Liverpool City Region Local Industrial Strategy: Statement of Emerging Strategic Priorities

1. **Background and Purpose**

Liverpool City Region’s Local Industrial Strategy will set out a long-term economic vision. Founded on a collaborative approach with local partners, it will articulate how we will build on our distinctive economic strengths, tackle our challenges, and develop transformational policies to unlock growth and address the barriers to an inclusive economy. We are committed to raising living standards for all our people, ensuring policies and interventions have a real focus on how all people and places within the City Region can benefit from, and contribute to, economic development.

The purpose of this statement is to provide an overview of progress to date, highlighting what our evidence base is telling us about the Liverpool City Region economy. It sets out emerging themes from our evidence, work already in train to tackle challenges in the economy, and initial thinking on ideas to significantly improve our productivity, aligned with the foundations of productivity and national Industrial Strategy Grand Challenges. It outlines next steps and areas for further research and engagement as part of the development of our final Local Industrial Strategy priorities.

Our Local Industrial Strategy will be underpinned by a robust evidence base (a summary evidence slide deck accompanies this paper). Both through commissioned work and our own analysis, we are building a clear narrative on the City Region’s economic strengths and assets, as well as its challenges. We are testing and consulting on our evidence base with a broad range of stakeholders, seeking views from businesses, the public sector, the social economy and academia.

We want this to be a genuinely inclusive strategy in terms of practice as well as ambition, so we will also seek the input and views of the people of the Liverpool City Region on our emerging thinking, and what actions are needed to improve their lives and communities.

To supplement our evidence base, we will:

- Commission updated economic forecasting to provide a longer-term view of our economy and social trends up to 2040. This will include a scenario analysis of the economic impacts of Brexit on the City Region as well as looking at how our changing economy will impact our housing market.
- Carry out a detailed analysis of the barriers that SMEs are facing and the support needed to help them grow and innovate.
- Undertake work to further understand supply chains, sectoral ‘deep dives’ and foresighting, plus the wider innovation ecosystem in the City Region.
The content of the Position Statement

This document is split into the following sections:

- Section 2 sets out a broad economic context, the progress we have made and the growth trajectory we are on;
- Section 3 explores our specialisms and transformative sector strengths alongside our sectors that will be important for developing an inclusive economy;
- Section 4 delivers an overview of some of the structural challenges that hold back growth and productivity across the City Region – such as entrenched economic inactivity, and a relatively small private sector;
- Section 5 aligns our evidence base against the five drivers of productivity (people, place, infrastructure, ideas, and business environment), and starts to explore the opportunity that exists in the City Region against the Grand Challenges.
- Section 6 concludes by presenting our emerging priorities and next steps.
2. The Economic Context

Liverpool City Region has a strong and historic industrial heritage, built upon an entrepreneurial fabric and a strong sense of identity. Its prosperity has been built on two things: our unique geographic assets; and the hard work, solidarity, creativity and innovation of our people. Just as these factors saw us prosper as a leading city in the world, and ensured our survival through economic adversity, they are also forming the foundations of our economic renaissance.

In recent years, the City Region has developed a range of UK leading assets and capabilities within key sub-sectors, and has forged a unique, internationally renowned cultural vibrancy which singles it out as a place to do business, live, work and visit. However, there are also longstanding challenges, particularly in health, employment, skills, and transport connectivity, which act as a brake on our productivity and a barrier to developing a truly inclusive economy.

Looking ahead, our economy must work within the context of the insecurity that Brexit and an uncertain global economic picture creates, together with automation and digitisation. This is where fostering a highly productive knowledge intensive economy will be increasingly important to our future prosperity, as will addressing the legacy of low skills within the existing workforce. To do this, we will need to work innovatively within future constraints, ensuring highly focused and targeted approaches to supporting long-term economic development, and creating the ‘right’ conditions conducive for growth.

Liverpool City Region is a growing economy

The City Region contributes £32bn to the national economy. Over the last decade, our economy has grown by £6.5bn, and has surpassed the national growth rate in three of the last four years. As our economy grows, it is becoming more productive, the most recent data for the City Region recorded productivity growth of 2.0% (GVA per filled job).

Figure 1: GVA Growth 2007-17, indexed (2007=100)

For any strong and resilient economy, healthy growth in its business base is essential. This needs to be driven in part through the growth of new businesses. Between 2012 and 2017, our business base expanded year on year with the addition of 10,800 businesses. This is, in
part, driven by a high business birth rate, which has remained significantly above the national rate for the last five years. This represents one of our key historic strengths – our entrepreneurial vibrancy. As our business base has grown, so too has the number of jobs - increasing by over 9,000 across the same period. 

Figure 2: Active Enterprises in the Liverpool City Region

![Bar chart showing active enterprises in the Liverpool City Region from 2012 to 2017.](chart)

Source: UK Business Demography

The City Region is a diverse economy that is not over-dependent on any one sector. That said, within industries we have demonstrable sectoral specialisms that have contributed to the growth of the City Region and will continue to do so going forwards. The next section discusses these sectors and the distinctive strengths within them, as well as providing an overview of some of our strategically important high employment sectors.
3. Our Sectoral Specialisms

Liverpool City Region is at the beginning of a period of transformational growth, led by the expansion of sectors where our assets, capabilities, specialisms and expertise set us apart from the rest of the UK, identified as Sector Accelerators. Below we begin to explore their characteristics.

Whilst high value sectors - and the specialisms within them - will be important for increasing the productivity of our economy, our other sectors are important strategically due to the employment opportunities they provide, and the accessibility of jobs to all residents. We explore this further below.

An underlying theme across the Local Industrial Strategy and within this Statement is innovation. Innovation takes many forms and is not just limited to products and ‘traditional’ R&D activities undertaken by a small number of sectors; rather it also includes improvements in processes and business models. A key aim therefore will be to create an environment where all firms across all sectors innovate, which will provide opportunities to move more of our business base up the productivity curve and in doing so, support opportunities for skills and job progression across the whole labour market. This is key in supporting the development of an inclusive and resilient economy.

**Sector Accelerators - enabling transformational growth of the City Region**

Sector Accelerators will drive high value growth as they continue to adopt new and innovative approaches, develop robust links in local supply chains, and form strong clusters of activity with both horizontal and vertical sector linkages.

Growth in these sectors will be catalysed by the areas of excellence identified in the LCR+ Science and Innovation Audit (the SIA); infection, materials chemistry, and advanced computing. The SIA recognises that these proven specialisms will be key drivers in achieving transformational growth.

Importantly, the cross-cutting characteristics of these sector accelerators and specialisms means they can connect to and support the wider economy, business base and people across the City Region – for example through technology diffusion across different sectors and developing innovative health and care solutions.

**Advanced Manufacturing – a key growth driver**

Manufacturing has always been important for the City Region economy. As new technologies pervade and Industry 4.0 practices embed, our manufacturers are becoming more advanced - adopting new technologies and increasing productivity, and we have an opportunity to innovate and build on this base, from glass to Fast Moving Consumer Goods (FMCG). The successful adoption of Industry 4.0 technologies has been partly driven by the European Regional Development Fund LCR 4.0 business support programme. This is the first of its type in the UK, ensuring that local manufacturing and engineering companies locally are at the forefront of the 4th Industrial Revolution.

As a sector, advanced manufacturing is broad, with our particular expertise in automotive manufacturing and the manufacture of chemicals and pharmaceuticals.

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, there is the 300-acre Jaguar Land Rover site where a car comes off the production line every 90 seconds. The sector has
grown at an unprecedented rate since 2010, with a Compound Annual Growth Rate of 16%. This has been considerably faster than the national rate, although challenges within the industry and through Brexit will require adaptation and forward planning.

**Figure 3 Automotive Manufacturing GVA Growth**

![Automotive Manufacturing GVA Growth](source)

Automotive manufacturing contributed £850m to the Liverpool City Region in 2017 and provided more than 7,000 jobs. We have a high concentration of both output and employment in the sector compared to the national level. The lack of business concentration is reflective of a sector dominated by a small number of key employers; approximately 500 automotive businesses operate in the City Region.

**Figure 4 Automotive Manufacturing Location Quotient Analysis**

![Automotive Manufacturing Location Quotient Analysis](source)
Liverpool City Region has a long history in the manufacture of chemicals and pharmaceuticals. Our strength in the sector dates back to 1940 when the government located the largest penicillin manufacturing plant in Speke. Since then the sector has continued to develop and the City Region is now home to some of the world’s biggest pharmaceutical players.

The sector makes a significant contribution to the economy, with an output in excess of £1.5bn in 2017. The base of more than 130 businesses provides over 7,500 jobs in the Liverpool City Region. Nationally, the sector has contracted, with a £4.5bn decline in output since 2010. Against this backdrop, the sector has been more resilient in Liverpool City Region, experiencing retrenchment that is more limited.

*Figure 5 Chemicals and Pharmaceuticals Manufacturing GVA Growth*

![GVA Growth Chart](chart)

Source: Office for National Statistics

We have high industrial concentration within the sector across the three domains of output, employment and business counts.

*Figure 6 Chemicals and Pharmaceuticals Manufacturing Location Quotient Analysis*

![Location Quotient Chart](chart)

Source: Office for National Statistics, BRES, UK Business Counts
Health and Life Sciences – building on world class research

Liverpool City Region has a range of specialist hospitals and health centres; our Universities produce world leading research related to the sector including through The University of Liverpool and The Liverpool School of Tropical Medicine, the first institution in the world dedicated to research and teaching in the field of tropical medicine; and there is continuous investment in our health and life science assets. All of this contributes to our successful and growing health and life sciences sector, which adds significantly to our economy. In 2017, it generated more than £3bn of GVA. The sector has grown continuously since 2010, albeit at a slower rate than that observed nationally.

Figure 7 Health and Life Sciences Indexed GVA Growth 2010-2017 (2010=100)

![Indexed GVA Growth Graph](image)

Source: Office for National Statistics

Figure 8 Health and Life Sciences Location Quotient Analysis

![Location Quotient Graph](image)

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

Across the broad sector definition, the City Region demonstrates a small amount of concentration in employment, output and business counts; however, this is not reflective of our unique specialisms in infectious disease and precision medicine. The City Region is world leading in infectious disease control with research excellence at University of Liverpool...
and the Liverpool School of Tropical Medicine, underpinned by industrial and NHS partnerships. These collaborations are also driving emerging strengths in life sciences and there are significant opportunities for greater commercialisation.

Importantly, the growth of Health and Life Sciences – particularly as precision medicine and the use of AI become more commonplace – represents an important opportunity to support health and care solutions for the City Region population and for healthy ageing, thus directly supporting one of the Grand Challenges.

**Digital and Creative – a growing cluster**

The Digital and Creative Sector is undergoing a revival, with a stream of new businesses starting, locating and growing in the City Region. We have the UK’s first school specialising in digital technology (The Studio) located in the Baltic Triangle, a historic part of Liverpool city centre, which is at the heart of the growing Digital and Creative cluster in the City Region.

Within this, we have a strong and growing advanced computing sector, incorporating big data analytics and artificial intelligence, underpinned by nationally significant assets. We have the most powerful supercomputer in the UK dedicated to industrial R&D, located at Sci-tech Daresbury and co-located with IBM research, plus one of the world’s first incubators dedicated to the development and exploitation of sensor technology at Sensor City in Knowledge Quarter Liverpool. We also have considerable strength in our Higher Education base; the University of Liverpool is one of the top three centres in the UK for Computer Science-related research publications. The sector and its assets will be key in driving productivity and innovation-led growth across all sectors of the City Region economy.

Digital and Creative is growing significantly, and faster than the national rate. Output from the sector surpassed £1bn in GVA in 2017, and it has grown at a Compound Annual Growth Rate of 7% since 2010.

*Figure 9 Digital and Creative GVA Growth*

Source: Office for National Statistics
There are around 2,500 businesses in the sector, providing close to 13,000 jobs. While there is less evidence of industrial concentration in the sector, the sector continues to grow with emerging specialisms in immersive technologies, AI, Digital Health, film and TV.

**Figure 10 Advanced Computing Location Quotient Analysis**

![Advanced Computing Location Quotient Analysis](image)

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

**Case Study: Daresbury**

Sci-Tech Daresbury is an Enterprise Zone and nationally significant science and innovation campus, anchored by the Science and Technology Facilities Council’s (STFC) Daresbury Laboratory, and the sister site to Harwell in Oxfordshire. The campus is home to nearly 150 high-tech companies, from start-ups to mature SMEs to multinationals (Atos, Hitachi, IBM, Mellanox) specialising in advanced engineering, digital/ICT, biomedical and energy and environmental technologies.

In addition to major strengths in accelerator science (the CERN-affiliated Cockcroft Institute) and advanced visualisation (University of Liverpool’s Virtual Engineering Centre), the STFC Hartree Centre is the most powerful supercomputer in the UK dedicated to industrial R&D and, thanks to a unique partnership with IBM Research – housing a Global Research Lab and the only UK-deployment of its Watson AI platform – provides world-leading capability in the application of AI, high performance computing and big data systems to solving the real-world challenges at the heart of the Government’s Industrial Strategy.

**Clean Growth – the path to decarbonisation**

Liverpool City Region is committed to achieving Carbon Neutrality (net zero carbon by 2040) and will maximise the opportunity from combining our natural assets and innovation expertise to develop the Clean Growth sector. Our innovation, particularly our expertise and capacity in hydrogen production, is an emerging strength which is borne out in key assets like Alstom’s Widnes Technology Centre, home to the design, build and testing of hydrogen trains; the first H2 refuelling station in the North of England using industrial hydrogen produced in St Helens; and hydrogen production by Inovyn. In addition, there are opportunities through the Mersey Tidal project and further development of offshore wind...
through the Orsted facility (see section 5), which has meant that we are ideally placed in growing this sector and meeting the Clean Growth Grand Challenge.

**Our key employment sectors – supporting the prosperity of our people**

Our evidence base has identified niche specialisms with particularly high value potential, but no sector or industry exists in isolation. The City Region boasts other key sectors that are strategically important due to the high volume of employment within them.

It is important we continue to support these sectors, recognising the role they play in providing employment for all residents, whilst raising the value and productivity of the jobs within them, particularly as technology pervades all areas of the economy. One example is our internationally recognised visitor economy (employing 57,000 people), providing foundational strength to the City Region and building an attractive place offering. The professional and business services sector is another major employer in the City Region (supporting over 100,000 jobs), with specialisms in wealth management, logistics and maritime. Critically, it also supports the growth of other sectors. We also have a vibrant social economy that employs more than 45,000 people, and connects people and places to economic and social opportunity. This is an important foundation for entrepreneurial activity across the City Region’s communities.

Liverpool City Region is perhaps best known for its maritime history. The maritime sector continues to have a strong network and supply chain in the region (particularly concentrated around Sefton, Wirral and Liverpool), and our Port is an integrated cluster of logistics assets and expertise that will deliver faster and greener global market access for businesses to and from the northern UK and Ireland via an enlarged post-Panamax container port. The new deep-water Liverpool2 container terminal can service 95% of the world’s largest container ships, opening up faster supply chain transit for at least 60% of the existing UK container market. The diversity of the sector results in high levels of employment - more than 28,000 people, with the local networking body Mersey Maritime actively looking to grow it. Importantly, there are also a range of ‘Port enabled businesses’ - such as food processing and logistics - that are located here because of the Port. The Port is therefore much more than just maritime, rather it is also an enabler for other sectors.

Driving growth in high value sectors and supporting key employment sectors to grow and progress up the value chain, will be important in addressing some of the challenges which currently constrain economic development in Liverpool City Region; these are highlighted in the following section.
4. The challenges facing the economy

Despite the positive developments in Liverpool City Region’s economy, we face a number of deep-seated challenges. Persistently high levels of economic inactivity, underlying health inequalities, entrenched concentrations of deprivation, and structural weaknesses in parts of our business base, act both as a brake on productivity and adversely impact life chances.

In terms of both prosperity (GVA per head) and productivity (GVA per filled job), we have performance gaps to close. GVA per head in the City Region is £20,400, roughly 77% of the UK’s per head GVA figure, placing it 29th out of the 38 LEP areas. Since 2010, the gap with the UK level has increased from £4,500 to £6,700 per person. 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 £6,000 less output than the UK.

Figure 11: GVA per head

There are a number of reasons for our weaker output per head performance, but it is particularly impacted by the high number of people in the City Region who are classified as economically ‘inactive’. Of the 26% of our working age population that is inactive, 30% is the result of long-term sick and 23% looking after family/home, meaning that 53% of inactivity is the result of sickness and caring responsibilities. We have the third highest inactivity rate of all the LEP areas, illustrating the severity of poor health outcomes that are both a significant underlying factor and outcome of inactivity.
Figure 12: Economic Inactivity Rate by LEP

Source: Annual Population Survey

The City Region performs below the UK across a range of health outcomes as the prevalence of ill health increases:

- 1 in 4 people of working age have limiting health conditions;
- Limiting health conditions rates are 5 percentage points higher than the rest of England;
- Life expectancy is 2.5 years lower than the national average.

Poor mental health is a particular issue in the City Region. Of 97,000 people claiming Employment Support Allowance, well over half have a mental health problem as the main health reason. There are more people aged 16-34 years on health-related out-of-work benefits because of a mental health condition than of all ages due to a musculoskeletal condition, even though musculoskeletal conditions are the second most frequent health-related reason for being out of work (Public Health England, NW 2019). This suggests a particular issue amongst our younger working age population.

Figure 13: Prevalence of mental health disorders by Local Authority area

Source: Public Health England
Our historically small business base and limited number of jobs across the whole economy have both had limiting influences on productivity. The business density rate is just 401 per 10k of the Working age Population, - the lowest of all 38 LEP regions. Similarly, job density is only 0.74 per working age person. Not enough businesses or jobs result in a constricted labour market and act as a drag on productivity.

The component which connects inactivity, business and job density barriers, is employability and skills – we need to create both the necessary labour supply in the City Region, and drive up demand from employers for skilled jobs that allows people to access more opportunities. While the number of people with no qualifications in the City Region is declining, we have not yet closed the gap with national performance across the skills spectrum – for example only 32.9% of the working age population are qualified to at least Level 4 (degree or equivalent), compared with 39% nationally.

*Figure 14: Skills Profile of the LCR, North West and UK*

We also need to ensure that the infrastructure in the City Region effectively connects our residents to local employment opportunities. Liverpool City Region is well served by an extensive rail, bus and road network. The Merseyrail network is the most intensively used commuter network outside London, yet connectivity is uneven across the City Region, with some areas less well served by our transport infrastructure. There are also specific challenges, such as addressing the efficient movement of freight across the City Region in a manner that minimises environmental impacts with the activities in and around the Port a particular issue. Further, in national terms, we also experience relatively poor long distance and inter-city rail connectivity compared to other City Regions. This is where the opportunities through HS2 and Northern Powerhouse Rail are particularly important.
Through a comprehensive understanding of our challenges, assets and capabilities, our forward focus is to build on the significant opportunity we have in the City Region. Through our Local Industrial Strategy, we will develop fully coherent and long-term policies that can seize our opportunities together with meaningfully addressing the entrenched barriers to enhanced productivity and the development of an inclusive economy. These will be framed through the foundations of productivity, which are introduced below.
5. Building on the foundations of productivity

Economic resilience is founded on the drivers of productivity. These are described in the national Industrial Strategy as people, place, infrastructure, ideas and business environment. Here we summarise the opportunities and challenges under each of these, together with initial thinking around improving outcomes and performance. We also begin to identify early considerations around the four Grand Challenges (Artificial Intelligence and Data, Clean Growth, Ageing Society and the Future of Mobility).

Productivity Driver: People

The people of the City Region are its greatest asset; however as borne out in our evidence base, while the productivity of our workers tracks close to the national average, our output per head is weak and too many of our people are outside the labour market with many facing long term health related issues. The polarisation between economic growth and social progress in Liverpool City Region is increasing. We therefore have an opportunity to address this imbalance and in doing so, foster a healthy, resilient economy.

This will require a long-term, joined-up focus on skills, education, employability and health. We are already implementing this new joined up approach to delivering interventions; one example is the Hugh Baird Life Rooms in Sefton.

Case Study: Hugh Baird College Health Campus and Life Rooms, Sefton

The Combined Authority has invested over £3m in the creation of a Health Training Hub with Hugh Baird College. The project has transformed a former Church in Bootle into a centre of excellence for health, social care and mental health training combined with a ‘Life Rooms’ - a local resource to improve wellbeing and employment of the local community.

The state of the art learning environment and facilities offer: simulated NHS wards; a human performance lab; research laboratories; a computing studio; and, importantly, social space for students to interact and reflect on their learning.

Situated on the same campus is the Life Rooms, a service operated by Mersey Care NHS Foundation Trust that also includes within its services a ‘Recovery College’ for residents with mental health needs that may benefit from learning. The Life Rooms offer physical and mental wellbeing support to the local community and work closely with Hugh Baird College in supporting students. This co-location of public sector services has been enabled by the devolution of Skills Capital funding.

There are a range of further initiatives being delivered to support people across the City Region. This includes the Ways to Work Programme that enhances employability and skills and the Households into Work pilot programme which supports disadvantaged people who face multiple employability barriers. There is a recently launched ‘one stop’ apprenticeship portal; and a newly devolved adult education budget which provides the opportunity of tailoring the adult education system to better address local priorities. We are delivering a Housing First Pilot which provides permanent housing for homeless people, without the need to prove ‘readiness’. Our Fair Employment Charter is also the beginning of a new, socially focused conversation with our business base.
Case Study: Households into Work Programme

Households into Work is designed to provide bespoke support packages for residents as part of a pathway towards employment. The aim of the programme is not just to help people find work, but to help them get to a point where thinking of employment is a realistic option. This is a major step forward.

Households into Work started in March 2018 and is jointly funded by both the Liverpool City Region Combined Authority and the Department for Work and Pensions. The programme employs a team of 25 advocates working across the City Region, mostly on an outreach basis. The advocates provide people who start on the programme with 1:1 support in resolving a range of issues which could prevent them finding or sustaining employment; these are complex and varied including debt and finance, housing, mental health illness, domestic violence, addiction(s), isolation and disaffection. Unlike other programmes, Households into Work encourages other members of the household to join so that the issues can be addressed collectively.

Our early thinking and evidence suggests that future action could include:

- A focus on the future of work and skills in the City Region including further work to support post 16 skills provision, focused on both supply and demand; exploring the potential to work with Local Authorities to improve early years outcomes, and steps to both mitigate the impact of automation on Liverpool City Region and maximise the opportunities that come with it.
- Supporting strategic development for the broader public service reform (PSR) agenda. Such is the scale of underlying inactivity and poor health outcomes, effective PSR is critical in developing the systems needed to achieve a meaningful step change in the life chances of people across the City Region. This could include extension and refinement of both the Households into Work and Housing First programmes, and utilisation of the growth in digital and technology to support delivery of services.
- Working with and supporting the local social economy - centred on networks, expertise and sustainability - in the development of solutions to meet these challenges, building on the City Region’s long and vibrant history within the sector.

Productivity Driver: Place

Liverpool City Region has a number of characteristics that mark it as a place to live, work, visit and do business. It has a distinctive sense of place, thanks to a wide range of diverse and vibrant communities, each supporting the creation of a strong identity. There are a host of key natural assets such as the coastlines of Sefton and Wirral which enhance the City Region’s attractiveness. It is one of Europe’s most iconic cultural destinations and Liverpool is now the sixth most visited city in the UK by people from overseas. Cultural vibrancy is a key asset that sets it apart from many places, and intertwined with our strong visitor economy, is a key building block for our place-based approach.

From an economic perspective, the city centre of Liverpool continues to grow and has the capacity for further significant development. It has the potential to benefit from the effects of agglomeration as productivity increases due to the concentration of economic and knowledge assets. Similar beneficial effects may become evident across our emerging science and innovation clusters.

However, as our evidence base shows, at the other end of the scale the City Region faces a number of place-related challenges, including entrenched and widespread deprivation where
the benefits of economic development have not been realised; high retail vacancy rates in some town centres and high streets, with implications for sense of place, image and reputation; and limited (often low quality) housing choice, with impacts for quality of life and attracting and retaining skilled labour in the City Region.

**Figure 16: Deprivation in the Liverpool City Region**

If we are to foster resilient neighbourhoods, quality living environments and a strong sense of community across all of the City Region, we need joined-up place-based approaches. Integrated interventions, facilitated by strategic investment that is targeted where it will have most impact, will lay the key foundations for an inclusive economy that works for all our people. Our place-based ambitions also need to recognise the potential and opportunity of our towns and their centres, building on their identity, location of social hubs, and being focal points for civic life.

A frequent - and often overlooked - underpinning factor for vibrant and prosperous places / communities is the social economy, which secures people and places at its heart. From grassroots voluntary organisations through to social enterprises and community businesses, policy responses need to recognise the role and contribution of the sector in driving up social capital and community development, in forging innovative solutions to pressing social problems, in delivering key services in places where public services are increasingly stretched, and of being stewards of key physical assets. It will be important to work with the sector to capitalise on its strengths and ensure that all three of the public, private and social sectors are increasingly collaborative in supporting people and places.
The Spatial Development Strategy (SDS), to be published in 2020, will provide an overarching blueprint for the City Region’s place-making ambitions. The City Region’s emerging Housing Statement will set out our ambitions for housing and identify priorities to focus delivery, ensuring that we support economic growth with the right mix of housing that meets both need and aspiration. Exploring potential options around regeneration and renewal of our more deprived and vulnerable neighbourhoods is a key priority and essential to delivering an inclusive economy. This would require a multi-agency approach, aligning our priorities and ambitions to arrive at a shared long term view and ambition for these neighbourhoods.

Our ambitions for housing extend to incorporating the highest standards of design, sustainability and connectivity – effectively future proofing our stock. This means working with the construction industry around modern methods of construction and, with sector leaders such as the Metro Mayor’s Design Champion, helping drive up standards of new homes, which will meet all needs and aspirations across the City Region. Homes will be encouraged to become more environmentally sustainable and thus make a positive contribution to health and wellbeing.

The Combined Authority has facilitated a £6m fund to revitalise our town centres and an independent Town Centres Commission, led by the Institute for Public Policy Research, has been launched to work with our local authorities to produce long-term investment plans for how towns can thrive over the next 20 years.

There are also emerging (and integrated) strategies for the visitor economy and culture, which, through their enabling contribution for economic development and productivity uplift, will support the opportunities that are now being presented as part of the Government’s Tourism Sector Deal.

**Productivity Driver: Infrastructure**

We have a number of infrastructure challenges including relatively poor national rail connectivity, car dependency, uneven connectivity within the City Region, and low take up of cycling and walking. Despite this, there have been significant improvements in our infrastructure – planned and delivered – including the upcoming roll out of the new fleet of Merseyrail trains and successful delivery of the Mersey Gateway. Further, there are significant opportunities through our Digital Infrastructure Plan that will support widespread digital inclusion, providing connectivity across the City Region.

Our integrated approach predicated on strategic infrastructure, including housing, will ensure that joined up policy, planning and investment result in an infrastructure system that is an economic enabler, connecting people to employment, services and amenities; that helps to create resilient, active communities, addressing social inclusion through access to transport and digital services; and that supports a shift to a low carbon economy.

The City Region will continue to invest in its public transport network and cycling and walking schemes, using devolved resources, Transforming Cities Fund and European Regional Development Fund. This will herald a step change in mobility from cars/road transport to clean, low carbon solutions.

We are at the forefront of the new era for digital connectivity, and are developing a 220km+ core fibre network to provide 1Gb per second connectivity, attract major inward investment, turbo charge the digital sector, and unlock growth across all sectors. The network will interlink all six local authority areas, our primary economic development sites and key economic
assets, including the transatlantic fibre-optic cable landings near Southport, STFC Hartree Centre and IBM’s high performance computing and artificial intelligence (AI) capabilities at Daresbury, the Knowledge Quarter Liverpool, plus the LCR’s 4 Global Digital Exemplar NHS trusts.

The project will serve to ensure we are at the forefront of this innovation through a comprehensive package incorporating: investment in digital infrastructure; digital inclusion and skills; enabling the roll out of 5G; building on Europe’s leading 5G health and care initiative following on from the Department for Digital, Culture Media and Sport (DCMS) testbed; and aiming to become a global 5G R&D hub.

**Case Study: Mersey Gateway**

The Mersey Gateway bridge opened in 2017. The need for the new bridge in Halton was clear: over 80,000 vehicles were using the existing Silver Jubilee bridge every day, ten times the number it was designed for; and it would provide important connectivity between the Liverpool City Region, north Cheshire and the wider region to key motorway networks.

Constructed over a three year period, the Mersey Gateway is the central feature of a new and improved 9.5km standard link road. With a unique design characterised by three large towers, the bridge is 2,130 metres long, with a river span of 1,000 metres.

The economic benefits of the Mersey Gateway are considerable, estimated to generate an additional £61.9m per year in GVA and 4,640 jobs by 2030 through direct employment, regeneration and inward investment. More broadly, the project includes plans to develop and integrate public transport, cycle and pedestrian links.

**Productivity Driver: Ideas**

Research and commercialisation of ideas are critical in developing a strong and identifiable regional USP. Some of our key opportunities here lie across our sector accelerators and specialisms, including materials chemistry, infectious disease, personalised health, and advanced computing. Investment from business and universities is ongoing and there are strong foundations in place for building on our industrial strengths.

Our business base is innovation active, with a high proportion engaged in innovation activity. Both private sector organisations and our HEI base have successfully secured over £73m of innovate UK funding since 2003.
The challenge is to bring together our innovative business communities and higher education base to forge collaborative relationships centred on innovation and commercialisation. We must develop a critical mass of R&D investment and increased commercialisation at a sufficient level to be a catalyst for attracting other significant investment. This requires a cluster of expertise, finance and amalgamation with the professional and business services sector together with integrating our approaches with inward investment.

We will need to support existing and emerging clusters of high value activity where they exist across the City Region, fostering agglomeration effects, which will provide the potential for greater investment opportunities, scale up activity, and enhanced commercialisation. This will also support broader policy goals to continue to develop our innovation ecosystem, ensuring it becomes increasingly integrated to achieve consistent levels of investment and attract venture capital and other forms of finance. Currently we have a high concentration of knowledge intensive businesses (KIBs) in Liverpool as shown in Figure 18, but across the Liverpool City Region, the proportion of KIBs falls short of national averages. Despite this, there are opportunities across the City Region, even where they may not be located within immediately identifiable concentrations – Glass Futures in St Helens being a case in point.
The City Region has experienced significant increases in R&D - with local R&D expenditure falling just short of 2% of GVA. We will develop stronger relationships between Industry, Government and Universities taking the Triple Helix approach to R&D and innovation, leading to high levels of innovation led growth.

A “smart specialisation” approach to fostering investment and growth will support this, as set out in the BEIS-commissioned LCR+ Science & Innovation Audit (SIA). This will help us focus on the areas in which the City Region has demonstrable transformational potential and economic impact, based on leading research, industry capabilities, and innovation assets.

We will continue to build on our research strengths and growing Knowledge Quarter by focusing on key initiatives. One of these is the £65m commercial collaboration between the University of Liverpool and Unilever on the Materials Innovation Factory, which has 300 researchers from academic and industrial groups working collaboratively to develop new science across a range of business sectors. It also offers a variety of commercial services to academic and commercial customers. Another example is collaboration between the Combined Authority and University of Liverpool on the Digital Innovation Factory – which will be a centre of excellence in simulation and virtual reality, bringing complementary areas of research in computer science, robotics and engineering and enabling engagement with business to promote innovation.
**Case Study: Knowledge Quarter Liverpool & Materials Innovation Factory**

Knowledge Quarter Liverpool (KQ Liverpool) brings together the City Region’s assets in life science, education and healthcare. It is home to the University of Liverpool, Liverpool John Moores University, Liverpool School of Tropical Medicine and the Royal Liverpool University Hospital. Upon completion of its new hospitals, it will be one of the largest academic and clinical campuses in the UK.

With world-leading specialisms in infectious diseases, materials innovation, personalised medicine, digital health, sensor technology and sports science, KQ’s focus is on encouraging the commercialisation of research, supporting more start-ups and spin-outs, growing SME’s and attracting inward investment. Paddington Village is one of its flagship initiatives - a £1bn expansion site that will house 1.8m square feet of science, technology, education and health space.

The £65M Materials Innovation Factory (MIF) in Knowledge Quarter Liverpool is a partnership between the University of Liverpool and Unilever. By combining one of the largest research-active companies with the top rated chemistry department in the UK, it is one of the most exciting developments of its kind in recent years. MIF offers one of the world’s most advanced facilities for robotics-enabled and high performance computing aided materials discovery and design. It is a unique and flexible space, and long-term research hotel residencies are available, offering the ability to co-locate research teams on site with specialists.

**Productivity Driver: Business environment**

We want to build on our reputation for creativity and innovation. Our existing business base has the capacity to grow, innovate and connect, therefore boosting demand for higher-level skills. This will enhance levels of both inward and indigenous investment, which are vital to raising productivity levels. However, we know from our evidence base that our business and job density is low and that the majority of businesses - and therefore employment - is anchored within lower value sectors, particularly within services. Helping businesses across the whole economy raise aspiration and their levels of productivity will be central to providing more quality jobs and developing an inclusive economy.

*Figure 19: Number of Business per 10,000 Working Age Population*

Source: UK Business Counts, Mid Year population estimates
Our aims need to focus on supporting a resilient business base, helping businesses move up through the value chain, increasing product and services export potential and boosting demand for high-level skills. Working to facilitate and incentivise inward investment will support this, particularly where it is foreign based, through business and employment creation, technology diffusion and productivity gains. Our ‘one front door’ approach, announced last year, will provide a focal point for investors and is an important starting point.

We need to help businesses to connect to deep, sustainable supply chains that present a range of opportunities for growth and therefore create chances for people to develop new skills and access quality jobs. Building on the work of the Local Growth Hub, we will target support at critical points in a business’ growth with the aim of connecting into networks to provide the support and financing opportunities they need to develop. Support for businesses in lower paid sectors is also important to help innovate their management practices, processes and services to improve productivity, and ultimately create the quality and quantity of employment opportunities and progression across the whole economy that people require.

Our businesses are supported by a comprehensive business support landscape. Our Growth Hub operates a hub and spoke model across the City Region and is currently supporting more than 3,500 of the City Region’s businesses, including 150 high-growth firms each year. Through ERDF-Funded programmes, including the New Markets and Business Growth Programme, we provide SMEs with access to finance and tailored advice and guidance to support their growth ambitions. These will be enhanced through new business support programmes funded through our Strategic Investment Fund, which will provide targeted support to our growing sectors and high growth potential firms, developing a strong ecosystem and enabling transformational growth. The support will include early-stage funding, focused skills development, leadership and management training, innovation and commercialisation support, together with the accommodation needed to help businesses flourish.

In addition, Skills for Growth Action Plans are in place to support sectors in developing better alignment between the skills our economy needs to grow and those that are actually delivered by local schools, colleges and providers.

**Emerging Opportunities – the Grand Challenges**

In building on our strengths, there is significant economic, environmental and social opportunity in addressing the Grand Challenges set by Government in the national Industrial Strategy. This will be developed further in the final strategy but we set out the emerging opportunities below.

**Clean growth and jobs to support our future**

Liverpool City Region - with 80% blue-green space, an emerging strength in hydrogen production and wider specialisms in clean energy and innovation - is uniquely positioned to harness a combination of natural and industrial assets to become a national leader in clean growth. It is in this context that the Metro Mayor has committed to a ‘net zero carbon’ City Region by 2040.

This will be built around the flagship Mersey Tidal project, but also include further strengthening of our foundation as a centre for offshore wind; build on our emerging hydrogen production assets; and a broader focus on supporting and stimulating clean innovation and financing across our wider economy, including through skills and infrastructure investment.
Mersey Tidal offers a unique opportunity to address the UK’s medium term energy supply through clean, sustainable means while embedding the Liverpool City Region as the UK centre for excellence in clean energy innovation and skills. The project could supply 2-5TWh of energy into the grid by the early 2030s, at a capital cost of £2-10 billion (depending on the optimum scale of the project) to be met by a mix of public and private financing. The City Region has invested resources on feasibility studies and master planning for the project, and is working closely with Government on the opportunity.

AI and data
There is significant ongoing activity in leveraging expertise and supercomputing hardware capabilities to drive cluster development for the benefit of Liverpool City Region and UK plc. In particular, IBM intends to expand its existing investment in the City Region, working with the Alan Turing Institute and the STFC Hartree Centre - applying leading AI and high performance computing to address industrial challenges - to anchor a national AI Solutions Hub at SciTech Daresbury. This will combine major new data archiving and AI-solutions capabilities as an integral part of Hartree Phase 4, with the possibility of a permanent global IBM Research Lab, plus a dedicated skills and SME out-reach programme. This investment could be met through a combination of public and investor funding.

Many other institutions in the City Region – including the Materials Innovation Factory, Alder Hey Children’s Hospital and the UK leading computer science department at the University of Liverpool – are already tapping into our expertise in AI. Our Local Industrial Strategy will look to broaden and deepen these relationships in order to firm up our place at the vanguard of ‘Industry 4.0’. There is clearly significant potential for cross cutting, productivity enhancing technologies that can support the wider economy and business base.

Ageing Society
We share the challenges and opportunities of an ageing society with other areas across the country. Our existing strengths in infectious diseases, pharma manufacturing and precision medicine offer key opportunities that we can seek to exploit. Our considerable university and NHS assets, combined with the pharma R&D hubs (Allergan and Bristol Myers Squibb) and supported by the 5G test-bed, means that there is capability to commercialise more. This can lead to novel treatments and a stronger cluster of life science firms that can be developed in a way that maximises health and social benefits for local people and supports greater independence. The 5G test-bed in particular has the potential to transform the way in which health and care is delivered for our elderly populations.

There are also opportunities of recalibrating our housing offer to address this, both in meeting the challenge and in identifying the market opportunities, as lifestyle choices for the older population change.

Future of Mobility
The City Region’s historically important automotive sector and sensor/digital sectors can exploit opportunities linked to autonomous and electric vehicles, and can therefore play a significant role in supporting our ambitions. Our work in hydrogen fuel for low carbon vehicles and trains is also clearly an important input into meeting the challenge. The key test here is finding a niche in which to invest and support R&D capacity in a way that complements ongoing activity in other areas of the country.
6. Emerging priorities and next steps

In summary, there is an optimistic outlook for the Liverpool City Region, and we must be forward thinking in our approach to maximising opportunities through the development and delivery of our Local Industrial Strategy. To ensure focus, a set of emerging priorities are forming that will evolve as we develop our thinking in the coming months and translate our evidence and consultation into policy and proposed interventions. These underpinning priorities are:

- Good work, health and wellbeing for all;
- Vibrant and connected communities;
- More businesses innovating and growing; and
- Clean growth.

This Position Statement will be used to support engagement with partners, seek views on our evidence, emerging ideas and the conclusions and ideas being shaped by it. The development of the strategy and its implementation will be a collaborative process, working closely with local authority and other partners. This engagement will help shape the final strategy, its priorities, actions and measures, as it is developed for publication by early 2020.

Strategies also need sufficient resources to deliver on the ground. The Combined Authority and partners are thinking ahead to delivery to determine where capacity, capability and resources for implementation come from and our final strategy will provide further details.