

LINCOLNSHIRE'S EVOLVING OPPORTUNITIES

FOREWORD FROM THE CHAIR



I don't think there's ever been a more crucial time for Lincolnshire to consider its economic future. Global competition is rising and technological innovation is driving significant change at an evermore rapid rate.

There is increasing recognition of the need to ensure that the whole of the UK benefits from economic growth. This is our opportunity to set out what our contribution is for the 21st century and how we can build on our areas of competitive advantage.

The framework set out in this document has been developed based on detailed analysis as well as significant discussion with local stakeholders. The resulting priorities in this call for evidence are framed around focus areas that are distinctive to Greater Lincolnshire and which make a specific contribution to the UK economy. We need to make sure that people in Greater Lincolnshire are equipped to transition into an increasingly automated and digital world that is already changing the working environment. We want to ensure that our agri-food industry is able to deploy new technologies to greatest effect; we plan to develop a new rural innovation testbed for energy and water; we want to identify cuttingedge solutions that will support people to live well for longer; we want to support a high-quality and inclusive visitor economy; and we want to enable an efficient, highly skilled ports and logistics industry. We are also exploring the role of housing in relation to future economic growth.

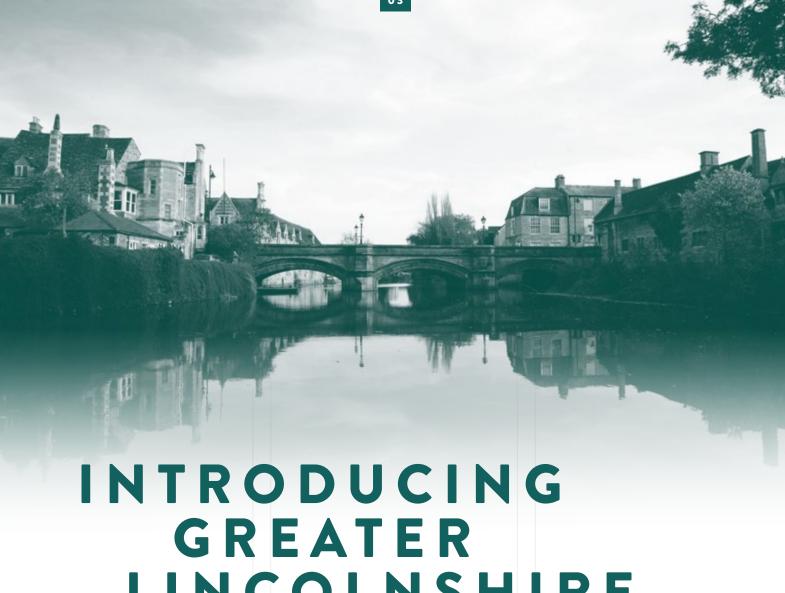
The development of a Local Modern Industrial Strategy builds on significant investment driven through the Greater Lincolnshire Local Enterprise Partnership (LEP) since our formation in 2011. Since then we have attracted £307 million in new funding through the Single Local Growth Fund, and committed a further £77 million of European funding. Although we are only halfway through these programmes, we have already helped to create 1,324 jobs, and to deliver 419 homes, we have supported 6,679 businesses and trained 11,162 people. Our Local Growth Funding now totals £180 million allowing investments in new schemes such as the Lincoln School of Medicine, and the infrastructure to unlock three Food Enterprise Zones in Holbeach, Hemswell Cliff and Grimsby.

With the UK's exit from the EU, the political context is changing but our goal remains the same: to increase productivity and create new commercial and employment opportunities across Greater Lincolnshire.

By focusing our collaborative energies, we can achieve great things for Greater Lincolnshire. I encourage you to share your own priorities and thoughts on both barriers that we need to overcome and the opportunities that we need to embrace. We look forward to hearing from you.

URSULA LIDBETTER MBE

Chair | Greater Lincolnshire Local Enterprise Partnership



LINCOLNSHIRE

Greater Lincolnshire has a population of 1,060,000. It consists of the unitary authorities of North Lincolnshire and North East Lincolnshire (both bordering the south bank of the Humber Estuary) together with the county of Lincolnshire and its constituent seven districts.

The area makes a distinctive contribution to national GVA and is an attractive option for investment and development.

We offer a range of important social and economic factors which make Greater Lincolnshire a great place to live and work, including:

- An abundance of land ready for development and a host of infrastructure projects in the pipeline or nearing fruition
- A diverse base of almost 44,000 VAT/PAYEregistered businesses plus an estimated 50,000 micro-businesses operating below the VAT threshold, offering massive supply chain opportunities across a range of sectors
- An international airport serving the business community
- A growing economy, growing faster than the UK average in the last 5 years

- The largest UK port by tonnage
- Part of the largest Enterprise Zone in the UK
- Two universities, two university technical colleges and seven colleges of further education
- Low housing costs and low crime rates
- 50 miles of coastline, historic sites, vibrant market towns and urban centres
- The heart of the UK's food industry, processing 70% of the UK's seafood and growing 25% of England's vegetables
- Real potential to deliver sustainable growth with around 100,000 new houses planned by 2030
- Significant national and international opportunities in offshore wind, automation and robotics and advanced manufacturing
- New infrastructure improvements with the potential to improve connectivity from the Lincolnshire coast to Gloucestershire.

SUMMARY

A distinctive Local Modern Industrial Strategy for Greater Lincolnshire

The development of a Local Industrial Strategy for Greater Lincolnshire aims to economically position our area for the future. The framework presented in this document is built on detailed analysis and wide discussion. The resulting emerging priorities are framed around focus areas that are distinctive to Greater Lincolnshire and which make a specific contribution to the UK economy. Each emerging opportunity is considered through a range of local lenses, such as the dispersed rural and coastal geography, the characteristics of our population, and the nature and scale of our businesses in order to draw out aims, opportunities, issues and potential interventions.

Focusing solely on high-tech sectors is not realistic. There is not enough critical mass, concentration, or sufficient structural conditions (e.g. skills in the workforce). By taking a more nuanced approach that crosscuts existing strengths, emerging technologies and challenge-based opportunities, places like Greater Lincolnshire may find they have many of the right conditions to pilot and export new approaches and solutions to the current and future challenges. These can have industrial as well as societal dimensions, and can be global as well as local in their applications.

GUIDING PRINCIPLES

The aim is that Local Industrial Strategies should help all places to:

- Increase productivity and realise their potential: By building on well evidenced and distinctive strengths aligned with the National Industrial Strategy
- Set out the spatial impacts of national and local policy across cities, towns and rural areas: By informing priorities and choices and demonstrating how they will allow all communities to contribute to, and benefit from, economic prosperity.

In order to achieve this, our Local Industrial Strategy, and each opportunity/priority will need to:

- » Be distinctive: Identify distinctive and specific local strengths and weaknesses
- Align with the national strategy: As outlined in the Industrial Strategy White Paper published last year. The White Paper identifies priorities across the five pillars of productivity: Ideas, People, Infrastructure, Business Environment, and Places
- Take a partnership approach: Bring together public and private local factors that are brought into a set of shared ambitions
- > Be targeted: It should not be exhaustive but should identify a strategic course, supported by complementary policies and actions. There should be a clear rationale for why proposed interventions will make a difference for specific problems
- > Future proof the economy: Take account of how the economy will evolve by 2050, and how global trends such as technological change and industrial digitalisation, Brexit, globalisation and demographic change are impacting on the local economy.
- Focus on improving living standards: As well as economic growth it is also about more good quality jobs and better pay
- > Evaluate and evolve: Set out clear plans to evaluate progress and feed this back into ongoing development and enhancement of interventions
- Seek competitive advantage: Position Greater Lincolnshire as a demonstrator in areas of key competence aiming for first to market status in crossover points between sectors/industries and technology.



RESPONDING TO THIS CALL FOR EVIDENCE

This paper sets out the framework upon which we are intending to develop a Local Industrial Strategy for Greater Lincolnshire.

It is intended as a starting point to encourage discussion and collate ideas. We encourage you to read this framework and to answer any or all of the questions which are relevant to you.

The Local Industrial Strategy will operate alongside other local strategies including the broader Strategic Economic Plan and is not the only evidence that will feed into future investment decisions.

QUESTIONS

PLEASE REFERENCE OR PROVIDE EVIDENCE TO SUPPORT YOUR RESPONSE.

- 1. What is the most important thing our Local Industrial Strategy should focus on?
- 2. Have we identified the right strengths and competitive advantages? If not what would you change?
- 3. What interventions would you prioritise to address the skills issue?
- 4. Are there additional issues on skills that you would want the Local Industrial Strategy to address?
- 5. What is the role of our Local Industrial Strategy in delivering the enhanced housing offer that we need, alongside the housing market and the planning system?
- 6. How can we encourage take-up of modern methods of construction and attract the associated skilled manufacturing jobs required across our area?

- 7. Would you add anything to the gaps identified in each opportunity/priority area?
- 8. What suggestions do you have for any interventions to support these priorities?
- 9. How could your organisation get involved with development or delivery of the Local Industrial Strategy?
- 10. What else does your business and/or community need to grow and succeed?
- 11. Are there existing activities aligned to this framework that we should be aware of?
- 12. What issues should we prioritise in our discussions with Government in relation to each opportunity/ priority?

PLEASE CONSIDER THE FOLLOWING IN YOUR RESPONSE:

Ideas need to:

- Be distinctive
- Be targeted
- > Be evaluated and able to evolve over time
- > Align with national strategy
- > Take a partnership approach
- > Future proof the economy
- > Focus on improving living standards
- > Seek competitive advantage.

DEADLINE FOR RESPONSES: 1ST MARCH 2019

Thank you for taking the time to read through this document, and for sharing your ideas and input. For more information and online submission visit www.greaterlincolnshirelep. co.uk/call-for-evidence

Any questions or additional evidence/information can also be submitted to greaterlincslep@lincolnshire.gov.uk

We recommend you review the full content of this Lincolnshire's Evolving Opportunities Framework document before responding to questions

WHAT THE LOCAL INDUSTRIAL STRATEGY (LIS) IS NOT

The Local Industrial Strategy will not be a bidding document. Although the Government has stated that having one in place will be a precondition for bidding into the UK Shared Prosperity Fund it is not the only document that will be taken into consideration. As such the Greater Lincolnshire LEP is also preparing to refresh our Strategic Economic Plan (SEP), which remains the strategy for all Greater Lincolnshire's priority sectors and themes, and through which many activities are already being funded.

The Local Industrial Strategy aims to complement these other activities by identifying some areas where strategic interventions might make the most difference, and become a test bed where solutions to persistent challenges can be trialled, scaled up and exported.

EMERGING OPPORTUNITIES/ PRIORITIES: THE PROPOSED FRAMEWORK

The framework sets out to understand and describe key areas that build on existing competencies and emerging technologies in the context of local challenges and opportunities for Greater Lincolnshire.

This process has led to the identification of five focus areas that have a distinctive Greater Lincolnshire character and which set out our long-term ambitions:

- 1. Future proofing the agri-food industry
- 2. A rural innovation test bed for energy and water
- 3. New solutions supporting people to live well for longer in rural areas
- 4. A high-quality, inclusive visitor economy
- 5. An adaptive ports and logistics industry driving greater connectivity

In addition, two cross-sector challenges were identified: skills and housing. We need to:

- > Ensure that people in Greater Lincolnshire are equipped to transition into an increasingly automated and digital world that is already changing the working environment and take advantage of the opportunities it offers
- Maximise the contribution which housing can make to the growth of our economy.

SKILLS CHALLENGE: EQUIP PEOPLE IN GREATER LINCOLNSHIRE TO A CHANGING WORK ENVIRONMENT AND TAKE ADVANTAGE OF THE OPPORTUNITIES IT OFFERS

Progression: Supporting students and adults to progress in their qualification and technical knowledge; to level 3, 4 and beyond.

Retrain the existing workforce: Technology, global competition and new working practices will mean the existing workforce will need significant support to help them adapt on the job in response to sustained disruption.

Partner with businesses to help them adapt and compete: Collaboration at sector level and across sectors will be important to help businesses plan and adapt to the challenges and opportunities of technological change.

HOUSING CHALLENGE: MAXIMISE THE CONTRIBUTION WHICH HOUSING CAN MAKE TO THE GROWTH OF OUR ECONOMY

New technologies and techniques: e.g. modular and panelised off-site construction as well as harnessing digitialisation and automation.

Skills for innovative construction: linking in with the national programme and identifying routes to support training and retraining at a local level.

Design to fit the population and geographical needs of Greater Lincolnshire: with a view to driving new innovation and business opportunities.

FOCUS AREA	FUTURE-PROOFING THE AGRI-FOOD INDUSTRY	A RURAL INNOVATION TEST BED FOR ENERGY AND WATER	NEW SOLUTIONS SUPPORTING PEOPLE TO LIVE WELL FOR LONGER IN DISPERSED AREAS	A HIGH-QUALITY, INCLUSIVE VISITOR ECONOMY	AN ADAPTIVE PORTS AND LOGISTICS INDUSTRY DRIVING GREATER CONNECTIVITY
VISION	 New jobs in higher skilled occupations (engineering, software, digital, production management) are created. Increased productivity and investment in innovation. 	Greater Lincolnshire is a rural test bed demonstrator and accelerator for new commercial models of energy generation and storage, new approaches to rural grid management and sustainable water storage.	 More people living well for longer. More efficient use of public resources. More involvement of SMEs working in partnership with public providers. Development of new healthcare solutions. 	 Less seasonality in the sector. Better quality employment. A tourism offer that attracts higher spending visitors throughout the year underpinned by a vibrant creative and cultural offer. 	 Increasingly automated processes. Greater efficiency and productivity. Redundant workers (e.g. drivers) retrained Greater Lincolnshire recognised as important export / import hub New solutions for developing infrastructure in a dispersed economy.
JUSTIFICATION AND EVIDENCE	 High location quotients in several sub-sectors. High, growing levels of employment. Productivity is a key challenge. Need more effective deployment of new technologies Industry leaders need vision to invest. 	 Above average levels of employment which are growing. Existing competencies in (clean) energy and water production and management. New solutions needed to address climate change. Significant physical assets (large landowners etc.) 	 › Large employer. › Demand increasing at a rapid rate, largely driven by ageing population. › Life sciences (biology and tech that improves health) is an existing / growing competency with significant market opportunities. 	 Large growing employer. Deprivation is particularly high in areas where tourism is a key sector. Mostly seasonal nature of coastal sites is a challenge in overcoming poverty and social exclusion. Recent investment in the cultural offer is driving new opportunities. 	 Relatively large employer. Also strategically important to other sectors. Potential links to overseas post-Brexit. Digital tech starting to transform industry. Infrastructure is a long-standing priority of the LEP given the peripheral nature of our area.
LINKS TO NATIONAL PRIORITIES AND OTHER SECTORS	 LEP represented on Food & Drink Council. Agricultural technologies is a national key sector Agri-science, robotics and autonomous systems are key technologies. Ports and logistics. Energy and water supply are also key. Artificial Intelligence and big data is a Grand Challenge. 	 Energy storage is a key technology. Agri-food a consumer, provider and manager of energy and water resources. Potential impact on low-carbon housing agenda and adoption of modern methods of construction. Clean growth is a Grand Challenge. Scope to increase the scale and pace of housing delivery. 	 Life sciences is a national key sector. Finding new improved ways to deliver health and social care is a national concern. Innovation in this space may affect the planning and management of future housing for older residents and those requiring care and support. Meeting the needs of an ageing society is a Grand Challenge. 	 Links to agri-food, Peripherality, vision, foresight and digitalisation. Inclusive growth is of increasing interest in relation to the development of the UK Shared Prosperity Fund. £150m Creative Industry Sector Deal was published in March 2018. 	 Robotics and autonomous systems is a national key technology. Links to agri-Food. The National Productivity Investment Fund is intended to support investments in transport housing and digital infrastructure. Links to Midlands Connect Strategy.

FOCUS AREA	FUTURE-PROOFING THE AGRI-FOOD INDUSTRY	A RURAL INNOVATION TEST BED FOR ENERGY AND WATER	NEW SOLUTIONS SUPPORTING PEOPLE TO LIVE WELL FOR LONGER IN DISPERSED AREAS	A HIGH-QUALITY, INCLUSIVE VISITOR ECONOMY	AN ADAPTIVE PORTS AND LOGISTICS INDUSTRY DRIVING GREATER CONNECTIVITY
GAPS	 Low skills, lack of investment in R&D and new technologies. Lack of leadership to lead change across the industry. 	 Needs new smart grid infrastructure, market places to connect producers and consumers, and investment in physical infrastructure. Potentially needs system level changes/change at national policy or regulatory level. 	 There is a role for SMEs to respond to unmet market demand for different delivery solutions. Platforms for open innovation across all sectors (private, public and university). 	 Sector dominated by micro, lifestyle businesses. Low adoption of technology (e.g. e-commerce). Lack of sufficient join up to other sectors (e.g. agrifood, culture and creativity). 	 Skills in existing workforce. Businesses understanding the opportunity/threat of new technology and being willing to invest. Infrastructure (physical and virtual) and connectivity are critical for the ongoing success of the sector.
INTERVENTIONS	 Upskilling and training of existing workforce. Support links between electronics and food sector. Promote leadership and future proofing. Innovation 'sprints' with businesses in technology and food sectors. Investment in R&D. 	 Platforms to enable public and private collaboration. Pilots to test new methods /technologies. Mechanisms to commercialise success. Procuring innovation. Build business case for new forms of energy and water capture, storage and distribution. 	 Create partnerships between innovative SMEs and larger organisations who can absorb risk/costs of new developments. Supporting innovation-friendly culture. Pilots and test beds. Clusters and networks for businesses developing technologies and devices to support active ageing. 	 Support to encourage new innovations and improve the service offer. Marketing and promotion of Greater Lincolnshire as a destination to higher value visitors. Networks for businesses in complementary sectors (culture and creative, agrifood, tourism) to help build links and joint offers. 	 Upskilling the workforce and training new entrants. Promoting new technology and leadership in the sector. Identifying locally led solutions to resolve gaps in infrastructure. Further understand and invest in key routes.

BACKGROUND

WHY ARE WE DEVELOPING A LOCAL INDUSTRIAL STRATEGY?

Local Industrial Strategies are being developed across the UK with the aim of addressing issues affecting low productivity and regional disparities to create growth and improve living standards across the country.

These strategies are being developed at a time of significant change within the UK and wider global economy. Global competition is increasing, and technological innovation is driving automation across all industries and is affecting how we live. The way we work is changing with increased flexible working and new modes of employment. At a time when we are seeing record levels of employment there is a growing realisation that we need to focus on the quality of jobs. Alongside this there is an increasing interest in measures of growth beyond GDP that incorporate quality of life and look beyond national level indicators to understand the patterns of growth at a local level.

The development of a Local Industrial Strategy for Greater Lincolnshire aims to place our area in a strong position for the future. This framework is built on detailed analysis and wide discussion. The resulting emerging opportunities and priorities are framed around focus areas that are distinctive to Greater Lincolnshire and which make a specific contribution to the UK economy. Each emerging priority is considered through a range of local lenses, such as the dispersed rural and coastal geography, the characteristics of our population, and the nature and scale of our businesses in order to draw out aims, opportunities, issues and potential interventions.

NATIONAL CONTEXT: THE GOVERNMENT'S INDUSTRIAL STRATEGY

Local Industrial Strategies will be developed in partnership with Government and will use the guidance provided in the <u>Industrial Strategy White Paper</u> published last year.

Following on from a manifesto commitment, the White Paper stated "we will work in partnership with places to develop Local Industrial Strategies, which will be developed locally and agreed with the Government. These strategies will help identify priorities to improve skills, increase innovation and enhance infrastructure and business growth. This will guide the use of local funding streams and any spending from national schemes."

Government is aiming to agree all Local Industrial Strategies by early 2020. We have stated that agreeing a Local Industrial Strategy with Government will be a necessary condition for Mayoral Combined Authorities and Local Enterprise Partnerships to draw down any future Local Growth Funding including the new UK Shared Prosperity Fund, which is being developed to replace European Structural Investment Funds (ESIF) once we exit the EU.

ADDRESSING THE UK'S PRODUCTIVITY GAP

The UK's low productivity (we produce less per hour than our competitors), has been well documented and is already a focus within our Strategic Economic Plan. The UK has some of the most productive businesses, people and places but also a history of underperformance. Regional disparity is a significant issue. In the UK, 61 per cent of people live in areas with incomes 10 per cent below the national average. This compares to only 50 per cent in Germany, and just 40 per cent in Italy. Furthermore, the productivity gap within regions is greater than between them.

The White Paper identifies five foundations of productivity to address these issues:

- Places: Reducing UK economic disparity and supporting all places to realise their potential. The role of Local Enterprise Partnerships within small business drawing together local authorities, business and other local leaders is a significant focus
- Ideas (innovation): Increasing investment in R&D, boosting the development element and improving linkages into local economies, strengths and clusters
- > People (skills): Improving the quality of technical education, the shortage of STEM skills, entrenched regional disparities in education and skill levels and ensuring that people (throughout their working lives) are not left behind by technological change
- Infrastructure: Making investments more geographically balanced and becoming more forward looking in terms of significant global economic trends
- > Business environment: Spreading best practice of the most productive businesses, access to finance, increasing exports, management and leadership skills.

The White Paper also proposes four Grand Challenges – transformative developments in technology in which the UK is in a position to seek competitive advantage. These are:

- Artificial intelligence and big data: The AI Sector Deal, an AI Council to support rapid adoption of AI technologies at scale – initially across six sectors: cybersecurity, life sciences, construction, manufacturing, energy, agri-tech.
- Clean growth: Low carbon technologies, transforming construction techniques to improve efficiency, improving efficiency of energy intensive industries.
- > The future of mobility (public and private transport systems): Including new modes of transport and business models, zero emission vehicles, self-driving technology.
- Meeting the needs of an ageing society: For example; supporting care providers to adapt business models to changing demands and developing new models of care, supporting new products and services for the growing global population of older people.

WHAT IS A LOCAL INDUSTRIAL STRATEGY AND HOW DOES IT FIT WITH THE EXISTING STRATEGIC ECONOMIC PLAN?

The key to Local Industrial Strategy is that they are local. So far Government has worked with eight areas across the UK to develop Local Industrial Strategy, and recently invited all remaining areas to produce one. The emerging picture from the early Local Industrial Strategy work is that the Local Industrial Strategy are diverse and are based on distinctive, locally led priorities.

The Local Industrial Strategy is a long-term plan to support our sectors after which we will be refreshing our Strategic Economic Plan which is the wider economic strategy for Greater Lincolnshire.

Government has published some <u>guidance</u> for local areas developing their Local Industrial Strategy. The guidance sets out that Local Industrial Strategy will be long-term, based on clear evidence and aligned to the National Industrial Strategy.

The aim is that Local Industrial Strategy should help all places to:

- Increase productivity and realise their potential: Building on well evidenced and distinctive strengths aligned with the National Industrial Strategy
- Set out the spatial impacts of national and local policy across cities, towns and rural areas: Informing priorities and choices and demonstrating how they will allow all communities to contribute to, and benefit from, economic prosperity.

In order to do this, our Local Industrial Strategy - and each priority area - will need to:

- Be distinctive: Identify distinctive and specific local strengths and weaknesses.
- b. Align with the national strategy: Identify priorities across the five pillars of productivity: Ideas, People, Infrastructure, Business Environment and Places, and connect into relevant Grand Challenges.
- c. Take a partnership approach: Bring together the public and private sectors to collaborate on a set of shared ambitions.
- d. Be targeted: It should not be exhaustive but should identify a strategic course, supported by complementary policies and actions. There should be a clear rationale as to why proposed interventions will make a difference for specific problems.
- e. Future-proof the economy: Take account of how the economy will evolve by 2050 for example, how global trends such as technological change and industrial digitalisation, Brexit, globalisation and demographic change are impacting on the local economy.
- f. Focus on improving living standards: As well as economic growth, it is not just about more jobs but more high quality jobs and better pay.
- g. Evaluate and evolve: Set out clear plans to evaluate progress and feed this back into ongoing development and enhancement of interventions.
- h. Seek competitive advantage: Position Greater Lincolnshire as a demonstrator in areas of key competence aiming for first to market status in crossover points between sectors/industries and technology.

WHAT THE LOCAL INDUSTRIAL STRATEGY IS NOT

The Local Industrial Strategy is not a bidding document. Although the Government has stated that having one in place will be a precondition for bidding into the UK Shared Prosperity Fund it is not the only document that will be taken into consideration when bidding into that fund. As such the Greater Lincolnshire LEP is also preparing to refresh our Strategic Economic Plan (SEP), which is the broader plan under which many activities are already being funded.

Once the terms of the UK Shared Prosperity Fund have been clarified, we anticipate developing a separate investment plan that will use the priorities set out within the Local Industrial Strategy as a hook, but which will also draw down on priorities set out in the SEP and indeed other strategies such as the Strategic Infrastructure Development Plan.

DEVELOPING A LOCAL INDUSTRIAL STRATEGY

RESEARCH, ENGAGEMENT AND EMERGING PRIORITIES

Since publication of the White Paper, the LEP has been leading a programme of research and engagement to draw together the framework for emerging opportunities/priorities set out in this document.

In order to build a Local Industrial Strategy that is locally distinctive, this process has involved a detailed look at the evidence to help us understand:

- > Our business and employment at a micro level
- Drivers and barriers of productivity across Greater Lincolnshire
- > How to build a more inclusive economy
- Opportunities and challenges for our key sectors following Brexit.

Alongside this we have been engaging widely with public and private sector partners, including local authorities, to seek input into our emerging opportunities/priorities. We have also held a number of MP led roundtables with local businesses. In addition, we have regular meetings with national stakeholders including key Government departments and have had ongoing engagement with other UK localities as they develop their own approaches.

In June 2018 we commissioned The Centre for Urban and Regional Development Studies, based at Newcastle University, to draw together the findings from these activities and develop a framework in order to help identify the specialisms, concentrations and supply linkages of businesses in our area as well as any emerging trends and potential interventions. Interviews with key stakeholders from industry, academia and the public sector over the summer helped to further develop the model.

OVERALL FINDINGS

The UK needs models which go beyond assumptions of (core) city led agglomeration (geographic concentration of industries) effects. Persistent failure to close the gap and a growing sense of places left behind economically and socially, requires different approaches to Local Industrial Strategies.

Greater Lincolnshire has its share of strengths and assets upon which to build a Local Industrial Strategy. However, it is not without its challenges. Whilst pockets of high/growing productivity exist, overall productivity in the economy is low. Greater Lincolnshire is ranked 33rd of the 38 LEP areas for productivity¹ which ranks 25th in terms of proportion of innovating firms². Greater Lincolnshire has a dispersed and rural pattern of population settlements³ and is the 7th most rural LEP area or the 4th largest in land mass. Employment is dominated by low skill, low wage jobs in traditional sectors⁴ obscuring higher skilled, higher wage occupations.

Therefore, focusing solely on high tech sectors is not realistic. There is not enough critical mass, concentration or sufficient structural conditions (e.g. skills in the workforce). By taking a more nuanced approach that crosscuts existing strengths, emerging technologies and challenge-based opportunities, places like Greater Lincolnshire may find they have many of the right conditions to pilot and export new approaches and solutions to the current and future challenges which have industrial as well as societal dimensions, and which can be global as well as local in their applications.

It should be noted that the evidence presented in this document and the proposed framework derived from its analysis is not intended to present a picture of the whole economy, nor is it suggested that only the areas identified should be the focus for future activities and investments. Instead it aims to identify some areas where strategic interventions might make the most difference, and in a joined up approach could help to position Greater Lincolnshire as a rural innovation test bed where solutions to persistent challenges can be trialled, scaled up and exported.



THE PROPOSED FRAMEWORK

The framework sets out to understand and describe key areas that build on existing competencies and emerging technologies in the context of local challenges and opportunities for Greater Lincolnshire.

This process has led to the identification of five crosscutting focus areas, or priorities, that have a distinctive Greater Lincolnshire character. Alongside these five areas of focus we have identified skills as a critical cross-sector challenge given how fundamental and significant it is to all sectors and areas of activity. We are also exploring the development of a cross-sector theme of housing given the integral part this plays across our priorities.

Cross-sector skills challenge: Ensure that people in Greater Lincolnshire are equipped to transition into an increasingly automated and digital world that is already changing the working environment and take advantage of the opportunities it offers

Cross-sector housing challenge: Maximise the contribution which housing can make to the growth of our economy

FIVE AREAS OF FOCUS:

- 1. Future proofing the agri-food Industry
- 2. A rural innovation test bed for energy and water
- 3. New solutions supporting people to live well for longer in dispersed areas
- 4. A high-quality, inclusive visitor economy
- 5. An adaptive ports and logistics industry driving greater connectivity

Further details of the model used are in Annex A. These are not intended however to be viewed as standalone areas of activity – in many cases there will be secondary interdependencies with one or more other industries, technologies or challenges which will need to be tackled simultaneously.

CROSS-SECTOR SKILLS CHALLENGE

'People' is one of the five foundations of productivity identified in the Government's Industrial Strategy White Paper. In our engagement activities so far it is the key concern raised by businesses across Greater Lincolnshire and so we have identified this as a cross-sector priority focus.

Skills are well recognised as a central driver for increasing productivity. In addition, the current supply of skills across the UK is seen as a significant barrier to our ability to adapt and succeed in a global economy which is rapidly changing as a result of new technology and working practices.

The Made Smarter Review⁵ highlighted the scale of change brought about by industrial digitalisation that is already transforming the world of work. It has been predicted that, within 20 years, 90 per cent of all jobs will require digital skills. This means that approximately 16.5 million people in the UK are going to need to be skilled to become 'digital workers' and 'digital makers'. Yet, there are 10.5 million people currently lacking basic online skills, the majority of whom are aged over 55, and many of whom are working in sectors where digitalisation will be crucial to keep the UK competitive internationally. The pace of change unleashed by digitalisation means that around two-thirds of children in primary school today will work in jobs which do not even exist yet. The nature of employment is also continuing to change. The days of working for a single employer have ended. Individuals will have a number of careers over their working lives and will need to continually reskill to be relevant in the marketplace.

As such, we have identified the following skills challenge, which sits at the heart of our work to develop this Local Industrial Strategy:

Equip people in Greater Lincolnshire to a changing work environment and take advantage of the opportunities it offers.

SKILLS IN GREATER LINCOLNSHIRE

The Greater Lincolnshire Area Review⁶ identified that the challenge for Greater Lincolnshire's economy is to ensure there are sufficiently skilled people to fill a projected 200,000 job vacancies by 20227. Forecasts show that demand for skills both locally and nationally is likely to be concentrated in the higher level occupations than is currently the case, and locally there will be less demand in lower level jobs. We already know that there will not be sufficient numbers of school leavers within that timeframe and so the working age population will shrink.

At sector level, the evidence gathering that we have undertaken so far has identified the following skills issues in relation to each focus area. As might be expected there is a significant crossover between



	KILLS OCUS AREA	ISSUES
1.	Future-proofing the agri-food industry	 Target the existing workforce with low/no skills to gain level 3 skills in engineering maintenance, digital and software through vocational and on the job training. Design FE programmes and apprenticeships that blend agriculture and technology components. Strategic management training for senior leaders to support long-term planning and succession planning.
2.	A rural innovation test bed for energy and water	Strategic leadership development across multiple sectors to identify and promote new business models and ways of working.
	New solutions supporting people to live well for longer in rural areas	 Among the wider population, improve digital skills to promote self-management of chronic conditions using new technologies. Among front line workers, improved use and understanding of new technologies and how to train patients to use them. For senior health and social care managers, how to procure innovation to deliver long-term change in service delivery and use.
4.	A high-quality, inclusive visitor economy	 Upskilling front line staff with low/no formal qualifications to create added value roles (e.g. digital skills, social media, website management etc.) Management and leadership training for (especially micro) business owners to promote greater ambition and equip them with the skills to grow their businesses.
5.	An adaptive ports and logistics industry driving greater connectivity	 For existing workforce, training in technical skills relating to management and maintenance of automated systems. Training/awareness raising for senior managers in implementing change, strategic planning, finance and investment.

Essentially the challenge is threefold

- 1. Progression:
 - Despite the proportion of school leavers obtaining a level 2 qualification being amongst the highest in England, Greater Lincolnshire has a higher than average proportion of adults with no qualifications. 27% of those over age 16 have no qualifications compared to 23% nationally. The position is improved at level 2 where 58% of the working age population have a level 2 qualification as their highest qualification compared to 51% nationally. At level 4, however, only 20% of the population are qualified to level 4 and above compared to 27% nationally.8 In addition, UKCES projections highlight the likelihood of increased demand for machine operatives and skilled trade occupations, and for a range of level 3 technical and associate professional technical roles.9 Support students and adults to progress in their qualifications and technical knowledge; to level 3, 4 and beyond.
- 2. Retrain the existing workforce: School leavers will only be part of the solution. There will be 128,000 18 year olds leaving school within the next decade across Greater Lincolnshire and from current statistics we would expect around 27% of them to be resident and qualified to level 4 or higher by the time they reach their mid-20s. Meanwhile technology, global competition and new working practices will mean the existing workforce will need significant support to help them adapt on the job in response to sustained disruption.
- 3. Partner with businesses to help them adapt and compete: We will need stronger partnerships across the education system and between businesses and education providers to ensure that we are able to transition. This could include interventions to help businesses attract the best talent from across Greater Lincolnshire and beyond including supply of housing and place marketing but also support to reconsider the roles available in light of industrial digitalisation. Collaboration at sector level and across sectors will be important to help businesses project and adapt to the challenges and opportunities of automation and digitalisation.

CROSS-SECTOR HOUSING CHALLENGE

Offering the right mix of available and attractive homes is critical to labour mobility. Without it our employers tell us they struggle to recruit and retain skilled labour.

In our engagement to date we have heard that our town centres need reimagining, and that we need to consider how an enhanced housing offer could play a role in attracting the skilled workforce which the area needs.

Government's ambition nationwide is to deliver more housing, in both scale and pace. Indeed, the Industrial Strategy White Paper outlines a number of policies to support this ambition including £34m to expand innovative construction training programmes across the country and implementation of a Construction Sector Deal.

We share this ambition in Greater Lincolnshire. Whilst skills shortages and the need to increase productivity are likely to drive through changes in the way we build, modular and panelised off-site construction will create skilled manufacturing jobs harnessing digitalisation, automation and resource-efficient techniques. In our Local Industrial Strategy we have the opportunity to set out how we will encourage take-up of these techniques in our area, and attract the associated skilled manufacturing jobs which they will bring. We would also like to consider how local drivers should shape the mix of housing needed, for example based on our population's needs and rural and coastal geography. Investment is required to drive modernisation, supporting the development of new techniques in the housing and construction supply chain and the corresponding integration of the new skills and have identified the following challenge:

Maximise the contribution which housing can make to the growth of our economy

HOUSING IN GREATER LINCOLNSHIRE

Housing is relevant to our Local Industrial Strategy in terms of new development, the role of our existing housing stock, and the contribution which housing can make to broader regeneration and growth ambitions.

We already know that over 100,000 new homes are planned across Greater Lincolnshire to 2030. Building new homes contributes directly to the local economy in the form of construction jobs, purchasing construction materials, professional skills, and spend on new household goods, but delivery is not keeping pace with need. Greater Lincolnshire is rural and coastal, with large areas affected by flood risk. Our geography, combined with often very low land values produces a real viability challenge. We need to diversify the type of housing delivered in Lincolnshire to widen choice, strengthen the market and enhance skilled employment opportunities.

Making our existing homes easier to heat and keep warm can result in: health and educational improvements; less time off work (or school) due to illness; and a reduction in the proportion of household expenditure on heating. These benefits should in turn contribute to raising attainment, increased productivity, and more income available to spend elsewhere in the economy.

The evidence gathering that we have undertaken so far has identified the following housing issues in relation to each focus area. There is some crossover between sectors, and they all have two things in common: people in lower-paid but essential jobs in all of these sectors need homes which they can afford to live in, whilst at the other end of the scale we need to diversify and reimagine our housing mix to create attractive places which will support recruitment and retention in the high-skilled roles which our Local Industrial Strategy will create.

	OUSING OCUS AREA	ISSUES
1.	Future-proofing the agri-food industry	Our market towns are the local services centres for our agri-food businesses. Their offer is part of the package when employers are recruiting, and employers tell us that they need reimagining. We need to consider how an enhanced housing offer could play a role in attracting the skilled workforce which the agri-food industry needs.
2.	A rural innovation test bed for energy and water	Modular and panelised off-site construction creates skilled manufacturing jobs using digitalisation, automation and resource-efficient techniques. The resulting homes have the potential to be super-insulated, require less energy to keep warm (or cool) and use less water than those built using traditional methods.
3.	New solutions supporting people to live well for longer in dispersed areas	 Housing is at the interface of health, care and our ageing population. More of us are living longer, often with long-term health conditions requiring care and support. This might need to be delivered in the existing home, in housing specifically designed for people needing support, or in health or care settings. The need for care and support is not limited to older people. Care providers need to adapt business models to changing demands and develop new models of care, supporting new products and services for the growing global population of people requiring care and support.
4.	A high-quality, inclusive visitor economy	The fabric and nature of our housing stock plays a huge part in creating (or undermining) the appeal of our place. Extending the tourist season will mean that the visitor economy workforce will need somewhere to live, all year round.
5.	An adaptive ports and logistics industry driving greater connectivity	 Traditional construction techniques involve procuring equipment and materials and shipping them to site for assembly and fabrication. Modular and panelised methods involve off-site manufacture of large units which need to be transported to site intact. A strengthened logistics system is required to support the rise of off-site construction techniques.

There are three emerging areas of potential focus alongside the need to better integrate our housing strategy with the aim to attract more skilled people to live in Greater Lincolnshire.

- 1. New technologies and techniques: Modular and panelised off-site construction as well as harnessing digitalisation and automation.
- 2. Skills for innovative construction: Linking in with the national programme and identifying routes to support training and retraining at a local level.
- 3. Design to fit the population and geographical needs of Greater Lincolnshire: With a view to driving new innovation and business opportunities.



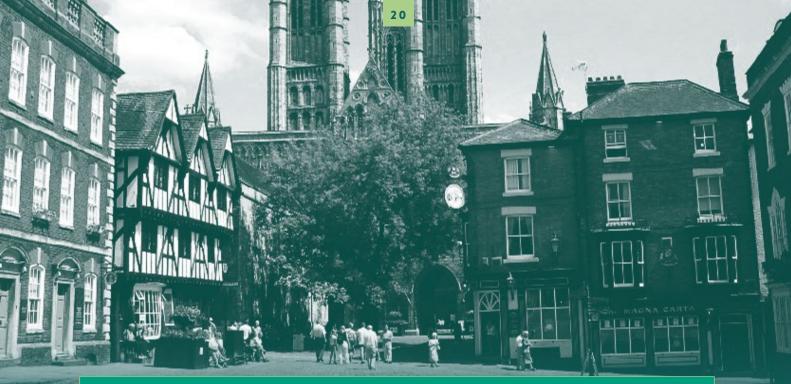
EMERGING PRIORITIES

1. FUTURE-PROOFING THE AGRI-FOOD INDUSTRY		
AXIS POINTS	AGRI-FOOD X AUTOMATION X FORESIGHT AND VISION	
JUSTIFICATION AND EVIDENCE	 Agri-food is a key foundational industry with high location quotients in several sub-sectors and high, growing levels of employment across Greater Lincolnshire. It is an industry of national significance. There is a high dependence on migrant, low(er) skilled workers. Productivity is a key challenge. There needs to be a step change in deploying new technologies to future-proof the industry as well as drive up productivity. This needs vision and willingness to invest, particularly by industry leaders. 	
LINKS TO NATIONAL PRIORITIES AND OTHER SECTORS	 The Greater Lincolnshire LEP represents all LEPs on the Food and Drink Council, which is developing a Food and Drink Sector Deal. Agricultural technologies have been identified nationally as a key sector. Agri-science, robotics and autonomous systems are key technologies. Ports and logistics is an important industry serving this sector. Energy and water supply are also key. Artificial Intelligence and big data is one of the Industrial Strategy Grand Challenges, agri-tech has been highlighted as a sector within it. Lincoln University led the food strand of The Made Smarter review on manufacturing and industrial digitalisation, which reported to Government last year. 	
VISION	 Low skill jobs are automated, new jobs in higher skill occupations (engineering, software, digital, production management) are created. Increased productivity and investment in innovation. 	
PLACE EFFECTS	 Main concentrations in North East and South East. Opportunities for collaboration with neighbouring LEPs. 	
GAPS	> Low skills, lack of investment in R&D and new technologies. Lack of leadership to lead change across the industry.	
INTERVENTIONS	 Upskilling and training of existing workforce. Support links between electronics and food sector – joint (e.g. Innovate UK) proposals etc. Promote leadership and future proofing. Innovation 'sprints' with businesses in technology and food sectors. Support for investment in R&D. 	
SKILLS ISSUES	 Target existing workforce with low/no skills to gain level 3 skills in engineering maintenance, digital and software through vocational and on the job training. Design FE programmes and apprenticeships that blend agriculture and technology components. Strategic management training for senior leaders to support long-term planning and succession planning. 	
KEY PARTNERS AND THEIR ROLES	 Lincoln Institute for Agri-Food Technology – innovation, research. FE and training providers – skills. Greater Lincolnshire LEP – network support, access to finance, leadership development. Innovating companies in food processing and automation. 	



2. A RURAL IN	NOVATION TEST BED FOR ENERGY AND WATER
AXIS POINTS	MANUFACTURING X ENERGY & WATER X CLIMATE CHANGE
JUSTIFICATION AND EVIDENCE	 Greater Lincolnshire has above average levels of employment in the manufacturing sector which is mostly growing. Within this there are existing competencies in (clean) energy and water production and management. Accelerating climate change is a huge issue and needs new solutions. There are significant physical assets in Greater Lincolnshire (large landowners etc).
LINKS TO NATIONAL PRIORITIES AND OTHER SECTORS	 Agricultural technologies have been identified nationally as a key sector. Energy storage is a key technology. Agri-food is a key industry both as a consumer, provider and manager of energy and water resources. Potential impact on low-carbon housing agenda and adoption of modern methods of construction. Clean growth is one of the Industrial Strategy Grand Challenges. Scope to increase the scale and pace of housing delivery.
VISION	Greater Lincolnshire is a rural test bed demonstrator and accelerator for new commercial models of energy generation and storage, new approaches to grid management and sustainable water storage.
PLACE EFFECTS	 Main concentrations in North East and South East. Need for collaboration with neighbouring Local Economic Partnerships and other sub-national organisations (e.g. Water Resources East).
GAPS	 Needs new smart grid infrastructure, (digital) marketplaces to connect producers and consumers, investment in physical infrastructure (pipes, reservoirs etc). Potentially needs system level changes/change at national policy or regulatory level.
INTERVENTIONS	 Platforms to enable factors (public, private, university) to collaborate. Investment in pilots to test new methods/technologies. Mechanisms to commercialise success. Procuring innovation. Building the business case for new forms of energy and water capture, management, storage and distribution. Awareness raising and championing of new models locally and nationally (to Government).
SKILLS ISSUES	Strategic leadership development across multiple sectors to identify and promote new business models and ways of working.
KEY PARTNERS AND THEIR ROLES	 Lincoln University and other (public and private) research organisations – supply/develop technologies. Large landowners – physical resources, host demonstrators and test bed site. Greater Lincolnshire LEP and local authorities – provide/secure funding for demonstrators, influence policy and regulation development, facilitate joined up leadership.

19



A A \square I \square	INCLUSIVE VISITOR ECONOMY

AXIS POINTS	VISITOR ECONOMY & CULTURE X SERVICE INNOVATION & DESIGN X INCLUSION
JUSTIFICATION AND EVIDENCE	 The visitor economy is a large and growing employer. Deprivation in Greater Lincolnshire is particularly high in areas where tourism is a key sector (e.g. coastal). The mostly seasonal nature of coastal is a challenge in overcoming poverty and social exclusion. Recent investment in the cultural offer is driving new opportunities to attract visitors to the area.
LINKS TO NATIONAL PRIORITIES AND OTHER SECTORS	 Links to agri-food, peripherality, vision and foresight and digitalisation. Inclusive growth is of increasing interest in relation to the development of the UK Shared Prosperity Fund. £150m Creative Industry Sector Deal was published in March 2018.
VISION	 Less seasonality in the sector. Better quality employment. A tourism offer and quality of service that attracts higher spending visitors throughout the year and creates more added value for businesses and their supply chain. A food destination with high quality restaurants, accommodation, coupled with nature and heritage assets and underpinned by a vibrant creative and cultural offer.
PLACE EFFECTS	> Potential impacts on coastal and rural areas.
GAPS	 Sector dominated by micro, lifestyle businesses. Low adoption of technology (e.g. e-commerce). Lack of sufficient join up to other sectors (e.g. agri-food, culture and creativity).
INTERVENTIONS	 Leadership to promote use of technology, investment in staff and facilities, and links with other sectors. Support (financial and training) to encourage new innovations and improve the service offer for visitors. Marketing and promotion of Greater Lincolnshire as a destination to higher value visitors. Networks for businesses in complementary sectors (culture and creative, agri-food, tourism) to help build links and joint offers.
SKILLS ISSUES	 Upskilling front line staff with low/no formal qualifications to create added value roles (e.g. digital skills, social media, website management etc). Management and leadership training for (especially micro) business owners to promote greater ambition and equip them with the skills to grow their businesses.
KEY PARTNERS AND THEIR ROLES	 Developing an ambitious, forward looking strategy for the Greater Lincolnshire visitor economy through Greater Lincolnshire LEP, local authorities, business leaders, sector bodies. Supporting businesses in the sector to innovate and develop – Greater Lincolnshire LEP, sector bodies. Upskilling staff and business owners – FE colleges, training providers, Centre for Culture and Creativity. Arts Council.



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AXIS POINTS	PORTS & LOGISTICS X DIGITALISATION X PERIPHERALITY
JUSTIFICATION AND EVIDENCE	 Ports and logistics are a relatively large employer. It is also strategically important to other sectors. Potential links to overseas post-Brexit. Digital technologies are already starting to transform the industry. Infrastructure is a long-standing priority of the LEP given the peripheral nature of our area.
LINKS TO NATIONAL PRIORITIES AND OTHER SECTORS	 Robotics and autonomous systems are a national key technology. Links to agri-food. The National Productivity Investment Fund is intended to support investments in transport housing and digital infrastructure. Links to Midlands Connect Strategy.
VISION	 > Processes increasingly automated. Greater efficiency and productivity. > Redundant workers (e.g. drivers) retrained as technicians, programmers, engineers etc. Lincolnshire seen as a nationally important hub for getting goods in and out of the country. > New solutions for developing infrastructure in a dispersed economy.
PLACE EFFECTS	> Coastal impact.
GAPS	 Skills in existing workforce. Businesses understanding the opportunity/threat of new technology and being willing to invest. Infrastructure (physical and virtual) and connectivity are critical for the ongoing success of the sector.
INTERVENTIONS	 Upskilling the workforce and training new entrants. Promoting new technology and leadership in the sector. Identifying locally led solutions to resolve gaps in infrastructure. Further understand and invest in key routes.
SKILLS ISSUES	 For the existing workforce, training in technical skills relating to management and maintenance of automated systems. Training and awareness raising for senior managers in implementing change, strategic planning, finance and investment.
KEY PARTNERS AND THEIR ROLES	 Skills through FE colleges, other training providers. Leadership via Greater Lincolnshire LEP, industry bodies. Local authorities and national Government in terms of transport and digital infrastructure. Maritime UK is working to develop a sector deal.

ANNEX A:

GREATER LINCOLNSHIRE TRIANGLE:

STRENGTHS, EMERGING SPECIALISMS, AND CHALLENGES

THE MODEL

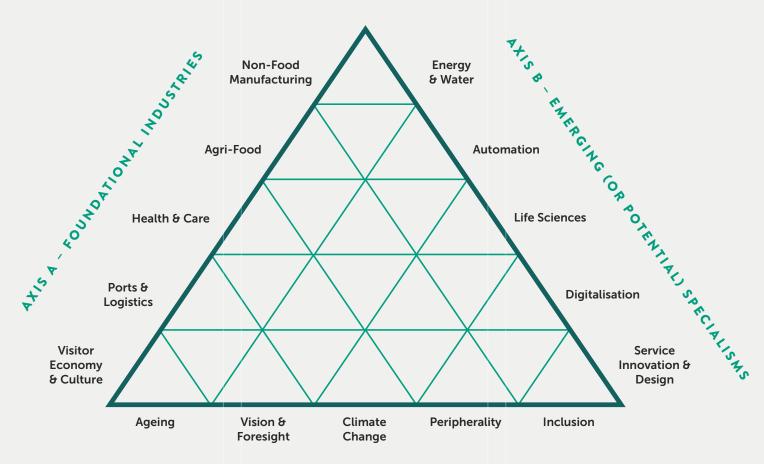
The following model has been developed for us by CURDS to help identify priorities for the Local Industrial Strategy. It draws together existing competencies and emerging technologies in the context of local challenges and opportunities in order to identify cross-cutting areas of activity (existing and potential) with a distinctive 'Greater Lincolnshire' character.

Based on an approach developed by the German state of Saxony¹⁰ to underpin their smart specialisation strategy it is essentially a triangle which describes existing strengths, areas of emerging specialism and future opportunities on each axis. The areas of future focus are points of overlap across the three axis points.

The three axis points identified for the Greater Lincolnshire model were:

AXIS A FOUNDATIONAL INDUSTRIES	In general, these are areas of economic activity that are typified by high numbers of employees and/or businesses which are therefore critical to the local economy. They may also be areas that Greater Lincolnshire is particularly specialised in compared to the rest of the UK.
AXIS B EMERGING (OR POTENTIAL) SPECIALISMS	These are new technologies that businesses or other organisations in Greater Lincolnshire have begun to develop specialisms in, and/or have identified as important areas for future development and growth, particularly in driving innovation in foundational industries or in responding to broader societal challenges.
AXIS C CHALLENGES (MARKET OPPORTUNITIES)	These are particular issues that place demands on increasingly scarce resources – physical as well as financial. While these have been selected for their specific Greater Lincolnshire significance, most have national if not international resonance. Therefore, they also represent market opportunities – if they can be tackled in Greater Lincolnshire there is potential to export the solutions to other places.

GREATER LINCOLNSHIRE TRIANGLE



AXIS C - CHALLENGES (MARKET OPPORTUNITIES)

JUSTIFICATION AND EVIDENCE

AXIS A	
NON-FOOD MANUFACTURING	Manufacturing (excluding food) employs 35,000 workers and represents 8% of employment (6% UK). Four sub-sectors account for two-thirds of jobs (metals, machinery, wood and furniture, plastics and rubber products) all of which are growing apart from metals.
AGRI-FOOD	Includes food production and processing. Employs over 55,000 people with employment growth in 2015-16 at 5.6% compared to the English average of 1.7%. Nationally significant industry with very high location quotients in several sub-sectors.
HEALTH AND CARE	Employs 60,000 people with employment growing faster than the national average. A new medical school at the University of Lincoln will be a significant new asset.
PORTS AND LOGISTICS	Employs 21,000 workers. The area has the largest port by bulk in the country and has a high level of interdependence with other key sectors (especially agri-food). ¹¹
VISITOR ECONOMY AND CULTURE	Employs almost 50,000 people with employment growing at nearly three times faster than the English average. Activity in this sector is high in areas (e.g. the coast) which have few other 'foundational' or high employment sectors. Strengthening the cultural 'offer' can also directly impact on success in the visitor economy sector as well as having indirect benefits for staff recruitment and retention by improving the quality of life offer in the area. The Government recently announced a £150m sector deal for creative industries, with an emphasis on the importance of developments in the sector outside London and the South East. A study has recently been commissioned by the University of Lincoln that will provide an evidence base on the nature and scale of the sector and its potential contribution to the wider economy.
AXIS B	
ENERGY AND WATER	New forms of energy capture and storage and water management are critical to support the local and national economy. Greater Lincolnshire has some identified assets ¹⁴ to trial and pilot new models.
AUTOMATION	Changes in the structure of the workforce (due to ageing, Brexit etc.) and the need for greater productivity in key sectors (agri-food, ports and logistics) mean that understanding the role of and deploying automated technologies will be critical. Existing strengths include the Lincoln Institute for Agri-Food Technology at the University of Lincoln. 16
LIFE SCIENCES	Greater Lincolnshire has a population that is ageing faster than the national average ¹⁷ , with people living longer but with multiple and complex health issues. ¹⁸ New ways of addressing these will be needed as traditional models of healthcare delivery struggle to meet demand (expected to increase by 33% by 2035). ¹⁹ The new medical school, and the Lincoln Institute for Health are both key assets. Between 2014 and 2018 Innovate UK grants offered to businesses and organisations in Greater Lincolnshire were more than twice the national average ²⁰ (see Annex B).

i. Together these sectors account for almost half of all employment in the area (see appendix) and have sub-sectors with high location quotients compared to the UK average. There are also pockets of innovation capability in electrical systems, agri-tech, food supply and sustainability. These are all identified as priority sectors by Greater Lincolnshire LEP.

DIGITALISATION	The digital sector itself is relatively small in Greater Lincolnshire (1.7% of the economy compared to 4.9% in England). ²¹ Focusing on it as a standalone sector is probably not yet justified. However the growing commonality of digital and digitalisation across the economy as a whole means that the deployment of digital technologies across other sectors to improve productivity and create more skilled job opportunities is needed.
SERVICE INNOVATION AND DESIGN	New and more innovative ways of designing and delivering products and services (public and private) will be important for productivity, job quality and maximising the effectiveness of public spending. In the private sector, better designed service offers will have an impact across all sectors, but particularly in areas such as tourism and the visitor economy. Moving service delivery up the value chain will lead to better and more productive jobs.
AXIS C	
AGEING	Greater Lincolnshire already has a higher than average older population. The proportion of the over 55s in Greater Lincolnshire is projected to increase 20% faster than the national rate between 2014 and 2025. In the coastal areas there are three people aged over 60 moving in for every two people aged 16-24 moving out. ²²
VISION AND FORESIGHT	This point was raised repeatedly in qualitative interviews. Whilst there is broad agreement that there is strong partnership working across sectors in Greater Lincolnshire, there is a sense that there needs to be more ambition and leadership to tackle/realise future challenges/opportunities. Both the public and private sectors need to be seen to invest in 'future-proofing' and lead from the front by setting the example for the rest of the economy.
CLIMATE CHANGE	This is a huge and growing challenge locally and nationally as well as globally. New ways of generating and using resources are required as well as strategies to respond to and mitigate catastrophic events.
PERIPHERALITY	Greater Lincolnshire has a low density, highly dispersed population (42% live in rural areas compared to an English average of 19%). ²³ Lincoln is the only urban area with a population above 100,000. There is no direct train service between Lincoln and London and the area is not served by any major motorway networks.
INCLUSION	Greater Lincolnshire has the third lowest mean gross salary in England compared to other LEP areas. Boston is the third lowest of all local authorities for median wage and has the highest percentage of low skilled occupations. Coastal areas are generally more deprived. ²⁴

ANNEX B:

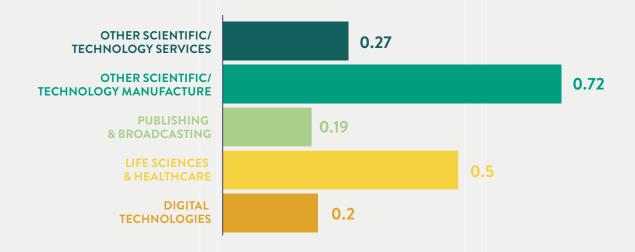
FIGURES AND TABLES

SECTOR	TOTAL EMPLOYMENT 2016	TOTAL BUSINESSES 2016	AVERAGE BUSINESS SIZE
AGRI-FOOD	56,200	6,095	9.2
MANUFACTURING	37,000	2,345	15.8
VISITOR ECONOMY	49,000	4,815	10.2
HEALTH AND CARE	60,000	2,555	23.4
PORTS AND LOGISTICS	21,000	3,055	6.9

Source: The Annual State of the Economy Report 2018 – Greater Lincolnshire LEP

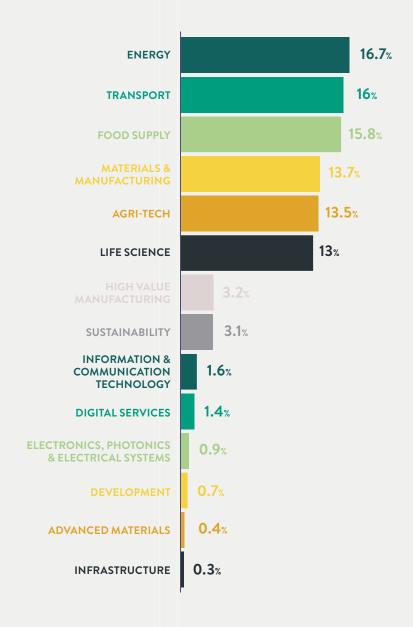
EMPLOYMENT BY SCIENCE AND TECHNOLOGY CATEGORY 2016

(ONS IDBR) - AVERAGE = 1.00

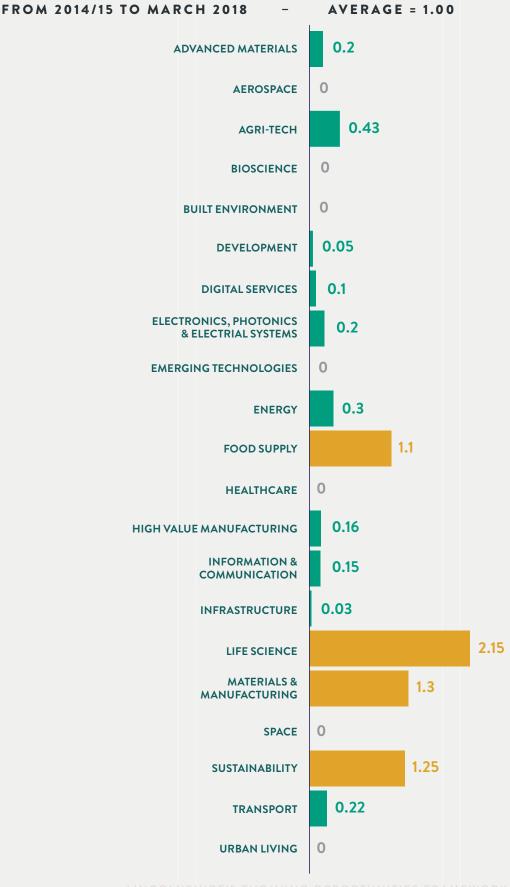


DISTRIBUTION OF GRANTS OFFERED BY INNOVATE UK IN THE GREATER LINCOLNSHIRE LEP AREA

FROM 2014/15 - MARCH 2018



GRANTS OFFERED BY INNOVATE UK BENCHMARKED AGAINST AVERAGE



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PLEASE ALSO REFERENCE THE FOLLOWING DOCUMENTS FOR MORE INFORMATION:

- > Department for Business, Energy and Industrial Strategy (2017a) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/730043/industrial-strategy-white-paper-print-ready-a4-version.pdf Industrial Strategy: Building a Britain fit for the future (see hyperlink P9)
- > Department for Business, Energy and Industrial Strategy (2018) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/744544/local-industrial-strategies-policy-prospectus.pdf Local Industrial Strategies: Policy Prospectus (See hyperlink P10).



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