

### Leeds Socio-Economic Baseline Report

Report

**July 2009**

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Metro and Leeds City Council

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## Contents

|          |                                  |           |
|----------|----------------------------------|-----------|
| <b>1</b> | <b>INTRODUCTION</b>              | <b>1</b>  |
| <b>2</b> | <b>POPULATION</b>                | <b>3</b>  |
| <b>3</b> | <b>ECONOMIC ACTIVITY</b>         | <b>7</b>  |
|          | Employment                       | 7         |
|          | Economic inactivity              | 8         |
| <b>4</b> | <b>DEPRIVATION</b>               | <b>13</b> |
| <b>5</b> | <b>TRANSPORT CHARACTERISTICS</b> | <b>19</b> |
|          | Transport Needs Index            | 21        |

## FIGURES

|            |                                                 |    |
|------------|-------------------------------------------------|----|
| Figure 1.1 | The City of Leeds within West Yorkshire         | 1  |
| Figure 1.2 | Leeds ward map - at the time of the 2001 Census | 2  |
| Figure 1.3 | Leeds ward map – current (established 2004)     | 2  |
| Figure 2.1 | Population growth in the City of Leeds          | 3  |
| Figure 2.2 | West Yorkshire population densities             | 4  |
| Figure 3.1 | Locations of the largest employers in Leeds     | 8  |
| Figure 3.2 | Job Seeker Allowance Claimants                  | 11 |
| Figure 4.1 | Index of Multiple Deprivation                   | 13 |
| Figure 4.2 | Income deprivation                              | 14 |
| Figure 4.3 | Employment deprivation                          | 14 |
| Figure 4.4 | Health deprivation                              | 15 |
| Figure 4.5 | Education deprivation                           | 15 |
| Figure 4.6 | Housing deprivation                             | 16 |
| Figure 4.7 | Living environment deprivation                  | 16 |
| Figure 4.8 | Crime deprivation                               | 17 |
| Figure 5.1 | Car ownership                                   | 20 |
| Figure 5.2 | Transport Needs Index in Leeds                  | 22 |

## TABLES

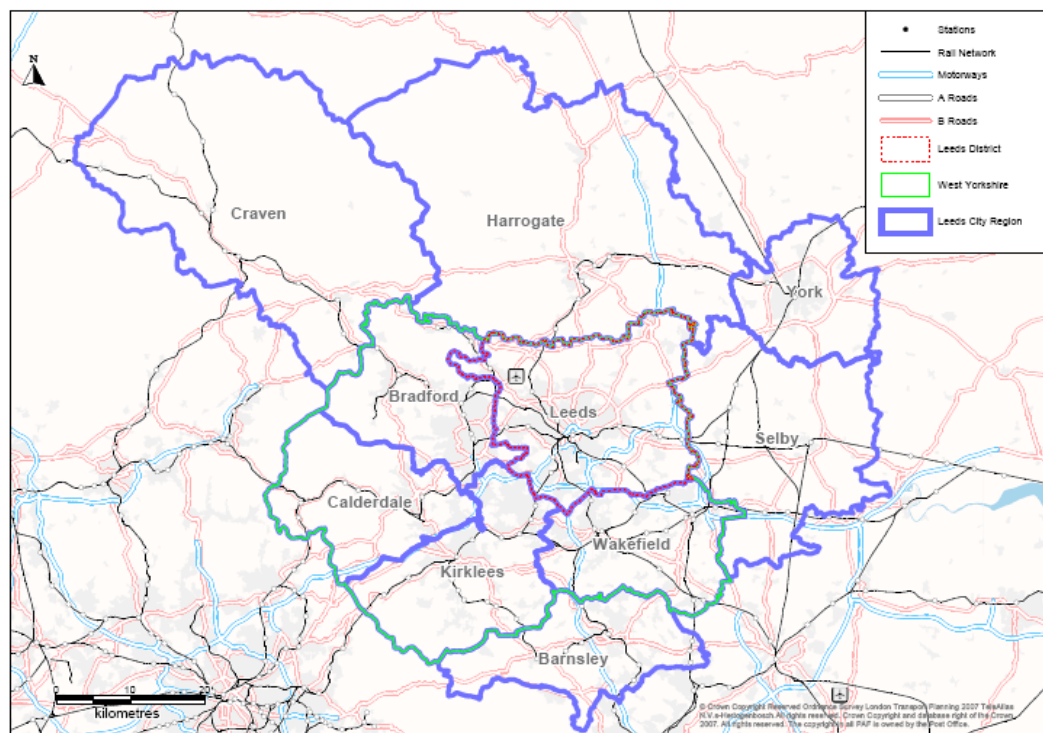
|           |                          |   |
|-----------|--------------------------|---|
| Table 2-1 | West Yorkshire Districts | 3 |
|-----------|--------------------------|---|

|           |                                        |    |
|-----------|----------------------------------------|----|
| Table 2-2 | Age of population                      | 4  |
| Table 2-3 | Population aged 19 years old and under | 5  |
| Table 3-1 | Jobs by industry                       | 7  |
| Table 3-2 | Employment growth                      | 8  |
| Table 3-3 | Economic inactivity                    | 9  |
| Table 3-4 | Unemployment                           | 10 |
| Table 5-1 | Car ownership                          | 19 |
| Table 5-2 | % of households with no car or van     | 19 |

# 1 Introduction

- 1.1 This report provides a description of the socio-economic characteristics of the City of Leeds. Its purpose is to set the context for the New Generation Transport (NGT) Major Scheme Business Case.
- 1.2 The City of Leeds is located within West Yorkshire and, in terms of both area and population, is the largest district within the Metropolitan County. The district contains the Leeds urban area and a further 28 towns, market towns and district centres. It is a key focus within the Leeds City Region, the area covering local authorities in North, South and West Yorkshire across which people travel to work, spend their leisure time, go to school, and live.
- 1.3 Figure 1.1 shows the location of the district within West Yorkshire and the Leeds City Region. The proposed NGT scheme falls entirely within the City of Leeds district boundary.

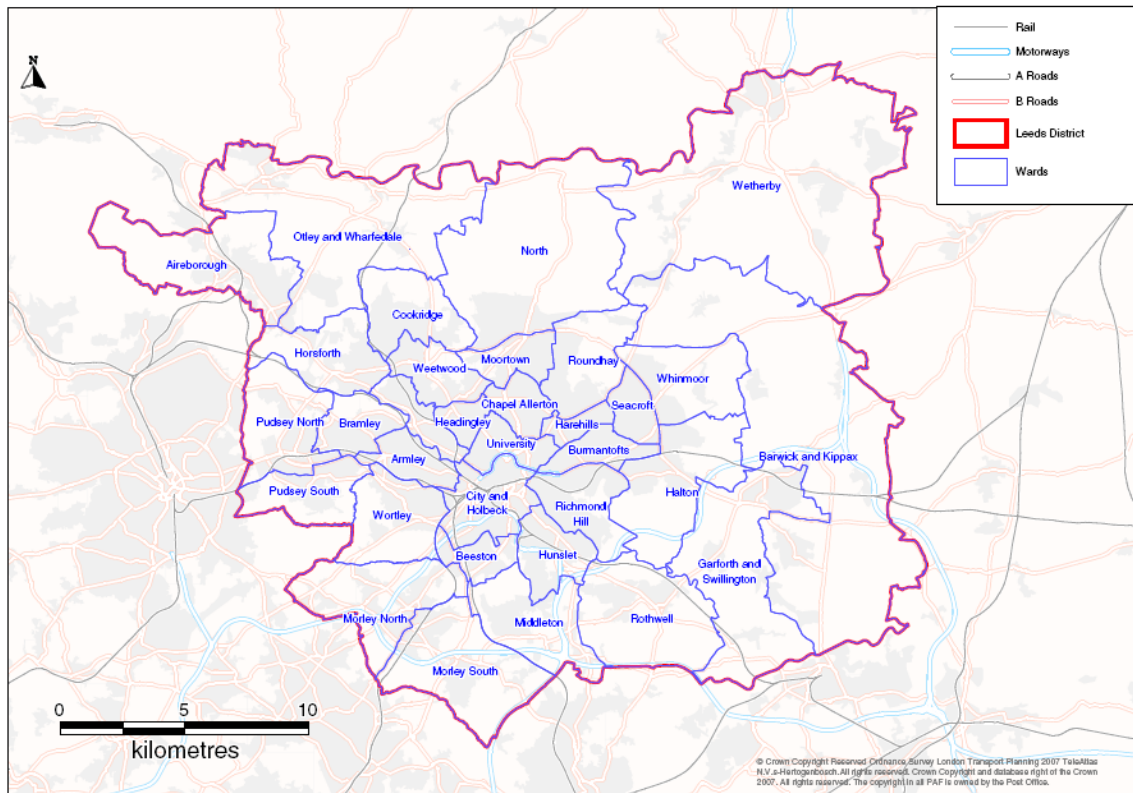
**FIGURE 1.1 THE CITY OF LEEDS WITHIN WEST YORKSHIRE**



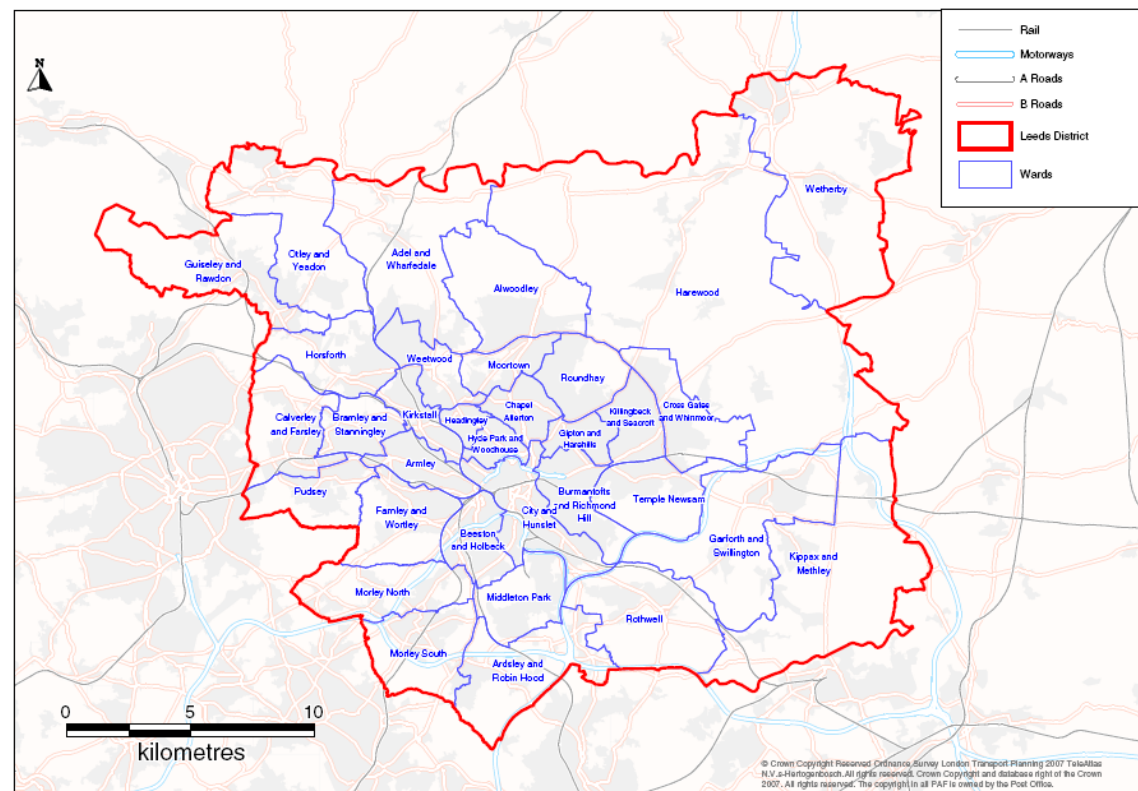
- 1.4 This report provides detailed information about the socio-economic characteristics of the City of Leeds. It is structured as follows:
- I Section two provides a summary of the characteristics of the Leeds population;
  - I Section three describes the employment characteristics of the district;
  - I Section four sets out information about social deprivation in Leeds; and
  - I Section five details the transport characteristics including car ownership and travel needs.
- 1.5 The 2001 Census is the most commonly used data source in this report and data is often presented at the ward level. Figure 1.2 maps the ward boundaries that

existed at the time of the 2001 Census, however boundaries and ward names have changed since then. Figure 1.3 maps the new ward boundaries and names, however it should be noted that these are not used in this report as the 2001 Census data is not available at the current ward level.

**FIGURE 1.2 LEEDS WARD MAP - AT THE TIME OF THE 2001 CENSUS**



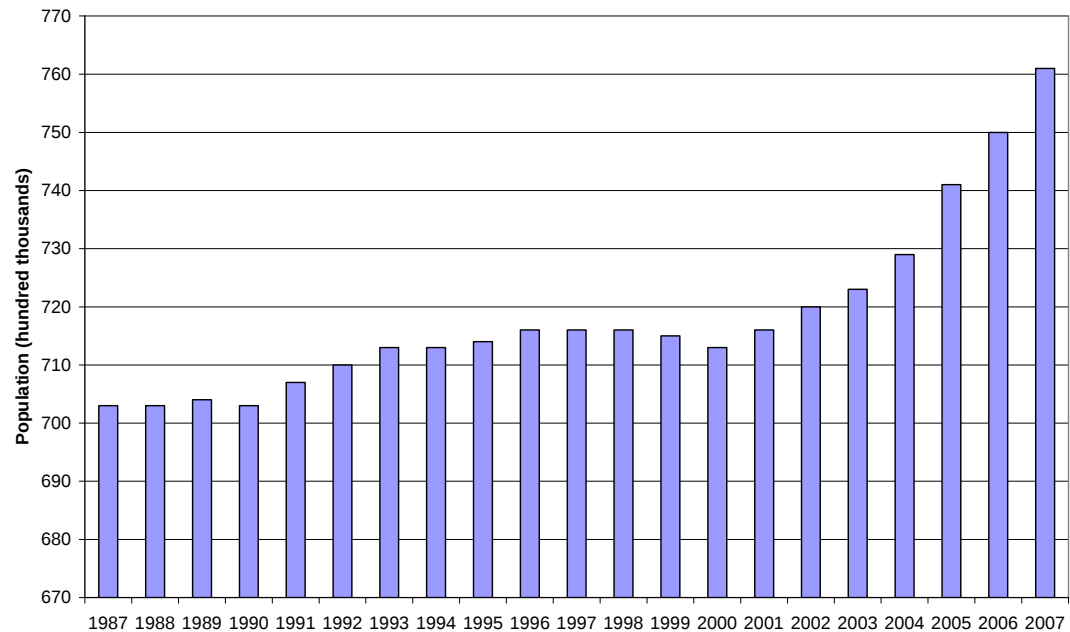
**FIGURE 1.3 LEEDS WARD MAP - CURRENT (ESTABLISHED 2004)**



## 2 Population

- 2.1 The City of Leeds population is just over three-quarters of a million. The population has been fast growing as shown in Figure 2.1. Since 2000 the district has experienced a 7% population growth compared to 5% in West Yorkshire and 4% in Great Britain.

**FIGURE 2.1 POPULATION GROWTH IN THE CITY OF LEEDS**



Source: ONS Mid Year Population Estimates

- 2.2 Leeds is the most densely populated district within West Yorkshire with almost 1,300 people per square kilometre compared to a district average of 1,025. Table 2-1 compares the district sizes, populations and population densities.

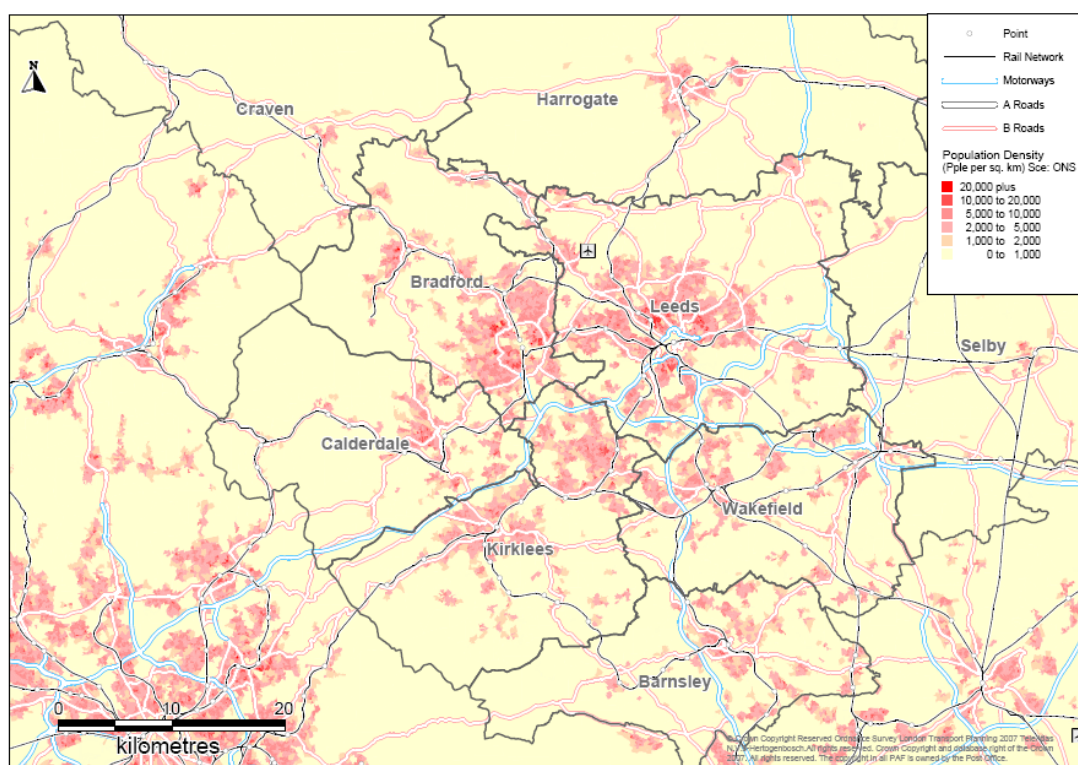
**TABLE 2-1 WEST YORKSHIRE DISTRICTS**

| District             | Population (2001) | Size (km <sup>2</sup> ) | Population per km <sup>2</sup> |
|----------------------|-------------------|-------------------------|--------------------------------|
| Calderdale District  | 192,396           | 364                     | 529                            |
| Wakefield District   | 315,173           | 339                     | 931                            |
| Kirklees District    | 388,576           | 409                     | 951                            |
| Bradford District    | 467,668           | 366                     | 1,276                          |
| Leeds District       | 715,404           | 552                     | 1,297                          |
| West Yorkshire total | 2,079,217         | 2,029                   | 1,025                          |
| England              | 49,136,678        | 132,930                 | 370                            |

Source: ONS 2001

- 2.3 Population density across West Yorkshire is mapped in Figure 2.2. This shows that the most densely populated parts of Leeds include areas towards the north and east of the city centre.

**FIGURE 2.2 WEST YORKSHIRE POPULATION DENSITIES**



Source: ONS 2001

- 2.4 Forecasts show continued population growth for Leeds - those undertaken by Yorkshire Futures and the University of Leeds suggest that the population of the district will increase by a further 5.6% between 2006 and 2030<sup>1</sup>. The Regional Spatial Strategy sets out how such growth will be accommodated and states that the City of Leeds must plan for 77,400 additional households by 2026. This increase equates to around a quarter on current numbers, which is clearly greater than the expected population growth. Additional factors which influence the need for more housing include an increase in the amount of one or two person households and a longer life expectancy.
- 2.5 The age of the population in Leeds is inline with the West Yorkshire and England average as shown in Table 2-2.

**TABLE 2-2 AGE OF POPULATION**

| Area                 | % of population 19 years old & under | % of population 20 to 59 years old | % of population 60 years old & over |
|----------------------|--------------------------------------|------------------------------------|-------------------------------------|
| Leeds District       | 26%                                  | 55%                                | 20%                                 |
| West Yorkshire total | 27%                                  | 54%                                | 20%                                 |
| England              | 25%                                  | 54%                                | 21%                                 |

Source: 2001 Census

<sup>1</sup> Source: Yorkshire Futures/University of Leeds, Yorkshire and Humber Population Projections: age and ethnicity, September 2006. (Quoted in Leeds in Brief, November 2007, Yorkshire Forward).

- 2.6 Analysis of population age by ward shows that wards with a higher than average concentration of older people tend to be located on the outer edges of the district in wards such as Cookridge, North, Otley and Wharfedale and Wetherby. In comparison, wards with a higher than average concentration of younger people tend to be concentrated in more central wards as shown in Table 2-3. These wards include Harehills, Burmantofts, City and Holbeck and Richmond Hill.

**TABLE 2-3 POPULATION AGED 19 YEARS OLD AND UNDER**

| Ward                   | % of population 19 years old & under | % of population 20 to 59 years old | % of population 60 years old & over |
|------------------------|--------------------------------------|------------------------------------|-------------------------------------|
| Aireborough            | 23%                                  | 55%                                | 22%                                 |
| Armley                 | 26%                                  | 56%                                | 18%                                 |
| Barwick and Kippax     | 24%                                  | 55%                                | 21%                                 |
| Beeston                | 28%                                  | 53%                                | 19%                                 |
| Bramley                | 29%                                  | 53%                                | 18%                                 |
| Burmantofts            | 29%                                  | 51%                                | 20%                                 |
| Chapel Allerton        | 27%                                  | 55%                                | 18%                                 |
| City and Holbeck       | 28%                                  | 54%                                | 19%                                 |
| Cookridge              | 24%                                  | 51%                                | 25%                                 |
| Garforth & Swillington | 24%                                  | 54%                                | 22%                                 |
| Halton                 | 22%                                  | 53%                                | 25%                                 |
| Harehills              | 35%                                  | 51%                                | 14%                                 |
| Headingley             | 18%                                  | 74%                                | 8%                                  |
| Horsforth              | 23%                                  | 54%                                | 22%                                 |
| Hunslet                | 30%                                  | 50%                                | 20%                                 |
| Kirkstall              | 21%                                  | 62%                                | 17%                                 |
| Middleton              | 29%                                  | 54%                                | 17%                                 |
| Moortown               | 25%                                  | 52%                                | 23%                                 |
| Morley North           | 24%                                  | 56%                                | 20%                                 |
| Morley South           | 26%                                  | 57%                                | 18%                                 |
| North                  | 24%                                  | 52%                                | 24%                                 |
| Otley & Wharfedale     | 23%                                  | 53%                                | 24%                                 |
| Pudsey North           | 23%                                  | 56%                                | 21%                                 |
| Pudsey South           | 25%                                  | 53%                                | 22%                                 |
| Richmond Hill          | 30%                                  | 50%                                | 20%                                 |
| Rothwell               | 24%                                  | 54%                                | 22%                                 |
| Roundhay               | 25%                                  | 54%                                | 21%                                 |
| Seacroft               | 32%                                  | 48%                                | 20%                                 |
| University             | 25%                                  | 62%                                | 13%                                 |
| Weetwood               | 27%                                  | 54%                                | 19%                                 |
| Wetherby               | 23%                                  | 52%                                | 25%                                 |
| Whinmoor               | 27%                                  | 51%                                | 22%                                 |
| Wortley                | 26%                                  | 53%                                | 20%                                 |
| <b>Leeds total</b>     | <b>26%</b>                           | <b>55%</b>                         | <b>20%</b>                          |

Source: 2001 Census



### 3 Economic activity

#### Employment

- 3.1 The City of Leeds is the location of over 490,000 jobs<sup>2</sup> and is the largest centre of employment within West Yorkshire. Employment has increased significantly over the last three decades with the largest growth being seen in financial and business services. These sectors account for over one quarter of all jobs in Leeds as shown in Table 3-1.

TABLE 3-1 JOBS BY INDUSTRY

| Industry Type                            | Leeds | Yorkshire & The Humber | Great Britain |
|------------------------------------------|-------|------------------------|---------------|
| Manufacturing                            | 9.4%  | 13.6%                  | 10.6%         |
| Construction                             | 5.6%  | 5.4%                   | 4.9%          |
| Services                                 | 84.5% | 79.7%                  | 83.0%         |
| • Distribution, hotels & restaurants     | 20.6% | 23.4%                  | 23.3%         |
| • Transport & communications             | 5.2%  | 5.7%                   | 5.9%          |
| • Finance, IT, other business activities | 27.1% | 17.8%                  | 21.6%         |
| • Public admin, education & health       | 26.4% | 28.5%                  | 26.9%         |
| • Other services                         | 5.2%  | 4.4%                   | 5.2%          |
| Tourism-related*                         | 7.5%  | 7.9%                   | 8.2%          |

Source: ONS annual business inquiry employee analysis, 2007.

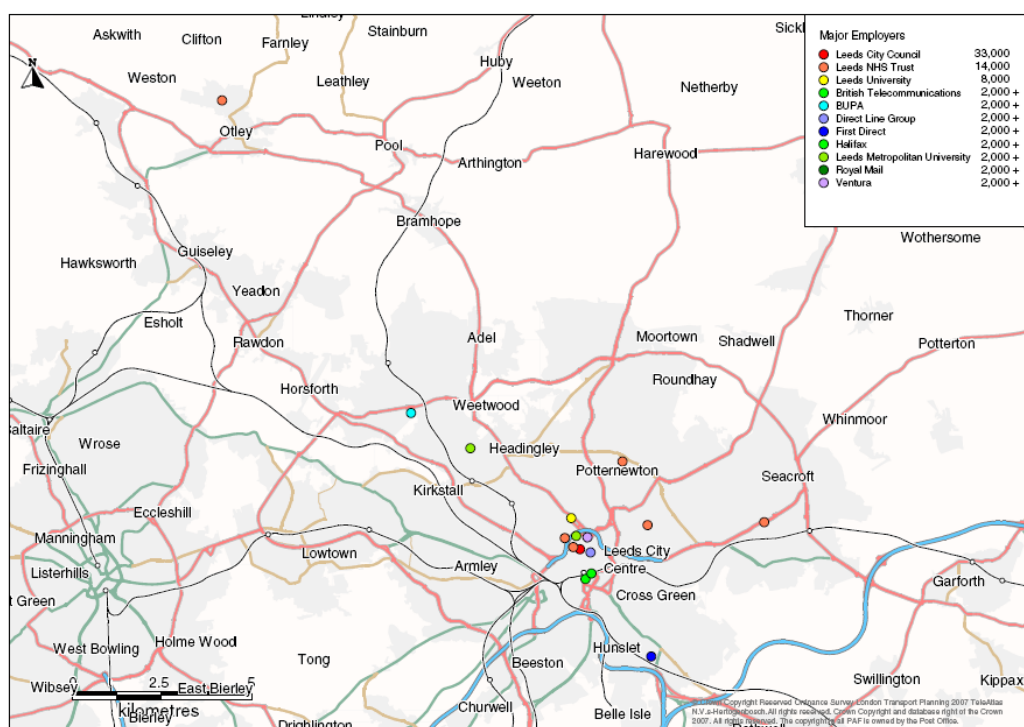
\* NB: Tourism consists of industries that are also part of the services industry.

- 3.2 The majority of employment opportunities are located within the Leeds urban area. Key employment areas are the city centre and University, which account for just under half of all employment within the outer ring road. Other important locations include St James's Hospital, town centres like Headingley and sites around the Outer Ring Road. Figure 3.1 illustrates the locations of the largest employers in Leeds, each accounting for more than 2,000 jobs.

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<sup>2</sup> Total jobs includes employees, self-employed, government-supported trainees and HM Forces, Nomis Job Density Data, 2006.

**FIGURE 3.1 LOCATIONS OF THE LARGEST EMPLOYERS IN LEEDS**



Source: Leeds City Council and Yorkshire Forward, 2009

- 3.3 Employment in Leeds is forecast to continue to grow at a faster rate than across West Yorkshire and the UK as a whole, as shown in Table 3-2.

**TABLE 3-2 EMPLOYMENT GROWTH**

| AREA              | Total employment - number of jobs (000s) |        |          |
|-------------------|------------------------------------------|--------|----------|
|                   | 2008                                     | 2018   | % change |
| Leeds             | 456                                      | 481    | 5.5%     |
| Leeds City Region | 1,464                                    | 1,525  | 4.1%     |
| West Yorkshire    | 1,113                                    | 1,168  | 4.9%     |
| UK                | 31,375                                   | 31,806 | 1.4%     |

Source: Leeds City Council, Leeds Economy briefing note, 2009

- 3.4 The success of the Leeds economy means that the district supports more jobs than can be filled by its population. This means there is net inward commuting; the total daily flow of commuters into Leeds from neighbouring districts is 80,000 more than the out flow.

### Economic inactivity

- 3.5 71% of households in the City of Leeds are economically active (the head is employed, self-employed, unemployed or a full-time student), whilst 29% is economically inactive (retired, part-time student, looking after home/family, permanently sick or disabled). This is identical to the West Yorkshire population profile but slightly different to the England average where 72% are economically active and 28% are economically inactive.
- 3.6 The wards with the highest levels of economic inactivity are shown in Table 3-3 and include University, Richmond Hill and Burmantofts.

**TABLE 3-3 ECONOMIC INACTIVITY**

| Ward                     | % Economically Active Households | % Economically Inactive Households |
|--------------------------|----------------------------------|------------------------------------|
| Roundhay                 | 78%                              | 22%                                |
| Morley North             | 78%                              | 22%                                |
| Morley South             | 77%                              | 23%                                |
| Aireborough              | 77%                              | 23%                                |
| Horsforth                | 77%                              | 23%                                |
| Pudsey North             | 76%                              | 24%                                |
| Barwick and Kippax       | 76%                              | 24%                                |
| Otley and Wharfedale     | 76%                              | 24%                                |
| Garforth and Swillington | 75%                              | 25%                                |
| Moortown                 | 74%                              | 26%                                |
| North                    | 74%                              | 26%                                |
| Wetherby                 | 74%                              | 26%                                |
| Halton                   | 73%                              | 27%                                |
| Rothwell                 | 73%                              | 27%                                |
| Pudsey South             | 72%                              | 28%                                |
| Kirkstall                | 72%                              | 28%                                |
| Wortley                  | 72%                              | 28%                                |
| Cookridge                | 71%                              | 29%                                |
| Middleton                | 71%                              | 29%                                |
| Armley                   | 71%                              | 29%                                |
| Bramley                  | 71%                              | 29%                                |
| Beeston                  | 69%                              | 31%                                |
| Chapel Allerton          | 68%                              | 32%                                |
| Weetwood                 | 68%                              | 32%                                |
| Whinmoor                 | 68%                              | 32%                                |
| Harehills                | 65%                              | 35%                                |
| Headingley               | 64%                              | 36%                                |
| City and Holbeck         | 63%                              | 37%                                |
| Hunslet                  | 63%                              | 37%                                |
| Seacroft                 | 61%                              | 39%                                |
| Burmantofts              | 61%                              | 39%                                |
| Richmond Hill            | 60%                              | 40%                                |
| University               | 56%                              | 44%                                |
| <b>Leeds total</b>       | <b>26%</b>                       | <b>55%</b>                         |

*Source: 2001 Census*

- 3.7 Unemployment in West Yorkshire (for the main householder) stands at 4.5%, which is much higher than the England average of 3.9%. That for the City of Leeds is more consistent with the England average at 4.1%, but certain wards have much higher unemployment rates. Wards which have double the Leeds average include Richmond Hill, Harehills, Seacroft, University, Burmantofts and City and Holbeck, as shown in Table 3-4.

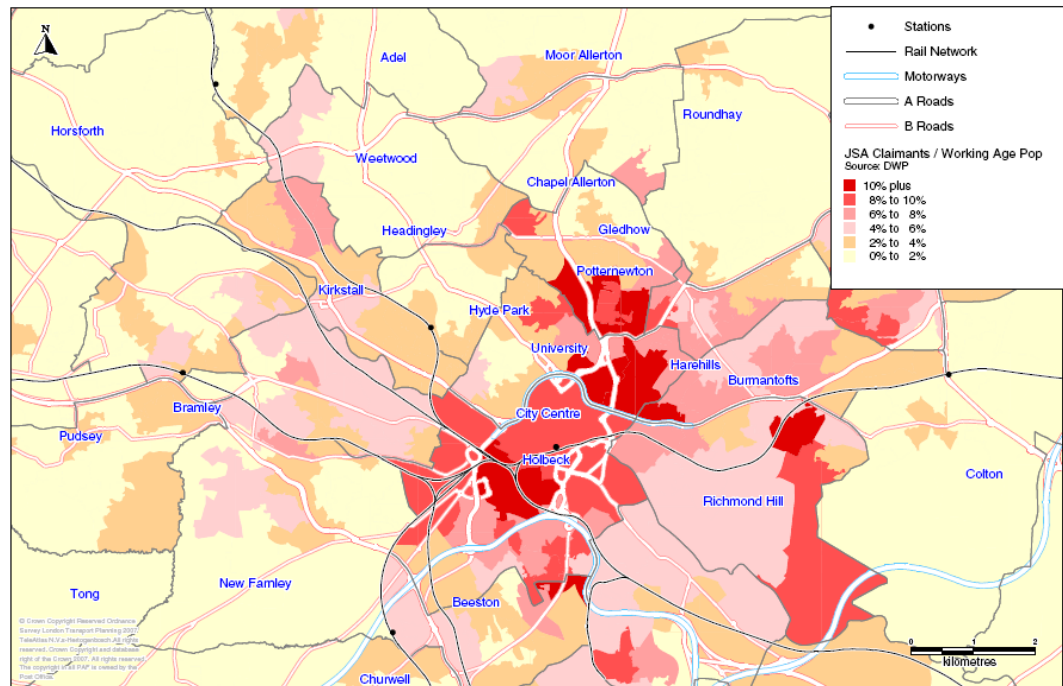
**TABLE 3-4 UNEMPLOYMENT**

| Ward                     | % of unemployed households (out of all economically active households) |
|--------------------------|------------------------------------------------------------------------|
| City and Holbeck         | 10.4%                                                                  |
| Burmantofts              | 9.9%                                                                   |
| University               | 9.7%                                                                   |
| Seacroft                 | 9.7%                                                                   |
| Harehills                | 9.5%                                                                   |
| Richmond Hill            | 8.2%                                                                   |
| Hunslet                  | 7.7%                                                                   |
| Chapel Allerton          | 6.9%                                                                   |
| Beeston                  | 6.5%                                                                   |
| Middleton                | 5.6%                                                                   |
| Armley                   | 5.0%                                                                   |
| Kirkstall                | 5.0%                                                                   |
| Wortley                  | 4.5%                                                                   |
| Whinmoor                 | 4.5%                                                                   |
| Bramley                  | 4.2%                                                                   |
| Headingley               | 3.6%                                                                   |
| Moortown                 | 2.8%                                                                   |
| Pudsey South             | 2.7%                                                                   |
| North                    | 2.6%                                                                   |
| Weetwood                 | 2.4%                                                                   |
| Rothwell                 | 2.4%                                                                   |
| Cookridge                | 2.4%                                                                   |
| Morley South             | 2.3%                                                                   |
| Barwick and Kippax       | 2.3%                                                                   |
| Roundhay                 | 2.2%                                                                   |
| Pudsey North             | 1.9%                                                                   |
| Otley and Wharfedale     | 1.8%                                                                   |
| Aireborough              | 1.8%                                                                   |
| Morley North             | 1.8%                                                                   |
| Horsforth                | 1.5%                                                                   |
| Halton                   | 1.4%                                                                   |
| Garforth and Swillington | 1.3%                                                                   |
| Wetherby                 | 1.3%                                                                   |
| <b>Leeds average</b>     | <b>4.1%</b>                                                            |

Source: 2001 Census

- 3.8 Figure 3.2 compares the proportion of Job Seekers Allowance claimants against the working age population. It shows that there are high proportions of claimants in parts of the City and Holbeck, Burmantofts and University wards.

**FIGURE 3.2 JOB SEEKER ALLOWANCE CLAIMANTS**



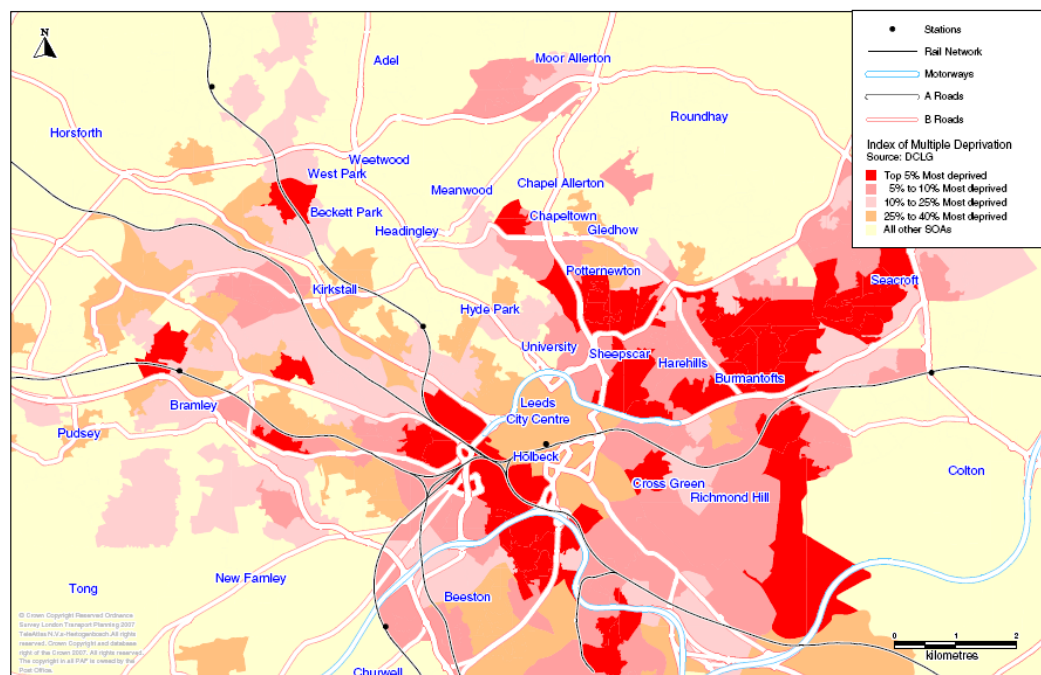
Source: ONS, 2007



## 4 Deprivation

- 4.1 Deprivation is most commonly measured by the Index of Multiple Deprivation (IMD). The IMD combines a number of indicators, chosen to cover a range of economic, social and housing issues, into a single deprivation score for each small area in England. This allows each area to be ranked relative to one another according to their level of deprivation.
- 4.2 The Indices of Deprivation 2007 have been produced at Lower Super Output Area level, of which there are 32,482 in the country. (LSOAs have between 1,000 and 3,000 people living in them with an average population of 1,500 people. In most cases, these are smaller than wards, thus allowing the identification of small pockets of deprivation.) There are also district summary scores for each of the 354 Local Authority districts in England.
- 4.3 The Lower Super Output Area ranked 1 by the IMD is the most deprived and that ranked 32,482 is the least deprived. Similarly, the Local Authority district ranked 1 is the most deprived and that ranked 354 is the least deprived.
- 4.4 The Leeds district rank of average IMD score is 85 out of 354, which means it is one of the 25% most deprived Local Authority districts. However, this is not uniform across the district and there are some parts of Leeds which are very affluent and some which are very deprived. This is illustrated in Figure 4.1.

FIGURE 4.1 INDEX OF MULTIPLE DEPRIVATION



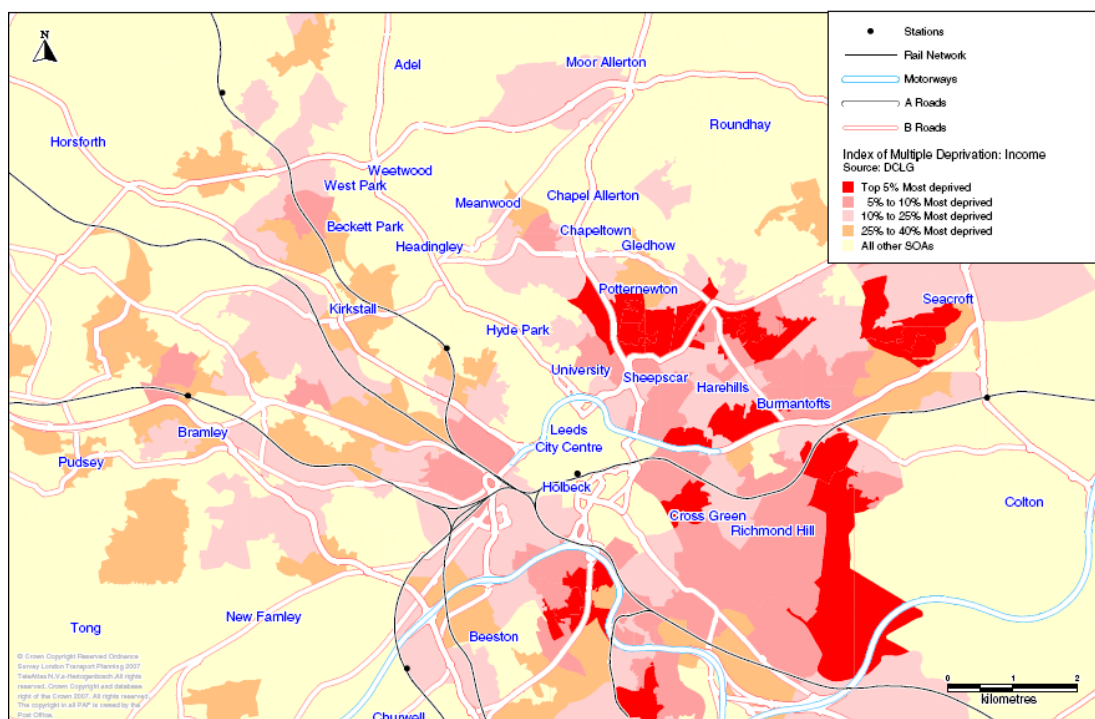
- 4.5 The categories that are assessed as part of the IMD are:

- I Income;
- I Employment;
- I Health;

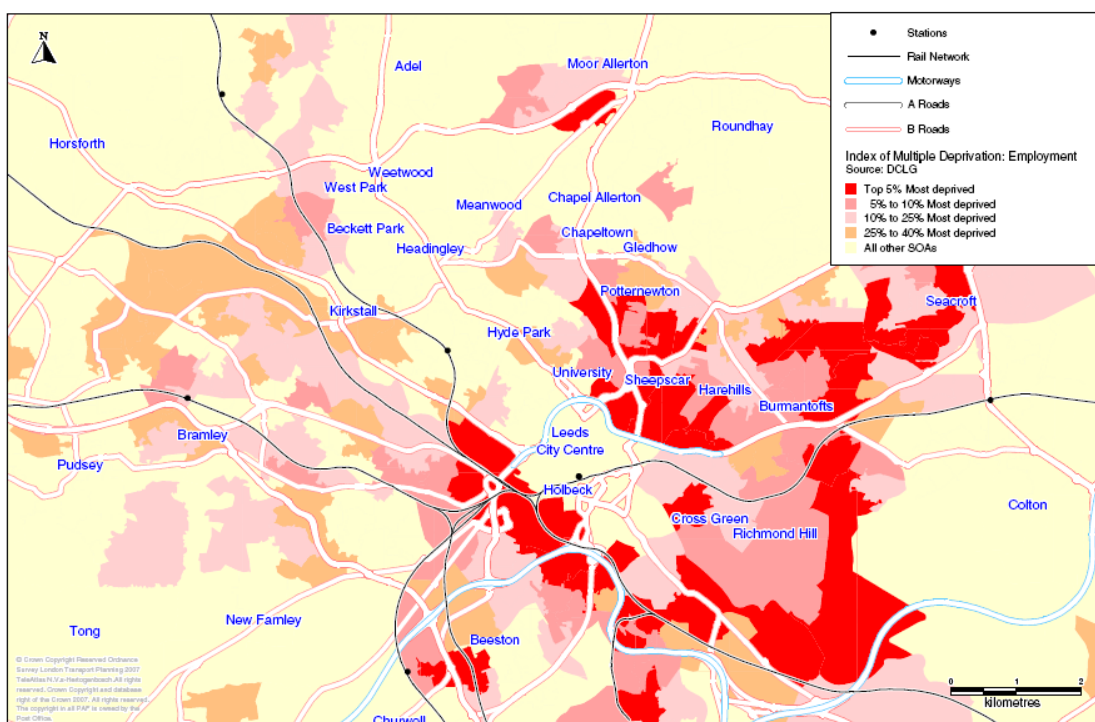
- I Education;
- I Housing;
- I Living environment; and
- I Crime.

4.6 These have been mapped and are presented in Figure 4.2 to Figure 4.8. The maps show that parts of East and South Leeds are the most deprived including areas around Harehills, Burmantofts and Richmond Hill.

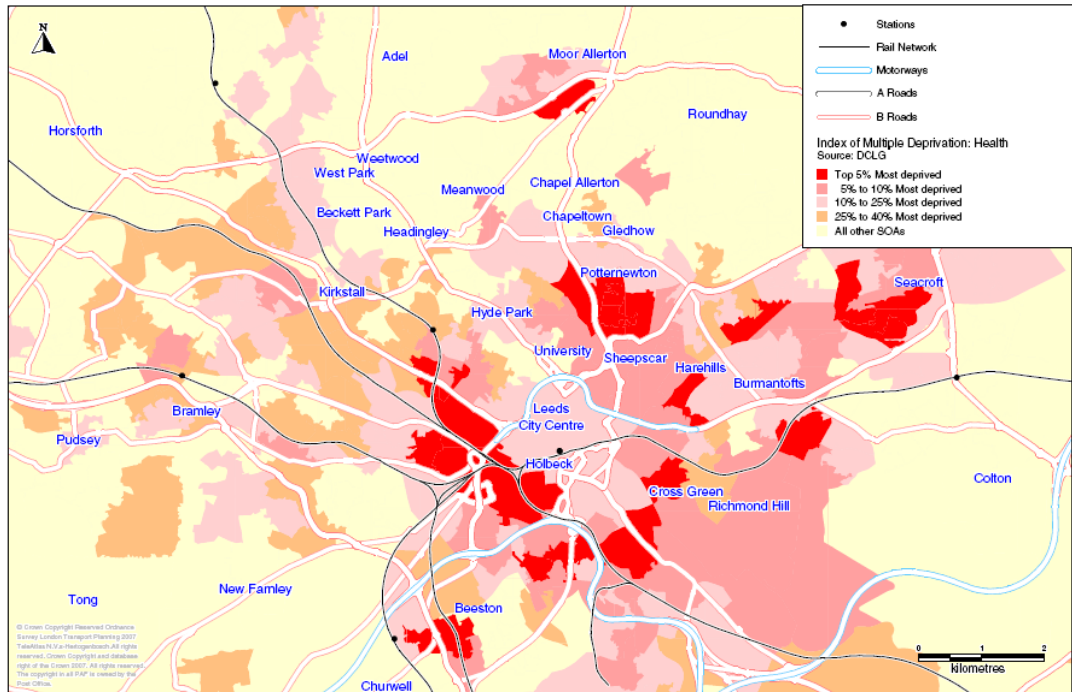
**FIGURE 4.2 INCOME DEPRIVATION**



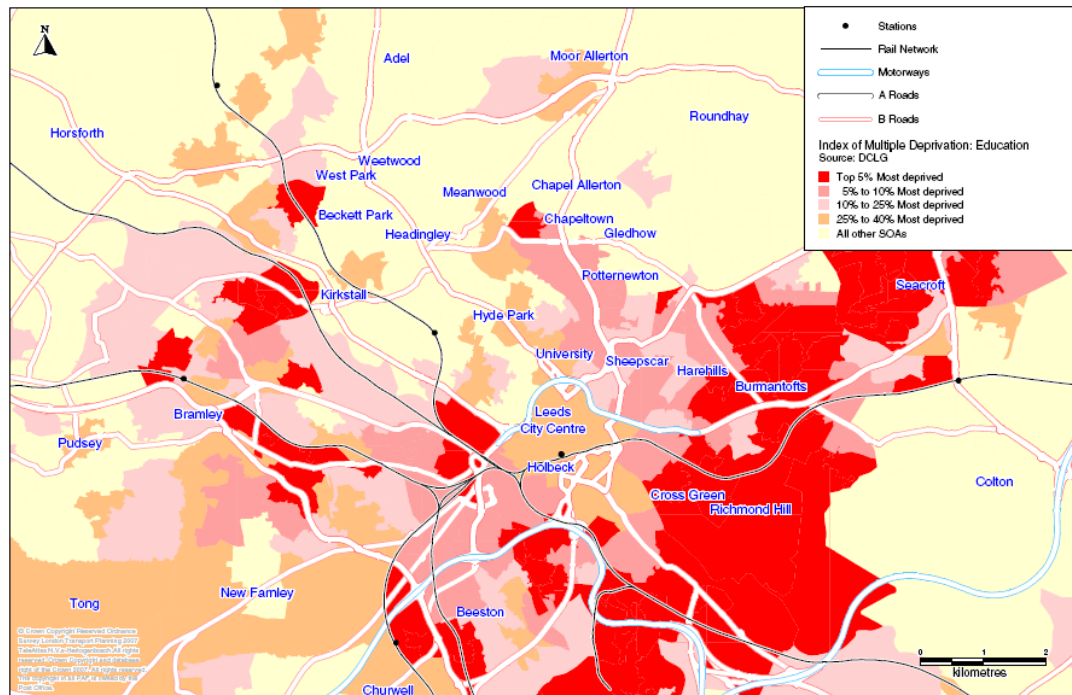
**FIGURE 4.3 EMPLOYMENT DEPRIVATION**



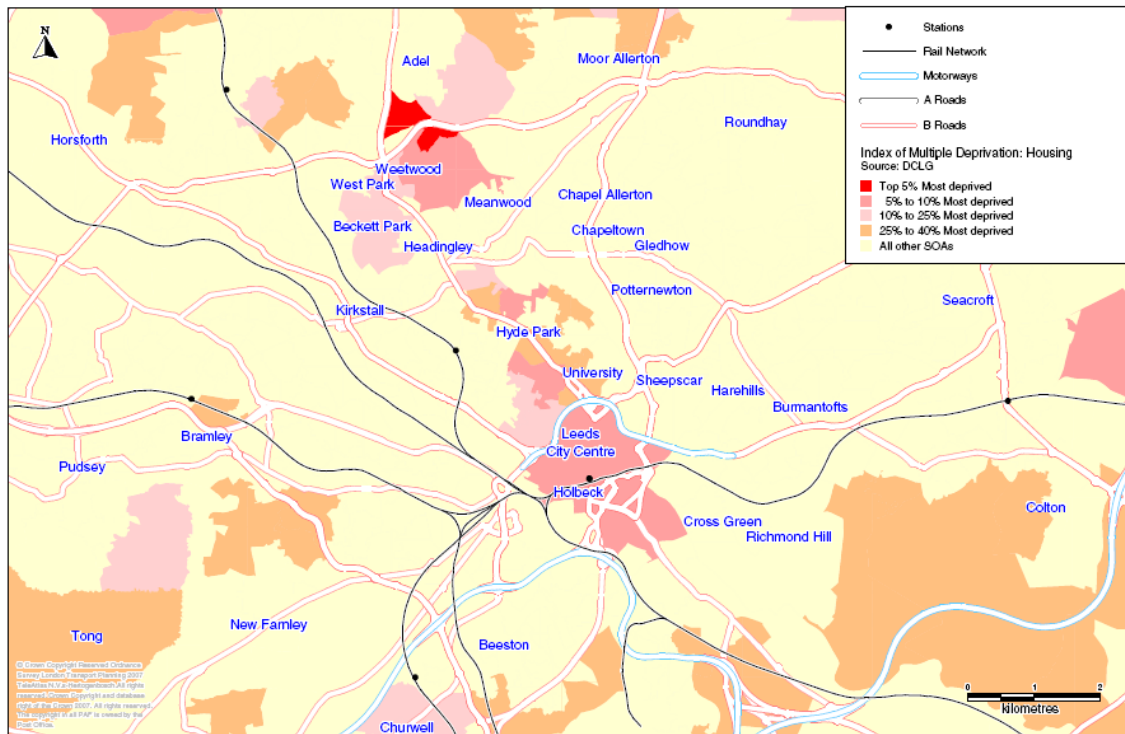
**FIGURE 4.4 HEALTH DEPRIVATION**



**FIGURE 4.5 EDUCATION DEPRIVATION**



**FIGURE 4.6 HOUSING DEPRIVATION**



**FIGURE 4.7 LIVING ENVIRONMENT DEPRIVATION**

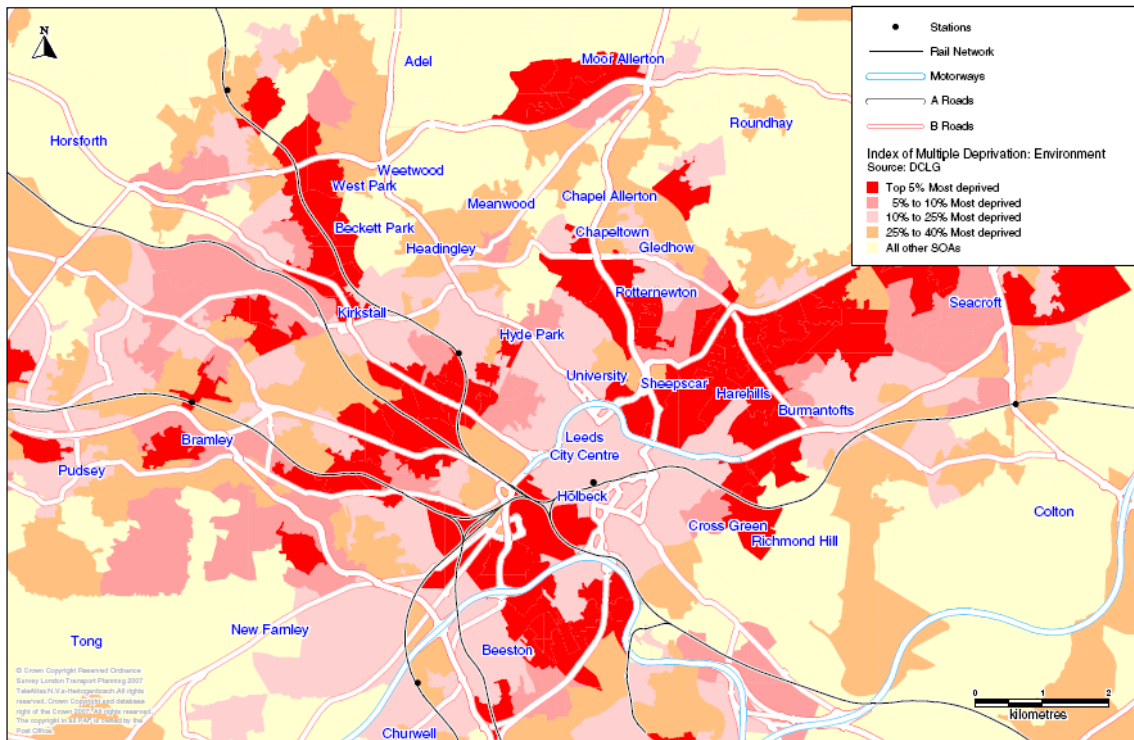
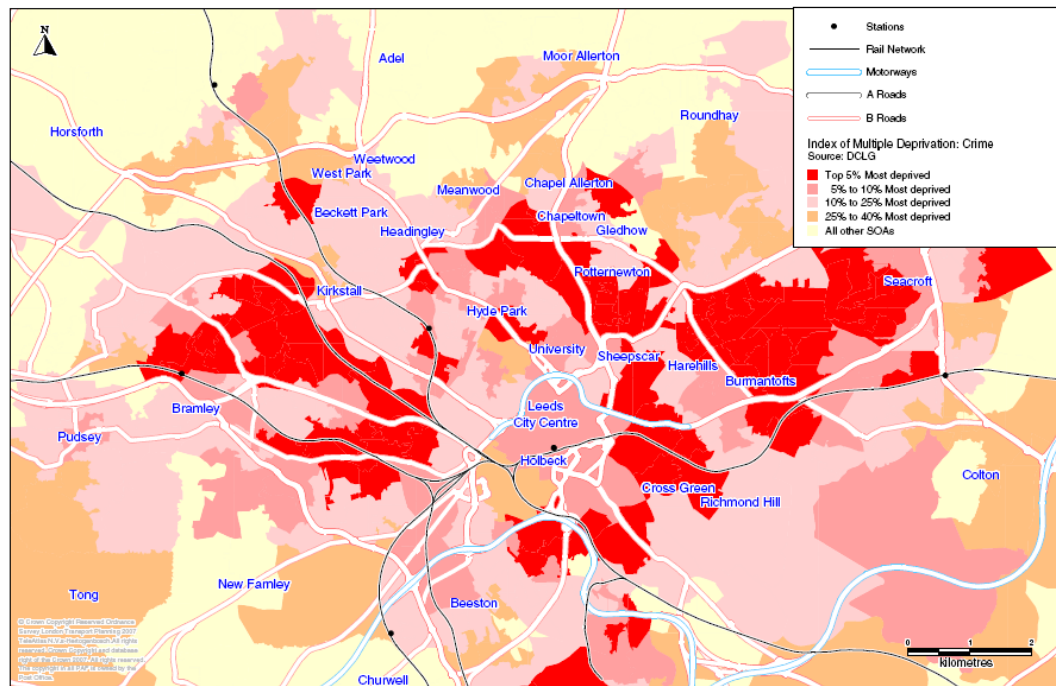


FIGURE 4.8 CRIME DEPRIVATION





## 5 Transport Characteristics

- 5.1 Approximately two thirds of households own at least one car or van in Leeds, which is in line with the West Yorkshire average but lower than the England average as shown in Table 5-1.

**TABLE 5-1 CAR OWNERSHIP**

|                | % households with no car or van | % households with 1 car or van | % households with 2+ cars or vans |
|----------------|---------------------------------|--------------------------------|-----------------------------------|
| Leeds          | 34%                             | 42%                            | 24%                               |
| West Yorkshire | 32%                             | 43%                            | 25%                               |
| England        | 27%                             | 44%                            | 29%                               |

Source: 2001 Census

- 5.2 Car ownership in Leeds is not evenly distributed and some wards have much a much higher proportion of households with no car or van compared to the district and county average. These wards include Harehills, Richmond Hill, Burmantofts, City and Holbeck and University as shown in Table 5-2.

**TABLE 5-2 % OF HOUSEHOLDS WITH NO CAR OR VAN**

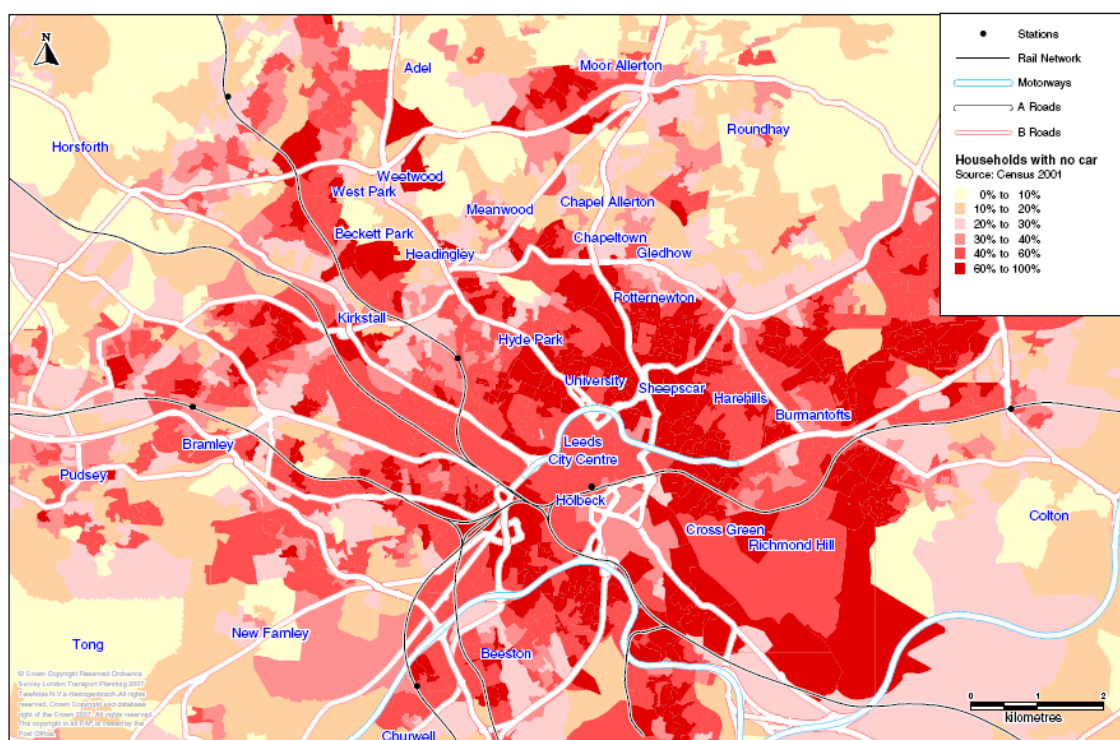
| Ward                     | % of household with no car or van |
|--------------------------|-----------------------------------|
| University               | 67%                               |
| City and Holbeck         | 59%                               |
| Burmantofts              | 56%                               |
| Richmond Hill            | 55%                               |
| Seacroft                 | 54%                               |
| Hunslet                  | 53%                               |
| Harehills                | 51%                               |
| Headingley               | 48%                               |
| Beeston                  | 47%                               |
| Chapel Allerton          | 45%                               |
| Kirkstall                | 43%                               |
| Armley                   | 42%                               |
| Bramley                  | 41%                               |
| Middleton                | 37%                               |
| Wortley                  | 36%                               |
| Whinmoor                 | 36%                               |
| Weetwood                 | 36%                               |
| Pudsey South             | 30%                               |
| Morley South             | 28%                               |
| Rothwell                 | 26%                               |
| Moortown                 | 25%                               |
| Cookridge                | 24%                               |
| Morley North             | 23%                               |
| Aireborough              | 22%                               |
| Garforth and Swillington | 22%                               |
| Pudsey North             | 21%                               |

| Ward                 | % of household with no car or van |
|----------------------|-----------------------------------|
| Halton               | 21%                               |
| North                | 21%                               |
| Horsforth            | 20%                               |
| Barwick and Kippax   | 20%                               |
| Otley and Wharfedale | 20%                               |
| Roundhay             | 18%                               |
| Wetherby             | 14%                               |
| <b>Leeds average</b> | <b>34%</b>                        |

Source: 2001 Census

- 5.3 Car ownership has been mapped in Figure 5.1 at Super Output Area. (These areas are smaller than ward levels and tend to contain approximately 1,500 households.) As expected, the map identifies specific pockets of very low car ownership.

**FIGURE 5.1 CAR OWNERSHIP**



Source: 2001 Census

## Transport Needs Index

- 5.4 The Transport Needs Index (TNI) is a tool that classifies the relative need for affordable public transport (primarily bus) across the UK using census data and the Index of Multiple Deprivation. It was developed by Steer Davies Gleave<sup>3</sup>.
- 5.5 The three variables used to compose the Transport Needs Index are:
- I Cars per adult in household (the fewer the cars the higher the need)
  - I Income (the lower the income the higher the need)
  - I Ruralness (the more rural the higher the need)<sup>4</sup>
- 5.6 Each of these variables was converted into an index in which 100 is the England and Wales average, with the higher the index the greater the transport need. The overall TNI is generated by multiplying the three indices together so each has roughly equal weight.
- 5.7 While there is no objective measure of transport need in the census, we would expect that use of bus would be higher for people with a high Transport Needs Index provided that there are suitable bus services available to them. Validated with actual survey data this is generally the case, although there are some interesting outliers of subgroups with a high index but low bus usage which may reveal an unmet need, for example lone parents who find it difficult to use the bus services. This highlights the point that while looking at transport need as a single dimension is a good starting point, it perhaps lacks a diagnostic element about the nature of the need. However the TNI is particularly useful GIS tool, for example to evaluate the relative social inclusion aspects of potential route options over a wide area.

### ***Summary of the TNI in Leeds***

- 5.8 A map of the Transport Needs Index in Leeds is provided as Figure 5.2. The figure shows that there are areas of high transport needs clustered around the city centre. These areas of transport need extend into south and east Leeds.

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<sup>3</sup> The TNI results have been cross checked for validation purposes using actual bus usage data from source survey datasets. These datasets include the following: Second Baseline Survey, Centro; London Travel Demand Survey, TfL; Multi-Modal Tracking Survey, GMPTE.

<sup>4</sup> The car ownership variable is designed to identify the extent to which people have access to their own private transport and therefore do not require public transport. This is sourced from the 2001 Census.

The income variable is designed to distinguish between people who choose not to have a car and can afford an alternative like taxi, and those that are forced to be reliant on public transport. Since the census does not include income, we have used the Index of Multiple Deprivation Income Score (2004) at Super Output Level making the assumption that all Output Areas within a Super Output Area have the same income deprivation level.

The ruralness variable, based on the ONS Urban Rural classification 2004, reflects the fact that in urban areas people have greater access to local facilities and services they can walk or cycle to and hence have a reduced need for public transport.

**FIGURE 5.2 TRANSPORT NEEDS INDEX IN LEEDS**

