

A Profile of the Economy, Labour Market and Business Structure of Newark and Sherwood

NTU

A report produced on behalf of the Newark and Sherwood District Council

September 2018

Oliver Woolsey, Nikolas Pautz and Will Rossiter

**NOTTINGHAM
BUSINESS SCHOOL**
Nottingham Trent University 

September 2018

This project was primarily undertaken by Oliver Woolsey as Economic Analyst and Dissemination Officer on the NTU Graduate Internship Programme over five weeks in January and February 2018. Additional statistical content, policy input and commentary provided by Nikolas Pautz and Will Rossiter.

Contact for information and enquiries:

Will Rossiter, Associate Professor, Department of Economics, Nottingham Business School,
Nottingham Trent University

Email: William.rossiter@ntu.ac.uk

Direct Dial: +44 (0)115 848 2875

Acknowledgements: we are grateful for the advice and guidance of Julie Reader Sullivan (Business Manager – Economic Growth, Newark and Sherwood District Council), Chris Lawton (Economics Department, NTU) and Fiona Anderson (Economic Partnerships Manager, NTU).

A Profile of the Economy, Labour Market and Business Structure of Newark and Sherwood

Contents

Executive Summary	4
Key Statistics	5
1. Introduction	7
2. Policy Context	8
3. Macroeconomic Overview	14
4. The Labour Market.....	20
4.1 Employment.....	20
4.2 Unemployment	22
4.3 Economic Inactivity	26
5. Skills Demand and Supply.....	27
5.1 Occupations	28
5.2 Skills and Qualifications	29
5.3 Earnings and Commuting.....	32
6. Business Structure and Key Sectors.....	34
6.1 Employment by sector	34
6.2 Enterprise and Business Survival	38
6.3 Top 20 Newark & Sherwood Registered Businesses by Turnover	42
7. Population and Society.....	44
7.1 Population Aging.....	44
7.2 Population Growth.....	45
7.3 Deprivation	46
8. Conclusions and Policy Recommendations	48
8.1 Statistical Profile Summary	48
8.2 Productivity.....	48
8.3 Inclusive Growth	50
8.3 In-Work Poverty.....	50

Executive Summary

This analysis has been undertaken to inform Newark and Sherwood District Council's implementation, monitoring and review of their Economic Prosperity Plan (Invest Newark & Sherwood, November 2017). This builds on an earlier study, 'A Profile of the Economy, Labour Market and Business Structure of Newark and Sherwood' (Lawton and Bickerton, October 2013). This report updates the analysis with the latest official statistics alongside interpretation in light of the emerging areas of interest in research and policy – including the Inclusive Growth agenda (NTU, D2N2 and the Royal Society - RSA), Ordinary Working Families, and Precarious Work (NTU/Civic Exchange and the RSA), as well as the UK Government's recent Industrial Strategy (BEIS, 2017).

Also of key importance to this local study is the productivity agenda, in light of the Chancellor of the Exchequer, Philip Hammond MP, identifying a national 'productivity crisis' in his Autumn Budget Statement (HM Treasury, 2017). This report will include particular attention to potential drivers of productivity, and relevant policy responses amenable to District-level intervention, particularly in terms of raising the demand for and supply of skills, and improving progression routes for young people and workers in job roles likely to be threatened by forthcoming waves of automation.

The final section of this report identifies a number of policy propositions relevant to the challenges and opportunities identified as a result of the statistical profiling. These address three key themes of relevance to Newark and Sherwood: productivity, inclusive growth and in-work poverty.

Key Statistics

Newark and Sherwood at a glance: **Green font** = local value outperforms LEP and/or national average/
orange font = underperforms the LEP and/or national averages.

Indicator	Value	Source
Employment rate (% 16-64), 12 months to June 2017	80% : Newark & Sherwood 73.1%: D2N2 74.4%: UK	ONS Crown Copyright, 'Annual Population Survey', July 2016 - June 2017.
Unemployment rate (% economically active 16+), 12 months to June 2017	4.1% : Newark & Sherwood 4.2%: D2N2 4.6%: UK	ONS Crown Copyright, 'Annual Population Survey', July 2016 - June 2017.
Employment in International Standard Classification of Occupations higher tier employment (Major groups 1-3)	34.8% : Newark & Sherwood 41.2%: D2N2 45.5%: UK	ONS Crown Copyright, 'Annual Population Survey', January 2016 - December 2016.
Employment in International Standard Classification of Occupations lower tier employment (Major groups 8-9)	29.6% : Newark & Sherwood 20.5%: D2N2 17.2%: UK	ONS Crown Copyright, 'Annual Population Survey', January 2016 - December 2016.
Employed residents qualified to NVQ Level 4+ (first degree + or vocational equivalent)	33% : Newark & Sherwood 36%: D2N2 43%: UK	ONS Crown Copyright, 'Annual Population Survey', January 2016 - December 2016.
Employed residents qualified to NVQ Level 3 (A Levels or vocational equivalent)	21% : Newark & Sherwood 22%: D2N2 19%: UK	ONS Crown Copyright, 'Annual Population Survey', January 2016 - December 2016.
Employed residents qualified to NVQ Level 2 (5 GCSEs A*-C or vocational equivalent)	15% : Newark & Sherwood 20%: D2N2 17%: UK	ONS Crown Copyright, 'Annual Population Survey', January 2016 - December 2016.
Employed residents with qualifications below Level 2 or with no qualifications	30.0% : Newark & Sherwood 22%: D2N2	ONS Crown Copyright, 'Annual Population Survey', January 2016 - December 2016.

	22%: UK	
Workplace-based earnings (median gross weekly pay, full-time workers)	£430.1: Newark & Sherwood £464.4: East Midlands £505.9: UK	ONS Crown Copyright, 'Annual Survey of Hours and Earnings', 2012.
Residence-based earnings (median gross weekly pay, full-time workers)	£483.0: Newark & Sherwood £515.5: East Midlands £552.7: UK	ONS Crown Copyright, 'Annual Population Survey', July 2016 - June 2017.
Business Birth Rate (new businesses as a % of end of year stock)	11.8%: Newark & Sherwood 12.7%: D2N2 14.7%: UK	ONS Crown Copyright, 'Business Demography 2016 – Enterprise Births, Deaths and Survivals.' 2017
Business Survival Rate (% businesses born in 2011 surviving 3 years)	63.0%: Newark & Sherwood 61.5%: D2N2 60.9%: UK	ONS Crown Copyright, 'Business Demography 2016 – Enterprise Births, Deaths and Survivals.' 2017

1. Introduction

This report was commissioned to inform Newark and Sherwood District Council's (NSDC's) implementation, monitoring and review of their Economic Prosperity Plan (Invest Newark & Sherwood, 2017). It builds on an earlier study, '*A Profile of the Economy, Labour Market and Business Structure of Newark and Sherwood*' (Lawton and Bickerton, October 2013). It updates that earlier analysis with the latest official statistics, interpreted in the context of priority topics for UK research and policy - including inclusive growth (NTU, the Nottingham Civic Exchange, D2N2 and the Royal Society), Ordinary Working Families and precarious work (NTU/Civic Exchange and the RSA), as well as themes addressed in the UK Government's recent Industrial Strategy (BEIS, 2017).

Of particular importance to this local economic profile is the productivity agenda, with the Chancellor of the Exchequer, Philip Hammond MP, identifying a national 'productivity crisis' in the Autumn Budget (HM Treasury, 2017). This report will analyse potential drivers of productivity, and relevant policy responses amenable to District-level intervention, particularly in terms of raising the demand for and supply of skills, and improving progression routes for young people and workers in job roles likely to be threatened by forthcoming waves of automation.

The report is set out in the following structure:

- A policy context, summarizing relevant national, sub-regional (particularly the D2N2 Strategic Economic Plan) and local policy priorities;
- A macro-economic context, comparing the local area to sub-regional and national trends in terms of output, employment and productivity - to provide an understanding of the extent to which recession and recovery have affected Newark and Sherwood, including local experiences of key national challenges such as low productivity, lower wage growth and low levels of investment and innovation;
- A labour market and skills profile, identifying how different sub-groups of the labour force in Newark and Sherwood have been affected by recession and recovery, and the extent of match or mismatch between measures of demand for and supply of skills;
- A summary of the local area's business structure by sector and the extent of dynamism in the business population, indicated by business births, deaths and survival;
- Demographic and social factors, including population growth and demographic ageing and deprivation/social exclusion; and
- Policy recommendations to respond to the strengths and weaknesses of the local area's economy, labour market, business population and social and demographic characteristics, relating back to key themes identified in the policy context and macro-economic context.

2. Policy Context

The UK government published its Industrial Strategy, *'Building a Britain Fit for the Future'*, in November 2017, which outlined the key priorities for long-term productivity growth, including in the context of potential challenges related to leaving the EU. The overall aim of the Industrial Strategy is to address the low levels of productivity in the UK economy, which are rooted in structural weaknesses including lack of incentives for investment, poor job-skills matching compared to European partners, low levels of innovation, and stubbornly low earnings growth, all of which have not improved significantly since the start of the financial crisis in 2007.

Prime Minister Theresa May framed *'Building a Britain Fit for the Future'* as the: “development of a modern Industrial Strategy that will help businesses to create high quality, well-paid jobs right across the country. The aim is to help young people develop the skills they need to do the high-paid, high-skilled jobs of the future, with the long term goal being to create the conditions where successful businesses can emerge and grow”.

The strategy identifies Five Foundations, which the government argues are “essential attributes of every successful economy.” These are:

1. **Ideas:** – R&D, innovation and the challenge of bringing scientific ideas to commercial market;
2. **People:** – Skills (particularly maths and technical skills), retraining and facilitating progression routes within the labour market more broadly;
3. **Infrastructure:** – Particularly transport, digital and housing;
4. **Business environment:** – Increasing SME productivity and encouraging more start-ups in the UK; and
5. **Places:** – Tackling regional disparities in productivity and economic performance.

The Industrial Strategy lists a number of overarching 'Grand Challenges' that are faced by the UK and other modern economies, identified on the advice of leading scientists and technologists. The government argues that many of the Five Foundations will be “strengthened” through the process of tackling these challenges, which include:

- The emergence of artificial intelligence and big data;
- The challenge of 'clean' or sustainable growth;
- The future of mobility and transport; and
- Meeting the needs of an ageing society.

The most recent iteration of the D2N2 Local Enterprise Partnership *'Strategic Economic Plan'* (SEP) was published on July 2013 (with the SEP currently going through the process of refresh). It sets out five Strategic Priorities for making D2N2 the most competitive and sustainable business location in the UK, developing the skills of young people and the workforce and to grow key sectors - identified because of their comparative sub-regional advantage, growth potential, or strategic importance.

The Strategic Priorities are:

1. Business support and access to finance;
2. Innovation;

3. Employment and skills;
4. Infrastructure for economic growth; and
5. Housing and regeneration.

The SEP then outlines key interventions in each of these five areas alongside integrated or cross-cutting activities including: rural development, social inclusion and digital take-up.

The D2N2 priority sectors are:

- Transport equipment manufacturing (covering the automotive, aerospace and rail elements of the wider 'advanced manufacturing sector');
- Life science (including medi-tech and bio-tech);
- Food and drink manufacturing;
- Construction;
- Visitor economy (the tourism, hospitality and leisure sectors);
- The 'low carbon economy' (defined by the Government as the 'Low Carbon Environmental Goods and Services' - the LCEGS, sector - which also includes cross-cutting occupations, such as environmental consultants); and
- The creative industries (a relatively small sector in employment terms, but strategically and culturally important).

D2N2 intend activities and investment aligned to the SEP to increase productivity and raise living standards, making D2N2 an even better place to live, work and invest.

In common with the Government's Industrial Strategy, it is worth noting that these priorities tend to be 'supply side' - i.e. they focus on the expectation that individuals need to adapt to meet the needs of key employment sectors (which, the policy implies, will then result in increased productivity and higher living standards). At both a national and a sub-regional level, there is little policy engagement with major UK challenges of 'under-employment' or 'skills mismatch' identified by the Office for National Statistics (ONS) in their *'Graduates in the UK Labour Market'* (2017), Universities UK (2018) and the Department of Education (2015). This evidence indicates that as many as half (49%) of all employed recent graduates are working in jobs that do not require graduate level skills, and even higher proportions of school- or college-leavers are over-qualified for their current roles. This points to a broader de-skilling of work in the UK, evident for some time prior to the recession (and may have been one of the underlying factors for the low rates of earnings growth driving the record levels of household debt prior to the 2007 crisis), affecting productivity (as measured by the amount of wealth created per worker or per hour worked) and also individual experiences of the 'quality' or 'dignity' of work, explored in Matthew Taylor's independent review for Government (2017) and the RSA's recent research on economic precarity and good work (e.g. Shafiqe, A., 2018, *'Addressing Economic Insecurity'*).

The D2N2 SEP outlines a single target Growth Strategy to create 55,000 private sector employee jobs in the LEP area by 2023, demonstrating a 'Work First' approach. Their goal is not only to increase employment levels but also to rebalance the economy away from the current over-reliance on public sector employment (and corresponding fall in private sector jobs in the sub-region following 2007).

Other priorities in the SEP mainly focus on increasing the business population in the area as well as creating 77,000 additional homes and providing leverage for funding through the City Deal, EU Structural and Investment Funds and private sector investment.

The SEP is currently undergoing a refresh that may result in significant change to its policy focus. At the time of writing, a working draft document has been circulated to stakeholders for comment. While it would be inappropriate for this report to comment on the substance of a yet to be finalised draft, it is worth noting that during this refresh, D2N2 commissioned a paper from the Civic Exchange, RSA and NBS on the importance of inclusive growth and policy options available to promote this objective (Black et al 2017). We will consider the relevance of these proposals to Newark and Sherwood in our discussion of policy options that respond to the conclusions of this report on the condition of the local economy.

Newark and Sherwood District Council have outlined their current objectives and high-level work plan for the Economic Development Strategy, with an update presented to the Council's Economic Development Committee on 22nd November 2017. The overarching strategic vision, 'Building a Shared Prosperity', remains the same as the original strategy adopted in 2014. This originally had 3 broad objectives:

Objective 1: To develop and maintain an in-depth understanding of the Newark and Sherwood economy, business stock and sector strengths. This will ensure that activities and resources available to support the strategic vision are appropriately focused;

Objective 2: To develop appropriate place marketing to visitors and investors. To achieve this, the District Council will work with partners such as Experience Nottinghamshire for Tourism and Invest in Nottingham and UKTI for Inward Investment opportunities (now Visit Nottinghamshire, Invest in Nottingham and Nottingham Partners under the re-branded, combined 'Marketing NG' Destination Marketing Organisation (DMO)); and

Objective 3: To plan and support growth for Newark and Sherwood. This incorporates a number of areas which the council can directly affect or can exercise influence.

The November 2017 re-focusing of the strategy maintained the 'Building a Shared Prosperity' aspiration as expressed by the above objectives, but moved on from these broad aspirations to propose 12 more specific objectives, explicitly relating to the policy and investment levers available to the District Council, to facilitate more focussed conversations with partners and providers/delivery bodies:

1. **Schools and businesses:** the District Council will partner with secondary schools in the area to improve links with employers, building a clearer understanding of how the council can assist schools in improving attainment and transferable skills and raising career aspirations. This objective also relates to exploring and delivering business-related projects to primary schools (particularly Years 5 and 6).
2. **Up-skilling 18-24 year olds:** based on the premise that the skills of local young people are lower than other groups and unemployment higher (though it is not clear from the evidence in the refreshed strategy document whether outcomes for this group are less favourable than elsewhere in the UK: claimant count data demonstrates that youth unemployment in Newark

and Sherwood is higher than the average for all working age (16+) residents, however it is in line with the national average for the same age group). This objective recommends collaboration with relevant agencies and developing programmes enabling young people to gain both additional skills (not necessarily accredited – e.g. ‘life skills’) and qualifications.

3. **Support for businesses:** aim to commission research into productivity rates at district level (note the smallest geography for which official productivity estimates - in terms of GVA per hour worked or per worked, i.e. ‘labour productivity’, is NUTS3) and current business survival rates (note this is published at a Local Authority District level and will be included later in this report). Following collation of this evidence, the District Council aims to work with businesses to address specific local gaps in provision.
4. **Key account management and access to support:** for the District Council to continue to deliver key account management for larger businesses in the district and where possible provide support and signposting for SMEs in the district.
5. **Developing business productivity:** Through a Productivity workshop in November 2017, to understand how best practice from the larger, successful businesses in the district can be adapted and implemented by small and growing businesses.
6. **Supporting industry clusters:** To assess the opportunity to provide workshops for priority sectors/clusters (which may differ or represent specific sub-divisions of the D2N2 Priority Sectors that are relatively more important to the local economy) facilitated by an expert in order to assist in strengthening businesses in the district. To also encourage mentoring between businesses in order to assist in development and share good practice
7. **Supply chain opportunities:** Through key account management activities, to develop a deeper understanding of the supply chain requirements for the larger businesses in the district and in turn assist smaller businesses in providing these requirements.
8. **Workshop space for SMEs and start-ups:** Undertake further research to establish the demand for flexible workshop space in Newark and, if appropriate, partner with relevant organisations to provide workspaces for businesses (for example, no larger than 3,000 -5,000 sq ft). From current anecdotal information, there is a demand for such space and, as there is little speculative build in the current climate, the Council could support businesses by stimulating demand and providing incubator and expansion (or ‘grow on’) space.
9. **Retail sector and town centre support:** To partner with relevant organisations to support work to ensure the Town Centres within the District remain vibrant. In particular to consider actions relating to empty/unoccupied retail space and absentee landlords.
10. **Encouraging Inward Investment:** To ensure the District is represented at property related events at an appropriate level of investment. When the outcome of the recent consultation and inquiry relating to Community Infrastructure Levy (CIL) is known, activities with commercial agents within the region and beyond could be initiated as well as through intermediaries in order to promote the land and commercial property opportunities available in the District. This will involve working closely with local Business Ambassadors (Business Leaders’ Group) and commercial agents to maximise opportunities.
11. **Promoting the District:** A short video of the district was produced in 2014, promoting the local area and its business community. This video is now in need of updating. Existing recent video material pertaining to the district will be reviewed and collated, or an entirely new short video commissioned

12. Improving business customers’ outcomes and experience of working with the District

Council: to deliver an improved service across the Council for business customers. This involves increasing collaboration between teams that work directly with business customers. First steps in this process have included an e-newsletter to businesses providing contacts for each of the departments that a business may have contact with

The national, sub-regional and local data presented in the rest of this report will be interpreted in the context of the Government’s, D2N2’s, and Newark and Sherwood District Council’s visions and objectives. Policy priorities at a national, sub-regional and local level are summarised in Figure 1 below.

Figure 1: Matrix of Economic Development Policy Priorities

Policy area*	UK Industrial Strategy	D2N2 SEP Strategic Priorities	NSDC Economic Prosperity Plan
Employment	People: - facilitating progression routes within the labour market	Employment and skills	Up-skilling 18-24 year olds
Innovation	Ideas: – R&D, innovation and commercialisation of scientific research	Innovation	
Education and Skills	People: – Skills (STEM skills) and retraining	Employment and skills	Schools and businesses; Up-skilling 18-24 year olds
Enterprise and Business Support	Business environment: – Increasing SME productivity and encouraging more start-ups in the UK	Business support and access to finance	Support for businesses; Key account management and access to support; Developing business productivity; Supporting industry clusters and Supply chain opportunities; and Workshop space for SMEs and start-ups:
Competition, Trade and Inward Investment			Promoting the District; and Encouraging Inward Investment.

Infrastructure, Regeneration and Housing	Infrastructure: –transport, digital and housing; Places: – Tackling regional disparities in productivity and economic performance.	Infrastructure for economic growth; and Housing and regeneration.	Retail sector and town centre support
---	---	--	--

*Policy areas (with a focus on productivity) are set out with broad reference to the Treasury’s ‘Five Drivers’ of productivity: Enterprise, Innovation, Skills, Competition and Investment – with employment (facilitating access to the job market/increasing demand for labour/facilitating progression within work) and infrastructure/housing added as two factors underpinning inter-regional disparities in economic performance.

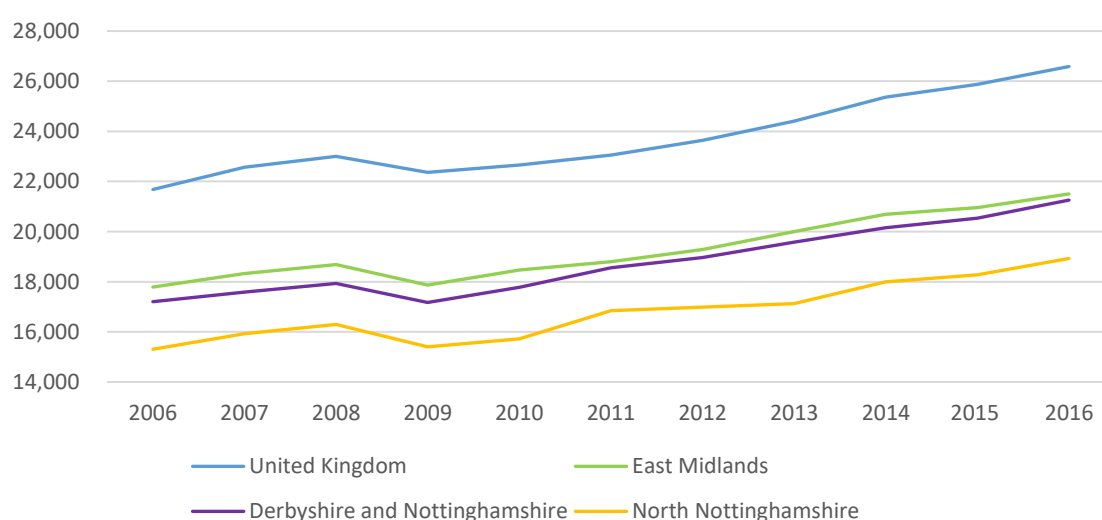
3. Macroeconomic Overview

Following the onset of recession in the UK in 2008, national output contracted at a comparable rate to that experienced in the Great Depression in the 1930s, and significantly exceeded the output lost in the recessions of the 1970s, 80s and 90s. Between the first quarter of 2008 and the second quarter of 2009, real GDP fell by 7.2% (ONS, 2017). This was the consequence of five consecutive quarters of negative economic growth. The UK then experienced a much more gradual recovery than it experienced after the recessions of the early 1980's and mid 1990's.

Although the extent of output lost across the UK was greater than in any previous recession since the 1930s, the labour market was far more resilient than in earlier recessions. The rate and level of employment fell far less than in previous recessions and has been steadily rising since October 2011. On top of this, unemployment increased far less, and is currently lower than it has been since the mid 1970's. Despite all of this, there are still some major concerns in the UK's economy with one of the main issues being weak levels of productivity comparatively to other developed economies.

Inflation in the UK has been steadily increasing from a low of 0.2% in October 2015 to 2.7% in the latest period, December 2017 (ONS, 2018). UK output growth (in Gross Domestic Product, GDP) has been between 2 and 4% per annum since the mid 1990's, with the exception of the period of contraction in 2008. Since recovering from the recession from the third quarter of 2009, national GDP growth has risen to around 2% per annum, except in 2014 when it went up to 3.1%. For the Autumn Budget Statement, the Office of Budgetary Responsibility (OBR) forecast growth to slow to 1.5% per annum in 2017, slowing more in 2018 and 2019, before increasing to 1.6% in 2022. This downward revision in forecast growth was mainly due to more negative productivity performance than expected.

Chart 1: Gross Value Added (Income Approach), per head of population at current basic prices - 2006 to 2016



Source: ONS Crown Copyright, 2017; 'Sub-national estimates of GVA – Table 2: Headline Gross Value Added (Income Approach) per head of population at current basic prices 2006 – 2016'. [Accessed 23rd of January 2018]

The most detailed geographical level for which official estimates of output (expressed in terms of Gross Value Added, GVA, at a sub-national level)¹ is published is NUTS3, a sub-division of statistical geography developed for the European Union, usually smaller than a County. Newark & Sherwood is covered by the North Nottinghamshire NUTS3 region, along with Ashfield, Bassetlaw and Mansfield Local Authority Districts. The wider D2N2 Local Enterprise Partnership area is captured by the Derbyshire and Nottinghamshire NUTS2 area. Chart 1 shows headline GVA per head between 2006 and 2016 for the UK, the East Midlands NUTS1 area, Derbyshire and Nottinghamshire NUTS2 and North Nottinghamshire NUTS3.

Chart 1 shows that:

- GVA per head in North Nottinghamshire in 2016 was £18,926, significantly lower than the UK (£26,584), the East Midlands (£21,502), and Derbyshire and Nottinghamshire (£21,256);
- The trend in GVA per head shown in the chart shows the dip in 2008 and 2009 in all areas, followed by recovery from 2010. However, it also shows that North Nottinghamshire recovered more slowly than elsewhere between 2011 and 2013; and
- As a consequence, GVA per head in North Nottinghamshire fell from 72.2% of the UK average at the start of the time series (2006) to 70.1% in 2009 and then recovered to 71.9% of the UK average in 2016.

GVA is a workplace-based measure, relating to the location in which the economic activity takes place (i.e. the business premises from which individuals create wealth). In some parts of the UK, there is a close correlation between the relative value of output generated in workplaces and the income associated with households. However, due to commuting effects, other areas can have high levels of (workplace-based) output alongside relatively low levels of (residence-based) income, or vice versa. Nottingham City is an example of somewhere that generates a relatively high level of output in GVA per head, but has low levels of household income. This is principally because large numbers of workers are resident elsewhere, and commute into the city.

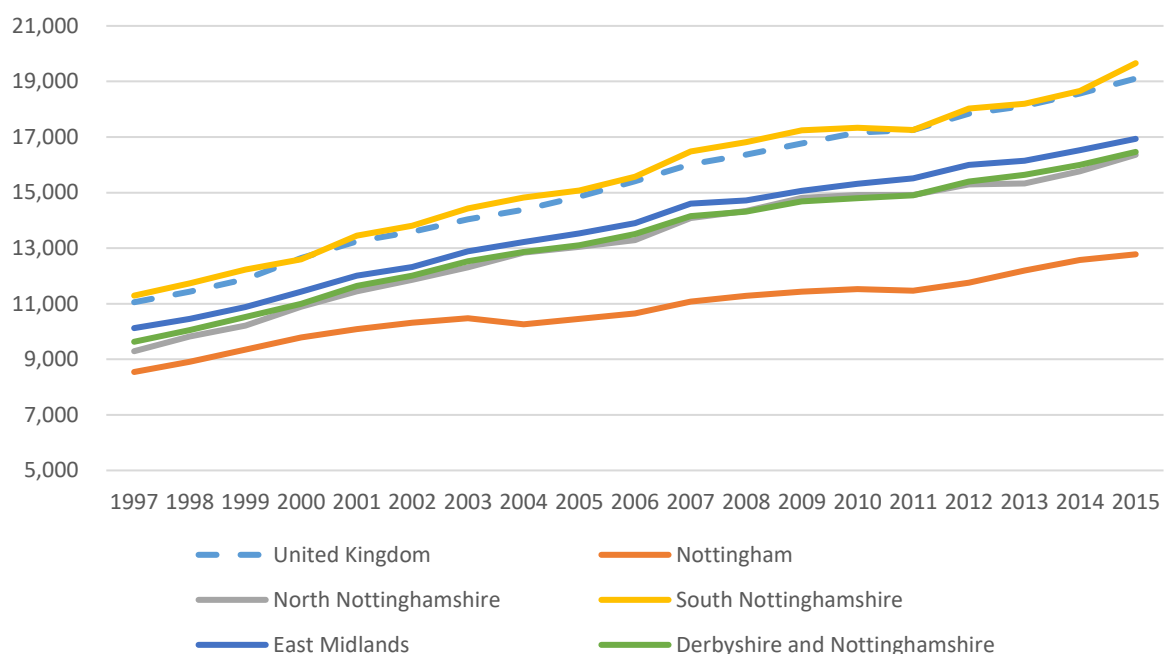
Gross Disposable Household Income (GDHI) represents (residence-based) aggregate income across the whole household sector (including income generated from employment and ownership of assets), after distribution measures such as taxes and benefits. It does not consider housing costs and the estimates are published at current basic prices, meaning that they are not adjusted for the effects of general price inflation. In many ways GDHI is a preferable measure of 'prosperity' to GVA in that it provides a useful measure of the economic wellbeing of households that takes us a little closer to the lived experience of communities, households and individuals.

Chart 2 shows GDHI per capita for the UK, the East Midlands, Derbyshire and Nottinghamshire and Nottingham, South Nottinghamshire and North Nottinghamshire NUTS3 areas. In contrast to Chart 1 (where GVA in North Nottinghamshire is significantly lower than the other areas illustrated), household income in North Nottinghamshire NUTS3 is closely in line with the average for D2N2 and the East Midlands region, at £16,361 per head in 2015. GDHI in North Nottinghamshire was 85.6% of the UK average (£19,106) in 2015: this has remained constant throughout the time series shown; as

¹ Gross Value Added (GVA) is equivalent to Gross Domestic Product (GDP) without adjusting for taxes and subsidies, which cannot be meaningfully applied at a sub-national level (i.e. for regions, sub-regions and industry sectors). GDP=GVA plus taxes less subsidies.

GDHI in North Nottinghamshire has tended to grow in-line with the national trend. Nottingham City compares particularly poorly on this indicator. GDHI in Nottingham grew more slowly than the UK average in the years prior to the recession that started in 2008, but also recovered more slowly after the recession. In 2015, GDHI in Nottingham was £12,779 per head, 66.9% of the UK average, the lowest of all 173 NUTS3 areas in the UK. Leicester had the lowest GDHI in the UK in 2014. On balance this suggests that skilled/more highly paid workers are likely to commute from North Nottinghamshire to work elsewhere (accounting for the lower workplace-based GVA, but higher residence-based GDHI).

Chart 2: Gross Disposable Household Income (GDHI) per head of population, 1997-2015 (aggregate measure for the household sector as a whole, not adjusted for housing costs)



Source: ONS Crown Copyright, 2017. 'Regional Gross Disposable Household Income: 1997-2015'.

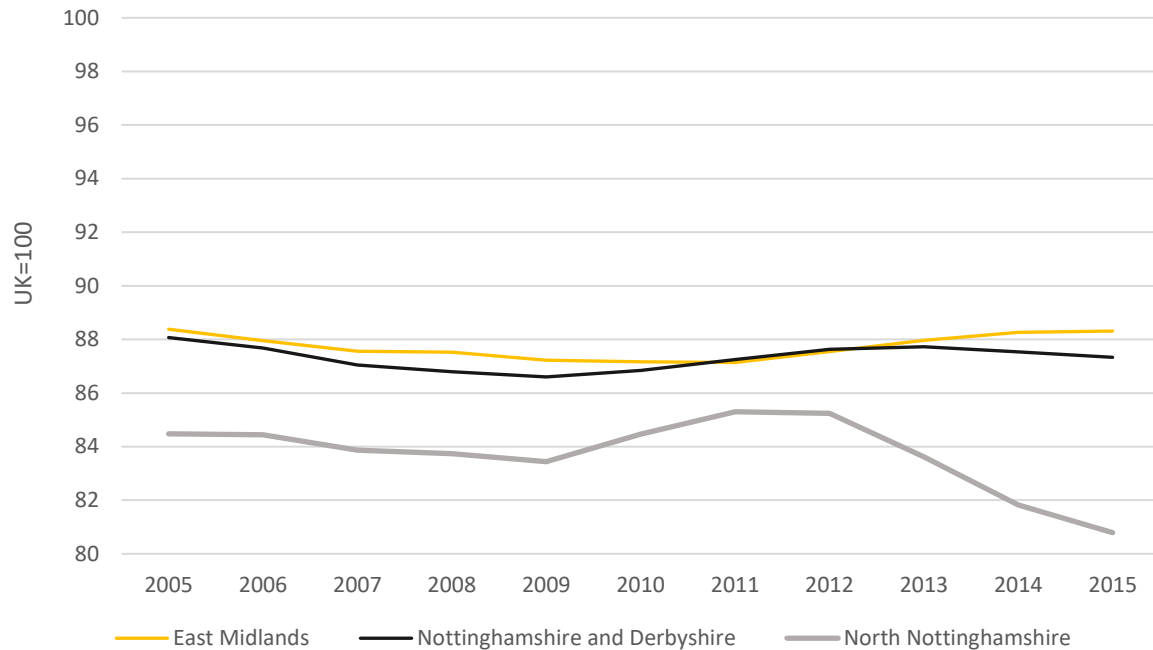
If lower forecast national output growth and the disparity between output and income at a local level are both related to productivity, it is important to have a detailed understanding of trends and driving factors behind productivity itself. 'Productivity' expresses how efficiently an economy (an individual workplace or business, an industry sector, a local area or region, or national economy) converts units of input into output – and is usually measured in various forms of output per unit of input (e.g. GVA per hour worked). Inputs include labour and capital, whilst output is typically measured in revenues and other GDP/GVA components such as business inventories. Productivity measures may be examined collectively (across the whole economy) or viewed industry by industry to examine trends in labour growth, wage levels and technological improvement.

Increasing productivity is generally considered to be the only sustainable way of improving living standards in the long term. However, productivity has been a major problem for the UK for several decades, and GVA per hour worked is estimated to be almost 19 percentage points below the average for G7 countries. Compared to France, Germany and the Nordic countries, the average British

employee works considerably longer hours (in common with the US) but produces less output as a consequence.

Within the UK, areas like the D2N2 LEP significantly lag the national average. Chart 3, which expresses sub-national productivity in terms of GVA per worker, illustrates that the D2N2 area has fallen below the East Midlands in recent years (itself below the UK average), to 87.3% of the UK in 2015. The CBI estimate that this is equivalent to an output gap with the national average of £8.2 billion (CBI, 2017).

Chart 3: Nominal (smoothed) GVA per filled job indices by NUTS region - 2005 to 2015



Source: ONS Crown Copyright, 2017; ‘Sub regional Productivity: Labour Productivity (GVA per hour worked and GVA per filled job) indices by UK NUTS2, NUTS3 sub regions and City regions – Table B1: Headline Nominal (smoothed) GVA per filled job indices; by NUTS 2 and NUTS 3 sub regions, 2002 – 2015’. [Accessed 23rd of January 2018]

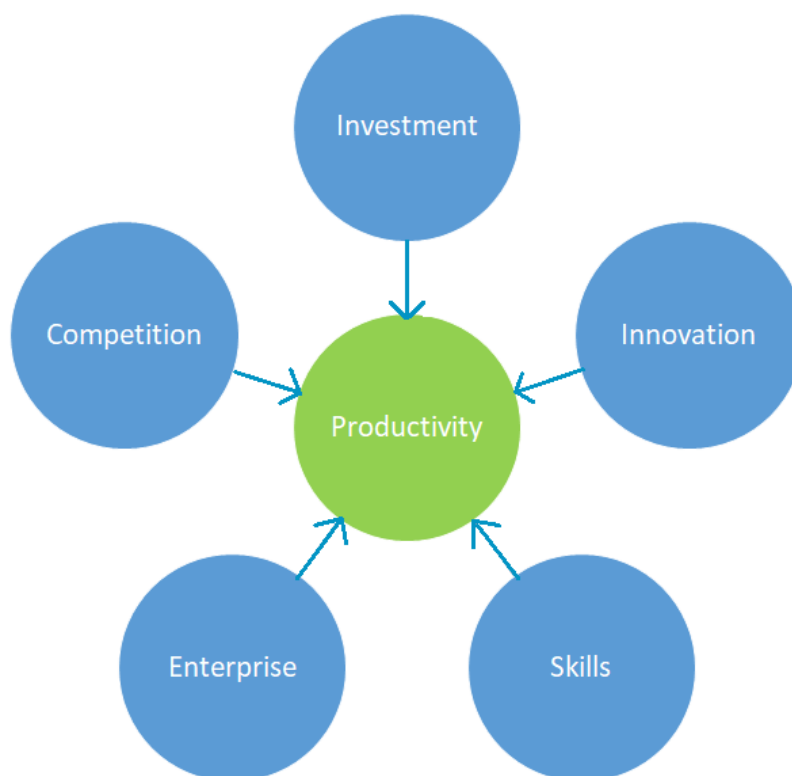
Chart 3 also shows that:

- The North Nottinghamshire NUTS3 area has had very low levels of productivity in general over the past decade and it appears to be steeply falling since 2012, from 85.2% of the UK average to 80.8% in 2015 (widening the gap with both the East Midlands and the D2N2 area);
- Relative productivity for the East Midlands and the D2N2 area have been more stable over the past decade and have generally been at around 87% to 88% to that of the UK. Despite the East Midlands showing overall low levels of productivity in comparison, its relative position in relation to the national average has been improving since 2011.

Analysis of the underlying components of economic performance suggests that certain factors are critical for determining productivity growth. The Government’s productivity framework identifies five

drivers that interact to underlie long-term productivity performance: investment, innovation, skills, enterprise and competition², as illustrated in Figure 2.

Figure 2: The Drivers of Productivity



Investment is in physical capital – machinery, equipment and buildings. The more capital workers have at their disposal, generally the better they are able to do their jobs, producing more and better quality output.

Innovation is the successful exploitation of new ideas. New ideas can take the form of new technologies, new products or new corporate structures and ways of working. Such innovations can boost productivity, for example as better equipment works faster and more efficiently, or better organisation increases motivation at work.

Skills are defined as the quantity and quality of labour of different types available in an economy. Skills complement physical capital, and are needed to take advantage of investment in new technologies and organisational structures.

Enterprise is defined as the seizing of new business opportunities by both start-ups and existing firms. New enterprises compete with existing firms by new ideas and technologies increasing competition. Entrepreneurs are able to combine factors of production and new technologies forcing existing firms to adapt or exit the market.

² Source: ONS Crown Copyright, 2017; 'The ONS Productivity Handbook, Chapter 3: Productivity Theory and Drivers', [Accessed 23rd of January 2018]

Competition improves productivity by creating incentives to innovate and ensures that resources are allocated to the most efficient firms. It also forces existing firms to organise work more effectively through imitations of organisational structures and technology.

This framework provides a useful rationale for indicators that affect productivity performance at a local level for Newark and Sherwood – including skills (measurable in terms of the qualifications held by the local workforce, and also the effectiveness in which those skills are deployed in terms of jobs matching and the demand for skills from employers) and entrepreneurship (and the wider ‘health’ and productive potential of the local business base, with a level of ‘churn’ indicating the emergence of new, higher growth, productive businesses and the re-allocation of resources to them away from older, slower growing, less productive businesses).

4. The Labour Market

Employment rates express the number of residents in paid employment as a percentage of all residents considered to be of working age (16-64). The International Labour Organisation defines unemployment as individuals without a job who have been actively seeking work in the past four weeks and are available to start work in the next two weeks. Together those who are classified as either employed and unemployed make up the economically active population. The unemployment rate is measured slightly differently and is expressed as a percentage of the economically active rather than the population who are of working age.

4.1 Employment

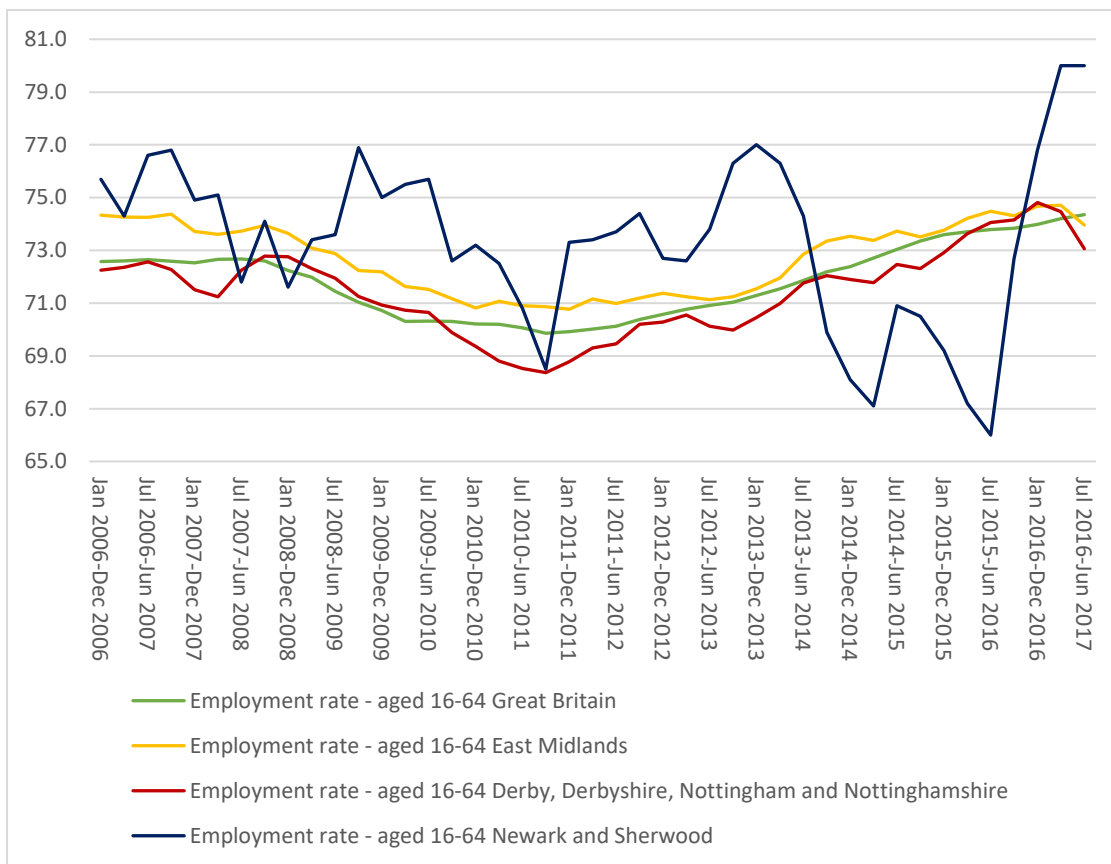
Because of the two different populations that are used to calculate employment and unemployment rates, it is quite possible, and relatively commonplace, for both to increase or decrease at the same time. For example, a reduction in the number of economically inactive adults (due to a change in childcare provision) could lead to increases in both the rate of employment (as some full-time parents succeed in finding appropriate employment) and the rate of unemployment (as others have started to actively look for a job, but had not yet found one at the time of interview, thus meeting the criteria for being unemployed).

Losses of output in the UK associated with the Great Recession of 2008/9 were greater than in any recession since the 1930's. In contrast, the labour market proved more resilient than many commentators anticipated on the basis of the employment effects of previous recessions. In Great Britain, employment levels have seen slow but steady growth since they reached a 15 year low of 69.9% towards the end of 2011. Currently, the UK is experiencing the highest employment rates that have been recorded since the relevant ONS data series started in 1971.

Chart 4 presents employment rates for Newark and Sherwood compared to the national, regional and LEP area averages from 2006 until 2017. At the district level it should be noted that these estimated employment rates are prone to fluctuation. Nevertheless, we can make the following observations:

- Employment rates for all of these geographic areas were adversely affected by recession, reaching their low point in 2011. Since then, employment rates have steadily improved;
- For the majority of this period, the employment rate in the East Midlands was above the national rate. In contrast, employment levels in the D2N2 area as a whole have tended to perform less well than regional and national comparators – particularly since 2011; and
- In general over the time period in question, the employment rate of Newark and Sherwood tended to track movements of the equivalent sub-regional, regional and national figures but was stronger than these comparators for the majority of this period.

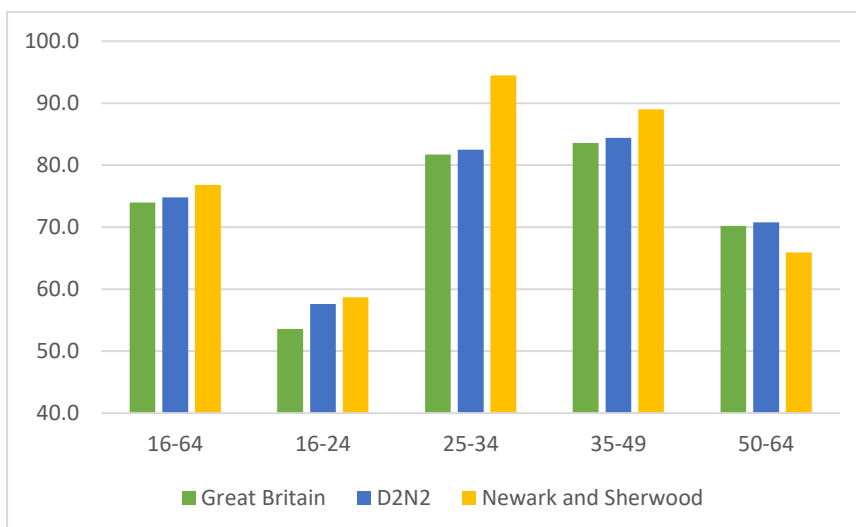
Chart 4: Employment Rate - As a Percentage of the Population Aged 16-64



Source: ONS Crown Copyright, 2017; Model Based Estimates of Employment, Jan 2006 – Dec 2006 to July 2016 – June 2017. From NOMIS [Accessed 12th of January 2018]

Overall employment levels can sometimes mask large variations between different age groups. Chart 5 provides a snap shot of employment rates for four cohorts within the working age population as they stood in 2016.

Chart 5: Employment by Age Group - January 2016 to December 2016 (%)



Source: ONS Crown Copyright, 2017. 'Annual Population Survey' January 2016 to December 2016. From NOMIS [Accessed 12th January 2018]

Chart 4 shows that Newark and Sherwood had a higher employment rate for the working age population in general than did either D2N2 or Great Britain. When we look at sub-groups within the working age population, the picture is more complex. The only demographic group that underperforms compared to the national and LEP area averages are the 50-64 age group. The age demographic with the highest employment rate in Newark and Sherwood is the 25-34's, this contrasts with Great Britain and the D2N2 area where the 35-49 group has the highest employment rate.

4.2 Unemployment

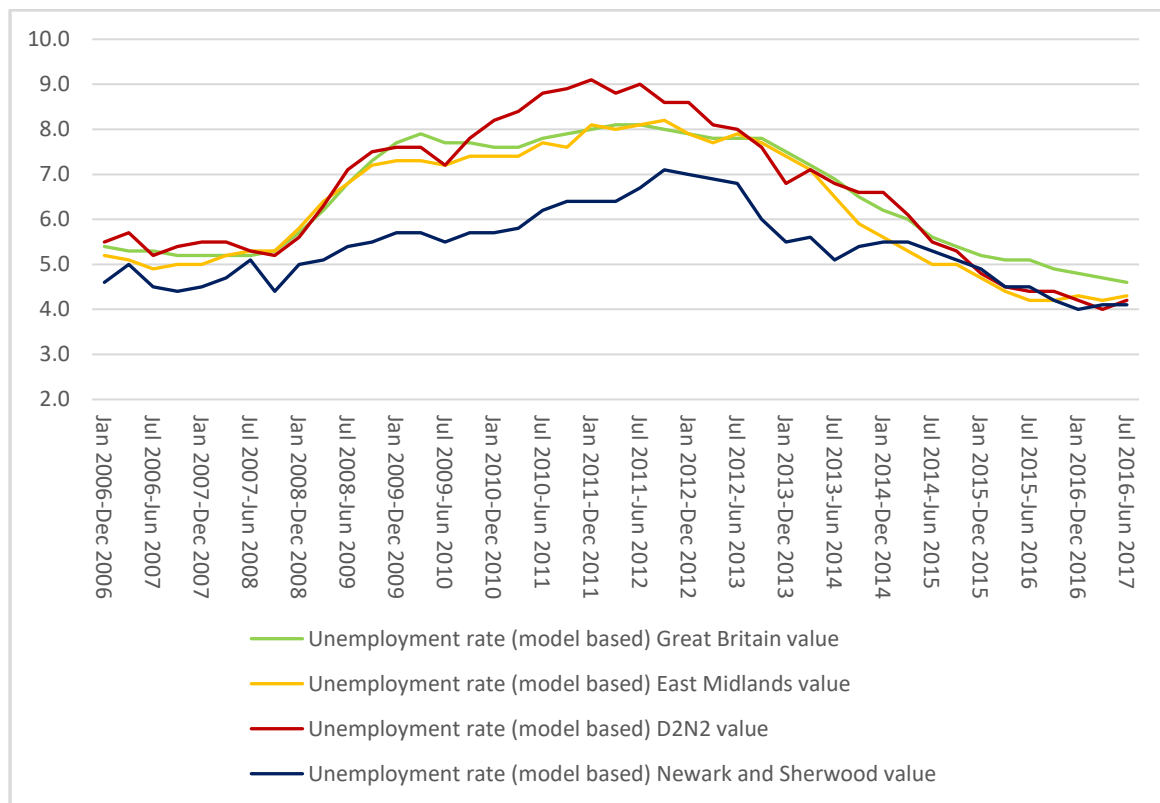
Currently, national unemployment levels are the lowest that they have been since 1975 at 4.3% and have been on a general downward trend since the financial crisis, with a peak of 8.5% in September to November 2011. Although unemployment nearly doubled during the 2008-9 recession, rates seen were far below those that have been seen in during previous recessions. This has widely been seen as suggesting a welcome degree of labour market resilience³.

Chart 6 shows that:

- Newark and Sherwood had lower unemployment levels than Great Britain for the majority of the last decade. Differences were statistically significant between October 2008 and June 2011 and between October 2012 and June 2014;
- Unemployment rates in the East Midlands tended to follow national trends quite closely up until July 2013 to June 2014. Since then, employment has fallen relative to Great Britain and rates have been below the national level in every time period since; and
- Unemployment rates in the D2N2 area were mostly around the national level, except for a noticeable increase from July 2009 to June 2010 up until July 2012 to June 2013. In more recent time periods, rates have fallen and have generally been below the national level since.

³ As previously noted, unemployment rates are measured differently to employment rates and are expressed as a percentage of those who are economically active rather than of the working population.

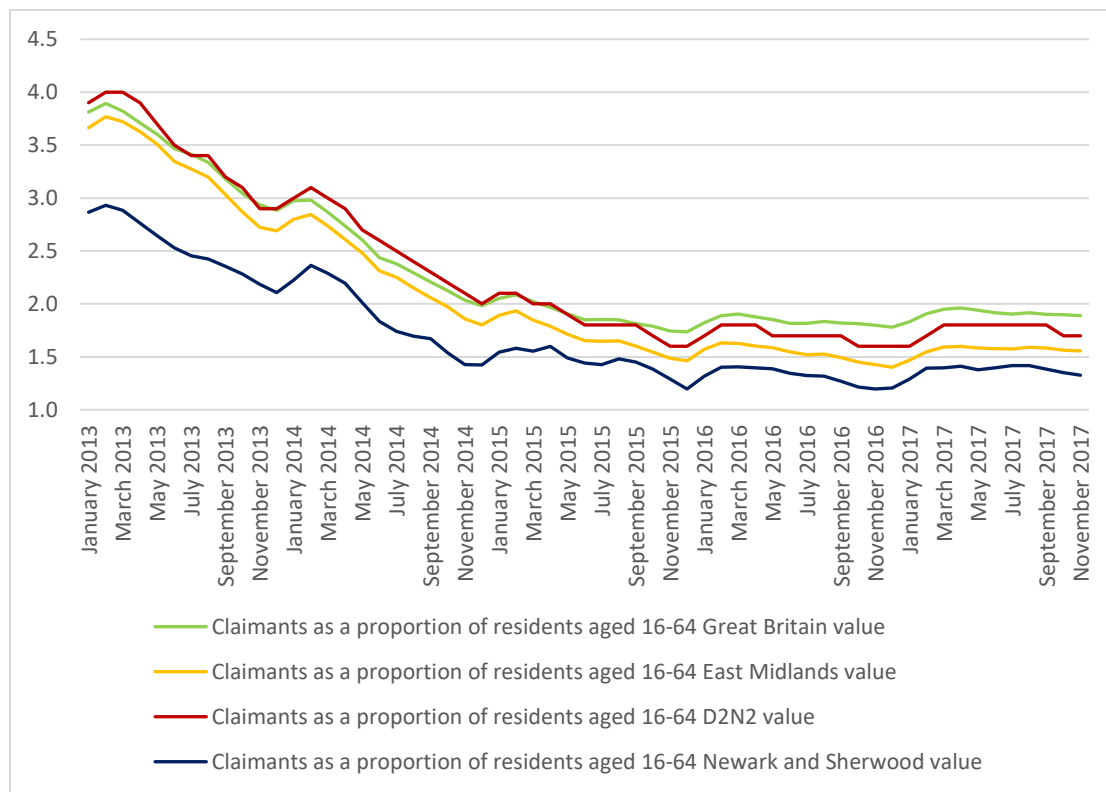
Chart 6: Unemployment Rate as a Percentage of the Economically Active Population



Source: ONS Crown Copyright, 2017; Model Based Estimates of Unemployment, Jan 2006 – Dec 2006 to July 2016 – June 2017. From NOMIS [Accessed 12th January 2018]

Chart 7 details the claimant count for Great Britain, the East Midlands and the D2N2 area. It must be noted however that the claimant count measures those who actually claim benefits and there is a significant number of people who are entitled to claim benefits but do not. It is also important to remember that the volume of benefit claimants is influenced by changes to benefit eligibility rules. Sub-regional figures are available from January 2013.

Chart 7: Benefit claimants as a proportion of residents 16-64 year olds (%)



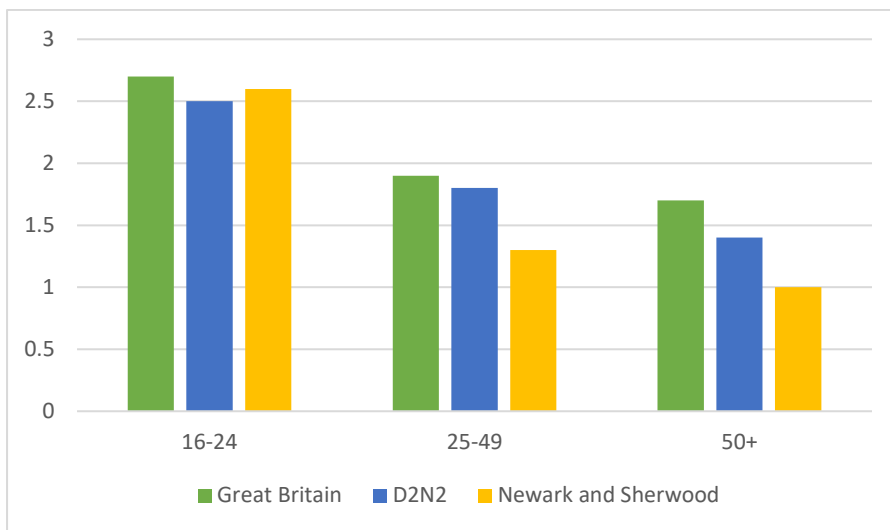
Source: ONS Crown Copyright, 2017. ‘Annual Population Survey’ January 2013 to November 2017. From NOMIS [Accessed 17th of January, 2018]

The chart also shows that:

- Claimant count has shown to follow a very similar trend to that of the unemployment rate over recent years, with levels in 2015/16 some of the lowest that they have been since the mid 1970’s; and
- Overall claimant count rates in Newark and Sherwood have been below national, regional and LEP area levels during every time period recorded.

Overall figures can mask issues within certain age demographics. Chart 8 breaks the most recent data down by age group, comparing Newark and Sherwood to Great Britain as well as the D2N2 area. The age groups contain data for everyone over the age of 16 i.e. the minimum age that an individual can possibly claim benefits.

Chart 8: Claimant Count by Age as a Proportion of the Population (%)



Source: ONS Crown Copyright, 2017. 'Annual Population Survey' January 2016 to December 2016. From NOMIS [Accessed 19th of January, 2018]

Chart 8 shows that:

- The claimant count of both the 25-49 and 50+ demographics in Newark and Sherwood is lower than the national and LEP area level;
- This is not the same with the 16-24 demographic where the claimant count is only marginally lower than Great Britain and is the only age demographic where there are a proportionally larger amount claiming benefits; and
- The percentage of claimants in the D2N2 area for each age bracket is marginally below the national level, but higher than Newark and Sherwood in all brackets except the 16-24s.

When productivity is measured per vacancy filled it is important to analyse the composition of the labour market in terms of the proportion of workers in full time employment as a lower proportion of the workforce working full time may make a region appear less productive than it actually is. For comparison the makeup of the Newark and Sherwood work force has been compared to the national level to give an indicator of general rates.

Over the past ten years in Newark and Sherwood, the percentage of the employed working in full time employment has been at a similar rate to the national level with no time periods showing a statistically significant difference. Data does however show that a higher proportion of the labour force work under 10 hours a week. Figures however for the percentage working between 10 to 34 hours a week has fluctuated comparatively to the national level and there is no distinct correlation.

Looking at the amount of hours that full time workers are working, the proportion 35 to 44 were mostly lower than the national level with some years showing a statistically significantly difference. There were increases in 2015 and 2016 and the percentage is now around the national level. Comparing the number of individuals working 45 hours a week plus, shows that Newark and Sherwood generally has a larger proportion of their workforce working these hours than in the UK. Overall, it can

be said that there is a polarisation in of the number of worked hours in Newark and Sherwood with more working with many working in the lowest and highest brackets, with fewer in the middle brackets.

Looking at the percentage in full time employment in the D2N2 area, figures have been lower than the national average almost every year in the past decade with the difference being significant every year except for 2013, 2014 and 2015. This difference appears to be caused by the percentage of 25-49 working full time. Figures are significantly lower in the early part of the past ten years but recovered more recently and there was no significant difference from the national level between 2011 and 2015. The data did however show a large improvement and it was significantly higher than the national average in 2016.

There is also a higher percentage of the employed who work under 10 hours a week in D2N2 as well as more who work 10 to 34 hours a week as compared the national level, although this is expected, as there are proportionally much more part time workers in the area. Again as expected, there have been proportionally fewer workers in the higher brackets with data for those working 35 to 44 hours a week being significantly below the national level in 2006 and 07 but has risen in more recent years and was actually significantly higher in 2015. In the highest bracket of those working 45+ hours a week, data showed to be generally lower than the national level and the difference was significantly lower in 2008 to 2010, 2012, 2014 and 2016.

4.3 Economic Inactivity

Those who are of working age that are not classified employed or unemployed are deemed to be economically inactive. The definition for which is individuals who are not in employment, who have not been seeking work within the last four weeks and/or are unable to start work within the next two weeks inactive. When measuring rates of economic inactivity it is expressed as a percentage of the working population. This means that individuals who are e.g. students, carers who are not seeking as well as 'discouraged workers' are all classified as economically inactive rather than as unemployed. The percentage of economically inactive individuals in Newark and Sherwood has fluctuated greatly in the past decade reaching as high as 32.3% in April 2015 to March 2016 and as low as 18.5% in July 2016 to July 2017 (NOMIS, 2018).

5. Skills Demand and Supply

The nature of skill is itself a matter for considerable debate. Some commentators emphasise the concept of skills as being social constructs – given meaning in particular social contexts. In economic terms, we may think of skill as being the ability and capacity acquired through deliberate, systematic and sustained effort to smoothly and adaptively carry out complex activities or job functions involving ideas (cognitive skills), things (technical skills) and/or people (interpersonal skills). Skill level of the workforce is a common theme identified in many productivity frameworks that have been developed over the years.

Skills are not just important from an economic perspective. They are also important from a social welfare or social mobility perspective. The ability of an individual to develop and apply skills is likely to be a significant determinant of the quality of employment they can access and their scope for progression when in employment. It follows that the acquisition of skills can enable workers to move up the occupational hierarch into higher paid (and potentially more secure) roles. Similarly, skills development may provide routes out of poverty for individuals in low income households.

Skills are not only important to ensure that individuals can remain employable (accessing, retaining and progressing within employment), but are an important requirement for high growth, innovative businesses. Research indicates a ‘virtuous circle’ in the relationship between skills and innovation. Skills are an important prerequisite if a firm is to be a successful innovator. The ability of firms to take-in and deploy new knowledge in order to develop new or improved products and services has often been seen as a function of workforce skill levels. ‘Absorptive capacity’ of this kind is in this sense an essential enabler of firm level innovation.

In turn, innovation further increases a firm’s demand for skills, if it is to unlock the benefits of the product or process improvements that can result from successful innovation. This observation also points to the importance, in policy terms, of considering the demand for, as well as the supply of skills in a local labour market. We may develop this line of argument further by noting the employer’s demands for skills are fundamentally a ‘derived demand’. They are the consequence of many other tactical and strategic decisions made within the organisation. Decisions including:

- What business models to adopt?
- What product or service markets to enter or develop?
- What technology should be deployed?
- How to manage the logistics of supply and distribution?
- Whether to sell direct or via intermediaries?
- How to design the work/production process? and
- What investment should be made in capital equipment?

Answering any one of these questions in a particular way could have significant consequences for the level and nature of the skills required in a particular business. It follows from this that local policy makers interested to stimulate demand for skills may need to find ways of influencing these kinds of higher order tactical and strategic decisions within local businesses.

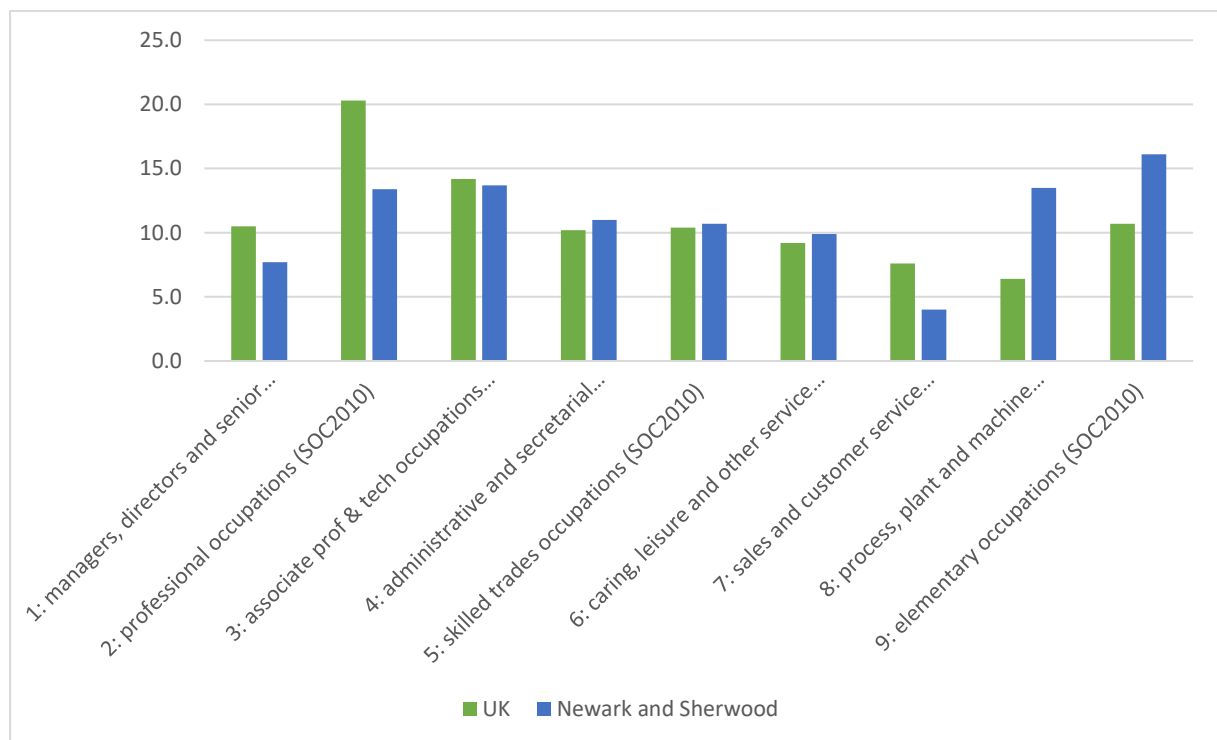
The East Midlands region, and many of the LEP areas included within it, exhibit characteristics indicative of a ‘low pay, low skill equilibrium’. This describes a situation in which a lower demand for

skills from many employers, due to the nature of the products or services they produce and their positioning within their markets (i.e. their ‘product market strategy’), is accompanied by a lower level of skills amongst the local workforce. This perpetuates a cycle, where companies may find it difficult to innovate (or to implement new or improved processes) due to a lack of workforce skills, whilst individuals may have limited incentive to invest in their skill development. Furthermore, highly skilled individuals are incentivised to migrate away from the local area or commute to work elsewhere. For a number of reasons set out in this report, Newark and Sherwood can also be described as exhibiting many of the characteristics of a ‘low pay, low skills equilibrium’.

5.1 Occupations

Employment by occupational group is an important indicator of the deployment of skills and the levels of skill required in the workplace. The Standard Occupational Classification (SOC, 2010) is derived from Labour force Survey responses on the activities that individuals do in their jobs based on *skills specialisation* (the types of skill used) and skill level. These correspond closely to the levels of qualifications in the workforce – although it is important to again emphasise that, just because an individual is in a job that requires a given level of skill, it does not necessarily mean that they have formal qualifications equivalent to that level.

Chart 9: Occupational Groups - % of Employed Residents



Source: ONS Crown Copyright, 2017. ‘Annual Population Survey’ January 2016 to December 2016. From NOMIS [Accessed 22nd of January, 2018]

Chart 9 presents a measure of the supply of skills and shows the percentage of the resident workforce working in each SOC 2010 groups for Newark and Sherwood compared to the national level. The following observations can be made comparing Newark and Sherwood to the national picture:

- Residents working in managerial and professional roles (SOC major groups 1 & 2) are under-represented in Newark and Sherwood compared to the national picture; and
- Residents working in process, plant or machine operative roles and other elementary occupations (SOC major groups 8 & 9) are over-represented in Newark and Sherwood compared to the national situation.

Generally speaking, this is typical of the LEP area, with there being a significantly higher percentage of people employed in major groups 8 and 9, compared to the national average, and a comparatively lower percentage of employees working in groups 1 and 2. The only significant difference in the economic makeup of Newark and Sherwood and the D2N2 area is the higher proportion of the workforce employed in SOC group 8. This suggests that the working population of D2N2 are generally lower skilled in comparison to the rest of the UK with Newark and Sherwood being no exception to this.

Looking at changes in the makeup of the workforce over the past ten years, in Newark and Sherwood there has been a fall of the percentage of workers working in managerial occupations (SOC major group 1). More positively we note a large increase in the proportion working in associate professional or technical roles from 6.4% to 13.7 (SOC 2010 major group 3).

5.2 Skills and Qualifications

This section considers the supply and demand for skills for Newark and Sherwood. The proxy measure that has been used to quantify level of skill of the workforce is the percentage of the working population by their highest qualification. The measure that has been used to measure qualifications is NVQ level.

Although this indicator explicitly measures *qualifications* rather than *skills* (which may be unaccredited), it is widely available and comparable across time and geographical area. However, it is important to emphasise that an individual's highest level of qualification may or may not confer the type and level of skills necessary for their job-role, and that individuals working in highly skilled jobs (such as owner-managers of businesses) may not necessarily have formal qualifications at an equivalent level.

Chart 10 illustrates the proportion of employed residents in Newark & Sherwood, D2N2 and the UK who have highest qualifications (i.e. qualifications at a given level but no higher) at the four levels frequently used in international comparisons:

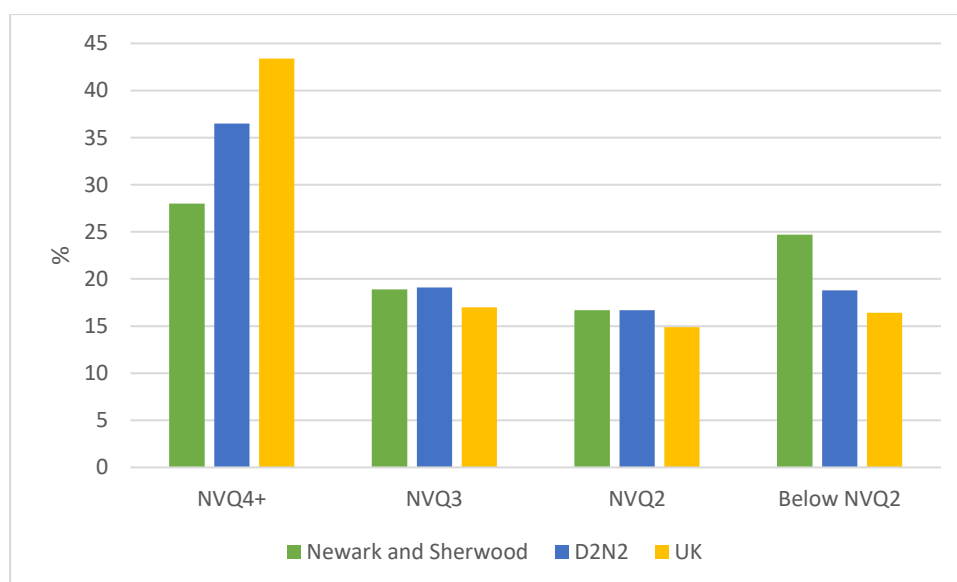
- NVQ/NQF⁴ Level 4 and above, such as a first degree or equivalent vocational qualification and qualifications above this, such as post-graduate degrees;
- NVQ/NQF Level 3, equivalent to A-Levels, Advanced Apprenticeships and other equivalent intermediate vocational qualifications;
- NVQ/NQF Level 2, such as 5 GCSEs at grades A*-C or equivalent vocational qualification – such as a NVQ2 or Apprenticeship. This level of qualification has been identified by the ILO as the minimum level of educational attainment required to enter and progress in the labour market

⁴ National Vocational Qualification/National Qualification Framework equivalence.

and it has been a target of successive UK governments that all school leavers aged 16-18 should have qualifications equivalent to this level; and

- All qualifications below a NVQ/NQF Level 2, including less than 5 GCSEs at grades A*-C, an NVQ1 or other entry-level vocational qualification. This category also includes individuals who have no formal qualifications.

Chart 10: Highest Qualification of Employed Residents (%), 2017



Source: ONS Crown Copyright, 2018. 'Annual Population Survey', January-December 2017. From NOMIS [accessed 13th August, 2018].

This shows that:

- The qualifications profile of employed residents in Newark & Sherwood is similar to the D2N2 average in terms of the proportions of employed residents holding mid- and lower-level qualifications;
- Newark & Sherwood has a substantially lower percentage of employed residents who are qualified at the NVQ4+ level (28%) compared to the D2N2 area (36.5%) and the UK overall (43.4%). This percentage has decreased significantly over the past 5-years since the 2013 report, which reported that, overall, the Newark & Sherwood had approximately 34.2% employed residents qualified to Level 4+;
- An above average proportion of employed residents had qualifications below Level 2 in Newark & Sherwood, at 24.7%. While the D2N2 area (18.8%) still had a higher average percentage than the UK (16.4%), it has dropped substantially in the past 5-years; and
- Newark & Sherwood and the D2N2 area showed relatively similar levels of Level-3 (18.9% and 19.1%) and level-2 qualifications (both 16.7%), while the UK as a whole showed that the percentage of employees with Level 3 and 2 qualifications was at 17% and 14.9%.

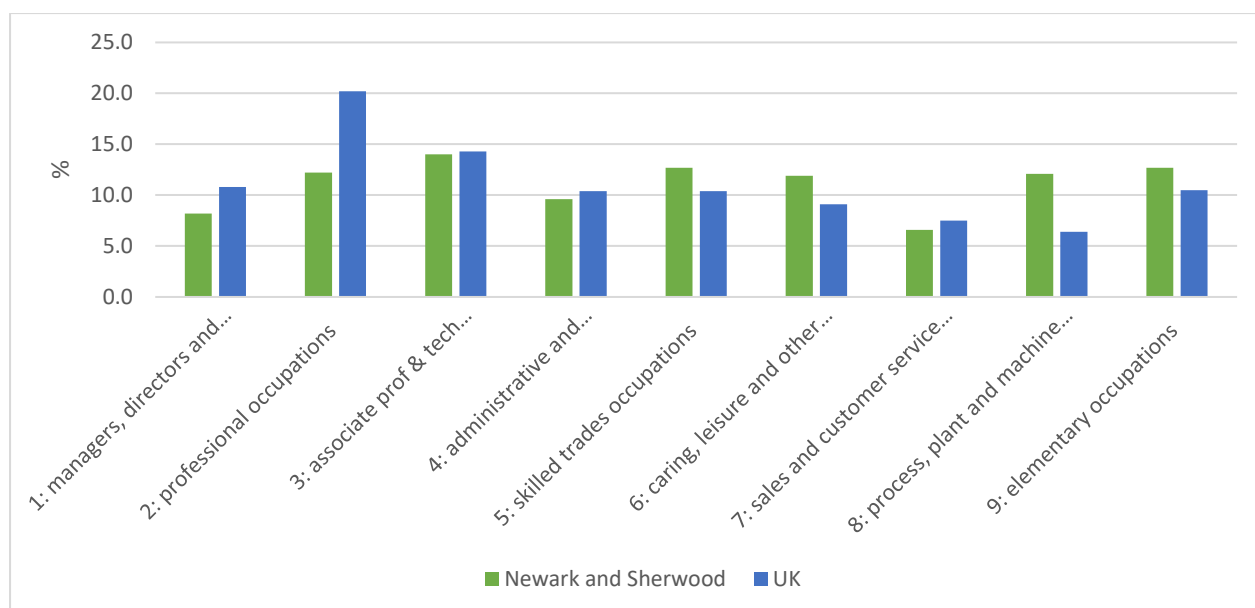
This local over-representation of lower-level qualifications at below Level 2 is consistent with the structure of employment by occupation for Newark & Sherwood, illustrated in Chart 6, which suggests a demand for ‘elementary occupations’.

Employment by occupational group is an important indicator of the deployment of skills and the levels of skill required in the workplace. The Standard Occupational Classification (SOC, 2010) is derived from Labour force Survey responses on the activities that individuals do in their jobs based on *skills specialisation* (the types of skill used) and *skill level*. These correspond closely to the levels of qualification supplied in the workforce (Chart 5) – although it is important to again emphasise that, just because an individual is in a job that requires a given level of skill, it does not necessarily mean that they have formal qualifications equivalent to that level.

Chart 11 compares the structure of employment by occupation in Newark & Sherwood to the UK average, showing that:

- The occupational groups associated with the highest level of skill (equivalent to a Level 4 qualification and above) account for a lower than average proportion of employment in Newark & Sherwood. Managers and Senior Officials account for 8.2% of employed residents locally, compared to 10.8% in the UK, whilst Professionals account for 12.2% (a drop of 5 percentage points since 2013) compared to 20.2% in the UK;
- Conversely, residents in Newark & Sherwood are relatively more likely to be employed in the occupational group associated with the lowest level of skill. Elementary Occupations, which require little in the way of skill, formal education or qualifications to perform, accounted for 12.7% of employed residents in Newark & Sherwood compared to 10.5% nationally; and
- The structure of employment in Newark & Sherwood is significantly over-represented in two occupations that are associated with intermediate levels of skill: skilled trades and caring, leisure and other service occupations.

Chart 11: Occupational Group (SOC Major, 2010) of Employed Residents (%), 2017



Source: ONS Crown Copyright, 2018. ‘Annual Population Survey’, January-December 2017. From NOMIS [accessed 13th August, 2018].

The importance of these last two intermediate-skilled occupations to employment in Newark & Sherwood also suggests the need for interventions encouraging young people to access work-relevant, vocational training at Levels 2 and 3, such as the 100 Apprenticeship campaign in Newark & Sherwood, which aims to encourage local businesses to recruit young apprentices.

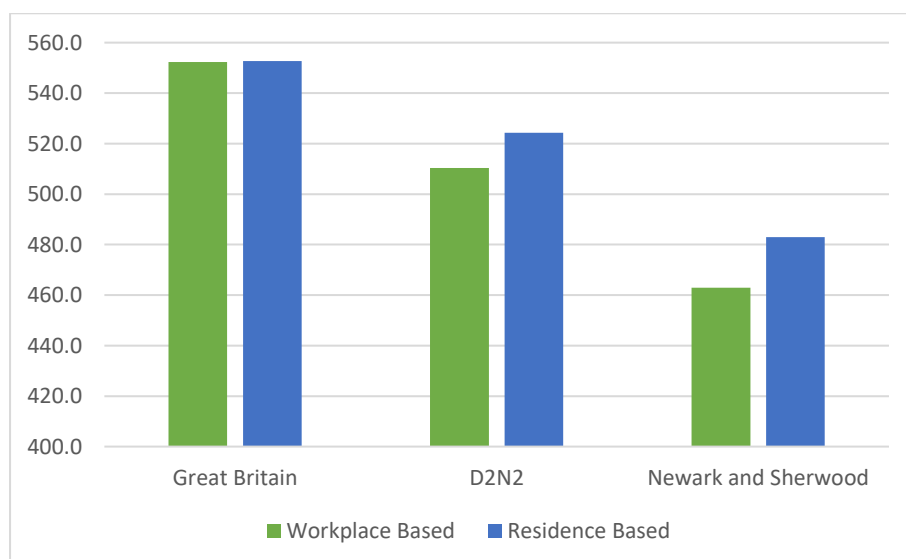
5.3 Earnings and Commuting

Earnings are often used as a proxy measure for the quality of local employment. This is because more productive workers are generally thought to command higher wages than their less productive counterparts. Also wage levels influence the economic wellbeing of workers and the households of which they form part. Data is available at a district level for earnings based on both individuals' place of residence and their workplace from the Annual Survey of Hours and Earnings (ASHE). Therefore we can compare estimates for those who live in the district, some of whom may work elsewhere, and for those who work in the district, some of whom may live elsewhere. Differences between these two earnings estimates allows us to draw inferences about the influence of commuting.

If 'residence-based' earnings are higher than 'workplace-based' earnings, it is reasonable to suggest that a significant number of higher paid (and thus more highly skilled and productive) residents are commuting out of the district to work elsewhere. Given Newark & Sherwood's good transport links by both road (A1) and rail (East Coast mainline), commuting is likely to be a significant influence on the area.

Chart 12 compares residence- and workplace-based earnings in Newark & Sherwood with the D2N2 LEP area as well as and national averages. It can be noted that the median is used as an average rather than the mean, as a very small percentage of top bracket earners will dramatically skew the data and will not produce an accurate representation of the situation of an average person in the area.

Chart 12: Gross Weekly Pay - Median full-time workers (£ per week), 2017



Source: ONS Crown Copyright, 2017. 'Annual Survey of Hours and Earnings – 2017'. From NOMIS [Accessed 12th January 2018]

From this data we may observe:

- Newark and Sherwood has a lower median weekly wage on both residence and workplace based measures than Great Britain as well as the D2N2 area;
- Earnings for those working in Newark and Sherwood are significantly lower than those who are residents in the district. The estimated average resident-based earnings are £483.0 per week compared to 462.9 for the estimates for workplace-based earnings. This strongly suggests that higher skilled workers who live in Newark and Sherwood are commuting to work outside of the district and that in general work within Newark and Sherwood may tend to be lower skilled and low paid; and
- A similar problem is occurring in the D2N2 area where the residency-based earnings are considerably higher than the workplace earnings suggesting that some higher skilled workers are commuting outside of the area to work.

6. Business Structure and Key Sectors

The economic development of an area is fundamentally an evolutionary process. The changing industrial structure of an area affects the economic welling of communities in a number of ways. It influences the nature of local employment opportunities available to residents, but it also has a direct impact on a localities ability to respond to economic shocks. This responsiveness has been termed ‘adaptive capability’ and it is the capacity of an area to ‘respond to exogenous forces on the one hand, and on the other, to create new paths of economic development from within’. Adaptive capability provides a way for an area to avoid getting ‘locked in’ to a path of long term economic decline⁵. Economic shocks can occur in any industry and can originate in local (for example the closure of a major employer), regional, national or global economies (the recession of 2008/09) and can be unpredictable. For this reason it is preferable that an economy should demonstrate resilience and the ability to recover quickly from any kind of shock.

Another key concept that is important to consider when discussing the industrial structure of an area is ‘path dependency’. This describes the idea that likely future paths of development are, at least in part, dependent on historic characteristics and trajectories of development. For example, current strengths in manufacturing in Nottinghamshire can be seen to reflect historic experiences of industrialisation, the presence of raw materials such as coal and other minerals, alongside accumulations of both human and physical capital. The current industrial structure of the area will therefore have significant bearing on the kind of industrial strengths that are likely to develop and be sustained in the future. The challenge for economic development practitioners is to connect these historic factor endowments to new and emerging opportunities from wherever they may arise.

6.1 Employment by sector

Chart 15 illustrates the structure of employment by sector in Newark & Sherwood, in terms of jobs located in local workplaces (rather than the residence-based measures of occupation in Section 5.2), compared to the D2N2 and national averages. This data includes both employees and working proprietors. The chart shows that:

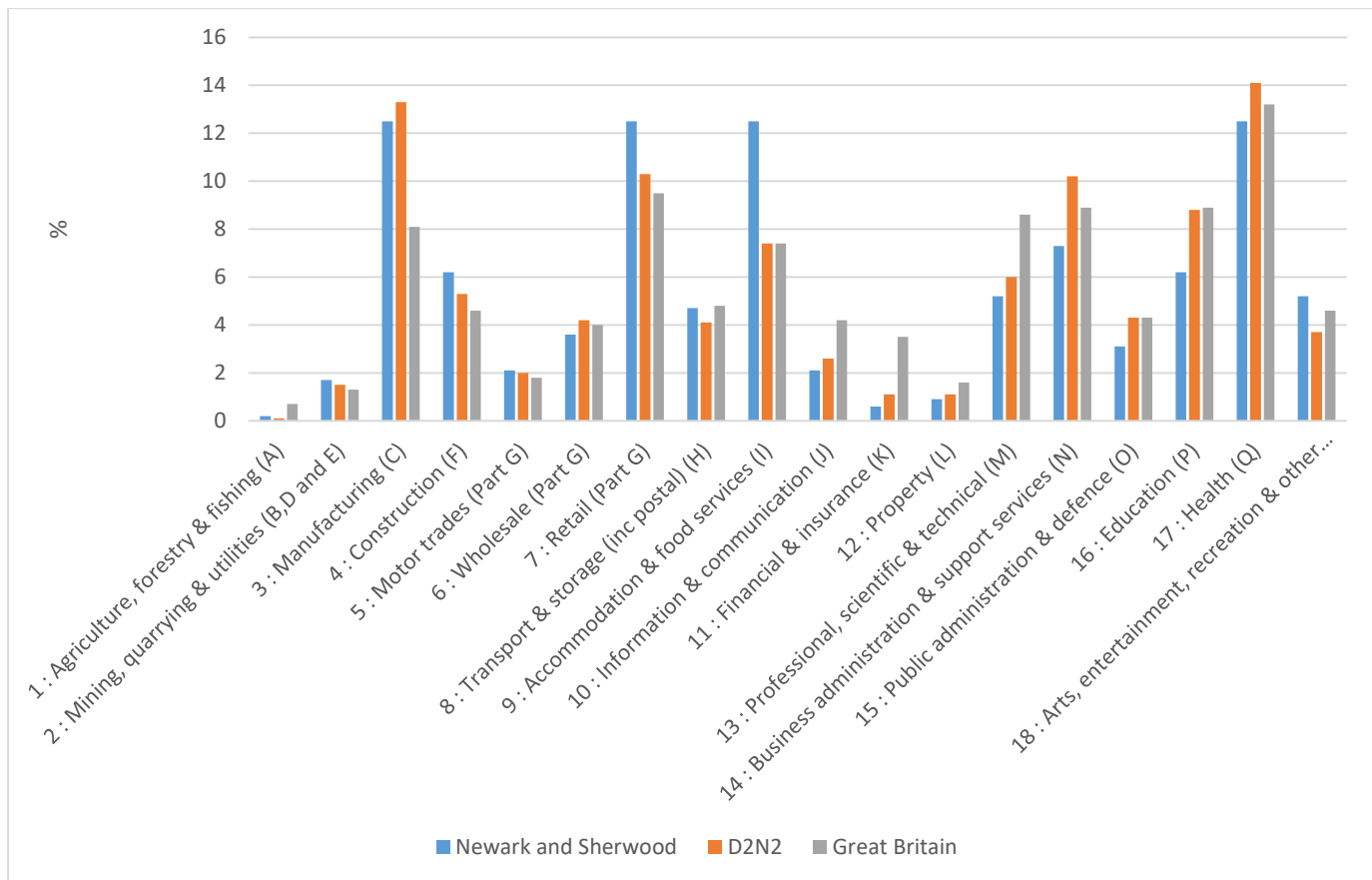
- The largest employment sectors in Newark & Sherwood are shared equally between, ‘Manufacturing’, ‘Retail’, ‘Accommodation & food services’, and ‘Health’ in 2016, all accounting for 12.5% of workplace-based employment and combined account for 50% of local employment;
- The ‘Manufacturing’ sector is slightly smaller than the D2N2 LEP (13.3%) but larger than the national average of 8.1% and represents a very significant local sector – explored in more detail in Chart 12. The ‘Retail’ sector accounts for a higher percentage than both the D2N2 LEP (10.3%) and national (9.5%) averages;
- Associated with these sectors are ‘Transport & Storage’ and ‘Wholesale’. The ‘Transport & Storage’ accounts for 4.7% of work-based employment Newark & Sherwood, in line with the national average, but slightly higher than the D2N2 LEP (4.1%). The ‘Wholesale’ sector in

⁵R Martin, University of Cambridge, on behalf of *emda*, ‘Thinking About Regional Competitiveness’, 2005.

Newark & Sherwood (3.6%) is slightly below both the D2N2 LEP (4.2%) and national average (4.1%);

- The 'Health' sector accounts for slightly smaller proportions employment as the national average (at 13.2%), and more substantial differences in the D2N2 area overall (14.1%);
- 'Construction' is significantly over-represented in Newark & Sherwood compared to both the LEP area and the national averages, accounting for 6.2% of employment locally compared to 5.3% in D2N2 and 4.6% in Great Britain; and
- Finally, 'Accommodation and food service activities' represents the most significant relative over-representation, accounting for 12.5% of employment in Newark & Sherwood compared to 7.4% in D2N2 and in Great Britain. This sector will include hotels and restaurants along with some food packaging and distribution (i.e. supply to hotels and restaurants). It is likely that estimates of employment in this sector pick up Centre Parcs, an important national accommodation and leisure provider with headquarters within the district.

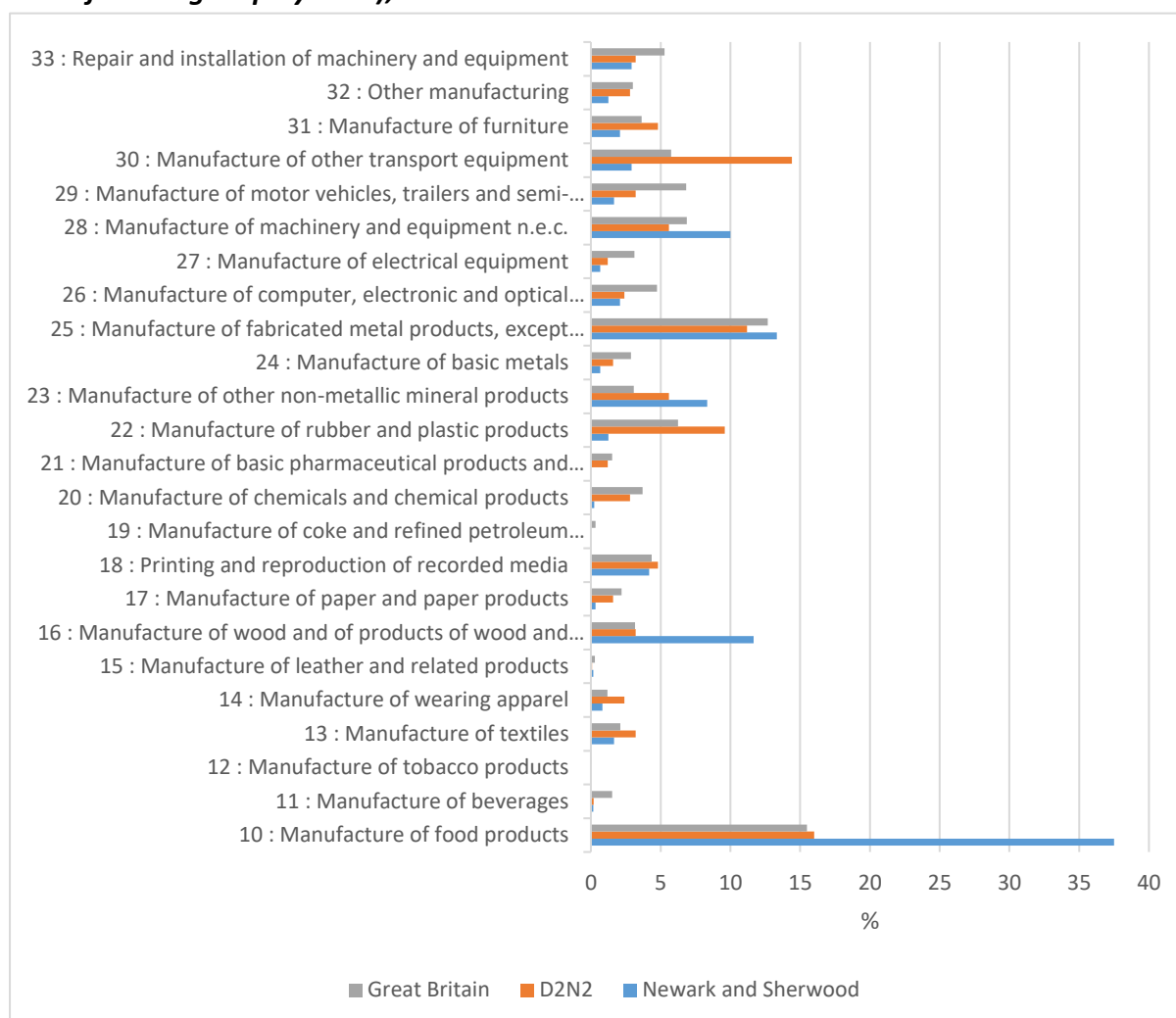
Chart 13: Employment by SIC 2007 Sections (%), 2016



Source: ONS Crown Copyright, 'Business Register and Employment Survey', 2016. Analysed in accordance with Chancellor's Notice: NTC/BRES11-P0325; held for research and economic briefing within the D2N2 Local Enterprise Partnership area.

The Standard Industrial Classifications provide significant sub-sectoral detail for Manufacturing. Employment in these more detailed sub-categories is illustrated in Chart 14, as a proportion of total employment in the wider Manufacturing sector (SIC Group C)

Chart 14: Manufacturing employment by SIC 2007 2-digit Sub-Sector (% total Manufacturing employment), 2016



Source: ONS Crown Copyright, Business Register and Employment Survey (BRES), 2016.

The chart shows three manufacturing sub-sectors that are particularly important in Newark & Sherwood:

- The ‘manufacture of food products’, which accounts for the largest share, at 37.5% of local manufacturing employment. This significantly exceeds the sub-sector’s share of manufacturing employment in the D2N2 area or Great Britain (at 16% and 15.5% respectively);
- The ‘Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials’ is also significantly over-represented in the district, accounting for 11.7% of Manufacturing employment compared to 3.2% in D2N2 and 3.1% in Great Britain; and
- The ‘manufacturing of machinery and equipment not elsewhere classified’ includes the production of turbines for the energy generation sector, pumps, ovens, furnaces, power-tools, air conditioning and other cooling and ventilation equipment, agricultural tools and machinery, and specialist machinery and equipment for other manufacturing sub-sectors

(such as equipment used in food production). This sub-sector accounts for 10 % of total manufacturing employment in Newark & Sherwood, compared to 5.6% in the D2N2 area and 6.8% nationally.

The above analysis allow a number of key local sectors to be identified by Newark & Sherwood District Council:

- **Distribution/Logistics** – represented by the large share of local employment in ‘Wholesale and Retail trades’, with some food packaging and supply to hotels, pubs and restaurants picked up in ‘Accommodation and Food Service Activities’;
- **Wholesale/Retail** trades– as above, represented by the large share (although in-line with the national average) of employment in the ‘Wholesale and Retail trades’;
- **Engineering** – evidenced by the local over-representation in the Manufacturing sub-sectors ‘manufacturing of fabricated metals (except machinery and equipment)’ and ‘manufacturing of machinery and equipment not elsewhere classified’ ; and
- **Food and Drink** - both through the very significant local over-representation in ‘Accommodation and Food Service Activities’ (the majority of which is related to the preparation and service of food and drinks in hotels, restaurants, pubs and takeaways) and also the large share of Manufacturing employment in the ‘manufacture of food products’ sub-sector.

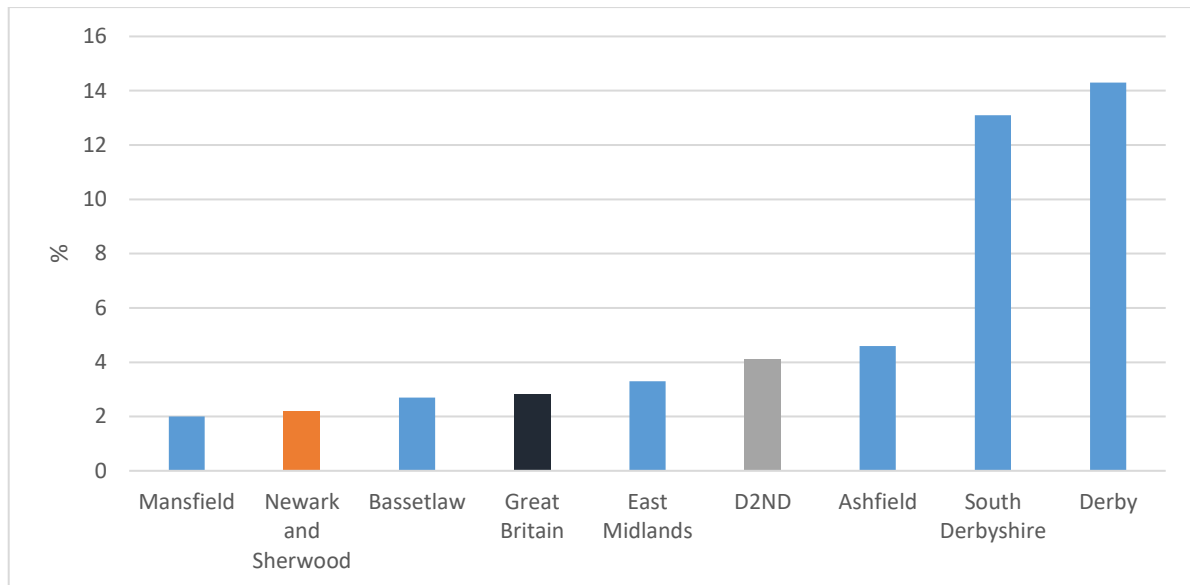
Although not prioritised in the current strategy, analysis of the latest BRES data suggests that **Construction** is also a locally important employment sector (compared to both the national average and the D2N2 LEP area).

Although Manufacturing is relatively important to employment in Newark & Sherwood, commonly used indicators of manufacturing innovation suggest that the area may have lower levels of innovative activity compared to elsewhere. The profiling of employment in ‘high- and medium-high technology’ manufacturing sub-sectors is utilised by the Government and the European Commission as a proxy measure for innovation at a local level. This measure aggregates employment in sub-sectors that, at a national and international level, have adopted highly advanced technological development or devices, mainly the use of electronics, and are characterised by a high ‘technological intensity’ (measured by R&D spend as a proportion of total value added in the sector). Such sub-sectors include: chemicals and pharmaceuticals, computers and electronic products, electrical equipment, motor vehicle and other transport equipment manufacturing, and the manufacture of other machinery and equipment. Although Newark & Sherwood has a high representation of employment in one of these sub-sectors (the manufacture of machinery and equipment n.e.c.), and has a number of important employers operating in other high technology sectors, including AVG (developers of security and anti-piracy software), the total concentration of individuals employed in these activities locally is relatively small.

Chart 15 presents total employment in high- and medium-high technology industries as a proportion of all workplace-based employment, including the LEP area, national and regional averages, and a range of comparator districts (such as those within the North Nottinghamshire NUTS3 area). This shows that Newark & Sherwood has a particularly low proportion of employment in innovation-

intensive manufacturing sectors, at only 2.2% of employment in 2016 – 0.3% rise since 2011 –, compared to 2.8% nationally, 4.1% in the D2N2 LEP area overall, and over 13% in both Derby and South Derbyshire (associated with the concentration of employment in automotive, rail and aerospace manufacturing and its supply chains in those areas).

Chart 15: Employment in High- and Medium-High Technology Industries (% total work-place based employment), 2016



Source: ONS Crown Copyright, ‘Business Register and Employment Survey’, 2016. Analysed in accordance with Chancellor’s Notice: NTC/BRES11-P0325; held for research and economic briefing within the D2N2 Local Enterprise Partnership area.

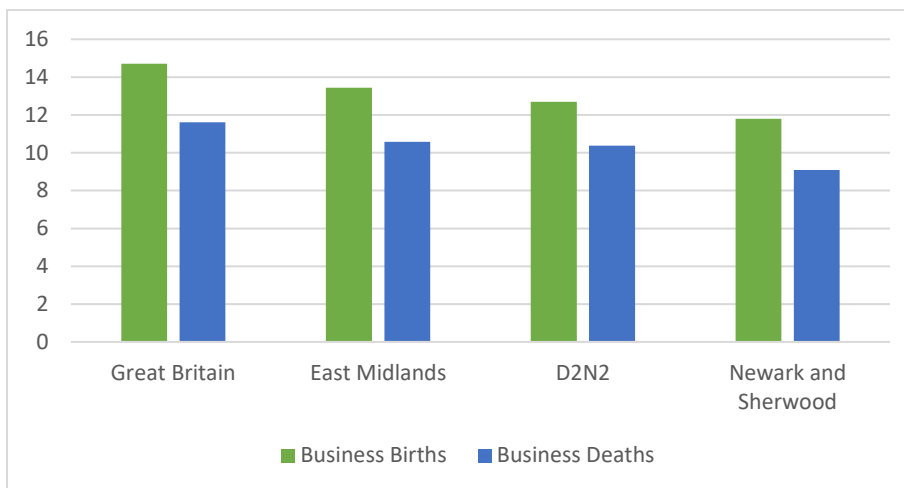
6.2 Enterprise and Business Survival

Local economic growth is facilitated by a number of factors, including the wider regional and national (and international) business environment, the skills of the local workforce (see Section 2.2), connectivity and infrastructure (including the communications infrastructure), and the extent and quality of entrepreneurial and innovative activity.

The main source of data on the business activity for Newark & Sherwood relates to business births, deaths and survival. Indicators of business start-up are important in informing economic development policy, as new starts can enhance the business stock and act as a spur to competition, with new entrants displacing less innovative incumbents and generating higher-quality employment. This process of churn re-allocates resources away from less efficient firms to more efficient ones and is a feature of high performing economies.

The recession had a large impact on rates with business births heavily decreasing as well as death rates increasing. Since then the UK economy experienced increasing business birth rates and falling death rates across the UK, although new business survival rates have only recently recovered to near pre-recession levels. The 2016 rates are shown in Chart 16.

Chart 16: Business Birth and Death Rates (Births/deaths as a % of total business stock)



Source: ONS Crown Copyright, 2017. 'Business Demography 2016 – Enterprise Births, Deaths and Survivals' [Accessed 23rd of January, 2018]

Chart 16 shows:

- Business birth rates in Newark and Sherwood were recorded as being 2.9% lower than in Great Britain, as well as also being lower than the East Midlands and in the D2N2 area. Low business birth rates appear to be a common trend in the local area with the other sub regions also having lower rates than in Great Britain.
- In contrast, Newark and Sherwood has had the lowest percentage of the business death rates compared to the other sub regions and rates are also lower than in Great Britain by around 2.5%. Low death rates also appears to be a local trend with the East Midlands and the D2N2 area rates also being recorded as being marginally lower than the national level.

As well as looking at the change in the total business population, due to the balance between birth and death rates, we can also look at the change in the survival rates of new businesses. This measure differs significantly from death rates (i.e. *all* businesses, regardless of age, that have ceased trading in a given year as a proportion of the total stock of all businesses), as survival rates specifically measure the number of *new* businesses born in a given year that are still trading after a certain period of time (usually 1, 2, 3, or 5 years).

Chart 17 describes three-year business survival rates and shows that:

- New businesses are now more likely to survive for their first three years of trading all across the UK now as compared to businesses that were started in 2011 (this will be due to the economy recovering). Survival rates are now higher in all of the recorded areas and survival rates for businesses Newark and Sherwood are now higher than the national level.
- What can also be taken from the data is that survival rates in the East Midlands are now higher than in the UK. This has changed from the previous report where they were just below the national level.

Chart 17: 3 Year Business Survival Rates - % of new business starts surviving 3 years - 2011 to 2014 and 2013 to 2016



Source: ONS Crown Copyright 2017. ‘Business Demography 2016 – Enterprise Births, Deaths and Survivals.’

Looking at overall statistics for businesses can be somewhat misleading however. Overall rates would count a micro and large enterprise as one unit and a large enterprise can produce exponentially more output and number jobs of jobs. Chart 18 shows the size distribution of businesses 2011 and 2016.

Table 1: Business count – Enterprises by Size (2011 and 2017)

	Great Britain (%)		D2N2 (%)		Newark and Sherwood (%)	
	2011	2016	2011	2016	2011	2016
Micro (0-9)	88.8	89.2	87.6	88	89.8	89.3
Small (10-49)	9.2	8.9	10.2	9.9	8.6	8.9
Medium (50-249)	1.6	1.6	1.7	1.7	1.5	1.6
Large (250+)	0.1	0.1	0.4	0.4	0.4	0.4

Source: ONS Crown Copyright, 2017. Business Population Estimates. December 2016. From NOMIS [Accessed 22nd of January, 2018]

Table 1 shows that:

- Newark and Sherwood has a fairly similar makeup to Great Britain, with the vast majority of businesses in both are classified as micro businesses. Also, there is a marginally higher

proportion of large businesses in Newark and Sherwood than in Great Britain, a trend that is also seen in the makeup of the D2N2 area⁶; and

- Looking at changes over the time period, it can be seen that the D2N2 area has shown the same trends as the rest of the UK with small increases in the proportion of micro businesses, a decrease in the percentage of small businesses as well as no change in the percentage of medium and large enterprises.

⁶ Note: Due to rounding, the cumulative total amount of each area may not always equate to 100%.

6.3 Top 20 Newark & Sherwood Registered Businesses by Turnover

The following section of the report lists the top 20 Newark and Sherwood registered companies by turnover in 2018. It is noteworthy that this listing provides further corroboration of the sectoral strengths identified above in section 6.1.

Table 2. Top 20 Companies by Turnover 2018

	Company name	R/O Full Postcode	Primary UK SIC (2007) code	Latest Operating Revenue (Turnover) th GBP Last avail. yr	Latest No of Employees Last avail. yr	Trade description
1.	Center Parcs (Holdings 1) Limited	NG22 9DP	64209	469,000	8,392	A group engaged in the operation of short break holiday villages.
2.	JTF Wholesale Limited	NG22 0PQ	46900	72,130	508	The trade of a wide range of household goods and seasonal products.
3.	Derry Building Services Limited	NG24 1JP	43210	68,453	239	Mechanical services engineers and electrical contractors.
4.	Brownhills Motorhomes Limited	NG24 2EA	45190	66,627	148	The retail of motorhomes, ancillary products and services.
5.	Hosting Developments Limited	NG24 2EA	45190	66,627	148	A group engaged in the retail of motorhomes and ancillary products and services.
6.	The Barcode Warehouse Group Limited	NG24 2DX	70100	55,898	249	A group engaged in the provision of barcoding equipment.
7.	Hospital of ST John And ST Elizabeth	NG24 2JN		55,587	595	1 (a) (i) to provide a hospital for the reception care and treatment of patients without distinction and in particular but without prejudice to the generality of the foregoing for patients requiring palliative care. (ii) to serve the sick and the dying and to care for the physical, spiritual and emotional needs of patients irrespective of nationality or religion.
8.	Tanvic Group Limited	NG24 1LS	45310	52,903	309	The sale of tyres and batteries.
9.	Benoy Limited	NG24 1EH	71111	49,655	489	A group engaged in the provision of architect and design services.
10.	Tanvic Group Holdings Limited	NG24 1LS	64209	67,374	308	A group engaged in the wholesale care tyre distribution service.
11.	Diverse Academies Trust	NG22 0JH	85310	42,484	952	General secondary education.

12.	Strawson Limited	NG22 8RD	01110	38,247	88	The provision of general farming, growing and marketing of vegetables.
13.	Aarsleff Ground Engineering Limited	NG24 3BU	43999	31,123	142	A group engaged in foundation piling including the manufacture and sale of precast concrete piles and related civil engineering.
14.	Cardzone Limited	NG22 8LS	47290	25,193	502	The retail of greeting cards.
15.	Seventy Seven Company Limited	NG24 1TW	45200	25,117	48	Sale of motor homes and cars, bodywork repairs and the servicing of vehicles.
16.	Walker & Son (Hauliers) Limited	NG22 0PQ	68209	21,928	87	A group engaged in the haulage contractors and providers of storage and warehousing facilities and property development.
17.	Jessops Construction Limited	NG24 1RZ	41201	21,109	21	The provision of construction services.
18.	Oakwood Fuels Limited	NG22 8UA	38220	20,301	115	The collection of automotive and industrial waste from a national portfolio.
19.	Blueprint Operations Limited	NG24 2EU	92000	20,300	13	The wholesale and rental of gaming machines.
20.	Mori LEE Europe Limited	NG24 2EU	46420	19,782	17	A group engaged in the design, manufacture and sale of bridal and occasion wear garments.

Source: FAME Database supplied by Bureau Van Djike

Note1: Eligibility criteria for inclusion in this listing: business is active, registered office in Newark & Sherwood, filed accounts within last 2 years.

Note 2: Turnover and employee numbers will often relate to activity outside Newark and Sherwood.

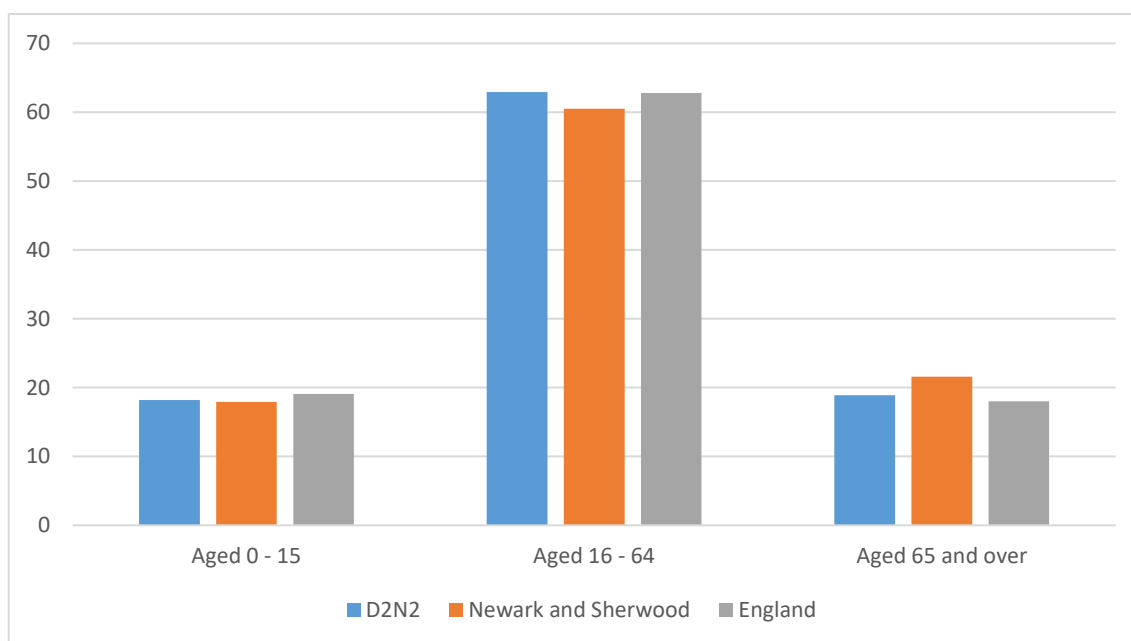
7. Population and Society

The latest ONS population data (2017) estimated that the population of Newark and Sherwood was 121,000 residents.

7.1 Population Aging

Chart 18 illustrates the age profile of the district, grouping the population by the three broad age-bands commonly used in demographic analysis: school age (% of residents aged 0-15); working age (% of residents aged 16-64); and pensionable age (% of residents aged 65 and over). This shows that the district has an older age profile than either the national average or the D2N2 LEP area overall, with 21.6% of residents aged 65 and over (compared to 18% in England). There is a smaller proportion of working age residents in the district, at 60.5% (compared to 62.8% the D2N2 area and 62.9% for England overall), whilst the proportion of residents in the school age group is slightly below the LEP area average (at 18.2%) and a little more so below the national average, at 17.9% compared to 18.9% in England overall.

Chart 18: Population by age-band (%), 2017



Source: ONS Crown Copyright, 'Mid-Year Population Estimates', 2017. From NOMIS [accessed 13th August, 2018].

Looking at the age profile in 2007 compared to 2017, it appears that the district has experienced an above average level of population ageing:

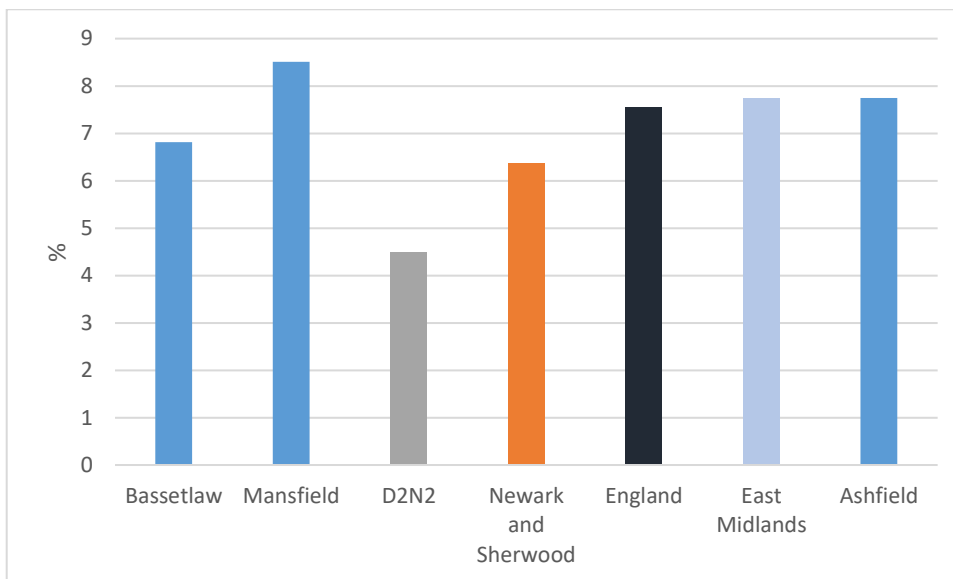
- In 2007, 18% of the population were in the pensionable age group (increasing to 22% in 2017);
- Also in 2007, 19% of residents were in the school age group (falling to 18 % in 2017); and
- The number of residents in the pensionable age group in Newark & Sherwood grew by 31.1% over the decade, compared to 24.3% in the D2N2 area and 18.9% in England overall; and
- A possible long-term concern may be that, in contrast with the pensionable age group, the school age group rose only 2% in Newark & Sherwood compared to 4.3% in the D2N2 area

and 7.7% in England overall. Additionally, the working-age population increased by 2.6% in Newark & Sherwood compared to 3.1% in the D2N2 area and 4.3% in England overall.

7.2 Population Growth

Chart 19 shows how the total population of Newark & Sherwood has changed over time. The district has experienced a significantly higher rate of growth over the last decade compared to both the national average and the average for the LEP area as a whole (and significantly exceeding the rate of population growth experienced in the other Local Authority Districts in the North Nottinghamshire NUTS3 area):

Chart 19: Total Population Growth (%), 2007-2017



Source: ONS Crown Copyright, 'Mid-Year Population Estimates', 2007-2017. From NOMIS [accessed 13th August, 2018].

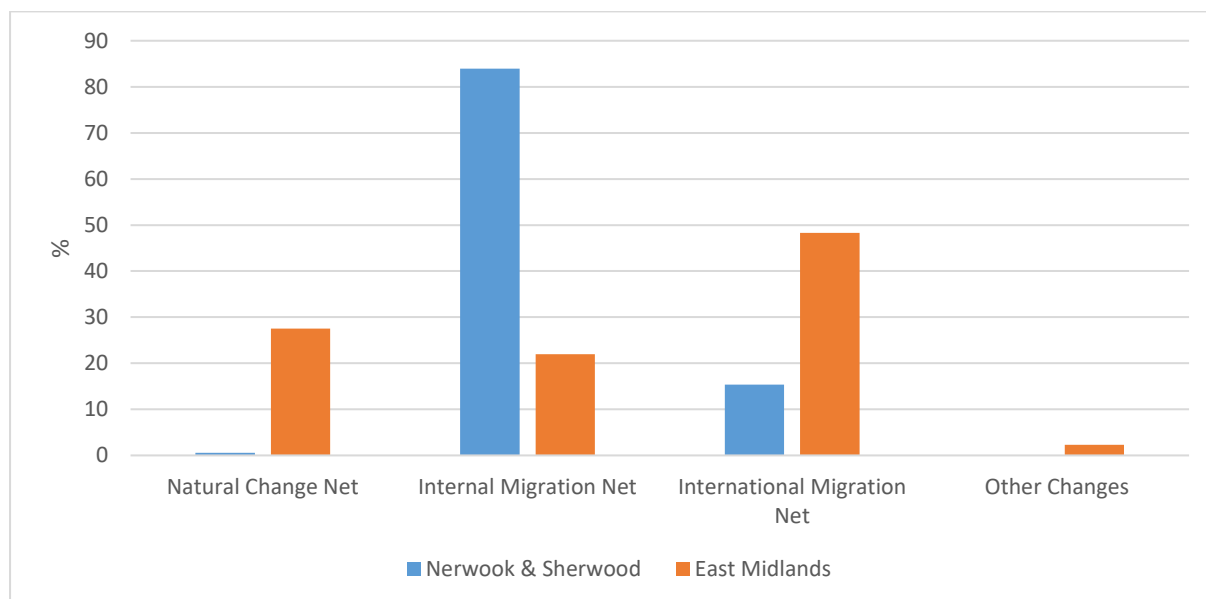
The ONS provide estimates of the components of population change between Mid-Year Estimates. These illustrate the relative importance of net migration compared to natural change (the balance of births and deaths in a given year). Net inward migration of working age people is particularly important in areas that experience population ageing.

Chart 20 shows that, for Newark & Sherwood, the most significant determinant of population growth is net internal migration – that is migration from other parts of the UK – which accounted for 83.9% of the population increase between 2016 and 2017. The ONS estimated that 6,164 individuals came to the district from other Local Authority areas and regions of England and Wales and 5,324 left the district and moved to another part of England and Wales – a net inward migration of 840 between 2016 and 2017. International migration was a relatively small component of population change, accounting for 15.3% of the population increase between 2016 and 2017, compared to 48.3% of the total population increase experienced in the East Midlands overall. This was due to an estimated 475 individuals moving to Newark & Sherwood from origins outside England and Wales, and 321 individuals leaving the district to international destinations - a net international migration of 154 individuals between 2016 and 2017.

Natural change in Newark & Sherwood was modest compared to the East Midlands overall, accounting for 0.6% of additional residents in the district between 2016 and 2017, compared to 27.5% in the East Midlands. This was due to 1,198 births in the district over the year and 1,192 deaths.

‘Other changes’ included in Chart 16 describe population changes due to movements of armed forces personnel or other individuals based in institutional premises (such as prison populations). In the case of Newark & Sherwood, these changes are negligible and accounted for a net increase of one individual.

Chart 20: Components of Population Change (% of total change), 2016-2017



Source: ONS Crown Copyright, ‘Mid-2007-17 Population Estimates: Components of Population change for England and Wales: estimated resident population’, from www.ons.gov.uk [accessed 13th August, 2018].

According to the 2011 Census, residents who were born outside the UK made up a relatively small proportion of the total population of Newark & Sherwood. In 2011, 1.7% of residents were born in EU Accession countries and 0.8% in other EU member states. A further 1.9% were born in other countries outside the EU. This total of 4.4% of residents who were born outside the UK is well below the total proportions of 9.4% in the East Midlands and 13.1% in England.

7.3 Deprivation

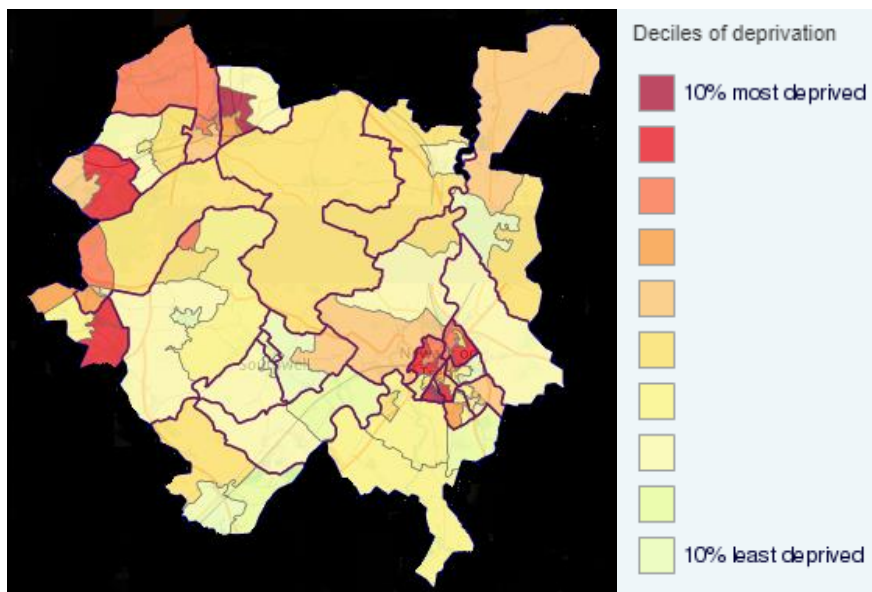
Deprivation has an economic as well as a social cost and is estimated to account for 38% of the productivity shortfall of the UK’s Core Cities⁷. The Department for Communities and Local Government and its predecessors have calculated local measures of deprivation in England since the 1970’s. It is important to note that these statistics are a measure of relative deprivation, not affluence, and to recognise that not every person in a highly deprived area will themselves be deprived. Likewise, there will be some deprived people living in the least deprived areas.

⁷ Core Cities evidence submission to RSA Inclusive Growth Commission 2017.

The English Indices of Deprivation 2015 is based on 37 separate indicators, organised across seven distinct domains of deprivation, which are combined, using appropriate weighting, to calculate the Index of Multiple Deprivation 2015 (IMD 2015). This is an overall measure of deprivation experienced by people living in an area and is calculated for every Lower layer Super Output Area (LSOA), or neighbourhood, in England. Every such neighbourhood in England is ranked according to its level of deprivation relative to that of other areas. Often it is taken that the most deprived 10 per cent or 20 per cent of neighbourhoods (or local authority districts) as the group of highly deprived areas, but other thresholds can be used.

Overall, Newark and Sherwood 003B LSOA is ranked 18,658 out of 32,844 LSOAs in England; with 1 being the most deprived. This is amongst the 50% least deprived neighbourhoods in the country however, it can be seen that there is large variation within parts. The main deprivates areas of Newark and Sherwood are in the North West/West are Ollerton, Clipstone, Blidworth and parts of Boughton. The other main areas of deprivation. There is also a noticeable cluster of deprivation in the South East, which mainly comprises of Bridge, Castle, Devon and Magnus. Apart from this the area appears to mostly in the top half of the least deprived areas in the country showing that the area is very diverse.

Map 1: Indices of Deprivation



Source: Open Data Communities, 2015 - 'Indices of Deprivation - 2015' - From <http://dclgapps.communities.gov.uk/imd/idmap.html>. [Accessed 31st January 2018].

8. Conclusions and Policy Recommendations

This section of the report will summarise key findings from the statistical profiling of Newark and Sherwood before going on to highlight a number of potential policy responses or propositions that the authority and its stakeholders may wish to consider.

8.1 Statistical Profile Summary

Summarising the key findings from the data analysis in the report has shown Newark and Sherwood is a high employment and low unemployment locality that nevertheless exhibits a number of characteristics associated with a low pay-low skills equilibrium:

- **High employment/low unemployment** – The local economy performs very well comparatively in both measures and outperforms the UK and D2N2 area, but there are concerns about quality of employment locally;
- **Low wages** and household income– The median gross weekly wage and GDHI are below levels seen nationally as well as those seen in the D2N2 area;
- The area **under-represents higher managerial and professional roles**;
- **High levels of supply and demand for lower skilled jobs** – There is a far higher proportion of workers in the area who work in elementary and process operative type roles than in the UK as a whole;
- **Low productivity rates** – Productivity rates have been seen to be low and declining in North Nottinghamshire (including Newark and Sherwood). Newark and Sherwood is by no means alone in this respect – but this is a major issue for the area;
- **Higher than average business survival rates** – but lower than average levels of business starts;
- **Notable sectoral strengths in retail and wholesale, engineering related manufacturing, food manufacturing, logistics and construction**;
- Manufacturing is relatively important to employment in Newark & Sherwood, but commonly used indicators of manufacturing innovation suggest that the area may have **lower levels of innovative activity** compared to elsewhere;
- **Aging population** – Although this is a trend that is occurring across the whole of the UK, Newark and Sherwood has a population that is aging more rapidly than many other areas; and
- There is evidence of significant **pockets of relative deprivation** alongside more prosperous communities - although the IMD shows the area to be at around average level in the UK, there is significant variation in the area with some parts ranking very highly and other very poorly.

The following sections will outline a number of policy suggestions that respond to the challenges and strengths highlighted above.

8.2 Productivity

A common theme across the UK Industrial Strategy, the D2N2 SEP and the Newark and Sherwood Economic Development Strategy all are looking to address low productivity rates, which have been identified as a key issue. Generally, the data analysis in this report support that this is a major area for

concern in Newark and Sherwood and also supports the implementation of the policies aimed to address the productivity gap that were outlined in the Economic Development Strategy.

The skill level of the work force has been highlighted as one of the fundamental drivers of productivity. Data analysis has shown that aggregate demand for skills is lower here than elsewhere. Although **skills supply is important, it is imperative that policy makers consider also the scope to stimulate demand for higher level skills within local employers**. From an individual perspective, skills acquisition is important as a means to securing better remunerated and potentially more fulfilling work. Therefore Policies aimed at skills development have the potential both to enhance productivity and promote economic inclusion in the locality.

Another of the objectives outlined in the Economic Development strategy is the encouraging of inward investment should be prioritised. **Inward investment** is important for many reasons – not the least of them being that there is good evidence of a correlation between inward investment and enhanced productivity. However, in the context of a relatively low pay-low skill local economy, the nature of employment created by such investment is important. Newark and Sherwood is likely to remain a relatively attractive location for manufacturing activity due to its locational advantages on the national transport network. However, **more medium and high technology manufacturing, would bring additional benefit in terms of quality of employment, demand for skills and local levels of innovation**. The question of how this can be achieved is far from trivial.

There may be scope for business incubation and/or accelerator type provision to promote this objective, while also addressing another problem highlighted by the statistical profile – that of lower than average rates of business starts. Recently published research from a team at the Centre for Economic Performance at the LSE⁸ has confirmed the efficacy of these types of intervention in facilitating business development. Furthermore, as the evidence from BioCity in Nottingham demonstrates⁹, when coupled with a distinctive sectoral focus, it is possible for these kinds of initiatives to promote the creation of high quality employment and innovation outcomes. It is beyond the scope of this report to assess the nature of existing incubator/accelerator provision in Newark and Sherwood, but this may be an issue that the authority should consider further.

Whilst there are certain things measures that Local Authorities can take to help increasing aggregate levels of productivity, firms in the area are ultimately responsible for their own productivity. As such, one of the ways that Local Authorities could assist firms may be working with them to ensure that they are able to accurately measure their productivity. With such measures in place, firms will be to be more self-aware of their own individual performance and be able to make better business decisions. **There may be scope to work with local universities and other stakeholders to develop and implement a productivity diagnostic for use by local companies**.

⁸ Madaleno et al (2018) Incubators, accelerators and regional economic development, CEP discussion paper No 1575.

⁹ SMITH, D.J., ROSSITER, W. and MCDONALD-JUNOR, D., 2017. Adaptive capability and path creation in the post-industrial city: the case of Nottingham's biotechnology sector. Cambridge Journal of Regions, Economy and Society, 10 (3), pp. 491-508. ISSN 1752-1378

8.3 Inclusive Growth

In 2017, the Nottingham Civic Exchange, The Royal Society of the Encouragement of Arts, Manufactures and Commerce (RSA) and Nottingham Business School conducted research looking at the importance of inclusive growth for the upcoming revision of the D2N2 SEP¹⁰. Drawing on the earlier RSA Inclusive Growth Commission, this report advocated the adoption of an inclusive growth focus in the revised SEP and made a number of practical recommendations.

One of the main recommendations from the research is that an inclusive growth framework is applied to all strategic and investment decisions relating to priorities identified in the SEP. In this way, inclusive growth becomes the lens through which priorities are identified and decisions made. The challenges identified in this statistical profile suggest that a similar approach could be equally relevant for Newark and Sherwood.

The RSA's first principle for inclusive growth is the creation of a shared, binding mission, locally designed and implemented, involving business, civil society and citizens. The key components of an approach to implementing

- **Social infrastructure** investment in education, skills and employability support, mental health support and affordable childcare to support a productive workforce;
- **Physical infrastructure** investment that better connects people to economic assets and opportunities, through housing, transport and digital infrastructures;
- **Inclusive industrial strategy** that develops sectors, clusters and technologies through long term commitment, and focusing on low paid and low productivity sectors (e.g. care, retail, hospitality, warehousing and logistics). Achieving this could include forming sectoral coalitions with other localities facing similar challenges; better connecting business and industry to schools, training providers and universities; and a commitment to life-long learning through coordinated investment and support; and
- One of the principal results of – and drivers of – inclusive growth will be **business-led productivity through quality jobs**: firms moving up the value chain by creating quality jobs (characterised as fair pay, scope for progression and autonomy, family friendly and flexible).

It is suggested that the focus of productivity-raising interventions should be on 'average'- performing firms rather than exclusively high and low performing firms. Combining a geographically sensitive approach with specific sector support is thought likely to reach the firms within localised supply chains and value chains which have significant growth potential and strong local multiplier impacts.

8.3 In-Work Poverty

The combination of high employment levels, low Gross Domestic Household Income, low average earnings and pockets of relative deprivation is strongly suggestive of a locality in which in-work poverty is likely to be a significant concern.

¹⁰ Black, Schifferes and Rossiter (2017) 'Refreshing the D2N2 Strategic Economic Plan: The case for inclusive growth'. Nottingham Civic Exchange, The RSA and Nottingham Business School.

Recent research by Professor Anne Green for the Public Policy Institute for Wales has highlighted a number of policy levers available to address in-work poverty¹¹. Suggested approaches include:

- As a major purchaser of goods and services local authorities can develop procurement policies that ring fence employment and training opportunities for local residents (including from disadvantaged neighbourhoods) and also set quality criteria in the commissioning of services.
- In their capacity as a major employer they can ‘lead by example’ in terms of fostering good practice in provision of work placements and in employment entry, in work progression (for example by promoting progression opportunities within their workforce), and job quality (by implementing the voluntary Living Wage and other job quality initiatives).
- Local Authorities can work with employer bodies and sector networks to identify and promote strategic sectors of importance to the local economy, working with education and training providers, careers and guidance professionals and other interested stakeholders, including trade unions.
- As part of their remit to promote local economic growth, they have an important role in linking the demand and supply sides of the labour market, developing a strategic focus on employment quality and enhancing productivity alongside concerns with the quantity of employment.
- In the short-/medium-term, priority actions for harnessing growth sectors for poverty reduction could include working together to ensure that in a place-based industrial policy there is a strategy for ‘foundational sectors’, such as social care, and other areas of large but low-paid employment including accommodation and food services. This is important given the numbers of jobs they provide, their relatively low barriers to entry and the scope for improving job quality in these sectors.
- Finally Professor Green also suggests moving away from a ‘Job First’ approach to employability and that instead a ‘Career First’ approach should be taken, where the aim should be to produce employment entry, in work progression and job quality.

¹¹ Green, Sissions and Lee (2017), ‘Harnessing Growth Sectors for Poverty Reduction: The Role of Policy’. Public Policy Institute for Wales.