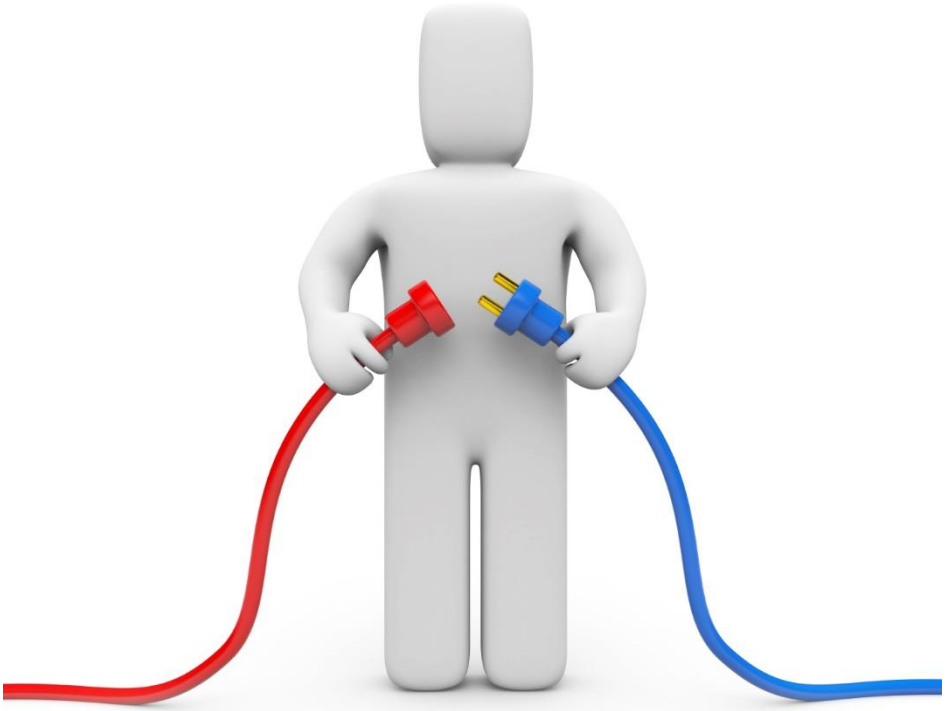
APPENDIX A

# SCR Combined Authority Constituent Membership Expansion

## The Economic and Spatial Argument

28 June 2016



SQW

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| **Approved by:** | Simon Pringle<br>Director | Date: | 28 June 2016 |

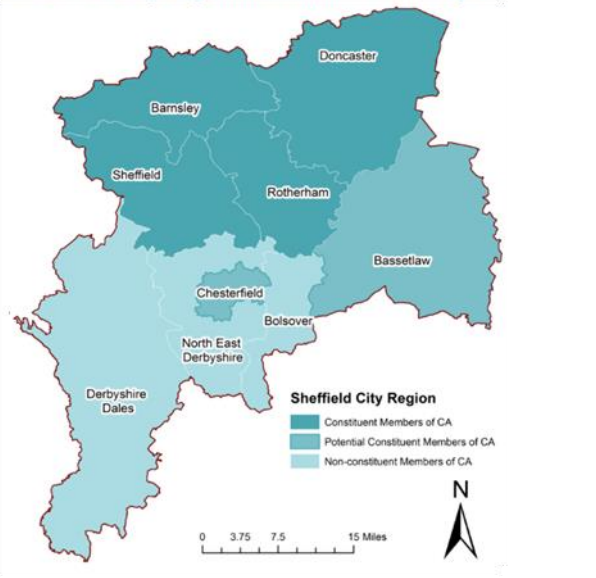
# Executive Summary

1. Following the successful agreement of devolution deals with Government in 2014 and 2015, Sheffield City Region (SCR) Combined Authority's proposals for further devolution of powers was ratified in March 2016. This will result in £900 m being devolved over a 30-year period, giving SCR control over a wider range of service functions, including Regeneration, Infrastructure, Business Rate Growth, Skills, and Education.

2. SCR Combined Authority was comprised at the outset of four Constituent Members (Sheffield, Doncaster, Barnsley, and Rotherham) and five Non-Constituent Members (Derbyshire Dales, North East Derbyshire, Chesterfield, Bolsover and Bassetlaw). However, the Cities and Local Devolution Act 2016 made two key changes which mean that Chesterfield and Bassetlaw now have an aspiration to join the SCR Combined Authority as Constituent Members.

3. In response, SCR is undertaking a governance review to meet the Government's Statutory Tests for approving a revised footprint for the Combined Authority. SCR's submission will be made by late Summer 2016. In its submission, SCR needs to demonstrate that a changed membership will improve the economy, efficiency, and effectiveness of the Combined Authority's devolved statutory functions, and as such will an additional positive impact on the economy than would be the case otherwise.

Figure 1-1: Sheffield City Region and Combined Authority Membership

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4. In this context, the SCR Executive Team commissioned SQW Limited, in partnership with Trends Business Research Limited (TBR) and Cambridge Econometrics Limited in May 2016 to develop the Economic and Spatial Argument for expanding SCR's Combined Authority Constituent Membership. This Argument was required to demonstrate the economic scale, flows and inter-relationships between the six districts (in the context of the wider SCR geography), demonstrate how the inclusion of Chesterfield and Bassetlaw as Constituent Members of SCR's Combined Authority will improve the effectiveness of devolved functions, and must be underpinned by robust and transparent evidence.

## A Summary of the Economic and Spatial Argument

5. The Economic and Spatial Argument for expanding SCR's Constituent Membership to include Chesterfield and Bassetlaw is built on eight components, which are summarised below.

### *Economic Scale and Common Characteristics: Six districts account for the majority of SCR's functional economic area, enabling the Combined Authority to achieve, potentially, greater efficiency and effectiveness by delivering functions at larger scale*

6. As part of its original proposals to become a Local Enterprise Partnership (LEP) and more recently prepare the LEP's Strategic Economic Plan, SCR undertook extensive research, including its own Independent Economic Review[1], to demonstrate how the nine Local Authorities comprising SCR are a functional economic geography**.**

7. The six districts that make up the proposed Combined Authority geography account for two-thirds of the nine districts of SCR's recognised functional geography. Moreover, **the economic scale of the six LADs combined accounts for a proportionally greater amount of the SCR total** – for example, the combined weight of the six districts accounts for 87 per cent of SCR's total economic output (measured by GVA), 86 per cent of its population and 85 per cent of its business base, and the inclusion of Chesterfield and Bassetlaw will increase the scale of the Combined Authority on these measures by 18-20 per cent.

8. Added to this, the six LADs have a number of shared and similar economic characteristics. For example, the size profiles of the six local authorities' business bases are very similar, levels of business formation (often used as a measure of entrepreneurial culture) are also closely aligned and they have similar urban and rural characteristics. The six districts also have similar growth trajectories. Looking back, between 2000 to 2014, the six districts were responsible for 92 per cent of SCR's total population growth – and this picture is likely to continue in future, with the six districts generating 87 per cent of SCR's projected population and GVA growth by 2030, and 88 per cent of jobs growth.

9. On this basis, the devolution of economic functions to six, rather than four, districts means that the Combined Authority can **achieve, potentially, greater efficiency and effectiveness by delivering functions at larger scale that is more closely aligned to the functional economic area of SCR.**

### *Business Base, including Sector Specialisms, Strengths, Assets and Linkages: Common and interconnected specialisms in SCR's priority sectors – co-design of devolved powers can better meet shared needs, with greater multiplier effects throughout the economy*

10. SCR has clear and accepted specialisms in five sectoral areas[2], operates in growing national and international markets, and is home to a unique combination of a strong business base, expertise, facilities and assets. A number of these are central to the all four of the Northern Powerhouse's Prime Capabilities (Advanced Materials and Manufacturing Processes, Digital, Healthcare Innovation, and Low Carbon Energy), which are expected to drive productivity improvements across the North, closing the wealth gap with the rest of the UK.

**11.** **The six districts of the proposed Combined Authority are home to many of the key businesses and assets (both infrastructural and knowledge-based) contributing SCR's priority sectors above**. The evidence demonstrates that the six districts also have common

[1] See: http://sheffieldcityregion.org.uk/independent-economic-review/
[2] The five specialisms are Financial/Professional/Business Services, Creative/Digital industries, Advanced Manufacturing/Engineering/Healthcare Technologies, Low Carbon, and Logistics.

profiles of specialisation in SCR's priority sectors, especially Manufacturing and Engineering, and many of which are particularly high productivity activities and have similar growth prospects. Moreover, **the six districts' specialisations are connected via strong supply chain linkages, so future business growth in these sectors will have knock-on multiplier effects across the geography.**

12. Given this evidence, **devolved powers –** such as those around business growth, innovation, inward investment, and business rate retention – **can be co-designed sensibly and effectively across this spatial footprint**. It will allow the Combined Authority to address the specific needs of these sectors and their supply chains in still further integrated and coherent ways, make investments in assets/facilities related to these sectors to enable growth, ultimately helping SCR to close its productivity gap. Moreover, devolved powers will enable the Combined Authority to further enhance sectoral strengths and assets that are of national and international significance.

### *Labour Markets and Travel-to-Work Patterns: Strong labour market interaction, emphasising the need for more joined up planning of future infrastructure investment that better reflects real functional geographies*

13. The labour markets of South Yorkshire, Chesterfield and Bassetlaw are integrated strongly and operate essentially as one functional market. **The six districts provide an important source of SCR's skilled workers** (for example, they account for 86% of SRC's total working age population with NVQ Level 4+). **Commuter flows – especially those from Chesterfield and Bassetlaw into South Yorkshire – are substantial both absolutely and relatively**. Some 16% of Bassetlaw's working residents commute into South Yorkshire every day, of which most (almost 3,400 people) travel into Doncaster. This is the highest flow of commuters out of the Bassetlaw district, followed by over 1,800 commuting to Sheffield and almost 1,800 to Rotherham. The picture is also striking for Chesterfield, where the number of workers commuting from Chesterfield into Sheffield (at over 3,100 people) is around eight times higher than the number commuting to Derby or Nottingham. Moreover, the evidence indicates that many of workers living in Chesterfield and Bassetlaw travel to South Yorkshire for higher paid job opportunities.

Figure 2: Functional Urban Areas


Source: OECD, 2012

14. These strong labour market linkages are illustrated by an analysis of functional urban areas undertaken by the OECD in 2012. This showed that the SCR is not a traditional monocentric city region. Instead it is comprised of **four adjoining functional urban areas – Chesterfield, Sheffield, Barnsley and Doncaster - mapping clearly onto the SCR footprint**, with a clear break in functional relationships with those authorities further to the south (see Figure 2).

15. This evidence supports the case for developing a transport plan and spatial framework across an expanded Combined Authority footprint which reflects more accurately where people choose to work (and live), and using this to inform **more joined up planning of future infrastructure investment,** which better reflect real functional geographies.

### *Retail Catchments: Strong retail linkages, with implications for spatial planning*

16. As well as understanding business relationships and travel-to-work patterns, where people live and spend their money also influences functional economic relationships between places. **On retail spending, the evidence shows clearly that there are strong linkages between Chesterfield/Bassetlaw and Sheffield/Doncaster, in particular**. For example, within Chesterfield's wider retail catchment (comprising a total population of 1.1 million people), Meadowhall was the most visited centre securing 16 per cent of shopping trips in 2015, followed by Sheffield central (15 per cent) and Chesterfield with nine per cent market share.

17. This also has **implications for transport and spatial planning**, especially in terms of ensuring appropriate land/property provision and retail/leisure demand relative to transport networks.

### *Travel-to-Learn Patterns: Travel-to-learn patterns are relatively localised but scope to benefit from better co-design and integration of devolved skills provision, particularly given its commonalities of sectors specialisms*

18. **Travel-to-learn patterns are relatively localised** across SCR, with Further Education (FE) students tending to study at institutions close to home; this pattern is typical generally across the country. Given this, the **SCR economy will benefit from better co-design and integration of devolved skills provision**, particularly given its commonalities of sectors, specialisations and growth prospects, and inter-related supply chains and assets. This will help to **ensure that the supply of skills meets better the needs of SCR's businesses** (and especially those in SCR's priority sectors).

### *Housing Market Areas: Localised and distinct housing markets, but scope for more joined-up spatial planning to reflect strong travel-to-work relations, leading to a more efficient economy*

19. **Housing markets across SCR are also relatively localised and distinct, with limited migration of people between the districts**. This is not unusual for SCR or other similar LEP areas in the North, especially those which are polycentric in their character. In part, this reflects the close proximity of the districts, and the ease of commuting between them for work (as demonstrated by the travel-to-work flows above, and journey times below). Arguably, **more joined-up spatial planning across the six districts**, reflecting where people want to live and work, will lead to **better connected and a more efficient functional economy**.

### *Transport Networks: The expanded geography is a sensible footprint for planning and managing transport functions given strong travel-to-work (and wider business and leisure) linkages*

20. **The six districts are reasonably well connected, but challenges exist in terms of congestion and over-crowding on key routes**, especially between Chesterfield and

Sheffield. Given the evidence above about strong labour market and business relationships, the **expanded geography proposed for SCR Combined Authority is a sensible footprint to tackle some of these transport issues, enabling key economic functions to work more efficiently, and potentials to be realised more fully**. Linking in cohesively as six authorities to wider transport thinking and planning from, for example, Transport for the North will also be helpful.

21. This is particularly important given the evidence around future economic growth – and particularly in similar/related sectors – which is likely to lead to increased commuter flows and business interactions. Moreover, making travel between the districts easier and more efficient may also help to encourage more of SCR's unemployed residents (a large share of whom are in the six districts) into work, which is likely to mirror current travel-to-work flows. **The scope for better utilisation of the labour market is, therefore, at hand**.

### *Socio-Economic Challenges and Common Policy Footprints: Similar challenges faced across the six districts, so the devolution and co-design of relevant powers (such as employment support and skills development) will enable more efficient delivery at scale to address these issues*

22. The six districts face some **similar challenges**, particularly in terms of productivity and deprivation (including long-term health issues, many of which reflect the shared industrial heritage of the area). **The districts combined also account for a large proportion of SCR's working age residents who are unemployed (94%) or without qualifications (89%).**

23. In light of this, the devolution and co-design of relevant powers (such as employment support and skills development) across the six districts will enable SCR Combined Authority to **implement interventions at an appropriate scale to tackle the challenges faced.** For example, the joined-up design and delivery of devolved employment programmes across the six districts will (a) mean that support is delivered at a greater scale, leading to efficiencies and potentially synergies, (b) enable the Combined Authority to support a large proportion of SCR's unemployed residents into work, so leading to a more productive city region in the longer-term, and (c) ensure that employment programmes better reflect the 'real' economy in meeting demands of SCR's priority sectors and 'working with the grain' of where people want to live/work. This should lead, in turn, to **increased multiplier effects from interventions across the whole economy.**

### *Conclusions*

1.1 Drawing the component lines of argument above into a cohesive whole, expanding the Constituent Membership of SCR's Combined Authority to include Chesterfield and Bassetlaw will deliver three unambiguous benefits:

- Greater operational **efficiency and effectiveness, by delivering functions at larger scale** across six (rather than four) of SCR's nine districts, which is more closely aligned with the SCR functional economic geography.
- Enabling SCR's Combined Authority to better **co-design policies more effectively to reflect common opportunities and challenges (and, again, do so on a larger scale),** especially in terms of business growth and innovation, inward investment,

employment support etc. In turn, expansion will enable SCR to develop policies in a complementary way *across* thematic areas, leading to greater multiplier benefits throughout the economy (e.g. skills interventions and land/property planning meeting the needs of local businesses, and transport interventions better reflecting where people want to live and work).

- Permit **more joined-up planning of future infrastructure investment and transport and spatial planning** across an expanded Combined Authority footprint which reflects more accurately real functional geographies.

### *Further Detail*

24. Further detail about the SCR's governance review, its progress, and its proposals is available from:

- David Hewitt, Senior Economic Policy Manager, Sheffield City Region Executive Team, 0114 254 13359 david.hewitt@sheffieldcityregion.org.uk.
- Fiona Boden, Senior Economic Policy and Delivery Analyst, Sheffield City Region Executive Team, 0114 220 3457, fiona.boden@sheffieldcityregion.org.uk.

# 1. Introduction

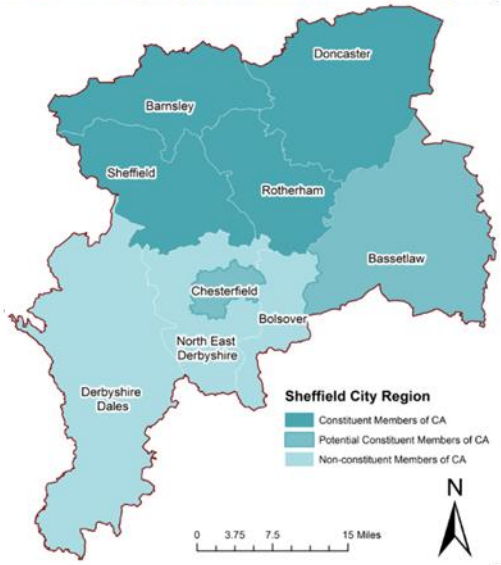
1.1 SQW Limited, in partnership with Trends Business Research Limited (TBR) and Cambridge Econometrics Limited, was commissioned by the Sheffield City Region (SCR) Executive Team in May 2016 to develop the Economic and Spatial Argument for expanding SCR's Combined Authority Constituent Membership. This assignment forms part of the evidence base being assembled by the wider Governance Review that SCR will submit to Government in late summer 2016.

## The Devolution Context

1.2 Following the successful agreement of devolution deals with Government in 2014 and 2015, SCR Combined Authority's proposals for further devolution of powers was approved in March 2016. This will result in £900 million being devolved over a 30-year period through Gainshare procedures to the area, giving SCR control over a wider range of service functions. These will include, inter-alia, Regeneration, Infrastructure, Business Rate Growth, Skills and Education, with the quid pro quo being the introduction of a Mayor (with additional flexibilities and budgets) for the City footprint.

1.3 SCR Combined Authority was comprised at the outset of four Constituent Members (Sheffield, Doncaster, Barnsley, and Rotherham) and five Non-Constituent Members (Bassetlaw, Bolsover, Chesterfield, Derbyshire Dales, and North East Derbyshire). However, the Cities and Local Devolution Act 2016 made two key changes to Combined Authority rules of importance to this study: first, it allowed non-contiguous areas to become Constituent Members of a Combined Authority; second, it removed the need for county council approval for a district to join a Combined Authority outside of their county area.

Figure 1-1: Sheffield City Region and Combined Authority Membership

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1.4 Both of these changes mean that Chesterfield (a non-contiguous district relative to the four existing Constituent Members, and in Derbyshire County's area) and Bassetlaw (part of Nottinghamshire) now have an aspiration to join the SCR Combined Authority as Constituent Members.

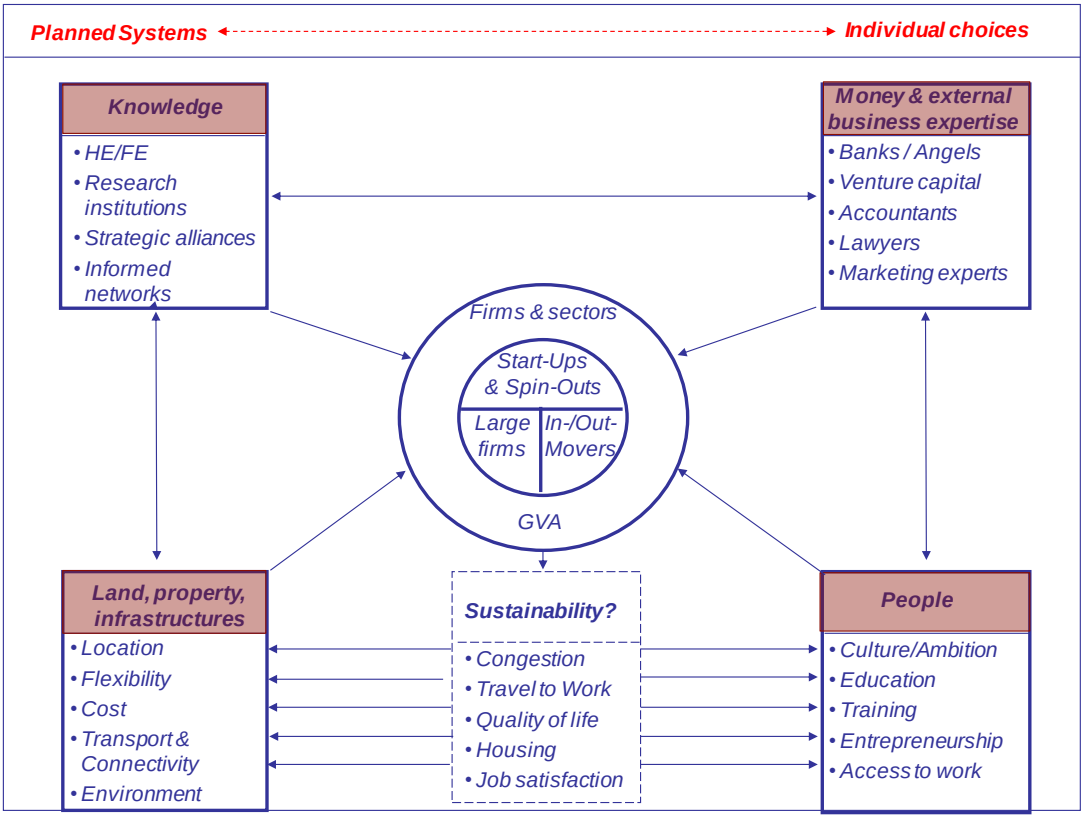
1.5 In response, SCR is undertaking a governance review to meet the Government's Statutory Tests for approving the Combined Authority's expanded geography and to put in place the powers needed to deliver its Deal. SCR's submission will be made by late summer 2016. In its submission, SCR needs to demonstrate that a changed membership will improve the economy, efficiency, and effectiveness of the Combined Authority's devolved statutory

functions, and as such will have an additional positive impact on the economy than would be the case otherwise.

## Developing the Economic and Spatial Argument

1.6 The Economic and Spatial Argument for expanding SCR's Combined Authority Constituent Membership was required to do three crucial things. First, it must demonstrate the **economic scale, flows and inter-relationships** between the six Local Authority Districts (LADs) in question, this in the context of the wider SCR geography. This implicitly requires understanding of how the SCR economic ecosystem (depicted in Figure 1-2) is performing, and how moving from four to six Constituent Members amplifies the economic benefits.

**Figure 1-2: A depiction of an ecosystem for economic interactions**




*Source: SQW*

1.7 Second, the argument needs to demonstrate how the inclusion of Chesterfield and Bassetlaw as Constituent Members of SCR's Combined Authority **will improve the effectiveness of devolved functions**, especially in relation to skills, employment, housing and planning, trade and investment, innovation and business growth. And third, the Economic and Spatial Argument needs to be **underpinned by robust and transparent evidence**, rather than assertion or anecdotes, which can withstand challenge and scrutiny.

1.8 In order to develop this Economic and Spatial Argument, the Study Team has undertaken the following:

- Held an Inception Meeting with the Study Steering Group on 4 May, which included representatives from SCR's Executive Team and Chesterfield and Bassetlaw Councils

- Undertaken a short public Call for Evidence among key partners across the City Region
- Reviewed and analysed a range of literature and data available from published and local sources including over fifty documents and more than ten data sets
- Produced a 'storyboard' for the Economic and Spatial Argument, tested and developed this with the Steering Group on 19 May, and then with a wider group of stakeholders on 24 May (including representatives from across the SCR geography)
- Undertaken further consultations, literature searches and data analysis to fill key gaps in the evidence base.

1.9 Against this background, the Economic and Spatial Argument for expanding SCR's Constituent Membership to include Chesterfield and Bassetlaw is comprised of eight key themes:

- Economic scale and common characteristics
- Business base, including sector specialisms, strengths, assets and linkages
- Labour markets and travel-to-work
- Travel-to-learn patterns
- Retail catchments
- Housing markets
- Transport networks
- Socio-economic challenges and common policy footprints

1.10 In the following Section, each line of the argument is discussed in turn, supported by relevant quantitative and qualitative evidence. The report is accompanied by 10 technical annexes: Annexes A to H present more detailed evidence for each of the lines of argument above; Annex I lists the documents reviewed and individuals consulted for the study; and Annex J outlines TBR's methodology for analysing sectoral specialisms and supply chain relationships.

# 2. The Economic and Spatial Argument

## Economic Scale and Common characteristics

### *Six districts account for the majority of SCR's functional economic area, enabling the Combined Authority to achieve, potentially, greater efficiency and effectiveness by delivering functions at larger scale*

#### *The Argument*

2.1 In developing the original proposals to become a Local Enterprise Partnership (LEP) and more recently the LEP's Strategic Economic Plan, **SCR undertook extensive research, including its own Independent Economic Review[3], to demonstrate how the nine Local Authorities comprising SCR are a functional economic geography**. As noted in the Strategic Economic Plan[4]:

> *'Comprising South Yorkshire and neighbouring districts in the East Midlands, Sheffield City Region represents a coherent, functional economic geography. Approximately nine out of ten residents live and work within the City Region; around 70 per cent travel within their own district while the remaining 30 per cent travel to other City Region Districts. Sheffield, Chesterfield and Bassetlaw are net providers of jobs with the other districts being net providers of labour.'*
>
> *'Sheffield City Region is not a classic mono-centric conurbation in the manner of Greater Manchester, Bristol or Glasgow. This reflects the economic history and the dominance of industries such as coal mining which led to very strong local economies. All of the districts make an important contribution to the City Region's GVA.'*

**2.2** The six districts that make up the proposed Combined Authority geography account for two-thirds of the nine districts of SCR's recognised functional geography. Moreover, **the economic scale of the six LADs combined accounts for a proportionally greater amount of the SCR total, and having six Constituent members brings the geography closer to the nine districts that comprise the functional economic area of SCR (compared to the four Constituent members at present). Added to which these six LADs have a number of shared and similar economic characteristics.** For example, the size profiles of the six local authorities' business bases are very similar, and levels of business formation (often used as a measure of entrepreneurial culture) are also closely aligned. On this basis, the devolution of economic functions to six, rather than four, districts means that the Combined Authority can **achieve, potentially, greater efficiency and effectiveness by delivering functions at larger scale.**

#### *The Evidence Base*

2.3 A range of datasets demonstrate clearly the argument around scale (Table 2-1). For example, the combined weight of the six districts accounts for 87 per cent of SCR's total economic

[3] See: http://sheffieldcityregion.org.uk/independent-economic-review/
[4] Strategic Economic Plan, SCR LEP

output (measured by GVA), 86 per cent of its population and 85 per cent of its business base. They also account for 86 per cent of SCR's working age population in employment and 80 per cent of those in higher level occupations. The inclusion of Chesterfield and Bassetlaw will increase the scale of the Combined Authority by 18 per cent in terms of GVA, 18 per cent in terms of jobs and 20 per cent by way of business numbers.

2.4 Looking back, between 2000 to 2014, the six districts were responsible for 92 per cent of SCR's total population growth – and this picture is likely to continue in future, with the six districts generating 87 per cent of SCR's projected population and GVA growth by 2030, and 88 per cent of jobs growth.

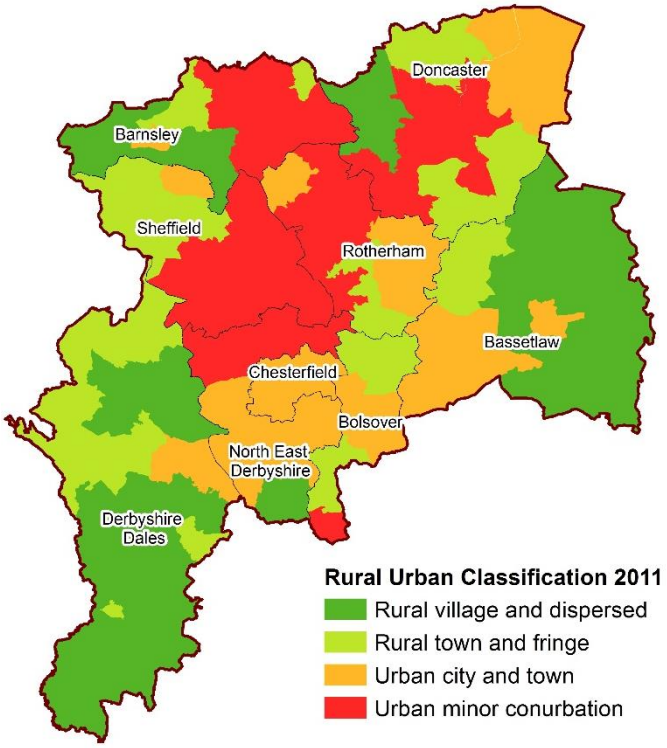
**Table 2-1: Economic Scale**

| | Sheffield City Region | Six LADs | Proportion accounted for by the six LADs | Date & source |
|---|---|---|---|---|
| Gross Value Added (GVA) | £31,225m | £27,103m | 87% | 2015, Cambridge Econometrics |
| Employment (i.e. workplace jobs) | 813,000 | 710,500 | 87% | 2015, Cambridge Econometrics |
| Population | 1,832,100 | 1,584,200 | 86% | 2014, ONS |
| Working age population (WAP) | 1,159,300 | 1,008,500 | 87% | 2014, ONS |
| WAP in employment | 812,233 | 697,667 | 86% | 2013-15, APS |
| %all in employment who are managers, directors & senior officials | 66,367 | 53,167 | 80% | 2013-15, APS |
| Enterprises | 41,765 | 41,765 | 80% | 2015, ONS |
| Business starts | 7,080 | 6,045 | 85% | 2014, ONS |

*Source: As above*

2.5 The six districts also share a number of common characteristics. Whilst most of the major urban areas are in South Yorkshire, parts of South Yorkshire (and the wider non-constituent members of SCR) include considerable swathes of 'rural town and fringe' and 'rural village and dispersed' areas, according to Defra's 2011 Rural Urban Classification (see Figure 2-1) and are therefore similar to large parts of Bassetlaw.

**Figure 2-1: SCR rural urban classification 2011 by MSOA[5]**




*Source: Defra RUC 2011. Map produced by SQW 2016. Licence 100030994. Contains OS data © Crown copyright [2015]*

2.6 The profile of the business bases is also very similar – the proportion of businesses that are micro in size (<10 employees) in Chesterfield and Bassetlaw sits within the South Yorkshire range of 85 per cent (in Sheffield) and 89 per cent (in Doncaster). Business start-up rates are also similar (66 business starts per 10,000 WAP in Bassetlaw and 58 in Chesterfield, compared to a range of 54 in Barnsley to 73 in Doncaster).

## Business Base, including Sector Specialisms, Strengths, Assets and Linkages

### *Common and interconnected specialisms in SCR's priority sectors – co-design of devolved powers can better meet shared needs, with greater multiplier effects throughout the economy*

#### *The Argument*

2.7 Research undertaken to inform SCR's Strategic Economic Plan identified the city region has clear specialisms in five sectoral areas, operates in growing national and international markets, and is home to a unique combination of a strong business base, expertise, facilities and assets. A number of these are of national and international significance, and are central to the all four of the Northern Powerhouse's Prime Capabilities (Advanced Materials and Manufacturing Processes, Digital, Healthcare Innovation, and Low Carbon Energy), which are expected to drive productivity improvements across the North, closing the wealth gap with the rest of the UK. Furthermore, these specialisms are also well aligned with the Northern

[5] MSOA – Middle Layer Super Output Area

Powerhouse's Enabling Capabilities of financial and professional services, logistics and education (and higher education in particular).

2.8 Growth in SCR's specialisms sectors is considered by the city region as critical to improving the economy's performance as a whole. The five specialisms are[6]:

- Financial, Professional and Business Services
- Creative and Digital Industries
- Advanced Manufacturing and Engineering and Healthcare Technologies
- Low Carbon
- Logistics.

2.9 The six districts of the proposed Combined Authority are home to many of the key businesses and assets (both infrastructural and knowledge-based) contributing SCR's priority sectors above. The evidence demonstrates that the six districts also have common profiles of specialisation in SCR's priority sectors, especially manufacturing and engineering, and many of which are particularly high productivity activities and have similar growth prospects. Sheffield's universities provide an important supply of gradates to these sectors, and the assets and expertise (predominantly based in South Yorkshire) clearly complement sectoral specialisms in Chesterfield and Bassetlaw well. Moreover, the six districts' specialisations are connected via strong supply chain linkages, so future business growth in these sectors will have knock-on multiplier effects across the geography.

2.10 The evidence demonstrates similarities in the sector profiles across the six districts, inter-connectedness between assets, expertise and businesses in priority sectors, and a closely interrelated commercial property market. Therefore, devolved powers – such as those around business growth, innovation, inward investment, and business rate retention – can be co-designed sensibly and effectively across this spatial footprint. It will allow the Combined Authority to address the specific needs of these sectors and their supply chains in still further integrated and coherent ways, and make investments in assets/facilities related to these sectors to enable growth, ultimately helping SCR as a whole to close its productivity gap. Moreover, devolved powers will enable the Combined Authority to further enhance sectoral strengths and assets that are of national and international significance. In addition, these linkages across the business-asset base and commercial property market strengthen the case for strategic planning across the six (rather than four) districts – particularly in terms of ensuring the supply of land and premises meets demand – and doing so at a scale that reflects how the real economy is functioning.

### *The Evidence Base*

2.11 The six districts have common specialisms in a number of sectors, including those relating to Manufacturing and Engineering related activities, which are closely aligned with SCR's priority sectors above. These specialisms include, for example, the manufacturing of Basic

[6] Source: Sheffield City Region (2014) Strategic Economic Plan

Metals and Metal Products, Non-Metallic Mineral Products, Electrical Equipment, and Machinery. More generally [7]:

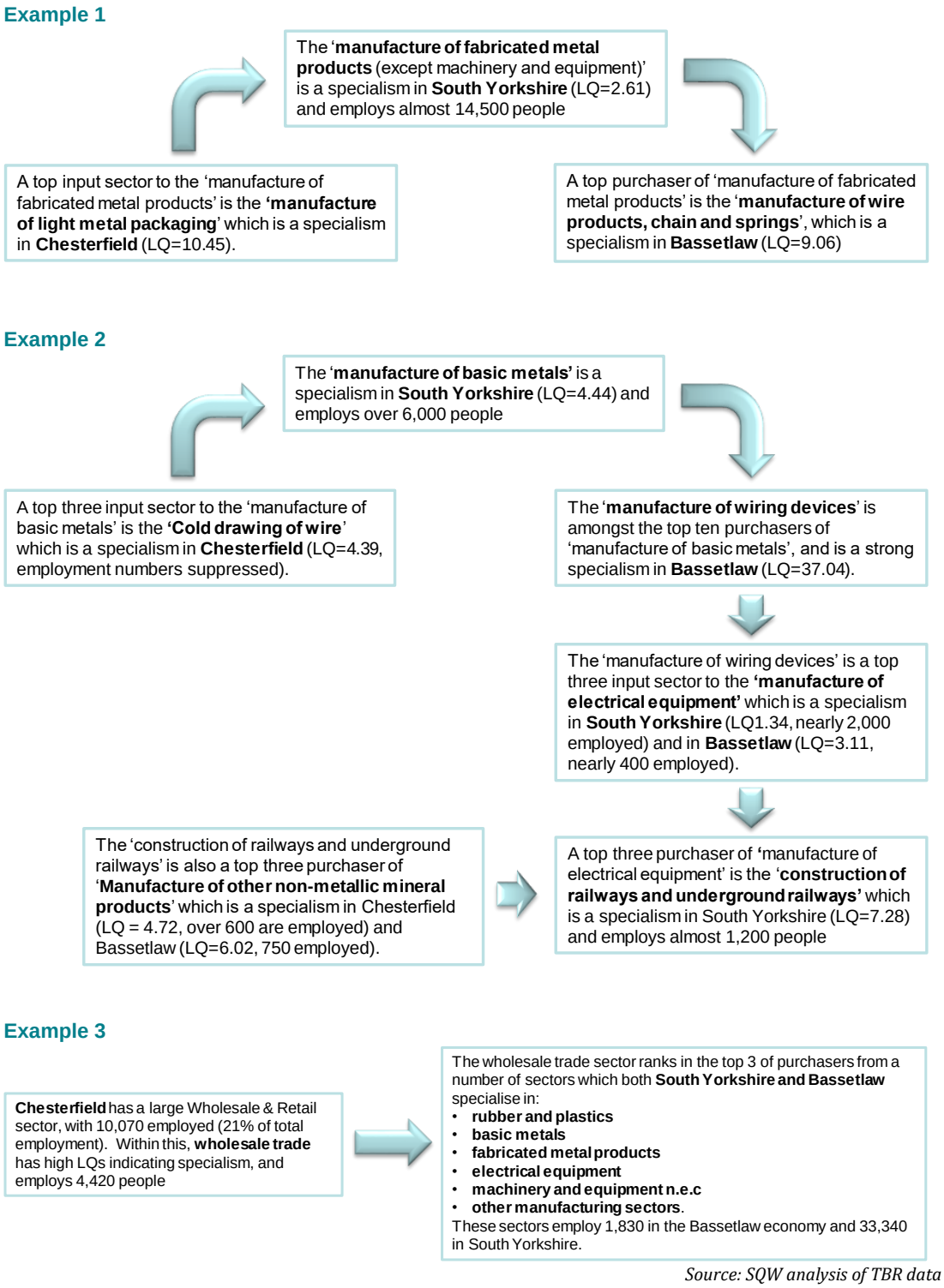
- One of the largest specialist sectors in South Yorkshire is Healthcare and Healthcare Technologies (Location Quotient, LQ=10.28) which employs over 40,000 people. The Healthcare and Healthcare Technologies sector is also an area of specialism in Bassetlaw and Chesterfield, employing around 3,600 and over 4,000 people respectively.

- The Manufacturing of Fabricated Metal Products (excluding Machinery) is a specialism in South Yorkshire, Chesterfield and Bassetlaw, and together these areas account for 88 per cent of all SCR's employment in the sector (over 16,000 people). The Manufacturing of Machinery is also a specialism in these areas, and together they represent 90 per cent of all SCR's employment in the sector (over 4,600 people).

2.12 Moreover, TBR's analysis suggests there are strong supplier/purchaser linkages in the common specialisms across the six districts, especially in Manufacturing, as illustrated by the diagrams below.

[7] Source: TBR analysis

**Figure 2-2: Supply chain linkages between the common specialisms and six districts**




*Source: SQW analysis of TBR data*

2.13 As noted above, the six districts have many national and/or international class assets, including the Advanced Manufacturing Research Centre with Boeing (AMRC), which is part of the UK's Catapult Network, the Medical and Nuclear AMRCs, Factory 2050, the National Metals Technology Centre, the Materials and Engineering Research Centre at Sheffield Hallam University, and the Advanced Computing Research Centre at the University of Sheffield. Many of these are located with South Yorkshire, but there are clear complementarities to the sector specialism present in Chesterfield and Bassetlaw as discussed above. For example:

- A world-leading manufacturer of equipment for ships and offshore installations was founded in Chesterfield because of the area's strong connections with metals industries and the proximity to Sheffield as a centre for metallurgical research.

- The Advanced Manufacturing Research Centre (AMRC) is a collaboration between the University of Sheffield and Boeing, based at the Advanced Manufacturing Park (AMP). Member companies benefit from access to world-class R&D capabilities and programmes, access to training and networking opportunities. Members include Advanced Manufacturing (Sheffield) Ltd (based at AMP), Fluid Maintenance Solutions Ltd (based at AMP), and William Cook Cast Products (Sheffield).

- A major Sheffield/Rotherham firm is currently undertaking collaborative research with the University of Sheffield in relation to metals manufacture. In turn, this firm has a supply chain in SCR of over 400 firms, of which 90 per cent are within the four constituent authorities and a further 5 per cent (22 firms) are in Bassetlaw and Chesterfield. The six authorities combined contain 96 per cent of the supply chain.

2.14 There is clear alignment between SCR's university specialisms and the sector specialisms across the wider business base, especially in engineering, computing and management, so providing a supply of highly skilled and relevant labour to SCR's businesses. Whilst evidence on graduate recruitment from SCR's universities into local businesses – and particularly into SCR's priority sectors – is limited[8], there is evidence to suggest that:

- The University of Sheffield has particularly expertise in Advanced Computing, Mechanical Engineering, Control Systems Engineering, and Management. For example: Sheffield Management School is in the top 1% globally and ranks first in the UK for Research Power (as part of the Research Excellence Framework[9]); 93% of the Faculty of Engineering's research is classified as 'world leading' or 'internationally excellence'; the University has the highest research income in engineering subjects for projects with UK industry partners; and the University hosts the UK's only dedicated Control Systems department.

- The RISE programme (designed to help SMEs grow by supporting them to access graduate talent) has led to 170 paid employment opportunities in over 100 of SCR's SMEs, of which six have been located in Chesterfield but none have been in Bassetlaw.

- A highly successful, fast growing Motor Finance Intermediary Business started in Chesterfield, and now has numerous offices across Chesterfield and Sheffield. The business taps into the business graduate market in Sheffield and this is an important reason for their establishing parts of their business in Sheffield.

- IT companies in Chesterfield have recruited a number of graduates from the two Sheffield Universities.

[8] Existing HESA data held by SCR was restricted, and therefore could not be presented in this report. Data from HESA or the Universities was not available within the timescale for this study. Data was also unavailable in the timescale on 2011 Census commuter flows by sector, to demonstrate how the districts provide important sources of labour in SCR's priority sectors.

[9] The Research Excellence Framework (Ref) is a quality measure of universities' academic work. Research Power relates to the quality and volume of research, taking account of the number of staff submitting research in this area.

**2.15** SCR is also an important source of inward investment enquiries to Chesterfield and Bassetlaw. Between April 2013 and August 2015, SCR generated 83 enquiries for Chesterfield (compared to 29 enquiries from Derbyshire's inward investment services) and around 130 enquiries shared by SCR's inward investment team with Bassetlaw over the same period (compared to one from D2N2's service).

**2.16** Commercial property markets are also closely interrelated. For example, when significant commercial sites become available in Chesterfield, they are usually marketed by a Sheffield agent – this includes the Markham Vale Enterprise Zone which is being marketed by an agent headquartered in Sheffield. The evidence suggests the commercial property market acts as one across the six districts, and especially so between Sheffield and Chesterfield.

2.17 Looking forward to 2030, there are a number of sectors which are important to South Yorkshire, Chesterfield and Bassetlaw (accounting for 2 per cent+ of the economies respectively) and are likely to grow rapidly. Some of these are in higher productivity activities that are closely related to SCR's priority sectors, such as IT services, financial and insurance services, warehousing and postal and wholesale trade[10]; others are lower productivity activities but will be large job creators over the next 14 years, such as construction, retail and health[11].

## Labour Markets & Travel-to-Work

### *Strong labour market interaction, emphasising the need for more joined up planning of future infrastructure investment that better reflects real functional geographies*

#### *The Argument*

2.18 The labour markets of South Yorkshire, Chesterfield and Bassetlaw are integrated strongly and operate essentially as one functional market. Not only do the six districts provide an **important source of SCR's skilled workers,** but **commuter flows – especially those from Chesterfield and Bassetlaw into South Yorkshire – are substantial** both absolutely and relatively. For example, the number of workers commuting from Chesterfield into Sheffield is around eight times higher than the number commuting to Derby or Nottingham. Moreover, the evidence indicates that many of workers living in Chesterfield and Bassetlaw **travel to South Yorkshire for higher paid job opportunities.**

2.19 This supports the case for developing a **spatial framework across an expanded Combined Authority footprint which reflects more accurately where people choose to work (and live)**, and using this to **inform strategic planning** activities which better reflect real functional geographies.

[10] For example, GVA generated by IT services is expected to increase by 60% in South Yorkshire, 44% in Bassetlaw and 50% in Chesterfield by 2030.
[11] For example, GVA generated by the health sector is expected to increase by 44% in South Yorkshire, 33% in Bassetlaw and 41% in Chesterfield by 2030.

### *The Evidence Base*

2.20 The six districts combined account for 86 per cent of SCR's total working age population with NVQ4+ level qualifications, which mirrors the share of those in highly paid occupations (as discussed above)[12].

2.21 Large flows of commuters travel from Chesterfield and Bassetlaw into South Yorkshire every day. As illustrated in Table 2-2, 16 per cent of Bassetlaw's working residents commute into South Yorkshire, of which most (almost 3,400 people) travel into Doncaster. This is the highest flow of commuters out of the Bassetlaw district, followed by over 1,800 commuting to Sheffield and almost 1,800 to Rotherham. These flows compare to c.1,500 travelling to Newark/Sherwood and only c.460 travelling to Nottingham. The picture is also striking for Chesterfield, where over 3,100 people commute into Sheffield, the second highest destination for out-commuters after North East Derbyshire. It is significantly higher than flows to Derby (under 400) or Nottingham (c320). Most of the journeys above are made by car.

**Table 2-2: Travel-to-work flows from Chesterfield/Bassetlaw into South Yorkshire's districts**

| District of origin | Self-containment | Commuting into South Yorkshire's districts | | Comparisons |
|---|---|---|---|---|
| Bassetlaw | 61 % | 16 % | Highest inflow to Doncaster, at 8 % or 3,345 people | 1,489 commute to Newark/Sherwood (3%); and 464 to Nottingham (1%) |
| Chesterfield | 58 % | 9 % | Highest inflow to Sheffield, at 8 % or 3,137 people | 391 commute to Derby (1%); and 319 to Nottingham (1%) |

*Source: 2011 Census*

2.22 In addition, the data show that nearly 10,000 people travel from South Yorkshire into Chesterfield and Bassetlaw daily. Particularly large flows are from Sheffield to Chesterfield (over 3,200 people), from Doncaster to Bassetlaw (over 2,200 people) and from Rotherham to Bassetlaw (over 2,100 people).

2.23 Commuter flows from Chesterfield and Bassetlaw into South Yorkshire have also been compared with those of Barnsley's workers, a district which is part of both Sheffield and the Leeds City Region LEPs and already a Constituent Member of SCR's Combined Authority. This shows that 22 per cent of Barnsley's working residents commute into Sheffield/Rotherham/Doncaster – this is similar to the 16 per cent of Bassetlaw's working residents who commute into these three districts.

2.24 Travel-to-work data has been analysed by ONS and the OECD to determine functional economic geographies at the UK and European levels, respectively. The results of these analyses are presented in Figure 2-3:

- The 2011 Census map (left) shows the ONS' travel-to-work areas (TTWAs), which are defined on the basis of an area meeting self-containment thresholds (whereby a high proportion of residents live and work in the same area)[13]. It is evident that four

[12] Source: APS, 2013-15
[13] TTWAs are aggregations of SOAs (Super Output Areas) that meet one of the following criteria: (i) Area has a working population of at least 3,500, and at least 75% of an area's resident workforce work in the area, and at least 75% of the people who work in the area also live in the area, or (ii) an area has a working population in excess of 25,000 and self-containment is 66.7%. See: http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/guide-method/geography/beginner-s-guide/other/travel-to-work-areas/index.html

TTWAs map very closely onto the SCR footprint – Chesterfield, Worksop and Retford (covering most of Bassetlaw), Sheffield, Barnsley, and Doncaster – with part of SCR's Derbyshire Dales district spreading south into the Derby TTWA.

- The OECD map (right) shows functional urban areas (FUAs) which were defined in 2012 as 'an economic unit characterised by densely inhabited urban cores and hinterland whose labour market is highly integrated with the cores'. This is based on population density and travel-to-work flows[14]. Four of the OECD's FUAs are clearly within the SCR footprint – Chesterfield, Sheffield, Barnsley and Doncaster – and all four are have contiguous boundaries. There is also a clear band of white (representing a break in functional relationships) between the FUAs that map onto the SCR footprint, and those authorities that form part of the D2N2 LEP area.

2.25 The data also show that residents of Chesterfield and Bassetlaw are commuting into South Yorkshire's districts for higher paid job opportunities. As illustrated in Table 2-3, those living in Chesterfield/Bassetlaw (but who could work anywhere) earn more than those working in Chesterfield/Bassetlaw (but who could live anywhere). Given the large flows of commuters from these districts into South Yorkshire, as evidenced above, it can be assumed that many of these higher paid jobs are to be in South Yorkshire[15].

**Table 2-3: Resident-based vs workplace-based gross weekly pay (2015)**

| District | Average resident gross weekly pay | Average workplace gross weekly pay |
|---|---|---|
| Bassetlaw | £506 | £427 |
| Chesterfield | £487 | £448 |

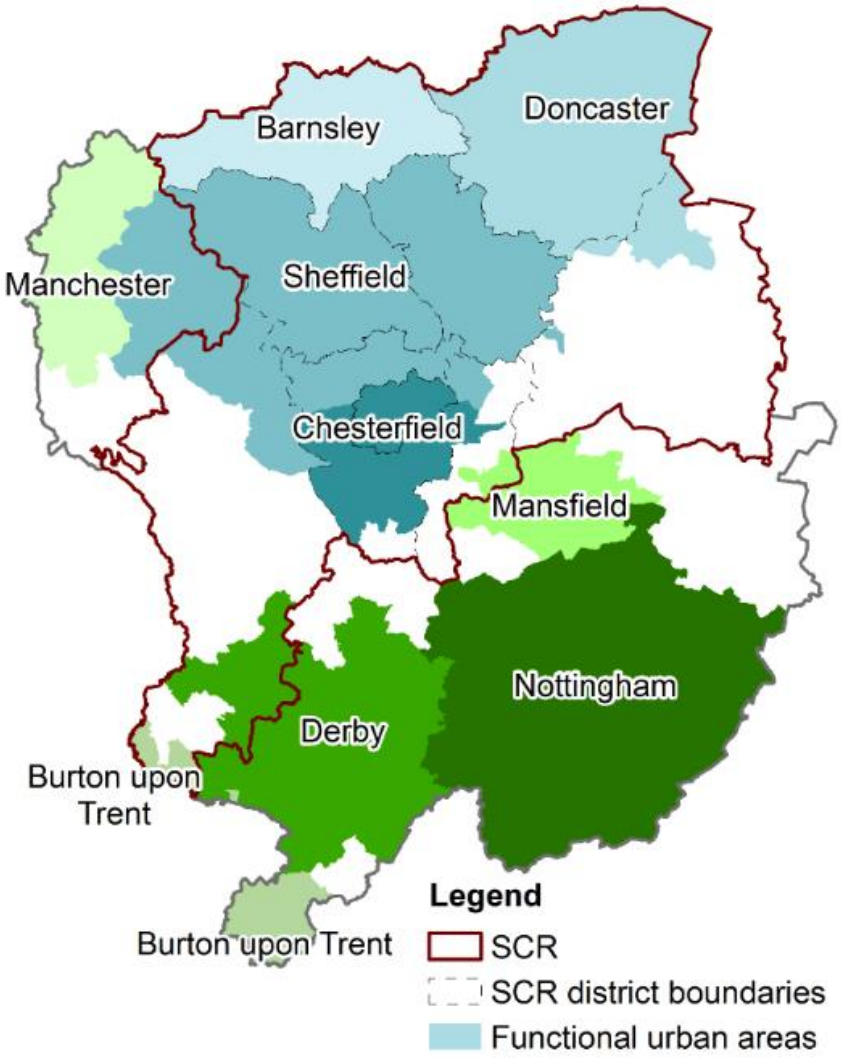
*Source: ASHE*

[14] TTW flows are based on 2001 Census data, but a comparison of 2001 and 2011 Census data shows similar commuter flows in terms of volume and direction between SCR's districts, so one can be confident the key messages from the OECD analysis are still robust and valid.
[15] Data on commuting by occupation from the 2011 Census was not available to SQW in the timescale for this study

**Figure 2-3: Travel-to-work maps**

**2011 Census Travel-to-Work Areas (TTWAs)**


**OECD functional urban areas**




*Source: ONS and OECD*

## Travel-to-Learn Patterns

### *Travel-to-learn patterns are relatively localised but scope to benefit from better co-design and integration of devolved skills provision, particularly given its commonalities of sectors specialisms*

#### *The Argument*

2.26 **Travel-to-learn patterns are relatively localised** across SCR, with Further Education (FE) students tending to study at institutions close to home; this pattern is typical generally across the country. Given this, the **SCR economy will benefit from better co-design and integration of devolved skills provision**, particularly given its commonalities of sectors, specialisations and growth prospects, and inter-related supply chains and assets. This will help **to ensure that the supply of skills meets better the needs of SCR's businesses** (and especially those in SCR's priority sectors).

#### *The Evidence Base*

2.27 Data on FE participation[16] shows that 63 per cent of 'learning aims' delivered to Chesterfield's residents are at FE institutions located within Chesterfield itself, and only 4 per cent are delivered in South Yorkshire's districts. A similar picture is evident for Bassetlaw, where 50 per cent are delivered to Bassetlaw's residents within Bassetlaw, and 8 per cent are delivered by institutions in South Yorkshire. That said, evidence is also available which shows that:

- Of all learners at Chesterfield College (including those participating in ESF programmes), 70 per cent live in SCR districts (and 30% live in South Yorkshire), compared to 54 per cent who live in D2N2 LEPs[17].
- 11% of all employers engaged with SCR's Skills Made Easy programme (which provides employers with advice on recruiting apprentices and offering training programmes to upskill their workforce) were in Bassetlaw (221 businesses) and Chesterfield (186 businesses). All of these companies have developed training plans through the support received from Skills Made Easy.

## Retail Catchments

### *Strong retail linkages, with implications for spatial planning*

#### *The Argument*

2.28 As well as understanding business relationships and travel-to-work patterns, where people live and spend their money also influences functional economic relationships between places. On **retail spending, the evidence shows clearly that there are strong linkages between Chesterfield/Bassetlaw and Sheffield/Doncaster, in particular**. This has **implications**

[16] Data provided by SCR refers to the number of learning aims, rather than number of learners (one learner can have multiple learning aims), but it has been assumed that most people take the same number of learning aims across districts and providers.
[17] Source: Chesterfield Borough Council, 2016

**for spatial planning**, especially in terms of ensuring appropriate land/property provision and retail/leisure demand relative to transport networks.

### *The Evidence Base*

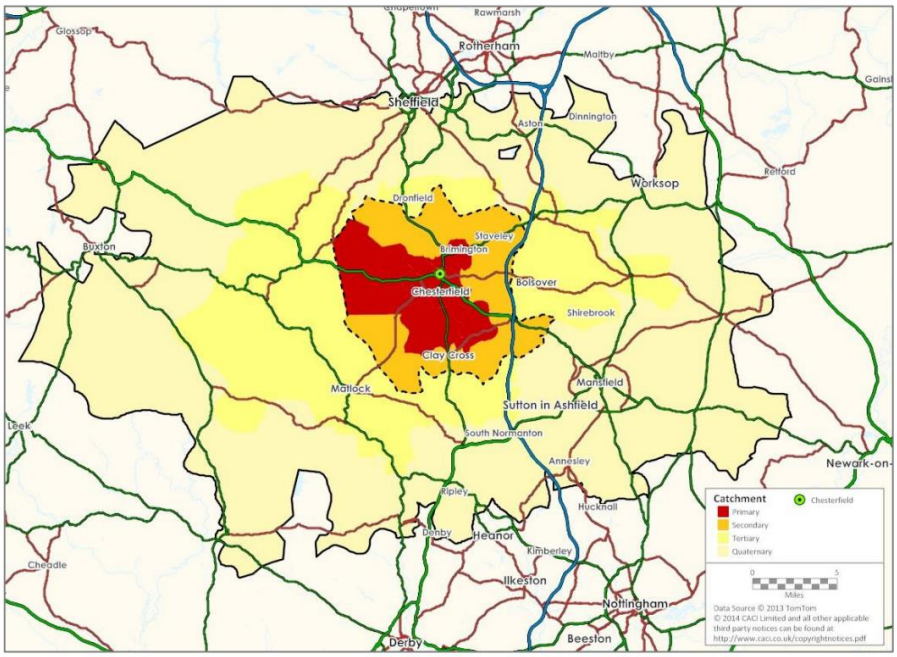
2.29 According to a review of retail assessments, there are particularly strong relationships between Chesterfield and Sheffield's city centre and Meadowhall complex, and also Bassetlaw and Doncaster/Sheffield. For example:

- Within Chesterfield's wider retail catchment[18] (comprising a total population of 1.1 million people), Meadowhall was the most visited centre securing 16 per cent of shopping trips in 2015, followed by Sheffield central (15 per cent) and Chesterfield with nine per cent market share. Nottingham achieves five per cent and Derby two per cent market share in the retail catchment[19] (see Figure 2-4).
- According to Sheffield's 2014 Retail Capacity Study, 40 per cent of all spend on comparison goods by Bassetlaw's residents[20] takes place in Sheffield city centre and Meadowhall. The equivalent figure for Chesterfield was nine per cent.
- Doncaster's 2015 retail study shows that some of Doncaster's primary catchment for retail spend extends into the north of Bassetlaw (Zone 3 on the second map below, Figure 2-4) and a much larger part of Bassetlaw is part of Doncaster's secondary catchment (Zones 10 and 11).

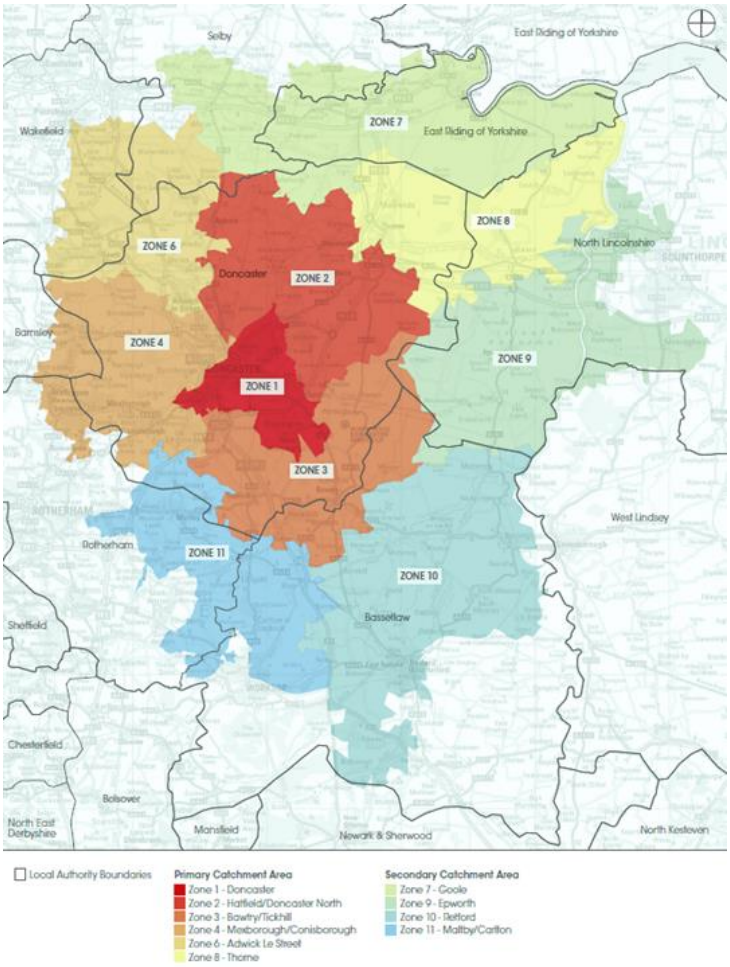
[18] The total area from which people travel to shop in Chesterfield
[19] Source: Chesterfield Borough Council, 2016, based on findings from the Chesterfield Retail and Leisure Study, 2015
[20] Based on data for 'zones' that approximately map onto Bassetlaw's district footprint.

**Figure 2-4: Retail catchments**

**Chesterfield retail footprint catchment – based on volume of trips to Chesterfield**




**Doncaster retail footprint catchment – based on volume of trips to Doncaster**




*Source: Chesterfield Retail and Leisure Study, 2015 and Doncaster Retail, Leisure and Town Centres Study, 2015, GVA*

## Housing Markets

### *Localised and distinct housing markets, but scope for more joined-up spatial planning to reflect strong travel-to-work relations, leading to a more efficient economy*

#### *The Argument*

2.30 **Housing markets across SCR are relatively localised and distinct, with limited migration of people between the districts**. This is not unusual for SCR or other similar LEP areas in the North, especially those which are polycentric in their character. In part, this reflects the close proximity of the districts, and the ease of commuting between them for work (as demonstrated by the travel-to-work flows above, and journey times below). Arguably, **spatial planning across the six districts can be more joined-up**, reflecting where people want to live and work, and enable the Combined Authority to plan for housing supply (especially in terms of local authority provision) at greater scale across six (rather than four) districts. This should lead to a **better connected and a more efficient functional economy**. Moreover, the Combined Authority will be able to link plans for housing at this scale with other complementary policies (e.g. economic growth and inward investment) to enable better synergies between each thematic area.

#### *The Evidence Base*

2.31 According to the 2011 Census, 10 per cent of Bassetlaw's residents who moved house in the year preceding the Census relocated to one of South Yorkshire's districts (almost 1,000 people), and four per cent of Chesterfield's residents moved to South Yorkshire (just over 470 people). This compares to nine per cent of Barnsley's residents moving to one of the other South Yorkshire districts, suggests low migration between districts in SCR is not unusual.

2.32 A review of Strategic Housing Market Assessments (SHMAs) suggests that Sheffield is a relatively self-contained housing market area, with 73 per cent of moves taking place within the city boundary[21]. Likewise, the Rotherham SHMA found that 73 per cent of moves within Rotherham originate in the borough – although it notes that a self-containment of 67 per cent for owner occupiers 'reflects the importance of the shared Sheffield-Rotherham market area particularly for working age households seeking family housing.'[22]. The Doncaster Housing Need Assessment 2015 concluded that 'Doncaster has a self-contained housing market area' but also noted that Doncaster shares 'major population transfers' with Bassetlaw and that the two have 'strong mutual ties'[23].

2.33 Chesterfield and Bassetlaw both sit within the 'North Derbyshire and Bassetlaw' Housing Market Area (which also covers Bolsover and North East Derbyshire – two of the other districts in SCR). The Sheffield, Rotherham and Doncaster housing market areas are contiguous with North Derbyshire and Bassetlaw housing market areas. The North Derbyshire and Bassetlaw SHMA acknowledges that '*the evidence does point towards a set of*

[21] Sheffield Strategic Housing Market Assessment, 2013
[22] Rotherham Strategic Housing Market Assessment, 2015
[23] Doncaster Housing Need Assessment, 2015

*relationships towards the larger economic centres to the north, such as Sheffield, Rotherham and Doncaster in economic terms (e.g. commuting flows)*' and even though the North Derbyshire and Bassetlaw Housing Market Area '*represents an appropriate functional housing market area . . . it should be recognised that there are economic links more widely across the City Region*'[24].

2.34 Across all assessments, there is a tendency to revert to district boundaries and assess housing market areas within those, partly reflecting the footprint of local authority planning functions.

## Transport Networks

### *The expanded geography is a sensible footprint for planning and managing transport functions given strong travel-to-work (and wider business and leisure) linkages*

#### *The Argument*

2.35 **The six districts are reasonably well connected, but challenges exist in terms of congestion and over-crowding on key routes**, especially between Chesterfield and Sheffield. Given the evidence above about strong labour market and business relationships between the six districts, **the expanded geography proposed for SCR Combined Authority is a sensible footprint for tackling and managing transport issues, enabling key economic functions to work more efficiently, and potentials to be realised more fully**. Linking in cohesively as six authorities to wider transport thinking and planning from, for example, Transport for the North will also be helpful.

2.36 This is particularly important given the evidence around future economic growth – and particularly in similar/related sectors – which is likely to lead to increased commuter flows and business interactions. Moreover, making travel between the districts easier and more efficient may also help to encourage more of SCR's unemployed residents (a large share of whom are in the six districts) into work, which is likely to mirror current travel-to-work flows. The scope for better utilisation of the labour market is, therefore, at hand.

#### *The Evidence Base*

2.37 Chesterfield district is particularly close to Sheffield, both in terms of physical proximity and ease of travel. For example, even though the two districts are non-contiguous, the distance between the two district boundaries is only 1.3 miles at its narrowest point, and the drive time from Chesterfield centre to Sheffield centre about 30 minutes. There are 17 train services per hour from Chesterfield to Sheffield (compared to 13 to Derby and 10 to Nottingham), with a journey time of 11 minutes. and nine bus services from Chesterfield to Sheffield per hour (20 per cent of all departures).

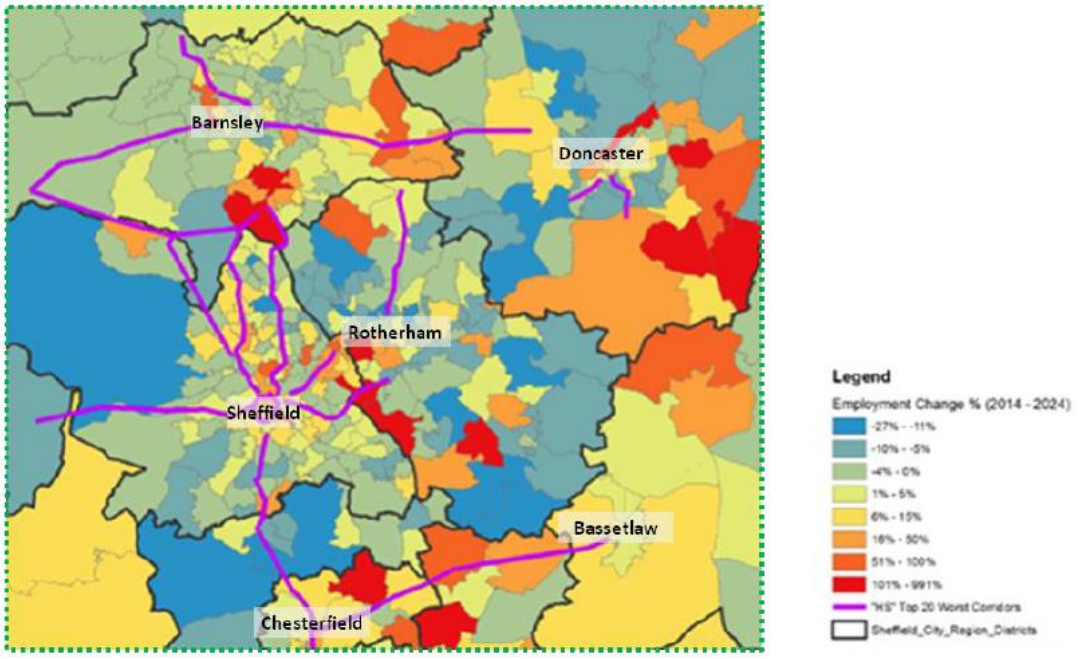
2.38 The picture for Bassetlaw is more mixed, partly reflecting further distance, rurality and the infrastructure network. For example, the drive time to Sheffield is 40+ minutes from Worksop and 55+ minutes from Retford, but the drive time to Doncaster is quicker from both Worksop (35+) and Retford (40+). Trains to Sheffield/Doncaster from Bassetlaw's stations are much less frequent than from Chesterfield, and take longer (considerably so in most cases).

[24] North Derbyshire and Bassetlaw Housing Market Area Local Investment Plan, 2010

Reflecting this, most of the commuters from Bassetlaw to Doncaster travel by car (91 per cent) rather than train (one per cent) or bus (five per cent).

2.39 There are congestion issues across the SCR area, as illustrated below. Congestion along the A61 corridor between Sheffield and Chesterfield, and from Chesterfield to Bassetlaw, is of particular concern in the context of this study, along with congestion issues within South Yorkshire. In addition, there are over-crowding issues on the Midland Mainline (e.g. between Sheffield and Chesterfield). As noted in the draft SCR Integrated Infrastructure Plan (2016) '*evidence suggests that without intervention, increased congestion resulting from growth could impede on the economic potential of the City Region'* and so SCR has designed a set of '*spatial packages'* to address these issues. This includes A61 corridor enhancements in support of the 'A61 Corridor Growth Area' identified in SCR's Strategic Economic Plan, which is home to '*a number of major mixed-use development sites with significant regeneration and job creating potential*'[25]. The delivery of the interventions set out in SCR's draft Integrated Infrastructure Plan would be aided by devolved transport functions that cover as much of the SCR footprint as possible.

**Figure 2-5: The 20 worst corridors of congestion in SCR and expected employment change for 2014-2024**




*Source: Sheffield City Region Draft Integrated Infrastructure Plan, 2016*

[25] Sheffield City Region Draft Integrated Infrastructure Plan, 2016

## Socio-Economic Challenges and Common Policy Footprints

### *Similar challenges faced across the six districts, so the devolution and co-design of relevant powers (such as employment support and skills development) will enable more efficient delivery at scale to address these issues*

#### *The Argument*

2.40 The six districts face some similar challenges, particularly in terms of productivity, unemployment and deprivation (including long-term health issues, many of which reflect the shared industrial heritage of the area), and the districts combined account for a large proportion of SCR's unskilled populations.

2.41 In light of this, **the devolution and co-design of relevant powers** (such as employment support and skills development) **across the six districts will enable SCR Combined Authority to implement interventions at an appropriate (and larger) scale to tackle the challenges faced.** For example, the joined-up design and delivery of devolved employment programmes across the six districts will (a) mean that support is delivered at a greater scale, leading to efficiencies and potentially synergies, (b) enable the Combined Authority to support a large proportion of SCR's unemployed residents into work, so leading to a more productive city region in the longer-term, and (c) ensure that employment programmes better reflect the 'real' economy in meeting demands of SCR's priority sectors and 'working with the grain' of where people want to live/work. This should lead, in turn, to increased multiplier effects from interventions across the whole economy. In addition, given the interdependence of the districts' business base and shared growth ambitions, joined-up spatial planning which takes into consideration energy and utility requirements of the businesses (and wider population) will be beneficial to the city region as a whole.

#### *The Evidence Base*

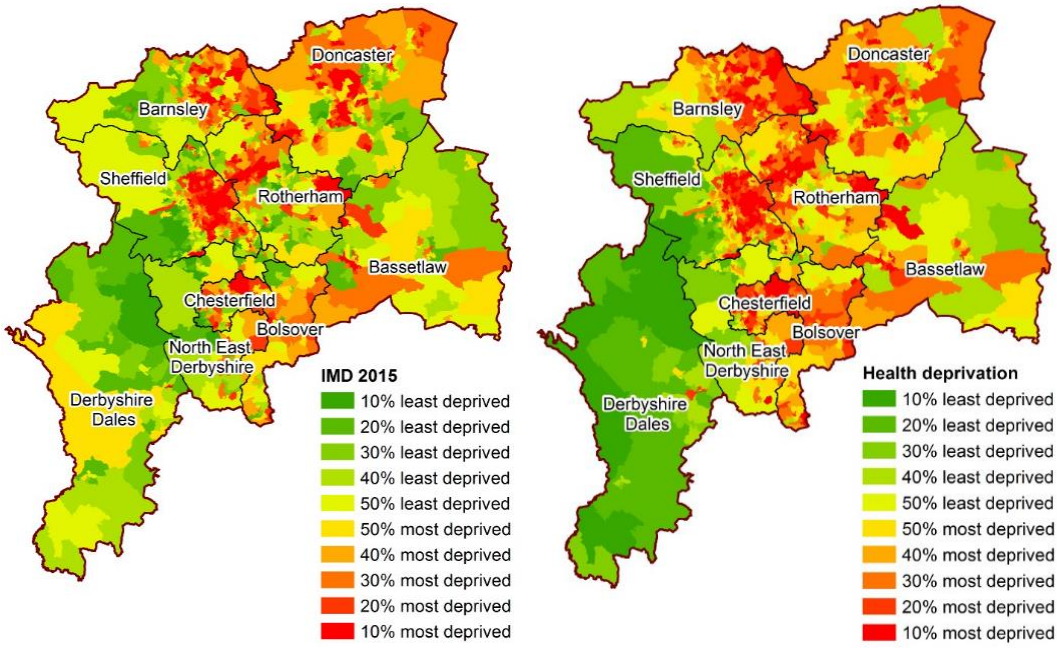
2.42 There will be some wealth upside by expanding the constituent members of SCR's Combined Authority to include Chesterfield and Bassetlaw, as GVA per head in the two districts (at £19,123 and £19,171 respectively) was above the SCR average (of £16,862) in 201526. Productivity, measured by GVA per job, in Chesterfield and Bassetlaw (£39,525 and £40,538, respectively) was also slightly higher than the SCR average (£38,405) in the same year. However, all districts – and the SCR as a whole – are below considerably the national average in terms of both GVA per head and GVA per job, reflecting shared restructuring challenges across the six districts.

2.43 The six districts account for the majority of SCR's working age population who are unemployed (94 per cent) and without qualifications (89 per cent)[27]. They also have similar challenges in terms of overall deprivation and health deprivation, with all districts home to some of England's most deprived areas (as illustrated in Figure 2-6). Long-term limiting illness is a particularly prevalent issue across the geography, with 10.7 per cent of SCR's residents stating their 'day to day activities are limited a lot by health issues' in the 2011

[26] Source: Cambridge Econometrics
[27] Source: APS, 2013-2015 average

Census. The proportion in Bassetlaw and Chesterfield exceeds the SCR average (at 10.8 per cent and 11.5 per cent, respectively). This is notably higher than the national average of 8.3 per cent. Partners are already looking at tackling health issues across this spatial footprint – for example, a Sustainability and Transformational Plan is being developed for South Yorkshire and Bassetlaw together, to ensure that Health and Care Services are built around the common and specific needs of their local populations. It is important to note that this is not being undertaken as part of the SCR devolution deal, which was an economic (rather than public service reform) deal.

**Figure 2-6: Index of Multiple Deprivation (2015)**




*Source: Source: Produced by SQW 2016. Licence 100030994. Contains OS data © Crown copyright [and database right] [2015]. Includes Index of Multiple Deprivation data (2015)*

2.44 Another common challenge across the six districts, and wider SCR, is one of energy and utilities supply. Data on this at a local level are limited, but TBR's analysis shows that Bassetlaw has a strong sector specialism in the Production of Electricity, employing 780 people in total. The EDF Energy coal-powered Cottam, West Burton A and gas-fired West Burton B power stations are such electricity producers, although recent Government announcements suggest that the coal fired stations will be phased out within the next decade. In addition to being an important source of energy in general, the sector has strong supply chain links – purchase and supply – with the Mining of Coal and Lignite, a specialist sector in South Yorkshire with 530 employed there. Also, Producers of Electricity are in the top three of suppliers to Manufacturers involved in Basic Metals and other Non-Metallic Mineral Products, which is an important specialism across SCR.

# Annex A: Economic Scale

A.1 This section presents data on the scale and characteristics of SCR including population and skills profile.

## Context – economic roles of places across SCR

A.2 The Sheffield City Region (SCR) Strategic Economic Plan set out the different roles of the individual places within SCR – see the diagram and the quoted text below.

A.3 "Comprising South Yorkshire and neighbouring districts in the East Midlands, Sheffield City Region represents a coherent, functional economic geography. Approximately nine out of ten residents live and work within the City Region; around 70% travel within their own district while the remaining 30% travel to other City Region Districts. Sheffield, Chesterfield and Bassetlaw are net providers of jobs with the other districts being net providers of labour."

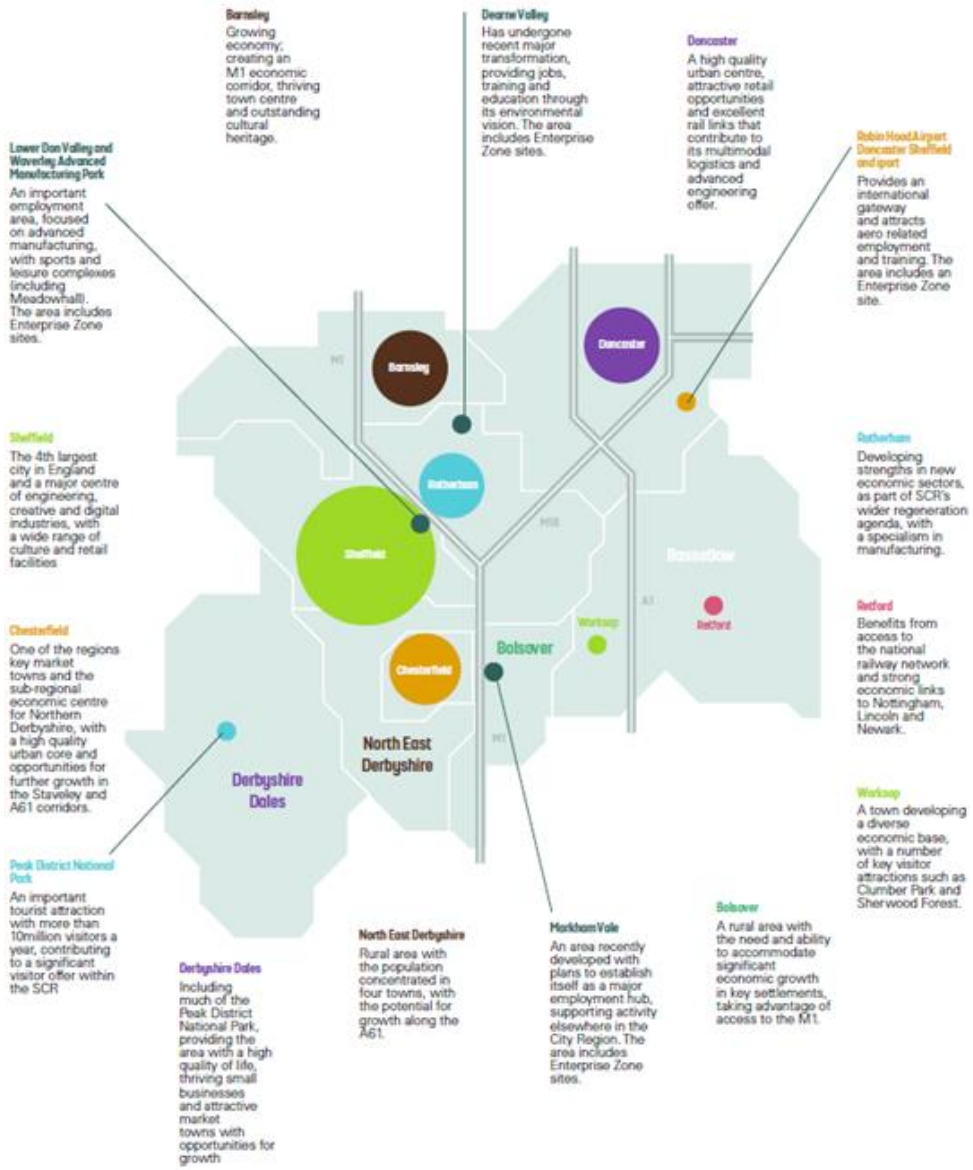
A.4 "Sheffield City Region is not a classic mono-centric conurbation in the manner of Greater Manchester, Bristol or Glasgow. This reflects the economic history and the dominance of industries such as coal mining which led to very strong local economies. All of the districts make an important contribution to the City Region's GVA." [28]

**A.5** **"Bassetlaw:** A predominantly rural area with two main towns – Worksop (developing a diverse economic base) and Retford (with strong economic links to Nottingham, Lincoln and Newark). In spite of its location within Nottinghamshire, it has clear synergies with the economies of South Yorkshire and northern Derbyshire. These relate to economic growth, skills, transport and housing provision."

A.6 **"Chesterfield:** A key employment centre with a high quality urban core and opportunities for further growth along the A6. Chesterfield provides employment to surrounding districts, particularly to those within Derbyshire, to which it is a strong net provider of jobs. It is continuing to develop housing and employment land on brownfield land in the Staveley and Rother Corridor and at Chesterfield Waterside."

[28] Strategic Economic Plan, SCR LEP

**Figure A-1: Roles of places in SCR**




*Source: Strategic Economic Plan, SCR LEP*

A.7 "The Sheffield City Region Enterprise Zone comprises a number of well-connected development areas along the M1 corridor, where a range of Enterprise Zone Incentives are available to encourage growth and investment by hi-tech firms. These areas have prioritised the development of modern manufacturing and technology-based enterprises."[29] Details on the Enterprise Zone are provided below.

**Table A-1: Sites of SCR Enterprise Zone**

| Area | Name | Size | Occupiers |
|---|---|---|---|
| Barnsley | Shortwood Business Park | 3.5 acres | Industrial |
| | Ashroyd Business Park | 12 hectares | Distribution, Manufacturing |
| | Gladman Park | 13 acres | Mixed |
| | Capitol Park | 36 acres | Mixed |

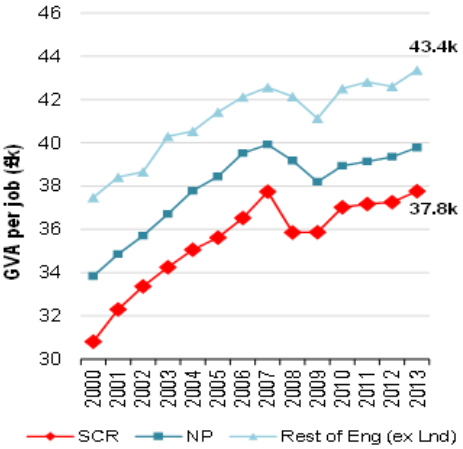
[29] http://sheffieldenterprisezone.co.uk/locations/

| | | | |
|---|---|---|---|
| Sheffield Rotherham | Europa Link | 20.8 hectares | Manufacturing, Warehousing, Office |
| | Tinsley Park | 34 hectares | Industrial |
| | Templeborough | 4.73 hectares | Office, Industrial |
| | Advanced Manufacturing Park (AMP)/Waverley | 47.6 hectares | Manufacturing |
| | Smithywood Business Park | 29 acres | Healthcare |
| | Phase 2 Dinnington | 41 acres | - |
| | Vantage Park | 5 acres | Office, Industrial, Warehousing |
| Markham Vale (Bolsover) | Markham Vale | 200 acres | Office, Industrial |
| Doncaster | Robin Hood Airport Business Park | 164 acres | Aviation and Aerospace |

*Source: SQW analysis*

## Economic Scale and Characteristics

A.8 "The SCR economy generated £30bn in Gross Value Added (GVA[30]) in 2013, accounting for 11% of the northern total. However, GVA per head – at £16,200 – was only 88% of the northern average and 76% of the rest of England excluding London. In 2013, SCR's productivity was £37,775, 87% of the rest of England excluding London. Historically, SCR's productivity has grown at a rate of 1.6% pa (2000/13), which was 0.5pp above the rest of England excluding London, suggesting productivity growth rate gap has closed over recent years. However, by 2025, SCR's productivity is expected to grow by 1.8% pa, only 0.1pp above the rest of England excluding London growth rate."[31]




### *Population*

A.9 In 2014, SCR's population was 1.8m. The four constituent members were 75% of this, and the two prospective members 12%. In total these 6 LADs account for 86% of SCR's population, 1,584,200. This is larger than the 2014 population of the metropolitan counties of both Merseyside (1,391,113) and Tyne and Wear (1,118,713).

A.10 From 2000 to 2014, all districts recorded an increase in population. The six LADs were responsible for 92% of the total growth.

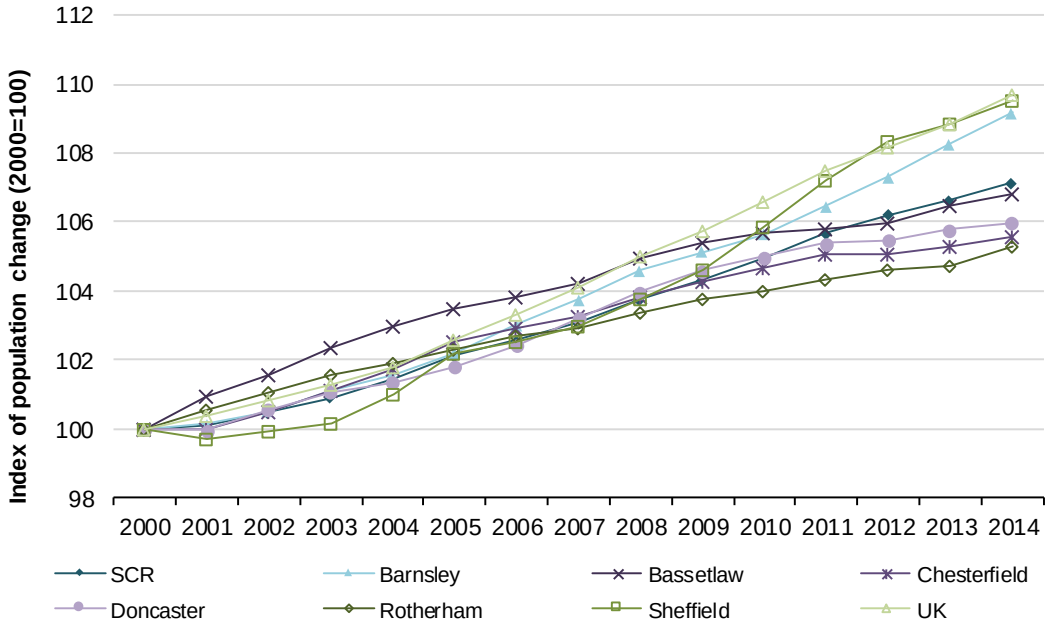
[30] "Gross Value Added (GVA) is a standard measure of the value of goods and services in a local area and is a proxy for local wealth and productivity in the local economy.
[31] SCR Narrative for Northern Powerhouse IER, SQW, 2016

**Table A-2: Change in Population**

| | 2014 | 2000-2014%Change |
|---|---|---|
| Barnsley | 237,800 | 9.2% |
| Bassetlaw | 114,100 | 6.8% |
| Chesterfield | 104,300 | 5.6% |
| Doncaster | 304,200 | 6.0% |
| Rotherham | 260,100 | 5.3% |
| Sheffield | 563,700 | 9.5% |
| SCR | 1,832,100 | 7.1% |

*Source: SQW analysis of Population Estimates*

**Figure A-2: Index of change in population (2000-2014)**

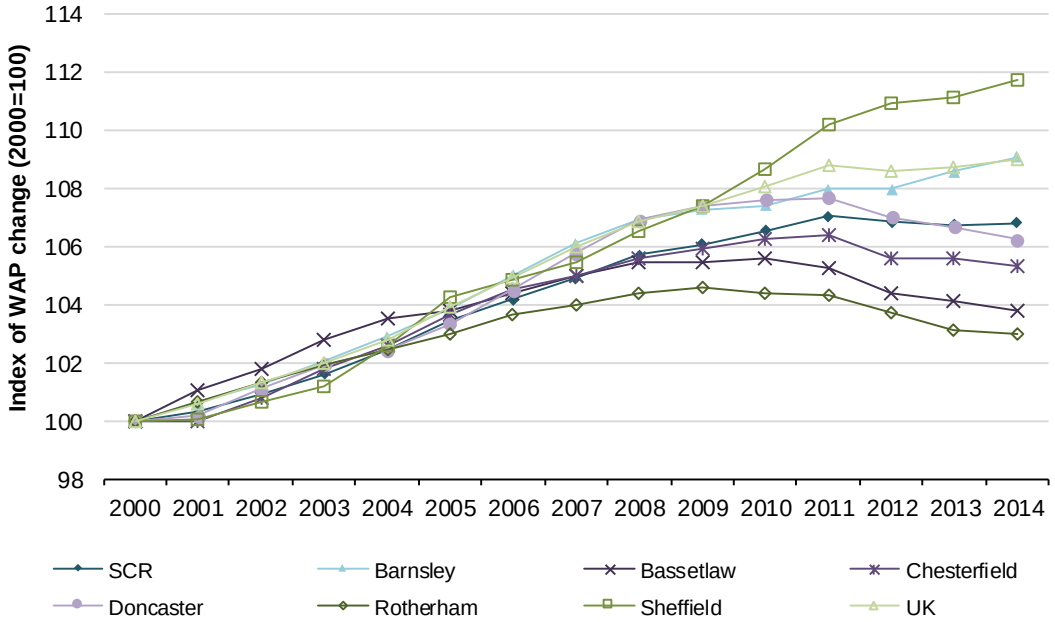



*Source: SQW analysis of ONS Population Estimates*

A.11 SCR's working age population (WAP) was 1.2m in 2014, the six districts accounted for 87% of this. The 1,008,500 people of working age in the six districts is higher than the equivalent figures for the metropolitan counties of both Merseyside (888,783) and Tyne and Wear (726,204).

A.12 From 2000 to 2014, all of the six districts recorded growth. However, Derbyshire Dales and North East Derbyshire (both non-constituent members) saw their WAP fall over this period. The 6 local authority districts (LADs) therefore accounted for 99% of the growth in SCR's WAP.

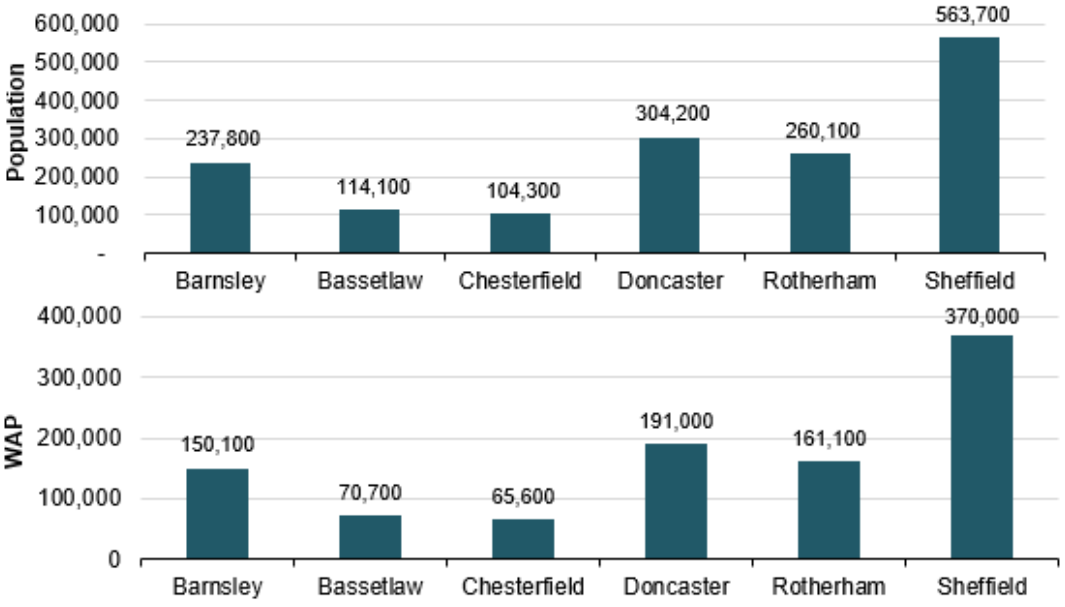
**Figure A-3: Index of change in WAP (2000-2014)**




*Source: SQW analysis of ONS Population Estimates*

A.13 The charts below show that, apart from the city of Sheffield, Doncaster has the highest population and working age population.

**Figure A-4: SCR population and working age population (2014)**

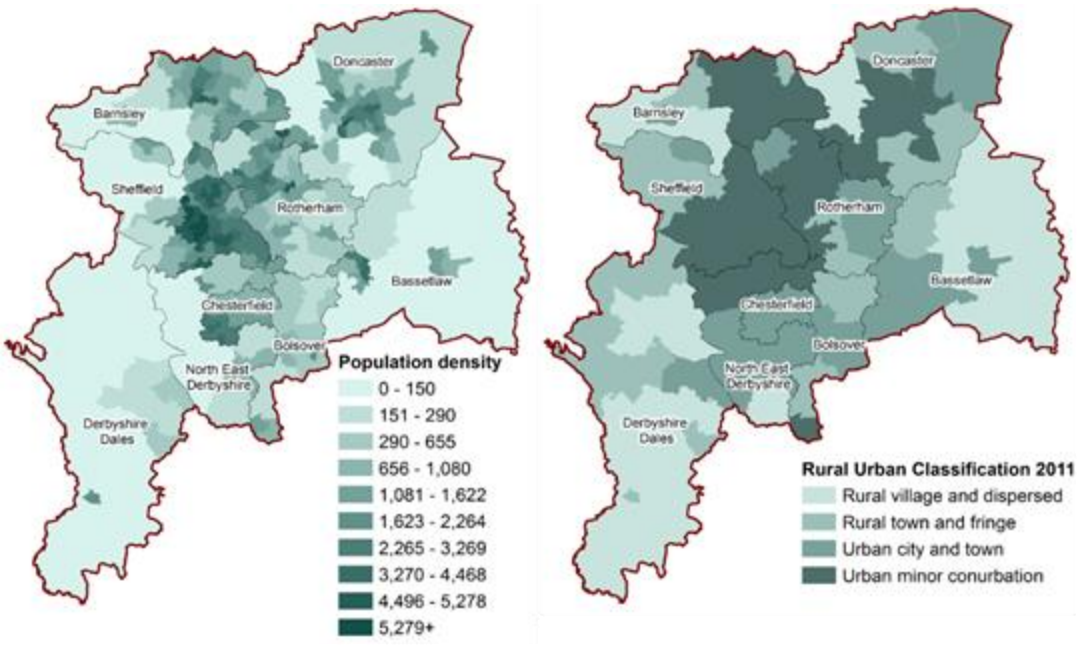



*Source: SQW analysis of ONS Population Estimates*

### *Population Density and Rurality*

A.14 The figure below shows population density in 2014 for all of the MSOAs in SCR, and their rural urban classification. Chesterfield (classed as urban city and town) is more densely populated than Bassetlaw (majority of Bassetlaw is classed as rural).

**Figure A-5: Population density at MSOA level (people per square kilometre) (2014) and Rural Urban Classification at MSOA level (2011)**



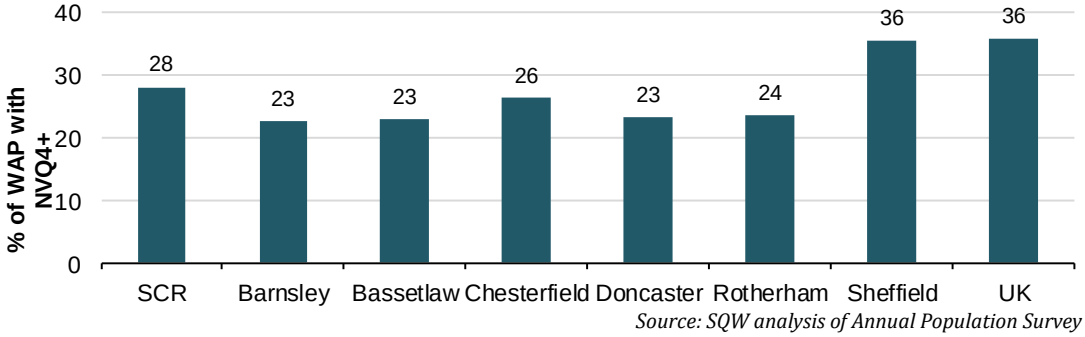

*Source: Produced by SQW 2016. Licence 100030994, Contains OS data © Crown copyright [and database right] [2015]. Contains Middle Super Output Area Mid-Year Population Estimates data*

## *Skills Profile*

A.15 The four constituent members of the Combined Authority (CA) have 76% of SCR's NVQ4+ populations, Bassetlaw and Chesterfield have 10%. In total, the six LADs have 86% of SCR's population with NVQ4+.

A.16 Between 2004/6 and 2013/15, the % of the WAP with NVQ4+ increased in all areas considered. The largest increase was in Doncaster (44%), and the smallest in Chesterfield (29%) apart from the outlier of Bassetlaw (4%).

**Figure A-6: of WAP with NVQ4+ (3 year average for 2013-2015)**



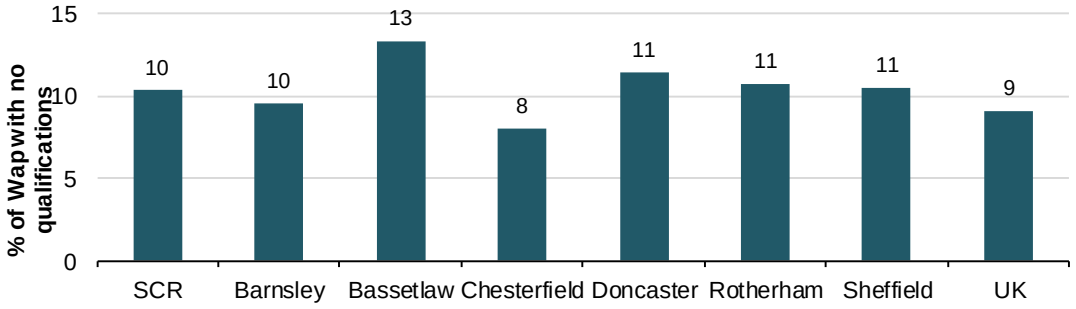

*Source: SQW analysis of Annual Population Survey*

A.17 Four constituent members have 77% of SCR's populations without qualifications, Bassetlaw and Chesterfield have 12%. In total, the six LADs have 89% of SCR's WAP without qualifications for the three year average of 2013-15.[32]

[32] Note: Data for Chesterfield for 2014 and 2015 "Estimate and confidence interval unreliable since the group sample size is small (3-9)." These data have been used as part of the three year averages.

A.18 Between 2004/6 and 2013/15, the % of the WAP with no qualifications decreased in all areas considered. The largest fall was in Chesterfield -50%, with the smallest in Bassetlaw -23%.

**Figure A-7: % of WAP with no qualifications (3 year average for 2013-2015)**




*Source: SQW analysis of Annual Population Survey*

## *Occupational Profile*

A.19 The occupational structure is similar for all districts. Bassetlaw has a higher proportion of process, plant and machine operatives, 15.4%, and Sheffield the highest in professional occupations, 24%, – see radar diagram and table below.

**Table A-3: % of those in employment at given level of occupation (2013-15)[33]**

| | managers, directors and senior officials | professional occupations | associate prof & tech occupations | administrative and secretarial occupations | skilled trades occupations | caring, leisure and other service occupations | sales and customer service occupations | process, plant and machine operatives | elementary occupations |
|---|---|---|---|---|---|---|---|---|---|
| SCR | 8.0 | 17.9 | 12.0 | 10.3 | 11.0 | 9.6 | 8.6 | 8.8 | 12.9 |
| Barnsley | 7.1 | 12.9 | 11.3 | 9.0 | 12.6 | 10.8 | 11.6 | 10.3 | 13.5 |
| Bassetlaw | 7.2 | 15.5 | 9.6 | 11.0 | 11.0 | 8.2 | 5.5 | 15.4 | 14.8 |
| Chester-field | 5.6 | 20.3 | 9.7 | 10.2 | 12.0 | 9.8 | 8.2 | 7.9 | 15.5 |
| Doncaster | 7.3 | 13.5 | 12.1 | 11.7 | 11.6 | 10.2 | 8.9 | 9.6 | 14.0 |
| Rother-ham | 9.7 | 13.7 | 11.6 | 11.2 | 11.6 | 10.7 | 9.9 | 9.2 | 11.4 |
| Sheffield | 7.1 | 24.0 | 12.9 | 9.7 | 8.5 | 9.3 | 8.5 | 7.5 | 11.9 |
| UK | 10.2 | 19.7 | 13.9 | 10.7 | 10.7 | 9.2 | 7.8 | 6.3 | 10.8 |

*Source: SQW analysis of Annual Population Survey data*

A.20 The four constituent members have 73% of SCR's managers, directors and senior officials whilst Bassetlaw and Chesterfield have a further 8%. The six LADs have 80%.

[33] Note: some data for Chesterfield and Bassetlaw "Estimate and confidence interval unreliable since the group sample size is small (3-9)." These data have been used as part of the three year averages.

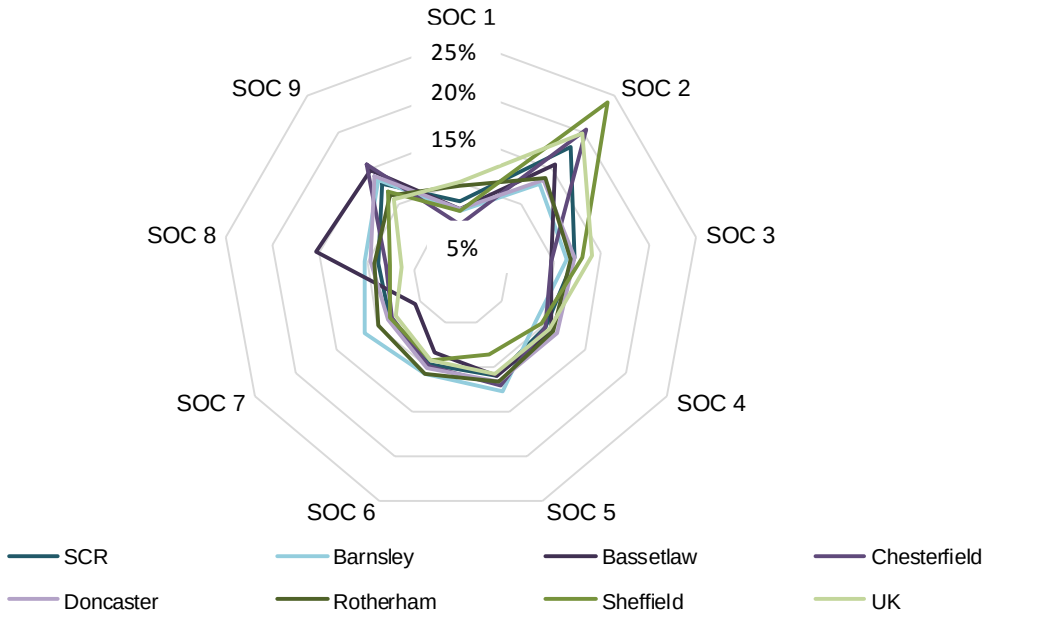
**Table A-4: % of those in employment at given level of occupation (2013-15)[34]**

| | Managers, directors and senior officials | Professional occupations | Associate prof & tech occupations |
|---|---|---|---|
| Current constituent members | 71% | 74% | 75% |
| Potential constituent members | 9% | 12% | 9% |
| Current and potential constituent members | 80% | 86% | 84% |

*Source: SQW analysis of Annual Population Survey data*

A.21 The four constituent members have 72% of SCR's population engaged in elementary occupations, Bassetlaw and Chesterfield have 14%. The six LADs therefore have 86% of SCR's population engaged in elementary occupations.

**Figure A-8: Percentage of all those in employment in given occupations (2013-15 average)[35]**




*Source: SQW analysis of Annual Population Survey*

## Forecast Data from Cambridge Economics

### *Population*

A.22 The latest population forecasts predict increases in population for each of the districts in SCR, at an average of 7%. The six local authorities account for 87% of the change.

**Table A-5: Population projections from 2015 to 2030 (000s)**

| | 2030 | Actual change | % change |
|---|---|---|---|
| SCR | 1974 | 123 | 7% |
| Barnsley | 263 | 21 | 9% |

[34] Note: some data for Chesterfield and Bassetlaw "Estimate and confidence interval unreliable since the group sample size is small (3-9)." These data have been used as part of the three year averages.
[35] Some data for Bassetlaw and Chesterfield has a note saying "Estimate and confidence interval unreliable since the group sample size is small (3-9)" – this data is included within the three-year average presented

| | 2030 | Actual change | % change |
|---|---|---|---|
| Bassetlaw | 122 | 7 | 6% |
| Chesterfield | 109 | 5 | 5% |
| Doncaster | 318 | 10 | 3% |
| Rotherham | 277 | 14 | 5% |
| Sheffield | 621 | 50 | 9% |

*Source: SQW analysis of CE projections*

A.23 The WAP is forecast to fall in all SCR districts apart from Barnsley and Sheffield.

**Table A-6: Working age population projections from 2015 to 2030 (000s)**

| | 2030 | Actual change | % change |
|---|---|---|---|
| SCR | 1169 | 0 | 0% |
| Barnsley | 154 | 2 | 1% |
| Bassetlaw | 68 | -3 | -4% |
| Chesterfield | 63 | -3 | -4% |
| Doncaster | 185 | -7 | -4% |
| Rotherham | 160 | -3 | -2% |
| Sheffield | 394 | 19 | 5% |

*Source: SQW analysis of CE projections*

A.24 The WAP as a proportion of total population is forecast to fall in all geographies considered.

**Table A-7: Projections for the WAP as a proportion of total population**

| | 2015 | 2030 | pp change |
|---|---|---|---|
| SCR | 63% | 59% | -3.9 |
| Barnsley | 63% | 59% | -4.3 |
| Bassetlaw | 62% | 56% | -6.0 |
| Chesterfield | 63% | 58% | -5.1 |
| Doncaster | 63% | 58% | -4.3 |
| Rotherham | 62% | 58% | -4.1 |
| Sheffield | 66% | 63% | -2.1 |

*Source: SQW analysis of CE projections*

### *GVA*

A.25 Overall GVA in SCR is forecast to rise to £41,736m by 2030. Some 74% of this is forecast to be generated by the four South Yorkshire authorities and a further 13% from Bassetlaw and Chesterfield combined. The six local authorities will therefore provide 87% of this.

A.26 GVA growth rate is forecast to be fairly consistent across the six authorities.

**Table A-8: Change in GVA from 2015-2030**

| | Projected GVA in 2030 (£2011m) | Actual change (£2011m) | % change |
|---|---|---|---|
| SCR | 41,763 | 10,539 | 34% |
| Barnsley | 4,405 | 1,097 | 33% |
| Bassetlaw | 2,953 | 758 | 35% |
| Chesterfield | 2,611 | 614 | 31% |
| Doncaster | 6,266 | 1,602 | 34% |
| Rotherham | 5,820 | 1,576 | 37% |
| Sheffield | 14,264 | 3,568 | 33% |

*Source: SQW analysis of CE projections*

### *GVA per Head*

A.27 Growth in GVA per head is forecast to vary from 23% in Barnsley to 30% in Doncaster and Rotherham, compared to 29% in the UK. GVA per head is forecast to remain lower in the six districts than for the UK as a whole.

**Table A-9: Change in GVA per Head from 2015-2030**

| | 2015 | 2030 | 2015-30 change | % change |
|---|---|---|---|---|
| SCR | 16,862 | 21,154 | 4,291 | 25% |
| Barnsley | 13,692 | 16,775 | 3,083 | 23% |
| Bassetlaw | 19,171 | 24,301 | 5,130 | 27% |
| Chesterfield | 19,123 | 23,900 | 4,777 | 25% |
| Doncaster | 15,179 | 19,728 | 4,549 | 30% |
| Rotherham | 16,086 | 20,982 | 4,896 | 30% |
| Sheffield | 18,726 | 22,975 | 4,249 | 23% |
| UK | 23,942 | 30,155 | 6,213 | 26% |

*Source: SQW analysis of CE projections*

## *Jobs*

A.28 Overall employment in SCR is forecast to rise to 851k by 2030. Some 75% is forecast to be from the four South Yorkshire authorities with an additional 13% from Bassetlaw and Chesterfield combined. Therefore, 88% of this growth will be provided by the six local authorities.

**Table A-10: Change in employment from 2015-2030**

| | Projected employment in 2030 (000s) | Actual change (000s) | % change |
|---|---|---|---|
| SCR | 851 | 38 | 5% |
| Barnsley | 91 | 4 | 4% |
| Bassetlaw | 57 | 2 | 4% |
| Chesterfield | 51 | 0 | 0% |

| | Projected employment in 2030 (000s) | Actual change (000s) | % change |
|---|---|---|---|
| Doncaster | 136 | 8 | 6% |
| Rotherham | 120 | 9 | 8% |
| Sheffield | 292 | 13 | 5% |

*Source: SQW analysis of CE projections*

### *Projections by Sector*

A.29 The table below shows projected GVA and employment changes until 2030 for SCR's key sectors (highlighted in bold) drawn from the Sector Specialisms report and SCR's SEP.[36] The sub-sectors below these have been identified by the study team from the 45 sectors contained in the Cambridge Econometrics data set.

A.30 Within each key sector, the sub-sectors that are forecast to be important to SCR in 2030 either in terms of their scale (GVA and/or employment) and/or growth between 2015 and 2030 (GVA and/or employment) are highlighted in green.

**Table A-11: Forecast employment and GVA change for SCR's key sectors (2015-2030)**

| | Employment (000s) | | | GVA (£2011m) | | |
|---|---|---|---|---|---|---|
| | 2030 | 2015-2030 change | % change | 2030 | 2015-2030 change | % change |
| **Advanced manufacturing and materials and healthcare technologies** | 45 | -17.0 | -28% | 3,329 | 530 | 19% |
| Chemicals | 2 | -0.5 | -23% | 254 | 110 | 76% |
| Non-metallic mineral products | 6 | -5.8 | -49% | 644 | 57 | 10% |
| Metals & metal products | 17 | -5.7 | -25% | 1,175 | 158 | 16% |
| Electronics | 1 | -0.8 | -47% | 73 | -20 | -21% |
| Electrical equipment | 3 | -0.4 | -11% | 143 | 8 | 6% |
| Machinery | 4 | -2.1 | -37% | 307 | 64 | 26% |
| Motor vehicles | 2 | -0.4 | -21% | 117 | 18 | 18% |
| Other transport equipment | 1 | 0.0 | 5% | 114 | 9 | 8% |
| Other manufacturing & repair | 10 | -1.4 | -12% | 502 | 125 | 33% |
| **Creative and digital** | 33 | 3.2 | 11% | 2,323 | 763 | 49% |
| Printing & recording | 3 | -0.4 | -13% | 153 | 25 | 19% |

[36] Sheffield City Region: Sector Specialisms, TBR and the University of Sheffield, 2014 and subsequently referenced in SCR LEP's Strategic Economic Plan, 2014

| | Employment (000s) | | | GVA (£2011m) | | |
|---|---|---|---|---|---|---|
| | 2030 | 2015-2030 change | % change | 2030 | 2015-2030 change | % change |
| Media | 4 | 0.2 | 4% | 303 | 70 | 30% |
| IT services | 20 | 2.2 | 12% | 1,770 | 645 | 57% |
| Arts | 7 | 1.2 | 21% | 98 | 24 | 32% |
| **Financial , professional and business services** | 157 | 19.8 | 14% | 5,823 | 1,256 | 27% |
| Financial & insurance | 17 | 0.3 | 2% | 1,549 | 448 | 41% |
| Real estate | 9 | -0.3 | -3% | 803 | 209 | 35% |
| Legal & accounting | 11 | -0.3 | -3% | 332 | 30 | 10% |
| Head offices & management consultancies | 16 | 1.4 | 9% | 167 | 14 | 9% |
| Architectural & engineering services | 14 | 1.6 | 12% | 511 | 53 | 12% |
| Other professional services | 13 | 2.9 | 28% | 597 | 89 | 18% |
| Business support services | 77 | 14.2 | 23% | 1,863 | 413 | 29% |
| **Logistics** | 43 | -1.0 | -2% | 1,986 | 453 | 30% |
| Land transport | 16 | -3.0 | -15% | 778 | 138 | 22% |
| Water transport | 0 | 0.0 | -26% | 16 | 5 | 42% |
| Air transport | 0 | 0.1 | 39% | 6 | 2 | 44% |
| Warehousing & postal | 27 | 1.9 | 8% | 1,186 | 308 | 35% |
| **Low carbon** | 9 | 0.6 | 7% | 749 | 144 | 24% |
| Electricity & gas | 3 | 0.1 | 6% | 225 | 36 | 19% |
| Water, sewerage & waste | 6 | 0.4 | 7% | 523 | 108 | 26% |
| **SCR total** | 851 | 38.2 | 5% | 41,763 | 10,539 | 34% |

*Source: SQW analysis of CE projections*

A.31 The table below provides further details on the sub-sectors highlighted in the table above. Specifically, it shows which of the SCR districts will contribute most to the scale of the sub-sector in 2030 and in which districts the largest growth will occur between 2015 and 2030.

**Table A-12: Sub-sectors forecast to be increasingly important to SCR in 2030**

| | Employment | | GVA | |
|---|---|---|---|---|
| | Scale in 2030 | Growth,2015-2030 | Scale in 2030 | Growth,2015-2030 |
| **Advanced manufacturing and materials and healthcare technologies** | | | | |
| Chemicals | - | - | Roth 23%, Bols 20% | Bols 24%, Bass/Roth 18% |
| Non-metallic mineral products | - | - | Donc 20% | - |
| Metals & metal products | Sheff 39%, Roth 21% | - | Sheff 39%,Roth 21% | Roth 20%, Sheff 17% |
| Other manufacturing & repair | Sheff 26% | - | Sheff 28% | Sheff 24%, Bass 18% |
| **Creative and digital** | | | | |
| IT services | Sheff 49% | - | Sheff 53% | Sheff 54% |
| **Financial, professional and business services** | | | | |
| Financial & insurance | Donc 15% | - | Donc 15%, Roth/Sheff 11% | Donc 17% |
| Business support services | Sheff 29%, Roth 22% | | Sheff 29%, Roth 22% | Roth 28%, Sheff 24% |
| **Logistics** | | | | |
| Land transport | Sheff 29% | - | Sheff 26% | Sheff 21% |
| Warehousing & postal | Sheff/Roth 24% | - | Donc/Sheff 24% | Donc 25%, Sheff 21% |
| **Low carbon** | | | | |
| Water, sewerage & waste | Sheff 29%, Roth 26% | - | Sheff 30%, Roth 26% | Roth 31%, Sheff 27% |

*Source: SQW analysis of CE projections*

A.32 The table below lists sectors that (a) accounted for 2%+ of an area's GVA in 2015 AND (b) are expected to grow by 10%+ in all areas below between 2015 and 2030. A number of sectors that meet these criteria are evidence in South Yorkshire, Chesterfield and Bassetlaw, demonstrating similarities in growth prospects across the six LADs, and with the SCR area as a whole.

**Table A-13: Sectors that accounted for 2%+ of an area's GVA in 2015 AND (b) are expected to grow by 10%+ between 2015 and 2030**

| | South Yorks (4 LADs) | Bassetlaw LAD | Chesterfield LAD | SCR (9 LADs) |
|---|---|---|---|---|
| **SCR specialisms (i.e. LQ > 1 compared to UK)** | | | | |
| **Metals & metal products** | ✓ | | ✓ | ✓ |
| **Construction** | ✓ | ✓ | ✓ | ✓ |
| **Motor vehicles trade** | ✓ | ✓ | ✓ | ✓ |
| **Retail trade** | ✓ | ✓ | ✓ | ✓ |
| **Land transport** | ✓ | ✓ | ✓ | ✓ |
| **Warehousing & postal** | ✓ | ✓ | ✓ | ✓ |
| **Public Administration & Defence** | ✓ | ✓ | ✓ | ✓ |
| **Education** | ✓ | ✓ | ✓ | ✓ |
| **Health** | ✓ | ✓ | ✓ | ✓ |
| Residential & social | ✓ | | ✓ | ✓ |
| Food, drink & tobacco | | ✓ | | ✓ |
| Non-metallic mineral products | | | ✓ | ✓ |
| Food & beverage services | ✓ | | | |
| Architectural & engineering services | ✓ | | | |
| **Not SCR specialisms (i.e. LQ < 1 compared to UK)** | | | | |
| Electricity & gas | | ✓ | | |
| Wholesale trade | ✓ | ✓ | ✓ | ✓ |
| IT services | ✓ | ✓ | ✓ | ✓ |
| Financial & insurance | ✓ | ✓ | ✓ | ✓ |
| Real estate | ✓ | ✓ | | ✓ |
| Business support services | ✓ | ✓ | | ✓ |
| Other services | ✓ | ✓ | ✓ | ✓ |

*Source: SQW analysis of CE data*

### *Productivity*

A.33 The table below shows productivity projections for SCR. The average productivity growth at SCR between 2015 and 2030 is forecast to be 28%. Within this, Chesterfield has the highest growth projections and Doncaster the lowest (31% and 26% respectively). This compares to a forecast UK growth of 29% to £59,496.

**Table A-14: Projections for productivity (GVA per worker)**

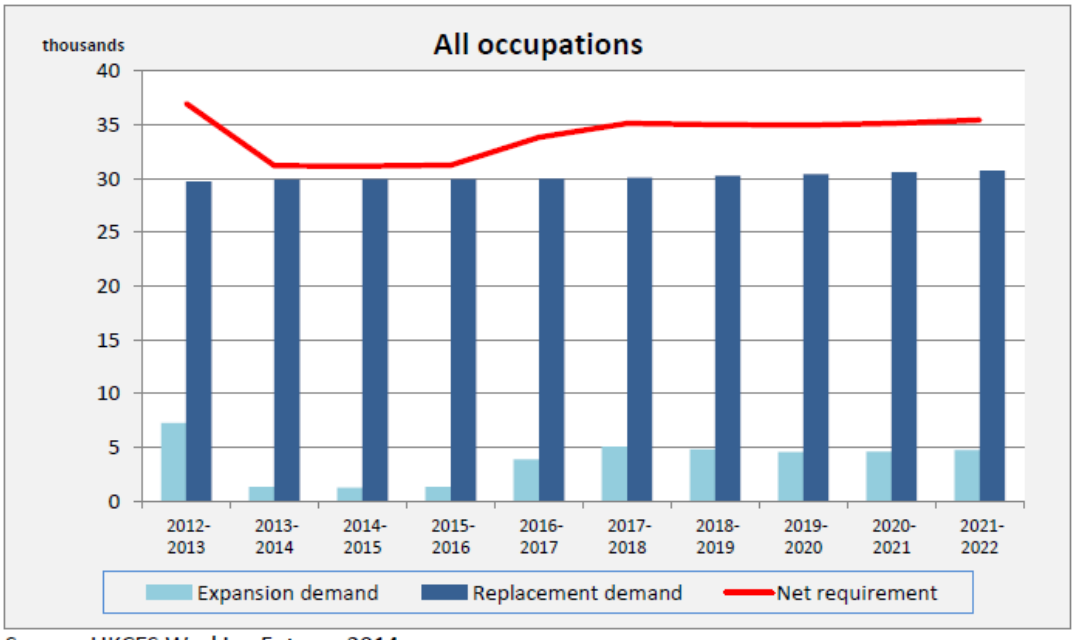
| | 2015 | 2030 | 2015-30 change | % change |
|---|---|---|---|---|
| SCR | 38,405 | 49,061 | 10,656 | 28% |
| Barnsley | 37,664 | 48,139 | 10,475 | 28% |
| Bassetlaw | 40,538 | 52,203 | 11,665 | 29% |
| Chesterfield | 39,525 | 51,617 | 12,091 | 31% |
| Doncaster | 36,510 | 46,155 | 9,645 | 26% |
| Rotherham | 38,167 | 48,561 | 10,394 | 27% |
| Sheffield | 38,322 | 48,857 | 10,535 | 27% |
| UK | 46,095 | 59,496 | 13,402 | 29% |

*Source: SQW analysis of CE projections*

## *Wider evidence on Expansion and Replacement Demand*

A.34 "On average, replacement demand will provide 6 times as many job opportunities as expansion demand over the next 10 years. By 2022, almost 40% of the existing workforce will need to be replaced. Of the over 35,000 employment opportunities, over 30,000 will be generated by replacement demand in 2022."[37]

**Figure A-9: Demand for labour in SCR, 2013-22**



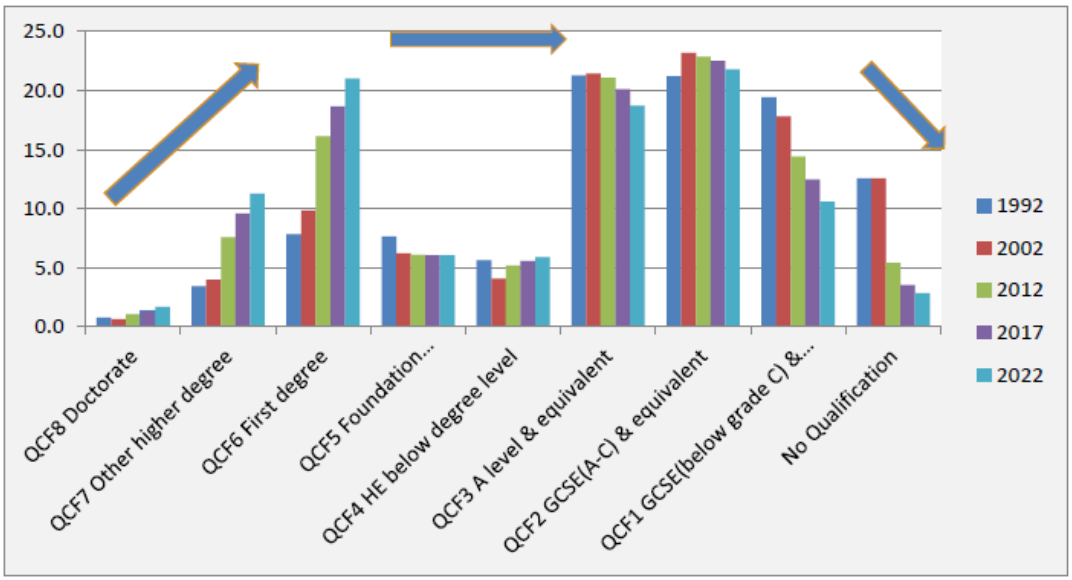

*Source: Sheffield City Region Labour Market Review, reiu, 2015*

## *Projections for Skills and Occupations*

A.35 Employers will demand higher levels of qualifications in the future (QCF5 and below forecast to decline)

[37] Sheffield City Region Labour Market Review, reiu, 2015

**Table A-15: Projected Future Qualifications Profile in SCR, 1992 - 2022**

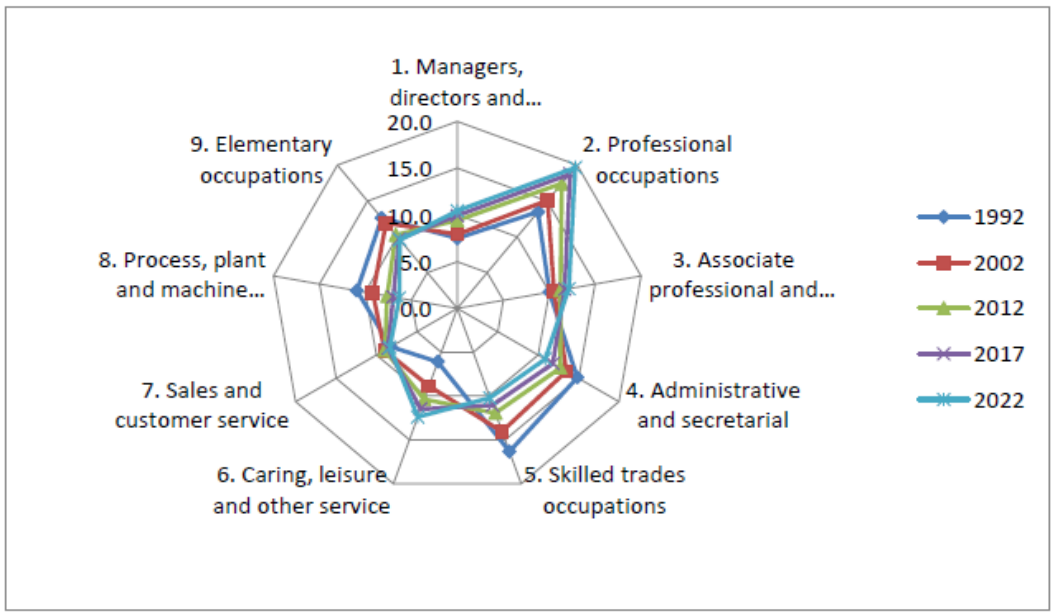



Source: UKCES Working Futures

*Source: Sheffield City Region Labour Market Review, reiu, 2015*

A.36 The occupational profile of the workforce is also forecast to shift away from lower skilled jobs

**Figure A-10: Share of Total Employment, by Occupations 1992-2022**




Source: UKCES Working Futures

*Source: Sheffield City Region Labour Market Review, reiu, 2015*

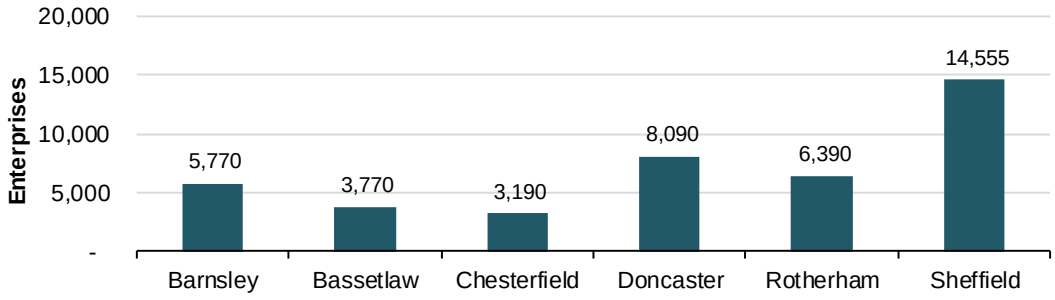
# Annex B: Business Base

B.1 This section presents evidence relating to SCR's business base and sectoral specialisms as well as business-business and academic-business links.

## Overall Business Base

B.2 There are almost 52,000 enterprises in SCR, 67% of which are in the four constituent member local authorities. 13% (almost 7,000) are in Bassetlaw and Chesterfield combined.

**Figure B-1: Enterprises in SCR (2015)**




*Source: SQW analysis of UK Business - Activity, Size and Location data*

B.3 There is a relatively consistent shape to the business base across SCR.

**Table B-1:Percentage of enterprises by employment size band (2015)**

| | Micro (<10) | Small (11-49) | Medium (50-249) | Large (250+) |
|---|---|---|---|---|
| SCR | 87% | 11% | 2% | 0% |
| Barnsley | 87% | 11% | 2% | 0% |
| Bassetlaw | 88% | 10% | 1% | 0% |
| Chesterfield | 85% | 12% | 3% | 1% |
| Doncaster | 89% | 9% | 2% | 0% |
| Rotherham | 86% | 11% | 3% | 0% |
| Sheffield | 85% | 12% | 2% | 0% |
| UK | 89% | 9% | 2% | 0% |

*Source: SQW analysis of UK Business - Activity, Size and Location data*

B.4 Both the current and potential constituent members contribute a relatively larger proportion of large enterprises to the SCR total than they do small enterprises.

**Table B-2: Proportion of SCR enterprises in current and prospective constituent members (2015)**

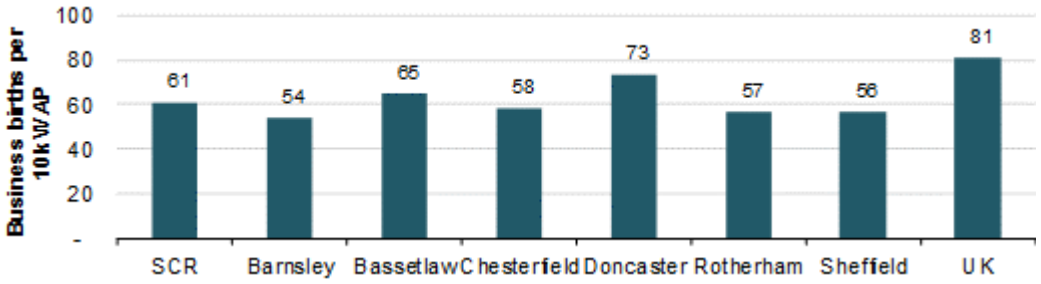
| | Micro | Small | Medium | Large | Total |
|---|---|---|---|---|---|
| Current constituent members | 66% | 69% | 73% | 71% | 67% |
| Potential constituent members | 13% | 14% | 14% | 15% | 13% |
| Current and potential constituent members | 80% | 83% | 87% | 85% | 80% |

| | Micro | Small | Medium | Large | Total |
|---|---|---|---|---|---|
| Other SCR districts | 20% | 17% | 13% | 15% | 20% |

*Source: SQW analysis of UK Business - Activity, Size and Location data*

B.5 Doncaster has the highest rate of business births per 10,000 WAP, Barnsley the lowest.

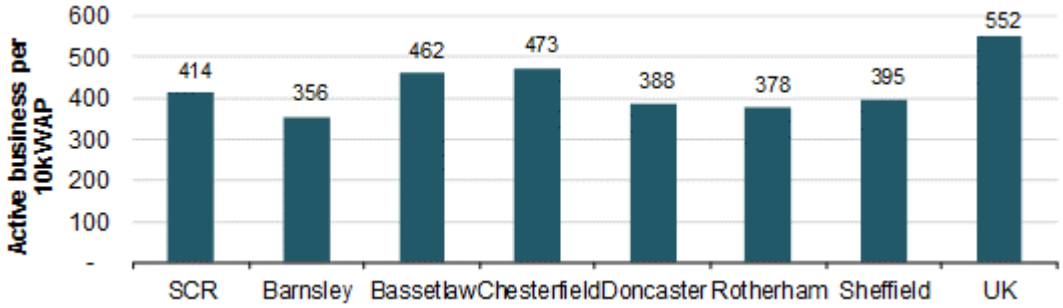
**Figure B-2: Business births per 10,000 WAP (2014)**




*Source: SQW analysis of Business Demography and Population Estimates*

B.6 SCR as a whole, and each district shown below, has a lower number of active businesses per 10,000 WAP than the UK average.

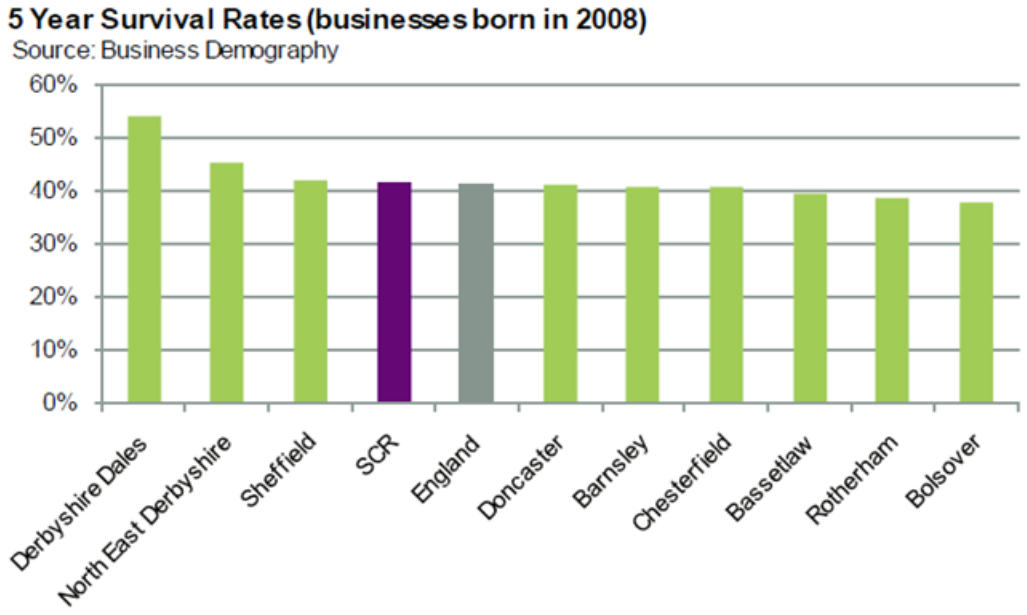
**Figure B-3: Active businesses per 10,000 WAP (2014)**




*Source: SQW analysis of Business Demography and Population Estimates*

B.7 SCR businesses born in 2008 have higher survival rates than the average English business. The five-year survival rate shows little difference between SCR local authorities, apart from Derbyshire Dales which has a considerably higher survival rate.

**Figure B-4: Five year survival rates**




*Source: SCR Bulletin: Business, Eksogen, 2015*

## Sectoral Specialisms and Strengths

B.8 SCR-Lancs joint SIA focusses on advanced manufacturing, the advanced engineering that supports it and the research excellence that underpins it.

B.9 Building on this, the table below shows assets in SCR's key sectors as identified in Sheffield City Region: Sector Specialisms, TBR and the University of Sheffield, 2014 and subsequently referenced in SCR LEP's Strategic Economic Plan, 2014.

**Table B-1: Key innovation assets and businesses in SCR's key sectors**

| | Advanced Manufacturing and Materials | Healthcare Technologies | Creative and Digital | Financial, Professional and Business Services | Logistics | Low Carbon | Other – Inc Rail |
|---|---|---|---|---|---|---|---|
| Barnsley | Ardagh Glass, Symphony Holdings, Premdor, ThyssenKrupp Aerospace | | | | ASOS Distribution | | |
| Bassetlaw | | | | | B&Q Distribution Hub<br>Wilkinson HQ and distribution centre | | |
| Chesterfield | MSE Hiller | | Central Technology | | Markham Vale enterprise zone, inc. Great Bear, etc. | | |
| Doncaster | | | | | Ikea, Next, Unilever, Freightliner Group, Wincanton, GB Railfreight, Amazon, Robin Hood Airport, Doncaster iPort<br>TNT | | Hitachi InterCity Express (IEP) 'Centre of Excellence' Doncaster UTC, Rhomberg Sersa (rail engineers) UK HQ, Wabtech Rail, National College for High Speed Rail, |
| Rotherham | Advanced Manufacturing Park, AMRC with Boeing, AMRC Composites and Design Prototyping & | Medical AMRC | | | | Rotherham is home to the largest hydrogen mini grid system in the UK, Nuclear AMRC | |

| | **Advanced Manufacturing and Materials** | **Healthcare Technologies** | **Creative and Digital** | **Financial, Professional and Business Services** | **Logistics** | **Low Carbon** | **Other – Inc Rail** |
|---|---|---|---|---|---|---|---|
| | Testing Centres, Rolls Royce, Castings Technology International (CTi), and The Welding Institute (TWI) Technology Centre, The Proving Factory for the Automotive Industry, National Metals Technology Centre, Factory 2050 | | | | | | |
| Sheffield | Outokumpu, Tata, Sheffield Forgemasters<br>UoS a partner in the Royce Institute<br>UoS Faculty of Engineering inc. Advanced Manufacturing Institute and The Mercury Centre. Turnover of around £40m. 93% of research 'world leading' or 'internationally excellent' - 2014 | Teaching Hospital Trust, Advanced Wellbeing Research Centre (being developed), Sheffield Precision Medical | Advanced Computing Research Centre | Sheffield Management School is in top 1% globally and ranks first in UK for Research Power | | Siemens Windpower Research Centre (UoS),<br>Sheffield has the largest district heating network in the UK<br>Energy 2050 – research on carbon capture and storage | National Centre of Excellence for Food Engineering (SHU)<br>Network Rail Innovation Technology Centre (with UoS) |

| | Advanced Manufacturing and Materials | Healthcare Technologies | Creative and Digital | Financial, Professional and Business Services | Logistics | Low Carbon | Other – Inc Rail |
|---|---|---|---|---|---|---|---|
| | REF. Hosts UK's only dedicated Control Systems department. One of three organisations worldwide to host 3 Rolls Royce advanced research centres. In last 5 years has received more Innovate UK grant funding than any UK university. Publications it co-authors with industrial partners in Industrial and Manufacturing Engineering are cited more often than any Russell Group University. UoS has highest research income in Engineering subjects for projects with UK industry partners.<br>Materials and Engineering Research Institute at SHU | | | | | | |

| | **Advanced Manufacturing and Materials** | **Healthcare Technologies** | **Creative and Digital** | **Financial, Professional and Business Services** | **Logistics** | **Low Carbon** | **Other – Inc Rail** |
|---|---|---|---|---|---|---|---|
| Other SCR LADs | | | | | | | |
| SCR overall strengths | High-precision engineering, metal and alloy projection, high quality design and manufacturing[38]<br>Industrial machinery, automotive, aeronautical, chemicals, hydraulics[39] | Highest concentration of medical device companies in UK[40]<br>Niche specialisms in Medical (and Dental) Devices, Advanced Wound Care, Orthopaedics, and Clinical Research | IT and software, interactive media, e-learning, design, cloud adoption, computer programming and simulation. Wider strengths are in data processing, interactive media, IT/software testing, e-learning, games, software, and satellite telecommunications. | | Logistics - SCR is home to international firms such as Amazon, ASOS and TNT, and has A1/M1 connections, East Coast and Midland Mainlines, the international Robin Hood airport. | | UoS – top 10% of UK universities and top 100 worldwide. 99% of research assessed as internationally recognised or better in the REF 2014 |
| SCR overall weaknesses | "Other northern LEP areas have up to twice the SCR's employment share in advanced manufacturing" whilst "SCR has a clear | SCR has an employment specialism in healthcare technologies compared to the national average and a number of other northern LEP areas, | | | | "SCR less specialised in this sector than other northern regions"[42] | |

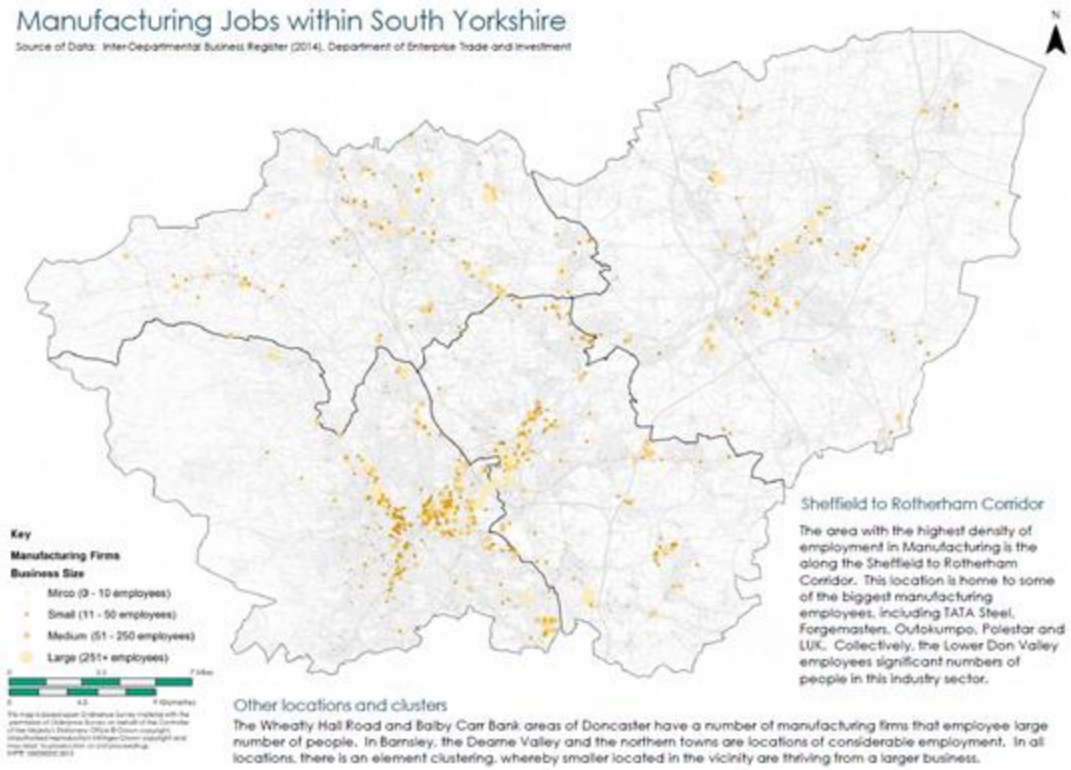
[38] Sheffield City Region Baseline Report, Oxford Economics, 2013
[39] Sheffield City Region: Sector Specialisms, TBR and University of Sheffield, 2014
[40] Sheffield City Region Baseline Report, Oxford Economics, 2013
[42] Sheffield City Region Baseline Report, Oxford Economics, 2013

| | Advanced Manufacturing and Materials | Healthcare Technologies | Creative and Digital | Financial, Professional and Business Services | Logistics | Low Carbon | Other – Inc Rail |
|---|---|---|---|---|---|---|---|
| | specialisation in low and med-low tech manufacturing" (uses 2011 data)[41] | although the sector still employs only 3,100 people | | | | | |

[41] Sheffield City Region Baseline Report, Oxford Economics, 2013

B.10 Manufacturing jobs in SCR are concentrated along the Sheffield-Rotherham corridor, with further locations in Doncaster.

**Figure B-1: Manufacturing jobs in South Yorkshire (2014)**




*Source: SCR Employment Analysis, SCR*

## Business-to-Business Interactions

**Summary**

- The Bassetlaw and Chesterfield economies are smaller than that of the current Sheffield City Region Constituent Members (SCR CM), in terms of employment and number of businesses.
- The two local authorities would expand the SCR CM by 20% in terms of business numbers and 18% in terms of employment.
- The Bassetlaw and Chesterfield economies share sector strengths with the SCR CM and have supply chain relationships within and between these sectors with those of the SCR CM.
- The manufacture of basic metals and of fabricated metal products (except machinery and equipment) is a strong shared strength which employs 600, 1,360 and 20,490 in the Bassetlaw, Chesterfield and SCR CM economies respectively.
- Evidence suggests the most important supply chain linkages are within the manufacturing industry, followed by construction and wholesale trade.
- The SCR CM has a specialism within the manufacture of basic metals sector, which is a top purchaser of goods from the wholesale trade sector. Chesterfield in turn has a specialism within the wholesale and trade sector, with a total employment of 4,420.
- Chesterfield is the only area to have a specialism within the wholesale and trade sector; however, it still employs 2,400 and 32,290 in Bassetlaw and the SCR CM. The evidence suggests that activity in this links the three areas through the purchase and supply of goods across industries in all three areas.
- The wholesale trade sector ranks in the top 3 of purchases by the rubber and plastics, basic metals, the fabricated metal products, the electrical equipment, machinery and

equipment n.e.c and other manufacturing sectors. These sectors employ a combined 1,830 in the Bassetlaw economy and 33,340 in the SCR CM economy.

When analysing the supply chains in more detail we reveal niche strengths in the local authority areas that complement the other areas. For example, businesses involved in the manufacture of rubber and plastic products, see their output being used in the construction of roads and motorways.

The key finding from the data is that when looking at the economies of Bassetlaw, Chesterfield and the SCR CM as a whole the importance of upstream and downstream supply chain links and the role Bassetlaw and Chesterfield play in providing goods and services to the SCR CM economy is evident. Equally, when looking solely at industrial specialisms there are shared specialisms, with concentrations of employment in the same industries in the three regions.

## *Detailed Findings from TBR*

### *Sector Specialisms*

B.11 Sector specialisms in an economy can be evidenced by the above-average presence of businesses and employment in those sectors when looking at a wider area, measured using location quotients (LQs). We have calculated (LQs) at different sector granularities in the Bassetlaw, Chesterfield and SCR CM economies to compare which strengths are shared in those areas.

B.12 Of the top 25 LQs calculated for every sector and each of the three areas, 12 industrial sectors are present in all three top 25 lists. This indicates the shared strengths across each area in terms of economic activity and hints at the business relationships that cross area borders.

B.13 Investigating the numbers of people employed in the 12 common sectors enables us to identify where the scale of the economic linkages is greatest.

B.14 Looking beyond the public sector (the top employer in all three areas), we see the manufacture of fabricated metal products, except machinery and equipment is the leading sector in the SCR CM employing almost 14,500. This sector is the second largest in Chesterfield with just over 1,000 employees and is a significant employer in Bassetlaw.

B.15 The wholesale and retail trade and repair of motor vehicles and motorcycles is the largest employer in Bassetlaw (1,050 employees) and Chesterfield (2,080 employees) and the second largest in the SCR CM (11,740).

B.16 Combined, the manufacture of fabricated metal products, except machinery and equipment, and the wholesale and retail trade and repair of motor vehicles and motorcycles employ almost 31,000 people across the three areas.

**Table B-2: specialist sectors common to each area's top 25 sector LQs (employment count)[43]**

| Description | UKSIC07 | Bassetlaw | Chesterfield | SCR CM |
|---|---|---|---|---|
| Manufacturing wood and wood products | 16 | 280 | 80 | 2,380 |
| Manufacturing rubber plastic products | 22 | 350 | 450 | 4,970 |

[43] LQs based on firm numbers are calculated using ONS UK Business Counts, and LQs based on employment use ONS BRES data. Common (or key) sectors have firm LQs of over 1.25 in each area and employment LQs of at least 1.25 in at least one other area (with the exception of UKSIC07 where none of the areas have an employment LQ over 1.25)

| Description | UKSIC07 | Bassetlaw | Chesterfield | SCR CM |
|---|---|---|---|---|
| Manufacturing non-metallic mineral products | 23 | 750 | 610 | 2,510 |
| Manufacturing of basic metals | 24 | 20 | 320 | 6,010 |
| Manufacturing fab metal prods, ex machinery | 25 | 580 | 1,040 | 14,480 |
| Manufacturing of electrical equipment | 27 | 390 | 130 | 1,940 |
| Manufacturing of machinery n.e.c. | 28 | 330 | 510 | 3,790 |
| Other Manufacturing | 32 | 150 | 290 | 2,160 |
| Repair and installation of machinery | 33 | 460 | 110 | 3,400 |
| Waste collection, treatment, disposal | 38 | 80 | 100 | 3,850 |
| Wholesale retail trade repair vehicles | 45 | 1,050 | 2,080 | 11,740 |
| Public admin, defence, social sec | 84 | 1,620 | 2,030 | 25,800 |

*Source: TBR analysis*

B.17 The largest specialist sector in the SCR CM is Business Professional and Financial Services (LQ of 5.88) employing 59,730 people. Whilst Business Professional and Financial Services is not an area of specialism in Bassetlaw or Chesterfield, a total of 8,870 people are still employed in this sector, suggesting there will be economic links with activity in this sector in the SCR CM (with the high LQ of 5.88).

B.18 Creative and Digital is also a large specialist sector in the SCR CM (LQ of 4.12) employing 22,020. Again, whilst not a specialist area in Bassetlaw and Chesterfield (in terms of LQ) the Creative and Digital sector does employment a significant number of people, totalling some 3,840 across the two areas, which again are likely to have links to the activity in the SCR CM.

B.19 Healthcare and Healthcare Technologies (including hospital activities) is a large specialism in the SCR CM (LQ of 10.28) employing 40,110 people. Much of this employment is in hospital and hospital related activity.

B.20 Manufacture of fabricated metal products, except machinery and equipment is a strong specialist sector in both the SCR CM (LQ of 2.61) and Chesterfield (LQ 2.09) employing 14,480 and 1,040 respectively (Table 1). There are likely to be links with Bassetlaw, even though employment is less (580) and the degree of specialism not as significant (LQ of 1.22).

### *Supply Chain Relationships*

B.21 The top three purchasers/suppliers of the 12 common sectors are themselves specialisms to at least one of the three areas. For example, the Manufacture of wood and of products of wood and cork is an area of specialism in the SCR CM. One of the key suppliers to this activity is the sawmilling and planning of wood sector. This supplier sector has a strong Location Quotient in Bassetlaw and Chesterfield (but not the SCR CM) suggesting that Bassetlaw and Chesterfield have important links to the SCR CM economy.

B.22 Purchasing and supply patterns of those sector specialisms can be analysed using the UK Input Output Analytical Tables (UKIOAT) and particular the top 3 sector purchasers/suppliers is a useful indicator. The purchasing and supply patterns are available at two digits Standard Industrial Classification, splitting out these two digit classes into more granular descriptions of economic activity reveal the interdependence of the economic areas.

B.23 The table below shows a summary of key relationships between a selection of common sectors and their input (upstream) sectors or output (downstream) sectors, and where these complimentary sectors are located with a strong specialism. It is interesting to see that the direction of linkages is two way, i.e. in some cases common sectors in Bassetlaw or Chesterfield are supplying the SCR CM and in other cases vice versa.

**Table B-3: Summary of key upstream and downstream relationships**

| Upstream supply chain of common sectors | | | |
|---|---|---|---|
| Common sector | LQ and employment | Upstream/input sector | LQ and employment[44] |
| Manufacture of other non-metallic mineral products | SCR CM - LQ 1.72, 2,510 employed | Manufacture of concrete products for construction purposes | Bassetlaw – LQ 24.12, 540 employed |
| Wholesale and retail trade and repair of motor vehicles and motorcycles | Chesterfield – LQ 2.31, 2,080 employed | Freight transport by road | Bassetlaw – LQ 2.78, 930 employed |
| Manufacture of electrical equipment | SCR CM – LQ 1.34, 1,940 employed | Manufacture of wiring devices | Bassetlaw – LQ 37.04, * employed |
| Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials | Bassetlaw – LQ 2.42, 280 employed | Sawmilling and planning of wood | Bassetlaw – LQ 3.19, 40 employed |
| Manufacture of rubber and plastic products | Chesterfield – LQ 1.63, 450 employed | Manufacture of plastics in primary forms | Bassetlaw – LQ 12.94, * employed |
| Manufacture of basic metals | SCR CM – LQ 4.44, 6,010 employed | Cold drawing of wire | Chesterfield – LQ 4.39, * employed |
| Manufacture of fabricated metal products, except machinery and equipment | SCR CM – LQ 2.61, 14,480 employed | Manufacture of light metal packaging | Chesterfield – LQ 10.45, * employed |
| Repair and installation of machinery and equipment | Bassetlaw – LQ 2.39, 460 employed | Manufacture of non-electronic instruments and appliances for measuring, checking, testing, navigation and other purposes, except process control equipment | Chesterfield – LQ 6.93, * employed |
| **Downstream supply chain of common sectors** | | | |
| **Common sector** | **LQ and employment** | **Downstream/output sector** | **LQ and employment** |
| Manufacture of other non-metallic mineral products | Bassetlaw - LQ 6.02, 750 employed | Construction of railways and underground railways | SCR CM – LQ 7.28, 1,150 employed |
| Manufacture of electrical equipment | Bassetlaw – LQ 3.11, 390 employed | Construction of railways and underground railways | SCR CM – LQ 7.28, 1,150 employed |
| Manufacture of wood and of products of wood and cork, except furniture; | Bassetlaw – LQ 2.42, 280 employed | Manufacture of office and shop furniture | Chesterfield – LQ 6.69, * employed |

[44] * represents a value suppressed in the BRES data in order to follow non-disclosure rules.

| | | | |
|---|---|---|---|
| manufacture of articles of straw and plaiting materials | | | |
| Manufacture of rubber and plastic products | Chesterfield – LQ 1.63, 450 employed | Manufacture of other food products n.e.c. | Bassetlaw – LQ 63.18, 3,140 employed |
| **Downstream supply chain of common sectors** | | | |
| Manufacture of fabricated metal products, except machinery and equipment | SCR CM – LQ 2.61, 14,480 employed | Manufacture of wire products, chain and springs | Bassetlaw – LQ 9.06, * employed |
| Repair and installation of machinery and equipment | SCR CM – LQ 1.53, 3,400 employed | Manufacture of non-electronic instruments and appliances for measuring, checking, testing, navigation and other purposes, except process control equipment | Chesterfield – LQ 6.93, * employed |

*Source: TBR analysis*

B.24 An example of how intertwined the supply chain links are can be seen when looking with more granularity within the manufacture of chemicals. Whilst manufacture of chemicals is not a common sector at an overall level Bassetlaw is strong in producing fertilizers and nitrogen compounds and of plastics in primary forms, but not of industrial gases. The SCR CM however does specialise in the production of industrial gases (330 employed 12% of UK total in this sector), which are used in the production of the rubber and plastic products in Bassetlaw and Chesterfield. The production of rubber and plastic products, a common sector, then has links to other activities as seen in the table above.

### *Bassetlaw*

B.25 Bassetlaw specialises at a broad sector level in Manufacturing, as do Chesterfield and the SCR CM. Of the top 25 employment LQs in Bassetlaw 10 are in manufacturing. Manufacturing employs 7,950 in the area, 17% of total employment, which is higher as a proportion than that of the SCR CM (11%).

B.26 The range of manufacturing Bassetlaw specialises in is large and includes in order of strength:

- Food products – 3,520 employed, LQ 6.21
- Non-metallic mineral products – 750 employed, LQ 6.02
- Electrical equipment – 390 employed, LQ 3.11
- Pharmaceuticals – 170 employed, LQ 2.74
- Wood and wood products – 180 employed, LQ 2.42
- Repair and installation of machinery – 460 employed, LQ 2.39
- Chemicals – 250 employed, LQ 1.59
- Rubber and plastic products – 350 employed, LQ 1.32

- Fabricated metal products, excluding machinery – 580 employed, LQ 1.22
- Other manufacturing – 150 employed, LQ 1.20

B.27 Of these ten sectors only food products, pharmaceuticals and chemicals are not shared as a specialism by the other areas.

B.28 Bassetlaw has symbiotic supply chain links to industry sectors across Chesterfield and the SCR CM, including for activities which are not in common sectors. The most notable example is the manufacturing of good products which is one of Bassetlaw's strongest and most significant sectors.

B.29 According to the UKIOAT the manufacture of food products sector is in the top 3 purchasers of products outputted by the manufacture of rubber and plastic products, for example for packaging uses. The manufacture of rubber and plastic products sector has a strong presence in each area, employing 450 and 4,970 in Chesterfield and SCR CM respectively.

B.30 Similarly, Chesterfield and the SCR CM specialise in the manufacture of plastic plates, sheets, tubes and profiles and of other plastic products (320 and 1,870 employed respectively). Evidence suggests these upstream plastic products are supplied for use in the strong food products sector in Bassetlaw.

B.31 Looking away from manufacturing, Bassetlaw shows a strong sector specialism in the production of electricity. The EDF Energy coal Cottam, West Burton A and gas-fired West Burton B power stations are such electricity producers, employing around 520 EDF staff and more contract partners. According to official statistics, a total of 780 are employed in the production of electricity in Bassetlaw. The sector has strong supply chain links – purchase and supply - with the mining of coal and lignite, a specialist sector in the SCR CM with 530 employed there. Producers of electricity are in the top 3 of suppliers to manufacturers involved in basic metals and other non-metallic mineral products.

B.32 This supply chain is set to change as the coal powered stations Cottam and West Burton A are phased out, there is an opportunity to take advantage of the strong low carbon economy in the area. The Low-carbon sector employs 960 in Bassetlaw and 7,450 in the SCR CM. These represent strong specialisms with LQs of 1.75 and 8.21 respectively. Specifically, the SCR CM specialises in the Materials recovery and Technical testing and analysis sectors, both key components of the low carbon sector. These sectors employ 1,730 and 2,250 with LQs above 2.

B.33 While it is more difficult to tease out supply chain linkages in niche sectors such as low carbon, there is a purchase and supply link to the construction sector. Construction is the fifth largest purchaser and supplier to the Waste (collection, treatment and disposal services) and materials recovery services sector.

B.34 Construction employs 2,250, 2,020 and 26,240 in Bassetlaw, Chesterfield and the SCR CM respectively as well as having key supply chain linkages elsewhere.

### *Chesterfield*

B.35 Chesterfield also specialises in Manufacturing, with 11 of the top 25 LQs being in Manufacturing and a total of 4,570 employed in the sector (11% of total employment).

B.36 The range of manufacturing Chesterfield specialises in, in order of strength:

- Other non-metallic mineral products– 610 employed, LQ 4.72
- Leather and related products - * employed, LQ 3.37
- Basic metals - 320 employed, LQ 2.650ther manufacturing - 290 employed, LQ 2.15
- Fabricated metal products, excluding machinery – 1,040 employed, LQ 2.09
- Furniture - 230 employed, LQ 1.76
- Machinery and equipment n.e.c. - 510 employed, LQ 1.75
- Paper and paper products - * employed, LQ 1.67
- Rubber and plastic products - 450 employed, LQ 1.63
- Printing and reproduction of recorded media - 240 employed, LQ 1.24
- Electrical equipment - 130 employed, LQ 1.01

B.37 Of these eleven sectors only leather and related products, paper and paper products and the printing and reproduction of recorded media are not shared as a specialism by the SCR CM.

B.38 Chesterfield also has a large Wholesale & Retail sector, with 10,070 employed (21% of total employment). Specifically, wholesale trade (SICs 45 and 46) has high LQs indicating specialism, employing a combined 4,420. This sector is highly linked via supply chains to the other specialisms found in across the SCR CM and in Bassetlaw.

B.39 Of the specialisms in Table 1, the wholesale trade sector ranks in the top 3 of purchases of a number of sectors which both the SCR CM and Bassetlaw specialise in; the rubber and plastics, basic metals, the fabricated metal products, the electrical equipment, machinery and equipment n.e.c and other manufacturing sectors. These sectors employ a combined 1,830 in the Bassetlaw economy and 33,340 in the SCR CM economy, showing the importance of the upstream supply chain from Chesterfield to jobs in Bassetlaw and the SCR CM.

**B.40** The table below shows the specialisms within wholesale and retail activities for employment in Chesterfield, in order of strength of specialism.

**Table B-4: Specialisms within wholesale and retail activities in Chesterfield, in order of strength**

| Description | UKSIC07 | Employment | LQ |
|---|---|---|---|
| Wholesale of mining, construction and civil engineering machinery | 46630 | 80 | 5.53 |
| Retail trade of motor vehicle parts and accessories | 45320 | 315 | 4.74 |
| Wholesale of wine, beer, spirits and other alcoholic beverages | 46342 | 145 | 3.54 |
| Wholesale of electronic and telecommunications equipment and parts | 46520 | 190 | 3.22 |
| Sale of new cars and light motor vehicles | 45111 | 585 | 2.55 |
| Wholesale of computers, computer peripheral equipment and software | 46510 | * | 2.48 |

| Description | UKSIC07 | Employment | LQ |
|---|---|---|---|
| Wholesale of coffee, tea, cocoa and spices | 46370 | * | 2.47 |
| Sale of other motor vehicles | 45190 | * | 2.39 |
| Maintenance and repair of motor vehicles | 45200 | 860 | 2.26 |
| Wholesale of machine tools | 46620 | 35 | 2.11 |
| Wholesale of musical instruments | 46491 | * | 2.07 |
| Agents involved in the sale of fuels, ores, metals and industrial chemicals | 46120 | * | 2.06 |
| Wholesale of dairy products, eggs and edible oils and fats | 46330 | * | 1.66 |
| Wholesale trade of motor vehicle parts and accessories | 45310 | 195 | 1.65 |
| Agents involved in the sale of machinery, industrial equipment, ships and aircraft | 46140 | * | 1.44 |

*Source: TBR analysis*

B.41 Within the Business professional and financial services sector in Chesterfield there is a strength in temporary employment agency activities, which employs 1,970 has an LQ of 1.5.

B.42 In the creative and digital industries there is a key strength in Chesterfield in computer consultancy activities, which employs 1,010 and has an LQ of 1.77. In the computer programming, consultancy and related activities sector as a whole, 1,250 and 7,840 are employed in Chesterfield and the SCR CM respectively. This sector has supply linkages with employment services, a sector specialism in Chesterfield.

B.43 Within the SCR CM, the activities of call centres and of collection agencies are identified strengths and may be possible supply links with Chesterfield, though these sectors are too granular to confirm this. These sectors employ 9,520 and 550 and have LQs of 4.91 and 2.44 respectively.

B.44 Of note in the table above is the strength of specialism in the wholesale of mining, construction and civil engineering machinery, which while not an area of specialism in the SCR CM does employ a further 180 according to official statistics. Whilst this sector cannot be analysed in the same way due to data availability, it is likely to contain many supply chain linkages with those industrial sectors present in the SCR CM. Although these employment numbers are low, they are in relatively high value industries, and play a role in the wider manufacturing and construction industries across the three areas which employ a large number of people.

B.45 Chesterfield has some unique specialisms in the manufacture of refractory and of abrasive products. These have strong supply links to the manufacture of other non-metallic mineral products sector. The manufacture of other non-metallic mineral products sector, as well as employing 610 and having an LQ of 4.72 in Chesterfield, employs 750 and 2,510 in the Bassetlaw and SCR CM areas.

B.46 The manufacture of other non-metallic mineral products in Chesterfield is an important supplier to the construction sector in Bassetlaw and the SCR CM, being the second top sector by consumption from which the construction sector purchases (construction itself being first). Construction is a large employer in all areas and there are some niche sector specialisms when looking at a more granular level. These include:

- Construction of railways and underground railways in the SCR CM, employs 1,150, LQ 7.28
- Site preparation is an area of specialism in Bassetlaw (LQ 1.42) and the SCR CM (LQ 4.58), employing 1,270 in the SCR CM
- Construction of roads and motorways in Bassetlaw, Chesterfield and the SCR CM, employs 190, 190 and 1,270, LQ 2.93, 2.84 and 1.67 respectively

### *Other evidence on business links*

B.47 A major Sheffield/Rotherham firm has over 400 companies in SCR as part of its supply chain. Some 90% of these are within the four constituent authorities with a further 5%, or 22 firms, in Bassetlaw and Chesterfield. The six authorities contain 96% of the supply chain.

## Business–Academic Networks and Innovation Networks

B.48 The **Advanced Manufacturing Research Centre with Boeing** is a collaboration between the University of Sheffield and Boeing. The AMRC is a membership network "open to any company which works in a complementary area or which wishes to participate in the support of our research programmes. Our current members range from top-tier suppliers to SMEs offering specialist equipment and services."[45]

B.49 **AMRC Forum**: a technology network for manufacturing businesses. Includes a quarterly journal and regular events. Past presenters have includes Boeing (with operations on the AMP), Rolls Royce (with operations on the AMP) and Sandvik (based in Sheffield).

B.50 AMRC is part of the **UK Catapult** network and **Boeing's GlobalNet** group of industrially-focused research centres – there are only two other locations in UK: University of Strathclyde and Cranfield University.

B.51 Others include:

- **Cutlers' Company** – cutlery and steel products
- **Chambers of Commerce**: Sheffield; Barnsley & Rotherham; Doncaster; and East Midlands Chamber (Derbyshire, Nottinghamshire, Leicestershire)
- **Institute of Mechanical Engineers**: South Yorkshire, Derby & Nottingham

### *Inward Investment*

#### *Bassetlaw*

B.52 Bassetlaw is part of the Invest in North Nottinghamshire project with an aim of "increasing new business investment"[46]

[45] www.amrc.co.uk
[46] Regeneration and Growth Strategy 2014-2028, Bassetlaw District Council

B.53 Around 130 enquiries were shared by SCR's inward investment team with Bassetlaw Between April 2013 and August 2015[47], compared to one from D2N2's service[48].

### *Chesterfield – The Derbyshire view*

B.54 Between April 2013 and August 2015, the 'Invest in Derbyshire' service has assisted enquires which relate directly to Chesterfield, Bolsover and North East Derbyshire:

*a.* 42 new enquiries
b. 13 new enquiries through UKTI
c. 4 foreign owned companies through the Investor Development Service[49]

### *Chesterfield – the Chesterfield View*

B.55 In the period April 2013 to August 2015, Chesterfield received only 29 enquiries via the Invest in Derbyshire service, whilst it received 83 enquiries over the same period from SCR Inward Investment service.

B.56 Enquiries for business premises received by the ED Team (2010) broadly reflect the labour market pattern described above. Firstly, Chesterfield is relatively self-contained with the majority of enquiries (67%) originating from within the Borough. A further 20% of enquiries were received from businesses in the surrounding districts of Bolsover, Derbyshire Dales and North East Derbyshire, and 7% from businesses in Sheffield/Rotherham. Very few enquiries were received from Derby, Nottingham or other districts in Derbyshire and Nottinghamshire.

B.57 A study of IT-related businesses revealed a number of linkages between Sheffield and Chesterfield / North East Derbyshire particularly in relation to the professional labour market and the commercial property market. IT companies in Chesterfield recruited a number of graduates from the two Sheffield Universities and businesses were happy to move between Sheffield and Chesterfield, viewing it as a single property market. Key local employer Proact started in Sheffield before relocating to Dunston Technology Park, similarly with Image Sound who are also based at Dunston.

B.58 There are examples of businesses having a longstanding and successful association with Chesterfield and SCR, and many Chesterfield businesses had significant supplier relationships with businesses in South Yorkshire. For example, "Cathelco was founded in Chesterfield because of the area's strong connections with metals industries and the proximity to Sheffield as a centre for metallurgical research." T Salisbury, Principal (2013). A study (1997) of engineering and metal goods business in Chesterfield identified that of 12 businesses that had relocated to the area, 8 had originated from Sheffield. [50]

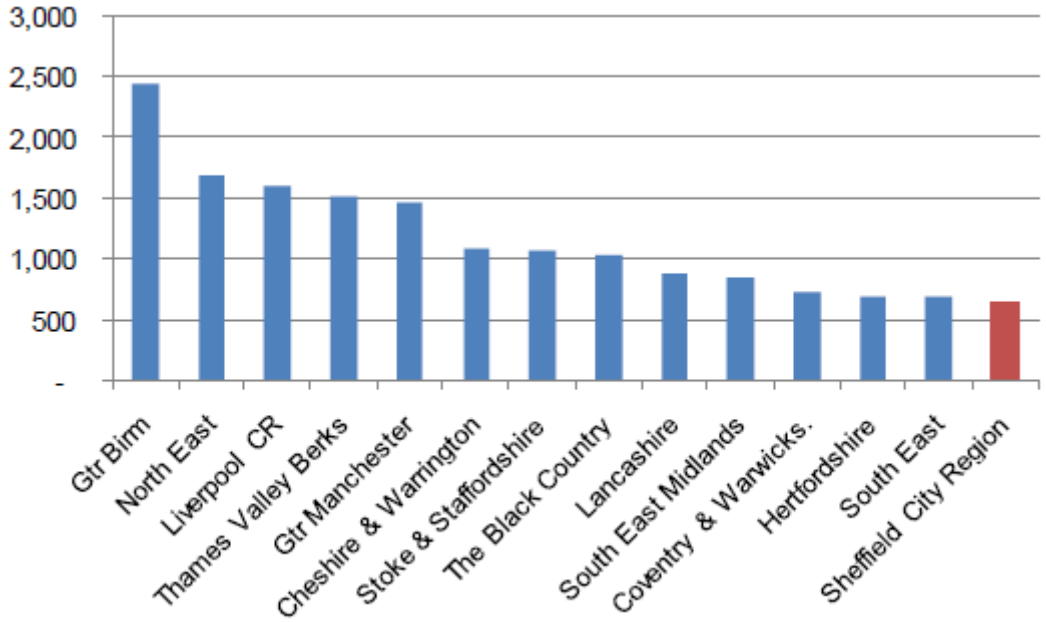
### *FDI*

**B.59** **"**While the chart below sets out only a one-year snapshot of the number of jobs created through FDI, the data is illustrative of Sheffield City Region's modest record of attracting

[47] Source: SCR Inward Investment Team
[48] Source: Bassetlaw Council
[49] Devolution Briefing, Derbyshire County Council, 2016
[50] Appendix 7, Membership Of Combined Authorities And Ratification Of The Sheffield City Region Devolution Deal, Chesterfield Borough Council, 2016

international investment. Even allowing for the sheer size of some other areas, Sheffield City Region performs poorly, although the region has a more impressive record with domestic inward investment."[51]

**Figure B-2: Jobs created through FDI (2012-13)**

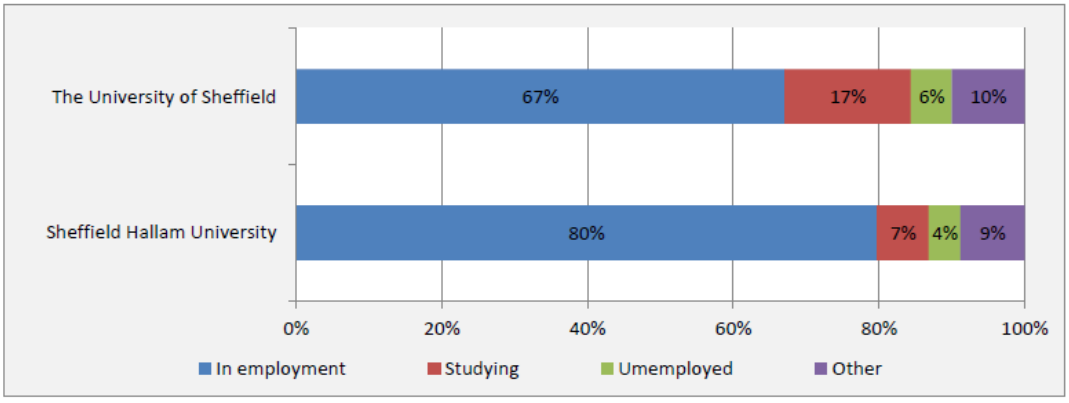



*Source: SCR IER, 2013*

## Graduate Employment and Retention

B.60 According to the SCR Labour Market Review, the majority of graduates from UoS and SHU find employment after graduating. However, there is no data on the location of **where** employed graduates find work.

**Figure B-3: Leaver destinations** (Note: Year not clear from document source, nor time since graduation)




Source: HESA

*Source: Sheffield City Region Labour Market Review, reiu, 2015*

B.61 Sheffield Hallam University data for the Business School:

[51] SCR IER, 2013

- 19% of Sheffield Business School placements were in the SCR in 2012-13
- 18% of 2010-11 graduates from Sheffield Business School employed in Sheffield and Doncaster postcode areas
- 24% of 2010-11 graduates from the Faculty of Arts, Computing and Sciences employed in Sheffield and Doncaster postcode areas[52]
- "the city has traditionally struggled to retain graduates" [53]

B.62 RISE is a business growth project, focused on helping SMEs grow by supporting them to access graduate talent as a way to upskill the workforce. RISE was originally developed by Sheffield City Council (SCC) and the City's Universities, however it operates at SCR level, with around 30% of the placements delivered outside of the district of Sheffield. In total, RISE has been responsible for 170 paid employment opportunities in over 100 SCR based SMEs.[54] Six of the SMEs registered with the programme are based in Chesterfield. None are based in Bassetlaw.

**Table B-5: Home local authority of firms participating in RISE**

| Local authority | Number of firms |
|---|---|
| Sheffield | 89 |
| Rotherham | 18 |
| Barnsley | 11 |
| Chesterfield | 6 |
| Doncaster | 3 |
| NE Derbyshire | 1 |
| Unknown | 2 |
| **Total** | **130** |

*Source: RISE monitoring data*

**Messages from consultees**

Strong links in the **commercial property sector**. Whilst there are some local agents that deal with local commercial property, if a significant site is for sale in Chesterfield it will probably be marketed by a Sheffield agent.

- For example, the developer behind Chesterfield Waterside (Bolsterstone) is also behind significant developments in Sheffield.
- Henry Boot Developments, HQ'd in Sheffield, are developing Markham Vale

**Residential property agents** work across Sheffield and Chesterfield

- Large Chesterfield agents (e.g. Redbrick) are setting up in Sheffield
- Sheffield agents are setting up in Chesterfield Blundells)
- Commercial Property Partners (CPP) have an office in each location

Case Study: **Evolution Funding** is a highly successful, fast growth business started in Chesterfield. It now has numerous offices and locations and these span Chesterfield and Sheffield. The owner is blind to the boundaries between the two places. They tap into the business graduate market in Sheffield and this is an important reason for their establishing parts of their business in Sheffield.

[52] Sheffield City Region Baseline Report, Oxford Economics, 2013
[53] Economic Linkages in Northern City Regions: Sheffield City Region, 2009, One North East for the Northern Way
[54] The Future of RISE, SCR Combined Authority Business Growth Executive Board, November 2015

Case study: **"Made in Chesterfield"** month, in November. This is an initiative designed to showcase business, engineering and the connection between these businesses and the real things that we use in everyday life. The event tries to tell the story of how engineering happens in Chesterfield, what the reality of working in the sector is and how this links to modern day life. An important part of this is a link they have with the AMP at Rotherham. The AMP brings their bus in help deliver important messages about the reality of a career in engineering.

**Unable to access:**

- Case studies of the employee location/supply chains of major SCR firms
- HESA data on graduate retention/destinations – data held by SCR has restricted access and so cannot be published in this report, nor was this available by LAD for Chesterfield and Bassetlaw. We were unable to source data directly from HESA or the universities in the time available for the study.
- Data on where graduates originate from and move to after finishing university by non-South Yorkshire districts
- Geography of access to finance data

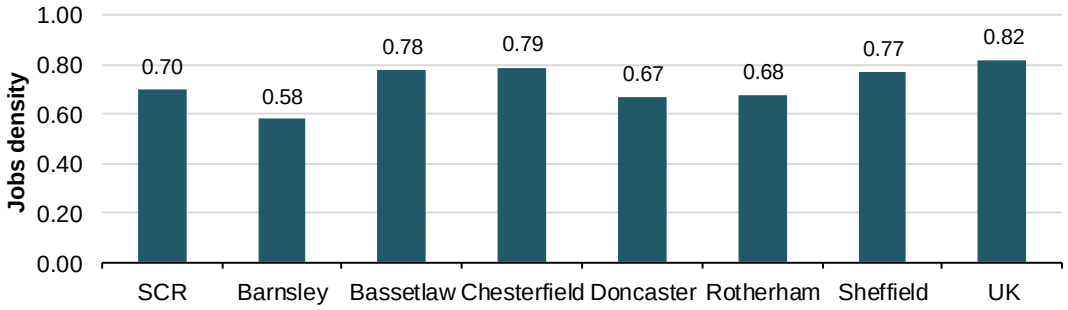
# Annex C: Labour Markets

C.1 This Annex presents data on the SCR labour market. This includes overall economic activity rates, skills shortages and vacancies, Jobseeker's Allowance claimants, and travel to work patterns from the 2011 Census.

### *Job density*

C.2 Bassetlaw and Chesterfield have the highest job densities in SCR. Between 2000 and 2014, jobs density increased in all areas, apart from Barnsley (-3%) and Chesterfield (-9%).

**Figure C-1: Jobs density (the numbers of jobs per resident aged 16-64)**

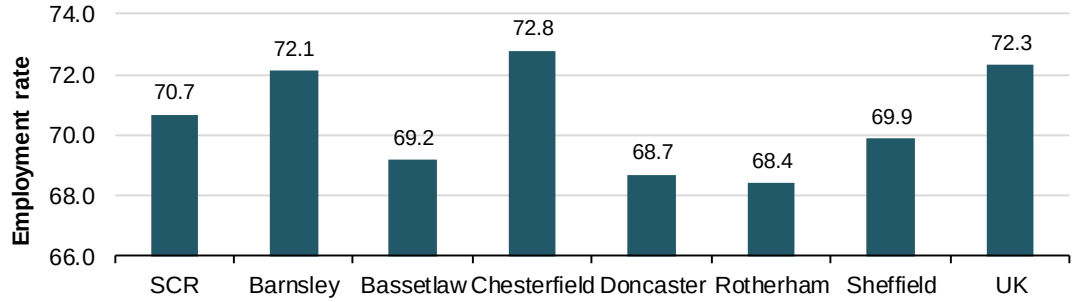



*Source: SQW analysis of Jobs Density data*

C.3 Chesterfield has the highest employment rate whilst Doncaster has the lowest: the gap between them is 4.4pp.

C.4 The four constituent members have 74% of SCR's WAP in employment, Bassetlaw and Chesterfield have 11%; the six therefore have 85%.

**Figure C-2: WAP employment rate (2013-2015 average)**




*Source: SQW analysis of Annual Population Survey*

C.5 "In SCR, part time working is slightly more prevalent compared to the national average. Of those in employment in SCR, 27% of people work part time and 73% work full time, compared to 25% and 75% respectively in England."

**Table C-1: Working age residents in full and part time employment (2014)**

| | Full time | Part time |
|---|---|---|
| Bassetlaw | 75% | 25% |
| Rotherham | 75% | 25% |
| Barnsley | 75% | 25% |
| **England** | **75%** | **25%** |
| Doncaster | 75% | 25% |
| North East Derbyshire | 74% | 26% |
| **Sheffield City Region** | **73%** | **27%** |
| Bolsover | 73% | 27% |
| Sheffield | 72% | 28% |
| Chesterfield | 70% | 30% |
| Derbyshire Dales | 69% | 31% |

*Source: Ekosgen analysis of APS data for SCR Labour market Bulletin*

## *Skills Shortages and Gaps*

C.6 This sub-section presents data on skills shortages and gaps across SCR, as well as data on vacancies across SCR.

C.7 The table below shows that SCR has a lower percentage of both hard to fill vacancies and skills shortage vacancies than England as a whole.

**Table C-2: Skills Shortage findings from the UKCES Employer Skills Survey**

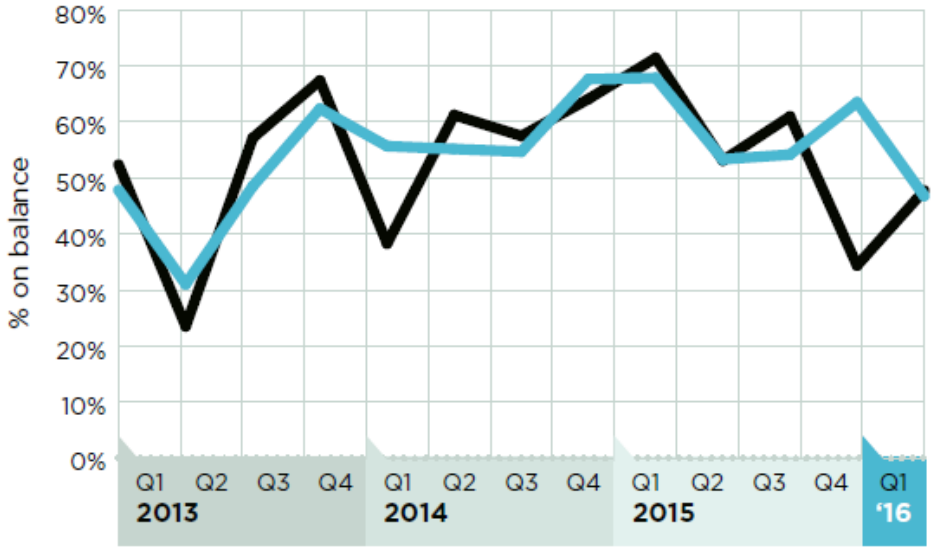
| | England | SCR LEP | D2N2 LEP |
|---|---|---|---|
| Survey replies (unweighted)[55] | 75,129 | 2,426 | 3,127 |
| Survey replies (weighted) | 148,8201 | 40,594 | 51,646 |
| Establishments with any vacancies | 20% | 16% | 19% |
| Have at least one vacancy that is hard to fill | 8% | 6% | 7% |
| Have a skills shortage vacancy (prompted or unprompted) | 6% | 5% | 6% |
| Number of vacancies | 797,440 | 20,053 | 24,242 |
| Number of skill-shortage vacancies | 180,159 | 4,762 | 5,727 |
| Number of vacancies as a % of all employment | 3% | 3% | 3% |
| % of all vacancies which are skills shortage vacancies[56] | 23% | 24% | 24% |
| % of establishments with any staff not fully proficient | 14% | 16% | 17% |
| Number of skills gaps - absolute figures | 1,184,701 | 29,128 | 38,812 |
| Number of staff not fully proficient as a % of employment | 5% | 4% | 4% |

*Source: UKCES Employer Skills Survey, 2015*

[55] This is the actual amount of survey replies, whereas the weighted figure accounts for differences in survey replies between areas by adjusting the figure accordingly.
[56] A skills shortage vacancy is a job vacancy that is difficult to fill due to a lack of skilled or qualified people to take the job.

C.8 However, local evidence shows that employers in SCR still experience difficulty in recruiting employees.

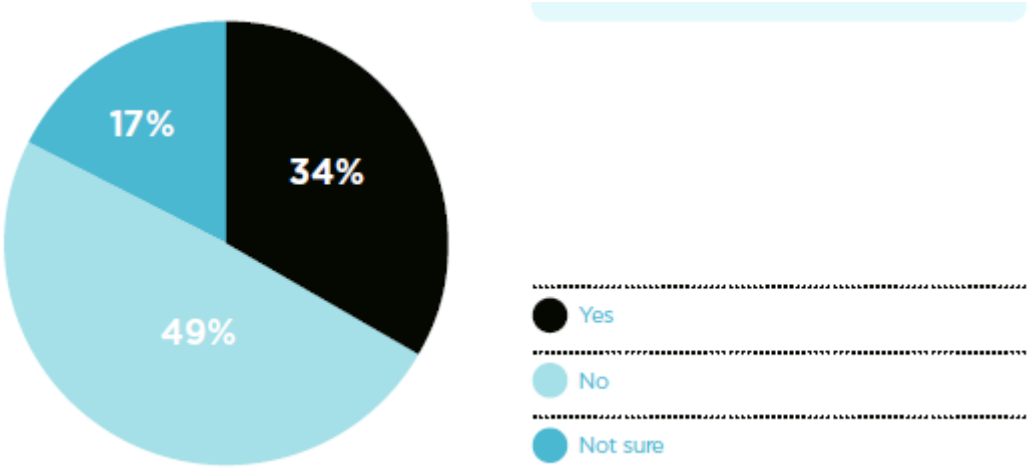
**Figure C-3: Proportion of employers who experienced difficulty in finding suitable employees in the last three months [Note: n value not available] (blue = services, black=manufacturing)**




*Source: Quarterly Economic Survey, 2016 Quarter 1 Issue 2, Doncaster Chamber (Draft version)*

C.9 A third of employers are likely to recruit an apprentice in the next 3 months

**Figure C-4: Are you likely to recruit an apprentice in the next 12 months?**




*Source: Quarterly Economic Survey, 2016 Quarter 1 Issue 2, Doncaster Chamber (Draft version)*

C.10 The table below shows which skills SCR employers have found most difficult to obtain over the last few years.

Figure 57 - Skills found difficult to obtain from applicants (prompted unless *) (employer base)

| Skill | Total | Sheffield City Region |
|---|---|---|
| Technical, practical or job specific skills | 62% | 61% |
| Problem solving skills | 41% | 39% |
| Planning and Organisation skills | 45% | 38% |
| Customer handling skills | 43% | 33% |
| Team working skills | 34% | 32% |
| Oral communication skills | 42% | 26% |
| Written communication skills | 39% | 26% |
| Numeracy skills | 28% | 26% |
| Literacy skills | 34% | 21% |
| Don't know | 8% | 15% |
| Strategic Management skills | 31% | 12% |
| Advanced IT or software skills | 23% | 10% |
| Foreign language skills | 17% | 9% |
| Basic computer literacy / using IT | 18% | 8% |
| No particular skills difficulties | 3% | 7% |
| Experience/lack of product knowledge* | 3% | 5% |
| Other | 1% | 1% |

Source: UKCES Employer Skills Survey, 2013

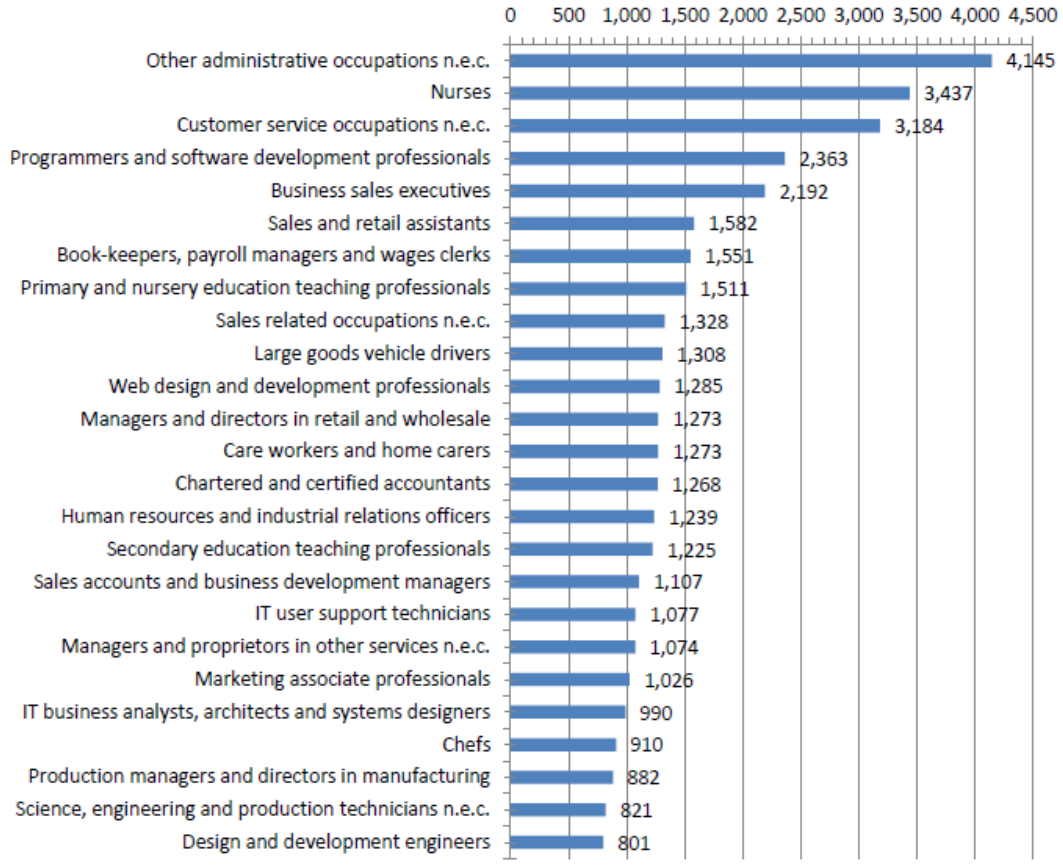
*Source: Sheffield City Region Labour Market Review, reiu, 2015*

### *Vacancies and Claimants*

C.11 This sub-section presents data on the largest sources of vacancies in SCR and, as a comparison, the occupational profile of Jobseeker's Allowance Claimants.

C.12 "The figure [below] shows the top 25 occupations in terms of vacancies in SCR [in the 12 months to the end of December 2014]. Other administrative occupations, nurses and customer service occupations generated the most vacancies."

**Figure C-5: Top 25 Occupations in terms of vacancies in SCR (2014)**

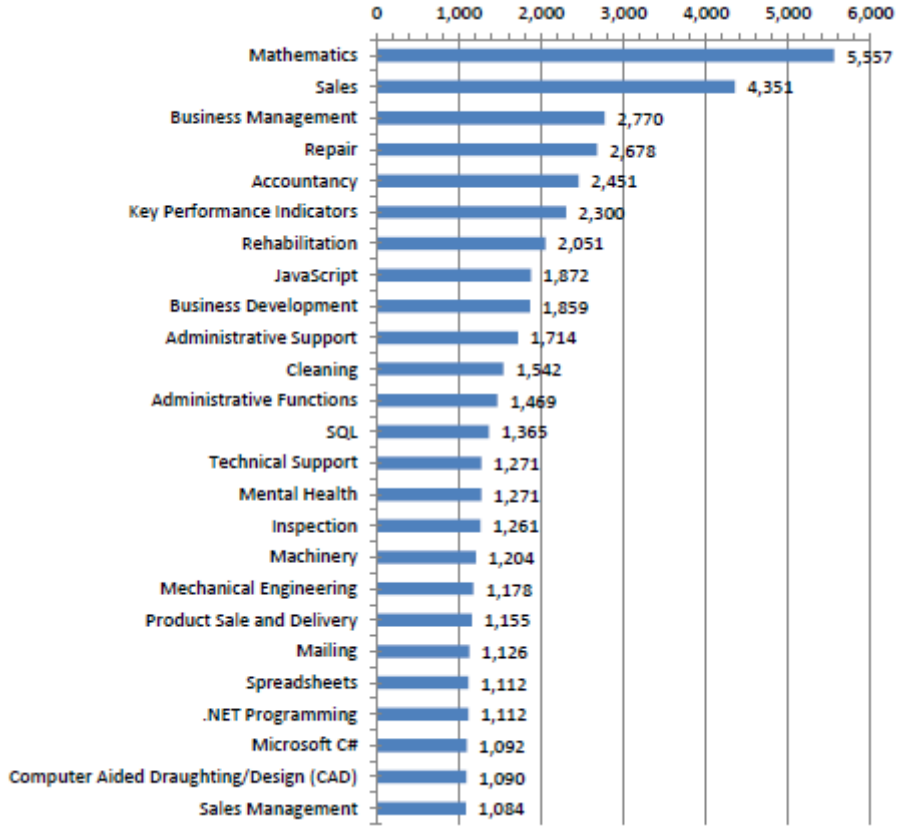



*Source: Sheffield City Region Labour Market Review, reiu, 2015*

C.13 "The figure below shows that IT skills are in high demand, with Microsoft, Computer Aided Draughting/Design, spreadsheets, .NET Programming, JavaScript and SQL all making the top 25 skill requested by employers."[57]

[57] Sheffield City Region Labour Market Review, reiu, 2015

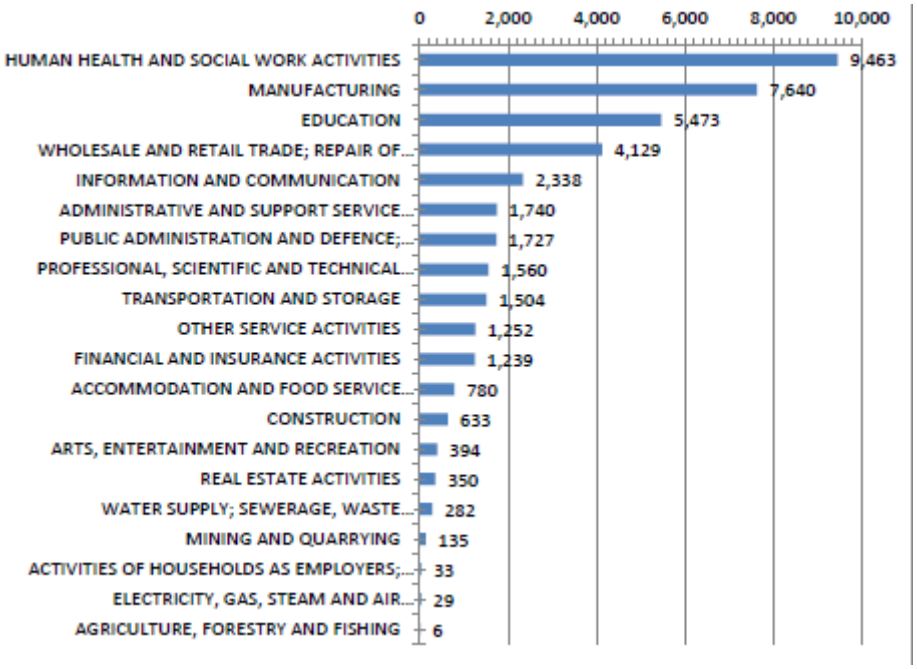
**Figure C-6: Top 25 skills in demand by SCR employers (2014)**




*Source: Sheffield City Region Labour Market Review, reiu, 2015*

C.14 The Health and Social Work, and Manufacturing sectors had the largest numbers of vacancies in 2014 – see below.

**Figure C-7: Vacancies by sector in SCR (2014)**




*Source: Sheffield City Region Labour Market Review, reiu, 2015*

C.15 For the top three sectors with the most vacancies across SCR in 2014 (as shown in the graph above), the table below shows the contributions that Chesterfield and Bassetlaw made to SCR's 2014 total employment in these sectors.

**Table C-3: Supply of jobs in Bassetlaw and Chesterfield for sectors with the most vacancies across SCR (2014)**

| | Bassetlaw | | Chesterfield | |
|---|---|---|---|---|
| | Employment | % of SCR | Employment | % of SCR |
| Human health and social work | 7,242 | 6% | 10,794 | 9% |
| Manufacturing | 7,953 | 9% | 4,571 | 5% |
| Education | 3,978 | 5% | 4,499 | 6% |

*Source: SQW analysis of BRES data*

### *Claimants by Occupation*

C.16 Bassetlaw has a higher proportion of managers, directors and senior officials who are claiming Jobseeker's Allowance than the SCR average. Chesterfield has a higher proportion

**Table C-4: Sought occupation of Jobseeker's Allowance claimants**

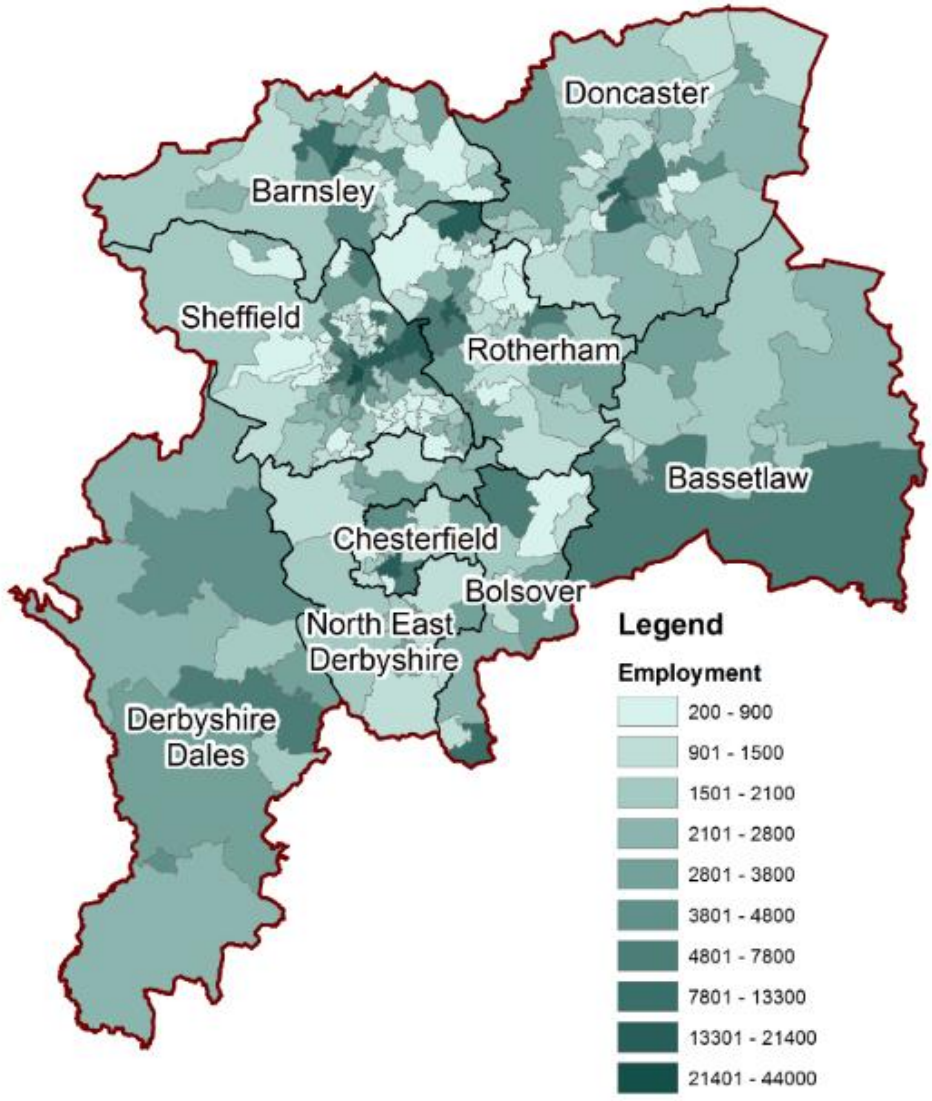
| | Managers, directors & senior officials | Professional occupations | Associate prof & tech occupations | Administrative & secretarial | Skilled trades occupations | Caring, leisure & other services | Sales & customer services | Process, plant and machine operatives | Elementary occupations | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Barnsley | 10% | 0% | 1% | 4% | 4% | 3% | 44% | 5% | 24% | 3,020 |
| Bassetlaw | 24% | 1% | 1% | 2% | 2% | 2% | 41% | 4% | 18% | 870 |
| Chesterfield | 8% | 0% | 1% | 4% | 4% | 2% | 50% | 3% | 21% | 895 |
| Doncaster | 6% | 0% | 1% | 4% | 4% | 2% | 46% | 4% | 28% | 4,820 |
| Rotherham | 8% | 1% | 1% | 4% | 4% | 3% | 45% | 5% | 24% | 4,170 |
| Sheffield | 10% | 1% | 2% | 3% | 3% | 2% | 48% | 3% | 23% | 9,390 |
| SCR | 9% | 1% | 1% | 4% | 4% | 3% | 46% | 4% | 24% | 24,615 |
| UK | 9% | 1% | 2% | 4% | 4% | 3% | 49% | 4% | 18% | 655,455 |

*Source: SQW analysis of Jobseeker's Allowance data*

## *Workplace Based jobs*

C.17 The map below shows workplace based employment in 2014.

**Figure C-8: Employment in SCR Middle Super Output Areas (2014)**




*Source: Produced by SQW 2016. Licence 100030994. Contains BRES data*

### *Workplace v Resident Populations*

C.18 The difference between the number of residents of a district who are in employment (residence based employment) and the number of people who work in a district (workplace based employment) is shown in the table below.

**Table C-5: Workplace population (employment) and residence based population (2014)**

| | Residents in employment (2013-15 average ) | Workplace based employment (2014) | Net workplace bias |
|---|---|---|---|
| Barnsley | 107,300 | 150,100 | 42,800 |
| Bassetlaw | 47,733 | 70,700 | 22,967 |
| Chesterfield | 46,567 | 65,600 | 19,033 |
| Doncaster | 129,633 | 191,000 | 61,367 |
| Rotherham | 109,433 | 161,100 | 51,667 |

| | Residents in employment (2013-15 average ) | Workplace based employment (2014) | Net workplace bias |
|---|---|---|---|
| Sheffield | 257,000 | 370,000 | 113,000 |
| SCR | 812,233 | 1,159,300 | 347,067 |

*Source: SQW analysis of BRES data and Annual Population Survey*

### *Resident vs Workplace Earnings*

C.19 Bassetlaw had the highest residence based earnings but the lowest workplace earnings. Workplace earnings were highest in Sheffield, just ahead of Rotherham.

C.20 In 2015, three districts had higher resident earnings than workplace earnings (Bassetlaw, Chesterfield and Rotherham) and three had higher workplace than residential earnings (Barnsley, Doncaster, Sheffield).

C.21 Between 2002 and 2015, all districts saw increases in both residence and workplace based earnings, the largest increase was in Bassetlaw's residence based (42%) followed by Doncaster and Rotherham's workplace based earnings (39%).

**Table C-6: Residence and workplace based gross median weekly earnings in 2015 (£) and change between 2002 and 2015**

| | 2015 | | | % change (2002-2015) | |
|---|---|---|---|---|---|
| | Residence | Workplace | Resident bias | Residence | Workplace |
| Barnsley | 469 | 494 | -25 | 36% | 40% |
| Bassetlaw | 506 | 427 | 79 | 42% | 31% |
| Chesterfield | 487 | 448 | 39 | 32% | 32% |
| Doncaster | 466 | 479 | -13 | 35% | 39% |
| Rotherham | 481 | 479 | 3 | 32% | 39% |
| Sheffield | 486 | 496 | -10 | 37% | 36% |
| UK | 528 | 528 | 0 | 35% | 35% |

*Source: SQW analysis of Annual Survey of Hours and Earnings data*

## Labour Market Flows

### *Travel to Work Patterns*

C.22 A report produced by the Northern Way and Work Foundation concludes that Sheffield and Rotherham are seen as a single economic entity, while Doncaster is identified as a significant centre for employment but the distance from Sheffield limits the amount of commuting. Barnsley is strongly connected to the labour markets of neighbouring areas and has strong links to both Sheffield and Leeds City Regions.

C.23 "The East Midlands districts are interconnected with strong commuter flows into Chesterfield, reflecting its role as an important employment centre within East Derbyshire. While Bassetlaw has linkages with Doncaster, Rotherham and Sheffield, linkages between

Chesterfield, North East Derbyshire, Derbyshire Dales and South Yorkshire are focused upon Sheffield." [58]

C.24 "While in volume terms there are large flows into Sheffield, particularly from Rotherham, the report highlights that that it is a relatively self-contained city with weaker economic linkages into its hinterland when compared to other larger northern cities. In Sheffield, 85% of residents live and work in the city taking 72% of the jobs, whilst in Manchester the figures are 73% and 31% respectively. In many ways Sheffield City Region is similar to the North East and the Derbyshire and Nottinghamshire LEP areas. [59]

C.25 The distribution of employment sites along the strategic road network is likely to increase commuter flows across local authority boundaries, while increasing the challenges of linking many communities to new employment locations."[60]

### *2011 Census Travel to Work Data Analysis*

C.26 The summary table immediately below shows where commuters originating from SCR commute to, in percentage terms.

**Table C-7: % of out commuters from SCR LADs going to specific destinations (2011)**

| | | Usual residence (origin) ---> | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Barnsley | Bassetlaw | Bolsover | Chesterfield | Derbyshire Dales | Doncaster | North East Derbyshire | Rotherham | Sheffield |
| Workplace (destination) | Same district | 57 | 61 | 30 | 57 | 54 | 71 | 25 | 55 | 78 |
| | Barnsley | 57 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 2 |
| | Doncaster | 4 | 8 | 1 | 0 | 0 | 71 | 1 | 6 | 1 |
| | Rotherham | 9 | 4 | 2 | 1 | 1 | 7 | 3 | 55 | 6 |
| | Sheffield | 10 | 4 | 5 | 8 | 6 | 4 | 23 | 23 | 78 |
| | S. Yorks | 79 | 16 | 8 | 9 | 6 | 83 | 27 | 87 | 86 |
| | SCR-D2N2 overlap LADs | 1 | 65 | 54 | 78 | 61 | 2 | 56 | 4 | 5 |
| | D2N2 only LADs | 0 | 8 | 32 | 7 | 21 | 1 | 11 | 1 | 1 |
| | Elsewhere in UK | 20 | 11 | 6 | 5 | 11 | 14 | 6 | 7 | 8 |
| | United Kingdom | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

*Source: SQW analysis of Census data*

[58] SCR IER, 2013 (pages 27-29)
[59] SCR IER, 2013 (pages 27-29)
[60] SCR IER, 2013 (pages 27-29)

C.27 This table shows all commuting flows between the districts in the SCR and D2N2 LEPs. Flows of more than 1,000 originating/ending in SCR are highlighted in yellow.

**Table C-C-1: Commuting flows within SCR and D2N2 (origin-left to right, destination-top to bottom) (2011)**

| | | Origin | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Barnsley | Bassetlaw | Bolsover | Chesterfield | Derbyshire Dales | Doncaster | North East Derbyshire | Rotherham | Sheffield | Amber Valley | Ashfield | Broxtowe | Derby | Erewash | Gedling | High Peak | Mansfield | Newark and Sherwood | Nottingham | Rushcliffe | South Derbyshire | Elsewhere in UK |
| Destination | Barnsley | 49,800 | 163 | 61 | 83 | 22 | 1,774 | 169 | 3,363 | 3,961 | 14 | 27 | 10 | 9 | 11 | 3 | 61 | 30 | 39 | 21 | 12 | 7 | 7,493 |
| | Bassetlaw | 177 | 26,770 | 1,658 | 362 | 32 | 2,226 | 347 | 2,169 | 884 | 50 | 452 | 82 | 58 | 53 | 325 | 10 | 1,093 | 1,719 | 188 | 108 | 26 | 4,201 |
| | Bolsover | 70 | 1,007 | 8,869 | 1,695 | 252 | 169 | 1,583 | 458 | 706 | 1,677 | 2,199 | 265 | 325 | 185 | 212 | 51 | 2,229 | 411 | 446 | 77 | 83 | 1,224 |
| | Chesterfield | 144 | 330 | 3,314 | 23,428 | 1,130 | 160 | 8,375 | 677 | 3,226 | 523 | 389 | 130 | 253 | 117 | 81 | 229 | 459 | 135 | 216 | 58 | 125 | 1,289 |
| | Derbyshire Dales | 14 | 18 | 492 | 1,958 | 14,107 | 21 | 1,637 | 67 | 919 | 1,986 | 151 | 93 | 1,507 | 274 | 32 | 1,105 | 109 | 22 | 87 | 36 | 392 | 2,252 |
| | Doncaster | 3,107 | 3,345 | 201 | 154 | 40 | 79,848 | 254 | 5,658 | 2,461 | 49 | 106 | 40 | 58 | 33 | 44 | 18 | 103 | 160 | 72 | 27 | 14 | 10,580 |
| | North East Derbyshire | 115 | 181 | 1,543 | 4,423 | 443 | 150 | 9,735 | 748 | 3,642 | 446 | 255 | 43 | 100 | 56 | 40 | 122 | 259 | 68 | 78 | 18 | 77 | 618 |
| | Rotherham | 8,226 | 1,771 | 603 | 464 | 147 | 7,490 | 1,324 | 53,655 | 11,700 | 55 | 97 | 42 | 67 | 35 | 36 | 61 | 155 | 109 | 57 | 31 | 23 | 4,417 |
| | Sheffield | 8,353 | 1,829 | 1,404 | 3,137 | 1,444 | 4,022 | 8,742 | 22,529 | 161,004 | 247 | 224 | 137 | 222 | 94 | 126 | 719 | 305 | 171 | 253 | 91 | 81 | 9,646 |
| | Amber Valley | 45 | 96 | 2,513 | 820 | 1,247 | 39 | 1,605 | 85 | 225 | 23,506 | 2,568 | 1,733 | 3,692 | 2,170 | 361 | 142 | 732 | 200 | 833 | 207 | 507 | 1,985 |
| | Ashfield | 56 | 418 | 2,293 | 431 | 175 | 159 | 586 | 152 | 274 | 1,633 | 19,362 | 1,573 | 658 | 733 | 1,947 | 30 | 6,949 | 1,764 | 2,860 | 656 | 179 | 2,259 |
| | Broxtowe | 15 | 71 | 204 | 101 | 60 | 28 | 120 | 42 | 138 | 1,414 | 1,647 | 11,874 | 822 | 3,968 | 1,416 | 11 | 355 | 331 | 4,890 | 1,229 | 168 | 1,978 |

| | Origin | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Barnsley | Bassetlaw | Bolsover | Chesterfield | Derbyshire Dales | Doncaster | North East Derbyshire | Rotherham | Sheffield | Amber Valley | Ashfield | Broxtowe | Derby | Erewash | Gedling | High Peak | Mansfield | Newark and Sherwood | Nottingham | Rushcliffe | South Derbyshire | Elsewhere in UK |
| Derby | 38 | 76 | 518 | 391 | 1,837 | 113 | 500 | 159 | 365 | 8,364 | 767 | 1,723 | 67,574 | 6,348 | 494 | 130 | 344 | 176 | 1,648 | 688 | 7,897 | 9,189 |
| Erewash | 18 | 32 | 187 | 104 | 156 | 23 | 106 | 32 | 93 | 2,533 | 653 | 3,761 | 3,194 | 18,158 | 538 | 13 | 221 | 131 | 1,801 | 560 | 602 | 1,869 |
| Gedling | 9 | 232 | 187 | 40 | 17 | 24 | 49 | 57 | 55 | 278 | 1,629 | 1,049 | 159 | 481 | 12,336 | 5 | 1,043 | 1,474 | 6,117 | 1,585 | 57 | 892 |
| High Peak | 22 | 5 | 59 | 226 | 1,291 | 12 | 239 | 54 | 510 | 75 | 8 | 15 | 49 | 15 | 2 | 19,288 | 6 | 5 | 5 | 3 | 55 | 5,013 |
| Mansfield | 27 | 616 | 1,997 | 355 | 67 | 89 | 329 | 134 | 258 | 382 | 4,548 | 385 | 175 | 193 | 1,137 | 15 | 17,969 | 3,132 | 872 | 323 | 28 | 858 |
| Newark and Sherwood | 39 | 1,489 | 566 | 92 | 27 | 145 | 92 | 140 | 120 | 121 | 1,036 | 354 | 168 | 166 | 1,410 | 10 | 3,593 | 22,891 | 1,156 | 994 | 29 | 5,593 |
| Nottingham | 51 | 464 | 697 | 319 | 270 | 113 | 325 | 188 | 422 | 2,163 | 7,571 | 15,394 | 2,671 | 6,560 | 20,015 | 33 | 2,443 | 3,480 | 67,048 | 15,002 | 626 | 10,927 |
| Rushcliffe | 25 | 194 | 130 | 72 | 44 | 26 | 48 | 22 | 88 | 303 | 782 | 1,814 | 475 | 895 | 2,686 | 3 | 417 | 1,109 | 6,962 | 14,223 | 193 | 4,644 |
| South Derbyshire | 6 | 4 | 101 | 66 | 308 | 14 | 129 | 15 | 35 | 526 | 166 | 189 | 3,517 | 630 | 59 | 22 | 114 | 38 | 227 | 89 | 11,520 | 8,067 |
| Elsewhere in UK | 17,236 | 4,695 | 1,708 | 2,052 | 2,852 | 15,726 | 2,240 | 7,115 | 16,066 | 3,190 | 2,645 | 4,413 | 11,773 | 5,430 | 3,156 | 14,578 | 2,215 | 6,148 | 9,548 | 8,419 | 16,976 | |

*Source: SQW analysis of Census data*

### *Chesterfield argument on Travel to Work flows*

C.28 3,150 Chesterfield residents travel to work in Sheffield each day, compared to only 400 travelling to Derby and 320 travelling to Nottingham. 3,200 people travel from Sheffield to Chesterfield for work but only 250 travel from Derby and 200 from Nottingham.

- "In terms of the cities, it is clear therefore that Chesterfield's primary economic relationship is with Sheffield rather than Derby or Nottingham… in terms of Chesterfield's primary functional relationships, these are defined by a geography which covers the five areas of Bolsover, Chesterfield, Derbyshire Dales, North East Derbyshire and Sheffield.

- Whilst four of these authorities are also within D2N2, all five are included within SCR, making this the key economic partnership from a Chesterfield perspective and reflecting economic linkages to the core city of Sheffield. Further, Chesterfield's functional relationship with Sheffield is not 'secondary' to its relationship with the neighbouring Derbyshire Districts. For example, outside of the Borough, Sheffield is the second most important source of jobs for Chesterfield residents, ahead of both Bolsover and Derbyshire Dales."[61]

### *Travel to Work by Mode*

C.29 Looking more closely at the larger cross boundary commuting flows (2,000+ workers) starting and/or ending in SCR, the majority of these trips are made by car or van – see below. This is especially true for commutes from Rotherham to Bassetlaw (93% of 2,169 trips made by car or van) and from Doncaster to Bassetlaw (92% of 2,226).

C.30 Commuting by bus, minibus or coach is the next most common method, particularly for commutes from Bolsover to Chesterfield, and Sheffield to North East Derbyshire between (12% of 3,314 and 3,624 trips respectively).

C.31 Overall, commuting by train was less common than commuting by bus but 15% of trips from Doncaster to Sheffield (4,022 commutes) and 10% from Barnsley to Sheffield (8,353 commutes) were made by train.

[61] Appendix 7, Membership Of Combined Authorities And Ratification Of The Sheffield City Region Devolution Deal, Chesterfield Borough Council, 2016

**Table C-A-1: Cross boundary commuting flows of more than 2,000 starting and/or ending in SCR (2011)**

**Cross-LA boundary trips of more than 2,000 people**

| Destination \ Usual residence (origin) ---> | Barnsley | Bassetlaw | Bolsover | Chesterfield | Derbyshire Dales | Doncaster | North East Derbyshire | Rotherham | Sheffield |
|---|---|---|---|---|---|---|---|---|---|
| Barnsley | | | | | | | | 3,363 | 3,961 |
| Bassetlaw | | | | | | 2,226 | | 2,169 | |
| Bolsover | | | | | | | | | |
| Chesterfield | | | 3,314 | | | | 8,375 | | 3,226 |
| Derbyshire Dales | | | | | | | | | |
| Doncaster | 3,107 | 3,345 | | | | | | 5,658 | 2,461 |
| North East Derbyshire | | | | 4,423 | | | | | 3,642 |
| Rotherham | 8,226 | | | | | 7,490 | | | 11,700 |
| Sheffield | 8,353 | | | 3,137 | | 4,022 | 8,742 | 22,529 | |
| Amber Valley | | | 2,513 | | | | | | |
| Ashfield | | | 2,293 | | | | | | |

**Drive car or van, or are a passenger in car or van**

| Destination \ Usual residence (origin) ---> | Barnsley | Bassetlaw | Bolsover | Chesterfield | Derbyshire Dales | Doncaster | North East Derbyshire | Rotherham | Sheffield |
|---|---|---|---|---|---|---|---|---|---|
| Barnsley | | | | | | | | 85% | 85% |
| Bassetlaw | | | | | | 92% | | 93% | |
| Bolsover | | | | | | | | | |
| Chesterfield | | | 85% | | | | 83% | | 90% |
| Derbyshire Dales | | | | | | | | | |
| Doncaster | 89% | 91% | | | | | | 86% | 81% |
| North East Derbyshire | | | | 85% | | | | | 81% |
| Rotherham | 85% | | | | | 84% | | | 86% |
| Sheffield | 83% | | | 82% | | 78% | 84% | 82% | |
| Amber Valley | | | 89% | | | | | | |
| Ashfield | | | 91% | | | | | | |

**Bus, minibus or coach**

| Destination \ Usual residence (origin) ---> | Barnsley | Bassetlaw | Bolsover | Chesterfield | Derbyshire Dales | Doncaster | North East Derbyshire | Rotherham | Sheffield |
|---|---|---|---|---|---|---|---|---|---|
| Barnsley | | | | | | | | 8% | 5% |
| Bassetlaw | | | | | | 3% | | 3% | |
| Bolsover | | | | | | | | | |
| Chesterfield | | | 12% | | | | 11% | | 4% |
| Derbyshire Dales | | | | | | | | | |
| Doncaster | 7% | 5% | | | | | | 7% | 4% |
| North East Derbyshire | | | | 9% | | | | | 12% |
| Rotherham | 10% | | | | | 8% | | | 7% |
| Sheffield | 3% | | | 6% | | 3% | 9% | 10% | |
| Amber Valley | | | 5% | | | | | | |
| Ashfield | | | 5% | | | | | | |

**Train**

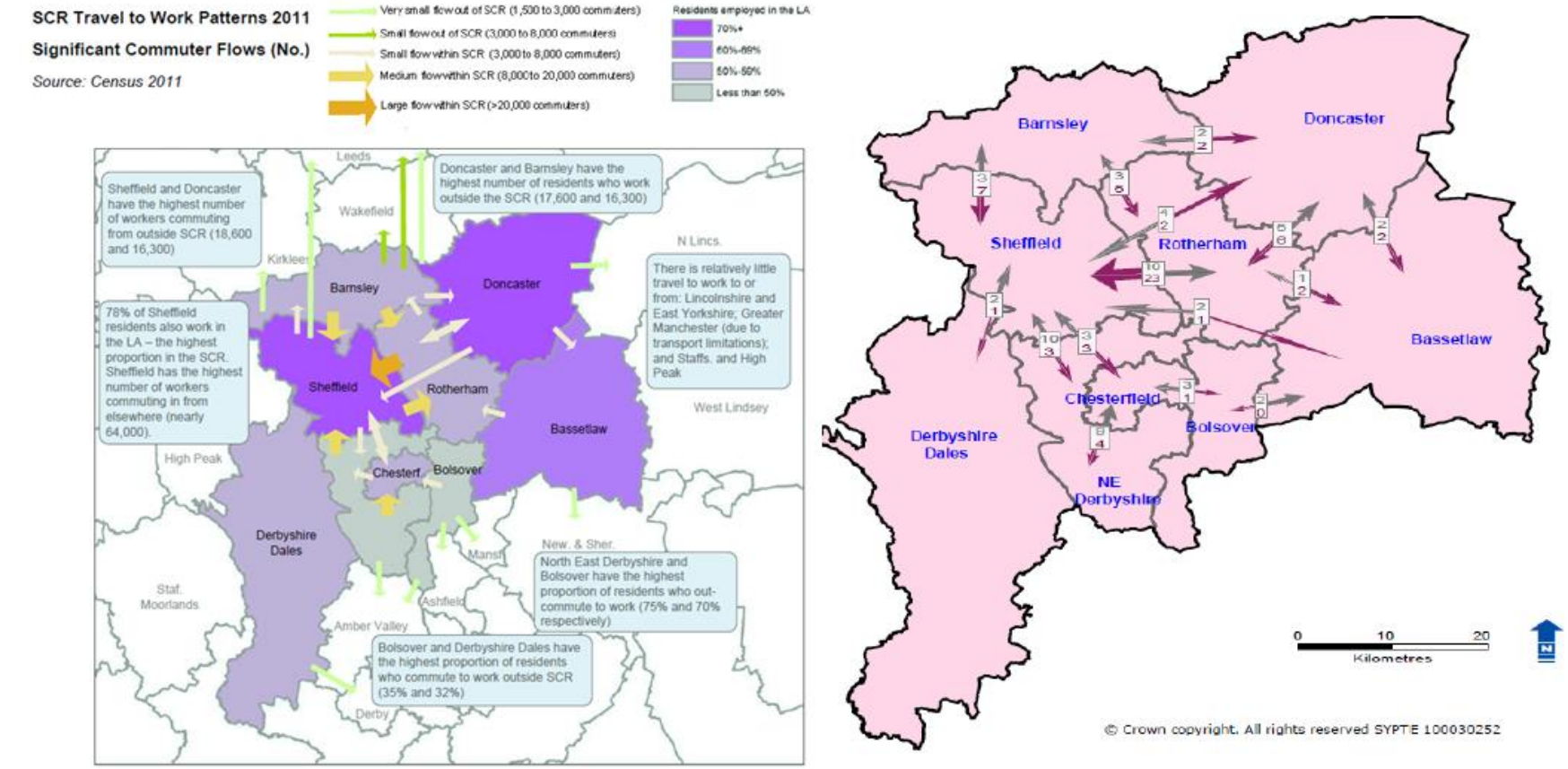
| Destination \ Usual residence (origin) ---> | Barnsley | Bassetlaw | Bolsover | Chesterfield | Derbyshire Dales | Doncaster | North East Derbyshire | Rotherham | Sheffield |
|---|---|---|---|---|---|---|---|---|---|
| Barnsley | | | | | | | | 1% | 5% |
| Bassetlaw | | | | | | 1% | | 1% | |
| Bolsover | | | | | | | | | |
| Chesterfield | | | 0% | | | | 0% | | 3% |
| Derbyshire Dales | | | | | | | | | |
| Doncaster | 1% | 1% | | | | | | 2% | 9% |
| North East Derbyshire | | | | 0% | | | | | 0% |
| Rotherham | 1% | | | | | 2% | | | 2% |
| Sheffield | 10% | | | 8% | | 15% | 2% | 2% | |
| Amber Valley | | | 0% | | | | | | |
| Ashfield | | | 0% | | | | | | |

*Source: SQW analysis of Census data*

### *Visual Representations of Commuting flows*

C.32 The two maps below show different visual representations of the commuting flows in SCR

**Figure C-1: SCR commuting flows (2011)**




*Sources: Left map: SCR Bulletin: Labour Market, Ekosgen, 2015, Right map: Sheffield City Region Independent Economic Review, 2013*

### *Changes in Travel to Work Flows, 2001-2011*

C.33 The table below shows the percentage point change in commuting outflows between 2001 and 2011 (i.e. the % that commuted to a destination as a % of all workers residing in a LAD in 2001, compared to the % in 2011). All districts have seen a fall in the number of their residents who work in that district (largest for Derbyshire Dales - falling from 66% to 54%) showing that the districts are becoming increasingly connected. The largest increase was for Barnsley to Rotherham commuters (6% to 9% of Barnsley's employed residents). However, it is important to note that the 2011 Census commuting analysis excludes the "mainly at or from home" category, which the 2001 Census included, explaining some of the difference in the figures.

**Table C-A-2: Percentage point change in commuting outflows between 2001 and 2011**

| | | Origin | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Barnsley | Bassetlaw | Bolsover | Chesterfield | Derbyshire Dales | Doncaster | North East Derbyshire | Rotherham | Sheffield |
| Destination | Barnsley | -10.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.4 |
| | Bassetlaw | 0.0 | -10.3 | -1.6 | 0.1 | 0.0 | 0.5 | 0.1 | 0.3 | 0.0 |
| | Bolsover | 0.0 | 1.4 | -8.2 | 1.5 | 0.4 | 0.1 | 1.0 | 0.2 | 0.2 |
| | Chesterfield | 0.0 | 0.1 | 1.4 | -10.5 | 1.0 | 0.0 | 1.8 | 0.2 | 0.3 |
| | Derbyshire Dales | 0.0 | 0.0 | 0.4 | 1.7 | -11.4 | 0.0 | 1.2 | 0.0 | 0.2 |
| | Doncaster | 1.1 | 2.7 | 0.4 | 0.1 | 0.1 | -4.7 | 0.2 | 1.3 | 0.3 |
| | North East Derbyshire | 0.0 | 0.1 | 0.8 | 1.7 | 0.6 | 0.0 | -10.7 | 0.2 | 0.4 |
| | Rotherham | 3.7 | 0.8 | 0.3 | 0.2 | 0.3 | 1.3 | 0.9 | -6.4 | 1.0 |
| | Sheffield | 1.6 | 0.3 | 0.5 | 1.2 | 0.8 | 0.4 | 1.2 | 1.3 | -6.1 |
| | Elsewhere in UK | 3.5 | 3.3 | 1.6 | 1.9 | 3.6 | 2.2 | 1.9 | 2.0 | 2.9 |

*Source: SQW analysis of 2001 and 2011 Census data. Please note, the 2011 Census commuting analysis excludes the "mainly at or from home" category, which the 2001 Census included, explaining some of the difference in the figures.*

C.34 At a higher level, Ekosgen found that commuting into and out of SCR has increased since 2011.

**Figure C-2: Change in travel to work between 2001 and 2011**

**Trends in Travel to Work Patterns**

Between the 2001 and 2011, the proportion of SCR residents who commute out of the city region to work has increased (+3% points). Similarly, the proportion of SCR workers who reside outside of the city region has increased, although by a much higher amount (+10% points). This trend is evident across all city region local authorities[11].

| Travel to Work Patterns 2001 | | | |
|---|---|---|---|
| *Residents by place of work* | | | |
| | **Total** | **Inside SCR** | **Outside SCR** |
| Residents – No. | 726,791 | 645,651 | 81,140 |
| Residents – % | 100% | 89% | 11% |
| Residents - %pt change 2001 - 2011 | - | +3% | -3% |
| *Workers by place of residence* | | | |
| | **Total** | **Inside SCR** | **Outside SCR** |
| Workers – No. | 650,452 | 645,651 | 4,801 |
| Workers – % | 100% | 99% | 1% |
| Workers - %pt change 2001 - 2011 | - | +10% | -10% |
| *Source: Census 2011* | | | |

*Source: SCR Labour Market Bulletin, Ekosgen, 2015*

### *Bassetlaw*

C.35 The table below shows the out commuters from Bassetlaw's MSOAs. The MSOA's which border Doncaster and Rotherham are highlighted in green (see map below); they have higher rates of commuting to South Yorkshire than other MSOAs in Bassetlaw do. These rates (40-18%) are higher than the rates of out commuting to the districts in Derbyshire and Nottinghamshire only (i.e. D2N2 'core' area) for MSOAs 14 and 15 which border Mansfield, and Newark and Sherwood (21% and 31%).

**Table C-A-3: % of out-commuters from Bassetlaw at MSOA level (2011)[62]**

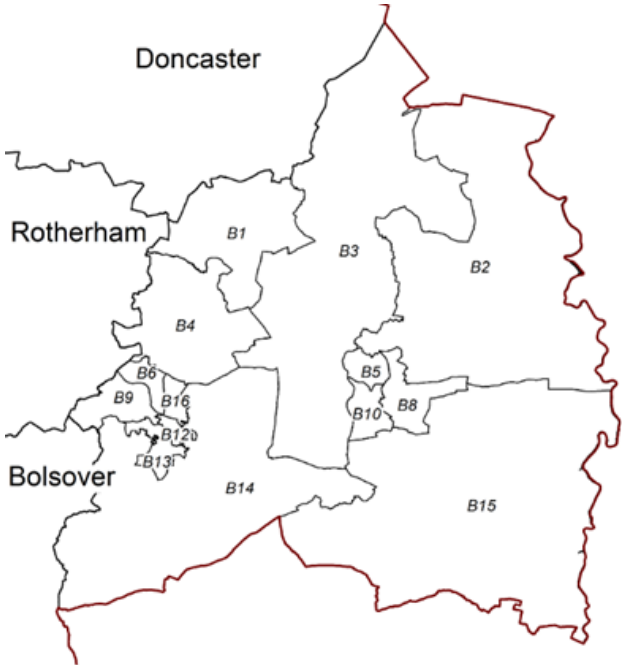
| | | **Usual Residence** | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | B1 | B2 | B3 | B4 | B5 | B6 | B8 | B9 | B10 | B12 | B13 | B14 | B15 | B16 |
| **Usual Workplace** | B1 | 21 | 2 | 3 | 3 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 |
| | B2 | 1 | 14 | 3 | 1 | 3 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 4 | 0 |
| | B3 | 3 | 3 | 12 | 1 | 6 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 2 | 1 |
| | B4 | 1 | 1 | 1 | 16 | 1 | 3 | 1 | 3 | 1 | 2 | 2 | 2 | 1 | 3 |
| | B5 | 2 | 4 | 5 | 2 | 16 | 1 | 10 | 1 | 11 | 1 | 1 | 2 | 4 | 1 |
| | B6 | 0 | 0 | 0 | 2 | 0 | 5 | 0 | 2 | 0 | 2 | 2 | 2 | 0 | 3 |
| | B8 | 2 | 4 | 3 | 1 | 10 | 1 | 15 | 1 | 11 | 1 | 1 | 1 | 3 | 1 |
| | B9 | 2 | 1 | 1 | 8 | 1 | 15 | 1 | 17 | 2 | 9 | 10 | 9 | 1 | 13 |
| | B10 | 2 | 5 | 5 | 1 | 13 | 1 | 14 | 1 | 17 | 1 | 1 | 2 | 5 | 1 |
| | B12 | 1 | 1 | 1 | 5 | 1 | 6 | 1 | 5 | 1 | 12 | 8 | 6 | 1 | 7 |
| | B13 | 2 | 2 | 2 | 9 | 2 | 10 | 3 | 10 | 2 | 14 | 17 | 11 | 2 | 12 |
| | B14 | 3 | 2 | 3 | 8 | 4 | 8 | 3 | 9 | 4 | 23 | 15 | 15 | 3 | 11 |
| | B15 | 2 | 9 | 5 | 1 | 12 | 1 | 14 | 1 | 12 | 1 | 1 | 3 | 28 | 2 |
| | B16 | 2 | 1 | 2 | 5 | 1 | 7 | 2 | 5 | 2 | 5 | 6 | 5 | 1 | 13 |

[62] For presentational purposes the names of the MSOAs have been shortened so, for example, Bassetlaw 0001 becomes B1in the table and on the map

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S. Yorks | 40 | 17 | 31 | 20 | 8 | 18 | 7 | 21 | 9 | 9 | 12 | 11 | 6 | 12 |
| SCR-D2N2 Overlap (not inc Bassetlaw) | 1 | 1 | 2 | 4 | 1 | 6 | 1 | 6 | 1 | 5 | 7 | 7 | 2 | 6 |
| D2N2 'core' | 5 | 7 | 7 | 6 | 7 | 7 | 9 | 8 | 8 | 8 | 9 | 13 | 21 | 6 |
| Elsewhere | 10 | 27 | 15 | 10 | 10 | 8 | 10 | 8 | 9 | 7 | 7 | 8 | 15 | 7 |
| Total | 3,785 | 3,266 | 2,523 | 3,041 | 2,389 | 4,135 | 3,449 | 2,850 | 3,116 | 2,247 | 2,746 | 2,626 | 3,187 | 4,446 |

*Source: SQW analysis of Census data*

**Figure C-3: MSOAs in Bassetlaw**




*Source: Source: Produced by SQW 2016. Licence 100030994, Contains OS data © Crown copyright [and database right] [2015]*

### *Comparison with Barnsley*

C.36 Already a constituent member of the SCR combined authority, Barnsley is also in the Leeds City Region LEP area. Some 22% of Barnsley's resident population who are in work commute to other districts in South Yorkshire, this compares to 16% of employed Bassetlaw residents who commute to any of the four South Yorkshire districts, and 9% of employed Chesterfield residents.

**Table C-A-4: % of commuting outflows going to South Yorkshire LADs (2011)**

| | | Usual residence (origin) | | |
|---|---|---|---|---|
| | | Barnsley | Bassetlaw | Chesterfield |
| Destination | Self-containment | 57% | 61% | 57% |
| | Barnsley | 57% | 0% | 0% |
| | Doncaster | 4% | 8% | 0% |
| | Rotherham | 9% | 4% | 1% |

| | | | | |
|---|---|---|---|---|
| | Sheffield | 10% | 4% | 8% |
| | To other South Yorks LADs | 22% | - | - |
| | To South Yorks LADs | - | 16% | 9% |

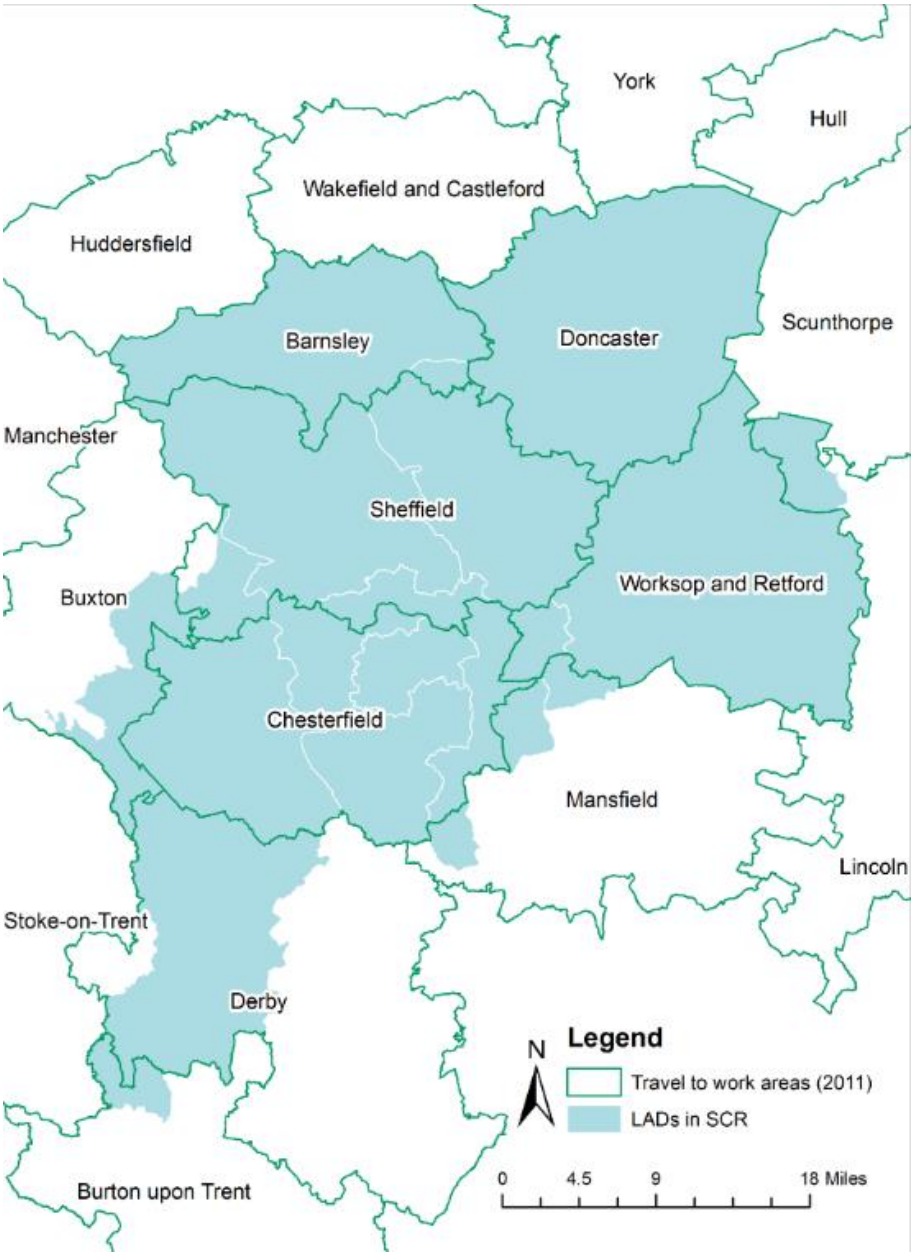
*Source: SQW analysis of Census data*

### *Mapping travel-to-work areas*

C.37 The map below compares the SCR local authorities' boundaries with the 2011 Census travel to work areas (TTWAs). The outer boundary of SCR is relatively well aligned with travel to work boundaries with only minor areas covered by the Lincoln, Mansfield, Burton upon Trent and Buxton TTWAs. There is a major overlap between Derbyshire Dales District and the Derby TTWA though.

- **Chesterfield District** is wholly within the wider Chesterfield TTWA
- **Bassetlaw District** is mainly in the Worksop and Retford TTWA with smaller parts in the NE and SW in the Lincoln and Mansfield TTWAs respectively.

**Figure C-4: Travel to Work areas (2011)**



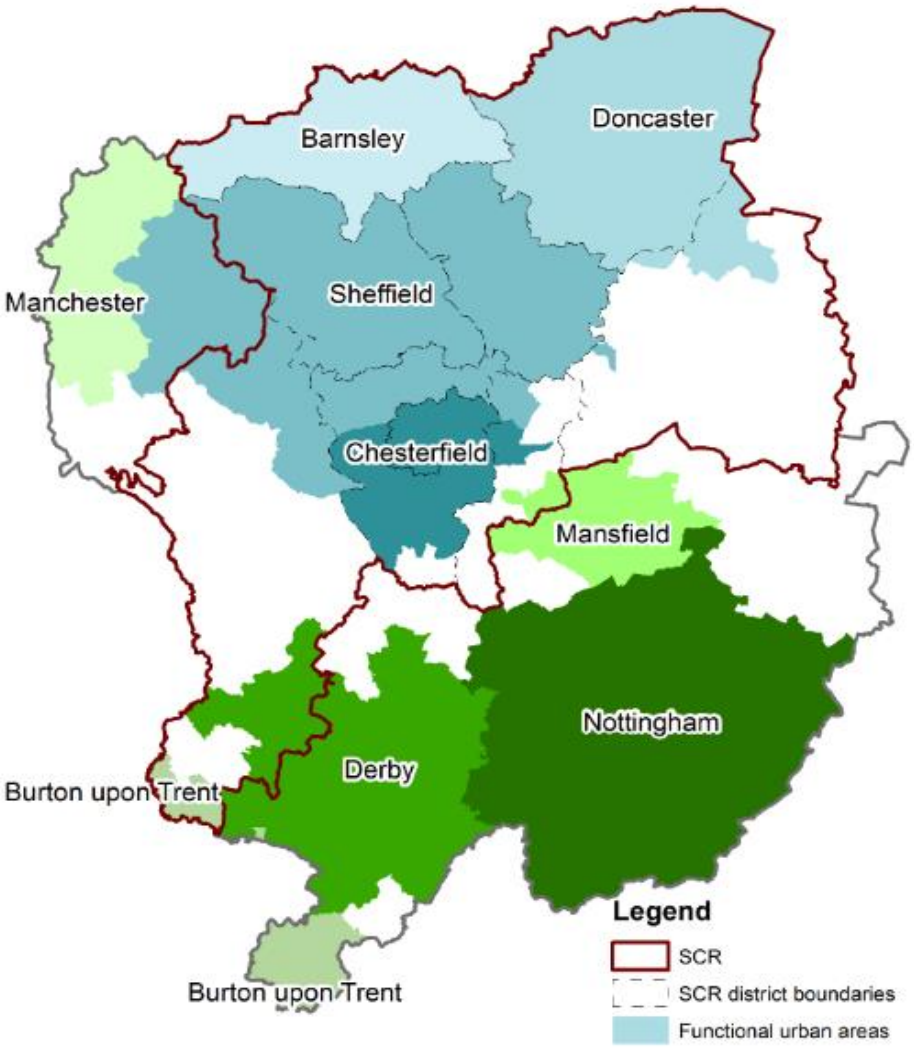

*Source: Produced by SQW 2016. Licence 100030994. Contains OS data © Crown copyright [and database right] [2015]*

C.38 The OECD defined[63] functional urban areas which cover parts of the SCR and D2N2 LEP areas are shown on the map below.[64] Each of these areas is "an economic unit characterised by densely inhabited "urban cores" and "hinterlands" whose labour market is highly integrated with the cores."[65] SCR contains all, or the majority of, the four functional urban areas of Sheffield (classed as a metropolitan area), Barnsley (medium sized urban area), Doncaster (medium sized urban area), and Chesterfield (small urban area). Also, there is a clear

[63] Redefining "Urban": A New Way to Measure Metropolitan Areas, OECD, 2012.
[64] Each functional urban area is an economic unit characterised by densely inhabited "urban cores" and "hinterlands" whose labour market is highly integrated with the cores. Using 2003 Census Statistical Areas as a base, urban cores are defined using population grid data at 1 km$^2$ from the population density disaggregated with Corine Land Cover dataset, produced by the Joint Research Centre for the European Environmental Agency (EEA). Polycentric cores and the hinterlands of the functional areas are identified on the basis of commuting data (travel from home-to-work) referred from the 2001 Census. Two urban cores are considered integrated if more than 15% of the residence population of any of the cores commutes to work in the other core.
[65] http://www.oecd.org/gov/regional-policy/50243581.pdf

distinction between the functional areas of the SCR and those of D2N2 area (illustrated by the band of white across the centre). This analysis was based on 2011 Census data, but the analysis above suggests there is little difference in the scale/direction of TTW flows between 2001 and 2011.

**Figure C-5: Functional urban areas defined by the OECD covering SCR and D2N2**




*Source: Produced by SQW 2016. Licence 100030994. Contains OS data © Crown copyright [and database right] [2015]*

### *Wider evidence gathered on TTW Patterns*

C.39 "According to the literature, SCR is a 'weakly monocentric' city region, and Sheffield is relatively self-contained city (partly reflecting Sheffield being well-bounded). Latest Census data show that 85% of employed residents work in SCR, and 89% of workers in SCR also live in SCR."[66]

[66] SCR Narrative for Northern Powerhouse IER, SQW, 2016

C.40 "Both in absolute and proportionate terms, the flow of people commuting out of the SCR for work is greater than the flow commuting in for work. Based on the 2011 Census, 15% of residents (100,100 people) work outside the city region but 11% of employment (68,500 people) is accounted for by in-commuters. These patterns in part reflect the city region's employment gap, which will result in residents looking for work elsewhere. The key flows out of the city region are north to Leeds and Wakefield and south to Derbyshire and Nottinghamshire local authorities. The travel to work patterns at the local authority level and key points are shown in the figure below."[67]

**Travel to Work Patterns 2011**

| *Residents and place of work* | | | |
|---|---|---|---|
| | **Total** | **Inside SCR** | **Outside SCR** |
| Residents – No. | 683,021 | 582,933 | 100,088 |
| Residents – % | 100% | 85% | 15% |
| *Workers and place of residence* | | | |
| | **Total** | **Inside SCR** | **Outside SCR** |
| Workers – No. | 651,260 | 582,739 | 68,521 |
| Workers – % | 100% | 89% | 11% |

*Source: Census 2011*

C.41 The same report includes the detailed table below.

**Travel to Work Patterns by Local Authority 2011**

| *Residents by place of work* | | | | *Workers by place of residence* | | | |
|---|---|---|---|---|---|---|---|
| | **Within LA** | **Within rest of SCR** | **Outside SCR** | | **Within LA** | **Within rest of SCR** | **Outside SCR** |
| Sheffield | 78% | 13% | 9% | Doncaster | 75% | 14% | 11% |
| | 161,004 | 27,499 | 18,649 | | 79,848 | 15,220 | 11,304 |
| Doncaster | 71% | 14% | 15% | Barnsley | 74% | 14% | 12% |
| | 79,848 | 16,206 | 16,317 | | 49,800 | 9,596 | 7,737 |
| Bassetlaw | 61% | 20% | 19% | Sheffield | 72% | 23% | 5% |
| | 26,770 | 8,644 | 8,392 | | 161,004 | 51,460 | 12,316 |
| Chesterfield | 57% | 30% | 12% | Bassetlaw | 62% | 18% | 19% |
| | 23,428 | 12,276 | 5,069 | | 26,770 | 7,855 | 8,365 |
| Barnsley | 57% | 23% | 20% | Rotherham | 59% | 35% | 6% |
| | 49,800 | 20,206 | 17,587 | | 53,655 | 31,725 | 5,185 |
| Rotherham | 55% | 37% | 8% | Chesterfield | 52% | 39% | 9% |
| | 53,655 | 35,669 | 8,195 | | 23,428 | 17,356 | 4,004 |
| Derbys.Dales | 54% | 14% | 32% | Derbys.Dales | 52% | 19% | 29% |
| | 14,107 | 3,510 | 8,351 | | 14,107 | 5,126 | 8,046 |
| Bolsover | 30% | 32% | 38% | NE Derbyshire | 42% | 49% | 9% |
| | 8,869 | 9,276 | 11,160 | | 9,735 | 11,245 | 2,180 |
| NE Derbyshire | 25% | 58% | 17% | Bolsover | 37% | 25% | 39% |
| | 9,735 | 22,431 | 6,368 | | 8,869 | 5,940 | 9,384 |

*Source: Census 2011*

C.42 "Bolsover and NE Derbyshire have the highest proportion of residents commuting out of their home local authority area for work, with NE Derbyshire residents in particular dependent on employment opportunities in other parts of the city region. Rotherham has the highest number of residents employed elsewhere in the city region."

C.43 "Sheffield is the most important provider of jobs to residents of other city region authorities, with nearly 51,500 people commuting to work in the city from the rest of the city region. In proportionate terms, NE Derbyshire, Chesterfield and Rotherham all have over one-third of total jobs filled by residents from other parts of the city region."

[67] SCR Bulletin: Labour Market, Ekosgen, 2015

C.44 "The level of labour market containment varies across the LEPs; the key points are:

- SCR ranks sixth out of the eleven LEPs in terms of the proportion of residents who work in the area and fourth out of eleven LEPs in terms of the proportion of workers who live in the area."[68]

**Table C-A-5: Labour market containment across different LEPs**

SCR and Peer LEP Travel to Work Patterns 2011

| *Residents by place of work* | | | | *Workers by place of residence* | | | |
|---|---|---|---|---|---|---|---|
| | No. | Within LEP % | Outside LEP % | | No. | Within LEP % | Outside LEP % |
| North Eastern | 738,245 | 93% | 7% | North Eastern | 720,516 | 96% | 4% |
| Leeds City Region | 1,151,148 | 92% | 8% | Humber | 343,111 | 92% | 8% |
| Humber | 353,252 | 89% | 11% | Leeds City Region | 1,152,005 | 92% | 8% |
| Gt. Manchester | 1,032,025 | 88% | 12% | Sheffield City Region | 651,260 | 89% | 11% |
| Tees Valley | 241,611 | 86% | 14% | D2N2 | 743,623 | 89% | 11% |
| Sheffield City Region | 683,021 | 85% | 15% | Liverpool City Region | 539,512 | 86% | 14% |
| Liverpool City Region | 562,713 | 83% | 17% | Tees Valley | 242,138 | 86% | 14% |
| D2N2 | 821,907 | 81% | 19% | West of England | 458,753 | 85% | 15% |
| West of England | 374,493 | 78% | 22% | YNYER | 420,738 | 81% | 19% |
| Gt. Birmingham & Solihull | 707,235 | 77% | 23% | Gt. Manchester | 1,059,711 | 78% | 22% |
| YNYER | 444,368 | 77% | 23% | Gt. Birmingham & Solihull | 739,021 | 74% | 26% |

*Source: Census 2011*

*Source: SCR Bulletin: Labour Market, Ekosgen, 2015*

C.45 As part of the North Derbyshire & Bassetlaw Strategic Housing Market Assessment, travel to work surveys were undertaken in Summer 2013. The results are shown in the table below.[69]

**Table C-A-6: Travel to Work patterns from North Derbyshire & Bassetlaw SHMA household survey (column-origin, row-destination)**

| Location of employment | Bassetlaw | Bolsover | Chesterfield | North East Derbyshire | TOTAL |
|---|---|---|---|---|---|
| Bassetlaw | 26,094 | 1,356 | 321 | 289 | 28,060 |
| Bolsover | 128 | 8,947 | 1,075 | 1,034 | 11,184 |
| Chesterfield | 516 | 2,863 | 23,515 | 6,050 | 32,945 |
| North East Derbyshire | 198 | 1,362 | 3,160 | 12,997 | 17,718 |
| All working in sub-region | 26,936 | 14,529 | 28,071 | 20,370 | 89,906 |
| Derbyshire Dales | 0 | 0 | 0 | 1,220 | 1,220 |
| Amber Valley | 0 | 1,950 | 0 | 1,206 | 3,155 |
| Elsewhere in Derbyshire | 450 | 1,432 | 3,943 | 1,525 | 7,350 |
| Sheffield | 2,342 | 2,309 | 3,816 | 9,122 | 17,590 |
| Rotherham | 1,898 | 440 | 472 | 894 | 3,704 |
| Doncaster | 3,238 | 0 | 0 | 0 | 3,238 |
| Elsewhere in Yorkshire | 0 | 0 | 0 | 1,221 | 1,221 |
| Ashfield | 0 | 1,630 | 0 | 0 | 1,630 |
| Mansfield | 1,021 | 1,836 | 0 | 0 | 2,858 |
| Newark & Sherwood | 1,168 | 0 | 0 | 0 | 1,168 |
| Elsewhere in Nottinghamshire | 1,295 | 2,686 | 2,312 | 1,879 | 8,173 |
| North Lincolnshire | 350 | 0 | 0 | 0 | 350 |
| Elsewhere in Yorkshire & Humber | 1,273 | 812 | 1,221 | 0 | 3,306 |
| West Lindsey | 1,013 | 0 | 0 | 0 | 1,013 |
| Elsewhere in Lincolnshire | 1,428 | 0 | 0 | 0 | 1,428 |
| Elsewhere in the East Midlands | 268 | 974 | 553 | 548 | 2,343 |
| Elsewhere in the UK | 2,545 | 1,643 | 1,764 | 1,600 | 7,553 |
| Abroad | 0 | 45 | 87 | 87 | 218 |
| All working outside sub-region | 18,290 | 15,757 | 14,169 | 19,301 | 67,518 |
| Total | 45,226 | 30,286 | 42,240 | 39,672 | 157,424 |

[68] SCR Bulletin: Labour Market, Ekosgen, 2015
[69] North Derbyshire & Bassetlaw Strategic Housing Market Assessment, 2013. It covers the districts of Bassetlaw, Bolsover, Chesterfield and North East Derbyshire. Chesterfield had 1,952 completed surveys and Bassetlaw 1,877 completed, Response rates of 19.5% and 3.9% to the survey, representing 4.1% and 3.9% of households, respectively.

*Source: North Derbyshire & Bassetlaw Strategic Housing Market Assessment, 2013*

C.46 Note: "Some caution should be exercised in looking at individual results for some areas (notably where cell values are zero). This is because not all options were available to households on the survey forms. For example households in Bassetlaw were not given the option to say they worked in Derbyshire Dales with any such commute being picked up in the elsewhere in Derbyshire category."[70]

**Messages from consultees**

Many Chesterfield businesses are run by people living in south east Sheffield (e.g. Dore). The perception is that ***they choose to commute south into Chesterfield*** (and therefore to work in or establish businesses in Chesterfield) rather than to establish them across Sheffield, because the commute is more pleasant and convenient.

One example of a recent investment was the Post Office. Driven by cost-saving exercises, the decision was made to close the Rotherham Post Office facility and consolidate into Chesterfield. This was influenced by a number of factors including that ***for any worker from Rotherham seeking to continue their employment [at the Chesterfield facility] the commuting distances were acceptable***. This provides an example of how the consolidated activities in Chesterfield are still highly linked to Rotherham.

Anecdotal evidence suggests that Bassetlaw and Chesterfield are 'natural' parts of the SCR labour market. Employers in South Yorkshire will always consider candidates from Bassetlaw and Chesterfield but are less likely to receive applications from Mansfield or Nottingham, for example. Candidates based in Mansfield may be a good fit for the role but are often unlikely to stay for a long time given the larger travel to work distance.

When firms in Bassetlaw and Chesterfield instruct recruiters they would tend to look north to Sheffield/Doncaster and only rarely instruct a second recruiter based in Nottingham.

This holds for jobs with salaries up to £60k (i.e. up to mid management level). Beyond this, larger salaries make relocation possible so these patterns do not always hold.

**Unable to access:**

- TTW patterns by occupation and sector from the 2011 Census
- UCKES Employer Skills Survey data. This data is not available at LAD level, only by LEA which does not map onto LADs in this geography
- Travel to work patterns for key SCR businesses
- Data on vacancies by sector. The Jobcentre Plus Vacancies dataset has been discontinued. The last data available is for November 2012. This has prevented mapping vacancies by sector to supply of skills by sector.
- Vacancy data at LAD level, only available at SCR level
- Further data on recruitment patterns

[70] North Derbyshire & Bassetlaw Strategic Housing Market Assessment, 2013

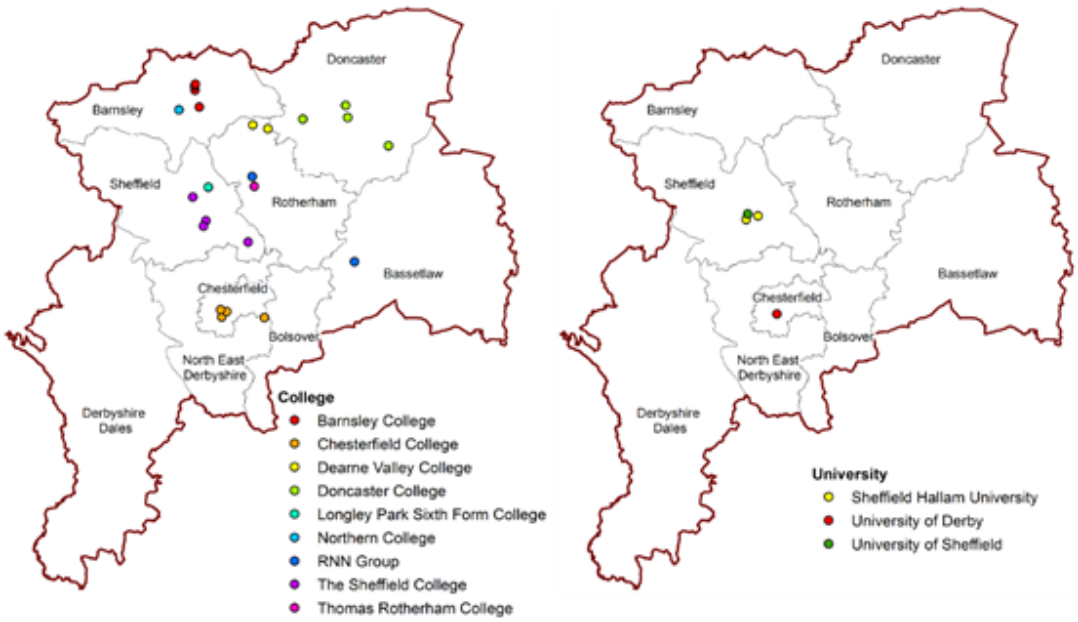
# Annex D: Travel to Learn

D.1 This Annex presents travel to learn data for FE students who live and/or learn in SCR.

## Learning Locations

D.2 The maps below show the FE and HE sites in SCR. Whilst many of the FE providers have multiple campuses, only one has campuses in different districts; the recently formed RNN Group (Rotherham and Bassetlaw).

**Figure D-1: FE and HE sites in SCR**




*Source: Produced by SQW 2016. Licence 100030994, Contains OS data © Crown copyright [and database right] [2015]*

## Learners

D.3 The data below shows where FE learners who live in SCR have their learning delivered. It shows the percentage of *learning aims* delivered within SCR and outside SCR. Note that learning aims are not the same as learners (one learner can have multiple learning aims) but this was the only data made available to SQW by SCR. However, by assuming that most people take the same number of learning aims across districts and providers, illustrative conclusions about travel to learn patterns can be drawn.

**Table D-1: % of learning aims delivered in SCR (2013/14)**

| | Learner home district | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Delivery district | Barnsley | Bassetlaw | Bolsover | Chesterfield | Derbyshire Dales | Doncaster | North East Derbyshire | Rotherham | Sheffield | Total |
| Delivered within SCR | 82 | 59 | 43 | 68 | 36 | 34 | 73 | 76 | 82 | 64 |
| *Of which in Bassetlaw* | *0* | *50* | *7* | *1* | *0* | *1* | *1* | *1* | *0* | *3* |
| *Of which in Chesterfield* | *0* | *1* | *34* | *63* | *34* | *0* | *57* | *0* | *1* | *7* |

| | Learner home district | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Delivery district | Barnsley | Bassetlaw | Bolsover | Chesterfield | Derbyshire Dales | Doncaster | North East Derbyshire | Rotherham | Sheffield | Total |
| *Of which in S. Yorks* | *82* | *8* | *1* | *4* | *2* | *32* | *15* | *75* | *79* | *54* |
| *Of which in SCR 6* | *82* | *59* | *42* | *68* | *36* | *33* | *73* | *76* | *80* | *64* |
| Delivered outside SCR | 18 | 41 | 57 | 32 | 64 | 66 | 27 | 24 | 18 | 36 |

*Source: SQW analysis of data provided by Sheffield City Region*

### *Debate on Travel to Learn Patterns*

D.4 The study team have generated the table below based on information published by Chesterfield Borough Council. The arguments used by Chesterfield BC and Derbyshire CC relating to this information are presented below.

D.5 "Excluding the SCR ESF Skills Support for the Workforce Contract, the College engaged with a total of 11,350 learners… The SCR ESF Skills Support for the Workforce was a contract that specifically targeted the SCR LEP region and therefore the percentage of learners engaged from SCR combined authority increases to 29.8% when the ESF learners are included… as one of the country's largest Apprenticeship providers, apprenticeships accounted for 44% of core provision (excluding ESF)… 36.9% of apprentices live outside of both LEP areas."[71]

**Table D-2: Chesterfield College – travel to learn %s (2014/15)**

| | All areas, exc. ESF | All areas inc ESF | Apprenticeships |
|---|---|---|---|
| Overlapping LADs | 52.6 | 40.3 | 25.9 |
| D2N2 only | 19.6 | 13.9 | 29.8 |
| South Yorkshire | 7.2 | 29.8 | 7.4 |
| Other LADs | 20.5 | 16 | 36.9 |

*Source: SQW analysis of figures in Appendix 7, Membership Of Combined Authorities And Ratification Of The Sheffield City Region Devolution Deal, Chesterfield Borough Council, 2016*

D.6 Other evidence presented by Derbyshire County states that[72]:

- "Less than 1% school aged Derbyshire pupils attend schools in South Yorkshire. Taken alongside travel to work patterns, most people who live in Derbyshire (Chesterfield in this instance), not only learn in Derbyshire (Chesterfield College in this instance) but also work in Derbyshire. Evidence shows that Apprenticeship provision reflects this pattern also. This is an indication of a strong functional economic alignment.
- Chesterfield College is clearly providing a throughput of skills that is feeding the Derbyshire economy, reinforcing the functioning economic geography boundaries. This understanding was confirmed when Chesterfield College announced as part of the SCR Area Based Review into skills provision that it felt it clearly 'looked south' in

[71] Membership Of Combined Authorities And Ratification Of The Sheffield City Region Devolution Deal, Chesterfield Borough Council, 2016
[72] Devolution Briefing, Derbyshire County Council, 2016

its relationship with provision for learners and is currently working with Derby College to consolidate the way in which skills provision is delivered in the D2 area.

- Cementing this inter-relationship in travel to learn patterns is the recent development of a Derby University campus at Chesterfield.

D.7 Other evidence presented by Chesterfield Council states that:

> *Chesterfield College "was selected as the sole lead provider for delivery of the ESF Skills Support for the Workforce contract in the SCR LEP area for 2013/15. This contract successfully delivered provision to 6,291 learners." It "specifically targeted the SCR LEP region and therefore the percentage of learners engaged from SCR combined authority increases … when the ESF learners are included."*[73]

### Skills Made Easy

D.8 The Skills Made Easy programme was launched in 2013 and provides employers with advice on recruiting apprentices and offering training programmes to upskill their workforce. The programme covers all SCR LADs except Derbyshire Dales.[74]

D.9 Some 221 Bassetlaw employers and 186 in Chesterfield have been engaged as part of the programme, representing 11% of all employers engaged and training plans agreed.

**Table D-3: Skills Made Easy employers and training plans by district (2013-2016)**

| | % of employers | % of employers engaged | % of training plans agreed | No. of employers engaged | Number of training plans agreed |
|---|---|---|---|---|---|
| Barnsley | 12 | 7 | 8 | 261 | 373 |
| Bassetlaw | 7 | 6 | 4 | 221 | 173 |
| Chesterfield | 7 | 5 | 7 | 186 | 362 |
| Doncaster | 16 | 17 | 11 | 594 | 545 |
| Rotherham | 14 | 13 | 16 | 436 | 757 |
| Sheffield | 35 | 44 | 44 | 1533 | 2152 |
| SCR 8 total | 100 | 100 | 100 | 3484 | 4844 |

*Source: Skills Made Easy Performance Digest, SCR, 2016*

D.10 In terms of sector of employer engagement, Bassetlaw and Chesterfield are similar to other LADs with retail and business among the most prominent. Hospitality employers were more likely to be engaged in Bassetlaw than across SCR (19% v 11%), whilst engineering was more common in both Bassetlaw and Chesterfield than across SCR (14%, 16% and 10% respectively).

**Table D-4: Percentage of employers engaged by sector (2013-2016)**

| | Bassetlaw | Chesterfield | SCR 8 |
|---|---|---|---|
| Retail | 27 | 22 | 22 |

[73] Appendix 7, Membership Of Combined Authorities And Ratification Of The Sheffield City Region Devolution Deal, Chesterfield Borough Council, 2016
[74] http://www.skillsmadeeasy.org.uk/about-us/

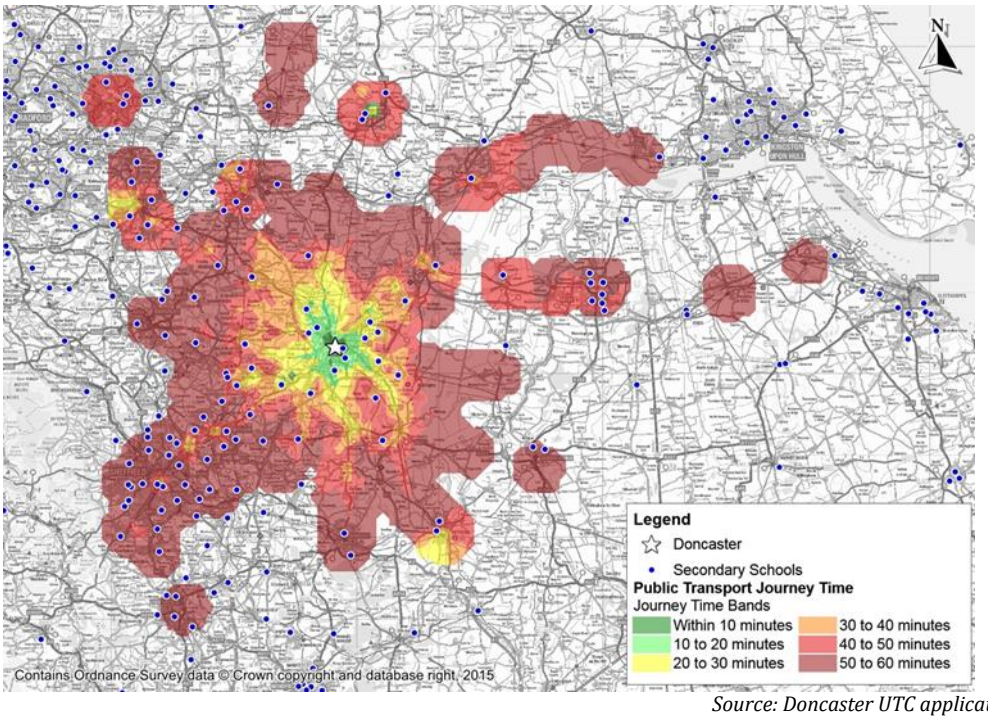
| | Bassetlaw | Chesterfield | SCR 8 |
|---|---|---|---|
| Business | 17 | 16 | 19 |
| Hospitality | 19 | 8 | 11 |
| Engineering | 14 | 16 | 10 |
| Construction | 5 | 8 | 10 |
| Adult care | 7 | 9 | 7 |
| Other care | 4 | 4 | 6 |
| Manufacturing | 3 | 5 | 5 |
| ICT | 1 | 2 | 3 |
| Child care | 0 | 5 | 3 |
| Logistics | 0 | 4 | 2 |
| Finance | 0 | 2 | 2 |
| CDI | 1 | 0 | 1 |

*Source: Skills Made Easy Performance Digest, SCR, 2016*

### *Additional Travel to Learn Evidence*

D.11 The potential catchment area of Doncaster University Technical College (UTC) is shown below. This is based on an analysis of public transport routes up to one-hour travel to learn journey time. "Sheffield UTC is located 23 miles from our proposed location however we would expect to draw primarily from outside their catchment area within the 20-30-minute journey time range."[75]

**Figure D-2: Doncaster UTC potential catchment area**




*Source: Doncaster UTC application form*

[75] Doncaster UTC application form

**Unable to access:**

- SCR's Post 16 Area Based Review and underlying data as this remains confidential until it has been published in the public domain

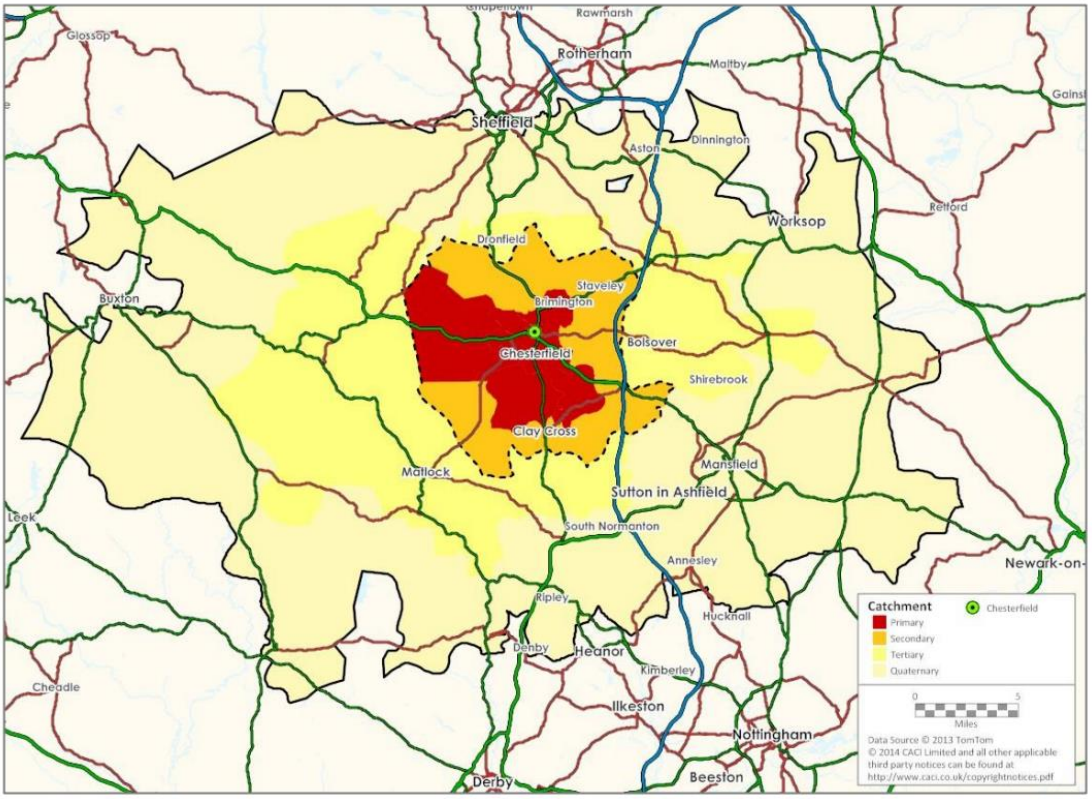
# Annex E: Retail

E.1 This annex presents the key messages from the retail assessments of Chesterfield, Bassetlaw, Sheffield and Doncaster.

## *Chesterfield*

E.2 "A retail assessment of Chesterfield town centre was undertaken by consultants CACI in 2014 [see map below]. Within Chesterfield's wider retail catchment (comprising a total population of 1.1 million people), Meadowhall is the most visited centre securing 16% of shopping trips, followed by Sheffield (15%) and Chesterfield with 9% market share. Nottingham achieves 5% and Derby 2% market share in the retail catchment, emphasising the strength of the functional links to key retail destinations in the SCR as opposed to the large retail centres to the south of the Borough.[76]"

**Figure E-1: Chesterfield retail footprint catchment**



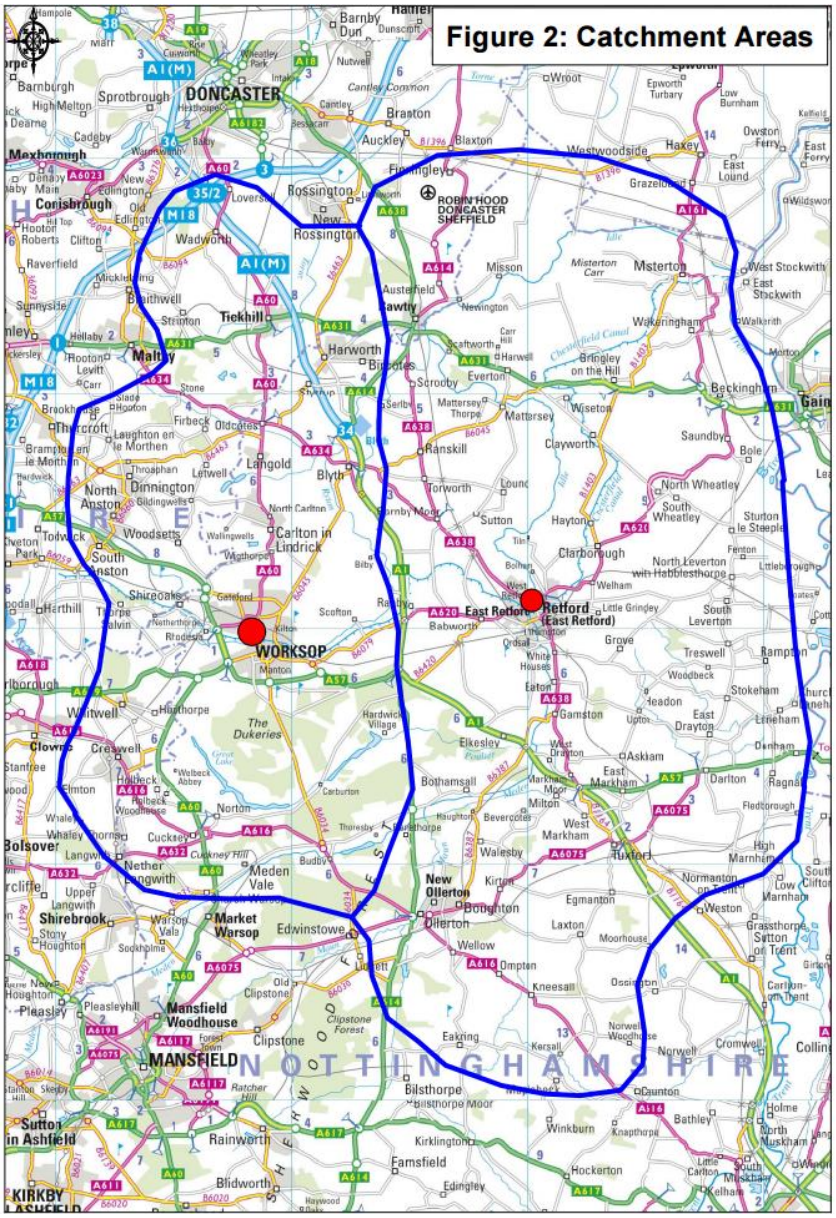

*Source: Chesterfield Retail and Leisure Study, 2015*

## *Bassetlaw*

E.3 The Bassetlaw Retail Needs Assessment identified the two catchment areas shown below.

[76] Appendix 7, Membership Of Combined Authorities And Ratification Of The Sheffield City Region Devolution Deal, Chesterfield Borough Council, 2016

**Figure E-2: Bassetlaw Retail Catchment Areas**

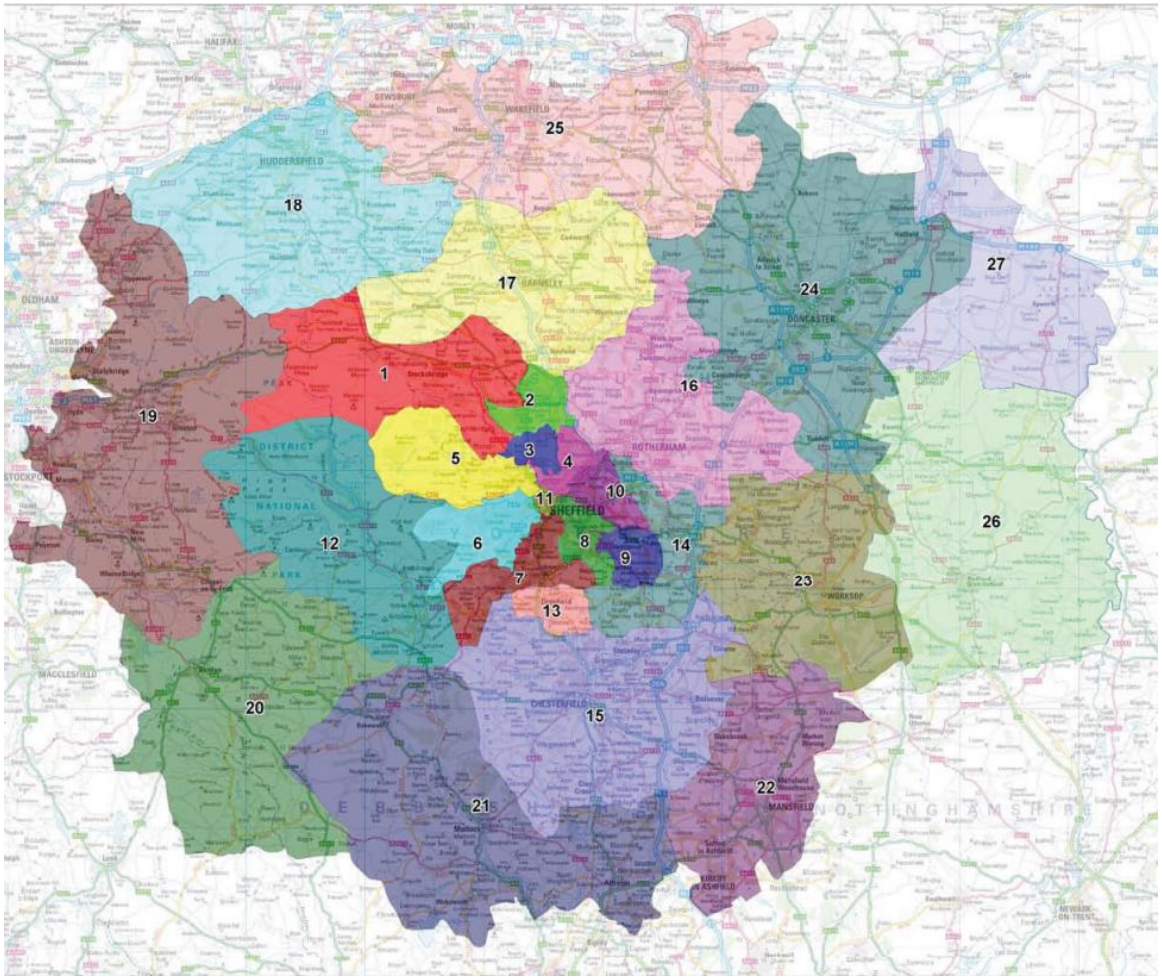



*Source: Bassetlaw Retail Needs Assessment, 2012*

## *Sheffield*

E.4 The Sheffield Retail Capacity Update 2014 identified 27 retail zones, with 1-14 classed as inner area zones and 15-27 as classed as outer area zones. Parts of these outer zones extend into Chesterfield (15) and Bassetlaw (23 and 26).

**Figure E-3: Sheffield retail study area zones**




*Source: Sheffield Retail Capacity Update 2014*

E.5 The table below shows the relationship between two of Sheffield's major retail areas – the city centre and Meadowhall – and the rest of the study area. For each zone, it shows the total expenditure on comparison goods in the two retail areas, and shows this figure as a percent of each zone's total expenditure on comparison goods.

**Table E-1: Comparison goods turnover derived from the study area by zone (2013)**

| | Spend in Sheffield City Centre | | Spend at Meadowhall | |
|---|---|---|---|---|
| **Area of residence** | **£m** | **%** | **£m** | **%** |
| 1 | 23.12 | 35% | 17.64 | 27% |
| 2 | 20.31 | 23% | 29 | 33% |
| 3 | 41.47 | 42% | 21.76 | 22% |
| 4 | 31.64 | 35% | 29.72 | 33% |
| 5 | 53.32 | 43% | 27.54 | 22% |
| 6 | 168.19 | 66% | 17.28 | 7% |
| 7 | 138.5 | 53% | 24.02 | 9% |
| 8 | 67.61 | 46% | 18.12 | 12% |
| 9 | 40.62 | 29% | 17.29 | 12% |

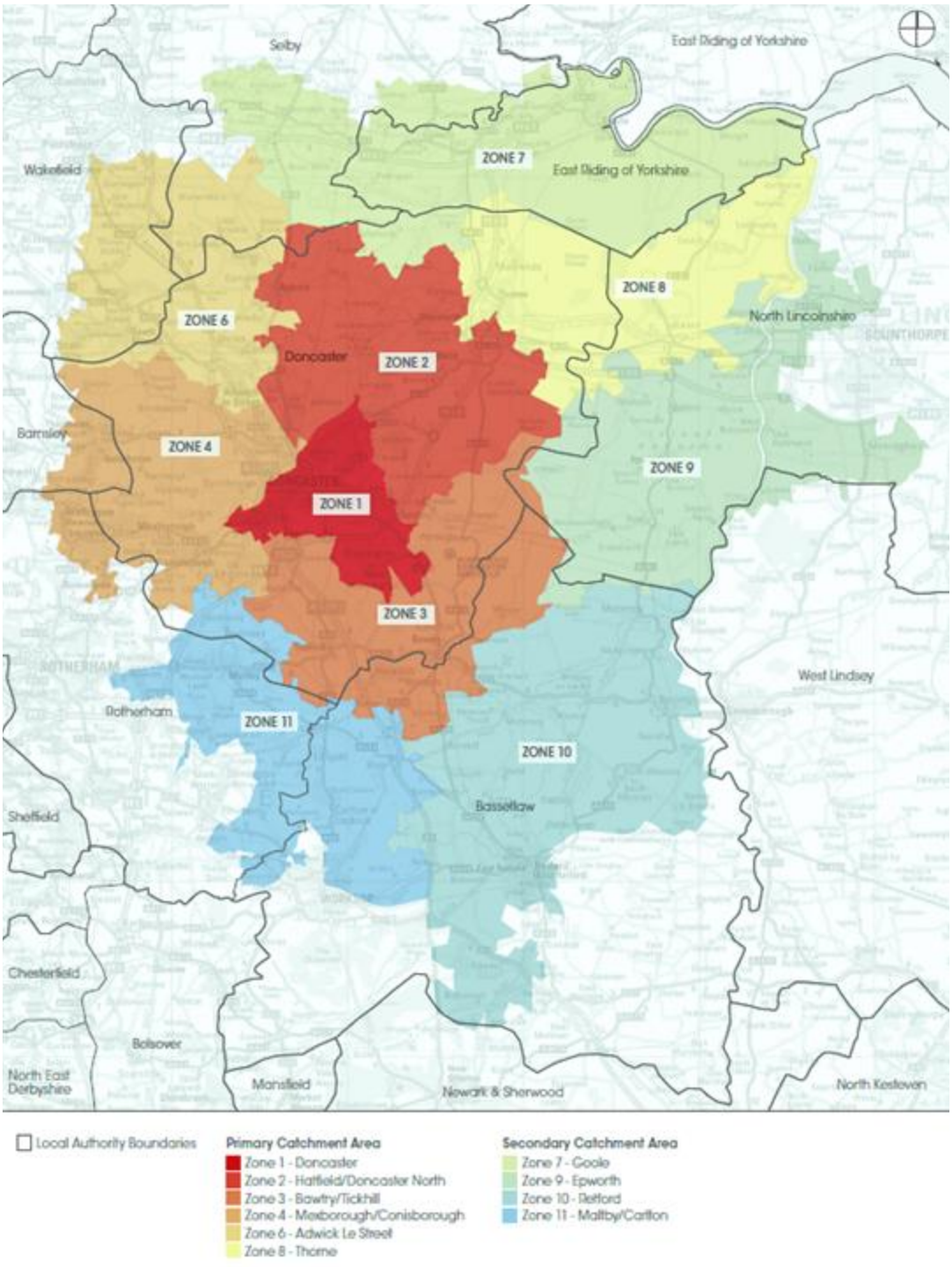
| | Spend in Sheffield City Centre | | Spend at Meadowhall | |
|---|---|---|---|---|
| 10 | 21.49 | 31% | 17.99 | 26% |
| 11 | 38.33 | 61% | 6.19 | 10% |
| 12 | 18.28 | 51% | 1.51 | 4% |
| 13 | 18.33 | 28% | 11.59 | 17% |
| 14 | 18.54 | 13% | 31.6 | 23% |
| **15** | **28.88** | **6%** | **14.76** | **3%** |
| 16 | 47.13 | 8% | 135.96 | 23% |
| 17 | 9.15 | 2% | 79.69 | 15% |
| 18 | 3.63 | 1% | 7.83 | 1% |
| 19 | 10.92 | 2% | 2.22 | 0% |
| 20 | 2.96 | 3% | 0 | 0% |
| 21 | 10.52 | 4% | 11.66 | 4% |
| 22 | 1.98 | 0% | 13 | 3% |
| **23** | **24.8** | **10%** | **36.93** | **14%** |
| 24 | 8.34 | 1% | 19.48 | 3% |
| 25 | 6.96 | 1% | 22.13 | 3% |
| **26** | **4.23** | **3%** | **16.86** | **13%** |
| 27 | 0 | 0% | 3.96 | 4% |
| Total | 859.11 | 11.8% | 635.72 | 8.7% |
| Zones 1-14 | 699.6 | 43% | 271.24 | 17% |
| Zones 15-27 | 159.51 | 3% | 364.48 | 6% |

*Source: Sheffield Retail Capacity Update 2014, GL Hearn*

### *Doncaster*

E.6 The 2015 Doncaster retail study found that a small part of Doncaster's primary catchment area extends into the north of Bassetlaw (zone 3). A much larger part of Bassetlaw is part of Doncaster's secondary catchment area; zones 10 and 11.

**Figure E-4: Doncaster's retail catchment areas**




*Source: Doncaster Retail, Leisure and Town Centres Study, 2015, GVA*

# Annex F: Housing

F.1 This Annex presents evidence relating to housing, including patterns of migration and Strategic Housing Market Area Assessments.

## *Migration Patterns*

F.2 The table below shows migration flows between the districts in SCR. Migration flows of more than 100 people are highlighted in yellow. Other than moves within a district, most of these involves moves to/from Barnsley, Sheffield and Rotherham.

F.3 Moving from Bassetlaw:

- 61.5% move within Bassetlaw
- 4.1% move to Doncaster
- 3.3% move to Sheffield
- 10% move to one of the four constituent member districts

F.4 Moving from Chesterfield:

- 62.1% move within Chesterfield
- 3.6% move to Bolsover
- 3.3% move to Sheffield
- 4.1% move to one of the four constituent member districts

F.5 Moving to the four South Yorkshire LADs:

- 77.6% are moves within South Yorkshire
- 20.5% are in moves from outside SCR
- 0.7% from Bassetlaw and 0.3% from Chesterfield
- Other SCR LADs account for 0.9% in total

**Table F-1: Origin (vertical) and destination (horizontal) of all usual residents who were living at a different address one year before the Census (2011)**

| | Destination | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Barnsley | Bassetlaw | Bolsover | Chesterfield | Derbyshire Dales | Doncaster | North East Derbyshire | Rotherham | Sheffield | Outside SCR |
| Barnsley | 15,044 | 33 | 7 | 7 | 14 | 416 | 32 | 638 | 701 | 3,357 |
| Bassetlaw | 20 | 6,147 | 153 | 41 | 42 | 407 | 22 | 240 | 331 | 2,589 |
| Bolsover | 12 | 199 | 3,395 | 317 | 20 | 21 | 321 | 62 | 106 | 1,998 |

| | Destination | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Barnsley | Bassetlaw | Bolsover | Chesterfield | Derbyshire Dales | Doncaster | North East Derbyshire | Rotherham | Sheffield | Outside SCR |
| Chesterfield | 19 | 73 | 336 | 5,728 | 149 | 21 | 944 | 33 | 301 | 1,619 |
| Derbyshire Dales | 4 | 14 | 40 | 201 | 3,197 | 9 | 130 | 3 | 259 | 2,502 |
| Doncaster | 348 | 359 | 31 | 31 | 34 | 22,290 | 16 | 716 | 586 | 5,638 |
| North East Derbyshire | 26 | 40 | 292 | 890 | 142 | 18 | 3,243 | 81 | 745 | 1,443 |
| Rotherham | 677 | 275 | 82 | 69 | 22 | 809 | 90 | 14,765 | 1,500 | 3,070 |
| Sheffield | 878 | 219 | 151 | 331 | 206 | 583 | 953 | 1,545 | 52,897 | 13,651 |
| Outside SCR | 3,278 | 2,304 | 1,777 | 1,365 | 2,441 | 4,860 | 1,323 | 2,129 | 19,951 | - |

*Source: SQW analysis of Census data*

### *Comparison with Barnsley*

F.6 Comparing migration flows from Bassetlaw and Chesterfield to those from Barnsley shows whether or not these flows are in line with those of existing Combined Authority members. Of those who originally lived in Barnsley, 9% moved to the three other South Yorkshire districts; a very similar percentage to the 10% who moved to South Yorkshire from Bassetlaw. The equivalent figure for Chesterfield is roughly half of this at 4%.

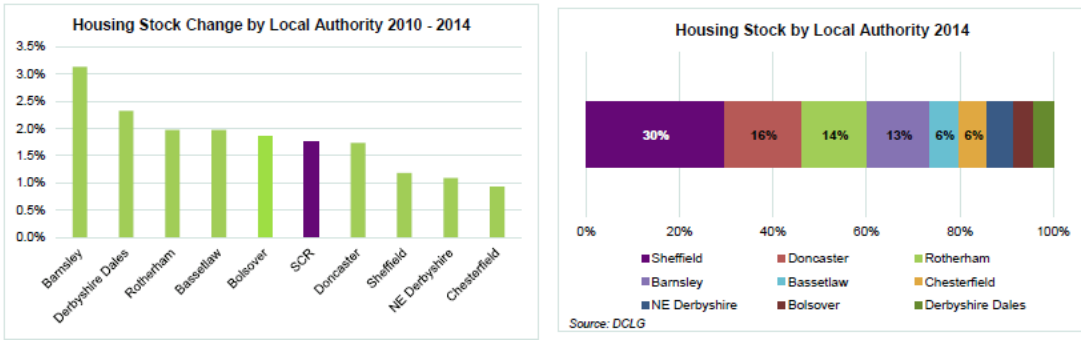
**Table F-2: Origin and destination of all usual residents who were living at a different address one year before the Census (2011)**

| | | Address one year ago (origin) | | |
|---|---|---|---|---|
| | | Barnsley | Bassetlaw | Chesterfield |
| Current usual residence (destination) | Self-containment | 74% | 62% | 62% |
| | Barnsley | 74% | 0% | 0% |
| | Doncaster | 2% | 4% | 0% |
| | Rotherham | 3% | 2% | 0% |
| | Sheffield | 3% | 3% | 3% |
| | To other South Yorkshire LADs | 9% | - | - |
| | To South Yorkshire LADs | - | 10% | 4% |

*Source: SQW analysis of Census data*

F.7 Bassetlaw and Chesterfield account for 12% of the housing stock in SCR – in line with the % of SCR's population they are home to. Between 2010-2014, housing stock in Bassetlaw increased by 2% but Chesterfield had lower growth (0.9%)

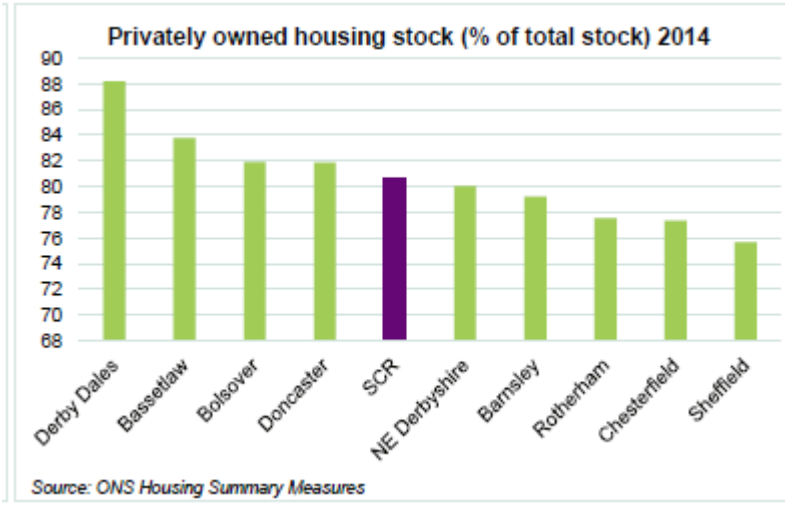
**Figure F-1: Housing stock in SCR (2014)**




Source: SCR Bulletin: Housing, Ekosgen, 2015

F.8 Privately owned housing makes up a greater percentage of all stock in Bassetlaw than the SCR average. The opposite is true for Chesterfield.

**Figure F-2: SCR privately owned housing stock (2014)**



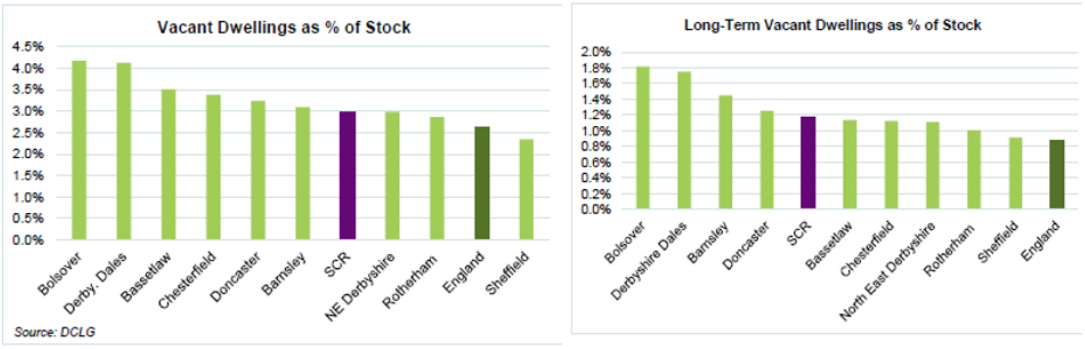

*Source: SCR Bulletin: Housing, Ekosgen, 2015*

F.9 "In 2014 there were 24,000 vacant dwellings in SCR, and the number has declined since 2011 (5,200 fewer vacancies). As a percentage of total housing stock, SCR has a vacancy rate of 3%. Although this slightly exceeds the national average of 2.6%, there is a need for some level of vacancies within the housing market to enable the market to function effectively."

F.10 "Long-term vacancies (6 months+) provide a better measure of potential demand issues within the housing market. The number of long-term vacant dwellings in SCR has been in decline since around 2008 although, again, the rate of decline has been less dramatic than in England as a whole. All the SCR local authorities have levels of long-term vacant stock that are above the national average."[77]

[77] SCR Bulletin: Housing, Ekosgen, 2015

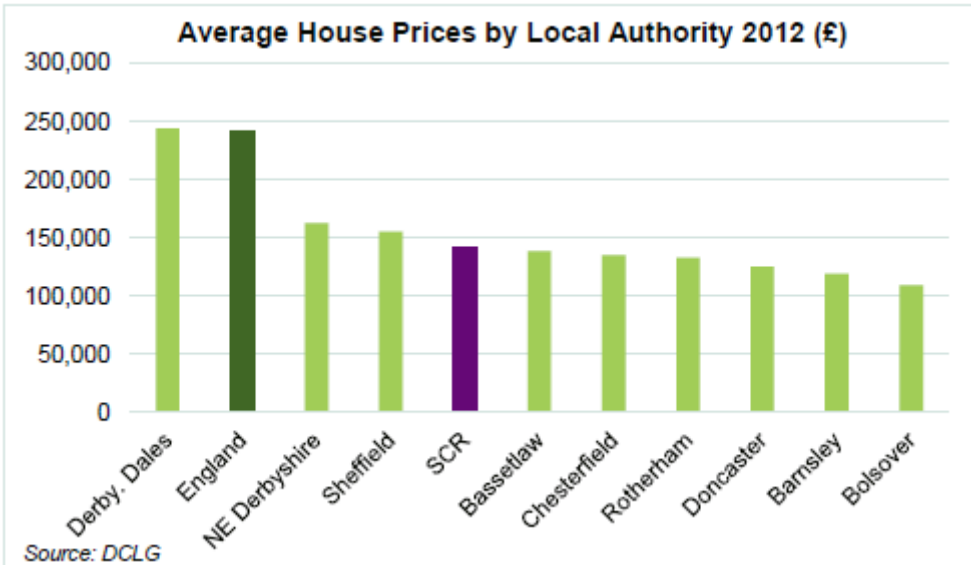
**Figure F-3: Vacant dwellings**




*Source: SCR Bulletin: Housing, Ekosgen, 2015*

F.11 On average, house prices in SCR are lower than in England. Bassetlaw and Chesterfield have lower average house prices than SCR.

**Figure F-4: SCR house prices (2012)**




*Source: SCR Bulletin: Housing, Ekosgen, 2015*

F.12 Comparing the ration of private and social rental prices to earnings, Bassetlaw is more affordable than the SCR average.

**Table F-3: Housing Affordability**

| Private Sector: Average Rental Prices and Ratio to Earnings 2014 | | |
|---|---|---|
| | Av. Monthly Rent (£) | Rent as % av. Earnings* |
| Sheffield | 525 | 32.0 |
| Derbyshire Dales | 595 | 31.4 |
| North East Derbyshire | 495 | 29.3 |
| Chesterfield | 475 | 29.3 |
| SCR av.** | 487 | 29.1 |
| Rotherham | 451 | 28.8 |
| Doncaster | 475 | 28.6 |
| Bolsover | 450 | 28.5 |
| Bassetlaw | 475 | 27.1 |
| Barnsley | 443 | 26.7 |
| *Source: ONS Housing Summary Measures*<br>***Based on average of the 9 LA's*<br>**Median gross monthly salary* | | |

| Social Housing for private registered providers: Average Rental Prices and Ratio to Earnings 2014 | | |
|---|---|---|
| | Av. Weekly Rent (£) | Rent as % 10th percentile earnings |
| Chesterfield | 84 | 75.1 |
| Barnsley | 83 | 65.4 |
| Doncaster | 79 | 65.1 |
| Sheffield | 76 | 64.2 |
| SCR av.* | 82 | 64.0 |
| Bassetlaw | 83 | 63.8 |
| North East Derbyshire | 86 | 58.6 |
| Rotherham | 78 | 56.0 |
| Derbyshire Dales | 88 | - |
| Bolsover | 86 | - |
| *Source: ONS Housing Summary Measures*<br>**Based on average of the 7 LA's with a value available*<br>*- Data not available* | | |

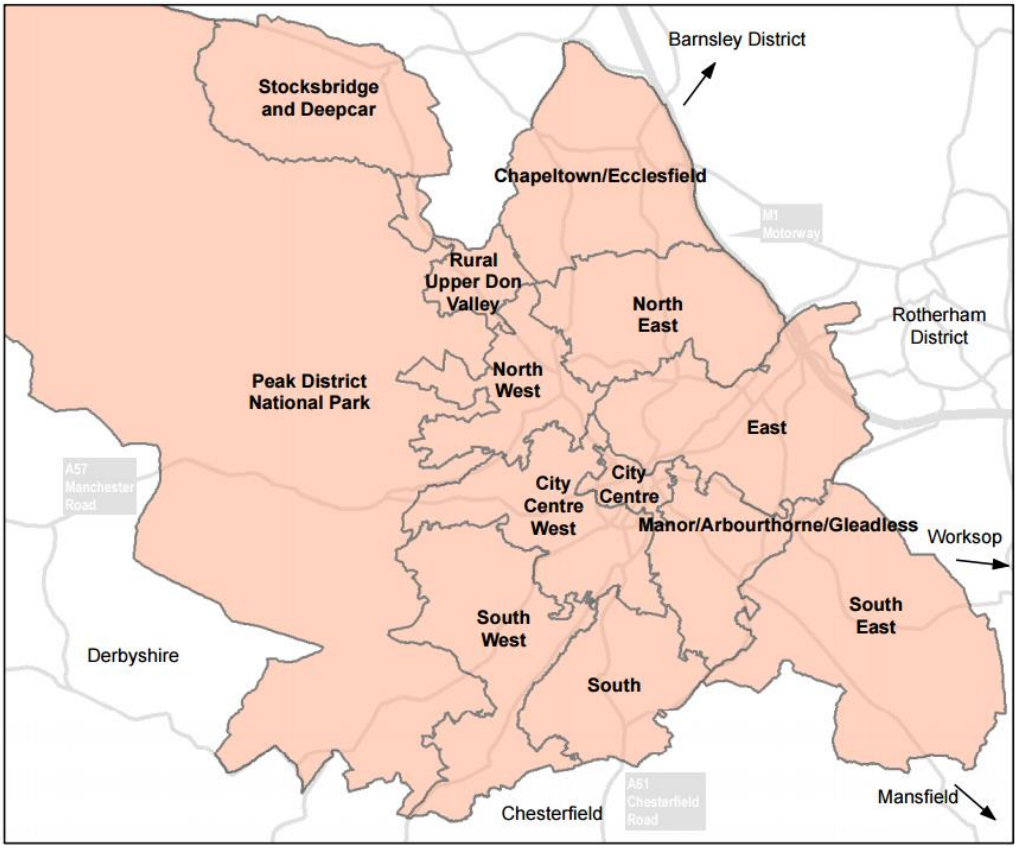
Source: SCR Bulletin: Housing, Ekosgen, 2015

## *Strategic Housing Market Assessments*

### *Sheffield*

F.13 The **Sheffield Strategic Housing Market Assessment** recognised that Sheffield is a self-contained housing market area, with 73% of moves taking place within the city boundary. Thirteen Housing Market Areas were identified within Sheffield as shown below.

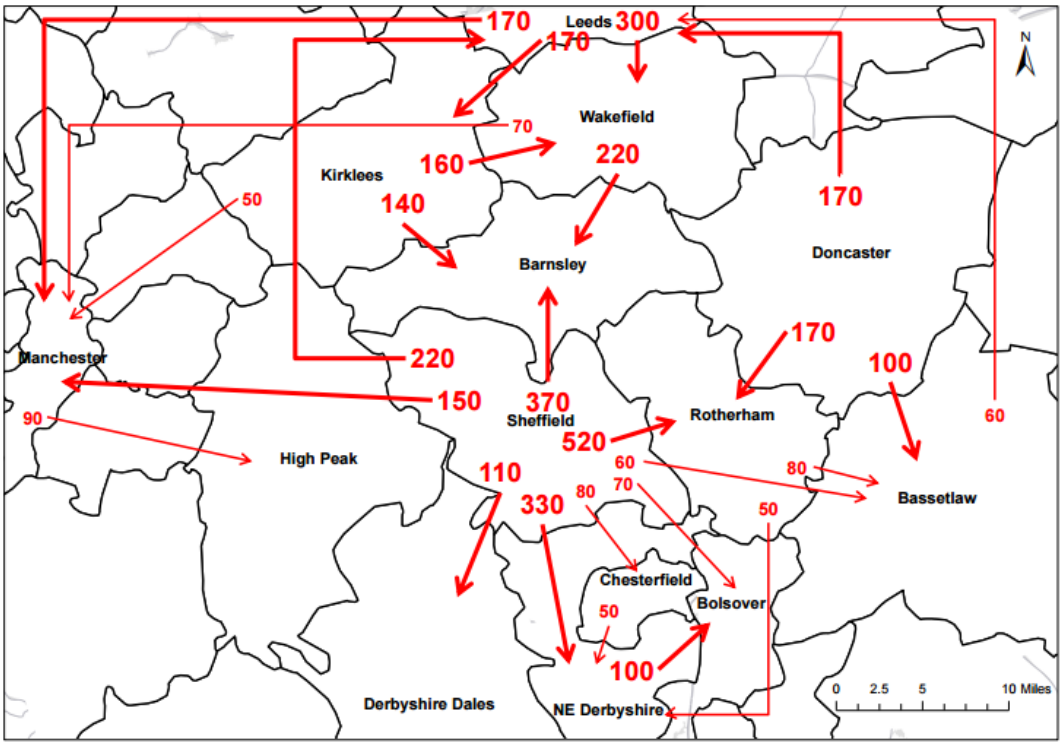
**Figure F-5: Map of the thirteen Housing Market Areas in Sheffield**




*Source: Sheffield Strategic Housing Market Assessment, 2013*

F.14 Sheffield has a net loss of population to its surrounding districts, as shown on the map below. However, Sheffield gains population from those making long-distance moves and international migrants, with around 6-7,000 net international migrants per year (although this includes international students).

**Figure F-6: Net flows of migrants between surrounding districts (year to June 2012)**




*Sheffield Strategic Housing Market Assessment, 2013, using ONS Migration Statistics Unit, Internal Migration by Local Authorities in England and Wales, Year ending June 2012.*

F.15 The top twenty origins and destinations of migrants to and from Sheffield are shown in the table below.

**Table F-4: Top 20 origins and destinations for internal migrants to and from Sheffield, year to June 2012**

| Rank | Destinations | | Origins | |
|---|---|---|---|---|
| | Name | Number of migrants | Name | Number of migrants |
| 1 | Rotherham | 2020 | Rotherham | 1500 |
| 2 | North East Derbyshire | 1040 | Leeds | 780 |
| 3 | Barnsley | 1020 | North East Derbyshire | 710 |
| 4 | Leeds | 1000 | Barnsley | 650 |
| 5 | Manchester | 610 | Doncaster | 550 |
| 6 | Doncaster | 520 | Manchester | 460 |
| 7 | Birmingham | 470 | Birmingham | 400 |
| 8 | Scotland (country) | 380 | Scotland (country) | 330 |
| 9 | Chesterfield | 360 | Nottingham | 320 |
| 10 | Nottingham | 330 | Bradford | 320 |
| 11 | Kirklees | 290 | East Riding of Yorkshire | 300 |
| 12 | Bassetlaw | 280 | Kirklees | 280 |
| 13 | Newcastle upon Tyne | 280 | Chesterfield | 280 |
| 14 | East Riding of Yorkshire | 270 | Leicester | 260 |
| 15 | Stockport | 260 | Stockport | 250 |
| 16 | York | 250 | York | 240 |
| 17 | Derby | 250 | Newcastle upon Tyne | 240 |
| 18 | Bradford | 250 | Trafford | 230 |
| 19 | Derbyshire Dales | 240 | Wirral | 220 |
| 20 | Bolsover | 230 | Derby | 220 |

*Source: Sheffield Strategic Housing Market Assessment, 2013, using ONS Migration Statistics Unit, Internal Migration by Local Authorities in England and Wales, Year ending June 2012.*

F.16 The Sheffield SMHA conducted a survey on expected future migration, the results are shown below.

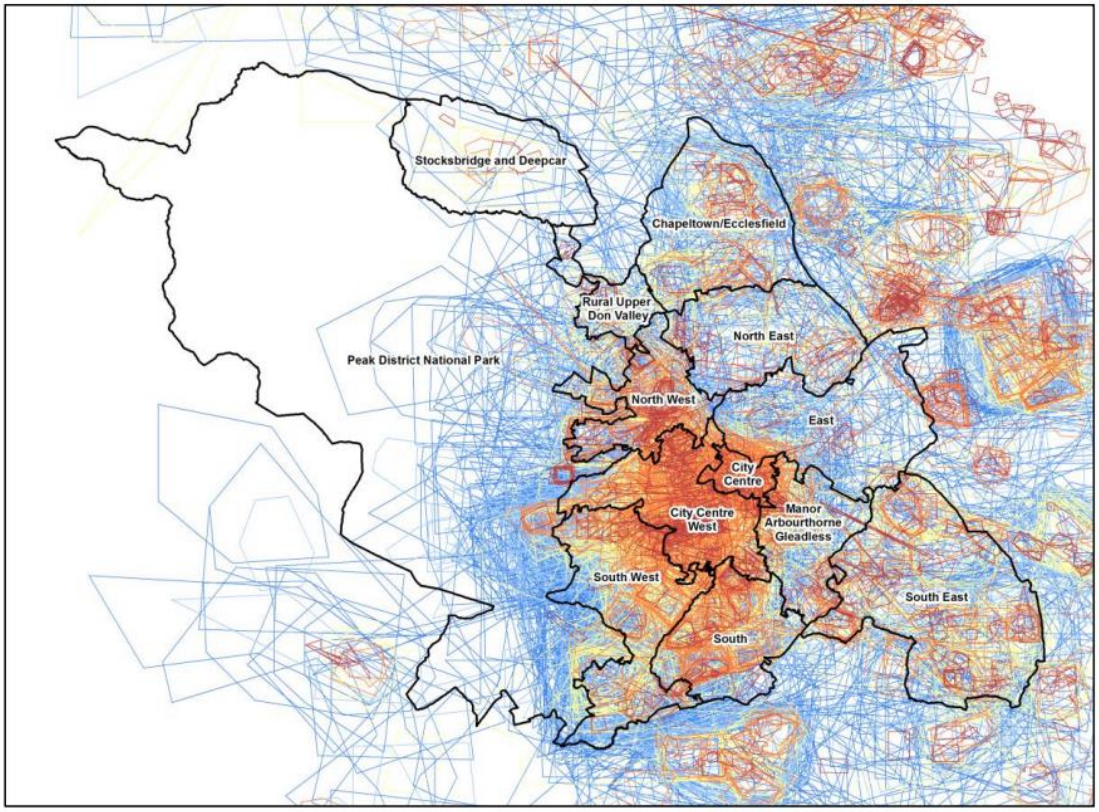
**Table F-5: Survey results on expected migration from Sheffield**

| Where do you expect to move to? | Within next 5 years | Per annum over the next 5 years |
|---|---|---|
| Derbyshire | 1205 | 241 |
| Rotherham District | 755 | 151 |
| Peak District | 725 | 145 |
| Chesterfield | 425 | 85 |
| Worksop | 379 | 76 |
| Barnsley District | 225 | 45 |

*Source: Sheffield Strategic Housing Market Assessment, 2013*

F.17 The map is an analysis of housing search areas on Rightmove.com by those living within the Sheffield Housing Market Area.

**Figure F-7: Analysis of house search areas on Rightmove.com**




*Source: Analysis of data provided by Rightmove.com in Sheffield Strategic Housing Market Assessment, 2013*

### *North Derbyshire and Bassetlaw*

F.18 The North Derbyshire and Bassetlaw Housing Market Area Assessment identified a functional housing covering the local authorities of Bassetlaw, Bolsover, Chesterfield and North-East Derbyshire. When defining the study area, it was concluded that: *"Overall the evidence does point towards a set of relationships towards the larger economic centres to the north, such as Sheffield, Rotherham and Doncaster in economic terms (e.g. commuting flows); but suggests that in terms of household movement a lot of this is much more localised – and has become increasingly so since 2007. … The migration evidence in particular and market characteristics point towards a different set of circumstances within the North Derbyshire and Nottinghamshire area relative to the larger urban centres to the north. We therefore consider that this represents an appropriate functional housing market area, albeit that it should be recognised that there are economic links more widely across the City Region."*[78]

[78] North Derbyshire & Bassetlaw Strategic Housing Market Assessment, GL Hearn, 2013

**Figure F-1: Map of the North Derbyshire and Bassetlaw Housing Market Area**


*Source: North Derbyshire and Bassetlaw Housing Market Area Local Investment Plan, 2010*

### *Doncaster*

F.19 The Doncaster Housing Need Assessment 2015 concluded that "Doncaster has a self-contained housing market area…with no evidence to suggest other areas should be considered to be part of Doncaster's HMA." It also noted that Doncaster shares "major population transfers" with Bassetlaw and that the two have a "strong mutual ties."[79]

### *Rotherham*

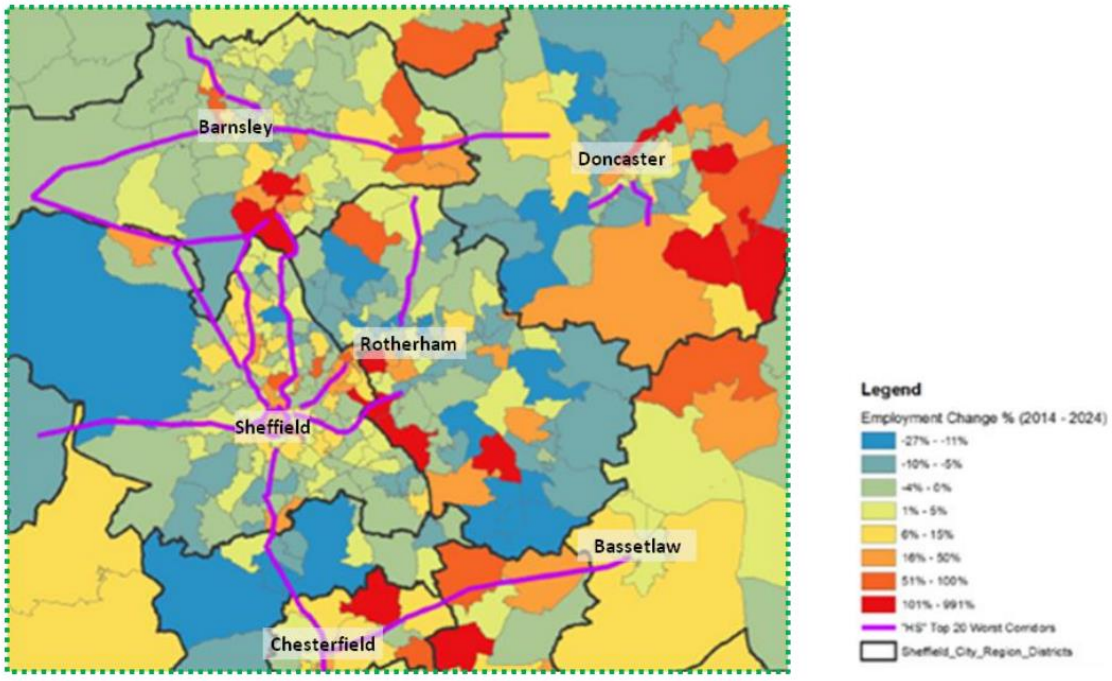
F.20 The Rotherham SHMA found that 73% of moves within Rotherham originate in the borough, meaning that it is a relatively self-contained housing market area. However, it notes that a self-containment of 67% for owner occupiers *"reflects the importance of the shared Sheffield-Rotherham market area particularly for working age households seeking family housing."*[80]

[79] Doncaster Housing Need Assessment, 2015
[80] Rotherham Strategic Housing Market Assessment, 2015

# Annex G: Transport and Connectivity

G.1 The map below shows the twenty worst corridors of congestion in SCR.

**Figure G-1: The 20 worst corridors of congestion in SCR and expected employment change for 2014-2024**



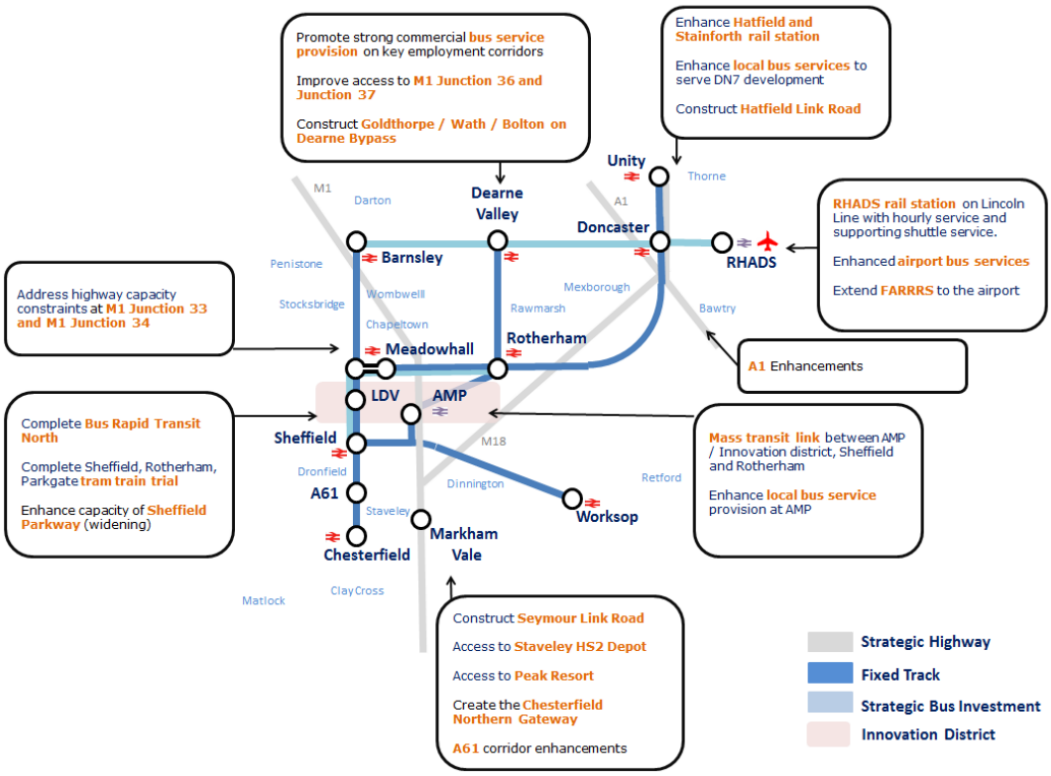

*Source: Sheffield City Region Integrated Infrastructure Plan, 2016*

G.2 "Evidence suggests that without intervention, increased congestion resulting from growth could impede on the economic potential of the City Region. SCR will seek to address this through the interventions set out in the spatial packages."[81]

G.3 The map below sets out some of the solutions identified for transport and connectivity in the Sheffield City Region Integrated Infrastructure Plan.

[81] Sheffield City Region Integrated Infrastructure Plan, 2016

**Figure G-2: SCR Connectivity map**




*Source: Sheffield City Region Integrated Infrastructure Plan, 2016*

G.4 Issues identified that relate to Chesterfield and Bassetlaw within SCR include:

- "Key junction capacity challenges exist in a number of areas, particularly Junctions 28 & 33-35 on the M1
- Over-crowding – constraints exist between Sheffield and Leeds via Swinton, Dronfield and Chesterfield via Midland Mainline, and via Hope Valley.
- Rotherham lacks a mainline rail connection, whilst Worksop suffers from infrequent services."[82]

G.5 There is also a focus on the A61 Corridor 'Growth Area' identified in the SEP: "*the A61 links a number of major mixed-use development sites with significant regeneration and job creating potential.*"[83] For which the key spatial recommendations in the Sheffield City Region Integrated Infrastructure Plan are: *"Address transport capacity issues on the A61, A619 and A617; Provide infrastructure to support 'The Avenue' and 'Staveley Works' developments."*[84]

[82] Sheffield City Region Integrated Infrastructure Plan, 2016
[83] Sheffield City Region Integrated Infrastructure Plan, 2016
[84] Sheffield City Region Integrated Infrastructure Plan, 2016

**Figure G-3: Seven identified SEP Growth Areas**


*Source: Sheffield City Region Integrated Infrastructure Plan, 2016*

## *Travel Times*

G.6 The table below shows the travel times from Chesterfield to Sheffield and major employment centres in the D2N2 LEP area.

**Table G-1: Travel times from Chesterfield**

| | Distance (miles) | Fastest train time (mins) | Average drive time (mins) |
|---|---|---|---|
| Chesterfield-Sheffield | 13 | 12 | 30-50 |
| Chesterfield-Mansfield | 12 | 100 | 20-40 |
| Chesterfield-Derby | 25 | 17 | 50-65 |
| Chesterfield-Nottingham | 26 | 37 | 40-70 |

*Source: National Rail enquiries for trains leaving after 7am and Google for journey starting at 8.10am*

G.7 The table below shows the travel times from Worksop and Retford (both in Bassetlaw) to Sheffield, Doncaster and major employment centres in the D2N2 LEP area.

**Table G-2: Travel times from Worksop and Retford**

| | Distance (miles) | Fastest train time (mins) | Average drive time (mins) |
|---|---|---|---|
| Worksop-Sheffield | 19 | 33 | 40-65 |
| Worksop-Doncaster | 19 | 53 | 35-45 |

| | Distance (miles) | Fastest train time (mins) | Average drive time (mins) |
|---|---|---|---|
| Worksop-Mansfield | 14 | 31 | 30-40 |
| Worksop-Nottingham | 30 | 67 | 65-90 |
| Retford-Doncaster | 18 | 14 | 40-45 |
| Retford-Sheffield | 29 | 44 | 55-75 |
| Retford-Mansfield | 20 | 68 | 40-45 |
| Retford-Nottingham | 31 | 102 | 60-80 |

*Source: National Rail enquiries for trains leaving after 7am and Google for journey starting at 8.10am*

### Bus Routes

G.8 Examination of main bus services in and out of Chesterfield main services show they are either:

- within Chesterfield
- to neighbouring towns and destinations within Derbyshire
- to Sheffield (via Dronfield and other Derbyshire settlements on the border with South Yorkshire)

G.9 In terms of frequent and regular bus journeys (those with a journey scheduled every hour on weekdays – i.e. commuting journeys):

- 44 services leave Chesterfield to wider destinations.
- 35 buses (80%) travel to destinations within the North Midlands.
- 9 bus journeys (20%) per hour leave Chesterfield and travel towards Sheffield – however, it is not possible to identify how many people get on or off the bus before the Derbyshire/ South Yorkshire border

G.10 Frequency and timing of bus services are indications of how 'commercial' bus routes are. The above information provides evidence that the popular commuter bus services are within the North Midlands boundary."[85]

### Train Services

**Table G-3: Peak time trains (journey start after 7am and end before 10am)**

| | | Destination | | |
|---|---|---|---|---|
| | | Sheffield | Derby | Nottingham |
| **Origin** | Chesterfield | 17 | 13 | 10 |
| | Worksop | 4 | 3 | 2 |
| | Retford | 3 | 3 | 2 |

*Source: Devolution Briefing, Derbyshire County Council, 2016 [Chesterfield figures] and National Rail Enquiries*

[85] Devolution Briefing, Derbyshire County Council, 2016

G.11 The table below shows all station entries and exits at mainline stations in Chesterfield and Bolsover.

**Table G-4: Total station entry and exits**

| | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
|---|---|---|---|---|---|
| Chesterfield | 1,466,000 | 1,490,500 | 1,499,000 | 1,565,000 | 1,640,500 |
| Retford | 400,000 | 409,500 | 418,000 | 431,500 | 456,000 |
| Shireoaks | 30,000 | 32,000 | 33,000 | 36,500 | 35,500 |
| Worksop | 458,000 | 464,000 | 450,500 | 453,000 | 457,500 |

*Source: Office of Rail & Road*

G.12 The table below shows annual rail passenger flows on Northern services between stations in Chesterfield and Bolsover and all stations in South Yorkshire. Note that this is for Northern Rail services only so will exclude any trips made on East Midlands Trains (this includes some Sheffield-Chesterfield services) and Virgin East Coast (some Sheffield-Retford services). These figures will therefore understate the flows, potentially considerably in relation to Chesterfield where Northern Rail operates a slower, stopping service compared to the fast trains run by rival operators.

**Table G-5: Passenger travel on Northern Rail Services in financial years 2014/15 and 2015/16**

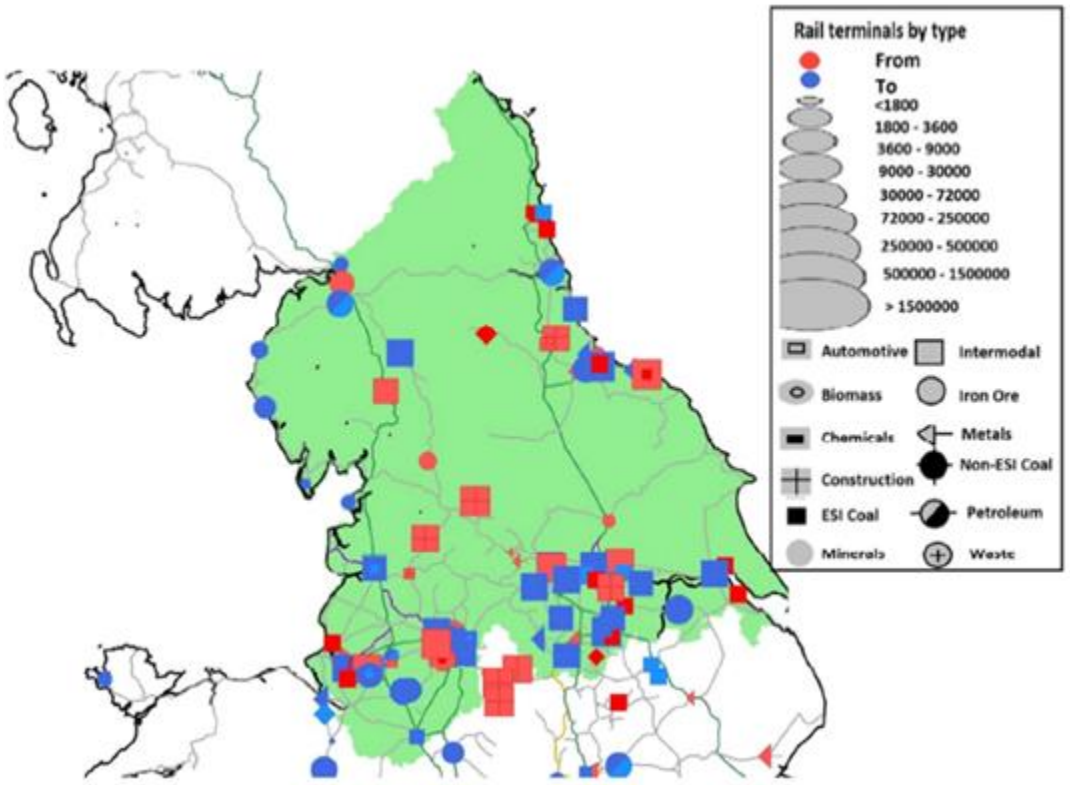
| | Origin | | | |
|---|---|---|---|---|
| | **Chesterfield** | **Retford** | **Shireoaks** | **Worksop** |
| Destination: South Yorkshire 2014/15 | 139,000 | 21,000 | 13,000 | 110,000 |
| Destination: South Yorkshire 2015/16 | 146,000 | 23,000 | 12,000 | 106,000 |
| | **Destination** | | | |
| | **Chesterfield** | **Retford** | **Shireoaks** | **Worksop** |
| Origin: South Yorkshire 2014/15 | 47,000 | 5,000 | 5,000 | 31,000 |
| Origin: South Yorkshire 2015/16 | 47,000 | 5,000 | 5,000 | 30,000 |

*Source: SYPTE Lennon data*

### *Rail freight*

G.13 There is a concentration of rail terminals in and around the SCR LEP area.

**Figure G-4: Rail terminals in the north of England by type**




*Source: Transport for the North Freight and Logistics Strategy: Baseline Report, Mott McDonald, 2015*

## *High Speed Rail*

G.14 The future location of the HS2 station in SCR has not been decided although an SCR document makes the case for a city centre station at Victoria, rather than a parkway station at Meadowhall, as this would bring more jobs and GVA. It finds that a station at Victoria would support 9,700 to 12,600 jobs. The document states that "because the overall quantum of jobs is so much higher[with a station at Victoria compared to Meadowhall], each district in the city region receives at least three times as many jobs from a station at Victoria compared with Meadowhall." [86]

G.15 Chesterfield and Bassetlaw are both expected to benefit from this, especially if the station is located at Victoria as the maps below show. Note that this analysis assumes the take-up of net additional jobs matches the current distribution of residence of those who currently work at the two station locations. This is based on the 2001 Census Travel to Work data as the 2011 Census Travel to Work data was not available at that time.

[86] High Speed Rail: Route and Station Location in Sheffield City Region, SCR, 2015

**Figure G-5: Net additional jobs created by an HS2 station at Victoria or Meadowhall**

*Figure 3: Net additional jobs created at Victoria by area of Residence (ie where workers commute from)*

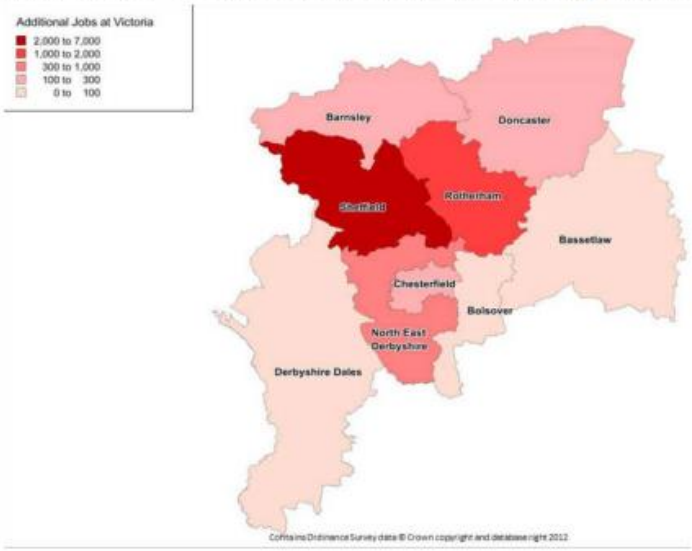
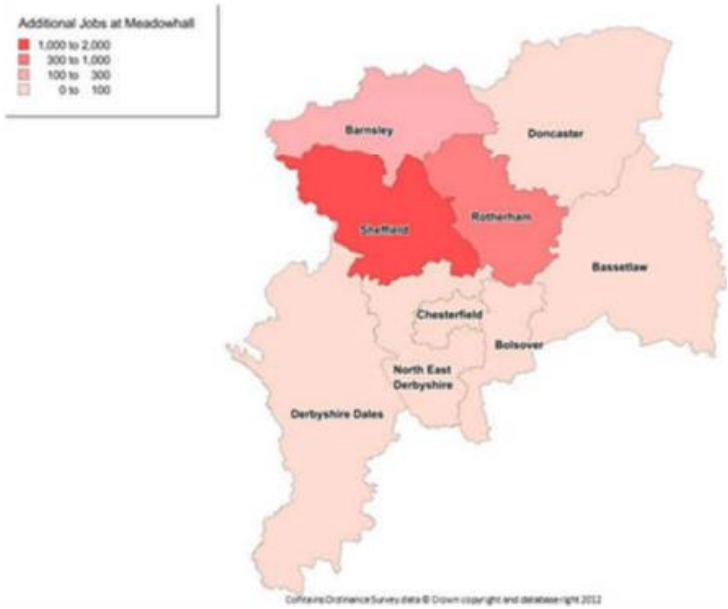



*Figure 4: Net additional jobs created at Meadowhall by area of Residence (ie where workers commute from)*




*Source: High Speed 2 – station location analysis Technical Note, Volterra Partners, 2014*

### *Other issues*

G.16 "The lack of supply of quality small industrial units hinders micro business start-ups and is exacerbated by the lack of provision of 'move-on' space for Bassetlaw's existing business base."[87]

**Unable to access:**

- Data on rail freight movement at LAD level
- Movement of goods/services between businesses by LAD

[87] Regeneration and Growth Strategy 2014-2028, Bassetlaw District Council

# Annex H: Challenges Facing SCR

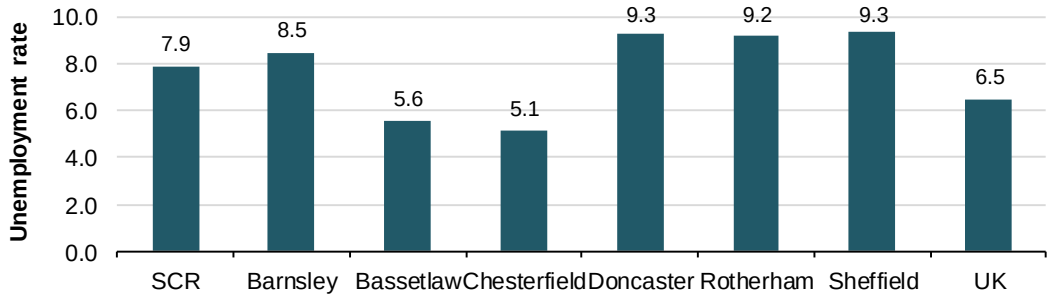
H.1 This Annex sets out evidence on the challenges faced by local authority districts in SCR. These include unemployment and deprivation.

## Unemployment

H.2 Bassetlaw and Chesterfield have lower unemployment rates than the four constituent member authorities. The range between the highest and lowest rates is 4.2 percentage points (pp). Since 2004-06, the unemployment rate has increased in all areas apart from Chesterfield where it fell by 0.5 pp. Rotherham saw the largest increase: 4.1 pp.

H.3 Four constituent members have 87% of SCR's WAP who are unemployed, Bassetlaw and Chesterfield have 8%. In total the 6 LADs have 94% of SCR's unemployed WAP.

**Figure H-1: WAP unemployment rate (2013-2015 average)[88]**




*Source: SQW analysis of Annual Population Survey*

## In-Work Benefits

H.4 "There are more in-work families (one adult working 16 hours or more per week) in SCR claiming personal tax credits than the England average… There is a slight variation in the average annual amount received across the city region, although in the majority of local authorities it is below the national average amount."

**Table H-1: In-work families in receipt of personal tax credits (2012/13)**

| | WTC | | CTC | | Av. annual amount (WTC & child tax credit) | Av. annual amount (WTC only) | Av. annual amount (CTC only) |
|---|---|---|---|---|---|---|---|
| | No. | % of all households | No. | % of all households | | | |
| Sheffield | 21,200 | 9% | 23,200 | 10% | £8,951 | £2,293 | £3,613 |
| Doncaster | 14,500 | 11% | 15,600 | 12% | £8,629 | £2,270 | £3,548 |
| Rotherham | 11,300 | 10% | 13,000 | 12% | £8,749 | £2,285 | £3,590 |
| Barnsley | 10,600 | 11% | 11,800 | 12% | £8,323 | £2,333 | £3,417 |
| Chesterfield | 4,300 | 9% | 4,700 | 10% | £8,445 | £2,398 | £3,485 |
| Bassetlaw | 4,300 | 9% | 5,100 | 11% | £8,444 | £2,191 | £3,614 |
| North East Derbyshire | 3,200 | 7% | 3,900 | 9% | £8,253 | £2,254 | £3,382 |
| Bolsover | 3,100 | 9% | 3,600 | 11% | £8,372 | £2,331 | £3,403 |
| Derbyshire Dales | 1,900 | 6% | 2,300 | 7% | £8,425 | £2,539 | £3,456 |
| **SCR total** | **74,400** | **10%** | **83,200** | **11%** | - | - | - |
| **England** | - | **9%** | - | **10%** | **£8,847** | **£2,325** | **£3,552** |

*Source: SCR Bulletin: Labour Market, Ekosgen, 2015*

[88]Note: the three year average for Bassetlaw includes data referenced as "Estimate and confidence interval unreliable since the group sample size is small (3-9)"

## Long Term Illnesses

H.5 The table below shows the percentage of the economically inactive population who are inactive because of long term sickness. The SCR average is higher than the UK average, and the Bassetlaw average is higher than this. Note that the D2N2 average is also higher than the UK average (24.2%) but is lower than the SCR average.

**Table H-2: % of economically inactive long-term sick (three year average for 2013-15)[89]**

| | 2013-2015 average |
|---|---|
| Barnsley | 35.1% |
| Bassetlaw | 27.7% |
| Chesterfield | 21.9% |
| Doncaster | 26.1% |
| Rotherham | 27.3% |
| Sheffield | 22.5% |
| SCR | 25.8% |
| UK | 21.9% |

*Source: SQW analysis of APS data*

H.6 SCR has a higher proportion of residents whose day to day activities are limited a lot by health issues than England (10.7% compared to 8.3%). Bassetlaw and Chesterfield both exceed the SCR average on this measure. The D2N2 average is also higher than the UK average (9.5%) but is lower than the SCR average.

**Table H-3: % of population whose day-to-day activities are limited a lot by a long-term health problem or disability[90]**

| | % of population |
|---|---|
| Barnsley | 12.6% |
| Bassetlaw | 10.8% |
| Chesterfield | 11.5% |
| Doncaster | 11.1% |
| Rotherham | 11.3% |
| Sheffield | 9.1% |
| SCR | 10.7% |
| England | 8.3% |

*Source: SQW analysis of Census data*

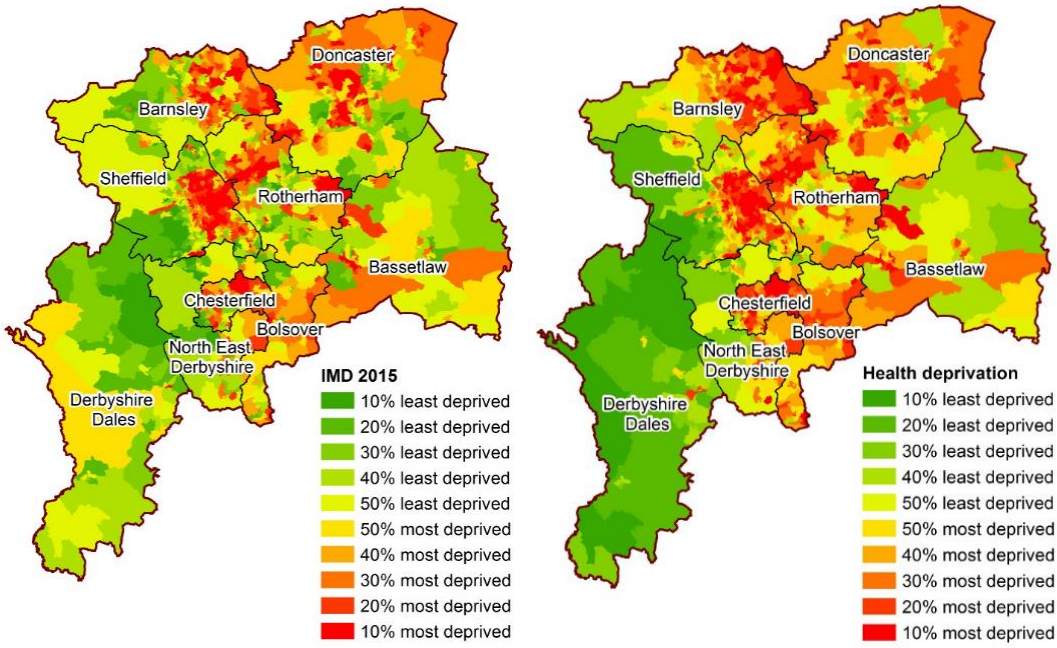
[89] On the data for Chesterfield, note that the "Estimate and confidence interval unreliable since the group sample size is small (3-9)" – this data has been included in the three year average

[90] "A long-term health problem or disability that limits a person's day-to-day activities, and has lasted, or is expected to last, at least 12 months. This includes problems that are related to old age. People were asked to assess whether their daily activities were limited a lot or a little by such a health problem, or whether their daily activities were not limited at all." Source: Census

## Deprivation

H.7 The maps below show the latest index of multiple deprivation statistics for SCR. The map on the left shows the overall ranking, while the map on the right looks specifically at the domain of health deprivation and disability.

**Figure H-2: Index of Multiple Deprivation (2015)**




*Source: Source: Produced by SQW 2016. Licence 100030994. Contains OS data © Crown copyright [and database right] [2015]. Includes Index of Multiple Deprivation data (2015)*

## Productivity

H.8 For evidence on the productivity challenge see Annex A.

# Annex I: References

I.1 The table below presents the documents reviewed as part of this study.

**Table I-1: References**

| Title | Author | Date |
|---|---|---|
| A New Way to Measure Metropolitan Areas | OECD | 2012 |
| Advanced Manufacturing Innovation District for Sheffield-Rotherham evidence base and recommendations | Oxford Economics | 2015 |
| Bassetlaw - Equality Impact Assessment of SCR constituent membership | Bassetlaw DC | 2016 |
| Bassetlaw - Extraordinary Council Meeting | Bassetlaw DC | 2016 |
| Bassetlaw Regeneration and Growth Plan | Bassetlaw DC | 2014 |
| Bassetlaw Retail Need Study | Martin Tonks | 2009 |
| Bassetlaw Retail Need Study - Appendices | Martin Tonks | 2009 |
| Bassetlaw Retail Needs Assessment | England and Lyle | 2012 |
| Chesterfield - Membership of Combined Authority | Chesterfield BC | 2016 |
| Chesterfield - Public Document Pack | Chesterfield BC | 2016 |
| Chesterfield Housing Market Assessment | GL Hearn | 2014 |
| Chesterfield Retail and Leisure Study | CACI | 2015 |
| Chesterfield Retail Study | CACI | 2010 |
| Chesterfield SCR Devolution Deal | Chesterfield BC | 2016 |
| Devolution briefing | Derbyshire County Council | 2016 |
| Doncaster Housing Need Assessment | Doncaster MBC | 2015 |
| Doncaster Retail, Leisure and Town Centres Study | GVA | 2015 |
| Doncaster UTC Application Form | | 2016 |
| Dynamics of Graduate Attraction, Retention and utilisation | SCR | 2014 |
| Economic Linkages in Northern City Regions: Sheffield City Region | One North East for the Northern Way | 2009 |
| Economic Structure of Sheffield City Region and Issues for Transport | Arup and Volterra Consulting | 2010 |
| Growing the York Economy - Working with LCR | City of York Council | 2013 |
| High Speed 2 – Station Location Analysis | Volterra | 2014 |
| High Speed Rail: Route and Station Location in SCR | SCR | 2015 |
| ICT Sector Study | Chesterfield BC | 2000 |
| Inclusive Growth Monitor | Joseph Rowntree Foundation | 2016 |
| National Institute for Infrastructure | Doncaster Chamber | |
| North Derbyshire and Bassetlaw Strategic housing Market Assessment | GL Hearn | 2009 |
| Public Reports Pack | City of York Council | 2013 |
| Quarterly Economic Survey 1 - Overarching Economy | Doncaster Chamber | 2016 |
| Quarterly Economic Survey 2 - Labour | Doncaster Chamber | Draft |
| Quarterly Economic Survey 3 - Trade | Doncaster Chamber | Draft |
| Rotherham Strategic Housing Market Assessment | University of Sheffield | 2015 |
| SCR Baseline Report | Oxford Economics | 2013 |
| SCR Bulletin: Business | Ekosgen | 2015 |
| SCR Bulletin: Employment, Output and Productivity | Ekosgen | 2015 |

| | | |
|---|---|---|
| SCR Bulletin: Housing | Ekosgen | 2015 |
| SCR Bulletin: Labour Market | Ekosgen | 2015 |
| SCR Business Growth Future of RISE | SCR | 2015 |
| SCR Demographic Forecasts | Edge Analytics | 2014 |
| SCR Employment Analysis | SCR | 2016 |
| SCR Integrated Infrastructure Plan Assumptions Report | Ekosgen | |
| SCR narrative for NPH IER | SQW | 2016 |
| SCR Sector Specialisms | University of Sheffield & TBR | 2014 |
| Sheffield Advanced Manufacturing District | UKTI | 2016 |
| Sheffield and Lancashire joint SIA bid | | 2016 |
| Sheffield City Region Independent Economic Review | SCR LEP | 2013 |
| Sheffield City Region Integrated Infrastructure Plan | SCR | 2016 |
| Sheffield City Region Labour Market Review | reiu | 2015 |
| Sheffield Retail Capacity Update | GL Hearn | 2014 |
| Sheffield-Rotherham Joint Strategic Housing Market Assessment | University of Sheffield | 2015 |
| Strategic Economic Plan | SCR LEP | 2014 |
| TfN Freight and Logistics Strategy: Baseline Report | Mott Macdonald | 2015 |
| TfN Freight and Logistics Strategy: Strategy Report | Mott Macdonald | 2016 |
| The Northern Powerhouse Series: Rail as catalyst for growth | SCR | |

*Source: SQW*

I.2 Members of the steering group, workshop attendees and consultees contacted as part of this study are listed below.

**Table I-2: Members of the Steering Group, Workshop Attendees and Consultees**

| Name | Organisation |
|---|---|
| **Steering Group** | |
| Dave Arminger | Bassetlaw District Council |
| Fiona Bowden | Sheffield City Region (SCR) |
| Andrew Gates | SCR |
| David Hewitt | SCR |
| Laurie Thomas | Chesterfield Borough Council |
| **Workshop attendees (not included above)** | |
| Steve Capes | Derbyshire Dales |
| Simeon Leach | Rotherham Metropolitan Borough Council |
| Mark Lynam | Barnsley Metropolitan Borough Council |
| Jennifer Rickard | Sheffield City Council |
| Lynda Sharp | Chesterfield Borough Council |
| Allison Westray-Chapman | Bolsover, and North East Derbyshire |
| **Consultees (not included above)** | |
| Beverley Alderton-Sambrook | Bassetlaw District Council |
| Tom Bannister | Bassetlaw District Council |

| Name | Organisation |
|---|---|
| Nigel Brewster | Brewster Pratap Recruitment Group |
| Professor Heather Campbell | University of Sheffield |
| Lisa Clarke | SCR |
| Chris Hobson | East Midlands Chamber of Commerce |
| Susan Mahon | SCR |
| Matthew Payne | SCR |
| Dom Stevens | Destination Chesterfield |
| Robert Wilkinson | Bassetlaw District Council |

# Annex J: TBR Methodology

J.1 To evidence the existing business interactions and supply chain relationships in Bassetlaw, Chesterfield and the current Sheffield City Region Constituent Members (SCR CM) TBR used three key datasets:

- UK Business Counts for the Great Britain area in 2014. Available at the most granular Standard Industrial Classification and for all the local authorities involved in this analysis.
- BRES Employment Counts for the Great Britain area in 2014. Available at the most granular Standard Industrial Classification and for all the local authorities involved in this analysis.
- The UK Input Output Analytical Tables (UKIOAT) which map the flows of domestic products and services between industries in the UK, at the two-digit Standard Industrial Classification level for 2010.

J.2 The cluster analysis first identified 25 top sectors in which each economy (Bassetlaw, Chesterfield and the SCR CM) specialise in terms of business counts and employment counts. The degree to which the areas specialise in an economic sector can be evidenced by the use of Location Quotients.

### *Location Quotients (LQs)*

J.3 Location Quotients are an indicator of specialism within a local area. They reflect the specialism in an industry in a geographical area when compared to a larger reference area – in this analysis Great Britain. An LQ greater than 1.25 represents a high concentration of activity (a specialism), while an LQ less than 1 represents a scarcity.

J.4 $LQ = (Ei,r / Ei ) / (Er / E)$

- Where: Ei,r is the number of employee jobs in industry i region r
- Ei is the number of employee jobs in industry i
- Er is the number of employee jobs in region r
- E is the number of employee jobs in Great Britain.

### *Supply Chain Relationships*

J.5 Cross referencing UK Input Output Analytical Tables with the Location Quotient analysis can build up the base of evidence of supply chain relationships through purchasing patterns. 'Overlaying' the top UK sector relationships onto the existing analysis provides further evidence of similar purchasing patterns within and across the economies of the two candidate authorities and the economies of the four existing constituent members.

J.6 For each identified specialism, the top purchasing and supplying sectors according to the UKIOAT are identified and the corresponding Location Quotients calculated in each area. In

this way upstream and downstream supply chain relationships between the economies of Bassetlaw, Chesterfield and the SCR CM are identified. For example, strengths in the production of basic metals in one location can be interpreted as an important input to other metallurgic industries based in another based on the amount of supply shown in the UKIOAT and the Location Quotients of these sectors in each area.