Lancashire Local Industrial Strategy

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Strategy
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Lancashire Local Industrial Strategy

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NB Text to be added once content finalised

1   Introduction

Introduction to Lancashire

1.1   Lancashire is a diverse county with a mix of urban, coastal, and rural communities, a population of 1.5 million people, and a working population of 1 million. It is home to 52,000 businesses, which generate around £31 billion Gross Value Added (GVA) each year. It has a relatively self-contained labour market: just 12% of its workforce commutes in and 14% of its residents commute out of the area. Economic activity is concentrated in six centres: Preston, Blackburn with Darwen, Blackpool, Lancaster, South Ribble, and Fylde.

1.2   Lancashire is home to the largest concentration of Aerospace activity in Europe, which generates turnover of around £7 billion annually; activity in the sector is focused on Blackburn with Darwen, Burnley, Fylde, Pendle, South Ribble and the Ribble Valley. It also has significant Advanced Manufacturing and Engineering (including the automotive sector) activity focused on Samlesbury and Warton (in South Ribble), Fleetwood (in Wyre), Burnley, Lancaster, and Preston. Lancashire is also a vital part of the nationally recognised North West Nuclear Arc and North West Clean Growth Arc assets with world-class capabilities in nuclear, hydrogen, wind and marine energy, and land management.

1.3   Together these sectoral capabilities provide a unique combination of skills, know-how, research and business assets with which to develop new processes, products and services to make the most of digitalisation (captured in the term 'Industry 4.0') and new materials for a range of markets and sectors, including energy generation, storage and distribution, mobility (innovation in aerospace and automotive), and medical technology (including adoption and diffusion).

1.4   The county is also famous for its tourism offer, which includes, Blackpool and Morecambe, as well as cultural and rural visitor offers, which are part of a significant and diverse rural economy, based on a strong and highly productive agricultural sector.

Our ambitions

Our ambition is for Lancashire's diverse economy and distinctive places to be prosperous, innovative, resilient, inclusive, environmentally sustainable, and connected.

1.5   Table 1-1 sets out our ambitions and the targets by which we will measure our progress to 2030. These ambitions and targets reflect our strengths, in terms of our manufacturing base, our weaknesses, in terms of our under-utilised resources and income inequality, and the economic, technological, social, and environmental opportunities and threats which we anticipate will arise in the next 10 years. Our key challenges are to upskill and reskill our workforce, and to support the generation of ideas and businesses to drive future growth. This

will require a new and ambitious Lancashire-wide deal with government for sustainable, inclusive growth.

Table 1-1: Lancashire's ambitions and targets for 2040

Ambition	Target
• **Prosperous** by making the most of our untapped potential to generate new high-value jobs in new sectors that serve new markets through enhanced support for start-ups, scale-ups, and the internationalisation of business.	• Narrow the 18% gap between Lancashire's GVA per worker and the UK's at an average rate of 0.9% pa to close it by 2040 • Increase business births by two percentage points to meet the UK average of 0.1% pa to reach 14% by 2040.
• **Innovative** by exploiting the synergies between our key sectoral capabilities and supporting the generation and adoption of new processes, materials, and digitalisation across our supply chains.	• Halve the 50% gap between Lancashire and the UK in R&D investment per head by 2040 to achieve £800 pc in real terms at 2011 prices. • Increase Lancashire's share of UK patent applications from 1.7% to match its 2.2% share of the UK population by 2040 – achieving an average growth of 0.025% pa.
• **Resilient** by building an agile, healthy workforce that can anticipate and respond to market and technological change.	• Increase the percentage of the working age population qualified to NVQ level 4+ by an average of 0.27% pa to move from 32.6% to the UK average of 38% by 2040. • Increase the share of professional, scientific and technical jobs in Lancashire's workforce by an average of 0.25% pa to move from 3% to match the UK average of 8% by 2040. • Assist workers to make the transition to high-value sectors that are forecast to generate increases in employment, including Information and Communication, Professional Services, and Construction.
• **Inclusive** by promoting good jobs, higher productivity, and greater earning power in all our diverse communities, recognising their unique contribution to Lancashire's competitiveness.	• Narrow the gap of 33% GVA per head between Lancashire and the UK average by equivalent of 0.825% pa to halve the gap by 2040 • Close the 18% earnings gap between Lancashire and the UK by the equivalent of 0.45% pa to halve the gap by 2040
• **Environmentally sustainable** by ensuring our investments help the UK to achieve net-zero carbon before 2050.	• A 57% reduction in carbon emissions relative to 1990 levels by 2032, as set out in the Lancashire Energy Strategy (2018) • Draw on lessons from the 'Preston Model' to ensure infrastructure investments in Lancashire have a net-positive environmental impact • Support local authorities to achieve their net zero carbon targets, e.g. South Ribble's ambition to hit net-zero by 2030

• **Connected** by enhancing:
  – Digital connectivity to enable digitalisation of industry and public services; and
	• Concentrate infrastructure investment:
	  – To maximise productivity in key employment sites, including Samlesbury Aerospace Enterprise Zone, Hillhouse

Ambition	Target
– Transport infrastructure to improve movement within and between Lancashire and the rest of the world, in particular its immediate neighbours.	Technology Enterprise Zone (focused on Energy, Chemicals and Polymers), Blackpool Airport Energy Enterprise Zone and Warton Aviation Enterprise Zone, plus the East Lancashire Advanced Manufacturing Corridor, Cuerden site (South Ribble) and the Lancaster Health Innovation Park; and urban centres: Blackburn, Blackpool, Burnley, Lancaster, and Preston; and – To reduce congestion/pollution and improve functioning of the labour market by improving mobility to enhance commuting.

The role of this strategy

1.6 This Strategy forms part of a suite of strategies and plans which were in development at the time of writing or had already been developed by partners in Lancashire (Figure 1-1). In addition to local planning, housing, transport, and public health strategies, the strategies and plans which address local economic development issues include the:

- **Greater Lancashire Plan** – will provide a vision and plan for all of Lancashire across a range of policy area, including spatial planning, it was in development at the time that this LIS was produced. The GLP will include an Independent Economic Review, which will complement the evidence based produced for this LIS by providing a more fine-grained analysis of functional economic markets/geographies and their implications for planning and infrastructure investment. [NB: This is holding text; Richard what do you want to say here?]

- **Lancashire Strategic Economic Plan** – highlights the need to realise the value of the 'arc of prosperity' that sweeps East-West across Lancashire, by delivering 50,000 new jobs, 40,000 new houses, and £3 billion of additional economic activity, above the local trend rate. Its priorities are: Sector Development & Growth, Innovation Excellence, Skills for Growth, Business Growth & Enterprise, Releasing Local Growth Potential, and Renewal of Blackpool.

- **ESIF Growth Programme** – prioritises investment in: (1) innovation and research and development; (2) support for small and medium-sized businesses; (3) low carbon; (4) skills; and (5) employment and social inclusion.

- **Lancashire Innovation Plan** – aims to: (1) stay ahead where we are strong; (2) develop new routeways to excellence via synergies and cross-overs in key sectors; (3) broaden the innovation base through capital investment and effective networking and collaboration; (4) develop enabling infrastructure, including better management of Intellectual Property and an innovation fund to incentivise innovation; and letting the world know about our innovation offer to generate inward investment and international collaboration.

- **Lancashire Energy Strategy** – has six key priorities: (1) build the low carbon supply chain in areas of existing strength; (2) support businesses to improve energy productivity; (3) accelerate the shift to low carbon transport; (4) develop heat networks; (5) Improve domestic energy efficiency; and (6) decarbonisation.

- **Lancashire Skills & Employment Strategic Lancashire Framework** – has four themes: (1) future workforce developing the talent pipeline via joint working between schools and

colleges and employers; (2) skilled and productive workforce increasing skill levels by supporting vocational education, and upskilling and reskilling the existing workforce, via apprenticeships, graduate retention, upskilling, and improving leadership and management development; (3) inclusive workforce by reducing the number of those not in employment, education or training, raising digital skills, and providing clear progressions routes; and (4) an informed approach to skills and employment by using data analysis and effective engagement with employers and training providers.

- **Lancashire Technical Education Vision** – by: (1) growing the productivity of our workers and businesses; (2) anticipating and responding to technological and market change; (3) supporting individuals through their working lives, starting at the primary school level; (4) collaboration between employers and providers to design and deliver technical training; and (5) effective coordination of training provision.

- **Lancashire Visitor Economy Strategy** – to: (1) be recognised as one of the top five English counties for short breaks and an active family holidays; (2) be a culinary 'must visit destination' because of the authenticity and quality of our locally sourced produce; (3) have cultural, countryside, coastal, and heritage offers that attracts repeat visits; (4) gain wider recognition of Lancashire's stunning 137-mile coastline; (5) be a preferred location for corporate events and conferences; and (6) be a destination that offers outstanding customer service and a best-practice in offer for accessible holidays.

- **Lancashire Cultural Strategy** has five themes: (1) communities and cultures; (2) pride in cultures; (3) celebration of cultures; (4) investing in cultures; (5) Organising for Cultures.

Plus:

- Science and Innovation Audits:
  - **High Value Manufacturing Science and Innovation** – with the vision to: (1) build on existing outstanding translational research assets ; (2) join up the skills landscape across the region from apprenticeships to Higher Education; (3) develop excellent leadership and management, and support new enterprise and entrepreneurship; support the internationalisation of the business base (as our innovation assets have strong global links and are already being replicated in Korea, the US and China); and (4) expand the research base in areas that will be important for Industry 4.0 and the future of manufacturing (e.g. robotics, data analytics, new materials and processes for light-weighting, resource efficiency, leadership and management).
  - **North West Coastal Arc Clean Growth** – with five key opportunities: (1) Communicating the economic importance of Clean and Sustainable Growth; (2) Improving connectivity between the region's assets for Clean and Sustainable Growth; (3) Enhanced support for connecting business to global markets; (4) Training regional talent to support and lead Clean and Sustainable Growth; and (5) Freedom and flexibility in supporting industrial R&D for Clean and Sustainable Growth, particularly in SMEs.
  - **North West Nuclear Arc** – with recommendations for strengthening: (1) Physical assets (Infrastructure) to facilitate greater collaboration; (2) People and skills to develop a coherent skills pathway for the nuclear sector and increase the diversity of the nuclear sector's workforce; (3) Knowledge base via increased R&D investment to achieve a target of investing 2.4% of GDP in R&D, and promote innovation in the supply chain, especially among SMEs (both those currently in the nuclear supply chain and those outside it); and (4) Business environment with support for long-term

investment, development of the global market for Small Modular Reactors (SMRs) and Advanced Modular reactors (AMRs), and internationalisation of the offer.

Figure 1-1: Hierarchy of Lancashire Strategies
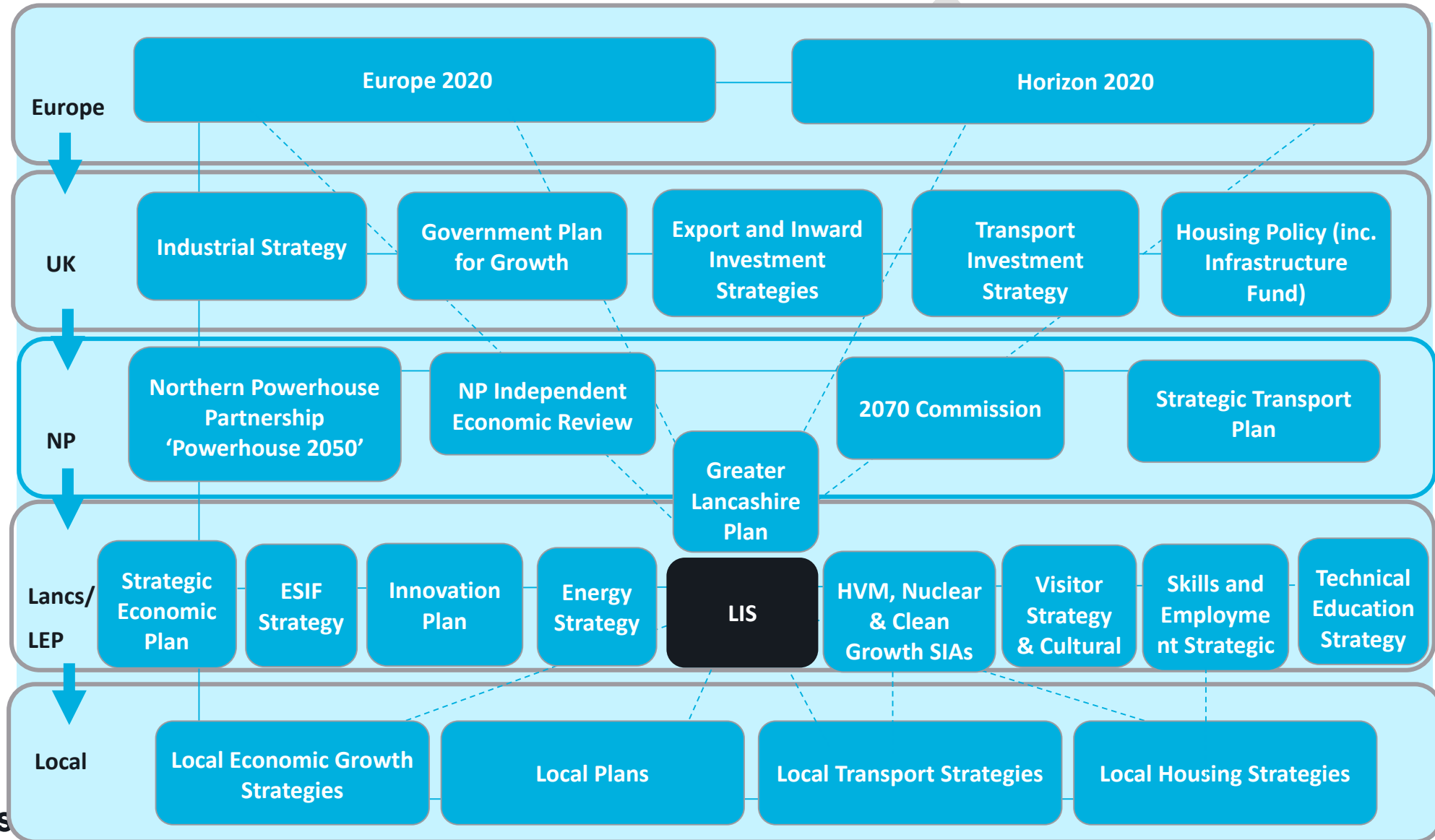
This Strategy adds value to our existing suite of strategies and plans by focusing on our local industrial priorities and the areas where we can make the most significant contribution to the UK's industrial priorities, as set out in the UK Industrial Strategy (Table 1-2 and Table 1-3) and in the Sector Deals struck between industry and government (

1.7   Table 1-4) and supported by the Industrial Strategy Challenge Fund.[1]

Table 1-2: Lancashire's support to drive productivity via the Foundations of Growth

Foundations of growth	Lancashire's support for delivery of the UKIS
Ideas: the world's most innovative economy	• **Supply chain excellence programme:** to identify and exploit synergies between our key sectors and their supply chains. • **Agri-Tech:** an Agri-Tech Demonstrator focused on development and adoption of new technologies and automation, building on Made Smarter programme in the manufacturing sector. • **Clean 4.0: c**reate a test bed for Clean Growth to demonstrate optimisation of innovation at scale. • **Clean Energy Technology Park:** develop and test new fuel solutions for the small and advanced modular nuclear reactor market. • **Drone Zone:** a Full-scale Technology Demonstrator and Economic Cluster. • **Composites Tooling and Training Centre**: for ultra-lightweight materials. • NB: What else should be added here?
People: good jobs and greater earning power for all	• **Mental Health: a** LEP-led Independent Review into Mental Health in Lancashire to address its impact on productivity as well as individual and community wellbeing. • **Careers Hub: e**xtension of the successful careers hub support to the whole of Lancashire. • **T Level Test Bed:** build future workforce by testing T-levels 4 & 5. • **Digital Pathways and Levelling Up:** develop real-time digital career pathways working with industry leaders. • **Skills Escalator ESF transition:** replace the current 'silo' approach to employment and skills by developing a pathway approach. • NB: What else should be added here?
Infrastructure: a major upgrade to the UK's infrastructure	• **Develop the 5G mobile network and extend full-fibre broadband:** to support investment on key employment sites. • **Preparing for HS2 and Northern Powerhouse Rail:** including the re-development of Preston station to support place-based initiatives. • **M65 capacity:** to accommodate economic growth and continuation across the Pennines into North Yorkshire and the Leeds City Region • Reinstatement of the rail line between Colne and Skipton to improve trans-Pennine links • **M66/A56 link between the M62/M60 and the M65** • **Rail service enhancement** to two trains per hour between Clitheroe and Blackburn/Manchester, plus enhancements to rail services to Blackburn, Accrington, Burnley and Manchester via Todmorden • **New Rossendale to Manchester links** • **Intersection of the M61 and M60** to improve links between Preston and Manchester • NB: What else should be added here?
Business Environment: the best place to start and grow a business	• **Asian Heritage Business Community Cluster:** understand and respond to the dynamics, scale and export potential of economic activities in our Asian Heritage Business Cluster via an extension of our Social Integration Pilot (with MHCLG). • **Development of Growth Hub 2.0:** with partner LEPs.

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[1] https://www.ukri.org/innovation/industrial-strategy-challenge-fund/

	• **Internationalisation of business support:** in partnership with NP11. • **Leverage Made Smarter programme:** to ensure SMEs in Lancashire's manufacturing sector adopt digitalisation, in order to stay competitive and operate in key supply chains. • NB: What else should be added here?
Places: prosperous communities across the UK	• **Preston Central Business District:** Using agglomeration to secure a Central Business District realising Grade A Office space. • **Renewal of Blackpool:** addressing Blackpool's unique characteristics to create economic opportunities for its local communities. • NB: What else should be added here?

Source: **UK Industrial Strategy** and local partners' inputs

Table 1-3: Lancashire's support to tackle the Four Grand Challenges

Grand Challenge	Lancashire's support for Grand Challenges
Artificial Intelligence and Data	• **A Secure Industrial Digitalisation programme**: building on the Made Smarter programme. • NB: What else should be added here?
Ageing Society	• **Leveraging ageing-related capabilities:** at the Lancaster University's Health Innovation Campus and UCLAN's Medical Device Innovation & Commercialisation Accelerator programme (MedIComm) • NB: What else should be added here?
Clean Growth	• **Clean 4.0:** create a test bed for Clean Growth to demonstrate optimisation of innovation at scale. • **Clean Energy Technology Park:** Fuel technology development opportunities linked to small and advanced modular nuclear reactors. • NB: What else should be added here?
Future of Mobility	• **Drone Zone:** A Full-scale Technology Demonstrator and Economic Cluster. • NB: What else should be added here?

Source: **UK Industrial Strategy** and local partners' inputs

1.8   Table 1-4 identifies the Sector Deals that had been struck at the time of writing in the left-hand column and, in the right-hand column, it indicates where and how Lancashire can support the delivery of these Deals. The table will inevitably be subject to change over time, but it reflects the longstanding diversity of our economy, the scale of our ambition, and the vital role that we will play in driving the competitiveness of UK industry and its in international markets.

Table 1-4: Lancashire's support for Sector Deals

Sector Deal	Lancashire's support for Sector Deals
Aerospace	• Working with the North West Aerospace Alliance, which represents around 25% of UK aerospace industry, to promote, develop, and shape the aerospace supply chain in Lancashire. • Building on the Sector Deal's Supply-chain competitiveness and growth programme through training schemes and by streamlining business processes. • Maximising the benefits of the Advanced Manufacturing Centre and then building on these with a Composites Tooling and Training Centre for ultra-lightweight materials and a 'Drone Zone' to provide a test-bed for drone technology. • Maximising the opportunities for investment and growth at the Samlesbury Aerospace and Warton Aviation Enterprise Zone Enterprise Zones. • NB: What else should be added here?
Artificial Intelligence	• Maximising the contribution of Lancaster University's Cybersecurity Research Centre, working in partnership with NHS Trusts and Police Forces, Local Authorities, HM Government and governments around the world. • Developing a Secure Industrial Digitalisation programme building on the Made Smarter programme. • Work with Government to identify how Lancashire can deploy resources to develop the 5G mobile network and extend full-fibre broadband to key employment sites and residential areas, as a priority. • Work with Government and the LEPs which are piloting the National Retraining Scheme to develop interventions and investments in digital skills. • Work with the National Centre for Computing Education to promote teacher training to raise standards in STEM subjects and computing. • NB: What else should be added here?
Automotive	• Working with the Northern Automotive Alliance to gather and disseminate market intelligence, improve project management, delivering effective marketing and communication in new markets. • Building on the Sector Deal's supply-chain competitiveness and productivity improvement programme. • Accessing and utilising the Transforming Cities Fund to promote future mobility in Lancashire – particularly in relation to zero-carbon emissions. • Accessing and utilising the Charging Infrastructure Investment Fund - £400m for electric charging points infrastructure, and R&D. • NB: What else should be added here?
Construction	• Building on the 'Preston Model' to maximise the local economic, social and environmental impact of public sector procurement in construction. • Lancashire colleges and working with industry to develop innovative training models to support delivery of new homes and critical infrastructure, using new construction techniques and skills. • NB: What else should be added here?
Creative Industries	• Developing our 'County of Culture' offer. • Working with Government to maximise the role of cultural and creative industries as drivers of local growth and attractors of skills and talent, e.g. developing place-based strategies, such as Making Blackburn to enhance the local creative ecosystem based on Blackburn's manufacturing

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Sector Deal	Lancashire's support for Sector Deals
	heritage, to build on the foundations in the proposed Cultural Investment Fund. • NB: What else should be added here?
Life Sciences	• Building on Life Sciences capabilities at the Lancaster University's Health Innovation Campus and UCLan's proposed Medical Device Innovation & Commercialisation Accelerator programme (MedIComm), which builds on UCLan's nineteenth century heritage as the Institution for the Diffusions of Useful Knowledge. • Working with the Digital Innovation Hubs particularly on Real-world evidence and Clinical Trials. • NB: What else should be added here?
Nuclear	• Development of the North West Nuclear Arc with partners in Cumbria, Liverpool City Region, Manchester City Region, and North Wales. • Development of a Clean Energy Technology Park to support the development of advanced modular nuclear reactors at the Springfield site, near Preston (worth £10m-£30m) as part of R&D for advanced modular reactors. • Participation in the Sector Deal's National supply chain and productivity improvement programme. • NB: What else should be added here?
Offshore Wind	• Development of the North West Clean Growth Arc partnership to build a Clean Growth cluster. • Drawing on the lessons to be learned from the scale-up and delivery of offshore wind to inform development of the potential markets in hydrogen and tidal energy, to ensure local supply chain development embeds the value of the market in the local, regional and northern economy. • NB: What else should be added here?
Rail	• Preparing for HS2 and Northern Powerhouse Rail, including re-development of Preston station. • Tailored Rail Apprenticeships delivered by Myerscough College. • NB: What else should be added here?
Tourism	• Building a high-value tourism offer through eco-tourism; with the Eden North Project in Morecambe providing a world-class facility. • Developing a Tourism Zone in partnership with government. • Promoting in-work training and vocational training to drive value-added in our tourism offer, via a partnership between employers and training providers in Lancashire. • NB: What else should be added here?

Source: **https://www.gov.uk/government/publications/industrial-strategy-sector-deals/introduction-to-sector-deals** and partners' input as part of consultations

Structure of this document

1.9   The document contains the following sections:

- **Economic context** – sets out the evidence and analysis on which this Local Industrial Strategy is based. It highlights key trends, opportunities and challenges and identifies five key themes which local partners need to address, if Lancashire is to stay ahead where it is currently strong, and develop new routes to excellence based on its potential: (1) Start-up, Scale-up and Internationalisation of Business; (2) Supply-chain Fusion; (3) Energy and Clean Growth opportunities; (4) An Agile, Healthy Workforce; and (5) Distinctive Places.
- **Business Environment** – outlines Lancashire sectoral and business mix, its strengths, weaknesses, opportunities and threats. It also outlines our ambitions for business and provides examples of current activity and our proposals for the future.
- **Ideas** – sets out our key assets and capabilities as well as opportunities and challenges in relation to R&D and innovation. It draws on the work of our Higher Education Institutions (HEIs) and recent Science and Innovation Audits in High-Value Manufacturing, Nuclear Energy and Clean Growth and provides examples of current work and outlines our proposals for the future.
- **People** – describes our workforce's strengths and weakness, with a particular focus on occupational and sectoral change, workforce ageing, and mental wellbeing. It showcases the nationally significant work that we have done in relation to careers support and vocational training; it then sets out the proposals which we have developed to ensure that we rise to the challenges that we face and take the opportunities that the future will offer.
- **Place** – introduces the diversity of Lancashire places, along with the strengths and challenges that are associated with such diversity. We provide examples of significant projects to make our places more attractive to residents, visitors and potential investors and future workers. These projects are different stages of development and involve multiple partners and a range of potential investors – there is no single delivery of funding vehicle that will deliver these projects, they each require their own arrangements.
- **Infrastructure** – highlights key infrastructure requirements to help deliver the sustainable, resilient, connected, innovative and inclusive economy that we seek. It highlights digital infrastructure, transport priorities, and climate change adaptation, which are all vital if we are to attract and retain investment and employment. It focuses particularly on the importance of connectivity to key employment sites and centres, and environmental priorities.
- **Implementation and evaluation** – outlines proposals as to how we propose to take forward this Strategy, particularly in relation to the provision of leadership and governance and enhanced local capability to deliver key policies, programmes and projects; plus, effective 'foresighting' activity to enable partners to anticipate and shape Lancashire's future, and not simply react to changes generated elsewhere.

2   Economic Context

Our ambition is for Lancashire's diverse economy and places to be prosperous, innovative, resilient, inclusive, environmentally sustainable, and connected.

Key messages
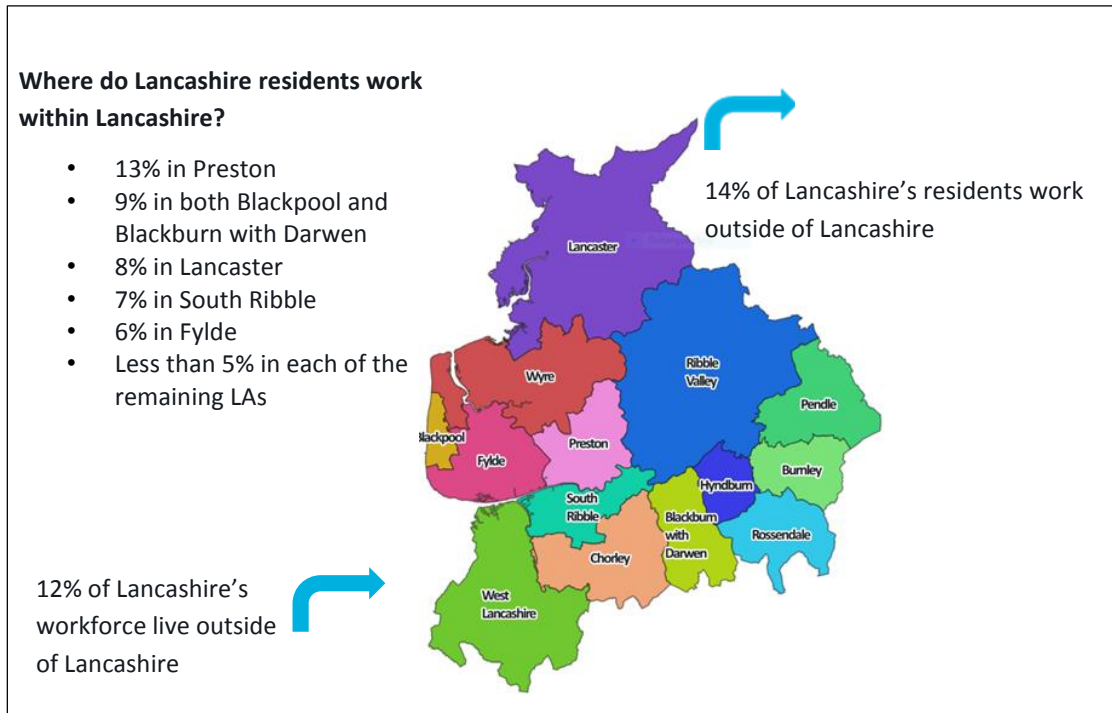
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Introduction to Lancashire

A manufacturing powerhouse driving economic change

2.1   Lancashire's economy is one of the strongest manufacturing economies in the UK. The manufacturing sector produces 20% of Lancashire's GVA, almost twice the UK average, and employs 13% of Lancashire's workers, relative to 9% nationally. It is home to the largest concentration of Aerospace activity in Europe, which generates turnover of around £7 billion annually; activity in the sector is focused on Blackburn with Darwen, Burnley, Fylde, Pendle, South Ribble and the Ribble Valley. It also has significant Advanced Manufacturing and Engineering (including the automotive sector) activity focused on Samlesbury and Warton (in South Ribble), Fleetwood (in Wyre), Burnley, Lancaster, and Preston. Lancashire is also a vital part of the nationally recognised North West Nuclear Arc and North West Clean Growth Arc assets with world-class capabilities in nuclear, hydrogen, wind and marine energy, and land management.

2.2   Lancashire also has a famous and economically significant tourism offer, including Blackpool and Morecambe, along with a wider cultural and rural offer that is part of a diverse rural economy, which is founded on a strong and productive agricultural sector.

A diverse county with multiple centres and a relatively self-contained labour market

2.3   Lancashire is a diverse county with multiple centres. It has a population of c.1.5 million, a working population of just under 1 million and a total Gross Value Added (GVA) of £30.8 billion a year. It is a relatively self-contained labour market: 12% of its workforce commutes in to Lancashire and 14% of residence work outside the area (Figure 2-1). Employment is concentrated in Preston, Blackburn with Darwen, Blackpool, Lancaster, South Ribble, and Fylde. Its economic activity rate is 78%, which is equal to the UK and just above the North West average, and its employment rate is 74%, equal to the UK and just ahead of the North West average.

Figure 2-1: Commuting in Lancashire

Where do Lancashire residents work within Lancashire?

- 13% in Preston
- 9% in both Blackpool and Blackburn with Darwen
- 8% in Lancaster
- 7% in South Ribble
- 6% in Fylde
- Less than 5% in each of the remaining LAs

14% of Lancashire's residents work outside of Lancashire

12% of Lancashire's workforce live outside of Lancashire

Source: Lancashire Local Industrial Strategy Evidence Base, 2019

A county that needs to level-up to UK levels of productivity and earnings

2.4   Figure 2-2 provides a snapshot of Lancashire's economic performance relative to the North West and the UK. It shows that Lancashire has a key specialism in manufacturing, based on the sector's share of local employment. Figure 2-2 also shows that Lancashire's GVA per head (at £19,600 a year) is below the North West average (which is £2,200 higher) and the UK average (which is £9,400 higher). This productivity gap is mirrored in average weekly earnings, which are £480 in Lancashire, relative to £502 in the North West and £541 in the UK. Overall, Lancashire has a lower share of high-skilled workers (those qualified to NVQ4 and above) in its workforce than North West and UK averages. This is one of the drivers of our below average productivity and earnings rates**.** Thus, we need to close the overall productivity and earnings gap that exists between Lancashire and the UK. It should be noted, however, the mean-averages of Lancashire-wide productivity and earnings mask significant variations in GVA per worker and weekly earnings between sectors, occupations and places (discussed further in Sections 5 and 6).

A county whose new generations are building on its entrepreneurial past

2.5   Lancashire has a long tradition of entrepreneurship that stretches back to the nineteenth century. Currently, however, it has a lower business density (the number of businesses per 10,000 population) than regional and national averages. Furthermore, its business birth-rate runs at 2 percentage points below the North West and UK average of 14%. Its business death rate of 9% is in line with the UK average and 1 percentage point below the North West average. Thus, we need to support a new generation of entrepreneurs to develop a pipeline of new businesses that will build a dynamic economy that will secure our economic future.

Figure 2-2: Snapshot of Lancashire's vital statistics relative to the North West and the UK

Source: Lancashire Local Economic Strategy Evidence Base, 2019

Headline economic data

2.6 Table 2-1 summarises headline data for Lancashire, relative to the North West and the UK. It shows that Lancashire accounts for around 18% of the North West's GVA, 1.8% of UK GVA, 20% of the North West's population; and 2.2% of the UK's population. It also shows Lancashire's economic activity and employment rates are in line with the UK and exceed that of the North West – given historically high rates of employment in the UK this indicates strong performance. Table 2-1, however, also shows Lancashire faces significant, long-term structural challenges, including its:

- Share of workers with higher level skills is 5.4% below the UK average;
- Share of employees in professional, scientific, and technical occupations is 3% below the UK average;
- GVA per employee is 83% of the UK average;
- Weekly earnings are 88% of the UK average; and
- Share of total R&D expenditure per person employed is less than 50% of the UK average.

2.7 Thus, while our headline employment figures are strong, this snapshot of our economic position shows that Lancashire has a productivity gap with the UK and the North West. We need, therefore, to raise GVA per worker by increasing the share of our workers with higher level skills, and the share of professional, scientific and technical occupations in our workforce to drive prosperity and increase earnings.

Table 2-1: Headline economic data for Lancashire

| Indicator	Lancashire	North West	UK	Source/Date
Total GVA	£30.8bn	£167.2bn	£1,756.1bn	ONS/2016
Total Population	1.484m	7.224m	65.648m	PE/2016
Working-age Population (WAP)	914.5k	4.5m	41.4m	APS/2016
Working-age Population (WAP) (%)	62%	63%	63%	APS/2016
Economic Activity Rate (WAP)	78%	76%	78%	APS/2017
Employment Rate (WAP)	74%	72%	74%	APS/2017
Employment Growth (WAP) (+/- since 2007)	+3%	+6%	+8%	BRES/2015
GVA per head	£19.6k	£21.8k	£29.0k	ONS/2015
GVA per employee	£42.1k	£45.5k	£50.8k	ONS/2015
GVA Growth (+/- since 1997)	+39%	+45%	+49%	ONS/2015
Average Weekly Earnings	£480pw	£502pw	£541pw	ASHE/2014
Proportion of WAP with NVQ L4+	32.6%	33.9%	38.0%	APS/2016
Total Active Enterprises	43.3k	259.7k	2.6m	BD/2015
Business Birth Rate	12%	14%	14%	BD/2015
Business Death Rate	9%	10%	9%	BD/2015
Employment in Manufacturing (% of all jobs)	13%	9%	8%	BRES/2015
University spin-outs/start ups since 2000	27 (1% UK)	156 (7%)	2,293	Spinouts UK/2017
Patent Applications (2005-2017)	1,130 (1.7% of UK, 22.8% of NW)	4,970	64,800	IPO/2017
Employment in Professional, Scientific & Technical (% of all jobs)	5%	7%	8% (GB)	BRES 2015
Total R&D Expenditure (£ per person employed)	£525	£1,093	£1,070	Eurostat + BRES/2011
Average House Prices	£143k	£157k	£225.3k	UKHPSSA + UKHPI/2017

Source: Steer-ED, 2019

Growth trends and projections

We have delivered significant growth in GVA but more is required if we are to close the productivity gap with the rest of the UK

2.8　　Lancashire has achieved significant growth in GVA since 1991, but this growth did not keep pace with that of the North West or the UK. Thus, the 'productivity gap' between Lancashire and the UK widened over the past 25 years. Projections of GVA growth for Lancashire to 2038 (generated using the Greater Manchester Forecasting Model and based on Oxford Economics' model) show that without action to snap out of Business As Usual (BAU) trends the productivity gap between Lancashire and the rest of the UK will widen further (Figure 2-4). The action required needs o be significant, systematic across sectors, sustained, and at significant scale if we are to raise the trajectory of future GVA growth.

Figure 2-3: GVA growth trends 1991-2016
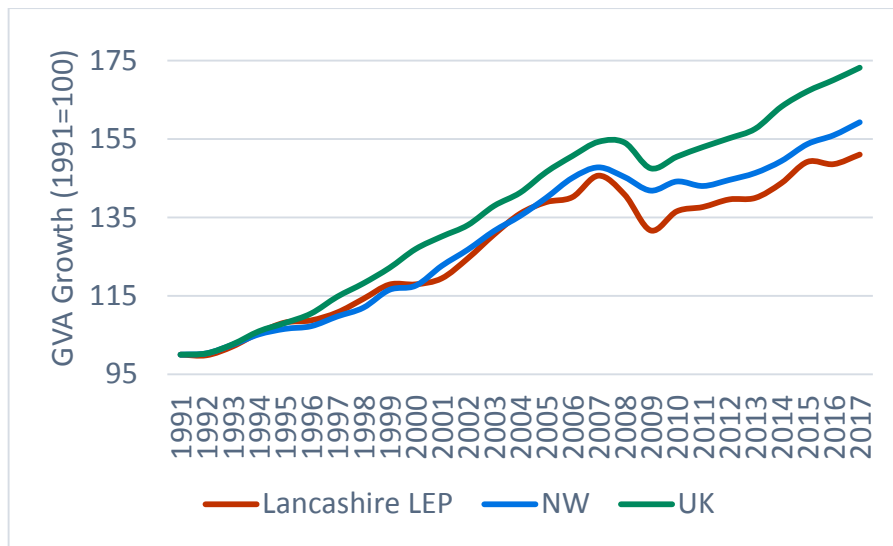
Source: Greater Manchester Forecasting Model (GMFM), 2019

Figure 2-4: GVA growth trends 2017-2038
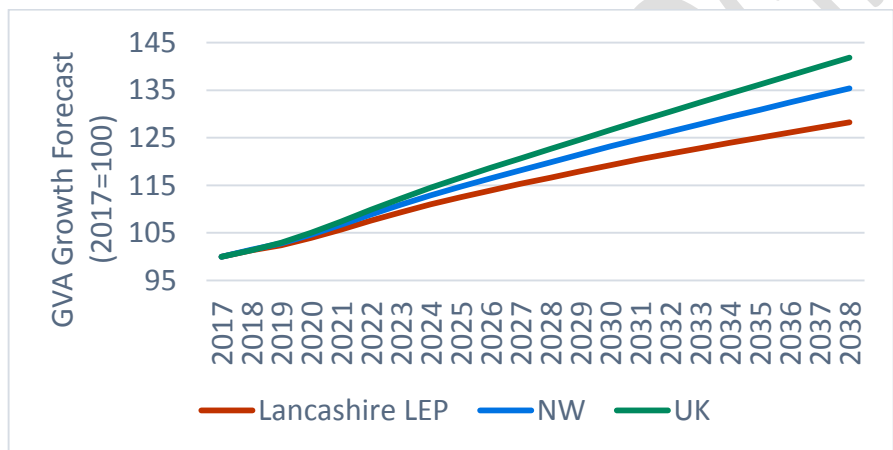
Source; GMFM, 2019

Our experience of fluctuating employment around an upward employment trend means that we need to build labour market resilience

2.9   Lancashire's economy generated employment growth in the period 1991-2016. This growth tended to be below the UK trend but above that of the North West. Figure 2-5 shows our economy experienced greater fluctuations than national and regional employment trends between 1991 and 2016. It also shows that our labour market sometimes moves counter to employment trends in the UK and North West – indicating our importance to the UK economy in tackling cyclical downturns. Thus, history shows that we need to build resilience and adaptability in to Lancashire's labour market and that Lancashire can grow when other parts of the economy shrink. Figure 2-6, however, provides a warning for our local economy, employment growth is not only projected to decline in the period to 2038 but overall employment is set to fall below 2017 levels. This need not mean lower levels of output – given projected increases in productivity – but, without action, it will mean fewer employment opportunities for local people.

Figure 2-5: Employment trends 1991-2016
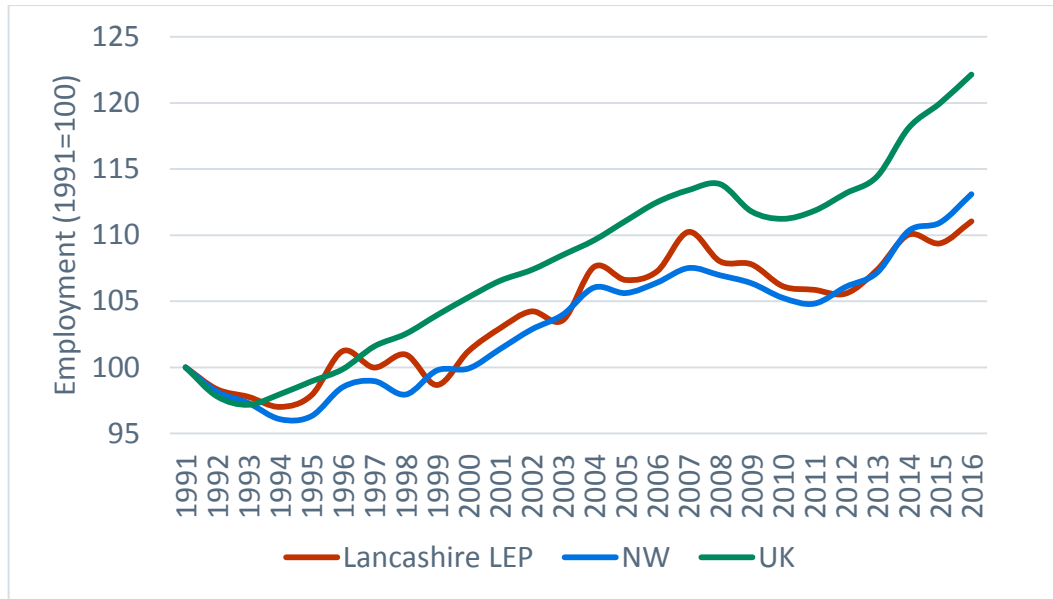
Source; GMFM, 2019

**Figure 2-6: Employment trends 2016-2038**
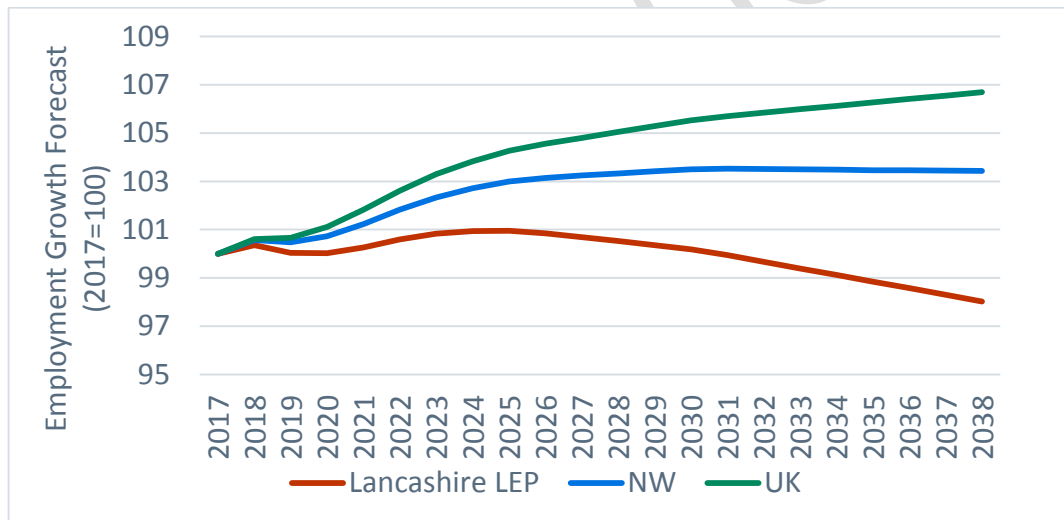
Source: GMFM, 2019

*Business-as-Usual will not close the productivity gap with the rest of the UK*

2.10   Figure 2-7 shows that overall worker productivity in Lancashire rose in the period 1991 to 2016 from around £31,000 p.a. to £42,000 p.a. but the gap between Lancashire's GVA per worker and the rest of the UK widened from £4,100 in 1991 to £6,900 in 2007 to £7,400 in 2016. Figure 2-8 shows the implications of BAU, with the productivity gap widening to £10,500 by 2038. Thus, while worker productivity in Lancashire is projected to rise over the next 20 years, without concerted action the productivity gap with the rest of the UK is set to widen.

Figure 2-7: Worker productivity 1991-2016
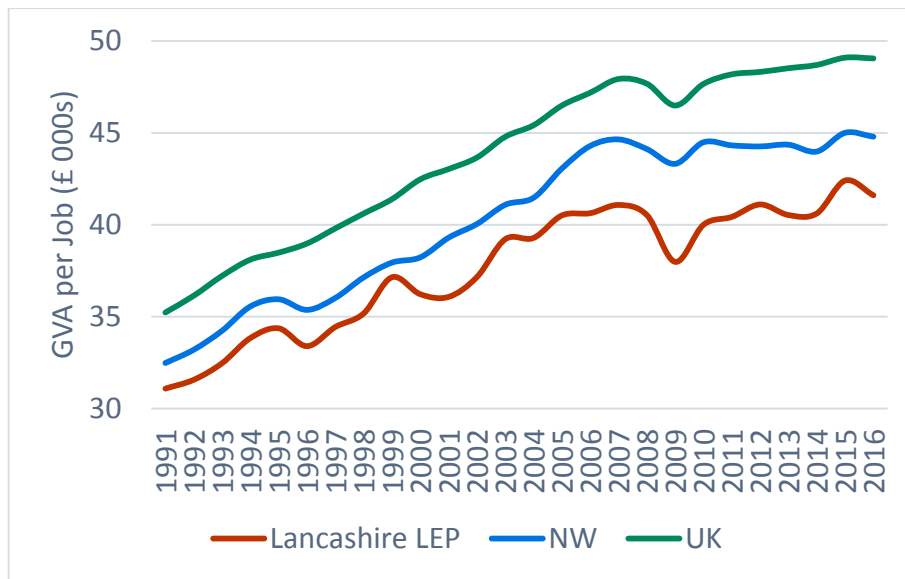
Source: GMFM, 2019

Figure 2-8: Worker productivity 2017-2038
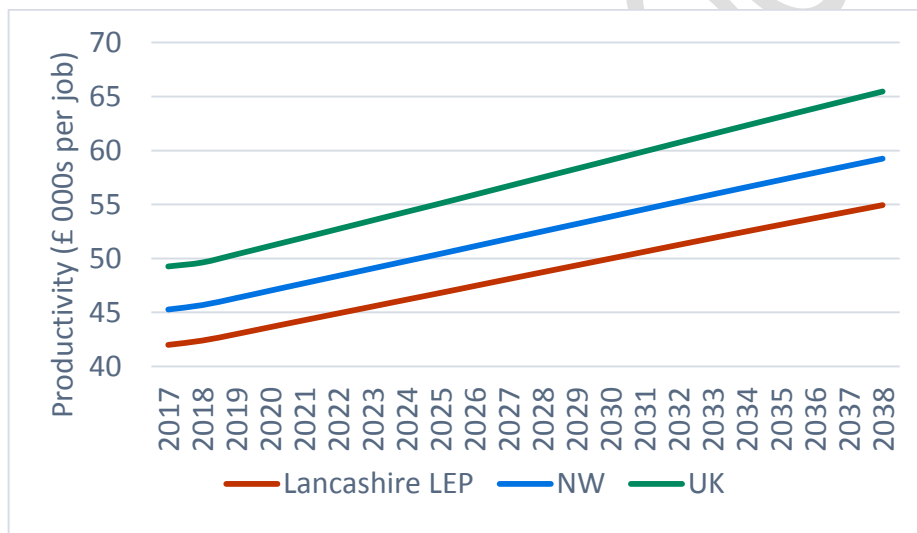
Source: GMFM, 2019

Sectoral mix and projected changes

Projections of significant sectoral change point to risks and opportunities to productivity growth

2.11   What Works Centre for Local Economic Growth advises the sectoral analysis should be used to target 'horizontal' policies (e.g. skills and employment training programmes) and local strengths to facilitate coordination with national interventions (e.g. Sector Deals). But warns

against LEPs seeking to achieve a particular sectoral composition for their local economy – as so many other factors are at play in determining sectoral composition.[2]

2.12   Table 2-2 provides a breakdown of the share of GVA and employment in Lancashire by sector with Location Quotients which identify the relative degree of specialisation in Lancashire. Those sectors with significant contributions to or specialism by GVA or employment are highlighted in **bold**. Table 2-2 shows the importance of Manufacturing as a generator of GVA and source of employment and Lancashire's specialisation relative to the UK average, along with Human health and social work. It also shows the importance of the wholesale and retail sector as an employer, even though Lancashire does not have a particular specialisation, and a relative specialisation in Accommodation and food, which is a relatively low productivity sector.

Table 2-2: Lancashire's sectoral mix

Sector	Share of total GVA (%)	Share of total employment (%)	GVA per job	GVA LQ	Employment LQ
Real estate	**13**	1	379,199	0.9	0.9
Electricity	1	0	135,220	0.7	0.9
Water supply; sewerage	1	1	84,045	**1.3**	**1.2**
Financial services	3	1	73,241	0.4	0.4
Manufacturing	**20**	**12**	65,807	**1.9**	**1.6**
Public administration and defence	6	5	52,159	**1.3**	1.1
Information and communication	3	3	47,922	0.5	0.6
Construction	6	7	38,369	1.0	1.1
Wholesale and retail trade	**13**	**15**	37,760	**1.2**	1.0
Agriculture	1	1	34,923	**1.7**	1.0
Transportation and storage	3	4	32,411	0.7	0.8
Professional services	5	6	31,532	0.6	0.7
Education	6	9	29,235	1.0	1.1
Other services	2	3	28,586	0.8	0.9
Human health and social work	**10**	**15**	27,760	**1.3**	**1.2**
Mining and quarrying	0	0	21,415	0.2	0.7
Accommodation and food	4	7	20,528	**1.2**	**1.1**
Arts	1	3	20,005	0.8	0.9
Administrative and support	3	7	17,531	0.6	0.8

Source: Source: GMFM, 2018

[2] https://whatworksgrowth.org/policy-challenges/industrial-strategy/

2.13   Figure 2-9 shows projected change in GVA and employment by high-level sectors for the period 2017 to 2038. The size of each 'bubble' represents the scale of a given sector's GVA in 2017 – the larger the bubble the greater the level of GVA produced. Projected change in GVA is on the vertical axis, and projected change in employment is on the horizontal axis. The projections show that the key sectors in Lancashire fall into one of three categories:

- 'Expanders' which are projected to generate increases in GVA and employment to 2038;
- 'Adjusters' which are set to experience increases in GVA along with decreases in employment to 2038; and
- 'Shrinkers' which will experience decreases in both GVA and employment to 2038.

2.14   The projections suggest that Lancashire is likely to see:

- An increase in employment and GVA in the following high-productivity sectors:
  – Information and Communication, Professional Services, Real Estate, and Construction;
  – With the exception of Construction, these are not economic sectors in which Lancashire currently specialises, so this shift will require workers to transition between sectors and/or new high-skilled workers will need to join Lancashire's workforce.
- Expansion of output and employment in the relatively low productivity sectors of:
  – Administrative support and the Arts;
  – Sectors in which Lancashire does not currently show specialisation and which are unlikely to contribute to narrowing the productivity gap with the UK.
- An increase in GVA but decrease in employment in the following high-value sectors:
  – Manufacturing, Financial Services, Water, Electricity, and Transportation and Storage;
  – It will be important to manage the transition of workers leaving these high-value sectors to ensure they find high-value jobs in expanding sectors.
- Declines in output and employment in the following sectors:
  – Mining and Quarrying, Agriculture (currently a significant GVA specialism), Public Administration and Defence (currently a GVA and employment specialism).

Figure 2-9: Projected sectoral mix 2017-2038

Size of bubble = GVA 2017
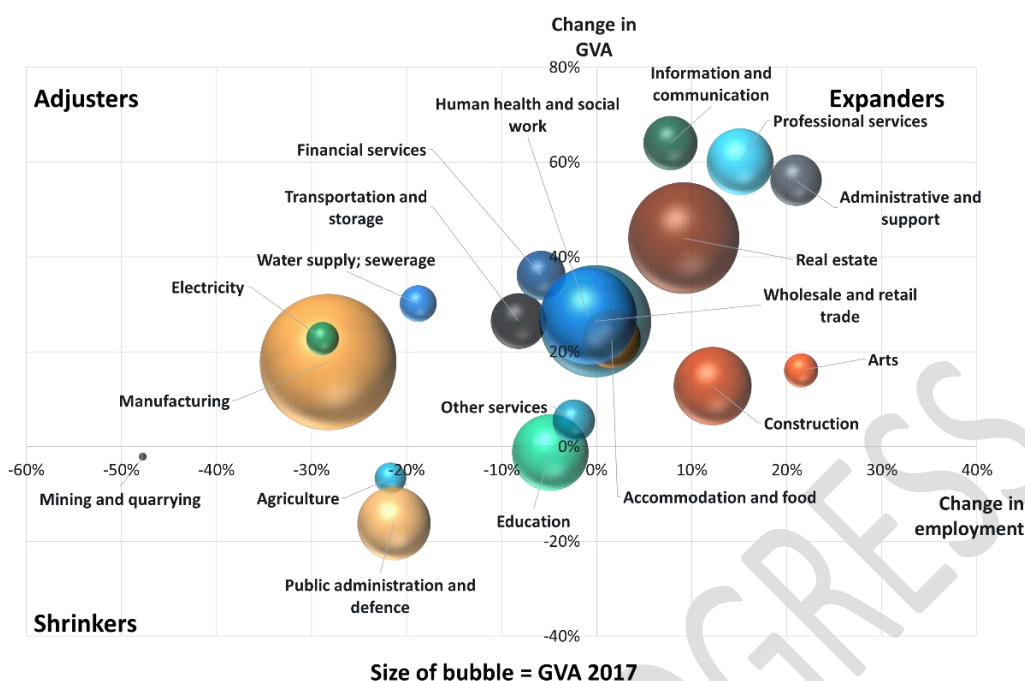
Source: Greater Manchester Forecasting Model, 2018

Occupational change

Scale of change

2.15   As well as significant sectoral change, which will require workers to move between sectors and additional workers to be attracted to and retained in Lancashire, there will be significant change to our economy's occupational structure – linked to sectoral and technological change. Table 2-3 sets out projections of occupational change over the next 20 years. It shows the percentage of the workforce currently working in a given occupational group, the projected percentage of workers in a given occupation in 2038 and the respective percentage change. The projections show increases in the share of workers employed in the following occupations:

- Culture, Media & Sports Occupations;
- Business & Public Service Professionals;
- Business & Public Service Associate Professionals;
- Skilled Construction & Building Trades;
- Science & Technology Professionals;
- Customer Service Occupations;
- Leisure & Other Service Occupations;
- Corporate Managers;
- Caring Personal Service Occupations;
- Managers / Proprietors in agriculture & services; and
- Health Professionals.

2.16   Decreases in the relative share of the workforce are projected for the following occupations:

- Transport & Mobile Machine Drivers & Operatives;
- Textiles, Printing & Other Skilled Trades;
- Science & Technology Associate Professionals;

- Administrative Occupations;
- Teaching & Research Professionals;
- Secretarial & Related Occupations;
- Elementary Occupations: Trades, Plant & Storage related;
- Process, Plant & Machine Operatives;
- Protective Service Occupations; and
- Skilled Metal & Electrical Trades.

2.17   Our local labour markets will need to upskill workers to move up the skills escalator within their sector and reskill workers to assist transitions between sectors at the same or higher skill level, if we are to maintain employment rates, drive productivity, and raise earnings.

Table 2-3: Occupational change 2017-2038

Occupation	2017	2038	Percentage Change
Culture, Media and Sports Occupations	1.60%	1.90%	18%
Business and Public Service Professionals	3.70%	4.20%	14%
Business and Public Service Associate Professionals	5.20%	5.80%	10%
Skilled Construction and Building Trades	3.60%	4.00%	9%
Science and Technology Professionals	3.80%	4.10%	7%
Customer Service Occupations	1.50%	1.60%	7%
Leisure and Other Personal Service Occupations	2.40%	2.50%	6%
Corporate Managers	6.30%	6.60%	5%
Caring Personal Service Occupations	8.70%	9.10%	5%
Managers / Proprietors in agriculture and services	4.10%	4.40%	5%
Health Professionals	4.20%	4.40%	4%
Elementary Occupations: Clerical and Services related	9.90%	10.20%	3%
Skilled Agricultural Trades	1.20%	1.20%	3%
Health and Social Welfare Associate Professionals	1.30%	1.40%	1%
Sales Occupations	6.10%	6.10%	-1%
Transport and Mobile Machine Drivers and Operatives	4.60%	4.40%	-5%
Textiles, Printing and Other Skilled Trades	2.90%	2.70%	-6%
Science and Technology Associate Professionals	1.50%	1.40%	-6%
Administrative Occupations	8.70%	8.00%	-7%
Teaching and Research Professionals	4.60%	4.20%	-7%
Secretarial and Related Occupations	2.20%	2.00%	-9%
Elementary Occupations: Trades, Plant and Storage related	2.00%	1.70%	-13%
Process, Plant and Machine Operatives	4.40%	3.70%	-15%
Protective Service Occupations	1.20%	1.00%	-16%
Skilled Metal and Electrical Trades	4.30%	3.50%	-18%

Source: GMFM, 2019

Drivers of change

2.18   These projections of sectoral and occupational change in Lancashire need to be viewed in the context of wider national and global trends, summarised in Figure 2-10, which looks at:

- **Global trends**, such as the uncertain international trade and investment environment, climate change, and an ageing society and workforce;
- **Changes in lifestyles, attitudes to learning and work**, including generational difference in attitudes to work and life-goals, increased personal responsibility for learning and development, declining mental health and unhealthy lifestyles; and
- **Technology drivers**, including AI, automation, 3D printing, new materials, Internet of Things, near/autonomous electric vehicles, and renewable energy and energy storage.

Drivers of change

Figure 2-10: Drivers of change and implications for Lancashire [Proposals included for illustrative purposes; all subject to discussion]

	Driver	Implication
Macro-drivers		
	• The uncertain international political and trading environment – especially in relation to UK-EU relations and international trade arrangements – affects market growth, supply chain operations, inward investment, and collaborative R&D.	• Risks to international trade and investment flows may adversely affect the operation of our global supply chains and international collaboration on R&D – meaning we need to work hard to maintain our role in established markets, while seeking to develop new ones, e.g. via internationalisation of our business support offer. • The uncertainty may increase demand for R&D and manufacturing in Lancashire, and the UK more widely – requiring supply chain excellence and test-bed facilities in key technologies. • Alternatively, if we cannot effectively respond to meet supply-chain needs, investment and activity may move overseas – requiring a strengthened inward investment offer, particularly focused on our research assets and our skills base.
	• Manmade climate change requires Lancashire to develop new production processes, new approaches to resource use, and new methods of land management.	• Lancashire's partners need to: – Innovate to reduce Lancashire's carbon footprint. – Develop new products and services to serve new markets seeking to achieve net-zero carbon emissions. – Invest in 'future proof' infrastructure that adapts to the impact of climate change.
	• Ageing population – globally, nationally and in Lancashire.	• Lancashire needs to ensure that it has the skills, products and services required to meet the needs of an ageing population – including test-bed facilities and training for the health and social care workforce.
	• Ageing workforce – nationally and in Lancashire.	• Lancashire needs to take steps to retain knowledge and skills in key sectors and to ensure economic wellbeing in age by extending working lives through upskilling and flexible working arrangements.
Changing lifestyles, attitudes to learning, and work		
	• Individuals are increasingly taking responsibility for their own learning and development – linked to an expectation of multiple careers over a working life.	• Lancashire needs to provide clear, useful, and practical information about growth sectors to help individuals make informed educational and career choices, e.g. via extension of our careers hub provision.
	• Workers now have expectations of digital and virtual learning	• Lancashire's training providers and employers need to provide engaging and accessible learning materials and

	Driver	Implication
	experiences as part of their education and training.	experiences to attract, retain and upskill workers – through greater collaboration of demand for and supply of training provision among employers and providers.
	• Confidence in universities and value-for-money offered by degrees is in decline.	• Lancashire needs to provide clear information and guidance on academic and vocational routes into work, and the earning potential associated with different qualifications, to enable students to make informed choices about their education and future careers.
	• Greater appreciation among learners of 'soft skills' given the advance of AI and automation.	• Lancashire's employers and training providers need to build on learners' desire to develop skills that AI cannot easily replicate by offering 'AI-proof' training as part of ongoing development.
	Changing attitudes to work and lifegoals: • Members of Generation X (born 1961-1980) seek work-life balance, manage 'portfolio careers', and are loyal to a profession but not necessarily to an employer. • Members of Generation Y (born 1981-1995) seek freedom and flexibility, are digital entrepreneurs who work with not for organisations. • Members of Generation Z (born post 1995) seek security and stability, are 'technoholics', and are IT-dependent.	• Employers in Lancashire need to: – Respond to the different work and lifegoals of different generations, if they are to attract and retain workers across the generations. – Ensure transfer of knowledge and behaviours between generations to facilitate effective team working and drive productivity. – Develop strategies to embed the knowledge and experience of workers who are likely to retire in successor generations, in order to build on existing knowledge and know-how to drive productivity.
	• Poor mental wellbeing and unhealthy lifestyles.	• Lancashire partners need to develop their capacity and capability in health management, in particular in data analysis and interpretation, and effective leadership, management and communication to deliver improvements in personal and public health and wellbeing, which in turn will help to drive productivity and promote inclusive growth.

Technology drivers	
Artificial Intelligence, Big Data, Cyber Security, and Blockchain technology.	Lancashire needs to raise its data analytic capabilities and skills, as AI and data analytics become pervasive across all sectors and work activities, e.g. through digitalisation programmes enhanced by workforce development plans – drawing on the lessons of the Made Smarter programme in the manufacturing sector.
Automation and robotics will drive productivity but will also displace workers across many sectors and occupations.	ONS estimates that over 50% of elementary occupations and process plant and machine operative jobs and 30% of professional occupations are at risk of automation, this means that, to maintain employment and raise productivity, Lancashire needs to reskill and upskill workers, particularly those in the manufacturing sector.
Additive manufacturing and new materials will transform design, innovation, production and delivery of a range of goods, offering new market opportunities to businesses.	Additive manufacturing and new materials enable customised, on-site manufacturing – this will change processes and the associated skill requirements for manufacturing, quality assurance, and logistics. Lancashire's manufacturing and logistics sectors, therefore, need to be prepared for this change.
New materials, e.g. graphene.	Lancashire's manufacturers need to develop, adopt and adapt to new materials that enable light-weighting, smart textiles, and improve energy efficiency, e.g. via a Composites Tooling and Training Centre for ultra-lightweight materials.
Growth of sensors and wearable technology will generate large volumes of data from the built environment, vehicles, production processes, and individuals.	Businesses and public services in Lancashire need to increase their capacity and capability to make service and product improvements which will be enabled by increasing flows of personal and spatial real-time data, e.g. by leveraging Lancaster University's research capabilities in cyber security and health innovation.
Autonomous/near autonomous electric vehicles and drones.	Lancashire needs to ensure its automotive and aerospace sectors both drive and respond to disruption in future mobility, by acting as a testbed for development and investing in infrastructure to enable the adoption of innovation in sustainable mobility.

☀	• Renewable and zero-carbon energy and developments in energy storage and distribution.	• Lancashire needs to work as part of the North West Clean Growth Arc to develop its renewable energy offer, particularly in relation to hydrogen and marine/tidal energy, and smart energy systems by drawing on lessons from the development and operation of offshore-wind and nuclear sectors to drive Clean Growth 4.0.
📡	• Disruptive technologies as yet unknown are likely to be developed and will serve new markets – potentially displacing older markets.	• Strong leadership and entrepreneurship are required to develop and exploit the potential benefits of disruptive technology. If Lancashire is to make the most of opportunities arising from disruptive technology it needs, therefore, to build a supportive environment for start-ups and provide world-class leadership development and entrepreneurship programmes, e.g. through Growth Hub 2.0.

Sources: See Appendix A.

Opportunities, challenges, and priorities for action

Our economy has significant opportunities and challenges to address. The Business- as-Usual projections show overall employment in Lancashire declining and the productivity gap widening over the next 10-20 years in the absence of intervention. Partners in Lancashire have discussed and debated these issues in a range of workshops, working groups, and one-to-one and one-to-many consultations between March 2019 and December 2019. The main conclusions of these debates are summarised in Table 2-4 and the priorities for action which flow from this analysis are summarised in

steer economic development

2.21   Table 2-5.

Table 2-4: Opportunities, challenges and implications for Lancashire [Proposals included for illustrative purposes; all subject to discussion]

	Opportunities and challenges	Implication

	• Without action:
	  – Employment in Lancashire will decline.
	  – The productivity gap between Lancashire and the UK will widen.
	• Business-as-Usual poses a significant challenge to ambitions to achieve sustainable, inclusive growth.
		• Business-as-Usual is not enough, if Lancashire is to:
		  – Attract and retain workers.
		  – Make the most of its unique combination of industrial and research assets and knowledge, in aerospace, advanced manufacturing, energy and clean growth.
		• Lancashire's partners need to develop programmes
		  – To promote health and wellbeing and retrain and upskill workers to maintain its employment base.
		  – Exploiting its unique combination of assets and know-how to take opportunities and tackle challenges, e.g. through 'sandpits' and identification of 'orphan IP'.

	• Major technology and market drivers are disrupting established national and global markets, sectors, and supply chains.
	• Economic forecasts indicate a continued decline in the number of manufacturing and routine roles as technology enables automation.
		• Partners in Lancashire need to support businesses and workers to:
		  – Shape the future, where they are drivers of innovation.
		  – Adapt to change, where they are part of wider networks and supply chains driven by others.
		• To do this, Lancashire needs to build on digitalisation programmes for businesses (e.g. Made Smarter in manufacturing), and reskill and upskill workers, e.g. via the Digital Skills Partnership, to build further agility, adaptability, and resilience in to its labour markets and its overall economy.

	• Lancashire has key strengths in aerospace, automotive, energy and marine sectors – it needs to stay ahead where it is strong and forge new routes to excellence to develop new markets by building on its innovation strengths.	• Lancashire partners need to:
		  – Take the opportunities offered and manage the risks posed by technological convergence in supply chains, driven by digitalisation and new materials (light-weighting), and supply-chain rationalisation (e.g. by supporting firms to operate in multiple supply chains) to stay ahead where they are currently strong.
		  – Ensure Lancashire's high-value manufacturing sectors and supply chains continue to innovate and operate at a global scale to forge new routes to excellence.

	• Lancashire currently lags behind England in terms of its business density and start-up survival rates. • Lancashire's economy must generate new businesses in	• Partners in Lancashire need to develop and support the employers of tomorrow by building on: – The strong start-up and survival rates of Blackburn with Darwen, Burnley, Ribble Valley and Pendle.

	new sectors if it is successfully to grow employment and develop new technologies and markets.	–	UCLAN's successful graduate enterprise work.
		–	Lancashire's relative successful track record in generating scale-up businesses.
✦	• Opportunities for and challenges to growth in Lancashire vary significantly by place; determined by geography, levels of connectivity, quality of life offers, and historic economic roles.	•	Lancashire's LIS needs to reflect the diversity and distinctiveness of Lancashire's places and the opportunities and challenges that these places face – from rural and coastal communities to urban centre and post-industrial towns.

Source: Steer-ED based on data analysis and stakeholder consultations and workshops, 2019.

Table 2-5: Lancashire's priorities for action [Proposals included for illustrative purposes; all subject to discussion]

	Priority for action	Proposed action/s
	• **Enterprise: start-ups, scale-ups and internationalisation**	• Support start-ups and firms to: – 'Add value' to the goods and services that they offer in order for them to stay ahead where they are strong. – Develop new goods and services to forge new markets – particularly in clean growth. – Identify and exploit export opportunities to internationalise the economy – as part of a drive to promote further internationalisation of the North's economy. • Ensure business support provision addresses specific growth opportunities in BAME communities and businesses and aligns with wider community development programmes.
	• **Supply chain fusion and development**	• Delivery of a supply-chain excellence programme for firms operating in Aerospace, Automotive, Marine and Energy supply chains to: – Exploit opportunities and manage risks associated with technological development (digitalisation) and the introduction of composites and new materials (light-weighting). – Maintain current customers and diversify into new markets, based on core digital and light-weighting competencies. • Develop a 'Drone Zone' test-bed capability to support future mobility, based on Lancashire's established strengths in aerospace. • Develop and deliver programmes to promote technology access, connectivity and inter-operability, and cyber security for Lancashire's key supply chains.
	• **Clean growth and energy opportunities**	• Capitalise on Lancashire's concentration of Low Carbon Energy assets and know-how, which include nuclear, wind, marine, hydrogen, and battery technology, as well as its land management expertise to: – Attract inward investment in clean growth technologies and markets. – Build international research collaborations in clean growth – as part of the North's wider innovation activity. – Contribute to the North's wider offer to design, develop, test, deliver, and regulate clean growth technologies and markets. • Deliver a Connected Clean Growth Network and Connected Clean Growth Leadership Development Programme for leaders in private, public and third sectors. • Develop a Fuel Technology Park to support the development of advanced modular nuclear reactors at the Springfield site, near Preston. • Work with the North West Energy Hub to develop Lancashire's contribution to the North's Hydrogen Energy offer, e.g. Hydrogen to Heysham (H2H) project to generate hydrogen for industrial processes, mobility, and gas grid injection at the Heysham Nuclear Power Station site.

	Priority for action	Proposed action/s
		• Develop a 'Grown Smarter' Agri-tech initiative in collaboration with neighbouring LEPs, drawing on the Made Smarter programme which promotes adoption of digitalisation in the manufacturing sector.

🏃	• **Agile and healthy workforce**	• Maintain the talent pipeline through an extension of careers hubs to improve performance against Gatsby Benchmarks, promotion of apprenticeships -including degree-level apprenticeships – and T-Levels.
		• Upskill and reskill the workforce across all age groups and sectors to respond to technological, sectoral, and occupational change – with a focus on supporting transitions from sectors with declining levels of employment to sectors with where employment is rising and to higher-level skills with:
		  – Further development of the Digital Skills Partnership to drive all-pervasive digital skills.
		  – Development of a skills escalator to support people's progression through the labour market over time.
		• Develop and support delivery of employer-led mental wellbeing initiatives to raise engagement in the workforce and reduce absenteeism and under-performance among employees to increase productivity.

🚩	• **Place distinctiveness**	• Develop bespoke place-based responses to place-specific assets, opportunities and challenges, including developing:
		  – Visitor offers for coastal, rural and urban markets, e.g. Eden of the North in Morecambe.
		  – Cultural and leisure offers to attract visitors and attract and retain residents and students, e.g. Creative People and Places in Blackpool and Wyre, 'Superslowway' in Pennine Lancashire, and Making Blackburn to build on the foundations provided by the Cultural Investment Fund.
		  – The Higher Education offer to attract and retain students, e.g. a Burnley Campus and Pennine Lancashire University Enterprise Zone.
		  – Interventions in local property markets to attract/retain businesses and workers, e.g. proposals for Central Lancashire to drive growth building on City Deal.
		  – Future-proofed infrastructure that addresses the impact climate change.

☁⬇	• **21st Century Connectivity**	• Improved East-West connectivity to meet current commuting priorities, including:
		  – Reinstatement of the rail line between Colne and Skipton, with associated upgrades to improve links with North Yorkshire and Leeds City Region.
		  – Continuation of M65 across the Pennines to improve links with North Yorkshire and Leeds City Region.
		  – Additional capacity on the M65 to ease congestion.
		• Improved links to Manchester: City Region
		  – M66/A56 link between the M62/M60 and the M65
		  – Rail service enhancement to two trains per hour between Clitheroe and Blackburn/Manchester, plus

	Priority for action	Proposed action/s
		enhancements to rail services to Blackburn, Accrington, Burnley and Manchester via Todmorden – New Rossendale to Manchester links – Intersection of the M61 and M60 to improve links between Preston and Manchester • 21st century digital connectivity for rural and coastal communities, as well as key employment sites and centres, through local leadership and coordination of investment by strategic partners, e.g. local authorities, NHS, schools and universities. • Preparing for HS2 and Northern Powerhouse Rail, including re-development of Preston station. • Tailored Rail Apprenticeships delivered by Myerscough College to drive the future talent pipeline. • Accessing and utilising the Transforming Cities Fund to promote future mobility in Lancashire – particularly in relation to zero-carbon emissions. • Accessing and utilising the Charging Infrastructure Investment Fund - £400m for electric charging points infrastructure, and R&D.
	• **Implementation: leadership, delivery capacity and capability, and market and technology foresight**	• Reinforce Lancashire-wide leadership to: – Build investor confidence. – Represent local diversity. • Invest in capacity and capability to deliver Lancashire-wide and locally-focused projects. • Invest in capacity and capability to undertake and act on market and technology foresight activity – working with partners across the North.

Source: Steer-ED based on data analysis and stakeholder consultations and workshops, 2019.

3   Business Environment

Our economy will be prosperous by generating new jobs in new sectors that serve new markets through support for start-ups, scale-ups, and the internationalisation of business.

Key messages

- …

Strengths and weaknesses

Strengths on which to build

International-class businesses and sectors

3.1   … INSERT KEY DATA

Map of business clusters

INSERT ARC OF PROSPERITY MAP

Case Study: Aerospace

3.2   …

Case Study: Automotive

3.3   …

Weaknesses to address

3.4   … INSERT KEY DATA

Enterprise: Start-ups and Scale-ups

3.5   …

Internationalisation

3.6   …

Opportunities and challenges

3.7   … INSERT KEY EVIDENCE

Market and technology drivers

3.8   …

Case Study: Supply Chain Fusion

3.9 …

Case Study: Energy and Clean Growth Opportunities

3.10 …

Links to the Grand Challenges

3.11 …

Our commitments and propositions

3.12 …

Table 3-1: Business Environment Proposition 1:

Context	Strategic Case	Intervention	Role of local partners and role of Government

Table 3-2: Business Environment Proposition 2:

Context	Strategic Case	Intervention	Role of local partners and role of Government

Etc.

Cross-boundary working

3.13 …

4 Ideas

Our economy will be innovative by exploiting the synergies between our key sectors and supporting the generation and adoption of new processes, materials, and digitalisation across our supply chains.

Key messages

- …

Strengths and weaknesses

Strengths on which to build

Lancashire's innovation assets and eco-system

4.1 …INSERT KEY DATA

Innovation Assets Map

INSERT INNOVATION ASSETS MAP

Case Study: Higher Education and Nuclear Sector collaboration

4.2 …

Case Study: Clean Growth

4.3 …

Case Study: Computing and Cyber Security

4.4 …

Weaknesses to address

4.5 …

Commercialisation of intellectual property

4.6 …

Opportunities and challenges

4.7 … INSERT KEY EVIDENCE

Links to the Grand Challenges

4.8 …

Commitments and propositions

4.9   …

Table 4-1: Ideas Proposition 1:

Context	Strategic Case	Intervention	Role of local partners and role of Government

Table 4-2: Ideas Proposition 2:

Context	Strategic Case	Intervention	Role of local partners and role of Government

Etc.

Cross-boundary working

4.11   …

5 People

Our economy will be resilient by building an agile, healthy workforce that can anticipate and respond to market and technological change.

Key messages

- …

Strengths and weaknesses

Strengths on which to build

5.1 …INSERT KEY DATA

Case Study: Skills and Employment Advisory Board

5.2 …

Case Study: Careers Hub

5.3 …

Case study: Digital Skills Partnership

5.4 …

Weaknesses to address

5.5 …

Inequalities

5.6 …

Case Study: Support for those not in employment, education or training

5.7 …

Ageing Workforce

5.8 …

Mental wellbeing

5.9 …

Case Study: BAE Systems programmes to support mental wellbeing in the workplace

5.10

Opportunities and challenges

5.11   …

Links to the Grand Challenges

5.12   …

Commitments and propositions

5.13   …

Table 5-1: People Proposition 1:

Context	Strategic Case	Intervention	Role of local partners and role of Government

Table 5-2: People Proposition 2:

Context	Strategic Case	Intervention	Role of local partners and role of Government

Etc.

Cross-boundary working

5.14   …

6   Place

Our ambitions

Our economy will be inclusive by promoting good jobs, higher productivity, and greater earning power in all our diverse communities, recognising their unique contribution to Lancashire's competitiveness. **And it will be environmentally sustainable** by ensuring our investments help the UK to achieve net-zero carbon before 2050.

Key messages

- …

Travel to Work patterns

6.1   …INSERT DATA ON TTWA to illustrate relatively limited travel between places in Lancashire (linked to poor connectivity)

Strengths and weaknesses

Strengths on which to build

6.2   … INSERT KEY DATA inc quality of life, plus data on variation between local authority districts

Case Study: Cultural Strategy?

6.3   …

Weaknesses to address

6.4   …Insert KEY DATA inc spatial deprivation and transport links, plus retail and high streets data?

Map showing major transport links and areas of deprivation

6.5   INSERT MAP SHOWING TRANSPORT LINKS AND DEPRIVATION

6.6   …

Case Study: Rural Productivity

6.7   …

Opportunities and challenges

6.8   … INSERT KEY DATA

Case Study: Visitor Economy

6.9   …

Case Study: Future High Streets and/or Town Deals?

6.10 …

Commitments and propositions

6.11 …

Table 6-1: Place Proposition 1:

Context	Strategic Case	Intervention	Role of local partners and role of Government

Table 6-2: Place Proposition 2:

Context	Strategic Case	Intervention	Role of local partners and role of Government

Etc.

Cross-boundary working

6.12 …

7   Infrastructure

Our ambitions

Our economy will be connected by enhancing our digital connectivity to enable digitalisation of industry and public services, and our transport infrastructure to improve movement within and between Lancashire and the rest of the world, in particular its immediate neighbours.

Key messages

- …

Strengths and weaknesses

Strengths on which to build

7.1   … INSERT KEY DATA inc. housing delivery data, current digital connectivity data, and good N-S transport links

7.2   QUESTION IN RELATION TO AIRPORT REQUIREMENTS: ACCESS OUTSIDE AND/OR CAPACITY INSIDE LANCASHIRE?

Weaknesses to address

7.3   …INSERT KEY DATA inc. spatial deprivation and transport links, plus retail and high streets data

Map showing major transport links and areas of deprivation

7.4   INSERT MAP SHOWING TRANSPORT AND DEPRIVATION

Opportunities and challenges

7.5   … INSERT KEY DATA inc. sites and premises information

7.6   QUESTIONS:

- ARE THERE INFRASTRCUTURE ASKS RELATED TO ENERGY – EG HYDROGEN – THAT NEED TO BE CITED IN THIS SECTON RATHER THAN IN BUSINESS ENVIRONMENT?

Commitments and propositions

7.7   …

Table 7-1: Infrastructure Proposition 1

Context	Strategic Case	Intervention	Role of local partners and role of Government

Table 7-2: Infrastructure Proposition 2

Context	Strategic Case	Intervention	Role of local partners and role of Government

Etc.

Cross-boundary working

7.8   …

8 Implementation and Evaluation

Our ambitions

8.1

Key messages

• …

Leadership and Governance

8.2 …

Local delivery capacity and capability

8.3 …

Market and Technology Foresight

8.4 …

Evaluation

Strategic Added Value

8.5 …

KPIs

8.6 …

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A   Sources: Figure 2-10: Drivers of change and implications for Lancashire [Proposals included for illustrative purposes; all subject to discussion]

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