

Appendix 1

Lincoln Economic Evidence and Growth Study 2020

Report for City of Lincoln Council
March 2020



**UNIVERSITY OF
LINCOLN**



SECTION 1. INTRODUCTION

This document provides an economic evidence base to underpin a Growth Strategy for the City of Lincoln, and to inform the Town Investment Plan. The report has been compiled by Lincoln International Business School at the University of Lincoln, and Rose Regeneration.

Structure of the Report

Summary sets out the high level findings arising from the report.

Section 2 sets out policy context for the Lincoln economy.

Section 3 provides an analysis of the business and employment base: what are the priority sectors; how many businesses are there in the city; their size and scale, and how productive they are.

Section 4 relates to people and communities: how many people live in Lincoln; the characteristics of the labour market, skills levels and levels of deprivation.

Section 5 considers how Lincoln performs against comparator cities

Section 6 sets out the outcomes from a structured sample of key informants about the opportunities and challenges facing the City

Addendum: Update on impact of Covid-19 on economy and Central Lincolnshire Economic Needs Assessment presented to Town Deal Board on 5 June 2020.

SUMMARY

Analysis of Data

The most profound growth in the Principal Urban Area (PUA) for Lincoln has been in **North Hykeham** over the last decade.

Health is the dominant sector in the PUA with retail and restaurants/hospitality key growing sectors.

Manufacture of turbines remains a highly distinctive sector with 35 times as many people employed in this sector in Lincoln than the national average.

Health and Higher Education are the key drivers of economic growth.

The digital sector is an opportunity area for the city economy, approaching a third of all the jobs and half the turnover associated with digital businesses in Greater Lincolnshire are in Lincoln. Lincoln has almost as many digital businesses as Norwich.

There has been a **noticeable decrease in GVA in relation to public administration and defence**.

Forecasts to 2039 from two sources are consistent. They suggest **modest overall growth focused principally in public services and health**.

Lincoln has a **lower skills base** than the national average.

There has been a **decline in professional occupations** but an increase in other technical professions, overall however **elementary occupations remain the most dominant** aspect of the local job scene.

Wages have increased more slowly than the national average and lost pace with adjoining areas at both workplace and residence level. The

growth between 2010 and 2019 has been 4% in Lincoln compared to 17% at the England level.

Benchmarking Findings

These findings are relative to the 10 comparator cities identified for benchmarking purposes.

Business and Innovation – Lincoln is a very **stable economy**, with a **modest turnover of businesses, a low stock of businesses and low GVA per worker**.

Demography – Lincoln has a relatively **small pipeline of 18-24 year old workers**, it has a **high proportion of over 65s** and a **modest proportion of the population was born overseas**.

Housing – Lincoln has a **big rented sector** and **good levels of affordability** in terms of the ratio of house prices to income.

Industrial Structure - Lincoln has a very **low proportion of Knowledge Intensive Businesses**, it is at the **upper end of the cohort in terms of manufacturing** and has a **relatively high dependency on public sector** employment.

Jobs/Employment – Lincoln has **high levels of economic inactivity**, a **modest number of private sector jobs** and **exceptional levels of benefit claimants**

Size – Lincoln is a **small service centre** for its functionality, in relative terms it has a **higher stock of jobs than its nearest competitors** in size and a **slightly better level of GVA** achievement.

Skills/Wages/Inequality – Lincoln has **low wages and low skills** compared to the other cities in the cohort.

Travel and Environment – Lincoln has a *limited public transport system* in terms of current commuter use and notwithstanding this a *modest carbon footprint*.

Narratives

Whilst this statistical digest identifies a significant number of challenges facing the City commentators are positive about its future. The key opportunities set out below are taken from interviews with those involved in the development of the City:

Growth of Waddington: The growth of Istar NATO headquarters at Waddington is attracting military contractors to Lincoln, including to Teal Park (QinetiQ, N3 military systems, 3SDL Communications, Leonardo) and to the Boole Technology Centre at Lincoln Science and Innovation Park (METIS Aerospace, Ebeni, SRC UK). Although many of these companies are out-stations of the main companies there is scope to persuade them to bring their headquarters to Lincoln, particularly as the MOD is committed to Istar expansion. The LSIP is currently embarking on a second building to house tenants that have outgrown the Boole Technology Centre, and it is likely that the majority of tenants in the new building will be from the defence sector.

Growth of the University: the University of Lincoln student population has exceeded 15,000, which was intended to be the optimum size of the institution. The University has recently opened a number of new schools in STEM subjects (e.g. Chemistry, Engineering, Geography, Pharmacy) and the Medical School.

Lincolnshire Institute of Technology: the significant investment planned in Lincoln College to enable it to create a step change in its technical training offer, alongside the enhancement of the outreach facilities of the

University Technical College (UTC) provide scope to increase the scale and range of technical training opportunities in the City.

Opening of Mosaic Digital Hub: the hub, which opened in the city centre October 2019, has Scholarpak as its anchor tenant and four offices have already been taken, along with many more hot desks. The hub is intended to provide a focal point for the sector and to help build the digital community; Digital Lincoln holds its meet ups there. The potential for knowledge sharing and collaboration, and to create an environment that counteracts the isolation of lone working in the sector.

Investment in the High Street and Transport Hub: the regeneration of the Cornhill area, longer term plans for the redevelopment of the South High Street area, likely to lead to a concentration of the retail core and the increase in the number of trains to London all provide significant optimism for future growth in the functional core of the City.

Eastern Bypass: The imminent completion of the Eastern Bypass will open up significant land for employment uses. It will help to remove the constraints to growth in a significant quarter of the City.

A World Class Tourism Offer: The completion of the HLF investment in the Cathedral, complemented by the recent Bomber Command museum provides a very potent mix of tourism opportunities connected with the City, which allied to its enhanced external connectivity by train and an improved circulation through the Eastern Bypass all provide significant potential for it to grow its role as a visitor economy.

SECTION 2 – POLICY AND STRATEGIC CONTEXT

This section provides a brief review of existing policies and strategies that apply to the Lincoln context.

The Economic Growth Strategy will inform the development of the City of Lincoln Council's next Strategic Plan, Vision 2025, which is currently out for consultation. This includes four priorities from the Council's long term vision:

- Let's drive inclusive economic growth
- Let's reduce all kinds of inequality
- Let's deliver quality housing
- Let's enhance our remarkable place

POLICY CONTEXT

Lincoln within the Greater Lincolnshire economy

The draft ***Greater Lincolnshire Local Industrial Strategy (2019)*** describes Lincoln as *“a historic cathedral city with a thriving economic and cultural life, it lies at the core of a network of market towns, urban centres and ports, with space to grow that is unique in England”*.

The LIS identifies the importance of Lincoln to the Greater Lincolnshire economy, in particular through provision of FE and HE, high-skilled employment, and access to services and amenities. It identifies further opportunities for growth particularly to capitalise on the innovation ecosystem, visitor economy and existing strengths in attracting foreign direct investment. The LIBS highlights recent growth in Innovate UK funding and potential for further innovation driven by the University and Lincoln Science and Innovation Park.

The ***Lincoln City Profile*** produced by the City of Lincoln Council highlights Lincoln's growing and increasingly dense population, where students account for almost 1 in 5 residents. The high jobs density of Lincoln reflects the city's role in creating employment for the Greater Lincolnshire region and beyond.

Infrastructure and Connectivity

Midlands Connect identifies the A46, which bypasses Lincoln to the west and north, as one of the country's most important trade routes but that is *“not always doing its job”*. Surveys undertaken by Midlands Connect with businesses along the route indicate that an improved A46 corridor would significantly boost their productivity. Its A46 Corridor Study highlights the importance of the construction of Lincoln Eastern Bypass, due to open in 2020, and sets out other potential improvements including a southern Lincoln bypass, targeted improvements on the A15 north of Lincoln, and junction improvements between the A1 and Lincoln.

Lincoln Transport Strategy highlights that, for a city of its size, Lincoln is relatively remote from the Strategic Road Network and traffic has experienced substantial growth since the turn of the century. Bus patronage has declined, and the quality of rail services is identified as often poor. The number of walking trips is decreasing and the City's cycle network is not comprehensive and is especially disjointed in the city centre.

SECTION 3 – EMPLOYMENT BASE AND PRIORITY SECTORS

3.1 Employment Base

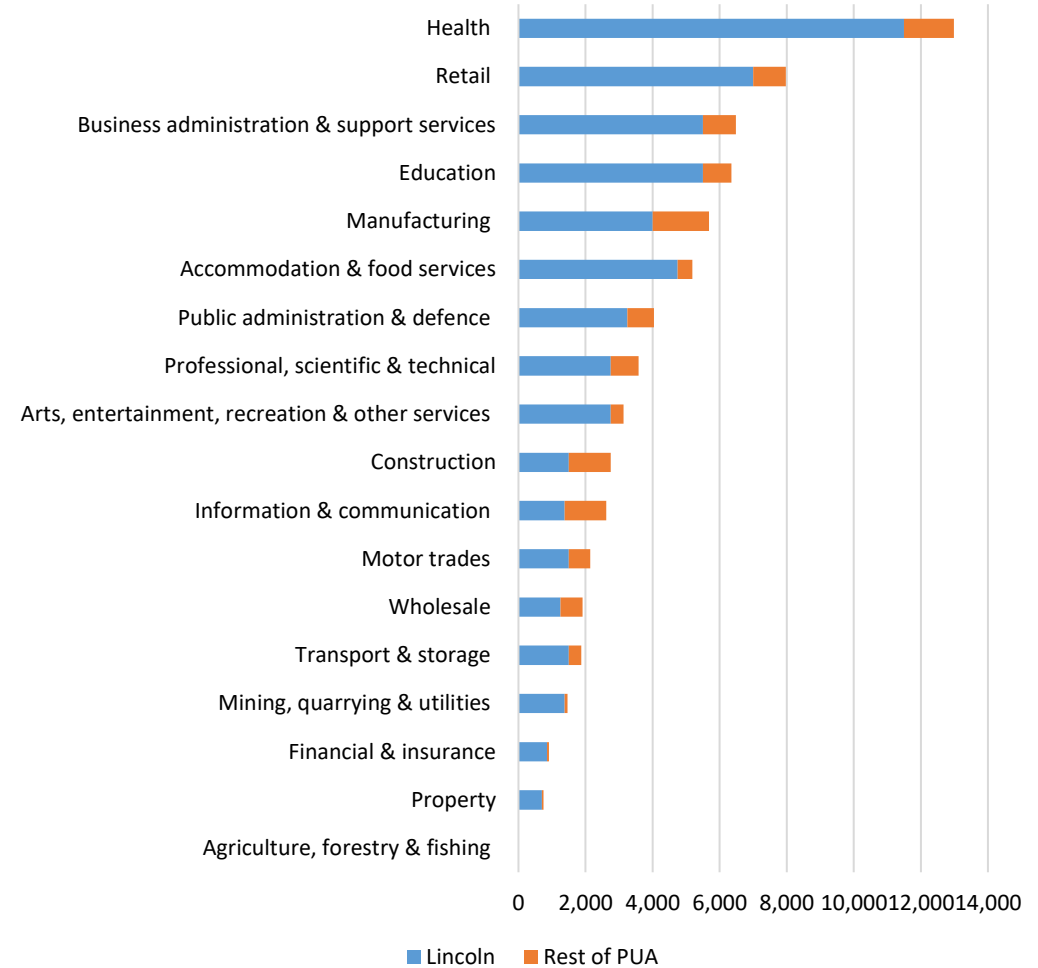
Hykeham is an important engine of jobs growth for the PUA

The City of Lincoln is the location of approximately 57,000 jobs (BRES, 2018) while the Lincoln Principal Urban Area has around 70,000.

Since 2015, the number of jobs within the City boundary has increased by approximately 800 or 1%. The rate of growth across the PUA, at 1400 jobs or 2%, is twice the rate for the City. Around 600 jobs have been created in North Hykeham, equivalent to approximately 5% growth. This demonstrates the importance of North Hykeham in generating jobs for the Lincoln economy and labour market.

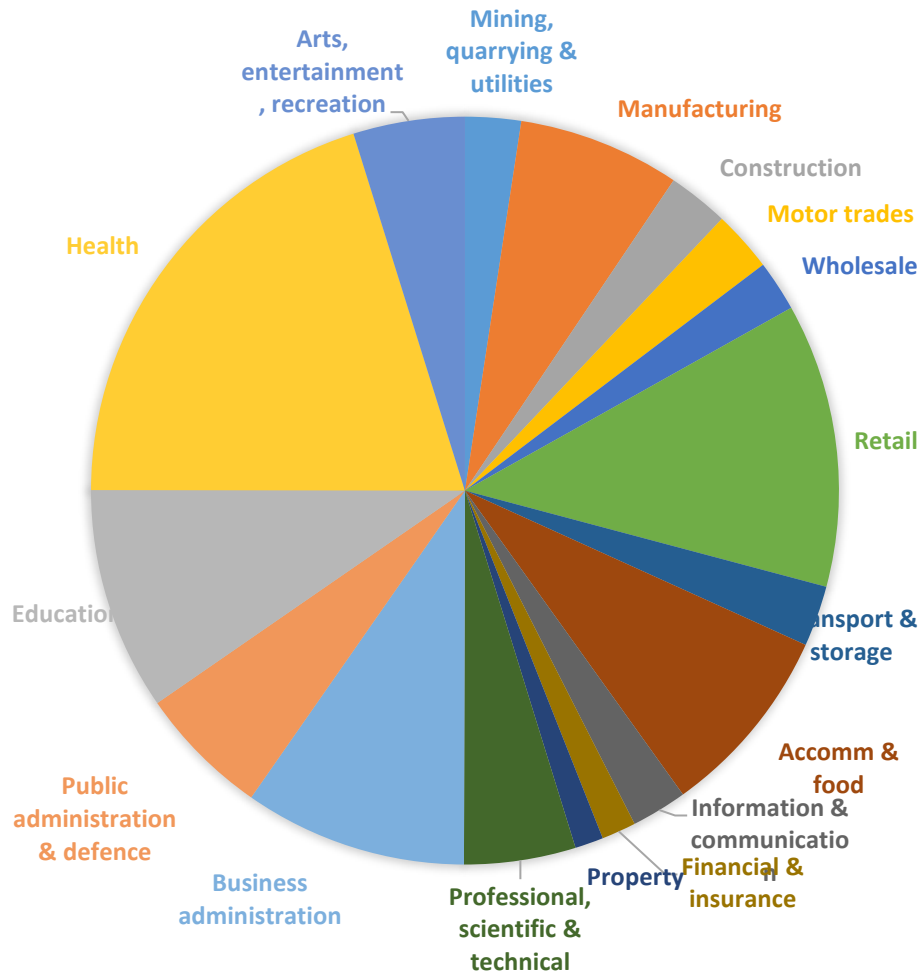
As shown in Graphs 1 and 2, health, retail and business administration are the three largest sectors by employment in the PUA.

Graph 1: Sectoral Employment, by Broad Industrial Sector



Source: BRES, 2018

Graph 2: Sectoral Employment in Lincoln, by Broad Sector



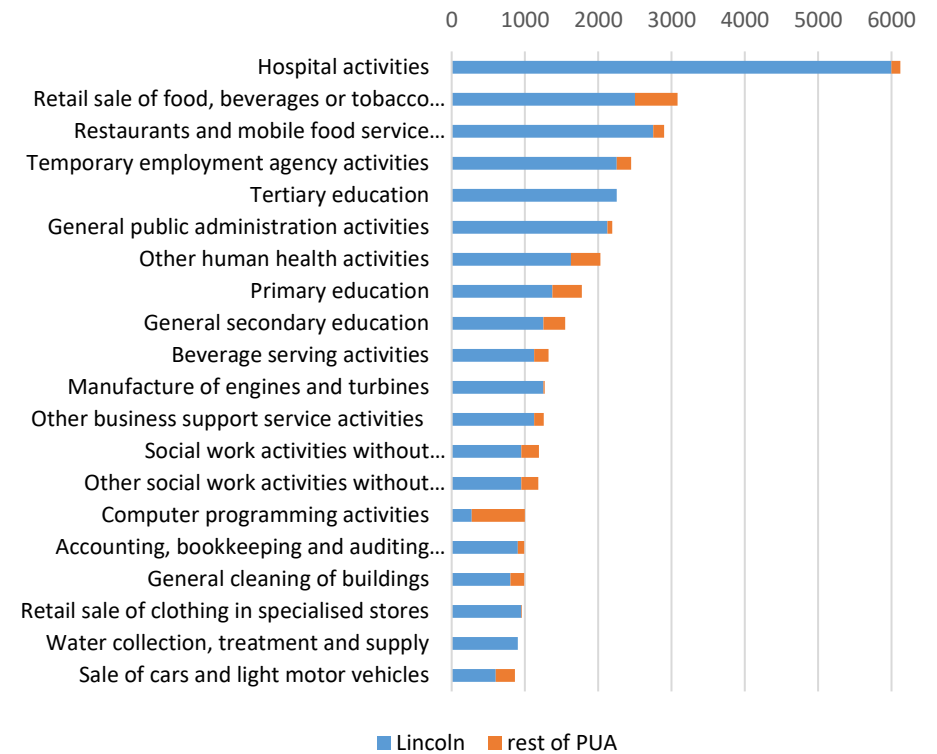
Source: BRES, 2018

3.2 Largest Sub-sectors by Employment

Hospital activities are a dominant sub-sector

Hospital activities alone are the largest sub-sector in the PUA, accounting for 6,120 jobs, of which 6,000 are in the city boundary. Other highly represented sub-sectors by employment are retail sale of food, and restaurants, each with around 3,000 jobs.

Graph 3: Top 20 Sub-Sectors, by Employment



Source: BRES, 2018

3.3 Most 'distinctive' sectors

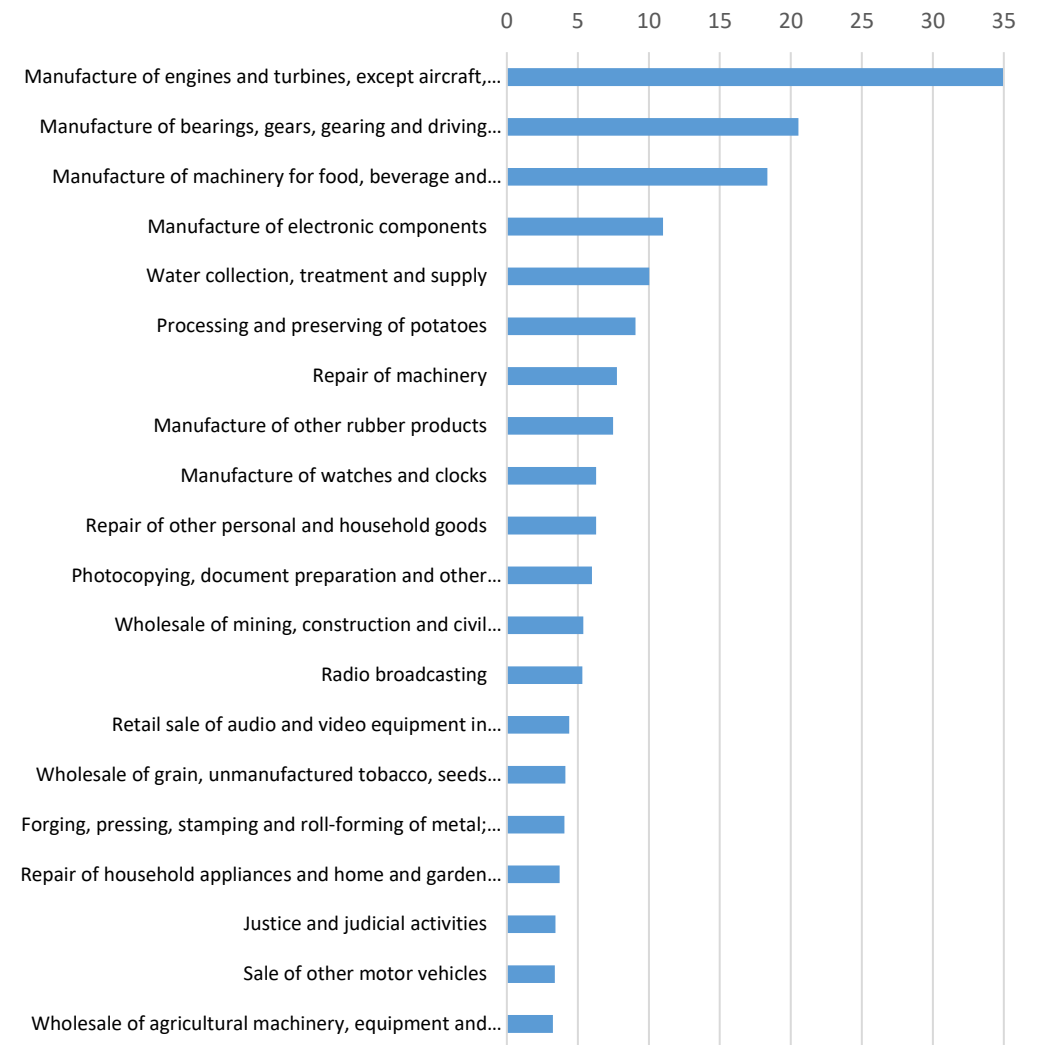
Lincoln has a number of distinctive manufacturing specialisms

The most distinctive sectors across the PUA, i.e. those that are highly represented locally with more than the national average employed, are in manufacturing.

Manufacture of engines and turbines employs 35 times that national average, followed by manufacture of bearings and gears (21 times) and machinery for food processing (18 times).

Distinctive non-manufacturing activities include water treatment, document preparation, and radio broadcasting.

Graph 4: Lincoln PUA's most distinctive sectors, by Location Quotient



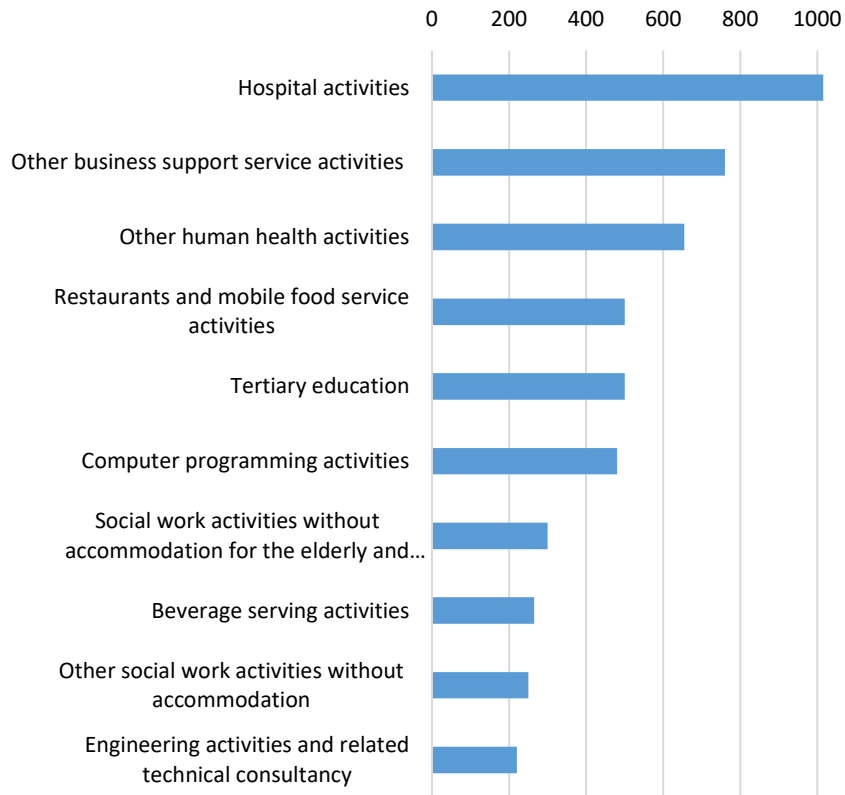
Source: BRES, 2018

3.4 Greatest areas of employment gains and losses

Health, restaurants and Higher Education drive employment growth

As well as being the largest sector by employment, health (hospitals and other human health activities) expanded by 1600 new jobs between 2015 and 2018.

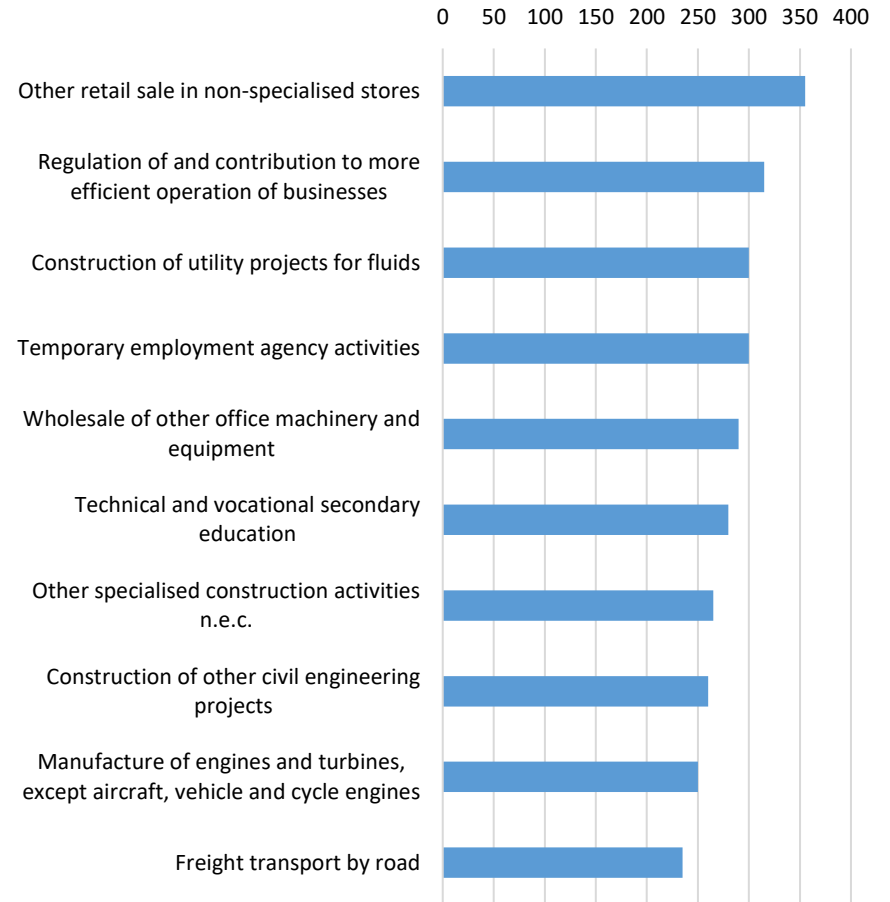
Graph 5: 10 Sub-sectors with greatest employment gains



Source: BRES, 2018

Retail and construction drive employment losses

Graph 6: 10 Sub-sectors with greatest employment losses



Source: BRES, 2018

3.5 Identifying Lincoln's Key Sectors

Graphs 7 and 8 compare a number of employment variables for sectors in Lincoln City and the PUA. The size of the bubble in each graph represents the number of people employed in the sector. The Y axis represents the percentage change in employment between 2015 and 2018. The X axis represents the location quotient, which measures how highly represented the sector is locally when compared to the national average. An LQ of 1 would mean that the same proportion of people were employed in a given sector as the national average, while an LQ of 2 would mean that twice the number of people were employed in that sector compared with the national average.

Presenting these variables on one graph provides a powerful tool for exploring the key sectors of any location. For example, a sector that is represented by a large bubble that appears in the top right quadrant of the graph is a large employer that is highly represented locally and is also growing. Those in the bottom right quadrant are sectors that are not currently highly represented but that are growing, so may be emerging sectors. Those in the top left quadrant are highly represented but are experiencing employment losses.

Graph 7 presents the sector analysis for employers within the Lincoln city boundary. Utilities (e.g. water treatment and supply), health, and motor trades emerge as highly represented and growing sectors.

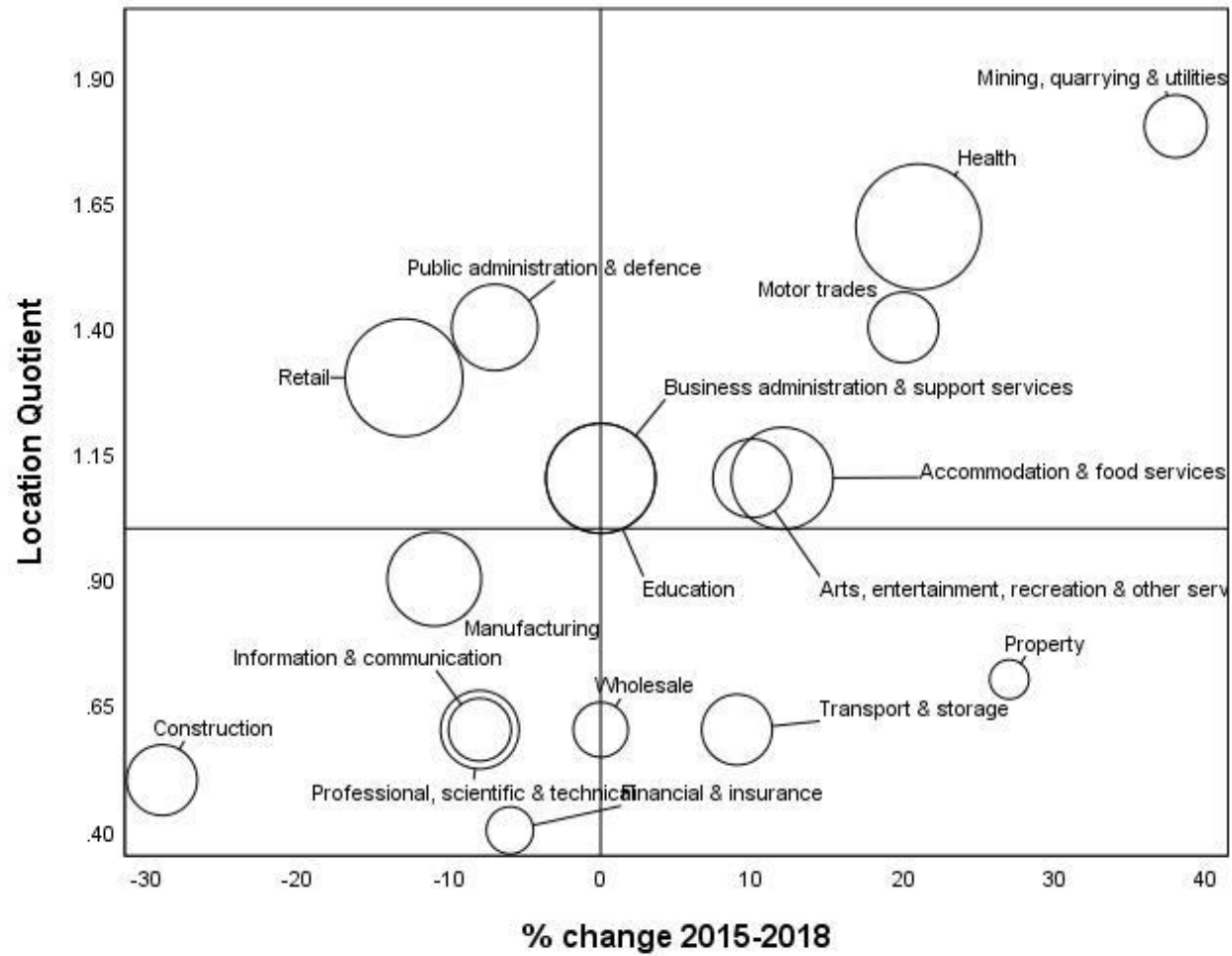
Accommodation and food, and arts and entertainment (both arguably part of the visitor economy) have both demonstrated jobs growth and are

well represented locally. Public administration and retail, both still important sectors for Lincoln in terms of employment, have experienced some employment decline. Manufacturing employs fewer people in Lincoln than the national average (although urban areas tend to have fewer manufacturing businesses than urban areas due to the cost of land) and is showing employment decline. Other declining sectors in the city include construction, information and communication, and professional and scientific and technical activities.

Graph 8 represents the sector analysis for the Lincoln Principal Urban Area (PUA). Here we can see a similar sectoral structure and dynamic to Lincoln, with a few exceptions. Information and communication activities emerge as a growing, rather than declining sector, which reflects the growth of digital companies in North Hykeham. Manufacturing is a more highly represented sector across the PUA, although still experiencing decline. Employment in professional, scientific and technical activities has remained static across the PUA, despite declining in Lincoln, which suggests growth in employment in North Hykeham and neighbouring wards.

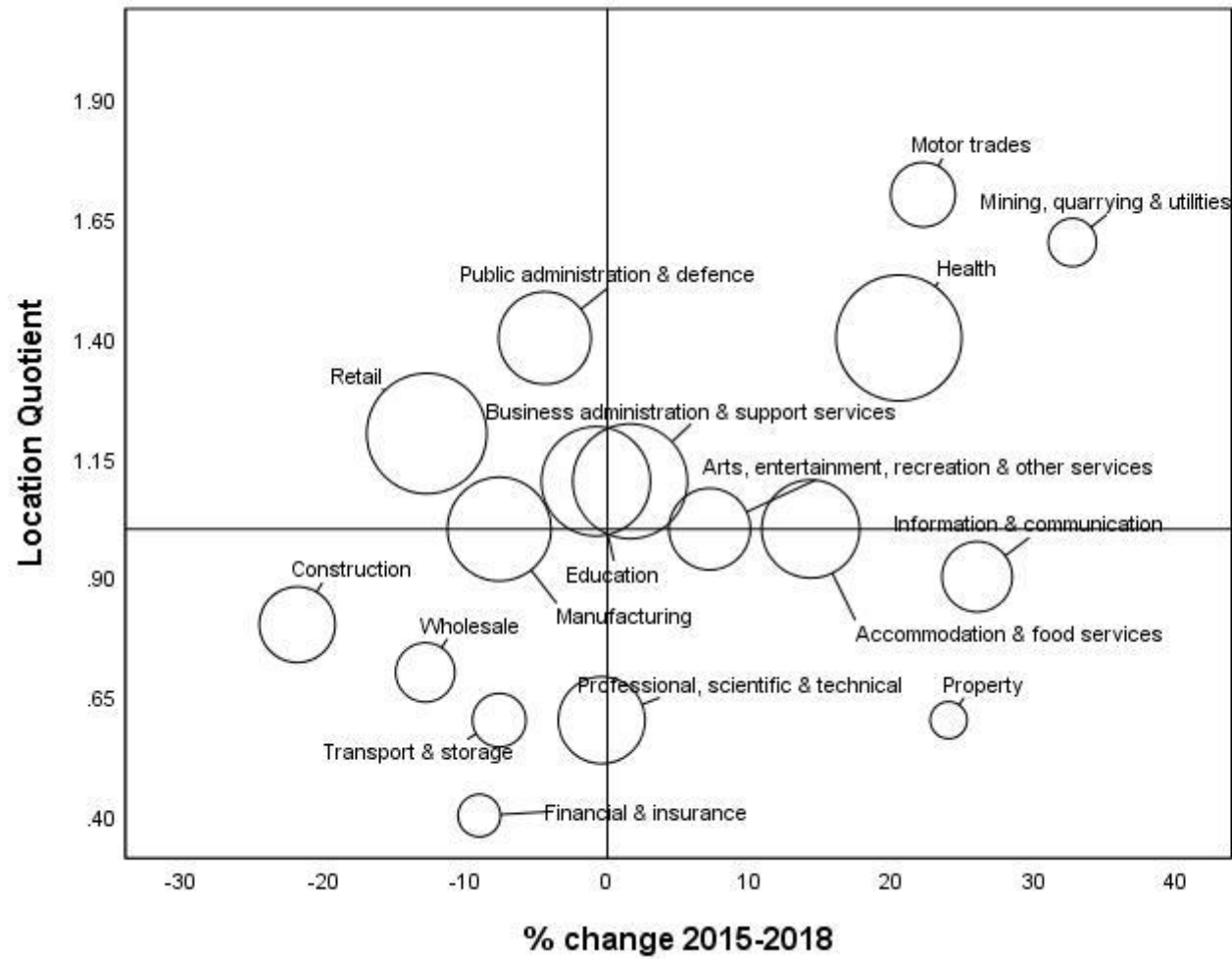
Graphs 9 to 16 show how the Lincoln PUA performs in the sectors identified as priority sectors by the Greater Lincolnshire LEP.

Graph 7: Sectors in the City of Lincoln



Source:
BRES, 2018

Graph 8: Sectors in the Lincoln Principal Urban Area

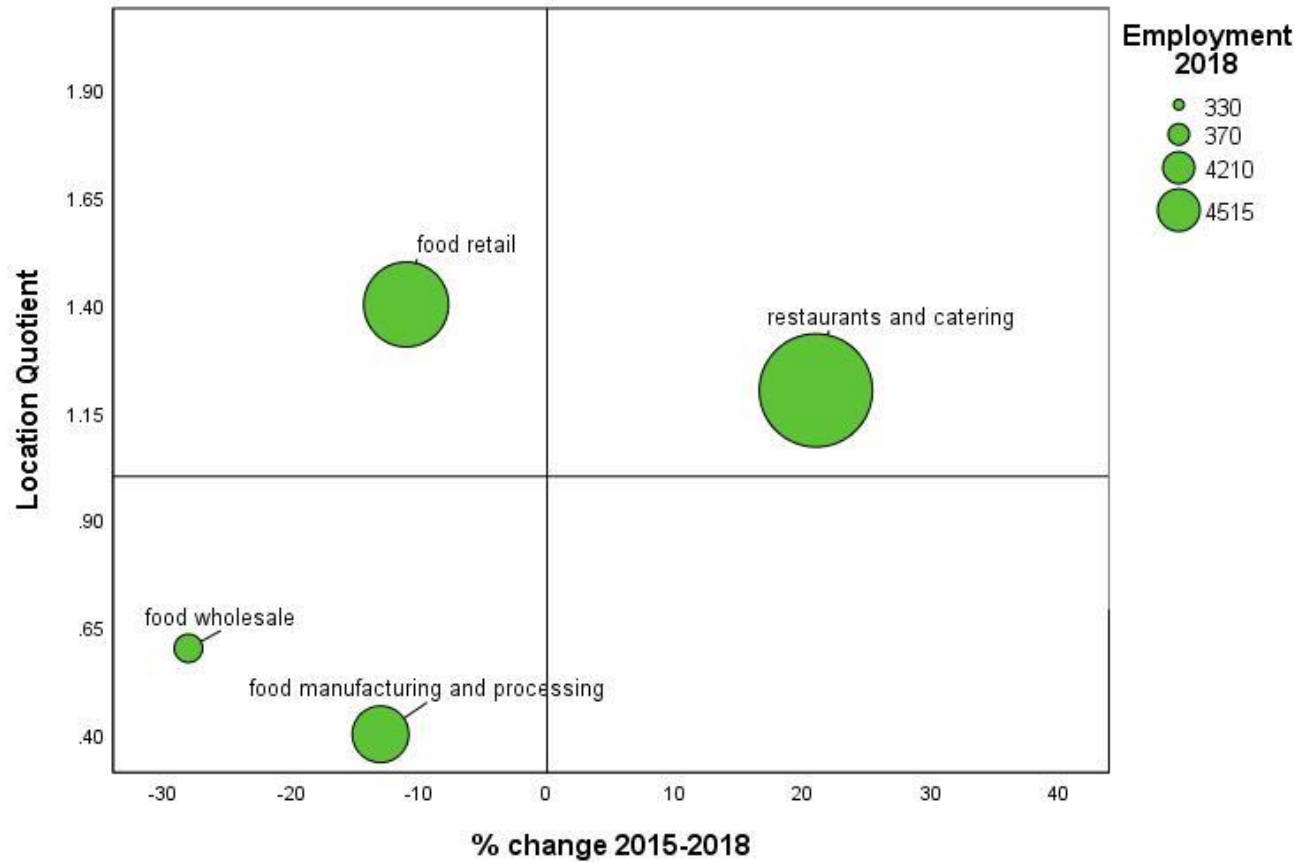


Source:
BRES, 2018

Agri-Food

As an urban area, the Lincoln PUA does not have any employment in primary production. However, it is highly represented in activities related to the agri-food supply chain. These include restaurants and catering, which is growing, and food retail which is declining. Although not shown in this graph, a number of engineering and digital businesses serve the agri-food sector.

Graph 9: Agri Food Employment in Lincoln PUA

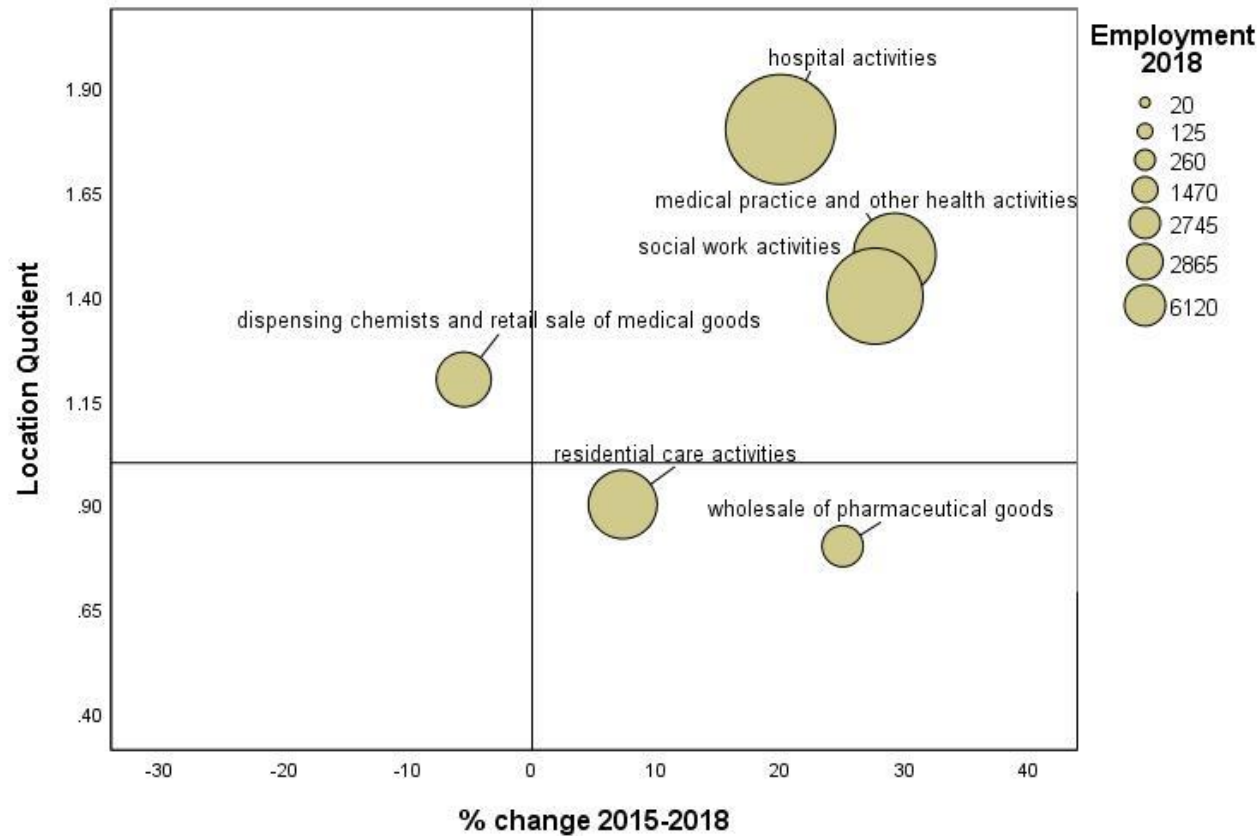


Source: BRES, 2018

Health and Care

Health and care is a large sector by employment that is fast growing, particularly around hospitals, medical practices, and social work. This may be related to the growing population of Lincoln, but also to the increasing consolidation of hospital services at larger sites such as Lincoln County Hospital.

Graph 10: Health and Care Employment in Lincoln PUA

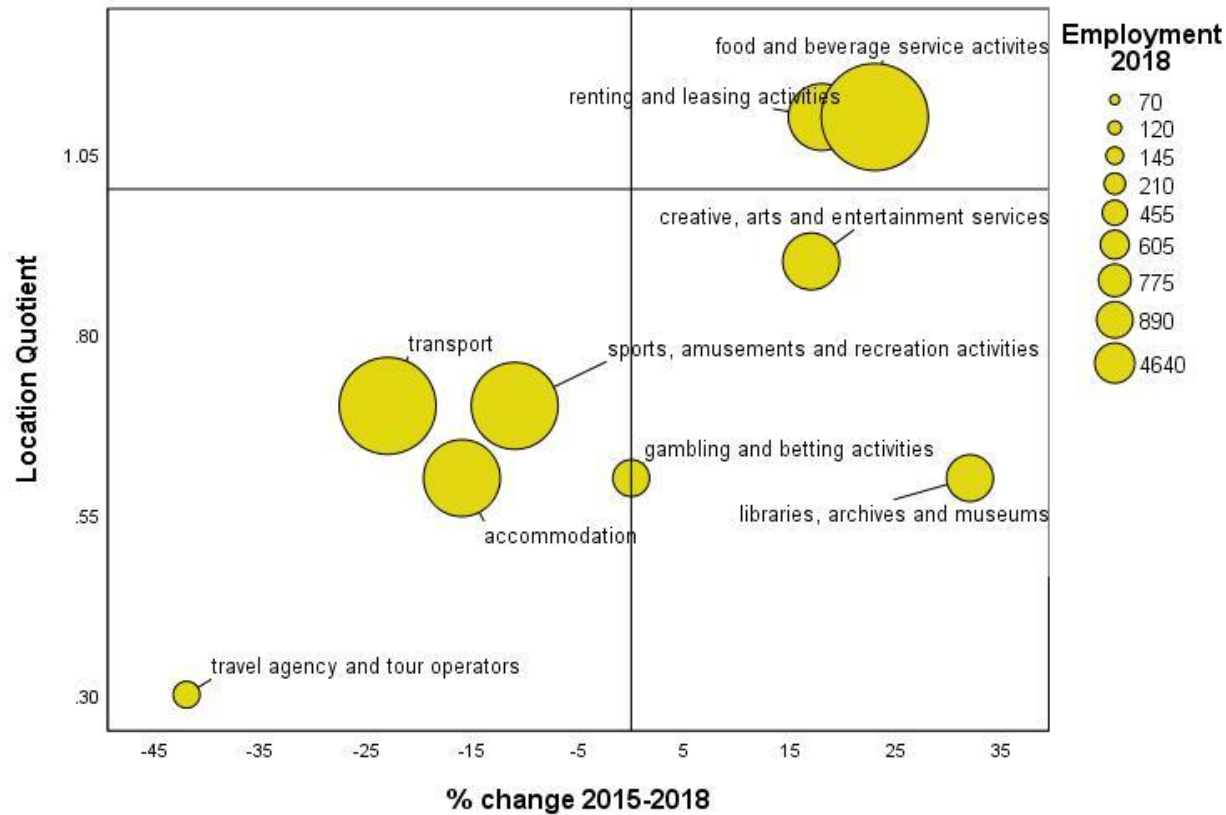


Source: BRES, 2018

Visitor Economy

Visitor economy is a key sector for Lincoln, with growing activities around cafes and restaurants in particular, and some growth in creative arts. Despite Lincoln’s heritage offer, few of the activities associated with visitor economy are highly represented. Although showing some growth here, there is vulnerability around museums and galleries associated with funding constraints. The accommodation sector in particular is under-represented and has seen loss of employment, which suggests that the city’s hotel offer is under-developed.

Graph 11: Visitor Economy in Lincoln PUA

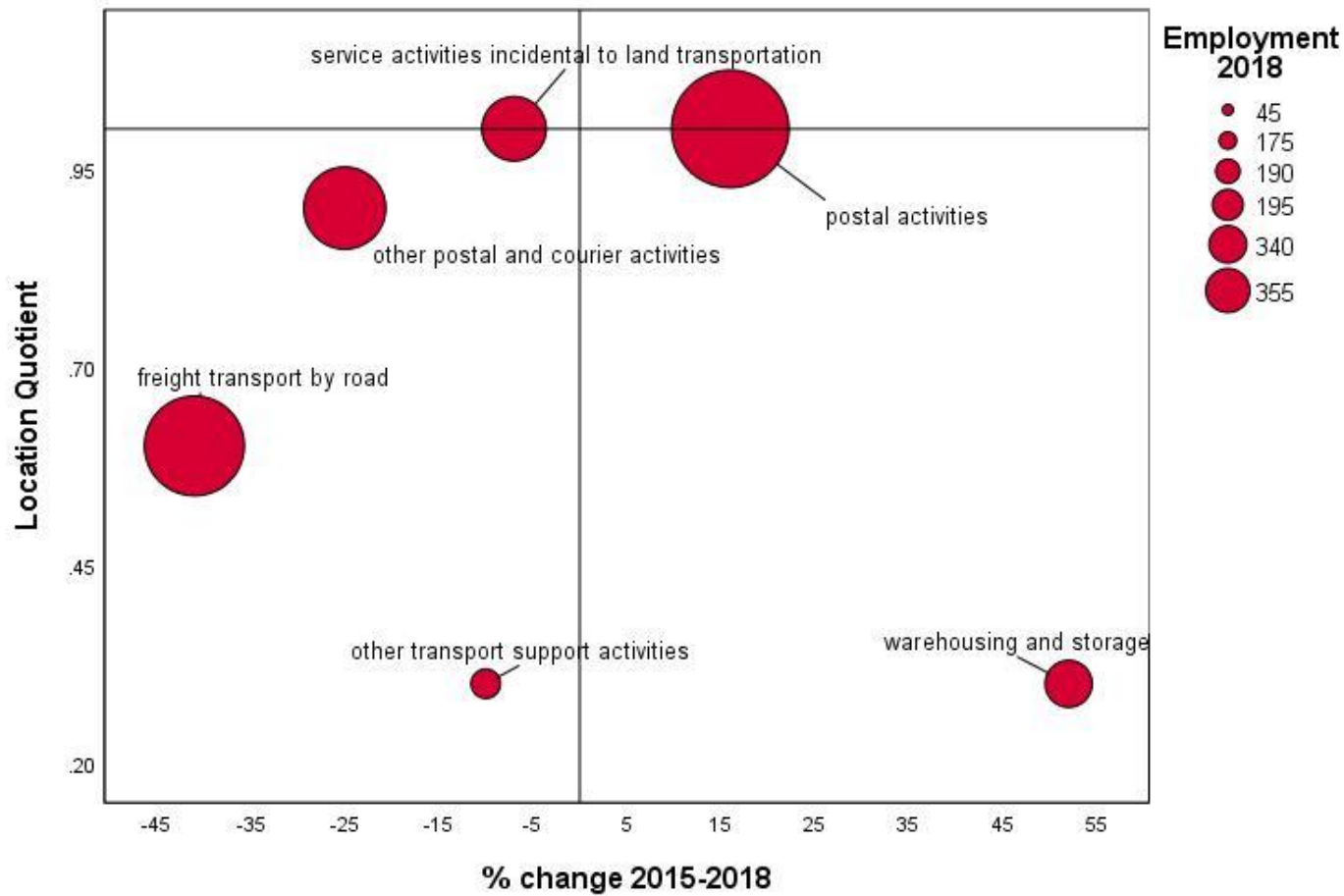


– Source: BRES, 2018

Ports and Logistics

Lincoln is not well represented in ports and logistics activities, which is unsurprising given that these activities tend to take place at port location and (mainly non-urban) areas well connected to main transport routes. There has, however, been some growth in postal and warehousing/storage activities.

Graph 12: - Ports and Logistics in Lincoln Principal Urban Area

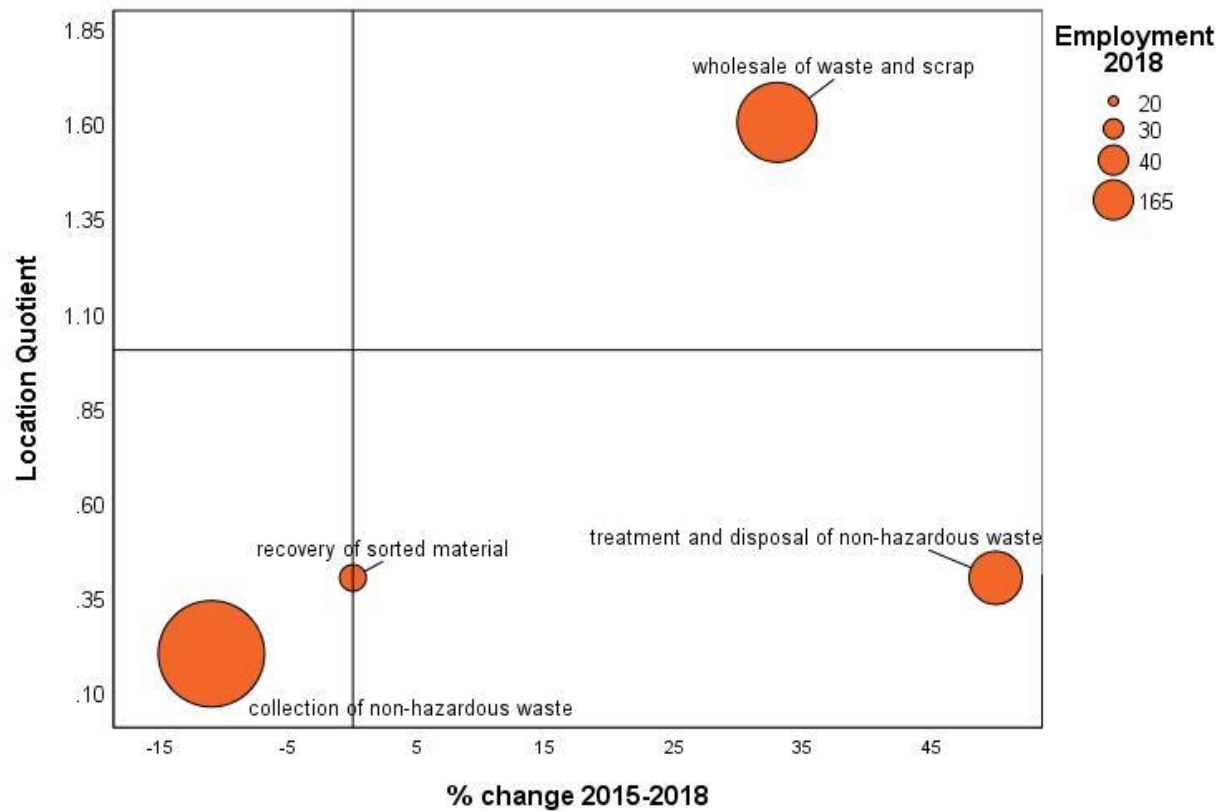


Source: BRES, 2018

Low Carbon

The renewable energy sector is difficult to measure using traditional industrial classification codes. Lincoln has some niche activity in wholesale of scrap and growth in the treatment of hazardous waste. We also know from Graph 7 that Lincoln has a high number of people employed in utilities, of which water treatment is a key component.

Graph 13 – Low Carbon in Lincoln Principal Urban Area

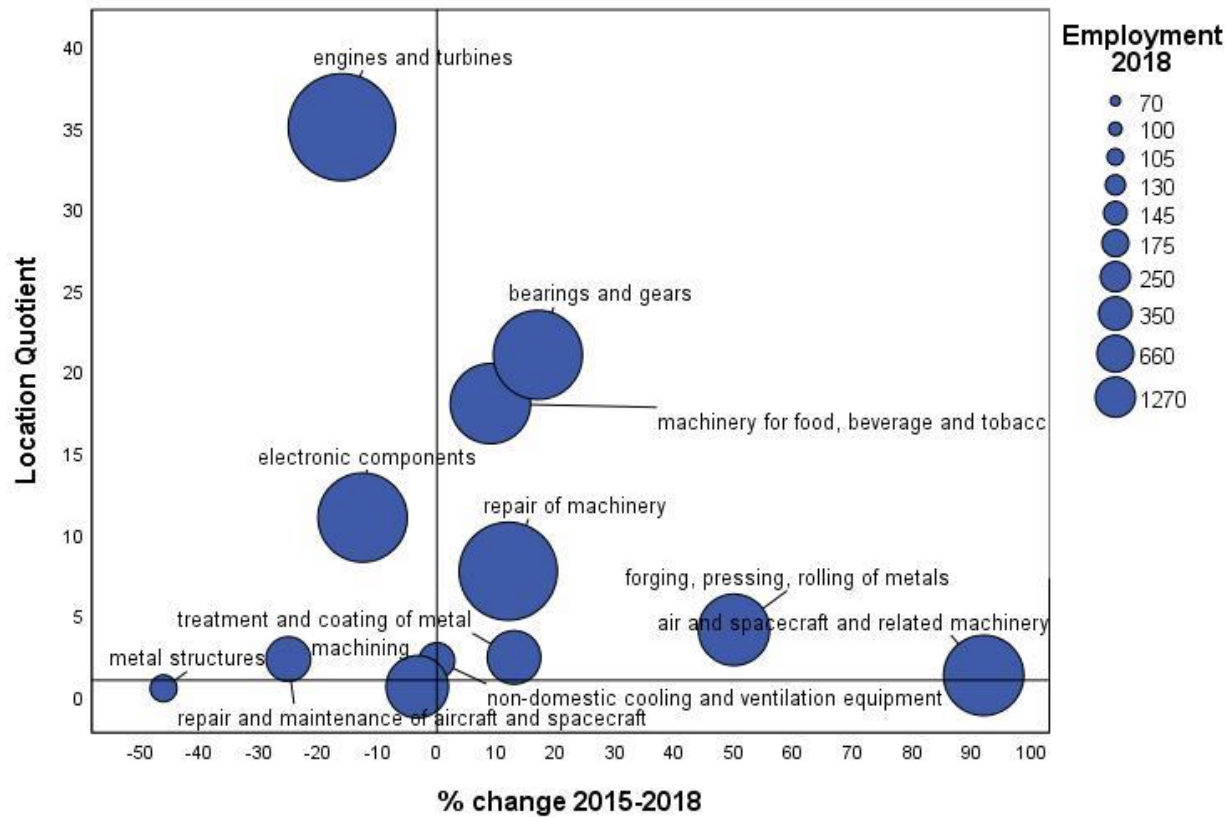


Source: BRES, 2018

Manufacturing – Engineering

The Lincoln PUA is home to a number of engineering specialisms, most notably manufacture of engines and turbines; 35 times the national average of employees are engaged in this activity. For turbines and other local specialisms, such as electronic components, there has been employment decline however. A number of areas have seen growth, however, including manufacture of bearings and gears, food processing machinery, metal pressing and rolling, and aircraft related machinery.

Graph 14 – Engineering in Lincoln Principal Urban Area

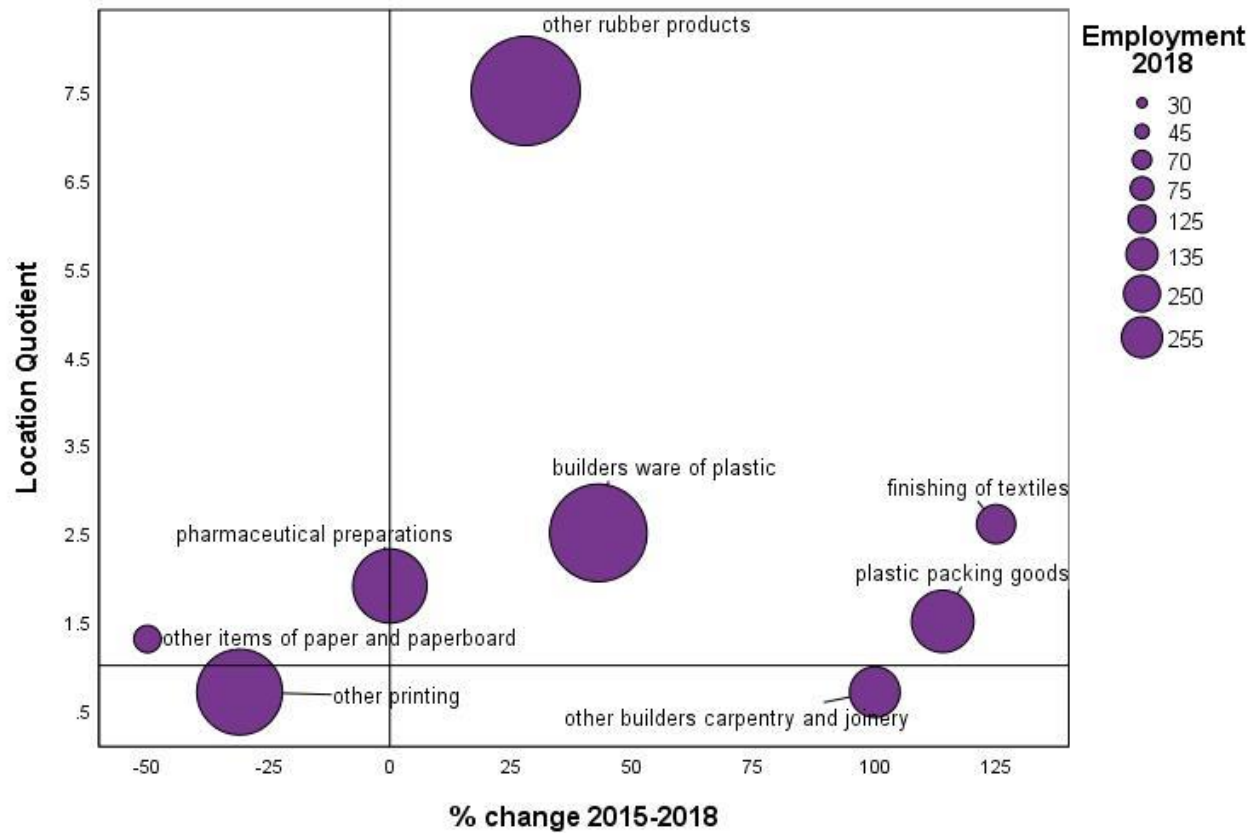


Source: BRES, 2018

Manufacturing – Other

Manufacturing activity that is not related to engineering includes rubber products, pharmaceuticals, textiles and plastic packaging. Several of these activities have seen employment growth, although the numbers of people employed are relatively low compared with engineering.

Graph 15 – Other Manufacturing in Lincoln Principal Urban Area

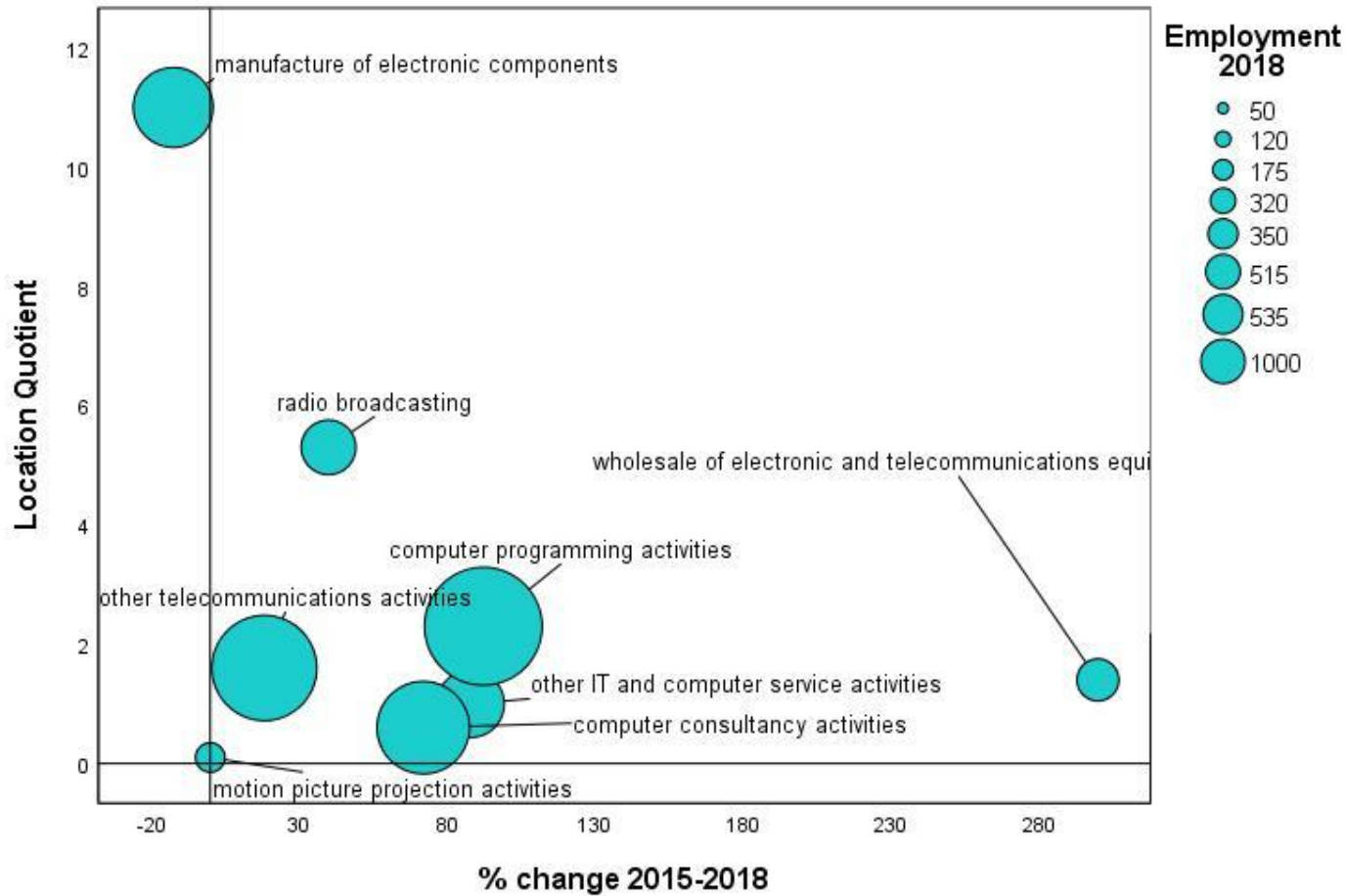


Source: BRES, 2018

Digital

Digital is identified as an enabling sector by the Greater Lincolnshire LEP. The sector in Lincoln is small but fast growing; for example, computer programming activities now account for 1000 employees, having grown from 500 in 2015.

Graph 16 – Digital in Lincoln Principal Urban Area



Source: BRES, 2018

A closer look at the digital sector

Rose Regeneration and the University of Lincoln undertook a study of Greater Lincolnshire’s digital sector for the Business Lincolnshire Growth Hub in 2019, which included a focus on the key ‘digital cluster’ of Greater Lincoln (which includes Lincoln and North Hykeham). The following is an extract from the Digital Landscape report which can be accessed here: <https://www.businesslincolnshire.com/explore/digital/digital-landscape-report/>. Because the analysis was based on 2017 rather than 2018 data, some of the employment figures may differ slightly to those presented in Graph 16.

Greater Lincoln is the location of more than a third (around 3,000) of Greater Lincolnshire’s digital tech economy jobs, and accounts for more than half the total turnover of all digital companies in Greater Lincolnshire. Greater Lincoln now has two and a half the proportion employed in digital tech economy jobs than Greater Lincolnshire, at 4.5%.

North Hykeham and the Skellingthorpe Road/Doddington Road areas continue to be important locations for the digital tech sector, with North Hykeham seeing significant digital sector growth. Central Lincoln and, in particular, the area around the University of Lincoln is home to more than 400 digital tech jobs.

Notable Sectors include computer programming, followed by telecommunications, manufacture of electronic components, and computer consultancy.

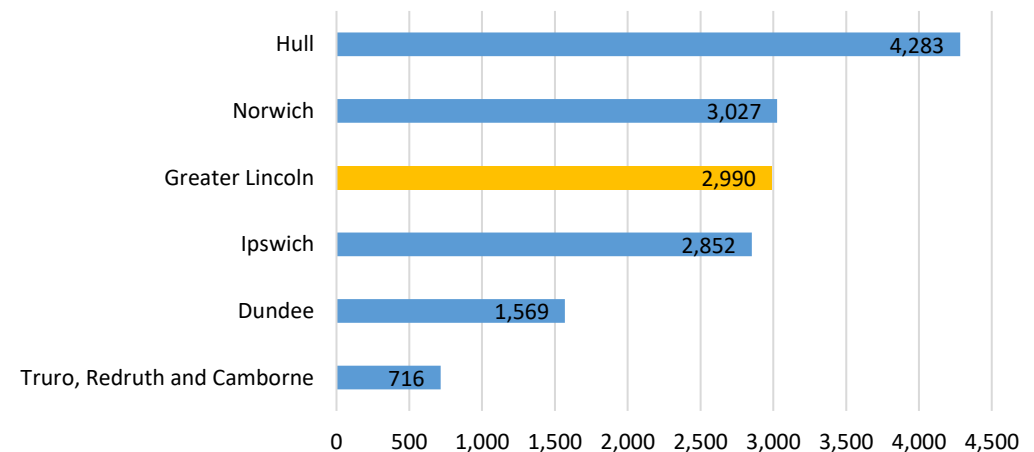
Digital Cluster Activity: Lincoln is the location of the new digital hub, Mosaic, and Digital Lincoln which is a local community of people and businesses interested in digital technology. Mosaic, which opened in October 2019, aims to facilitate the growth and development of the

digital sector by providing dedicated space for digital businesses to network and collaborate.

Lincoln is also home to the University of Lincoln and Bishop Grosseteste University; there is a strong link between the University of Lincoln and local digital sector, based around recruitment of graduates into local digital jobs, and the emergence of new digital companies from incubation facilities based at both universities and the Lincoln Science Park.

Notable Companies include GCI Communications, Dynex Semi-Conductor, Integrity Software, ScholarPack, and Rockstar Games.

Graph 17 – Number of Digital Tech Economy Jobs in Greater Lincoln and Comparator Cities



(Source: BRES, 2017 and Tech Nation, 2018)

3.6 Business Productivity

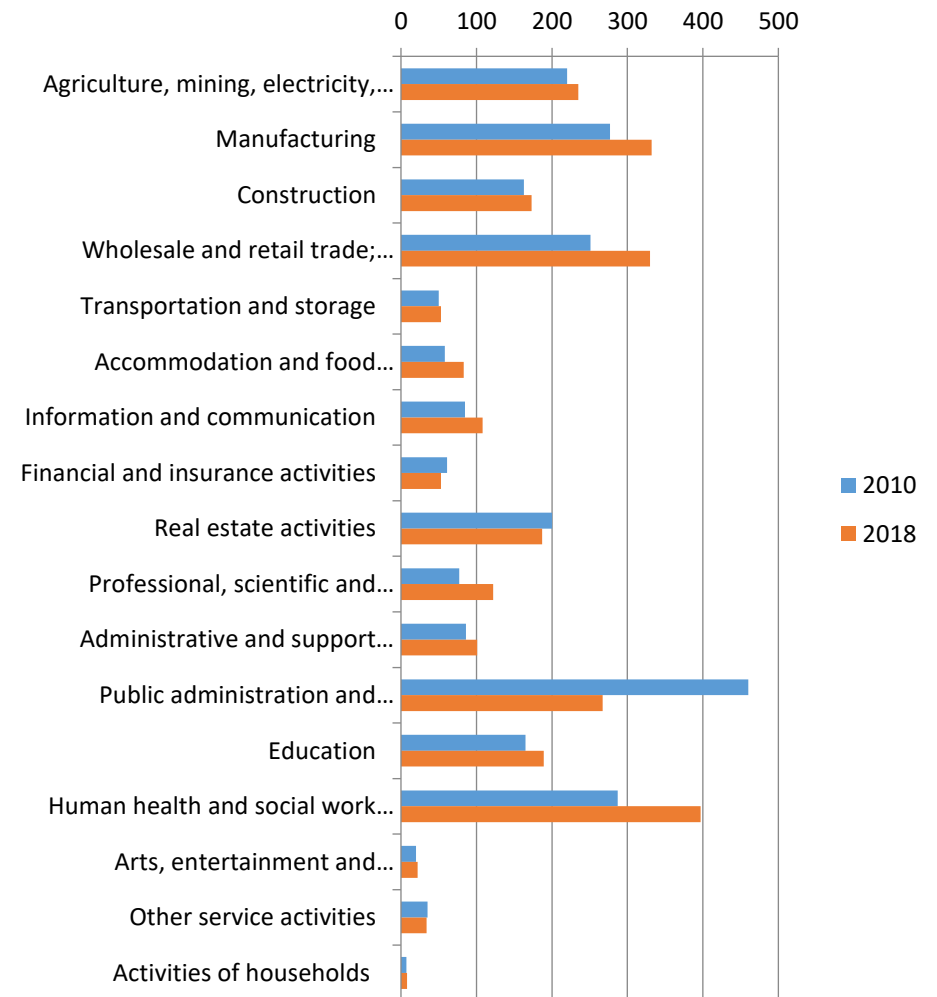
Gross Value Added (GVA) provides an indication of the Gross Domestic Product (the value of all goods and services) in a region. This helps us to understand differences in the productivity of each broad industrial sectors.

Graph 18 shows estimates of total GVA for each broad industrial sector in Lincoln, by 2016 prices. The estimates are calculated on a workplace basis, so allocated to the location where the economic activity takes place.

Overall the graph shows that the value of GVA has increased for most industrial sectors in Lincoln since 2010. Those with the greatest increase in GVA include wholesale and retail, human health and social work activities, and manufacturing.

Public administration and defence is notable in its decline in GVA contribution, perhaps stemming from public sector funding cuts following the 2008 recession. Real estate activities have also seen a reduction in GVA since 2010, albeit by a smaller magnitude.

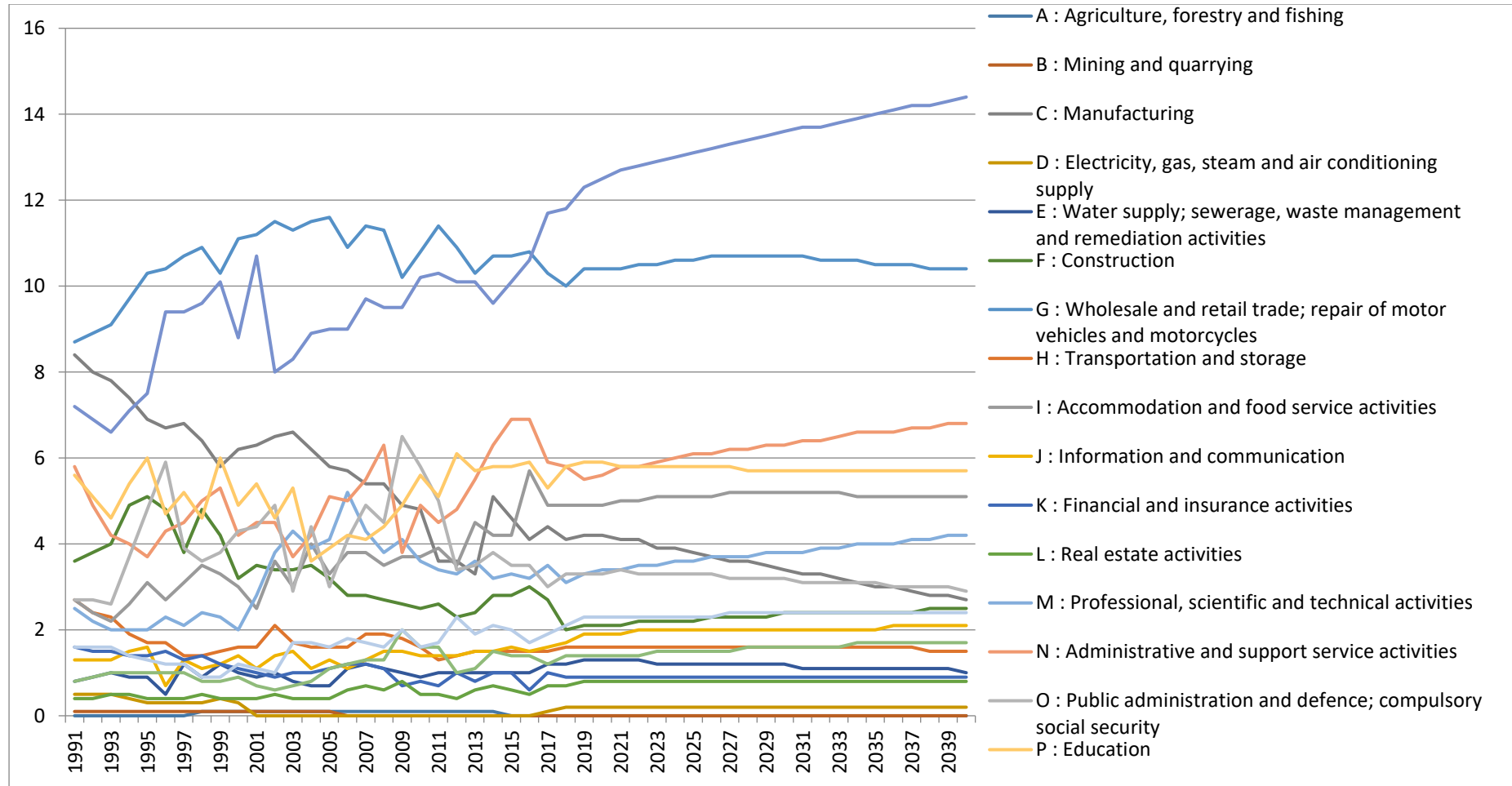
Graph 18 – Regional gross value added (balanced) by industry: local authorities by NUTS 1 region (£million, 2016 prices)



Source: Office for National Statistics (2018)

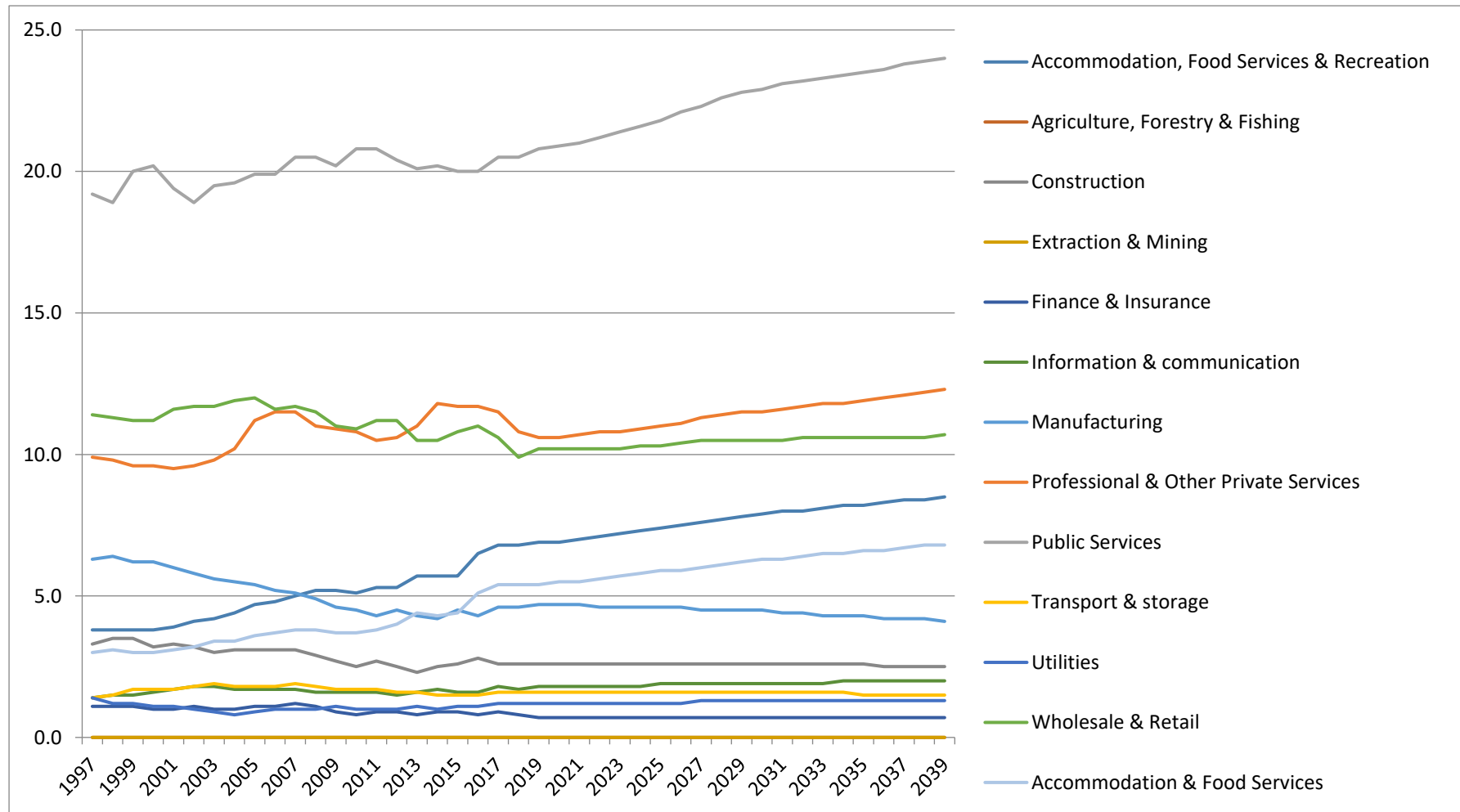
3.7 Employment Forecasts

Graph 19: Oxford Economics Employment Forecasts for Lincoln city (thousands)



The graph above sets out the projections from Oxford Economics for the City of Lincoln to 2039. Modest growth is projected on a sector by sector base for the city. The areas projected to grow most significantly are Human Health and Social Work Activities and Administrative and Support Service Activities.

Graph 20: Experian Employment Forecasts for Lincoln city (thousands)



The Experian model broadly agrees (on the basis of the graph shown above) that the largest growth will be in public services and that growth overall will be modest.

SECTION 4 – PEOPLE AND COMMUNITIES

4.1 Population

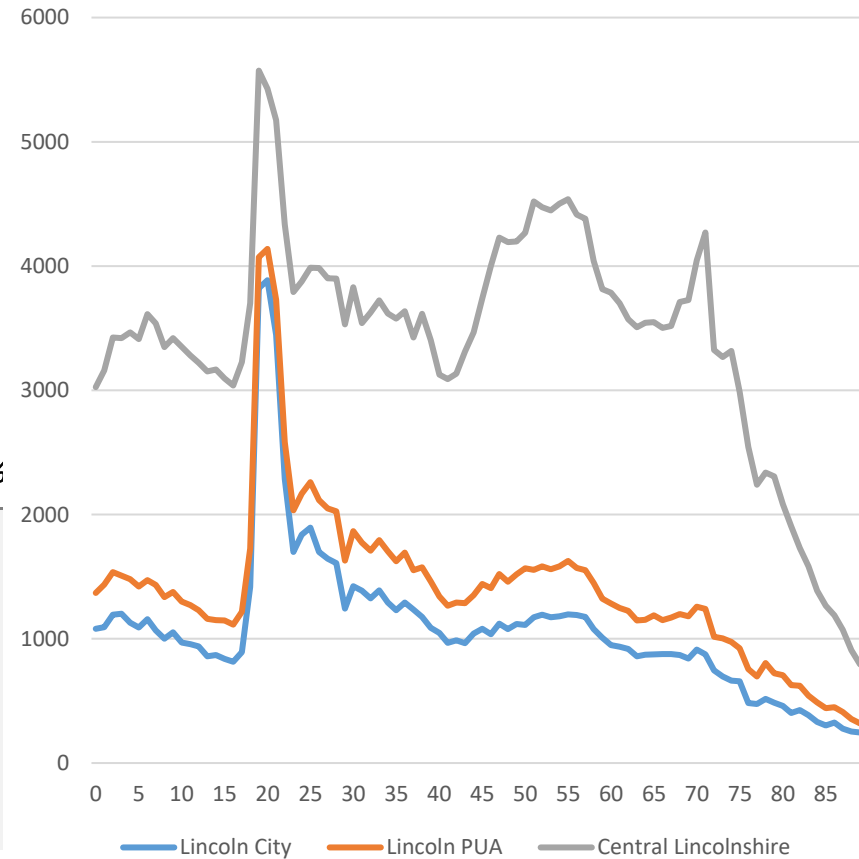
Lincoln Principal Urban has a resident population of 127,896, of which 99,039 live within the City of Lincoln local authority boundary. The population of Lincoln has grown by 1,974 residents or 2% since 2015, which is in line with the Greater Lincolnshire and national averages. The population of the Principal Urban Area has increased by 3,816 or 3%. The population growth of the Principal Urban Area outside the Lincoln boundary therefore accounts for almost half of the population growth of the PUA.

Table 1: Resident Population 2015 and 2018

	2015	2018	Increase in residents	%
<i>Lincoln</i>	97,065	99,039	1,974	
<i>Lincoln PUA</i>	124,080	127,896	3,816	
<i>Central Lincolnshire</i>	301,753	309,893	8,140	
<i>Greater Lincolnshire</i>	1,067,200	1,087,700	20,500	
<i>Great Britain</i>	63,288,400	64,553,900	1,265,500	

Source: ONS mid-year population estimates, 2018

Graph 21: The Age Profile of Lincoln City, PUA and Central Lincolnshire



Source: ONS mid-year population estimates, 2018

4.2 Labour Market

The Lincoln Principal Urban Area has approximately 82,000 residents of working age (16-64). Of these, around 63,000 or 76.6% are economically active; that is in employment or unemployed and actively seeking work. The economic inactivity rate is greater for Lincoln and the Lincoln PUA when compared with the Greater Lincolnshire and Great Britain. This can be partly attributed to the high student population, which accounts for nearly half of those who are economically inactive in Lincoln.

Table 2: Labour Market Activity

	<i>Lincoln</i>	<i>Rest of PUA</i>	<i>Lincoln PUA</i>	<i>Greater Lincs</i>	<i>GB</i>
<i>Economically Active</i>	75.1%	83.0%	76.6%	79.0%	78.9%
<i>In employment</i>	73.0%	79.2%	74.2%	75.0%	75.6%
<i>Unemployed</i>	4.8%	3.8%	4.6%	4.9%	4.1%
<i>Economically Inactive</i>	24.9%	17.0%	23.4%	21%	21.1%

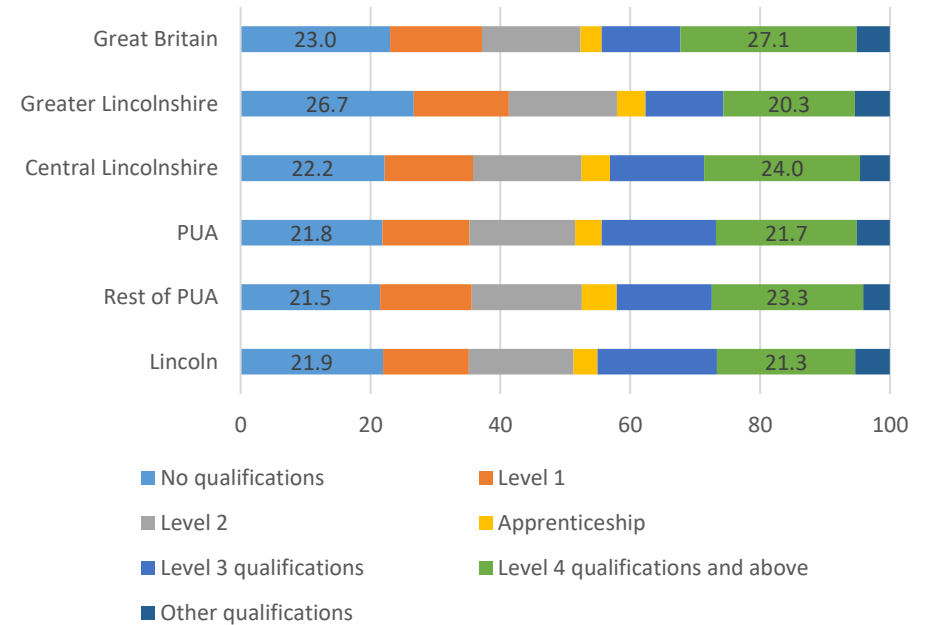
Source: Annual Population Survey 2018 and Census 2011

4.3 Skills

Detailed information on levels of qualifications (as a proxy for skills) is only available for smaller geographies (such as ward) from the 2011 Census. As the graph shows, in 2011, the qualifications profile of Lincoln and the PUA were broadly similar, with around 22% lacking any qualifications, and 21% with at least a level 4 qualification. The wards outside the Lincoln boundary that make up the 'rest of the PUA' had a slightly higher proportion of those with level 4 qualifications.

For level 4 qualifications, all areas lagged behind the profile for Great Britain, where 27% of the population aged over 16 were qualified to this level.

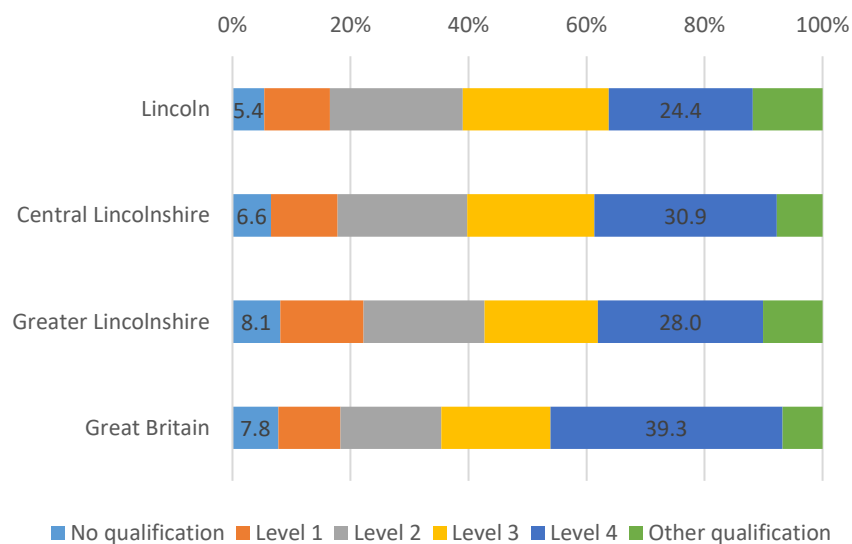
Graph 22: Highest level of Qualification for residents aged 16 and over (%), 2011



Source: Census 2011

As the following graph shows, the British population has become more qualified over the last decade, with 39% of residents aged 16 and over now qualified to level 4 (degree level) and above. In Lincoln, almost a quarter of residents are now level 4 qualified. The proportion of those that are qualified to this level in Central Lincolnshire, at 31%, is greater still and exceeds the Greater Lincolnshire average.

Graph 23: Highest level of Qualification for residents aged 16 and over, 2019



Source: Annual Population Survey, 2019

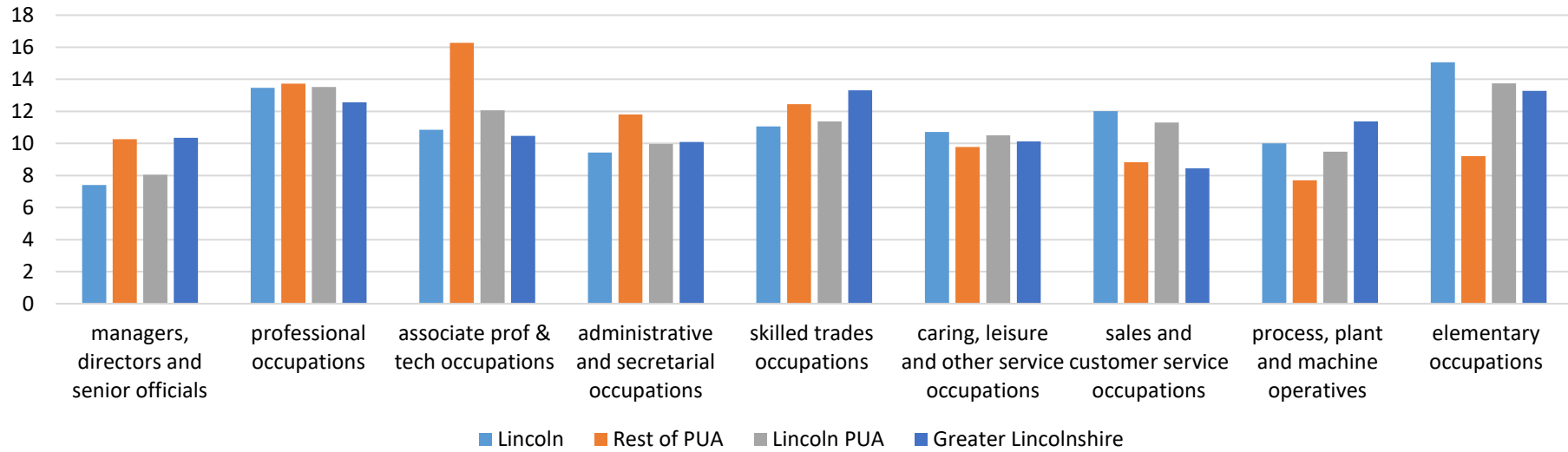
4.5 Occupations

Table 3: Employment by Occupations (%), 2019

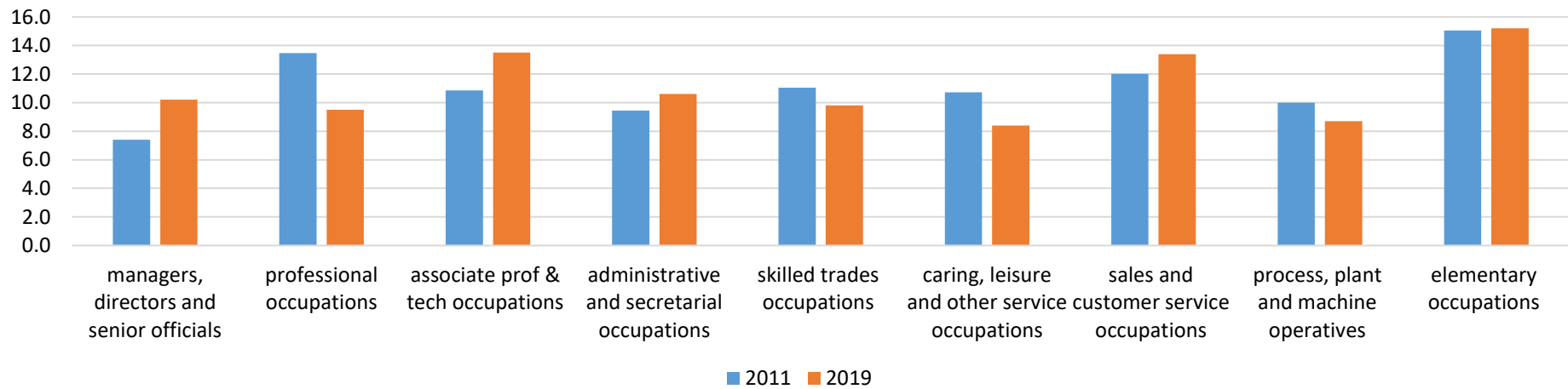
	Lincoln	Central Lincolnshire	Greater Lincolnshire	Great Britain
managers, directors and senior officials	10.2	9.1	11.8	11.1
professional occupations	9.5	15.5	13.8	21.0
associate prof & tech occupations	13.5	11.8	10.9	14.8
administrative and secretarial occupations	10.6	9.5	7.9	9.8
skilled trades occupations	9.8	13.9	13.2	10.0
caring, leisure and other service occupations	8.4	10.2	11.4	9.0
sales and customer service occupations	13.4	9.5	7.9	7.3
process, plant and machine operatives	8.7	7.8	10.9	6.3
elementary occupations	15.2	12.8	11.8	10.3

Source: Annual Population Survey, 2019

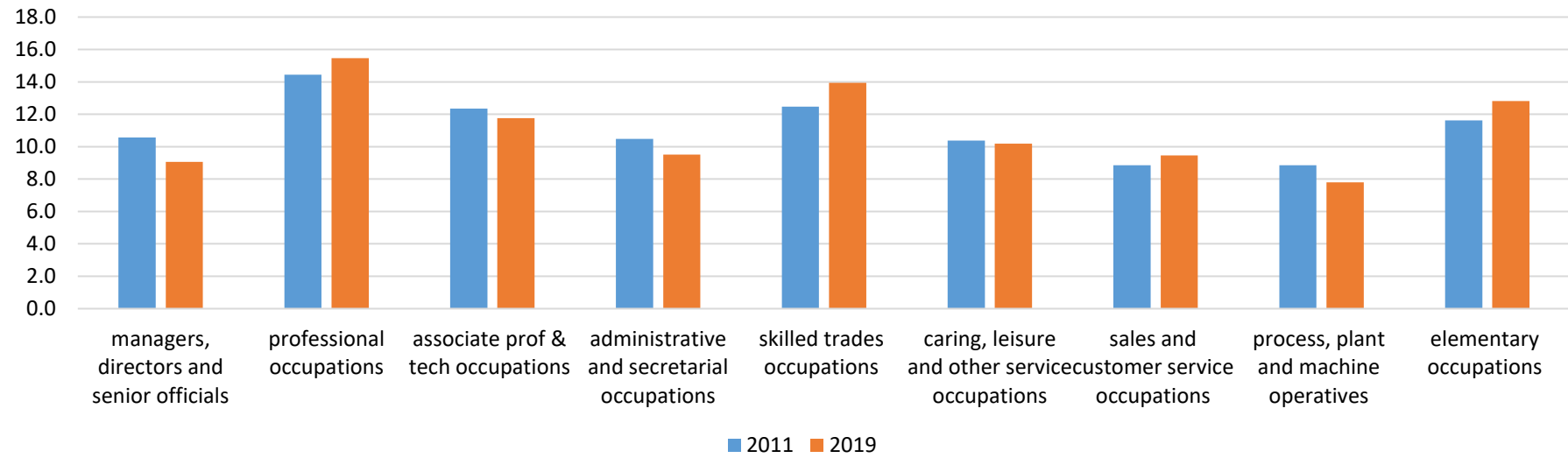
Graph 24: Employment by Occupation in Lincoln at the time of the 2011 Census (%)



Graph 25: Employment by Occupation in Lincoln City, 2011-2019 (%)



Graph 26: Employment by Occupation in Central Lincolnshire, 2011 and 2019 (%)



4.4 Wages

Average wages for Lincoln and surrounding districts have historically been below that for the country overall. It is not possible to get details of wages for the Lincoln PUA, but the table below presents gross weekly wages for Lincoln and the other Central Lincolnshire districts of North Kesteven and West Lindsey, along with Greater Lincolnshire.

The gross weekly wage of those who work in Lincoln was £559 in 2019, which is almost £150 less than the average national weekly wage. While average wages across Great Britain have increased by 17% between 2010 and 2019, they have grown by no more than 5% in Lincoln. This suggests that the economy of the City continues to be dominated by low wage employment. The comparison between residence- and workplace-based wages does not suggest a big difference between those who live in Lincoln and those who work in Lincoln.

The wage growth in North Kesteven and West Lindsey far exceeds the national average, however, which suggests strong productivity growth across the wider Central Lincolnshire economy. In the case of North Kesteven, some of this may be driven by business activity in North Hykeham, although it is not possible to confirm this using this dataset. Across all three Central Lincolnshire districts, the residence-based wages are stronger than the workplace-based wages, which suggests that out-commuting or remote working are playing a role in pushing up average wages.

Graph 27: Mean Gross Weekly Pay, 2010 and 2019

	Workplace-based			Residence-based		
	2010	2019	% change	2010	2019	% change
Lincoln	£531	£559	5%	£551	£574	4%
North Kesteven	£491	£608	24%	£525	£631	20%
West Lindsey	£501	£607	21%	£561	£651	16%
Greater Lincolnshire	*£539	£589	*9%	*£554	£606	*9%
Great Britain	£601	£706	17%	£602	£706	17%

Source: Annual Survey of Hours and Earnings, 2020

*Greater Lincolnshire data only available from 2014

Gross weekly wage is for £559 by place of work and £573 by place of residence

SECTION 5 – BENCHMARKING

SECTION 5. Benchmarking

Lincoln is a historic city, which can be benchmarked against a number of peer cities. Analysis of the list of Cipfa near neighbours from an audit perspective and consideration of the list of its similarity in terms of role and function with the local authorities that network as part of the England's Historic Cities group provides the following listing of comparators:

- Canterbury
- Cambridge
- Carlisle
- Exeter
- Gloucester
- Ipswich
- Mansfield
- Oxford
- St Albans
- Worcester

The assessment of the towns to include has included a consideration of their spatial profile. Cambridge, Canterbury and Carlisle as local authority areas have larger hinterlands but are included to give good geographical coverage. Mansfield is included because it is a near neighbour and along with Ashfield is in the Centre for Cities benchmarking list, which we have followed as our guiding principle for the benchmarking process. Durham,

5.1 Business and Innovation

which would also be a good fit is excluded because as part of a county unitary the data for the city is hard to isolate. Salisbury and Lancaster have hinterlands, which are so large they are not usefully comparable.

The Centre for Cities benchmarking process involves the following themes:

- Business and Innovation
- Demography
- Exports
- Housing
- Industrial Structure
- Jobs/Employment
- Size
- Skills/Wages/Inequality
- Travel and Environment
- Welfare

In total 35 variables based on a nuance of this list, themed around the measures which are most straightforwardly accessible, are considered to provide a ranking on each benchmarked area.

This area of benchmarking considers the fluctuations in the local economy, by comparing rates of business births and deaths. It examines “churn” based on starts and closures as a % of all businesses. It looks at entrepreneurship in terms of the stock of businesses per 10,000 workers and it looks at productivity in the context of GVA per worker.

Lincoln emerges as a very stable economy. It has the smallest rate of business births and deaths within the list. It also has a low level of starts and closures as a percentage of all its businesses. It has the lowest stock of businesses per 10,000 people and the third lowest GVA per worker. In very simple terms as a small City it can be characterised as having a low level of business dynamism.

	Births Per 10,000 popn		Deaths Per 10,000 popn		Churn Starts - closures as % of all		Stock Businesses per 10000 people		GVA per Worker
Lincoln	19.750	Lincoln	17.927	Cambridge	-0.001	Lincoln	154	Mansfield	16073
Mansfield	25.919	Mansfield	21.707	Carlisle	0.007	Mansfield	178	Canterbury	19839
Carlisle	26.463	Carlisle	24.089	St Albans	0.008	Worcester	301	Lincoln	22243
Worcester	38.767	Worcester	32.388	Lincoln	0.012	Carlisle	320	Carlisle	23774
Gloucester	45.020	Canterbury	38.536	Oxford	0.014	Gloucester	335	Ipswich	24728
Canterbury	45.808	Gloucester	39.507	Gloucester	0.016	Oxford	363	Gloucester	26198
Cambridge	48.108	Oxford	43.702	Canterbury	0.019	Ipswich	376	Worcester	26860
Oxford	48.686	Ipswich	47.054	Worcester	0.021	Canterbury	383	St Albans	29130
Ipswich	57.202	Cambridge	48.506	Exeter	0.022	Cambridge	395	Exeter	31446
Exeter	63.611	Exeter	54.524	Mansfield	0.024	Exeter	414	Cambridge	38900
St Albans	87.791	St Albans	81.989	Ipswich	0.027	St Albans	690	Oxford	41848
England	60.747	England	53.217	England	0.018	England	414	England	29356

5.2 Demography

Lincoln is mid ranked in terms of 18-29 year olds (its pipeline of talent) and in terms of 45-64 year olds (more mature workers) it is also mid ranked, Lincoln has a very high proportion of over 65 year olds. Overall it has a moderately positive demographic profile with a moderate stock of younger workers and a high proportion of over 65s. Lincoln is relatively modest in the diversity of its population having relatively few residents not born in the UK (albeit apart from Oxford and Cambridge which are centres of international learning the whole range across the cities considered is 5 to 13%)

	18-29		45-64		65+		Not born in UK
Carlisle	0.11	Mansfield	0.19	Mansfield	0.12	Carlisle	0.05
Ipswich	0.13	Cambridge	0.20	Cambridge	0.13	Mansfield	0.06
Gloucester	0.14	Oxford	0.21	Exeter	0.15	Worcester	0.08
St Albans	0.15	Exeter	0.22	Oxford	0.16	Lincoln	0.10
Canterbury	0.16	Lincoln	0.23	Canterbury	0.16	Gloucester	0.10
Worcester	0.19	Canterbury	0.24	St Albans	0.17	Canterbury	0.11
Lincoln	0.24	Worcester	0.25	Worcester	0.17	Exeter	0.11
Exeter	0.27	St Albans	0.26	Carlisle	0.17	Ipswich	0.12
Oxford	0.28	Carlisle	0.26	Gloucester	0.19	St Albans	0.13
Cambridge	0.30	Gloucester	0.28	Lincoln	0.20	Oxford	0.28
Mansfield	0.32	Ipswich	0.28	Ipswich	0.22	Cambridge	0.29
England	0.15	England	0.26	England	0.18	England	0.14

Sources: ONS Mid Year Population Estimate and Census 2011

5.3 Housing

Lincoln has a distinctively high number of rented properties. It has a relatively modest number of full or part owned properties compared to the city norms within this cohort. The City has a very modest affordability ratio with relatively low housing values.

	% Total Rent		% Owned		Affordability- cost compared to average wages per year		Total Number of Houses		Average Cost of a House
St Albans	0.26	Cambridge	0.50	Carlisle	5.2	Lincoln	39,825	Mansfield	134563
Carlisle	0.30	Oxford	0.50	Mansfield	5.6	Worcester	42,042	Carlisle	138190
Gloucester	0.31	Lincoln	0.57	Lincoln	5.8	Mansfield	44,928	Lincoln	152604
Canterbury	0.32	Ipswich	0.58	Ipswich	7.0	Cambridge	46,714	Ipswich	198316
Mansfield	0.32	Exeter	0.62	Gloucester	7.1	Carlisle	48,342	Gloucester	203502
Worcester	0.33	Worcester	0.67	Worcester	7.2	Exeter	49,242	Worcester	211395
Exeter	0.38	Mansfield	0.68	Exeter	8.6	Gloucester	50,363	Exeter	255773
Ipswich	0.42	Canterbury	0.68	Cambridge	8.8	Oxford	55,375	Cambridge	302549
Lincoln	0.43	Gloucester	0.69	St Albans	11.8	St Albans	56,140	Oxford	403543
Oxford	0.50	Carlisle	0.70	Oxford	12.8	Ipswich	57,298	Canterbury	448292
Cambridge	0.50	St Albans	0.74	Canterbury	12.9	Canterbury	60,771	St Albans	491562
England	0.35	England	0.65	England	8.0	England	22,063,368	England	246453

Sources: 2011 Census, HM Treasury House Price Data

5.4 Industrial Structure

Lincoln has a very modest number of Knowledge Intensive Businesses, a relatively high proportion of manufacturing employers and mid ranking dependency on the service sector. This manifests itself in a relatively modest proportion of private businesses and a relatively higher proportion of public agency jobs in its service sector. The majority of Cities have a higher proportion of service sector jobs in the public sector than the England average as a consequence of their functionality as major public service centres.

	Knowledge Intensive Business %		Manufacturing %		Services %		Public Service %		Private Services %
Carlisle	12	Canterbury	1.7	Carlisle	83	St Albans	18	Oxford	41
Lincoln	14	Exeter	3	Mansfield	84	Carlisle	28	Worcester	50
Canterbury	16	Ipswich	3	Worcester	86	Mansfield	29	Canterbury	52
Oxford	18	Cambridge	3	Gloucester	88	Ipswich	32	Lincoln	52
Gloucester	19	St Albans	3	Ipswich	88	Gloucester	35	Gloucester	53
Mansfield	20	Oxford	4	Lincoln	88	Exeter	36	Exeter	54
Exeter	21	Gloucester	6	Exeter	90	Worcester	36	Carlisle	55
Ipswich	21	Lincoln	7	Oxford	90	Lincoln	37	Mansfield	55
Worcester	21	Worcester	9	St Albans	91	Canterbury	39	Cambridge	56
St Albans	26	Mansfield	10	Canterbury	91	Cambridge	41	Ipswich	56
Cambridge	28	Carlisle	11	Cambridge	97	Oxford	49	St Albans	73
England	23	England	8	England	86	England	26	England	60

Source: Business Register and Employment Survey 2018

5.5 Jobs/Employment

Lincoln has the highest unemployment in its cohort of comparators. This involves a relatively high proportion of 16 -24 year olds. The City has a small working population, relatively high levels of economic inactivity and a relatively very small proportion of people employed as a proportion of the working population. It has a relatively under developed private sector stock of jobs compared to its comparators.

	Claimants as a proportion of residents aged 16-64		16-24 as a proportion of claimants		Working Pop'n		Econ inactive
Cambridge	1.6	Mansfield	0.09	Carlisle	65625	Gloucester	16.4
Exeter	1.6	Cambridge	0.13	Mansfield	67031	Worcester	17.2
St Albans	1.6	Gloucester	0.15	Lincoln	67083	Oxford	17.7
Oxford	1.9	St Albans	0.15	Worcester	67200	Cambridge	18.6
Canterbury	2.2	Lincoln	0.17	Gloucester	80714	Ipswich	18.7
Carlisle	2.4	Oxford	0.19	Cambridge	86563	Exeter	19.5
Worcester	2.5	Carlisle	0.19	Exeter	87188	Mansfield	20.5
Gloucester	2.8	Canterbury	0.23	Ipswich	87917	Carlisle	20.6
Mansfield	3.2	Ipswich	0.24	St Albans	88125	Lincoln	26
Ipswich	3.6	Worcester	0.34	Canterbury	105682	St Albans	26.4
Lincoln	3.6	Exeter	0.40	Oxford	107895	Canterbury	29.6
England	2.9	England	0.19	England	34848276	England	20.9

Sources: DWP Benefits Claimant Data, ONS Mid Year Population Estimates; Nomis Local Authority Area Profiles

	% employed as % of the Working Popn		% Private Sector Jobs		% Jobs Public Money		Ratio
Canterbury	68.2	Oxford	51	St Albans	18	Oxford	1.04
Lincoln	70.4	Cambridge	59	Carlisle	28	Cambridge	1.44
St Albans	72.0	Canterbury	61	Mansfield	28	Canterbury	1.56
Mansfield	76.3	Lincoln	63	Ipswich	32	Lincoln	1.70
Carlisle	77.0	Exeter	64	Gloucester	35	Exeter	1.78
Ipswich	77.7	Worcester	64	Exeter	36	Worcester	1.78
Exeter	78.9	Gloucester	65	Worcester	36	Gloucester	1.86
Cambridge	79.8	Ipswich	68	Lincoln	37	Ipswich	2.13
Worcester	80.3	Carlisle	72	Canterbury	39	Carlisle	2.57
Oxford	80.4	Mansfield	72	Cambridge	41	Mansfield	2.57
Gloucester	80.8	St Albans	82	Oxford	49	St Albans	4.56
England	76.2	England	64	England	36	England	1.78

5.6 Size

Lincoln is the smallest city in the comparator list by population but punches modestly above its weight in terms of GVA per worker and total stock of jobs.

	GVA		Population		Total Jobs
Mansfield	16073	Lincoln	99,039	Mansfield	40000
Canterbury	19839	Worcester	101,891	Worcester	54000
Lincoln	22243	Carlisle	108,387	Lincoln	56000
Carlisle	23774	Mansfield	108,841	Carlisle	57000
Ipswich	24728	Cambridge	125,758	Gloucester	63000
Gloucester	26198	Gloucester	129,285	Canterbury	66000
Worcester	26860	Exeter	130,428	Ipswich	72000
St Albans	29130	Ipswich	137,532	St Albans	75000
Exeter	31446	St Albans	147,373	Exeter	92000
Cambridge	38900	Oxford	154,327	Cambridge	106000
Oxford	41848	Canterbury	164,553	Oxford	121000

Sources: ONS Regional/Local GVA Tables, ONS Mid Year Population Estimates, Business Register and Employment Survey

5.7 Skills/Wages/Inequality

Lincoln has comparatively low levels of wages and relatively poor education outcomes compared to its comparator cities.

	Weekly Wages		IMD Education
Mansfield	470.7	Mansfield	18
Carlisle	518.3	Ipswich	35
Lincoln	519.1	Lincoln	57
Worcester	543.4	Carlisle	83
Ipswich	548.9	Gloucester	85
Gloucester	549.7	Canterbury	187
Exeter	570.6	Exeter	194
Canterbury	626.6	Worcester	201
Oxford	630.9	Oxford	232
Cambridge	631.9	Cambridge	284
St Albans	766.6	St Albans	316
England	591.3	England	158

Sources: English Indices of Deprivation 2019, Annual Survey of Hours and Earnings

5.8 Travel/Environment

Lincoln has a relatively low stock of people who work mainly from home a moderate level of public sector commuting, the City also has a relatively modest carbon footprint.

	%Work Mainly From Home		% Public Transport		CO2 Per Capita
Gloucester	0.07	Worcester	0.06	Ipswich	3
Ipswich	0.07	Carlisle	0.07	Lincoln	3.5
Lincoln	0.07	Mansfield	0.07	Worcester	3.5
Mansfield	0.08	Gloucester	0.08	Canterbury	3.6
Worcester	0.08	Lincoln	0.08	Gloucester	3.6
Exeter	0.09	Canterbury	0.10	Exeter	3.7
Carlisle	0.10	Ipswich	0.10	Mansfield	4.1
Cambridge	0.11	Cambridge	0.11	Cambridge	4.3
Oxford	0.11	Exeter	0.11	Oxford	4.4
Canterbury	0.12	Oxford	0.19	Carlisle	5.5
St Albans	0.13	St Albans	0.21	St Albans	6.3

Sources 2011 Census, DECC CEO2 Emissions Per Capita

SECTION 6 – KEY INFORMANT NARRATIVES

As part of the evidence gathering for the Lincoln economic growth study, interviews were undertaken with the following:

- Julian Free, Pro Vice Chancellor, University of Lincoln
- Tom Blount, Boole Technology Centre, Lincoln Science and Innovation Park
- Sukhy Johal, Director of Centre for Culture and Creativity, University of Lincoln
- Ben James, Mosaic Digital Hub
- Victoria McNaughton, Mosaic Digital Hub
- Lewis Stringer, British Business Bank
- David Rossington, Investors in Lincoln
- Tim Bradford, Banks Long and Co
- Herman Kok, Lindum Construction
- Dan Westlake, Digital Lincoln
- Investors in Lincoln – at its Board Meeting on 6 February 2020

Key emerging findings include:

6.1 Key Trends

Some key developments affecting the Lincoln economy include:

Growth of Waddington: The growth of Istar NATO headquarters at Waddington is attracting military contractors to Lincoln, including to Teal Park (QinetiQ, N3 military systems, 3SDL Communications, Leonardo) and to the Boole Technology Centre at Lincoln Science and Innovation Park (METIS Aerospace, Ebeni, SRC UK). Although many of these companies

are out-stations of the main companies there is scope to persuade them to bring their headquarters to Lincoln, particularly as the MOD is committed to Istar expansion. The LSIP is currently embarking on a second building to house tenants that have outgrown the Boole Technology Centre, and it is likely that the majority of tenants in the new building will be from the defence sector.

Growth of the University: the University of Lincoln student population has exceeded 15,000 which was intended to be the optimum size of the institution. The University has recently opened a number of new schools in STEM subjects (e.g. Chemistry, Engineering, Geography, Pharmacy) and the Medical School

Lincolnshire Institute of Technology: the significant investment planned in Lincoln College to enable it to create a step change in its technical training offer, alongside the enhancement of the outreach facilities of the University Technical College (UTC) provide scope to increase the scale and range of technical training opportunities in the City.

Opening of Mosaic Digital Hub: the hub, which opened in the city centre October 2019, has Scholarpak as its anchor tenant and four offices have already been taken, along with many more hot desks. The hub is intended to provide a focal point for the sector and to help build the digital community; Digital Lincoln holds its meet ups there. The potential for knowledge sharing and collaboration, and to create an environment that counteracts the isolation of lone working in the sector.

Investment in the High Street and Transport Hub: the regeneration of the Cornhill area, longer term plans for the redevelopment of the South High Street area, likely to lead to a concentration of the retail core and

the increase in the number of trains to London all provide significant optimism for future growth in the functional core of the City.

Eastern Bypass: The imminent completion of the Eastern Bypass will open up significant land for employment uses. It will help to remove the constraints to growth in a significant quarter of the City.

A World Class Tourism Offer: The completion of the HLF investment in the Cathedral, complemented by the recent Bomber Command museum provides a very potent mix of tourism opportunities connected with the City, which allied to its enhanced external connectivity by train and an improved circulation through the Eastern Bypass all provide significant potential for it to grow its role as a visitor economy.

6.2 Ideas around Inclusive Growth

Commentators identified the key agenda around Inclusive Growth:

Ensuring career pathways is something mentioned by a number of interviewees. This is only possible where clusters grow to the size which enables businesses to 'hold people' and enable them to move within/between companies.

The University, Boole Technology Centre, Mosaic all identify their role in creating and retaining jobs and improving graduate retention. For example, the University of Lincoln has created 2,000 direct jobs and Boole Technology 90 jobs. A key aim of Mosaic is to "keep people here and to make Lincoln as a destination instead of Nottingham or Sheffield".

Mosaic is intending to create linkages to local schools to inform them about careers in the digital sector. It highlights the role of the digital

sector in facilitating innovation in other sectors in the city. Its tenant Scholarpack runs coding clubs for young people.

The Sincil Bank area was discussed which was described by some as having poor quality housing that was in need of updating. As students increasingly move into purpose-built accommodation there is also the risk that some houses in this area could be left empty.

The opening up of the North East quadrant of the City through the development of the Eastern Bypass will create opportunities to repurpose key sites such as the Allenby Industrial Estate and provide key employment opportunities in one of the most deprived areas of the City.

6.3 Key Sectors

The following key sectors were identified by informants:

Defence – driven by RAF Waddington this sector is important for the supply chain that is growing in Lincoln, but also for the skilled workforce it brings to Lincoln

Agri tech – this sector is driven by sites just north of the City at Riseholme and the Bishop Burton facility at the Lincolnshire Showground, linking into the wider history of agriculture in Lincolnshire and facilitating innovation within the sector, underpinned by the Holbeach Centre for Food Manufacturing, Lincoln Centre for Agri-Technology, and Boole Technology Centre.

Digital – this sector is described as small but "rocketing", underpinned by growth in defence, HE and agri-tech. The newly opened Mosaic hub

provides a focal point for the sector in the City, though Hykeham is also a key area of growth.

Healthcare –this sector is very important with the presence of the County Hospital and the development of Lincoln Medical School, which is being established partly to help attract and retain medical professionals, alongside the Schools of Pharmacy and Chemistry at the University of Lincoln.

Engineering – this sector was identified as important but vulnerable, and in need of support to ensure jobs are retained in Lincoln particularly for companies whose HQs are elsewhere. The Lincoln Science and Innovation Park was identified as a key driver in the context of this sector as is the School of Engineering at the University of Lincoln, which is a joint venture with Siemens.

Retail – this sector was described as lacking resilience and beholden to national trends. There were views however that a consolidation of the retail core north of the railway line, with the St Marks area evolving a residential character over time would help build the resilience of the offer. Key opportunity sites such as the redevelopment of the indoor market were identified as part of the discussions.

Visitor Economy/Creative Industries (also related to digital and retail) - respondents highlighted this sector as important for ensuring ‘stickiness’ of Lincoln for arts graduates (e.g. via provision of makerspaces) and in its role in the quality of life offer of Lincoln. However, theatres, museums and galleries are under threat due to funding constraints. Some aspects of creative industries link strongly across to digital (e.g. craft and design, web design, marketing). Enhanced connectivity to London and the scale

of the investment in the Castle/Cathedral offer were highlighted as causes for optimism.

Social Economy – around themes such as creative industries, local growing, health and care there has been a blossoming of the informal and social economy sectors in Lincoln. This in some sense marks its transition to a mature University City with its relatively more dynamic mix of people and interests driving social innovation around enterprise. This aspect of the economic development of the City was highlighted as providing the potential to address market failure in a number of areas and potentially linking to the inclusive growth agenda.

6.4 Key neighbourhoods

The following key sites sections of the City were identified as potential areas of future interest

Teal Park – for employment growth. Only a small proportion of the site is currently in use and it is strategically placed for easy access to major infrastructure and to benefit from the growth currently being experienced in north Hykeham.

LSIP (together with St Marks and the University) – this sector was identified as a key City Centre area for employment growth.

Sincil Bank – This was identified as a key area for redevelopment of industrial sites and ensuring Inclusive Growth for local residents. The agenda here was described as being about ensuring that local people can access newly created jobs and are connected to the City.

Western Growth Corridor – This was reaffirmed as the premier opportunity site in the City. Major challenges around connecting it effectively into the wider infrastructure needed to ensure its success, remain. Some commentators were cynical about the ability to achieve its full potential.

6.5 Key Constraints

A number of key constraints were identified in terms of the physical infrastructure of the City these involved principally

Lack of superfast broadband

Lack of power capacity

Low profile of Lincoln – Lincoln was described as less well known than it might be and a place where from the perspective of some there was still limited ambition. One commentator characterised it as “a brilliant city but people don’t know where it is.” The role of Visit Lincoln in raising the city’s profile was recognised. A number of external commentators identified that whilst there had been prodigious growth as a consequence principally of the University, Lincoln was starting from a low base and still had a very significant way to go before it is perceived to have the functionality of a credible City on a par with “the big 3: Nottingham, Leicester and Derby” in our region.

6.6 Key Opportunities

Interviewees identified the following key opportunities going forward

Lack of power supply means there is an opportunity to lead the way on power generation via water and solar, and to create jobs in these areas.

Improving the quality of the existing housing stock (e.g. in Sincil Bank) but also ensuring supply of the ‘middle tier’ of housing for young families in Lincoln.

Lincoln should be lobbying for 5G to be rolled out across the city and county – in contrast to the predominantly urban areas that are prioritised currently

The potential to attract HQs of military contractors to Lincoln, particularly as the MOD is committed to Istar expansion at Waddington

The potential for close working relationship between School of Chemistry, Pharmacy and Medical School with Coop pharmacy service facilitated by LSIP – this encompasses all elements of the pharmaceutical supply chain and creates potential for activities such as pharmaceutical testing.

Potential to increase provision of workspace for creative sector businesses and graduates, e.g. through the development of sites such as the Barbican Hotel

Potential to increase viability of theatre spaces like Drill Hall though joint management with LPAC – the Lincoln University Arts Centre

The increase in the frequency of the Lincoln-London direct train service which creates opportunities for city centre businesses – e.g. Mosaic tenants value the city centre location which is convenient for visitors from London

Lincoln as a “smart city” – the potential to bring skills, digital business, infrastructure together and perhaps use the WGC as an opportunity to implement new technology

The creation of a “welcoming administrative framework” – an open door that businesses can walk through to talk to someone, as well as favourable business rates and planning policy. This opportunity includes scope for Lincoln City Council to act as a ‘neutral sorting house’ for businesses seeking support.

Addendum: Lincoln Towns Fund Evidence Base Update

This report provides an update to the original evidence base, to present the latest picture on the impact of Covid-19 on the local economy and a summary of the Central Lincolnshire Needs Assessment which had been recently produced. The report was presented to Town Fund Board on 5 June 2020.

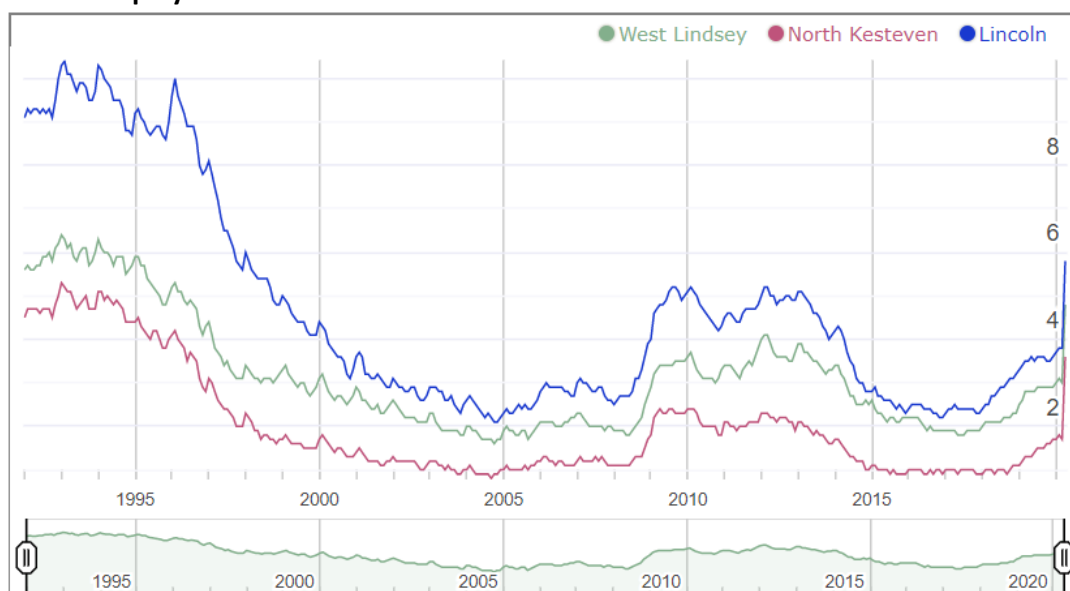
1. Emerging Picture of the Impact of the Coronavirus in Lincoln

We are still in the midst of the Coronavirus pandemic, and the extent of its economic impact is yet to unfold. However, we have conducted some early work on unemployment and furlough rates in Lincoln and other Lincolnshire districts to identify initial trends.

1.1 Unemployment

Graph 1 sets out the long-term trends in the unemployment claimant rate since 1992. As of April 2020, Lincoln's claimant rate (5.8%) is the highest since 1998, and greater than seen during the 2008 recession.

Graph 1: Unemployment Claimant Counts for Central Lincolnshire districts – 1992-2020



Source: ONS Claimant Counts, via NOMIS (2020)

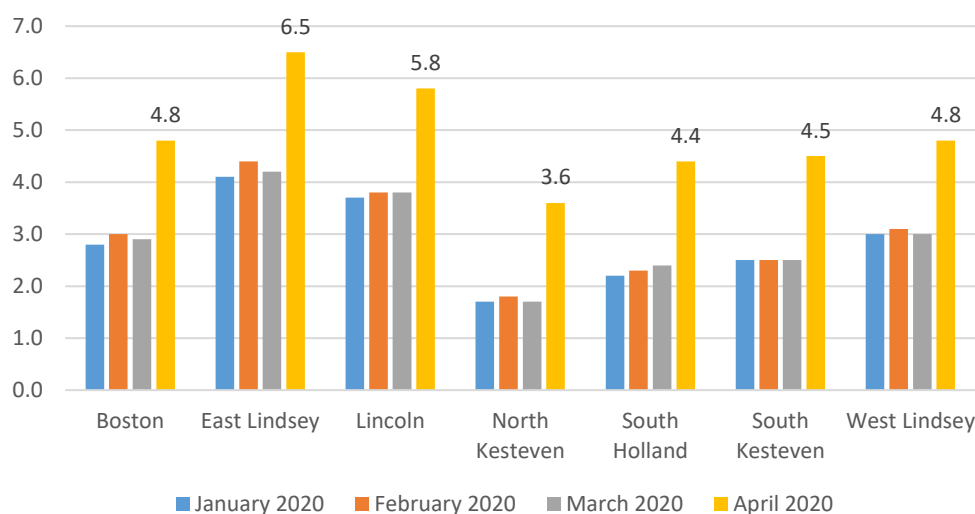
Table 1 and Graph 2 show the change in the number and rate of unemployment claimants between January and April for all local authority districts in Lincolnshire. It shows a significant increase in claims across the county, with more than 9,000 new claimants. Lincoln has the second highest number of claimants, after East Lindsey, although the rate of change is lower than other districts because Lincoln started from a relatively high base of claimants. North Kesteven has seen the greatest change, with its rate doubling since January, albeit from a low base of 1,155.

Table 1: Unemployment Benefit Claims – January-April 2020

	Jan-20	Feb-20	Mar-20	Apr-20	change	% change
Boston	1,170	1,240	1,225	2,005	835	71
East Lindsey	3,180	3,405	3,250	4,985	1,805	57
Lincoln	2,485	2,570	2,555	3,900	1,415	57
North Kesteven	1,155	1,215	1,195	2,450	1,295	112
South Holland	1,215	1,270	1,290	2,420	1,205	99
South Kesteven	2,055	2,125	2,100	3,740	1,685	82
West Lindsey	1,655	1,720	1,680	2,645	990	60
Lincolnshire Total	12,915	13,545	13,295	22,145	9,230	71

Source: ONS Claimant Counts, via NOMIS (2020)

Graph 2: Unemployment Benefit Claims, as % of working age population – Jan-Apr 2020



Source: ONS Claimant Counts, via NOMIS (2020)

Further analysis by age suggests that the claimant rate increase has been highest among those aged 25-49 than for those aged 16-24 and 50+.

1.2 Vulnerability through the lens of furloughing

The RSA has conducted a study to identify local authority districts that are most at risk of job losses¹, based on rates of jobs furloughed. This is based on findings from the ONS Business Impact of Coronavirus Survey (BICS), which identifies the proportion of workforce that has been furloughed among a sample of businesses from different sectors. Analysis of this data undertaken by Oxford Consultants for Social Inclusion (OCSI) suggests that Lincoln, along with Boston, has the lowest proportion of jobs at risk in Lincolnshire.

¹ RSA (2020) One-in-Three Jobs in Parts of Britain at Risk due to Covid-19, available online at: www.thersa.org/about-us/media/2020/one-in-three-jobs-in-parts-of-britain-at-risk-due-to-covid-19-local-data-reveals

Table 2: At Risk Jobs, by local authority district

	% jobs at risk
Boston	23.7-24.7
East Lindsey	34
Lincoln	23.7-24.9
North Kesteven	25.8-27.1
South Holland	25.8-27.1
South Kesteven	24.9-25.8
West Lindsey	25.8-27.1
UK overall	

Source: RSA and OCSI (2020)

The BICS survey has identified the rates of furlough for each sector, as set out in Table 3. The highest rates can be observed in tourism and arts-related activities, while education and health activities show the lowest proportion of jobs on furlough. The RSA identifies that districts with a high proportion of knowledge-intensive businesses are least at risk, while rural districts dependent on tourism and hospitality activities are most at risk.

Table 3: Estimated percentage of sector workforce furloughed, UK

Sector	% on furlough
Manufacturing	31.1%
Construction	46.2%
Wholesale And Retail Trade	21.5%
Accommodation And Food Service Activities	73.3%
Transportation And Storage	32.0%
Information And Communication	13.0%
Professional, Scientific And Technical Activities	13.2%
Administrative And Support Service Activities	31.3%
Education	6.8%
Human Health And Social Work Activities	8.5%
Arts, Entertainment And Recreation	69.9%
All Industries	28.4%

Source: ONS Business Impact of Coronavirus Survey (BICS) (2020)

We have applied a similar methodology to that used by the RSA. This has involved taking the percentage of jobs identified as furloughed for each sector (Table 3) and applying this to the industrial composition of each Lincolnshire local authority district. The employment data for industrial sectors comes from the Business Register and Employment Survey (BRES) 2018, which is publicly accessible via NOMIS. Using this approach, the approximate number of jobs furloughed per sector in Lincoln and other Lincolnshire districts are presented in Table 4 below.

The BICS survey currently does not provide data for public administration and defence, and a number of small sectors such as finance and property. It has therefore not been possible to infer numbers for these sectors. The estimates provided in Table 4 are therefore conservative. Looking at the data for Lincoln, it is estimated that at least 13,000 jobs have been furloughed, which is the third highest volume of jobs after South Kesteven and East Lindsey. Within Lincoln, the visitor economy and retail sector appear to have been hit hardest, with more than 3,000 jobs furloughed in the hospitality sector alone. By comparison, the high proportion of jobs retained in Lincoln's health and education sectors appear to have a protective effect for now.

Table 4: Estimated number of jobs furloughed, by sector and local authority district

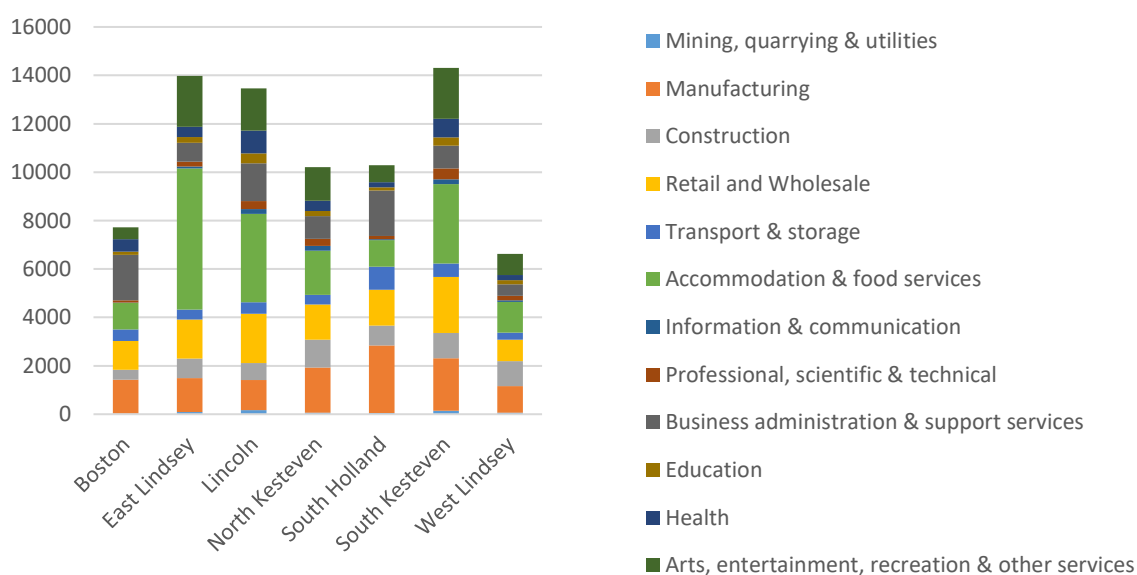
Industry	BB	EL	LC	NK	SH	SK	WL
1 : Agriculture, forestry & fishing*	#	#	#	#	#	#	#
2 : Mining, quarrying & utilities	24	97	174	63	49	139	70
3 : Manufacturing (C)	1,400	1,400	1,244	1,866	2,799	2,177	1,089
4 : Construction (F)	416	809	693	1,155	809	1,040	1,040
5,6,7 : Retail and Wholesale	1,183	1,613	2,043	1,451	1,484	2,311	882
8 : Transport & storage (inc postal)	480	400	480	400	960	560	288
9 : Accommodation & food services	1,095	5,840	3,650	1,825	1,095	3,285	1,278
10 : Information & communication	20	78	195	195	39	195	59
11 : Financial & insurance*	#	#	#	#	#	#	#
12 : Property*	#	#	#	#	#	#	#
13 : Professional, scientific & technical	91	195	325	293	130	455	195
14 : Business administration & support services	1,878	783	1,565	939	1,878	939	470
15 : Public administration & defence*	#	#	#	#	#	#	#
16 : Education	136	238	408	204	136	340	170
17 : Health	510	425	935	425	213	765	213
18 : Arts, entertainment, recreation & other services	489	2,097	1,748	1,398	699	2,097	874
Furloughed jobs (estimated)	7,721	13,973	13,459	10,213	10,289	14,303	6,624
Percentage of all jobs furloughed (estimated)	24%	32%^	24%	26%	26%	26%	25%

Source: Developed using Business Register of Employment Survey (2018) and BICS (2020)

*results for these sectors not provided by the BICS Survey

^analysis by OCSI suggests a furlough rate of 34% in East Lindsey

Graph 2: Estimated number of jobs furloughed, by sector and local authority district



1.3 Discussion

Looking across the two sets of analysis, there are some common observations. Lincoln, East Lindsey and South Kesteven have seen the highest growth in unemployment claims and emerge as the districts with the largest (estimated) number of jobs furloughed.

Lincoln now has a claimant rate of 6%, the highest since 1998. While the surrounding districts of North Kesteven (3.6%) and West Lindsey (4.8%) have lower rates, together the three Central Lincolnshire districts have seen an increase of 4,000 unemployment claims, an increase of 70%. In North Kesteven, the number of new claims in April exceeded the existing claimant base. It is fair to assume that a large proportion of these claimants will live in North Hykeham, which lies within the Lincoln Principal Urban Area and is a key part of the Lincoln economy.

The analysis does not include the public sector. For now, the high proportion of employees employed in education, health and (it is fair to assume) the public sector appears to have a mitigating effect on furloughing rates within Lincoln. However, these sectors may be vulnerable in the medium term when current financial cycles end. With Lincoln home to the City and County Council and other sub-regional public bodies, it may face a disproportionately larger impact from jobs losses/furloughing in this context.

2. Draft Central Lincolnshire Economic Needs Assessment (ENA)

Turley produced the draft ENA for Central Lincolnshire in March 2020. As with the Lincoln Economic Evidence Base, the data presented in the ENA pre-dates the Covid-19 crisis. The ENA examines the economic performance of the three Central Lincolnshire districts, in order to inform the Central Lincolnshire Local Plan (2018-40). It provides an evidence base to underpin decisions around provision of land to accommodate the likely creation of new jobs.

The ENA identifies that Lincoln has experienced strong growth since the last ENA was produced in 2012. In fact, jobs growth had exceeded employment forecasts. In Lincoln in particular the number of new jobs created had already (within 6 years) exceeded the 24 year forecast, by 25%. Jobs growth in North Kesteven and West Lindsey had been steady and consistently over this time.

The Lincoln Economic Evidence Base and the ENA identify similar sector growth patterns, with some minor differences due to the periods of growth examined. As with the Evidence Base, the ENA highlights strong growth in Information and Communication, Business Administration and Support Services, and Arts, Entertainment and Recreation. Information and Communication is identified as representing 15% of total employment growth in Central Lincolnshire. The ENA identifies that Retail jobs have declined in Lincoln in particular, but there has been simultaneous growth in Food Services (such as restaurants and cafes). Trends in occupations are broadly the same as the Evidence Base, with growth in professional and service occupations.

Turley has conducted some sub-regional analysis to identify where jobs growth has occurred; It identifies that a number of areas in the vicinity of Lincoln and North Hykeham have each created over 1,000 new jobs between 2012 and 2018. These include the area around Brayford Pool, Lincoln County Hospital, and Outer Circle Road, which are shown to have concentrations of growing employers. North Hykeham has three areas where at least 500 jobs have been created. Overall, two thirds of local areas (LSOA's) in Central Lincolnshire have seen employment growth, while one third have seen employment decline.

In terms of employment space, the ENA highlights a significant reduction in the vacancy rate for industrial, office and retail employment space between 2012 and 2018, which suggests that previously vacant space has supported employment growth to date. This is true for all districts but most pronounced in North Kesteven. The much lower vacancy rate in 2018 suggests limited capacity to support future employment growth within existing employment space.

Turley kindly shared employment forecasts (from Experian and Oxford Economics) with the University of Lincoln, which means that these were already incorporated into the Evidence Base. These forecast employment declines in the public sector, manufacturing and transport and storage, but continuing growth in professional and scientific, health, and accommodation and food services.

The ENA identifies some broad implications for demand for employment land. Across Central Lincolnshire, fewer than half of new jobs will require office space, warehousing and industrial land. Among these, it estimates highest demand for office space (6.5 ha), and substantially lower for warehouses (4.3 ha) and industrial land (0.9 ha).