK, that would equate to total GVA of approx. £142.9bn – £30.7bn higher than currently. • This gap is projected to grow to £42.4bn by 2038. • We have estimated the GVA uplift that may stem from new approaches facilitated by Yorkshire devolution using five policy perspectives, and using cautious, mid-range and ambitious scenarios. Subject to a number of caveats and assumptions, these provide illustrative figures that suggest that:

Over-arching Research Question	Economic Coherence Test	Findings
		– Uplift in exports value equivalent to GVA of £3.1bn-£10.4bn; – Uplift in inward investment jobs equivalent to GVA of £5.9m-£19.7m; – Uplift on skills equivalent to GVA of £0.46bn-£1.56bn; – Uplift in business base equivalent to GVA of ££4.6bn-£15.4bn; – Uplift in in R&D investment to the value of £0.4bn-£1.35bn, with long-term GVA benefits; and – Uplift in transport investment to the value of £39m-£130m (using latest year's data) or £0.5bn-£1.66bn (using future spend pipeline data), with long-term GVA benefits. • These figures cannot all simply be added together to produce a total because of interrelationships and double-counting risks. • However, depending on levels of ambition and activity an illustrative total uplift could be in the region of £9bn to £30bn a year, over a 20-year timeframe and subject to devolution leading to additional investment, and the key policy areas above being prioritised and actioned accordingly and effectively. This amounts to £1,600-£5,400 a head.
• Is there a case to establish a directly-elected Mayor (as enabled under the Cities and Local Government	• Are there sufficient economies of scale – based on similarities in economic structure – to support devolved arrangements to the study area? • Are there sufficient economies of scope – based on differences in economic structure	• There are considerable similarities in economic structure across most of the Yorkshire area on indicators around the business base (starts, survival rates, etc.), productivity, employment, and (as far as the available data reveal) on innovation and exporting. The main exception is much of North Yorkshire where (apart from in hotspots such as Scarborough) employment and skills

Over-arching Research Question	Economic Coherence Test	Findings
Devolution Act 2016)? – What is the economic case for devolving statutory economic, social and environmental powers and funding streams?	– to support the case for devolved arrangements to the study area? • Is there sufficient difference between the study area's economic structure and that of the national economy to warrant devolved governance arrangements? • Are there significant barriers to the coordination of economic development activity at the level of the study area to warrant devolved governance arrangements?	statistics in particular are healthier than in the rest of Yorkshire. However, North Yorkshire still shares many of the same challenges around GVA growth, business productivity and median incomes. Hence as similar challenges, opportunities and approaches are often in place, there are potential economies of scale in coordinating some (but not all) of those at Yorkshire level. • Our findings on sectors also make clear that there are shared areas of interest, especially around energy and food and drink in SEPs, but also niche strengths in local areas and sub-regions at subsector level. • Economies of scope exist, especially in terms of the diverse economic geography at Yorkshire level, which combines large cities and urban centres (for example n West Yorkshire, South Yorkshire and Hull) with extensive rural and coastal areas in North Yorkshire and parts of the Humber, as well as a spread of economic, cultural and natural capital assets. The combination of these varied economic geographies will support economic resilience and can be presented and connected to present a rounded offer that assists in attracting investment, skills and tourism. • Data for the study area overall show it to be markedly different to the UK economy overall. In particular, it faces greater challenges on a suite of economic indicators including on business growth and productivity, exports, innovation, employment and skills. Its sectoral mix is also different, with a deficit in areas such as information and communications and professional services, and a greater emphasis on sectors such as manufacturing, distribution, education and care.

Over-arching Research Question	Economic Coherence Test	Findings
		• Some limited coordination of economic development activity currently takes place. But SEPs generally make little reference to one another, and administrative and bureaucratic barriers mean that projects and activities are generally limited to a single LEP area, even where there may be economies of scale or greater impact from a more coordinated approach. The main exception is around the visitor economy and major events where Welcome to Yorkshire has provided a successful vehicle for coordination at regional scale and achieved considerable success.

A Appendices

Appendix A: Review of Strategic Economic Plans

Aspect	Humber	Leeds City Region	Sheffield City Region	YNYER	Key points across SEPs
Overall priorities – themes, objectives, etc.	Ambition focused on the Energy Estuary and Vision is in 3 parts covering: -Economy (focus on renewables), - Skills (raised and better aligned to economy) -Place (visitor economy/ culture, infrastructure & housing, sites and flood risk) Five Strategic Enablers: - Infrastructure that Supports Growth - Supporting Businesses to Succeed - Skilled and Productive Workforce - Flood Risk and Environmental Management	Vision focuses on good growth delivering prosperity, jobs and quality of life for all Four priorities: -Growing business -Skilled people, good jobs - Clean energy & environment - Infrastructure for growth	Vision: a stronger and bigger private sector that can compete in national and global markets Six thematic priorities: -increase no. of start ups -Facilitate/support growth of existing firms -Attract investment -Promote business global trade opportunities -Develop skills, labour mobility and education -Secure investment in infrastructure	Vision (2013 SEP): best place in England to grow a small business, combining a quality business location with great quality of life Targets on jobs, GVA and house building, plus median wages gap and productivity gap Five priorities: -Successful businesses -Global leader in agri-food and bio-economy - Inspired people - Successful and distinctive places -Well connected economy	Overall – cover largely similar themes and objectives, if with some local variations Visions have different emphasis but are not contradictory and have scope to add up to a complementary offer The same three themes of business, skills and infrastructure are prominent in all four areas Energy and Environment/low carbon (potentially linked to Bioeconomy), and place are prominent in 2-3 areas.
Evidence - Key points & challenges	Focus on potential of the Energy Estuary, as well as wider sector strengths. Mostly rural and coastal. Notes skills/education improvements and	Some excellent assets, rising FDI, sectors with growth potential and fit with northern strengths, and WY+ Transport Fund …but challenges on:	Sector 'design, develop and distribute' strengths identified including several research centres/ centres of excellence such as AMRC	Opportunities/assets include agri-food and Biorenewables/ Bioscience; potash and energy investment; high skill levels; strong business base; high speed rail; and	Overall, broadly similar challenges are identified in the majority of LEP areas. Raising GVA, productivity and the size and strength of the business base, the need for more and better paid jobs, better broadband and

Aspect	Humber	Leeds City Region	Sheffield City Region	YNYER	Key points across SEPs
	But identifies barriers/ challenges on: No. with no qualifications plus low higher-level skills Unemployment, esp. in Hull, NEL, and the coast Business survival/growth Fragmented business support and low take up High flood risks Variable broadband/ICT GVA growth below regional/national average	GVA growth not fast enough to close gaps Productivity + drivers of Low innovation despite high HE presence Low businesses per capita Skills rising but gaps growing esp. higher level Employment rising but underemployment Earnings gaps and 'missing middle' Increasing flood risks Variable broadband speeds Need to raise exports Housing supply rising slower than population Road congestion and rail connectivity	Identifies four major challenges/targets: More jobs - 70,000 to close gap to average More businesses - 6,000 to close gap to average More higher-skilled occupations – 30,000 Higher productivity - £3 billion+ rise in GVA to narrow productivity gap	rural/coastal quality of life offer. …but challenges on: Areas of deprivation and weak market demand on the coast Post Brexit business uncertainty Median wages below average + skew towards lower paid sectors Risks to energy businesses from national policy Housing affordability and low house building Flood risks broadband connections – esp. for rural SMEs East-west connectivity between our towns and neighbouring cities	reducing flood risk were all noted by 3 or more LEPs Challenges noted by 2 LEPs include transport, housing, low median income. Exports, energy, innovation and post-Brexit are noted once each. The challenges that are brought out in each SEP are not comprehensive, so it is likely that more areas will share an issue than may mention it (e.g. innovation). The key assets and strengths brought out in LEP areas tend to be more locally specific and distinctive – e.g. the Humber Estuary, Research Centres of Excellence or major investments.
Sector priorities	Energy Estuary (renewables and decarbonisation) as an overall sector priority Other important sectors: Ports & logistics	Innovative manufacturing Financial & prof services Health & life sciences Low carbon & environmental industries Digital & creative Food & drink	SEP sector content based on IER which identified 5 key ones: Financial, professional & business services Creative & digital	Agri-food and Bioeconomy (Biorenewables and Bioscience) singled out as a distinctive sector	Overall, shared core sectors in 3 of the 4 areas, with more locally specific approaches more evident in addition in the Humber and YNYER Crossover in LCR. SCR and the Humber for the 3 sectors of

Aspect	Humber	Leeds City Region	Sheffield City Region	YNYER	Key points across SEPs
	Engineering & manufacturing Chemicals (and process) Creative & digital Food Visitor economy		Advanced manufacture, engineering and healthcare technologies Low carbon Logistics		manufacturing/ engineering; creative & digital and energy/low carbon. That rises to all 4 for the latter if bio-economy included, and food and drink is also in 3 areas if Agrifood is included. YNYER notable in having a distinctive approach with just two interrelated sectors. Humber also distinctive in its overall focus on energy, and in 2 other distinctive sectors (ports; chemicals/process)
Business support and enterprise – priorities and approach	coordinated, universal business support and signposting offer (via Growth Hub) Build the growth capabilities of SMEs (inc. access to finance and workspace) Entrepreneurial culture and new enterprises Increase innovation in local businesses Targeted support to businesses in key sectors (inc. supply chains, inward investment) Export support	Business Growth Hub (LEP Growth Service) Innovation Access to finance Digital Supply chain development Enterprise Trade & investment Resource efficient businesses	SCR Growth Hub at the core of business support New business start-up support including Information, advice and support -SCR Start-up Zone - Enterprise culture and pre-start engagement - Intellectual knowledge Support existing firms' growth through: -Access to finance -Innovation boost - Growth deals	Help new businesses get off the ground Help established SMEs to be more successful Help growth minded businesses to achieve their ambitions (e.g. access to finance, innovation, leadership & management skills, supply chains, staff recruitment and development.) Establish 'How's Business' access point to business support	Similar models in all areas, with a Growth Hub or equivalent at the heart, and a range of support for new and existing businesses, many aspects of which are common Helping foster/support new starts; access to finance and innovation are noted in all 4 Other aspects frequently cited are supply chains (3), exports and investment (3) Aspects such as skills, premises and digital are

Aspect	Humber	Leeds City Region	Sheffield City Region	YNYER	Key points across SEPs
			[NB – separate SEP priorities are dedicated to trade and investment]		noted under business support in some SEPs and covered elsewhere in others Distinctive elements include leadership & management in YNYER and resource efficiency in LCR.
Innovation – priorities and approach	Innovation low key in 2014 SEP, within the strategic enabler on 'Supporting businesses to succeed' Four actions based on: -Research collaboration in priority sectors -Business-to-business collaboration on new products & services -New forms of innovation infrastructure and finance -Investment in new technologies SEP Review notes innovation was low key in the SEP, with a draft Innovation Strategy the basis for future Humber work. Current position of that uncertain, but a strong energy focus.	SEP innovation strand has four actions based on: High quality innovation products and services Role of universities SIAs - focus on MedTech and bio-science Work with Innovate UK - funding for local firms Also: Digital and tech runs across SEP 2014 Innovation strategy (but dated)	Innovation not explicit within 2015-25 SEP headlines or objectives but included in a priority on promoting growth in existing firms 'Innovation Boost' project to promote growth in existing firms Some high-profile innovation assets – AMRC, Nuclear AMRC, Medical AMRC – manufacture, health and energy to the fore, also food and computing	Innovation within SEP Priority on Profitable & Successful Businesses' but not prominent Innovation also noted in relation to Agri-food & Bioeconomy	Overall, innovation is less prominent in SEPs than in North West and North East – but most or all LEPs now recognise this and are looking to strengthen innovation Yorkshire Universities brings region's HE together, engages with LEPs and is an innovation asset. HE sector sees value of working at the Yorkshire level Opportunities for complementarity and stronger joint offer around sector innovation and assets – esp. on manufacture, health, energy and also food and digital

Aspect	Humber	Leeds City Region	Sheffield City Region	YNYER	Key points across SEPs
Transport and connectivity priorities (within and beyond LEP)	Objectives in the SEP were - connectivity to labour markets (e.g. access to employ sites, park & ride) -enhance strategic and key local linkages (e.g. highways schemes) - Remove transport barriers to growth (e.g. pinch points, improvements that support quality of place) - Integrate Humber into improvements in other regions (Hull to East Coast rail via Selby electrification, South Humber Ports to Doncaster gauge enhancements) -Resilience and efficient maintenance of the transport network -Broadband connectivity enhancements	Digital infrastructure Transport infrastructure and services: -31 strategic priorities in WY+ transport fund -single metro style public transport network with smart ticketing and better bus and rail -HS2 and NP Rail - sustainable, affordable travel to work services	External connectivity; including: - maximise benefits of high speed rail -devo of existing rail network as part of north -strategic road network -international connectivity (airport focus) Enabling Infrastructure - local sustainable transport	Improve east west connectivity, espy between towns and their neighbouring cities Maximise high speed rail investment through station improvements and better access Ease congestion in York and Harrogate. A1237 York Ring Road and A59 /A61 Harrogate Relief Road noted Enhance the resilience of the road network, particularly to flooding Widespread reliable telecomms and high-speed broadband	Transport and connectivity are prominent in all the SEPs, with each including a mixture of local interests and ones that cross LEP boundaries Improved broadband/digital in 3 of 4 SEPs (SCR is the exception – but this gap likely to be closed in the future) All include specific local schemes or mechanisms for them, for instance to connect people to jobs or provide access to sites 3 have an interest in High Speed Rail and its benefits Air is more of a local focus and only prominent in SCR. Ports is only prominent in the Humber. All note transport schemes that cross LEP areas or Northern schemes/working.

Aspect	Humber	Leeds City Region	Sheffield City Region	YNYER	Key points across SEPs
	SEP review notes priority ones that still need approval/resources as: - A63 from M62-Port of Hull -Hull-Selby electrification				
Other Infrastructure priorities – e.g. sites, housing, energy and environment	Energy Estuary and Clean Growth an overall focus Create the right conditions for business growth (supply of sites and premises, EZs, etc.) Housing quality, volume affordability, resilience etc flood protection and climate adaptation regenerate, transform and reposition neighbourhoods SEP review clear that future Humber LEP housing growth proposals will focus on Hull (to avoid duplication with YNYER and Greater Lincs elsewhere)	Integrated Spatial Priority Areas: -Urban Growth Centres -Housing Growth Areas -Employment Growth Areas Integrated flood prevention New energy generation Energy efficiency and empowering consumers Green infrastructure	Transformational city region schemes – inc. delivery of 14,000 homes and process based mechanisms Enabling Infrastructure – increasing housing delivery	Housing affordability and unlock the housing growth the area needs Fast-track employment sites with market demand for high value sector growth – sites including York Central Enable sustainable rural economies – rural and quality of life is important and linked to cities Flood risk raised as an issue, e.g. risks to infrastructure Energy – noted as an energy powerhouse - Drax and Eggborough, plus bio and one of the world's largest wind farms offshore	Strong degree of similarity - housing and employment/ business sites (e.g. EZs) are in all 4 SEPs, and quality places, energy, and flood protection are in in 3 (SCR is the exception for each) Most EZs and sites are local, but a good number are in dual LEP areas (e.g. York, Selby, Barnsley) Housing growth is important in all areas, and most area also interested in quality and affordability Green infrastructure and/or environmental management is included in 2 SEPs, with links made to flood protection and catchments approach – which crosses LEP areas.

Aspect	Humber	Leeds City Region	Sheffield City Region	YNYER	Key points across SEPs
Culture/ leisure/ tourism approach	'A great place to live and visit' one of 5 strategic enablers in SEP Clear on value of a distinctive cultural, leisure & visitor offer, linked to Hull UK City of Culture 2017	Not explicitly covered in priorities or actions Some reference in good growth narrative Box on 'Visitor Economy, Culture and Quality of Place' notes that some work on culture/tourism is best done at Yorkshire level New work on culture and LIS moving forward	Passing reference to city region attractive cultural offer and quality of life No Yorkshire level SEP reference, LIS position uncertain	Narrative and vision stress quality of place/ life and cultural offer, plus links to tourism – although not a priority in itself Yorkshire level not explicit in SEP, but since fed in as part of culture study in 2017 and in current SEP/LIS thinking	Culture, quality of place/life and tourism feature in most SEPs to some but not usually great extent. Strongest in the Humber, then in YNYER This element is becoming more prominent and work was completed on it in LCR late 2017, including YNYER input and links to the Yorkshire level Opportunity to present a stronger shared culture and quality of place offer at Yorkshire level Case for this made in terms of attracting skills, investment, tourism, etc.
Trade and inward investment	Growing international trade and exports and promoting investment from foreign and indigenous firms is included as an action within business support section. Trade and investment also connected to sectors and energy estuary	An action under 'Growing Businesses' and includes: Integrated City Region approach to trade and investment Targeted investment through unique propositions in financial and professional services, health, digital and manufacturing	Inward Investment focus: -Inward investor support - The inward investment product - Improving our reach Trade and exports focus:	Relatively little content on trade and investment support for export is covered in the detail of business support Export potential and internationalisation covered in relation to agri-food and Bioeconomy	Overall, a very similar approach in all areas - which promotes trade (esp. exports), international business and inward investment It is mainly the level of emphasis and subtleties of detail that vary rather than the overall direction.

Aspect	Humber	Leeds City Region	Sheffield City Region	YNYER	Key points across SEPs
		Improve export performance, including through simplified and joined up support Explore opportunity for a UKTI Taskforce for the Northern Powerhouse [Also, a separate Trade & Investment strategy]	-Developing export potential -Export challenge -Harnessing export growth -Proactively targeting high growth markets		Points to opportunities for a collaborative approach which may have greater scale and impact, be more efficient, and able to utilise Yorkshire as a better brand/identity in many markets (if with potential exceptions).
Skills and employment – challenges/priorities	Employer investment in skills at all levels (inc. Humber Skills Fund for employers to upskill and Apprenticeship Hub) Inclusive, LEP-wide approach with key stakeholders (inc. an Energy Campus and UTC) Influence provision to meet local economic need (inc. business-education links, employability charter, sector academies) Improve LMI and IAG to support informed choices.	Headline ambitions on: NEETs Higher level skills 5 Priority action areas: More and better apprenticeships Great education, connected to business Employability, access to jobs, realising potential Building workforce skills and attracting talent Addressing skills gaps and shortages	Theme on skills, labour and education includes: -Skills Bank (a single training fund) -Progress to work (employability programme) -Learn to work (focused on education-business links and curriculum) -Invest in excellent facilities (including FE facilities and centres for glass, rail and nuclear)	Employability of young people and attract/ keep talented young people in our area – inc. apprenticeships, graduate retention and business-education links/IAG Develop local workforce – focus on priority sectors. Develop strong communities and build skills, attitude and ambition to help people access jobs – linked to coastal/rural regen and enterprise skills Investment in skills infrastructure - bring college infrastructure to a high standard plus investments pipeline	Skills is a key issue everywhere and there is high consistency in the action areas proposed Core aspects in all LEP areas include apprenticeships, employability, business skills needs (e.g. upskilling workforce, sector needs and skills shortages), and education-business links and related IAG, and skills capital investments Other skills issues cited less often include enterprise skills (2 areas), raising employer demand for skills (1 area), attracting talent (2 areas), ambition (1 area)

Aspect	Humber	Leeds City Region	Sheffield City Region	YNYER	Key points across SEPs
	Support people in finding/sustaining employment, progressing, or setting up enterprises Develop excellent learning environments (specific skills capital projects)			Also: 'Stimulate market demand on the coast' – inc. supply chain opportunities from big investments and place-based regeneration	3 areas have a similar skills profile, with YNYER the outlier with above average skills. While it has some distinctive points (e.g. on ambition, talent and coastal employment) it still shares core issues with other areas. LCR has a distinctive 'more jobs, better jobs' strand
Other Themes (not covered under the headings above)	Energy Estuary and Clean Growth run through Environmental management Sustainable development	Good Growth focus – combining economic growth, inclusion and quality of place /environmental goals	Focus on a stronger, larger private sector as the golden thread Social inclusion is a cross cutting theme Low Carbon as a cross cutting theme	Rural/coastal concerns and opportunities Food/Energy covered under sectors and other infrastructure	Each SEP has a at least one additional theme that is usually quite distinctive, and often linked to the Vision In Humber this is the Energy Estuary, in LCR it is Good Growth, in SCR it is a bigger, stronger private sector, and in YNYER it is rural/coastal economy and quality of life. Social Inclusion and Environment/Low Carbon also feature in some SEPs. Distinctive themes are sometimes focused on place specific geography, but are not contradictory.

Aspect	Humber	Leeds City Region	Sheffield City Region	YNYER	Key points across SEPs
Connection to other LEPs, the north or Yorkshire level	No overall references to Yorkshire level SEP review makes strong connections to the North and LEPs in it on Energy – esp. offshore wind and decarbonisation Work with overlapping LEPs, and others to explore options for the continuation of YORHUB construction frameworks	Little reference to Yorkshire level More on NP fit/role, including sectors and transport Clear that will work with others in the North, esp. neighbouring LEPS/CAs to implement priorities where advantageous	No reference to Yorkshire level, but connection to neighbouring LEPs where relevant is noted – including to LCR on healthcare technologies Northern level also noted, esp. regarding transport	Majority of the LEP area is also in two LEP areas Clear links to Hull and West Yorkshire Pragmatic on boundaries – if business services can be made simpler by working across a larger geography, but remain tailored to needs – it will seek to do that. Notes 'significant scope working as Yorkshire or the North for working at internationally significant scale, e.g. to drive sector growth or maximising R&D strengths'	Most SEPs make little or no explicit connection to Yorkshire level, but all refer to North wide working at times and show openness to links with other LEPs on specific issues/ opportunities. This may not be surprising given the political context for LEPs and SEPs at the time they were written YNYER is notable in identifying significant scope for working as Yorkshire, such as on approaches to international activity, sector growth, and R&D.
SEP review/LIS position	Review based on 2014 SEP and 2016 review of it LEP is active on early stages of LIS work and has consulted on and published a 'Blueprint for LIS' outline document	Based on 2016-2036 SEP LIIS under development but currently just outline and high-level themes and priority challenges, etc.	Based on 2015-2025 SEP SEP review/LIS under development and early draft work on Local Inclusive Industrial Strategy prepared	Based on 2016 update of 2014 SEP, noted as a bit dated. No LIS under development yet Meeting with James Farrar/YNYER LEP will update on position	All the SEPs were written in the 2014-2016 period and are seen as somewhat dated given the changes in context since. It is important to view them alongside early messages from new LIS development.

Appendix B: Key sectors and employment levels in Yorkshire and Humber

Yorkshire and Humberside Local Authorities with 2-digit SIC employment levels over 2,500 persons, 2016

	East Riding of Yorkshire	Kingston upon Hull, City of	North East Lincolnshire	North Lincolnshire	Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby	York	Barnsley	Doncaster	Rotherham	Sheffield	Bradford	Calderdale	Kirklees	Leeds	Wakefield
01 : Crop and animal production, hunting and related service activities																					
02 : Forestry and logging																					
03 : Fishing and aquaculture																					
05 : Mining of coal and lignite																					
06 : Extraction of crude petroleum and natural gas																					
07 : Mining of metal ores																					
08 : Other mining and quarrying																					
09 : Mining support service activities																					
10 : Manufacture of food products	3,000	5,000	5,000	3,000					2,500				3,000				5,000		2,500	3,500	4,500
11 : Manufacture of beverages																					
12 : Manufacture of tobacco products																					

	East Riding of Yorkshire	Kingston upon Hull, City of	North East Lincolnshire	North Lincolnshire	Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby	York	Barnsley	Doncaster	Rotherham	Sheffield	Bradford	Calderdale	Kirklees	Leeds	Wakefield
13 : Manufacture of textiles																			3,500		
14 : Manufacture of wearing apparel																					
15 : Manufacture of leather and related products																					
16 : Manufacture of wood and of products of wood and cork, except furniture;manufacture of articles of straw and plaiting materials																					
17 : Manufacture of paper and paper products																					
18 : Printing and reproduction of recorded media																				3,000	
19 : Manufacture of coke and refined petroleum products																					
20 : Manufacture of chemicals and chemical products																					
21 : Manufacture of basic pharmaceutical products and																					

	East Riding of Yorkshire	Kingston upon Hull, City of	North East Lincolnshire	North Lincolnshire	Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby	York	Barnsley	Doncaster	Rotherham	Sheffield	Bradford	Calderdale	Kirklees	Leeds	Wakefield
pharmaceutical preparations																					
22 : Manufacture of rubber and plastic products																					
23 : Manufacture of other non-metallic mineral products																					
24 : Manufacture of basic metals				4,000												2,500					
25 : Manufacture of fabricated metal products, except machinery and equipment		3,000														6,000			2,500	3,500	
26 : Manufacture of computer, electronic and optical products																					
27 : Manufacture of electrical equipment																					
28 : Manufacture of machinery and equipment n.e.c.																	2,500		3,000	2,500	
29 : Manufacture of motor vehicles, trailers and semi-trailers																					

	East Riding of Yorkshire	Kingston upon Hull, City of	North East Lincolnshire	North Lincolnshire	Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby	York	Barnsley	Doncaster	Rotherham	Sheffield	Bradford	Calderdale	Kirklees	Leeds	Wakefield
30 : Manufacture of other transport equipment																					
31 : Manufacture of furniture																			2,500		
32 : Other manufacturing																					
33 : Repair and installation of machinery and equipment																					
35 : Electricity, gas, steam and air conditioning supply																				3,000	
36 : Water collection, treatment and supply																					
37 : Sewerage																					
38 : Waste collection, treatment and disposal activities; materials recovery																				3,000	
39 : Remediation activities and other waste management services. This division includes the provision of remediation services, i.e. the clean-up of																					

	East Riding of Yorkshire	Kingston upon Hull, City of	North East Lincolnshire	North Lincolnshire	Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby	York	Barnsley	Doncaster	Rotherham	Sheffield	Bradford	Calderdale	Kirklees	Leeds	Wakefield
contaminated buildings and sites, soil, surface or ground water.																					
41 : Construction of buildings																2,500			3,000	7,000	
42 : Civil engineering																				3,000	
43 : Specialised construction activities	3,000	3,500		3,000									3,000	3,500	3,500	6,000	4,000	2,500	4,000	10,000	3,500
45 : Wholesale and retail trade and repair of motor vehicles and motorcycles	3,500	2,500		2,500										3,500		4,500	4,500		5,000	7,000	4,000
46 : Wholesale trade, except of motor vehicles and motorcycles	5,000	6,000	3,000	3,000		2,500	4,500					3,000	3,000	5,000	4,000	12,000	10,000	5,000	11,000	18,000	9,000
47 : Retail trade, except of motor vehicles and motorcycles	11,000	12,000	7,000	6,000	2,500	3,500	8,000			5,000		13,000	8,000	12,000	9,000	25,000	19,000	7,000	17,000	32,000	13,000
49 : Land transport and transport via pipelines	3,000	2,500		3,000										4,000		4,000	3,000		3,500	8,000	3,000
50 : Water transport																					

	East Riding of Yorkshire	Kingston upon Hull, City of	North East Lincolnshire	North Lincolnshire	Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby	York	Barnsley	Doncaster	Rotherham	Sheffield	Bradford	Calderdale	Kirklees	Leeds	Wakefield
51 : Air transport																					
52 : Warehousing and support activities for transportation	4,500		4,000	3,000									3,000	5,000			4,000			6,000	12,000
53 : Postal and courier activities																3,000				4,000	
55 : Accommodation	3,000									3,500		2,500								4,000	
56 : Food and beverage service activities	7,000	5,000	3,000	3,000			6,000			4,000		8,000	3,500	6,000	5,000	13,000	8,000	4,500	8,000	20,000	7,000
58 : Publishing activities																	2,500				
59 : Motion picture, video and television programme production, sound recording and music publishing activities																					
60 : Programming and broadcasting activities																					
61 : Telecommunications																3,000				4,000	
62 : Computer programming, consultancy and related activities																4,000				12,000	

	East Riding of Yorkshire	Kingston upon Hull, City of	North East Lincolnshire	North Lincolnshire	Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby	York	Barnsley	Doncaster	Rotherham	Sheffield	Bradford	Calderdale	Kirklees	Leeds	Wakefield
63 : Information service activities																					
64 : Financial service activities, except insurance and pension funding																6,000	6,000	5,000		12,000	
65 : Insurance, reinsurance and pension funding, except compulsory social security																					
66 : Activities auxiliary to financial services and insurance activities												3,500				3,000				10,000	
68 : Real estate activities																3,000	3,000			6,000	2,500
69 : Legal and accounting activities																5,000	2,500			14,000	
70 : Activities of head offices; management consultancy activities							2,500									6,000	4,500			14,000	
71 : Architectural and engineering activities; technical testing and analysis																4,000			2,500	9,000	2,500
72 : Scientific research and development																					

	East Riding of Yorkshire	Kingston upon Hull, City of	North East Lincolnshire	North Lincolnshire	Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby	York	Barnsley	Doncaster	Rotherham	Sheffield	Bradford	Calderdale	Kirklees	Leeds	Wakefield
73 : Advertising and market research																					
74 : Other professional, scientific and technical activities																				4,000	
75 : Veterinary activities																					
77 : Rental and leasing activities																				2,500	
78 : Employment activities	2,500	7,000	3,000		3,000									4,000		8,000	6,000	14,000		19,000	7,000
79 : Travel agency, tour operator and other reservation service and related activities																					
80 : Security and investigation activities																				8,000	
81 : Services to buildings and landscape activities																3,500			3,000	10,000	
82 : Office administrative, office support and other business support activities	2,500	3,000													8,000	7,000	2,500			14,000	

	East Riding of Yorkshire	Kingston upon Hull, City of	North East Lincolnshire	North Lincolnshire	Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby	York	Barnsley	Doncaster	Rotherham	Sheffield	Bradford	Calderdale	Kirklees	Leeds	Wakefield
84 : Public administration and defence; compulsory social security	9,000	5,000		2,500		3,500						5,000		7,000	7,000	13,000	8,000	3,000	5,000	14,000	9,000
85 : Education	10,000	11,000	7,000	6,000	3,000	3,500	7,000			4,000	3,500	11,000	8,000	12,000	9,000	33,000	23,000	8,000	18,000	40,000	12,000
86 : Human health activities	7,000	10,000	6,000	4,500			5,000			4,500		10,000	8,000	13,000	11,000	28,000	17,000	5,000	11,000	31,000	12,000
87 : Residential care activities	5,000	4,000		3,000			6,000					2,500	3,000	4,000	3,500	5,000	6,000	2,500	5,000	9,000	4,500
88 : Social work activities without accommodation	4,500	4,500	3,500				3,000					3,500	4,000	4,000	2,500	8,000	8,000	3,000	4,500	16,000	3,500
90 : Creative, arts and entertainment activities																					
91 : Libraries, archives, museums and other cultural activities																					
92 : Gambling and betting activities																				3,500	
93 : Sports activities and amusement and recreation activities																4,000	2,500			6,000	
94 : Activities of membership organisations																				4,000	

	East Riding of Yorkshire	Kingston upon Hull, City of	North East Lincolnshire	North Lincolnshire	Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby	York	Barnsley	Doncaster	Rotherham	Sheffield	Bradford	Calderdale	Kirklees	Leeds	Wakefield
95 : Repair of computers and personal and household goods																					
96 : Other personal service activities																				3,500	
97 : Activities of households as employers of domestic personnel																					
98 : Undifferentiated goods- and services-producing activities of private households for own use																					
99 : Activities of extraterritorial organisations and bodies																					

Detailed employment LQ correlations for Yorkshire & Humberside (2016)

One Yorkshire signatories in **bold**	**East Riding of Yorkshire**	**Kingston upon Hull**	North East Lincolnshire	North Lincolnshire	**Craven**	**Hambleton**	**Harrogate**	**Richmondshire**	**Ryedale**	**Scarborough**	**Selby**	**York**	**Barnsley**	**Doncaster**	Rotherham	Sheffield	**Bradford**	**Calderdale**	**Kirklees**	**Leeds**	**Wakefield**
East Riding of Yorkshire		**0.065**	0.564	-0.040	**0.225**	**-0.017**	**0.342**	**-0.032**	**0.183**	**0.897**	**0.053**	**-0.172**	**0.104**	**0.024**	-0.011	-0.102	**-0.019**	**0.035**	**0.008**	**-0.173**	**0.024**
Kingston upon Hull, City of			0.199	-0.078	**0.681**	**0.129**	**-0.128**	**-0.113**	**-0.022**	**0.028**	**-0.076**	**-0.013**	**0.164**	**0.065**	0.099	0.007	**0.000**	**0.041**	**0.177**	**0.027**	**0.040**
North East Lincolnshire				0.177	0.072	0.257	0.201	-0.044	0.125	0.510	0.056	0.023	0.220	0.180	0.090	-0.002	0.152	0.178	0.046	0.004	0.185
North Lincolnshire					-0.073	-0.085	-0.075	-0.103	0.103	-0.051	-0.050	-0.172	0.024	0.058	0.249	0.081	-0.057	0.354	0.012	0.136	0.058
Craven						**0.117**	**0.184**	**0.004**	**0.236**	**0.299**	**-0.027**	**-0.045**	**-0.067**	**-0.080**	-0.096	-0.076	**0.012**	**0.116**	**0.235**	**-0.093**	**-0.044**
Hambleton							**0.456**	**0.346**	**0.446**	**0.083**	**0.403**	**0.289**	**0.241**	**0.230**	0.103	0.073	**0.135**	**0.079**	**0.051**	**-0.169**	**0.195**
Harrogate								**0.338**	**0.559**	**0.475**	**0.375**	**0.295**	**0.011**	**0.006**	0.021	0.050	**0.095**	**0.046**	**-0.045**	**0.026**	**0.139**
Richmondshire									**0.404**	**0.064**	**0.117**	**0.207**	**0.036**	**0.111**	-0.019	-0.018	**-0.014**	**-0.053**	**-0.042**	**-0.115**	**0.015**
Ryedale										**0.356**	**0.147**	**0.143**	**0.044**	**0.079**	0.296	0.298	**0.056**	**0.059**	**-0.043**	**-0.121**	**-0.063**
Scarborough											**0.058**	**-0.058**	**-0.037**	**-0.028**	-0.018	-0.041	**0.003**	**0.033**	**-0.058**	**-0.095**	**-0.014**
Selby												**-0.124**	**0.105**	**0.189**	0.053	-0.106	**0.141**	**0.075**	**0.022**	**-0.078**	**0.367**
York													**0.033**	**0.124**	-0.008	0.260	**0.011**	**-0.083**	**-0.115**	**0.141**	**0.000**
Barnsley														**0.618**	0.451	0.114	**0.298**	**0.364**	**0.248**	**-0.021**	**0.409**
Doncaster															0.536	0.322	**0.092**	**0.242**	**0.143**	**0.098**	**0.390**
Rotherham																0.611	0.164	0.250	0.134	0.210	0.242
Sheffield																	0.035	0.132	0.039	0.220	-0.002

One Yorkshire signatories in **bold**	**East Riding of Yorkshire**	**Kingston upon Hull**	North East Lincolnshire	North Lincolnshire	**Craven**	**Hambleton**	**Harrogate**	**Richmondshire**	**Ryedale**	**Scarborough**	**Selby**	**York**	**Barnsley**	**Doncaster**	Rotherham	Sheffield	**Bradford**	**Calderdale**	**Kirklees**	**Leeds**	**Wakefield**
Bradford																		**0.248**	**0.369**	**0.083**	**0.159**
Calderdale																			**0.300**	**0.187**	**0.250**
Kirklees																				**0.083**	**0.215**
Leeds																					**0.098**
Wakefield																					

Source: Steer Economic Development calculations using ONS data

Appendix C: Areas for further study

Throughout this report, we have highlighted areas for further study.

On Sectors we highlighted the need for further research into:

- Supply-chain linkages – both within the region and with national and global supply chains;
- The role of strategic assets and/or sectors serving the whole of Yorkshire from one or two locations; and
- Sector/industry gaps, where leadership at the level of Yorkshire might add value to efforts to re-balance the economy in terms of sectors as well as economic geography.

On R&D and Innovation we highlighted the need for further research to:

- Unpack the drivers of under-investment in R&D in Yorkshire and Humber (e.g., industrial structure, nature of the research base, relative to the research priorities of funders and investors, and access to risk capital) to inform the development of interventions and to determine their form and scale.

On International Trade and Investment, we highlighted the need for further research:

- To understand how arrangements to promote international trade and investment in Yorkshire could improve upon – or extract more value from – current national and pan-Northern arrangements;
- On the potential to use the Yorkshire brand as a tool to engage business in exporting activities; and
- The drivers of and barriers to businesses engaging in exports and/or international supply chains.

On skills we highlighted the need for further research into:

- Future skill requirements which are significant and common across a range of key sectors/industries in the geography;
- How best to improve awareness of and access to significant specialist training assets, so that it is easier for employers and staff to find and access provision outside their area;
- Barriers to retraining, to test whether pan-Yorkshire interventions to tackle market failures (fear of skilled staff being poached by rivals, opportunity costs of releasing staff for training etc.) could add value to existing arrangements; and
- Identify where pan-Yorkshire leadership and coordination can build on the Northern Powerhouse research, *Educating the North*.

On business base, starts, deaths, survivals, and scale-ups we highlighted a need to:

- Map the main the characteristics of the region's business population (e.g. firm size, businesses' growth (by turnover and employment), legal structure/s, the patterns of domestic and overseas ownership, firms' involvement in international trade/supply/value chains, and the scale of business investment in capital); to establish a more detailed understanding of the drivers of and barriers to business growth and the extent to which these are shared across Yorkshire; and
- Understand the scale at which business support needs to be provided, e.g., start-up advice at the local level and access to equity finance at a pan-Yorkshire or pan-Northern level.
- Use specially provided ONS data on start-ups and survival rates by place and industry to measure the relative significance of place-specific factors that increase or decrease

survival rates (i.e. once survival rates are adjusted for national and industry-specific effects).

On transport we highlighted the need for further research to:

- Support intra-regional connectivity, in particular:
  - Identification/specification of a road network to facilitate intra-Yorkshire travel between local authority areas; and
  - Simplified/cheaper ticketing for cross-LTA rail journeys; and
- Understand the importance of economic and efficient international connectivity as a driver of economic growth and what this means for policy makers in the region.

In addition to the above, further research is required into policy domains which fell outside those covered as part of our test of economic coherence, but which are relevant to the wider devolution debate, in particular, the roles of primary and secondary education, housing policy and markets, business rates, planning policy, and the interconnected areas of flood management, green infrastructure and natural capital. Additionally, it will be important to understand how ambitions and actions to raise GVA and productivity enabled through devolution can be delivered in a sustainable and inclusive way that reaches all communities, including the most disadvantaged, and contributes to health and environmental goals such as air quality, local quality of place and carbon reduction.

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