

# North West Productivity and Growth Strategies

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## Abstract

This Insights Paper provides an overview of the challenges and opportunities for the North West, with a particular focus on productivity. It describes the key social and economic drivers across the region, with specific attention paid to the initiatives that are driving growth and development. Section 2 provides an overview of productivity in the region relative to the UK as a whole. Section 3 examines various drivers of productivity, using a 'scorecard' approach developed by The Productivity Institute's Data Lab.

Section 4 provides an overview of the initiatives that are being taken in different parts of the region that may contribute to future productivity improvements, with a focus on sustainability and net zero, human capital, physical capital, and technology.

Section 5 provides insights and perspectives from a range of regional actors from the public and private sectors. It is based on a roundtable event which sought to gain practitioners' views on the key productivity challenges and opportunities. This is followed by a SWOT analysis for the region and policy considerations.

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# 1 Introduction

The North West of England is composed of five distinct but interconnected sub-regions (see Figure 1): the two major cities and urban agglomerations surrounding Manchester and Liverpool and the more rural regions of Lancashire and Cumbria to the north and Cheshire to the south. It has strong economic linkages to its immediate neighbours, Yorkshire and the North East, North Wales, and the West Midlands. This Insights Paper provides an overview of the productivity challenges and opportunities facing the region.

*Figure 1: Map of the North West*



The paper examines various drivers of productivity using a 'scorecard' approach developed by The Productivity Institute's Laboratory. The analysis shows that Manchester is "Steaming Ahead" with a higher productivity level and growth rate than the UK since the 2008 recession. The last North West Insights Paper Executive Summary reported that the North West average and most sub-regions were in the "Falling Behind" quadrant (with both lower 2021 productivity levels and 2008-2021 growth rates than the UK regional average). They have since moved to the "Catching Up" quadrant, so they have lower productivity in 2022 but higher 2008-2022 growth rates than the average UK region.

The paper outlines key interventions and actions taken across the region that address these low productivity challenges, with a focus on strategies and initiatives in the areas of net zero, skills and human capital, housing and infrastructure, and digitalisation and AI adoption.

The economic strategies for the region prioritise inclusive growth, the continued support of innovative sectors, developing world-class infrastructure and talent, and transitioning to a zero-carbon economy. There are clear signs of growth, ambition, and success as the region leverages its world-class research, particularly in the life sciences, advanced manufacturing and digital adoption. The paper emphasises the need for a coordinated, long-term effort by both central government and local actors to address the North West's productivity challenges.

## 1.1 Structure of the Paper

This Insights Paper provides an overview of the challenges and opportunities for the North West, with a particular focus on productivity. It describes the key social and economic drivers across the region, with specific attention paid to the initiatives that are driving growth and development. Section 2 provides an overview of productivity in the region relative to the UK as a whole. Section 3 examines various drivers of productivity, using a 'scorecard' approach developed by The Productivity Institute's Data Lab.

Section 4 provides an overview of the initiatives that are being taken in different parts of the region that may contribute to future productivity improvements, with a focus on sustainability and net zero, human capital, physical capital, and technology.

Section 5 provides insights and perspectives from a range of regional actors from the public and private sectors. It is based on a roundtable event which sought to gain practitioners' views on the key productivity challenges and opportunities. This is followed by a SWOT analysis for the region and policy considerations.

## 2 Current landscape

### 2.1 Highlights from the previous Insights Paper

The previous North West [TPI Insights](#) paper was published in 2021 and provided a comprehensive analysis of the productivity challenges faced by the North West (Allmendinger et al., 2021). It outlined that the region's average productivity, as measured by Gross Value Added (GVA) per hour worked, lags the national average, and that this gap was widening over the past decade. It highlighted that the primary reasons for this productivity shortfall were underinvestment by the public and private sectors in key growth drivers such as infrastructure, R&D, and human capital, as well as the long-term scarring from the region's industrial decline. The region's fragmented economic geography and lack of critical mass also contributed to the productivity gap.

The report identified several factors explaining the North West's productivity performance, including its economic structure and organisational capital, geography and place, human capital and skills, investment and knowledge capital, and institutions and governance. The region's productivity challenges are not limited to its sectoral composition but also stem from lower productivity within individual sectors compared to the national average. The region's reliance on SMEs, lack of large company headquarters, and lower engagement with international markets were also identified as contributing factors.

In recent years, some of the challenges for the North West's productivity have been the result of chronic underinvestment in key growth drivers, including infrastructure, R&D, and human capital. Other factors include a lack of opportunities and finance for high-growth potential firms, skills mismatches, and the hollowing out of local government capacity due to over-centralisation and austerity<sup>1</sup>. However, as this Insights Paper will explain, there are some significant interventions to redress this.

Addressing the North West's productivity challenge will require a concerted, long-term effort by both central government and key local actors. This should involve a renewed commitment to devolution, and a focus on supporting growth and innovation, exposure to international competition, technology adoption, and the development of the workforce and management skills needed for a digitally enabled, net-zero economy. Critically, there is a need for a better understanding of the drivers of productivity, specific to the different places across the region, to ensure that policy interventions are targeted effectively.

The 2021 report asserted that addressing the North West's productivity challenges would require coordinated policies and long-term commitments that respond to the region's specific local circumstances. Key priorities include supporting the region's digital transformation, improving human capital through better education, skills, and health outcomes, and strengthening the region's innovation ecosystem and institutional capacity. The report also emphasised the need for further research to better understand the drivers of productivity growth and the impact of policy interventions in the North West. This Insights Paper will outline some of the key interventions and actions taken across the region to address these challenges and identify areas that may still require development in order to improve

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<sup>1</sup> [The north-west's productivity crisis: Causes, challenges and solutions](#) By Professor Kieron Flanagan, 2021.



productivity and prosperity. This will be based on the reports and intelligence from across the North West sub-regions along with the data provided by the Data Lab at The Productivity Institute.

## 2.2 Governance and key anchor institutions

The North West has two Combined Authorities: Greater Manchester (GMCA, comprised of 10 Local Authorities, and the Liverpool City Region, LCR, including 6 local authority areas). Both the LCR and GMCA have elected Mayors. The region is home to several impactful anchor institutions. Anchor institutions refer to the large organisations within an area that connect to the wider community to support economic growth and social development. These include organisations in the public, private and community and voluntary sectors and typical examples are Universities, Further Education Colleges and Training Providers and NHS trusts. The ability of anchor institutions to act as drivers of social and economic wellbeing is influenced by the extent to which they can work together towards a common purpose for the region (Collier, 2022). This report highlights several impressive collaborations across the North West that should support productivity and prosperity, particularly in innovation and net zero, life sciences and advanced manufacturing.

### 2.2.1 Changes in Governance Structure since 2021

The change in the sub-national governance structures since The Productivity Institute's (TPI) North West Forum report in 2021 includes the abolition of seven councils in Cumbria, replaced by two unitary authorities. These came into operation in April 2023. Cumberland Council replaced Allerdale Borough Council, Carlisle City Council, and Copeland Borough Council. Westmorland and Furness Council covers the former districts of Barrow-in-Furness, Eden and South Lakeland.

The Local Enterprise Partnerships across England ceased to exist in March 2024. These have been replaced in Cumbria by Enterprising Cumbria<sup>2</sup>, in Cheshire and Warrington by Enterprise Cheshire and Warrington<sup>3</sup>, in Lancaster by Invest in Lancaster<sup>4</sup>. In the Mayoral Combined Authority (CA) of Greater Manchester and Liverpool City Region the LEPS have been replaced by Business Boards that work alongside the CAs<sup>5</sup>.

## 3 The Productivity Landscape

The North West has a population of 7.4m in the 2021 Census and is the third most populated region in the United Kingdom<sup>6</sup>. The population has grown by 368,100 since 2011 or 5.2% (compared to an increase in population for the UK of 5.8%). The working age population (16-64 years old) is 4.5m which makes up 60.8% of the population in 2021. The region has some of the most significant structural deprivation challenges in the country, with more than 222,100 people claiming out-of-work benefits in October 2024 (5.5% of the population, compared to 4.7% in the UK). The North West has 23.7% of the working-age population classified as inactive, compared

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<sup>2</sup> See <https://www.cumberland.gov.uk/news/2024/enterprising-cumbria-board-members-announced>.

<sup>3</sup> See <https://cheshireandwarrington.com/how-we-work/>.

<sup>4</sup> See <https://investinlancashire.com/>.

<sup>5</sup> See <https://gmbusinessboard.com/> and <https://www.liverpoolcityregion-ca.gov.uk/business-and-enterprise-board-2>.

<sup>6</sup> See <https://www.nomisweb.co.uk/reports/lmp/gor/2013265922/report.aspx>

to 21.6% in the UK. Of the inactive population, 32.5% are inactive due to ill health (for 2023-24), compared to 30.4% in the UK.

The estimated number of businesses operating in the North West is 313,710 in 2024. The majority of firms (83%) in the region are micro-sized with fewer than 10 employees. 16.5% are SMEs employing between 10 and 249 people, and just 0.4% (or 1,390 firms) employ 250+ people. The corresponding figures for the UK are 84.2% micro, 15.4% SMEs, and 0.4% 250+. The North West economy generated £220bn in economic output in 2022 (9.8% of the UK total)<sup>7</sup>, with growth of 23.2% since 2008 (compared to 18% growth of UK GVA since 2008).

The Productivity Institute has conducted extensive research on the range of drivers that can help places improve productivity and become more prosperous. The 'scorecard' approach has been developed by TPI's Productivity Lab.

### 3.1 The 2024 TPI UK ITL3 Productivity Scorecards

The 2024 edition of The Productivity Institute's UK International Territorial Level 3 (ITL3) Regional Productivity Scorecard series assesses productivity performance across regions and devolved nations in the UK, facilitating comparisons between and within regions at the ITL1 and ITL3 geographical levels. The scorecards include data from various sources, such as the latest revised release of the ONS sub-national productivity data and provide detailed information on productivity drivers for the years 2020, 2021, and 2022. The series covers the three devolved nations of the UK, along with nine English ITL1 sub-national areas and 179 ITL3 sub-regional areas.

Figure 2 illustrates the North West region TPI ITL3 Scorecard for 2022, with data for ITL3 sub-regions within the North West. The Scorecard in Figure 2 presents the productivity (GVA/hour) level for 2022 and the drivers of productivity. Figure 3 presents the cross-plot of the ITL3 region productivity level in 2022 against the growth rate in productivity between 2008 and 2022 to show the changes in productivity over time. The scorecard in Figure 2 and the cross-plot in Figure 3 use a four-category taxonomy to describe how the sub-regions are progressing compared to the UK average productivity level and growth rate. As shown in Figures 2 and 3, the North West ITL1 area is categorised as a "Catching Up" region, with a higher productivity growth rate at 9.9% (between 2008 and 2022) than the UK average of 8%, but a lower productivity level (GVA/hour at £36.8) than the UK in 2022 (£39.7). Within the North West, Manchester is categorised as a "Steaming Ahead" sub-region, with a productivity level (£40.7) and growth rate (17%) both above the UK averages. The improvement for Manchester since the TPI 2021 Insights Paper is significant, transforming it from a "Falling Behind" to a "Steaming Ahead" city.

Most other Greater Manchester and Lancashire sub-region productivity, along with Sefton and Warrington, have improved, moving into the "Catching Up" category (with a lower productivity level than the UK in 2022 but higher growth rates since 2008). Cheshire East, Cheshire West and Chester, Greater Manchester South West, and Mid Lancashire are in the "Losing Ground" quadrant, with higher productivity than the UK average in 2022 but also below-average growth since the 2008 recession. Lastly, regions categorised as "Falling Behind," such as East Merseyside, Liverpool, West Cumbria, and the Wirral, exhibit both low productivity levels in

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<sup>7</sup> See ONS GVA(B), Table 1 in

<https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/nominalandrealregionalgrossvalueaddedbalancedbyindustry>

2022 and lower growth rates since 2008 than the UK. Further information on the scorecards can be found [here](#).

Figure 2: 2024 Release of TPI Regional Productivity Scorecards: ITL3 North West

North West ITL3 Scorecards for 2022																						
Category	Driver of Productivity	TLD	TLD62	TLD63	TLD33	TLD45	TLD34	TLD61	TLD47	TLD71	TLD72	TLD44	TLD73	TLD74	TLD35	TLD36	TLD46	TLD12	TLD11	TLD37	TLD41	TLD42
		North West	Cheshire East	Cheshire West and Chester	Manchester	Mid Lancashire	Greater Manchester South West	Warrington	Chorley and West Lancashire	East Merseyside	Liverpool	Lancaster and Wyre	Sefton	Wirral	Greater Manchester South East	Greater Manchester North West	East Lancashire	East Cumbria	West Cumbria	Greater Manchester North East	Blackburn with Darwen	Blackpool
Productivity	Taxonomy relative to the UK	Catching up	Losing ground	Losing ground	Steaming ahead	Losing ground	Losing ground	Catching up	Catching up	Falling behind	Falling behind	Catching up	Catching up	Falling behind	Catching up	Catching up	Catching up	Catching up	Falling behind	Catching up	Catching up	Falling behind
	Taxonomy relative to ITL1		Losing ground	Losing ground	Steaming ahead	Losing ground	Losing ground	Steaming ahead	Catching up	Falling behind	Falling behind	Catching up	Catching up	Falling behind	Catching up	Catching up	Catching up	Catching up	Falling behind	Catching up	Catching up	Falling behind
	GVA per hour worked	£36.80	£45.70	£44.00	£40.70	£40.30	£39.80	£38.00	£36.60	£35.70	£35.60	£35.40	£35.30	£34.90	£33.50	£33.20	£33.10	£32.70	£32.00	£31.10	£30.60	£29.70
Business Performance	Export Intensity	25.3%	53.7%	42.8%	21.4%	58.3%	17.7%	21.7%	14.1%	36.0%	19.3%	14.3%	20.0%	13.0%	16.2%	12.1%	18.8%	22.9%	23.2%	14.6%	14.9%	4.5%
	New Businesses	12.5%	9.9%	10.4%	14.8%	11.1%	12.8%	11.7%	10.6%	12.6%	15.9%	10.9%	12.6%	13.0%	12.6%	13.1%	11.9%	9.4%	8.7%	13.7%	13.0%	17.0%
Skills & Training	Low Skilled*	10.8%	8.3%	8.9%	12.7%	5.3%	9.1%	11.0%	13.8%	13.9%	11.2%	10.1%	10.5%	9.8%	9.3%	12.9%	9.9%	10.2%	11.8%	12.5%	17.1%	13.6%
	High Skilled	42.6%	48.9%	42.0%	52.5%	47.3%	51.8%	47.5%	42.4%	38.4%	50.1%	36.4%	41.7%	42.7%	44.5%	34.8%	35.4%	44.5%	32.5%	33.3%	29.1%	34.8%
Health & Well-being	Active	80.2%	87.8%	77.9%	75.7%	82.6%	79.2%	84.0%	77.0%	81.8%	74.3%	78.8%	80.2%	83.2%	84.3%	81.0%	79.2%	87.8%	81.5%	78.7%	75.4%	77.6%
	Inactive due to illness*	36.3%	31.4%	26.7%	31.5%	28.4%	29.3%	30.2%	34.4%	48.4%	40.3%	39.9%	35.2%	41.6%	36.5%	38.6%	36.8%	52.9%	52.1%	33.0%	31.6%	49.7%
	Working Age	57.2%	51.3%	53.3%	65.9%	55.3%	58.7%	58.9%	55.7%	56.0%	64.7%	54.8%	55.1%	57.1%	57.4%	56.8%	54.8%	52.7%	55.1%	56.8%	56.2%	56.4%
Investment, Infrastructure & Connectivity	4G connected	86.9%	84.3%	71.9%	98.7%	81.6%	94.8%	82.2%	73.2%	91.9%	98.9%	78.6%	77.4%	83.3%	93.9%	89.9%	89.8%	65.6%	70.3%	92.7%	97.0%	84.9%
	Fibre connected	35.8%	31.7%	56.0%	40.3%	40.7%	40.6%	21.9%	47.1%	26.1%	45.4%	56.5%	43.2%	71.2%	29.7%	20.3%	22.5%	23.5%	17.8%	39.4%	14.2%	3.9%
	GFCF per job	£9,478	£11,783	£11,946	£11,578	£11,812	£10,966	£7,654	£6,777	£9,139	£11,195	£7,642	£8,259	£6,855	£5,908	£5,664	£6,443	£11,323	£20,234	£6,104	£6,522	£5,039
	ICT per job	£404	£420	£536	£454	£657	£508	£387	£326	£414	£442	£474	£403	£290	£270	£216	£384	£372	£506	£271	£255	£178
	Intangibles per job	£1,900	£3,450	£2,283	£2,077	£3,287	£2,954	£1,527	£1,246	£2,071	£1,480	£700	£1,015	£2,465	£1,299	£784	£1,028	£3,231	£1,216	£1,163	£844	£822

**Key**

Better: higher than 105% of weighted mean of ITL1 parent region

Equal: within 95% - 105% of weighted mean of ITL1 parent region

Worse: lower than 95% of weighted mean of ITL1 parent region

No data available

\* Reverse colour scale, lower values stimulate productivity

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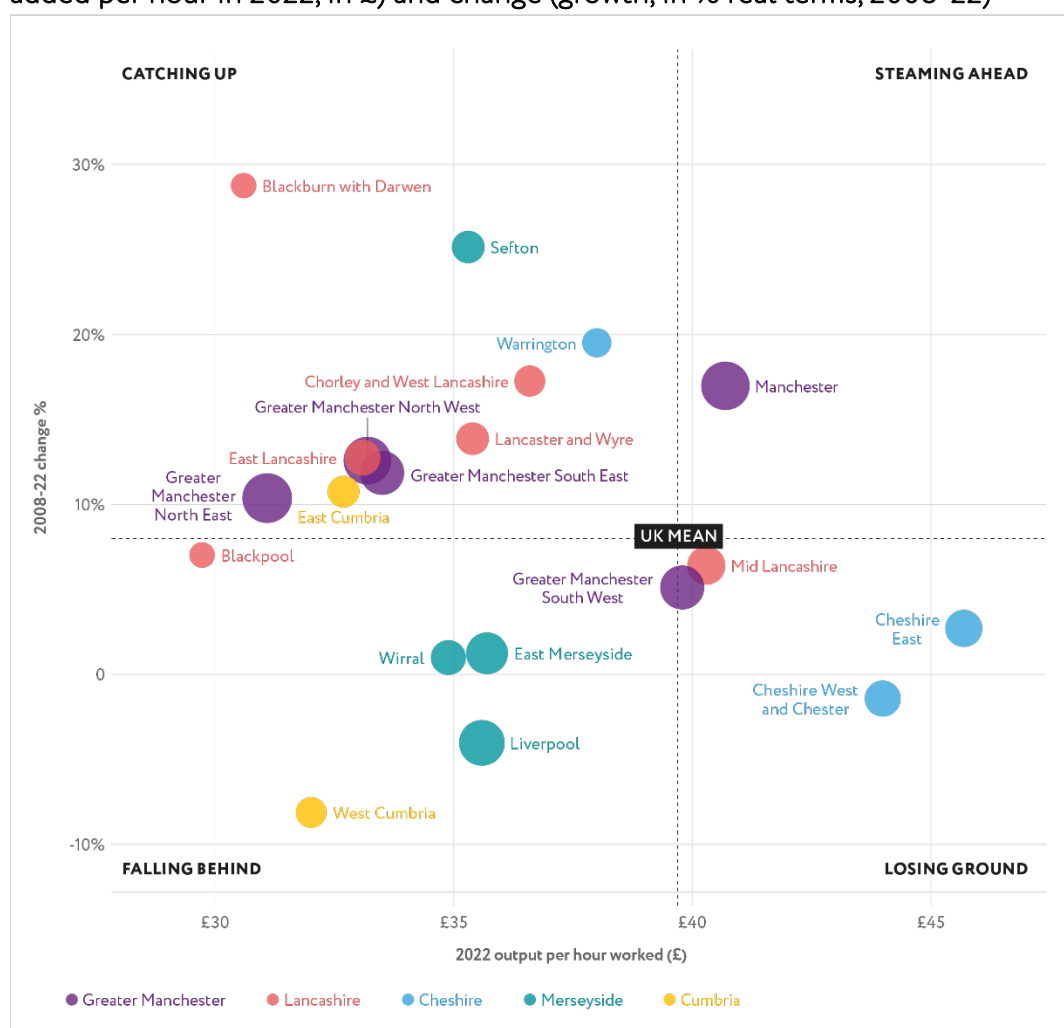
<https://doi.org/10.48420/23791680>

[Annex: Methods and Sources](#)

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Source: Garcia et al, (2024), TPI North West ITL3 Scorecards, ([https://www.productivity.ac.uk/wp-content/uploads/2024/11/2024\\_TPI\\_North\\_West\\_ITL3\\_Scorecards.pdf](https://www.productivity.ac.uk/wp-content/uploads/2024/11/2024_TPI_North_West_ITL3_Scorecards.pdf))

Figure 3: Labour Productivity Performance by ITL3 Regions in the North West, levels (value added per hour in 2022, in £) and change (growth, in % real terms, 2008-22)



Source: Office for National Statistics, Subregional productivity: labour productivity indices by UK ITL2 and ITL3 subregions, [ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/datasets/subregionalproductivitylabourproductivitygaperhourworkedandgaperfilledjobindicesbyuknuts2andnuts3subregions](https://ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/datasets/subregionalproductivitylabourproductivitygaperhourworkedandgaperfilledjobindicesbyuknuts2andnuts3subregions) June 2024. Ortega-Argilés, R. and Menukhin, O. (2025) UK Subnational Productivity Visualisations, TPI Productivity Forum detail DOI:10.48420/28212929

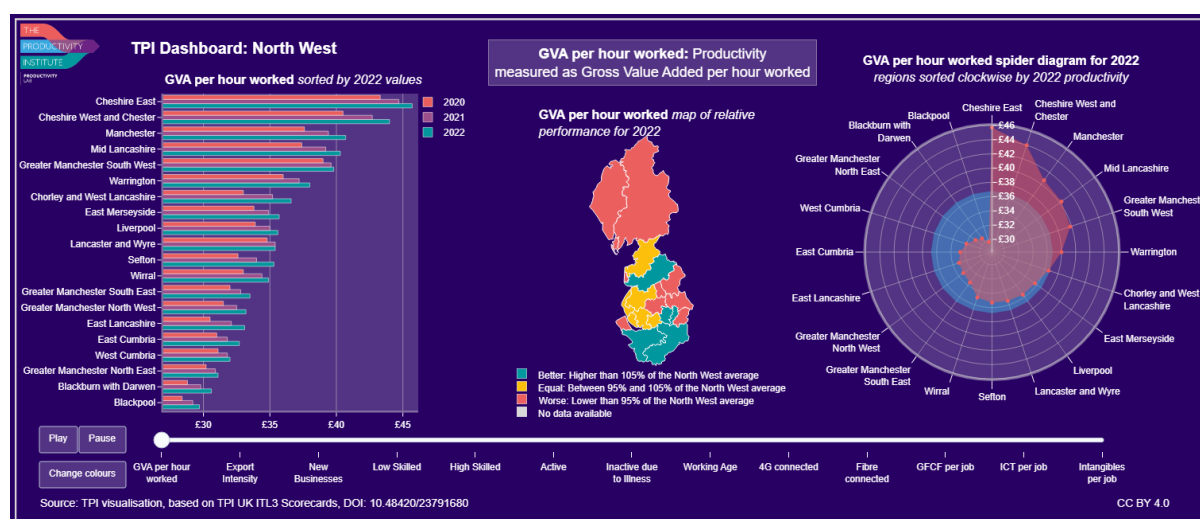
Notes: Size of bubble denotes working population for the region and colour denotes ITL2 region. The Greater Manchester boroughs within the ITL3 regions are as follows. GM SE: Stockport & Tameside; GM SW: Salford & Trafford; GM NE: Bury, Oldham & Rochdale; GM NW: Bolton & Wigan. East Merseyside contains the boroughs of Halton, Knowsley and St. Helens. East Lancashire includes the districts of Burnley, Hyndburn, Pendle and Rossendale. Mid Lancashire includes the districts of Chorley, Fylde, Preston, Ribble Valley and South Ribble. East Cumbria covers the former districts of Carlisle, Eden and South Lakeland. West Cumbria covers the former districts of Allerdale, Barrow-in-Furness and Copeland.

The TPI Regional Productivity Scorecard for ITL3 North West in Figure 2 and Dashboard in Figure 4 assess four key regional productivity drivers: business performance, skills and training, health and well-being, and investment and infrastructure. These drivers are evaluated using 12 indicators, examining their short and long-term performance from 2022. From the North West Scorecards, we find that export performance (from 2021) is above the median (green) for 4/20 sub-regions in 2022, with the rest of the sub-regions below the median (red). This is a

deterioration in relative export performance since 2019 (this is compared to the 2023 release of the scorecard, see Gouma et al., 2023), when 5/20 were above the median and two sub-regions were at the median. New business starts as a percentage of the total business population were found to be above the median for 6/20 sub-regions in 2019, with this falling to 5/20 sub-regions in 2022.

Persistent skills challenges remain across the North West. In 2019, six of the 20 ITL3 sub-regions were below the median for the number of adults with only low-level qualifications (no qualifications or NVQ1 only), increasing to eight sub-regions in 2022. There have been improvements in the share of adults with high skills (NVQ4+) as 9/20 sub-regions were below the median in 2019, falling to 8/20 in 2022, an indication that the region may be retaining more graduates.

Figure 4: Illustration from the TPI Dashboard for the North West



Source: <https://www.productivity.ac.uk/the-productivity-lab/the-2024-tpi-uk-itl3-productivity-scorecard-series/>

In terms of health and wellbeing, the active share of the working population (those in the labour market in employment or unemployed) has increased in the North West from 77.7% in 2019 to 80.2% in 2022. Manchester, Liverpool and Blackburn with Darwen, had the lowest share of the active working population in 2022. The share of the inactive working population reporting ill health increased in the North West from 27.2% in 2019 to 36.3% in 2022 (inactivity has risen nationally since the COVID-19 pandemic). The working age measure is an indication of the dependency ratio in a sub-region. This is calculated as the share of the population aged 16-64 years old divided by the total population in an area. This percentage for the North West has fallen from 61.2% in 2019 to 57.2% in 2022, possibly indicating an aging population. Manchester and Liverpool have the highest shares of 16-64 year olds in the population, with rates above the North West median.

Infrastructure indicators include the percentage of indoor premises with 4G services from all mobile network operators within the region and fibre connectivity, which is the percentage of premises that have access to a full optic-fibre connection. Both measures have improved over time with 80.1% of the North West premises receiving 4G in 2019, rising to 86.9% in 2022. In

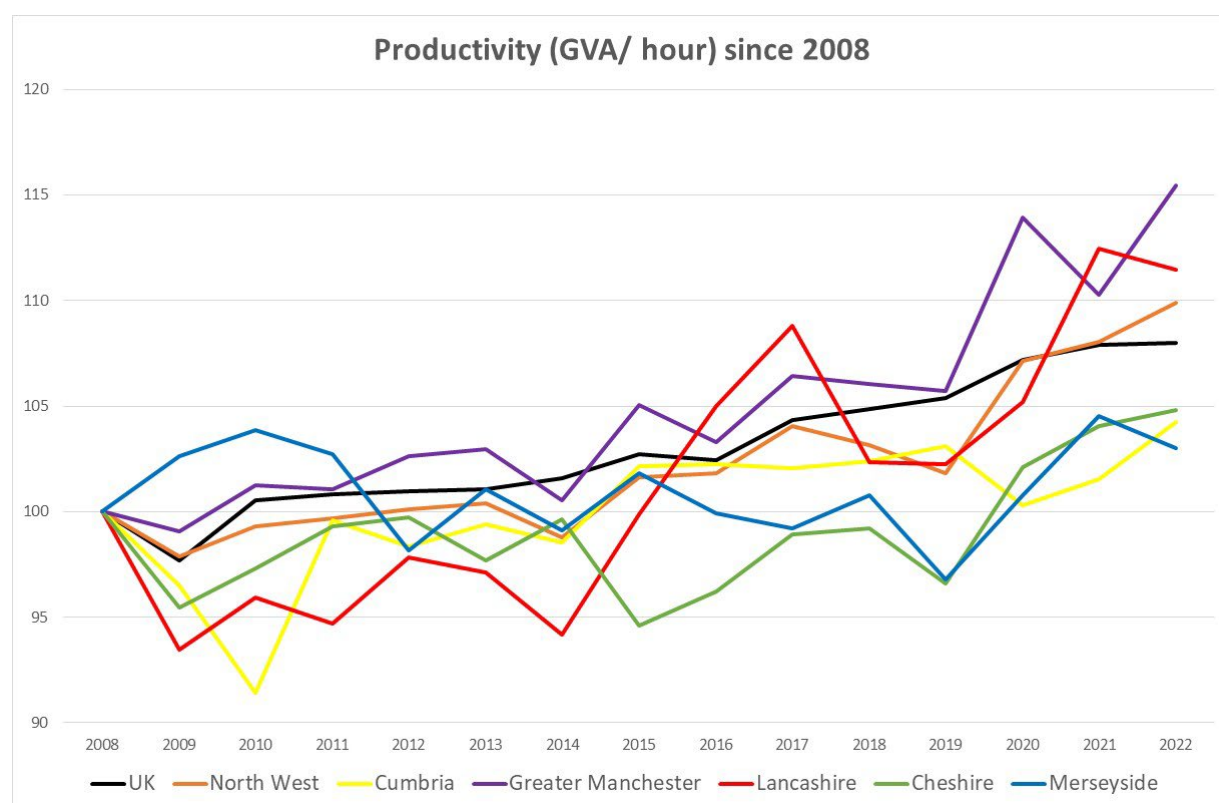
terms of fibre optic rollout, the percentage has increased from 8.2% in 2019 (with 6/20 sub-regions better than the median) to 35.8% in 2022, with 10/20 better than the median.

The indicators representing investment in the region are from the ONS (2022) release of ITL3 sub-regions Gross Fixed Capital Formation (GFCF) divided by the number of jobs in the region. The series ends in 2020 and is carried over to the 2021 and 2022 scorecards. Generally, those regions that have the highest investment per job have the highest productivity. An exception to this is West Cumbria, with two large industrial sites with high investment that includes Barrow-in-Furness (where BAE Systems build nuclear submarines) and Copeland (where Sellafield nuclear site is located and being decommissioned). Information and Computer Technology (ICT) and Intangibles per job are also noted (as categories of investment within GFCF), generally these have higher investment per job in more productive sub-regions.

## 3.2 North West Productivity Growth Since 2008

The North West sub-regions (at ITL2) growth in productivity since 2008 are compared in Figure 5 along with the UK and North West (at ITL1), with the 2008 base year set at 100. Here we see that Greater Manchester productivity (GVA/hour) has grown by 15.4% since 2008, with UK growth at 8% and the North West at 10% by 2022. Lancashire has the second highest growth of the sub-regions at 11.5% followed by Cheshire at 5%, Cumbria at 4% and Merseyside at 3%.

Figure 5: Comparison of Productivity Growth for North West Sub-regions Since 2008



Source: ONS (2024b).



In the Appendix we show further charts for the components of productivity (GDP and hours) and the progress of employment in the sub-regions since 2008. From Figure A.1 for GDP we see that again Greater Manchester has far outpaced the rest of the North West with growth since 2008 of 35%, compared to UK growth of 18% and for the North West of 23%. Cheshire has had the second highest growth in output within the North West at 22%, with Merseyside growing by 17%, Lancashire by 15%, and Cumbria by 3%. In Figure A.2, for hours worked per week, Greater Manchester has had the highest growth of 17.5% since 2008, compared to UK hours growth of 11.5% and for the North West of 11%. Cheshire has had the second highest hours worked growth within the North West at 15.5%, with Merseyside growing by 10%, Lancashire 3% and Cumbria with fewer hours worked since 2008 with -1.4%.

Employment changes since 2008 are shown in Figure A.3. Greater Manchester employment has had higher growth than the rest of the North West since 2008 of 16.6%, compared to UK employment growth of 11% and 10% in the North West. Cheshire has had the second highest employment growth within the North West at 12%, with Merseyside growing by 10%, Cumbria 1.4% and Lancashire 0.3%. Lancashire and Cumbria employment has been far less resilient to economic shocks, and both have yet to recover their pre-COVID employment levels.

### 3.3 North West Strengths in Industrial Strategy Sectors

We present some analysis by The Data City using their Real-time Standard Industrial Classification (RTICs) codes gathered from searching firms' websites. Table 1 shows the specialisation in the eight priority sectors outlined in the Government's Green Paper on Industrial Strategy 2035 for the North West (ITL1 level) and the five sub-regions (ITL 2 level). The location quotients are calculated by taking the number of operating addresses of companies classified in the sectors (company counts) as input data. A location quotient greater than one shows the North West region has a greater strength in that sector than the UK average. Please note this is experimental research that has not yet been published.

**Table 1: Experimental RTICs Location Quotients for North West's Industrial Strategy Sectors**

Industrial Strategy Sector	NW	Cumbria	GM	Lancs.	Cheshire	LCR
Advanced Manufacturing	0.96	0.8	1	1.2	1.1	0.8
Clean Energy Industries	0.7	1.9	0.4	0.8	1.2	0.7
Digital Creative Industries	0.9	0.8	0.9	0.7	0.8	0.8
Defence	0.6	N/A	0.3	0.8	N/A	1.7
Digital and Technology	0.9	0.7	1	0.9	1.4	0.9
Financial Services	0.9	0.7	0.9	0.8	1.3	0.8
Life Sciences	1.12	1.3	1	1	1.7	1.1
Professional and Business Services	1.06	0.9	1.2	1	1.4	1

Source: The Data City, <https://thedatacity.com/real-time-sic-codes/>



Table 1 shows that the North West has firm specialisations in the life sciences and professional business services sector with location quotients greater than one. The advanced manufacturing sector firms have a quotient of just under one. When we analyse location quotients by ITL 2 sub-regions, we find that Cumbria has higher specialisation in the clean energy industries, which aligns with the presence of the Sellafield nuclear site and renewable energy. There is also a specialism in the life sciences sector in Cumbria, with a concentration of activity around the GSK site in Ulverston<sup>8</sup>. Greater Manchester has some specialisms with the highest location quotient for companies in the Professional and Business Services (PBS) sector. GM also has strengths in advanced manufacturing, digital and technology and life science companies. Lancashire has the strongest location quotient across the North West for advanced manufacturing (with the presence of BAE Systems in Preston), with further strengths in life sciences and PBS. Cheshire has a high specialism in life science companies and a concentration of activity in Alderley Park<sup>9</sup>. Cheshire has further strengths of companies in digital and technology, PBS, financial services, clean energy industries and advanced manufacturing. The Liverpool City region has a concentration of companies higher than the UK average in defence. Here LCR has additional strengths in life sciences and PBS. We discuss each of these sub-regions in more detail in the following sections. Table 2 illustrates some of the key words retrieved in the Data City analysis of websites for the three strongest areas across the North West. Key words in Professional and Business Services in the North West pick up the strength of advanced manufacturing and life sciences in the region.

**Table 2: Frequent Key Words mentioned on Company Websites by sector**

Life Sciences	Professional and Business Services	Advanced Manufacturing
orphan drug	medical technologies	human machine
small molecule	orphan drug	digital supply chain
contaminated land	advanced materials	additive manufacturing
precision medicine	Prefabrication	industry 4.0
flood resilience	future of mobility	3d printing
environmental consultancy	precision medicine	manufacturing technologies
biologic	omni channel	Gamification
regenerative medicine	medical affairs	Robotics
medical affairs	industry 4.0	advanced manufacturing
	autonomous vehicles	internet of things

Source: The Data City, note the higher up the table the greater frequency.

<sup>8</sup> See <https://www.bbc.co.uk/news/uk-england-cumbria-64181124>

<sup>9</sup> See <https://www.alderleypark.co.uk/about-us>

## 4 Key Strategic Activities in the North West

This section provides an overview of each of the sub-regions within the North West based on the key economic and strategic documents that they produce. It will then give examples of strategies and interventions that they have planned and/or implemented. It will pay particular attention to the issues of 1) net zero, 2) skills, health and wellbeing, and 3) housing, infrastructure, planning and digitalisation and AI.

### 4.1 The Liverpool City Region

The Liverpool City Region (LCR) Combined Authority covers the metropolitan counties of Merseyside and Halton (in Cheshire). Merseyside has a population of 1.552m<sup>10</sup> people in the 2021 Census, with an increase of 3% since 2011. Merseyside has 47,510 businesses that generate 685,000 jobs across various sectors, from life sciences and manufacturing to tourism/visitor economy. The local economy GVA was £39.6bn in 2022 (18% share of North West total) and grew by 17% since 2008.

In terms of data from TPI's Productivity Lab Scorecard in Figure 2, in 2022, East Merseyside had a productivity (GVA/ hour) level of £35.70, just below the North West median of £36.80. East Merseyside has strengths in export intensity and intangible investment per job. Liverpool's productivity is at £35.60, and The Wirral's is at £34.90. Along with East Merseyside, these sub-regions are "Falling Behind" the UK average productivity level (£39.70), with growth rates also below the UK average. Liverpool has entrepreneurial strengths through the number of new businesses and share of highly skilled residents in 2022, along with a higher share of the working-age population (16-64 years) and strong internal connectivity. Sefton has a productivity level of £35.30, but as it has grown between 2008 and 2022 by 25% (higher than the UK's growth rate of 8%), it is in the "Catching Up" quadrant of Figure 3. Sefton has the most drivers of productivity around the median for the North West, though it has worse export intensity, 4G connectivity and investment per job, but fibre connectivity is better than the North West median.

#### 4.1.1 Liverpool City Region Overview

The Liverpool City Region Combined Authority was established in 2015 through a devolution agreement with the UK government which gave it greater powers and funding to drive economic growth and improve residents' outcomes. It is made up of the six local authorities of the city region – Halton, Knowsley, Liverpool, Sefton, St Helens and Wirral. Halton Borough Council is in Cheshire but collaborates with the Liverpool city region.

The key investment priorities include strengthening the core pillars of the economy (innovation, skills and labour market, place-making, and infrastructure); investing in clusters of opportunity (specialisms within advanced manufacturing, health and life sciences, and digital and creative – together with emerging opportunities in areas such as Clean Energy); and embedding inclusive economic development. The Combined Authority is committed to ensuring its investments

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<sup>10</sup> Population and GVA figures are from ONS (2024a) business and employee jobs are from Nomis: <https://www.nomisweb.co.uk/reports/lmp/la/1967128598/report.aspx?town=liverpool>

create social value, support the transition to net zero, and embed equality, diversity and inclusion.

The Strategic Investment Fund (SIF) is the mechanism through which the Combined Authority manages its devolved funding to invest in economic development aligned with its strategic priorities. The Combined Authority's Investment Strategy details the SIF's investment priorities, approval process, and funding principles. As part of further devolution, the Combined Authority will receive an Integrated Settlement from April 2026, intended to deliver consolidated funding with a single outcomes framework.

## 4.1.2 Growth sectors and opportunities

Life Sciences is a key growth sector for the region, with a cross-over to digital technology and advanced manufacturing. The examples below are taken from the LCR reports such as the Economic Opportunities Framework and Life Sciences Innovation Zone Prospectus<sup>11</sup>.

### 4.1.2.1 Health and Life Sciences

The Liverpool City Region (LCR) has one of Europe's largest pharma clusters and has the world's first tropical disease research institute (Liverpool School of Tropical Medicine). The region delivers £2 billion of infectious disease research and development annually, the largest concentration in the UK<sup>12</sup>. The city region has expertise in vaccine development through to production, and excels in therapeutics, with the University of Liverpool's world-renowned expertise in chemistry and pharmacology. LCR's advanced manufacturing capabilities, including the Materials Innovation Factory and Glass Futures, have the potential to support the commercialisation of life sciences research. With a low-cost base, and plans to increase R&D investment, the Liverpool City Region positions itself as a global destination for health and life sciences innovation and investment. Government confidence in the City Region's strengths is reflected in its Investment Zone designation in Life Sciences (see below) combined with High Potential Opportunity (HPO) from DBT, which is focused on vaccines. See [here](#) for more information.

### 4.1.2.2 Advanced Manufacturing

With a port-centric location providing global trade opportunities, a skilled workforce, established R&D infrastructure, and the presence of major Original Equipment Manufacturers (OEMs), LCR positions itself as having significant competitive advantages for advanced manufacturing businesses. It is important for productivity, where the percentage contribution to LCR's GVA is 70% larger than the national average, and where advanced manufacturing productivity is 17% higher than the national average. Strengths include automotive, with 15% of the UK's annual car production; Vaccine Production/Biomanufacturing (as in Health and Life Sciences above); advanced materials development utilising specialisms including the world-leading Materials Innovation Factory; and shipbuilding and engineering.

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<sup>11</sup> [https://api.liverpoolcityregion-ca.gov.uk/wp-content/uploads/HLS24\\_brochure-v2-1.pdf](https://api.liverpoolcityregion-ca.gov.uk/wp-content/uploads/HLS24_brochure-v2-1.pdf)

<sup>12</sup> [HLS24\\_brochure-v2-1.pdf](#)

#### 4.1.2.3 The Freeport and Innovation (Investment) Zone

UK Freeports are hubs for innovative, low-carbon industries. They bring local government, the private sector, and other partners together to deliver a shared economic vision built on local strengths. Freeports offer businesses tax reliefs, public investment, and support for innovation and trade, and to date, have attracted £2.9 billion in investment and created 6,000 jobs<sup>13</sup>. Freeports operate through public-private partnerships and are located across England, Scotland, and Wales. They also aim to benefit local communities by creating high-quality, long-term jobs and enabling councils to invest in infrastructure and skills programmes. Investment Zones are part of the same policy family as Freeports.

They are areas across the UK where central and local governments will work with businesses and local partners to create the conditions for investment and innovation. They cover defined economic geographies and include tax reliefs and direct government funding.

The Liverpool City Region has been granted both Investment Zone and Freeport status. The LCR Freeport, established in January 2023, has a focus on advanced manufacturing, pharmaceuticals, and green energy. The Freeport area, spanning 45km from Wirral Waters to Port Salford, offers approved operators a package of customs benefits and tax reliefs. The freeport is expected to drive R&D and innovation, particularly in green technologies, with the potential to add £850m to the local economy and create 14,000 jobs. The Life Sciences Innovation Zone (LCR uses the term Innovation Zone locally as opposed to Investment Zone), has the potential to attract £800 million in government and private sector investment and create 8,000 jobs.

The Port of Liverpool is also a key part of the global logistics industry. It provides excellent connectivity and a strategic location on both sides of the River Mersey and Manchester Ship Canal. It operates two main terminals, Royal Seaforth Container Terminal (RSCT) and Liverpool2, with additional facilities in Greenock, Dublin, and along the Manchester Ship Canal. It connects Liverpool to Global trade and connections and has excellent multimodal connectivity with immediate access to road, rail and sea networks.

### 4.1.3 Highlights from the key strategic economic documents

#### 4.1.3.1 Plan for Prosperity and Economic Opportunities Framework

The Plan for Prosperity is the Liverpool City Region's overarching economic and place strategy. It provides a strategic framework for future priorities, policy and investment decisions, and conversations with the Government about how they work together through devolution to increase prosperity for all people and communities. It sets out how the City Region will work towards an inclusive economy, address the net zero challenge, and maximise its prominence on the global stage, whilst also addressing key productivity pillars.

The Economic Opportunities Framework is a strategic investment document. Building on the Plan for Prosperity, the Framework aims to plan for an innovation-led economy of the future – how it is transforming and the opportunities for growth that will support high skilled jobs, drive up productivity, and deliver benefits for people and communities across the city region. It focuses on key clusters of transformational economic activity and innovation and the opportunities they provide, together with an emphasis on the key enablers that are important if the City Region is to realise its opportunities.

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<sup>13</sup> [About UK Freeports - UK Freeports](#)

#### 4.1.3.2 The Corporate Plan 2024-28

The LCR Combined Authority has a vision to make the region the best place “to grow up, grow a family, and grow a business”, where no one is left behind. The Corporate Plan 2024-2028<sup>14</sup> outlines the authority's priorities and strategies to achieve this vision through five key areas: Economy, People, Place, Transport, and Digital Infrastructure. The [Innovation Strategy](#) demonstrates a commitment to invest 5% of GVA in Research and Development by 2030. Realising the 5% target would deliver an estimated £41.7bn of gross economic benefit, a 10% increase in productivity and 44,000 new jobs<sup>15</sup>.

The report outlines the Authority's commitment to working towards net-zero emissions and addressing housing challenges. Transport priorities include delivering an integrated, publicly controlled public transport system and decarbonising the network. Digital infrastructure goals involve maximising the benefits of the region's ultrafast broadband network and harnessing the power of emerging technologies like AI.

#### 4.1.4 Net zero

The priority areas for investment are advanced manufacturing, health and life sciences, and digital and creative industries, as these represent the best opportunities for economic development and address societal and environmental challenges, including the region's net zero target for 2035.

The Combined Authority, through working with partners to drive increased inward investment, has launched the Life Sciences Innovation Zone, which has the potential to attract £800 million in government and private sector investment and create 8,000 jobs. LCR is a leading specialist in using data and digital innovation to transform healthcare, with initiatives like the Civic Healthtech Innovation Zone. The region also excels in advanced manufacturing, including the Materials Innovation Factory and Glass Futures.

Mersey Tidal Power is a key initiative that can potentially use the River Mersey and local people to transition to green energy. LCR has one of the UK's largest tidal ranges and much expertise in tidal power. Harnessing the power of tides has the potential to provide clean energy across the region. This initiative presents an opportunity for LCR to be innovative industry leaders and create thousands of jobs. More information can be found [here](#).

The Liverpool City Region Combined Authority received £21.7 billion over 25 years from the UK government for the HyNet carbon capture and storage project, which will create thousands of jobs in the region and surrounding areas. HyNet is a low-carbon cluster concentrated in LCR that will implement large-scale carbon capture and storage and low-carbon hydrogen infrastructure, enabling industry to decarbonise.

The initiative is expected to secure £5 billion in private sector capital, allowing companies to compete in international low-carbon markets and attracting new industries to the UK. HyNet will position Britain as a world leader in the global net-zero economy, creating 6,000 construction jobs and long-term operational roles while also strengthening the region's economy through a growing supply chain. More can be found [here](#).

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<sup>14</sup> <https://www.liverpoolcityregion-ca.gov.uk/corporate-plan>

<sup>15</sup> <https://www.liverpoolcityregion-ca.gov.uk/innovation>

### 4.1.5 Skills, health and wellbeing

There are a number of initiatives across the region to support and develop skills from entry-level to advanced levels. For example, the Adult Skills Fund (ASF) is designed to provide flexible, tailored programmes of learning to support engagement, build confidence, and enhance their wellbeing. It is for adults aged 19 and above in the Liverpool City Region. It aims to engage adults and provide the learning they need to progress into work or further education or training. Some qualifications funded through the ASF include English and Maths skills, English as a second or other language, digital skills, employability and adult community learning. Another example is the award-winning 'Be More' apprenticeships and training portal, which brings together local career content, information, advice, guidance and career opportunities through its website. The recently approved LCR Long Term Skills Plan provides the structure and strong foundations for future skills policy development and investment decisions locally, enabling informed conversations with the Government about how, through further devolution and local determination, the Liverpool City Region can better influence and facilitate prosperity for all its people and communities.

The Liverpool City Region also has a strong educational pipeline for students in its key sectors, mainly through its specialisms to address health and wellbeing issues. For example, in health and life sciences education, research, and innovation, there are over 64,000 higher education students, including 26,000 enrolled in health and life sciences-related courses. The Liverpool City Region is using AI and digital technologies to address mental health challenges that affect a significant portion of the population and have substantial economic consequences.<sup>16</sup> The Mental Health Digital Research Centre will serve as a hub for growing the UK's digital mental health sector.

### 4.1.6 Housing, infrastructure and planning

The Liverpool City Region aims to transform the public transport network by building a fully integrated London-style transport system and better connections to and from the region. Its progress has been illustrated by a combination of investments in its active travel network and £0.5bn on one of the country's most modern and publicly accessible train fleets, together with progressing on bus franchising and pipeline being delivered through its £710m City Regional Sustainable Transport Fund. The Liverpool City Region's emerging Local Transport Plan will provide a long-term view of how this fully integrated transport network will be delivered.

The Liverpool City Region is ambitious about solving housing challenges. It has invested more than £100m in improving the energy efficiency of homes, and its £60m Brownfield Land Fund is being used to build houses to transform brownfield land. One of the solutions identified to address housing challenges is the 'Future Homes LCR' project. This will position the Liverpool City Region at the forefront of sustainable, affordable housing in the UK. The low-energy, zero-carbon houses speed up housebuilding, provide skilled jobs and reduce energy bills. Further plans for modular building techniques include the use of the 700 brownfield sites in the Liverpool City Region, which have the potential to accommodate 42,000 homes.<sup>17</sup> In addition to this project, there are plans to improve housing stock so that it supports health and wellbeing, sustainability and protection from flooding and biodiversity. The Investment Strategy produced in 2023 also highlighted plans to reduce vacancy rates and increase footfall in the town centres

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<sup>16</sup> Liverpool City Region Life Sciences Innovation Zone A Wealth of Life Sciences Innovations and Opportunities

<sup>17</sup> [Liverpool City Region Mayor unveils ground-breaking new 'zero bills' home that will revolutionise housebuilding](#)

outside of the city centre. A key investment has included a £10.55m investment in a new theatre; Shakespeare North, that celebrates Shakespeare's connection with Knowsley. Another example is a £6.6m investment in a new attraction on the Wirral waterfront – Eureka Science and Discovery designed to engage children and young people up to 14 years old in exploring how science, technology, engineering, arts, and mathematics (STEAM) can enjoyable and viable parts of their future.

The spatial development strategy will be the underpinning piece for housing, planning, and regeneration. This will set out the strategic planning framework for the future development and use of land in the City Region, looking ahead at least 15 years. This is in development, and a range of draft policies for public consultation were published in 2023.

#### 4.1.7 Digitalisation and AI adoption

Digital capabilities and high-performance computing have positioned the City Region at the forefront of technology-driven industry solutions. Key assets and expertise, such as at the Sci-Tech Daresbury and the Hartree National Centre for Digital Innovation<sup>18</sup>, drive AI and data proficiencies, allowing businesses to acquire the technical capability required to adopt digital technologies like supercomputing, data analytics, AI, Immersive Technology, and Quantum Computing. These digital capabilities transcend multiple sectors to deliver scalable technology solutions – for example, in The Liverpool City Region's Health and Med Tech offer - and are central to the development of Creative Content opportunities – including key strengths in gaming, TV, Film, and immersive technologies.

The Liverpool City Region is using AI and digital technologies to address mental health challenges that affect a significant portion of the population and have substantial economic consequences.<sup>19</sup> The Mental Health Digital Research Centre will serve as a hub for growing the UK's digital mental health sector. Mersey Care's Maghull Health Park is a leader in severe mental illness and forensic psychiatry, focusing on digital, VR, and AR technology for treating mental illness and training staff. The Centre has the opportunity to develop the UK's digital mental health sector.

The Civic HealthTech Innovation Zone ([CHI-Zone](#)) is led by the University of Liverpool and uses artificial intelligence (AI) and other data-driven technologies to transform healthcare, social care and wellness. It aims to responsibly use AI to support the lives of adults and children and enable older adults to live better through AI-powered technologies in their homes and communities.

The region is establishing an AI Task Force and collaborating with local authorities to create the Office for Public Service Innovation (OPSI). It also works alongside trade unions to develop a model of best practices for using AI. It is important to note that OPSI is about public services broadly and AI and technology only form part of its broader objectives.

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<sup>18</sup> Hartree Centre, <https://www.hartree.stfc.ac.uk/>

<sup>19</sup> Liverpool City Region Life Sciences Innovation Zone A Wealth of Life Sciences Innovations and Opportunities



## 4.2 Greater Manchester

The Greater Manchester city region comprises ten boroughs: Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan. The boroughs have established a collaborative working arrangement over a number of decades, as detailed by Harding and Peake-Jones (2023). The Greater Manchester Combined Authority (GMCA) was formally established in 2011 along with the Greater Manchester LEP and Transport for Greater Manchester (TfGM). The Statutory City Region Pilot, 2014, formalised the role of an elected Mayor for the region, and in 2016, a significant portion of the health and social care budget was devolved to Greater Manchester. This arrangement positioned Greater Manchester as one of the most devolved regions in England. The first election of the mayor was in 2017, with Andy Burnham elected. Andy Burnham is now on his third term as Mayor.

Greater Manchester has a range of devolved powers at its disposal, and these have increased over time.<sup>20</sup> The previous Government released a White Paper on industrial policy in 2017 with Local Enterprise Partnerships in England tasked to set local industrial strategies. Greater Manchester produced a Local Industrial Strategy in 2017<sup>21</sup>. Greater Manchester has relied on a strong evidence base over time, initially provided by the Manchester Independent Economic Review in 2009 and then, in 2018, the Independent Prosperity Review. The long-term spatial plan for GM was adopted in 2024, called “Places for Everyone.”<sup>22</sup>

Greater Manchester has a population of 2.870m<sup>23</sup> people in the 2021 Census, with an increase of 6.9% since 2011. Greater Manchester has 123,380 businesses that generate 1.574m jobs across a range of sectors. The local economy’s GVA was £89.5bn in 2022 (41% share of North West total) and grew by 35% since 2008, the highest growth out of the North West sub-regions.

In terms of data from TPI’s Productivity Lab Scorecard in Figure 2, as already noted, Manchester is the only ITL3 region “Steaming Ahead” in the North West. Manchester has better than the North West median strengths in most drivers of productivity, apart from export intensity, share of low skilled workers and active population. Greater Manchester South West (GMSW with the boroughs of Salford and Trafford) is in the “Losing Ground” quadrant as it had a productivity (GVA/ hour) level in 2022 of £39.80, above the UK level but a growth rate also below the UK average at 5%. GMSW excels in most productivity drivers apart from the export intensity. The other GM ITL3 sub-regions have experienced higher than the UK average growth rates since 2022 and with productivity below the UK levels, they are in the “CatchingUp” quadrant in Figure 3. To read more about the productivity performance of Rochdale, see Sensier et al. (2024).

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<sup>20</sup> The last Government’s policy announcements for Greater Manchester include the “Trailblazer” deeper devolution deal in March 2023 (<https://www.gov.uk/government/publications/greater-manchester-combined-authority-trailblazer-deeper-devolution-deal>).

<sup>21</sup> <https://greatermanchester-ca.gov.uk/what-we-do/economy/greater-manchester-s-local-industrial-strategy>

<sup>22</sup> See: <https://www.greatermanchester-ca.gov.uk/what-we-do/planning-and-housing/places-for-everyone/>

<sup>23</sup> Population and GVA figures are from ONS (2024a), business and employee jobs are from Nomis: <https://www.nomisweb.co.uk/reports/lmp/la/1967128590/report.aspx?town=greater%20manchester>



## Manchester

Over the past 25 years, Manchester has seen a significant transition from industrial decline to a thriving, internationally recognised city.<sup>24</sup> The regeneration and recovery have been achieved through a long-term shared vision and genuine partnership between the public, private, and voluntary sectors. Manchester's economic strategy sets out a vision for its next evolution phase, intending to address both productivity shortfalls and meet its climate commitments. The strategy outlines five key priorities to achieve this vision:

- 1) using investment and development to drive inclusive growth,
- 2) nurture thriving, productive and innovative sectors,
- 3) develop world-class infrastructure, places and talent,
- 4) transition to a zero-carbon and resilient economy,
- 5) Include more people in economic opportunity

The strategy identifies several critical enablers, including robust and resilient infrastructure, a skilled and adaptable labour market, strategic and impactful investment, and a culture of innovation and creativity.

Manchester's role in the Greater Manchester region is vital, with the city supporting the growth and prosperity of the surrounding areas. However, the strategy aims to create a cohesive and integrated economic ecosystem where the aims of the city, and the region as a whole, are aligned in pursuit of common goals.

Manchester, like the city of Liverpool, has a visible international profile, and its world-class Universities have contributed to its strong economic growth and higher productivity. The city is committed to fostering international collaborations, learning from global peers, and using its connections, brand, and reputation to attract further investment.

The University of Manchester launched a new capability, Unit M, in 2024<sup>25</sup> to support the region's innovation economy. Unit M aims to connect and catalyse the innovation ecosystem in Manchester and the wider region to accelerate inclusive growth. Unit M is designed to address all aspects of the innovation challenge - from R&D to innovation adoption through talent and skills - by making the world-leading innovation assets and talents of the University more accessible to all. Unit M will drive a new strategy for the University to create a globally leading innovation ecosystem in the region. This will encompass powering the start-up and scale-up community, catalysing industry clusters, leading future skills provision, strengthening the University's regional partnerships, and telling Manchester's innovation story.

### 4.2.1 Net Zero

Manchester has committed to becoming a zero-carbon city by 2038, 12 years ahead of the UK Government's target. This transition to a zero-carbon and resilient economy will provide

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<sup>24</sup> [Investing in success - an Economic Strategy for Manchester | Investing in success - an Economic Strategy for Manchester | Manchester City Council](#)

<sup>25</sup> <https://www.manchester.ac.uk/about/news/university-of-manchester-launches-unit-m-to-supercharge-inclusive-growth/>

opportunities for the city's economy in areas such as technology, housing retrofit, energy, transport, and research<sup>26</sup>.

The local industrial strategy established the Greater Manchester's Graphene, Advanced Materials & Manufacturing Alliance (GAMMA) – an alliance of manufacturers, universities, and public agencies – and an approach was taken to diffuse advanced materials and industrial digital technologies to support advanced manufacturing to transition to net zero and boost competitiveness, driving a more productive, sustainable, highly skilled and innovative industry. This has increased investment, including the Sustainable Materials and Manufacturing Centre (SMMC)<sup>27</sup> in Rochdale, receiving £4.8m of revenue funding from Greater Manchester's Investment Zone, known as Atom Valley (see Sensier et al., 2024). This initiative has been designed to establish Greater Manchester as a key hub for innovation, where businesses can experiment with and develop pioneering materials and manufacturing technologies. To establish the SMMC and co-ordinate these initiatives, the funding is being aligned to the £15m from Rochdale's Towns Fund and a further £5.2m of capital funding from the Investment Zone to deliver a new 30,000 sq ft innovation facility at Kingsway Business Park. The building will bring together various programmes and stakeholders and host laboratory space, workshops, metrology space, design and analysis studios, a lecture theatre, and meeting rooms. It will also have flexible workspaces for start-ups, office space for manufacturers, and a café. This development will become a showcase for Atom Valley, joining up innovation, business support and inward investment activities that support the wider ambitions across the development sites released under GMCA's Places for Everyone.

The 2019 Local Industrial Strategy<sup>28</sup> set out a vision to position the city region as a hub of technological innovation, sustainable development, and inclusive economic growth. Alongside defining four frontier sectors, the vision for Advanced Materials and Manufacturing was to:

*“position Greater Manchester as a world-leading city-region for innovative firms to experiment with, develop and adopt advanced materials in manufacturing”*

## 4.2.2 Skills, Health and Well-Being

The 2024, On Productivity report<sup>29</sup> stresses the importance of local and regional institutions having greater autonomy to shape skills policy strategies to meet the specific needs of the region. It also highlights the importance of ensuring that higher skills translate into improved productivity rather than just higher wages and the need to better align skills development with broader economic and innovation policies.

Manchester's labour market has expanded rapidly, with a highly qualified workforce, a high concentration of high-skilled jobs in the city centre, and a vibrant ecosystem of new businesses and start-ups. This demonstrates Manchester's commitment to developing a sustainable and

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<sup>26</sup> Investing in success: An Economic Strategy for Manchester.

<sup>27</sup> The Atom Valley investment zone includes Rochdale, Bury and Oldham <https://www.atom-valley.co.uk/news/planning-permission-submitted-for-visionary-advanced-sustainable-materials-manufacturing-hub-in-atom-valley/>

<sup>28</sup> <https://www.gov.uk/government/publications/greater-manchester-local-industrial-strategy>

<sup>29</sup> <https://documents.manchester.ac.uk/display.aspx?DocID=59363>

dynamic economy. To meet the needs of current and future employers, Manchester must attract more highly skilled workers to live in the city, while ensuring that existing residents are not excluded or displaced.

The Mayor of Greater Manchester, Andy Burnham, outlined an ambitious plan in 2023 to create two equal pathways for young people when they make their GCSE choices – one academic and one focussed on technical careers. As part of the Trailblazer Devolution Deal, Greater Manchester has further oversight of post-16 technical skills, allowing local leaders to shape better how the city-region supports the one in three young people who do not want to go to university and match them into skilled jobs created in the local economy. The Mayor proposed the Greater Manchester Baccalaureate (MBacc) for technical education, which would sit alongside the existing English Baccalaureate (EBacc) for those wanting to pursue a university education. Almost two-thirds of 16-year-olds in Greater Manchester do not pursue or achieve an EBacc, and an MBacc is designed to fill the gap.

The plans for technical education also include working with employers in the city-region to match the skills needed in Greater Manchester's economy through creating employer boards, ensuring a clear line of sight to the great jobs available in the city-region. Further workplace experiences, curriculum enrichment, and other opportunities would also be created to support the development of soft skills and entry into the world of work.

Greater Manchester's experimental Working Well programme<sup>30</sup> started in 2014 with a small long-term unemployed pilot group to challenge the Department for Work and Pensions' Work Programme and create a case for devolution. It has since developed into a system of devolved, test-and-learn provision that spans a whole spectrum of needs. Working Well provides a family of services that embody Greater Manchester's employment and health offer and have been commissioned to support people experiencing or at risk of long-term unemployment. It refers to the relationship of employment and health. It is grounded in the principles in the Work, Health and Disability policy paper 'Improving Lives', concluding that good work is good for your health. Up to July 2023, the GM Working Well programme had supported over 70,000 residents, unpicking a wide range of barriers to work. Of these, over 25,000 people found employment, many of whom were not likely to move into work without specialist intervention.

The GM Innovator Accelerator programme has seen the University collaborate with four major projects<sup>31</sup>. The Centre of Expertise in Advanced Materials and Sustainability is based in Rochdale. The Greater Manchester Advanced Diagnostics Accelerator aims to address the higher prevalence of poor health across GM. It is led by Health Innovation Manchester, hosted by The University of Manchester NHS Foundation Trust, and partnered with the University. Focussing on liver, heart and lung disease, programme outputs are designed to open market opportunities for local businesses and support NHS cultural change from reactive acute care to proactive community prevention, resulting in better health outcomes and reduced demand for hospital services.

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<sup>30</sup> <https://www.greatermanchester-ca.gov.uk/what-we-do/work-and-skills/working-well/>

<sup>31</sup> <https://www.manchester.ac.uk/about/news/major-government-funding-for-greater-manchester-innovation-in-materials-health-and-ai>

### 4.2.3 Housing, Infrastructure and Planning

The transport network in Manchester is crucial for the city's economic growth. However, the current reliance on private vehicles poses significant challenges, leading to severe congestion and poor air quality. Enhancing public transport is essential to connect a larger, high-skilled workforce to the city centre, as almost 40% of Manchester's highly skilled workers cannot reach the central employment district within a reasonable travel time.

Manchester Airport is also a vital asset, generating £1.4 billion for the local economy and supporting over 20,000 jobs. To realise a higher-productivity future for Manchester, substantial investments and a long-term commitment to sustainable transport solutions, are necessary. They include improved intercity connections and capacity, which are fundamental to the future economic prosperity of Manchester, the North of England, and the UK.

Greater Manchester's Local Nature Recovery Strategy (LNRS) outlines priorities for different habitats, including urban green spaces and buildings, which make up nearly 50% of the Greater Manchester area<sup>32</sup>. The draft priorities for urban green spaces and buildings aim to enhance these spaces for both nature and people, such as by increasing nature-rich accessible spaces in public and commercial buildings, improving parks and open spaces, greening streets and transport routes, driving nature-rich green space creation in regeneration and development projects, and supporting community-led initiatives. These priorities are accompanied by practical actions that everyone can take to contribute to nature recovery in urban areas, such as installing homes for wildlife, planting wildlife-friendly gardens, and creating new community green spaces.

Devolution has given Greater Manchester more control over its finances. The region has gained powers over local transport, business rates, planning, housing, employment, adult skills, and policing and fire services. An elected mayor provides additional accountability to this process. Greater Manchester's plans for future devolution aim to further support and develop opportunities across the city-region, with strategic partnerships ensuring alignment and coordination of activities.

The Live Well initiative will be supported by Greater Manchester's Housing First approach which recognises that good health, good education, and good jobs cannot come without a good, permanent home. Live Well centres will offer housing advice and support for renters, including access to property checks, and enforcement action against rogue landlords, and legal advice to challenge wrongful evictions.

### 4.2.4 Digitalisation and AI

The Made Smarter programme, launched in 2018 as a pilot across the North West, helps local manufacturers adopt digital technologies to boost productivity and competitiveness. It offers SMEs funding, specialist advice, and support for digital transformation. The programme has engaged with over 2,500 manufacturers in the region, providing grants, mentoring, and training. It aims to create a world-class digital ecosystem, enhancing the local economy and creating jobs.

The University of Manchester leads the Manchester Turing Innovation Hub, a project funded by the GM Innovator Accelerator programme, working with a consortium of business, academic and public sector organisations. The project aims to accelerate Greater Manchester's £5bn digital

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<sup>32</sup> <https://gmgreencity.com/local-nature-recovery-strategy-habitat-priorities/>

economy by supporting existing start-ups and creating new ones – especially in the field of artificial intelligence. It will also help develop skills in the region, with a particular focus on women and under-represented groups in the industry. The Hub will bridge the gap between cutting-edge research and business and will have centres across the region from which to coordinate activity. With no city having a global lead in AI commercialisation, the project aims to position Greater Manchester at the forefront, which would have a transformative effect on the regional economy and jobs.

## 4.3 Cheshire and Warrington

Cheshire has a population of 969,386<sup>33</sup> people in the 2021 Census, with an increase of 7.4% since 2011. Cheshire has 48,290 businesses that generate 528,000 jobs across a range of sectors from professional services, pharmaceuticals and advanced manufacturing to low carbon. The local economy GVA was £37.7bn in 2022 (17% share of North West total), and grew by 21.6% since 2008.

In terms of data from TPI's Productivity Lab Scorecard in Figure 2, in 2022 Cheshire East had the highest productivity (GVA/ hour) level in the North West at £45.70 and Cheshire West and Chester at £44, both above the UK median. These sub-regions are in the "Losing Ground" quadrant, with lower growth than the UK median since 2008. Warrington has a productivity of £38, just above the North West median but below the UK. Warrington has experienced growth since 2008 of 19.5%, so it is "Steaming Ahead" in the North West and catching up with the UK. Cheshire East and Cheshire West and Chester have strengths in most drivers of productivity, apart from a share of new businesses, below the median for the share of the working age population (16-64 years), and poor fibre connectivity in Cheshire East. Warrington also has below-medium connectivity but has a greater share of highly skilled residents in 2022, with less inactivity due to illness.

### 4.3.1 Growth Sectors and Opportunities

The key sectors in Cheshire and Warrington were described in detail in the Local Industrial Strategy (LIS) published in 2019<sup>34</sup>. These include finance and business services, logistics and distribution, manufacturing (including chemicals and pharmaceuticals), life sciences, and energy and clean growth. The finance and business services sector is significant, with major companies like Assurant, Barclays, and Lloyds Bank. Logistics and distribution is a large employer, benefiting from the area's proximity to Manchester and Liverpool.

Manufacturing is highly productive, with strengths in chemicals, automotive, and pharmaceuticals. The life sciences sector has a strong medicines discovery and manufacturing presence, with companies like Sanofi and Thermo Fisher Scientific.

The energy and clean growth sector includes the Stanlow refinery, the Protos Energy Park's renewable energy sources, and the region's nuclear engineering services cluster, as well as emerging strengths in smart energy systems and hydrogen.

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<sup>33</sup> Population and GVA figures are from ONS (2024a), business local units and employee jobs are from Nomis: <https://www.nomisweb.co.uk/reports/lmp/la/1946157072/report.aspx?town=cheshire>

<sup>34</sup> LIS from <https://cheshireandwarrington.com/what-we-do/strategy/analysis-and-plans/>

### 4.3.2 Net Zero

The Net Zero NW Cluster Plan<sup>35</sup> is a vision for decarbonisation and clean growth. It aims to make more carbon savings than the annual carbon emissions of all North West homes, as well as create and protect high value jobs. The North West Industrial Cluster includes HyNet North West, due to become operational in 2025, which involves industries across the region being helped to switch to clean hydrogen as an energy source<sup>36</sup>. It also involves the widespread capture of CO<sub>2</sub> from the North West's main emitters: CO<sub>2</sub> which is then transported and locked away beneath the sea. Called carbon capture, usage and storage (CCUS). To achieve this, HyNet is repurposing onshore and offshore assets, including existing gas pipelines. The region also has some important geological assets, including:

- the Hamilton gas field in Liverpool Bay, which has been assessed as being the UK's most suitable, safe site for permanent storage of CO<sub>2</sub>
- former salt caverns located in Cheshire.

### 4.3.3 Skills, Health and Well-Being

According to the Cheshire and Warrington Local Industrial Strategy, and as noted in the Scorecard, the area has a high skills base. In 2018, almost 45% of working-age people had qualifications roughly equivalent to a degree level or higher, compared to the regional average of 34.5% and the national average of 38.4%. Some parts of Cheshire and Warrington – south Chester, Appleton (south of Warrington), Knutsford and Wilmslow – over 60% of the population have this level of qualification. There is a lower than average proportion of people with no or low qualifications. Linked to these high skills levels, almost 36% of working age residents are employed as senior managers and professionals.

There are also large numbers of residents who are not able to fully enjoy the wider economic success of the sub-region, with concerns around the limited opportunity for in-work progression for those in lower paid jobs. Also, poor health and wellbeing are limiting factors for many residents – either directly or through the impact of caring for others with long-term health conditions. Cheshire and Warrington have an ageing population, and early retirement is comparatively high.

### 4.3.4 Housing, Infrastructure and Planning

The Cheshire and Warrington Local Industrial Strategy notes the easy access to Manchester and Liverpool, two airports within 30 minutes, international shipping links from Liverpool, the Manchester Ship Canal and North Wales, and 11 universities within 30 miles of the Cheshire Science Corridor.

Major planned rail infrastructure investment was planned with the arrival of HS2 in Crewe. This has since been cancelled, but there has been a discussion between the Mayors of Manchester and Birmingham to look for private funding<sup>37</sup>. Northern Powerhouse Rail (NPR) will increase the

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<sup>35</sup> <https://www.netzeronw.co.uk/north-west-cluster>

<sup>36</sup> <https://www.ukri.org/who-we-are/how-we-are-doing/research-outcomes-and-impact/innovate-uk/net-zero-north-west-cluster-plan/>  
[North West Cluster | Net Zero North West](#)

<sup>37</sup> <https://www.bbc.co.uk/news/articles/c4gz832149eo>

capacity, speed, and resilience of our east-west links to Liverpool, Manchester and beyond. NPR creates the opportunity for a significant rail hub at Warrington Bank Quay.

Cheshire and Warrington Local Industrial Strategy has plans for over 100,000 new homes with recent investment including almost £20m of government funding to unlock the infrastructure required to provide new homes in Macclesfield and Crewe. New developments are planned at Rossfield Park, close to the centre of Ellesmere Port, which will have 1,000 new properties. A £19.3m housing development is underway in Warrington at Centre Park.

A report by GL Hearn in 2018 for the Cheshire and Warrington LEP<sup>38</sup> on the Housing Strategy and Delivery Plan, note that the adopted planning frameworks within the sub-region plan for a total of 69,764 new homes between 2010 and 2030, with 19,360 already completed by 2018. The report describes the main population centres. Warrington is well-connected with railway stations that provide frequent and soon to be improved services to Manchester, Liverpool and London. Chester already has an attractive and well-developed City Centre living area and is working to enhance its transport links to Liverpool, Manchester and beyond. The City Centre already has a strong sense of place, with historical attractions and high quality public realm. Transformational investment through the proposed £300m Northgate Development will also reinforce the attractiveness of living in the City Centre. Macclesfield is surrounded by attractive countryside and has good transport links (including rail) to Greater Manchester, which makes the Borough a high-value area. It is a significant employment destination in its own right including proposals to transform the nearby former Astra Zeneca site into Alderley Park, which has up to 7,000 highly skilled jobs. Crewe's Local Plan makes provision to regenerate the town and is actively pursuing place-making redevelopment and investment, including the Royal Arcade shopping centre.

### 4.3.5 Digitalisation and AI

A report by Plum Consulting (2023) found good levels of digital connectivity were available in Cheshire and Warrington. There is widespread availability of superfast broadband (with download connectivity speed of 30 Mbps and above), and 4G mobile coverage. Infrastructure has also been deployed to provide ultrafast (100+ Mbps) connection speeds through direct to the premises fibre connectivity. The availability of direct fibre is above the national UK average in Cheshire West, but below that average in Cheshire East and Warrington.

## 4.4 Cumbria

Cumbria is a largely rural county with a beautiful natural capital, including two World Heritage sites and three Areas of Outstanding Natural Beauty, creating the most extensive protected landscape in the country. Cumbria has many small to medium settlements, each with its own identity. Carlisle is the only city in Cumbria, with large towns including Barrow-in-Furness, Kendal, Penrith, Workington Whitehaven, Keswick, Maryport, Ulverston and Millom.

Cumbria has a population of 500,700<sup>39</sup> people in the 2021 Census, with an increase of 0.2% since 2011. Cumbria has 26,840 businesses that generate 269,000 jobs across various sectors,

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<sup>38</sup> Reports downloaded from <https://cheshireandwarrington.com/what-we-do/strategy/analysis-and-plans/>

<sup>39</sup> See <https://www.nomisweb.co.uk/reports/lmp/la/1941962771/report.aspx?town=cumbria>



from manufacturing and tourism to low carbon. The local economy GVA was £13bn in 2022 (6% share of North West total) and has grown by 3% since 2008.

In terms of data from TPI's Productivity Lab Scorecard in Figure 2, in 2022, East Cumbria had a productivity (GVA/ hour) level of £32.70, below the North West median of £36.80 but a higher growth rate than the UK since 2008 of 10.8% so is in the "Catching Up" quadrant. East Cumbria has strengths in its workforce with below NW median of low skilled workers, median level of high skilled workers and a higher share of the working population. Investment per job was higher in 2020 than the North West median. West Cumbria's productivity was at £32 in 2022, and its productivity growth rate has contracted since 2008 at -8%, so it is in the "Falling Behind" quadrant in Figure 2. It has a median level of active residents in 2022, along with a higher share of the working age population (16-64 years). The amount of investment per job and ICT investment per job in 2020 was much higher than the North West median due to the presence of the large industrial sites of BAE Systems and Sellafield.

#### 4.4.1 Growth Sectors and Opportunities

Cumbria's Strategic Economic Plan, as set out by the LEP for 2014-2024, comprises a four-pronged approach to unleash the county's economic potential across its advanced manufacturing, nuclear and energy, vibrant rural and visitor, and strategic M6 corridor sectors. Key priorities included supporting advanced manufacturing through supply chain development and skills training, capitalising on Cumbria's nuclear expertise and infrastructure, promoting the county's natural assets and tourism offerings, and enhancing connectivity along the M6 corridor. This was supported by four economic drivers, including business support, skills development, infrastructure improvements, and environmental sustainability. Businesses need infrastructure (communications, transport, workspace) to grow. Public-private collaboration is key to unlocking development opportunities. Cumbria has extensive highways but needs broadband, rail, and housing investment to support economic growth.

The Cumbria LEP developed a Local Industrial Strategy in 2019<sup>40</sup>. The LEP's Annual Report from 2023 stated that it's vision for Cumbria is for it to be "The place to live, work, visit and invest sustainably - where exceptional industry and innovation meets a breathtakingly beautiful and productive landscape".

The LEP outlined 6 themes in its "Restart, Reboot, Rethink – A Plan for Cumbria's Economic Recovery" to provide transformational opportunities for Cumbria's economy:

1. Clean Energy Production – a world-recognised heritage and expertise, which provides the platform for significant future investment in energy generation.
2. Diversify to Thrive – building on the pivoting that has taken place and moving it to the next level in terms of localisation of supply chains and movement into new markets.
3. The New Visitor Experience – capturing the changes in visitor behaviour by offering a world class experience to a wide range of markets.
4. The Future of Food – extending Cumbria's existing meat and dairy excellence into new markets.
5. Cumbria - the UK's Natural Capital – promoting and exploiting the benefits created by having the most protected landscape in England.

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<sup>40</sup> <https://www.thecumbrialep.co.uk/governance-and-accountability/strategy-plans/>



6. The Way We Live, the Way We Work Now – promoting Cumbria as a great location for people to rethink the way that they will live and work in the future.

The Borderland's Inclusive Growth Deal<sup>41</sup> was signed with the Government in 2021, providing £452m of investment into the Borderlands region. The geography of the Borderlands covers Cumbria, Northumberland and the South of Scotland. The policy ambition is for the region to reach its potential for everyone, delivering green growth and attracting new businesses and investment. The deal also aims to improve connectivity, deliver skills and innovation, and improve places in the region to support their longer-term resilience.

The Borderlands projects funded within Cumbria include the Carlisle railway station redevelopment programme securing £20m from the Borderlands deal working with the councils, Network Rail and Avanti West Coast to improve the station as a regenerated entrance to Carlisle and improve connectivity. The Carlisle Citadels (group of Grade 1 listed buildings on the site of a former modern fortress) project is working to relocate some University of Cumbria facilities<sup>42</sup> to the building. The redevelopment of the Citadels site is part of the shared 'Vision for Carlisle in 2030', which aims to develop the area into a thriving centre for business, residents, education and culture. This wider investment plan will see over £100m being invested in the regeneration of Carlisle city centre over the next five years. The Citadels will include new facilities such as a multi-use lecture theatre, café, exhibition space and The Carlisle Business Exchange. The Citadels project complements the neighbouring development of Carlisle Station and investment through the Carlisle Town Deal and Future High Street Funding. It will also provide a £118m boost for the Borderlands economy (GVA). Both projects are due to be completed by 2026.

With the creation of two new unitary councils in Cumbria in April 2023, Cumberland and Westmorland and Furness have merged service provisions that previously were divided between six district and Cumbria County councils. Westmorland and Furness Council has adopted previous Local Plans<sup>43</sup>. Cumberland Council has set a plan for 2023-27 as a placeholder for open discussion<sup>44</sup>. They are gathering stakeholder's views on a Cumbrian economic strategy. In preparation for the strategy, five priorities have been proposed in consultation with MetroDynamics:

1. Inclusive and productive economy including skills and business development, innovation and sector development.
2. National security and resilience including energy & low carbon, food production and water management.
3. New model of public services including employability support and health & social care.
4. Natural Capital & Sustainable tourism including land management and destination management.
5. Regeneration, housing and infrastructure including sustainable transport.

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<sup>41</sup> <https://www.borderlandsgrowth.com/the-deal>

<sup>42</sup> <https://www.cumbria.ac.uk/t2030/carlisle-citadels-campus/>

<sup>43</sup> <https://www.westmorlandandfurness.gov.uk/localplan>

<sup>44</sup> <https://www.cumberland.gov.uk/your-council/council-documents/council-plan/how-we-will-do-cumberland-approach>

## 4.4.2 Net Zero

As noted in the last Cumbria LEP Annual Report in 2023, Barrow was identified as the new 'Powerhouse of the North' given BAE Submarine Systems' planned expansion of its build programme. This presents an opportunity not only for Barrow but for the whole of Cumbria due to the manufacturing and other supply chain opportunities that it will generate. Alongside this, new nuclear energy generation opportunities are emerging in Cumberland, which could further enhance Cumbria's existing 5.6% contribution to the UK's clean energy generation.

In terms of developing skills for Net Zero, the Lakes Further Education College, Workington<sup>45</sup> has recently opened a Green Energy and Skills Centre which features low carbon experience bays designed to develop the skills needed for air and ground source heat pumps, solar Photo Voltaic and battery storage, solar thermal, retrofit, electric vehicle charging and low carbon heating.

The Lake District National Park has key responsibilities to achieve sustainability and net zero. It has a Partnership Management Plan for 2020-25 and outlines actions to respond to each of United Nation's Sustainable Development Goals<sup>46</sup>.

The Borderlands deal is also encouraging green growth through its energy programme and its Natural Capital England programme.

## 4.4.3 Skills, Health and Well-Being

The Local Skills Improvement Plan has been developed by the Cumbria Chamber of Commerce<sup>47</sup>. The Chamber provided an overview of activity including:

- Promoting and explaining training options, funding sources and pathways to employers (including Bootcamps)
- Visiting schools, colleges and providers to engage students in career and learning opportunities and employer needs
- Supporting the employer-led development of an advanced manufacturing apprenticeship pathway.
- Chamber events on key areas of focus including AI and Automation, customer service and sustainability

Partnership activity and work underway by partners:

- Collaborating with the University of Cumbria on retaining students in the county post-study e.g. through linking them with businesses.
- Supporting development of the Land & Nature Skills Service (LANSS) a new service connecting people with learning and training opportunities in the land and nature-based sector, due for launch in September this year, with the full LANSS team now in place.

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<sup>45</sup> <https://www.in-cumbria.com/news/24752087.green-energy-skills-centre-opens-lakes-college-workington>

<sup>46</sup> <https://www.lakedistrict.gov.uk/caringfor/lake-district-national-park-partnership/management-plan/delivering-sustainable-development-goals>

<sup>47</sup> For an update on the LSIP see: <https://www.cumbriachamber.co.uk/local-skills-improvement-plan-update-2/>

- Carlisle College have expanded their engineering provision to deliver a Level 3 Metal Fabricator apprenticeship standard and a Level 2 Engineering Operative apprenticeship.

#### 4.4.4 Housing, Infrastructure and Planning

The key infrastructure assets within Cumbria are the M6 motorway (North to South), the A66 road (East to West), and the West Coast mainline station, which links Scotland to the north and Manchester, Birmingham, and London to the south. The Cumbria West coastline has a railway link which is currently being upgraded, and there is also a rail line between Lancaster and Barrow.

Cumberland Council provide an update on a major infrastructure project, the Carlisle Southern Link Road<sup>48</sup>. This will connect Junction 42 of the M6 with the A595 to the west. The route will include new junctions linking existing radial routes into Carlisle and St Cuthbert's Garden Village<sup>49</sup>. The route will include bridges over two main railway lines and the Caldew and Petteril rivers, a network of footways and cycle ways and an extensive programme for landscaping and environmental mitigation. The 8km long road will provide vital infrastructure to relieve congestion in Carlisle and provide the access and network capacity to enable the successful and accelerated delivery of Garden Village. This is a development that could provide up to 10,000 new homes.

#### 4.4.5 Digitalisation and AI

As noted by Made Smarter<sup>50</sup>, Cumbria has previously been considered a place for 'conventional manufacturing' only. However, a few Cumbrian businesses have put a real focus on innovation. The large Cumbrian industries of Sellafield and BAE Systems have exposed smaller businesses in the region to innovative manufacturing practices – so utilising advanced technologies has inspired for the entire supply chain.

Playdale Playgrounds in Haverthwaite, South Cumbria, has joined several Made Smarter initiatives, including the digital ambassador and digital leader graduate programme<sup>51</sup>. Playdale aims to double its exports by investing in digital technology<sup>52</sup>.

### 4.5 Lancashire

Lancashire has a population of 1.5m people in the 2021 Census<sup>53</sup>, with an increase of 4.8% since 2011. Lancashire has 52,120 businesses that generate 582,000 jobs across a range of important and future-facing sectors from manufacturing and tourism to cyber, digital and low carbon. The

<sup>48</sup> <https://www.cumberland.gov.uk/parking-roads-and-transport/streets-roads-and-pavements/road-maintenance-closures-and-improvements/carlisle-southern-link-road-cslr-project>

<sup>49</sup> <https://www.stcuthbertsgv.co.uk/>

<sup>50</sup> <https://www.madesmarter.uk/resources/blog-how-cumbria-manufacturers-are-overcoming-digitalisation-challenges/>

<sup>51</sup> <https://cumbriacrack.com/2023/08/02/cumbrian-digital-leader-graduates-from-made-smarter-programme/>

<sup>52</sup> See Case Study <https://www.madesmarter.uk/media/0fzgw2it/playdale-playgrounds-case-study.pdf>

<sup>53</sup> See <https://www.nomisweb.co.uk/reports/lmp/la/1941962782/report.aspx?town=lancashire>

local economy's GVA was £39.6bn in 2022 (18% share of North West total), and grew by 15% since 2008. It is home to globally leading firms and is the fourth largest aerospace cluster in the world.

In terms of data from TPI's Productivity Lab Scorecard in Figure 2, in 2022 Mid Lancashire had a productivity (GVA/ hour) level of £40.30, above the UK median of £39.70, but with growth since 2008 of 6.4%, below the UK average of 8%, so it is in the "Losing Ground" category. Mid Lancashire has strengths in most drivers of productivity with high export intensity. Chorley and West Lancashire's productivity is at £36.60, with growth since 2008 of 17%. It is catching up to the UK in Figure 2. Its labour force is around the median for drivers of productivity with less inactivity due to illness. Although 4G connectivity is below, the median fibre connectivity is above. In 2022, Lancaster and Wyre's productivity was £35.40 (growth since 2008 at 14%), East Lancashire at £33.10 (growth 13%) and Blackburn with Darwen at £30.60 (growth 29%). All these sub-regions have lower than UK median levels of productivity, but have experienced higher growth than the UK average, so they are in the "CatchingUp" quadrant. Blackpool is falling behind the UK average productivity level at £29.70 and has grown 7% since 2008. Blackpool did have a higher than median share of new businesses in 2022.

Lancashire 2050<sup>54</sup> sub-regional strategy focuses on eight priority areas: 1) Economic Prosperity; 2) Transport and Infrastructure; 3) Environment and Climate; 4) Housing; 5) Early years and education; 6) Employment and skills; 7) Health and wellbeing; 7) Community and Place.

Within this sub-regional plan is the Economic Strategy 2023-25<sup>55</sup>. This highlights three important areas: 1) Strategic development and connectivity, 2) Business support and 3) skills and talent. We will now discuss these plans in the following sections.

### 4.5.1 Challenges and Opportunities

As reported by the Lancashire Economic Strategy, Lancashire faces challenges to increasing economic activity, and this needs to be addressed to prevent perceived shallow talent pools (low employment growth in Lancashire is shown in Figure A.3) which could reduce inward investment and cause businesses to relocate elsewhere.

The success of scaling firms is mixed across Lancashire, with seven of the 12 local authority districts (within the Lancashire County Council footprint) having a higher incidence of high-growth firms than the national average. For the county council area overall, in 2020, 4.2% of businesses were classed as "High Growth", compared to 4.3% in the United Kingdom. Encouragingly, the districts in Lancashire with the highest incidence of "High Growth" firms are in East Lancashire and in districts where productivity has been highlighted as poor. Burnley (4.5%), Hyndburn (6.0%), and Rossendale (5.6%) all have high growth firm rates in excess of the national average – something to be celebrated, and something which needs to continue to close productivity gaps.

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<sup>54</sup> See <https://www.lancashire2050.co.uk/>

<sup>55</sup> See <https://www.lancashire.gov.uk/council/strategies-policies-plans/corporate/economic-strategy/>

### 4.5.2 Net Zero

Lancashire's 2050 plan aims to reduce carbon emissions and energy demand, transition and increase energy generation from renewables and low-carbon sources.

The Local Government Association shows Lancashire to be the area of the UK with the highest number of Energy and Low Carbon jobs per population head, with more than 60,000 Low Carbon jobs by 2050.

In terms of the Council sustainability planning, due to increased fuel costs, they plan to actively signpost local businesses to the energy consumption audits and improvement plans delivered by their partners, as well as helping to develop businesses working in the low carbon products and technologies sector.

### 4.5.3 Skills, Health and Well-Being

The Economic Strategy notes there are now 175,000 economically inactive residents in Lancashire, and this is a challenge (24.4%, above the national average of 21.5%, and 4.1% above where it was pre-pandemic). The council sees this as an opportunity, with some 30,000 inactive residents stating they would like a job. These 30,000 who would like a job and 27,000 unemployed residents in Lancashire combine to create a cohort of almost 60,000 residents who could help alleviate the recruitment challenges that businesses are facing.

The labour market remains buoyant despite economic challenges and has seen more than 65,000 vacancies posted in Lancashire during 2024 (10,000 more than the same period in 2021). Widening the talent pool for businesses to recruit is crucial to alleviate recruitment challenges, but as important as the health and well-being benefits that secure well paid employment can bring to residents. Widening this talent pool is especially important for Lancashire, with an ageing population and a smaller percentage of Lancashire's population being of working age than the national average (60.7% of Lancashire residents are aged 16-64, compared to 62.4% in Great Britain).

Lancashire also produces over 17,000 graduates a year, which places it in the top third of sub-regions nationally. However, graduate retention is below average in Lancashire (24.4% of graduates from Lancashire Higher Education Institutions are still living and working in Lancashire three years later, compared to 30.3% of graduates nationally staying to work where they studied). This places Lancashire around the national median.

Lancashire has a lower proportion of residents with higher level (4+) qualifications than the national average, and Apprenticeships are seen as a way to improve this, with a movement over the last 5 years towards Apprenticeship Starts at higher levels. Since the pandemic Level 4+ Starts have grown by 19%, relative to an overall drop in Apprenticeship Starts of 23% in Lancashire. These higher-level Apprenticeship Starts now account for 28% of all Apprenticeship Starts, compared to 18% pre-pandemic.

The Lancashire Skills and Employment Hub published the refreshed Lancashire Skills and Employment Strategic Framework in 2021. This strategy aligns with the four core priorities and builds on the partnerships with business and educational providers that the Hub oversees, including the Adult Skills Forum, Lancashire Digital Skills Partnership, and Lancashire Careers Hub.

The council's drive to provide a skilled and productive workforce includes working with businesses to understand their skills needs by understanding labour market intelligence through the development of a Data Observatory and by working in partnership with the Chambers of Commerce to build on the Local Skills Improvement Plan trailblazer. This will shape and influence the curriculum offered by post-16 providers to young people and adults seeking to reskill and upskill.

The council aims to increase the number of Lancashire businesses signed up to the Lancashire Skills Pledge – this recognises those businesses that are committed to inspiring, recruiting and developing the people of Lancashire and provides a 'front door' for businesses to engage with skills and employment providers.

#### **4.5.4 Housing, Infrastructure and Planning**

Lancashire's economic strategy focuses on addressing skills shortages, providing affordable housing, and supporting urban renewal and development projects. The strategy aims to attract and retain workers by delivering decent and affordable housing, linking housing regeneration to economic and transport plans, and tackling concentrated deprivation. The county council is leading strategic development projects, including four enterprise zones and the National Cyber Force headquarters, with a total estimated programme value of £20bn. The county council will take the lead on strategic development projects along with the majority of Lancashire's transport pipeline.

The Lancashire 2050 plan aims to deliver decent and affordable housing for every community and link housing regeneration to economic and transport plans. Further urban renewal will be achieved by demolishing and replacing housing stock in some areas. There are aims to tackle concentrated deprivation and provide housing choices to attract and retain workers in the area.

#### **4.5.5 Digitalisation and AI**

Lancashire has seen significant growth in employment requiring digital, tech, cyber and low carbon skills, matched by an increased number of Lancashire's residents active and skilled in the workforce. The County Council is building Lancashire's workforce by reskilling and upskilling people. They advocate an inclusive approach, to increase the diversity of the workforce and to maximise people's ability to secure well paid, good jobs to improve economic prosperity.

Building on the Lancashire LEP's digital strategy the County Council note in their Economic Strategy that digital employment could more than double to over 50,000 by 2035, with advances coming from the National Cyber Force, the clustering of digital and cyber businesses in Lancashire, as well as movements towards a more digital economy.

Through the Lancashire Digital Skills Partnership, they will continue to work with businesses to reskill and upskill the county's workforce to adopt new technologies and will encourage our digital and tech businesses to sign up to the Tech Talent Charter to drive greater diversity in our digital workforce.

## 5 Overview of the challenges and opportunities and policy recommendations

Having discussed the regional productivity data and outlined some challenges and opportunities that sub-regional areas are addressing. This section will, firstly, provide a narrative summary of a roundtable discussion with members of the North West Productivity Forum. The summary focuses on the priorities for the North West.

### 5.1 The Productivity Challenges and Opportunities across the North West-Roundtable highlights

In November 2024, a small group of Forum members met to discuss the key productivity challenges and opportunities for the North West. The roundtable discussion paid particular attention to the themes of: net zero; skills, health and wellbeing; housing and infrastructure and digitalisation and AI. The following section provides an overview of the discussion that aligns with the issues discussed in this report.

#### Digitalisation and AI

- Digitalisation and AI present both opportunities and challenges. Businesses are increasingly open to adopting new technologies, but there are concerns about the impact on jobs and the need to foster the right leadership and management skills to drive innovation.
- The region's professional and business services sector is already quite digitalised, but there are opportunities to further enhance productivity through technology adoption.
- Fostering an innovation culture, investing in software, and exploring new energy sources like hydrogen and nuclear are important for the region's future.
- Transport is a key constraint, but better connectivity of economic clusters could boost productivity in the North West.
- Connecting cities and surrounding areas, managing the transition to a more automated workforce, and aligning technology adoption with sustainability goals are key priorities for the region's economic development.

#### Net Zero

- The North West has significant opportunities in hydrogen, carbon capture and storage, and renewable energy projects.
- The North West has a Climate Action Plan and is exploring various decarbonisation initiatives, including [HyNet](#), [Mersey Tidal power](#), and [Glass Futures](#) in St. Helens.
- An area for further development is supporting some of the technologies across the region that are still in the research and development stage to reach to a commercially viable scale.
- Productivity role models, benchmarking, and initiatives like Made Smarter can help drive growth and innovation in the region.
- The region needs to foster an innovation culture, invest in software, and explore new energy sources like hydrogen and nuclear to support data centres and meet net-zero goals.

#### Housing and Infrastructure

- The discussion highlighted the complexity of addressing housing needs, from the high costs of city centre living to the prevalence of empty homes.
- The city region faces housing and spatial development challenges. There were concerns about the quality and affordability of housing and the need for a major retrofit program to address population health and skills demands.
- Connectivity, both physical and digital, has seen major improvement but also raised some concerns. There is the need to improve connectivity between cities and surrounding areas to enhance productivity.
- Transport is a key constraint, highlighting the need to attract workers and improve connectivity between economic clusters in the North West.
- Connectivity and functional economic geographies were highlighted as important for regional growth. The upcoming Devolution White Paper is seen as an opportunity for the leadership from across the sectors and the region to ensure that the decisions made lead to full impact at the local level.

**Skills, health and wellbeing (including business skills and performance).**

- Retaining and reskilling talent is crucial, as businesses face challenges with employees leaving for higher wages and better opportunities elsewhere.
- There are skills shortages, particularly in knowledge-intensive sectors, and the need to retain and reskill the workforce are pressing concerns.
- Business culture, networks, and agglomeration are important factors in enabling businesses to be more productive
- Anchor institutions and the connections between places and firms can support productivity growth and address regional inequalities



## 5.2 North West SWOT analysis

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• GMCA has been instrumental in trialling devolution and Working Well policy that is now national policy.</li> <li>• Home to one of Europe's largest pharma clusters, the UK's only High Potential Opportunity for Vaccines, and the world's first tropical disease research institute (LCR).</li> <li>• Numerous initiatives in world leading innovations including the life sciences in LCR and innovation clusters in GM.</li> <li>• Internationally renowned Higher Education institutions leading innovation and research especially in life sciences and advanced manufacturing.</li> <li>• Key initiatives and investments such as Freeports, enterprise zones and digital development (Made Smarter).</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Poor health outcomes in the region have a significant impact on economic performance (inactivity).</li> <li>• Reliance on private vehicles poses significant challenges, leading to severe congestion and poor air quality.</li> <li>• Lack of transport infrastructure to connect work and training opportunities.</li> <li>• Need for skills and workforce to support future housing retrofits.</li> <li>• Retaining and reskilling talent to support high-value companies in the region.</li> <li>• Rail infrastructure running at capacity with limited growth opportunities.</li> <li>• Loss of HS2 infrastructure funding and associated investment in Crewe.</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• The Local Growth Plans present an opportunity for local places to take on a greater role in shaping their economies and improving productivity</li> <li>• Manchester and Liverpool Airports are important for growth.</li> <li>• The upcoming Industrial Strategy White Paper in 2025 is a potential opportunity to establish further clusters in the region.</li> <li>• GM is developing a Decarbonisation Roadmap, which will present a significant opportunity for the North West.</li> <li>• Support some of the technologies across the region that are still in the research and development stage to reach a commercially viable scale.</li> <li>• Aligning technology adoption with sustainability goals.</li> <li>• Challenges in providing the right technology for professional business services.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Almost 40% of Manchester's highly skilled workers cannot reach the central employment district within a reasonable 45-minute travel time.</li> <li>• Improved intercity connections and capacity are fundamental to the future economic prosperity of the region<sup>56</sup>.</li> <li>• Underinvestment in R&amp;D spend and start-up activity currently hinders the region from achieving its full potential.<sup>57</sup></li> <li>• Retaining of highly skilled graduates/workforce.</li> <li>• Funding to the scale of the decarbonisation challenge is a significant issue, requiring a blend of finance options and partnership working.</li> </ul>

<sup>56</sup> [https://www.manchester.gov.uk/downloads/download/7603/economy\\_strategy\\_for\\_manchester](https://www.manchester.gov.uk/downloads/download/7603/economy_strategy_for_manchester)

<sup>57</sup> <https://www.manchester.ac.uk/about/news/university-of-manchester-launches-unit-m-to-supercharge-inclusive-growth/>

## 5.3 Policy Considerations

This paper has identified many areas where the region has taken big and bold steps to address its challenges. There are strengths in innovation, with many benefits that cross over to health, life sciences, advanced manufacturing and net zero. The region is also aware of its responsibility to improve regional disparities in income, health and access to opportunities. This will require strong partnerships, collaborations, and long-term planning from across the region to capitalise on its strengths and address its challenges. The regional development strategy is beginning to recognise the relationships across housing, health, skills, and connectivity considerations and take an integrated approach to addressing these challenges. The region has made very positive strides towards making improvement and the following concluding reflections are suggestions for further consideration.

- Key institutions from the public and private sectors should work together to increase investment and support of research and development, commercialisation, start-ups and scale-ups
- Provide targeted business support, particularly around technology adoption and innovative practices. Role models, clusters and hubs can support this.
- Leverage the opportunities presented by the upcoming Industrial Strategy White Paper to establish and nurture these clusters.
- There are many innovative, world-leading schemes within the region, such as the innovation zones, which provide compelling talent retention offers and attractive retraining programmes to both nurture and retain talent. Could learning from this model be more widely shared across the North West?
- Improvements still need to be made to transport links and connectivity across the region through the development of integrated transport hubs
- Partners from key sectors need to coordinate the presentation of investable ideas from across the region to both provide tailored support and attract investment.

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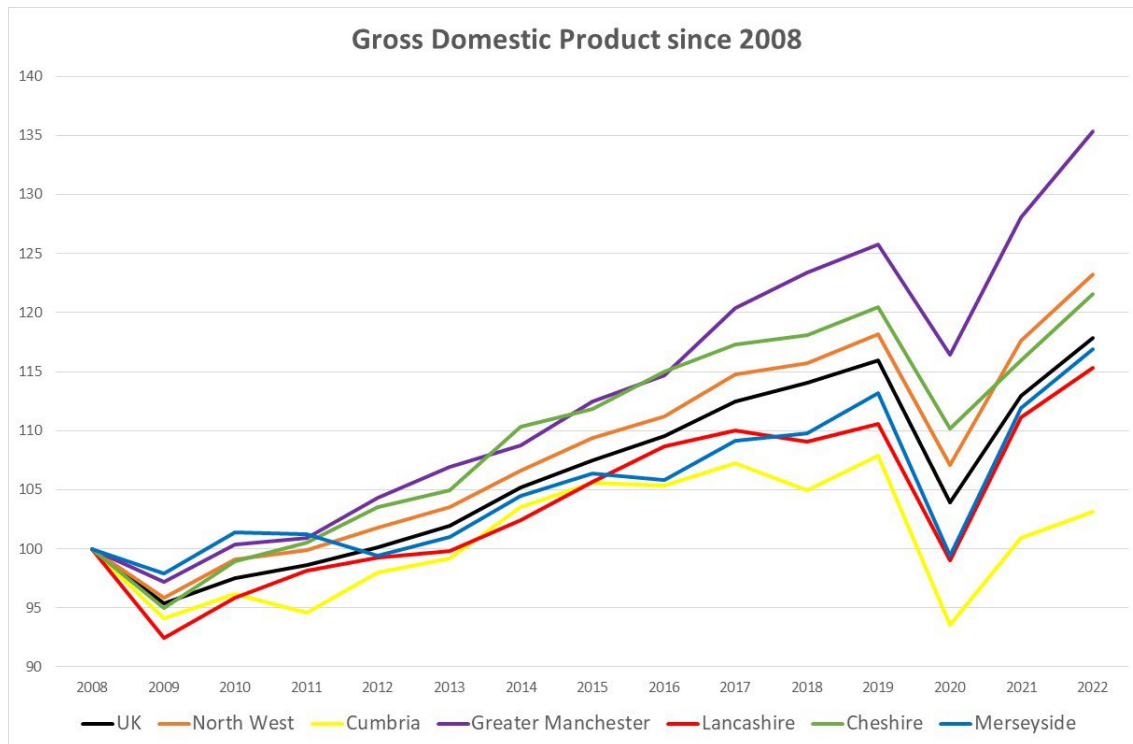
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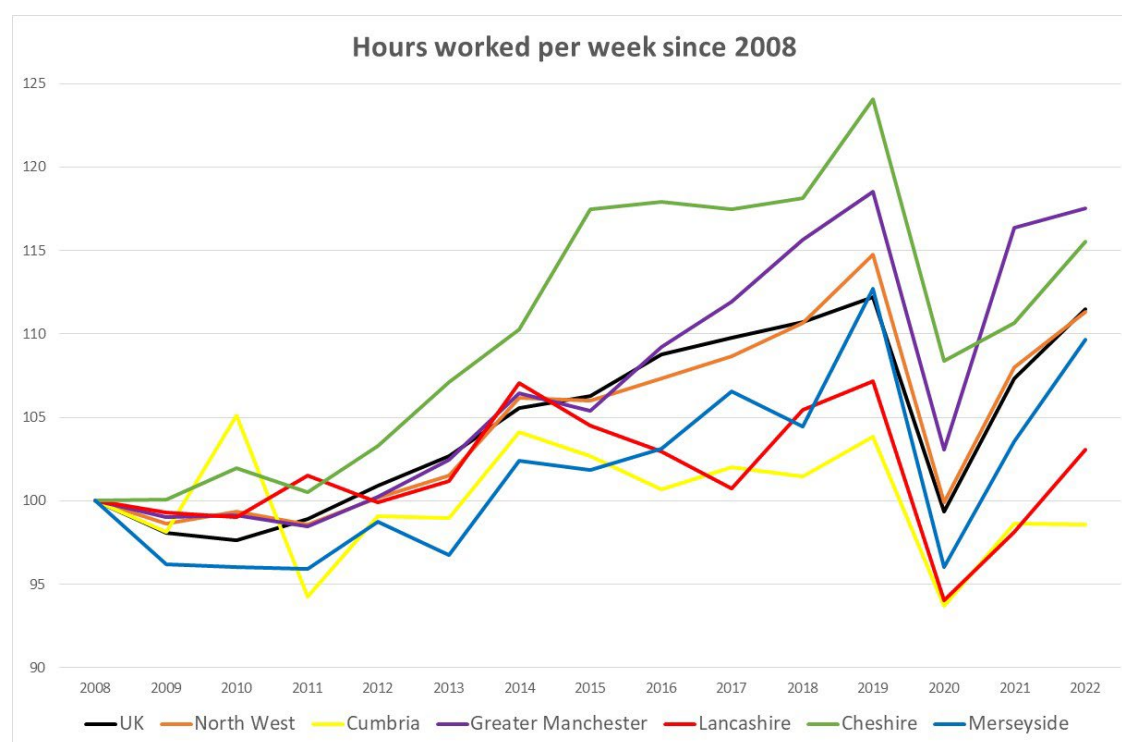
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## 7 Appendix: North West Productivity Components & Employment Since 2008

Figure A.1: Comparison of GDP for North West Sub-regions Since 2008



**Figure A.2: Comparison of Hours worked for North West Sub-regions Since 2008**



**Figure A.3: Comparison of Employment for North West Sub-regions Since 2008**

