

BRIEFING NOTE: CHESHIRE AND WARRINGTON'S LOCAL INDUSTRIAL STRATEGY – DRAFT FOR DISCUSSION

JULY 2019 (v.5)

1. Background

The Industrial Strategy was launched with the release of a Green Paper in January 2017. The main objective was to provide a policy framework for major public and private sector investment decisions and to set out a plan to increase productivity, improve living standards and drive economic growth across the whole of the UK.

Cheshire and Warrington was selected in July 2018 as **one of six LEPs as part of a 'second wave' of LIS development**, following on from an initial three "Pathfinders" – Greater Manchester, West Midlands and Oxford-Cambridge-Milton Keynes.

In the six months from September 2018 to March 2019 extensive work was undertaken to further develop and understand the LEP economy in a finer grain of detail than previously. This has included specific focus on: -

- **Productivity** – overall and sectoral
- **Business base** – profile, demography, companies, R&D, foreign ownership, exports and FDI
- **Residents and labour market** – demographics, employment, skills, earnings, migration
- **Spatial analysis** – 5 principal towns & rural

A high-level summary of the key headlines from the evidence base is attached as **Appendix A**.

The LEP has undertaken extensive engagement over the last 9 months to test its interpretation of the evidence and emerging conclusions, with over 35 events across the sub-region involving a range of key stakeholders. All evidence and insight has also been uploaded to the LEP website (<http://www.871candwep.co.uk/local-industrial-strategies/>).

Further challenge has been provided through the establishment of an internal LIS Steering Group and an external 'Expert Panel'. The former comprises representatives from the LEP, Local Authorities and MHCLG, whilst the Expert Panel comprises a mix of senior policy makers, industrialists and academics.

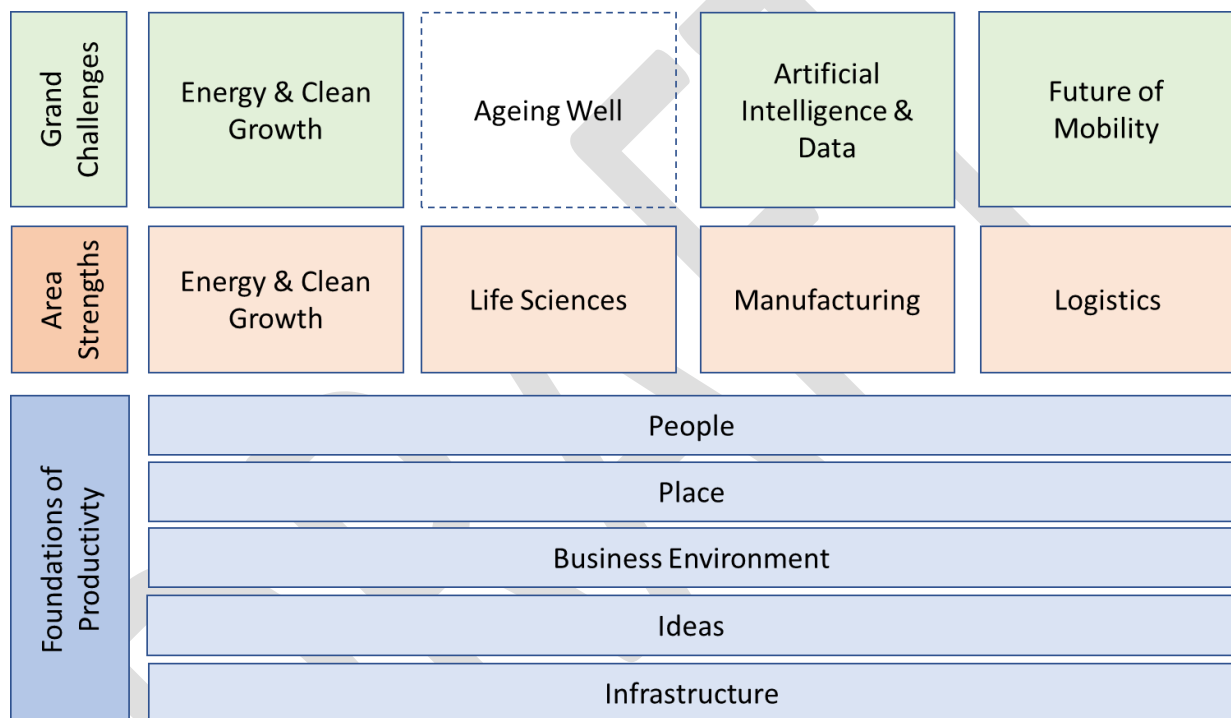
2. Developing LIS Content

Local Industrial Strategies are intended to set out key priorities and interventions for the short – medium term, in our case to 2030. The Cheshire and Warrington LIS will complement the existing Strategic Economic Plan and its supporting strategies. The Strategy is therefore the start of an ongoing programme of activity based on a series of statements of intent. The detail for many of the priority interventions are still to be finalised and will need support and buy-in from Government, the business community, our Local Authority partners and wider stakeholders if they are to be developed and delivered successfully.

Government has fixed views on the general style and format of Local Industrial Strategies, but expects that each will be distinctive, rooted in evidence and driven by clear priorities. The narrative and key messages will be developed jointly with each LEP area. The LIS document will be finalised towards the end of the process, with initial conversations locally and with Government supported by a series of Policy Position Papers (PPPs) which set out the public narrative, evidence base, strategic case local commitment and asks of Government for each of the workstreams under development.

Currently nine workstreams are being progressed (Fig.1) which cover four areas of specialism drawn from the evidence alongside the five foundations of productivity. These workstreams are led by a mix of industry leaders, LEP and local authority policy specialists and have been co-developed using existing networks and groups from across the sub-region.

Fig.1 LIS Workstreams (Area Strengths and Foundations of Productivity)

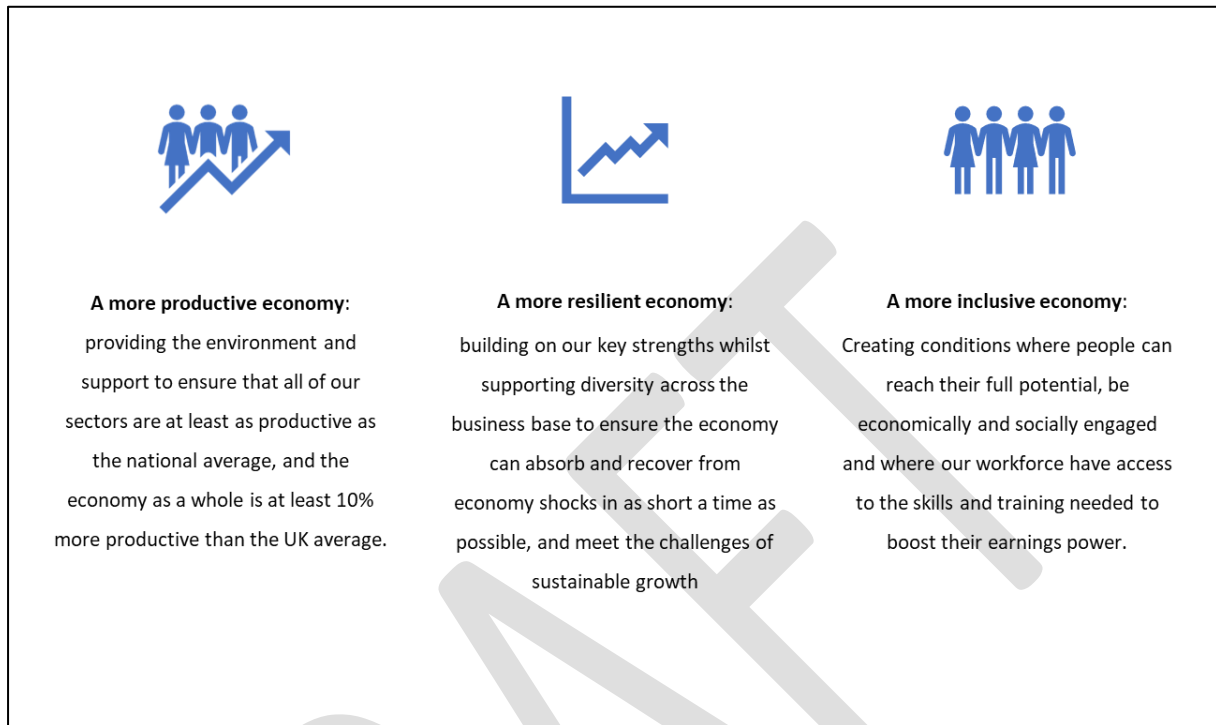


In addition, the LEP is supporting its three local authority partners to produce Local Area Industrial Strategies to account for the reality that the LEP has some standout strengths, opportunities and challenges, however this means some sectors or places which are significant to local economies can perhaps get lost in the sub-regional narrative.

The next section of this paper sets out the current thinking in respect of each workstream.

3. Cheshire and Warrington LIS Outcomes

The work to develop our evidence and impact has led us to target **three clear outcomes** for our Local Industrial Strategy namely, to build: -



4. Key Messages

We are the most successful economy in the Northern Powerhouse; dynamic, outward facing and primed for further growth. However, **there are areas of current and potential weakness in our economy that we need to address through our Local Industrial Strategy in order to achieve our growth ambitions in a way that is sustainable economically, environmentally and socially.**

We have an unparalleled level and breadth of expertise in **energy and clean growth** combined with the assets and opportunities to lead the way on the Energy and Clean Growth Grand Challenge. We have significant strengths in nuclear engineering, energy systems including power distribution and storage creating a multi vector smart energy grid powered by green energy and a mix of energy storage technologies, and can make a significant contribution to the government's ambition of creating the world's **first zero carbon industrial cluster by 2040.**

We have a **skilled workforce**, although our education and training system has been slow to adapt to meet the fast-changing skills needs of our economy. We need to accelerate and **increase the numbers of people trained in STEM subjects** – both young people leaving education and existing, older workers. Our employer-led **Virtual Institute of Technology** and **Digital Skills Partnership** will be critical in achieving this.

Too many of our people don't feel the benefit of our wider economic success. We will build on our existing programmes of support and training to equip our residents with the skills and capabilities to

maximise their potential and take advantage of opportunities to progress in work and **increase their earning power**.

Manufacturing remains the foundation of our economy. Chemicals, pharmaceuticals and automotive are highly productive sub-sectors, whilst others such as food & drink manufacturing have scope to improve their productivity.

We need to ensure key manufacturers and their supply chains are **ready and able to compete effectively in a digitally enabled, low carbon market**. We also need to equip their workforce with the skills needed to adapt to changing work roles.

Our work on the Clean Growth Grand Challenge should also grow supplies of secure, affordable low carbon energy to help the manufacturing sector remain competitive in the face of international competition.

In **Life Sciences**, we are one of a handful of locations in the world with the strength and depth of knowledge and expertise in **medicines discovery, formulation and manufacturing**. By linking this with academic institutions and business support through our Growth Hub we can work to increase the rate of success for development of new medicines and the proportion of these manufactured in the UK.

Logistics is an important and fast-growing sector in Cheshire and Warrington, but it is complex in its nature and composition and its rate of growth seems to have impacted on its productivity compared to national benchmarks. We expect further significant growth in this sector given our strategic location nationally. The extensive national road and rail network that runs through our sub-region, plus our proximity to neighbouring ports and airports and the Manchester Ship Canal makes Cheshire and Warrington a prime logistics location. We need to work closely with our Local Authority Partners and private sector developers and landowners to **identify the land and infrastructure needed to accommodate that growth in a sustainable way**.

We have an economy that many places would envy but concerns over the level of new business formations and productivity across many of our sectors. Continued development of our **Business Growth Hub** is going to be crucial in helping maintain a healthy, growing business base, supporting new start-ups and scale ups and unlocking the potential of our entrepreneurs.

Cheshire and Warrington is home to businesses and science assets of global significance. We have the largest life sciences cluster outside of the south east, are home to the world's largest scientific experiment and are surrounded by centres of academic excellence.

Our businesses excel at translating ideas into practical, commercial opportunities. Ensuring ongoing success needs a distributed and resilient innovation eco-system that can support start-ups and SMEs to innovate and **Ideas** to flourish whilst encouraging businesses to innovate in order to improve productivity.

The LEP and its local authority partners already recognise the importance of creating places that are connected and which will **attract and retain the talent** that we need to grow our economy in the long term. In particular making sure that we have a housing offer that meets the needs of people through the various stages of their working life and beyond, and town and city centres that are diverse and vibrant and attractive places to live, work and relax. *[Need to ensure there is appropriate reference to the rural economy and natural capital].*

We are developing a **robust, costed and prioritised investment programme** which will set out the infrastructure and other interventions needed to improve our productivity and facilitate sustainable economic growth.

5. Responding to the Grand Challenges

Energy and Clean Growth

The LEP's Local Industrial Strategy will prioritise Energy and Clean Growth. Our economy is founded on manufacturing and energy is a key factor both as a feedstock for the chemicals industry and as a power source for the wider manufacturing sector. Driving forwards solutions to affordable, long-term, sustainable production will be critical for our continued economic success.

We have an unparalleled level and breadth of expertise in **energy and clean growth**. Combined with the natural and industrial assets within the area this puts us in a great position to work with industry to develop viable solutions and to lead the way on the Energy and Clean Growth Grand Challenge. We have significant strengths in nuclear engineering, energy systems including power distribution and storage creating a multi vector smart energy grid powered by green energy and a mix of energy storage technologies and contributing to the Government's mission to establish the world's **first zero carbon industrial cluster by 2040**.

We will create new technologies and expertise to build the clean energy industry of the future and address climate change. We will export this knowledge around the world.

The region has a rich pedigree in energy and fuels; we are the supplier of much of North West road, aviation and heating oil fuels and producer of nuclear feedstock at Capenhurst.

Our local industrial strategy now proposes to accelerate our plans, bringing shovel-ready projects on stream sooner and securing more private sector investment to deliver decarbonisation. This concerted investment programme, will deliver industrial decarbonisation of 5M te CO₂ per annum rising to 15M te p.a by 2030. Projects include the 'E-Port Smart Energy Master Plan' - a local, low carbon smart energy system based around the industrial heartland of Ellesmere Port. Our work will provide a significant input to the UK's commitment to net zero greenhouse gases by 2050.

We are looking to build the industry and long-term exportable expertise of the future, delivering more productive growth for the sub-region and UK economy. This will create more high wage, high skilled jobs locally, and provide the blueprint for a global transition to clean growth. At the same time, more sustainable local energy generation will provide reliable and cost-efficient energy for our residents – reducing fuel poverty in areas such as Ellesmere Port – and for business – addressing one of the main barriers to growth.

HMG will work with Cheshire and Warrington LEP, the three member local authorities and its key energy industry organisations to deliver Cheshire and Warrington's ambition. Under the leadership of the Cheshire Energy Hub, we are already working with Government through the Industrial Strategy Challenge Fund and intend to be an active participant in further rounds of ISCF (Energy Detailed Designs), Industrial Clusters Mission and the Industrial Energy Transformation Fund rounds, as well Local Growth Fund activity in Cheshire & Warrington.

We will build on the existing investments and work together to accelerate delivery and promote the area as a centre of expertise and excellence in energy and clean growth.

This will include:

Stimulating further innovation

- Research & development into alternative and cheap energy solutions
- Developing new models of carbon capture & storage

Creating New Markets

- Implementing smart energy systems and grids
- More deployment of low-carbon energy resources
- Development of the micro modular reactor

Supporting transition of the energy system

- Investing in energy supply chains and an energy sector network
- Decommissioning of existing nuclear infrastructure

Our local cluster has already committed to a long-term programme of low carbon energy related investment, with deepened partnership working with government having the potential to catalyse and accelerate the rate of development. Led by industry and supported by government, many practical and tangible projects have already secured funding in the sub-region and adjacent areas which will really drive practical development of hydrogen and CCUS forwards over the next couple of years.

We will look to work with other LEPs and industry to maximise the benefits of shared expertise and innovation, whilst also driving forward CWLEP ambition using local strengths and opportunities. Our existing investments, which will be important steppingstones to achieving our ambition, include:

Support the development of affordable low or zero carbon energy for clean growth

- The Energy Innovation District - launched in September 2017 - an idea driven by business through the Cheshire Energy Hub, with the overarching aim to lower energy costs and increase energy security
- The North West Energy Innovation District has been awarded funding by UK Research and Innovation to deliver the first stage of the 'E-Port Smart Energy Master Plan' - a local, smart energy system based around the industrial heartland of Ellesmere Port.

Demonstrate Leadership in the transition to a low carbon economy; Building new infrastructure

- Over £190m has been invested in delivering three new assets in the past few years – 57MW wind farm, 21MW biomass plant, and 20MW gas fired energy from waste facility
- Protos will deliver a private electrical grid that will connect several energy generation assets and storage with energy intensive industry. This will also form part of the E-Port Smart Energy Masterplan.

- Hynet is a Cadent led initiative to decarbonise gas networks across the NW – providing the potential for a 20% blend in the general gas network and 100% supply to industry – centralised hydrogen generation would be supported by CCS.
- £4m support from government towards a £21m project by Tata Chemicals to build the UK's largest Carbon Capture facility by 2022.

Stimulating further energy innovation

- Centurion is an Innovate UK supported project for 100MW power-to-gas energy storage project supported by INOVYN, Storengy and ITM.
- Through LGF, the LEP has supported the creation of the Intelligent Energy Systems Demonstrator at Thornton Science Park. This offers a flexible space for research, innovation and development, allowing companies to test new equipment in a self-contained environment able to simulate a range of conventional and unconventional energy systems and smart grids
- URENCO in partnership with Wood, Cammell Laird and Laing O'Rourke are developing a micro modular reactor at the Capenhurst facility where it also operates three plants producing enriched uranium to support nuclear power stations across the world.
- £2.9 million contract from government to Wood group to lead a key nuclear research programme to enhance the techniques used to design reactors and optimise their performance.

Ageing Well

The LEP, like the country as a whole, has an ageing population which will create many challenges in the medium to long term. We also see it as a positive and an opportunity to harness the skills, talent and economic power of the older generation.

The government focus on ageing well has been on providing at least five years of better quality life for people by 2035; we believe that keeping people active and involved in the economy can be as effective a 'medicine' and support better mental and physical well-being.

Building on work started by Cheshire West and Chester as part of the World Health Organisation (WHO) Age Friendly Communities initiative, the LEP aims to set its own 'mission' under the Ageing Well Grand Challenge: *[to be defined!]*

Artificial Intelligence and Data

Whilst the LEP doesn't believe at this stage that it has a leading role to play in responding to the AI & Data Grand Challenge, it recognises the critical importance that this technology will have in boosting productivity in a number of its sectors including manufacturing, logistics, life sciences and the digital and creative sector.

Future of Mobility

[Response to be developed. Clear linkages with our automotive sector and also logistics but likely to be an area that lends itself to wider area collaboration. Future of Mobility also relevant given the polycentric nature of the sub-region when much of the thinking to date has been focussed on the impact / opportunities within large urban areas]

6. Building on our Area Strengths

The following section sets out the current draft public-facing content from each of the workstream policy papers. This will evolve further during August and September to reflect ongoing discussions with government departments.

Life Sciences

Many areas of the UK will include **Life Sciences** as a strength in our Local Industrial Strategy; in a field that is significant in its breadth in Cheshire and Warrington we know that within Life Sciences we are genuinely one of a handful of locations in the world with a strong track record and strength and depth of knowledge and expertise in **medicines discovery, development, formulation and manufacturing**.

Core companies in the cluster have raised over £315m of investment since 2014, 35% of the amount raised by core life sciences companies across the north as a whole. Growth has outstripped the figures for the north and north west over the last five years with growth at Alderley Park averaging an exceptional 20% per annum.

We have a thriving bio-science cluster built on the legacy of decades of medicines research and development. The cluster is underpinned by significant industry expertise, including leading companies such as Astra Zeneca, Waters Corporation, Advanced Medical Solutions and Recipharm (formerly part of Sanofi Group), and assets in Macclesfield and Alderley Park including the Medicines Discovery Catapult and Anti-Microbial Research Centre. Its growth continues to be driven by the changing nature of the pharmaceutical industry, as it moves away from large single integrated structures to more dispersed models. This new model does create significant opportunities for new company development, research and innovation, but also challenges for smaller companies given the costs involved in developing and testing new drugs.

By linking the area's industrial expertise with academic institutions and more targeted business support and financing we can work to increase the rate of success for development of new medicines and the proportion of these manufactured in the UK. We will work with industry to develop detailed proposals for an open access high containment facility to support medicines development - 'turning molecules into medicines', which could in addition specialise in support lower volume manufacturing for personalised medicines at the testing stage.

Researchers and scientists at ICI, Zeneca and latterly AstraZeneca at Alderley Park have been responsible for the invention of some of the world's bestselling heart and cancer drugs and the site continues to evolve, cementing its position as the key drug discovery hub site for Northern England. AstraZeneca's manufacturing plant at Hurdsfield is the company's second largest manufacturing site globally – responsible for generating almost three quarters of 1% of all UK exports and with leading

expertise in drug formulation; Recipharm (formerly Sanofi) in Holmes Chapel develops and produces a range of asthma treatments whilst Dechra Pharmaceuticals in Northwich is an international specialist veterinary pharmaceuticals business.

Through our Local Industrial Strategy, we will build on our existing sector strengths and assets to support growth in two key areas: -

- Biomarker discovery and drug translational science
- Development of Complex and Nanomedicines, (including manufacturing capabilities)

In respect of Complex and nanomedicines, the LEP will support development of structured programmes to attract and support growth of companies in nanomedicine, drug delivery and complex medicines. This will include a review of how best to support the commercial success of these companies through access to scale-up, including the potential for an open access high containment facility to support medicines development - 'turning molecules into medicines', which could in addition specialise in support lower volume manufacturing for complex and nanomedicines.

This will be supported by wider, ongoing investment into the Cheshire Science Corridor using retained business rates from the Science Corridor Enterprise Zone to ensure that the physical and digital infrastructure is available to the businesses, academics and researchers that need it to do their work and link to other centres of research and development expertise.

We will expand our work through our Growth Hub and sector representative organisations to create the right business environment and networks to enable development of the broader life sciences cluster, attract talent and maintain the sector's significant productivity performance. We will consider how better to support life sciences SMEs face the challenges of scaling up, making best use of existing funding mechanisms.

This will also involve increasing the level of collaboration with neighbouring LEPs, specifically Liverpool and Manchester, to raise the profile of the wider life sciences sector nationally and internationally.

We will continue to work with Greater Manchester on development and deployment of the Greater Manchester and Cheshire Life Sciences Fund, with the potential to at least double the size of the Fund by 2025. The Fund is the result of a collaboration between Cheshire and Warrington Enterprise Partnership, Greater Manchester Combined Authority, Cheshire East Council, and Manchester Science Partnerships and offers seed and early stage venture capital funding to life sciences businesses location in the region.

Manufacturing

Manufacturing, including Chemicals and pharmaceuticals, is a critical part of our economy and we have many prime examples of high productivity manufacturing excellence. Home to national and international brands including Bentley Motors, Vauxhall, Siemens, Tata Chemicals and AstraZeneca, Cheshire and Warrington has a rich heritage of manufacturing excellence. Around a quarter of Cheshire and Warrington's GVA is generated by manufacturing activity and almost 10% of employment. This in turn drives significant export activity and inward investment.

As a sector, manufacturing has already undergone considerable change and faces many other challenges in the short – medium term including adapting to increased automation and digitisation (with associated skills needs) and a new trading environment post-Brexit.

Our manufacturing sector is incredibly productive, but in some areas the strength of supply chains is not as strong as it could be, and there are challenges to remaining competitive in the face of rising energy costs and increased international competition.

For the wider sector, and in particular manufacturing supply chains, to continue to thrive companies and their workforce need support to understand and adapt to a digitally enabled future and meet the challenge of adapting to a low carbon future and the use of more sustainable materials in their production processes.

Through our Local Industrial Strategy, we have an ambition to make our manufacturing supply chains amongst the most productive in Europe, through increased levels of automation and digitisation, driving the creation of high quality, well paid jobs and through a shift to more sustainable production process and materials.

Programmes such as Made Smarter and National Manufacturing Competitiveness Levels (NMCL) will support manufacturing companies to increase their productivity and competitiveness, whilst our Virtual Institute of Technology will help equip their workforce with the skills needed to adapt to changing work roles. Our work on the Clean Growth Grand Challenge should also grow supplies of secure, affordable low carbon energy to help the manufacturing sector remain competitive in the face of international competition.

Logistics

[To be added]

Creating the right foundations (the Five Foundations of Productivity)

People

The Skills and Education Plan identifies two priorities for Cheshire and Warrington: to support businesses to continue to access the skills they need and to support all residents to thrive in employment. The LIS will be an opportunity for us to accelerate work on these priorities and ensure they are delivered in way that is sustainable, working in collaboration with Government.

The priorities are:

- Businesses being at the heart of inspiring and informing young people, parents, carers and youth workers and individuals seeking work or seeking to progress in work to ensure they make informed decisions about the training and education and careers that they choose to follow. This will be delivered via a network of local Pledges where employers, local schools, colleges, youth organisations and other partners work together to develop a coherent programme of inspirational events.

- Employers driving the development of a virtual ‘Institute of Technology’, which will bring employers and local colleges together to design and deliver training and education packages - initially focused on digital and STEM skills. This includes retraining and upskilling the existing workforce where there is an urgent need to raise digital skills. The key to success will be real time intelligence about the design and delivery of the skills businesses need.

Underpinning these two priorities is the greater use of real time labour market intelligence – supported through the skills advisory panel funding – to inform the future labour market skills requirements.

The Local Industrial Strategy highlights the importance of digital in helping to raise productivity and improve the overall quality of jobs as well as providing individuals with the skills to access employment across Cheshire and Warrington. An initial focus of the work on the two priorities will be digital and Science, Technology, Engineering and Maths (STEM) related skills. From logistics to automotive to financial services, digital and STEM skills are fundamental to our local employers’ needs. Over the last two years Digital Skills have been identified as a key, cross-cutting skills need that form the corner stone of every business in every sector. We have launched the Digital Skills Partnership, in collaboration with HMG.

HMG and Cheshire and Warrington are working together to deliver the four major programmes of work and to ensure the Pledge network and Virtual Institute of Technology/Skills for Growth programme are sustainable and deliver their objectives. In addition, HMG will work with the LEP, through the Employers’ Skills and Education Board, to address identified barriers to delivery. The first step will be a review of the extent to which data and local labour market intelligence informs the development of training and education across Cheshire and Warrington. This is a priority given the new Ofsted framework.

On inclusive growth, our ambition is to enable all residents to take advantage of local opportunities for prosperity. Building on the findings of the LIS evidence and consultation, we will design and deliver new projects to raise the earning power of all our residents. Through the Local Industrial Strategy we will set out how every Cheshire and Warrington resident will be supported to meet their full potential. We want to grow the economy by offering more opportunities to residents who face significant barriers to employment and to progress to higher paid work. We will also create a compelling offer for older residents and retain the spending power of those residents who choose to enjoy their retirement here.

Cheshire & Warrington is among the highest performing regions outside of London in terms of growth; however, we are conscious that the evidence and forecast for future growth presents a challenging picture. Productivity has not recovered to 2007 levels and the number of working age residents is slowing due to our ageing population. The prospect of falling productivity is a real risk unless we do more to promote inclusive employment and skills opportunities for those residents who experience the greatest barriers to work and explore sector-led pay progression opportunities.

We have identified three priorities for the local industrial strategy, which expand and link existing programmes (for example ‘In to work’) and also develop new priority areas. A more inclusive economy will create the conditions where our residents and workers can reach their full potential,

be economically and socially engaged and where our workforce have access to the skills and training needed to boost their earnings power.

The 3 priority areas will:

1. Promote investment to achieve high levels of social value through local supply routes and promote a fair living wage
2. Maximise the post-retirement opportunities for our older residents
3. Remove complex barriers to employment and financial independence through our 'In to Work' support programmes and enable people to be well in work by directly supporting their mental well being

Place

We passionately believe that Cheshire and Warrington is the best place in the UK to live, work, invest and relax. We are a sub-region with a track record of outstanding economic performance, coupled with an array of outstanding urban, semi-urban and rural communities and natural resources.

We are an extremely diverse sub-region, from the Roman city of Chester to the new town of Warrington - the North's most economically successful town, to some of the most desirable market towns and villages in the country with access to outstanding natural assets such as Delamere Forest and the Peak District National Park. We are home to world class science and technology clusters in life sciences, nuclear engineering and energy and clean growth, the UK's largest chemical engineering cluster and two car plants, Bentley and Vauxhall at the same time as being an important agricultural and food production centre and key visitor destination.

Despite our economic success and outstanding quality of life, we face a number of challenges to ensure that we have vibrant, inclusive and sustainable places across the whole of our sub-region that can attract, grow and retain the businesses and talent we need to support our economic growth ambitions.

Our demographic trends pose a significant challenge to our continued economic success. Population growth in Cheshire and Warrington in the 10 years to 2015 was much lower the UK average (4.2% compared to 7.8%) and our future population growth is expected to be half that of the England average (8% compared to 15.5%). Over one third of our manufacturing workforce is aged over 50 years and replacement demand alone is estimated at 230,000 jobs by 2025. At the same time, it is estimated that 10,000 20-30 year olds will leave the sub-region by 2026. We need to ensure that we have the right housing, retail and leisure offer to attract and retain the young people required to support our continued economic growth.

Whilst we have seen an increase in the supply and rate of housebuilding in our area, our new supply of housing has been predominately larger traditional family homes for sale in suburban and rural locations that are more suited to families that are already well established on the housing ladder. The fit between housing supply and demand is not aligned and this is a key factor in the low levels of attraction and retention of talented young people in the sub-region. Affordability has worsened significantly since 2009 and house price entry levels are becoming even more unaffordable for people living in the area compared to the rest of the North West.

There are also distinct spatial inequalities within Cheshire and Warrington, particularly around skills levels, deprivation and wages, concentrated in areas that consistently underperform against the rest of the sub-region. Parts of Ellesmere Port, Crewe, Warrington, Chester and Winsford are amongst the 10% most deprived areas in the country. We need to ensure that all of our communities benefit from our economic success and enjoy access to high quality jobs, housing, retail, leisure, cultural and natural assets.

Almost half the population of Cheshire and Warrington (477,000) live in rural areas, and almost 27,000 businesses are located outside of our main towns and urban centres. Our rural areas have seen a high level of jobs growth (20.2% between 2012-17) and agriculture, food production, logistics and distribution and the visitor economy are important sectors in the rural economy. There are challenges in ensuring equality of opportunity for people living and working in rural areas, including patches of poor digital connectivity, poor public transport and affordability of housing. Many rural areas face particular demographic issues with some places where less than 10% of their residents are aged between 20 – 34 and some of the lowest levels of population growth, which may pose problems for their long-term sustainability.

Like many other places across the country, our town and city centres are facing the challenges of changing retail habits, the dominance of national retail chains, outdated and ageing retail stock and fragmented ownership. We need to rebalance our town centre offer, creating a sustainable retail offer and increasing the level of leisure and residential uses to ensure that they remain the heart of the communities they serve. Significantly increasing residential uses in our urban centres will not only help to revitalise town centres, but will also help rebalance our housing offer, enabling us to build smaller, more affordable homes that will be attractive to younger people.

We recognise that having access to a range of cultural, heritage, sporting and leisure activities is not only a key component in promoting a high quality of life for our residents and supporting cohesive and inclusive communities but can also be an important driver of inward investment decisions. Recent developments such as the opening of Storyhouse in Chester, Barons Quay in Northwich and Time Square in Warrington are helping grow our leisure and cultural offer and add to some of the top-class attractions in Cheshire and Warrington including Chester Zoo – the UK's most visited zoo and second most paid-for visitor attraction in the UK with over 1.9 million visitors a year, Cheshire Oaks, Chester Races, Quarry Bank Mill and Tatton Park, as well as a range of museums, heritage facilities, parks, forests and outdoor attractions. The sub-region has an established programme of major events including the 'Blue Dot' Festival, RHS Flower Show at Tatton and Chester International Film Festival and has recently hosted the Rugby League World Cup, Cycling Tour of Britain, Welsh Rally GB and the International Horse Trials at Bolesworth.

Cheshire and Warrington is already one of the best connected sub-regions in the country, with easy access to the dynamic cities of Liverpool and Manchester and strong economic connections into North Wales and the West Midlands. HS2 offers a once in a generation opportunity to turbocharge our connectivity not only nationally, but importantly within the sub-region itself. It will be a key driver of our future economic growth and will physically and economically transform the town of Crewe.

Our strategic priorities are:

(1) Creating a world class business environment

We are determined to make Cheshire and Warrington one of the best locations in the UK to locate and grow a business. We already have a world class science and technology offer across the Cheshire Science Corridor, which includes: Jodrell Bank, headquarters of the Square Kilometre Array; Alderley Park, Astra Zeneca's former R&D HQ which is now home to over 150 life sciences businesses; Birchwood Park the UK's centre of excellence in nuclear engineering and Thornton Science Park, fast becoming recognised as a leading UK centre for energy and clean growth. We are taking a proactive approach to the Cheshire Science Corridor Enterprise Zone, investing £30m up front to unlock and accelerate development and creating a sub-regional investment fund to reinvest the retained business rates in economic development projects across the sub-region. In addition to the Science Corridor, we have identified key growth areas and strategic employment sites in Chester City Centre, the Energy Innovation District in Ellesmere Port, Warrington 'New City' and the proposed Crewe HS2 Growth Corridor that will maximise the economic benefits of HS2 for the towns of Crewe, Middlewich and Winsford. We will also ensure a strong supply of high-quality business accommodation that meets needs of our rural businesses.

(2) Building the right homes in the right places

Housing is an essential component in creating successful places and supporting economic growth. Having the right mix of housing, in the right places and at an affordable price is key to meeting the needs and aspirations of our existing communities and of young people and families moving in to Cheshire and Warrington to live and work. We will focus our housing growth across our principal cities and towns and work in partnership with Homes England to positively disrupt the housing market in Cheshire and Warrington by leading, intervening in and making new markets where necessary in order to encourage a broader range of housebuilders and developers and position the area as a sound proposition for institutional investors by de-risking development, particularly on brownfield sites in town centres.

(3) Rebalancing our town centres

We are already investing heavily in our city and town centres including City Place and Northgate in Chester city centre, Time Square in Warrington and Barons Quay in Northwich, and the £40m expansion of Cheshire Oaks, along with emerging regeneration plans for Ellesmere Port, Macclesfield, Crewe and Winsford. We want to tackle the challenge of fragmented ownership by bringing landlords together with public sector partners, adapting and extending planning and property development tools and encouraging institutional investment in our high streets through piloting the creation of town centre REITs.

(4) Enhancing our cultural and leisure offer

We will ensure that the sub-region offers a broad range of cultural assets, events and activities throughout the year, and that there is a mix that provides for a range of age groups and interests. We want to build on the success of our Visit England funded, Brilliant Science project which promoted the sub-region as a key destination for business tourism, targeting key scientific conferences into the area by embedding the Brilliant Science and a Business tourism approach into our broader place marketing approach for Cheshire & Warrington and the Science Corridor. We will aim to drive visitor numbers across the country, extend the season

and to tackle local barriers to tourism growth and seek to be an early pilot for one of the new Tourism Zones.

(5) Articulating our place proposition, branding ourselves and our offer more effectively to prospective investors

The sub-region has many significant benefits that make it attractive to inward investors, but it lacks a consistent and coherent narrative and ‘brand’ when trying to ‘sell’ those benefits to external audiences. Those who live and work in Cheshire and Warrington know what an outstanding location it is – many others (including some surprisingly close to home) don’t. Much of the feedback from business is that there is a great story to tell about Cheshire and Warrington and the places within it, but that as a sub-region we currently don’t do that in a consistent, coordinated and effective way, especially to external (international) audiences. Work is underway to develop a more coherent brand and ‘value proposition’ for the sub-region, the Cheshire Science Corridor and our key sectors and to create an inward investment strategy to really showcase Cheshire and Warrington on the global investment stage and increase the flow of foreign direct investment into the sub-region.

Key Spatial Priorities (to be included on a map in the LIS)	
Growth Areas <ul style="list-style-type: none"> • Warrington New City • Mersey-Dee Alliance • Constellation Strategic Employment Areas <ul style="list-style-type: none"> • Cheshire Science Corridor • Energy Innovation District • Crewe HS2 Growth Corridor • Port Warrington 	Town Centres <ul style="list-style-type: none"> • Crewe • City Place (Chester) • Ellesmere Port • Macclesfield • Northgate (Chester) • Northwich • Warrington • Winsford

Business Environment

Cheshire and Warrington is home to some of the world’s best-known companies including Bentley, AstraZeneca and Essar Oil. These large companies as well as thousands of smaller, dynamic new businesses are together helping to drive growth. Our business base is stable and growing, with a low business death rate of 10% and a good business survival rate leading to impressive scale up rates.

Our economy is growing steadily, but productivity is stalling. Many of our sectors are underperforming compared to other parts of the UK; if our underperforming broad sector groups were performing at the national average this would add £3.7bn to the economy every year.

The ambition through our local industrial strategy is to make our economy more resilient and able to withstand and recover from shocks that may happen. We want to increase the number of fast-growing SMEs, increasing the productivity and resilience of our broad sector mix and create more skilled jobs for our residents. Effective business support will key to this. Market intelligence from our Growth Hub identifies clear areas of opportunity particularly around SMEs with the potential and

ambition to scale. This focus is fed by strong economic intelligence and has informed the development and delivery of support across the sub region.

We see evidence of good scale-up activity already which indicate existing track record of high growth businesses. Cheshire East is ranked as the eighth highest local authority by the number of scale-ups in the country, due to polycentric nature of the business base and the work of the Growth Hub in Cheshire and Warrington the Scale Up base is continuing to grow and high growth potential businesses are able to flourish. Businesses that start here tend to survive, and the sub-region has low business death rates. We want to capitalise on this supportive environment and grow it.

Despite this, there is clearly an opportunity for further growth in this area. Our ambition is open up this pathway to a greater number of businesses and remove barriers as well as perception of barriers that exist in Cheshire and Warrington but also on a national level. The cost of high quality support and advice is one of the biggest issues holding back potential transformational growth, part of our vision is to demonstrate that the value of this potential investment far outweighs the cost of it.

This new activity will complement the priorities already set out in our Strategic Economic Plan, with work underway to create a refreshed and targeted Growth Hub which works with local businesses to provide the right support at the right time to support them to thrive. Through the Local Industrial Strategy, we will increase higher value targeted support with an emphasis on growth and productivity, identifying and targeting only businesses who meet the growth potential criteria (this is currently estimated to be at least 565 businesses). We will offer a broad mix of support, ranging from identification of opportunity through to mentoring, Leadership and Management and key investment support.

While the clear focus will be on SMEs with growth ambition and potential, we will also link this work closely with the successful large companies in the sub-region, which together employ over half of our workforce. This will be through close working with the larger companies and developing with them a high value mentoring network and using these companies in a strategic and focused manner to ensure their knowledge and expertise is retained in the Cheshire and Warrington economy. By developing this peer to peer network and utilising the knowledge, expertise and strategic importance of our large companies to benefit our growing SME base we believe clear economic impact can be derived.

While this is clearly a priority, we are very aware of the need for a strong and reliable business pipeline. The start up rate in Cheshire is fairly stable but there is a need for more of these start ups to be in a position to quickly graduate onto the growth platforms we are proposing. In order to generate this level of start up we will be working in closer partnership with universities not just in Cheshire but across the Northern Powerhouse to push the message that Cheshire and Warrington is the strongest place to base a University spin out or other high value start up.

Ideas

The North's science and technology powerhouse

Cheshire and Warrington is the North's science and technology powerhouse. We have the highest concentration of private sector science and technology assets, the highest share of professionals

working in science and research in the North of England and the highest levels of R&D spend per employee in England¹.

The Cheshire Science Corridor links together a number of nationally and internationally significant science and technology assets including: Jodrell Bank, headquarters of the Square Kilometre Array; Alderley Park, home to over 200 life sciences businesses, the national Anti-Microbial Resistance Centre (AMR) and the Medicines Discovery Catapult; Birchwood Park the UK's centre of excellence in nuclear services; Capenhurst Technology Park, a cluster of leading technology companies at the site of the former Electricity Council Research and Development Centre, adjacent to URENCO's uranium enrichment and nuclear waste treatment plant; Daresbury (just across the border in Liverpool City Region), which is home to the UK's fastest industrial supercomputer and the University of Liverpool's Virtual Engineering centre; and Thornton Science Park, fast becoming recognised as a leading UK centre for energy and clean growth

Adapting to disruption: the changing nature of R&D and innovation

Cheshire and Warrington's economy developed around a number of foundational industries and large-scale manufacturers, including chemicals, pharmaceuticals, energy (including nuclear) and automotive. For years, our economy has been dominated by large multi-national companies such as Astra Zeneca, Shell (and more recently Essar), Vauxhall, Bentley, Wood and Rolls-Royce Nuclear, to name but a few. Much of our R&D and innovation has been undertaken by these large multi-national companies in these legacy industries as evidenced by our relatively low levels of R&D expenditure as a share of turnover² and number of patents registered to inventors within the sub region.³ However, these industries are either already being disrupted or are highly vulnerable to disruption by innovations in technology and business models or new market entrants.

In order to maintain our competitiveness and meet our economic ambitions we need to support our existing industries to adapt and innovate and encourage and support new start-ups and spin-outs to bring new innovations to the market.

Playing to our strengths to tackle grand challenges

By focusing on exploiting our super strengths in life sciences, energy, chemicals and manufacturing in order to forge new discoveries and technologies we will help drive productivity and the future economic growth of the Northern Powerhouse and UK plc and play a leading role in meeting the government's Ageing Society and Clean Growth grand challenges.

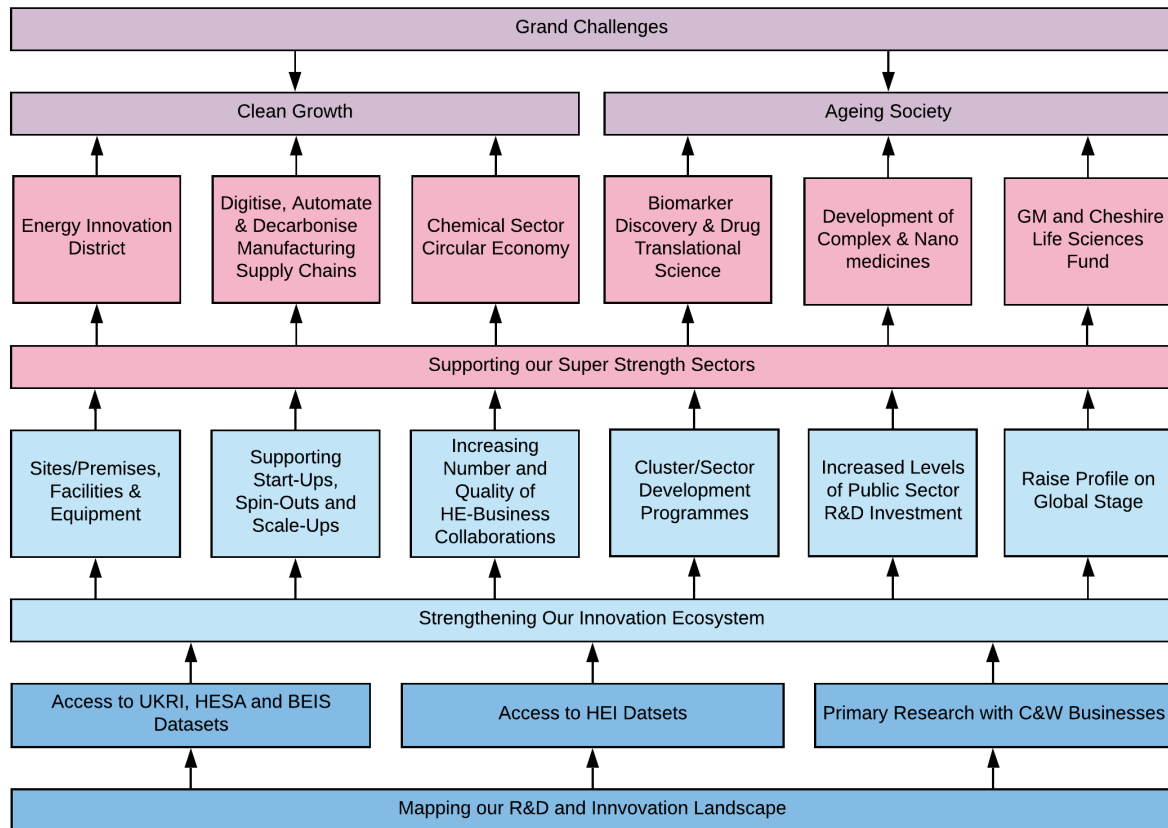
Figure 1. Below shows our innovation roadmap setting out how we intend to meet the two grand challenges through supporting our key super strength sectors and strengthening our innovation ecosystem.

Fig. 1. Cheshire and Warrington Innovation Roadmap

¹ BEIS (2015), *Mapping Local Comparative Advantages in Innovation*, pg 54.

² Innovation Survey 2010.

³ BEIS (2015), *Mapping Local Comparative Advantages in Innovation*, pg 107.



In particular, we will ensure that we focus our R&D and innovation investment and activities to support:

- The life sciences sector to increase the rate of success for the development of new medicines and the proportion of these manufactured in the UK, making a significant contribution to the Ageing Society grand challenge and help drive UK productivity and exports.
- The Cheshire Energy Hub's plans for the creation of the world's first net-zero carbon industrial cluster by 2040 by creating the new technologies and expertise to build the clean energy industry of the future and address climate change, which can be exported around the world.
- The UK's largest chemical cluster to develop and invest in the re-use and remanufacture of raw materials and products to build the circular economy, re-shore activity and build new product bases.
- Our manufacturing supply chains to be the most productive in Europe through increased levels of automation, digitisation and decarbonisation in manufacturing, driving the creation of high quality, well paid jobs and through a shift to more sustainable production process and materials.

Strengthening our innovation ecosystem

Our existing innovation ecosystem is highly developed in some areas, in particular in terms of private sector led R&D and innovation and a series of legacy assets, some of which, such as Alderley Park and Thornton Science Park, are being successfully adapted from closed to open systems/facilities. However, we do have some key gaps and weaknesses, which could hamper our ability to meet our ambitions and fully exploit the opportunities available to us.

Although Cheshire and Warrington has participated in a number of overlapping SIAs, including the Liverpool and Greater Manchester City Region SIAs, the North West Coastal Arc Nuclear and Clean Growth SIAs, the Chemical Processing Sector SIA and the Northern Bioeconomy SIA, we do not have a complete picture of our innovation ecosystem and our understanding of R&D across the sub-region is still fragmented. We will undertake additional work to fully map our existing innovation eco-system in order to better design programmes and inform innovation investments.

Innovation coordination was a common theme across all Wave 2 and Wave 3 SIAs and of particular importance is co-ordinated innovation and business support; strategic investment and access to finance; and recognition of sector identity through a single body⁴. We want to improve our innovation co-ordination across the sub-region. The Cheshire Energy Hub is an exemplar of an industry-led cluster that has brought key industry players together with academia and public sector partners to drive innovations in the energy sector. Alderley Park provides a blueprint for cluster development by providing incubation and acceleration, access to finance and access to facilities, equipment and technical and professional support. But we need to ensure that such best practice is shared across sectors. We will do this through the development of cluster/sector development programmes, support for networking within and across sectors (and LEP areas) and the facilitation of supply chain development and innovations through open innovation competitions with top tier companies.

Despite being at the centre of one of the largest concentrations of Higher Education Institutions (HEIs) in Europe with 15 HEIs within a 30-mile radius providing access to some 200,000 students, we are not fully exploiting this access and under-perform as a sub-region in some key areas including Higher Education investment in R&D (HERD), accessing UKRI funding, number of registered patents and number of students graduating and number of postgraduate students in STEM subjects. We want to develop more strategic relationships with a number of our key neighbouring universities, particularly those research-intensive universities that are either already actively engaging with companies in our area or have research strengths in our super specialisms. This is important in order to ensure that we can attract the best and brightest graduates in the North West to work in Cheshire and Warrington, the significantly increase the number of HEI-business collaborations in the sub-region and to attract start-ups and spin-outs from universities to locate into our area.

We will expand our work through our Growth Hub to support start-ups, spin-outs and scale-ups by creating the right business environment and networks to enable them to grow, develop and innovate through access to talent, premises, facilities and equipment and finance. This will be supported by wider, ongoing investment into the Cheshire Science Corridor using retained business rates from the Cheshire Science Corridor Enterprise Zone to ensure that the sites and premises, physical assets and digital infrastructure is available to businesses, academics and researchers to do their work and link to other centres of research and development expertise. Digitisation will play a key role across our key priority sectors of life sciences, energy (including nuclear), chemicals and manufacturing and we have a real opportunity, working in partnership with Daresbury Sci-Tech and in particular the Hartree Centre to significantly drive innovation in this area.

Finally, the Cheshire Science Corridor is already gaining traction within the Northern Powerhouse and nationally as a key science and tech location and we will increasingly work with our neighbouring LEPs, specifically Liverpool and Manchester, to raise the profile of the wider area and

⁴ BEIS (2018) Northern Powerhouse Chemical & Process Sector Science and Innovation Audit, pg 7.

better market ourselves as an international science and tech inward investment location on the global stage.

Infrastructure

We have realistic ambitions to almost double the size of its economy by 2040. To achieve this ambition, we need to make sure that our infrastructure doesn't act as a constraint, whether that is in relation to transport, digital communication or other utilities.

Business tells us that connectivity is one of their main barriers to growth. Currently our central UK location, with easy access to Manchester and Liverpool, two airports within 30 minutes, international shipping links from Liverpool, the Manchester Ship Canal and North Wales is one of our key strengths, however parts of our strategic network are heavily congested, and increasingly local roads are struggling to cope with the growth in traffic being experienced. This impacts on productivity and also on key sectors like logistics.

In the coming years, Cheshire and Warrington will see major planned rail infrastructure investment via HS2, arriving at Crewe in 2027. HS2 will have up to 5 – 7 trains per hour each way from Crewe Hub to London, Birmingham and Manchester bringing the area within an hours' journey of London.

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

For these major investments to achieve maximum benefit, we need to make sure that there is supporting investment in the local connectivity linking our towns and villages to these key transport nodes and that there are attractive alternatives available to the car to make travel within and beyond the sub-region more sustainable.

We appreciate that we cannot do everything at once and need to plan future infrastructure in line with need and available budgets and adapt to and embrace changing technologies. Initially we will focus on developing key hubs for both transport and digital infrastructure, starting with Chester, Crewe, and Warrington given their focus in our transport strategy as key rail hubs, and tying in with extensive work being undertaken by the three local authorities to shape these places to underpin growth. We are also particularly looking to build upon and maximise the benefits of High Speed 2 services stopping at Crewe.

To achieve our ambitions we need central government to work with us to:

- Support Network Rail to undertake their Continuous Modular Strategic Planning process to consider how to improve connectivity to Crewe Hub for regional services;
- Help us engage with Highways England to identify ways to better manage the motorways and trunk roads can provide more reliable linkages between Chester, Crewe and Warrington and to the key neighbouring city regions of Liverpool and Manchester as well as strategic connectivity to North Wales and the Midlands, with a particular focus on managing congestion and improving journey time reliability;
- Assist with the development of a digital strategy, with a focus on understanding the use of shared data and information to transform strategic planning, developing cost effective options

for addressing ‘last mile’ connectivity and identifying the best package of measures to boost productivity and competitiveness, drive skill development and attract people to the area ;

- Help us to develop solutions for non-car modes in our three hub locations, particularly to/from their hinterlands, including the potential for any future Transforming Cities Funds to be available to support such smaller cities/larger towns; and
- Identify options for sustainable financing mechanisms for local contributions to schemes;

In addition, we want to work with government and utility companies to explore options to develop affordable mechanisms which enable investment in utilities in a timely fashion to avoid capacity constraints restricting our ability to grow the economy.

Finally, in order to help the sub-region develop interventions which support the Local Industrial Strategy and drive improvements in economic productivity the LEP Board agreed has agreed to allocate £400,000 per year for three years towards studies/business case development to allow the sub region to respond quickly as and when invitations arise from government departments to bid for funding.

7. Developing the LIS through to Publication

As previously indicated, the ideas set out in Section 6 will develop further through a series of direct conversations with government during August and September 2019, after which the final text will be written and agreed prior to formal publication. Local Industrial Strategies in non-Mayoral Combined Authority Areas have, to date, been signed off by the Secretary of State for Business, Energy and Industrial Strategy, and the LEP Chair, following a formal clearance process involving HM Treasury and other relevant departments.

It is currently anticipated that the Cheshire and Warrington LIS will be published before the end of October 2019.

Appendix A: Evidence Base Headlines

The headlines from the evidence gathering and insight work are that Cheshire and Warrington is: -

Economy

- **A very successful economy** – currently generating **£30.9bn per year** with an ambition to be a £50bn+ economy by 2040
- **2.7% average annual Gross Value Added (GVA) growth** compared to 2.2% in the UK and 2.1% in NW
- **Highest GVA per head of northern LEPs and 4th highest of all LEPs – £33,384**
- **£34.63 produced per hour worked** – 4.1% higher than UK and 13.6% higher than the NW but **stagnant and still not back to 2007 levels**
- Manufacturing is the largest sector by GVA at **£7.7bn** – 25% of GVA with 9% of the jobs
- **Super strengths** (high productivity, specialisation and jobs) in **petroleum, chemicals & pharma and motor vehicles**
- **Specialisms** in chemicals, automotive assembly, nuclear energy, oil refining, medicines discovery and manufacture
- **Almost 46%** employed in public services and retail and hospitality. High employment in services and manufacturing

Ideas

- High levels of business-led research and development, though concerns that this is rested in a few, large-scale businesses.
- The sub-region lags behind other parts of the UK in terms of public sector R&D, though this may be symptomatic of the lack of a major research-intensive University
- Excellent asset base on which to build – the Cheshire Science Corridor has the largest concentration of science and technology assets in the North of England

People

- Population currently 927,000 but **growing at half the rate** of the rest of the UK.
- A **highly skilled resident population**, but an ageing one, with over **21% of residents 65 and over**; much of the high skills base rests in the older population
- Challenges around inclusive growth, with **over a fifth of residents earning less than the real living wage**⁵

Infrastructure

- Major opportunity available from the planned **High Speed 2** hub station at Crewe
- Significant **national road assets** but issues of congestion across the motorway and local major route networks
- **Digital infrastructure** provision is good in much of the sub-region but there remain patches of poor coverage, especially in more rural areas.
- Energy infrastructure could be a break on growth, with much of the electricity network at capacity.

⁵ As defined by the Living Wage Foundation: £9/hr across the UK compared with £8.21/hr for the National Living Wage

Business Environment

- **Over 42,000** VAT registered businesses – **89.5%** micros, **8.5%** small, **1.6%** medium and **0.4%** large
- High number of **businesses per capita** with **good survival** and **scale up rates**
- Low business death rate of **10.8%**, but low birth rate of **13.4%**
- An outward-facing, internationally connected economy, with **£7.6bn** exports and over **81%** of current inward investment projects in key sectors

Place

- A **polycentric** area with wealthy and established rural areas, and clusters of deprivation and **young qualified residents** in urban centres
- **Net attractor** of workers, especially young people from surrounding areas (including Liverpool)
- Areas of **low affordability** in rural areas with **more affordable** urban centres
- Some mismatches between demand and supply in the housing market with a lack of smaller, town centre accommodation across a range of tenures including the private rented sector.