# Lincoln Economic Evidence and Growth Study 2020

## SECTION 1. INTRODUCTION

This document provides an economic evidence base to underpin a Growth Strategy for the City of Lincoln.

**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 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

In addition to the desk research and key informant interviews conducted for this study an econometric model has been commissioned. This is currently under construction and once complete will provide a basis for the testing of a number of future economic scenarios in terms of predictions associated with the economic development of the City.

## 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 document provides an economic evidence base to underpin the development of an Economic Growth Strategy for City of Lincoln Council. It sets out the key characteristics of the Lincoln economy, and seeks to identify the key strengths and future opportunities to drive the City's growth ambitions.

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.

Visitor economy, health and care sectors. Growth in Innovate UK funding and potential for further innovation driven by the University and LSIP. LIAT and Lincoln Centre for Autonomous Systems. Lincoln at the heart of the 'Innovation' chapter.

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.

## Section 3 – Employment Base and Priority Sectors

### 3.1 Employment Base

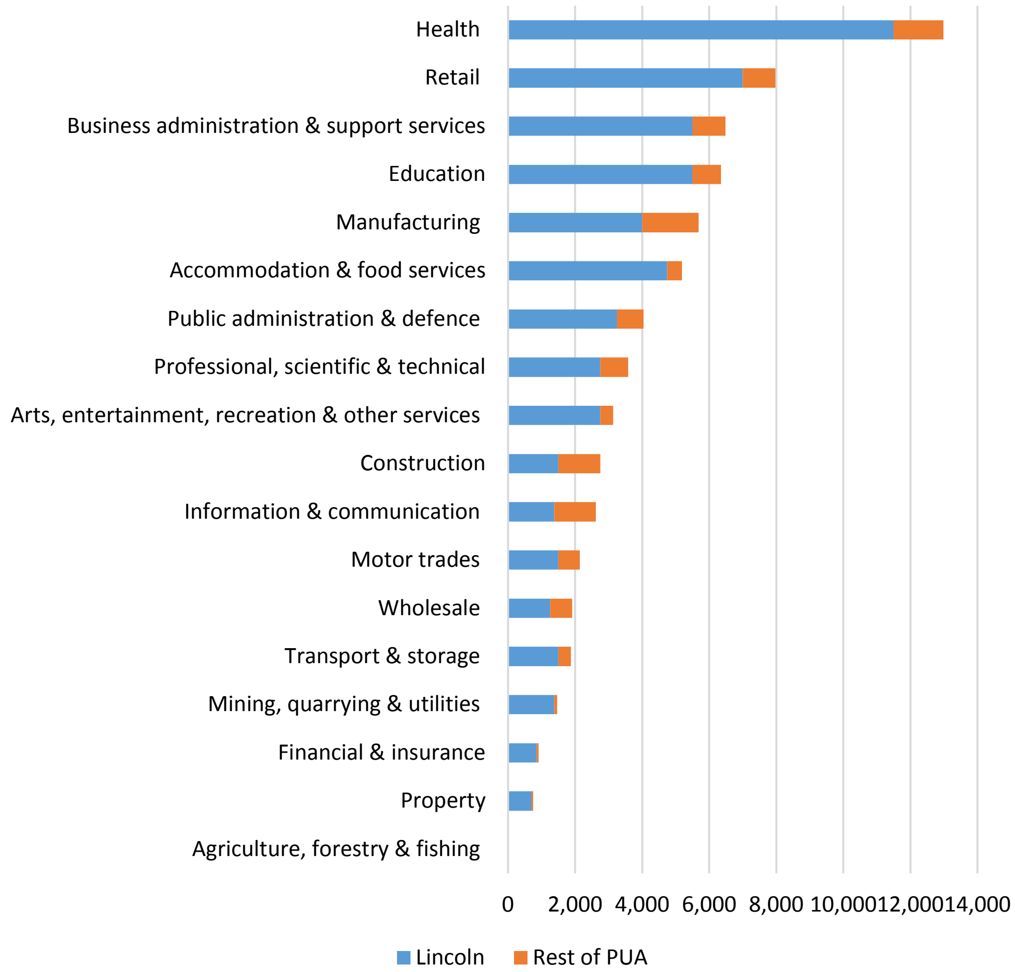
***Hykeham is an important engine of jobs growth for the PUA***

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.

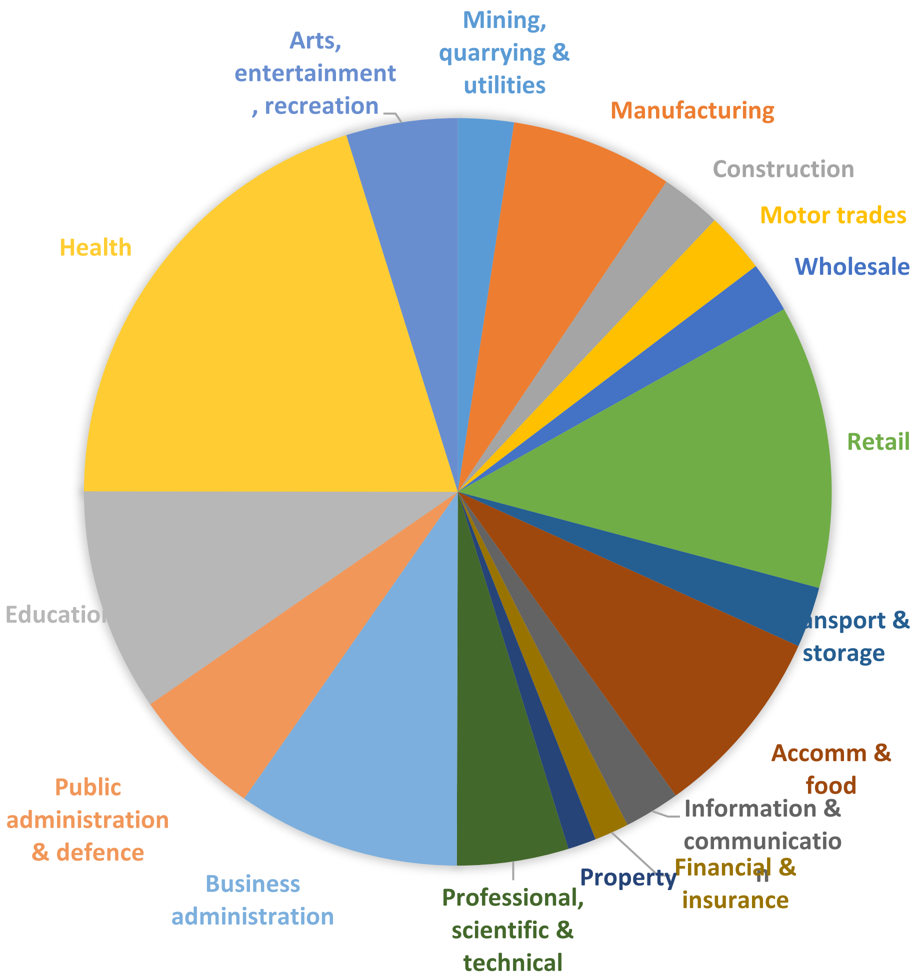
As shown in Graphs 1 and 2, health, retail and business administration are the three largest sectors by employment in the PUA.

**Graph 1: Sectoral Employment, by Broad Industrial Sector**




*Source: BRES, 2018*

**Graph 2: Sectoral Employment in Lincoln, by Broad Sector**



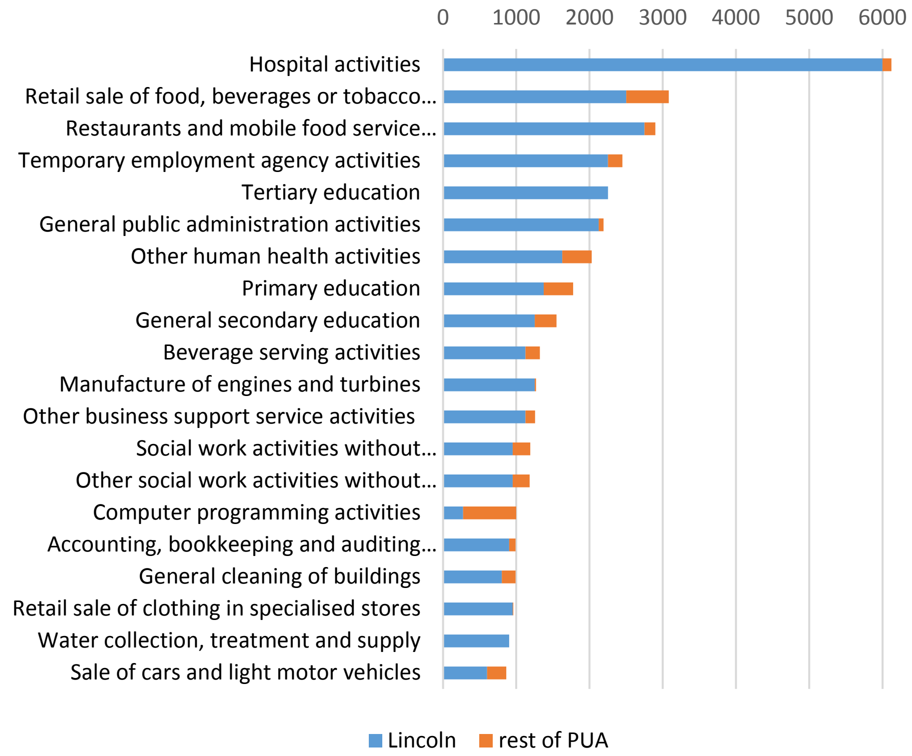

*Source: BRES, 2018*

## 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

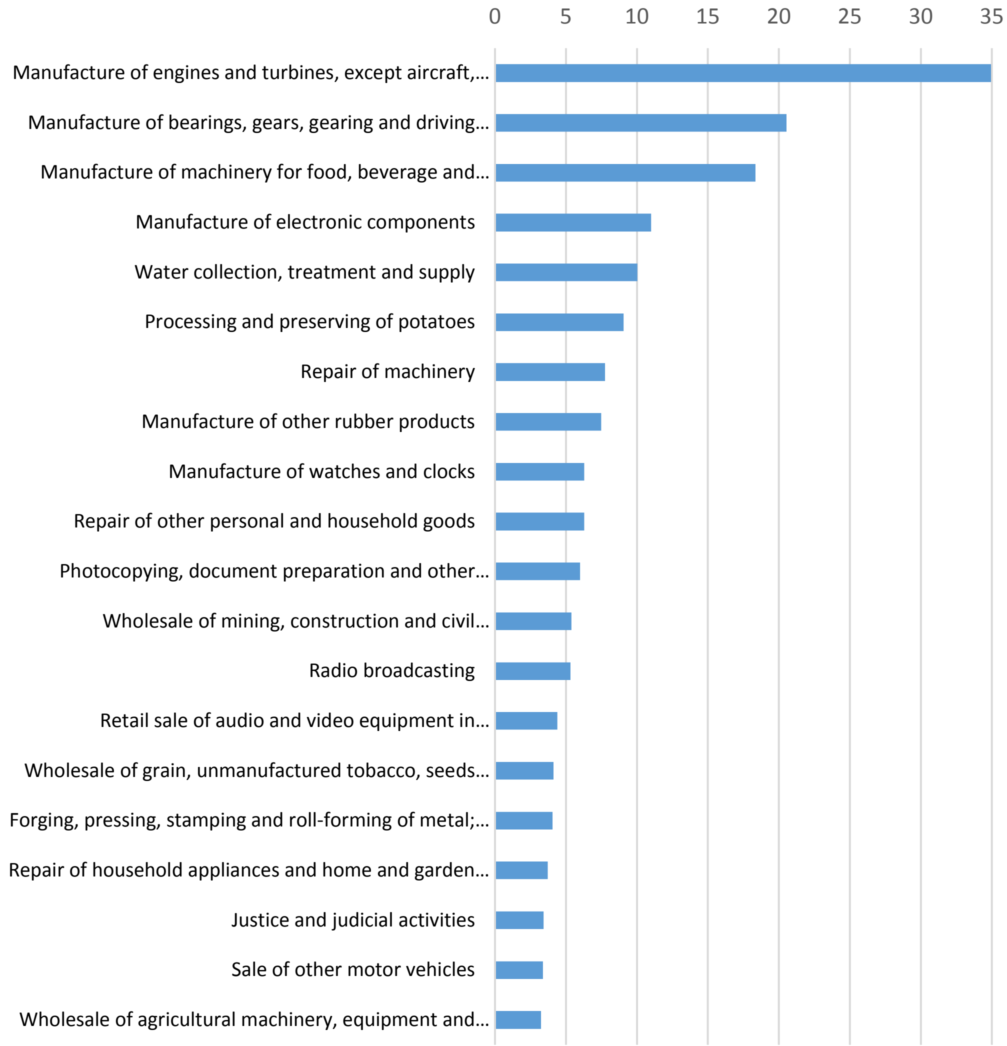
***Lincoln has a number of distinctive manufacturing specialisms***

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**



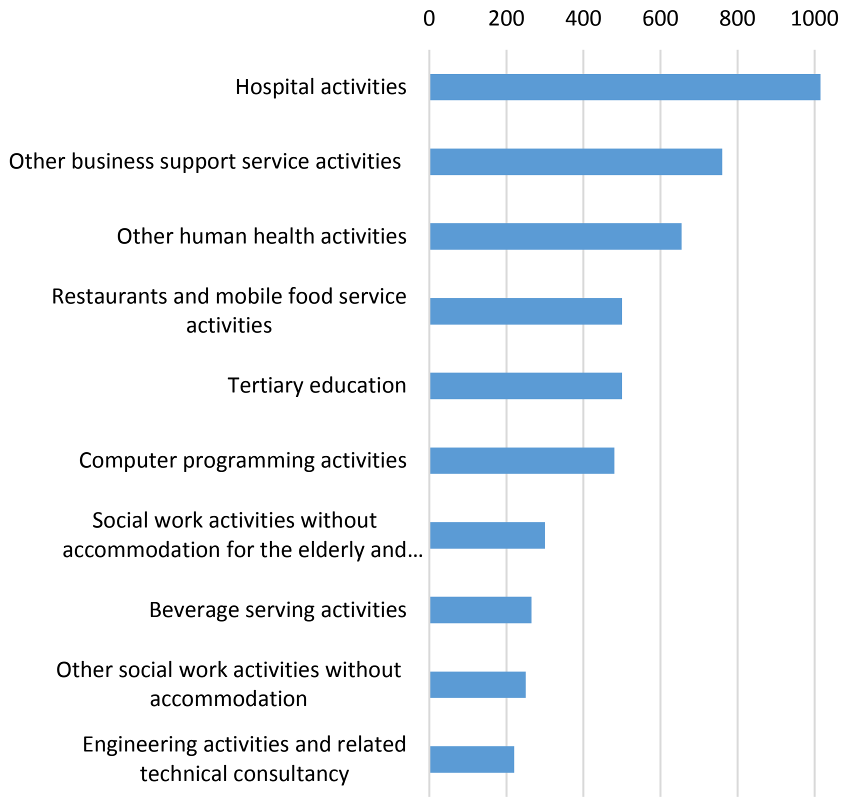

*Source: BRES, 2018*

### 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.

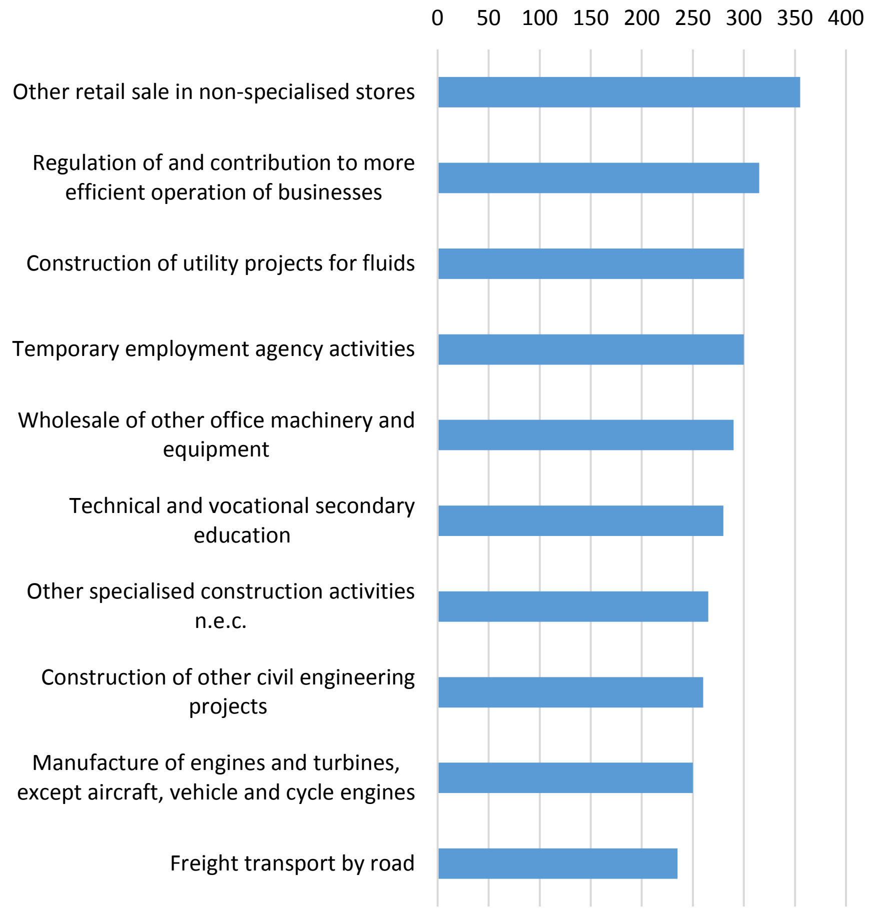
**Graph 5: 10 Sub-sectors with greatest employment gains**




*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.

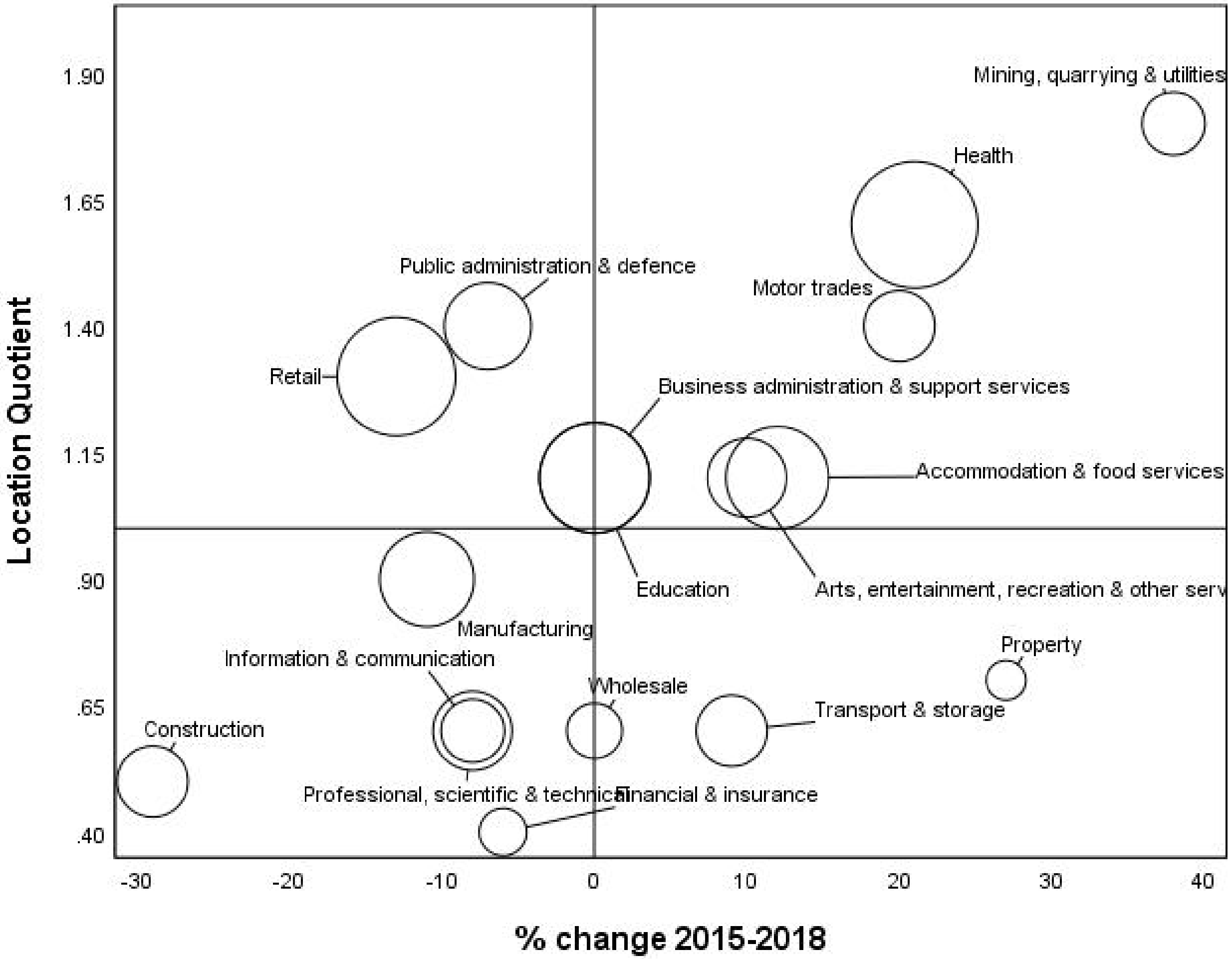
Presenting these variables on one graph provides a powerful tool for exploring the key sectors of any location.  For example, a sector that is represented by a large bubble that appears in the top right quadrant of the graph is a large employer that is highly represented locally and is also growing.  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.

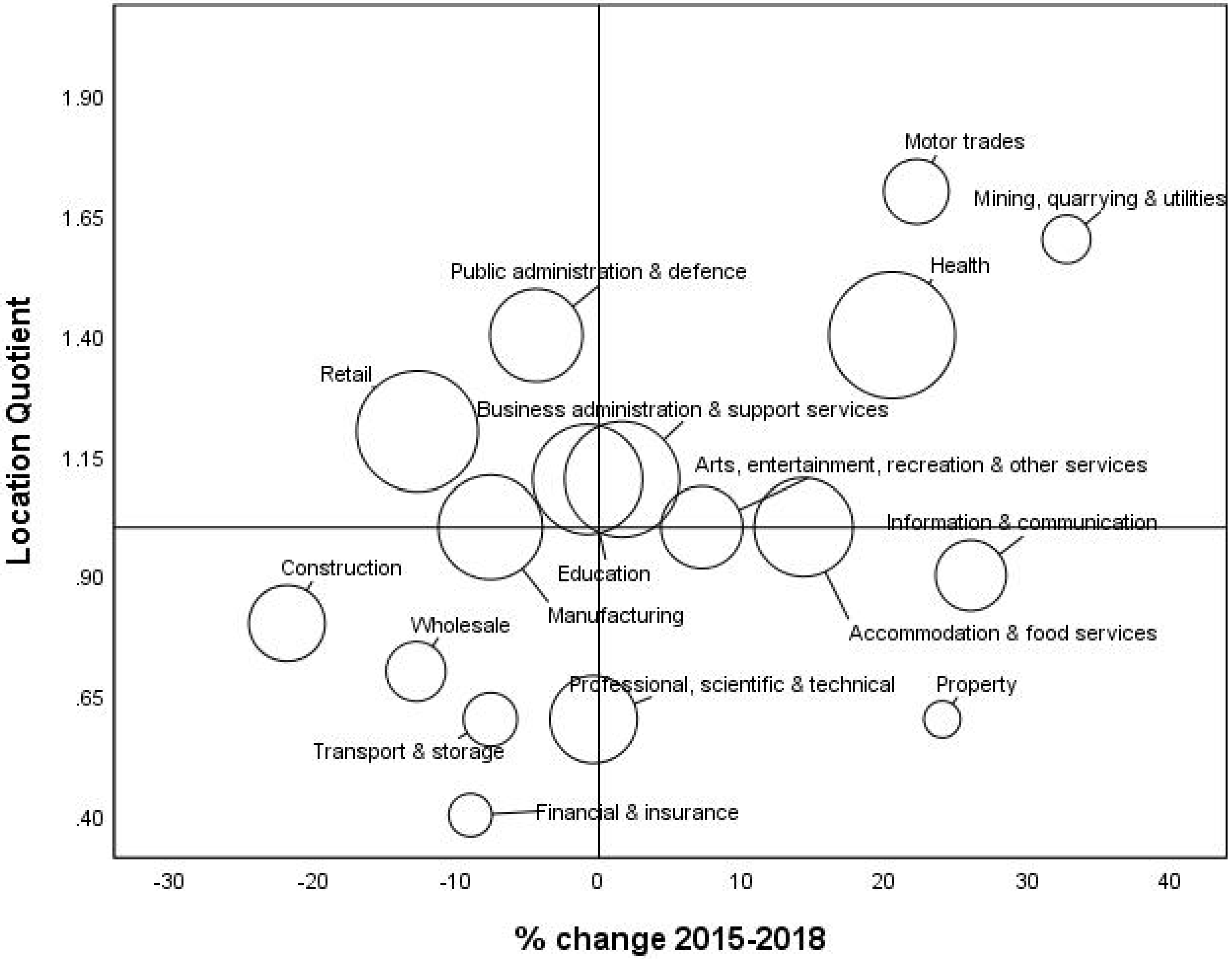
Graphs 9 to 16 show how the Lincoln PUA performs in the sectors identified as priority sectors by the Greater Lincolnshire LEP.

**Graph 7: Sectors in the City of Lincoln**




*Source: BRES, 2018*

**Graph 8: Sectors in the Lincoln Principal Urban Area**

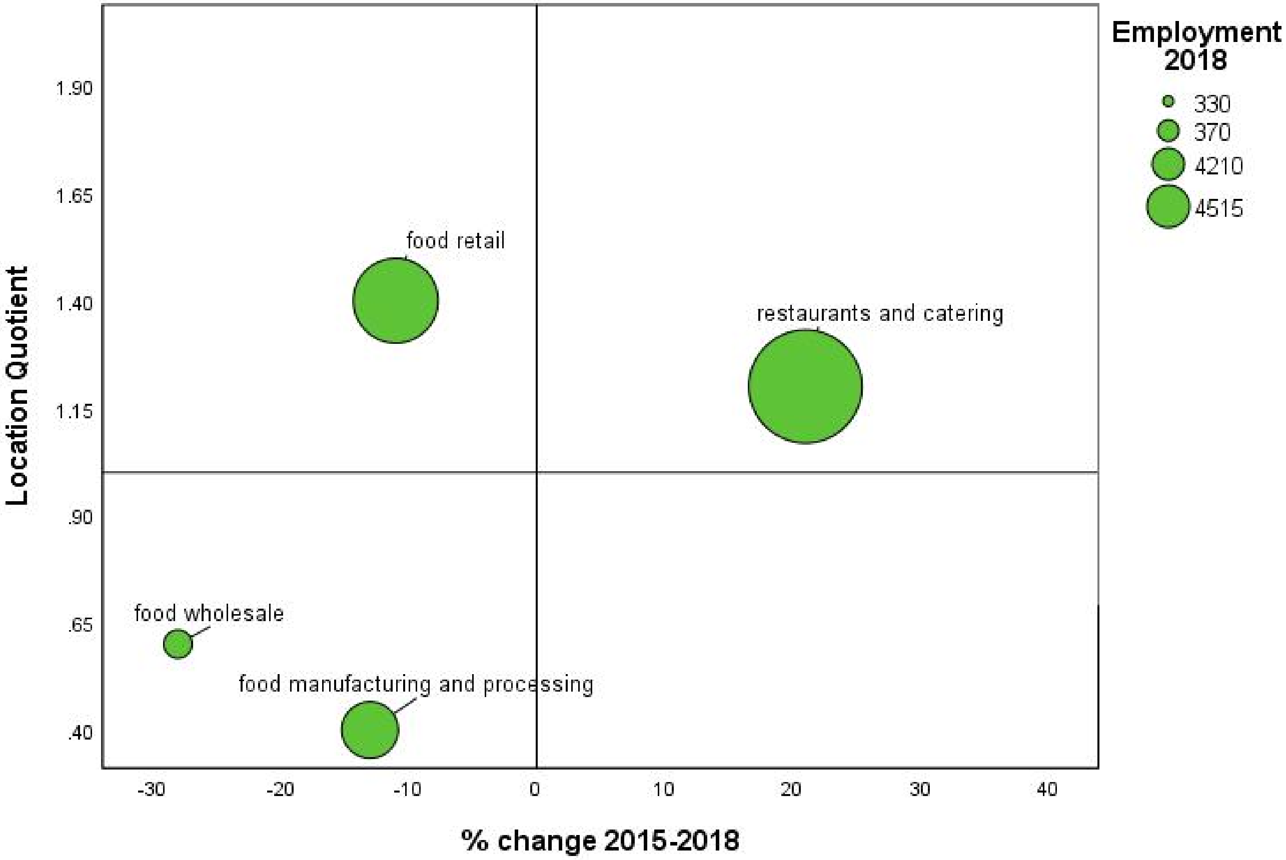



*Source: BRES, 2018*

**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**

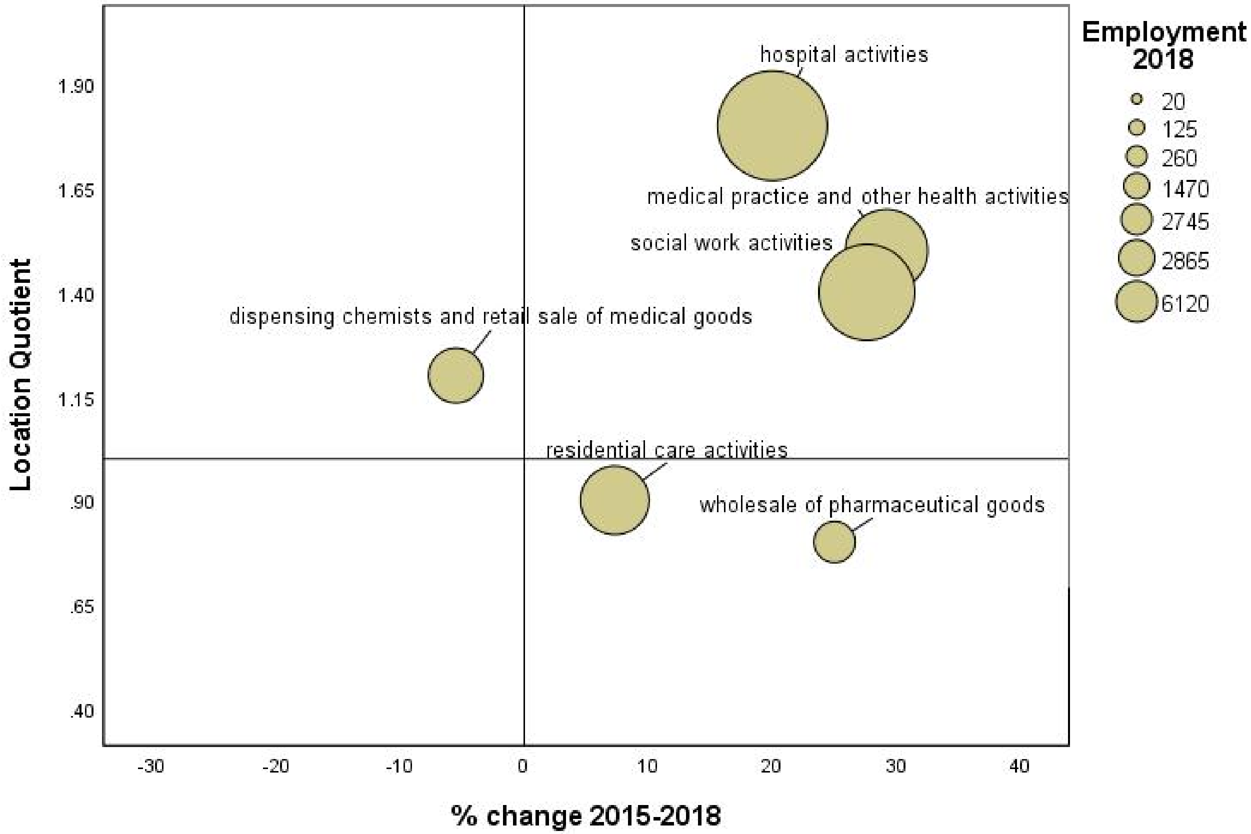



*Source: BRES, 2018*

**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**

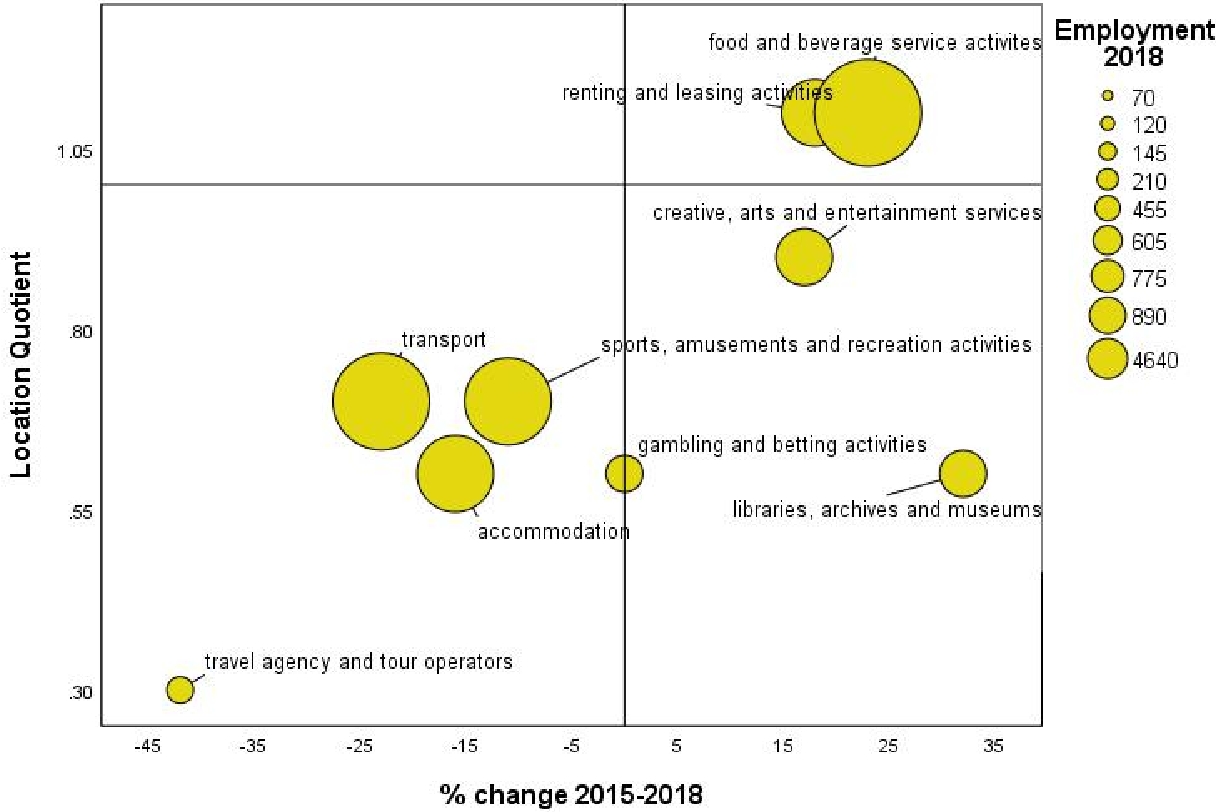



*Source: BRES, 2018*

**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**

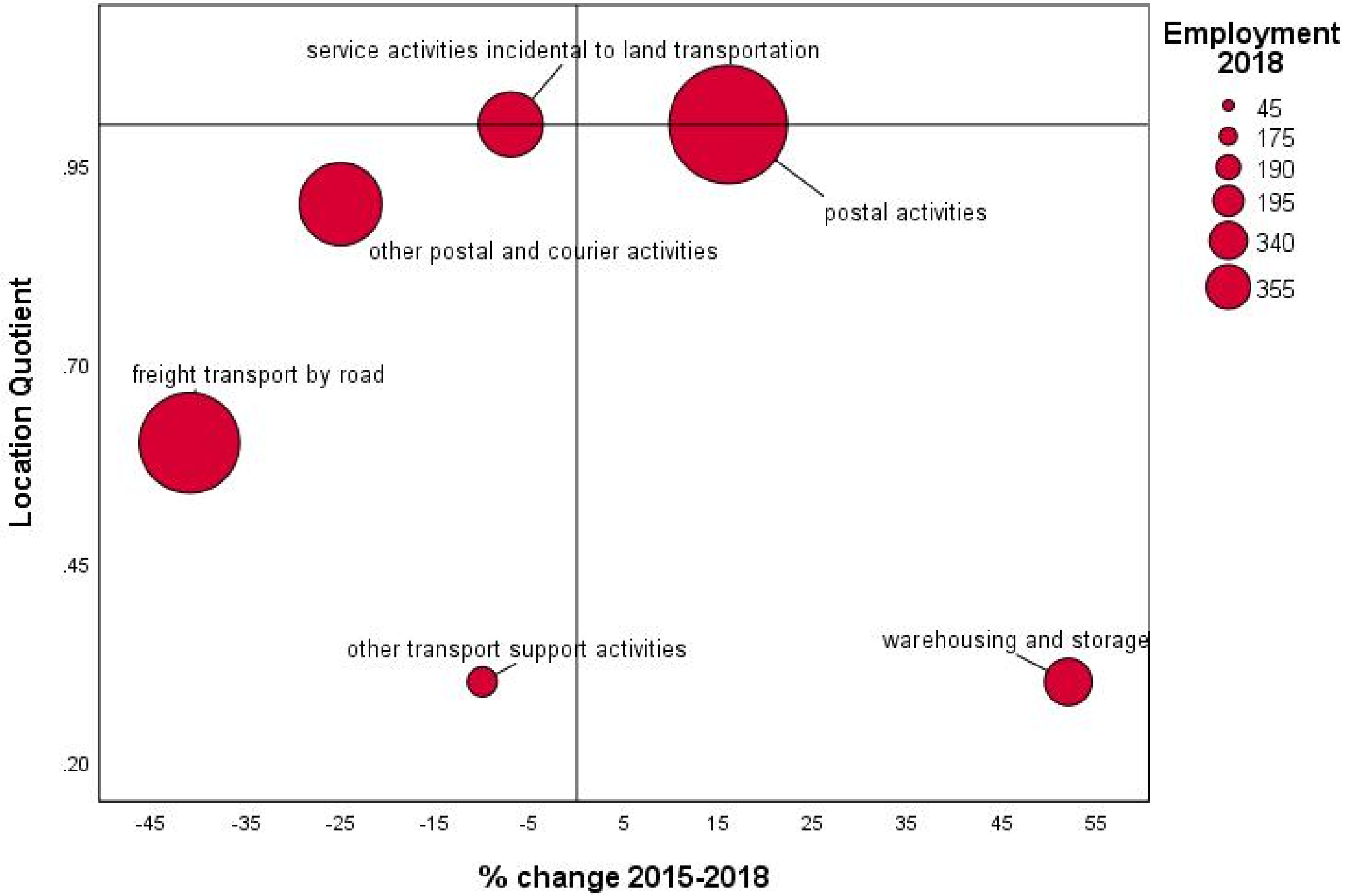



*– Source: BRES, 2018*

## 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**

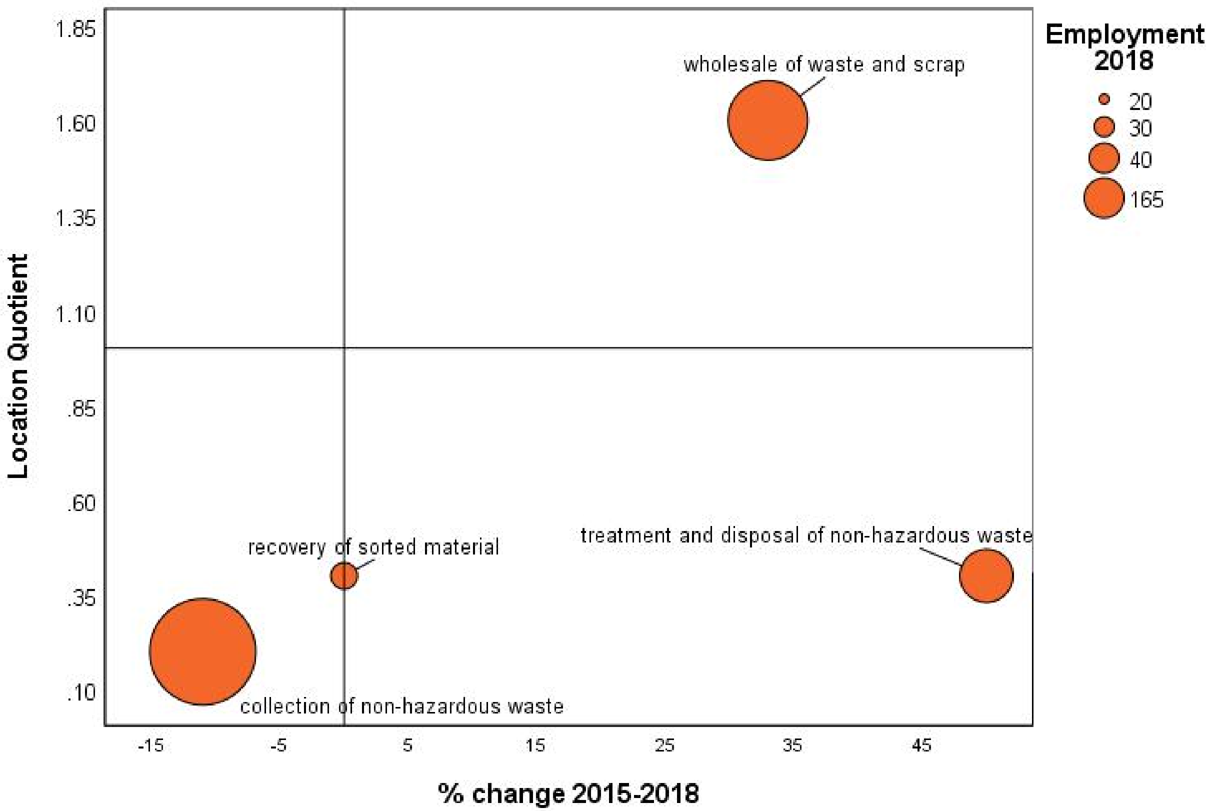



*Source: BRES, 2018*

## 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 that 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**

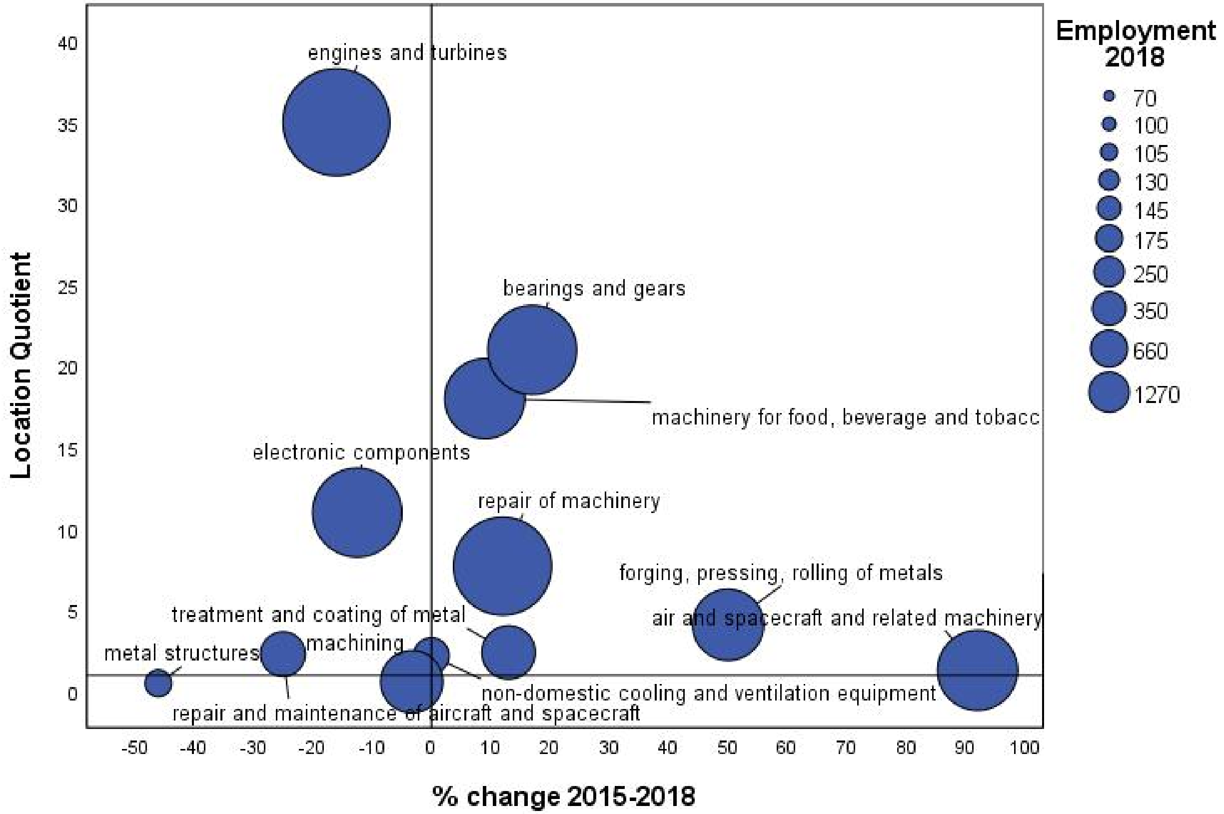



*Source: BRES, 2018*

## 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**

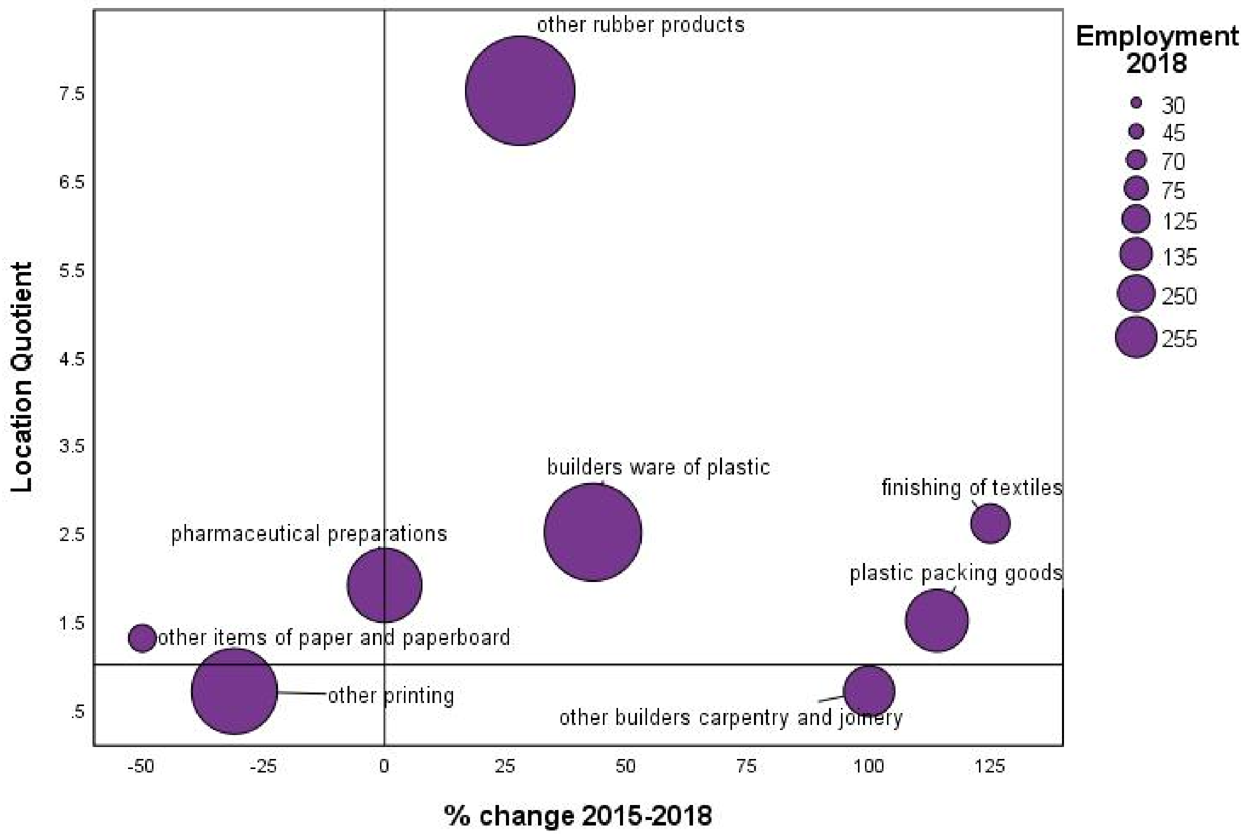



*Source: BRES, 2018*

## 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**

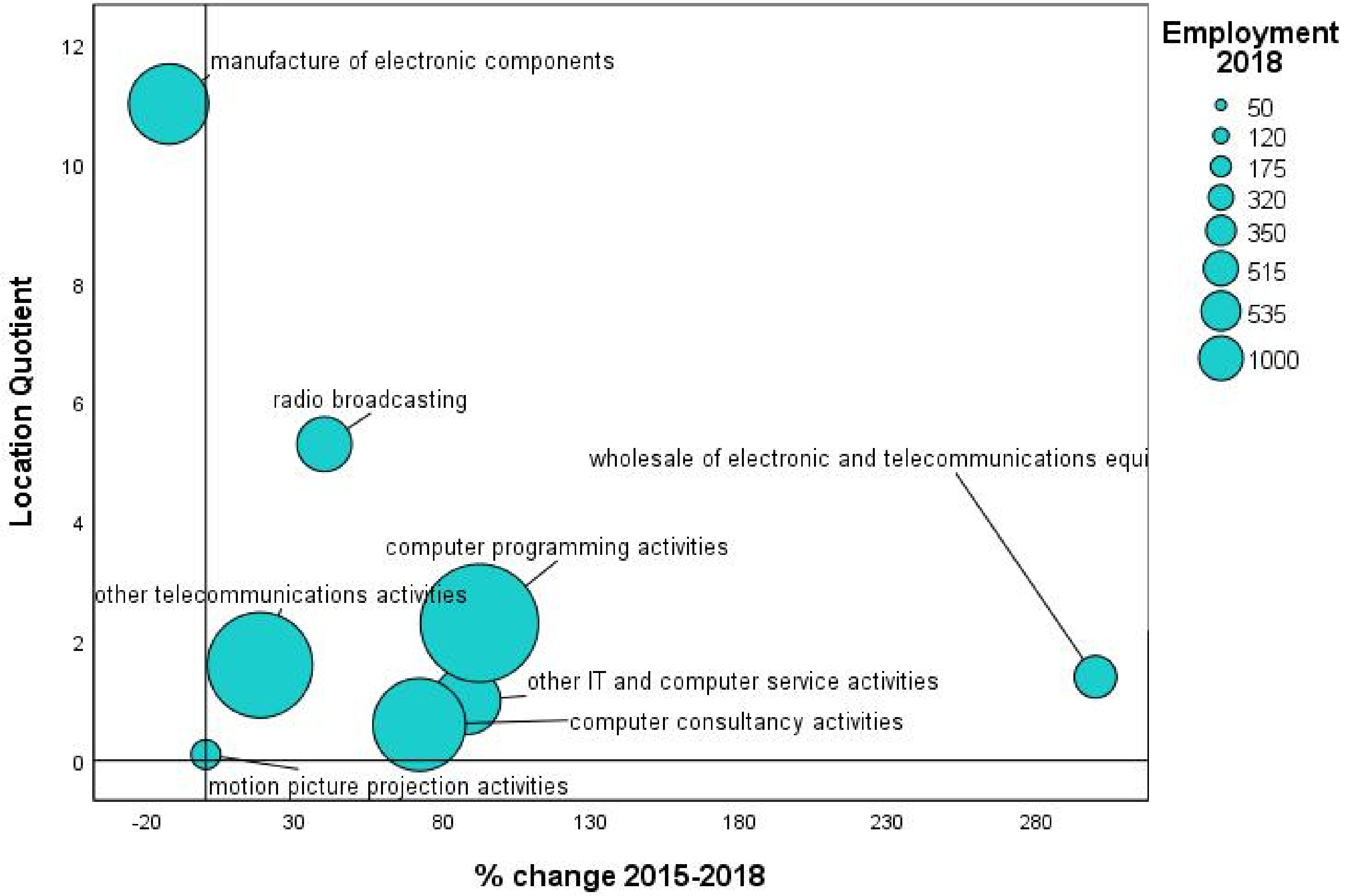



*Source: BRES, 2018*

## 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/](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.*

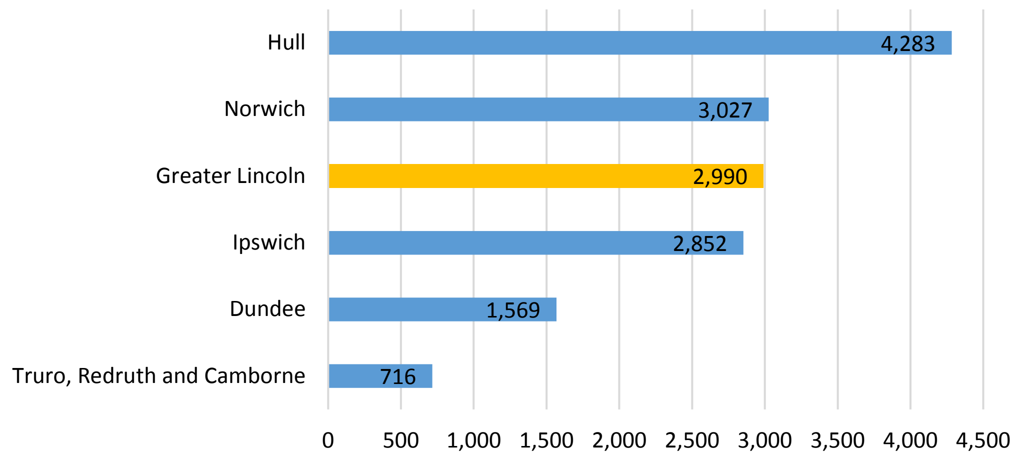
***Notable Sectors** include computer programming, followed by telecommunications, manufacture of electronic components, and computer consultancy.*

***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

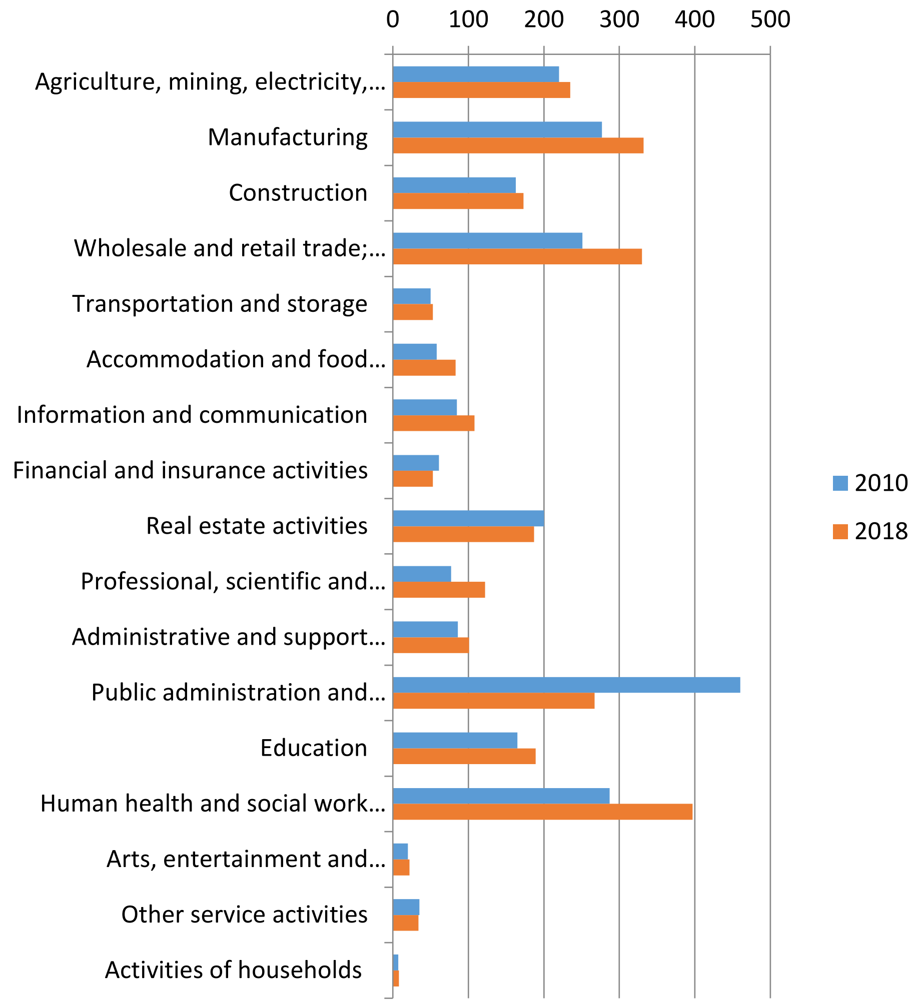
Gross Value Added (GVA) provides an indication of the Gross Domestic Product (the value of all goods and services) in a region. This helps us to understand differences in the productivity of each broad industrial sectors.

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.

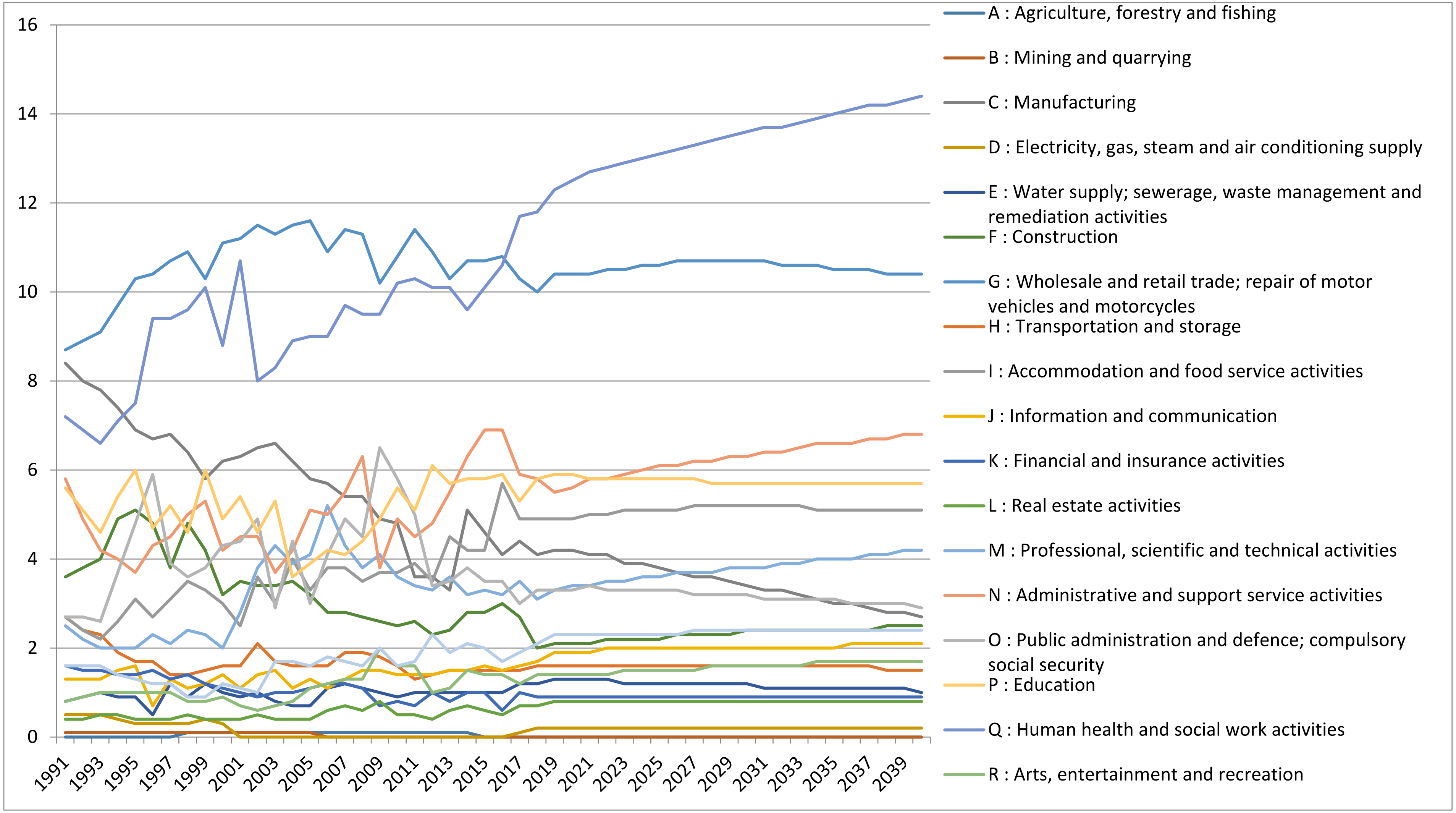
**Graph 18 – Regional gross value added (balanced) by industry: local authorities by NUTS 1 region (£million, 2016 prices)**




*Source: Office for National Statistics (2018)*

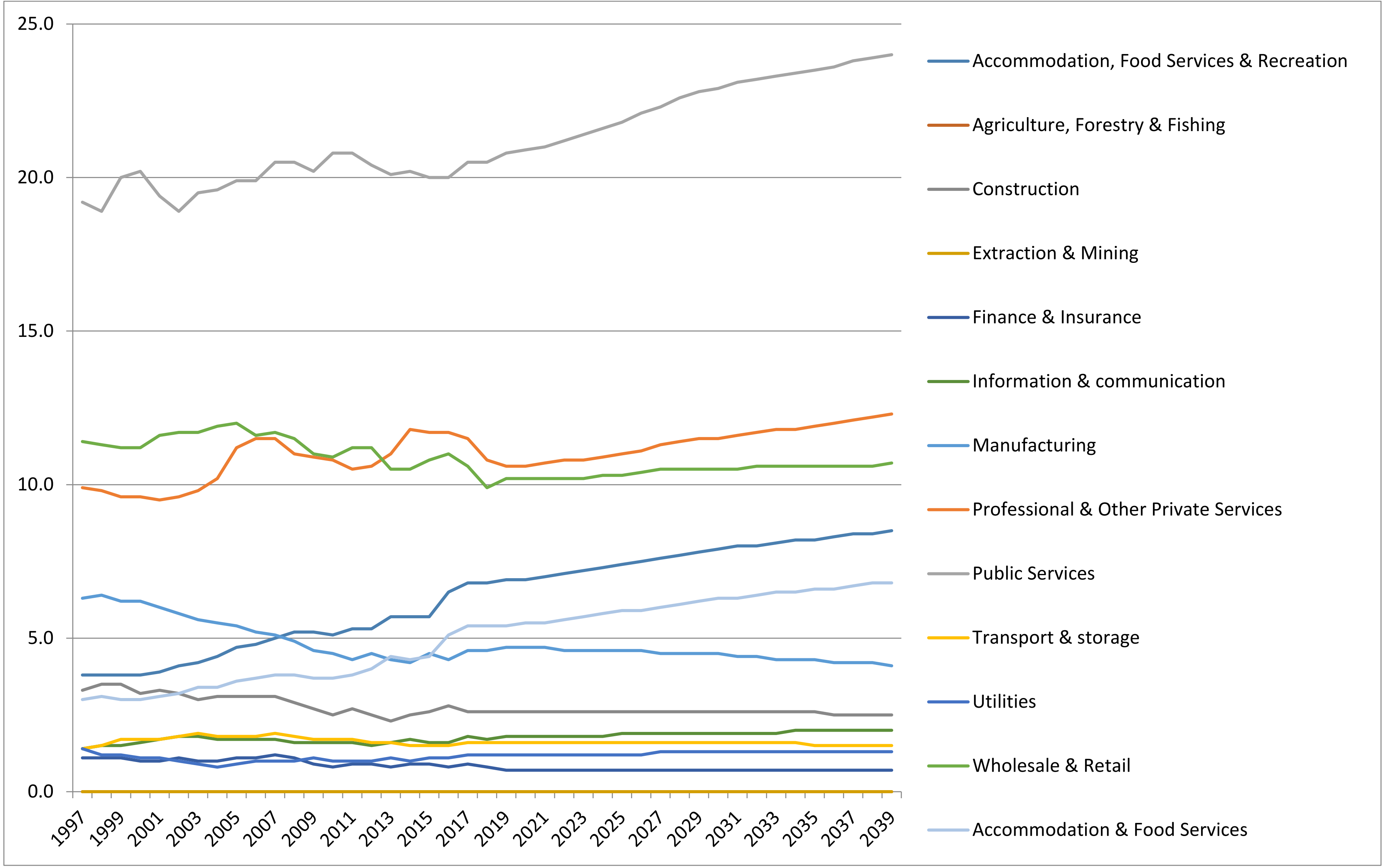
### 3.7 Employment Forecasts

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



The table above sets out the projections from Oxford Economics for the City of Lincoln to 2039.  Overall 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**

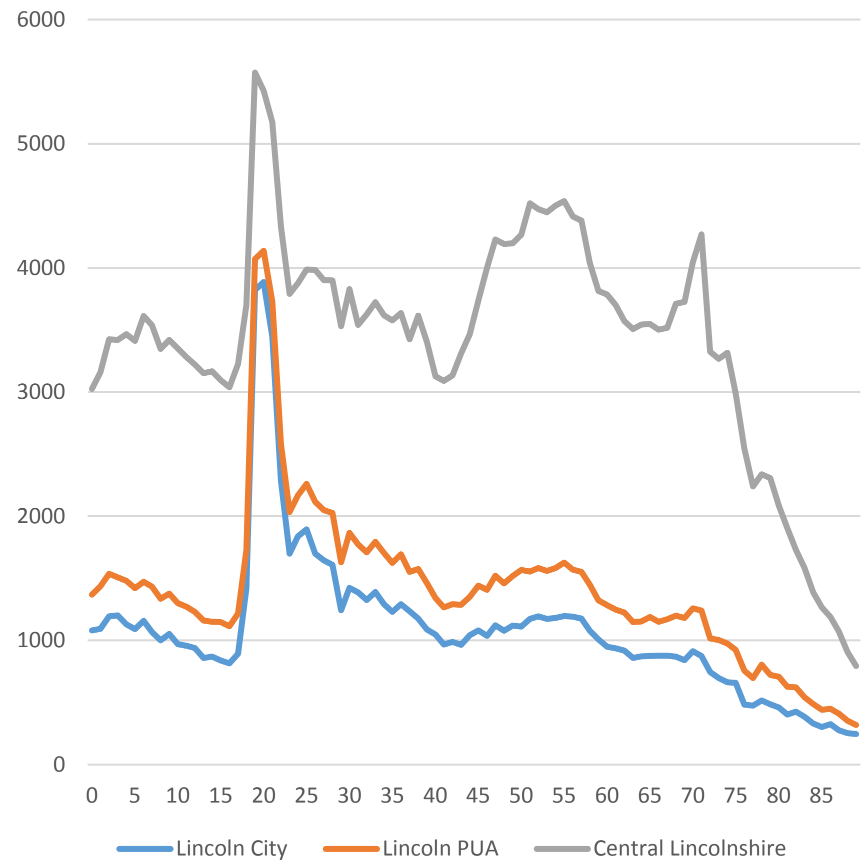
Lincoln Principal Urban has a resident population of 127,896, of which 99,039 live within the City of Lincoln local authority boundary. The population of Lincoln has grown by 1,974 residents or 2% since 2015, which is in line with the Greater Lincolnshire and national averages. The population of the 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* | *%* |
|---|---|---|---|---|
| *Lincoln* | 97,065 | 99,039 | 1,974 | |
| *Lincoln PUA* | 124,080 | 127,896 | 3,816 | |
| *Central Lincolnshire* | 301,753 | 309,893 | 8,140 | |
| *Greater Lincolnshire* | 1,067,200 | 1,087,700 | 20,500 | |
| *Great Britain* | 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**

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

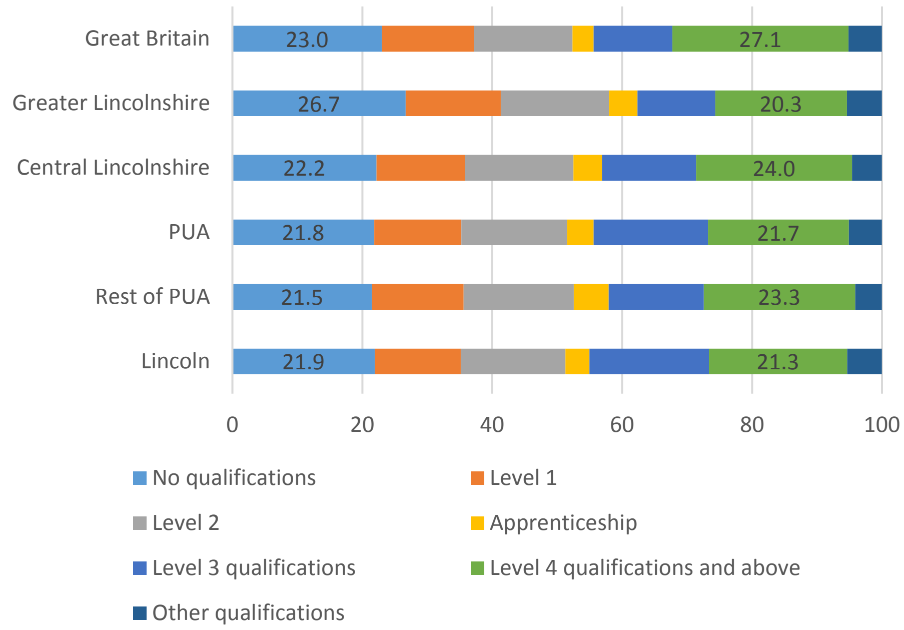
*Source: Annual Population Survey 2018 and Census 2011*

### 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.

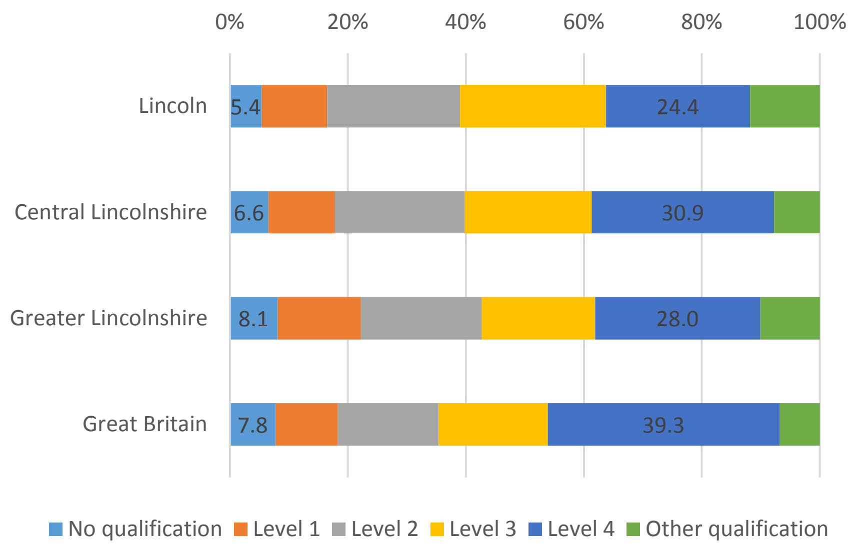
**Graph 22: Highest level of Qualification for residents aged 16 and over (%), 2011**




*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**



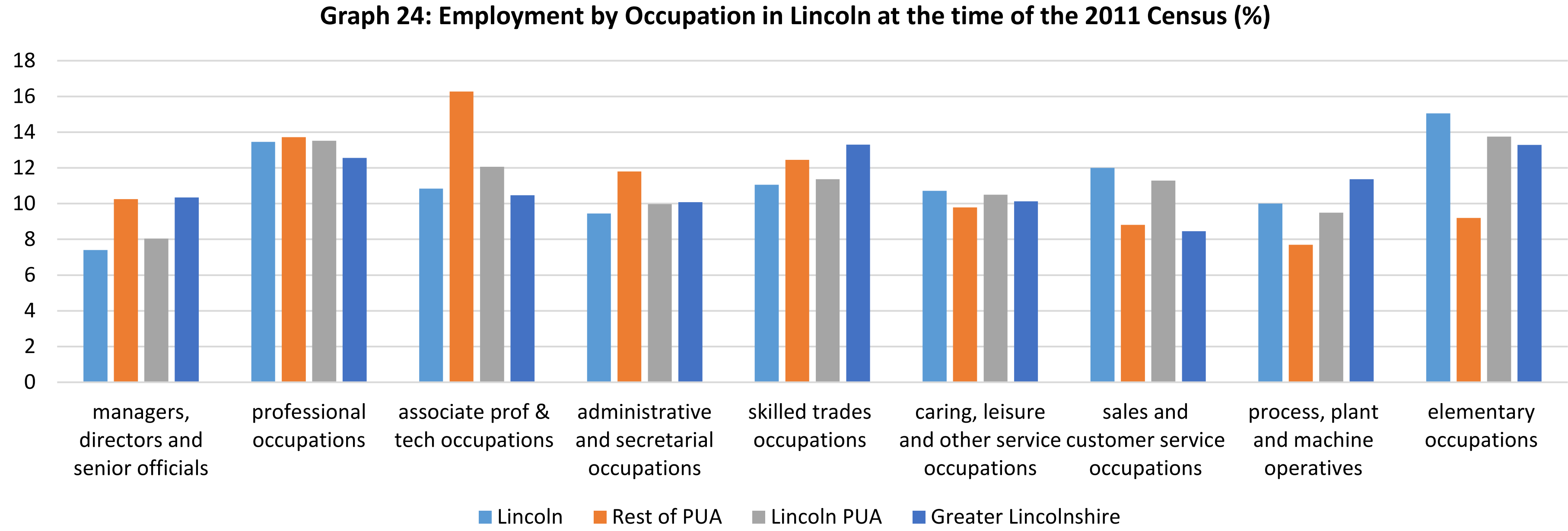

*Source: Annual Population Survey, 2019*

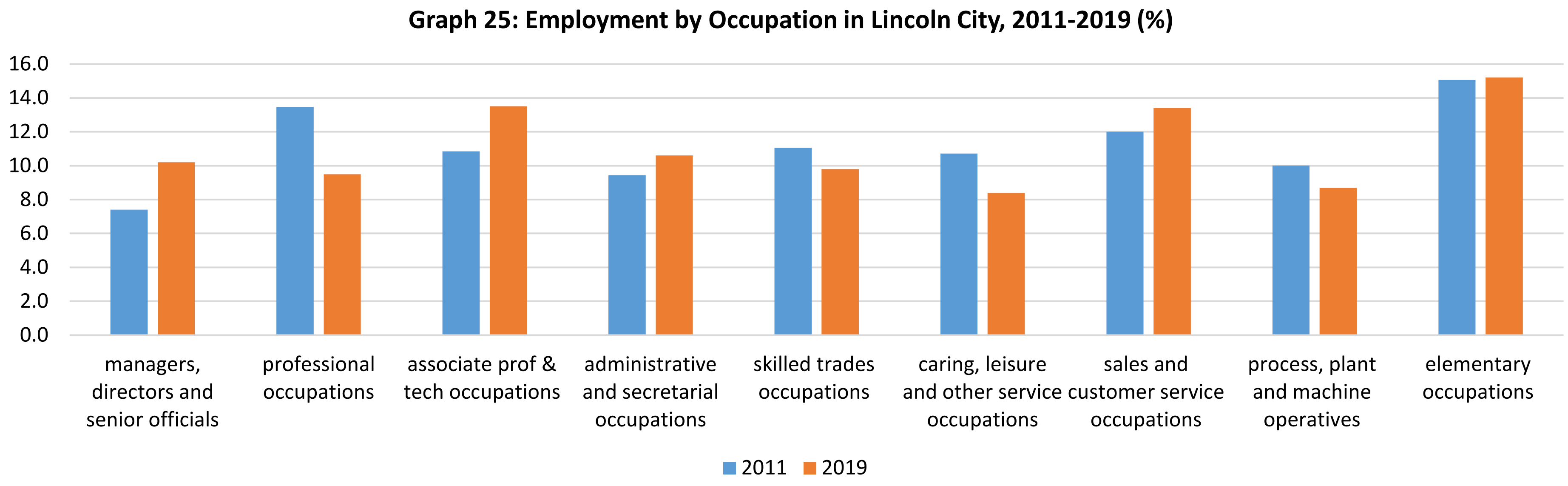
## 4.5 Occupations

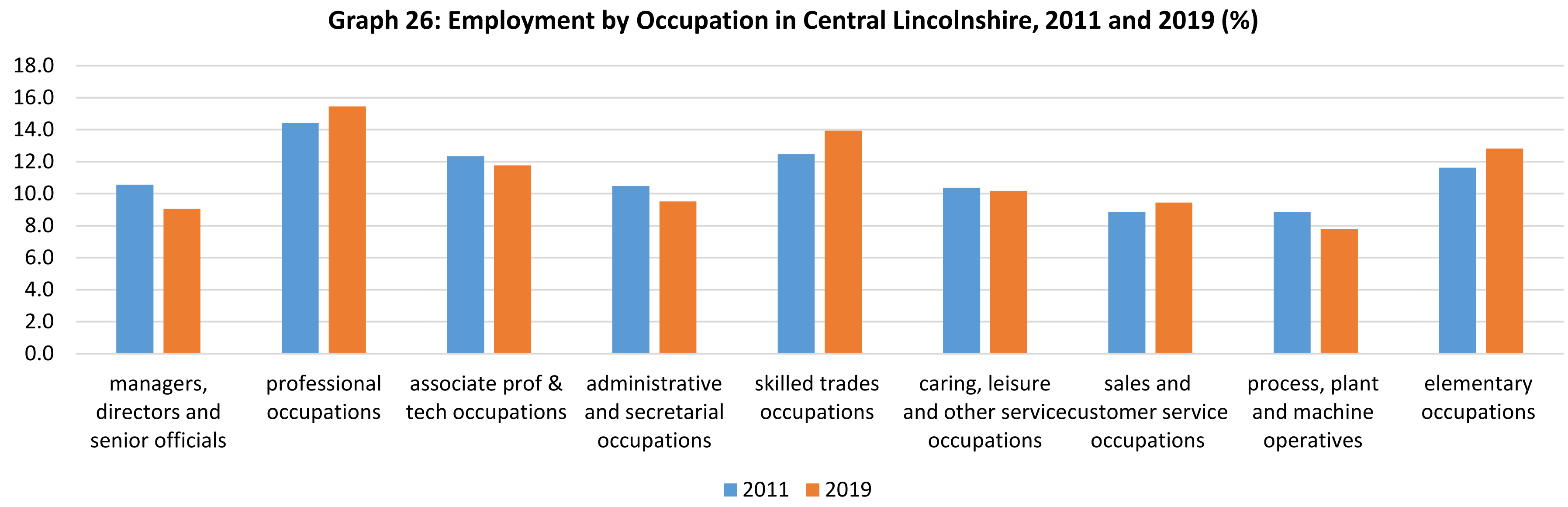
*Table 3: Employment by Occupations (%), 2019*

| | 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 (%)
18
16
14
12
10
8
6
4
2
0
managers, directors and senior officials
professional occupations
associate prof & tech occupations
administrative and secretarial occupations
skilled trades occupations
caring, leisure and other service occupations
sales and customer service occupations
process, plant and machine operatives
elementary occupations
Lincoln
Rest of PUA
Lincoln PUA
Greater Lincolnshire


Graph 25: Employment by Occupation in Lincoln City, 2011-2019 (%)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
managers, directors and senior officials
professional occupations
associate prof & tech occupations
administrative and secretarial occupations
skilled trades occupations
caring, leisure and other service occupations
sales and customer service occupations
process, plant and machine operatives
elementary occupations
2011
2019


Graph 26: Employment by Occupation in Central Lincolnshire, 2011 and 2019 (%)
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
managers, directors and senior officials
professional occupations
associate prof & tech occupations
administrative and secretarial occupations
skilled trades occupations
caring, leisure and other service occupations
sales and customer service occupations
process, plant and machine operatives
elementary occupations
2011
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 4: Highest level of Qualification for residents aged 16 and over, 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**

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, 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.

### 5.1 Business and Innovation

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** | |

**Sources ONS: Business Demography and Regional/Local GVA Tables**

## 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%)

| Demography | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 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.

| Housing | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | % 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.

| Industrial Structure | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 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** | 80 | **England** | 86 | **England** | 26 | **England** | 60 |

**Source Business Register and Employment Survey**

## 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 Population | | Econ inactive | | % employed as % of the Working Population | | % Private Sector Jobs | | % Jobs Public Money | | Ratio |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cambridge | 1.6 | Mansfield | 0.09 | Carlisle | 65625 | Gloucester | 16.4 | Canterbury | 68.2 | Oxford | 51 | St Albans | 18 | Oxford | 1.04 |
| Exeter | 1.6 | Cambridge | 0.13 | Mansfield | 67031 | Worcester | 17.2 | Lincoln | 70.4 | Cambridge | 59 | Carlisle | 28 | Cambridge | 1.44 |
| St Albans | 1.6 | Gloucester | 0.15 | Lincoln | 67083 | Oxford | 17.7 | St Albans | 72.0 | Canterbury | 61 | Mansfield | 28 | Canterbury | 1.56 |
| Oxford | 1.9 | St Albans | 0.15 | Worcester | 67200 | Cambridge | 18.6 | Mansfield | 76.3 | Lincoln | 63 | Ipswich | 32 | Lincoln | 1.70 |
| Canterbury | 2.2 | Lincoln | 0.17 | Gloucester | 80714 | Ipswich | 18.7 | Carlisle | 77.0 | Exeter | 64 | Gloucester | 35 | Exeter | 1.78 |
| Carlisle | 2.4 | Oxford | 0.19 | Cambridge | 86563 | Exeter | 19.5 | Ipswich | 77.7 | Worcester | 64 | Exeter | 36 | Worcester | 1.78 |
| Worcester | 2.5 | Carlisle | 0.19 | Exeter | 87188 | Mansfield | 20.5 | Exeter | 78.9 | Gloucester | 65 | Worcester | 36 | Gloucester | 1.86 |
| Gloucester | 2.8 | Canterbury | 0.23 | Ipswich | 87917 | Carlisle | 20.6 | Cambridge | 79.8 | Ipswich | 68 | Lincoln | 37 | Ipswich | 2.13 |
| Mansfield | 3.2 | Ipswich | 0.24 | St Albans | 88125 | Lincoln | 26 | Worcester | 80.3 | Carlisle | 72 | Canterbury | 39 | Carlisle | 2.57 |
| Ipswich | 3.6 | Worcester | 0.34 | Canterbury | 105682 | St Albans | 26.4 | Oxford | 80.4 | Mansfield | 72 | Cambridge | 41 | Mansfield | 2.57 |
| Lincoln | 3.6 | Exeter | 0.40 | Oxford | 107895 | Canterbury | 29.6 | Gloucester | 80.8 | St Albans | 82 | Oxford | 49 | St Albans | 4.56 |
| **England** | 2.9 | **England** | 0.19 | **England** | 34848276 | **England** | 20.9 | **England** | 76.2 | **England** | 64 | **England** | 36 | **England** | 1.78 |

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

## 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.

| Size | | | | | |
|---|---|---|---|---|---|
| | GVA | | Population | | Total Jobs |
| Mansfield | 1727 | Lincoln | 99,039 | Mansfield | 40000 |
| Lincoln | 2175 | Worcester | 101,891 | Worcester | 54000 |
| Carlisle | 2577 | Carlisle | 108,387 | Lincoln | 56000 |
| Worcester | 2749 | Mansfield | 108,841 | Carlisle | 57000 |
| Canterbury | 3222 | Cambridge | 125,758 | Gloucester | 63000 |
| Ipswich | 3361 | Gloucester | 129,285 | Canterbury | 66000 |
| Gloucester | 3366 | Exeter | 130,428 | Ipswich | 72000 |
| Exeter | 4082 | Ipswich | 137,532 | St Albans | 75000 |
| St Albans | 4261 | St Albans | 147,373 | Exeter | 92000 |
| Cambridge | 5127 | Oxford | 154,327 | Cambridge | 106000 |
| Oxford | 6750 | Canterbury | 164,553 | Oxford | 121000 |

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

## 5.7 Skills/Wages/Inequality

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

| Skills/Wages/Inequality | | | |
|---|---|---|---|
| | 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** | |

**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.

| Travel and Environment | | | | | |
|---|---|---|---|---|---|
| | %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 Risehlome 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 transaction 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 super fast 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.