

# SHEFFIELD CITY REGION TRANSPORT STRATEGY

## 2011-2026

Evidence Base

DOCUMENT 5: SUPPORTING ECONOMIC GROWTH



SHEFFIELD  
**City Region**

**southyorkshire**  
local transport plan

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# 1. Introduction

## The Evidence Base

- 1.1. This document forms part of the series of Evidence Base documents, which are presented here as an Annex to our Third Local Transport Plan (LTP3). This series of documents presents a substantial body of evidence we have compiled while developing the Transport Strategy, which is the first of the two parts of the new LTP3.
- 1.2. The evidence we have gathered is used to establish the arguments that inform the list of policies included in the Transport Strategy. The wider context for the Evidence Base is provided in Document 1: Geographic and Demographic Overview.

## This Document

- 1.3. This document is the part of the Evidence Base dealing with our goal of Supporting Economic Growth. This goal relates to the following challenges specified in our Transport Strategy:
  - Linking people to employment and training opportunities
  - Tackling congestion and unreliability
  - Making public transport more attractive to increase its modal share for travel to work
  - Improving resilience and reliability
  - Improving external connectivity to other cities
  - Unlocking development sites for employment growth
  - Encouraging people to walk, cycle or use public transport as modes of choice.
- 1.4. The evidence relating to the goal of Supporting Economic Growth is split across a number of the evidence base documents. There is a substantial body of evidence in Document 2: Networks and Document 3: Forecasting that cover some of the topics only briefly described in this document.
- 1.5. Chapter 2 provides information about the economic performance of Sheffield City Region (SCR) and the challenges that need to be overcome. Chapter 3 describes some of the issues relating to employment and access to the labour market. Chapter 4 outlines evidence relating to connectivity. Chapter 5 describes the role of transport in supporting regeneration and Chapter 6 summarises this document.

## 2. Economy

### Introduction

- 2.1. This chapter provides an overview of the economic performance of SCR. The evidence presented describes the links between transport and the economy. The chapter also describes the economic links in SCR and recent economic performance.

### Economic History

- 2.2. As identified in Document 1 of this evidence base, SCR lies at the heart of the UK and is renowned for its strong industrial heritage and unique natural beauty. SCR has had a decade of rapid growth; it has re-established itself as a centre of advanced manufacturing and engineering, while also developing expertise in new areas such as digital media.
- 2.3. SCR is an area of a strong local culture, has areas of high environmental quality, and strong tradition. It has a history at the very forefront of the UK industrial and entrepreneurial development, and a tradition of specialism in steel production, manufacturing and mineral mining. The brand identification "Made in Sheffield" is known worldwide as a symbol of product quality and manufacturing excellence.

### Recent Economic Performance

- 2.4. Between 1999 and 2007 SCR saw strong economic growth, with the GVA per head of population increasing by 48.2%<sup>1</sup>. The rate of economic growth in SCR was above the rate seen in England as a whole (44.7%) over the same period.
- 2.5. SCR's economic growth, however, took place from a low base,<sup>2</sup> and therefore there still remains a high level of economic inactivity<sup>3</sup>. Growth has not been uniform across SCR. Despite the general growth in prosperity brought about by the expanding economy of SCR, pockets of deprivation remain<sup>4</sup>.
- 2.6. Economic growth has brought about increased levels of employment in SCR<sup>5</sup>. Figure 2.1<sup>6</sup> shows the split between primary, secondary and service sector output by GVA. From 2006 to 2008 these are recorded outputs and from 2009 to 2026 the values for each sector are forecast. The figure shows that the proportion of employment in SCR which is in the public sector has increased between 2002 and 2009<sup>7</sup>. The level of increase seen in SCR (from 24.9% of jobs to 27.8%) is also above the increase for Yorkshire and the Humber (23.3% to 25.2%). However, as can also be seen from Figure 2.1, increases in service sector employment in SCR have masked declines in manufacturing and primary industry employment between 2002 and 2008.

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<sup>1</sup> ONS data

<sup>2</sup> ONS data shows that GVA per head for South Yorks in 1999 was around £10k pa, compared to an England wide figure of £14k. The same data shows that South Yorks had the second lowest GVA per head of the Metropolitan counties in England.

<sup>3</sup> Over a quarter of the working population in South Yorkshire is classified as economically inactive by ONS.

<sup>4</sup> The proportion of deprived super output areas in South Yorkshire is around twice the national average.

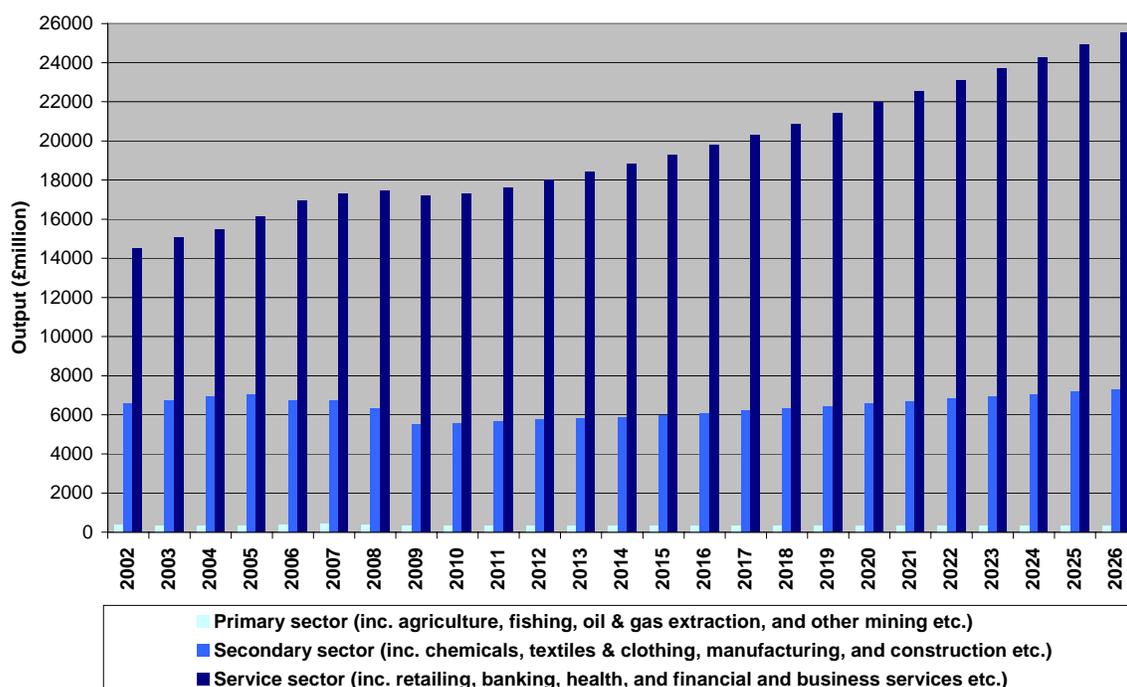
<sup>5</sup> Employment in South Yorkshire has increased from 540,000 people to 585,000 between 2000 and 2009

<sup>6</sup> Experian Data

<sup>7</sup> Experian Data

- 2.7. It should also be mentioned that the forecasts presented in Figure 2.1 were made before the change in government in 2010. The figure suggests that the trend whereby service sector employment growth is forecast to continue to 2026. However, given the significant budget deficit and central government's drive to rebalance the economy towards the private sector, it is currently unclear whether this historic trend is likely to continue.
- 2.8. Levels of business start-ups in SCR have increased in recent years<sup>8</sup>. However, VAT registered companies per 10,000 heads of population in SCR are below the national average<sup>9</sup> at around 90% of the levels seen in the other metropolitan counties. As such, whilst economic growth in SCR over the last 10 years has been strong, the significant contributor to it has been through service sector including public sector job growth.

**Figure 2.1 GVA Output Growth by Sector**



Source: Experian

## Transport and Business

- 2.9. Supporting economic growth is recognised as an important priority for SCR<sup>10</sup>. Transport has a key role in supporting economic growth as a facilitating measure which improves access to labour markets and allows the movement of people and goods. Transport is also a key employment market, with 37,000 jobs in the transport sector, which accounts for 6% of the workforce in SCR<sup>11</sup>.

<sup>8</sup> VAT registered companies in South Yorkshire increased by 11.4% (2,845 more VAT registered companies) between 2000 and 2006 (ONS)

<sup>9</sup> ONS as above

<sup>10</sup> Yorkshire and Humber Strategic Prioritisation Framework and DaSTS Stage 1 Report, SCR's own input into DaSTS, both 2009.

<sup>11</sup> Experian Data

- 2.10. Nonetheless, amongst businesses, transport is perceived as unsatisfactory. Only 17% of businesses agree that the current transport provision “meets all their business needs”, with 64% disagreeing<sup>12</sup>. During workshops used to inform the Transport Strategy<sup>13</sup>, poor connectivity and increasing traffic congestion were highlighted as critical problems in SCR.
- 2.11. Business views are contained within a report on roads policy published by the Confederation of British Industry<sup>14</sup>. This report sets out a number of desirable outcomes, including changing working patterns, strengthening capital investment and reforming the management and funding of roads.
- 2.12. A local picture is provided by the Yorkshire and Humber Chambers of Commerce<sup>15</sup> in their business manifesto. This manifesto sets out the views of the Chambers of Commerce in relation to a number of issues, including transport infrastructure, access to broadband technology and the potential for enabling flexible working. It also sets out the perceived shortfalls in transport policy, particularly that over the last 6 years spending per head of population in SCR has consistently fallen below the English average.
- 2.13. Other sections of the manifesto highlight the views of local businesses. Findings include:
- 92% of businesses stated that roads are essential or very important to their business operations (including 86% of businesses in Sheffield, 87% in Barnsley and Rotherham and 93% in Doncaster)
  - 64% of businesses stated that the transport system fails to fully meet their needs
  - 49% of businesses stated that they were suffering significant impacts on transport operating costs
  - 9 out of 10 business stated that road congestion is a serious problem
  - 65% of businesses strongly believe that major transport schemes take too long to materialise
- 2.14. The manifesto also sets a number of desirable policies, including the following, which are particularly relevant to South Yorkshire and SCR:
- Implement major public transport schemes to improve access to our key cities, including motorway widening on the M1.
  - Deliver a package of rail improvements, including the East Coast Main Line, increased capacity for commuters and inclusion on the proposed High Speed Rail network.
  - Allow longer rail franchises.
  - Improve access to Robin Hood Doncaster Sheffield Airport.

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<sup>12</sup> Yorkshire Chambers of Commerce (2009) Business Manifesto

<sup>13</sup> Workshop report (December 2010) – Outlined in Document 4 Consultation and Stakeholder Engagement

<sup>14</sup> CBI (2010) Back to Business

<sup>15</sup> Yorkshire and Humber (2009) Business Manifesto

## Key Growth Sectors

- 2.15. The economy of SCR is evolving to capitalise on the area's expertise in a number of specific sectors. These industries are emerging as economic drivers for change in SCR and attracting investment into the area. Supporting these key growth sectors will be important for ensuring future prosperity.
- 2.16. SCR takes pride in its tradition in the extractive and metallurgical industries, but has also become highly specialised in creative and digital media. The following provides specific examples of the growth sectors and some of the organisations involved:
- The rapidly growing healthcare technologies sector, which is tightly defined, employs just under 3,500 (0.6%) of the workforce in SCR. The largest area of growth is in the manufacture of medical and surgical equipment, which has a clear link to advanced manufacturing, materials and engineering.
  - The University of Sheffield and Barnsley Hospital have collaborated with Toby Churchill Ltd (Cambridge) and Xovox Communications Ltd (Sheffield) to develop a device which allows severely disabled people to live independently. The device works by voice recognition; the person issues a command to the device which then sends an infra-red signal to a peripheral which then undertakes the task.
  - The growth in digital and new media is impressive, with a 56% rise in employment in SCR, outstripping the overall figure for England of 10%. This growth has resulted in this sector now accounting for 14% of the total number of businesses in SCR, which includes more than 7,700 companies.
  - The Cultural, Communication and Computing Research Institute (C3RI) at Sheffield Hallam University has been working closely with industry in exploiting new media and developing new applications. C3RI is currently collaborating with Rotherham NHS Hospital Trust in the field of medical information systems.
  - Within Sheffield there are two successful universities. Sheffield Hallam is widely recognised as one of the most successful and dynamic new universities, with a successful record of local engagement and particular strengths in design. The University of Sheffield is a major research-intensive University, with strengths across the full range of disciplines and a strong tradition of interdisciplinary working and engagement with industry.
  - The University of Sheffield's Advanced Manufacturing Research Centre (AMRC) with Boeing was established in 2001 and is seen as a successful manufacturing-based research organisation. The centre provides local companies with access to the aerospace supply chain, best practice guidance and also provides business support. In order to be members of AMRC, businesses provide annual financial contributions which funds further research. Its successes have included work in the aerospace industry, with Messier Dowty winning a contract to design the nose and landing gear for Boeing Commercial Aircraft.

## 3. Employment

### Introduction

This chapter describes the characteristics of employment in SCR. The chapter starts by highlighting the employment rates and job sectors. The chapter then moves on to explain the impact of the recession and access to employment.

### Employment

- 3.1. SCR has a total population of working age slightly below 1.09 million, 75% of which is located within South Yorkshire. Employees as a proportion of the population and employment by sector are shown in Table 3.1 and Table 3.2 respectively.

**Table 3.1 Employment Rates<sup>16</sup>**

|                                   | Economically active population as proportion of working age population | Employed population as proportion of working age population | Unemployed as a proportion of economically active population | Working age population |
|-----------------------------------|--|---|--|------------------------|
| Barnsley                          | 75.6%  | 67.6%   | 9.1%   | 139,000                |
| Doncaster                         | 76.3%  | 69.4%   | 8.8%   | 177,400                |
| Rotherham                         | 78.7%  | 69.9%   | 9.1%   | 154,800                |
| Sheffield                         | 77.4%  | 70.4%   | 8.0%   | 342,800                |
| <b>South Yorkshire</b>            | <b>77.1%</b>   | <b>71.0%</b>  | <b>8.5%</b>  | <b>814,000</b>         |
| Additional from wider City Region | 80.4%  | 76.3%   | 6.1%   | 273,700                |
| <b>Sheffield City Region</b>      | <b>78.0%</b>   | <b>72.4%</b>  | <b>7.9%</b>  | <b>1,087,700</b>       |
| <b>Great Britain</b>              | <b>78.9%</b>   | <b>73.3%</b>  | <b>6.9%</b>  |                        |

Source: National Statistics (Nomis: [www.nomisweb.co.uk](http://www.nomisweb.co.uk)) Crown copyright material is reproduced with the permission of the Controller Office of Public Sector Information (OPSI).

<sup>16</sup> Figures for South Yorkshire and the Sheffield City Region have been calculated by factoring NOMIS data.

**Table 3.2 Employee Jobs by Sector**

|                                   | Manufacturing | Construction | Services     | Tourism     | Total jobs (thousands) |
|-----------------------------------|---------------|--------------|--------------|-------------|------------------------|
| Barnsley                          | 16.4%         | 6.0%         | 76.9%        | 8.0%        | 69.4                   |
| Doncaster                         | 9.5%          | 8.1%         | 81.3%        | 7.0%        | 115.9                  |
| Rotherham                         | 15.3%         | 6.8%         | 76.3%        | 6.6%        | 99.4                   |
| Sheffield                         | 10.9%         | 4.2%         | 84.5%        | 6.9%        | 248                    |
| <b>South Yorkshire</b>            | <b>12.1%</b>  | <b>5.8%</b>  | <b>81.3%</b> | <b>7.0%</b> | <b>532.7</b>           |
| Additional from wider City Region | 16.0%         | 5.4%         | 75.7%        | 8.2%        | 177.6                  |
| <b>Sheffield City Region</b>      | <b>13.1%</b>  | <b>5.7%</b>  | <b>79.9%</b> | <b>7.3%</b> | <b>710.3</b>           |
| <b>Great Britain</b>              | <b>10.2%</b>  | <b>4.8%</b>  | <b>83.5%</b> | <b>8.2%</b> |                        |

Source: National Statistics (Nomis: [www.nomisweb.co.uk](http://www.nomisweb.co.uk)) Crown copyright material is reproduced with the permission of the Controller Office of Public Sector Information (OPSI).

- 3.2. Table 3.1 shows that unemployment rates are highest in the South Yorkshire districts, all of which exceed the national average, with Barnsley and Rotherham having the highest rates. Within South Yorkshire, the proportion of the population who are employed and of working age (i.e. employed people aged between 16 and 64) is lower than the national average in all four districts.
- 3.3. In terms of numbers of jobs, South Yorkshire accounts for approximately 75% of jobs within SCR; just under 35% are provided by Sheffield. In common with the country as a whole, the economy of SCR is dominated by service industries. The service sector accounts for nearly 85% of employment in Sheffield, which is slightly higher than the national average. Services account for proportionally fewer jobs in Barnsley, Doncaster and Rotherham.
- 3.4. In addition to the sectoral information presented in Tables 3.1 and 3.2, NOMIS data identifies that public sector administration accounts for proportionally more jobs in all South Yorkshire districts than the national average. This sector provides over 33% of all jobs in both Sheffield and Barnsley.
- 3.5. Barnsley and Rotherham both have a higher proportion of jobs within the manufacturing sector than the national average. Barnsley, Doncaster and Rotherham all have higher proportions of jobs within the construction industry, compared to the national average.
- 3.6. The pattern of employment has shifted in line with the focus of the economy, with less reliance on mineral extraction, processing and industries such as metal production. The impact of these changes was in some cases, severe. In the last 35 years, 170,000 jobs have been lost in traditional manufacturing and primary industries<sup>17</sup>, leading to large-scale unemployment.
- 3.7. The SCR Strategic Economic Assessment identifies that, between 2001 and 2008, there were over 19,000 fewer people employed in the semi-skilled and elementary occupations. There was also a fall of 7,000 in the skilled manual trades and a small drop in the lowest grades of administrative and clerical staff. Managers, professional and technical skills increased by over 66,000. Sales occupations also increased by 11,500.

<sup>17</sup> Sheffield City Region (2010) Strategic Economic Assessment

- 3.8. The historical legacy of these changes is illustrated by the Dearne Valley area, straddling the Barnsley, Doncaster and Rotherham districts, to the north of Swinton. This area was dominated by coal and dependent industries, such as coal-derived chemicals and the transportation of coal via rail freight. This is no longer the case.
- 3.9. A Yorkshire Forward report<sup>18</sup> identified that the Dearne Valley still has 5,700 fewer people in employment than would be expected if it conformed to the national average. Reasons highlighted for this included more people 'permanently sick or disabled', more people looking after their home and family, more retired people, and more people economically inactive for other reasons.
- 3.10. In order to overcome the reliance on the traditional industries, funding such as 'Objective 1' has been awarded to the area for a number of years. This funding has been used to encourage new industries to locate in SCR and also to up-skill the population through sponsoring specific training schemes.
- 3.11. The classification of the districts described above highlights some critical issues for Sheffield City Region, particularly in ensuring effective access to the new jobs created in SCR. Advanced manufacturing and metals have historically been important sources of employment. Recently this sector has seen a decline in employment, coupled with an increase in productivity. This is attributed to increasing specialisation in high-value sectors such as alloys for aviation. Computing is seen as a key growth sector within SCR, with the majority of employment within this sector based in Sheffield.
- 3.12. The Yorkshire Forward report concludes that with some characteristics of the labour force in Sheffield City Region and what needs to be addressed in order to strengthen the links between the districts and reduce isolation. The report sets out that:
- Compared to other regional centres, such as Leeds and Manchester, Sheffield has a greater proportion of public sector employment
  - The lower skills profile within SCR prevents many residents from benefiting from the high skill employment growth within Sheffield
  - Travel within SCR is dominated by the private car, and this can be a barrier to accessing employment. Some areas within the former coalfield have poor public transport links which limits access to employment
  - In order to maximise economic benefits, neighbouring towns and cities need to build on their distinct characteristics and improve links with Sheffield. This can take a number of forms, for example, improved transport links between the 'dependent' areas, such as Barnsley and North East Derbyshire.

### **Effect of the Recession**

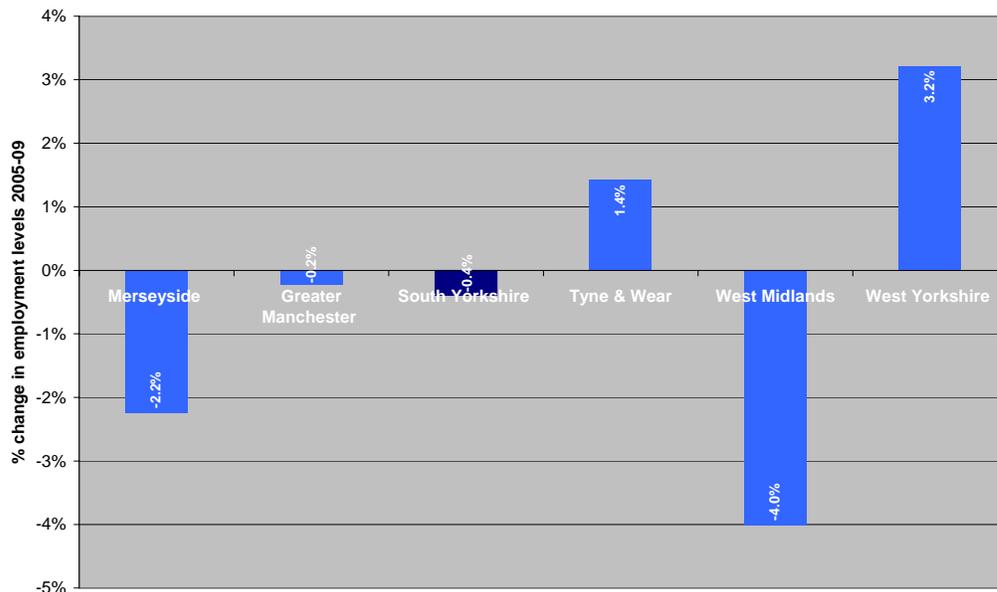
- 3.13. Between 2005 and 2009, employment in South Yorkshire fell by 0.4%<sup>19</sup>, which is significantly below the fall seen in many other metropolitan counties, as Figure 3.1 shows.

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<sup>18</sup> Yorkshire Forward (2004) The Economy of the Dearne Valley

<sup>19</sup> ONS data

**Figure 3.1 Employment Change 2005 to 2009, Metropolitan Counties of England**



Source: ONS

- 3.14. However, the dependence of SCR on public sector employment suggests that SCR will be vulnerable to a likely public sector recession<sup>20</sup> during the early years of the LTP3 period. Recent research published by The Centre for Cities<sup>21</sup> sets out that local economies which exhibited lower levels of skills and entrepreneurship before the recession are likely to stay in recession longer than local economies with high skill and entrepreneurship levels. The assessment described in the report suggests that Barnsley was amongst the local economies likely to suffer the harshest and longest recessions in the UK.
- 3.15. Other forecasts of the effect of the recession on SCR vary<sup>22</sup>. Forecasts prepared using TEMPRO<sup>23</sup> suggest employment growth between 2008 and 2026 of 6% in SCR, with growth in all districts. By contrast, forecasts made using the Regional Econometric Model, maintained by Yorkshire Forward, suggest that employment growth over the same period will be 2%, and that growth will not take place in all districts.
- 3.16. The Regional Econometric Model suggests there will be increasing employment in Bassetlaw, Bolsover, Doncaster and Rotherham and small increases (>1%) in Sheffield and Barnsley. Chesterfield, the Derbyshire Dales and North East Derbyshire would experience a fall in employment. Given the uncertainty of future economic conditions, the extent, nature and distribution of economic growth in SCR is difficult to forecast with any certainty, even for the near future. It is clear, however, that proactive measures need to be taken by the authorities to prevent decline in economic activity.

<sup>20</sup> Sheffield City Region (2009) SEA: Recession and Recovery Section

<sup>21</sup> The Centre for Cities (2010) Cities Outlook

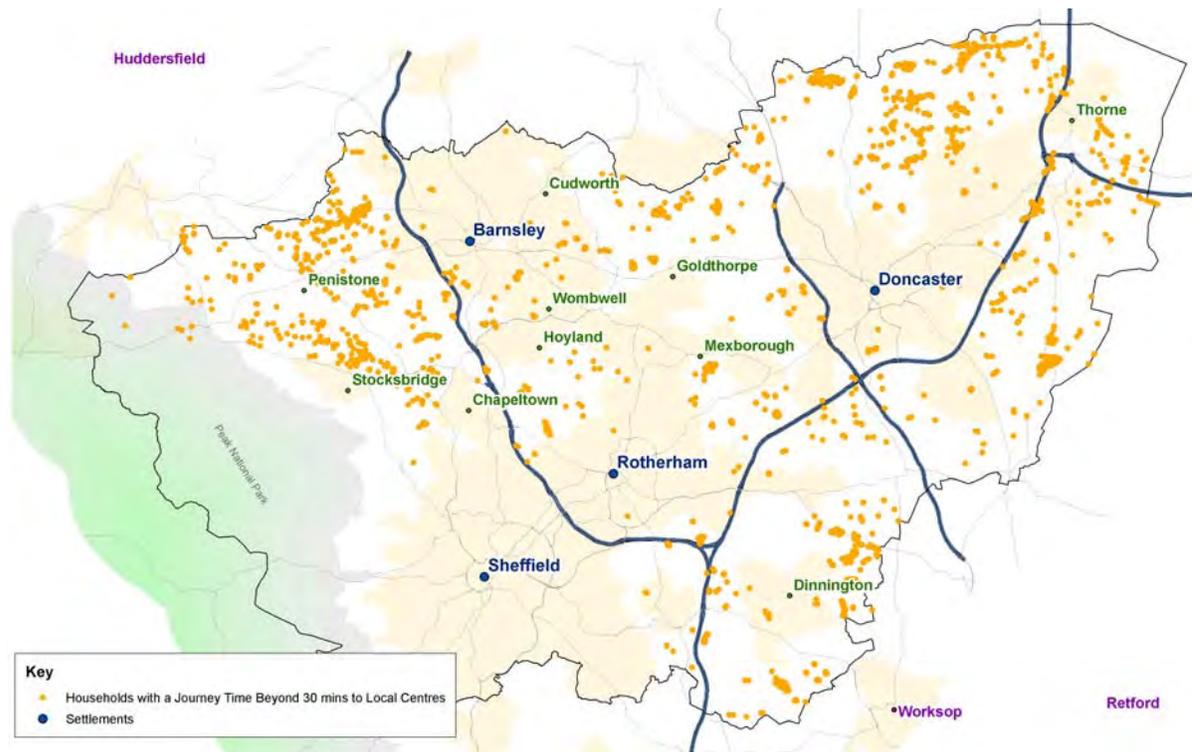
<sup>22</sup> Arup (2010) SCR Connectivity Baseline report

<sup>23</sup> TEMPRO provides summaries of National Trip End Model (NTEM) forecast data for transport planning purposes. The forecasts include population, employment, households by car ownership and trip ends.

## Access to Labour Markets

- 3.17. If businesses can access the quantity of labour they require more readily then the efficiency, and therefore productivity, of businesses will grow. In SCR there is a further consideration, that structural change in the economy has left many settlements without a major employer. Access to key business centres is therefore a critical element, to reduce levels of economic inactivity and deprivation.
- 3.18. The public transport network in the South Yorkshire is widely available, with over 99% of households having access to an employment centre<sup>24</sup> within 30 minutes. Figure 3.2 identifies areas in South Yorkshire that are currently inaccessible by public transport. As Figure 3.2 shows, access from areas to the west and north east of the South Yorkshire are the most limited.

**Figure 3.2 Inaccessible Areas in South Yorkshire.**



Source: SYPTE

- 3.19. Figure 3.2 suggests that at the moment there is a high level of theoretical access to job opportunities across South Yorkshire. In practice, however, it is not possible for people living in all areas of SCR to access jobs which they wish to hold. Reasons for this include timetables not matching shift patterns, the need to interchange and the cost of travel, amongst others. This topic is covered in more detail in Document 6: Enhancing Social Inclusion and Health.

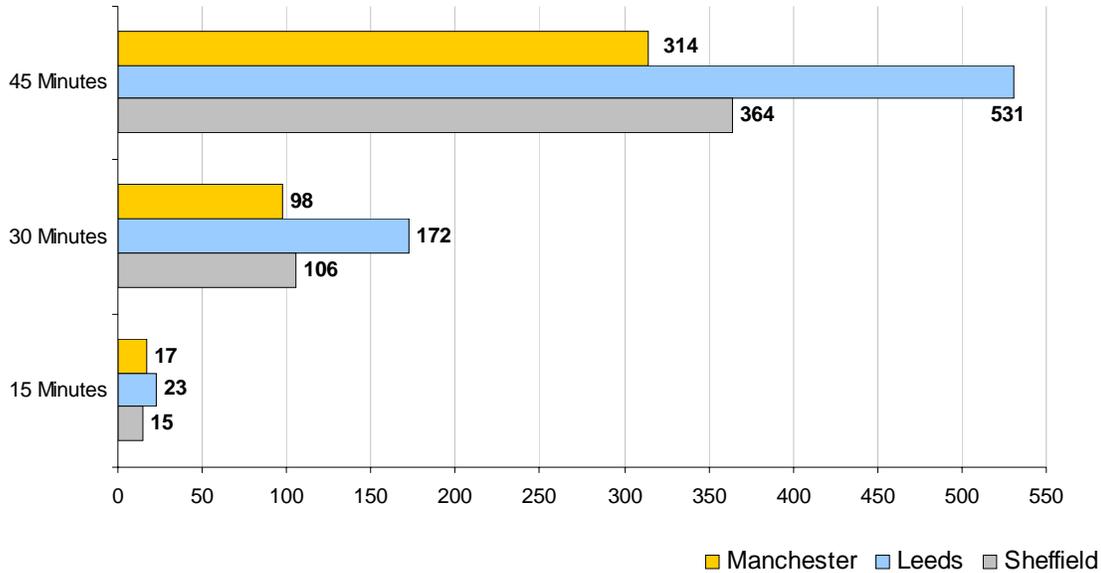
## Drive-time Catchment

- 3.20. Figure 3.3 shows the peak hour drive-times and square miles covered for Manchester, Leeds and Sheffield, as presented in SCR's Strategic Economic Assessment. It shows

<sup>24</sup> SYPTE accessibility monitoring data

the drive commute “reach” for each city, i.e. the area which can be accessed within the specified drive-time. This, combined with population information, provides an indication of the size of each city’s labour pool.

**Figure 3.3 Peak Hour Drive Times and Square Miles Covered**



Source: Census of Population 2001, Workplace Statistics

3.21. Figure 3.3 shows that, within a 45 minute drive of central Sheffield during the peak hour is an area of 364 square miles. This compares to 531 square miles for Leeds and 314 square miles for Manchester. However, the hinterland of Sheffield has a far lower population density than those of Leeds or Manchester. The population within each drive-time area is lower for Sheffield, which contains 450,000 households, compared to 860,000 households in Manchester and 710,000 households for Leeds. Clearly the implication of this is that Sheffield is able to draw from a much smaller labour catchment than comparator cities. For example, based on the figures presented above, Sheffield’s labour catchment is 52% of the size of Manchester’s.

## 4. Connectivity

### Introduction

- 4.1. This chapter outlines the importance of a well connected transport network to SCR's economy. The chapter describes the need to support the link between City Regions and within SCR. The chapter also identifies the priorities for investment that have been examined at a national level then applies this to SCR.

### Defining the Economic Links

- 4.2. A report produced by Northern Way and Work Foundation<sup>25</sup>, examines the linkages between the settlements that define SCR. It focuses on the transport linkages between settlements, but also institutional, business and social networks. It concludes that Sheffield is a relative self-contained city with weaker economic links into its hinterland when compared to other large northern cities. The study identifies Manchester City Region to make a comparison, where the city of Manchester has a strong influence across the Manchester City Region.
- 4.3. In Sheffield, 85% of residents live and work in the city taking 72% of jobs, whilst in Manchester the figures are 73% and 31% respectively. There are additional smaller centres of employment in Sheffield City Region. Some of these centres do not receive the benefits of Sheffield's economic success, and are isolated from Sheffield by poor transport links.
- 4.4. Figure 4.1 shows the study's assessment of the links between Sheffield and the other towns in SCR.

**Figure 4.1 Sheffield City Region Relationships**



Source: Sheffield City Region Strategic Economic Assessment

<sup>25</sup> Sheffield Linkages Report (2009) Northern Way and The Work Foundation

- 4.5. As can be seen in Figure 4.1, the report suggests that:
- Sheffield and Rotherham are seen as a single economic entity. They have the closest economic relationship in SCR and the local authorities have a history of working together.
  - Doncaster has been classified as 'isolated' from Sheffield. Doncaster is identified as a significant centre for employment, but the distances between the two centres limit the amount of commuting. Doncaster is close to being independent from Sheffield in terms of its labour market, but it does not have sufficiently high-value employment. It is also less successful economically, compared to other free-standing economic areas in other City Regions, such as York and Warrington.
  - Barnsley is dependent on the Sheffield labour market. The borough has strong links to SCR and into the Leeds City Region. There are strong commuting links between Barnsley and Wakefield districts in particular.
- 4.6. Building on the work carried out by the Northern Way, the Sheffield Connectivity Study identifies that SCR has been classified as weakly mono-centric. With Sheffield identified at the centre of employment and the main driver of growth in SCR. The report identifies Doncaster and Chesterfield as important sources of economic growth in SCR. The following summarises the key points raised in the report:
- The legacy of the areas industrial past has left a large stock of traditional former employment land. The availability of out of town employment sites and structural change to SCR's economy has resulted in jobs being delivered in out-of-town locations. The impact of this has been to reduce highway and public transport network capacity and accessibility. The availability of out-of-town employment land could potentially continue the trend of out-of-town employment opportunities.
  - SCR has to balance the need to regenerate and remake existing places with the delivery of growth aspirations. This balance between remaking places and delivering housing growth has a significant implication for delivering connectivity and managing travel in a sustainable way.
  - There are gaps in the strategic walking and cycling network, particularly to network hubs.
  - Transformational bus improvements are required to address a range of problems. These include, network coverage, peak period delays, lack of bus priority measures and inadequate ticketing options.
  - Performance of the rail network is relatively weak. Many corridors in SCR are affected by low frequencies, slow speeds and poor service quality. Most local services are becoming overcrowded and the existing inadequacies have suppressed demand.
  - Peak period congestion affects many parts of SCR highway network, leading to poor journey time reliability and environmental issues.
  - Connections to national and international networks constrain SCR in terms of economic growth and prosperity.
  - Whilst there has been a marked improvement in the Indices of Multiply Deprivation (IMD) ranking of SCR districts (in all 9 districts between 2004 and 2007). The IMD scores show relatively high deprivation in most districts, with the exception of NE Derbyshire and Derbyshire Dales. This highlights the deprivation in many part of SCR and reinforces the need for affordable access to employment opportunities. This will be increasingly important if the dispersed

nature of development continues, with the focus on out of town employment parks.

- Variations in cross-boundary ticketing on buses results in poor value for money for passengers and makes journeys complicated. This leads to a lack of appeal to new and potential users.

## Supporting Growth

- 4.7. The ability of businesses to operate efficiently depends upon a transport network being able to provide reliable and reasonably fast travel for those who need to use it. Transport also plays a role in unlocking economic opportunities, by providing access to suitable land for development.
- 4.8. A recent Cabinet Office report<sup>26</sup> suggests that businesses see poor connectivity as a constraint to their future economic growth. Therefore, areas of poor connectivity in SCR are unlikely to see similar levels of growth as those with good transport connections. The Cabinet Office report suggests that reducing travel times by 10% is likely to increase economic productivity by between 0.4% and 1.1%.
- 4.9. The modelling work, outlined in Document 3: Forecasting, identifies that if current trends continue, increases in productivity will lead to increased use of the transport network. We need to be proactive in managing growth to ensure the negative impacts of congestion do not arise from increased use of the network. The Cabinet Office Report forecasts that the cost of congestion is to increase to £34 billion, nationally, by 2025, if current trends continue.
- 4.10. In SCR, the increasing levels of congestion will result in reduced reliability of journey times if we fail to take action. It is important to note that reliability is a significant issue, which will adversely affect industry in general, and the logistics sector in particular. The topics of reliability and connectivity are closely linked and will need to be tackled simultaneously. Reliability is discussed in more detail in Document 2 Networks.
- 4.11. In addition, the pockets of poor connectivity in urban areas limit accessibility to employment and services. People living in areas of poor accessibility in SCR will find it harder to access jobs and key services.

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<sup>26</sup> An Analysis of Urban Transport, Cabinet Office Strategy Unit (November 2009)

## Identifying Priorities for Investment

- 4.12. The Eddington Report<sup>27</sup> suggests how Government investment should be targeted. It identifies the priority for investment as those parts of the network that are crucial for economic growth, but which are not currently able to perform. The Northern Way<sup>28</sup> has also undertaken research which demonstrates the importance of a balanced strategy. This research investigates the need to look at journeys within City Regions, between City Regions and access to international gateways.
- 4.13. Further work undertaken by the Northern Way<sup>29</sup>, sets out how weaker City Regions can benefit through improved links to economically strong City Regions. Evidence on this is presented later in this section.
- 4.14. The Centre for Cities report, *On Track*, further highlights the interrelation between transport and economic growth. The focus of this report is the importance of rail to the growth of the economy. The report identifies that people increasingly travel to work by train, and many companies rely on trains to transport their goods and supplies. Rail freight now has a 12 percent share of the UK's surface freight market compared with 8 percent in 1994/95. The industry predicts rails share will more than double by 2030<sup>30</sup>.
- 4.15. Improved transport connections have the potential to offer access to a wider pool of potential suppliers and customers, and a broader labour market<sup>31</sup>. By exposing companies to larger concentrations of economic activity and more competition, better transport encourages the business base to be more productive. The report examines a number of case studies for rail improvements including the link between Sheffield and London. Figure 4.2 displays the number of businesses in each of the cities and towns that could be set to benefit from rail improvements in the country in general.

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<sup>27</sup> Eddington Report, DfT/ Treasury 2006

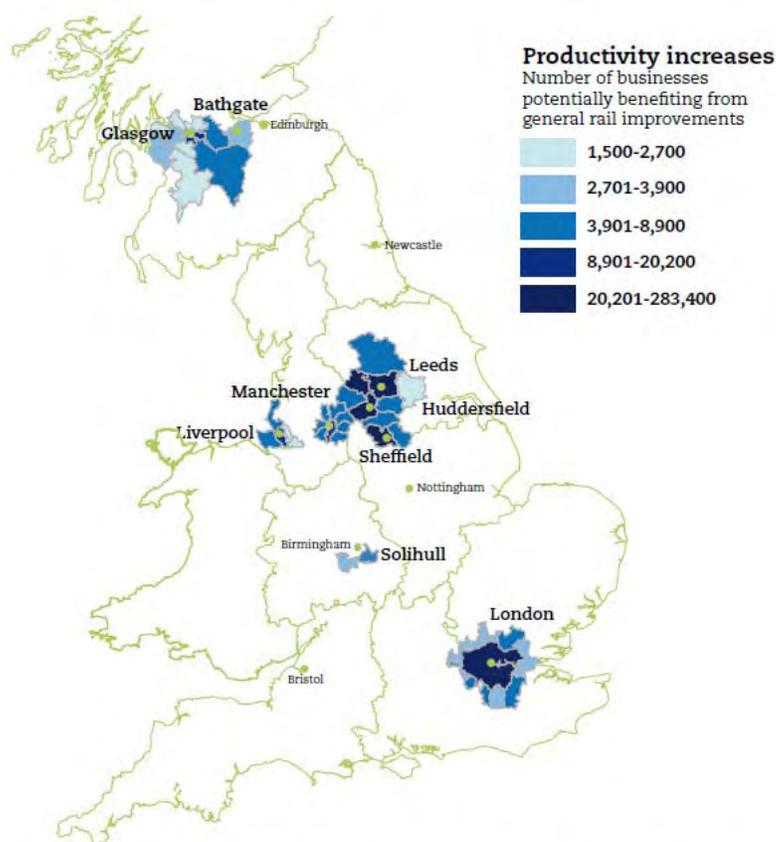
<sup>28</sup> Northern Way Strategic Direction, 2006

<sup>29</sup> Overman Study into Connectivity between City Regions, 2009

<sup>30</sup> See: [www.networkrail.co.uk/asp/1530.aspx](http://www.networkrail.co.uk/asp/1530.aspx)

<sup>31</sup> Graham, D (2006) Investigating the link between productivity and agglomeration for UK industries. Available from: [www.southwesteip.co.uk/downloads/documents/20070316160706.pdf](http://www.southwesteip.co.uk/downloads/documents/20070316160706.pdf)

**Figure 4.2 Businesses Potentially Benefiting from General Rail Improvements**



Source: NOMIS (2010), Annual Business Inquiry, workplace analysis, 2008 data. Northern Way (2009) and own analysis. Note that where local authority areas are only partly included the reduced number of businesses is mapped across the whole local authority area.

- 4.16. Improved links between Sheffield and London are suggested to offer opportunities for businesses in Sheffield and lead to benefits for Sheffield's hinterland. Businesses, for example, will gain easier access to the markets of the capital and its international connections.
- 4.17. London is identified as already being important to Sheffield's economy. A breakdown of journeys on the Sheffield to London route by ticket types shows the importance of business journeys. Over 20 percent of journeys made between the two cities are first class.
- 4.18. The Centre for Cities report suggests that as part of improving the service to London, integrated timetabling would be needed, to support other nearby towns and communities. Improvements on this route would provide benefits for passengers from Barnsley and Rotherham travelling to London and better connectivity for passengers travelling between the international gateways of St Pancras and East Midlands Airport. Furthermore, the suggested improved service from Sheffield would also stop at Chesterfield, Derby and Leicester, giving all these places improved rail access to London<sup>32</sup>.

<sup>32</sup> Memorandum submitted by Nottinghamshire County Council (EM02-06). Available from: [www.parliament.thestationery-office.co.uk/pa/cm200910/cmselect/cmeastmid/104/104we08.htm#note25](http://www.parliament.thestationery-office.co.uk/pa/cm200910/cmselect/cmeastmid/104/104we08.htm#note25)

- 4.19. The report indicates that people can derive significant benefits from targeted investments in the rail network. Rail passengers can benefit through timing savings on their journey, allowing for a more productive use of their time. They will also benefit from increased frequencies and longer trains on overcrowded commuter routes.
- 4.20. Those people who live in cities and towns where rail investment is taking place will also gain from this investment by having the potential to access higher wages, with the largest potential beneficiaries being those who work in medium skill occupations such as nursing or administrative roles.
- 4.21. For cities and towns, rail investment means being better connected to one another and to wider economic areas. Rail investment can therefore play a role in strengthening economic linkages and activity in the UK. This will allow cities and towns to develop particular sectors in their economy that they have a competitive advantage in whilst complementing growth in surrounding cities.

## Linking City Regions

- 4.22. A report produced by the Spatial Economics Research Centre<sup>33</sup> describes how links between City Regions can be strengthened. The aim of the study was to understand economic integration and interaction between the Manchester and Leeds City Regions. As well as analysing current patterns, the research assesses the possible economic impacts of increased integration. Whilst the report focuses on Leeds and Manchester, there are valuable lessons which can also be applied to SCR.
- 4.23. The research was commissioned by the Northern Way as a contribution to its Policy and Research programme, to provide robust evidence about the economic relationships between the two City Regions and to assess:
- Economic opportunities which could accrue from closer links, to the two City Regions, other Northern territories and the wider UK;
  - Risks, either in terms of adverse impacts on the economy of one of the two centres, or impacts on surrounding territories; and
  - The potential and feasibility for public policy to stimulate and encourage such relationships.
- 4.24. The key findings of the study are:
- There is currently relatively little evidence of interaction between Leeds and Manchester, despite their apparent geographical closeness. In particular, commuting is around 40% of the level that would be expected for two cities of similar size and proximity. High transport costs between the two centres are assessed to account for the low levels of commuting. There is also little evidence of interaction between customers and suppliers in the two regions.
  - Evidence suggests that people will commute to areas with high wage employment, whereas they commute out from areas with low wages. Closer economic interaction is likely to lead to increased wage levels, however, this will accrue to people who increase their skill levels in response to the greater opportunities available. Those who do not increase their skills levels will see very little change in their income levels.

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<sup>33</sup> Strengthening Economic Linkages between Leeds and Manchester: Feasibility and Implications Report (2009) Spatial Economics Research Centre

- The likelihood of commuting roughly increases with skill levels. Those with the highest skill levels most likely to commute to new job opportunities further afield.
- Although closer economic interaction could lead to higher income levels, this could be undermined by other factors, for example, increasing house prices.
- In terms of the ability to increase GDP, improved links between Leeds and Manchester (by reducing travel times by 20 minutes) creates a lower uplift in GDP than investment to reduce journey times between Leeds and London by 40 minutes. Improving links within Manchester also deliver greater overall benefits than improving links between Leeds and Manchester.

4.25. A number of implications highlighted within the report on the linkages between Leeds and Manchester are also applicable to Sheffield City Region. These are:

- Increased wages in the Leeds and Manchester City Regions may increase commuting to those areas from Sheffield City Region. This may reduce the availability of skilled labour, particularly in the north of SCR where there is already significant out commuting to West Yorkshire.
- Sheffield City Region is likely to see agglomeration benefits as a result of travel time reductions from Leeds to London, particularly if it lies on the route of the improvement.
- Measures which reduce travel times between the City Regions of Leeds and Sheffield would be likely to benefit SCR through widening the labour market.
- Transport investment alone will not be enough to increase GDP. To benefit from the investment in transport, skills levels must also rise.

4.26. Further to the evidence presented here, additional information relating to connectivity and economic growth is included in Document 2: Networks and Document 3: Forecasting evidence base documents. These documents cover the current provision of transport, and explore the interaction between land use and transport in more detail.

## 5. Regeneration

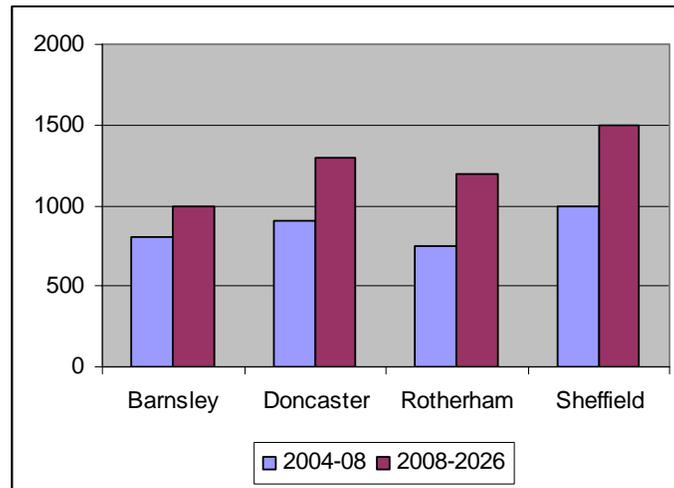
### Introduction

- 5.1. This chapter describes the need to plan for growth and to make SCR an attractive place for investment. This includes growth in housing and the emergence of Enterprise Zones.

### Housing Growth

- 5.2. Housing growth and renewal targets have previously been set at a regional level, in the Regional Spatial Strategies (RSS). However, decisions on housing developments are now taken forward by local authorities.
- 5.3. Although no longer in use, the principles of the RSS have shaped the development of the emerging Local Development Frameworks. To support these frameworks, the Transport Strategy must persuade district partners to ensure new housing and housing renewal is sustainable, in terms of its impacts on the transport system. Challenges identified by the Strategic Prioritisation Framework for the Yorkshire and Humber Region in delivering the targets of the RSS include:
- Ensuring the right number of houses and mix of types is provided in the right locations
  - Ensuring suitable land is available in those locations
  - Ensuring the transport network can support housing growth
  - Managing the growth in trips
  - Access to key services.
- 5.4. Guidelines on providing transport infrastructure in support of housing development are encapsulated in Planning Policy Statements issued by central government. These guidelines are now becoming part of local planning policy through the development of the Local Development Frameworks.
- 5.5. Figure 5.1 shows high levels of forecast annual housing growth for the South Yorkshire districts between 2004 and 2026. Annual growth between 2008 and 2026 is higher in all cases than growth experienced between 2004 and 2008.

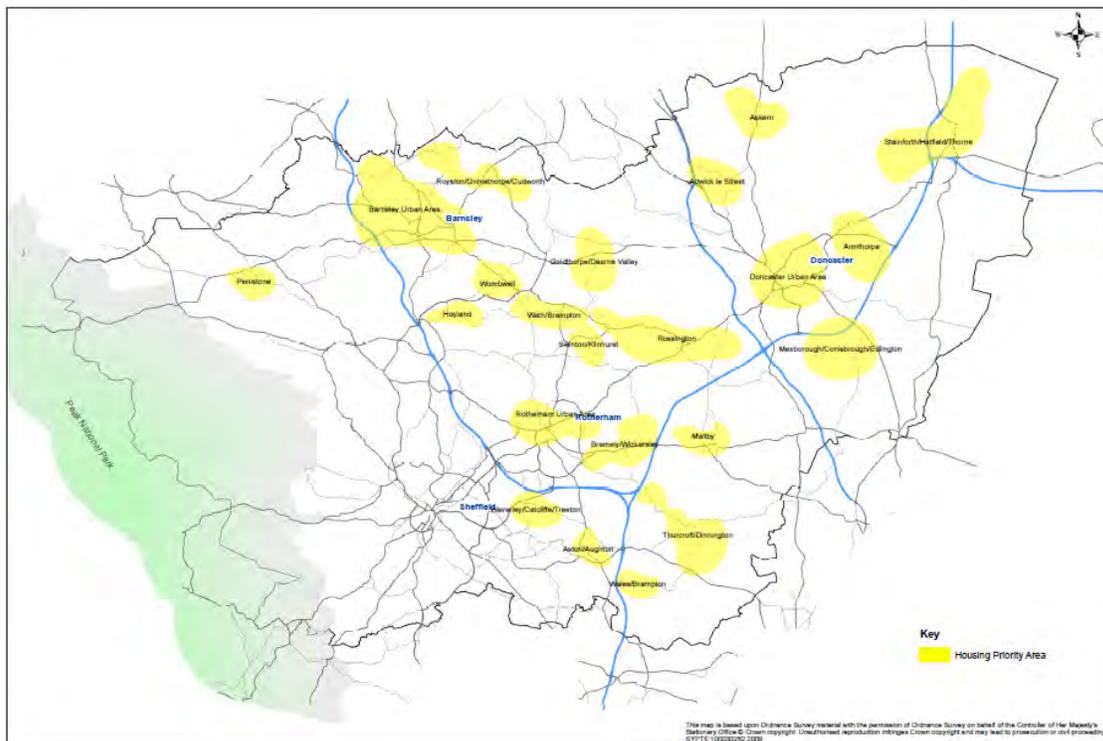
**Figure 5.1 Annual Average Housing Growth 2004-2008 and 2008–2026 by District: Growth in Housing Units by Year**



Source: the Housing Challenge, Yorkshire and Humber Plan

- 5.6. Particular growth points were also identified in the Regional Housing Strategy. For South Yorkshire these include Transform South Yorkshire (a housing market renewal pathfinder area) and Rossington eco-town (Doncaster).
- 5.7. The spatial distribution of the growth, as identified in the Local Development Frameworks of South Yorkshire districts is shown in Figure 5.2. The figure highlights extensive housing growth and renewal in the centres of Barnsley, Doncaster, Rotherham and Sheffield, the Dearne Valley towns and the Upper Don Valley, as well as other priority areas in Rossington, Dinnington and Hatfield.

**Figure 5.2 Housing Growth Points in South Yorkshire**



Source: South Yorkshire Local Development Frameworks/ SYPTF

- 5.8. Work to compare the housing allocations to the existing public transport networks is underway through use of the Land Use and Transport Integration (LUTI) model. However, there is a need to ensure that housing growth areas will be delivered in a way that overcomes the transport issues in that area. For example, existing overcrowded rail routes should receive increases in rail capacity to cater for new commuters.

### Enterprise Zones

- 5.9. Within SCR, several areas have been identified as potential Enterprise Zones (EZ's). The primary function of these sites is to target an area of land for investment which will deliver significant economic outcomes to support regeneration of the area.
- 5.10. The EZ's will be a focal point for investment and will need to be supported by sustainable travel opportunities, linking businesses with the labour market through a sufficient range of transport links. All candidate EZ's are capable of delivering GVA growth by attracting new business and expanding existing businesses. The Enterprise Zones are expected to attract private sector finance in the short run, and will support the LEP's wider priorities. The potential EZ's are as follows:
- Courthouse Campus Barnsley
  - Robin Hood Business Park
  - Modern Manufacturing Priority Area
  - Chesterfield Waterside
  - Markham Vale
  - Bassetlaw A1M Site

## 6. Summary

- 6.1. This Evidence Base document relates specifically to one of our goals. There are many topics where overlaps exist between this document and others in the series. Specifically, further information is provided in the following documents:
- Document 1: Geographic and Demographic Overview
  - Document 2: Networks
  - Document 3: Forecasting
  - Document 6: Enhancing Social Inclusion and Health.
- 6.2. The key messages from this Evidence Base document are summarised below:
- Improving transport is vital for supporting economic growth.
  - There are a number of transport links that need to be improved. The evidence suggests that improving to links to other City Regions, such as Manchester, Leeds and London, will result in economic benefits for our City Region.
  - SCR is well defined by the economic links and travel to work patterns of the areas that make up SCR. Improvements to the Strategic transport network within SCR are important.
  - Ensuring people have access to education, training and job is important to ensure people can engage the labour market.
  - The Transport Strategy needs to persuade and support district partners to ensure future development patterns are sustainable, in terms of its impacts on the transport system.
  - Transport has an important role in unlocking development land in order to facilitate future economic growth.