

Liverpool City Region Local Industrial Strategy

Evidence base

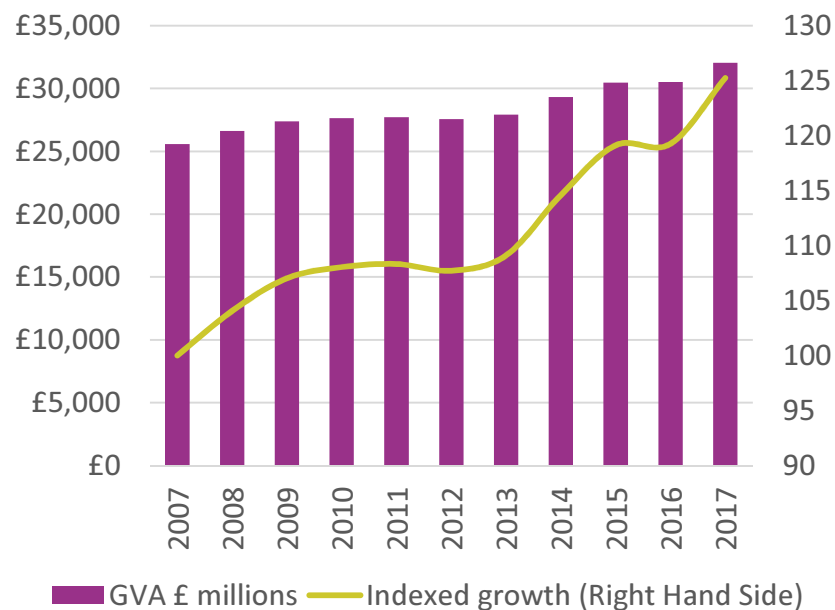
July 2019



METROMAYOR
LIVERPOOL CITY REGION

Liverpool City Region is a growing economy . . .

GVA Growth 2007-2017



Source: ONS

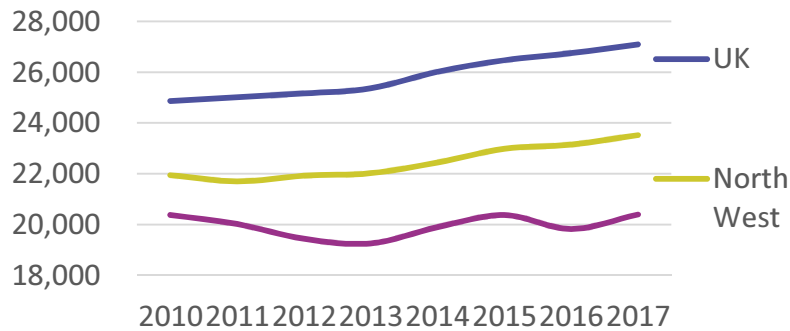
Liverpool City Region is a £32bn economy - measured by Gross Value Added (GVA). In the last decade, **we have added over £6bn** to our economy, against the backdrop of the deepest recession the UK has experienced since the Second World War.

Our economy stagnated during the recession, while others were shrinking, and it took longer for the full impact to be felt in LCR. This means it has taken us longer to recover, while other economies started to rebound as early as 2009, **our recovery did not start until 2013**.

We are now experiencing strong levels of growth, for three of the last four years we have grown faster than the national average, and between 2016 and 2017, our economy grew by more than 5%.

... but we have performance gaps to close

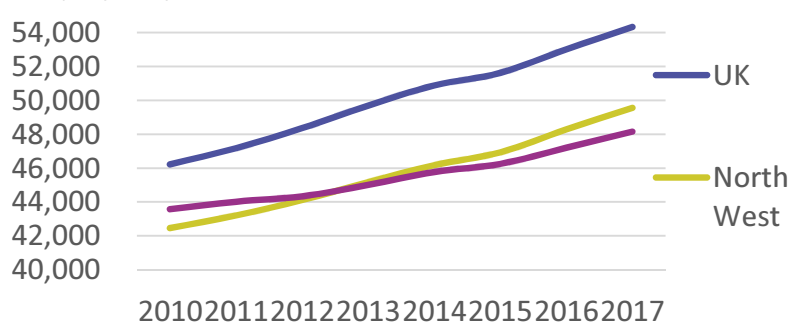
GVA per head (2010-2017)



A delayed recovery has **widened the gap between LCR and the UK** in terms of relative output, and productivity.

Our economy generates £20.4k of GVA for every LCR resident, 77% of the UK level. Since 2010, the **gap has increased** from £4.5k to £6.7k per person.

GVA per filled job (2010-2017)



Our productivity (GVA per filled job) **tracks much closer to national levels**, and is **89% of the UK level**. Despite this, every filled job in **the LCR produces £6k less** output than the UK.

Source: ONS

. . .and so, to close these gaps, we need to improve our performance against the five foundations



In October 2018, HM Government published a Policy Prospectus for Local Industrial Strategies to ***“build on unique local strengths to ensure every community, and the country, reaches their economic potential and creates high quality good jobs.”***

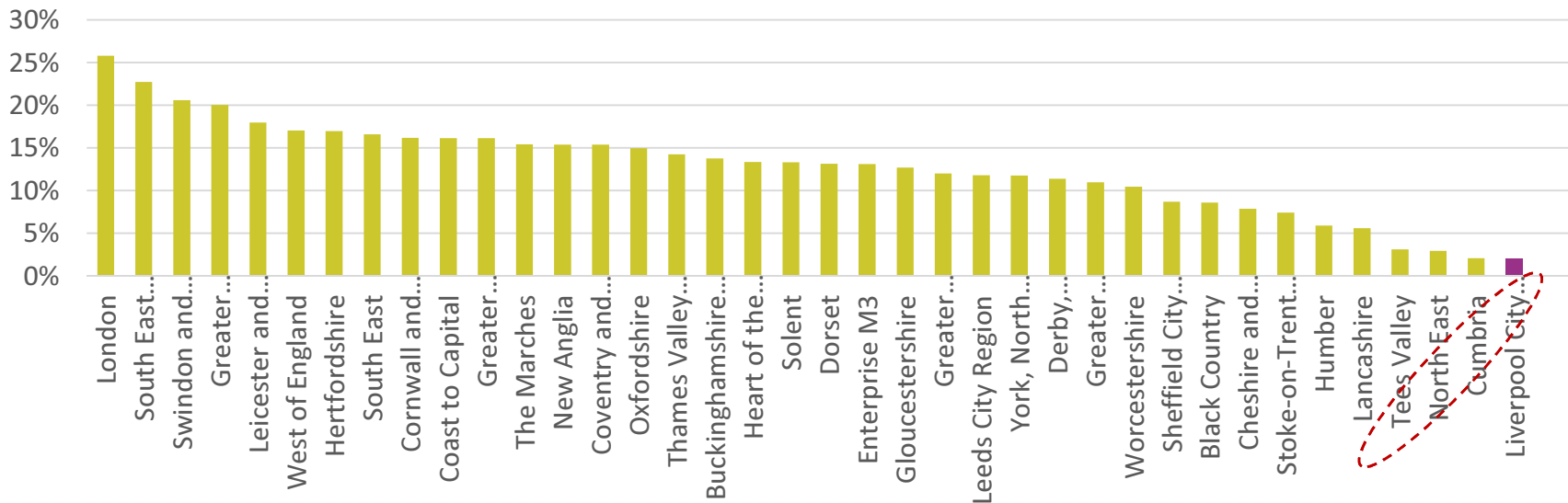
Local Industrial Strategies should boost productivity and earning potential across local areas by focusing on the **five foundations of productivity.**

1 – People

Our population is growing – but at a relatively slow rate . . .

1.5 million people live in the City Region, and our population has grown year-on-year since 2003. However, comparatively, we have experienced a slow rate of population growth, growing slower than any other LEP.

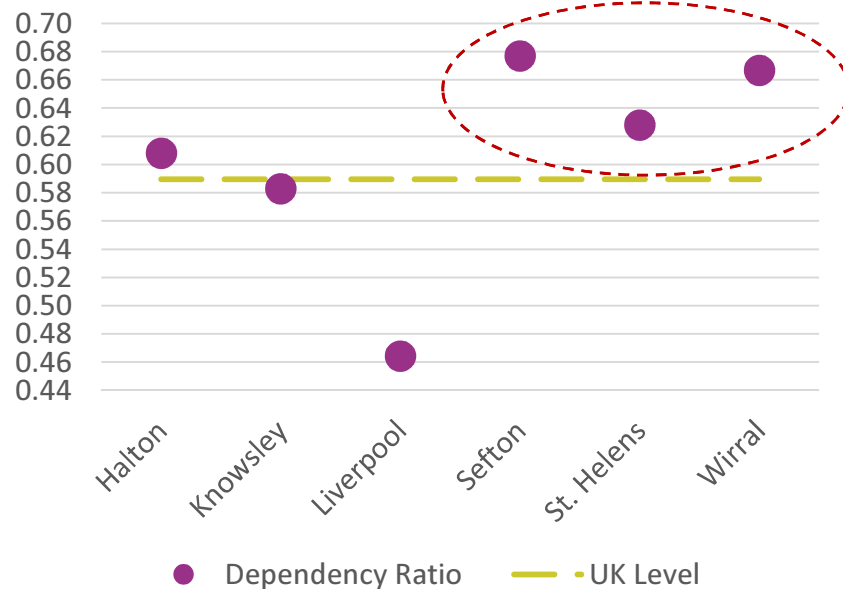
% Change in population by LEP (1997-2017)



Source: Mid Year Population Estimates

... and we have a number of ageing communities

Dependency Ratio (2017)



At the City Region level, the ageing population is less prominent than for other areas of the UK. However, this masks the prevalence of the ageing society in other areas of the City Region, particularly Sefton and Wirral.

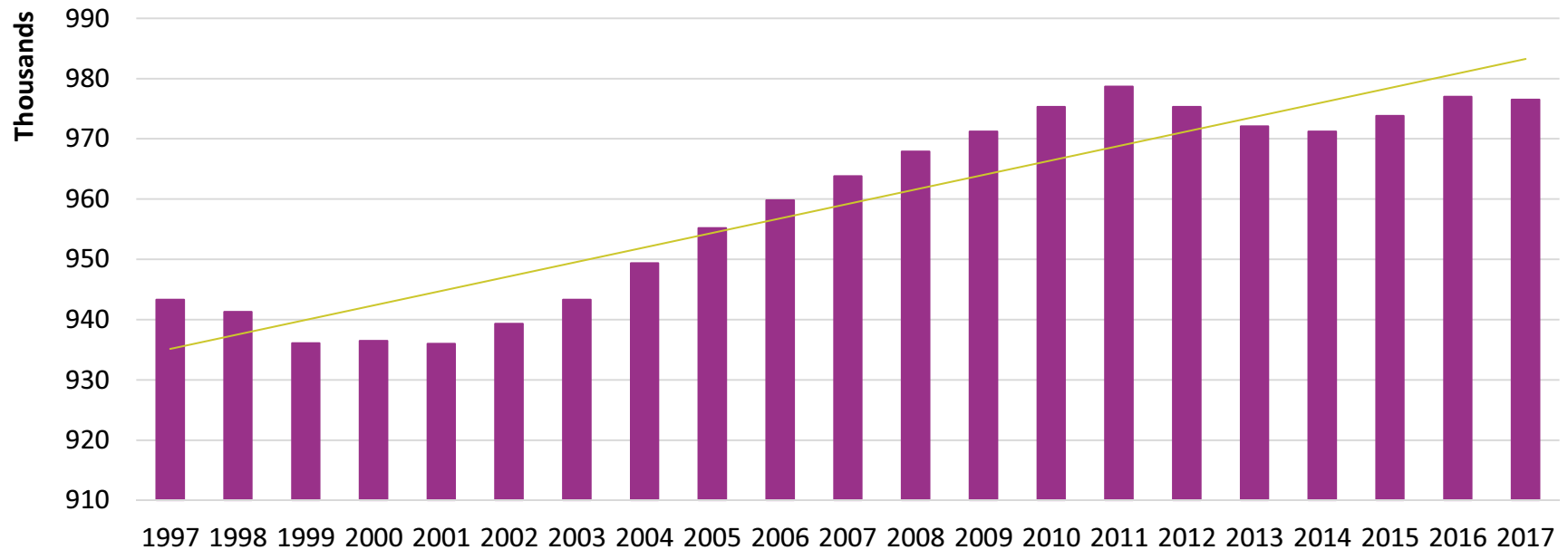
In both of these areas, the dependency ratio is also considerably higher than the UK level, reflective of the high proportion of residents age 65+ and smaller Working Age Populations. In these areas, the Working Age Population face a greater burden in supporting the ageing and youth population.

Source: Mid Year Population Estimates

Overall, our Working Age Population is growing. . .

We have a Working Age Population of 977k which has grown (with fluctuations) over the last 30 years.

Liverpool City Region Working Age Population (1997-2017)

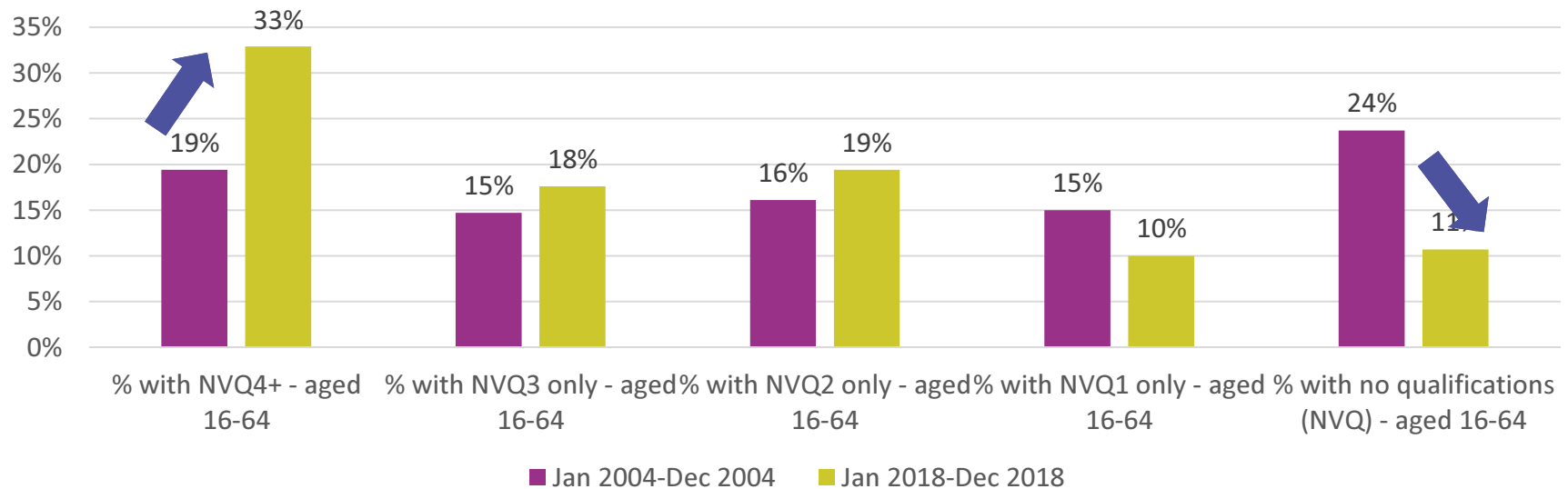


Source: Mid Year Population Estimates

. . . And the WAP is becoming more skilled. . .

Our skills profile is improving. Since 2004, the **proportion of highly skilled residents has increased**, at the same time, the **proportion of residents with no qualifications has fallen.**

Change in qualification levels (2004-2018)

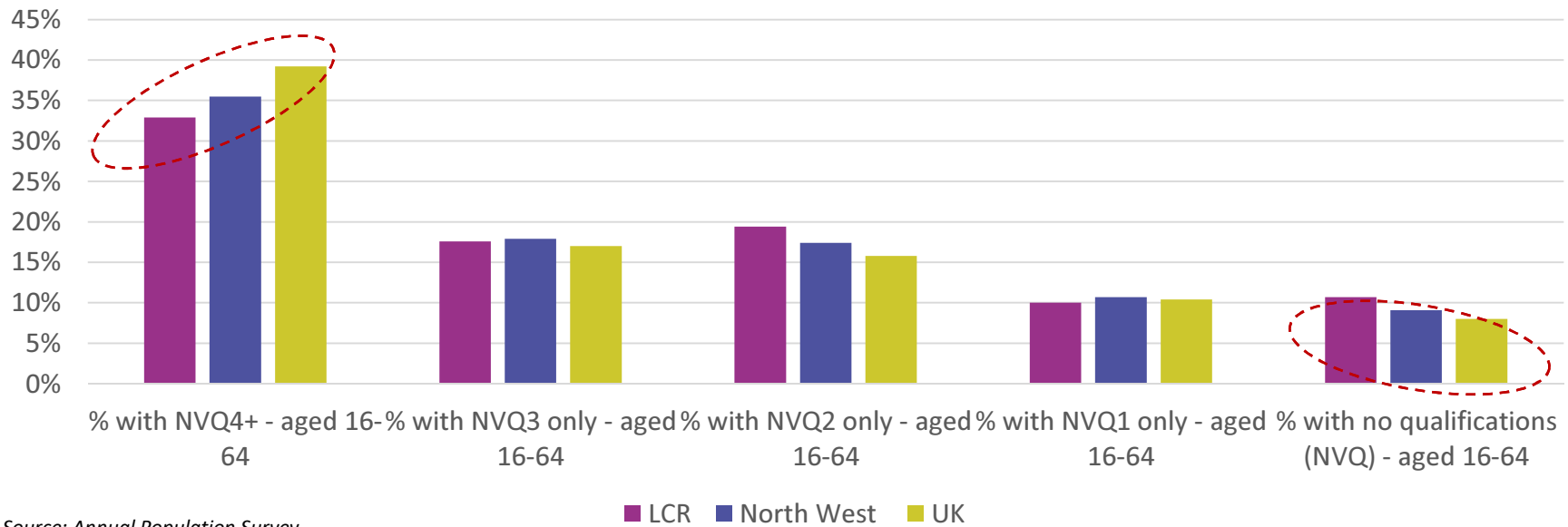


Source: Annual Population Survey

... But we need more highly skilled workers

While our skills profile is improving, comparatively, we have a **low proportion of highly skilled workers (NVQ4+)**, and a high proportion of residents with no qualifications. **A highly skilled population is a key component of a competitive, productive economy.**

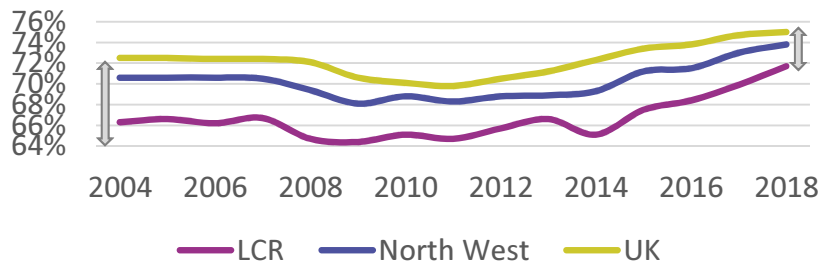
Qualification levels of the Working Age Population (2018)



Source: Annual Population Survey

Our employment rate is growing. . .

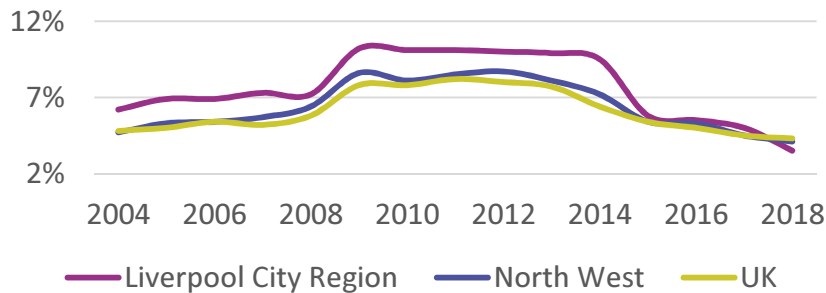
Employment Rate (2004 -2018)



Each year a **growing number of our residents are employed**, with significant growth in our **employment rate** from 2014 onwards. This fast rate of growth has **closed the gap considerably** between the LCR employment rate and that of the UK.

As of 2018 **72% of our Working Age Population were in employment**, compared to 74% in the North West and the UK rate of 75%.

Unemployment Rate (2004 -2018)



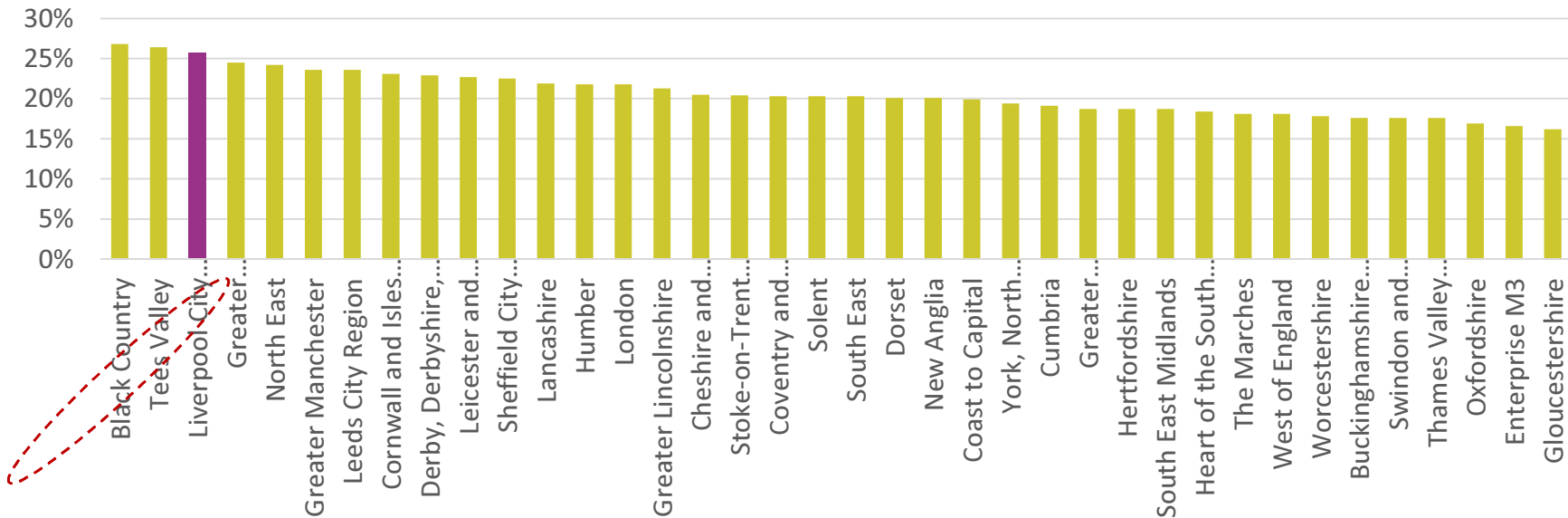
At the same time, **our unemployment rate has fallen significantly** from 6.2% in 2004, to 4.1% in 2018. As of 2018, the unemployment rate was lower than that of both the North West and the UK.

Source: Annual Population Survey

... but a high proportion of our WAP is inactive...

With 26% of our Working Age Population currently inactive, we have the third highest rate of economic inactivity of all LEPs in the UK, this is a key driver of our output gap with the UK.

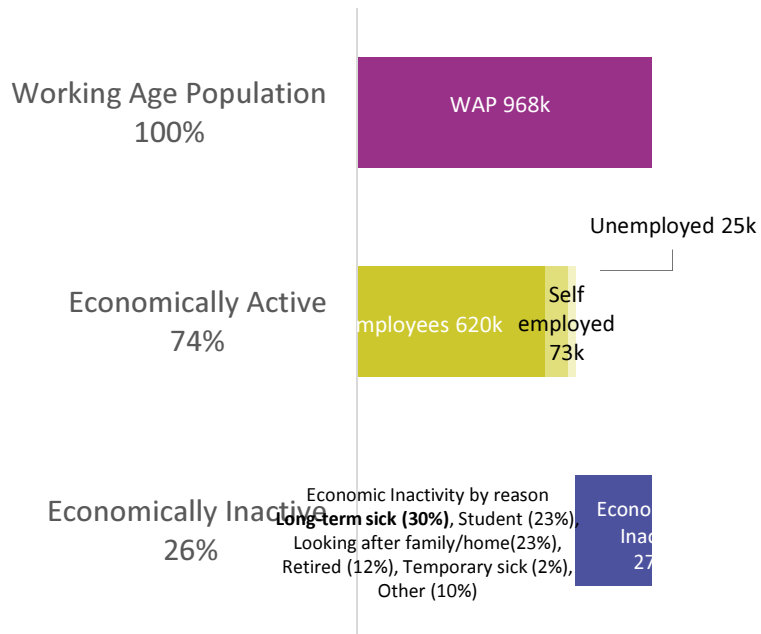
Economic Inactivity Rate (2018)



Source: Annual Population Survey

... and disconnected from the world of work

Liverpool City Region Labour Supply (2018)



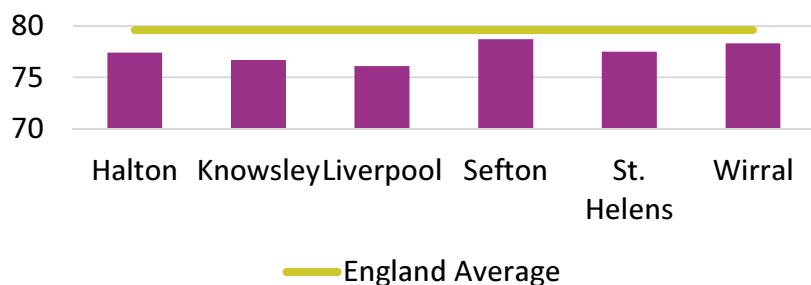
Source: Annual Population Survey

We have 274k residents that are economically inactive, a high proportion of these (30%) do not participate in the labour force **due to long term sickness**. Long term sickness is highest in St Helens (37.4%) and lowest in Liverpool (26.9%).

Of our working age population, we have a proportionately higher number of residents that do not want a job when compared with the UK. In addition to sickness there are a number of reasons for this, such as stay at home parents and people who have retired early – essentially lifestyle choices.

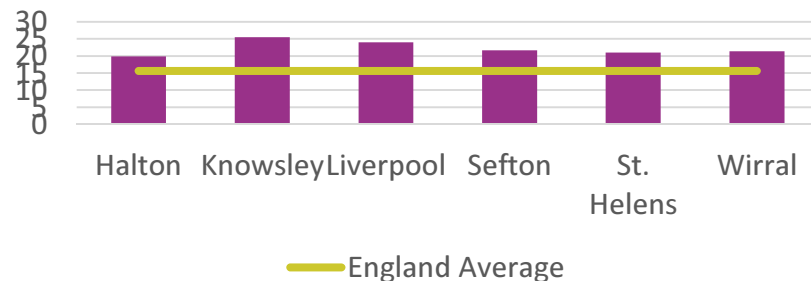
Inactivity is underpinned by complex health-related challenges

Male Life Expectancy at Birth (2018)



Source: Public Health England

Prevalence of Common Mental Health Disorders (2018)



Source: Public Health England

Our economic inactivity rate reflects the range of **complex health and wellbeing challenges** residents in the City Region face:

- One in four people of working age in the LCR have **limiting health conditions**;
- **Life expectancy is two and a half years lower** than for England;
- The prevalence of **ill health is increasing**; and
- There is a **high prevalence of mental health disorders**¹.

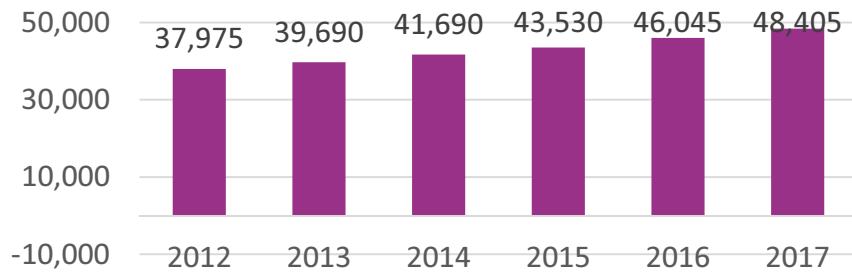
Unfavourable health conditions in the LCR contributes to both the employment and productivity gap.

¹ Health for Wealth: Building a Healthier Northern Powerhouse for UK Productivity

2 – Business Environment

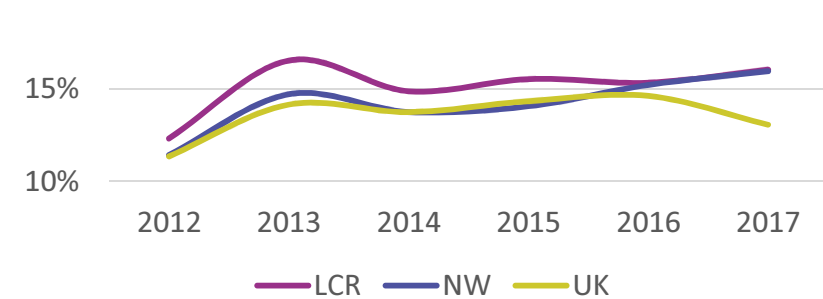
Our Business Base is growing . . .

Number of Active Enterprises in the LCR (2012-2017)



Source: UK Business Demography

Business Birth Rate (2012-2017)



Source: UK Business Demography

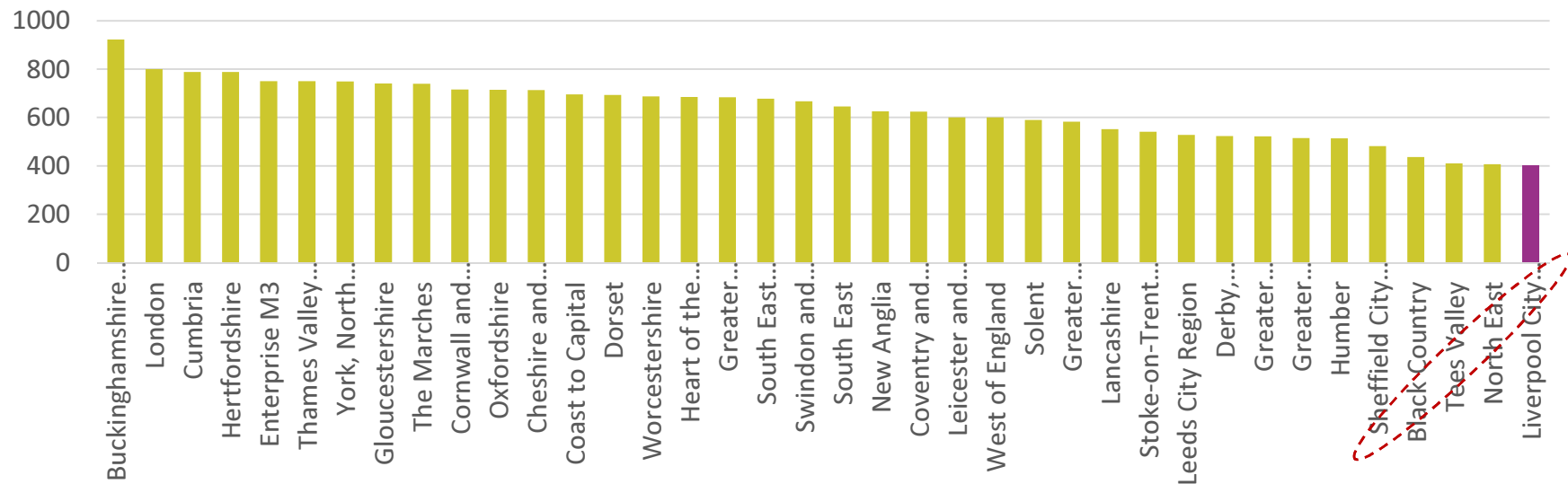
There are **48,000 active businesses** in the Liverpool City Region. Since 2012, **our business base has grown** each year and **at a faster rate** than both the North West and the UK.

This is driven by a **consistently higher business birth rate**, reflective of **our entrepreneurial culture**.

. . . But our business density is too low

Our business density is the lowest of all LEPs and contributes to our performance gaps with the UK. A larger business base will increase competition, generate more output and employment opportunities and, ultimately, improve performance of the Liverpool City Region.

Number of Businesses per 10k of WAP



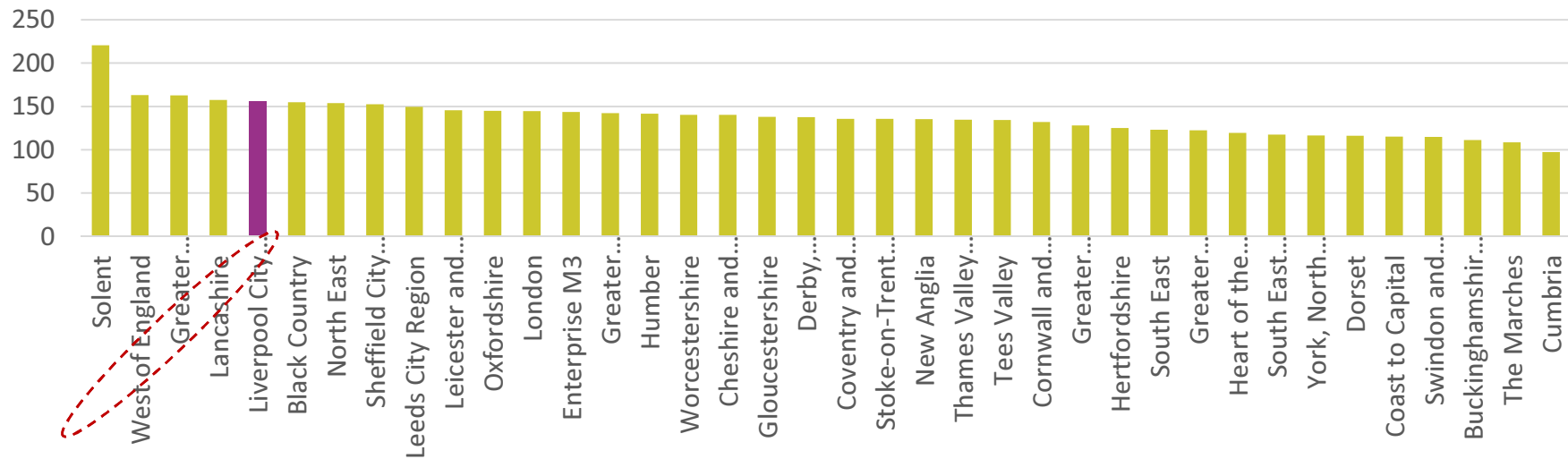
Source: UK Business Counts, Mid Year population estimates

As our business base grows we need more scale-up businesses .

..

Scale-up businesses are an important source of employment and drive productivity. Relative to our business base, we have the **fifth highest proportion** of Scale-up businesses of all LEPs. However, the scale-up population is small, with just **610 located in the City Region**.

Number of Scale-ups per 10k of businesses

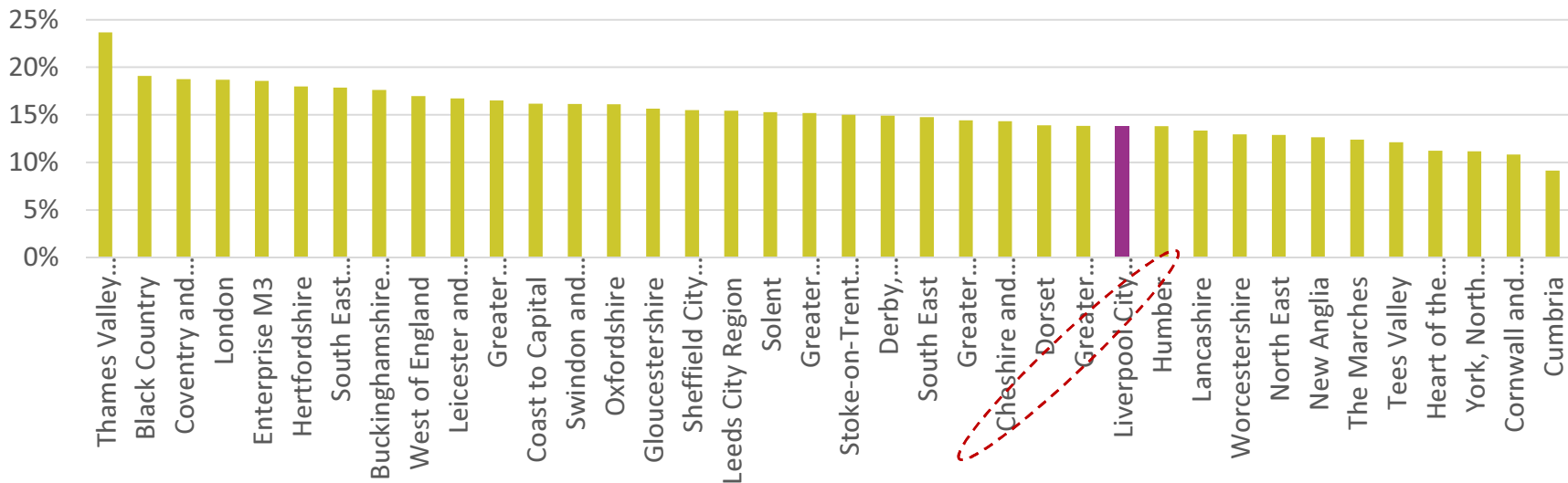


Source: The Scale-up Institute and UK Business Counts

. . . And we need more exporting businesses

Businesses that sell beyond local markets tend to be more productive. In LCR, **just 14% of the business base is in export intensive sectors**, and **just 2.4% of businesses export regularly**. Increasing the number of businesses that sell products and services overseas could improve productivity of the City Region.

% Share of businesses in Export-intensive Industries



Source: UK Business Counts

We have transformational growth opportunities

Across the City Region we have developed, and continue to develop core strengths across a number of sectors that provide real opportunity for strong levels of growth in terms of both jobs and GVA. Our sector accelerators, are sub-sectors of the economy that have strong growth potential, unique and nationally significant assets and strong potential to form innovation-led growth clusters across the City Region.

The sectors we have identified to drive the opportunity in the Liverpool City Region are:

- Automotive manufacturing
- Chemicals and Pharmaceuticals manufacturing
- Life Sciences and Healthcare
- Digital and Creative
- Clean Growth

(Note Clean Growth sector analysis will be added following forthcoming work)

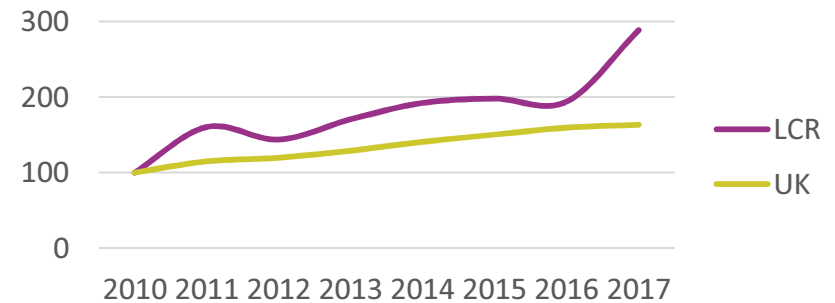
Automotive Manufacturing

One quarter of a million cars are produced in the Liverpool City Region annually. **The sector is diverse**, on the one hand we are home to Briggs Automotive Company (BAC) producing 20 high performance supercars each year, and on the other hand is the 300-acre Jaguar Land Rover site where **a car comes off the production line every 90 seconds**.

Across the sector there are approximately 55 businesses, employing more than 7,000 people. Since 2010, the sector **has grown considerably faster than the UK**, with a Compound Annual Growth Rate (CAGR) of 16%.

There is a **high concentration of employment and output compared to the UK**, but a lower concentration of businesses. This is reflective of the **high number of large, key employers in the sector**.

GVA Growth 2010-2017 (Indexed 2010=100)



Source: Office for National Statistics

Degree of specialisation (LQ analysis)



Source: Office for National Statistics, BRES, UK Business Counts

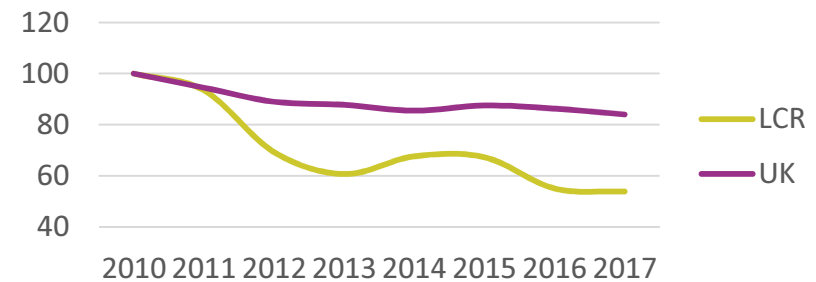
Chemicals and Pharma Manufacturing

Liverpool City Region is **home to some of the world's biggest pharmaceutical players**. In 2017, the sector contributed in excess of £1.5bn of GVA. There are over 130 businesses operating in the sector, employing more than 7.5k employees.

Nationally, the sector has contracted, with a £4.5bn decline in output since 2010, against this backdrop, the sector has shown resilience in the Liverpool City Region.

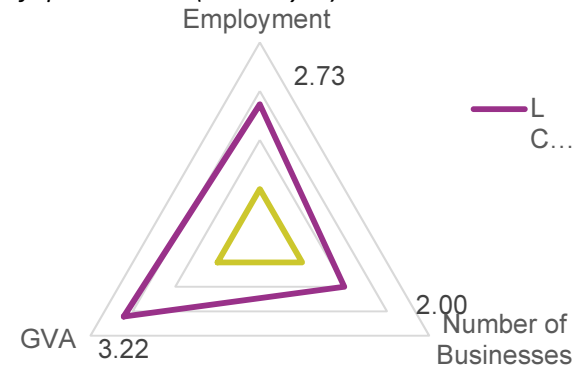
There is a considerably **high concentration of employment, businesses and output compared to the UK**, demonstrating the LCR's sector specialism and expertise.

GVA Growth 2010-2017 (Indexed 2010=100)



Source: Office for National Statistics

Degree of specialisation (LQ analysis)



Source: Office for National Statistics, BRES, UK Business Counts

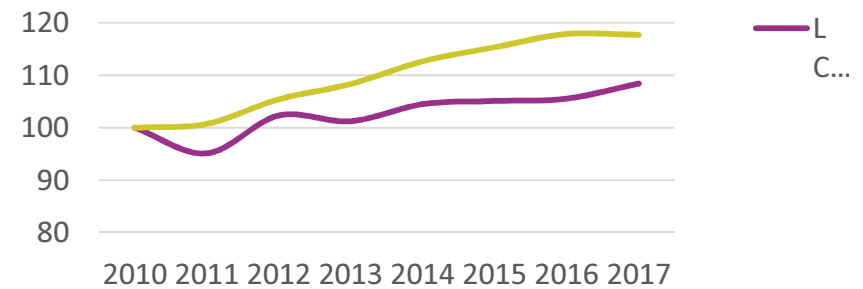
Life Sciences and Healthcare

Our Universities produce **world leading research** related to the Life Sciences and Healthcare sector.

In 2017, the sector contributed more than £3bn of GVA and provided c. 95,000 jobs, across a business base of more than 2,000. Since 2010, **the sector has grown**, albeit at a slighter slower rate than that seen nationally.

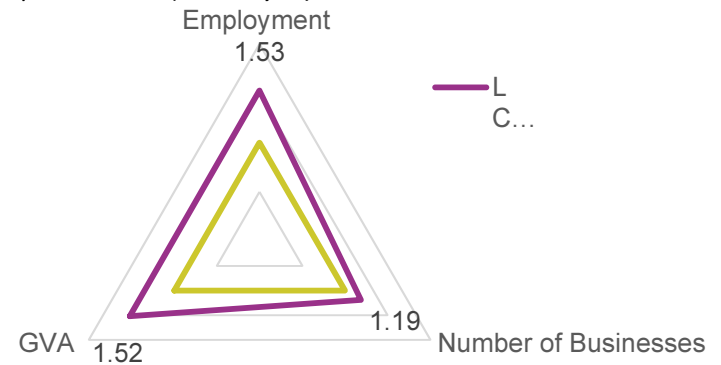
Our specialism in the sector is demonstrated through a higher concentration of employment, businesses and output than what is seen nationally.

GVA Growth 2010-2017 (Indexed 2010=100)



Source: Office for National Statistics

Degree of specialisation (LQ analysis)



Source: Office for National Statistics, BRES, UK Business Counts

Digital, Creative and Technology

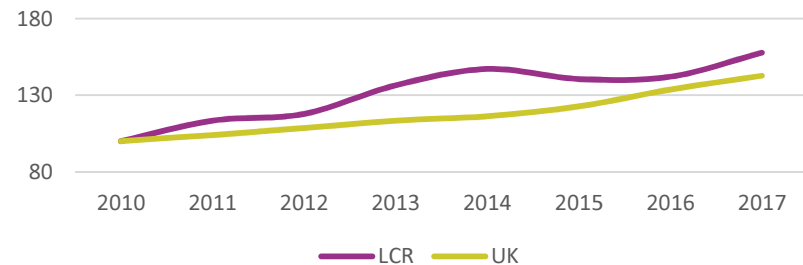
The Digital and Creative Sector in LCR is **growing, with a constant stream of new businesses starting, locating and growing in the City Region**. We also have a strong, and growing advanced computing sector, underpinned by **nationally significant assets** such as the most powerful supercomputer in the UK.

The sector is growing significantly, and faster than the national rate. Output from the sector surpassed £1bn in GVA in 2017, and the sector has grown at a CAGR of 7% since 2010.

There are around 2,500 businesses in the sector, providing close to 13,000 jobs.

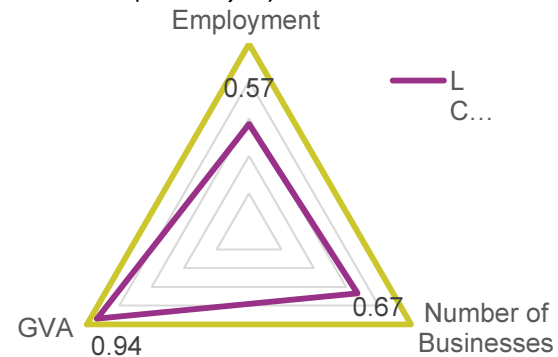
While there is less evidence of industrial concentrations, the sector continues to grow with emerging specialisms.

GVA Growth 2010-2017 (Indexed 2010=100)



Source: Office for National Statistics

Degree of specialisation (LQ analysis)

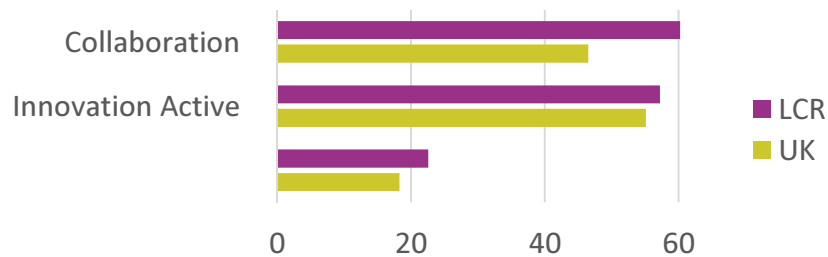


Source: Office for National Statistics, BRES, UK Business Counts

3 – Ideas

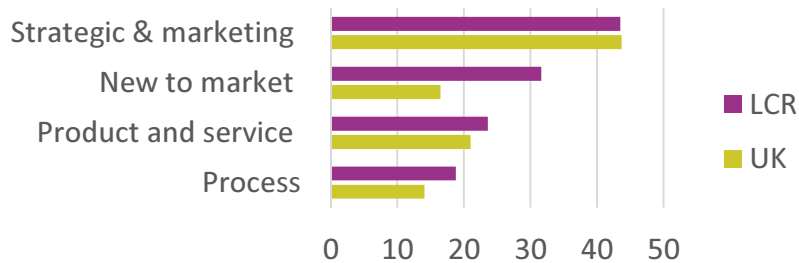
Our business base engages in innovation. . .

Percentage of businesses engaging in innovation activities



Source: BEIS, UK Innovation Survey

Innovation activity engaged in (%)



Source: BEIS, UK Innovation Survey

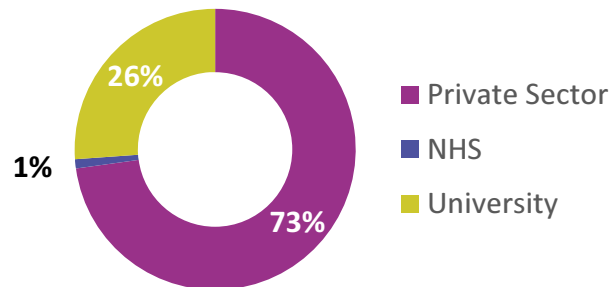
With 57.2% of businesses innovation active, **we have a higher proportion of businesses engaged in innovation than the UK average.**

A high proportion of businesses engage in collaborative innovation (this includes collaboration with other businesses, research institutes, HEIs and government).

The most common innovation activity is that related to new/improved strategic business practices and changes to marketing concepts or strategies.

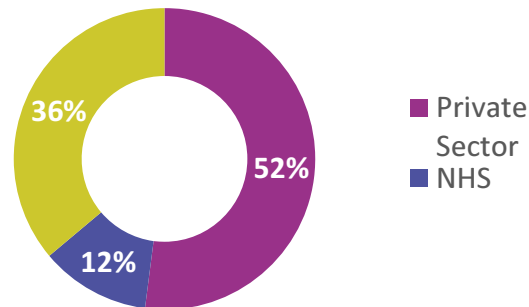
... And businesses secure a considerable amount of innovation funding ...

Breakdown of Innovate UK funding by number of grants



Source: Innovate UK

Breakdown of Innovate UK funding by value of grants



Source: Innovate UK

Since 2003, organisations in the Liverpool City Region have secured 655 Innovate UK grants, totalling over £73m.

Of the 655 grants, almost three quarters (73%) have gone to private sector businesses. By value the share falls to 52% showing that typically, private sector businesses receive lower value grants than Universities or the NHS.

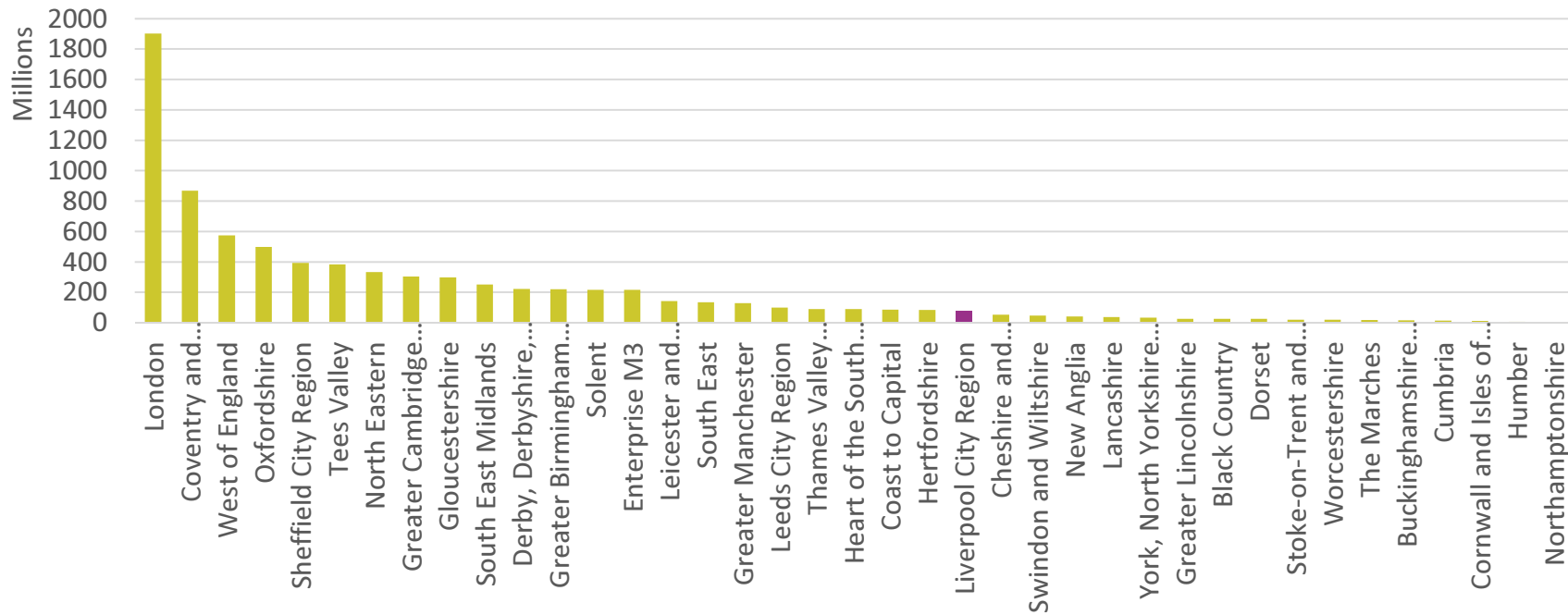
Top companies by value of Innovate UK funding received (2003-2018)

Company	Sector	Value of Grants	Number of Grants
Aimes	Digital	£3.2m	23
Unilever	FMCG	£1.9m	10
Videregen	Life Sciences	£1.5m	2
Ulemco	Clean Growth	£1.4m	5
Acal Energy	Chemicals	£1.3m	12

Source: Innovate UK

... but we are in the bottom half of all LEPs for the amount of funding attracted

Innovate UK funding by Local Enterprise Partnership



Source: Innovate UK

We have a strong research base. . .

Universities in the City Region and Student Population

University	Number of Students
Liverpool Hope University	8,000
Liverpool John Moores University	22,000
The Liverpool Institute of Performing Arts	690
The University of Liverpool	25,000
Liverpool School of Tropical Medicine	120

Areas of research excellence

University	Areas or Research Excellence
Liverpool Hope University	Mathematics and Computer Science
Liverpool John Moores University	Sport and exercise science
The University of Liverpool	Chemistry , computer science and informatics
Liverpool School of Tropical Medicine	Clinical medicine, public health

Source: Research Excellence Framework, 2014

Universities have a significant role to play in nurturing the knowledge economy and high quality research makes a major contribution to economic prosperity.

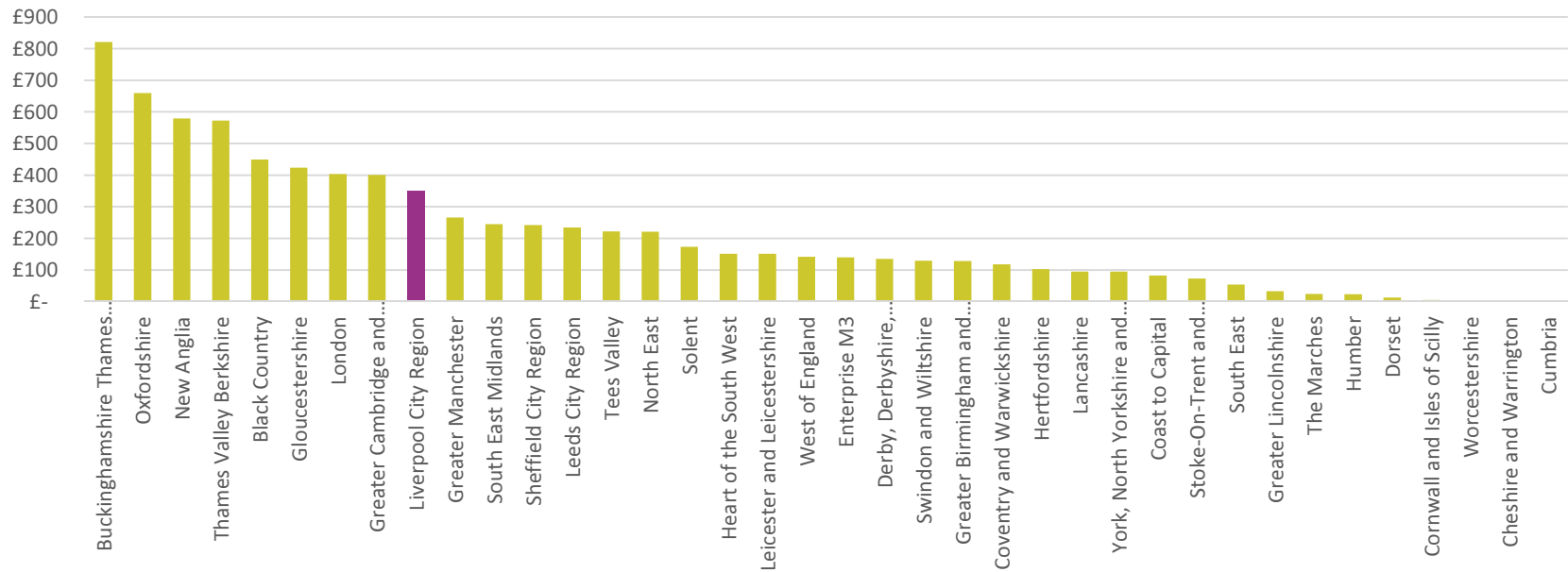
Universities in the Liverpool City Region are home to Research Excellence and achieved noteworthy results in the last Research Excellence Framework review in 2014.

The University of Liverpool had seven subjects in which **research was ranked in the top ten** in the UK, and **ranked first in the UK for research in Chemistry.**

. . . And our Universities have a relatively high R&D expenditure

Universities in the Liverpool City Region have the highest relative expenditure on R&D of all North West LEPs.

Higher Education expenditure on R&D per FTE

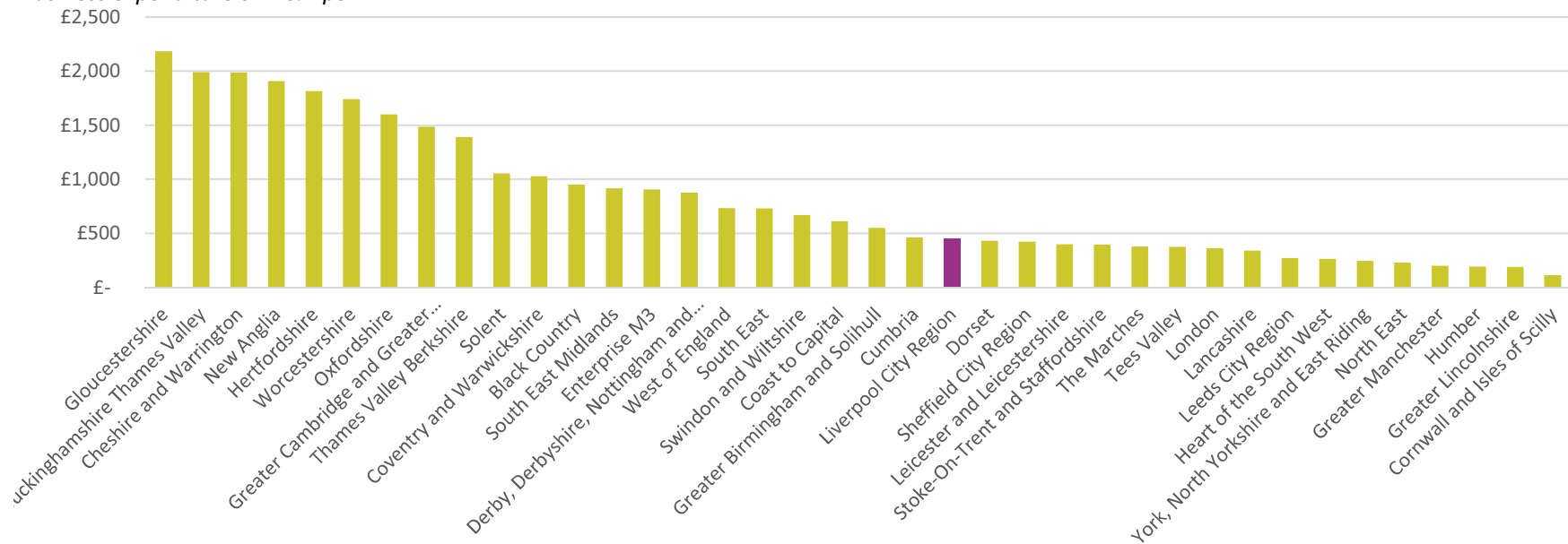


Source: Eurostat, 2014

. . . But business R&D expenditure is low

Although business expenditure is higher than that of our HEIs, compared to other LEPs, business expenditure on R&D in the Liverpool City Region is low.

Business expenditure on R&D per FTE



Source: Eurostat, 2014

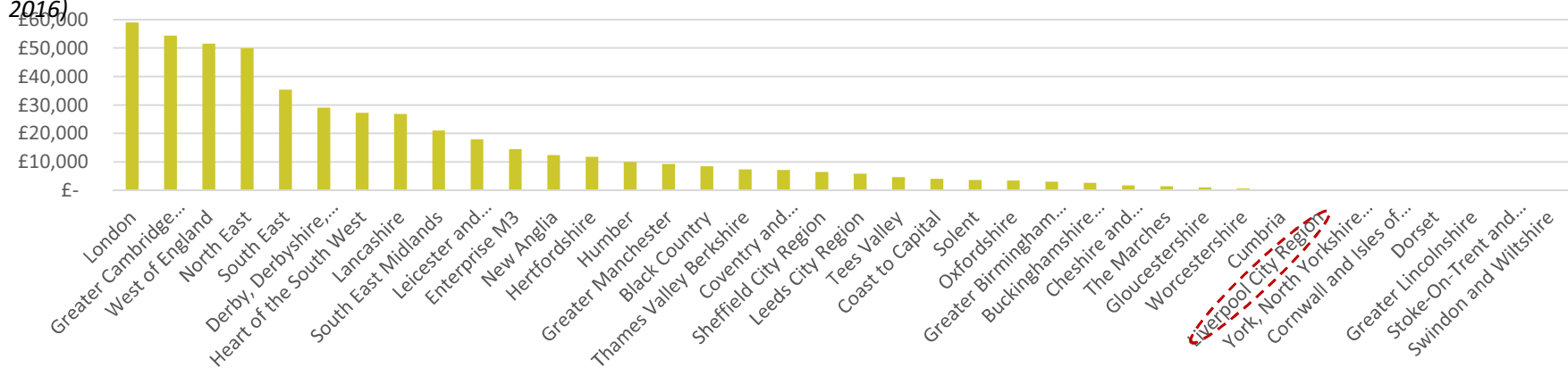
Evidence on collaboration between Universities and the business base is mixed

Business and Community Services by HE provider

University	Total Number of Contracts	Total Value of Contracts	Rank (out of 162)
Liverpool Hope University	25	372	106
LJMU	122	2,038	57
The University of Liverpool	469	15,296	19

Source: HESA

Income for consultancy and contract research for businesses (2014-2016)



Source: HEBCI

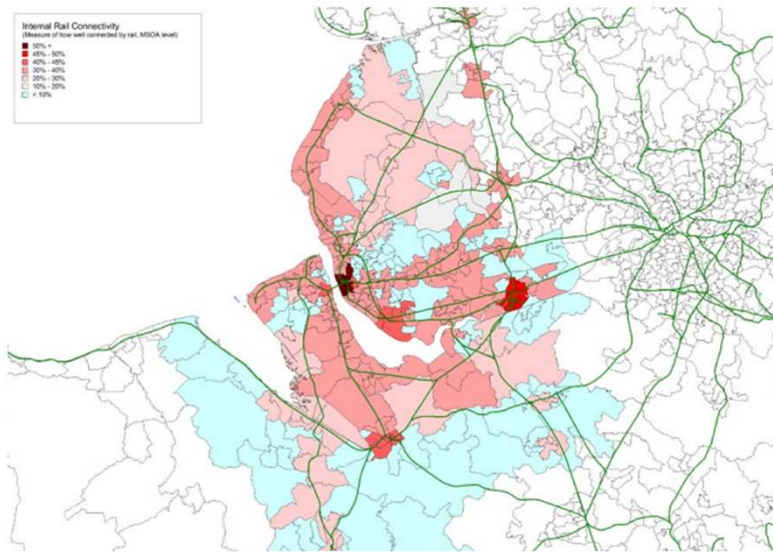
Relationships between universities and businesses are important to unlock innovation and growth, and to develop and graduate talent.

There is some evidence of collaboration between Universities and businesses, but these tend to be focussed on larger organisations, with limited long-term relationships fostered between universities and SMEs.

4 – Infrastructure

Our local rail infrastructure provides uneven connectivity . . .

Internal connectivity of Liverpool City Region and its hinterland by rail



Source: Merseytravel Long Term Rail Strategy

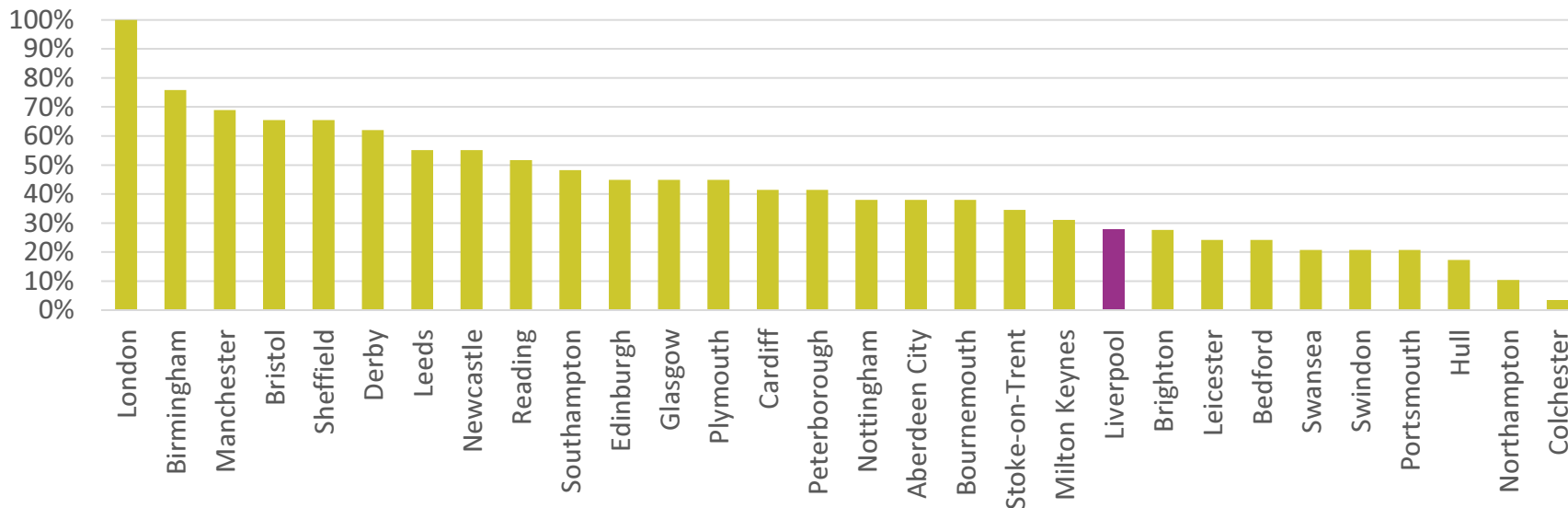
The Merseyrail network is the “jewel in the crown” of the city’s rail assets and patronage has grown rapidly since the franchise was devolved in 2004.

At a local level, Liverpool City Region and its wider functional geography is well connected, especially at the core. However, for some areas, especially those of a more rural nature, rail connectivity is weaker.

... And Liverpool is poorly connected to other locations around Britain

Liverpool's wider connectivity (based on whether or not a direct service links the locations) is poor, especially for a city of its size. Of the 20 cities with better connectivity, only seven have a larger population than Liverpool.

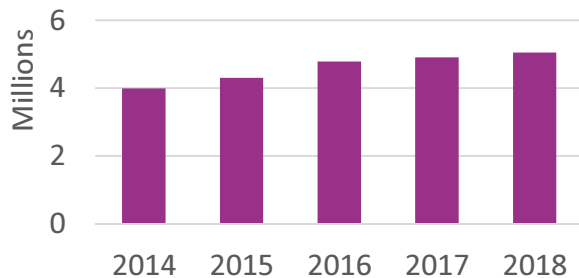
Connectivity of key GB towns and cities



Source: Merseytravel Long Term Rail Strategy

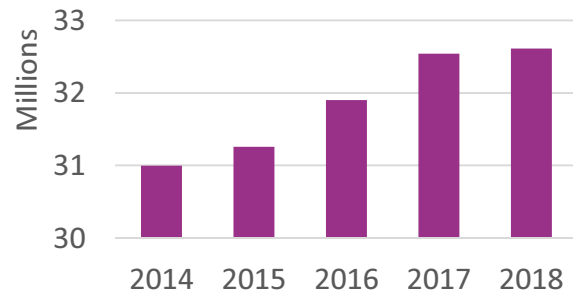
We have key international gateways

Liverpool John Lennon Airport Passenger Numbers (2014-18)



We are connected internationally by John Lennon airport and our close proximity to Manchester airport. **LJLA is a growing international airport** and has grown considerably over the last decade. It now handles over 5 million passengers annually. However, **connectivity to the airport is weak**, unlike many other major global airports, it has no dedicated rail line.

Port Tonnage (2014-18)



Our Westward facing port is another international gateway as well as being a significant asset to the LCR economy. The port handles over 33 million tonnes of freight cargo per year and serves more than 100 global destinations including China, Africa, Australia, India, the Middle East and South America.

We are a digitally connected City Region

Digital Connectivity by Local Authority

	Superfast	Ultrafast
Halton	98.85%	73.72%
Knowsley	99.12%	79.69%
Liverpool	97.46%	80.95%
Sefton	99.39%	62.42%
St Helens	98.57%	87.46%
Wirral	98.75%	58.69%
UK	94.95%	54.01%

Source: SQW analysis of <https://labs.thinkbroadband.com/local/England>

Proportion of the population that have rarely/never used the internet



Source: SQW analysis of <https://labs.thinkbroadband.com/local/England>

Liverpool is one of the best digitally connected cities in the UK. We have built our own Internet Exchange, ensuring world-class speeds. We connect to London directly (LINX) and to the GTT transatlantic internet cable linking the city to North America and Europe.

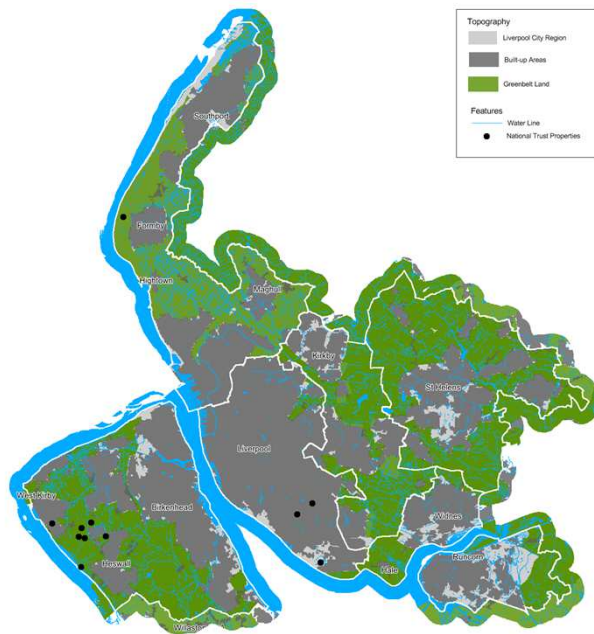
Liverpool is also a 5G testbed area creating a platform for the smooth roll out of 5G mobile internet connectivity over the next few years creating multi-gigabyte connectivity across the region.

All districts in the City Region have access to superfast broadband, and digital connectivity is higher than national averages across all LAs. However, **digital inclusion is an identified challenge** with a higher than average proportion of the population that rarely, or have never used the internet.

5 – Place

There are significant place-based assets across the City Region

Blue and Green Infrastructure in the City Region



Liverpool City Region has a rich asset base. It is home to more museums, theatres, galleries and heritage buildings than any other place outside of London. Adding to this are the natural assets across the City Region, we have miles of coastline and beaches and over 100 parks. Around 80% of the City Region is blue/green space.

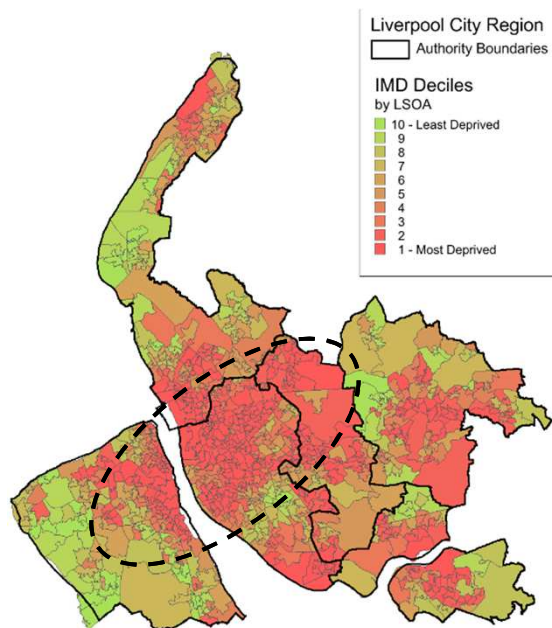
There are some place-based challenges in the City Region, including higher than average crime rates, significant pockets of deprivation, and low wages.

Indicator	LCR	England
Workplace Earnings	£538	£575
Resident Earnings	£534	£575
% of LSOAs in UK most deprived	31%	-
Crime per 1k Population	90	86.5
Affordability Ratio	5.86*	8.0

* North West data, LCR Data not available

Neighbourhoods are characterised by significant levels of multiple deprivation

Deprivation levels across the Liverpool City Region



Source: Index of Multiple Deprivation

Liverpool City Region has a significant number of neighbourhoods characterised by deprivation. Almost one third of all LSOAs in the City Region are in the most deprived decile in the UK.

These neighbourhoods are located across the City Region but there is a particular concentration in a corridor running North from East Wirral, through North Liverpool/South Sefton to North Knowsley.

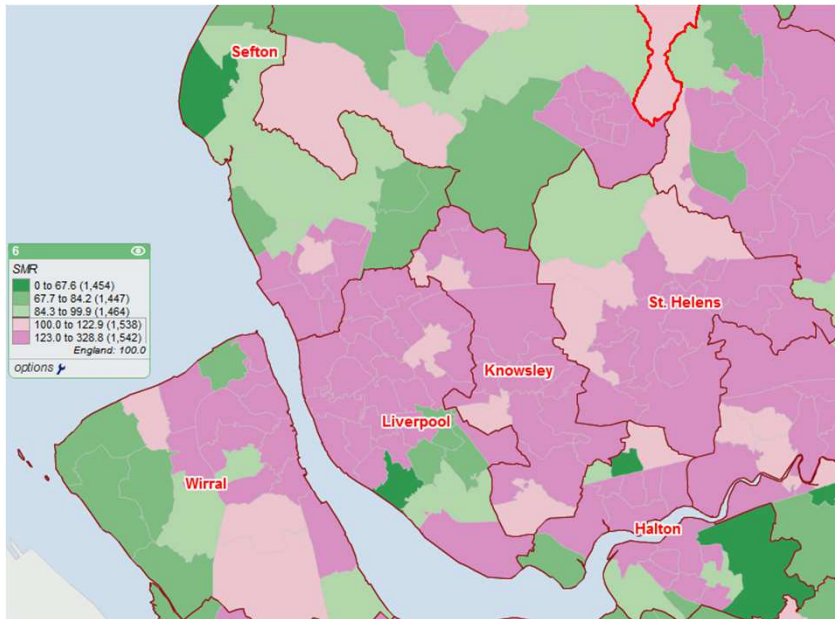
The scale of deprivation, and the impact this has on economic growth and productivity, **underlines the need to regenerate these neighbourhoods.**

Our growing Social Economy will also be important in improving the opportunities for residents in our most deprived communities.

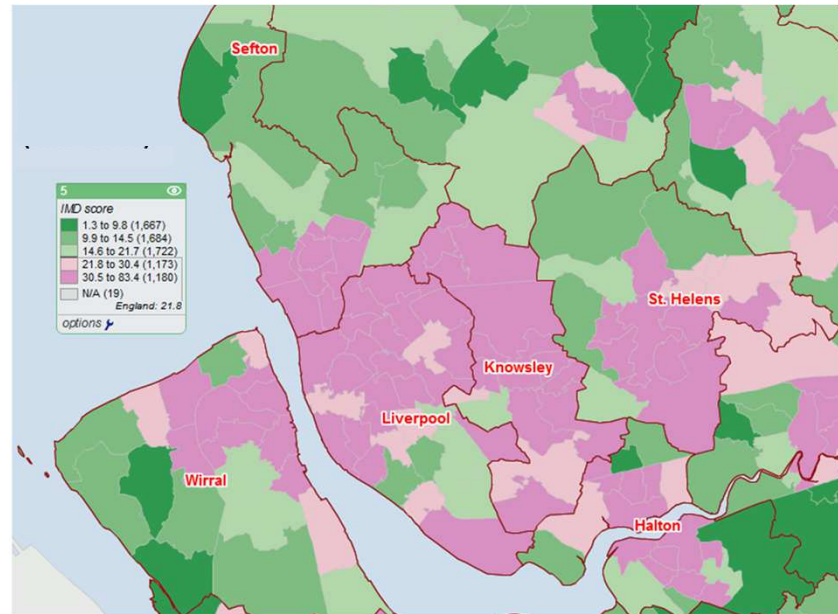
. . . That also suffer from low air quality

There is a striking correlation between areas with poor air quality and high levels of deprivation

Deaths from respiratory diseases

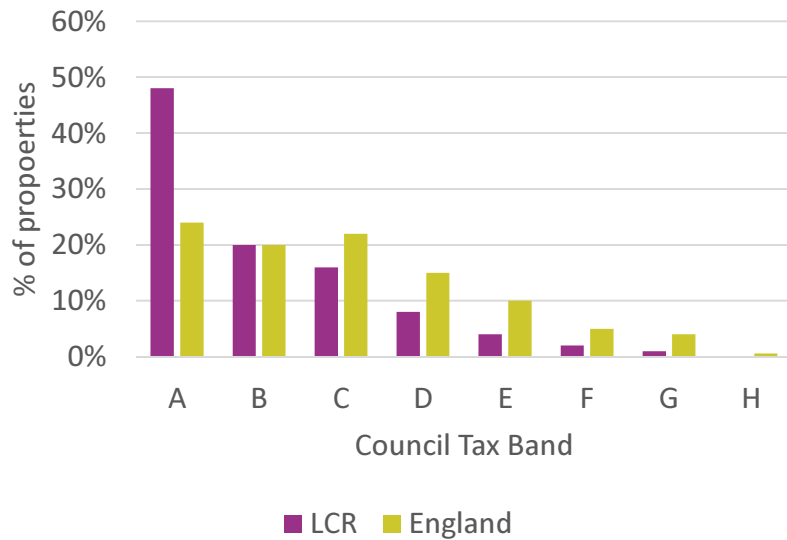


Deprivation levels across the Liverpool City Region



The City Region needs to have the right housing choice. . .

Housing Stock by Council Tax Band



Source: Council Tax Band Stock of Properties

Since 2016, over 11,000 new homes across all tenures have been delivered across the city region – the highest rate of delivery since the 2008 recession.

However **our current housing choice is characterised by a higher than average proportion of lower value houses** (Council Tax Bands A and B) than that found nationally, 68% of our housing stock is in Council Tax Band A or B, compared to 44% of housing stock in England.

This limited housing choice offer has implications for quality of life and attracting/retaining skilled labour to the City Region.

. . . And higher quality office space

Office availability and demand (2016)

	Office availability		Office demand	
	Built last five years	All (sq ft.)	Average annual take up (last 5 yrs.)	Years supply
Halton	-	36,500	122,500	3
Knowsley	-	87,000	45,600	1.9
Liverpool	10,900	2,315,900	304,400	7.6
Sefton	-	446,500	88,000	5.1
St Helens	-	202,600	54,900	3.7
Wirral	700	249,000	65,700	3.8
Total	11,600	3,666,100	681,000	5.4

Source: Cushman & Wakefield

Liverpool City Region has high availability of office space, especially in the Liverpool and Sefton. However, the majority of this space is old, and not meeting the expectations of businesses. Only Liverpool and Wirral have had new office space delivered over the last five years.

The oversupply of low quality office space is suppressing rent yields, and subduing private sector activity in developing higher quality space.

High quality business space that is fit for purpose is one important driver of attracting new businesses into the City Region, and addressing the low business density challenge.