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1. Population

1.1 Population change 2001-2009

The mid-2009 population estimate for Nottinghamshire is 776,600 with population in the districts ranging from 116,400 in Ashfield to 99,700 in Mansfield. Between 2001 and 2009 the population of Nottinghamshire increased by 3.7%, less than the increases in the East Midlands (6.2%) and England (4.8%). The population increases between 2001 and 2009 have varied greatly between districts – the lowest increase was in Gedling (0.8%); the highest increase was in Newark & Sherwood (6.2%). Table 1 below gives further details on population numbers.

Table 1: Population numbers and changes in the county, region and nationally

Area	Mid-2001	Mid-2009	% change 2001-2009
Ashfield	111,500	116,400	4.4
Bassetlaw	107,800	111,600	3.5
Broxtowe	107,500	111,500	3.7
Gedling	111,800	112,700	0.8
Mansfield	98,100	99,700	1.6
Newark & Sherwood	106,400	113,000	6.2
Rushcliffe	105,800	111,700	5.6
Nottinghamshire	748,800	776,600	3.7
East Midlands	4,189,600	4,451,200	6.2
England	49,449,700	51,809,700	4.8

Source: Population Estimates Unit, ONS: Crown Copyright

1.2 Population change by broad age group 2001-2009

Between 2001 and 2009 there has been a slight decrease (0.4%) in the proportion of the population in Nottinghamshire who are children. The largest decrease in the number of children was in Broxtowe (11%) where the number went down by 2,400, whilst the lowest decrease was in Rushcliffe (1%) where the number went down by 200.

Between 2001 and 2009 the numbers of both working age people and older people increased, by 4.1% and 3.6% respectively. Broxtowe had the greatest increase in the working age population of 3,700 (5.5%) whilst the rural districts of Bassetlaw and Newark & Sherwood had the highest increases in the number of older people, 3,900 (19.1%) and 3,800 (17.8%) respectively. Figure 1 below shows the changes in the numbers of children, working age and older people between 2001 and 2009.

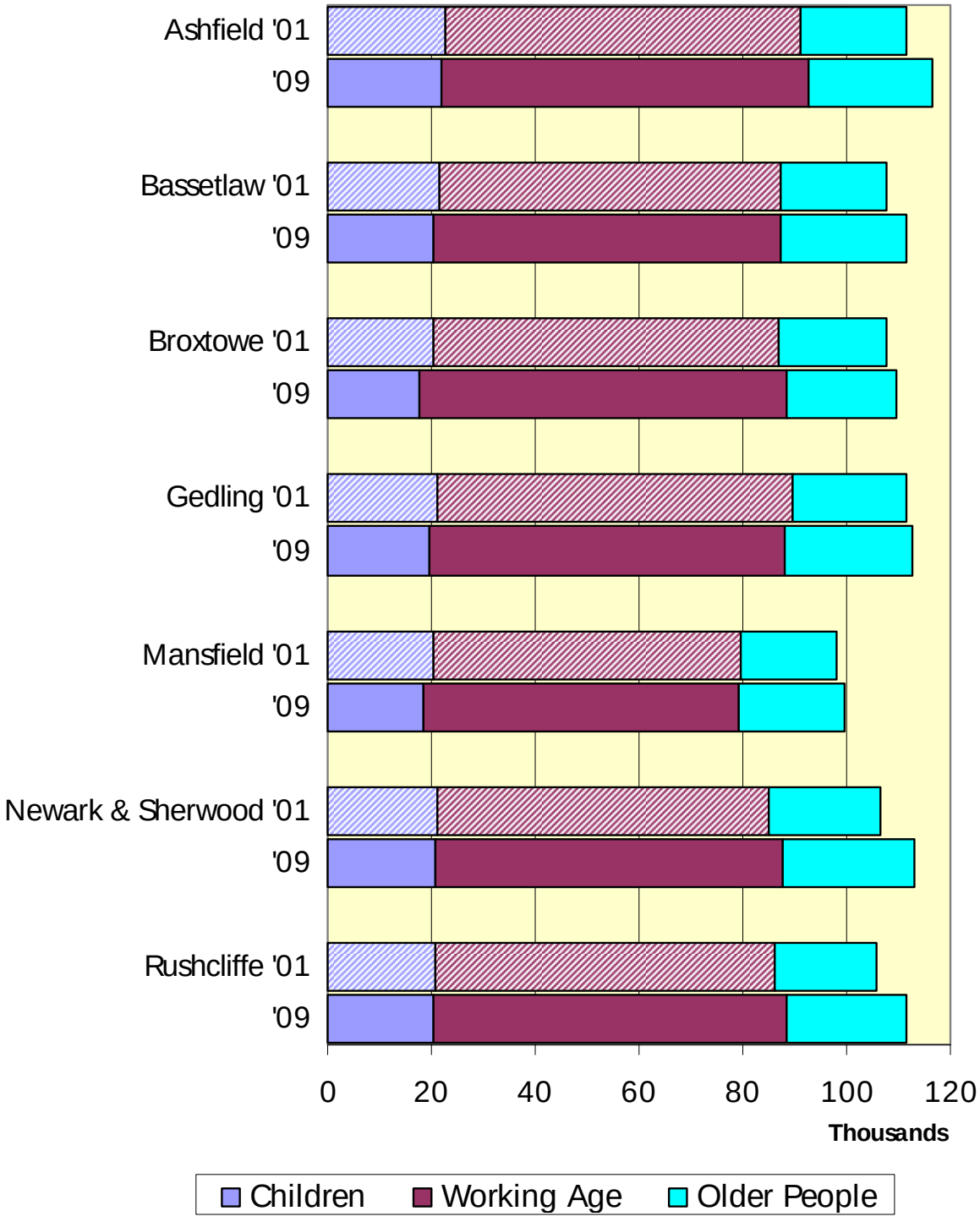


Figure 1: Changes in the numbers of children, working age and older people between 2001 and 2009 split by district

1.3 Population projections

1.3.1 2008 based population projections

Population projections are trend based with assumptions of births, deaths and migration based on observed levels over the previous five years.

The population of Nottinghamshire has increased by 3.3% during the period 2001 to 2008 and is projected to increase by a further 14% from 2008 to 2026. Over the period 2001 to 2026, Mansfield is expected to have the lowest increase in population of 10.4%, which is less than half of the overall increase expected in the East Midlands (21.8%). Rushcliffe (21.5%) and Newark & Sherwood (21.6%) are projected to have the greatest increases in total population during the period 2001 to 2026.

Nottinghamshire's population is projected to increase from 773,300 in 2008 to 879,500 in 2026, an increase of 14%. The largest increases are projected to be in Rushcliffe (16%) and Broxtowe (16%), with the lowest in Mansfield (9%) and Bassetlaw (9%). Table 2 below details population numbers as well as 2026 projections.

Table 2: Population numbers and 2026 population projections

Area	2001	2008	2026	% change 2008-2026
Ashfield	111,500	115,700	131,800	14%
Bassetlaw	107,800	111,300	121,200	9%
Broxtowe	107,500	110,900	128,200	16%
Gedling	111,800	112,300	127,700	14%
Mansfield	98,100	99,800	108,300	9%
Newark & Sherwood	106,400	112,500	129,400	15%
Rushcliffe	105,800	110,800	128,500	16%
Nottinghamshire	748,800	773,300	879,500	14%
East Midlands	4,189,600	4,429,400	5,101,900	15%
England	49,449,700	51,464,600	58,334,100	13%

Source: ONS: Crown Copyright

The numbers of 0-4 and 5-9 age groups in Nottinghamshire are projected to increase by 10% and 20% respectively. The numbers of older age groups are, however, expected to increase more significantly – 30% increase in 30-34, 65-59 and 70-74 year olds; 60% increase in 75-89 year olds; with 90 year olds and over increasing three-fold.

Despite the number of people of working age (aged 16 to pensionable age) being projected to increase by 3.6% (16,900 people) between 2008 and 2026, the overall percentage of the county's working age population is projected to fall by over 5%, from 61.1% to 56.0%.

Figure 2 below shows the projected population changes between 2008 and 2026 split by gender and age group.

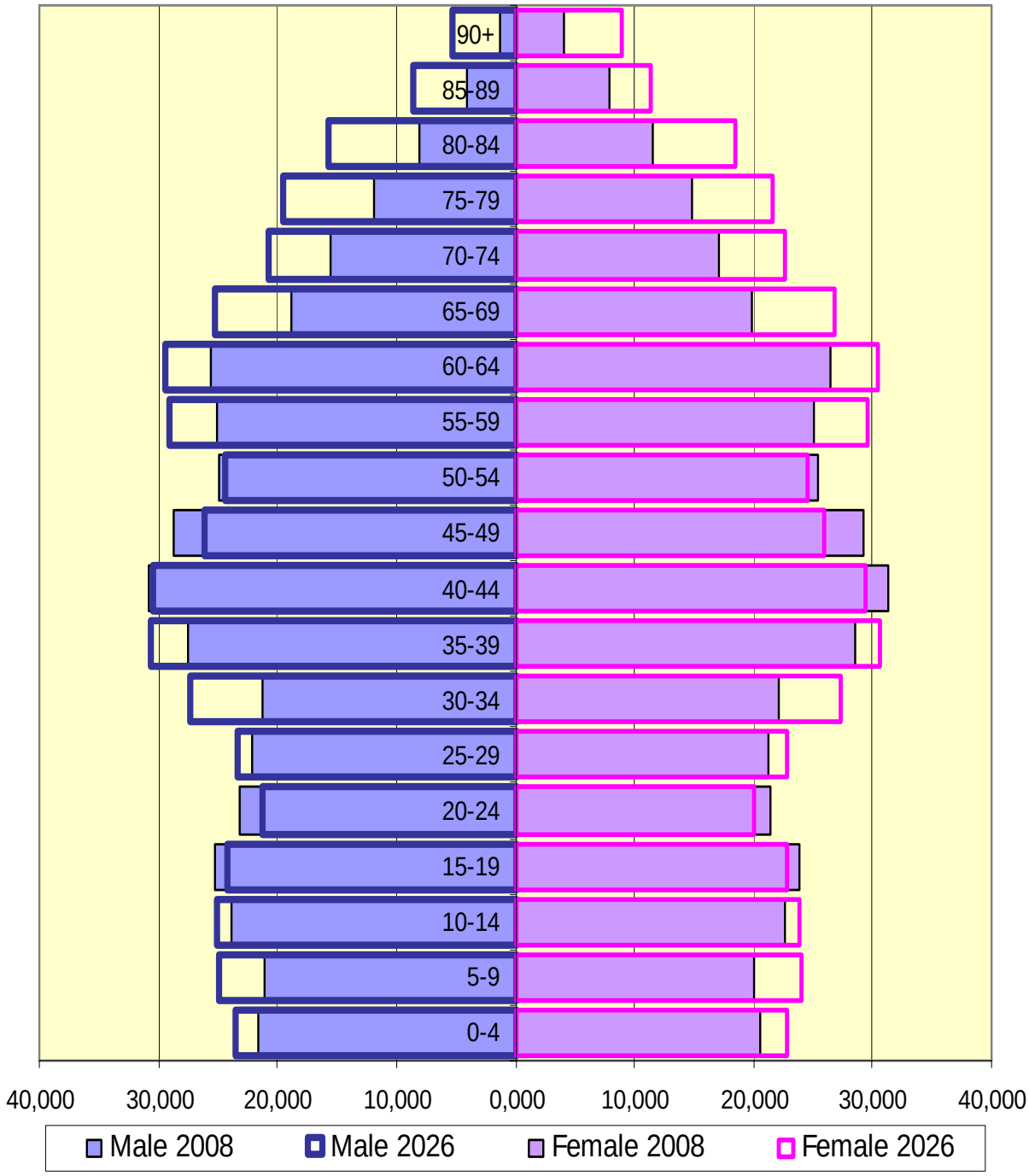


Figure 2: Projected population changes between 2008 and 2026 split by gender and age group.
Source: Subnational Statistics Unit, ONS: Crown Copyright

At a district level, only Ashfield's working age population is projected to increase (by 3.1%) during the period 2008 to 2026, with the other districts showing a decrease ranging from 3.1% in Broxtowe to 7.1% in Bassetlaw.

An increase in the number of children (aged 0-15years) is projected in each district; the lowest increase projected in Bassetlaw (1.5%) and the highest increase in Gedling (16.2%). Only Gedling, however, projects an increase in its proportion of children from 17.5% in 2008 to 18.1% in 2026 (the other districts are expected to go down).

Increases in the number of older people (pensionable age and over) are projected in each district – the lowest being a 33.5% increase in Broxtowe; the highest in the rural districts of Bassetlaw (52.2%), Newark & Sherwood (49.6%) and Rushcliffe (46.0%). An increase in the proportion of older people compared to the whole county population is also projected in each district.

Figure 3 below shows the projected population in each of the districts.

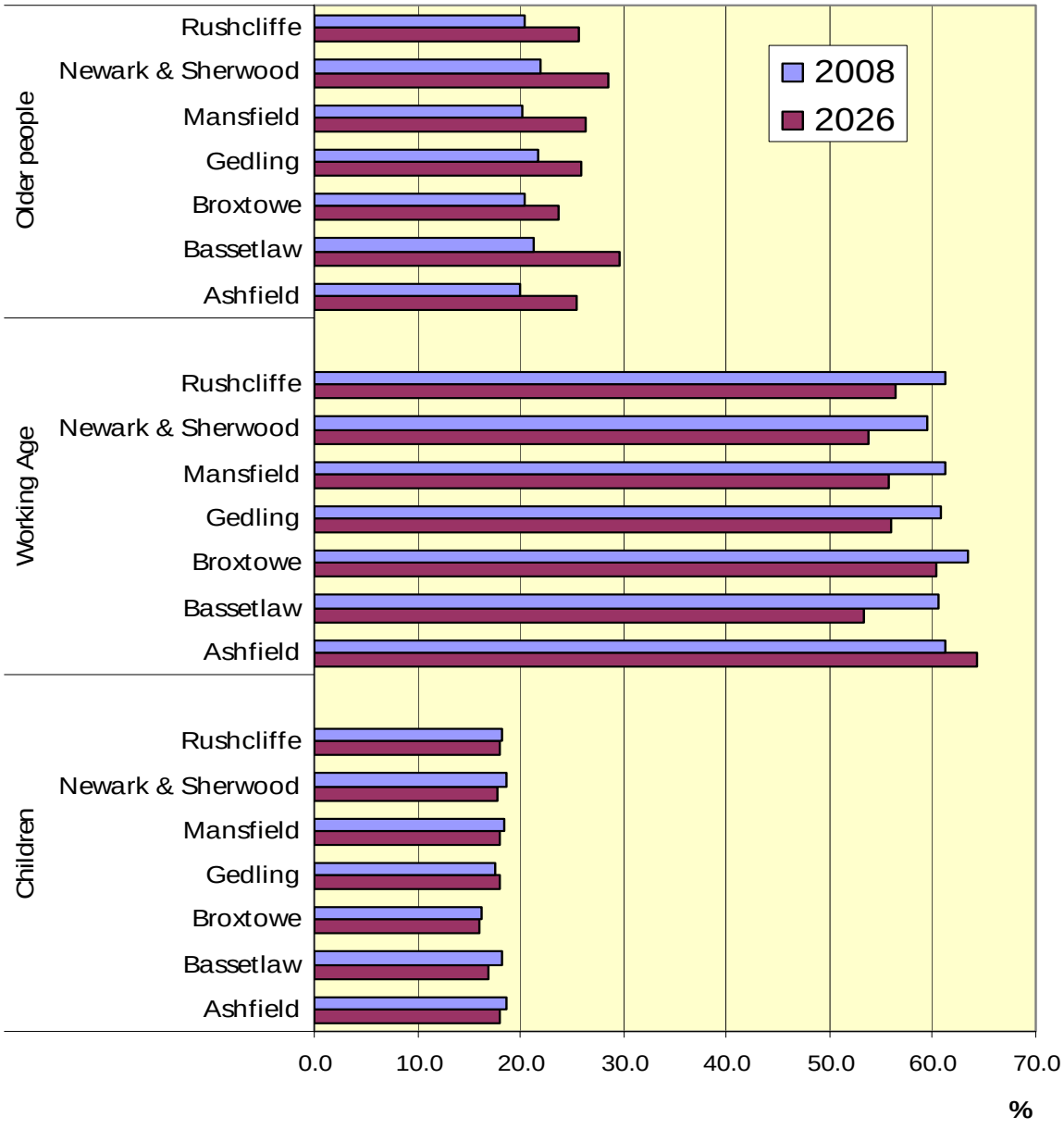
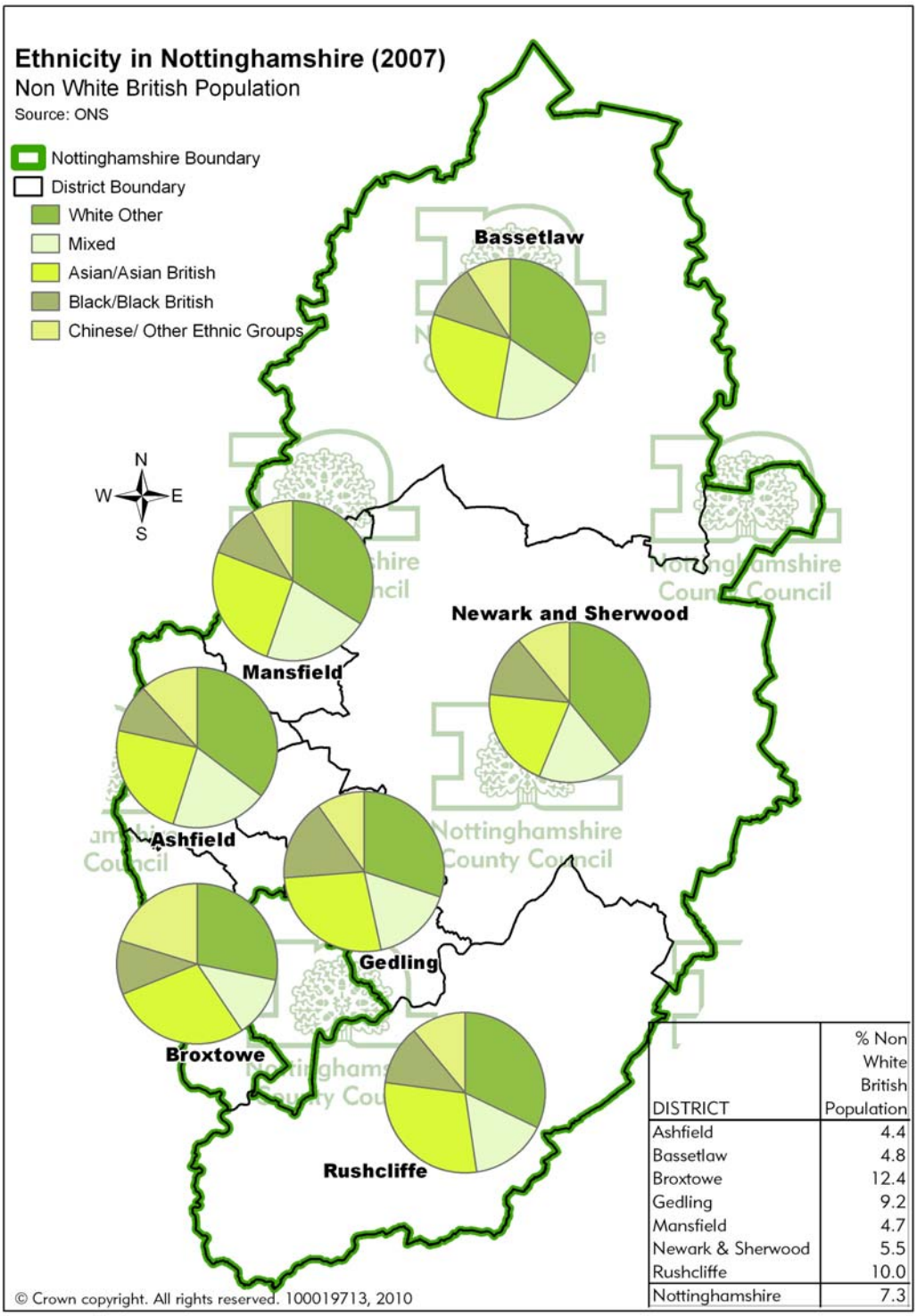


Figure 3: Projected population in each of the districts.
Source: Subnational Statistics Unit, ONS: Crown Copyright

1.4 Ethnicity

7.3% of the population age in Nottinghamshire is non-White British, which is lower than the East Midlands (12%) and England (16.4%). At a local level, Broxtowe has the highest rate of non-White British (12.4%); Newark & Sherwood has the highest White other population (39.1%), which includes White Irish and White European; Rushcliffe has the highest proportion of Asian/Asian British (29.4%), which includes Pakistani, Bangladeshi and Indian; and Gedling has the highest rate of Black/Black British (16.5%). Figure 4 below shows the make-up of the groups other than White British population in each of the districts in Nottinghamshire.



DISTRICT	% Non White British Population
Ashfield	4.4
Bassetlaw	4.8
Broxtowe	12.4
Gedling	9.2
Mansfield	4.7
Newark & Sherwood	5.5
Rushcliffe	10.0
Nottinghamshire	7.3

Figure 4: Make-up of the groups other than White British population in each of the districts in Nottinghamshire.

Source: Population Estimates Unit, ONS: Crown Copyright

ONS have produced experimental Population Estimates by Ethnic Groups for local authorities in England for 2007

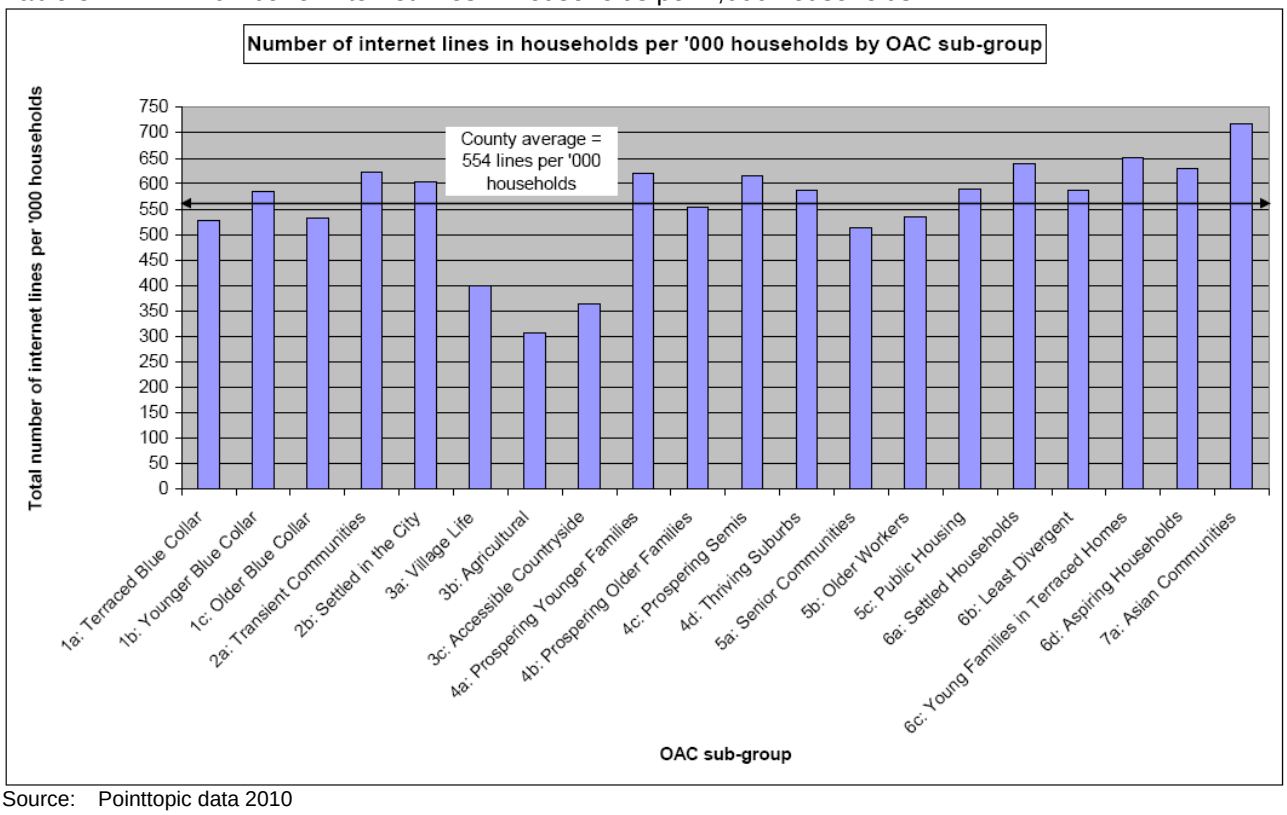
1.5 Indices of deprivation

Figure 5 shows the 2007 indices of deprivation. Deprivation levels are highest in the urban parts of north-west Nottinghamshire, particularly in Ashfield, Mansfield and Worksop. Mansfield is the most deprived district in Nottinghamshire and is within the 10% most deprived districts in England. Ashfield and Bassetlaw are in the most deprived third of English districts.

1.6 Access to broadband

Figure 6 below details the percentage of the population where users cannot get 2mbps broadband speeds. The map clearly shows that there is less availability in the more rural areas. This is supported by the detail shown in table 3 below which shows the numbers of people who have taken-up access to broadband. Table 3 is split by output area classification and shows that there is a smaller take-up of broadband amongst people who live in rural areas ('village life, 'agricultural', and 'accessible countryside'). There is also less take-up amongst older people.

Table 3: Number of internet lines in households per 1,000 households



Source: Pointtopic data 2010

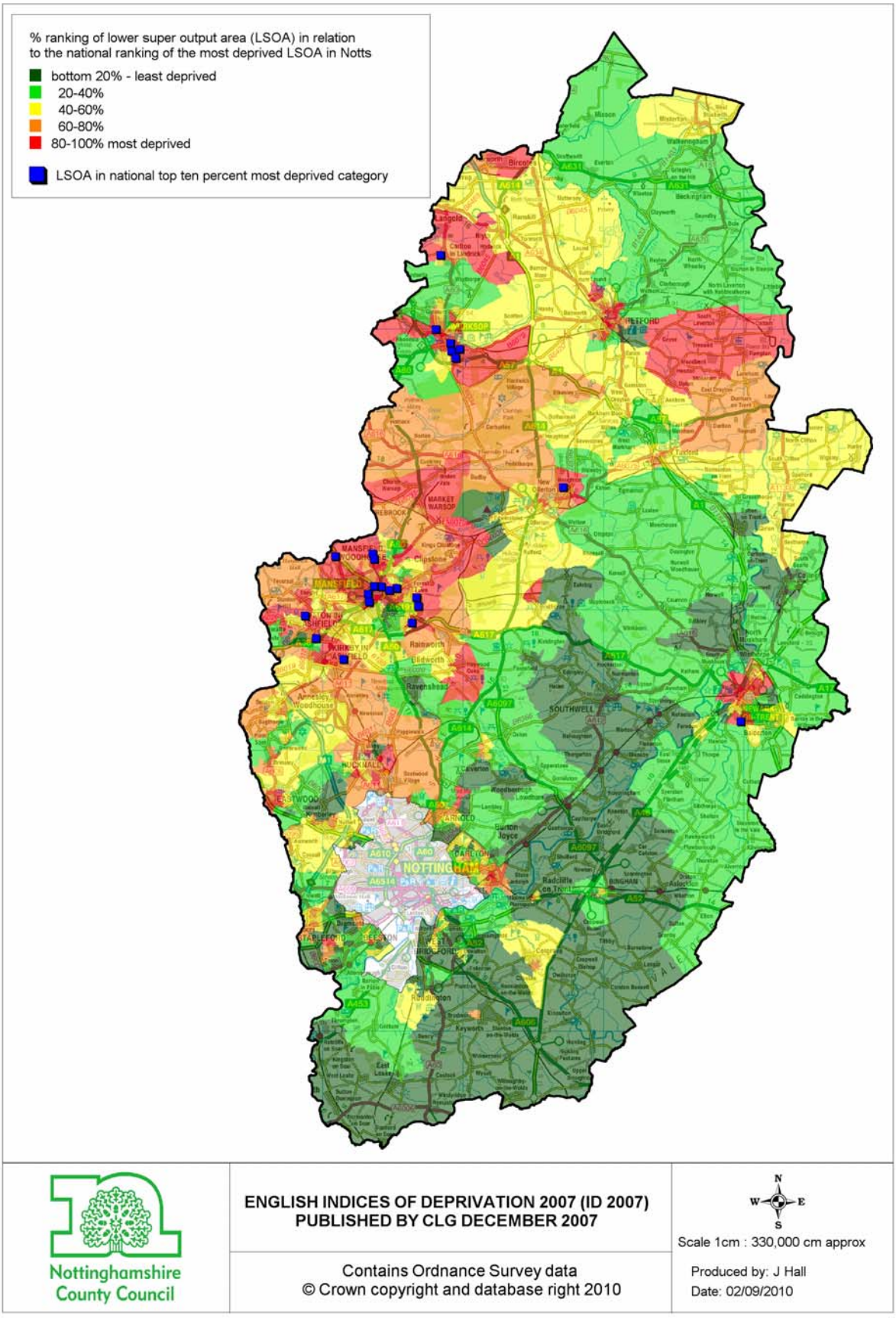


Figure 5: Indices of deprivation 2007

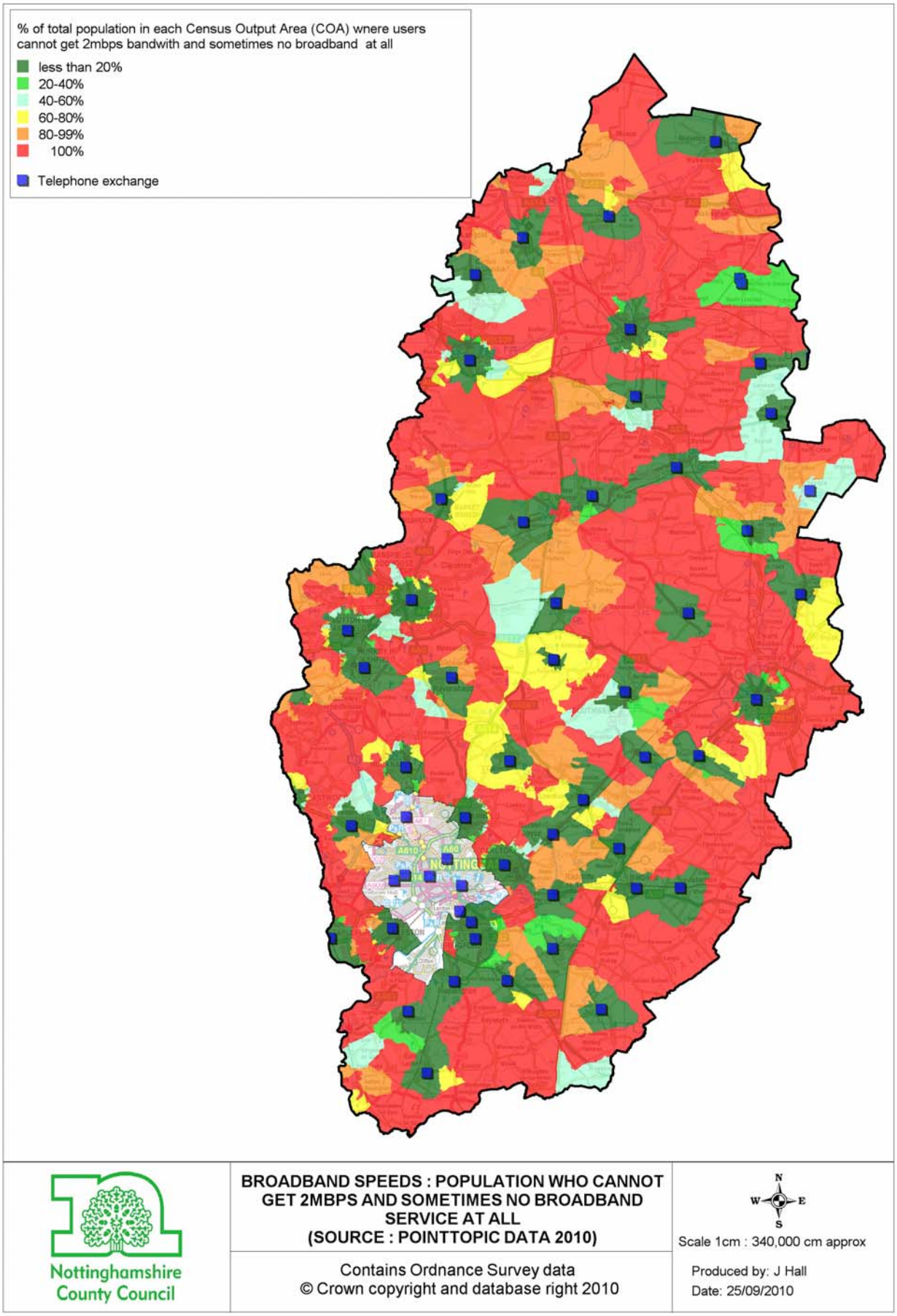


Figure 6: Percentage of Nottinghamshire census ward population whom cannot get 2mbps broadband speeds

Source: Pointtopic data 2010

2. Employment

2.1 Sectoral analysis

Nottinghamshire underwent major sectoral change in the last quarter of the 20th Century, in large due to the decline of the mining and textile industries and the resulting job losses. The service sector has emerged as a large industry group and major employer, behind the public sector which is the county's biggest employer. In 2008 public administration, education & health provided the most jobs (27.5% of all jobs); followed by distribution, hotels & restaurants (24%); and banking, finance & insurance. Nottinghamshire has a larger proportion of employment in energy & water and construction than either the East Midlands or Great Britain. In 2008 the rate of start-ups of enterprises and local units in Nottinghamshire was 41.7 per 10,000 adult residents, less than the averages in the East Midlands (46.7 per 10,000 residents) and England (57.2 per 10,000 residents). Figure 7 below shows the split of employment type by industrial sector.

In 2008 65.6% of employees in Nottinghamshire were full-time workers; and 48.5% of employees were female (51.5% were male).

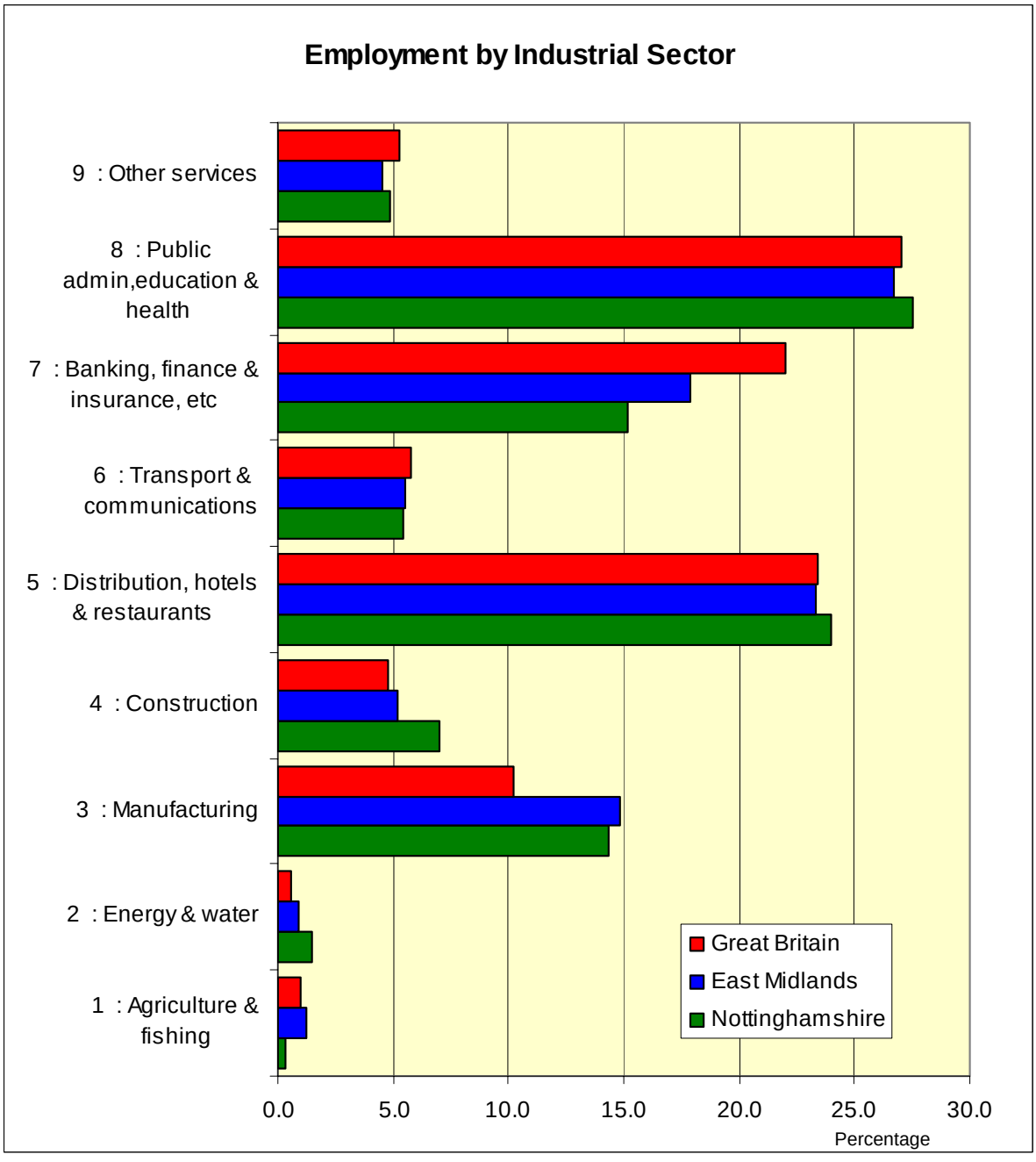


Figure 7: Split of employment type by industrial sector

2.2 Employment change

Whilst employment in agriculture & fishing has increased by 18% between 2006 and 2008, the numbers involved are small with less than 150 extra jobs. Employment in banking, finance & insurance has increased by 14.7% (almost 5,500 extra jobs), whilst other services has increased by 12% (almost 1,500 extra jobs). Conversely, employment in public administration, education & health has decreased by 1% (around 800 fewer jobs) and employment in manufacturing has decreased by 0.3% (around 120 fewer jobs). Figure 8 below details the percentage change in type of employment.

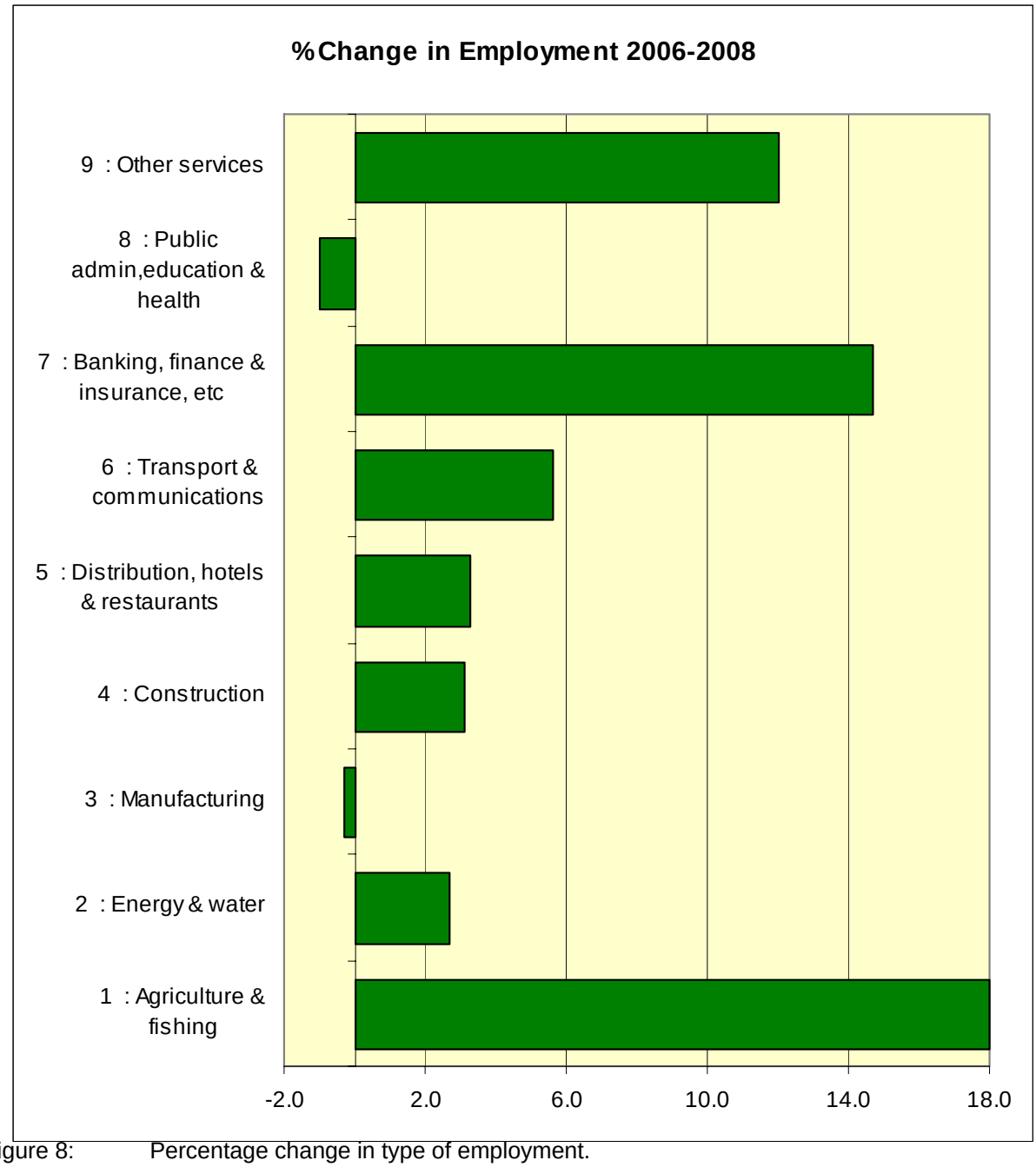


Figure 8: Percentage change in type of employment.

2.2.1 Job gain and loss announcements in Nottinghamshire during the past 12 months

Figures taken from the local press between September 2009 and August 2010 show that overall approximately 1,800 new jobs were announced in the past year, and 5,900 job losses. The retail sector has seen the largest job gains, with nearly 750 new jobs announced. Over 400 of these jobs were created by Tesco. Other net job gains were seen in accommodation and food services (140) and private social care (130).

The largest net job losses announced in Nottinghamshire during the past 12 months were in the public sector (3,900). UK Coal announced more than 400 job losses as a result of the closure of Welbeck Colliery, the largest for a single private company during this period. Other sectors that have seen major net job losses were banking and insurance (300); construction (200); real estate (200); and arts, entertainment and recreation (200). These sectors are defined by industry rather than work function and therefore may not always correspond with SIC headings. Figure 9 below details the share of the job gains by sector during the period 01.09.09-31.08.10, whilst figure 10 below details the share of the job losses by sector during the period 01.09.09-31.08.10.

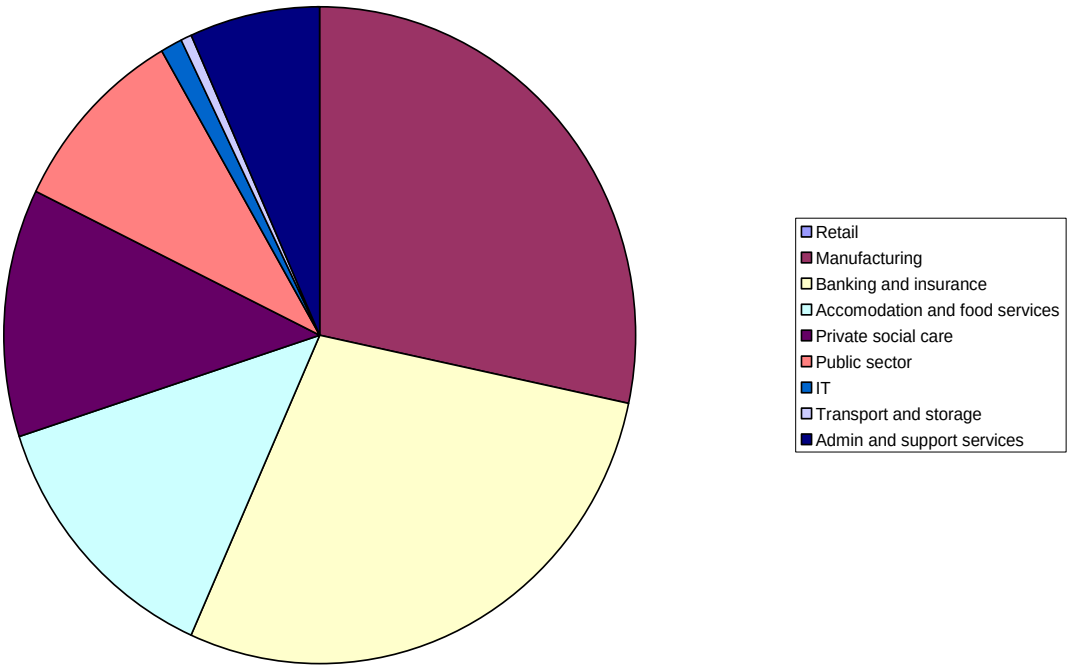


Figure 9: Share of the job gains by sector during the period 01.09.09-31.08.10
Source: Local press

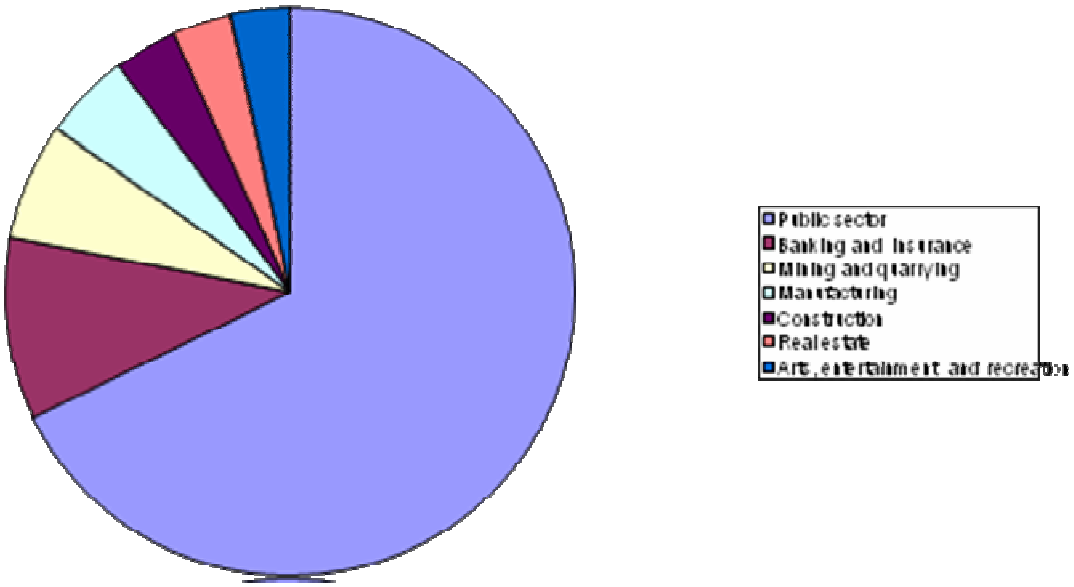


Figure 10: Share of the job losses by sector during the period 01.09.09-31.08.10
Source: Local press

2.3 Major employers in Nottinghamshire

Table 4 below details the ten largest employers in Nottinghamshire. Seven of the top ten largest employers (defined as companies/ organisations employing 500 or more workers) in the county are public sector, the largest of which is Nottinghamshire County Council. The largest private sector employer in the county is e.on UK, followed by Alliance Boots and Experian.

Table 4: The ten largest employers in Nottinghamshire

Company/organisation	No. of employees
Nottinghamshire County Council	29,000
Nottingham City Council	13,100
Nottingham University Hospital NHS Trust	13,100
e.on UK (Powergen)	6,600
The Nottinghamshire Healthcare NHS Trust	6,500
The University of Nottingham	6,000
Alliance Boots	6,000
Nottinghamshire Police	4,300
Nottingham Trent University	3,500
Experian	3,000

2.4 Centres of employment

In terms of employees in employment, the main employment centres in the county are Ashfield, Mansfield, Newark, Worksop and the urban areas adjacent to the City boundary. The manufacturing industry tends to be concentrated in Netherfield & Colwick, central Newark and parts of Worksop and Ashfield. Banking, finance & insurance is spread more widely throughout Nottinghamshire but with a particular emphasis towards the south of the county.

Figure 11 below shows the numbers of industries in each county ward in Nottinghamshire. Figures 12 and 13 show the numbers of industries in manufacturing; and banking, finance and insurance respectively.

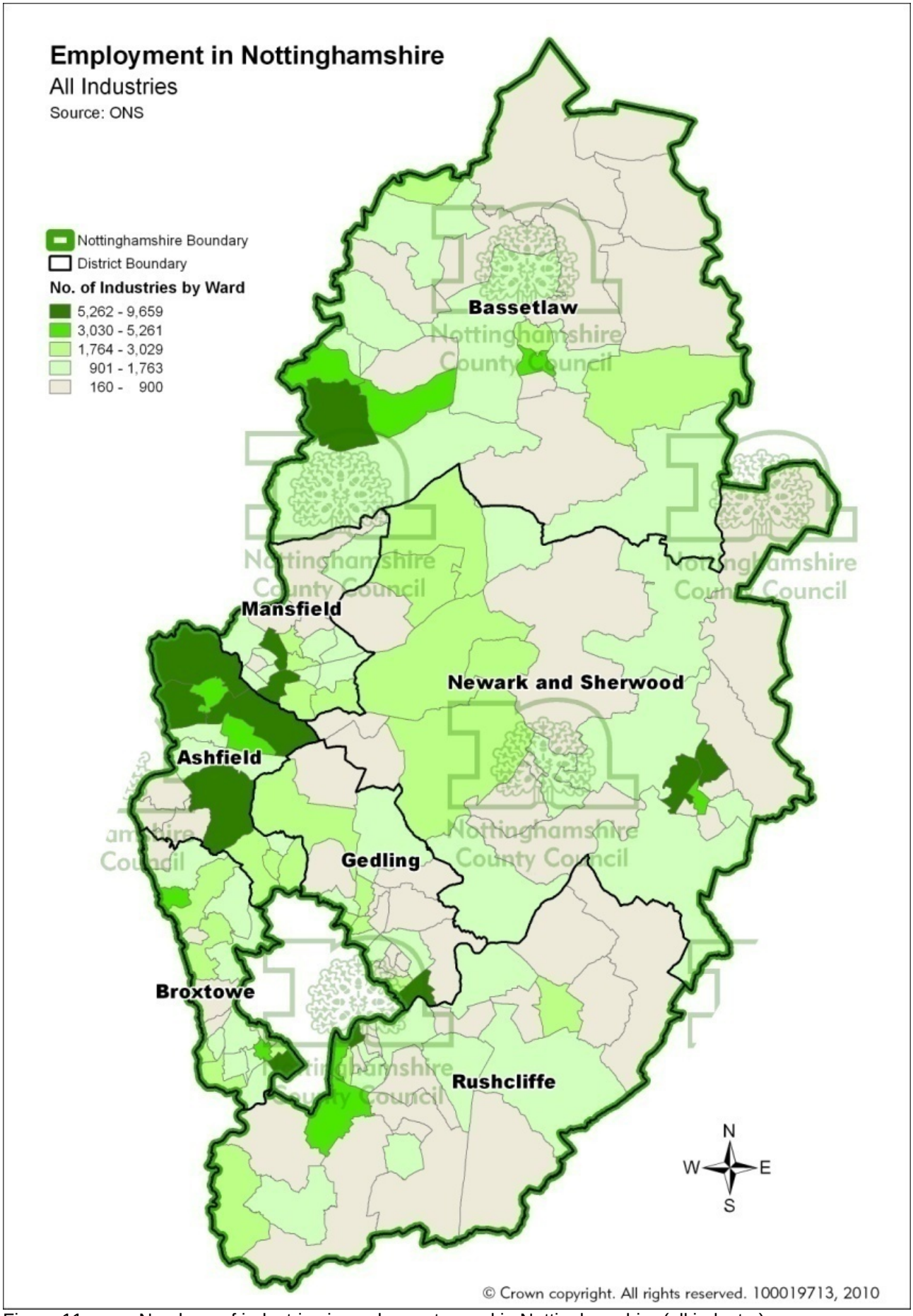


Figure 11: Numbers of industries in each county ward in Nottinghamshire (all industry)

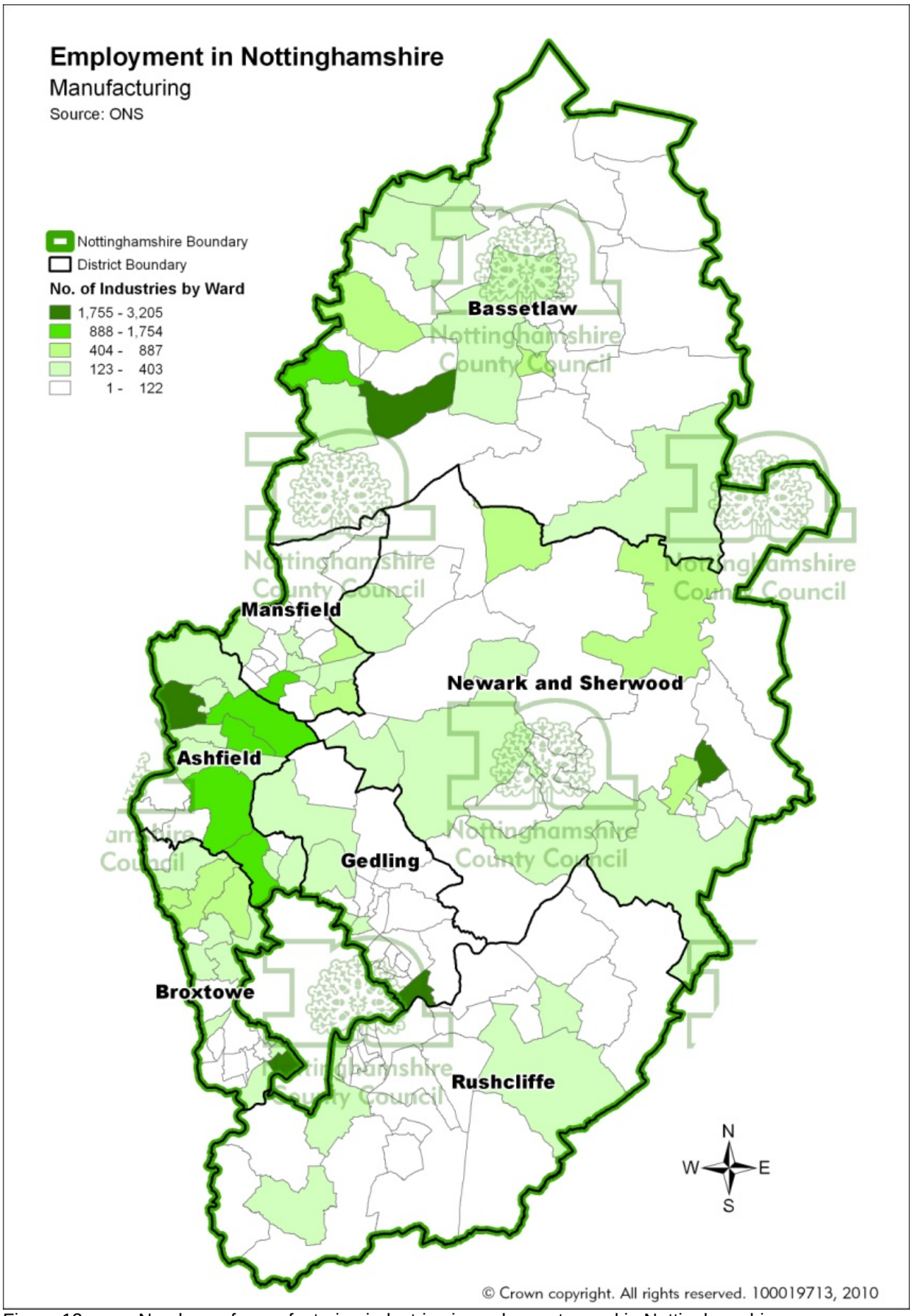


Figure 12: Numbers of manufacturing industries in each county ward in Nottinghamshire

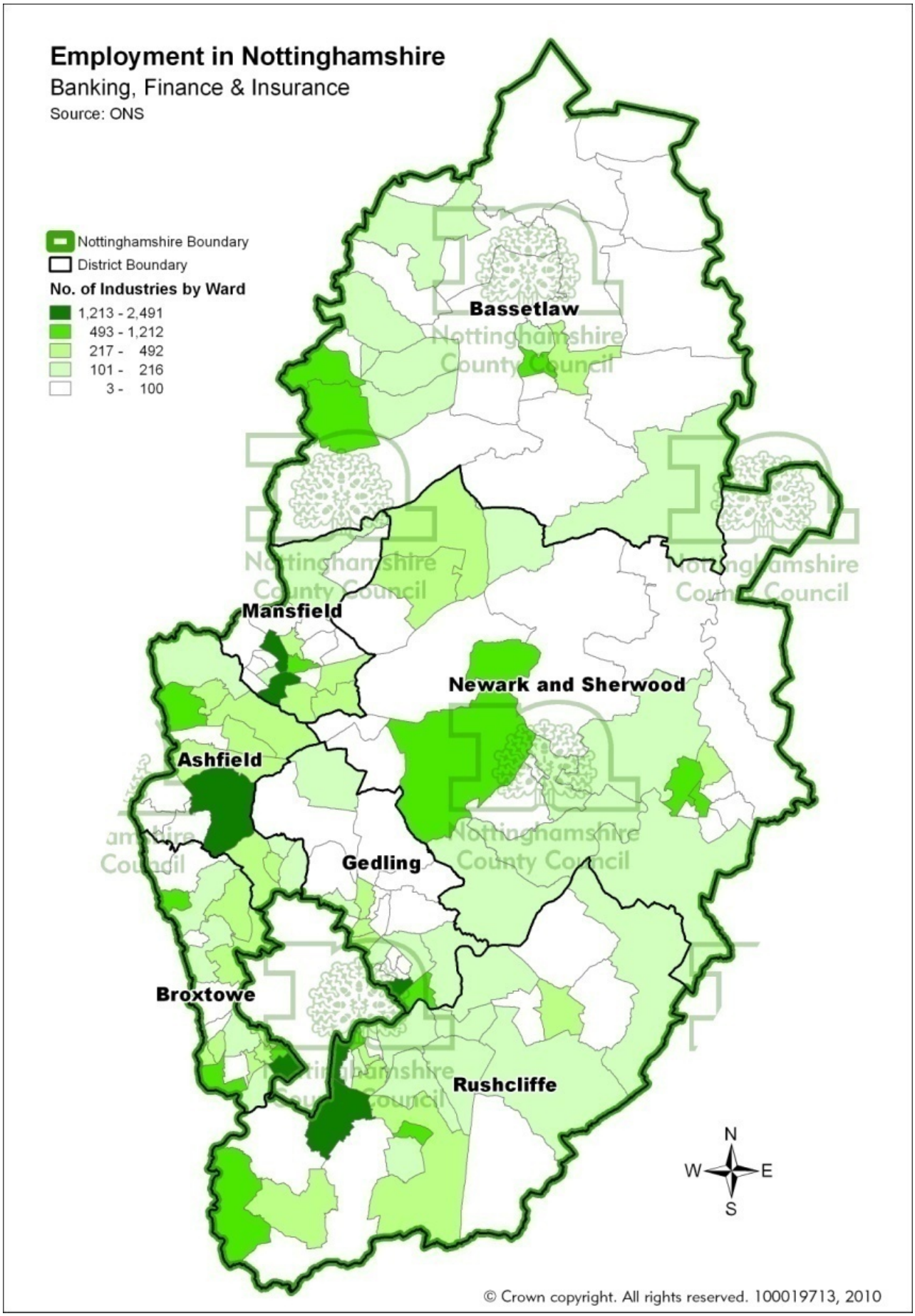


Figure 13: Numbers of banking, finance and insurance industries in each county ward in Nottinghamshire

2.5 Access to employment

Table 5 below details the percentage of working age people (aged 16-74) with access to employment by public transport within 20 and 40 minutes. Figures 14 to 21 below show the time taken to travel to major employment destinations by public transport in Nottinghamshire (figure 14) and each of the seven districts (figures 15-21). Major employment destinations are locations where there are 500 or more employees (not necessarily employed by the same employer). Access to employment by public transport is generally good although it is worse from the more rural parts of the county as seen in the length of time taken to travel to them in the table and figures below.

Table 5: Access to employment by public transport

	Percentage of working age people (16-74 year olds) with access to employment by public transport within	
Area	**20 minutes**	**40 minutes**
Ashfield	94%	100%
Bassetlaw	85%	99%
Broxtowe	100%	100%
Gedling	95%	100%
Mansfield	99%	100%
Newark & Sherwood	80%	97%
Rushcliffe	93%	100%
Nottinghamshire	92%	99%

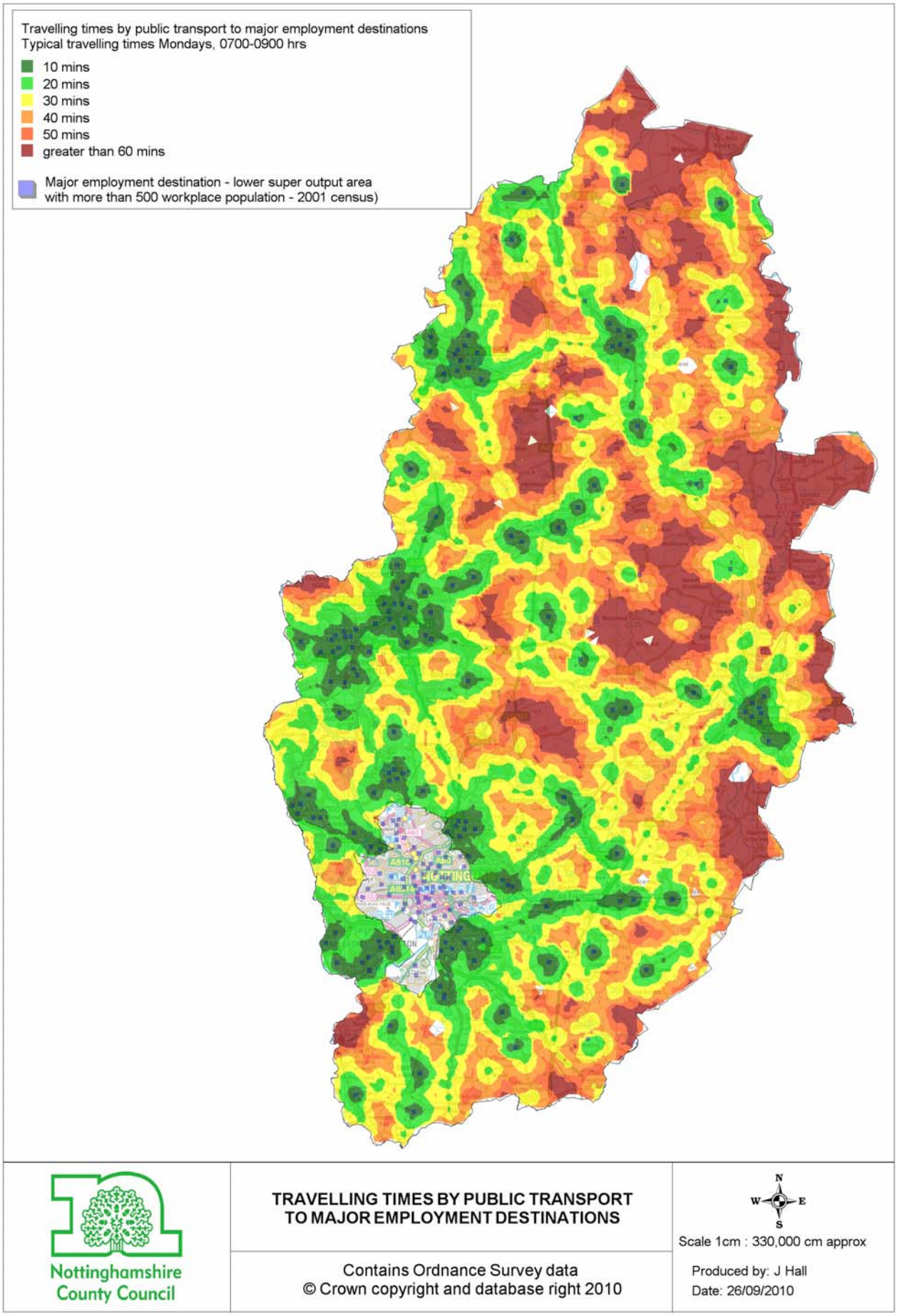


Figure 14: Travel times by public transport to major employment destinations in Nottinghamshire

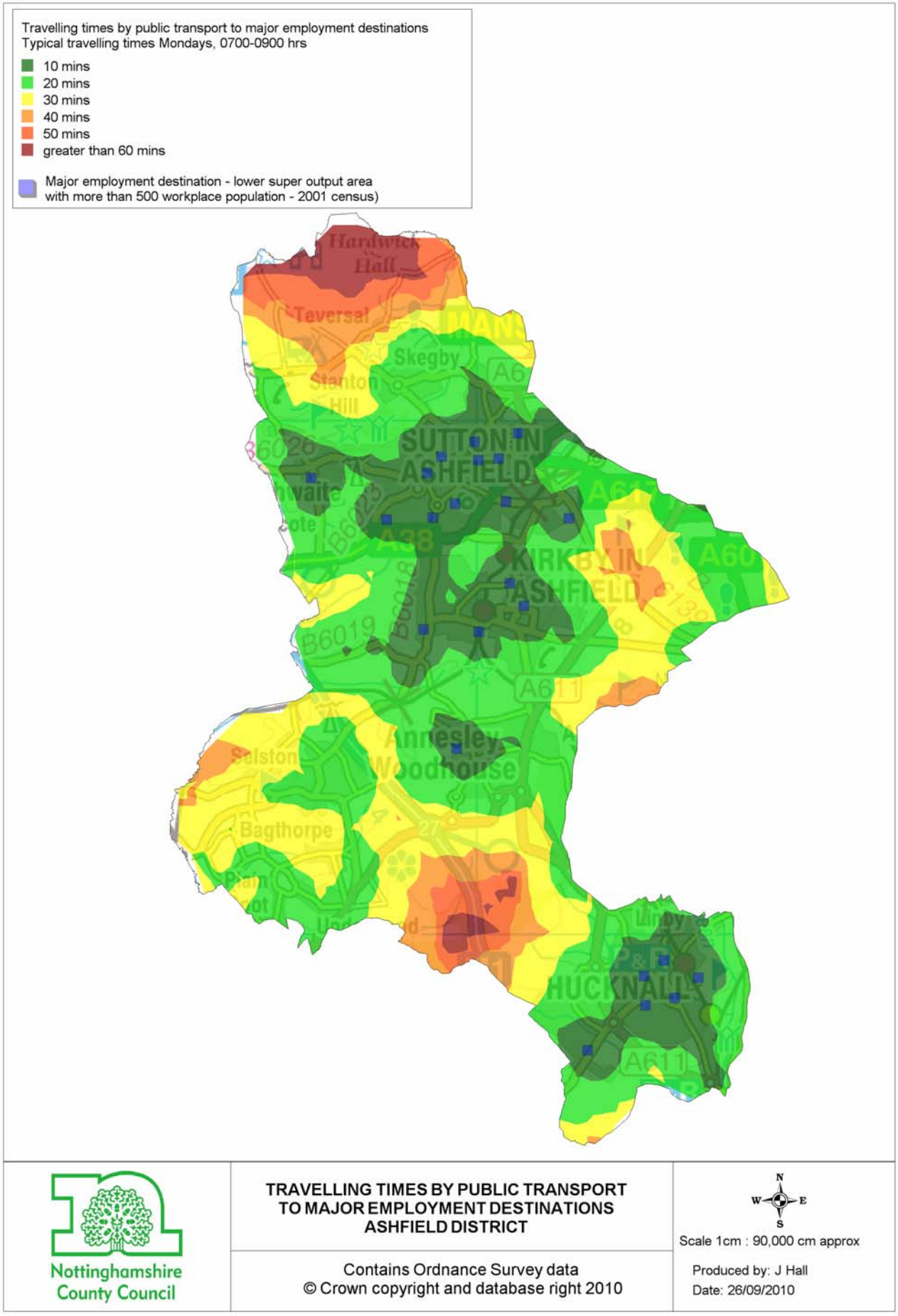


Figure 15: Travel times by public transport to major employment destinations in Ashfield district

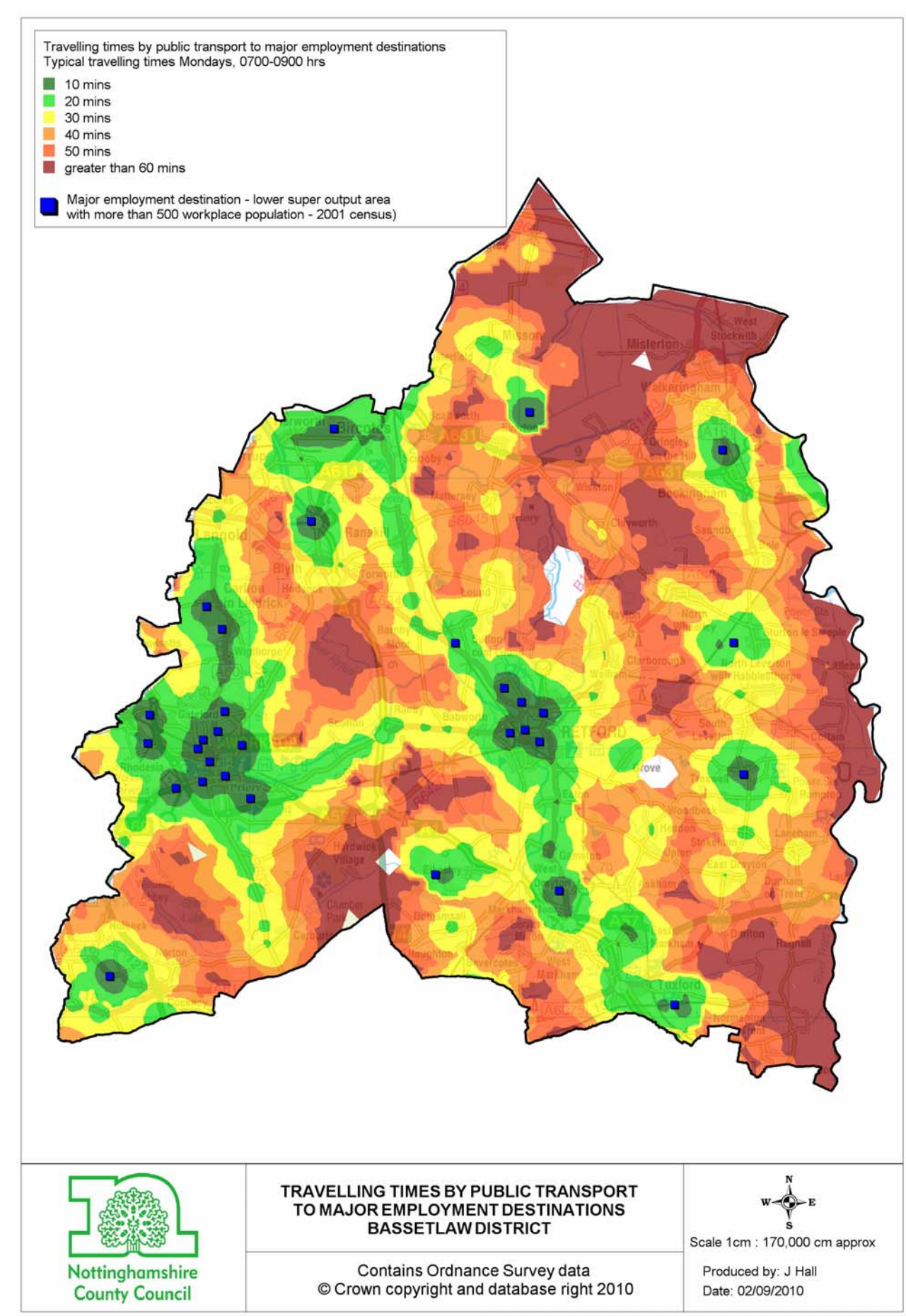


Figure 16: Travel times by public transport to major employment destinations in Bassetlaw district

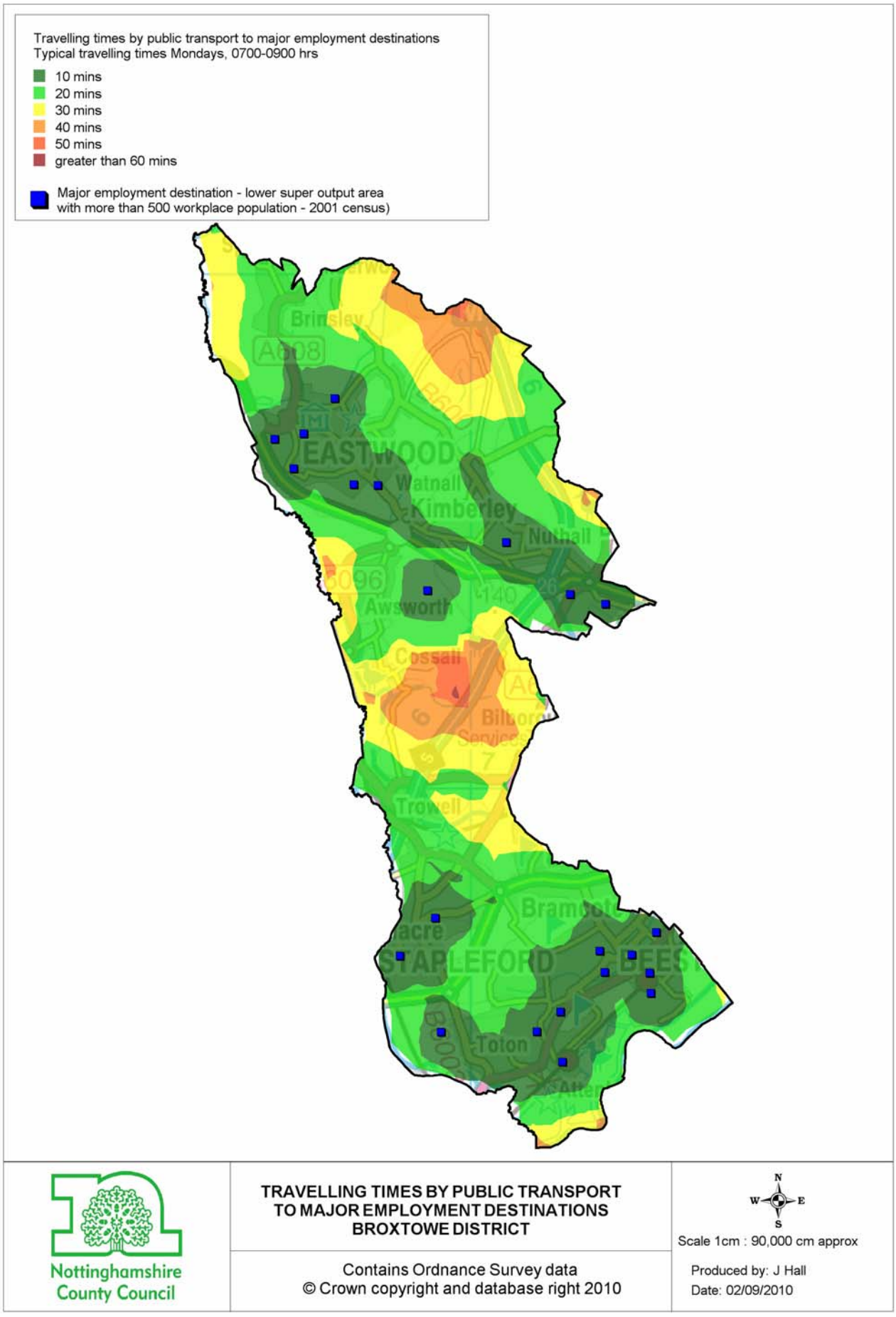


Figure 17: Travel times by public transport to major employment destinations in Broxtowe district

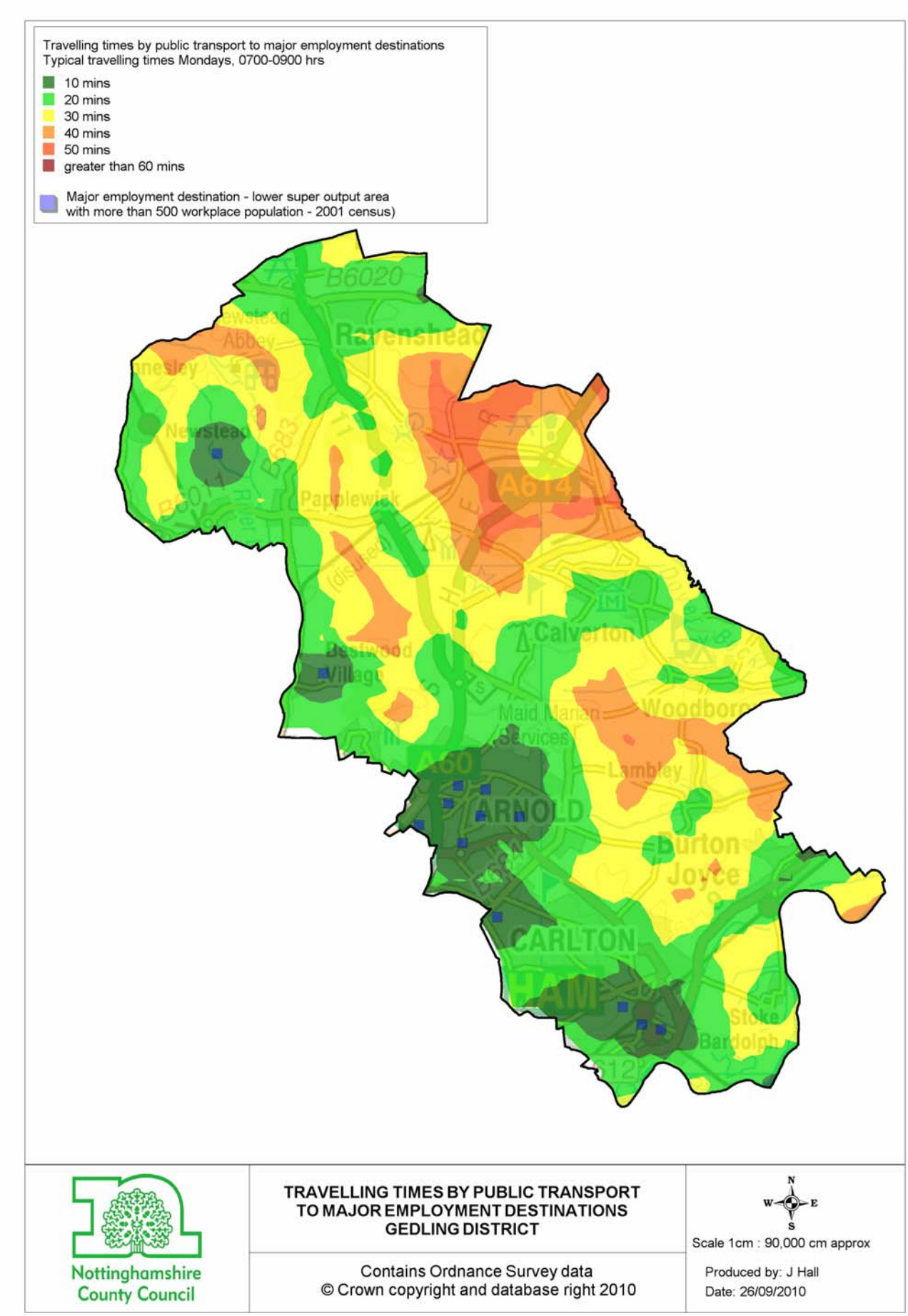


Figure 18: Travel times by public transport to major employment destinations in Gedling district

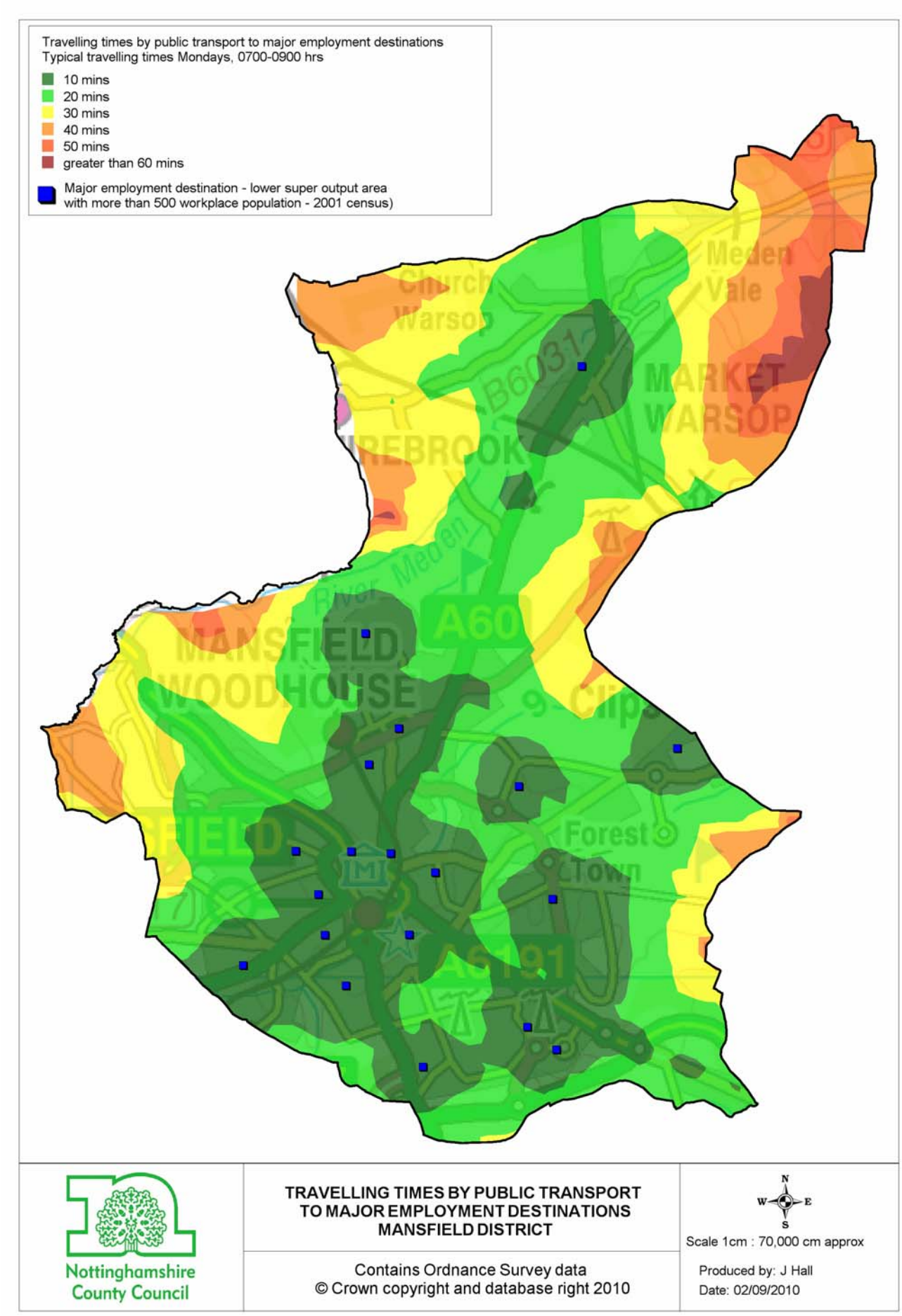


Figure 19: Travel times by public transport to major employment destinations in Mansfield district

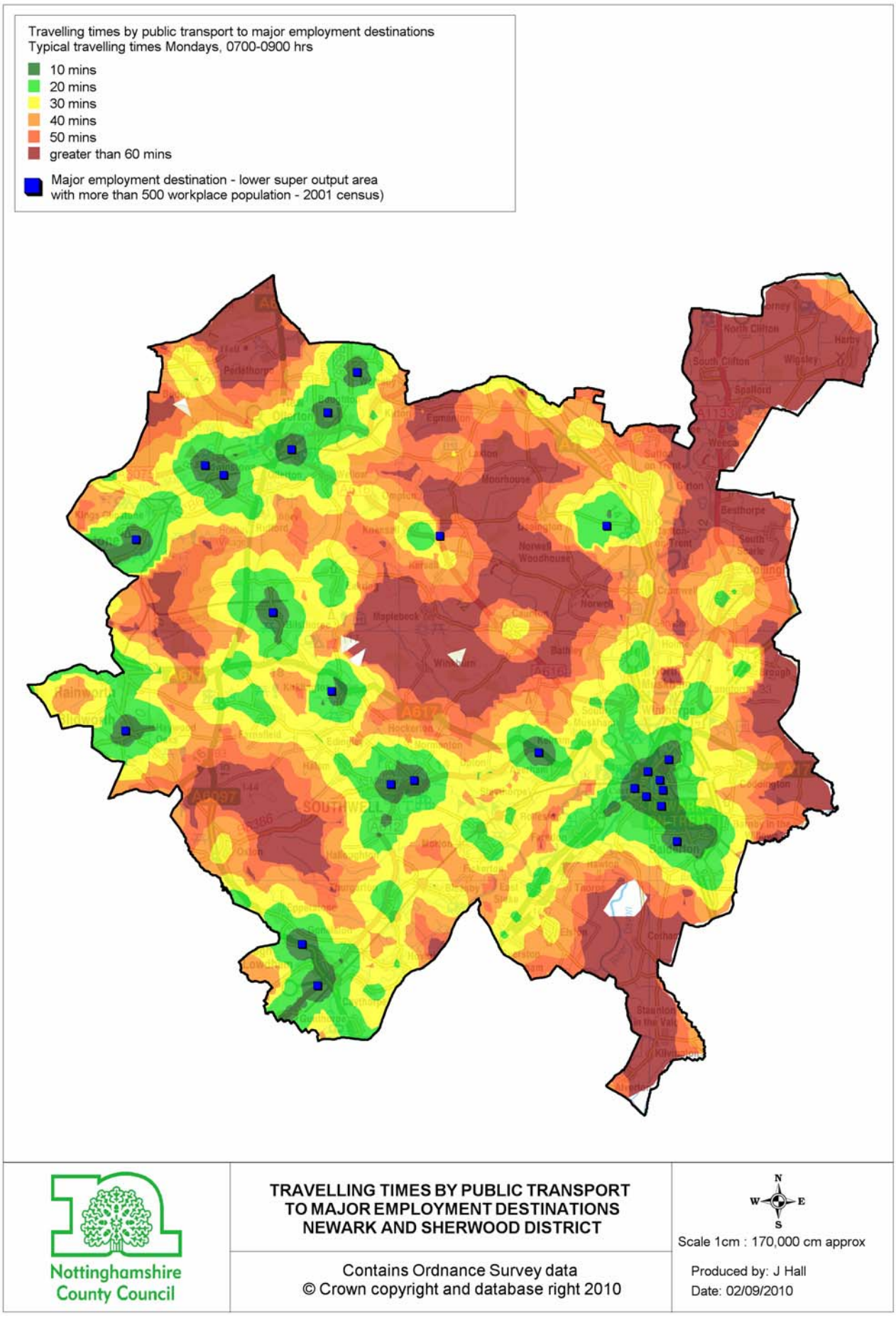


Figure 20: Travel times by public transport to major employment destinations in Newark & Sherwood district

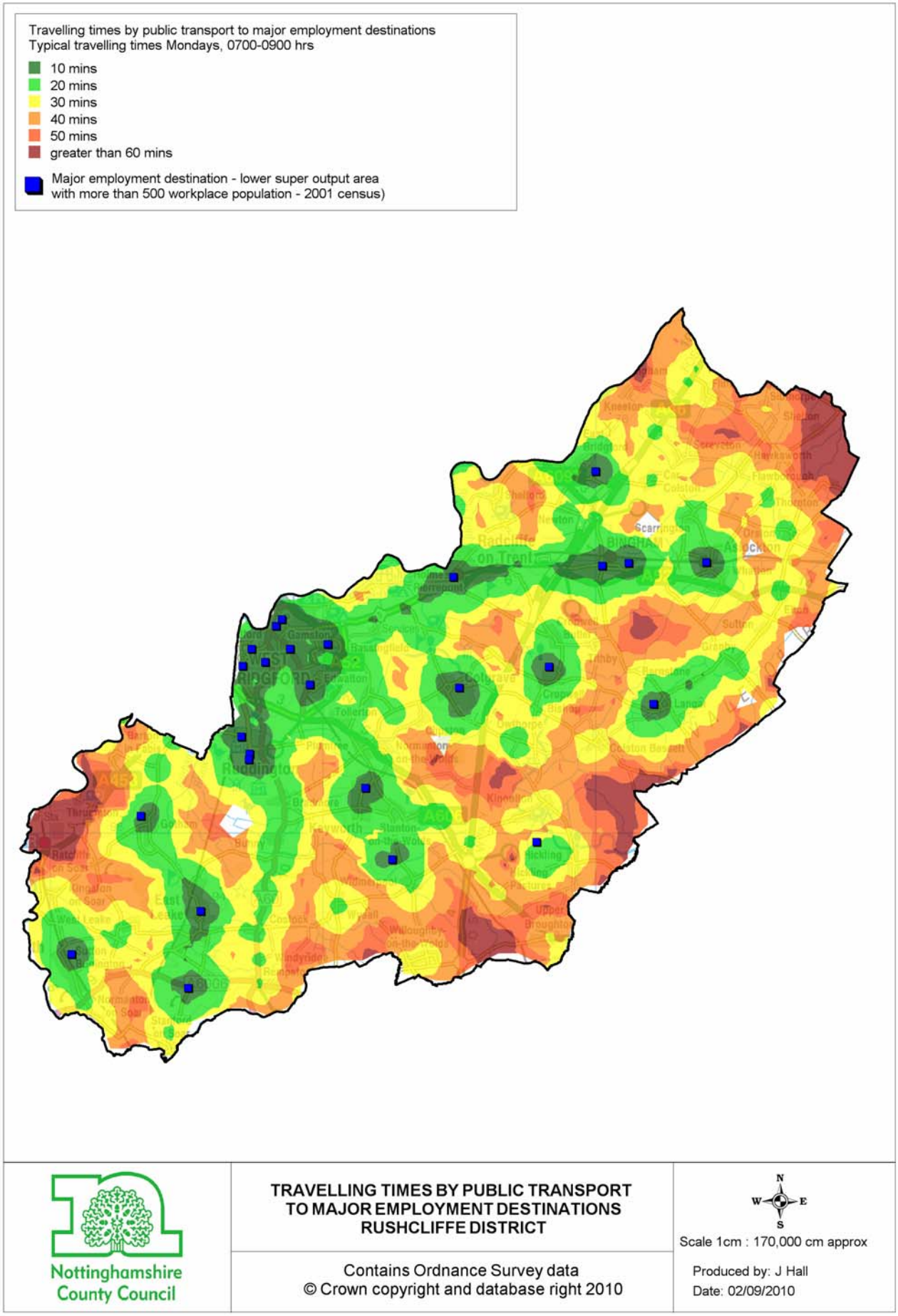


Figure 21: Travel times by public transport to major employment destinations in Rushcliffe district

2.6 Labour Market

The spatial variation in employment rates and qualification levels correlates closely with other socio-economic indicators for the county, with higher levels of performance in the south of the county, and lower levels in the north and west. Qualification levels in the worst performing districts are significantly below the regional and national averages.

The employment rate* in Nottinghamshire in the year to December 2009 was 72.2%, the same as the East Midlands average but above the UK (70.6%). Employment rates in the districts ranged from 64.3% in Mansfield to 77.2% in Rushcliffe as detailed in table 6 below.

Table 6: Employment rates

Area	Employment rate
Ashfield	69%
Bassetlaw	71%
Broxtowe	73%
Gedling	75%
Mansfield	64%
Newark & Sherwood	75%
Rushcliffe	77%
Nottinghamshire	72%
East Midlands	72%
United Kingdom	71%

Source: Office for National Statistics Labour market statistics: East Midlands August 2010

**On August 11th 2010 the population figures used to calculate employment and unemployment rates were changed. This is to reflect that between 2010 and 2020 the state pension age for women will gradually increase from 60 to 65 years. As a result the rates will differ from those published previously.*

The proportion of Nottinghamshire residents working in the three upper tier occupational groups in the year to September 2009 was 40.8%. This was above the East Midlands average of 40.2% but below the UK average of 43.6%.

2.6.1 Unemployment

The unemployment claimant count in Nottinghamshire in September 2010 stood at 25,773 representing a rate of 2.9% of the resident population aged 16-64, lower than both the East Midlands (3.3%) and the UK (3.6%). District unemployment rates, however, range from 3.8% in Mansfield to 1.8% in Rushcliffe. The worst unemployment tends to be in the west of the county with other pockets in Retford and central Newark. Ward rates peak in Ravensdale in Mansfield which has an unemployment rate of 7.7%. Table 7 below shows the unemployment rates in each district whilst figure 22 below details the unemployment rates in Nottinghamshire by county ward.

Table 7: Claimant count by district in Nottinghamshire in September 2009

	No. of claimants			Change over		Claimant count rate		
Area	Male	Female	Total	Month	Year	Male	Female	Total
Ashfield	1,899	789	2,688	-64	-545	5.1%	2.1%	3.6%
Bassetlaw	1,311	602	1,933	-4	-436	3.7%	1.7%	2.7%
Broxtowe	1,467	649	2,116	-26	-248	3.9%	1.8%	2.8%
Gedling	1,519	636	2,155	-7	-264	4.3%	1.7%	3.0%
Mansfield	1,759	674	2,433	-33	-344	5.5%	2.1%	3.8%
Newark & Sherwood	1,153	489	1,642	-77	-358	3.3%	1.4%	2.3%
Rushcliffe	911	405	1,316	-20	-185	2.5%	1.1%	1.8%

Source: Nottinghamshire County Council Employment Bulletin September 2010

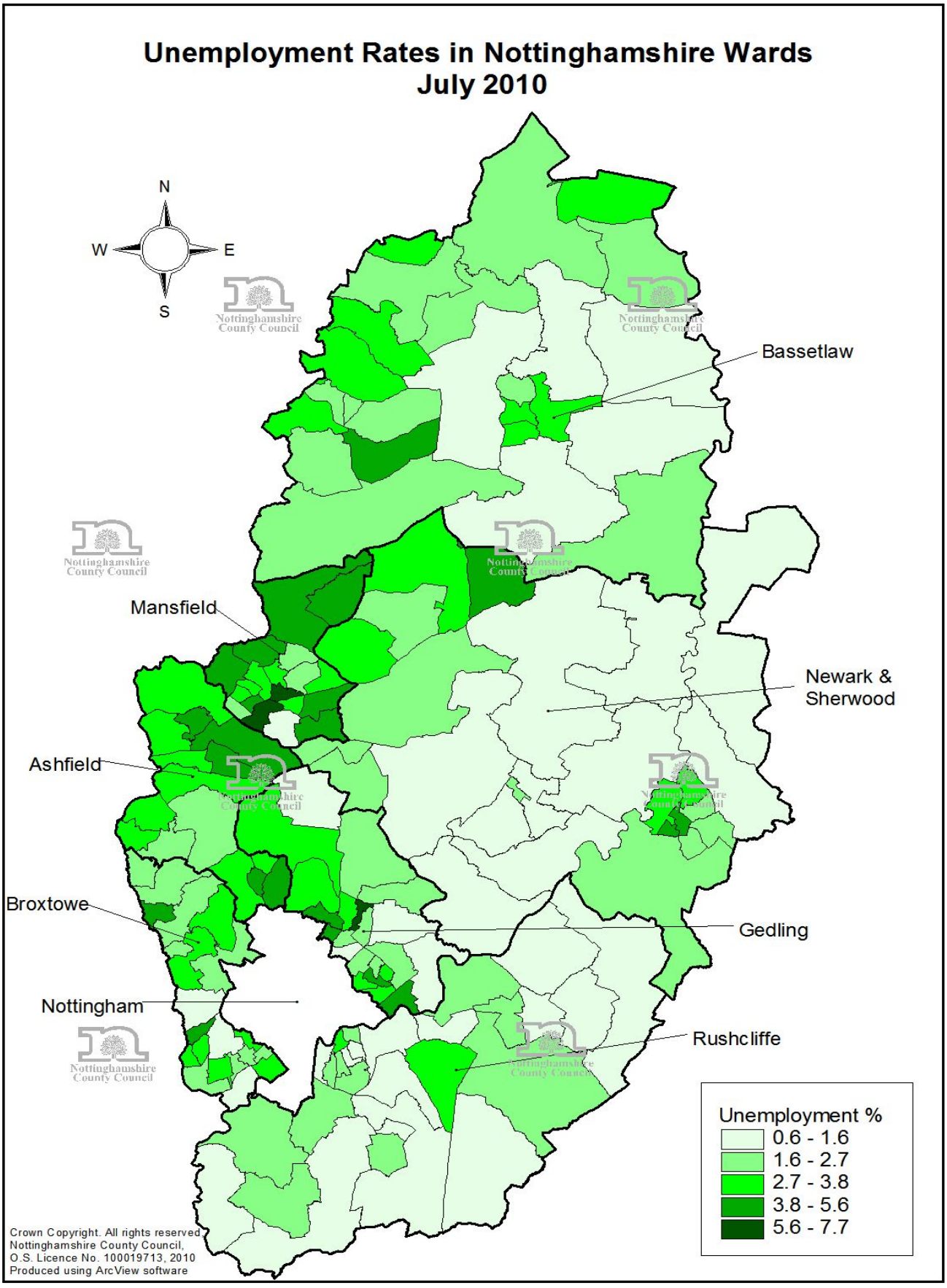


Figure 22: Unemployment rates in Nottinghamshire by county ward in July 2010
Source: Nottinghamshire County Council Employment Bulletin

2.6.2 Earnings

The median gross weekly earnings of Nottinghamshire full-time workers is £446.00 per week, compared to £456.60 for the East Midlands and £488.70 for the UK. Full-time workers in Mansfield are the poorest paid in Nottinghamshire with median gross weekly earnings of £404.30, whilst workers in Rushcliffe are the highest paid, earning £470.80 per week. Women in Nottinghamshire continue to earn less than men with median full-time weekly earnings of £380.70 compared to £484.10 earned by men. Figure 23 below details the gross weekly pay of full-time workers in the county, region and nationally.

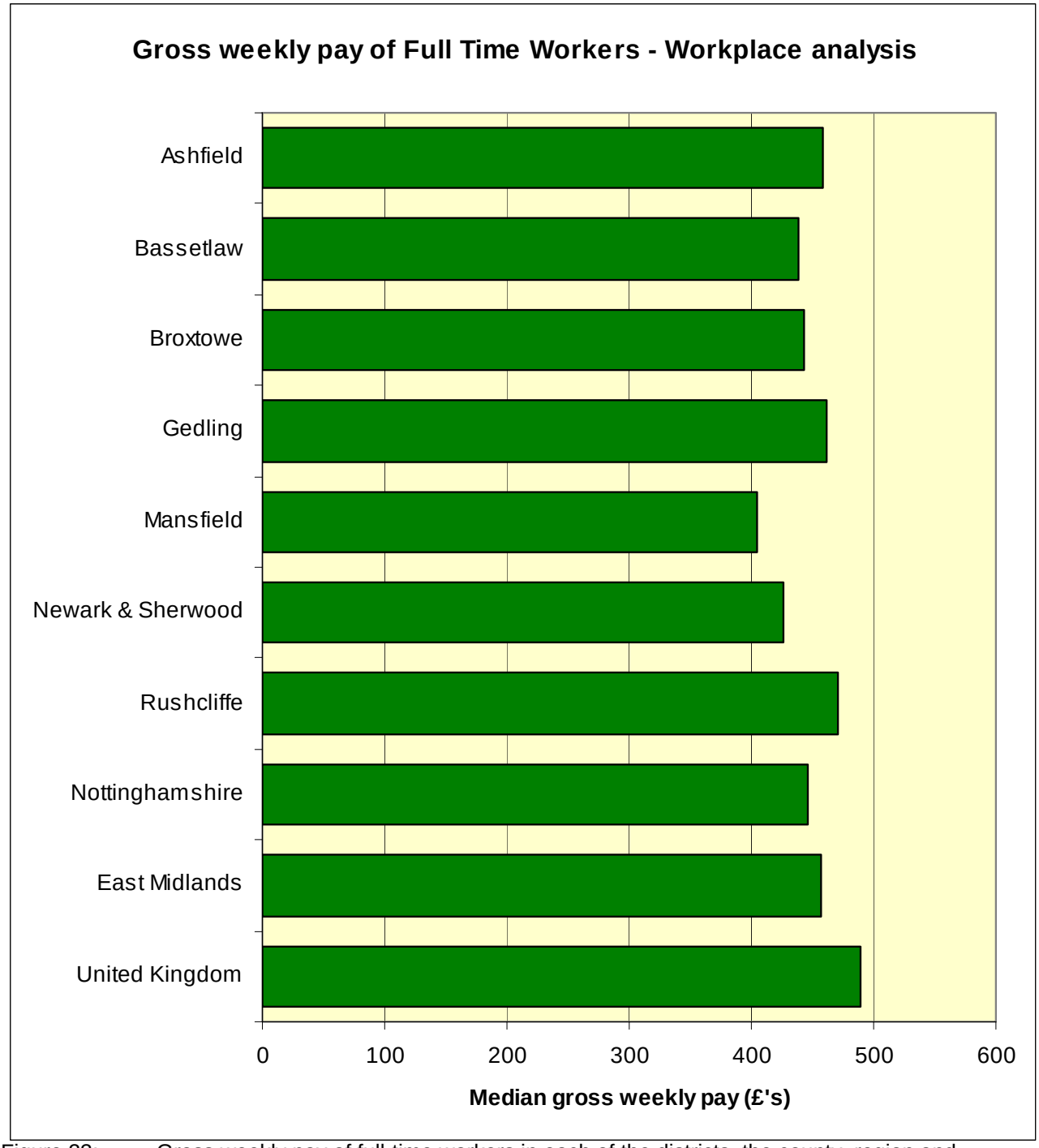


Figure 23: Gross weekly pay of full-time workers in each of the districts, the county, region and nationally

2.6.3 Qualifications

The percentage of the 16-64 population with high level qualifications (equivalent to an NVQ Level 4 or higher) in Nottinghamshire was 26.3% in 2009, compared with 25.7% in the East Midlands and 29.8% in the UK. Rates in the districts ranged from 15.3% in Bassetlaw to 42.4% in Rushcliffe.

Table 8 below details the percentage of the population aged 16-64 with qualifications equivalent to NVQ4 or higher. The proportion of people qualified to NVQ4 or higher is generally increasing, although reductions have been seen in Bassetlaw, Gedling and Rushcliffe. The rate in Newark & Sherwood has been consistently increasing since 2006 and is now above the county and regional averages.

Table 8: Percentage of the population aged 16-64 with qualifications equivalent to NVQ4+ split by district.

Area	2005	2006	2007	2008	2009
Ashfield	14.3	12.6	15.6	15.7	15.5
Bassetlaw	18.3	22.3	25.5	19.5	15.3
Broxtowe	33.4	32.9	35.4	36.3	35.7
Gedling	26.3	29.4	31.4	27.8	26.0
Mansfield	18.5	15.4	15.6	18.9	21.4
Newark & Sherwood	19.2	18.6	22.0	23.4	27.6
Rushcliffe	48.1	44.6	43.3	46.2	42.4
Nottinghamshire	25.5	25.1	27.1	26.9	26.3
East Midlands	23.1	24.6	25.5	24.9	25.7
United Kingdom	26.4	27.3	28.4	28.5	29.8

Source: Annual Population Survey

In 2009 the percentage of the population aged 16-64 with no qualifications was 11.6% in Nottinghamshire, compared to13.0% in the East Midlands and 12.6% in the UK. Rates in the districts varied from 6.5% in Rushcliffe to 21% in Mansfield. The proportion of people with no qualifications is generally reducing. Broxtowe, Mansfield and Rushcliffe districts have, however, seen some increase in recent years. The rates in Gedling and Newark & Sherwood districts have been decreasing since 2006. Table 9 below details the percentage of the population aged 16-64 with no qualifications.

Table 9: Percentage of the population aged 16-64 with no qualifications

Area	2005	2006	2007	2008	2009
Ashfield	16.6	15.2	13.4	18.0	10.7
Bassetlaw	17.2	16.5	14.4	21.2	14.0
Broxtowe	8.7	10.7	9.5	8.8	9.5
Gedling	10.8	17.9	13.8	10.2	8.0
Mansfield	18.8	12.2	16.4	15.1	21.0
Newark & Sherwood	8.6	15.9	15.1	14.0	12.4
Rushcliffe	4.1	9.6	9.1	4.5	6.5
Nottinghamshire	12.1	14.0	13.0	13.1	11.6
East Midlands	15.0	14.0	13.7	14.5	13.0
United Kingdom	14.6	14.1	13.5	13.7	12.6

Source: Annual Population Survey

2.7 Access to training

Table 10 below details the percentage of 16-19 year olds with access to further education colleges by public transport within 20 and 40 minutes. Figures 24 to hhh below show the time taken to travel to colleges of further education by public transport in Nottinghamshire (figure 24) and each of the seven districts (figures 25-31). Access to colleges by public transport is worst from the more rural parts of the county as seen in the length of time taken to travel to them in the table and figures below.

Table 10: Access to further education colleges by public transport

	Percentage of 16-19 year olds with access to further education colleges by public transport within	
Area	**20 minutes**	**40 minutes**
Ashfield	72%	97%
Bassetlaw	29%	71%
Broxtowe	62%	99%
Gedling	42%	99%
Mansfield	87%	99%
Newark & Sherwood	41%	91%
Rushcliffe	55%	92%
Nottinghamshire	55%	92%

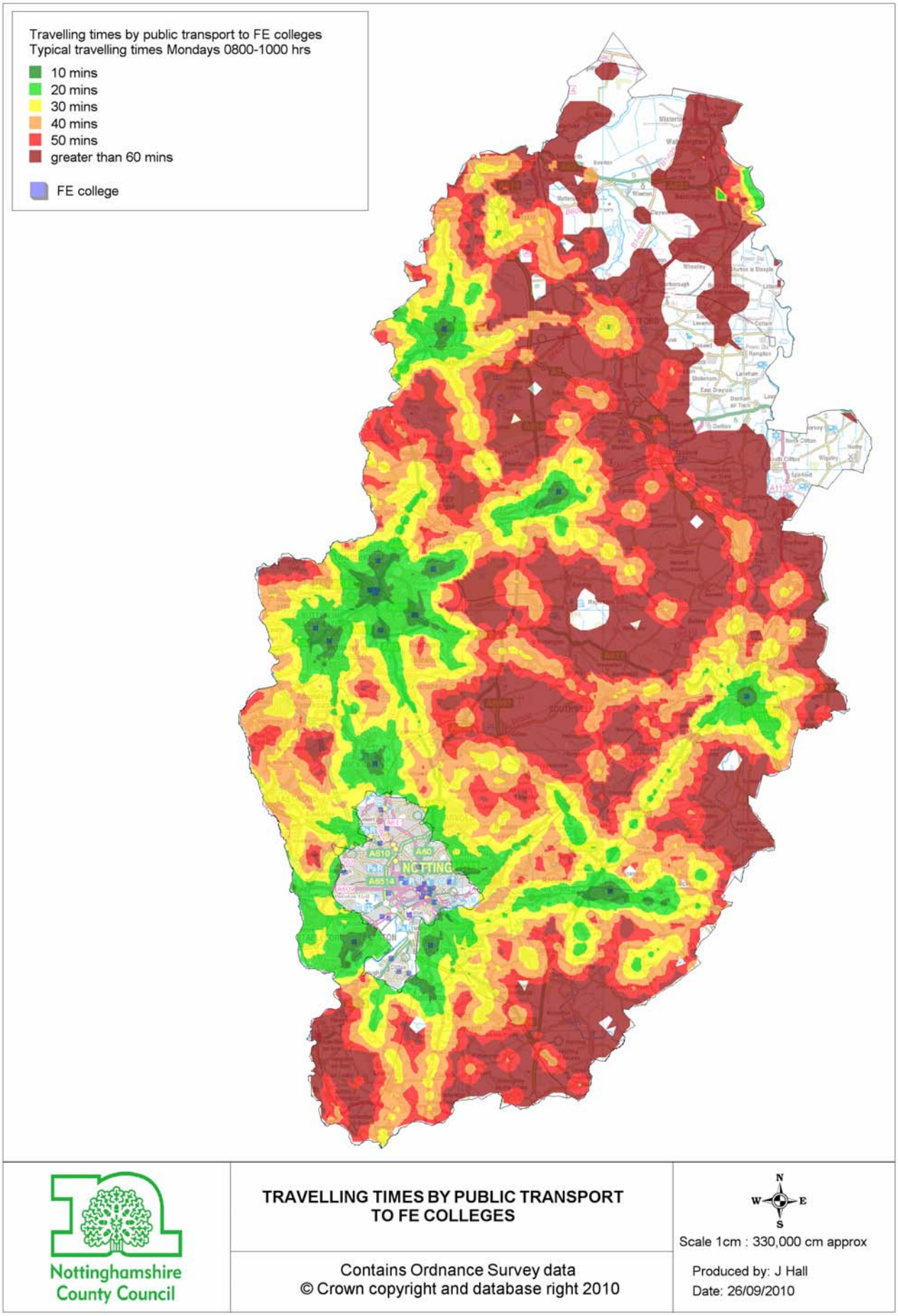


Figure 24: Travelling times by public transport to colleges of further education in Nottinghamshire

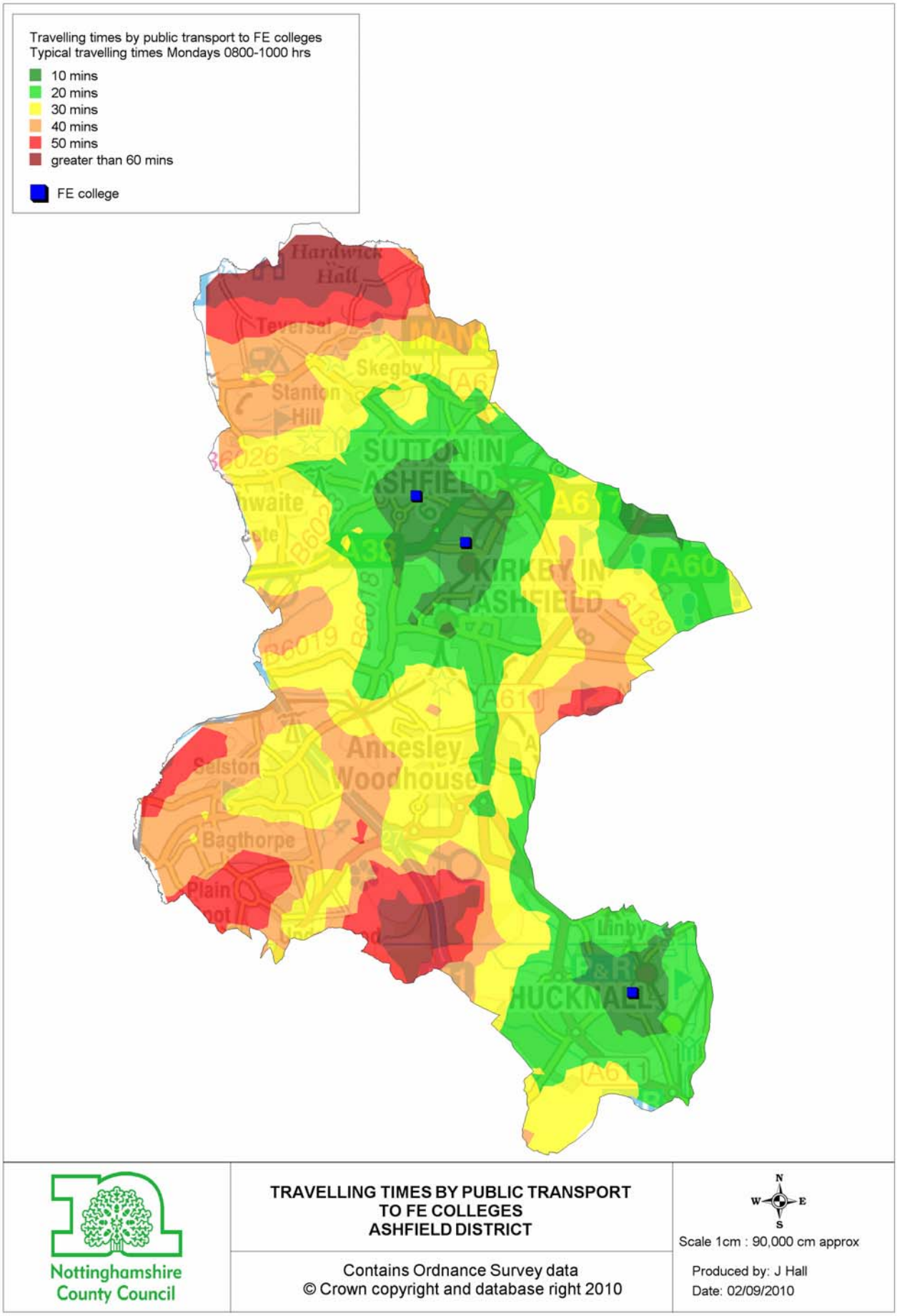


Figure 25: Travelling times by public transport to colleges of further education in Ashfield district

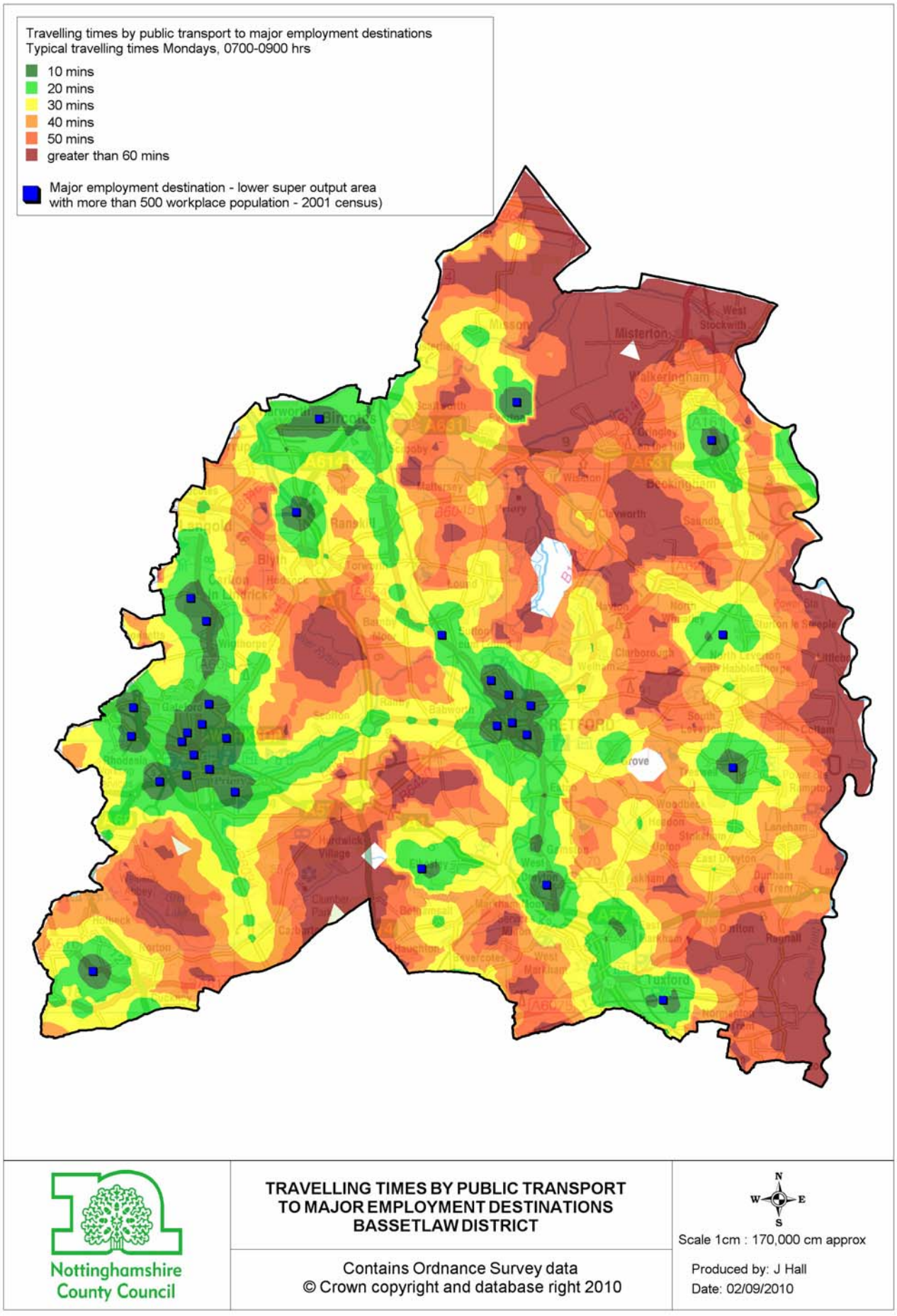


Figure 26: Travelling times by public transport to colleges of further education in Bassetlaw district

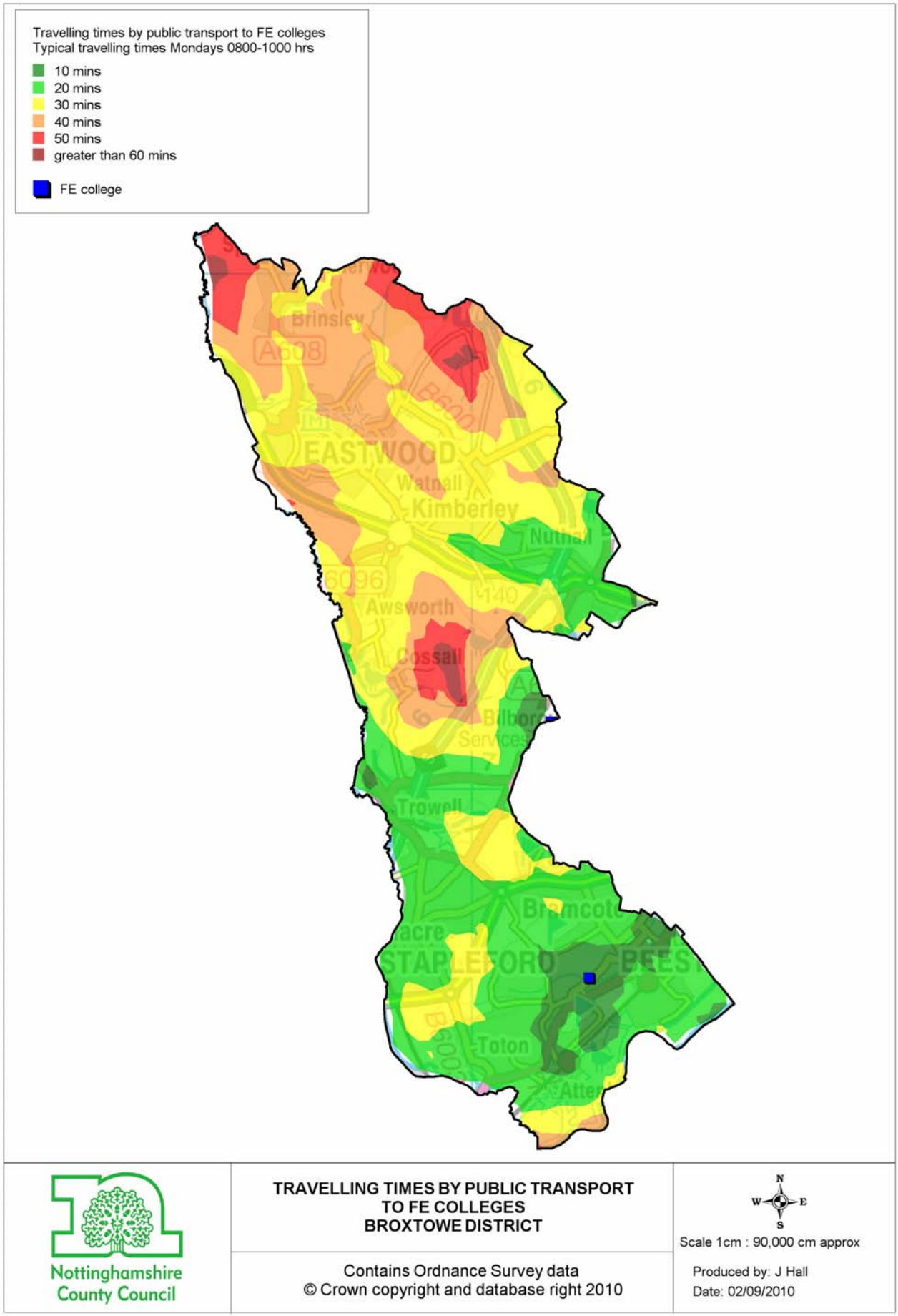


Figure 27: Travelling times by public transport to colleges of further education in Broxtowe district

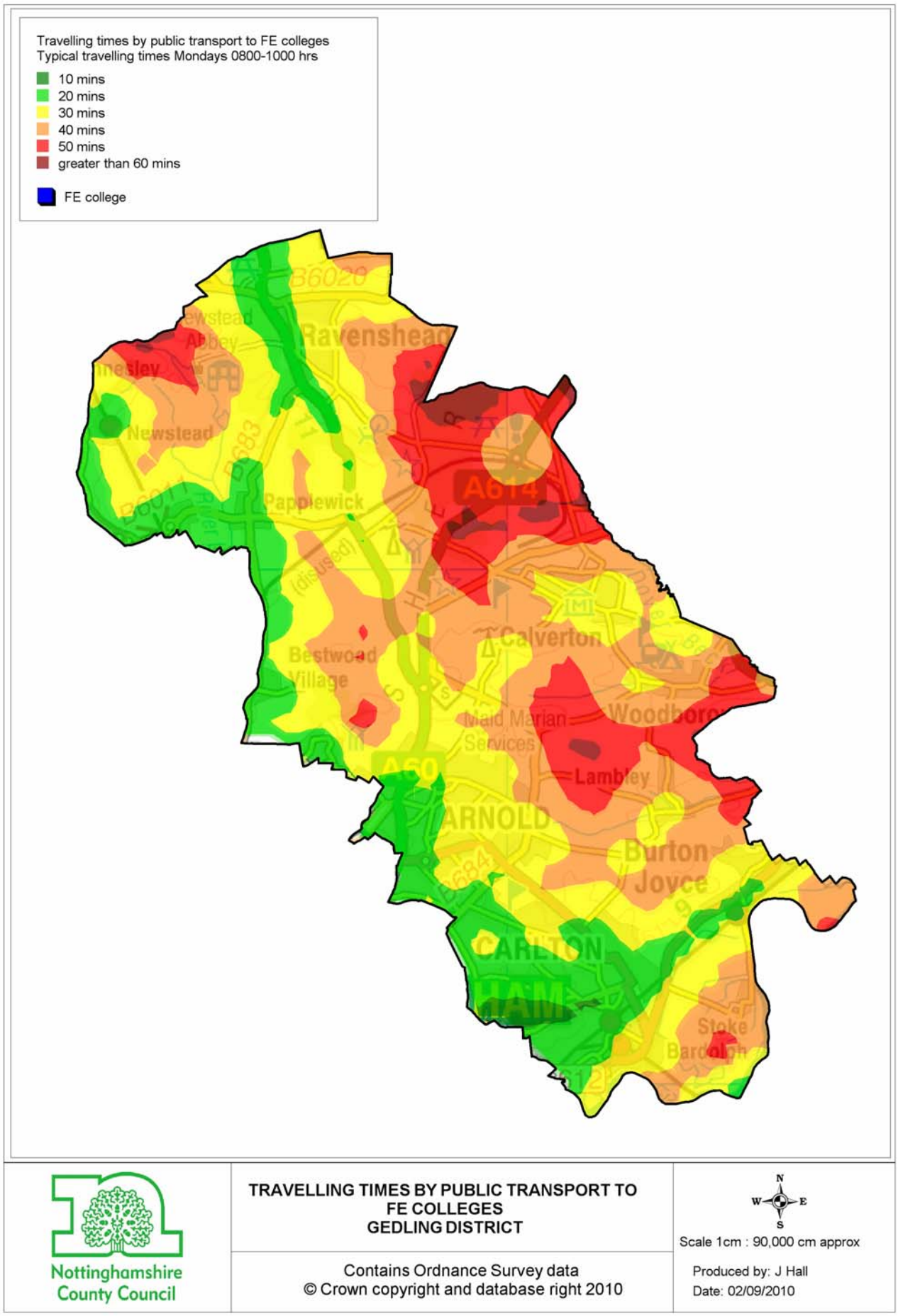


Figure 28: Travelling times by public transport to colleges of further education in Gedling district

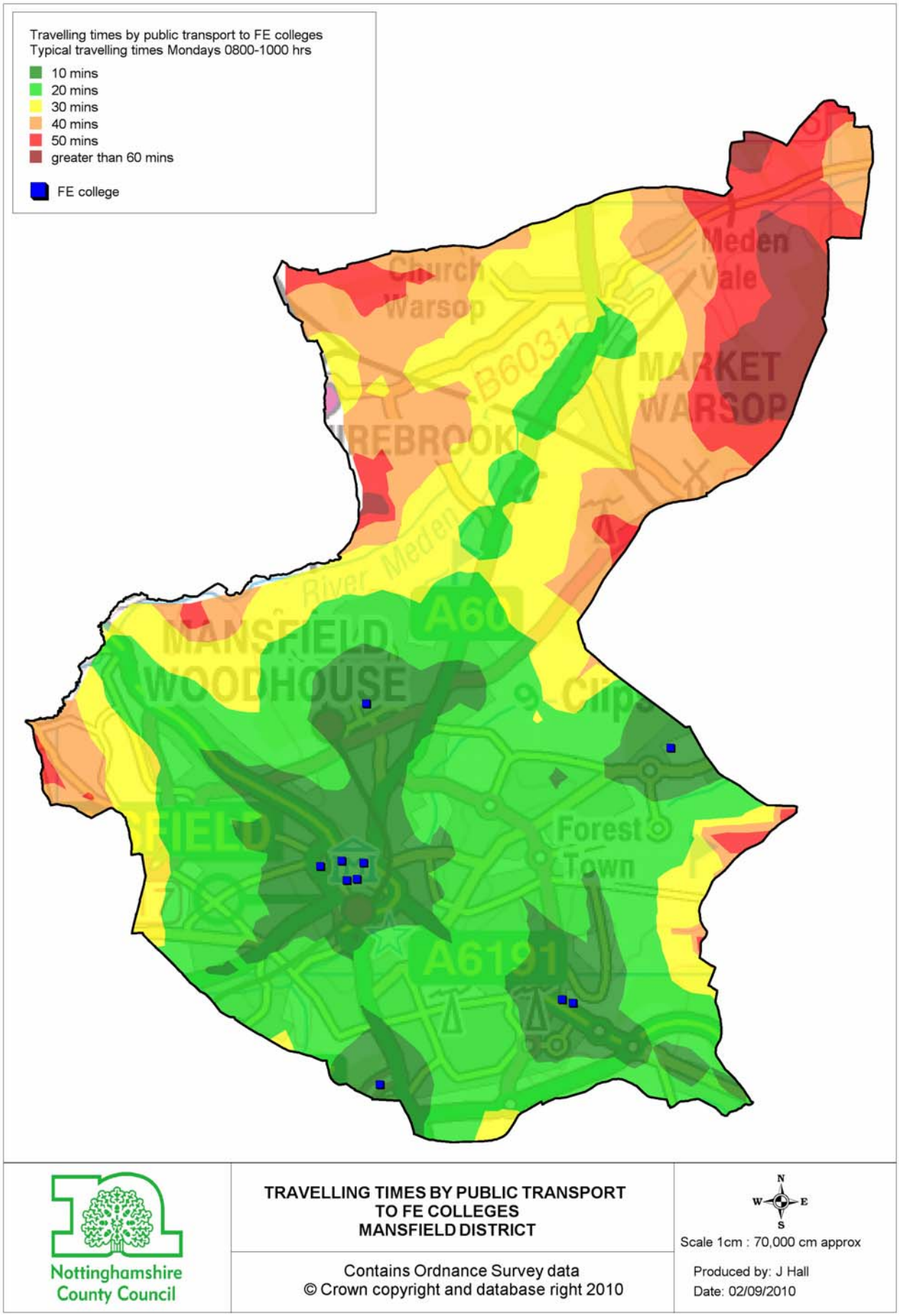


Figure 29: Travelling times by public transport to colleges of further education in Mansfield district

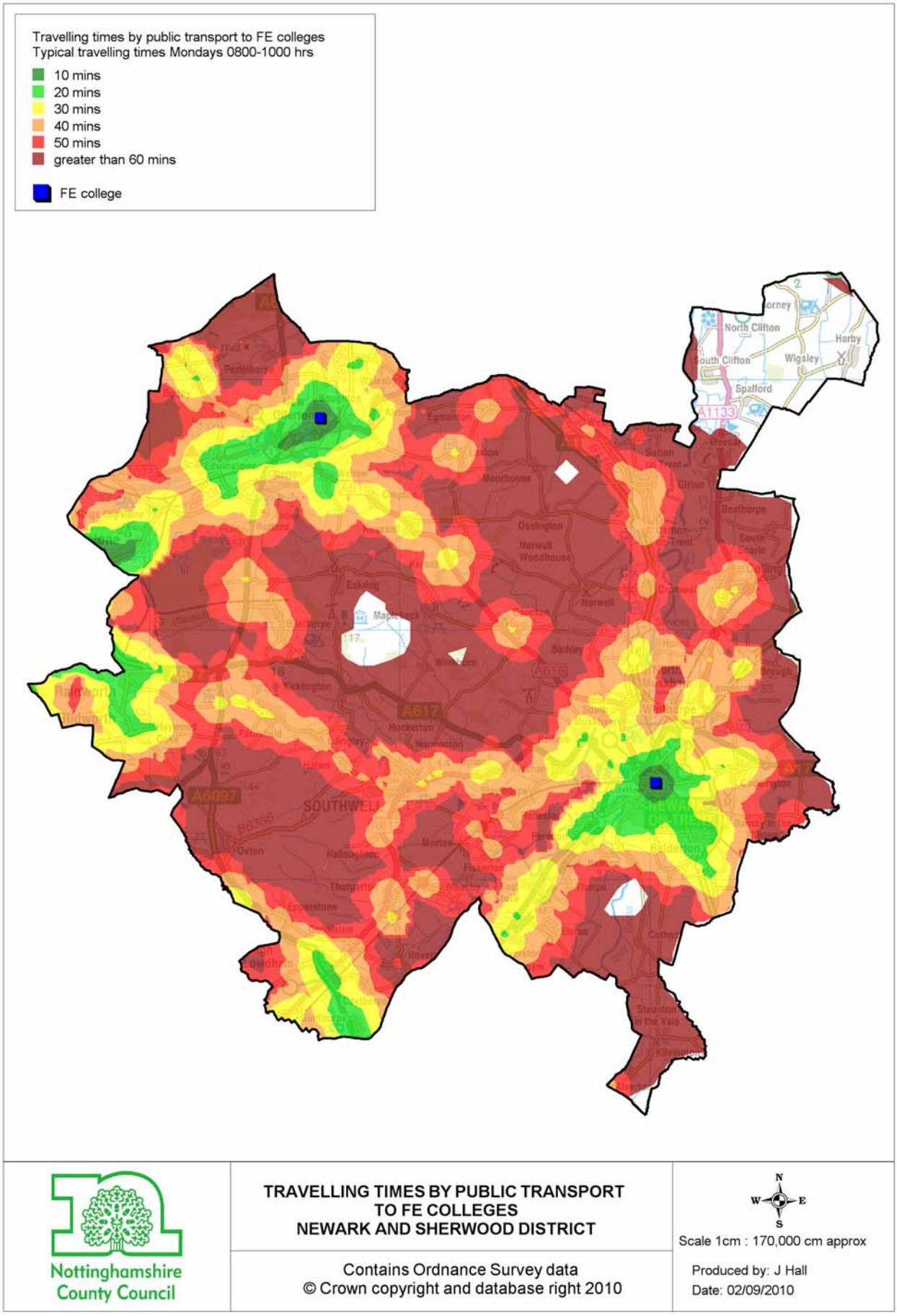


Figure 30: Travelling times by public transport to colleges of further education in Newark & Sherwood district

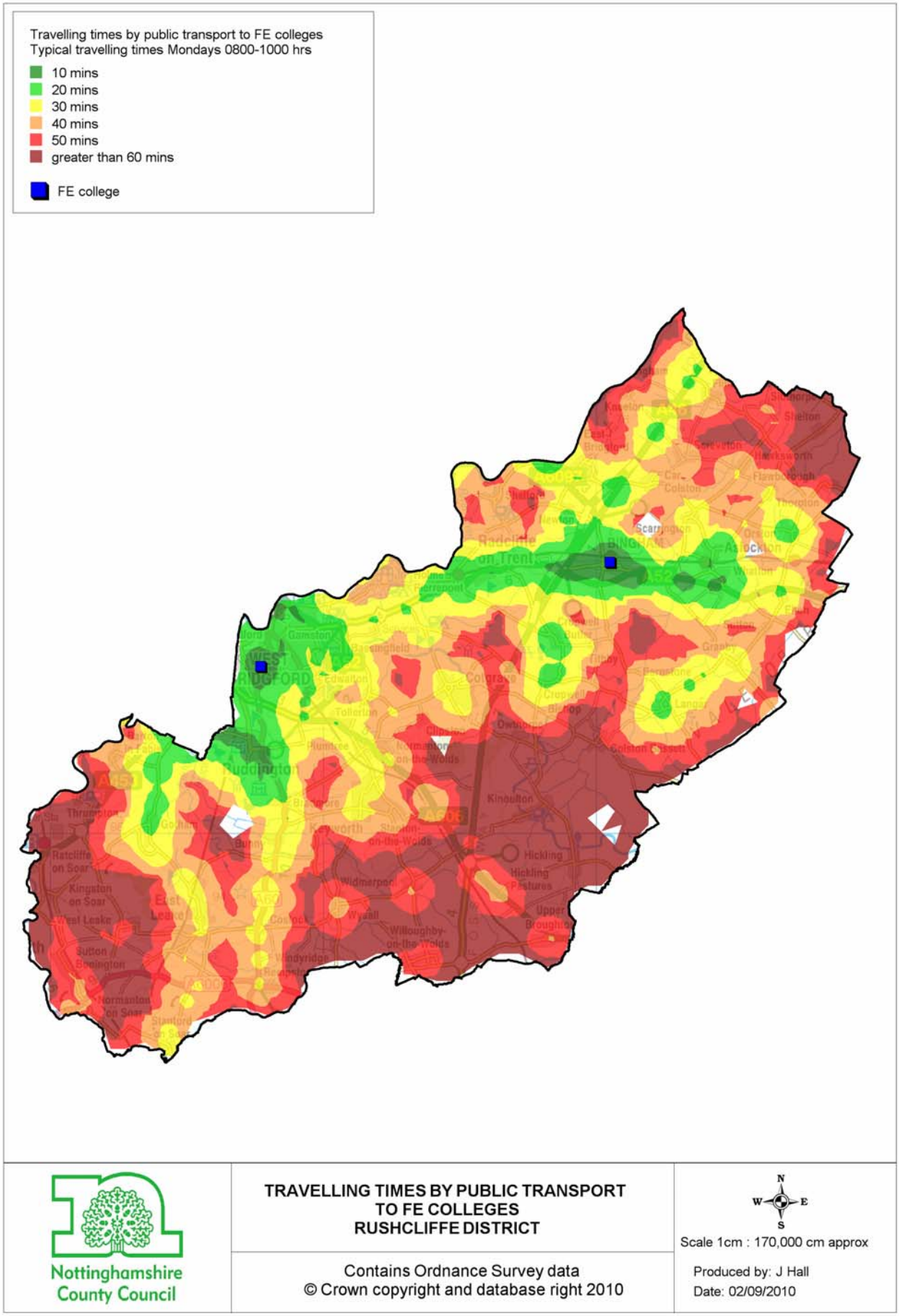


Figure 31: Travelling times by public transport to colleges of further education in Rushcliffe district

3. Health

3.1 Nottinghamshire Joint Strategic Needs Assessment

The Nottinghamshire Joint Strategic Needs Assessment identified some key facts surrounding health in the county including:

- there is a 12 year gap in life expectancy for the over 50s between the best and worst wards in Nottinghamshire
- smoking is the greatest single cause of avoidable illness and preventable death in England but one in four adults in the county smoke
- reduced life expectancy is mainly due to heart disease, respiratory diseases and lung cancer – smoking is a contributing factor to all of these
- obesity reduces life expectancy by an average of nine years and obesity affects up to 15% of children and one in four adults in Nottinghamshire
- Mansfield has 6% more obese children than Rushcliffe
- alcohol and drug abuse in Nottinghamshire are an increasing source of ill health particularly amongst younger people
- the numbers of road casualties in Nottinghamshire are high, and
- road traffic injury is a major cause of death in 5 to 19 year olds.

3.1.1 People with disabilities

Figure 32 below shows the percentage of working age who are disabled and gives an indication of the level of disability by looking at the three classifications; 'DDA only disabled', 'DDA & also work limiting disabled' and all 'disabled'.

It can be seen quite clearly that Mansfield has the highest proportion of 'disabled' people with a rate of 26.7%. This is followed by Bassetlaw (23.9%), Broxtowe (22.7%) and Ashfield 21.9%. These four districts all have rates well above that of the East Midlands (19.2%) and the UK (18.6%). A similar pattern is evident when looking at the figures for 'DDA and also work limiting disabled' but the pattern for 'DDA only disabled' is quite different with only Broxtowe (5.6%), Bassetlaw (5.4%) and Ashfield (4.4%) being marginally above the regional figure of 4.3%.

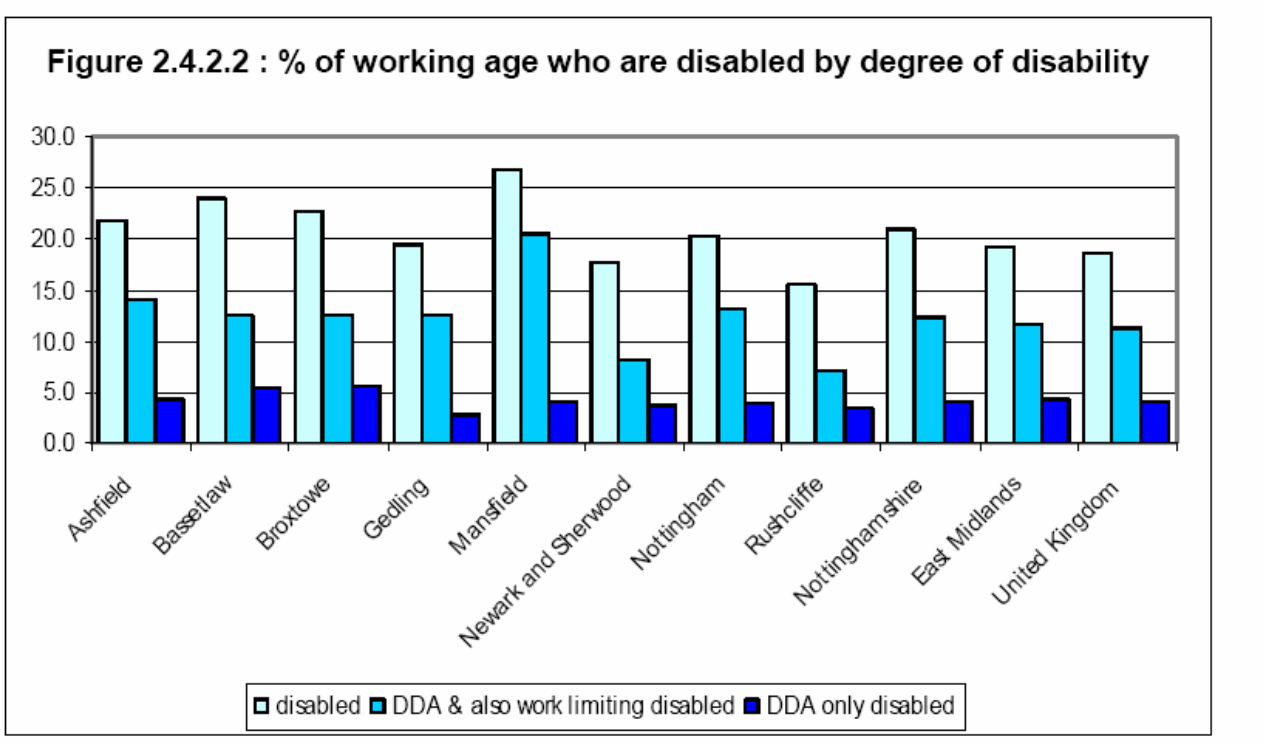


Figure 32: Percentage of working age population who are disabled by degree of disability
Source: Nottinghamshire Joint Strategic Needs Assessment 2009

3.1.2 People with limiting long-term illnesses

Table 11 below shows the percentages of the population with a limiting long-term illness as well as the percentage of households with one or more people with a limiting long-term illness. The 2001 Census shows that 20% of the population of Nottinghamshire has a limiting long-term illness, which is above both regional (18.4%) and national (17.9%) averages

Table 11: Percentage of population and households with a limiting long-term illness

Area	Percentage of population with a limiting long-term illness	Percentage of households with at least one person with a limiting long-term illness
Ashfield	22.1%	40.0%
Bassetlaw	21.9%	39.4%
Broxtowe	18.2%	33.5%
Gedling	18.3%	33.6%
Mansfield	24.2%	43.4%
Newark & Sherwood	19.7%	36.0%
Rushcliffe	15.6%	29.2%
Nottinghamshire	20.0%	36.4%
East Midlands	18.4%	34.2%
England	17.9%	33.6%

3.1.3 People with sensory impairments

Councils are legally obliged to hold and maintain a register of visually impaired people but this is not the case for hearing impairment. The County Council's Adult Deaf and Visual Impairment Service collects data on the numbers of people with visual and hearing impairment registering with the Council.

The most recent statistics held by the NHS show that in Nottinghamshire there are:

- 1,811 registered blind people
- 2,800 registered partially sighted
- 740 known to the service who are pre-registered (people who are not registered but for whom support is offered to assist daily living)
- 198 deaf people who have speech
- 156 deaf people without speech, and
- 758 people who are hard of hearing.

The districts with the most numbers of people on the Visual Impairment Register in 2007 were Gedling, Bassetlaw and Ashfield, whilst those with the fewest were Rushcliffe and Mansfield.

In Nottinghamshire in March 2008 there were 140 dual sensory impaired people over the age of 18, although the majority of these were over 65 years of age.

3.2 Obesity

3.2.1 Adult obesity

When comparing the 2006-08 figures with 2003-05 figures, the percentage of obese adults (aged 16 and over) has decreased in each of the districts in the county, compared to a slight increase in England. The percentages of obese adults in Ashfield and Mansfield, however, remain higher than the average in the East Midlands and England. Table 12 and figure 33 below detail the percentage of the adult population (aged 16 and over) who are classed as obese.

Table 12: Percentage of the adult population (aged 16 and over) who are obese

	Percentage of adults classed as obese		
Area	**2000-02**	**2003-05**	**2006-08**
Ashfield	25.9%	29.2%	28.2%
Bassetlaw	27.4%	27.6%	23.6%
Broxtowe	22.9%	23.9%	23.2%
Gedling	23.0%	23.9%	23.4%
Mansfield	24.6%	28.1%	25.0%
Newark & Sherwood	25.0%	25.5%	23.5%
Rushcliffe	20.4%	19.5%	19.0%
East Midlands	25.1%	25.6%	24.3%
England	21.8%	23.6%	24.2%

Source: 2001 Census data

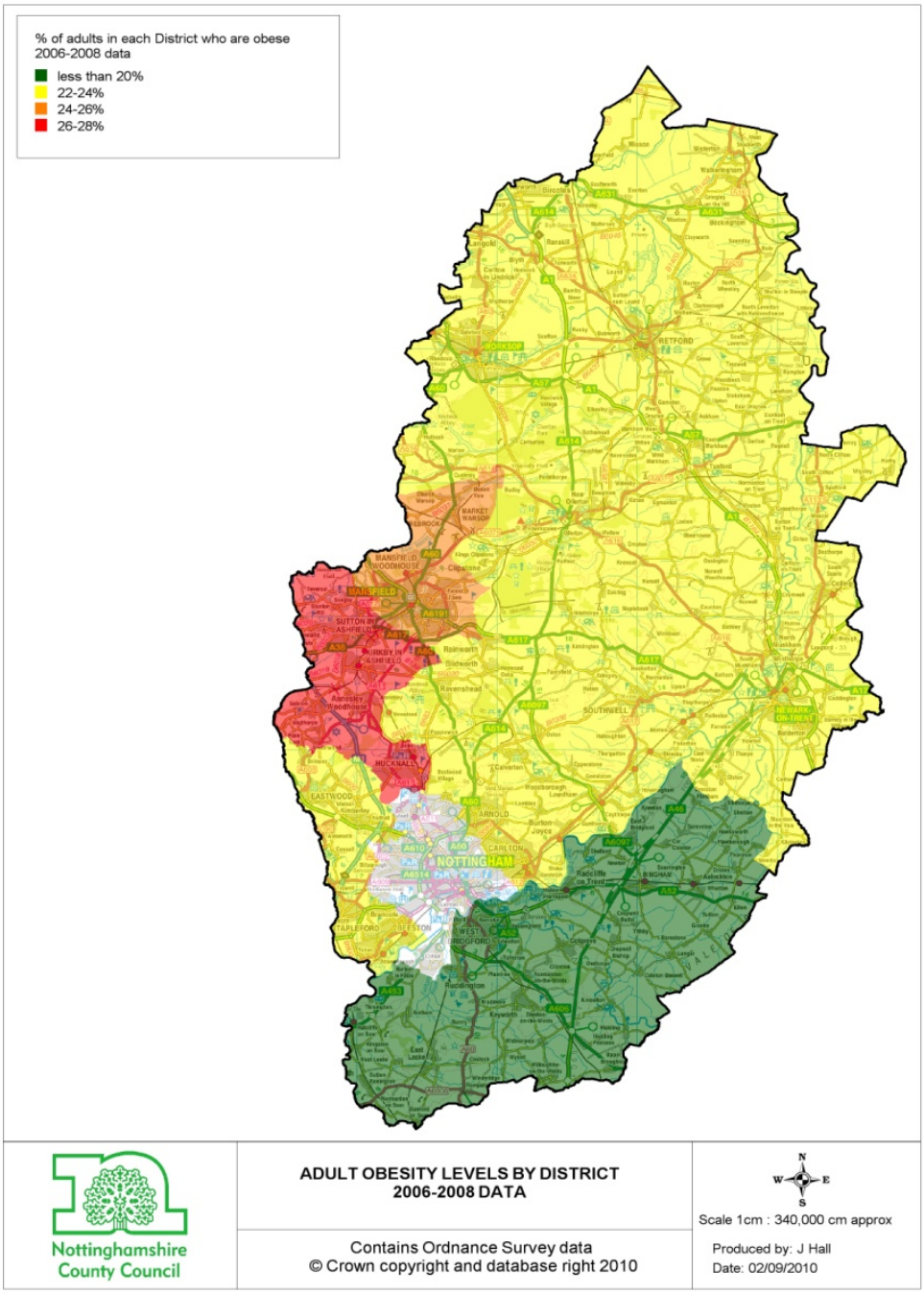


Figure 33: Percentage of adults aged 16 and over whom are obese in 2006-08 mapped by district

3.2.2 Child obesity

Child obesity levels in Ashfield, Bassetlaw and Mansfield are higher than the average in England. Rushcliffe has the lowest child obesity levels in the county. Table 13 and figure 34 below details the percentage of children (aged under 16) whom are classed as obese.

Table 13: Percentage of children (aged under 16) whom are classed as obese split by district.

	Percentage of children classed as obese
Area	**2008-09**
Ashfield	9.9%
Bassetlaw	10.5%
Broxtowe	7.7%
Gedling	9.5%
Mansfield	10.3%
Newark & Sherwood	8.7%
Rushcliffe	7.3%
Nottinghamshire	9.1%
East Midlands	9.1%
England	9.6%

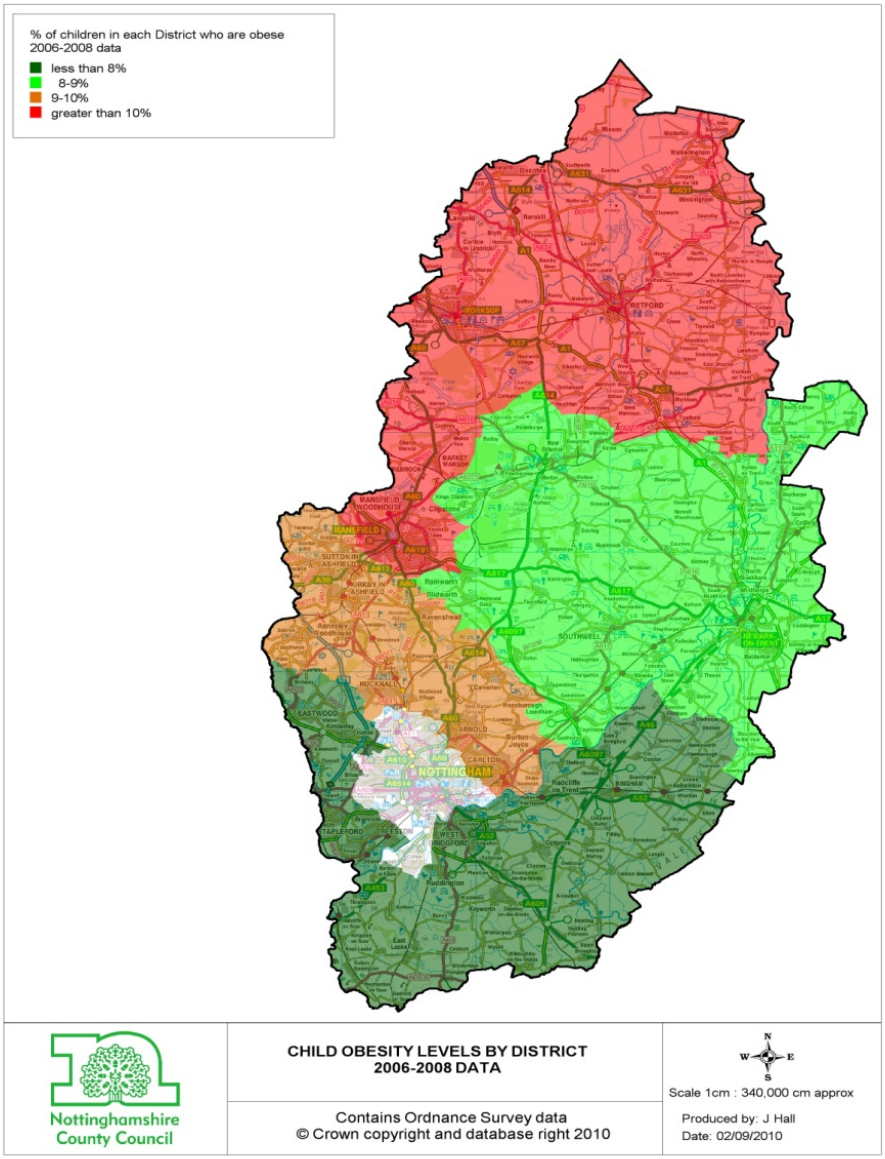


Figure 34: Percentage of children (aged under 16) whom are classed as obese split by district

3.3 Participation in sport and active recreation

Sport England's Active People Survey (APS) records the percentage of the adult population who participate in sport and active recreation, at a moderate intensity, for at least 30 minutes on at least 12 days out of the last 4 weeks (equivalent to 30 minutes on 2 or more days a week). Interviews for the survey took place over a 12 month period – APS1 was undertaken in 2005/06; APS2 was undertaken in 2007/08; and APS3 was undertaken in 2008/09. At least 1,000 residents in each district completed the interview in 2005/06, with 500 from each district in subsequent years. Results of the survey are shown below in figure 35.

The survey results indicate that there has been a slight increase in adult participation in sport and active recreation each year at the national and regional level whilst in the county the rate fell in 2008/09 (APS3).

At the district level participation in sport and active recreation increased in Bassetlaw and Newark & Sherwood each year. Conversely, Ashfield experienced decreases each year resulting in Ashfield's adult participation rate being the lowest in the county. When comparing 2008/09 and 2005/06 decreases were also seen in Broxtowe and Rushcliffe. Rushcliffe, however, maintains the highest activity rate in the county (despite significant fluctuations in each of the years), just ahead of Bassetlaw.

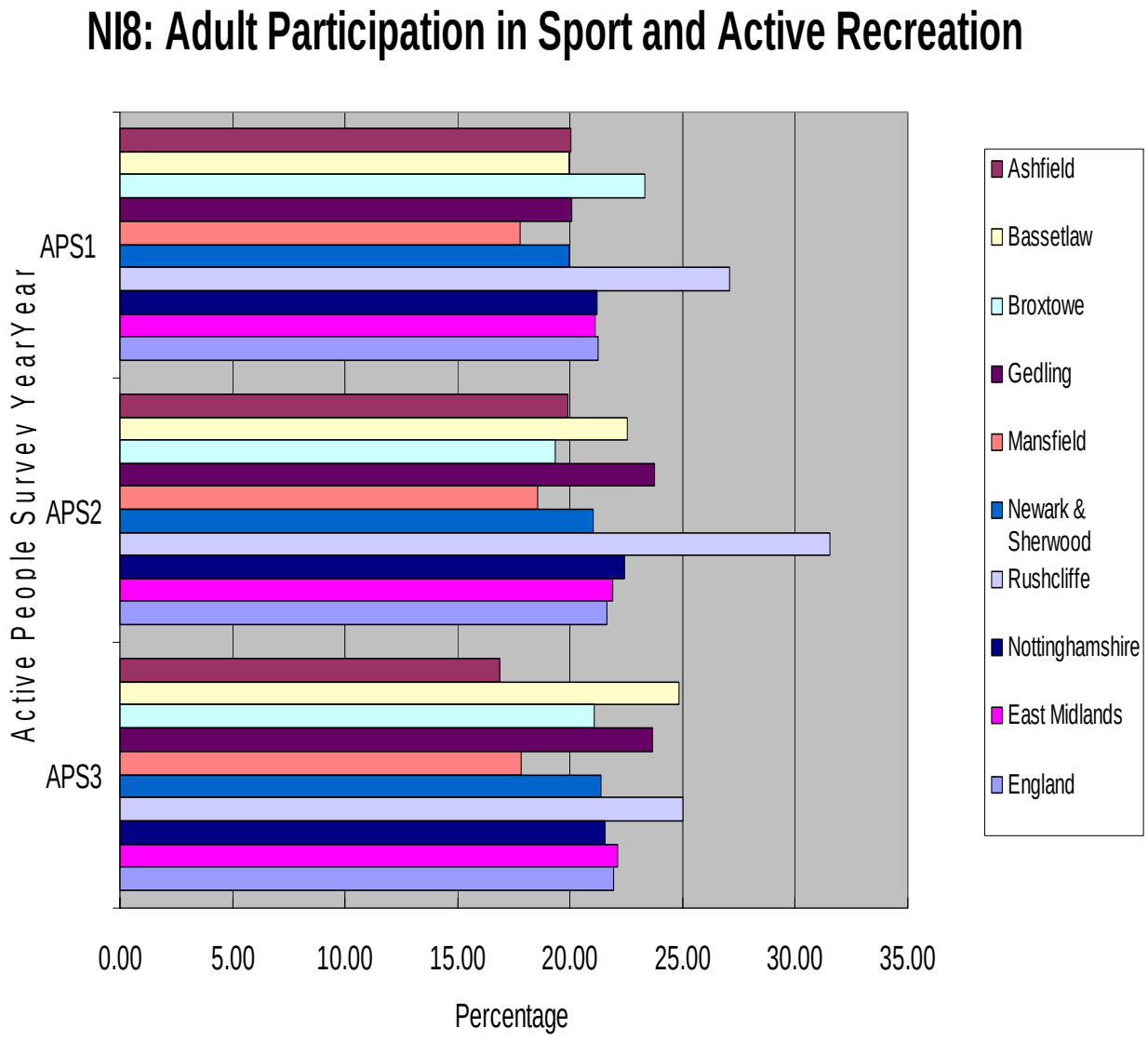


Figure 35: Adult participation in sport and active recreation
Source: Sport England

3.4 Access to health

Table 14 below details the percentage of households with access to doctors' surgeries by public transport within 20 and 40 minutes, whilst table 15 details the percentage of households with access to a hospital by public transport within 20 and 40 minutes. Figures 36 and 37 below show the time taken to travel to doctors' surgeries and hospital by public transport respectively in Nottinghamshire. Access to these health locations by public transport is generally good although it is worse from the more rural parts of the county as seen in the length of time taken to travel to them in the tables and figures below.

Table 14: Access to doctors' surgeries by public transport

	Percentage of households with access to doctors' surgeries by public transport within	
Area	**20 minutes**	**40 minutes**
Ashfield	99%	100%
Bassetlaw	78%	98%
Broxtowe	100%	100%
Gedling	99%	100%
Mansfield	99%	100%
Newark & Sherwood	87%	99%
Rushcliffe	93%	100%
Nottinghamshire	94%	99%

Table 15: Access to hospitals by public transport

	Percentage of households with access to hospitals by public transport within	
Area	**20 minutes**	**40 minutes**
Ashfield	45%	99%
Bassetlaw	28%	64%
Broxtowe	20%	98%
Gedling	42%	98%
Mansfield	41%	98%
Newark & Sherwood	24%	60%
Rushcliffe	27%	82%
Nottinghamshire	33%	86%

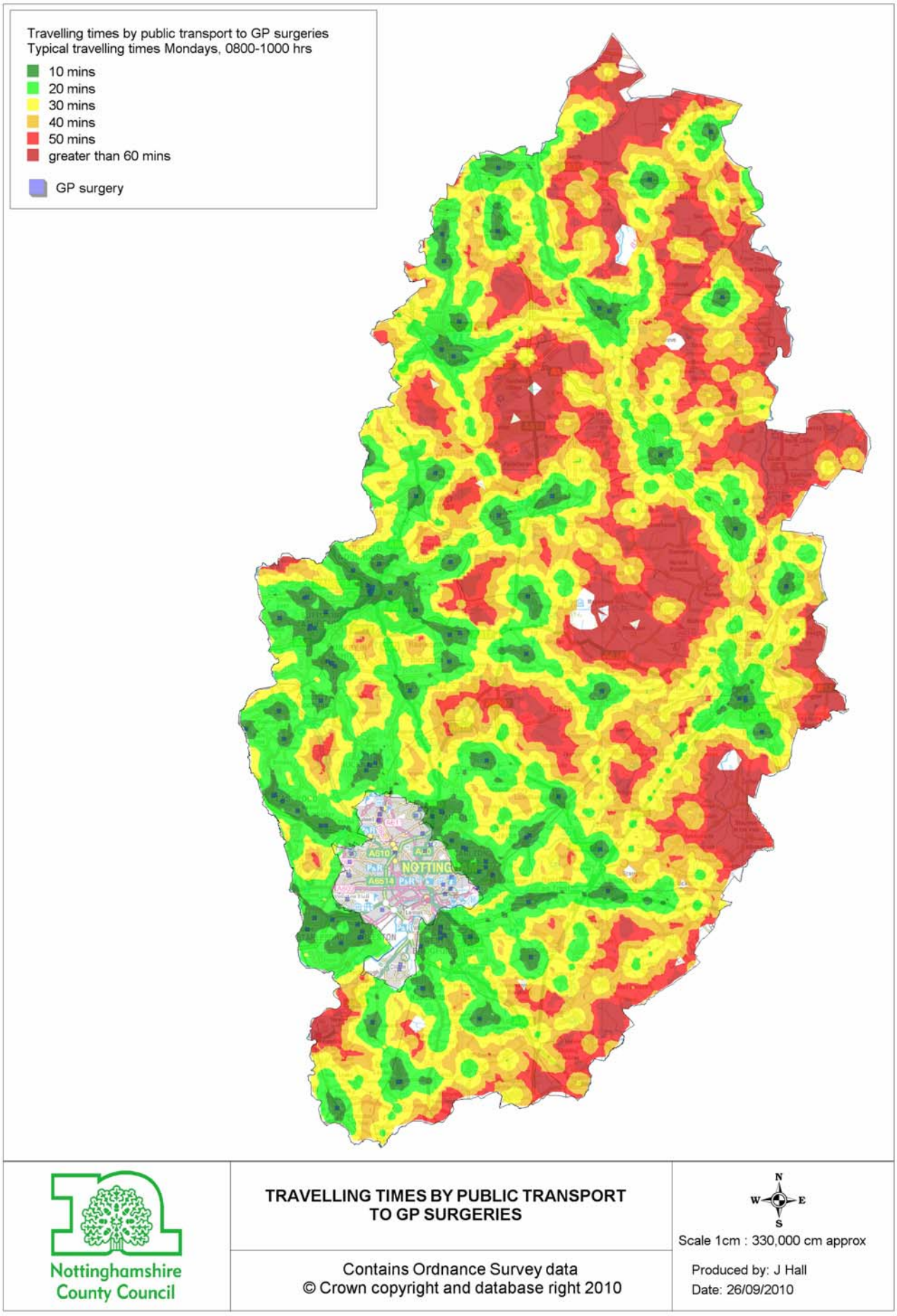


Figure 36: Travelling time by public transport to doctors' surgeries in Nottinghamshire

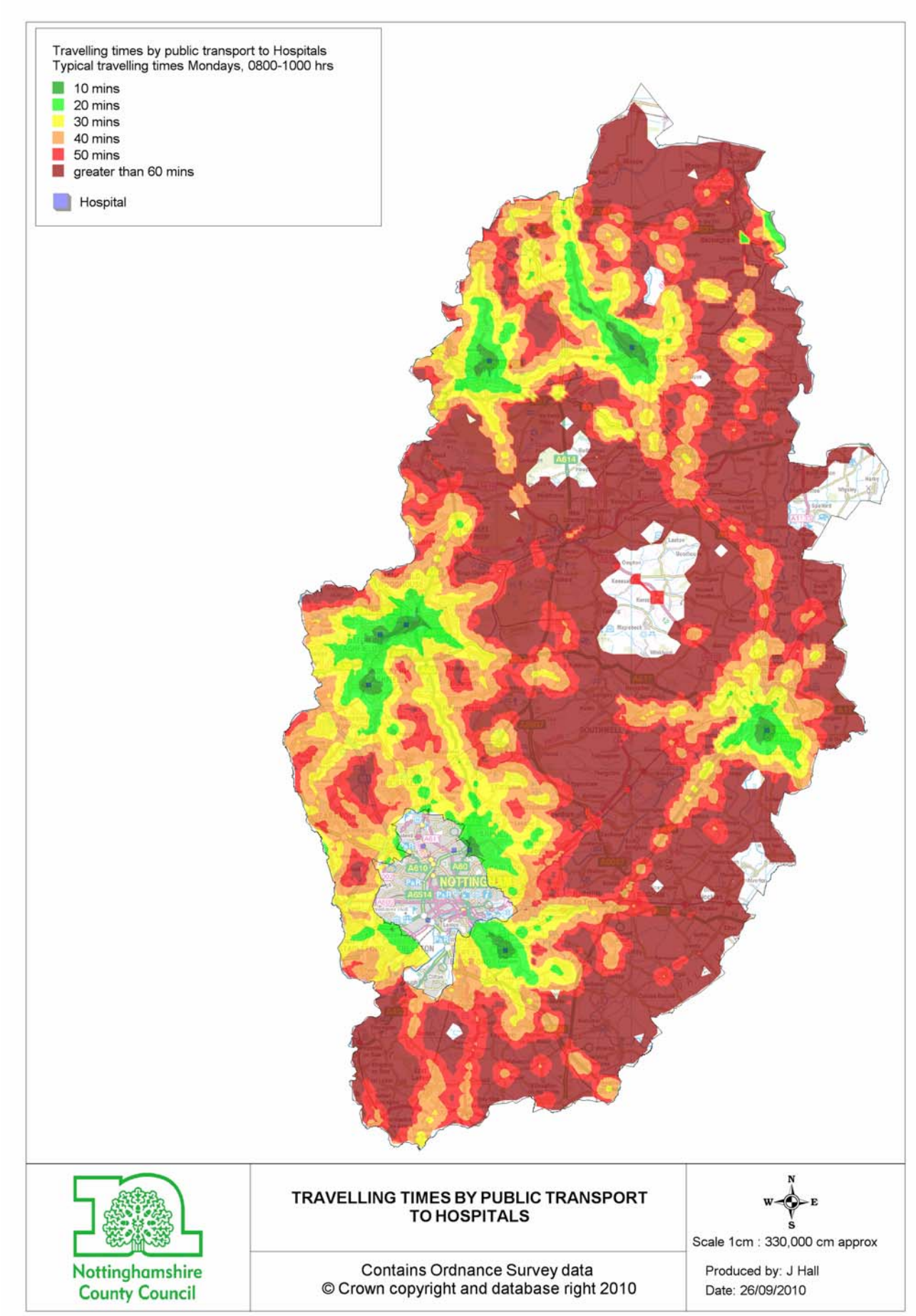


Figure 37: Travelling time by public transport to hospitals in Nottinghamshire

4. Crime

4.1 Vehicle Crime

4.1.1 Reported vehicle & pedal cycle crime 2007-2009

Table 16 below shows the rates of vehicle theft and tampering between 2007 and 2009. The figures shown in the table are rates per 1,000 population in the respective year.

All of the districts have seen year on year decreases in the rate of theft of vehicles between 2007 and 2009. Bassetlaw has the highest rate of thefts of vehicles (4.1 per 1,000) although this has dropped from 6.5 per 1,000 in 2007.

All districts have shown year on year decreases in thefts from vehicles between 2007 and 2009 except for Rushcliffe which dropped from 11.0 per 1,000 in 2007 to 6.9 per 1,000 in 2008 but then increased to 7.7 per 1,000 in 2009. The rates of theft from vehicles in Rushcliffe have, however, seen decreases when comparing 2009 with 2007. Mansfield experienced the highest rates of thefts from vehicles both in 2007 (16.8 per 1,000) and in 2009 (9.3 per 1,000) although there has been a steady decrease in the rates of this crime.

The rate of vehicle interference and tampering has reduced in each district with the 2009 rate per 1,000 ranging from 0.8 in Mansfield to 1.3 Bassetlaw.

The rate of thefts of pedal cycles per 1,000 population is highest in Newark & Sherwood (3.2 in 2009) despite decreases in the rates of theft. The rates of thefts of pedal cycles per 1,000 population has, however, increased in Ashfield, from 1.5 in 2007 to 1.7 in 2009 and has shown no improvement in Broxtowe between 2007 and 2009.

Table 16: Rates of vehicle theft and tampering between 2007 and 2009 per 1,000 population

Area	Year	Theft of vehicles	Theft from vehicles	Vehicle interference & tampering	Theft of pedal cycles
Ashfield	2007	3.9	11.2	2.2	1.5
	2008	3.8	10.6	1.8	1.6
	2009	3.3	8.6	1.3	1.7
Bassetlaw	2007	6.5	13.0	2.6	2.5
	2008	4.6	11.7	2.0	2.5
	2009	4.1	8.8	1.3	2.3
Broxtowe	2007	2.7	12.4	2.8	1.5
	2008	2.3	8.6	1.5	1.6
	2009	1.7	7.8	0.9	1.5
Gedling	2007	2.8	8.3	1.8	1.6
	2008	2.6	7.0	1.3	1.3
	2009	2.1	5.4	0.9	1.0
Mansfield	2007	4.5	16.8	2.0	2.2
	2008	3.7	13.7	1.5	1.8
	2009	2.8	9.3	0.8	1.6
Newark & Sherwood	2007	3.0	8.1	2.1	3.8
	2008	2.9	7.3	1.4	4.0
	2009	2.1	4.8	0.9	3.2
Rushcliffe	2007	1.6	11.0	2.6	1.9
	2008	1.3	6.9	1.0	1.7
	2009	1.1	7.7	0.9	1.4

Source: Notts. Police CRMS Data returned to SAU Data Hub

Figure 38 below details the theft from vehicles per 1,000 population in 2009. High levels of thefts from vehicles tend to be concentrated around public car parks, particularly:

- railway station car parks at Sutton Parkway, Newark and Beeston where vehicles may be left for long periods of time
- local shopping centres in West Bridgford and Mansfield, and
- leisure facilities such as Sherwood Forest and Clumber Park in Bassetlaw and The National Water Sports Centre in Rushcliffe.

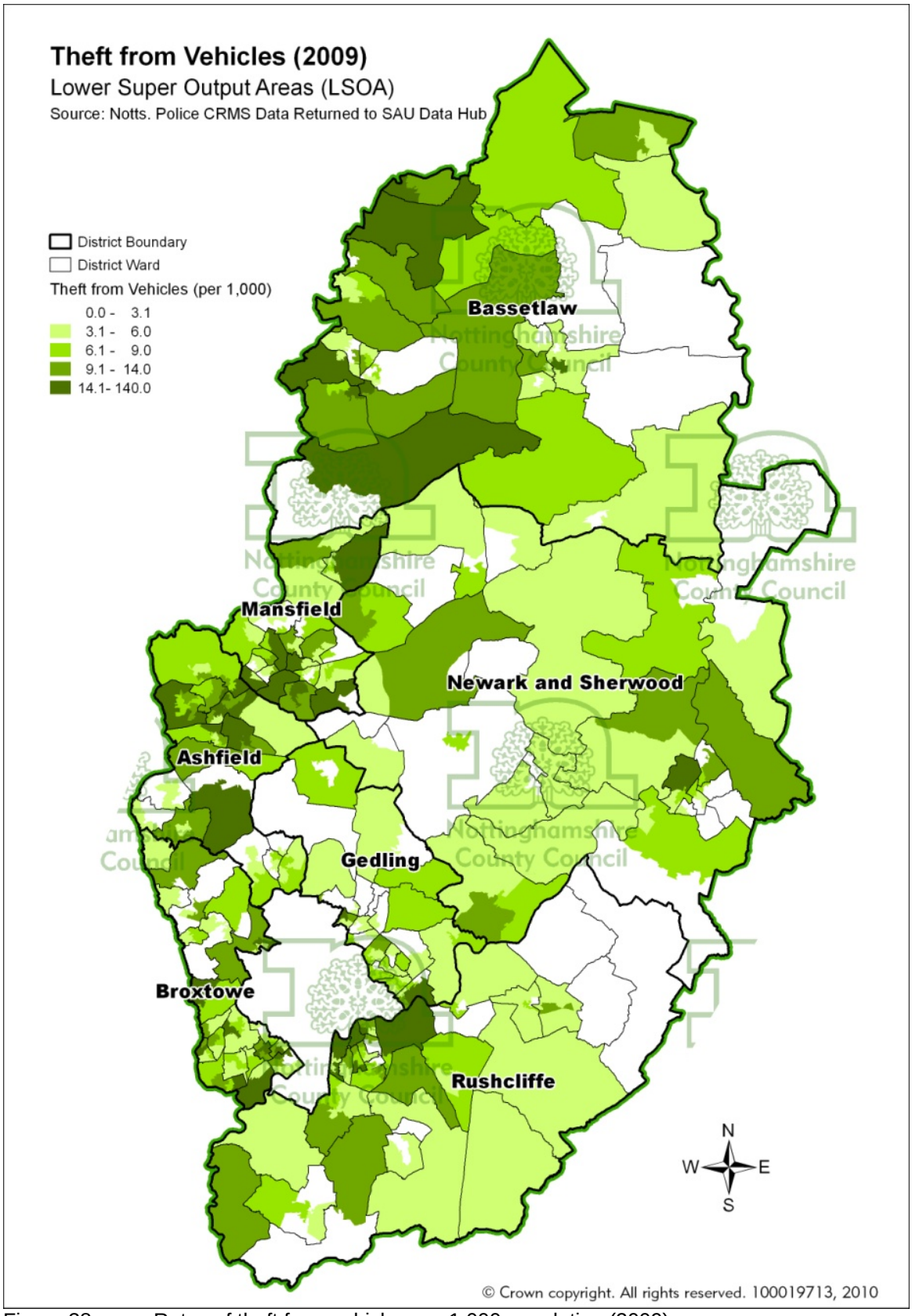


Figure 38: Rates of theft from vehicles per 1,000 population (2009)
Source: Notts. Police CRMS Data returned to SAU Data Hub

4.2 Reported crime-related incidents on the rail network in Nottinghamshire

The total numbers of reported crime-related incidents on the rail network has decreased from 503 in 2008 to 437 in 2009. Table 17 below details the top 10 types of reported incidents as well as the numbers of reported incidents. The top 10 locations of reported incidents as well as the numbers of incidents reported at each location are shown in table 18 below.

Table 17: Top 10 types of reported incidents as well as the numbers of reported incidents

Type of crime	2008	2009
Trespass	101	99
Cable theft	86	26
Anti-social behaviour (ASB)	48	60
Theft – rail property	34	15
Level crossing	34	35
Criminal damage	32	24
Line of route	26	40
Theft – passenger property	23	18
Pedal cycle	19	15
Stone throwing	19	17

Source: British Transport Police (BTP) data

Table 18: Top 10 locations of reported incidents as well as the numbers of incidents reported at each location

Location	2008	2009
Newark Northgate	62	35
Retford	50	34
Worksop	43	30
Mansfield	30	42
Newark Castle	29	24
Beeston	26	38
Newark	26	-
Radcliffe on Trent	24	-
Clipstone	19	-
Mansfield Woodhouse	18	16

Source: British Transport Police (BTP) data

5. Growth

5.1 Housing site locations

Across the county, over 15,700 dwellings are identified for development on sites with over 100 dwellings. 6,300 of these dwellings have planning permission or are under construction. The remaining 9,400 dwellings are those identified in district council 'strategic housing land availability assessments' (SHLAAs). These are sites that are reasonably expected to come forward, i.e. they are suitable; available; and achievable; mostly with an anticipated start date in the next five years. All districts have identified many more additional sites in their SHLAAs which are not, or may not be, suitable; available; or achievable. One of the main reasons for this is that planning policy changes would be needed in order to bring these sites forward.

Newark & Sherwood district has identified the greatest number of large sites. Most of the large sites in Bassetlaw, Broxtowe, Gedling and Newark & Sherwood are predominantly SHLAA sites. Other additional significant sites include Sharphill, West Bridgford (1,200 dwellings) and Gedling Colliery (1,120 dwellings). Figure 39 below identifies the locations of housing site commitments in Nottinghamshire.

Growth points and possible Sustainable Urban Extensions (SUEs) have not been included in the figures above. The proposed housing numbers in each of the districts are detailed within the districts' local development frameworks and are detailed in tables 19 to 23 below. The housing numbers are, however, now in question as a result of the recent revocation of the East Midlands Regional Plan and its housing targets.

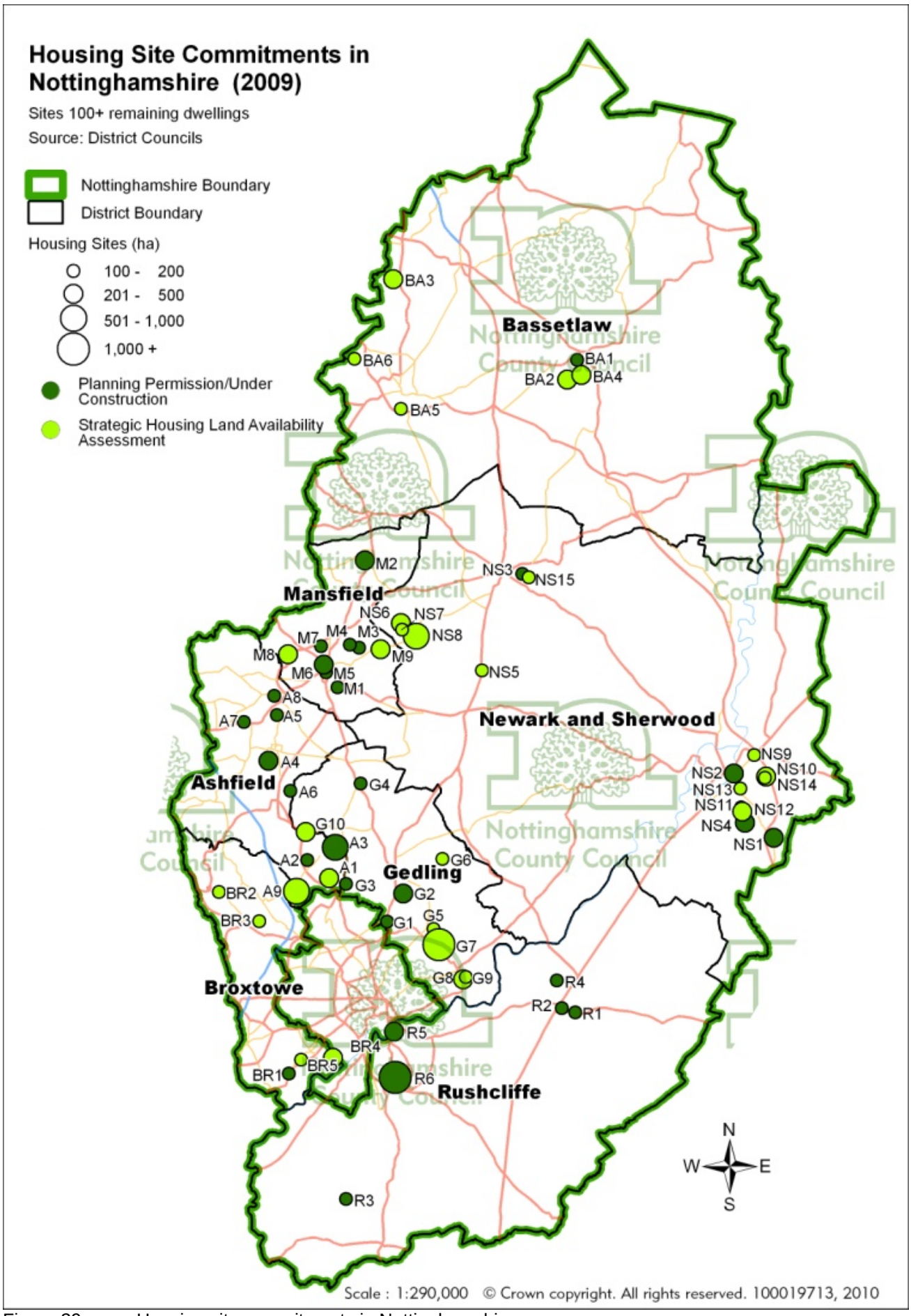


Figure 39: Housing site commitments in Nottinghamshire
Source: District councils

Table 19: Proposed housing numbers in Ashfield

	District wide	Hucknall	Rest of Ashfield
Requirement to 2026	11,200	3,600	7,600
Completions 1/04/06-31/03/09	1,510	611	899
Existing planning permissions	3,166	1,318	1,848
Balance to find	6,524	1,671	4,853
Homes identified by SHLAA within urban area	1,969	1,490	479

Source: Ashfield District Local Development Framework

Table 20: Proposed housing numbers in Bassetlaw

	Worksop	Retford	Harworth	Carlton & Langold	Tuxford	Misterton	Rural service centres
Requirement to 2026	1,806	1,468	1,242	226	226	169	508
Current permissions and allocations 2010-2015	429	1,076	187	361	22	173	122

Source: Bassetlaw District Local Development Framework

Table 21: Proposed housing numbers in Broxtowe, Gedling and Rushcliffe (the county part of the Nottingham Core Housing Market Area)

	Broxtowe	Gedling	Rushcliffe
Requirement to 2026	6,800	8,000	15,000
Completions 1/04/06-31/03/09	1,035	947	1,140
Principal urban area	2,796	3,923	10,278
Non-principal urban area	2,969	3,130	3,582
Balance to find	5,765	7,053	13,860

Source: Nottingham Core Local Development Framework

Table 22: Proposed housing numbers in Mansfield

	District wide	Mansfield urban area	Warsop parish
Requirement to 2026	10,600		
Completions 1/04/06-31/03/09	966	893	73
Existing planning permissions	3,206	2,727	476
Balance to find	6,431		

Source: Mansfield District Local Development Framework

Table 23: Proposed housing numbers in Newark & Sherwood

	District wide	Newark urban area	Service centres	Principal villages
Requirement to 2026	14,161	9,913	2,832	1,416
Completions 1/04/06-31/03/09	3,549	2,153	969	427
Balance to find	10,614	7,760	1,864	990

Source: Newark & Sherwood District Local Development Framework

5.2 Employment land locations

Over 510 hectares (ha) of employment land commitments of 2 ha or more (allocations, outstanding planning permissions or land under construction) have been identified in the county. Around 20% of the county's employment land is found in both Newark & Sherwood and Ashfield whilst Gedling (6%) and Broxtowe (7%) have the least amount of available land. A significant amount of identified employment land (48%) in the county does not have planning permission and almost all the employment land identified in Bassetlaw does not have planning permission.

Figure 40 below identifies the employment land availability in Nottinghamshire. Significant employment land sites are located at Chapel Lane, Bingham (37.1 ha); Bevercotes Colliery (35.75 ha); Abbott Rd, Mansfield (29.25 ha); and Pinxton Lane, Sutton in Ashfield (25.5 ha).

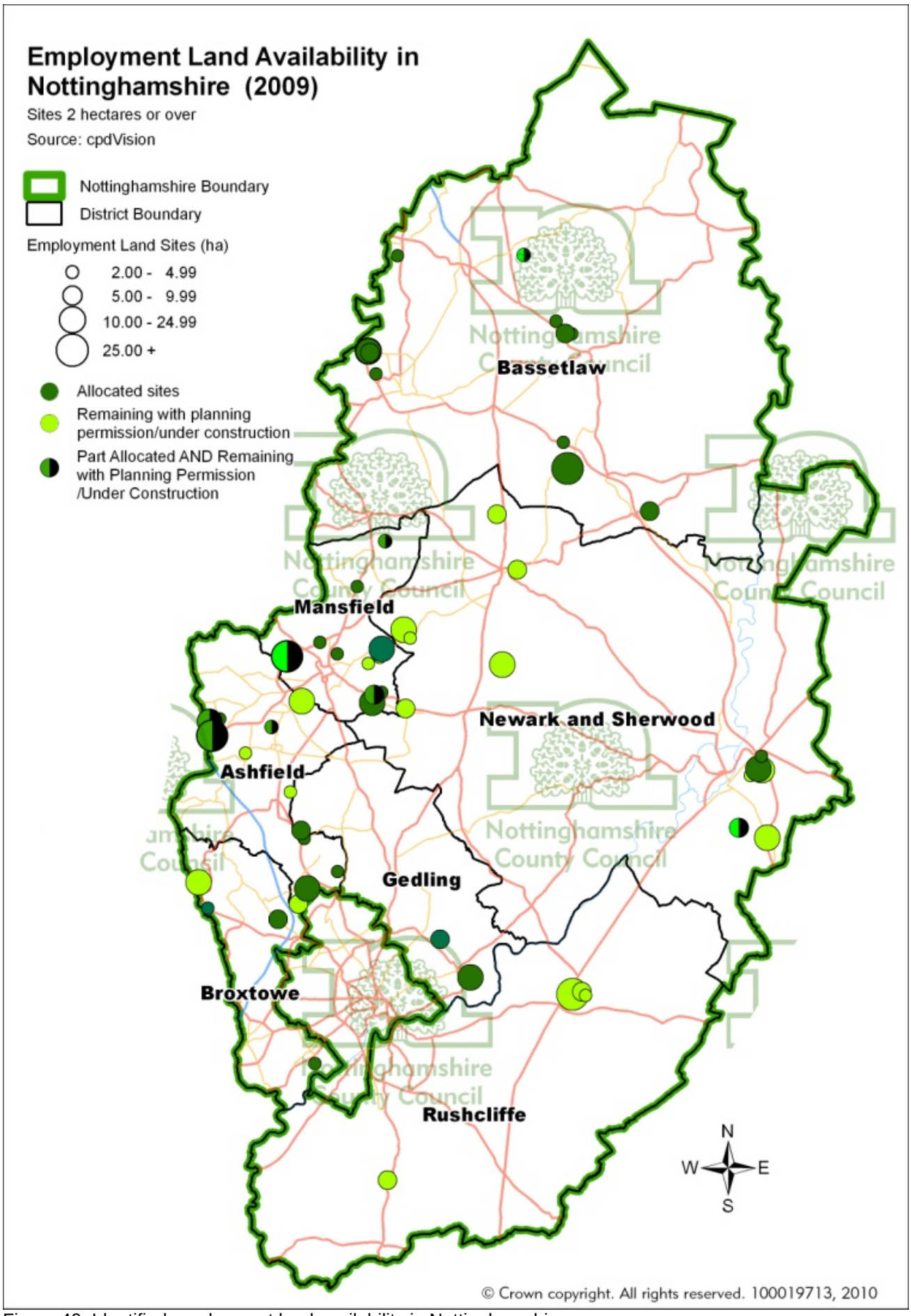


Figure 40: Identified employment land availability in Nottinghamshire
Source: District councils. Employment land is identified as either/or Use Classses order B1, B2 or B8

5.3 Forecast increase in jobs 2006-2021

The Department for Transport model TEMPRO provides forecasts of population growth and jobs growth. Figure 41 below shows the forecast percentage increase in jobs in Nottinghamshire.

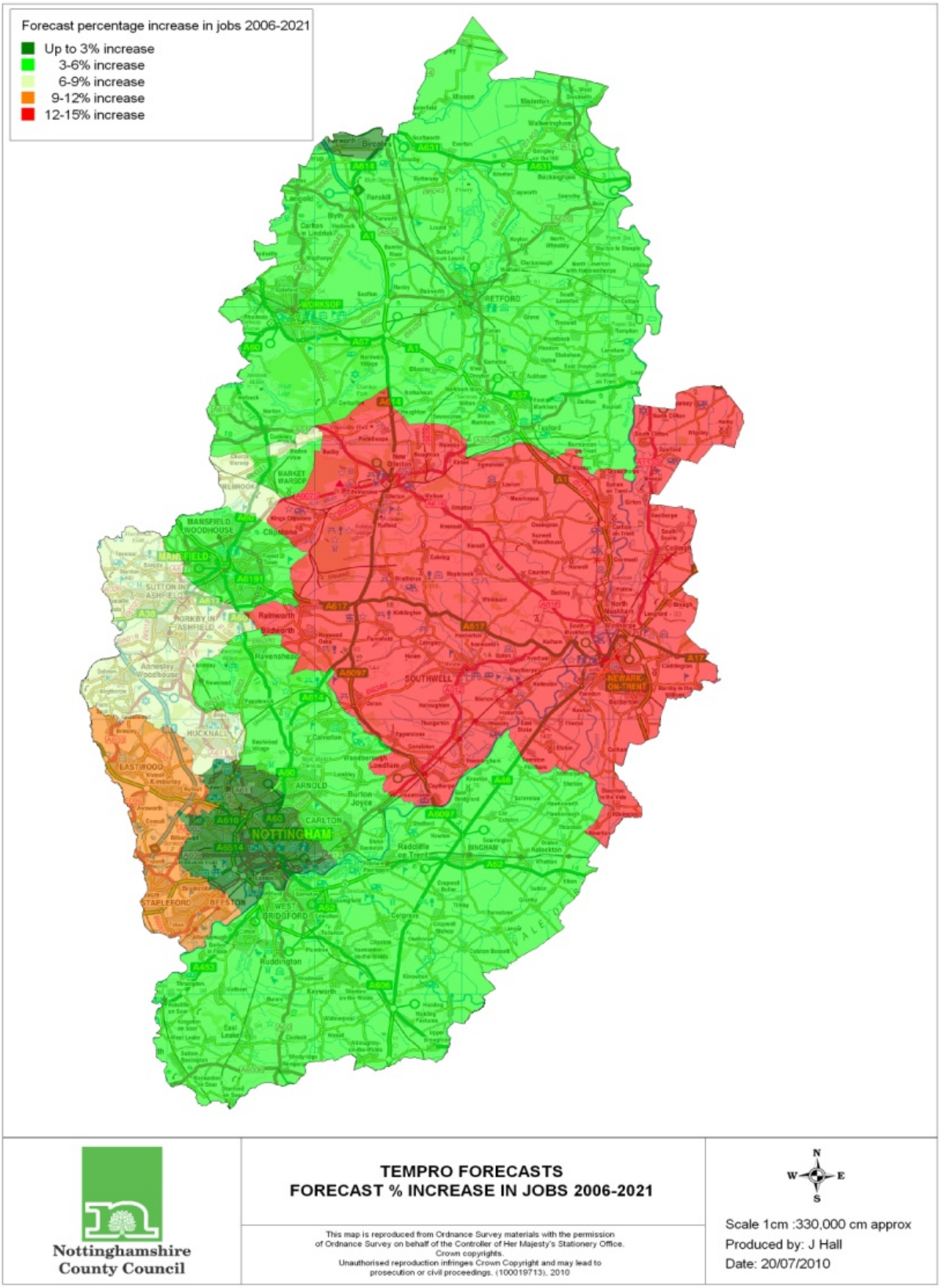


Figure 41: Forecast percentage increase in jobs in Nottinghamshire 2006-2021
Source: TEMPRO forecasts

Section 2: Natural and historic assets

6. Biodiversity and the natural environment

Biodiversity loss over the last 50-100 years is thought to have been greater in the East Midlands than in any other region, and Nottinghamshire's biodiversity has been one of the hardest hit, with rapid, widespread and sustained losses in species and habitats. Many species have become extinct, and areas of habitat have been reduced to isolated fragments. For example:

- 97% of Nottinghamshire's flower-rich meadows have been lost since the 1930s, and
- 90% of Nottinghamshire's heathland has been lost since 1920.

Such losses arose primarily as a result of agricultural intensification; intensive commercial forestry; and population growth and development. Many of the surviving habitat fragments receive some form of nature conservation designation, either as Sites of Special Scientific Interest (SSSIs), or as Sites of Importance for Nature Conservation (SINCs), although other areas of important habitat exist outside these sites.

6.1 Designated Sites of Special Scientific Interest

Sites of Special Scientific Interest (SSSIs) are nationally important, legally protected sites, which are identified and designated by Natural England, and represent the finest sites for wildlife and natural features in Britain. As of 1 June 2010, there were 68 SSSIs wholly or partly in Nottinghamshire, covering 3,403 hectares, or approximately 1.6% of the land coverage of the county. This compares with a figure of 4.5% for the East Midlands, and approximately 7.5% for England as a whole. 93% of SSSIs in Nottinghamshire are in 'target condition', compared to 97.2% in the East Midlands and 93.2% nationally. Nottinghamshire has the lowest number of SSSIs designated for their geological or geomorphological importance in the East Midlands – four sites covering 11 hectares – but these four sites are in 'target condition'. Figure 42 below identifies the locations of SSSIs in the county and their proximity to the road network.

6.2 Designated Sites of Importance for Nature Conservation

Sites of Importance for Nature Conservation (SINCs) are sites that have been identified as being of at least county-level importance for their wildlife. Figure 43 below shows the locations of SINCs within the county and their proximity to the road network. They are a local, non-statutory designation, used throughout the UK principally in relation to land use planning and development, under various names. As of 31 March 2010, there were 1,387 SINCs in Nottinghamshire, covering 17,352.6 hectares, or 8% of the county. National Indicator (NI) 197 measures the proportion of SINCs that are under positive conservation management. In 2009/10, NI 197 figures for Nottinghamshire (excluding Nottingham City) were 21.2% of SINCs under positive conservation management, which was an improvement on the 2008/09 figures of 19.6%.

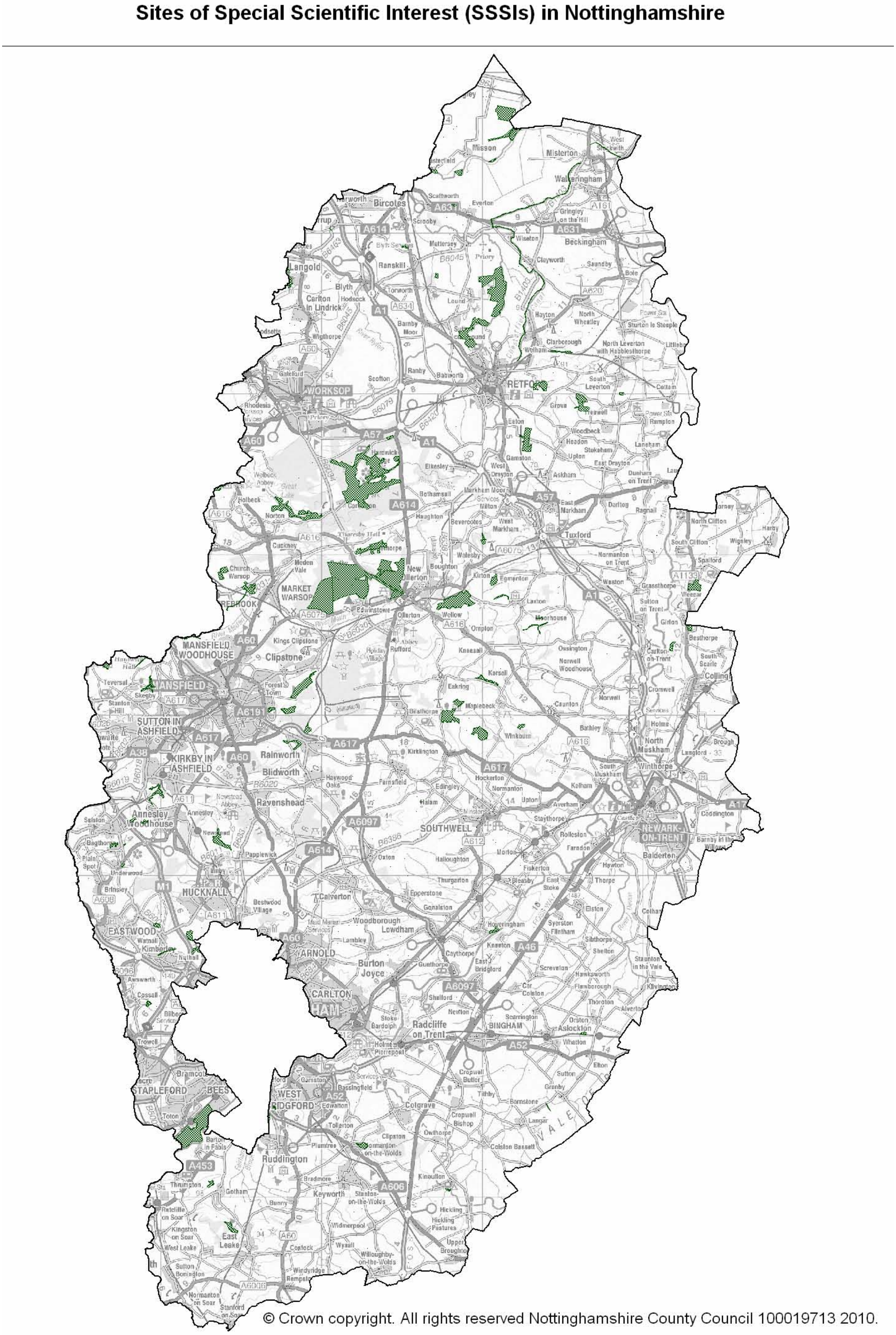


Figure 42: Locations of SSSIs in Nottinghamshire

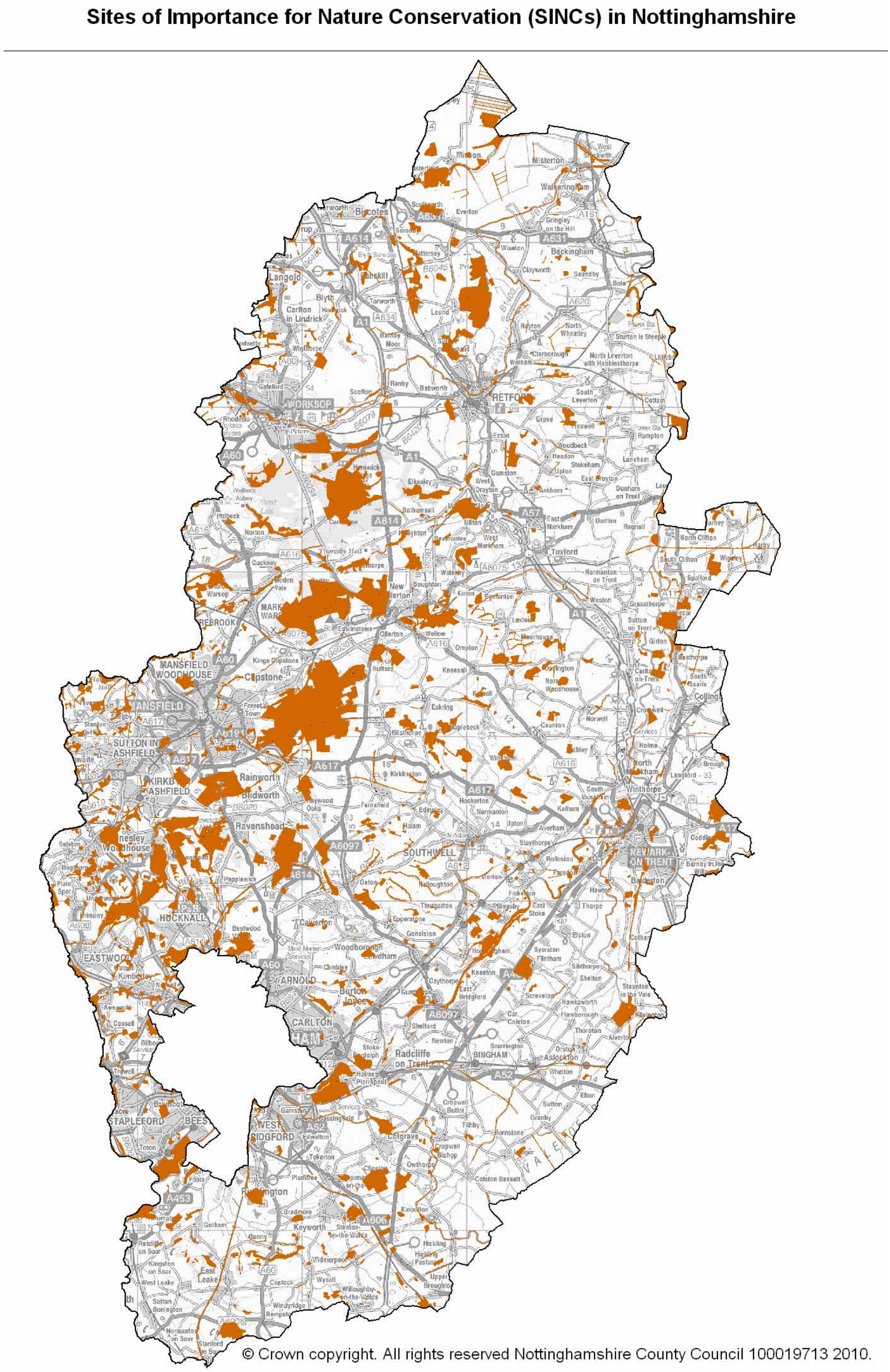


Figure 43: Locations of SINCs in Nottinghamshire

6.3 Accessible greenspace

In recognition of its benefits to people and their communities, accessible green space has been mapped at a regional and national scale using Natural England's Accessible Natural Greenspace Standard (ANGSt). The maps are used to illustrate relative provision levels and to inform policy-making by showing broad trends and areas of search for green space provision and management.

The 'State of the Environment in the East Midlands' report (Natural England, 2010) contains an assessment of the amount of accessible greenspace in the East Midlands. Nottinghamshire compares favourably with the rest of the East Midlands (only Derbyshire does better, with large areas of access land in the Peak District National Park). There are, however, relatively low levels of access in the more rural districts – Rushcliffe and the eastern parts of Newark & Sherwood and Bassetlaw in particular all have significant areas in the bottom 25% regionally for accessible greenspace. In addition, Natural England's ANGSt standards recommend that there should be 1 hectare of local nature reserve (LNR) per 1000 of population.

6.3.1 Local nature reserves

Local nature reserves (LNRs) are places with wildlife or geological features that are of special interest locally, and offer people opportunities to study or learn about nature, or simply to enjoy it. As of 8 July 2010, there were 42 LNRs in the county (excluding Nottingham City) covering 703 hectares, equating to 0.90 hectares of LNR per 1000 of population. Figure 44 below identifies the locations of local nature reserves in the county and their proximity to the road network.

6.4 Ancient woodland

Ancient woodland is woodland which has existed since at least 1600. It is a finite resource and cannot be recreated. Most ancient woodland sites receive some level of protection through the planning system, and some are designated as Sites of Special Scientific Interest (SSSIs). As of August 2010, there were approximately 3449 hectares of ancient woodland in the county. Most ancient woodland can now be found in the central claylands, Sherwood, and along the western fringes of the county. Very little ancient woodland remains in the intensively farmed southern, eastern and northern parts of the county, or around the major population centres. Figure 45 below details ancient woodland mapped to show its location to the transport network.

6.5 Tourism and the natural environment

In the East Midlands, tourism supports 25,000 businesses, 80 million visits and annually generates £4.8 billion (SSFF, 2001 figures) or 3.5% of the Region's GDP. The natural environment is identified as a key element in the success of the tourism industry by The East Midlands Tourism Strategy 2003-2010 (Destination East Midlands) and *emda.*

'Destination East Midlands' states that preserving and enhancing the quality of the environment is critical to future success as a destination. One of its aims was the conservation and improvement of natural habitats to create top quality wildlife destinations. Although Nottinghamshire does not have any designated National Parks or Areas of Outstanding Natural Beauty, Sherwood Forest, Clumber Park and Rufford Abbey together attract almost 1.5 million visits per year. Sherwood Forest is both a major recreational resource, and a National Nature Reserve, subject to the strictest of protection regimes.

Location of Local Nature Reserves in Nottinghamshire

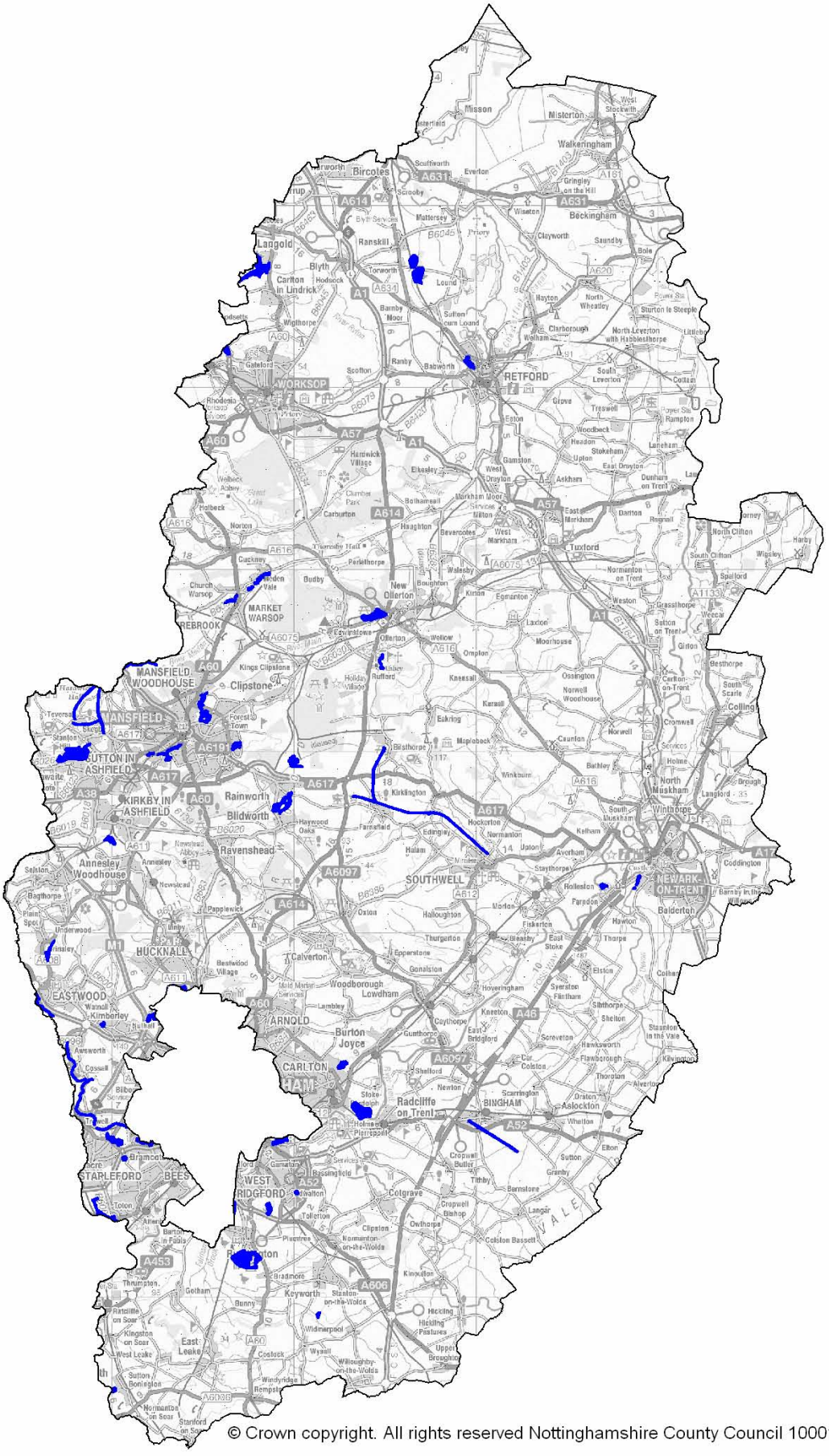


Figure 44: Locations of local nature reserves in Nottinghamshire

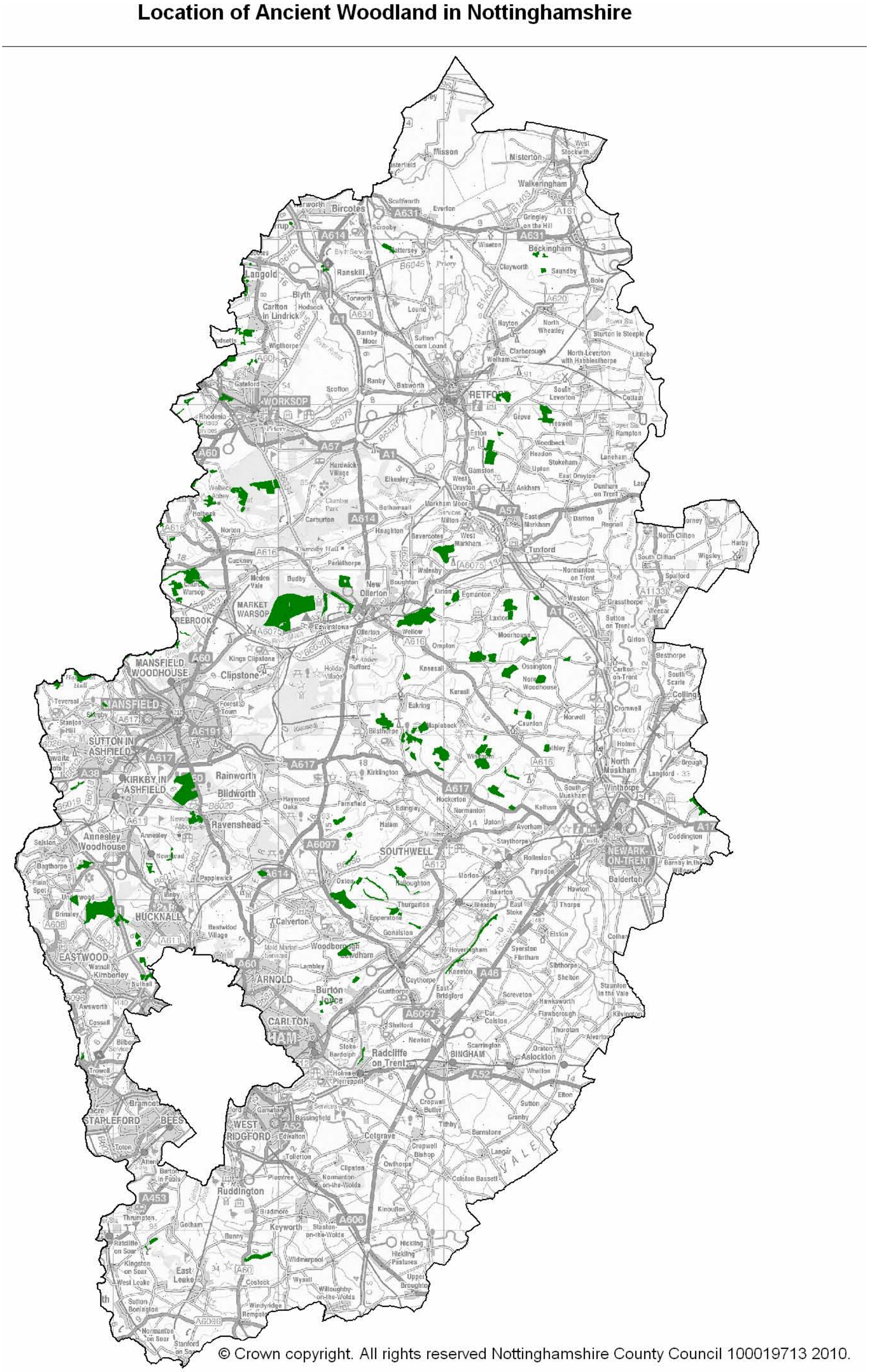


Figure 45: Ancient woodland sites in Nottinghamshire

7. The historic environment

7.1 Conservation areas

Nottinghamshire County Council Historic Environment Record (HER) records a list of 'historic cores' which are settlements that were in existence before 1830. Table 24 below shows the number of designated conservation areas and number of historic cores (pre19th century). The information was gathered from Sanderson's maps but has not been examined for Mansfield. Figure 46 below shows the location of the conservation areas and their proximity to the road network.

Table 24: Numbers of conservation areas and historic cores in Nottinghamshire

Area	No of conservation areas	No of Historic cores on county HER	Rate of CA designation	No at risk
Ashfield	4	16	25%	0
Bassetlaw	20	91	21%	2
Broxtowe	14	22	64%	0
Gedling	6	12	50%	2
Mansfield	11	NA	100%	4
Newark & Sherwood	47	93	51%	5
Rushcliffe	26	60	43%	0

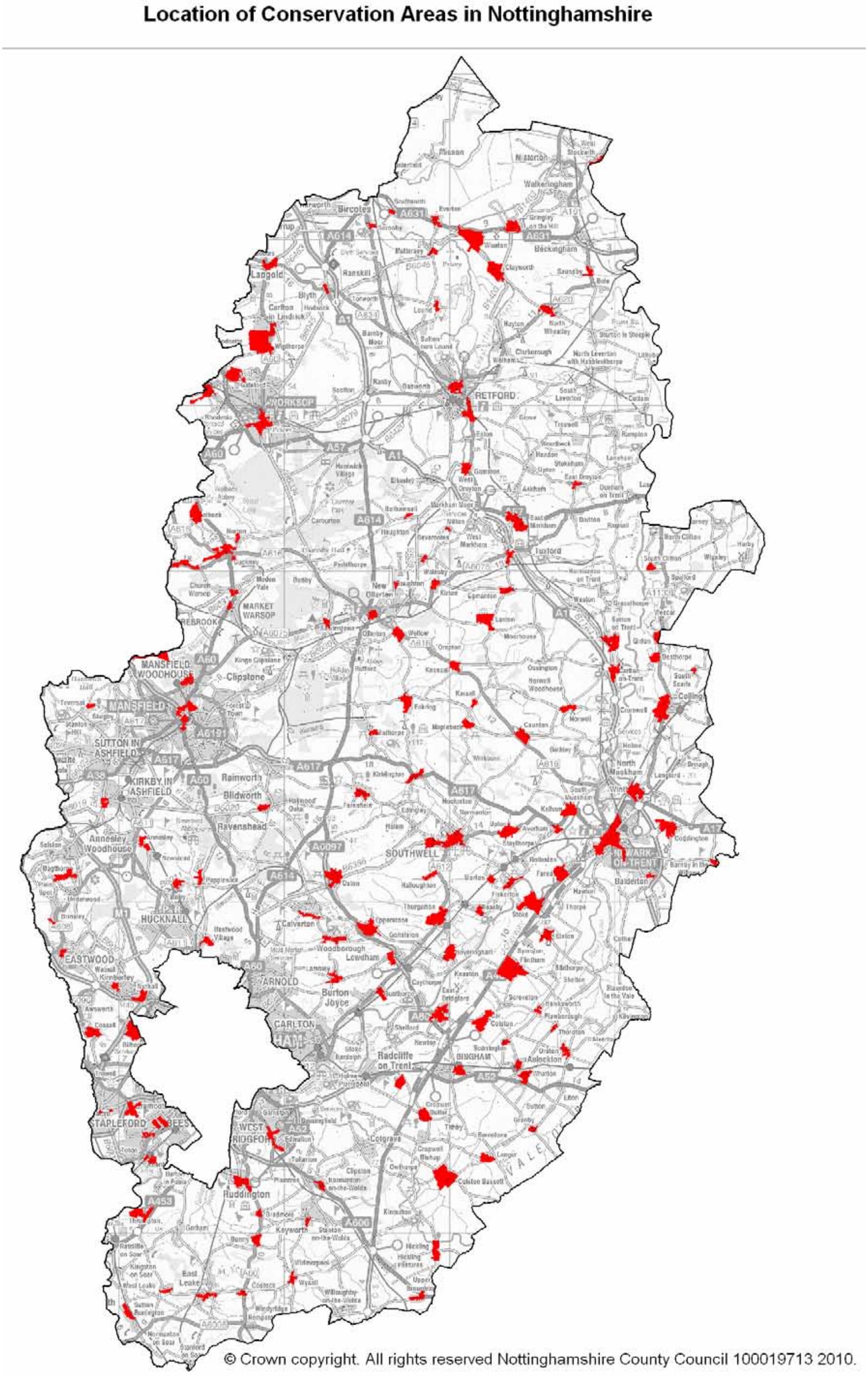


Figure 46: Location of the conservation areas

7.2 Listed buildings and buildings at risk

Tables 25 and 26 below details the number of listed buildings (LBE) and the rate of buildings at risk (B@R). Newark and Sherwood has the highest number of listed buildings in the county and the lowest rate of buildings at risk. The number of listed buildings has been taken from English Heritage on-line dataset 'LBONLINE', www.lbonline.english-heritage.org.uk/Login.aspx . The B@R figure is generated from database and 'grouped' so that a single 'list' entry can only appear once (i.e. multiple B@R entries against the same General Reference Number do not count individually). Figure 47 below shows the location of the listed buildings and their proximity to the road network.

Table 25: Numbers of listed buildings and buildings at risk in Nottinghamshire

	Nottinghamshire County Council (NCC) figures		District figures		NCC % at risk
Area	**B@R**	**LBE**	**B@R**	**LBE**	**(District %)**
Ashfield	7	79	2	78	8.86 (2.56)
Bassetlaw	74	1086	70	979	6.8 (7.15)
Broxtowe	20	149	-	-	13.42 -
Gedling	19	189	-	-	10 -
Mansfield	16	249	16	227	6.43 (7.05)
Newark & Sherwood	69	1391	76	1850	5 (4.11)
Rushcliffe	42	650	44	590	6.46 (7.46)
TOTAL	**247**	**3793**			**6.5**

Table 26: Numbers of buildings at risk – Grade IIs

	Nottinghamshire County Council (NCC) figures		District figures		NCC % at risk
Area	**B@R**	**Grade II LBE***	**B@R**	**Grade II LBE**	**(District %)**
Ashfield	7	71	2	78	9.86 (2.56)
Bassetlaw	60	979	70	979	6.13 (7.15)
Broxtowe	18	133	-	-	13.53 -
Gedling	16	167	-	-	9.58 -
Mansfield	16	232	16	227	7.05 (7.05)
Newark & Sherwood	67	1282	76	1850	5.23 (4.11)
Rushcliffe	42	597	44	590	7.04 (7.46)

Source: B@R figures for EMRA Annual Monitoring, September 2009-10

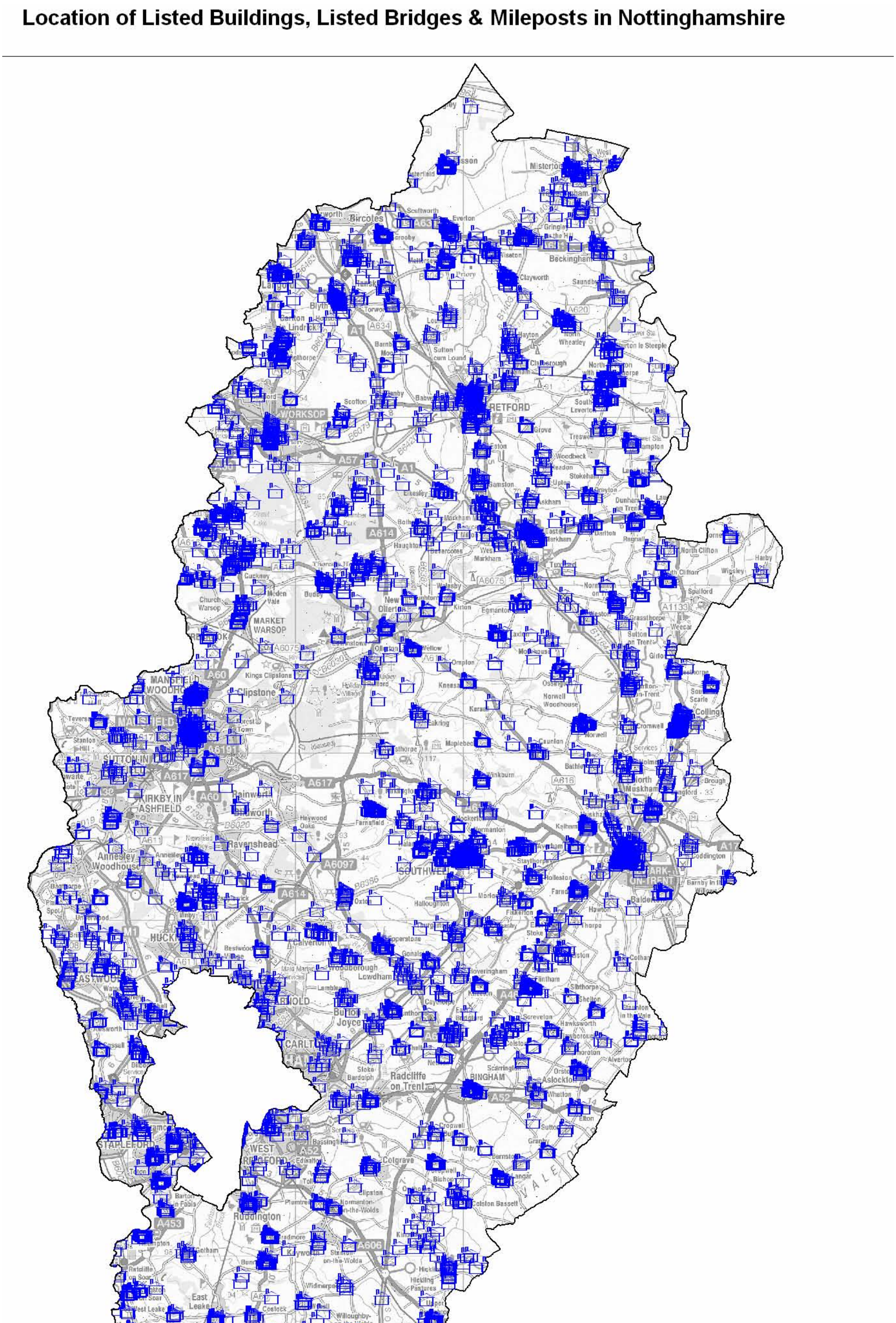


Figure 47: Location of listed building, bridges and mileposts

7.3 Registered parks and gardens; and battlefields

Table 27 below details the numbers of parks and gardens; and battlefields in each of the districts as well as the numbers at risk. Figure 48 below shows the location of the registered and unregistered parks and gardens and their proximity to the road network.

Table 27: Numbers of parks and gardens; and battlefields in Nottinghamshire

Area	Parks & gardens	Battlefields	No. at risk
Ashfield	2	-	1
Bassetlaw	4	-	1
Broxtowe	0	-	-
Gedling	4	-	1
Mansfield	1	-	0
Newark & Sherwood	4	1	0
Rushcliffe	4	-	0

7.4 Scheduled ancient monuments

Table 28 below details the numbers of scheduled ancient monuments (SAMs) in each of the districts as well as the numbers at risk. Figure 49 below shows the location of scheduled ancient monuments and their proximity to the road network.

Table 28: Numbers of scheduled ancient monuments in Nottinghamshire

Area	SAMs	No. at risk
Ashfield	9	3
Bassetlaw	32	5
Broxtowe	6	1
Gedling	9	1
Mansfield	4	2
Newark & Sherwood	74	10
Rushcliffe	26	2

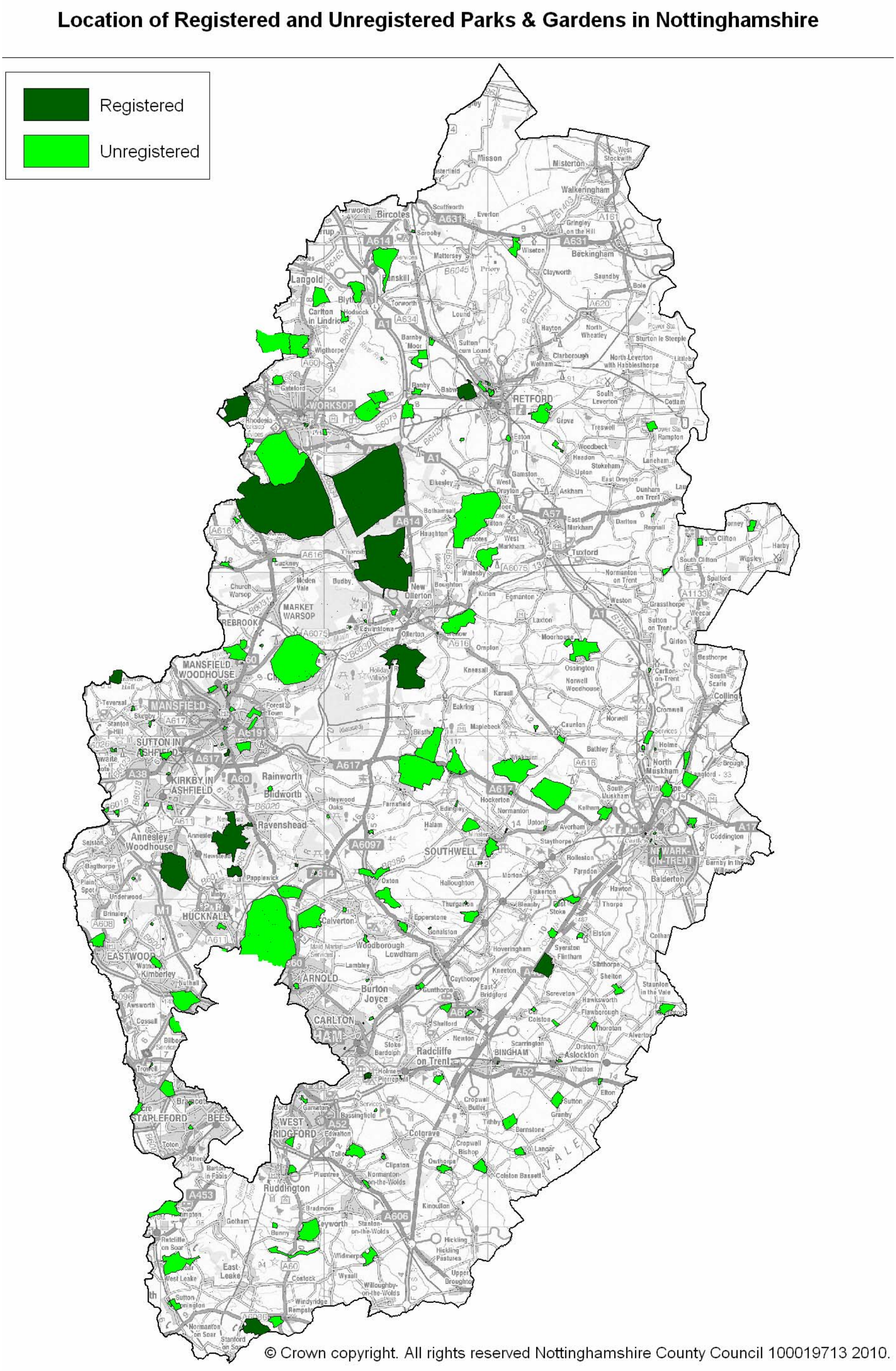


Figure 48: Locations of registered and unregistered parks and gardens

Location of Scheduled Ancient Monuments in Nottinghamshire

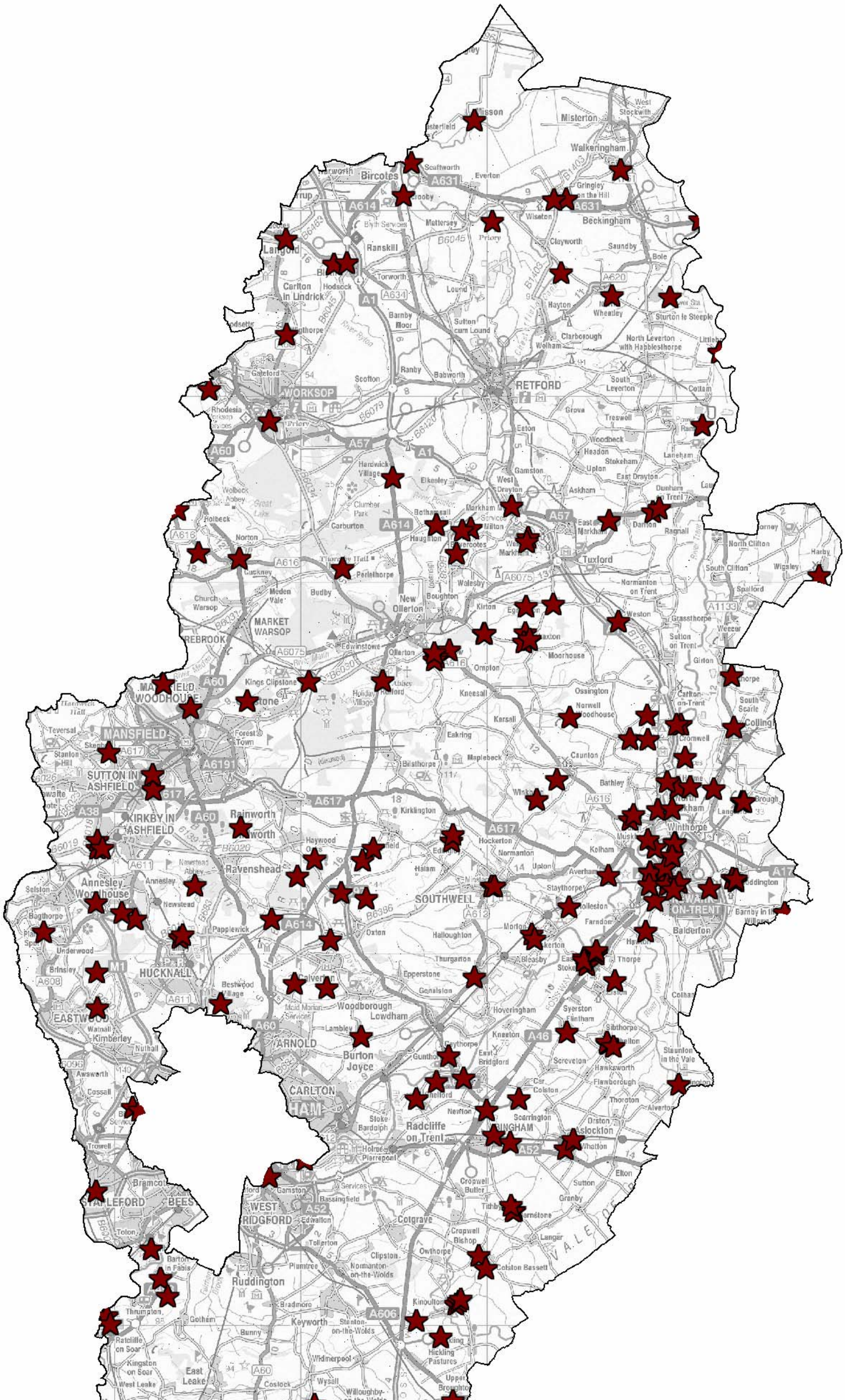


Figure 49: Locations of scheduled ancient monuments

Section 3: Transport

8. Traffic

8.1 Strategic routes

The Highways Agency (HA) is responsible for the motorway and trunk road network that is considered to be of national importance in England. The HA's Strategic Road Network for the East Midlands is detailed below in figure 50.

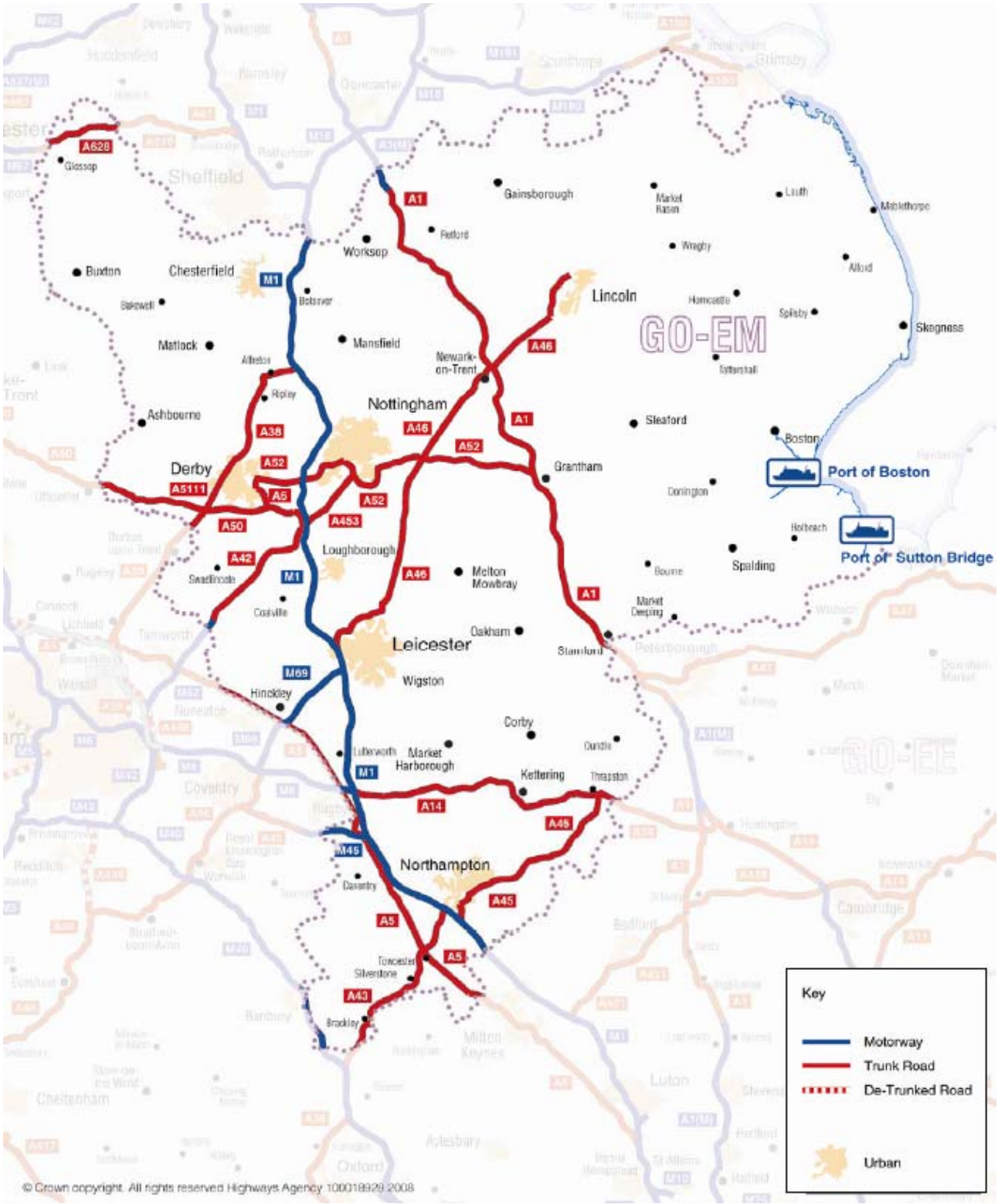


Figure 50: Strategic Road Network for the East Midlands
Source: Highways Agency Regional Network Report for the East Midlands 2008

The County Council also identifies its strategic routes across the county based on the number of vehicles travelling along routes. Figure 51 below details the core road network in Nottinghamshire. The routes identified have, on average, over 15,000 vehicles in total per day or have, on average, over 500 HGVs per day.

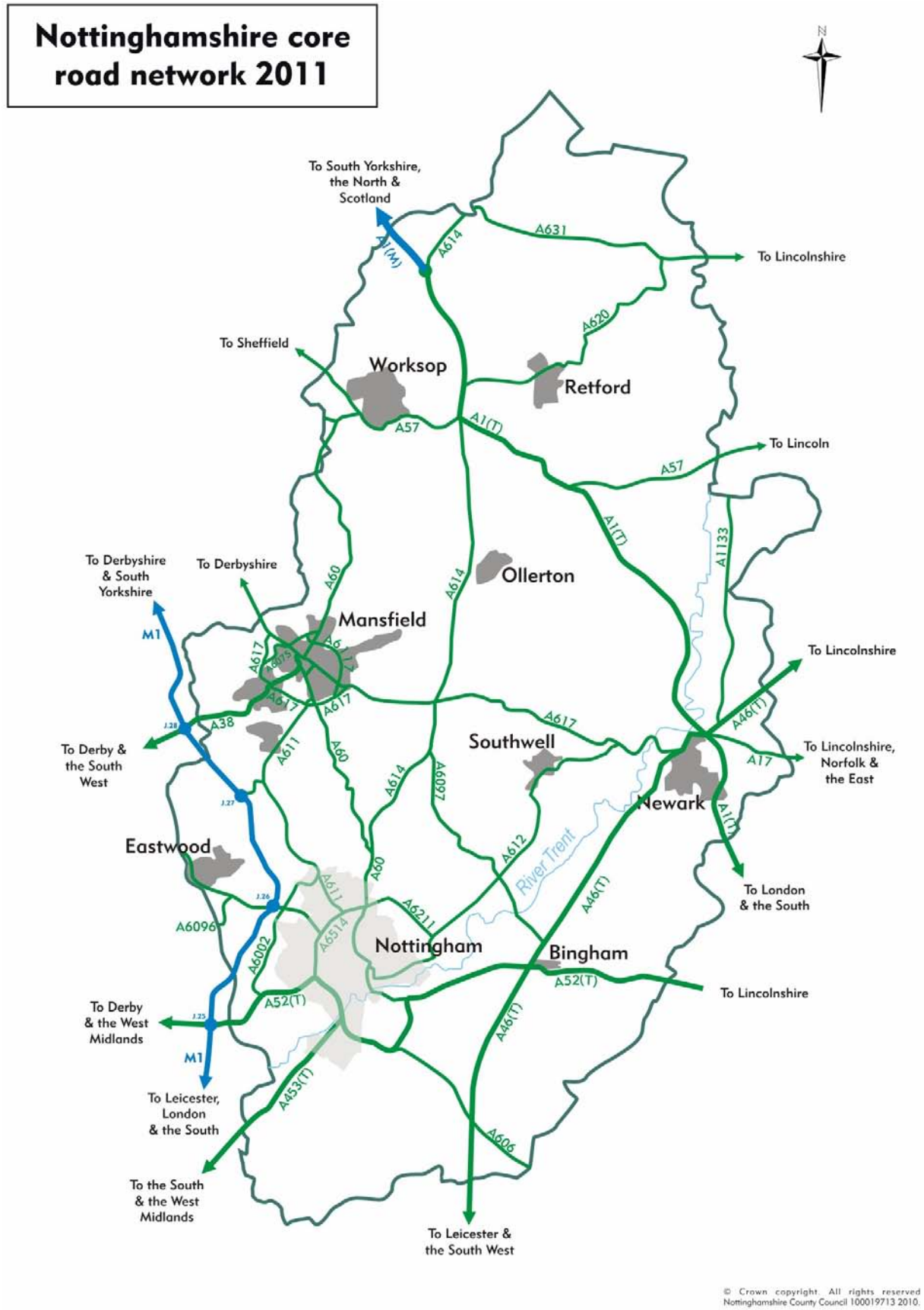


Figure 51: Nottinghamshire core road network
Source: Nottinghamshire County Council

8.1.1 Annual Average Daily Traffic flows

The HA produce regional network reports every two years. The last report, 'Regional Network Report for the East Midlands', produced in 2008, details statistics for 2006. The 2006 annual average daily traffic flow on the Highways Agency's Strategic Road Network in the East Midlands is shown below in figure 52.

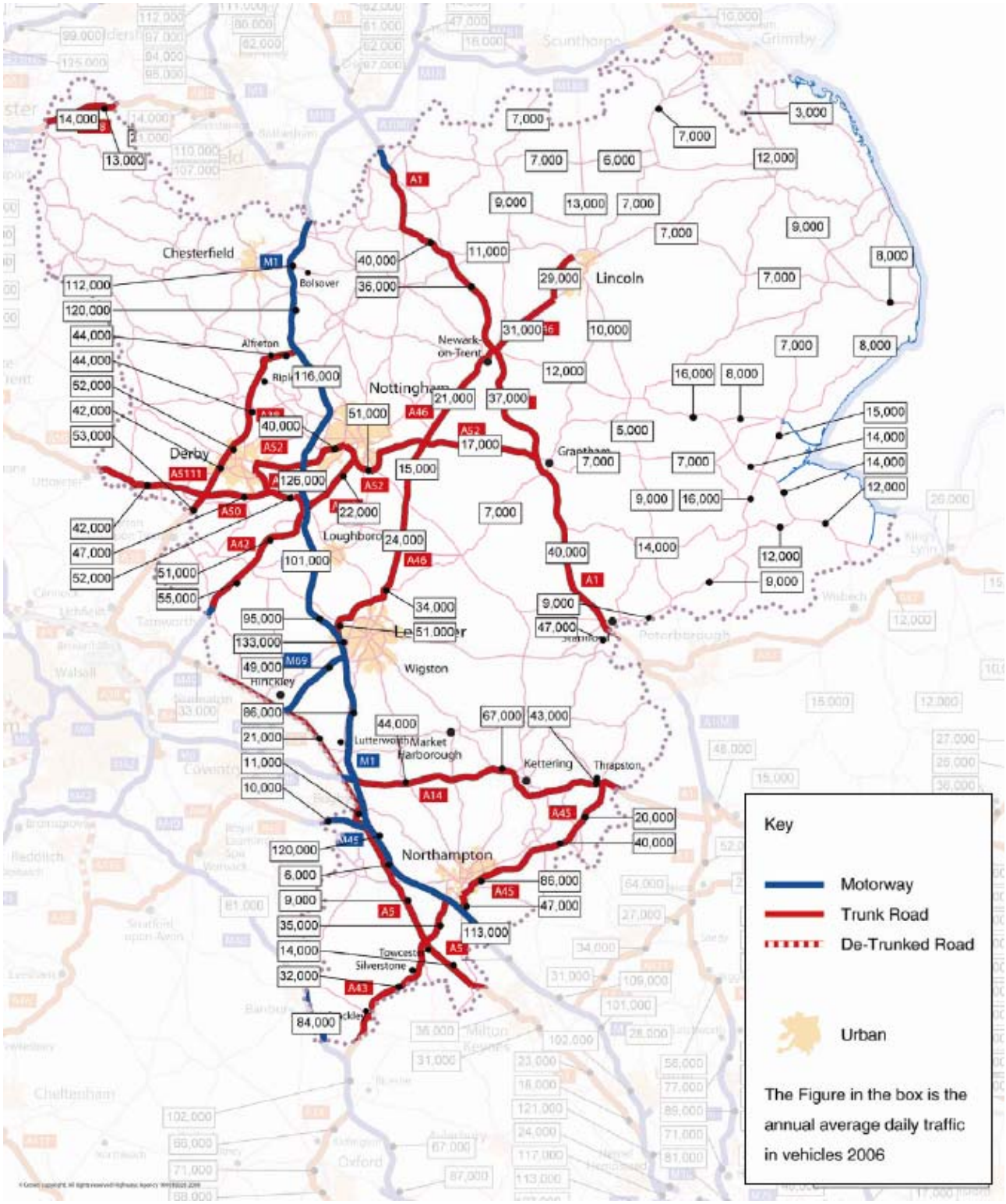


Figure 52: 2006 annual average daily traffic flow on the Strategic Road Network in the East Midlands
Source: Highways Agency Regional Network Report for the East Midlands 2008

Traffic flows are monitored at 200-300 sites across the county each year. Maps showing traffic flows on A, B and C roads in each of the districts are shown below in figures 53 to 59.

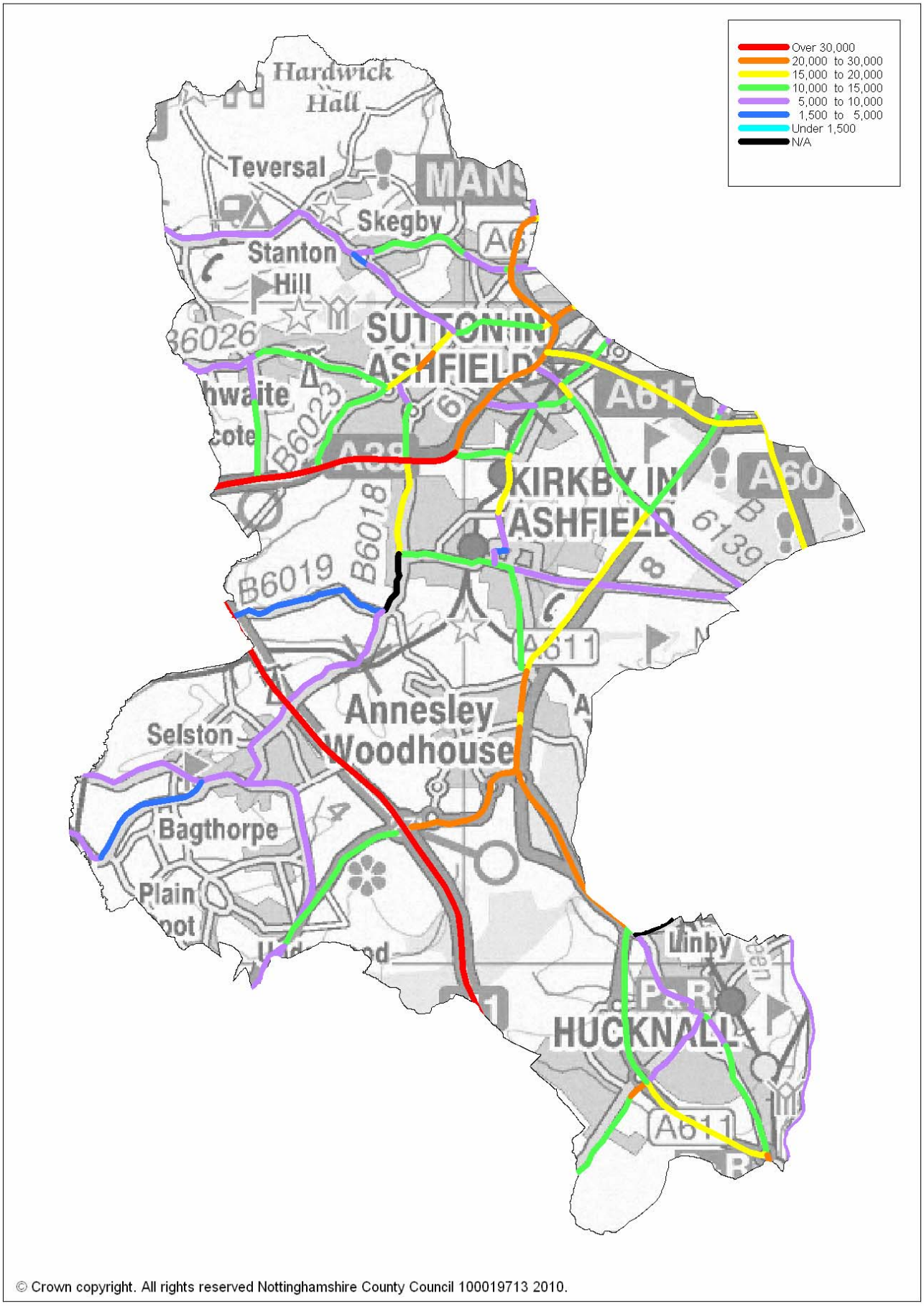


Figure 53: 2009 annual average daily traffic flows in Ashfield district
Source: Nottinghamshire County Council

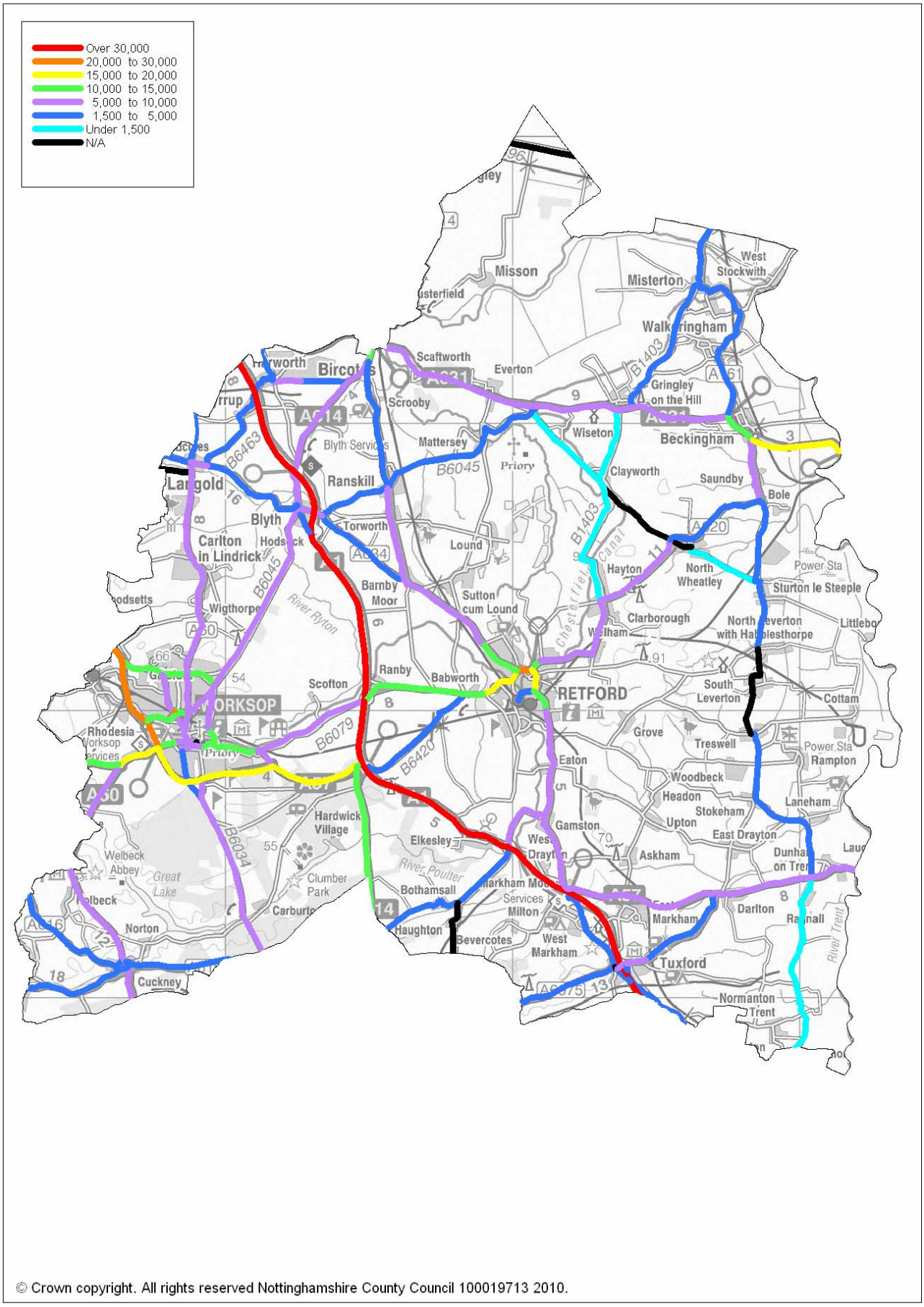


Figure 54: 2009 annual average daily traffic flows in Bassetlaw district
Source: Nottinghamshire County Council

Figure 55: 2009 annual average daily traffic flows in Broxtowe district
Source: Nottinghamshire County Council

Figure 56: 2009 annual average daily traffic flows in Gedling district
Source: Nottinghamshire County Council

Figure 57: 2009 annual average daily traffic flows in Mansfield district
Source: Nottinghamshire County Council

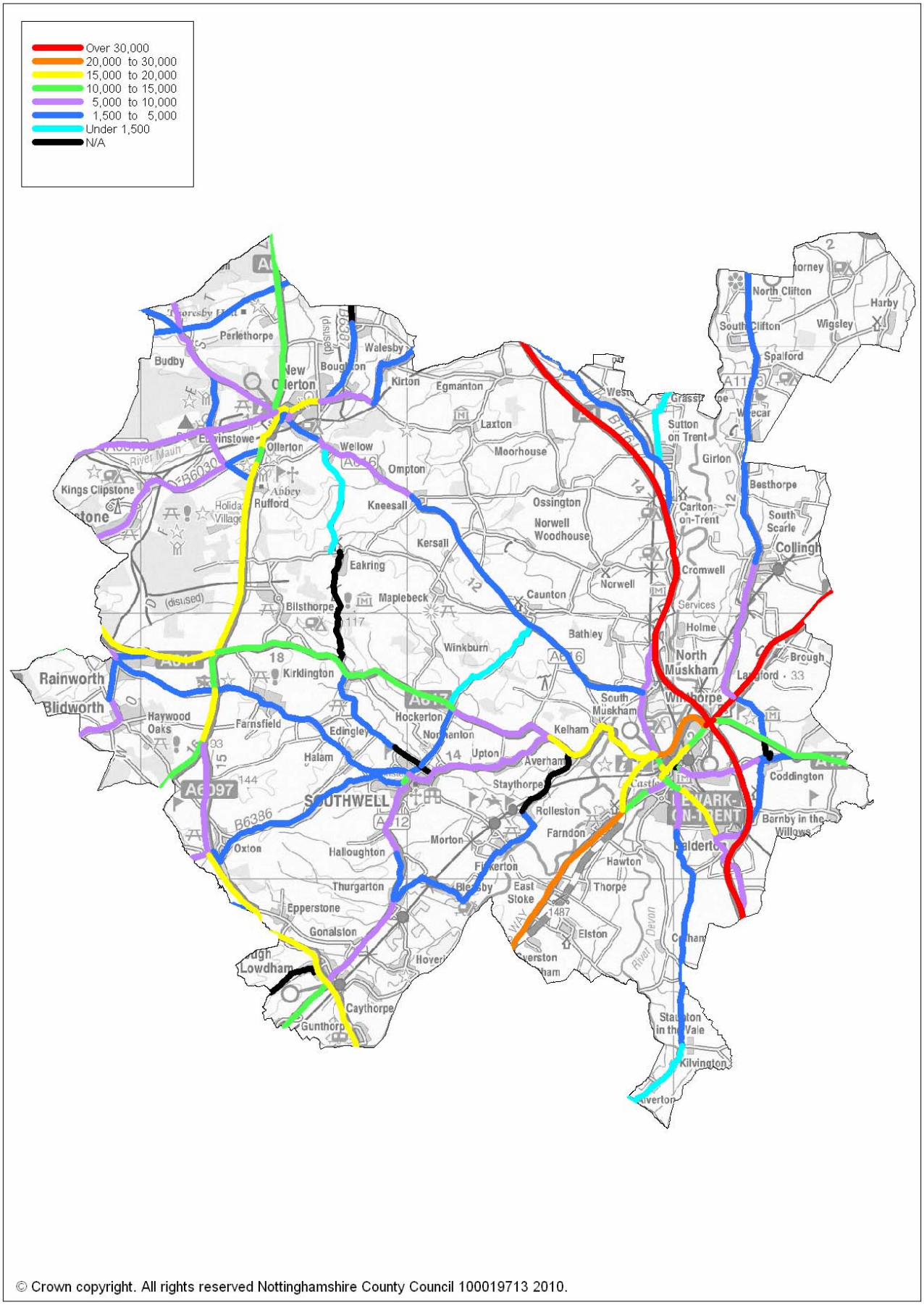


Figure 58: 2009 annual average daily traffic flows in Newark & Sherwood district
Source: Nottinghamshire County Council

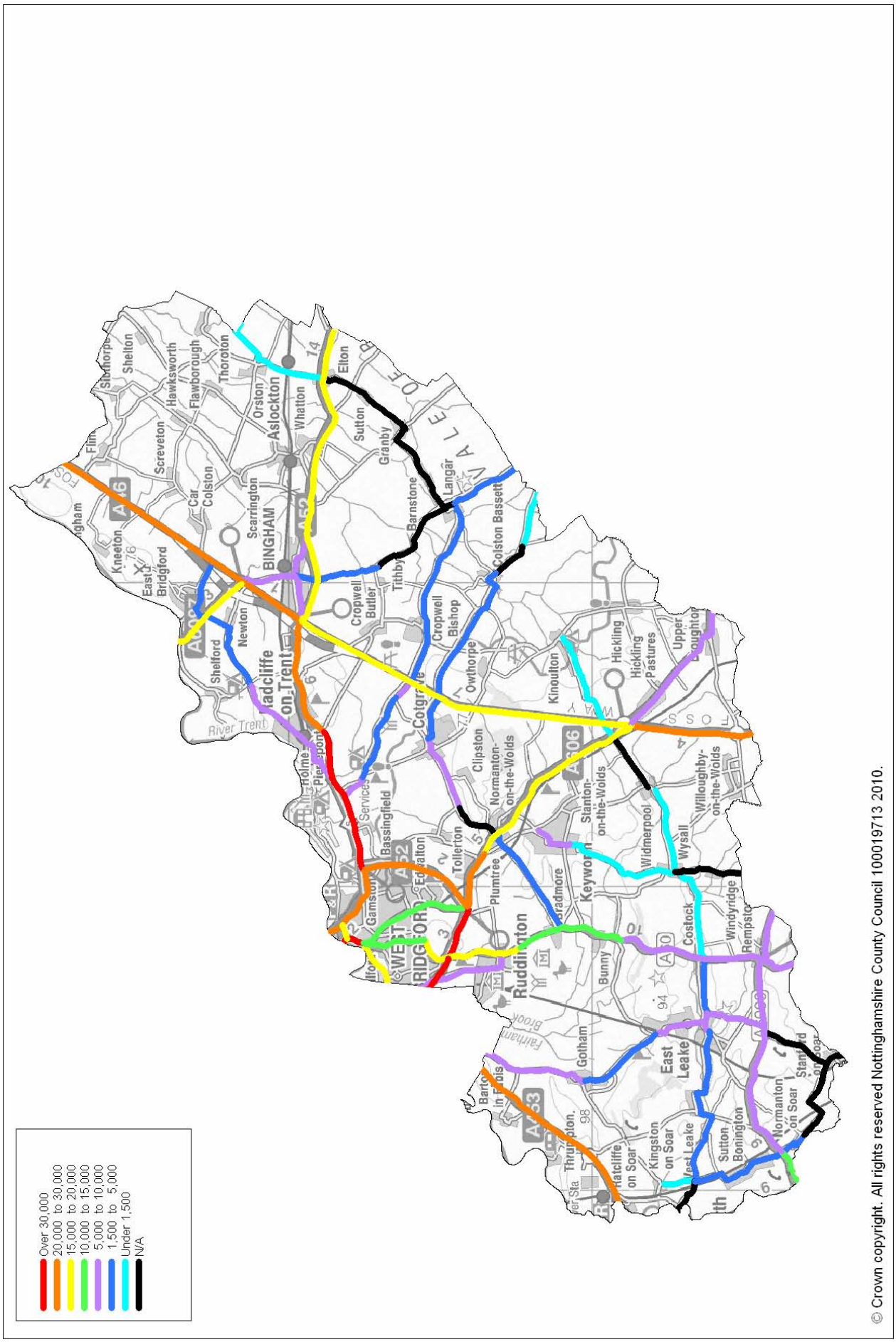


Figure 59: 2009 annual average daily traffic flows in Rushcliffe district
Source: Nottinghamshire County Council

8.1.2 Heavy goods vehicles flows

Heavy Goods Vehicle (HGV) flows are recorded as part of the traffic monitoring undertaken in the county. Maps showing the HGV flows on A, B and C roads in each of the districts are detailed below in figures 60-66.

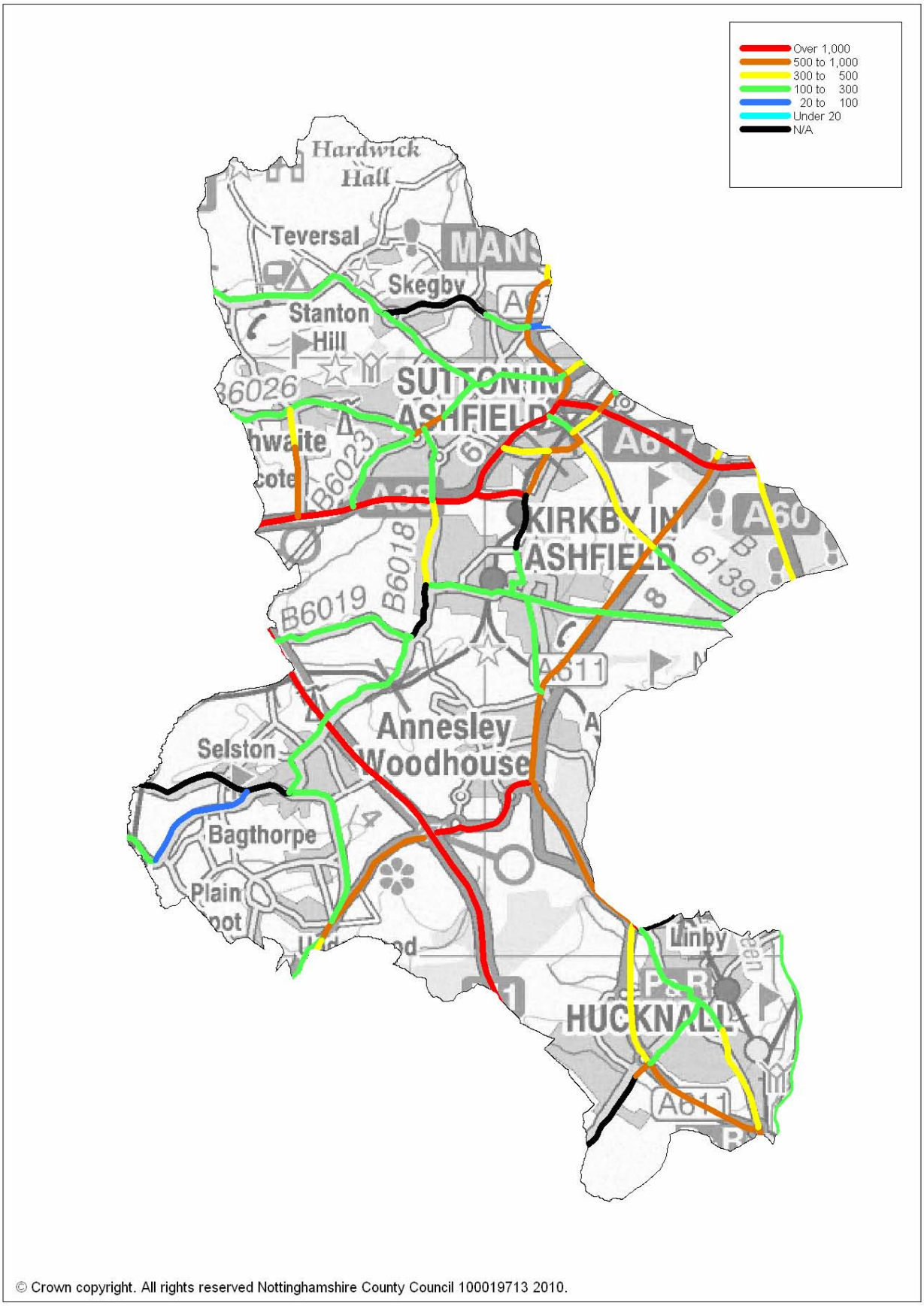


Figure 60: 2009 annual average daily traffic flows of heavy goods vehicles in Ashfield district
Source: Nottinghamshire County Council

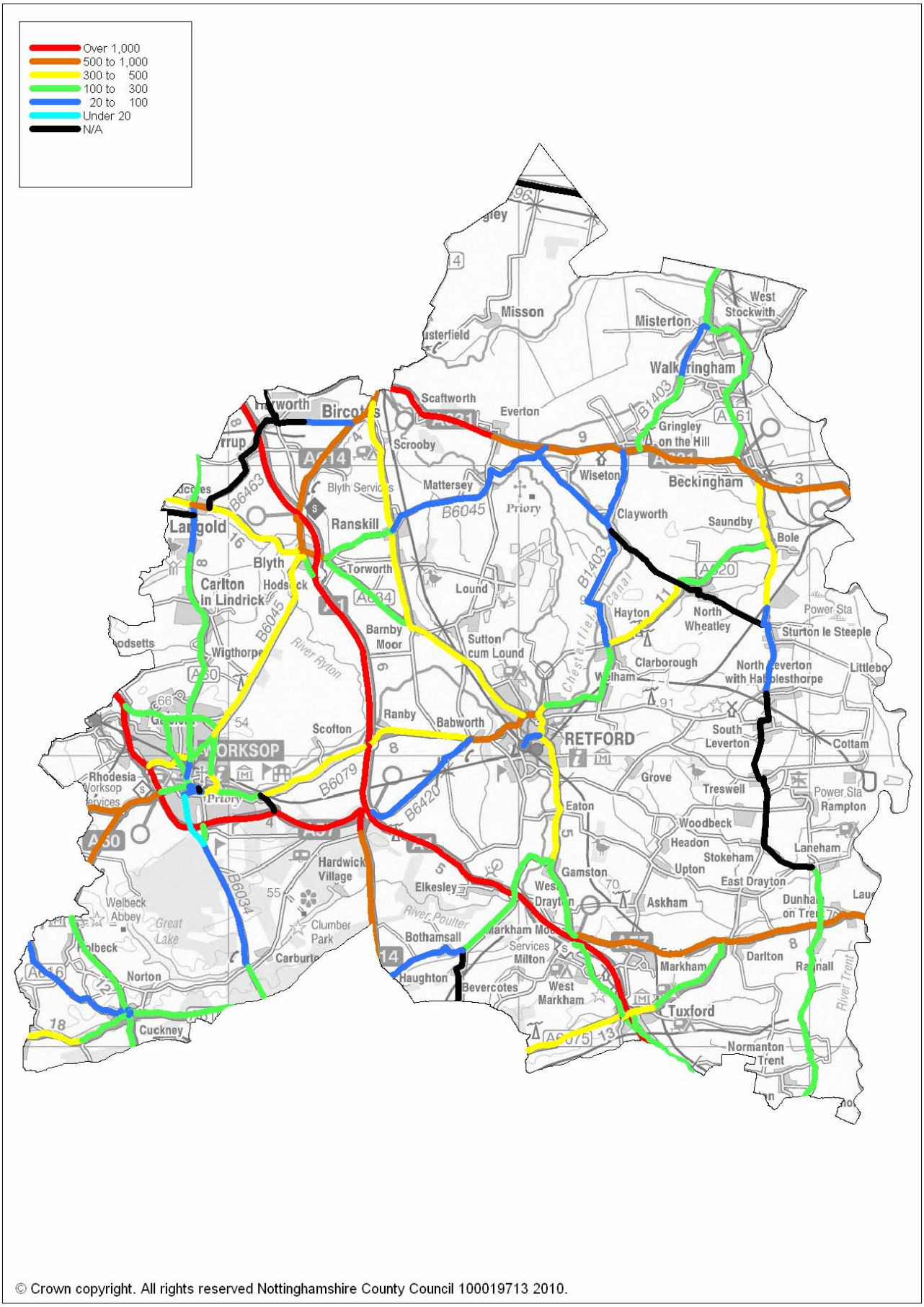


Figure 61: 2009 annual average daily traffic flows of heavy goods vehicles in Bassetlaw district
Source: Nottinghamshire County Council

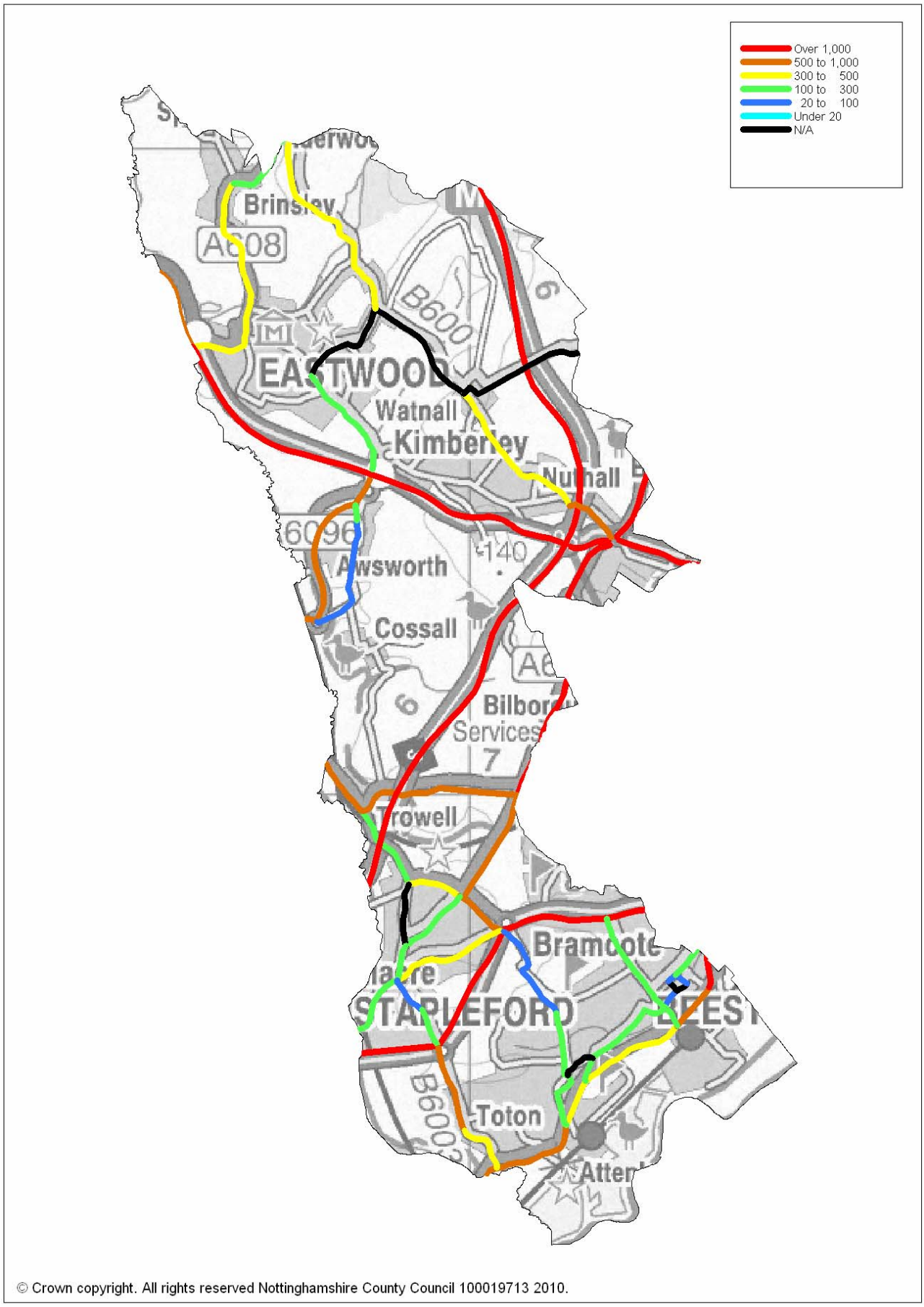


Figure 62: 2009 annual average daily traffic flows of heavy goods vehicles in Broxtowe district
Source: Nottinghamshire County Council

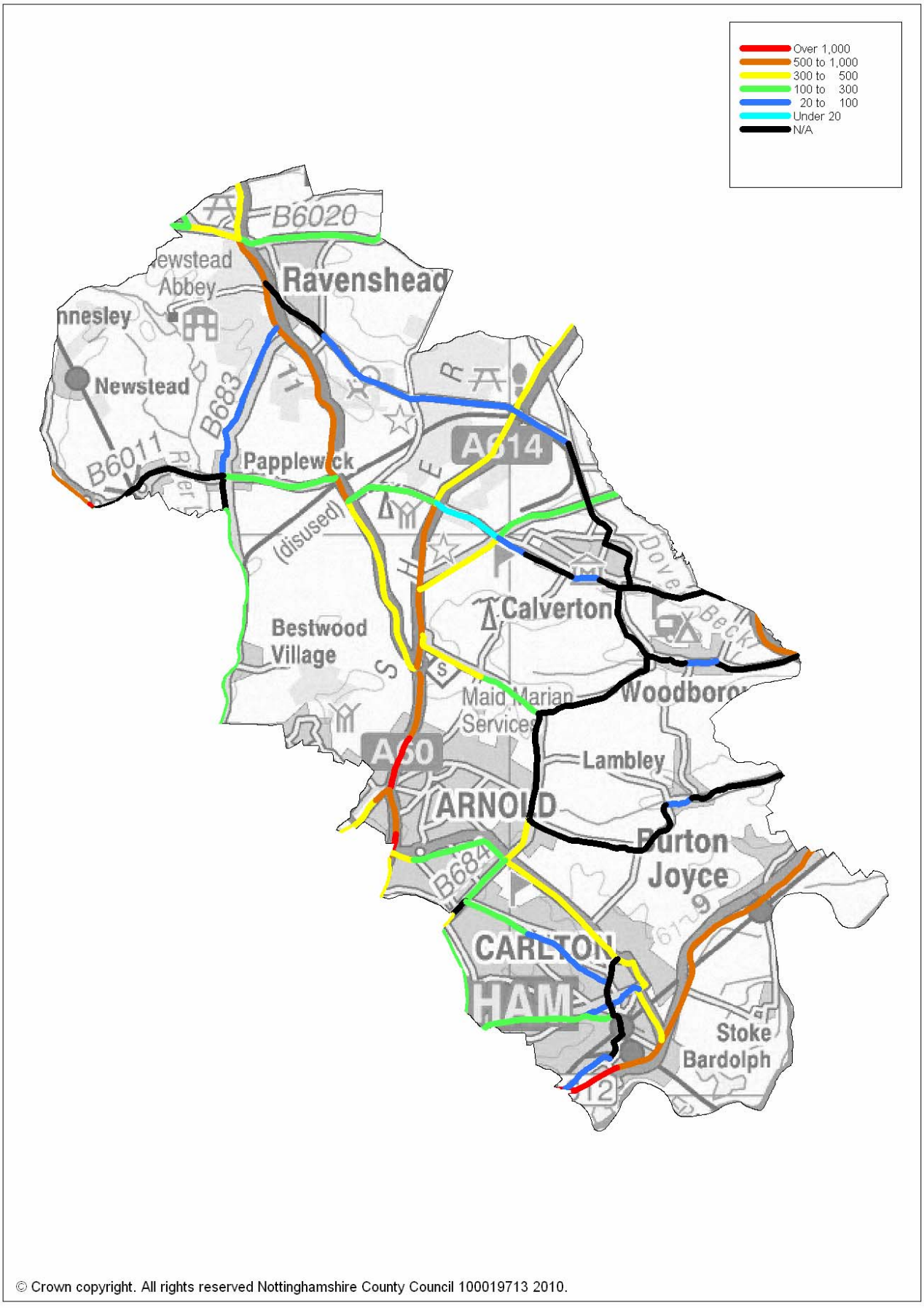


Figure 63: 2009 annual average daily traffic flows of heavy goods vehicles in Gelding district
Source: Nottinghamshire County Council

Figure 64: 2009 annual average daily traffic flows of heavy goods vehicles in Mansfield district
Source: Nottinghamshire County Council

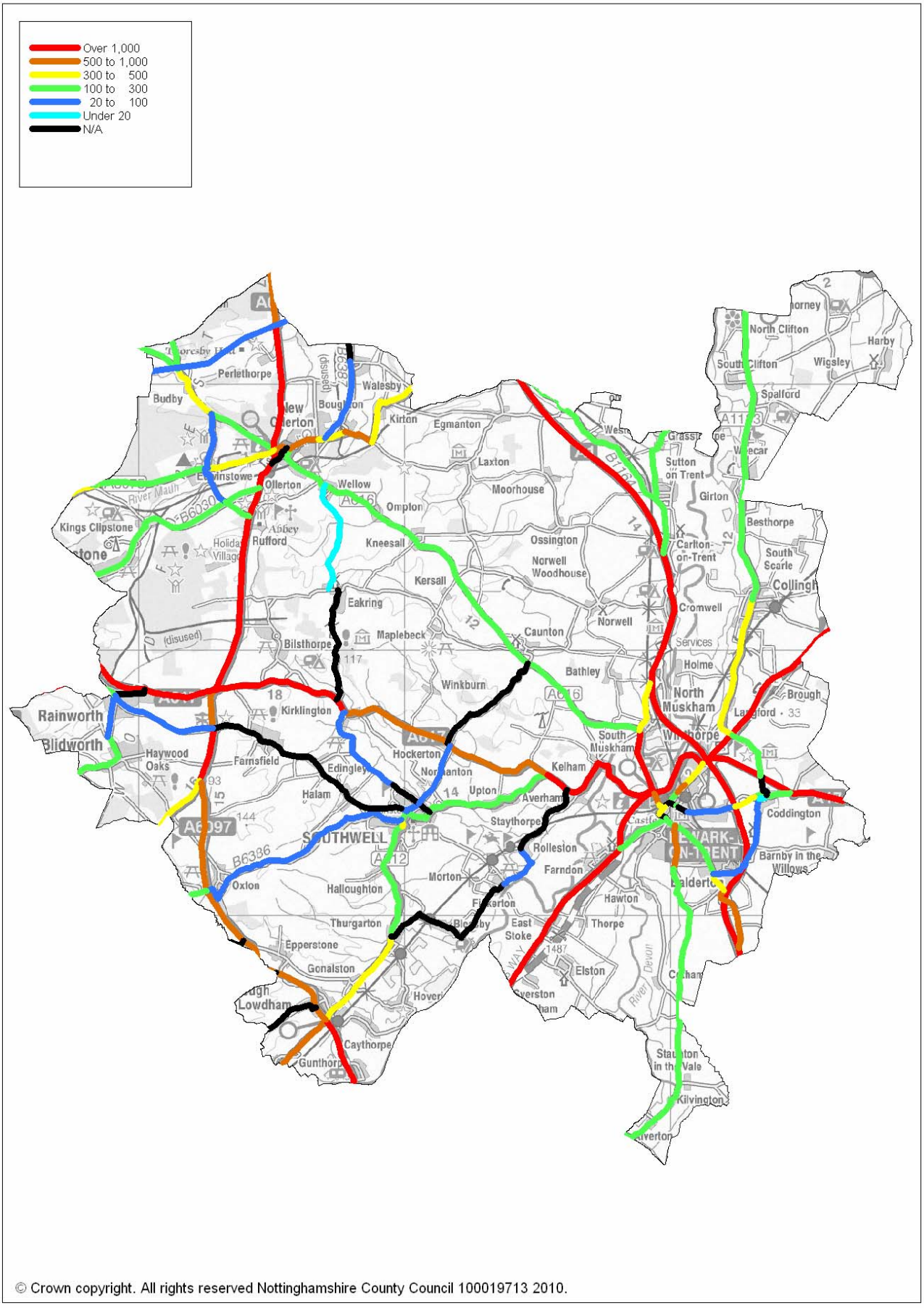


Figure 65: 2009 annual average daily traffic flows of heavy goods vehicles in Newark & Sherwood district

Source: Nottinghamshire County Council

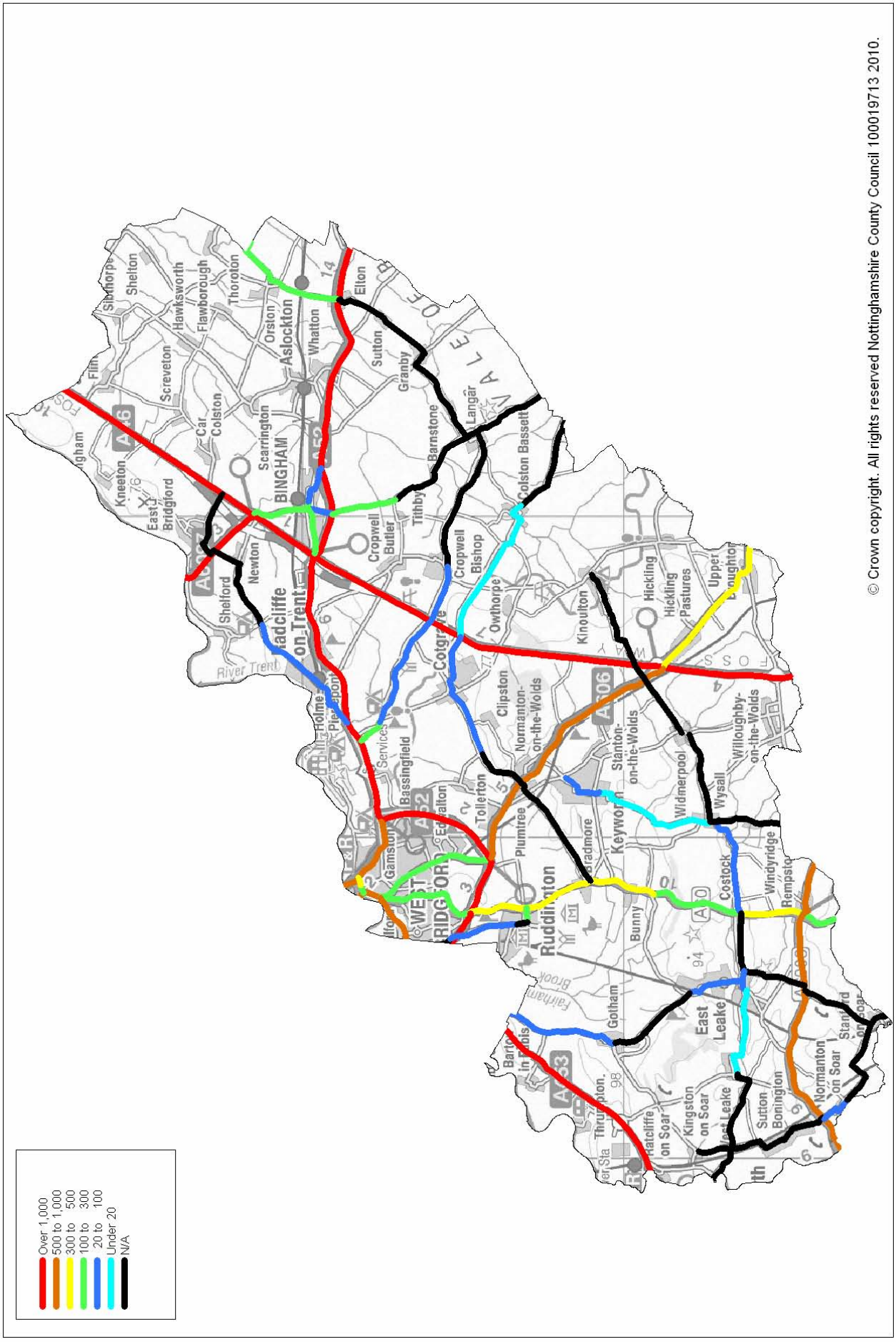


Figure 66: 2009 annual average daily traffic flows of heavy goods vehicles in Rushcliffe district
Source: Nottinghamshire County Council

8.1.3 Diversionary routes from the Strategic Route Network

The County Council liaises with the Highways Agency to determine the most suitable diversionary routes, which are then utilised when incidents on the Highways Agency's network require traffic to be re-routed. The nature of such routes is considered when improvements to the road network are being developed to help ensure that the routes remain suitable. An example of the diversionary routes is detailed below in figure 67.

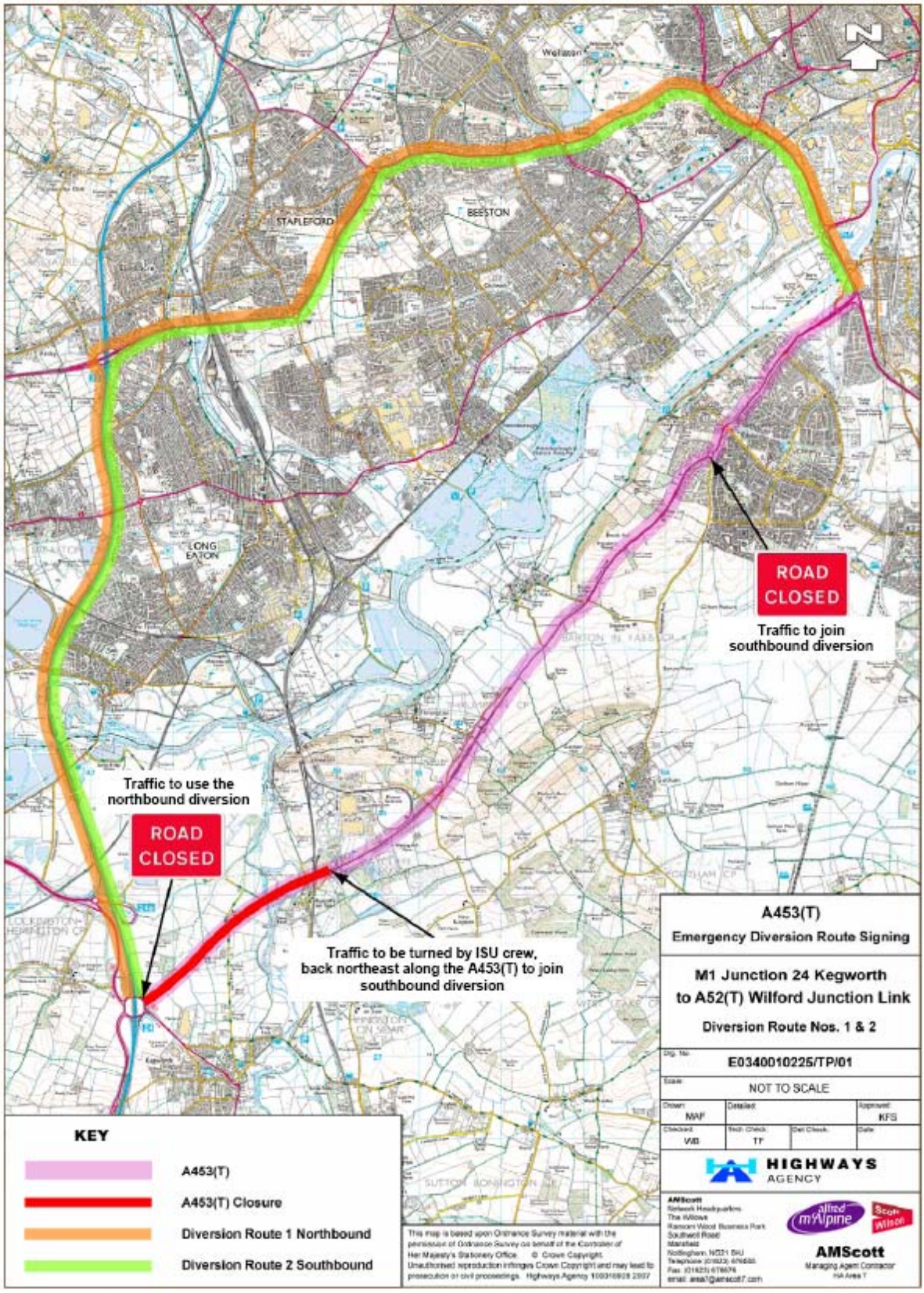


Figure 67: Diversionary routes from the south section of the A453
Source: Highways Agency

8.2 Delay on the network

In 2007, the East Midlands Development Agency (emda) commissioned a study to identify the economic costs of congestion to the East Midlands region's economy. The study quantified both the 'direct' and 'indirect' costs of congestion. The report recognised that high levels of congestion result in a major cost to the regional economy with direct and indirect costs amounting to approximately £935m per year. The study looked at the distribution of economic costs by sub-region within the East Midlands. The 'Three cities' sub-region was found to incur the highest cost of congestion – £500m per year, including direct and indirect impacts. It should be noted that this excludes congestion costs incurred on the East Midlands region's national strategic road network (including some motorways and trunk roads within the study area) which amounted to a further £185m per year.

Table 29 below shows the estimated direct costs of congestion on non-trunk routes for the relevant housing market areas in Nottinghamshire.

Table 29: The economic costs of congestion in the Nottinghamshire housing market areas

Housing Market Area	Total (£m)	Per capita (£)
Nottingham core (Broxtowe, Gedling and Rushcliffe districts; Hucknall; Nottingham City; and the Derbyshire district of Erewash)	152	209
Nottingham outer (Mansfield and Newark & Sherwood districts; and the Ashfield district except Hucknall)	3	12
Northern (Bassetlaw district)	10	26

Source: The economic costs of congestion in the East Midlands Region, emda June 2007

In 2008, a congestion management study looked at the patterns of congestion in the 'Three cities' sub-region and their surrounding areas – Derby, parts of Derbyshire, Leicester, Leicestershire, Nottingham and the Greater Nottingham part of Nottinghamshire. The results of the congestion survey showed significant morning peak congestion inbound on many of the radial routes into the 'Three cities' as well as Melton Mowbray, Loughborough and Coalville.

To monitor delay on the network, journey time surveys are undertaken annually on each of the routes into Nottingham City and within the four largest market towns in the north of the county – Mansfield, Newark, Retford and Worksop. The results of these surveys are detailed in the sections below.

8.2.1 Journey time surveys in market towns

Journey time surveys utilising GPS technology were undertaken during 2008, 2009 and 2010 in each of the four largest market towns in the north of the county – Mansfield, Newark, Retford and Worksop. Surveys were undertaken in the morning peak; the evening peak; and during the inter-peak period. Table 30 below details the results of the inbound journey time surveys during the morning peak (0730-0930) in each of the market towns between 2008 and 2010. The figures show that the average speeds have not got worse in any of the market towns, with increases in speeds in Mansfield, Retford and Worksop when compared to 2008. Between 2008 and 2010 journey times have reduced significantly in Retford (by 23 seconds per mile) and Mansfield (by 12 seconds per mile). Also detailed below are maps (figures 68-75) showing the 2010 average speeds along inbound and outbound routes into each of the market towns during the morning peak.

Table 30: Average journey times during the morning peak in the market towns

		Morning peak (0730-0930) inbound					
		Average speed (mph)			Average journey time per mile (minutes)		
Location	Route length (miles)	2008	2009	2010	2008	2009	2010
Mansfield	26.1	18	18	19	3:23	3:26	3:11
Newark	7.2	20	20	20	3:08	3:00	3:07
Retford	6.0	15	17	17	4:01	3:41	3:38
Worksop	10.7	19	20	20	3:02	2:55	3:05

Mansfield

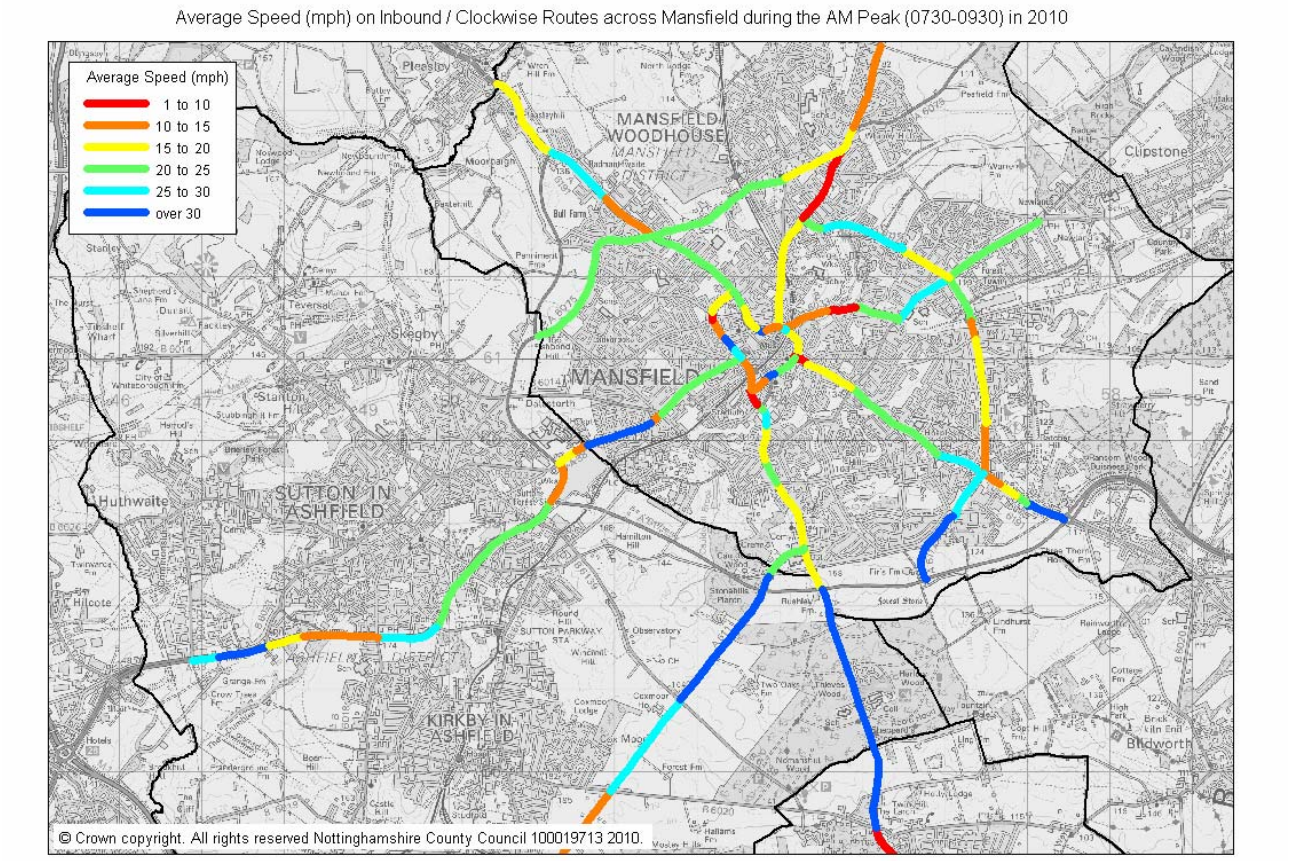


Figure 68: Average inbound journey time speeds in Mansfield during the morning peak
Source: Nottinghamshire County Council

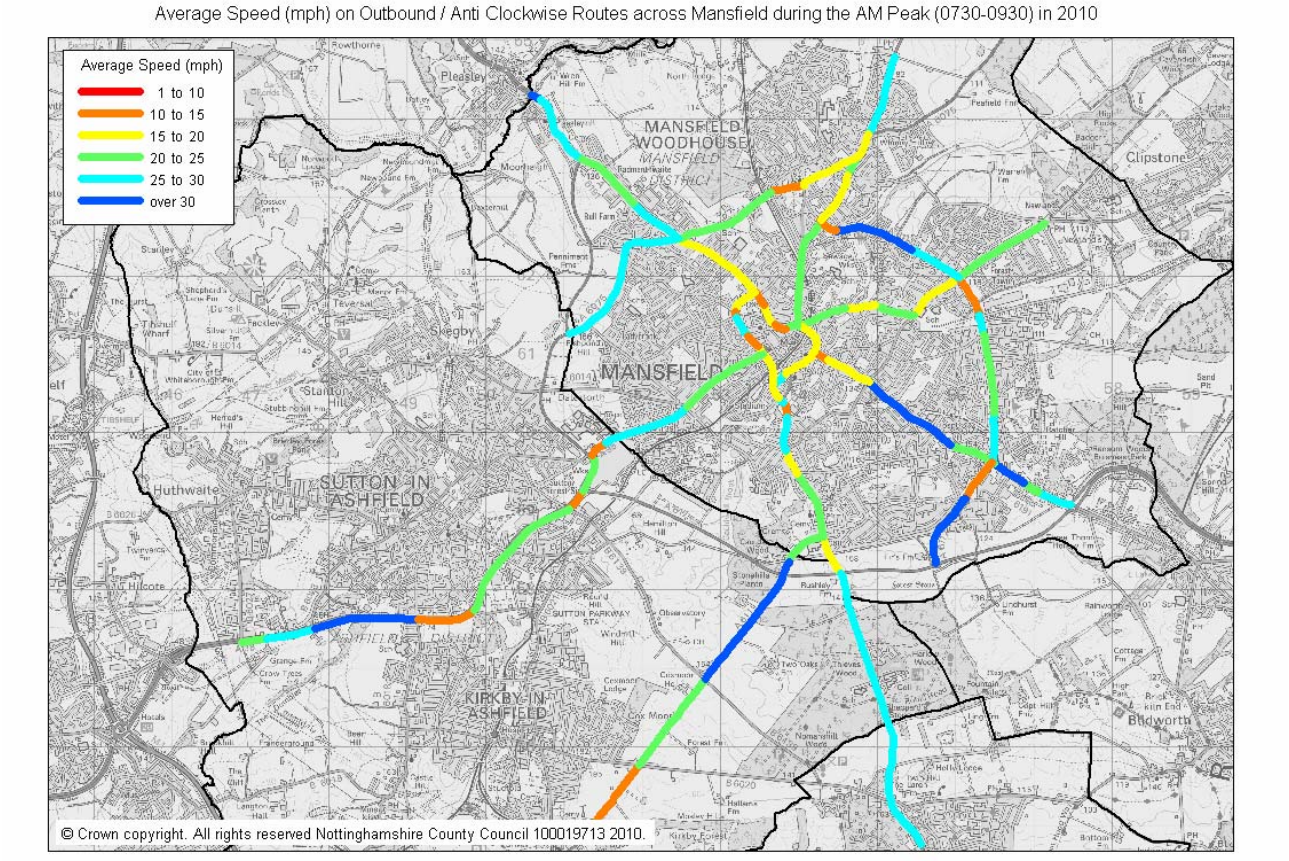


Figure 69: Average outbound journey time speeds in Mansfield during the morning peak
Source: Nottinghamshire County Council

Newark

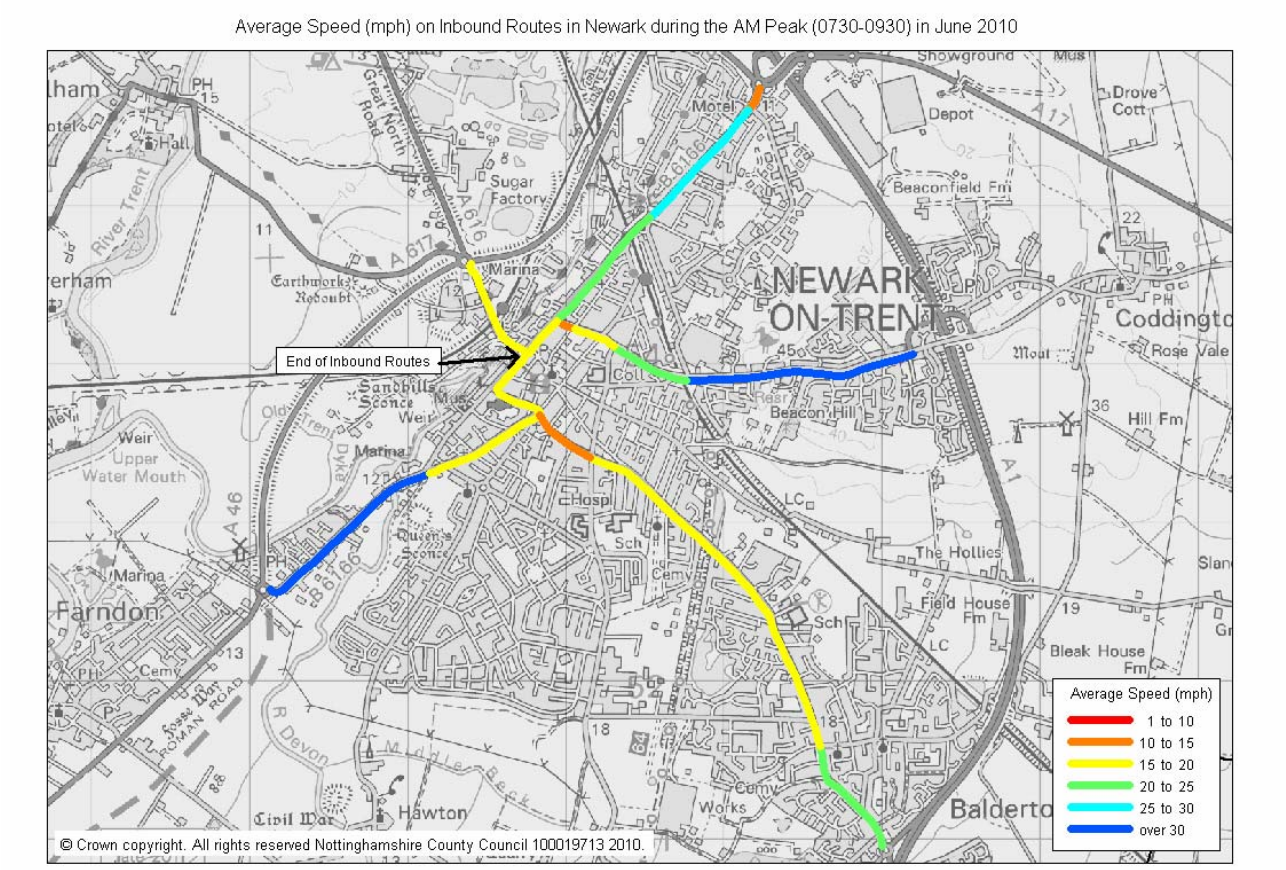


Figure 70:: Average inbound journey time speeds in Newark during the morning peak
Source: Nottinghamshire County Council

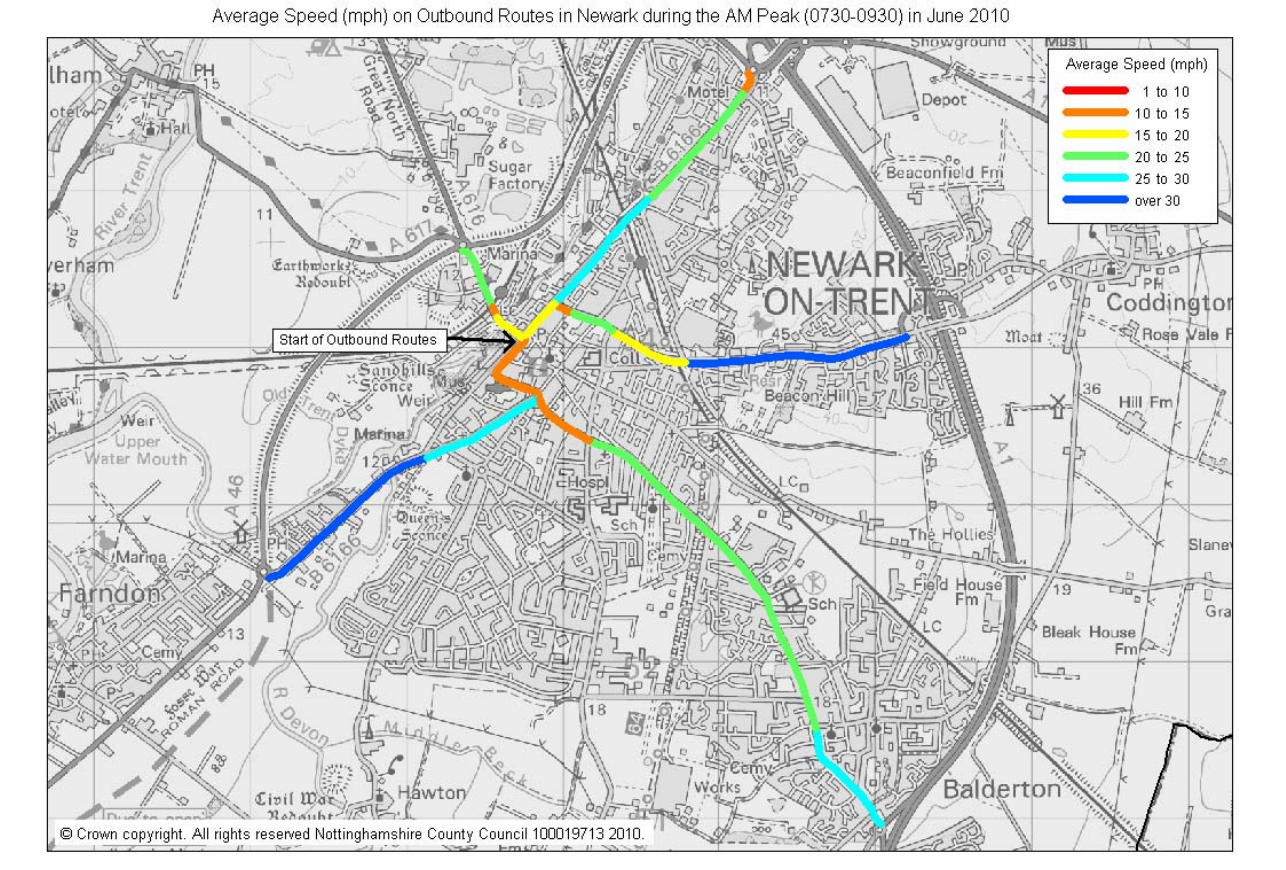


Figure 71: Average outbound journey time speeds in Newark during the morning peak
Source: Nottinghamshire County Council

Retford

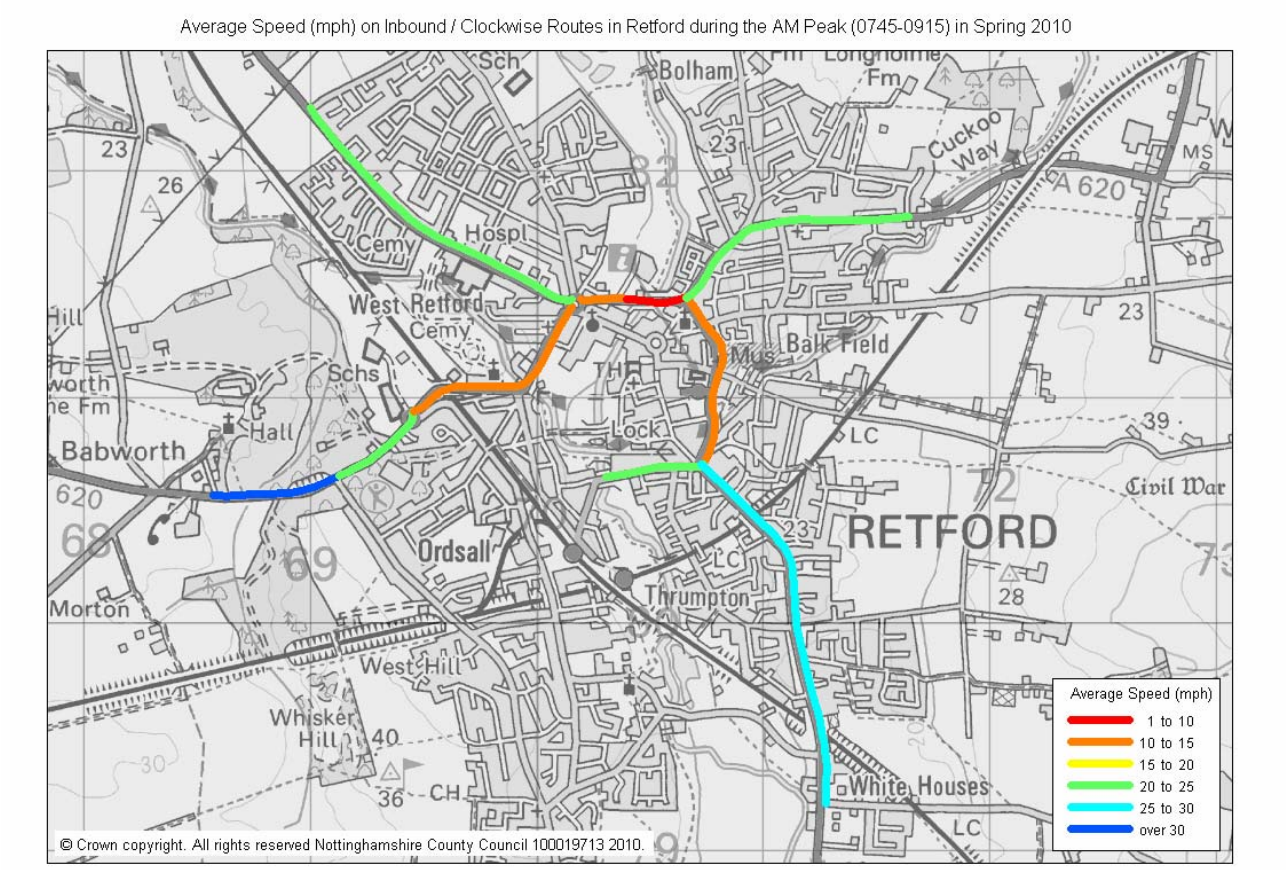


Figure 72: Average inbound journey time speeds in Retford during the morning peak
Source: Nottinghamshire County Council

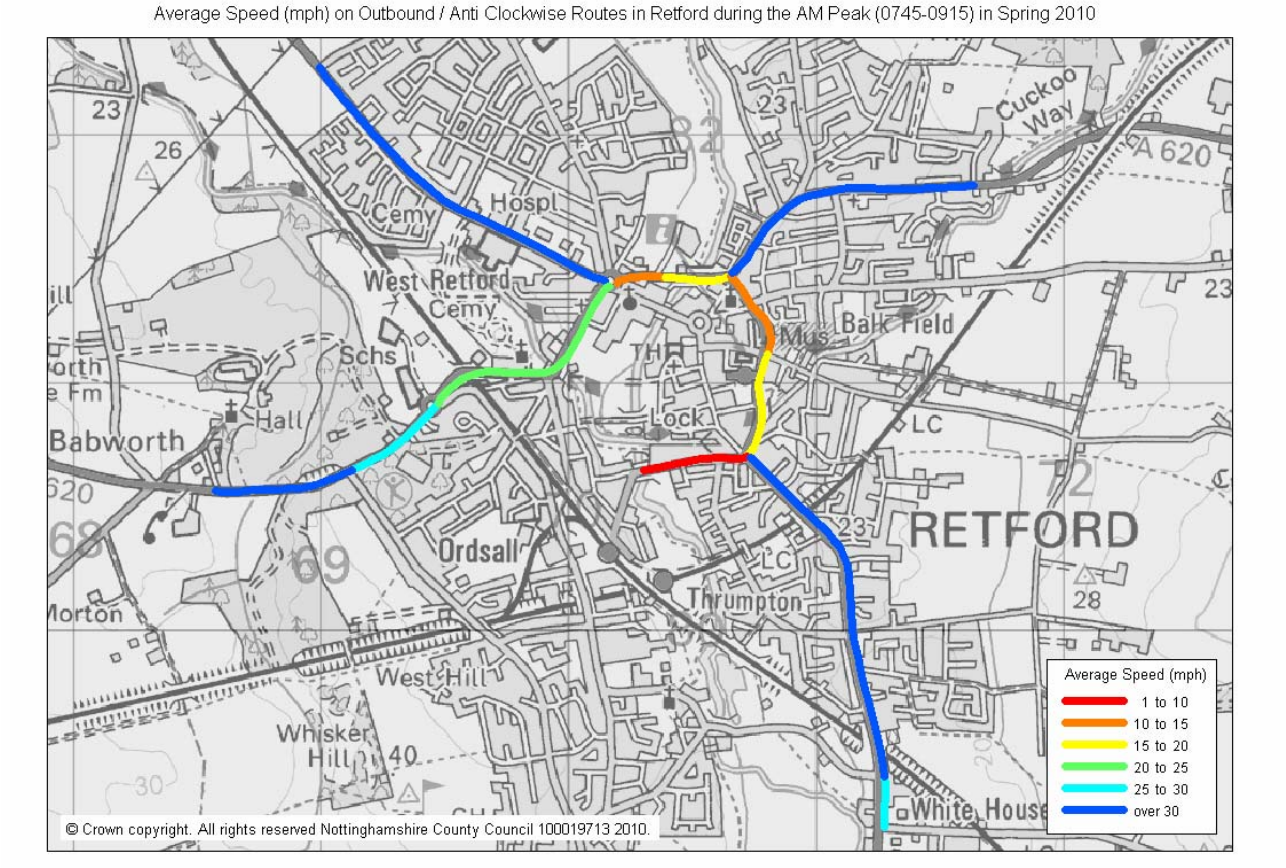


Figure 73: Average outbound journey time speeds in Retford during the morning peak
Source: Nottinghamshire County Council

Worksop

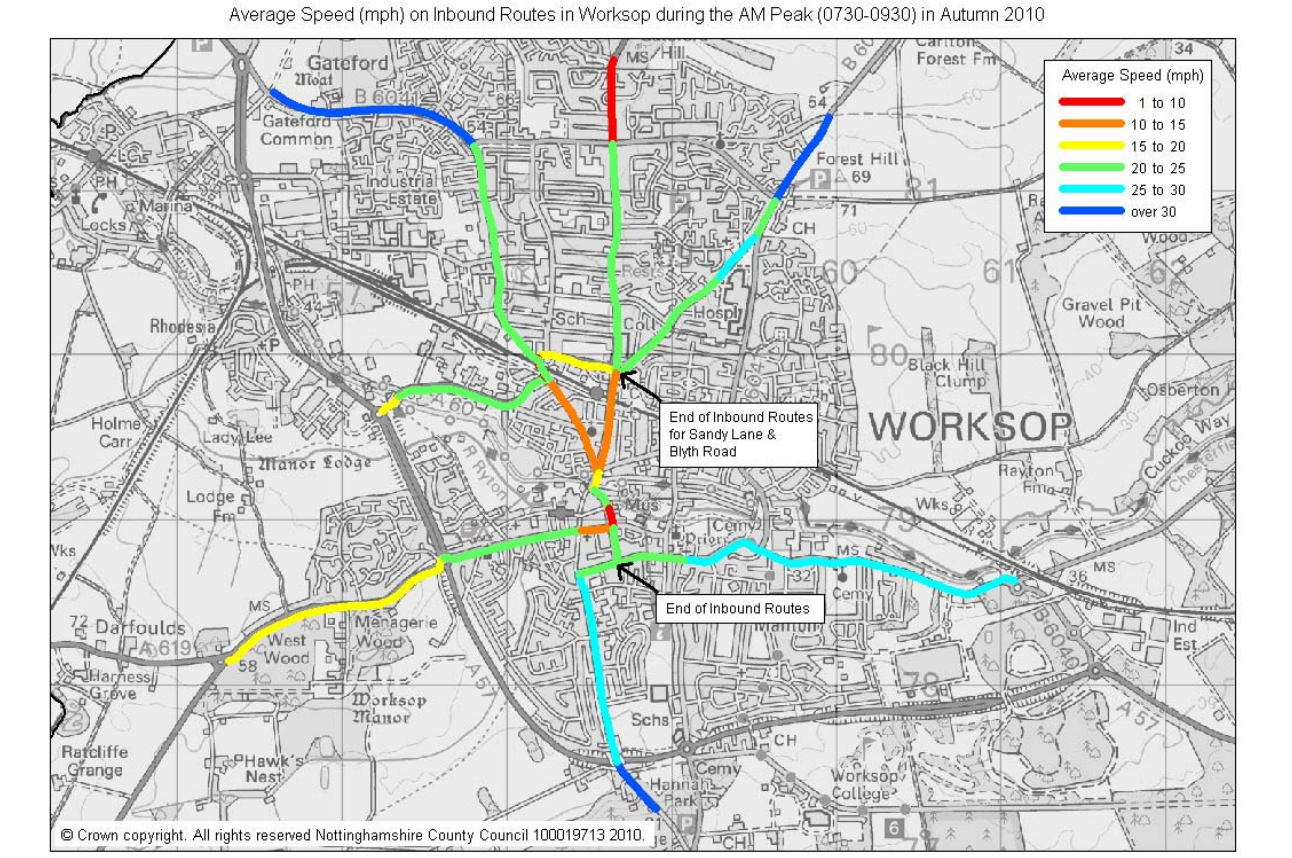


Figure 74: Average inbound journey time speeds in Worksop during the morning peak
Source: Nottinghamshire County Council

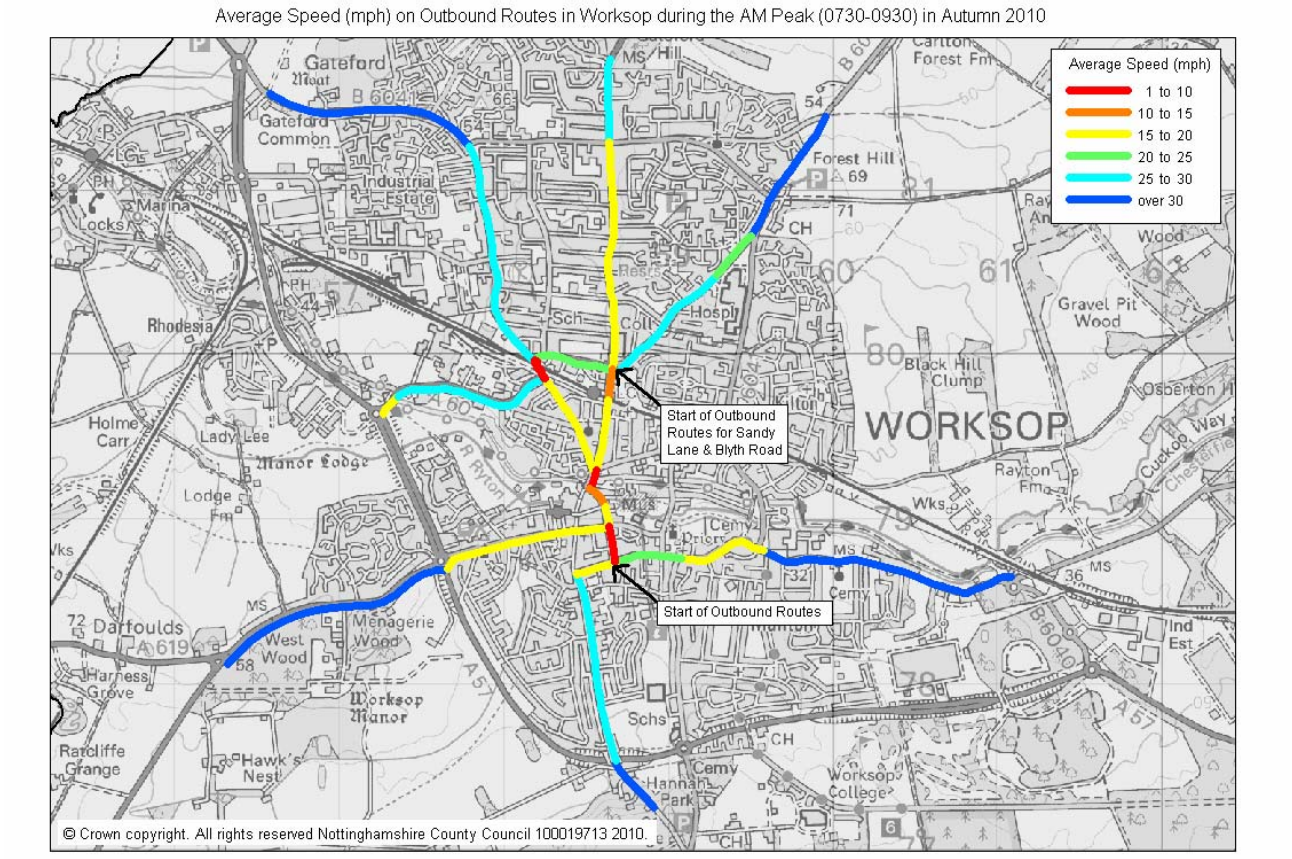


Figure 75: Average outbound journey time speeds in Worksop during the morning peak
Source: Nottinghamshire County Council

8.2.2 Journey time surveys into Nottingham city centre

During the second Local Transport Plan period the County Council, jointly with Nottingham City Council, were required to monitor congestion within the Greater Nottingham conurbation. A total of 18 routes (13 of which travelled through the county) were monitored through journey time surveys utilising GPS technology. The routes monitored are:

- Key routes (first monitored Autumn 2005 and repeated annually)
    - A60(N): Leapool Roundabout to Huntingdon Street
    - A60(S):Ruddington to Trent Bridge
    - A453: Ring Road to Castle Boulevard
    - A610: A6096 junction Awsworth to Canning Circus
    - A611: south end of Hucknall Bypass to Mansfield Road
    - A612: Burton Joyce to Pennyfoot Street
    - A6005: County Boundary to Wilford Street
    - A6011 (LB): Radcliffe Road to London Road via Lady Bay Bridge
    - A6011/A6520/A60(S) (TB): Gamston Roundabout to Canal Street via Trent Bridge
    - A6514 Ring Road (N): Derby Road to Mansfield Road
    - A6514 Ring Road (S): Mansfield Road to Derby Road
- Other radial routes (first monitored Spring 2006 and repeated annually)
    - A606: Tollerton to Loughborough Road
    - A609: Trowell to Canning Circus
    - A6200: Ring Road to Canning Circus
    - B682: Moor Bridge to Mansfield Road
    - B684: Woodborough turn to Huntingdon Street
    - B686: Colwick Loop Road to Manvers Street
    - Radford Road – Ring Road to Alfreton Road.

The overall results of the surveys along the 13 routes through the county in the morning peak are included in table 31 below, whilst the morning peak results along individual routes are shown below in figure 76. Between 2007 and 2009 (2010 data was not available at the time of writing) the overall journey speeds have not got any worse in Greater Nottingham. There is, however, significant variance in the journey time between the routes, ranging from 2.5 minutes per mile on the A612 to around 4.7 minutes per mile on the A611. There have been reductions in the journey times along most of the routes but journey times have increased on several sections in the county including B684, A606, A6005, and A609.

Table 31: Average journey times during the morning peak in Greater Nottingham

		Morning peak (0730-0930) inbound					
		Average speed (mph)			Average journey time per mile (minutes)		
Location	Route length (miles)	2007	2008	2009	2007	2008	2009
Greater Nottingham	30.8	19	19	19	3:11	3:30	3:13

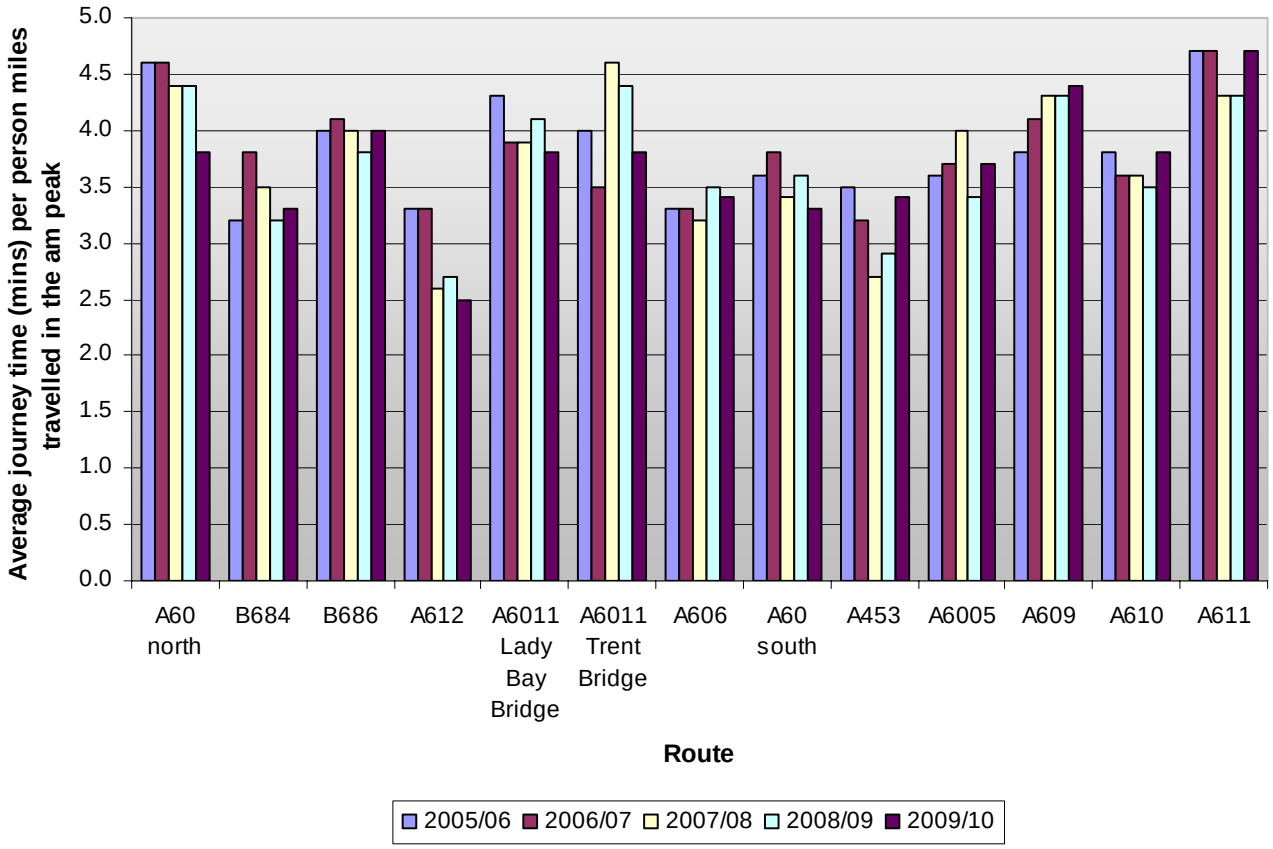


Figure 76: Person journey times in Greater Nottingham

8.2.3 Inter-urban delay

The Department for Transport has provided the County Council with 2009/10 Trafficmaster GPS data for the county. The Trafficmaster data has been mapped to show the journey time speeds on the network in the county (including inter-urban routes) during the morning peak and this shows that there is currently no inter-urban delay. Unfortunately, the County Council do not hold earlier year's data so no trends can be analysed but this data will be useful in future years to determine whether or not journey times between the local centres, market towns and the City are improving or worsening. The journey speeds are shown in figures 77-80 below.

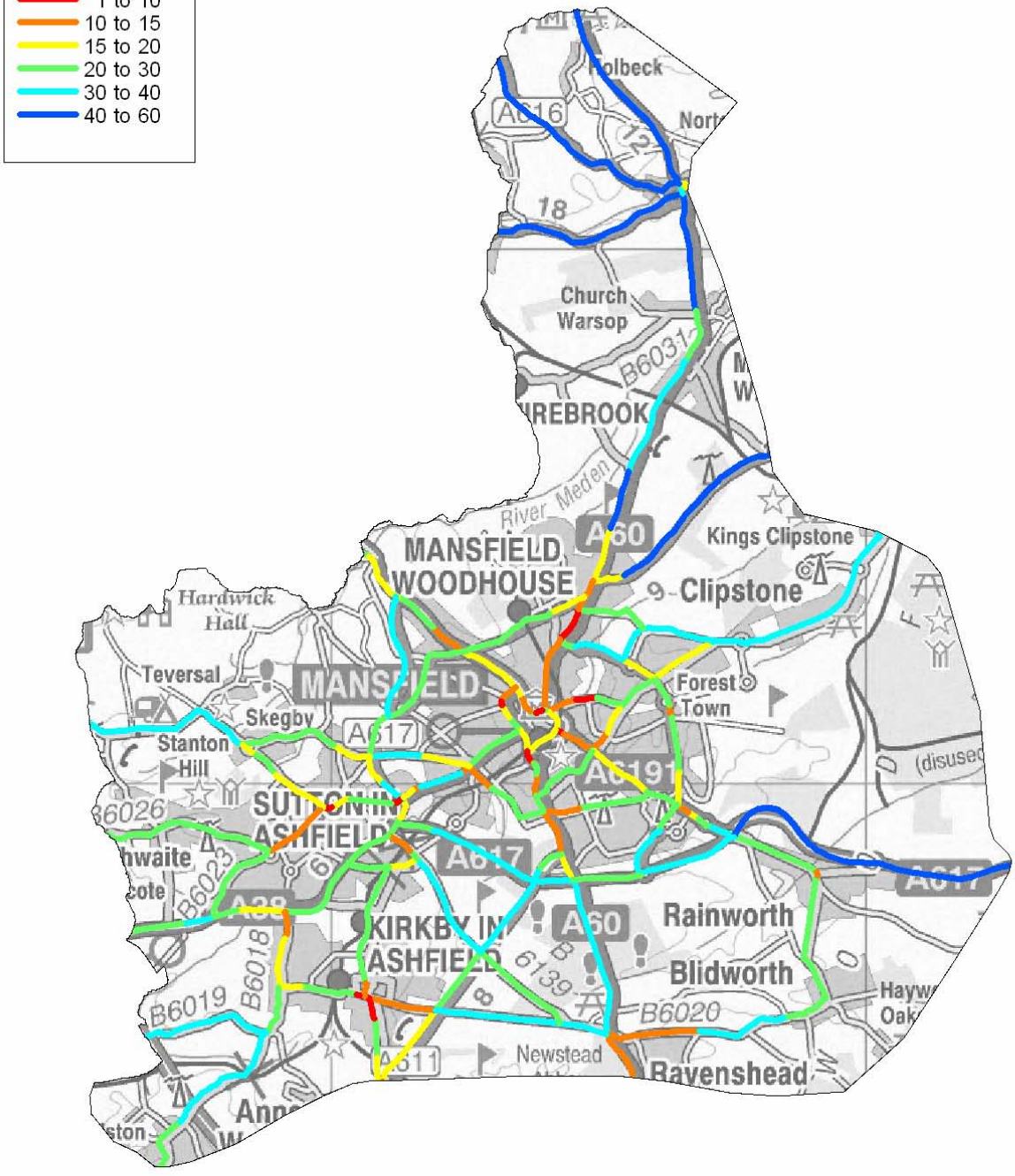


Figure 77: Average inbound and clockwise journey time speeds in Ashfield and Mansfield districts during the morning peak

Source: Trafficmaster GPS data

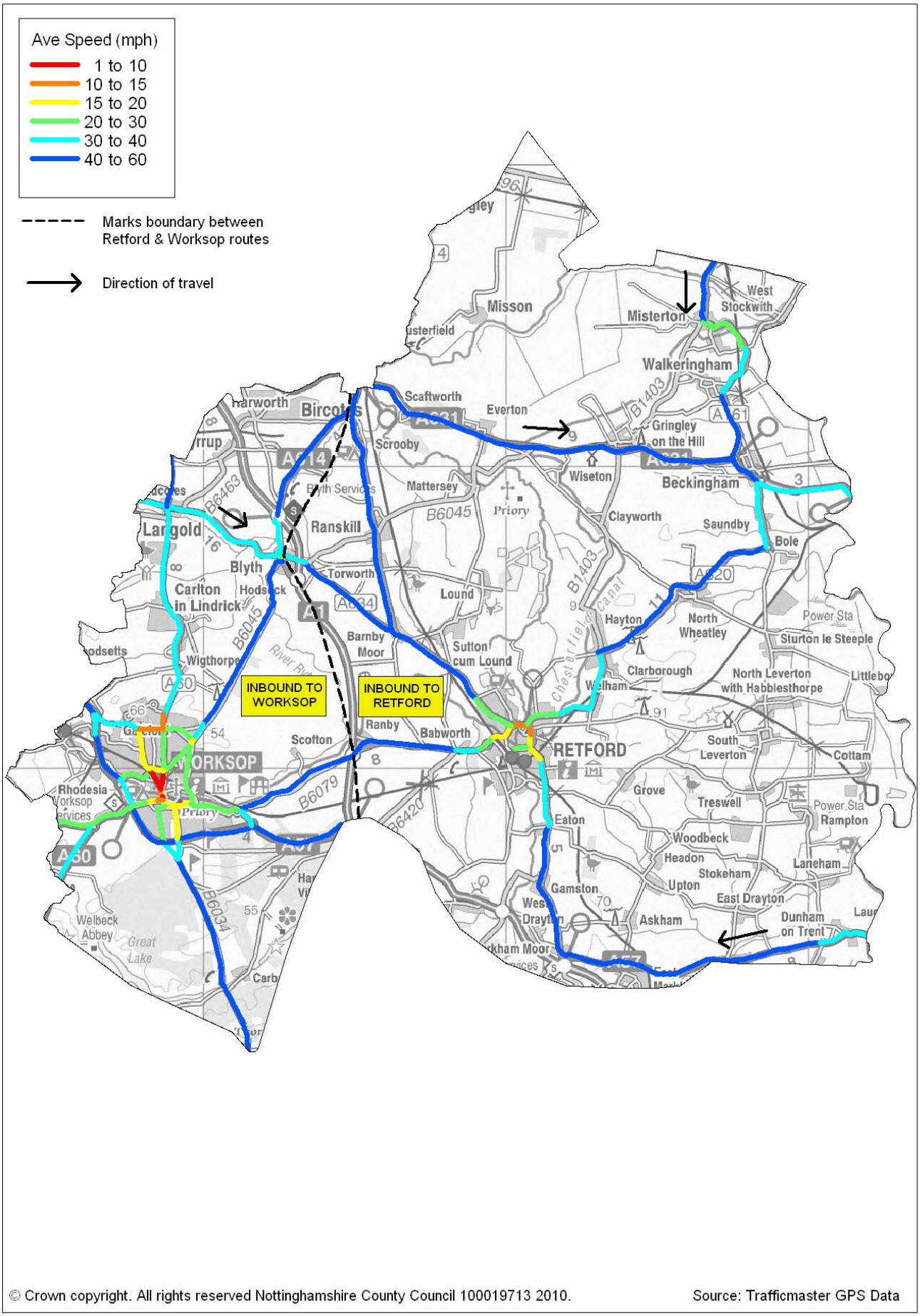


Figure 78: Average inbound journey time speeds in Bassetlaw district during the morning peak
Source: Trafficmaster GPS data

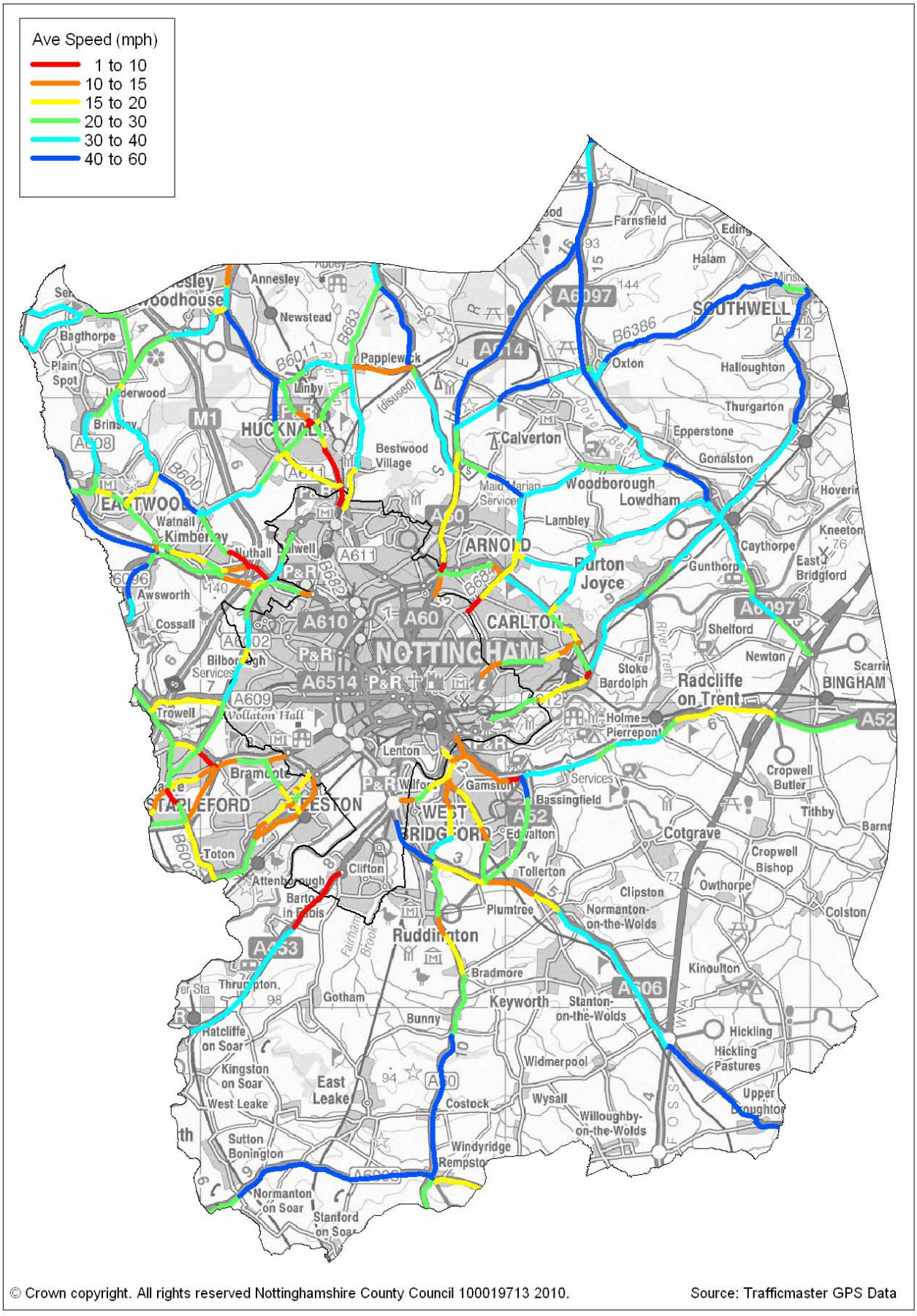


Figure 79: Average inbound and clockwise journey time speeds in Greater Nottingham during the morning peak

Source: Trafficmaster GPS data

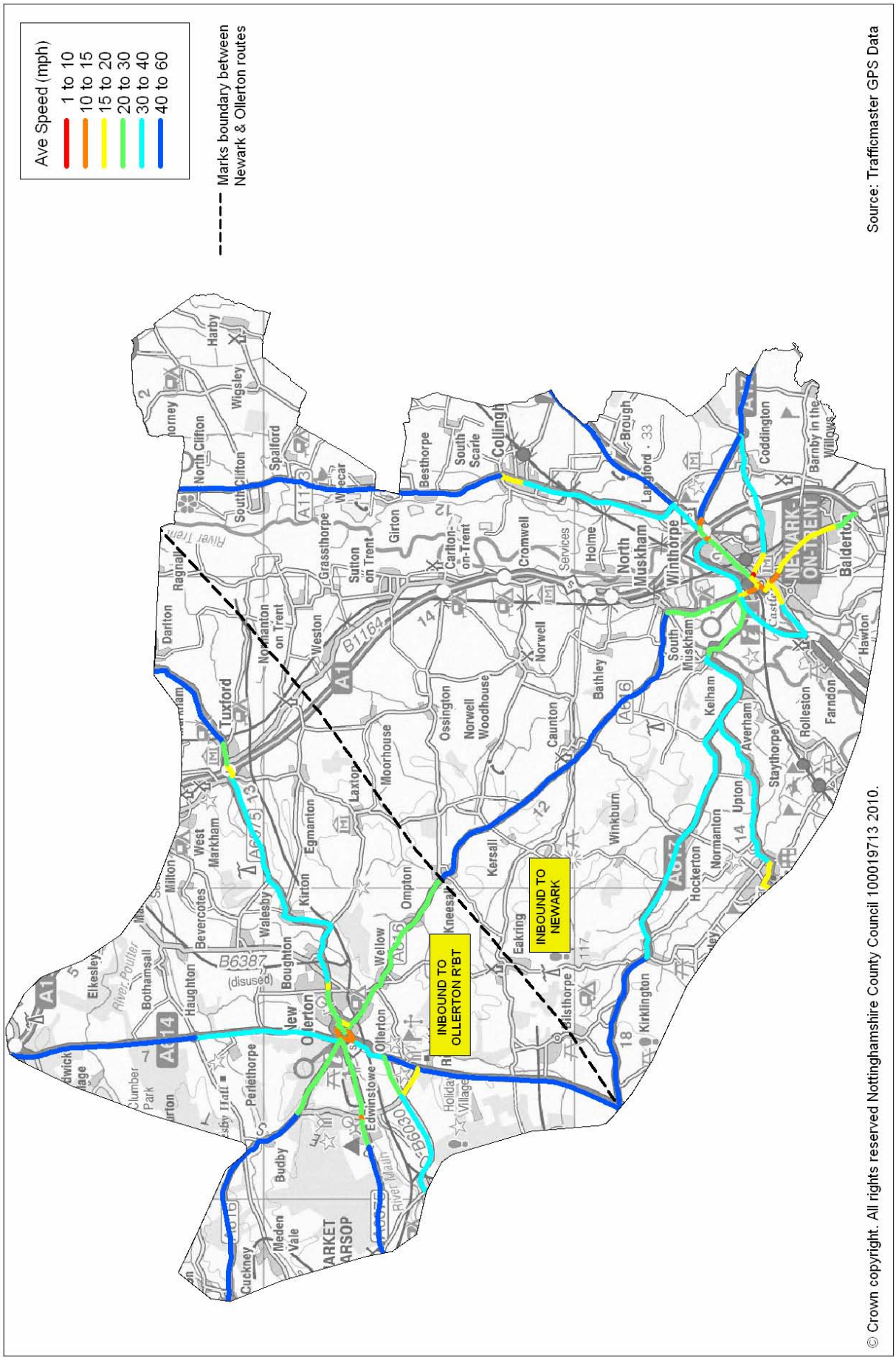


Figure 80: Average inbound journey time speeds in Newark & Sherwood district during the morning peak

Source: Trafficmaster GPS data

8.2.4 Vehicle delay on the Highways Agency Strategic Route Network

The 'Regional Network Report for the East Midlands 2008' produced by the Highways Agency (HA) analysed observed delays in 2006 on the Strategic Road Network (SRN). The delay on the HA roads in the region is shown in figure 81 below. The roads in Nottinghamshire identified as having the greatest delay per vehicle and peak hour vehicle delay were:

- A453 between Nottingham and the M1
- A52 east and west of Nottingham, and
- A1 particularly Newark to Grantham.

Improvement works have been undertaken along the A1 since 2006 and therefore vehicle delay is likely to have reduced along the A1.

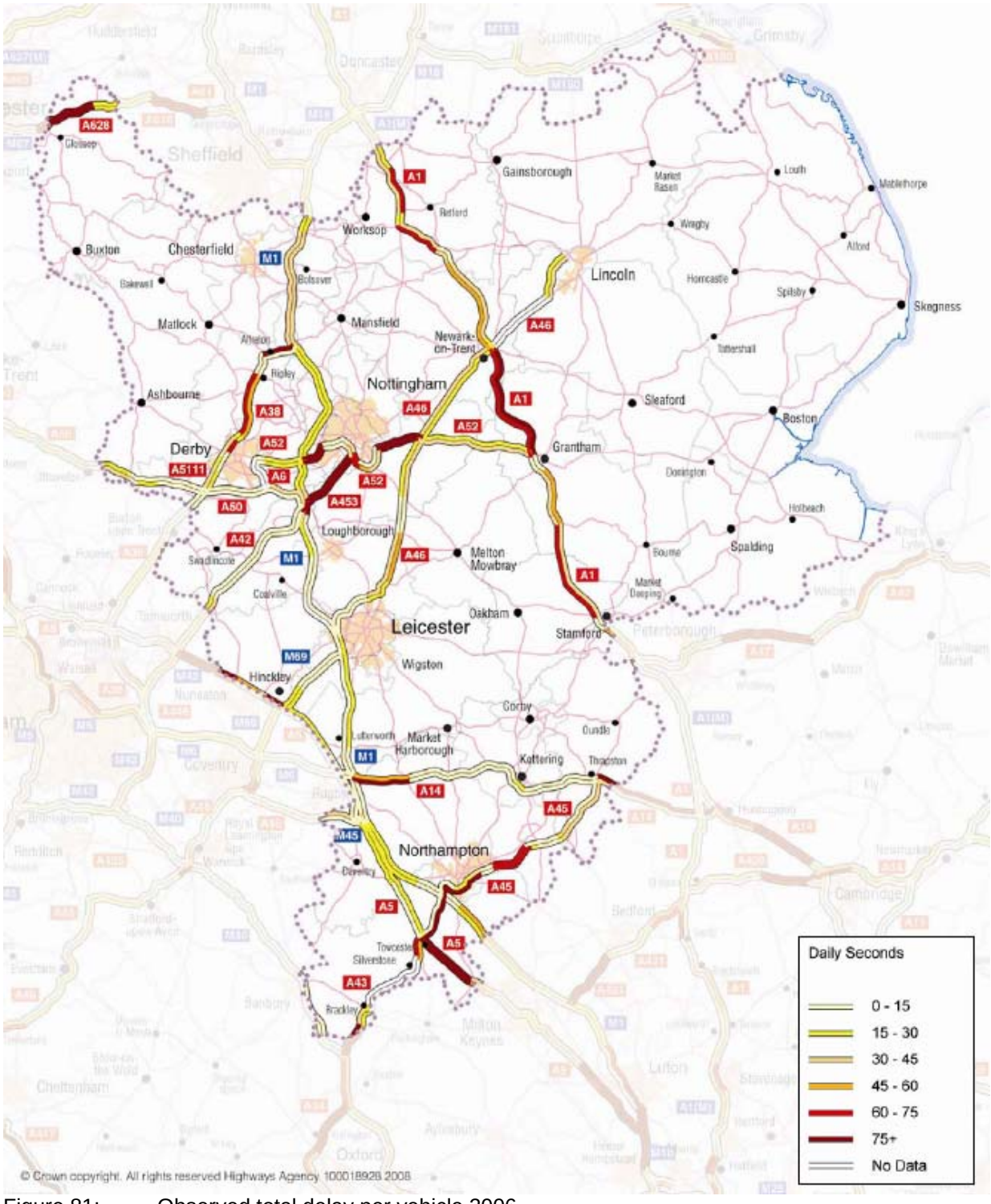


Figure 81: Observed total delay per vehicle 2006
Source: Highways Agency Regional Network Review for the East Midlands 2008

8.3 Capacity on the network

The level of congestion, commonly called the level of link 'stress', is measured by comparing the level of observed traffic against the maximum amount of traffic that could travel along the road in an hour, i.e. the capacity of the road. Some roads are more congested than others and for longer than just the busy morning and evening rush hours. When the ratio of flow to capacity is less than 90% the link operates within capacity. Between 90% and 100% stress, the link is approaching capacity and the traffic flows are susceptible to flow breakdown. At greater than 100% stress the link operates over capacity and experiences stop-start traffic flows, queuing traffic and delays.

8.3.1 Highways Agency

The Highways Agency (HA) is responsible for monitoring the traffic levels, congestion and delays on the Strategic Road Network (SRN). An analysis of the observed conditions and delays in 2006 was reported in the HA's 'Regional Network Report for the East Midlands 2008'. The daily stress along the HA routes in the region are shown in figure 82 below. This report identifies particular locations on the SRN where the network is congested during both peak and off peak periods. The road lengths on the SRN in Nottinghamshire identified by the HA as having high daily stress (over 90%) levels in 2006 were:

- M1 between junctions 26 and 27
- A453 between the M1 and Nottingham
- A46 between Saxondale (A52) and Newark, and
- A52 between Wheatcroft roundabout (A606) and Saxondale (A46).

Since the report was published the HA has undertaken widening along the M1 between junction 26 and 27; and is undertaking improvement works along the A46 between Saxondale and Newark. Future observations may therefore show significant improvements along these routes.

8.3.2 District stress maps

Stress maps have been produced by organisations on behalf of Ashfield, Bassetlaw and Newark & Sherwood district councils during the development of their local development frameworks (unfortunately at the time of publication no map has been produced yet for the Mansfield district). These maps have been reproduced with the permission of the district councils in a uniform format below in figures 83-85.

According to the work undertaken for the district councils – in Ashfield links on the B6026 Huthwaite Road, and A38 currently operate over capacity; whilst in Newark the A46 (a Highways Agency managed road) currently operates over capacity.

The districts councils' stress map assessments show that the number of roads in the county at or above capacity would increase considerably if the proposed housing and employment growth goes ahead without any mitigation, with each of the districts being affected.

8.3.3 The Nottingham Core Housing Market Area transport model

A transport model has been produced to help predict traffic flows within the Nottingham core Housing Market Area (HMA), which includes Broxtowe, Gedling and Rushcliffe districts; Hucknall; Nottingham City; and the Erewash district of Derbyshire. The model has been used to produce stress maps for the Nottingham Core HMA which has identified a number short sections of road that currently operate over capacity in each of the districts detailed above, generally on routes into the city and district centres. Figure 86 details link stress and figure 87 details junction capacity. The modelling undertaken show that the number of roads in the county at or above capacity would increase considerably if the proposed housing and employment growth goes ahead without any mitigation, with each of the districts being affected.

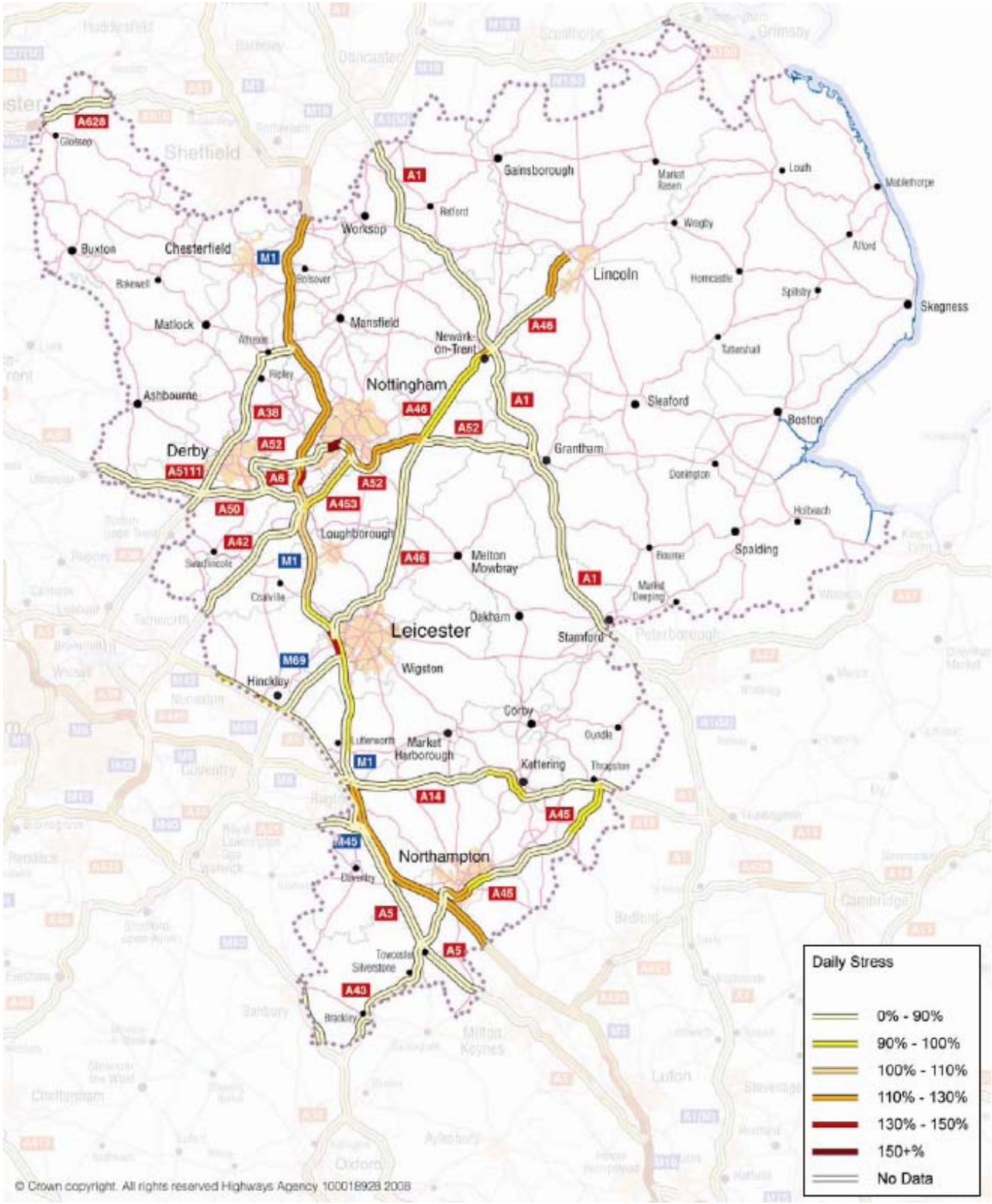


Figure 82: Observed link stress of the Highways Agency Strategic Route Network 2006
Source: Regional Network Report for the East Midlands 2008

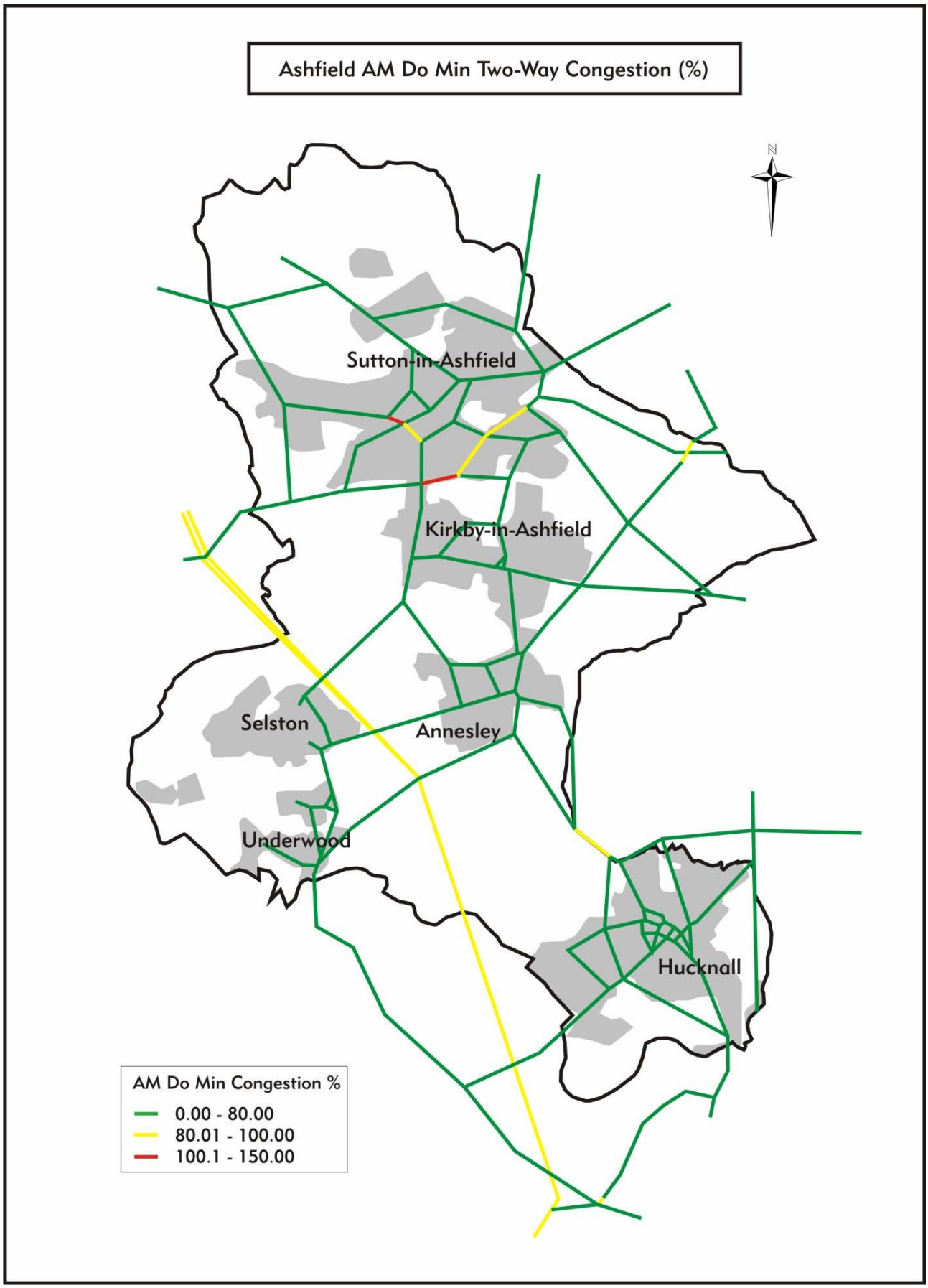


Figure 83: Observed link stress on the strategic road network in Ashfield district in 2010
Source: Ashfield District Council Local Development Framework Transport Study

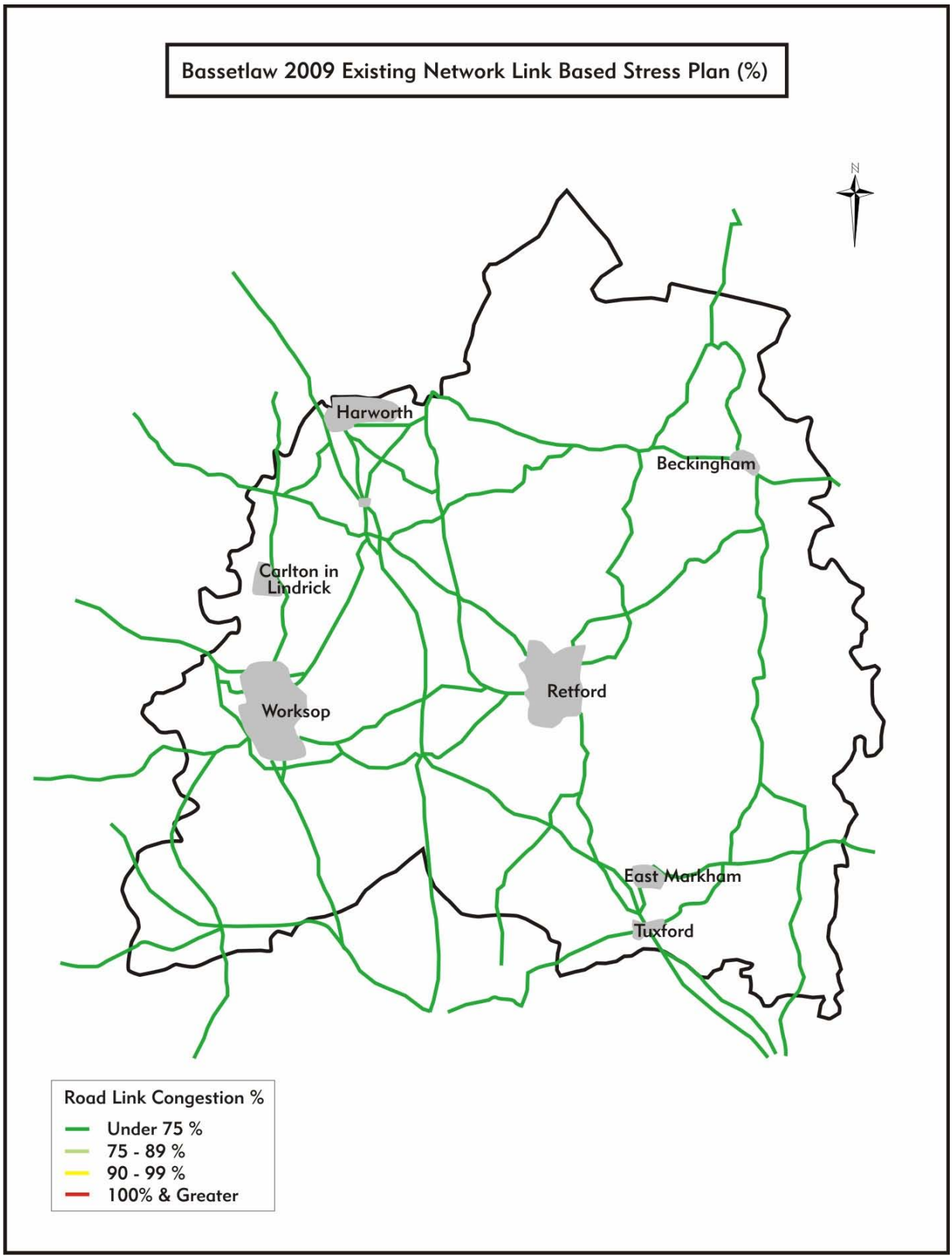


Figure 84: Observed link stress on the strategic road network in Bassetlaw district in 2009
Source: Bassetlaw District Council Local Development Framework Transport Study

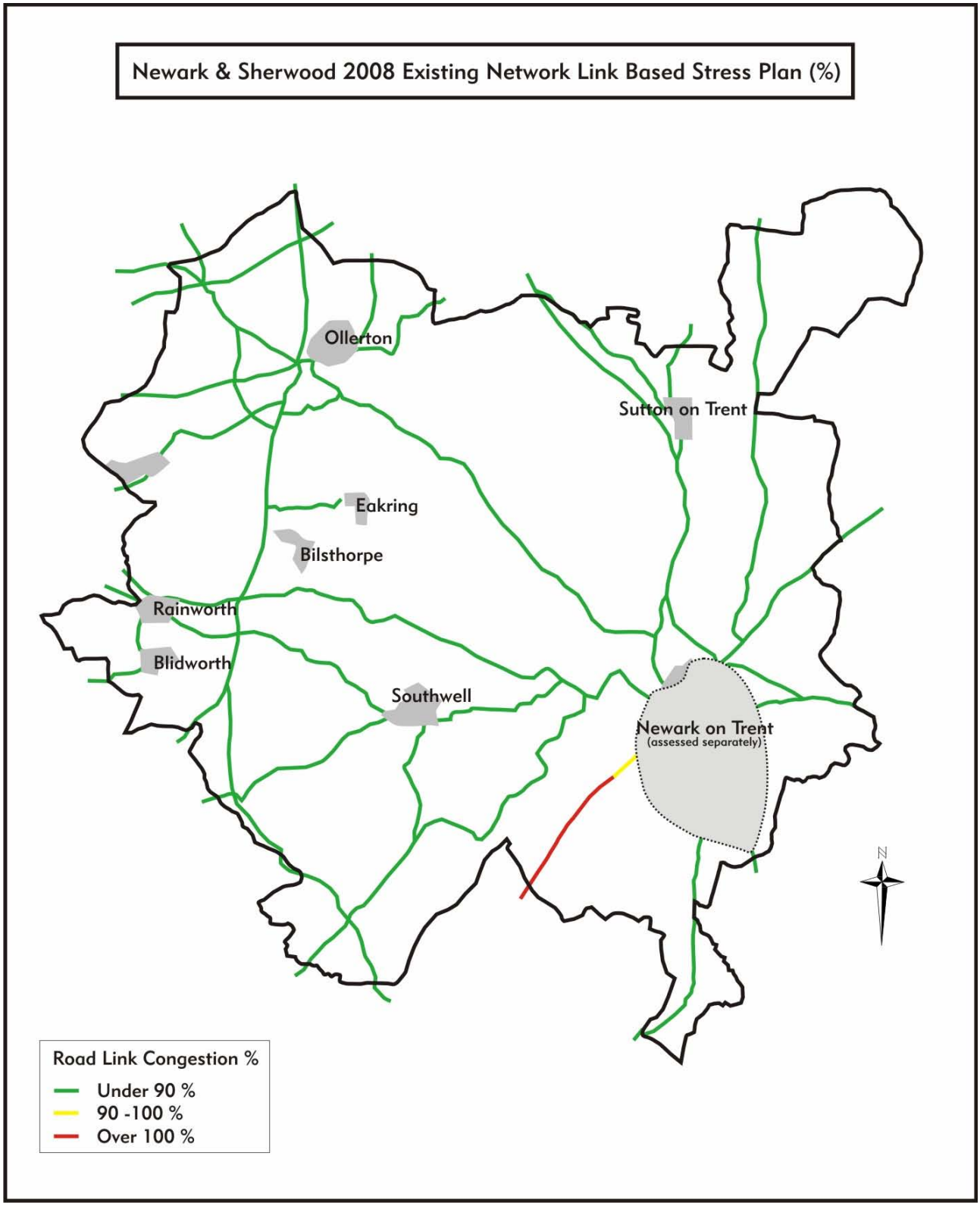


Figure 85: Observed link stress on the strategic road network in Newark & Sherwood district in 2007
Source: Newark & Sherwood District Council Local Development Framework Transport Study

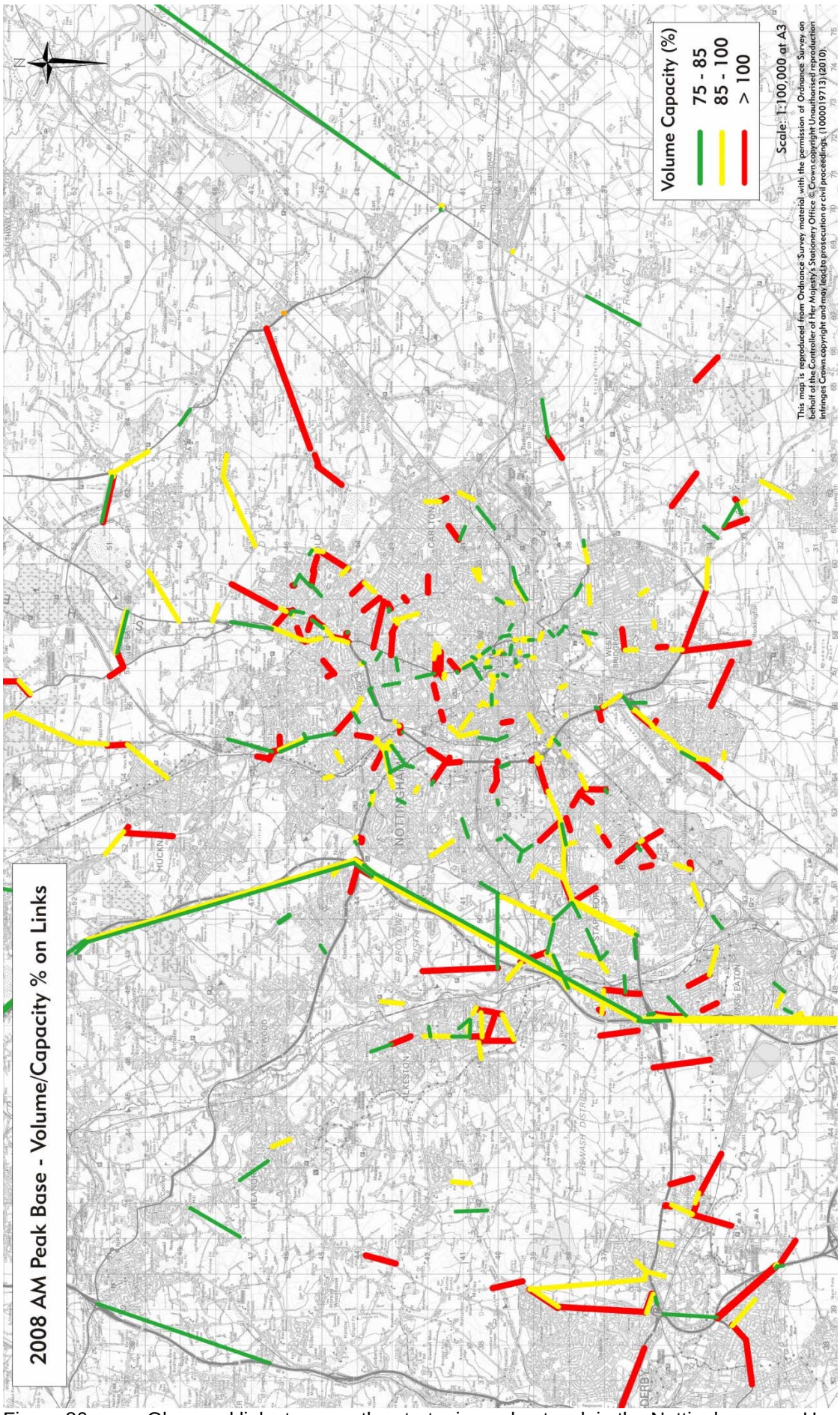


Figure 86: Observed link stress on the strategic road network in the Nottingham core Housing Market Area in 2008

Source: Greater Nottingham core Housing Market Area transport model

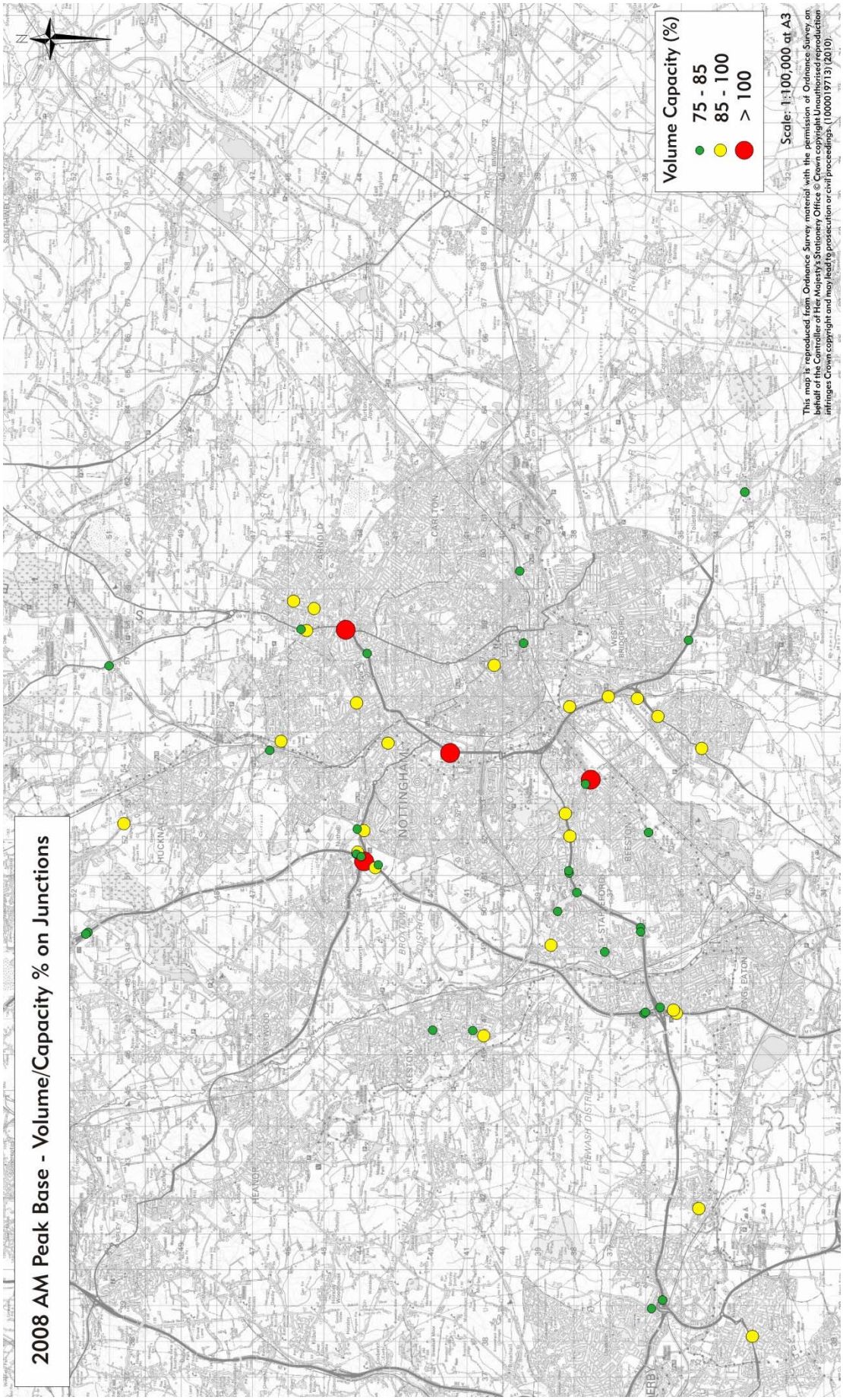


Figure 87: Observed junction capacity on the strategic road network in the Nottingham Core Housing Market Area in 2008

Source: Greater Nottingham core Housing Market Area transport model

8.4 Traffic mileage

8.4.1 Changes in area wide traffic mileage by district

When comparing 2005 with 2009, traffic mileage has only increased in Newark & Sherwood and has significantly decreased in the more urban districts of Broxtowe, Gedling and Rushcliffe. Table 32 below shows the changes in vehicle kilometres travelled when compared to 2005 in the county, region and nationally.

Table 32: Changes in area wide traffic mileage when compared to 2005

	Changes in annual area wide traffic mileage									
Year	Ashfield	Bassetlaw	Broxtowe	Gedling	Mansfield	Newark & Sherwood	Rushcliffe	Nottingham shire	East Midlands	Great Britain
2006	1%	1%	0%	0%	-2%	1%	-2%	0%	2%	2%
2007	0%	1%	-1%	2%	1%	6%	0%	2%	3%	3%
2008	-1%	0%	-9%	-7%	1%	2%	-2%	-1%	1%	2%
2009	-1%	0%	-7%	-5%	0%	3%	-4%	-1%	0%	1%

Source: DfT and Nottinghamshire County Council traffic counts

8.4.2 Changes in rural and urban area wide traffic mileage

Traffic mileage on rural roads in Nottinghamshire in 2009 is at the same level as it was in 2005. In fact it has remained at the same level as 2005 in each of the subsequent years except 2007. Traffic mileage on urban roads in Nottinghamshire in 2009 is 2% less than it was in 2005. Table 33 below details changes in annual vehicle kilometres travelled when compared to 2005 on rural and urban roads.

Table 33: Changes in rural and urban traffic mileage when compared to 2005

	Changes in area wide traffic mileage	
Year	Rural roads	Urban roads
2006	0%	1%
2007	3%	1%
2008	0%	-3%
2009	0%	-2%

Source: DfT and Nottinghamshire County Council traffic counts

8.4.3 Cordon data

Automatic traffic counts are undertaken around the four market towns in Nottinghamshire – Mansfield, Newark, Retford and Worksop – to determine the levels of traffic entering the town centres. Table 34 below details the changes in the numbers of vehicles entering the market towns when compared to 2005.

Table 34: Changes in traffic entering the market towns when compared to 2005

	Changes in traffic entering the market town			
Year	Mansfield	Newark	Retford	Worksop
2006	-2%	0%	0%	-5%
2007	-3%	0%	-2%	-8%
2008	-4%	-3%	-5%	-8%
2009	-8%	-6%	-2%	-12%

Source: DfT and Nottinghamshire County Council traffic counts

8.5 Vehicle ownership

8.5.1 Vehicle ownership levels

Table 35 below details the number of licensed vehicles in Nottinghamshire. There has been a 3% increase in the number of licensed vehicles in the county between 2005 and 2009. The numbers of vehicles continued to increase year on year until 2009 when there was a slight decrease in the numbers of licensed vehicles. The East Midlands and Great Britain both saw increases in licensed

vehicles each year and the increases were higher than seen in Nottinghamshire (4.6% and 4.1% respectively).

Table 35: No. of licensed vehicles

	No. of licensed vehicles (thousands)								
	Nottinghamshire							East Midlands	Great Britain
Year	Cars	Motor cycles	Light goods	Heavy goods	Buses and coaches	Other vehicles	Total	Total	Total
2005	360	17	38	7	1	8	431	2,534	32,897
2006	363	19	37	7	1	8	435	2,566	33,369
2007	368	19	38	8	1	7	441	2,617	33,957
2008	372	19	38	8	1	8	445	2,654	34,206
2009	371	19	37	7	1	8	444	2,655	34,258

Source: DfT vehicle licensing statistics

The most recent data on the numbers of household with access to a car are from the 2001 census. Table 36 below shows the percentage of households without access to a car and the percentage of households with two or more cars. The percentage of households in the whole of Nottinghamshire without a car is lower than the national average. The number of household in Ashfield (28%) and Mansfield (29%) districts, however, have higher than the county and national average.

Table 36: Car ownership levels

District	No. of households	Percentage of households with no car	Percentage of households with two or more cars
Ashfield	46,600	28%	26%
Bassetlaw	44,690	24%	31%
Broxtowe	45,445	23%	30%
Gedling	47,556	23%	30%
Mansfield	41,601	29%	26%
Newark & Sherwood	44,465	22%	33%
Rushcliffe	43,670	17%	40%
Nottinghamshire	314,027	24%	31%
England	20,451,427	27%	29%

Source: 2001 Census data

Generally, car ownership in the urban areas is lower than that in the district as a whole (with up to 50% of households without a car in some urban wards); and particularly less than in rural areas (where up to 94% of households had a car in some rural wards).

8.6 Traffic movements

8.6.1 Travel to work areas

There are four travel to work areas in the county as determined by 2001 Census commuting patterns (as shown in figure 88 below):

- the Nottingham travel to work area which, in addition to Nottingham city, encompasses the whole of Broxtowe and Rushcliffe districts, the majority of Gedling district, as well as parts of Ashfield and Newark & Sherwood districts. It also includes parts of eastern Derbyshire and northern Leicestershire
- the Mansfield travel to work area which includes all of Mansfield district, the majority of Ashfield and Newark & Sherwood districts, as well as the south western tip of Bassetlaw and the north of Gedling district. It also includes parts of eastern Derbyshire
- the Worksop and Retford travel to work area which encompasses most of Bassetlaw (excluding the north eastern and south western tips of the district) as well as part of Derbyshire, and

- the eastern part of Newark & Sherwood as well as the north eastern tip of Bassetlaw are part of the Lincoln travel to work area.

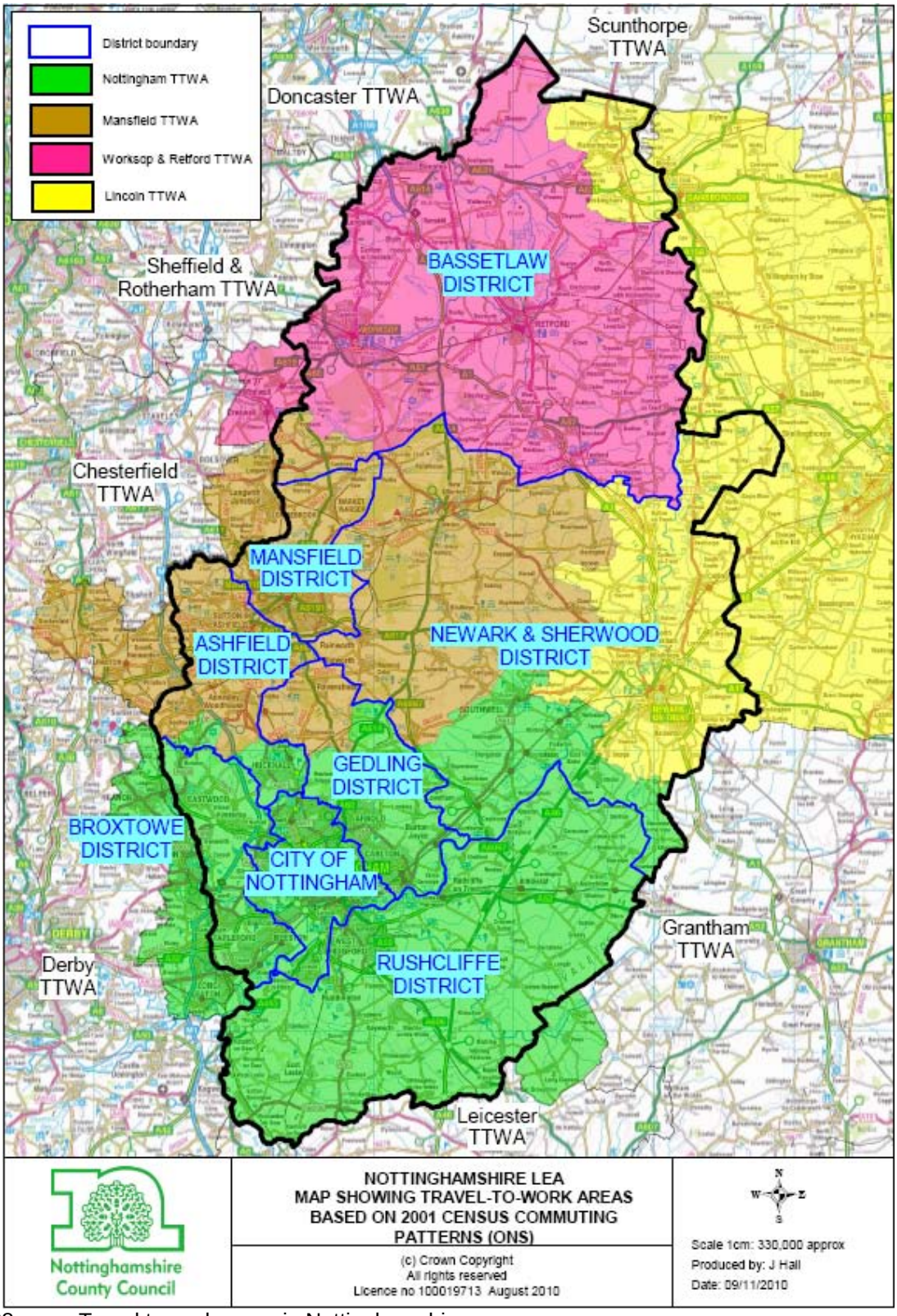


Figure 88: Travel to work areas in Nottinghamshire
Source: 2001 Census data

8.6.2 Interaction with neighbouring authorities

In 2001, most of the county's workforce worked in the county (including the city of Nottingham). Only 16% of the county's workforce is travelling outside of the county (excluding the city of Nottingham), ranging from 22% in Bassetlaw and Broxtowe districts to only 8% in Gedling, as shown in table 37 below.

Table 37: Percentage of county workforce travelling outside the county for employment

Percentage of the workforce of each district travelling out of the county for employment							
Nottinghamshire	Ashfield	Bassetlaw	Broxtowe	Gedling	Mansfield	Newark & Sherwood	Rushcliffe
16%	16%	22%	22%	8%	12%	13%	17%

Source: 2001 Census data

These details can be investigated further as shown in table 38 below. This table shows that more workers travelling out of the county are travelling into Derbyshire than any other authority.

Table 38: Percentage of workers travelling out of the county to neighbouring areas

	Percentage of workers travelling out of the county to neighbouring areas							
Travelling to	**Nottinghamshire**	Ashfield	Bassetlaw	Broxtowe	Gedling	Mansfield	Newark & Sherwood	Rushcliffe
Derbyshire	6%	12%	2%	15%	3%	8%	2%	3%
Leicestershire	3%	1%	0%	3%	2%	1%	1%	9%
Lincolnshire	1%	0%	4%	0%	0%	0%	5%	1%
S Yorkshire	2%	1%	12%	0%	0%	1%	1%	0%
Elsewhere	3%	2%	4%	3%	3%	2%	3%	4%

Source: 2001 Census data

Table 39, as well as figure 89, below give detail on the numbers of people travelling to and from Nottinghamshire to work. The largest numbers of workers are travelling from the county (particularly the south of the county) into Nottingham. There are also significant flows of workers travelling to or from Derbyshire in the west of the county. The majority of these movements are people travelling between Derbyshire and its neighbouring Nottinghamshire districts of Ashfield, Bassetlaw, Broxtowe and Mansfield for work.

Movement of workers across neighbouring authorities' boundaries is also evident (although to a much lesser degree) in the south of the county between Leicester/Leicestershire and the districts of Broxtowe and Rushcliffe; in the north of the county between Bassetlaw district and South Yorkshire; and in the east of the county between Lincoln/Lincolnshire and Newark & Sherwood district.

In the north of the county, Bassetlaw district forms part of the Sheffield City Region. The Sheffield City Region also includes the Derbyshire districts of Bolsover, Chesterfield, Derbyshire Dales and North East Derbyshire along with the Yorkshire councils of Barnsley, Doncaster, Rotherham and Sheffield. In 2001, only 12% of the Bassetlaw workers, however, travel to South Yorkshire for work.

Table 39: Where workers are travelling to/from outside Nottinghamshire

	Where workers are travelling to/ from						
	Derby / Derbys	Leicester/ Leics	Lincoln / Lincs	Northants / Rutland	South Yorks	London	Rest of UK
No. of residents from outside the county travelling to Nottinghamshire for work	22,604	4,088	4,933	250	6,177	169	4,022
No. of Nottinghamshire residents who work outside the county boundary	25,796	8,487	5,283	543	6,816	1,431	9,000

Source: 2001 Census data

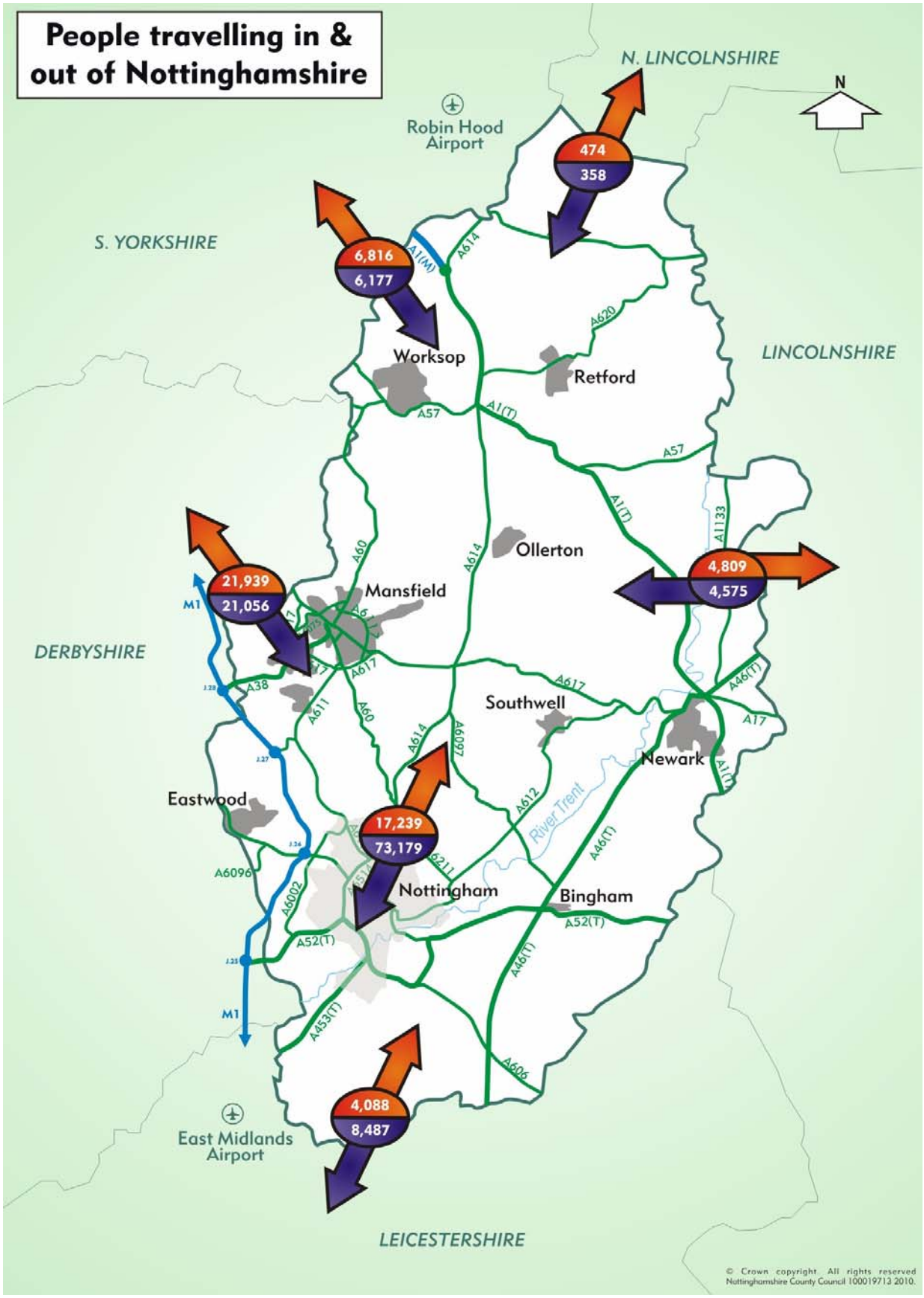


Figure 89: People travelling into and out of Nottinghamshire for work
Source: 2001 Census data

8.6.3 Interaction between districts

Table 40 shows the percentage of county and Nottingham city workforce whom work in each of the Nottinghamshire districts and Nottingham city, whilst figure 90 shows the numbers of workers travelling between each district. In the south of the county the main employment attractor is the

city of Nottingham. In terms of employment, Bassetlaw is the most self-sufficient of all of the districts with over 70% of its residents working within the district. Almost 70% of Mansfield residents work in either Mansfield or neighbouring Ashfield.

Table 40: Where workers are travelling to/from within Nottinghamshire

	Place of employment							
Place of residence	Ashfield	Bassetlaw	Broxtowe	Gedling	Mansfield	Newark	Rushcliffe	Nottingham
Ashfield	50.53%	0.85%	2.88%	2.76%	8.09%	1.41%	1.11%	15.94%
Bassetlaw	0.58%	71.07%	0.14%	0.36%	1.27%	2.70%	0.37%	1.02%
Broxtowe	2.14%	0.13%	35.79%	2.21%	0.64%	0.37%	2.74%	34.24%
Gedling	2.97%	0.38%	2.74%	35.98%	1.69%	1.83%	3.79%	42.41%
Mansfield	15.21%	2.56%	0.73%	1.92%	54.75%	5.65%	0.78%	5.84%
Newark	3.19%	3.40%	0.67%	2.96%	6.64%	59.29%	2.19%	8.80%
Rushcliffe	0.94%	0.14%	2.60%	2.89%	0.44%	1.32%	39.56%	34.77%
Nottingham	1.76%	0.14%	3.91%	5.09%	0.60%	0.57%	4.87%	72.92%

Source: 2001 Census data

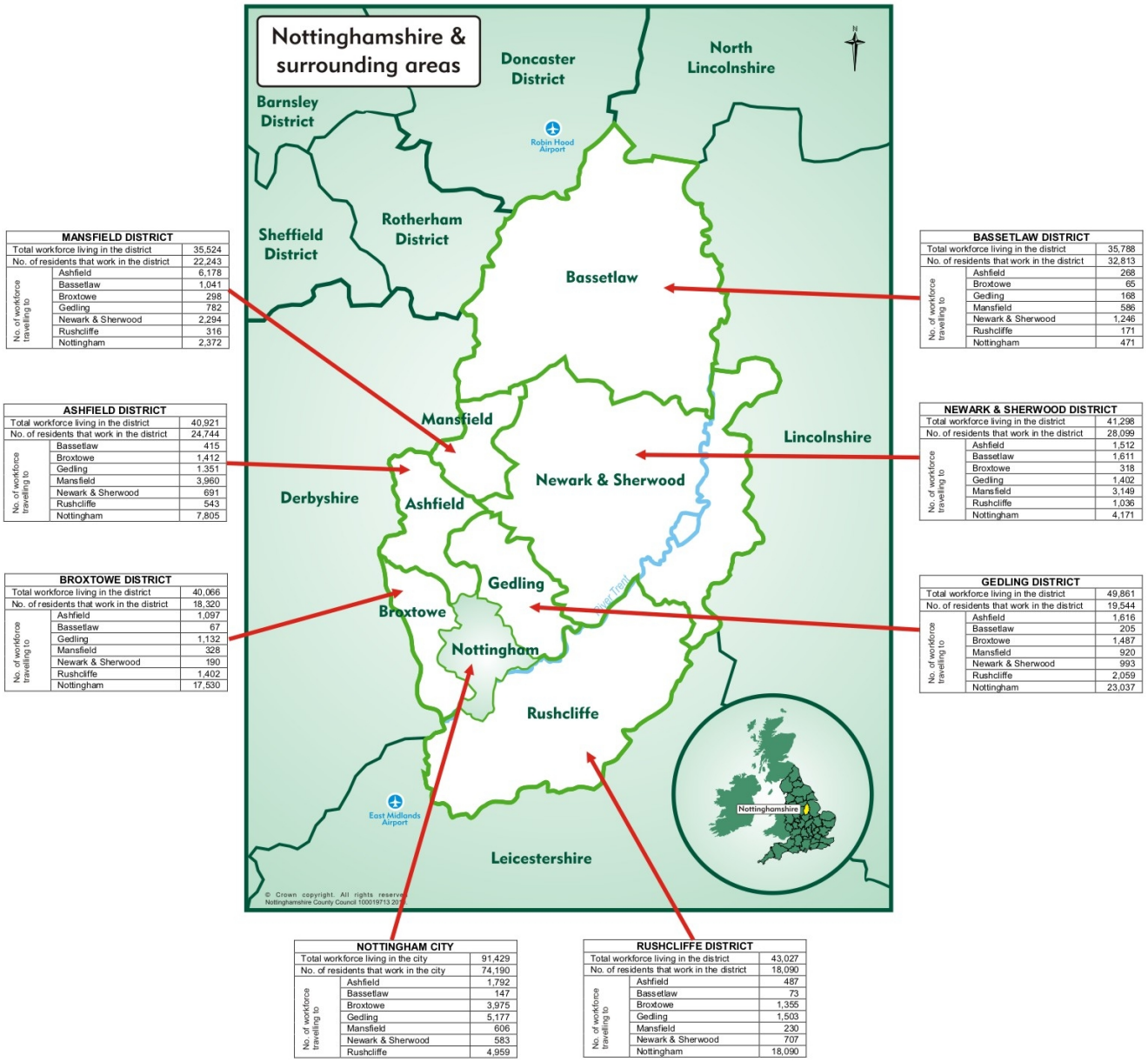


Figure 90: Where workers are travelling to (within the county area)

Source: 2001 Census data

8.6.4 Cordon data

Automatic traffic counts are undertaken around the four market towns in North Nottinghamshire – Mansfield, Newark, Retford and Worksop – to determine the levels of traffic entering the town centres. Table 41 below details the changes in the numbers of vehicles entering the market towns when compared to 2005.

Table 41: Changes in traffic entering the market towns when compared to 2005

	Changes in traffic entering the market town			
Year	Mansfield	Newark	Retford	Worksop
2005	0	0	0	0
2006	-2%	0%	0%	-5%
2007	-3%	0%	-2%	-8%
2008	-4%	-3%	-5%	-8%
2009	-8%	-6%	-2%	-12%

Source: DfT and Nottinghamshire County Council traffic counts

9. Road casualties

The numbers of casualties injured on Nottinghamshire's roads has been in steady decline for a number of years as shown in the figures below. There remain, however, three particular areas of focus – speed, motorcycle riders and young drivers. These three areas are detailed in section 9.7 below.

The numbers of casualties in the districts correspond to the lengths of network in each of the districts (i.e. the length of the networks is greatest in Newark & Sherwood, Bassetlaw, and Rushcliffe respectively).

9.1 Killed and seriously injured casualties

The numbers of killed and seriously injured (KSI) casualties has decreased year on year and in 2009 the number of casualties had fallen by over 46% when compared to the 1994-98 average; and by 25% when compared to 2005. The numbers of killed and seriously injured casualties are shown in figure 91 and table 42 below.

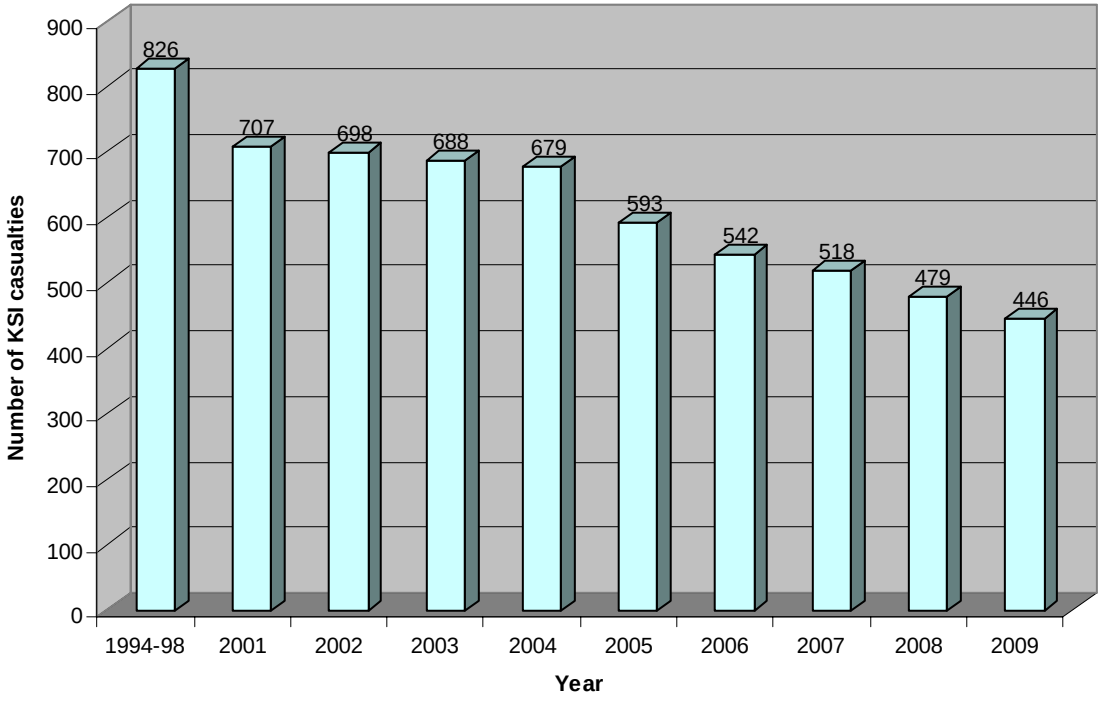


Figure 91: The number of killed and seriously injured casualties in Nottinghamshire
Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

The numbers of KSI casualties in Broxtowe and Mansfield districts increased in 2009 and there have been slight increases in the number of casualties in these two districts when comparing 2009 with 2005. There was an 8% increase in Broxtowe district – although almost a fifth of these are on motorway and trunk roads – and a 6% increase in Mansfield district. It should be noted, however, that these districts had the lowest numbers of casualties in the base year.

Table 42: The number of killed and seriously injured casualties in Nottinghamshire

	No. of killed or seriously injured casualties					Comparison of 2009 with 2005
District	**2005**	**2006**	**2007**	**2008**	**2009**	**% change**
Ashfield	71	74	73	53	54	-24%
Bassetlaw	119	103	88	85	84	-29%
Broxtowe	49	46	69	47	53	8%
Gedling	72	57	45	45	46	-36%
Mansfield	54	51	43	63	57	6%
Newark & Sherwood	127	118	127	109	89	-30%
Rushcliffe	101	93	72	78	66	-35%
Nottinghamshire	593	542	518	479	446	-25%

Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

When comparing 2009 with the 1994-98 average, Nottinghamshire has seen more significant decreases in the number of KSI casualties than most other authorities in the East Midlands as shown in table 43 below, better than the regional and national averages.

Table 43: Killed or seriously injured casualty comparative data from East Midlands authorities

	No. of killed or seriously injured casualties		Comparison of 2009 with 1994-98 average
Authority	**1994-98 average**	**2009**	**% change**
Nottingham City	323	148	-54%
Northamptonshire	773	391	-49%
Nottinghamshire	824	447	-46%
Lincolnshire	764	456	-40%
Leicestershire	408	263	-36%
Derbyshire	618	449	-27%
Leicester City	126	87	-31%
Derby City	143	117	-18%
East Midlands Region	4,020	2,384	-41%
England	40,815	23,206	-43%

Source: DfT Reported Road Casualties Great Britain 2009 Annual Report

9.2 Slightly injured casualties

The numbers of slight injuries has seen significant reductions and in 2009 the number of casualties had decreased by just over 21% when compared to the 1994-98 average; and by 15% when compared to 2005. The numbers of slight injured casualties are shown in figure 92 and table 44 below.

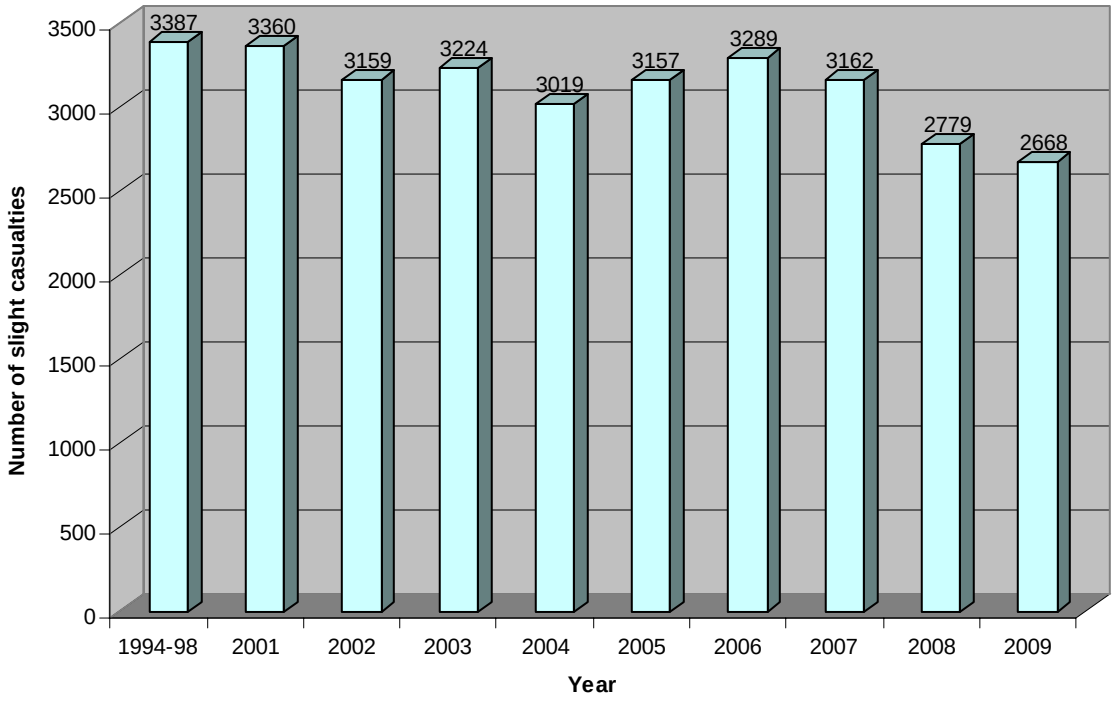


Figure 92: The number of slightly injured casualties in Nottinghamshire
Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

When comparing 2009 with 2005, the numbers of slight casualties has decreased in each of the districts except Rushcliffe. The numbers of casualties in Rushcliffe has, however, decreased year on year since 2006.

Table 44: The number of slightly injured casualties in Nottinghamshire

	No. of slight casualties					Comparison of 2009 with 2005
District	**2005**	**2006**	**2007**	**2008**	**2009**	**% change**
Ashfield	448	531	470	412	395	-12%
Bassetlaw	586	572	531	415	434	-26%
Broxtowe	364	336	409	320	318	-13%
Gedling	386	371	363	299	334	-13%
Mansfield	463	427	393	433	369	-20%
Newark & Sherwood	537	561	566	469	421	-22%
Rushcliffe	373	491	433	430	401	8%
Nottinghamshire	3,157	3,289	3,162	2,779	2,668	-15%

Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

When comparing 2009 with the 1994-98 average, the reduction in slight casualties in Nottinghamshire is the same as the regional average but less that the national average as shown in table 45 below. The actual number of casualties remains higher than other authorities in the region (except Lincolnshire), although it should be noted that the number of casualties in Nottinghamshire also started from a higher base figure.

Table 45: Slightly injured casualty comparative data from East Midlands authorities

	No. of slightly injured casualties		Comparison of 2009 with 1994-98 average
Authority	**1994-98 average**	**2009**	**% change**
Northamptonshire	2,316	1,557	-33%
Leicestershire	2,773	1,945	-30%
Derbyshire	3,585	2,525	-30%
Nottingham City	1,452	1,089	-25%
Nottinghamshire	3,381	2,672	-21%
Leicester City	1,390	1,255	-10%
Lincolnshire	3,079	2,859	-7%
Derby City	925	970	5%
East Midlands Region	19,097	14,992	-21%
England	241,953	173,574	-28%

Source: DfT Reported Road Casualties Great Britain 2009 Annual Report

9.3 Child killed and seriously injured casualties

The numbers of child KSI casualties has decreased year on year and in 2009 the number of casualties had fallen by just over 68% when compared to the 1994-98 average; and by 50% when compared to 2005. The numbers of child killed and seriously injured casualties are shown in figure 93 and table 46 below.

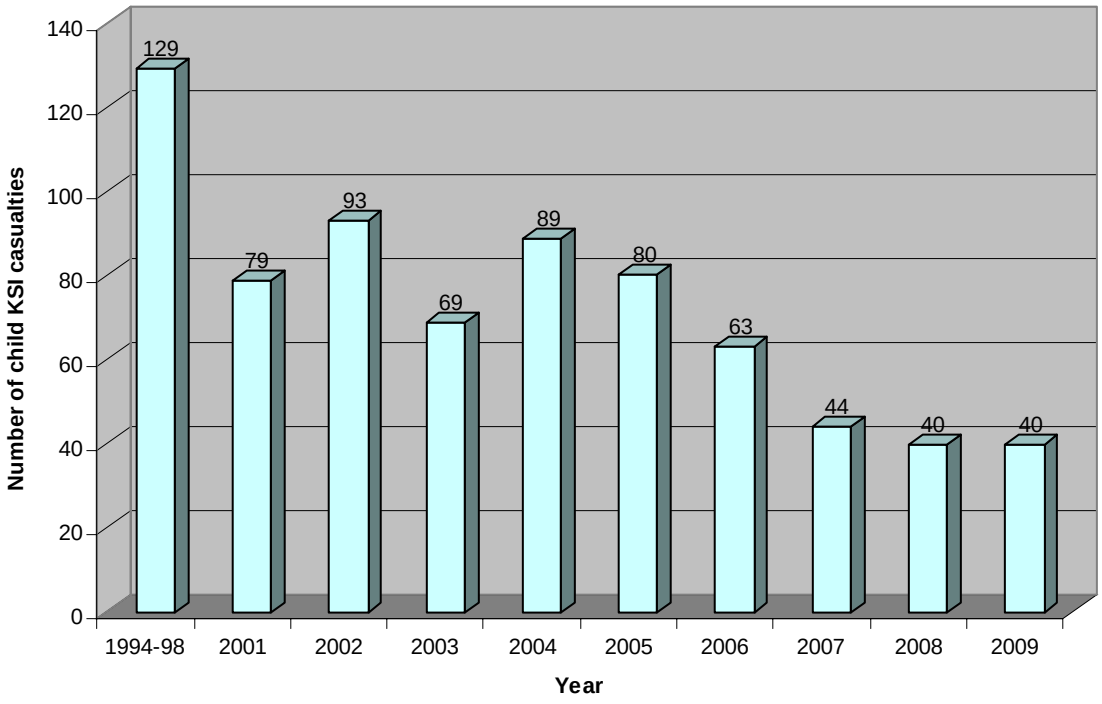


Figure 93: The number of child killed and seriously injured casualties in Nottinghamshire
Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

Despite starting from a low base, the numbers of child KSI casualties have decreased in each of the districts when comparing 2009 with 2005.

Table 46: The number of child killed and seriously injured casualties in Nottinghamshire

	No. of child killed or seriously injured casualties					Comparison of 2009 with 2005
District	**2005**	**2006**	**2007**	**2008**	**2009**	**% change**
Ashfield	15	13	5	6	5	-66%
Bassetlaw	16	7	9	6	8	-50%
Broxtowe	8	8	6	4	4	-50%
Gedling	7	6	8	5	3	-57%
Mansfield	11	10	5	8	10	-9%
Newark & Sherwood	13	12	9	4	7	-46%
Rushcliffe	10	7	4	7	4	-60%
Nottinghamshire	80	63	44	40	40	-50%

Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

When comparing 2009 with the 1994-98 average, Nottinghamshire has seen more significant decreases in the number of child KSI casualties than other authorities in the East Midlands (except Nottingham City) as shown in table 47 below, better than the regional and national averages. But the actual number of casualties is higher than all the other authorities in the region, although it should be noted that the number of casualties in Nottinghamshire also started from a higher base figure.

Table 47: Child killed or seriously injured casualty comparative data from East Midlands authorities

	No. of child killed or seriously injured casualties		Comparison of 2009 with 1994-98 average
Authority	**1994-98 average**	**2009**	**% change**
Nottingham City	67	16	-76%
Nottinghamshire	129	41	-68%
Lincolnshire	76	27	-65%
Leicestershire	42	16	-62%
Derby City	28	11	-61%
Northamptonshire	88	38	-57%
Derbyshire	72	34	-53%
Leicester City	27	18	-34%
East Midlands Region	534	202	-62%
England	5,729	2,278	-60%

Source: DfT Reported Road Casualties Great Britain 2009 Annual Report

9.4 Pedal cyclist killed or seriously injured casualties

The numbers of pedal cyclist KSI casualties has decreased year on year and in 2009 the number of casualties had fallen by almost 56% when compared to the 1994-98 average; and by over 22% when compared to 2005. The numbers of pedal cyclists killed and seriously injured casualties are shown in figure 94 and table 48 below.

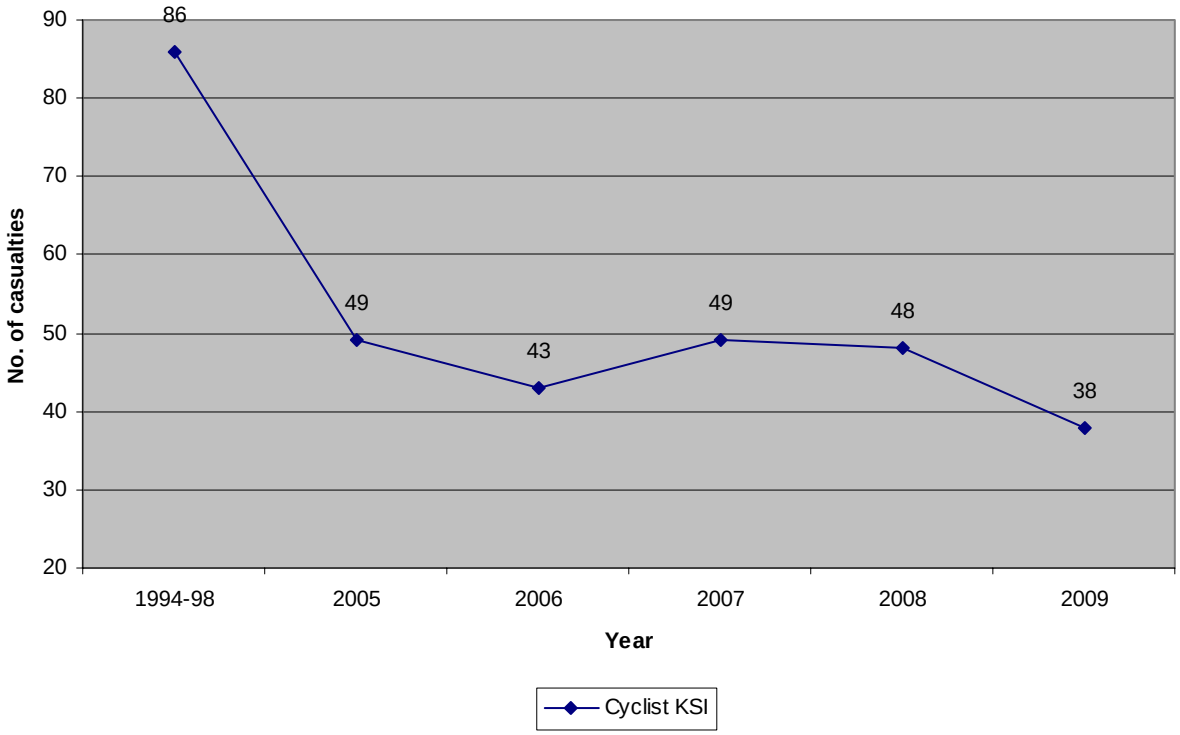


Figure 94: The number of pedal cyclist killed and seriously injured casualties in Nottinghamshire
Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

When comparing 2009 with 2005 the numbers of pedal cyclist KSI casualties has decreased in each of the districts except Broxtowe and Rushcliffe. Whilst there have been increases in the number of cyclist KSI casualties in Broxtowe and Rushcliffe, the actual numbers of casualties in 2009 are still small, 12 and 7 respectively. Both Broxtowe and Rushcliffe districts also started from a very low base (4 and 3 casualties respectively) and have seen significant increases in cycling levels (5% and 12% respectively) during the same period.

Table 48: The number of pedal cyclist killed and seriously injured casualties in Nottinghamshire

	No. of cyclist killed or seriously injured casualties					Comparison of 2009 with 2005
District	**2005**	**2006**	**2007**	**2008**	**2009**	**% change**
Ashfield	9	6	4	4	4	-56%
Bassetlaw	10	4	8	6	2	-80%
Broxtowe	4	10	6	6	12	200%
Gedling	6	4	6	4	3	-50%
Mansfield	6	7	1	7	5	-17%
Newark & Sherwood	11	7	19	12	5	-55%
Rushcliffe	3	5	5	9	7	133%
Nottinghamshire	49	43	49	48	38	-22%

Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

When comparing 2009 with the 1994-98 average, Nottinghamshire has seen more significant decreases in the number of pedal cyclist KSI casualties than other authorities in the East Midlands (except Northamptonshire) as shown in table 49 below, significantly better than the regional and national averages. But the actual number of casualties is higher than all the other authorities in the region, although it should be noted that the number of casualties in Nottinghamshire also started from a higher base figure.

Table 49: Pedal cyclist killed or seriously injured casualty compared with East Midlands authorities

	No. of pedal cyclist killed or seriously injured casualties		Comparison of 2009 with 1994-98 average
Authority	**1994-98 average**	**2009**	**% change**
Northamptonshire	47	18	-62%
Nottinghamshire	86	38	-56%
Leicestershire	28	14	-49%
Nottingham City	39	27	-30%
Lincolnshire	44	36	-19%
Derbyshire	37	32	-13%
Leicester City	13	13	0%
Derby City	17	25	+45%
East Midlands Region	313	205	-34%
England	3,376	2,470	-27%

Source: DfT Reported Road Casualties Great Britain 2009 Annual Report

9.5 Pedestrians killed or seriously injured casualties

The numbers of pedestrian KSI casualties has seen steady decreases and in 2009 the number of casualties had reduced by 58% when compared to the 1994-98 average; and by 37% when compared to 2005. The numbers of pedestrians killed and seriously injured casualties are shown in figure 95 and table 50 below.

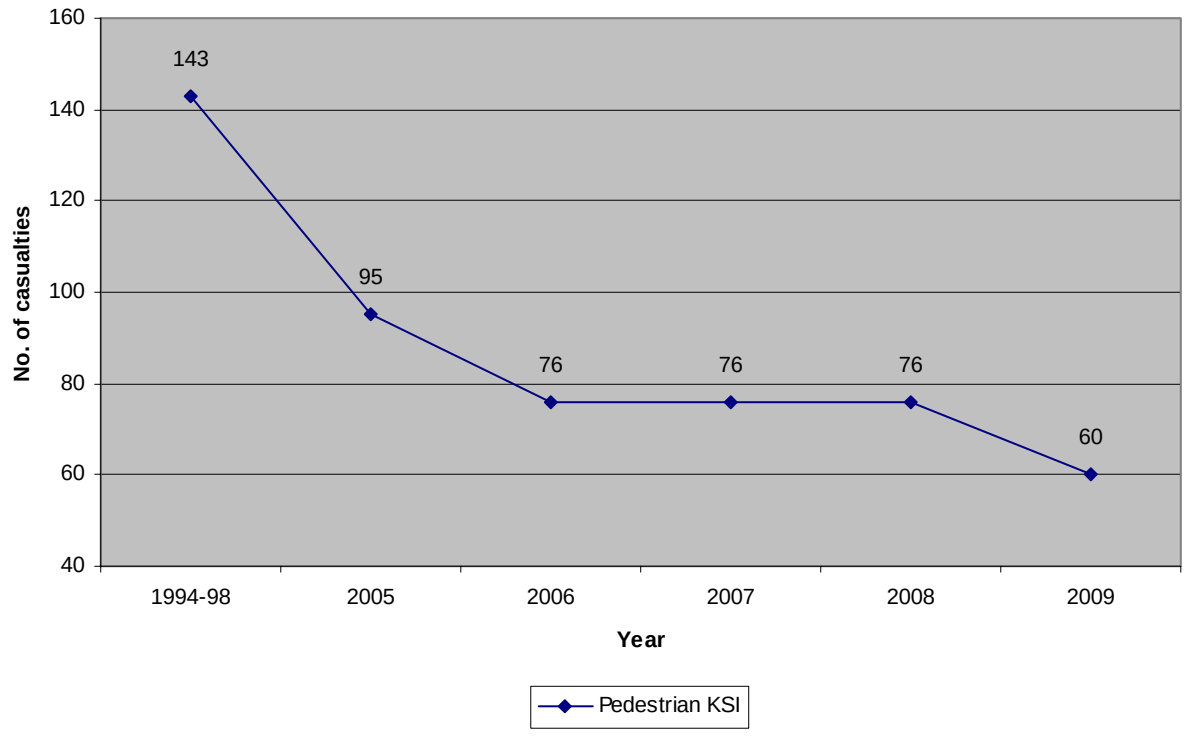


Figure 95: The number of pedestrian killed and seriously injured casualties in Nottinghamshire
Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

Despite starting from a low base, the numbers of pedestrian KSI casualties have decreased in each of the districts when comparing 2009 with 2005, except Ashfield where there has been no change.

Table 50: The number of pedestrian killed and seriously injured casualties in Nottinghamshire

	No. of pedestrian killed or seriously injured casualties					Comparison of 2009 with 2005
District	**2005**	**2006**	**2007**	**2008**	**2009**	**% change**
Ashfield	15	14	14	10	15	0%
Bassetlaw	13	10	12	14	5	-62%
Broxtowe	10	10	10	8	5	-50%
Gedling	17	10	6	11	5	-71%
Mansfield	17	12	11	17	13	-24%
Newark & Sherwood	16	15	19	11	11	-31%
Rushcliffe	7	5	4	5	6	-14%
Nottinghamshire	95	76	76	76	60	-37%

Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

When comparing 2009 with the 1994-98 average, Nottinghamshire has seen more significant decreases in the number of pedestrian KSI casualties than other authorities in the East Midlands (except Nottingham City) as shown in table 51 below, significantly better than the regional and national averages.

Table 51: Pedestrian killed or seriously injured casualties compared with East Midlands authorities

	No. of pedestrian killed or seriously injured casualties		Comparison of 2009 with 1994-98 average
Authority	**1994-98 average**	**2009**	**% change**
Nottingham City	133	50	-62%
Nottinghamshire	143	60	-58%
Leicestershire	60	26	-57%
Derby City	59	26	-56%
Northamptonshire	123	62	-49%
Derbyshire	109	61	-44%
Leicester City	62	36	-42%
Lincolnshire	80	58	-28%
East Midlands Region	771	381	-51%
England	9,861	5,236	-47%

Source: DfT Reported Road Casualties Great Britain 2009 Annual Report

9.6 Car drivers and passengers

The numbers of car driver and passenger KSI casualties has decreased significantly and in 2009 the number of casualties had fallen by 47% when compared to the 1994-98 average; and by 27% when compared to 2005. The numbers of car drivers and passengers killed and seriously injured casualties are shown in figure 96 and table 52 below.

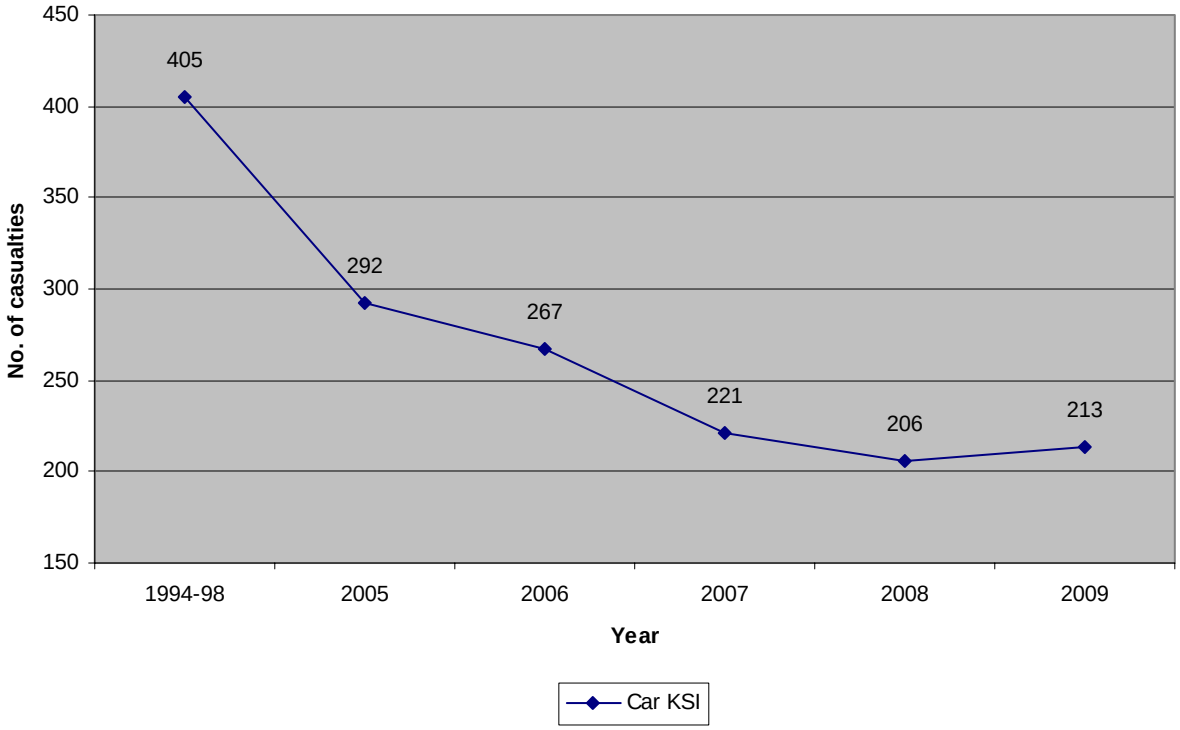


Figure 96: The number of car driver and passenger killed and seriously injured casualties in Nottinghamshire

Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

When comparing 2009 with 2005, the numbers of car driver and passenger KSI casualties has decreased in each of the districts except Mansfield, where the number of casualties has increased in each of the last two years. The numbers of car driver and passengers KSI casualties in Mansfield, however, remains low when compared to other districts.

Table 52: The number of car driver and passenger killed and seriously injured casualties in Nottinghamshire

	No. of car driver and passenger killed or seriously injured casualties					Comparison of 2009 with 2005
District	**2005**	**2006**	**2007**	**2008**	**2009**	**% change**
Ashfield	26	33	24	24	23	-12%
Bassetlaw	61	53	43	33	49	-20%
Broxtowe	24	10	31	17	15	-38%
Gedling	34	26	11	15	20	-41%
Mansfield	16	17	17	20	21	31%
Newark & Sherwood	68	68	48	55	55	-19%
Rushcliffe	63	60	46	42	33	-48%
Nottinghamshire	292	267	221	206	213	-27%

Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

When comparing 2009 with the 1994-98 average, the reduction in car driver and passenger KSI casualties in Nottinghamshire is higher than the regional average but less that the national average as shown in table 53 below. But the actual number of casualties is higher than some other authorities in the region, although it should be noted that the number of casualties in Nottinghamshire also started from a higher base figure.

Table 53: Car drivers and passengers killed or seriously injured casualties compared with East Midlands authorities

	No. of car driver and passenger killed or seriously injured casualties		Comparison of 2009 with 1994-98 average
Authority	**1994-98 average**	**2009**	**% change**
Nottingham City	94	34	-64%
Northamptonshire	471	210	-55%
Nottinghamshire	418	215	-49%
Lincolnshire	478	249	-48%
Derbyshire	327	201	-39%
Leicester City	35	23	-35%
Leicestershire	233	155	-34%
Derby City	44	33	-25%
East Midlands Region	2,130	1,135	-47%
England	19,579	9,249	-53%

Source: DfT Reported Road Casualties Great Britain 2009 Annual Report

9.7 Road safety issues

9.7.1 Motorcyclist killed or seriously injured casualties

The numbers of motorcycle KSI casualties has decreased by 15% when compared to the 1994-98 average; and by 10% since 2005. This decrease is significantly lower than all other road users but in line with the national picture. In 2009 motorcyclists accounted for 1% of traffic on Nottinghamshire's roads but 25% of all of the KSI casualties. The numbers of motorcycle riders and passengers killed and seriously injured casualties are shown in figure 97 and table 54 below.

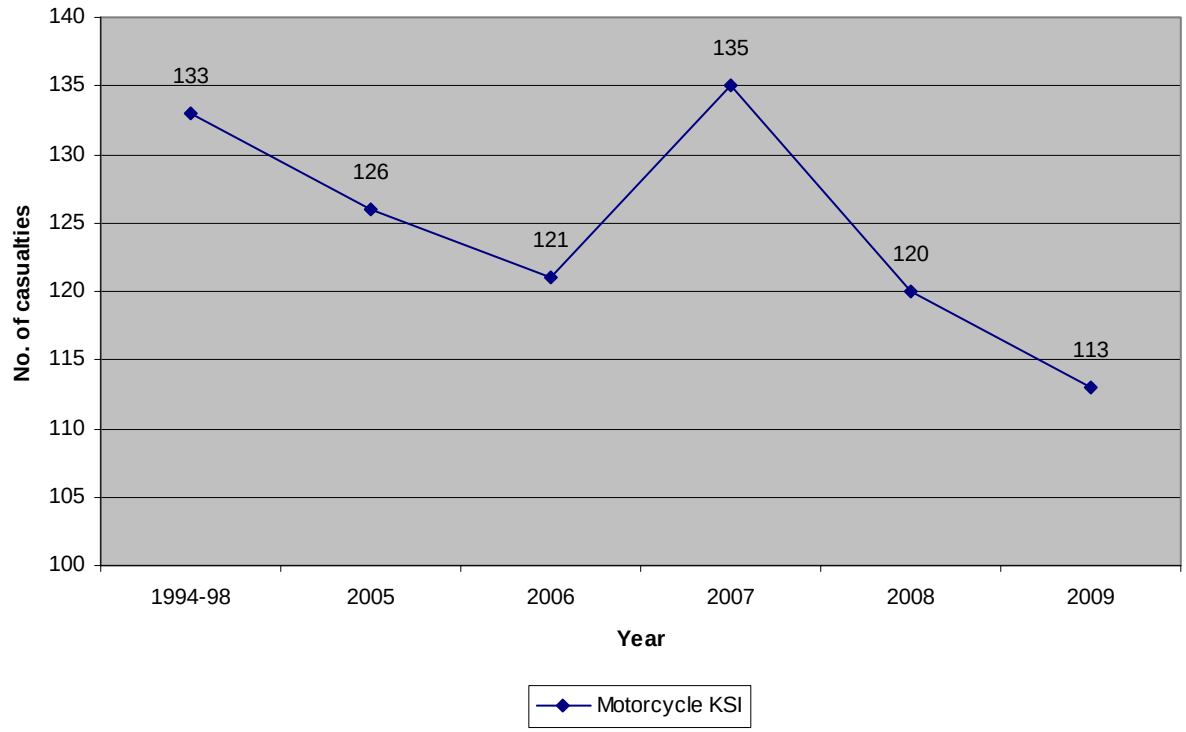


Figure 97: The number of motorcyclists and passenger killed and seriously injured casualties in Nottinghamshire

Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

The greatest numbers of KSI motorcycle casualties involve riders of larger bikes over 500cc whilst they are overtaking (stationary and moving vehicles) or negotiating bends. The largest numbers of slight casualties involve riders of smaller bikes up to 125cc whilst they are overtaking (stationary and moving vehicles) or turning right. Historically the majority of accidents have involved older

riders on higher powered bikes but accidents involving teenagers riding mopeds and bikes up to 125cc now feature.

When comparing 2009 with 2005, the more urban areas of Broxtowe and Gedling have seen increases in the numbers of KSI motorcycle casualties.

Table 54: The number of motorcyclists and passenger killed and seriously injured casualties in Nottinghamshire split by district

	No. of motorcyclist and passengers killed or seriously injured casualties					Comparison of 2009 with 2005
District	**2005**	**2006**	**2007**	**2008**	**2009**	**% change**
Ashfield	19	20	26	15	9	-53%
Bassetlaw	26	26	20	24	23	-12%
Broxtowe	10	13	18	13	17	70%
Gedling	14	14	20	14	18	29%
Mansfield	15	13	13	13	15	0%
Newark & Sherwood	22	21	29	24	16	-27%
Rushcliffe	22	14	9	18	15	-32%
Nottinghamshire	126	121	135	120	113	-10%

Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

When comparing 2009 with the 1994-98 average, Nottinghamshire has seen more significant decreases in the number of motor cycle and passenger KSI casualties than most other authorities in the East Midlands as shown in table 55 below, better than the regional and national averages. But the actual number of casualties is higher than most other authorities in the region, although it should be noted that the number of casualties in Nottinghamshire also started from a higher base figure.

Table 55: Motorcycle rider and passengers killed or seriously injured casualties compared with East Midlands authorities

	No. of motorcycle rider and passenger killed or seriously injured casualties		Comparison of 2009 with 1994-98 average
Authority	**1994-98 average**	**2009**	**% change**
Nottingham City	44	28	-37%
Lincolnshire	112	94	-16%
Nottinghamshire	133	113	-15%
Northamptonshire	89	79	-11%
Leicestershire	61	57	-6%
Leicester City	12	11	-5%
Derbyshire	116	138	+19%
Derby City	19	32	+65%
East Midlands Region	590	558	-5%
England	5,867	5,211	-11%

Source: DfT Reported Road Casualties Great Britain 2009 Annual Report

9.7.2 Young drivers

When comparing 2009 with 2005, the numbers of young driver KSI casualties has fluctuated but has ultimately increased by 12%. The proportion of young driver KSI casualties has also increased. Young driver KSI casualties in 2009 accounted for 37% of all of the car driver KSI casualties in Nottinghamshire, compared to 29% in 2005. The numbers of young car drivers and passengers killed and seriously injured casualties are shown in figure 98 below.

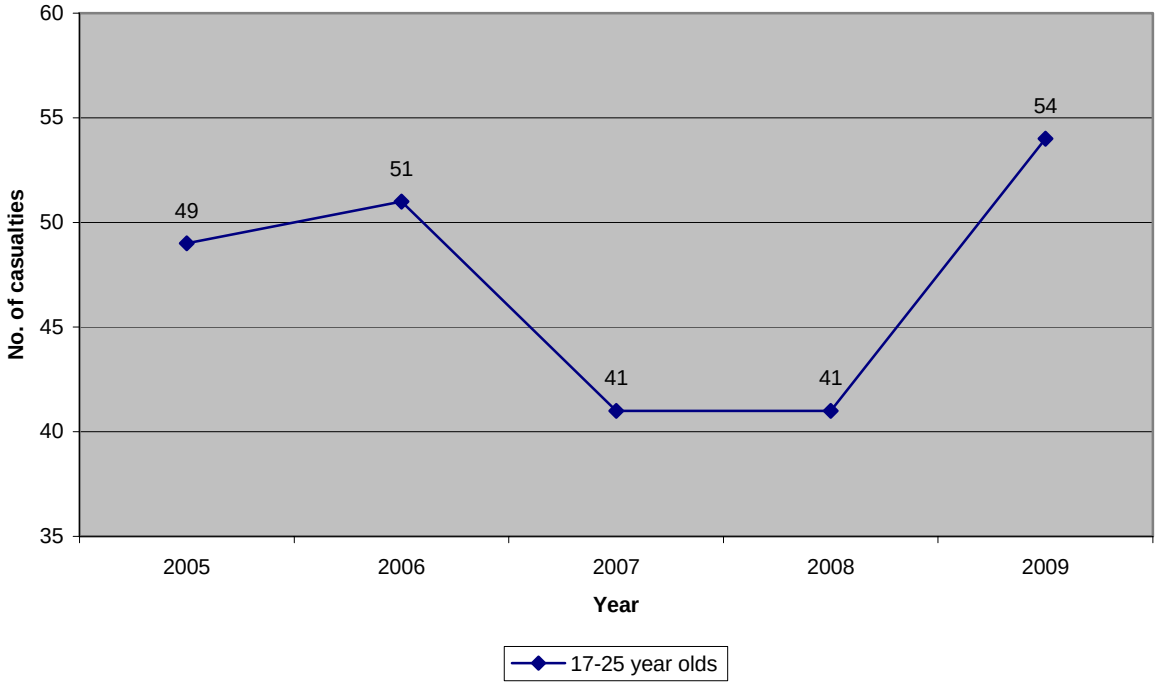


Figure 98: The number of young drivers and passenger killed and seriously injured casualties in Nottinghamshire

Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

9.7.3 Speed

The numbers of KSI casualties where speed (either excessive speed or driving too fast for the conditions) was a contributory factor to the accident has decreased by 24% when comparing 2009 with 2005. The number of fatal casualties where speed was a contributory factor to the accident, however, has doubled between 2005 and 2009. In 2009 speed was a contributory factor in 43% of all of the fatal casualties in Nottinghamshire. The numbers of killed and seriously injured casualties where speed was a contributory factor are shown in figure 99 below.

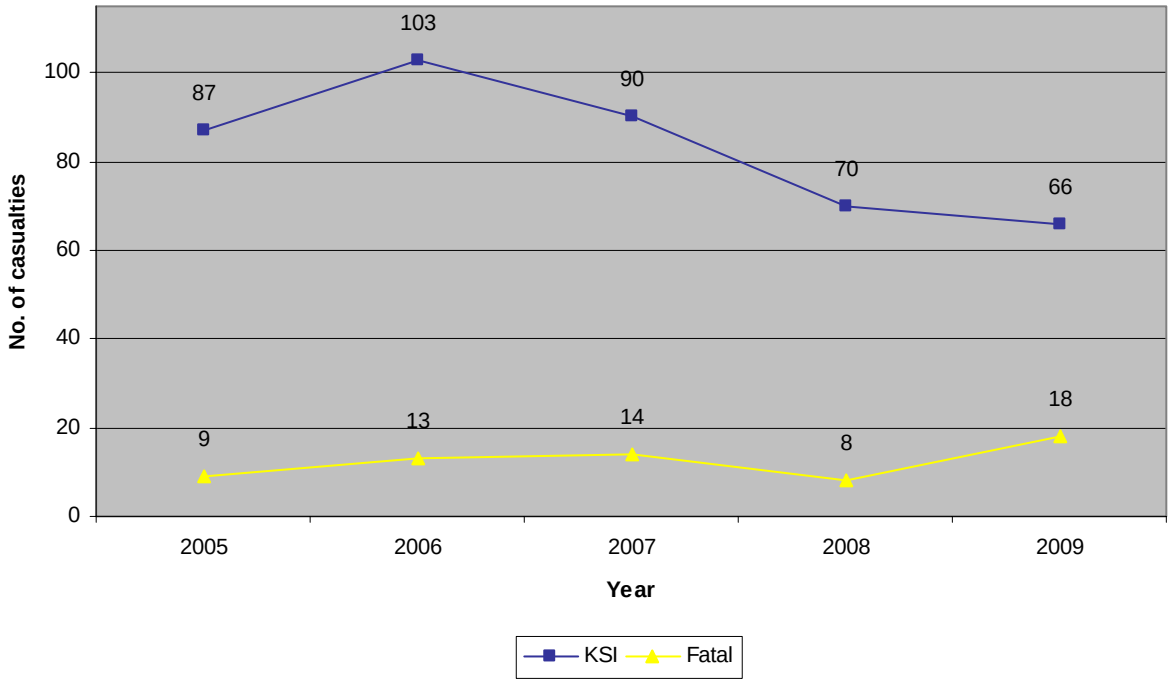


Figure 99: The number of fatal casualties and the number of killed and seriously injured casualties in Nottinghamshire where speed was a contributory factor to the accident

Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

The number of killed and seriously injured casualties where speed was a contributory factor has significantly decreased in rural areas but has slightly increased in urban areas as shown in figure 100 below.

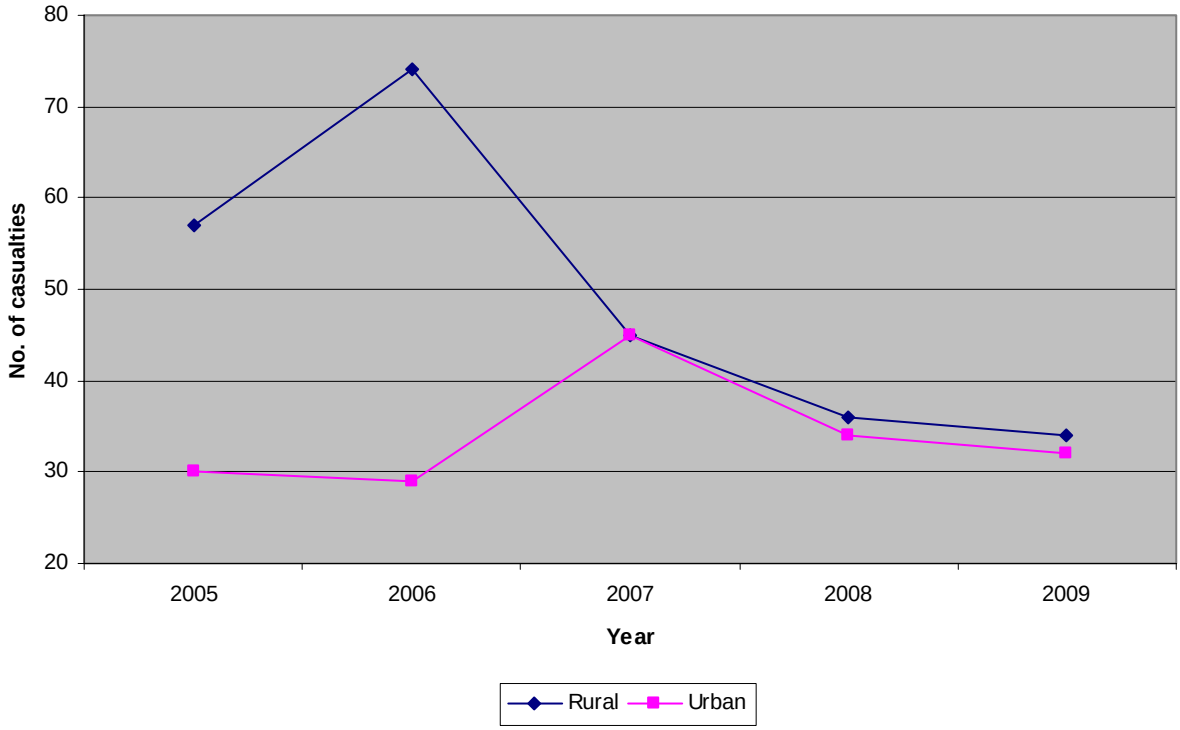


Figure 100: The number of killed and seriously injured casualties in rural and urban areas of Nottinghamshire where speed was a contributory factor to the accident

Source: Nottinghamshire County Council from STATS19 data - figures as at 05.08.10

10. Passenger transport

10.1 Passenger journeys

10.1.1 Bus patronage

In 2009/10 over 35 million passenger bus journeys originated in the county. Despite a very small decrease in passenger numbers in 2009/10, bus passenger numbers in the county have increased by almost 8% since 2005/06 as shown in figure 101 below.

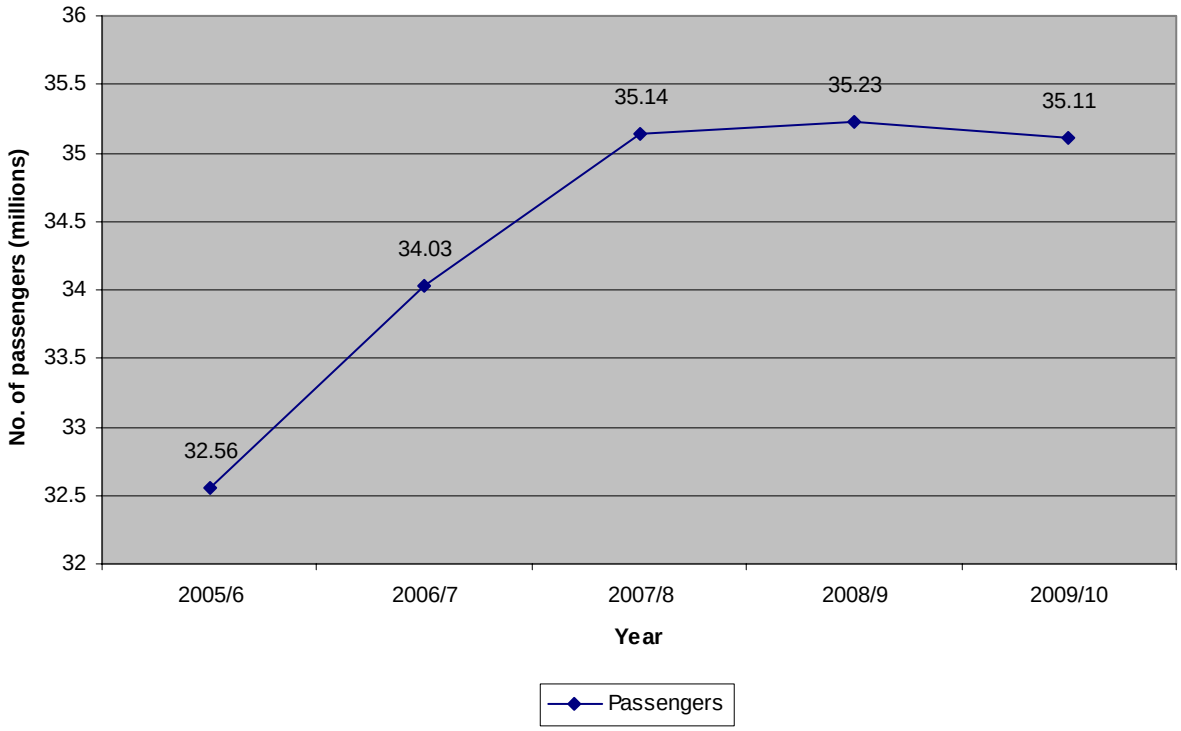


Figure 101: Bus passenger journeys originating in Nottinghamshire
Source: Bus operators

10.1.2 Rail patronage

Rail patronage has significantly increased in Nottinghamshire as shown in table 56 below which details the growth in rail journeys at all stations in Nottinghamshire between 2001/02 and 2008/09. Between 2005/06 and 2008/09 the numbers of rail journeys has increased by 37%. The rate of growth in Nottinghamshire exceeds the national growth, and is greater than the change in road traffic nationally or in Nottinghamshire, as shown in figure 102 below.

Table 56: Growth in rail journeys at all stations in Nottinghamshire 2001/02 to 2008/09

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Rail journeys In Nottinghamshire	2,278,000	2,477,000	2,592,000	2,643,000	2,737,000	3,511,000	3,537,000	3,738,000

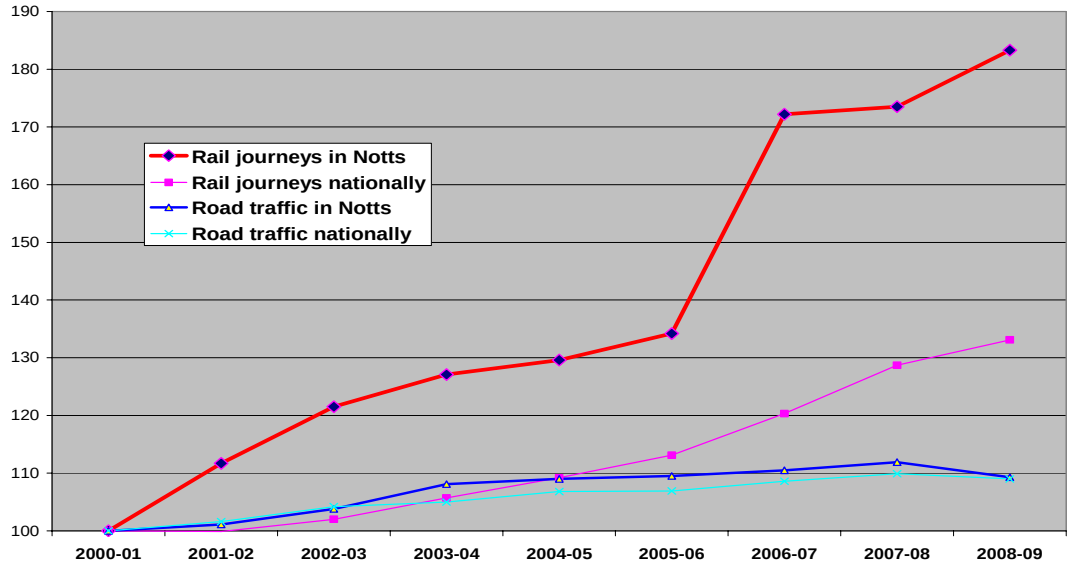


Figure 102: Growth of rail patronage and road traffic

Midland Mainline

Until 2000 the frequency of services on the Midland Mainline (MML) was lower than on other Inter-City routes, with just one train per hour between London and Nottingham. In 2000, however, a second train per hour was introduced between Nottingham and London. This brought the service frequency up to more normal Inter-City levels and led to large patronage increases. Despite underinvestment in the MML (as detailed in section xxxx below), patronage has been rising faster on the MML (98% increase in 11 years) than the 76% overall rise on Inter-City routes.

East Coast Main Line

The East Coast Main Line (ECML) provides important connections from Newark and Retford to London and the North:

- Newark to London is the 6th largest flow of passengers on the entire ECML, with 567,000 passenger journeys per year
- Retford has over 100,000 ECML passengers per year, a far greater volume than would be expected for a town of its size, and
- there are also important flows to Doncaster, Leeds and further north.

Since 1998/9 Newark has had the highest percentage growth of journeys to/from London of any station on the ECML (127% increase) and the third highest growth in absolute numbers (317,000 additional journeys per year). These increases are significant considering that Newark has a population of only 40,000, compared to the far bigger catchment areas of ECML stations such as Leeds, York, Newcastle, or Edinburgh. Both Newark and Retford have seen significant patronage growth over recent years, as shown in table 57 below.

Table 103: Passenger journeys to/from London at ECML stations.

				Change 2004/05-2008/9		
City/town	1998/9	2004/05	2008/09	%	Actual number	Busiest ranking
Peterbrough	1,275,000	1,745,000	1,837,000	5%	92,000	1st
Leeds	930,000	1,300,000	1,582,000	22%	282,000	2nd
Newcastle	815,000	920,000	977,000	6%	57,000	3rd
York	620,000	810,000	888,000	10%	78,000	4th
Edinburgh	730,000	565,000	698,000	24%	133,000	5th
Newark	250,000	430,000	567,000	32%	130,000	6th
Grantham	235,000	420,000	439,000	5%	19,000	7th
Doncaster	355,000	385,000	426,000	11%	41,000	8th
Darlington	255,000	305,000	384,000	26%	79,000	9th
Wakefield	245,000	325,000	378,000	16%	53,000	10th
Retford	55,000	85,000	105,000	24%	20,000	N/A

Robin Hood Line

Since the Robin Hood Line reopened in 1995 another seven rail lines in England have been re-opened to passenger use. All of the re-opened lines are considered successful but the Robin Hood Line carries almost as many passengers as the combined total of the other seven lines, as shown in figure 104 below.

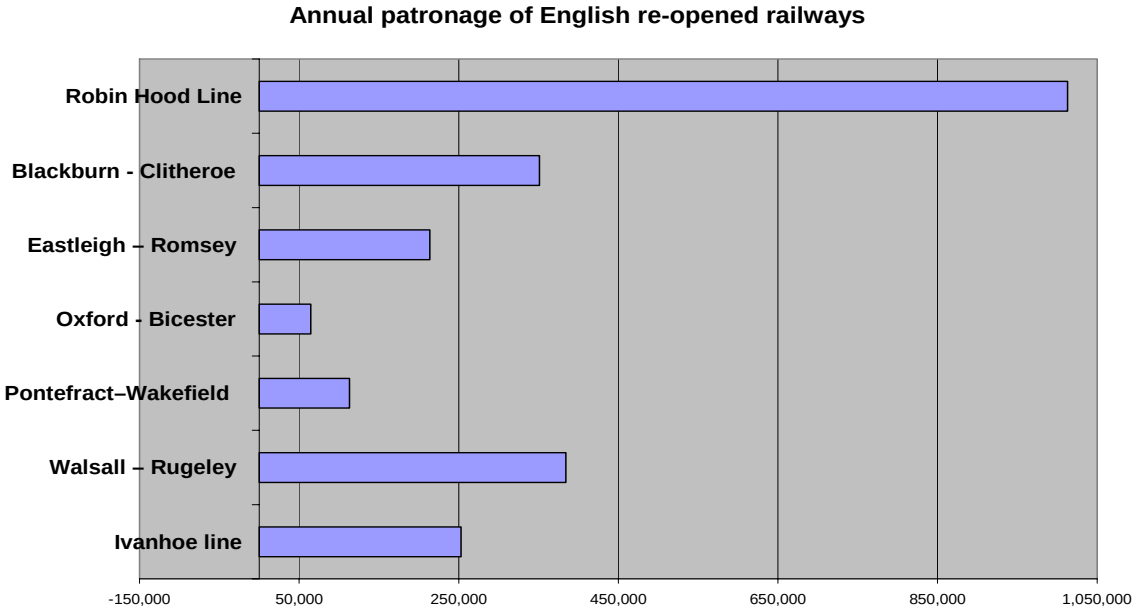


Figure 104: Annual patronage of re-opened English railways

10.1.3 Bus station usage

There are currently five bus stations in Nottinghamshire – Beeston, Mansfield, Newark, Retford and Sutton in Ashfield. Annual patronage is monitored intermittently at four of the stations and is detailed in tables 58-61 below. Annual patronage has increased at Mansfield, Retford and Sutton in Ashfield bus stations. Patronage has fallen at Newark bus station although the survey undertaken in 2010 took place the week before the bus station closed for redevelopment. The number of people using the bus station therefore may have been affected through bus users already using alternative stops along their route instead of the station.

Table 58: Annual weekday patronage at Mansfield bus station

	Annual patronage			Difference between 2009 and 2005
	2004	2008	2009	
Mansfield bus station	5,206,655	5,408,260	5,751,080	+10%

Table 59: Annual weekday patronage at Newark bus station

	Annual patronage		Difference between 2010 and 2006
	2006	2010	
Newark bus station	647,515	574,620	-11%

Table 60: Annual (weekday and weekend) patronage at Retford bus station

	Annual patronage				Difference between 20010 and 2005
	2005	2008	2009	2010	
Retford bus station	465,730	564,595	685,971	674,716	+45%

Table 61: Annual weekday patronage at Sutton in Ashfield bus station

	Annual patronage		Difference between 2010 and 2006
	2006	2010	
Sutton in Ashfield bus station	1,122,705	1,426,180	+27%

10.1.4 Rail station usage

There are currently 26 rail stations in Nottinghamshire. Patronage at each of the stations (as well as Nottingham station) is shown in table 62 below but significant growth occurred at:

- Beeston
- Newark
- Retford, and
- Worksop.

High percentage increases, albeit with lower absolute numbers, occurred at:

- Attenborough
- Bleasby
- Collingham
- Fiskerton
- Shireoaks (probably due to new housing within walking distance of Shireoaks station), and
- Thurgaton.

Significant reductions in rail patronage occurred at the following stations:

- Newstead, and
- Sutton Parkway.

High percentage decreases, albeit with lower absolute numbers, occurred at:

- Elton.

Table 62: Patronage at Nottinghamshire stations 2004/05 to 2008/09

						Change 2004/5 to 2008/09	
Station	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**Number**	**Percentage**
Aslockton	16,064	18,538	21,363	21,473	18,334	2,270	14%
Attenbrough	26,797	24,756	33,333	37,566	37,418	10,621	40%
Beeston	330,651	337,148	368,248	400,139	404,062	73,411	22%
Bingham	28,053	26,134	25,181	29,457	29,974	1,921	7%
Bleasby	3,868	4,606	5,208	5,403	5,140	1,273	33%
Burton Joyce	7,906	9,934	10,049	9,418	7,782	-124	-2%
Carlton	14,621	16,609	17,732	18,329	18,938	4,317	30%
Collingham	22,289	23,178	31,145	29,781	31,772	9,483	43%
Elton	1,310	860	145	172	157	-1,153	-88%
Fiskerton	6,759	8,878	10,477	10,824	9,654	2,895	43%
Hucknall	152,035	149,153	155,555	154,593	156,470	4,435	3%
Kirkby-in-Ashfield	155,415	155,102	149,585	139,213	150,980	-4,435	-3%
Lowdham	18,086	19,579	20,095	21,665	23,066	4,980	28%
Mansfield	374,799	379,302	361,079	343,907	348,680	-26,119	-7%
Mansfield Woodhouse	120,729	126,918	129,473	129,774	142,426	21,697	18%
Netherfield	7,238	6,938	6,108	7,178	8,292	1,054	15%
Newark - both stations combined	1,026,807	1,107,759	1,190,450	1,247,220	1,306,076	279,269	27%
Newstead	30,105	28,298	27,514	26,103	26,654	-3,452	-11%
Radcliffe	9,565	10,892	9,326	13,305	11,704	2,139	22%
Retford	298,398	320,410	363,084	357,812	376,066	77,668	26%
Rolleston	8,195	7,899	8,342	6,016	7,434	-761	-9%
Shireoaks	15,460	17,487	20,097	18,380	23,164	7,704	50%
Sutton Parkway	126,199	126,055	119,401	117,685	112,436	-13,763	-11%
Thurgarton	1,056	2,791	2,122	2,036	2,938	1,882	178%
Worksop	390,438	407,669	426,482	389,779	444,522	54,084	14%
Nottingham	5,476,714	5,371,367	5,769,764	5,890,544	5,990,750	514,036	9%

Source: Office of Rail Regulation Station usage Statistics

10.2 Bus services

10.2.1 Strategic route maps

Figures 105 to 111 below detail the existing commercial and supported bus service bus routes in Nottinghamshire.

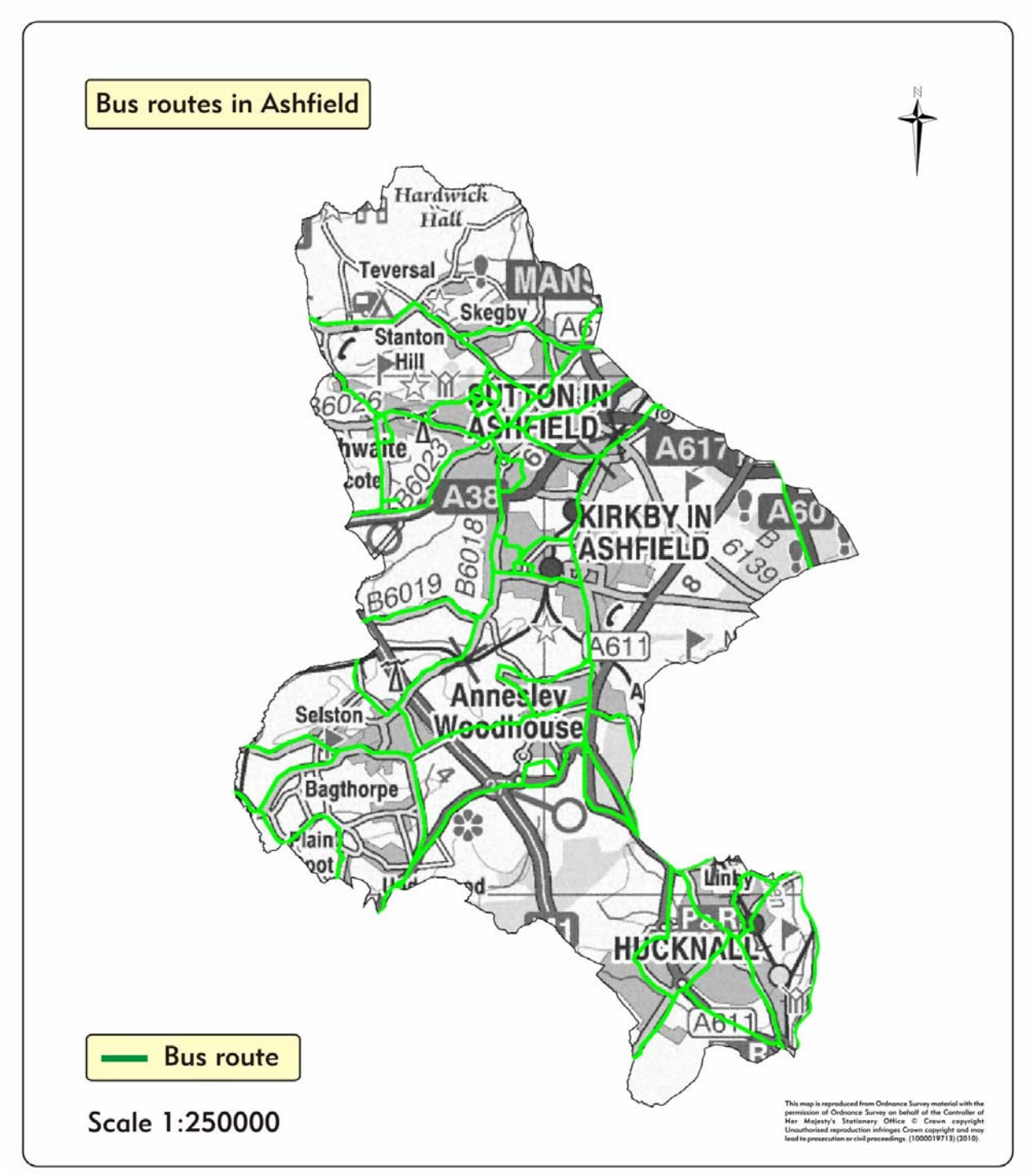


Figure 105: Commercial and supported bus service routes in Ashfield district
Source: Nottinghamshire County Council local bus travel guides as at August 2010

Figure 106: Commercial and supported bus service routes in Bassetlaw district
Source: Nottinghamshire County Council local bus travel guides as at August 2010

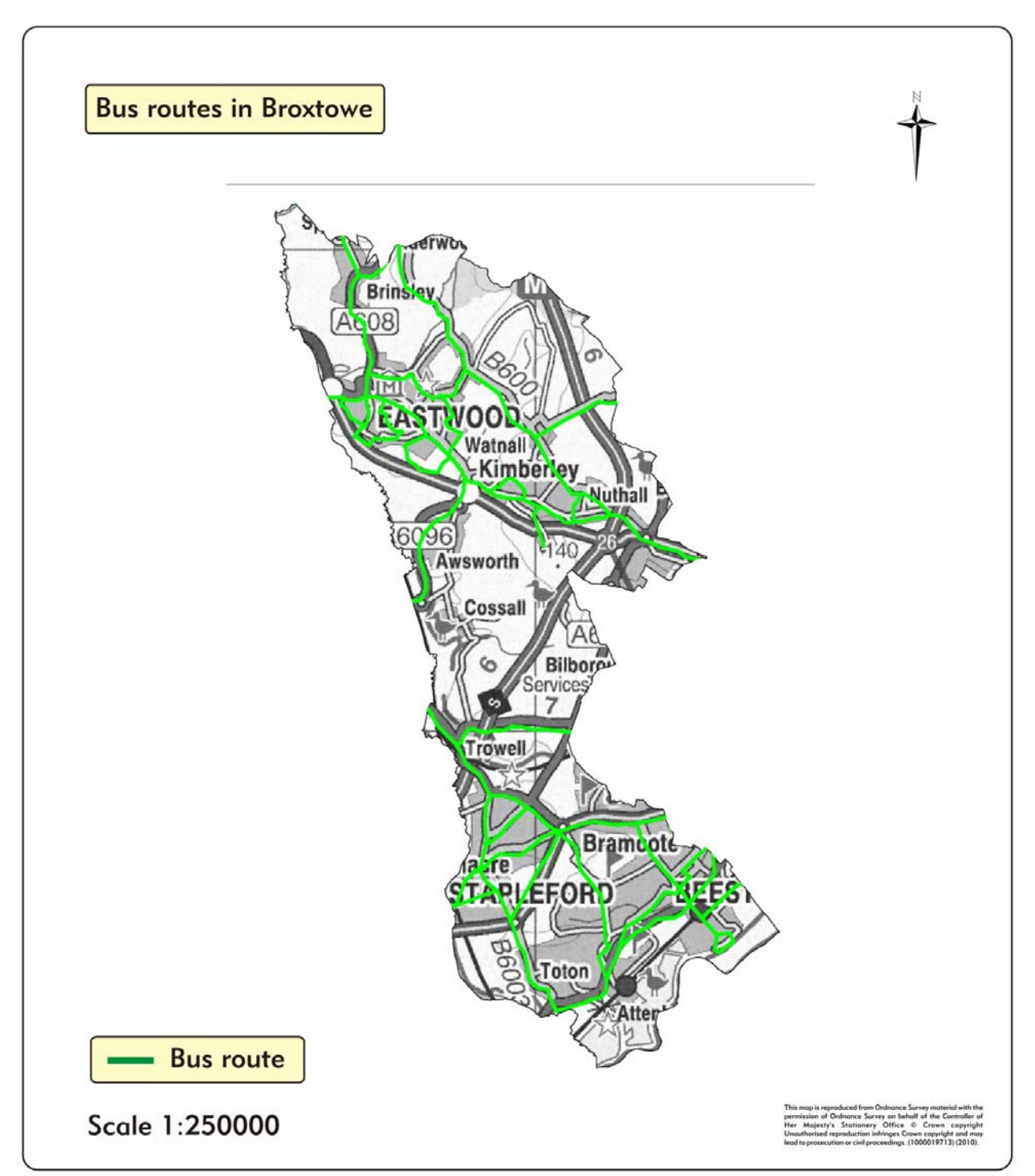


Figure 107: Commercial and supported bus service routes in Broxtowe district
Source: Nottinghamshire County Council local bus travel guides as at August 2010

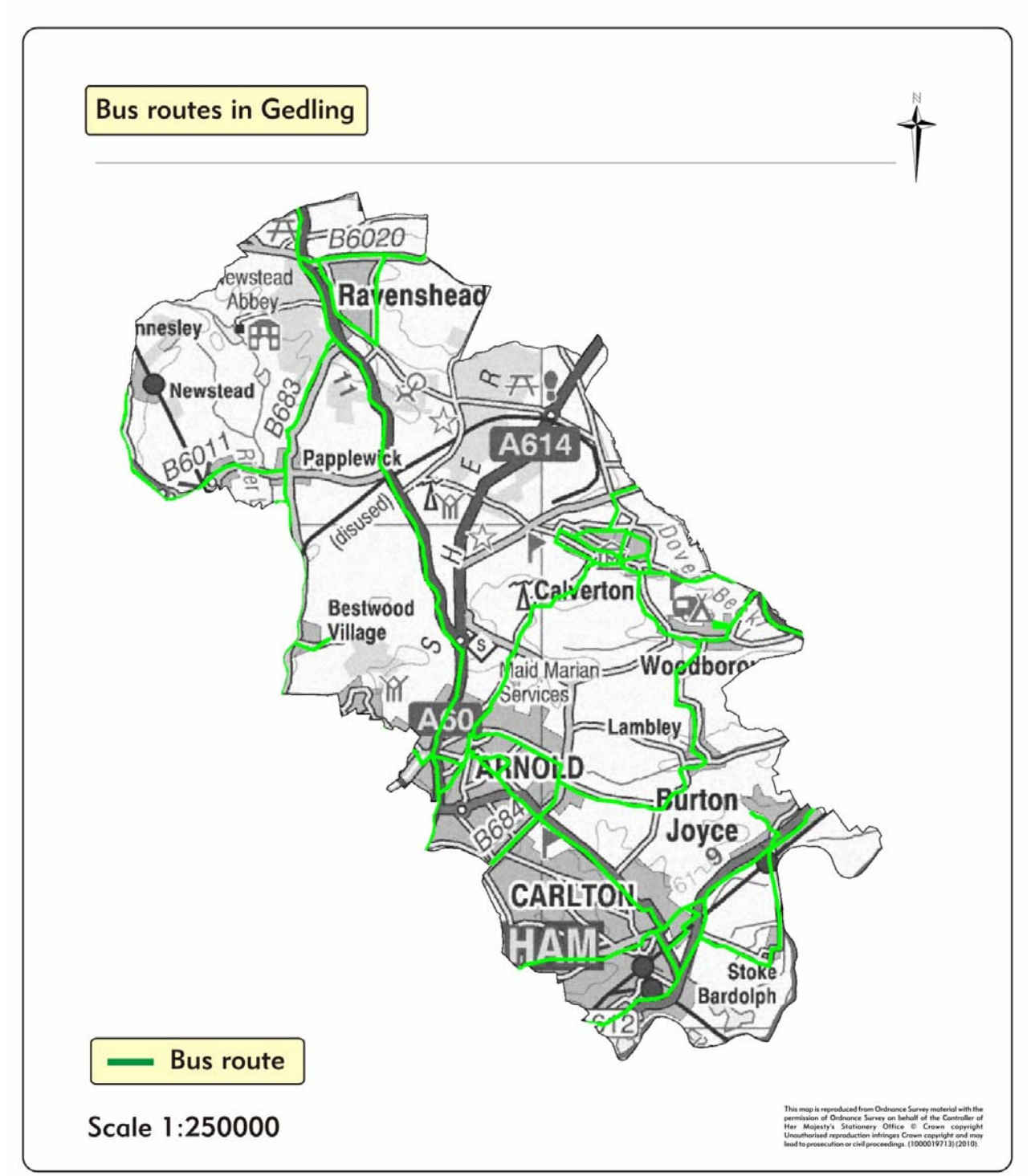


Figure 108: Commercial and supported bus service routes in Gedling district
Source: Nottinghamshire County Council local bus travel guides as at August 2010

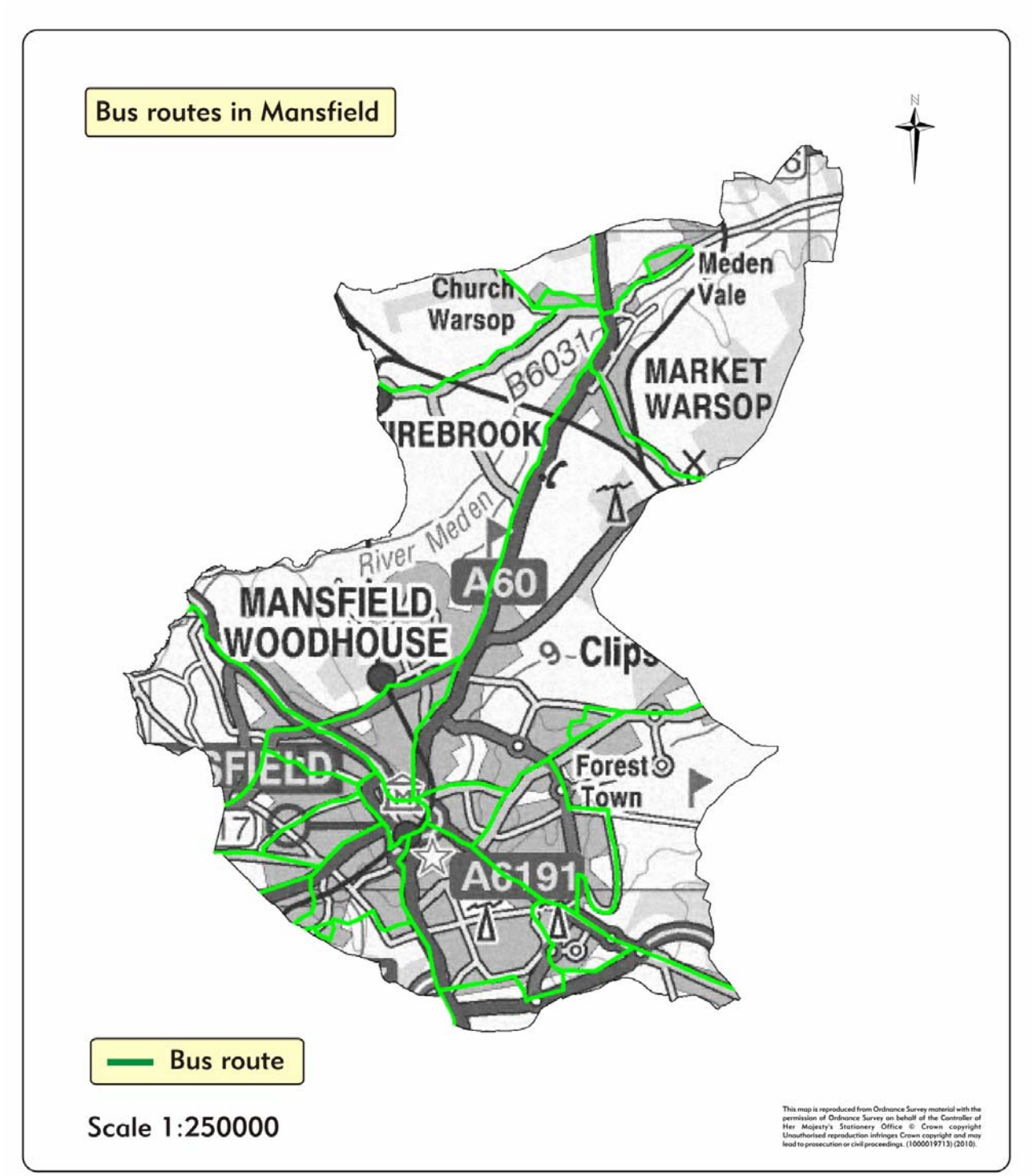


Figure 109: Commercial and supported bus service routes in Mansfield district
Source: Nottinghamshire County Council local bus travel guides as at August 2010

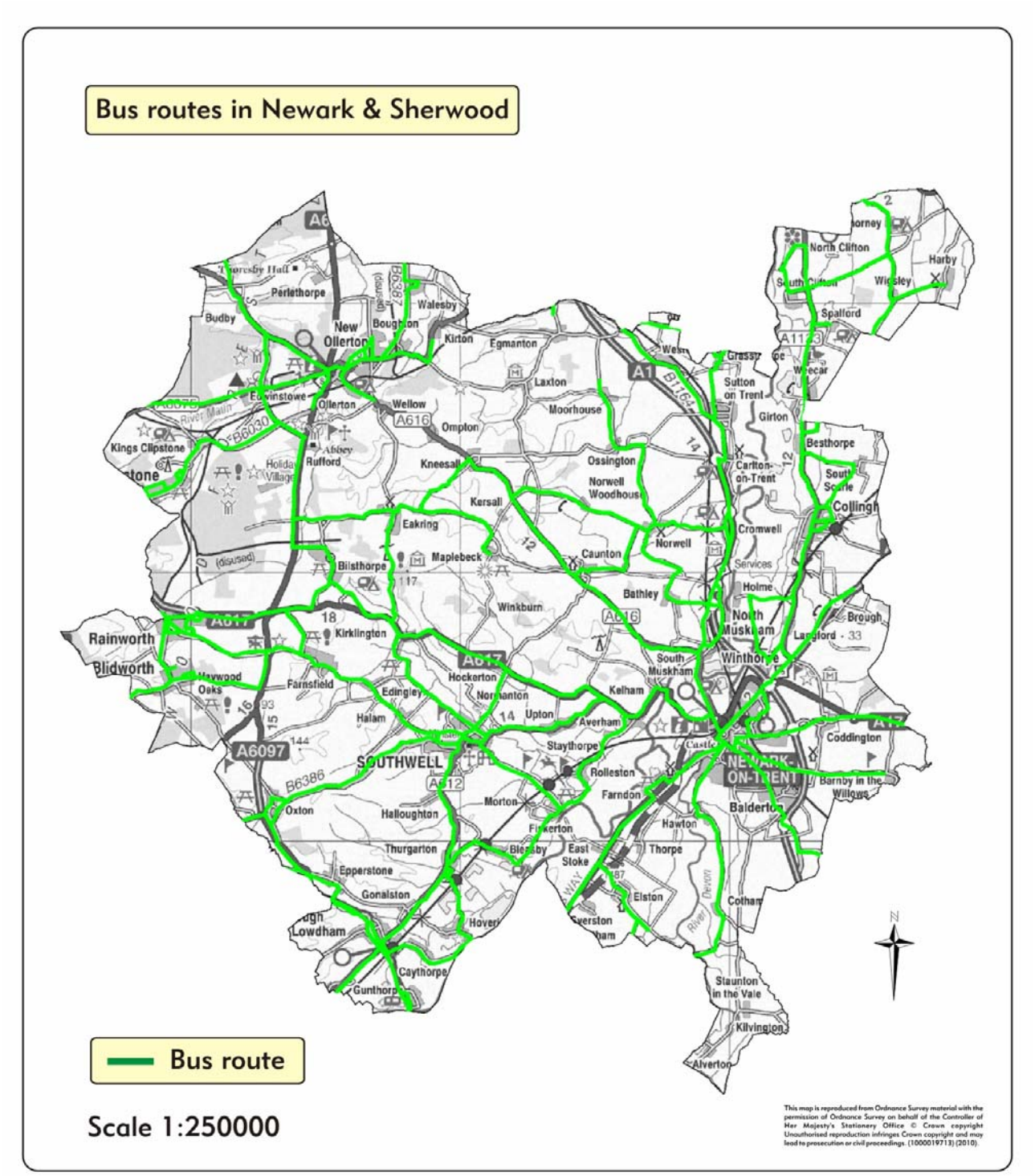


Figure 110: Commercial and supported bus service routes in Newark & Sherwood district
Source: Nottinghamshire County Council local bus travel guides as at August 2010

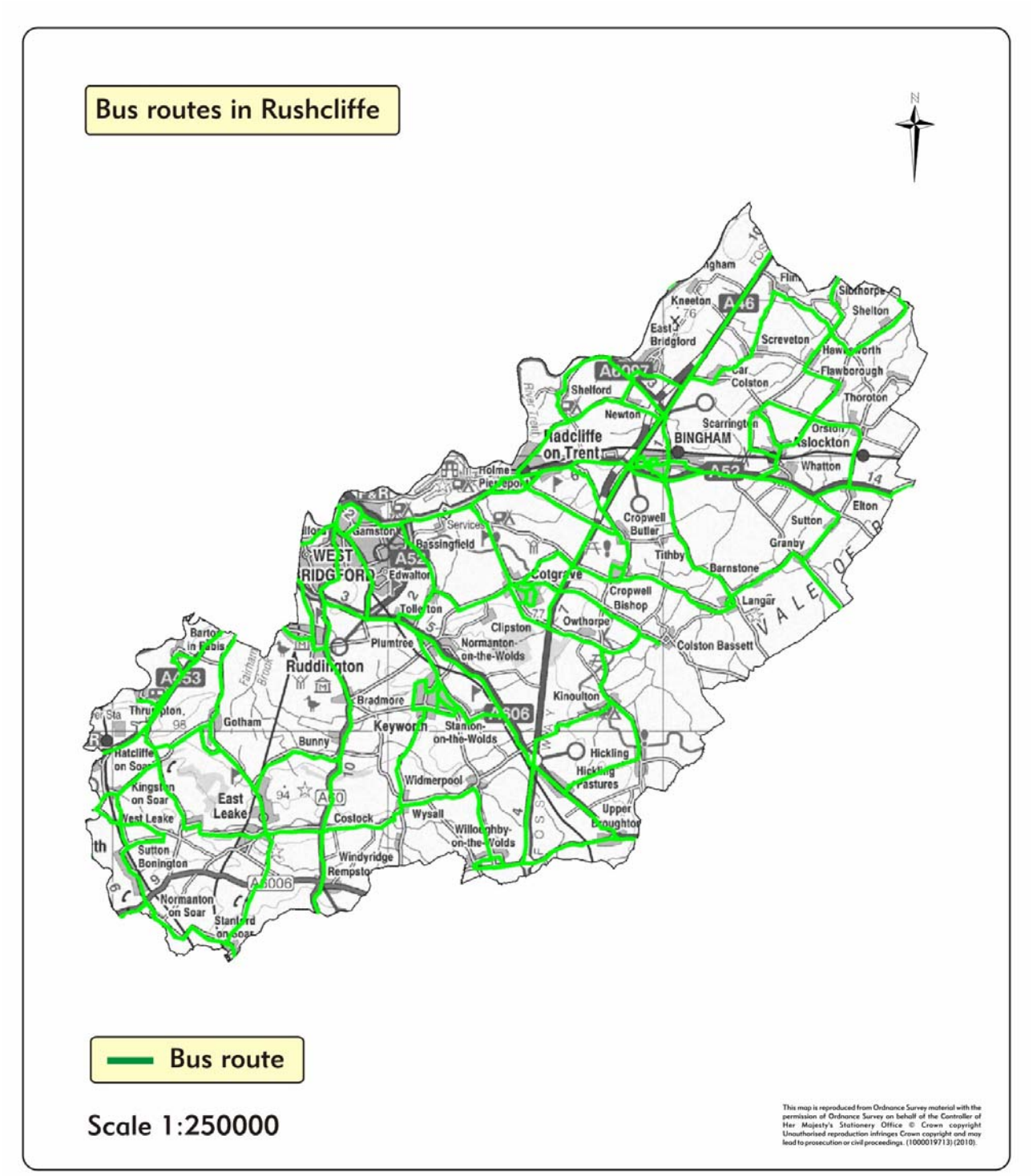


Figure 111: Commercial and supported bus service routes in Rushcliffe district
Source: Nottinghamshire County Council local bus travel guides as at August 2010

10.2.2 Punctuality

Recorded punctuality of the bus services during the last four years has fluctuated significantly. An audit of the monitoring of punctuality measurements highlighted several errors in the data and therefore this data should be viewed with caution.

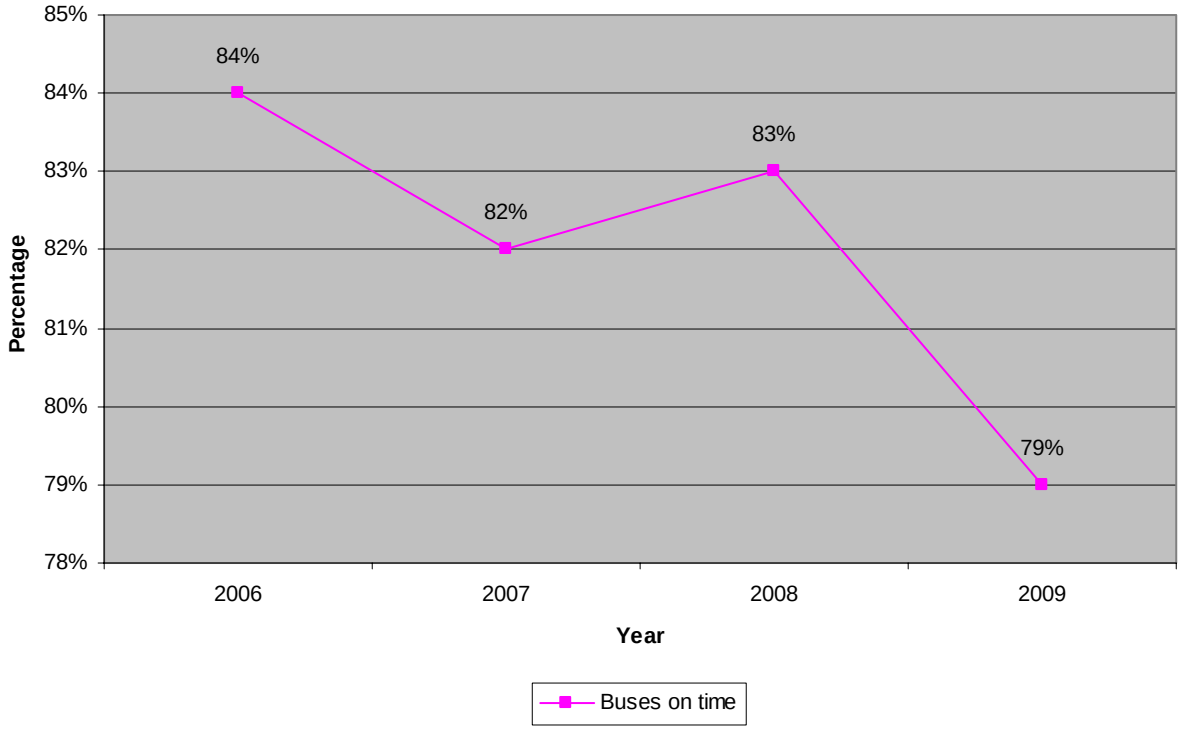


Figure 112: Punctuality of buses in Nottinghamshire (percentage on time at timing points)
Source: Nottinghamshire County Council surveys

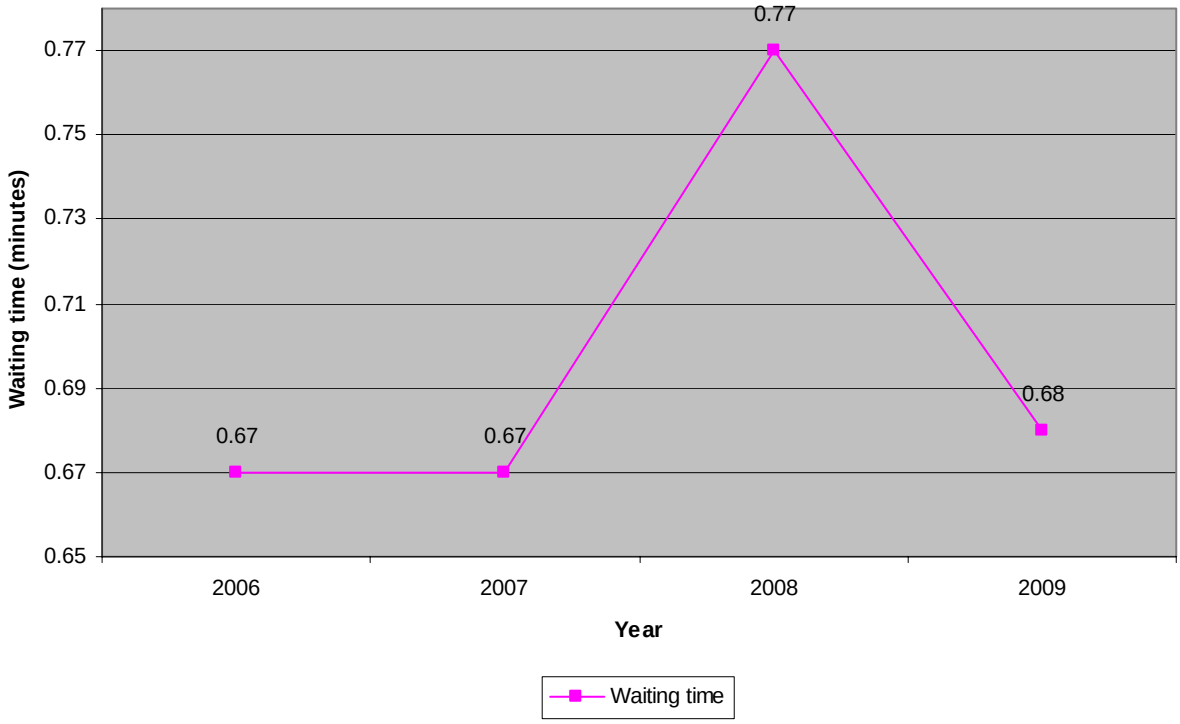


Figure 113: Punctuality of buses in Nottinghamshire (excess waiting time)
Source: Nottinghamshire County Council surveys

10.2.3 Delays on the network

Locations where buses have frequent delays because of highway conditions (such as queuing traffic or parked cars) are identified in partnership with operators. Work has been undertaken to improve conditions at many locations but there are still a number of sites across the county that have not yet been investigated to determine the reality of the problem, the length of delay or the feasibility of a solution. Table 63 below details the existing delay hotspots that have been identified

by operators – these locations have not yet been investigated to determine the reality of the problem or the length of delay.

Table 63: Locations of frequent bus delays due to highway conditions

District	Location	Description
Ashfield	Annesley Cutting/ Derby Rd junction, Annesley	Junction delays
	Nottingham Road/ Bypass Junction (A611), Hucknall	Junction delays at roundabout
	National School, Annesley Road, Hucknall	Inconsiderate parking at school times makes it difficult to access bus stops
	Glenside, Kirkby in Ashfield	Inconsiderate parking
	Kirkby Woodhouse Primary School, Main Road, Kirkby Woodhouse	Inconsiderate parking at school times
	A38 Ashfields junction (Kings Mill Road East/Sutton Rd/Kirkby Road junction)	Volume of traffic and junction delays at traffic lights
	Ashfield School, Sutton Road, Kirkby in Ashfield	Volume of traffic and inconsiderate parking at school times
	Station Street, Kirkby in Ashfield	Volume of traffic
	Mansfield Road/ Sutton Road, Sutton in Ashfield/ Mansfield (Kingsmill corridor)	Volume of traffic. Junction delays at traffic lights
	Outram Street, Sutton in Ashfield	Volume of traffic. Loading and unloading
	High St/ Watnall Rd junction, Hucknall	Junction delays at traffic lights
	Market Place/ High Street (The Byron Cinema) Hucknall	Loading and unloading. Inconsiderate parking at bus stops
	Sutton Road/ Copeland Rd junction, Kirkby in Ashfield	Junction delays due to indiscriminate parking at school times
Bassetlaw	Market Square, Retford	Illegal parking. Inconsiderate parking at bus stops
	Gateford Rd, Worksop	Illegal parking at bus stops
	Newcastle Avenue Worksop	Illegal parking
	Central Avenue, Worksop	Illegal parking
	Bridge Street/ Market Place, Worksop	Illegal parking
	Westgate, Worksop	Illegal parking
	Newgate Street, Worksop	Illegal parking
	Potter Street Worksop	Illegal parking
	Valley Road, Worksop	Inconsiderate parking on traffic calming features
	Ryton Street, Worksop	Illegal parking on road and at bus stops
	Clinton Street, Manton	Inconsiderate parking
	Blyth Road, Worksop (North Nottinghamshire College)	Inconsiderate parking outside North Nottinghamshire College
	Blyth Road, Worksop (Bassetlaw Hospital)	Inconsiderate parking on brow of hill outside hospital
Broxtowe	Bus station (Station Road), Beeston	Maintenance issue
	Bus Station (Styring Street), Beeston	Maintenance issue
	Dovecote Lane, Beeston	Toucan crossing causing delays to buses
	Nottingham Road/ Toton Corner, Beeston	Inbound delays in am peak
	High Road, Chillwell	Indiscriminate parking between Cator Lane and Castle College
	Gyratory, Eastwood	AM peak traffic congestion
	Nottingham Road/ Hill Top, Eastwood	Loading and unloading
	Ilkeston Rd/ Balloon Woods, Nottingham	Volume of traffic and junction delays at traffic lights
	Nottingham Road, Nuthall (bus plug)	Issues relating to cycle lane reducing carriageway width
	The Roach, Stapleford	Junction delays
	Derby Road, Stapleford	Loading and unloading
	Nottingham Road/ Toton Corner, Beeston	Junction delays
	Banks Road School, Banks Road, Toton	Inconsiderate parking at school times
	Chillwell Road/Ellis Grove, Beeston	Loading and unloading

Gedling	Mansfield Road, Arnold	Junction delays
	George's Lane, Calverton	Safety issue on bend of road
	St Wilfrid's Primary School, Main Street, Calverton	Inconsiderate parking at school times
	Main Street, Calverton	Inconsiderate parking near chip shop
	Blidworth Road/ Mansfield Road/ Nottingham Road, Ravenshead	Junction delays at traffic lights
Mansfield	A60 Leeming Lane/ A6075 Warsop Road, Mansfield Woodhouse	Junction delays
	A60 Leeming Lane/A6117 Old Mill Lane, Mansfield Woodhouse	Junction delays
	A6075 Abbott Road/ Westfield Lane, Mansfield	Junction delays
	Oak Tree Lane, Lingforest Road, Mansfield	Junction delays
	A617 Ratcliffe Gate/St Peters Way, Mansfield	Junction delays
	Rosemary Street (Bus Station entrance), Mansfield	Taxis blocking entrance to bus station
	Holly Primary School, Holly Drive, Forest Town	Inconsiderate and illegal parking at school times
	Southwell Road East, Rainworth	Traffic calming
Newark & Sherwood	Forest Road, New Ollerton	Junction delays
	Ollerton roundabout, New Ollerton	Capacity issues
Rushcliffe	Market Place, Bingham	Inconsiderate parking on road and at bus stops
	Radcliffe Road, Regatta Way/ Davies Road, Gamston	Motorists running red light at traffic signals
	Melton Road/ Main Road, Plumtree	Junction delays
	Boundary Road/ Melton Road West Bridgford	Junction delays
	Rugby Road/ Loughborough Road, West Bridgford	Vehicle grounding at junction
	Bingham Road, Radcliffe on Trent	Indiscriminate parking. Inconsiderate parking at bus stops
	Main Road, Radcliffe on Trent	Inconsiderate parking near church
	Wilford Road, Ruddington (Grices)	Parking bays reducing road width
	Abbey Road/ Davies Road, West Bridgford	Junction delays. Inconsiderate parking
	Bridgford Road, West Bridgford	Illegal use of the bus lane
	Central Avenue, West Bridgford	Bus only access frequently abused
	Davies Road, West Bridgford	Congestion due to parked cars
	Tudor Square, West Bridgford	Location of pedestrian crossings

Source: Public transport operators

10.2.4 Gaps in the network

Access to bus services is good across most of the county, although there are fewer services in some of the more rural parts of the county, especially in the evenings and on Sundays. To supplement the commercial bus network, the County Council currently spends approximately £7m per year to provide additional services. Without the County Council providing support through subsidising services, many households would find it difficult to access services. Table 63 below shows the percentage of people in Nottinghamshire in 2010 with access to an hourly or better bus service, with and without the County Councils' support. Figures 114 and 115 show the access to all of the county's bus services and the commercial services only, respectively. This shows what the effect would be if funding support for all County-supported services was withdrawn. This hypothetical scenario shows that many communities would face a reduced level of service and some communities would have no services at all. In some areas there may also be an increase in the distance walked to the nearest bus stop with a suitable frequency.

Table 64: Accessibility of public transport networks in 2010

Percentage of households within 800m of a bus stop with an hourly or better bus service Monday to Saturday (0600-1800)		Percentage of households within 800m of a bus stop with an hourly or better bus service Monday to Saturday (1800-2400)		Percentage of households within 800m of a bus stop with an hourly or better bus service Sunday (1000-1800)	
All services	Without County Council supported services	All services	Without County Council supported services	All services	Without County Council supported services
96%	91%	83%	71%	85%	76%

Source: Nottinghamshire County Council

Similarly, figures 116 (all services) and 117 (commercial services) below show the differences in the local bus network in the evenings between 6pm and midnight if County Council supported services were withdrawn.

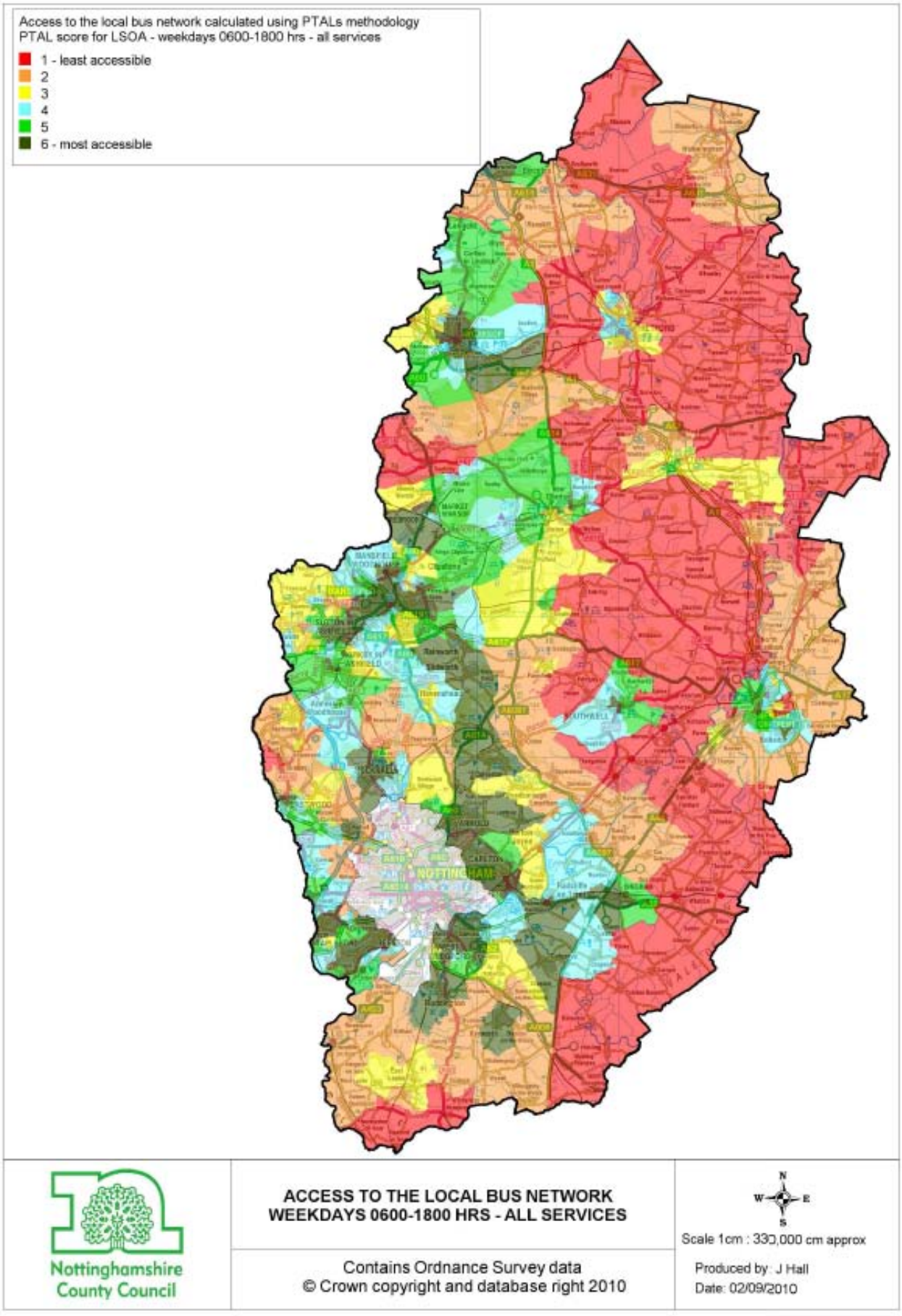


Figure 114: Access to all services on the local bus network on weekdays between 6am and 6pm

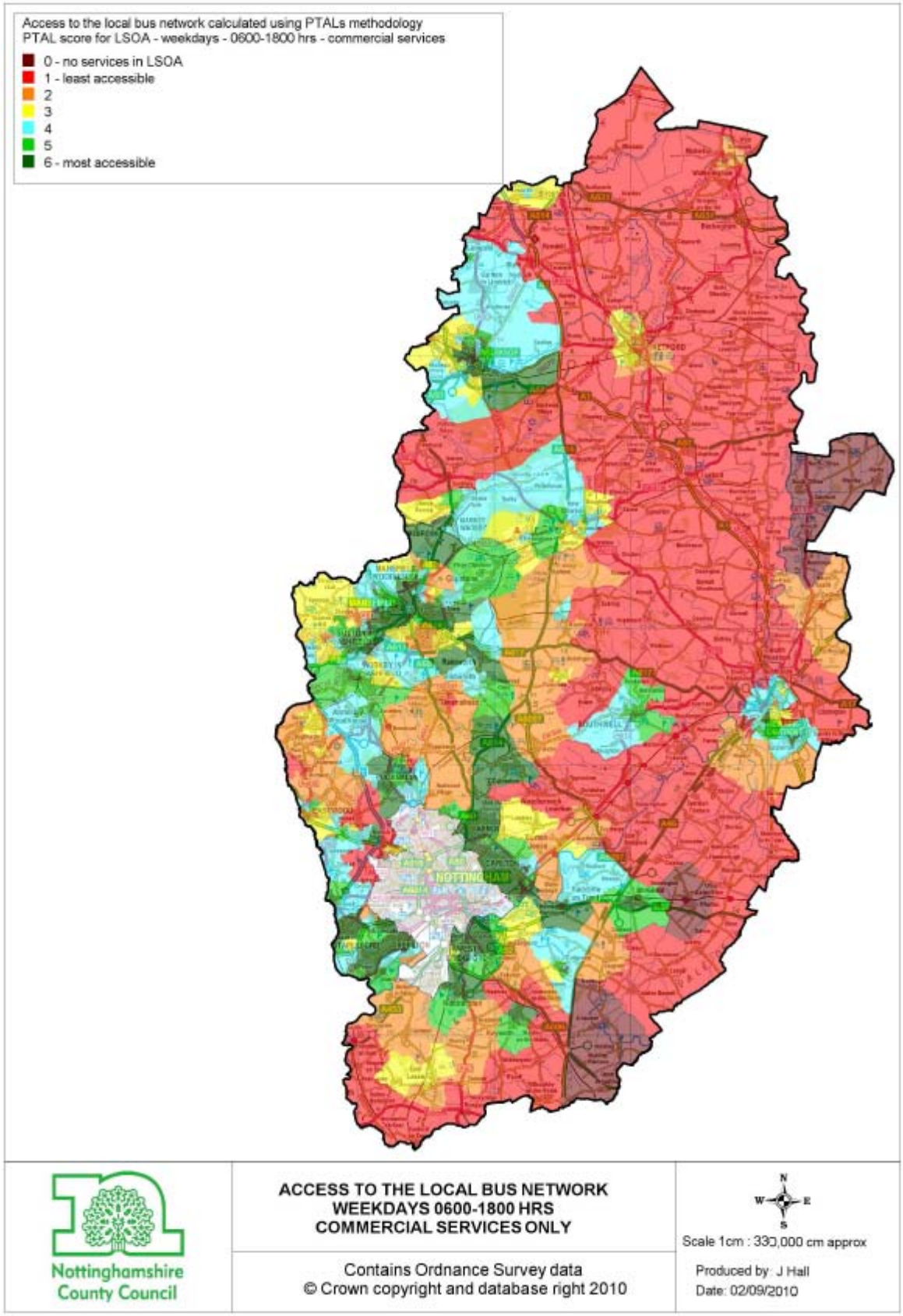


Figure 115: Access to commercial services on the local bus network on weekdays between 6am and 6pm

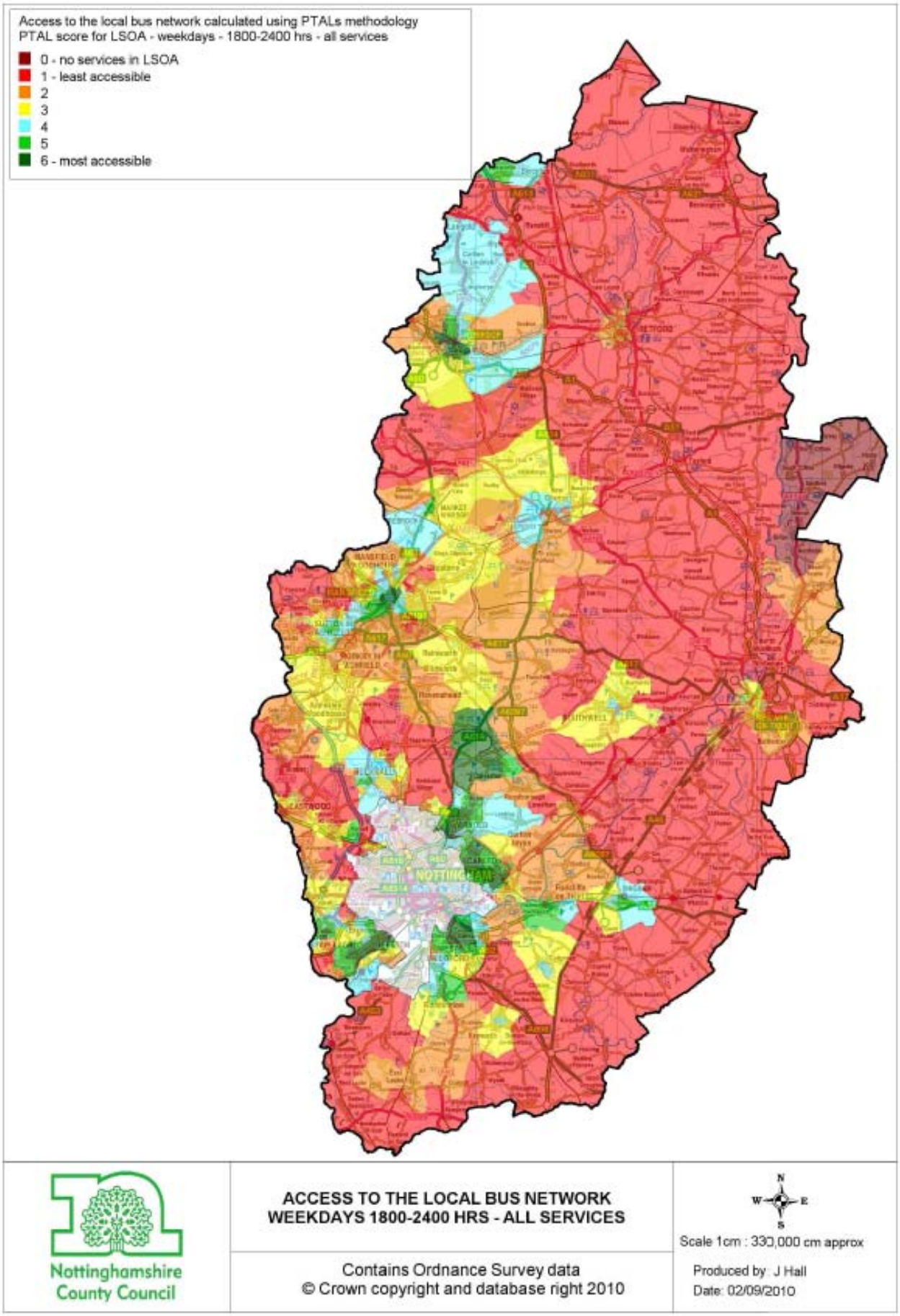


Figure 116: Access to all services on the local bus network on weekdays between 6pm and midnight

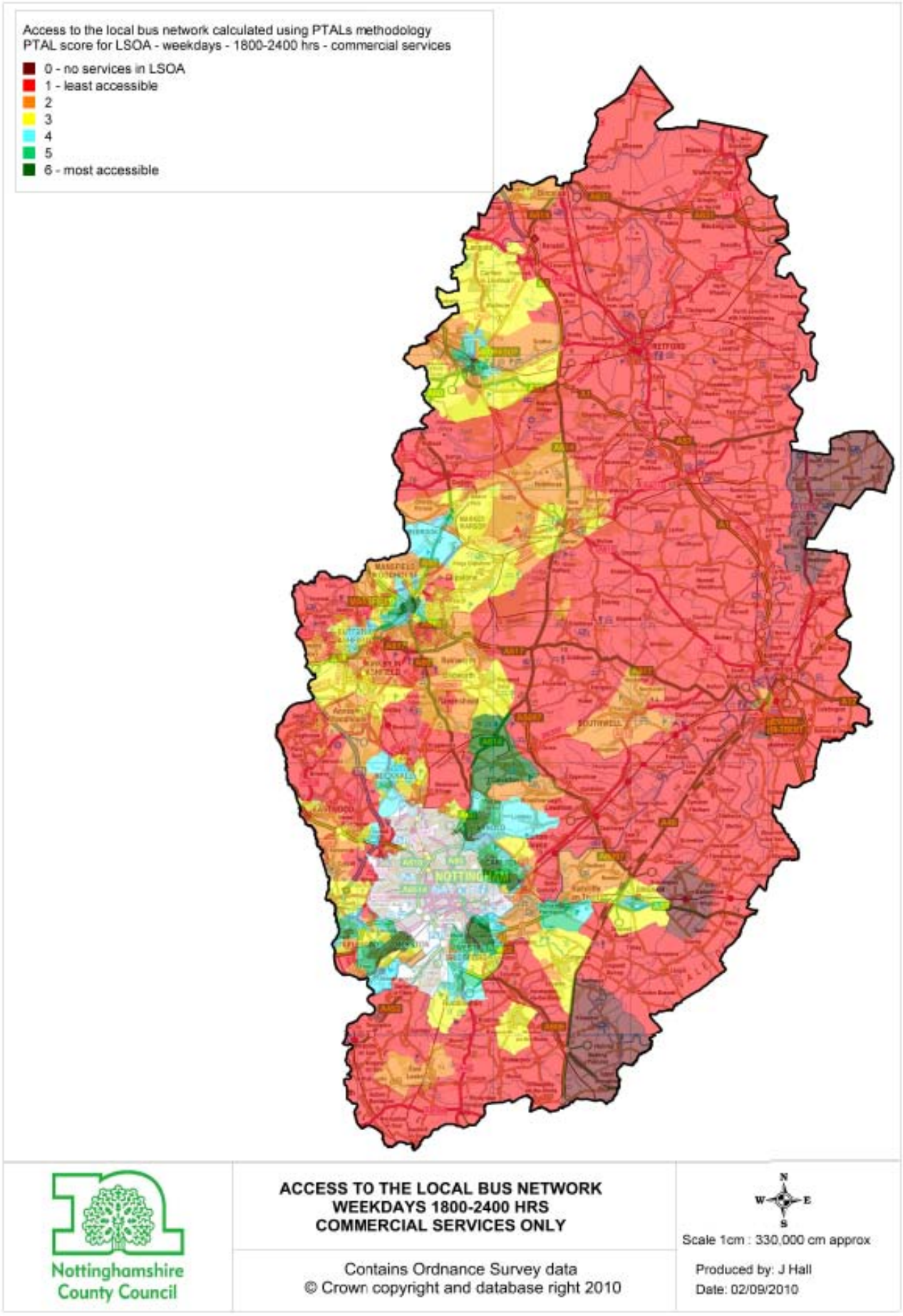


Figure 117: Access to commercial services on the local bus network on weekdays between 6pm and midnight

10.2.5 Community transport

Community minibus and social car schemes play a key role in providing transport to help older people, people with mobility difficulties, or those without access to conventional public transport to access key services and destinations. A number of services are provided across the county, some of which are subsidised by the County Council. There are, however, shortfalls in the services available, particularly in parts of Broxtowe, Gedling and Rushcliffe districts. There are 12 service providers of community minibus schemes in Nottinghamshire. Table 65 below details the service providers and the types of service offered whilst figure 118 shows the coverage of the social car scheme in Nottinghamshire.

Table 65: Community minibus schemes in Nottinghamshire

Service Provider	What Service is Offered?	Who can Use the Service?	Where?
Age Concern Newark & Sherwood	Group travel	Anyone over 50 in Newark & Sherwood	Newark & Sherwood
Calverton Miners	Group travel	Community groups	Gedling
Clowne & District Community Transport	Travel for groups	Affiliated groups	Bassetlaw
Community Centrepoint	Travel for group outings	Affiliated groups	Parts of Ashfield
Erewash Community Transport	Travel for groups and shopper services to Asda, Tesco, Sainsburys, Derby, Nottingham and local services.	People who are elderly, infirm, disabled or who have no other means of transport.	Broxtowe
Keyworth & District Community Concern Trust	Group Travel	Affiliated groups	Rushcliffe
Our Centre	Group minibus travel and shopper bus service	Local community groups and people who live in rural areas	Parts of Ashfield
Oxton Flyer	Shopper bus	People eligible for concessionary fares	Oxton
Ravenshead Community Project	Group travel and hail and ride village bus.	Ravenshead residents	Ravenshead
Sherwood Countryman Buses	Group hire and shopper services from Ollerton to Newark & Southwell	Affiliated community groups	Newark & Sherwood
Soar Valley Bus	Daily shopper services	Everyone	Normanton on Soar, East Leake, Ratcliffe on Soar, Loughborough.
Warsop Vale Village Association	Group travel	Community groups	Mansfield

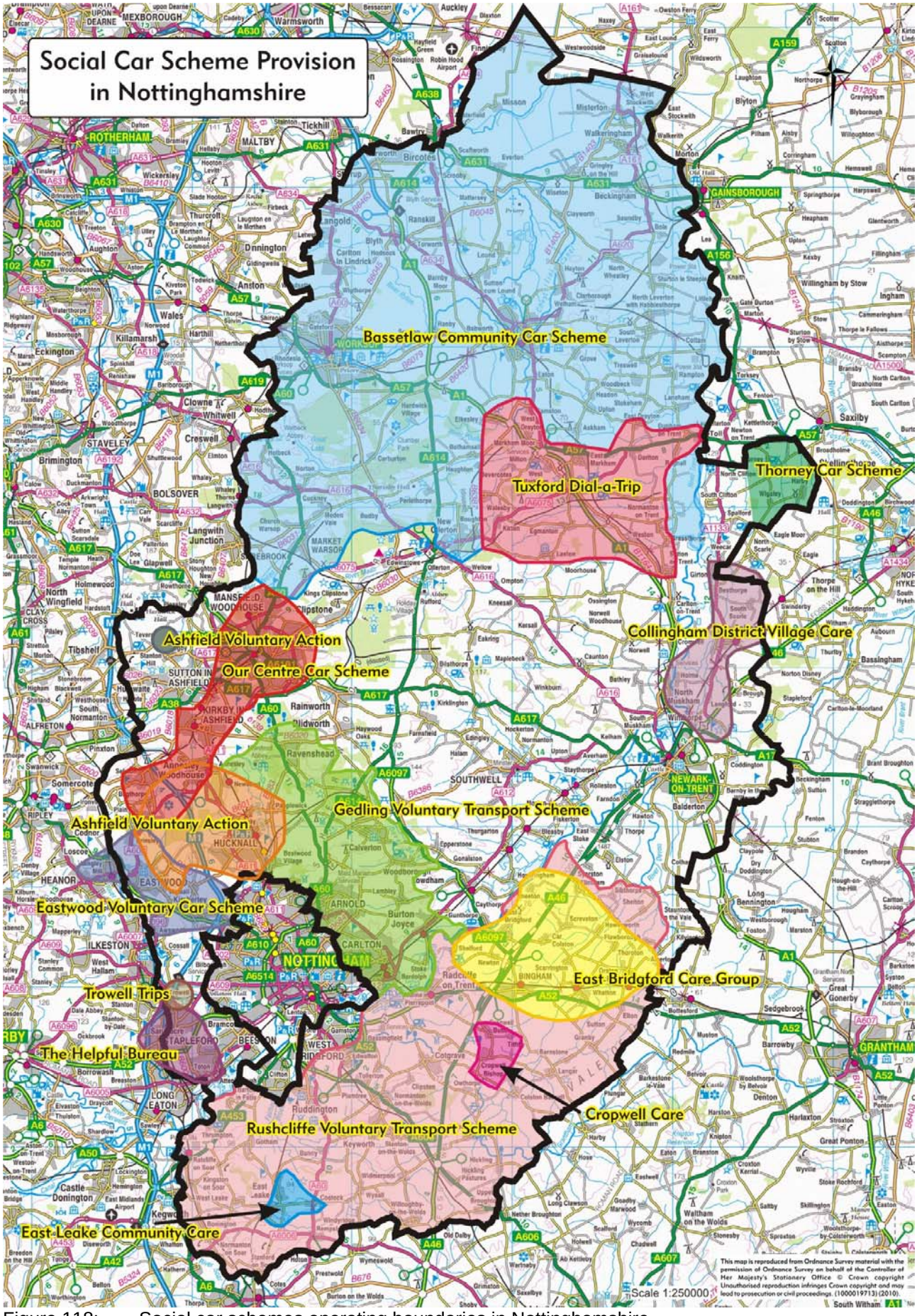


Figure 118: Social car schemes operating boundaries in Nottinghamshire

10.3 Bus infrastructure

10.3.1 Bus fleet

A survey of operators was undertaken in 2009/10 to determine the age and accessibility of their fleet. Approximately 50% of the operators responded, including the largest operators in the county (Nottingham City Transport, Stagecoach and Trentbarton) whom operate 90% of the fleet in the county. The survey found that:

- 76.4% of respondents' vehicles are aged under 10 years
- 60.3% of respondents' vehicles have Euro 3 engine type or better (Euro 3 - 37.1%; Euro 4 - 15.2%; Euro 5 - 7.8%), and
- 66.9% of respondents' vehicles are fully accessible (compared to 28.95% in 2006).

Nottinghamshire County Council's Nottinghamshire Transport Services has its own fleet of over 180 vehicles. The average age of these vehicles is 4.5 years and 81.7% of the vehicles have Euro 3 engine type or better.

10.3.2 'At stop' infrastructure (shelters; flag poles; information; kerbs)

At the end of 2009/10, 80% of bus stops in the county (4,428) had flagpoles with timetable information. In addition to this there are 1,467 shelters in the county.

Nottingham City Transport (NCT) has a three year plan to fit their entire fleet with 'Real Time' information. By the end of 2010/11 there should be 14 cross-boundary routes with 'Real Time' infrastructure. These routes are on NCT services 1, 6, 10, 11, 13, 14, 21, 24, 27, 36, 44, and 45 and involve approximately 105 buses. Trentbarton currently has two routes with 'Real Time' infrastructure (Indigo and Rainbow 4). Stagecoach has seven cross-boundary 'Real Time' routes into Worksop, financed by South Yorkshire passenger transport executive (PTE), which includes Stagecoach services 19, 22, 25, 27, x29, x30 and 99 and involves 30 buses. A trial is being undertaken in Nottinghamshire with South Yorkshire PTE to allow passengers in Nottinghamshire access to the 'Real Time' information by mobile internet and SMS with the intention to trial some on-street signs in Nottinghamshire by April 2011. 'Real Time' compatible displays have also been erected in a number of bus stations and employment sites across the county.

10.3.3 Bus priority

In March 2010 there was a total of 5.9km of bus lanes in the county. The locations of the bus lanes are detailed below in table 66.

Table 66: Locations of bus lanes in Nottinghamshire

Location	Bus lane length
A60 Loughborough Road, West Bridgford – *northbound** A60/Millicent Road – A60/A6520 Radcliffe Road	195m
A60 Loughborough Road, West Bridgford – *southbound** A60/Millicent Road – A60/A6520 Radcliffe Road	195m
A6011 Radcliffe Road, West Bridgford – *westbound** A6011 bus plug – A6011/Regatta Way	310m
A6011 Radcliffe Road, West Bridgford – *westbound*+ A6011/Davies Road – A6011/Cyril Road	415m
Bridgford Road, West Bridgford – *northbound*+ Hound Road – Loughborough Road	160m
Musters Road, West Bridgford – *northbound*+ Bridge Grove – Bridgford Road	80m
B600 Nottingham Road, Nuthall – *southbound*+ B600 west of M1 bridge – B600 Nottingham Road (No. 79)	525m
Kimberley Road, Nuthall – *southbound*+ Kimberley Road (No. 94)/Larkfield Road – Kimberley Road (No. 6)/ Maple Drive	555m
A60 Mansfield Road, Woodthorpe – *southbound*+ A60/Marlborough Road – A60/Black Swann Close	410m
A60 Leeming Lane, Mansfield Woodhouse – *southbound*+ A60 (No. 126) north east of King Street – A60 (No. 62) south west of Springfield Drive	230m
Leeming Street, Mansfield – *southbound*+ Leeming Street/A6009 – Leeming Street/Toothill Lane	145m
West Gate, Mansfield – *southbound*+ West Gate/A6009 – West Gate/St John Street	75m
A60 Nottingham Road, Mansfield – *northbound*^ Bath Street – St Peter's Way	122m
Bridge Street, Mansfield – *eastbound*^ Toothill Lane – St Peter's Way	112m
Hardy Street, Worksop – *southbound*^ Central Avenue – Newcastle Avenue	107m
A52 Derby Road, Bramcote – e*astbound ** (Highways Agency maintained road) A52/Sherwin Arms roundabout – A52 county boundary	2,300m
TOTAL LENGTH OF BUS LANES	**5,936m**

** Bus lane is on dual carriageway road with at least four vehicle running lanes plus bus lane.*
+ Carriageways have two vehicle running lanes plus bus lane.
^ Carriageways have single vehicle running lane (one direction only) plus bus lane.

Measures are also installed to give buses priority at traffic signals along routes with high bus usage, hence they tend to be in the more urban areas along routes with more frequent bus services. Such measures identify when buses are approaching the signals and trigger the green signal until the bus has passed. Table 67 below details the number of sites with such priority features in each of the districts.

Table 67: Number of traffic signal locations in each district with bus priority features

District	No. of sites
Ashfield	8
Bassetlaw	4
Broxtowe	10
Gedling	13
Mansfield	14
Newark & Sherwood	1
Rushcliffe	11

10.3.4 Ticketing

A range of ticket types are available in the county, including daily, weekly, monthly, three and six monthly, as well as annual tickets:

- All of the bus operators that serve Nottinghamshire offer single and return tickets for both adults and children
- Seven of the operators offer weekly tickets for unlimited travel within a defined area, and nine of the operators offer day tickets for unlimited travel within a defined area. Five of these ticket types are available across different modes (Kangaroo, CityRider, Hucknall Connect, NET & Pheonix Flyer and Plus Bus)

- Three operators offer 10-trip tickets (TM travel, NET and Premiere)
- Group tickets are available from 2 operators (NET and NCT)
- Three operators offer smartcards (NCT and NET - EasyRider Citycards and Trent Barton - mango)
- Monthly tickets are available from six of the operators across a defined boundary of which two are available across different modes (NET & Pheonix Flyer and EasyRider Citycards)
- Three monthly tickets are available from four of the operators across a defined boundary, of which one is available across different modes (Easyrider Citycards)
- Six monthly tickets are available from three operators across a defined boundary, of which one is available across different modes (EasyRider Citycards)
- Annual tickets are available from five of the operators across a defined boundary of which one is available across different modes (EasyRider Citycards), and
- NET offer tram only tickets payable through paypoint outlets for periods of 3, 7, 15 and 30 days duration.

10.3.5 Concessionary fares

Approximately 82% of those eligible to a concessionary pass due to age have taken up the pass, this equates to over 165,000 passes. The age criteria for entitlement to a concessionary pass is now in line with the increase in state pension age for women. Therefore there will be a growing proportion of the 60 to 64 age group who are not entitled to a pass. Table 68 below details the percentage of older people who have taken up their entitlement to a concessionary pass in 2009.

Table 68: Percentage of older people who have taken up their entitlement to a concessionary pass

District	Percentage of pass holders
Ashfield	91%
Bassetlaw	77%
Broxtowe	100%
Gedling	88%
Mansfield	89%
Newark & Sherwood	81%
Rushcliffe	95%

It is not possible to calculate a figure for take-up on grounds of disability because there is no defined figure for the number entitled in Nottinghamshire. This is because a person does not have to be registered disabled to qualify. Approximately 10,000 passes have, however, been issued to people on the grounds of disability.

10.4 Rail services

10.4.1 Rail strategic route and frequency map

Rail services provide important connections both within the county and between Nottinghamshire and elsewhere. The coverage of the rail network (as shown in figure 119 below) is relatively good. Figure 120 shows the range of destinations, number of trains per day, and normal journey times between each destination.

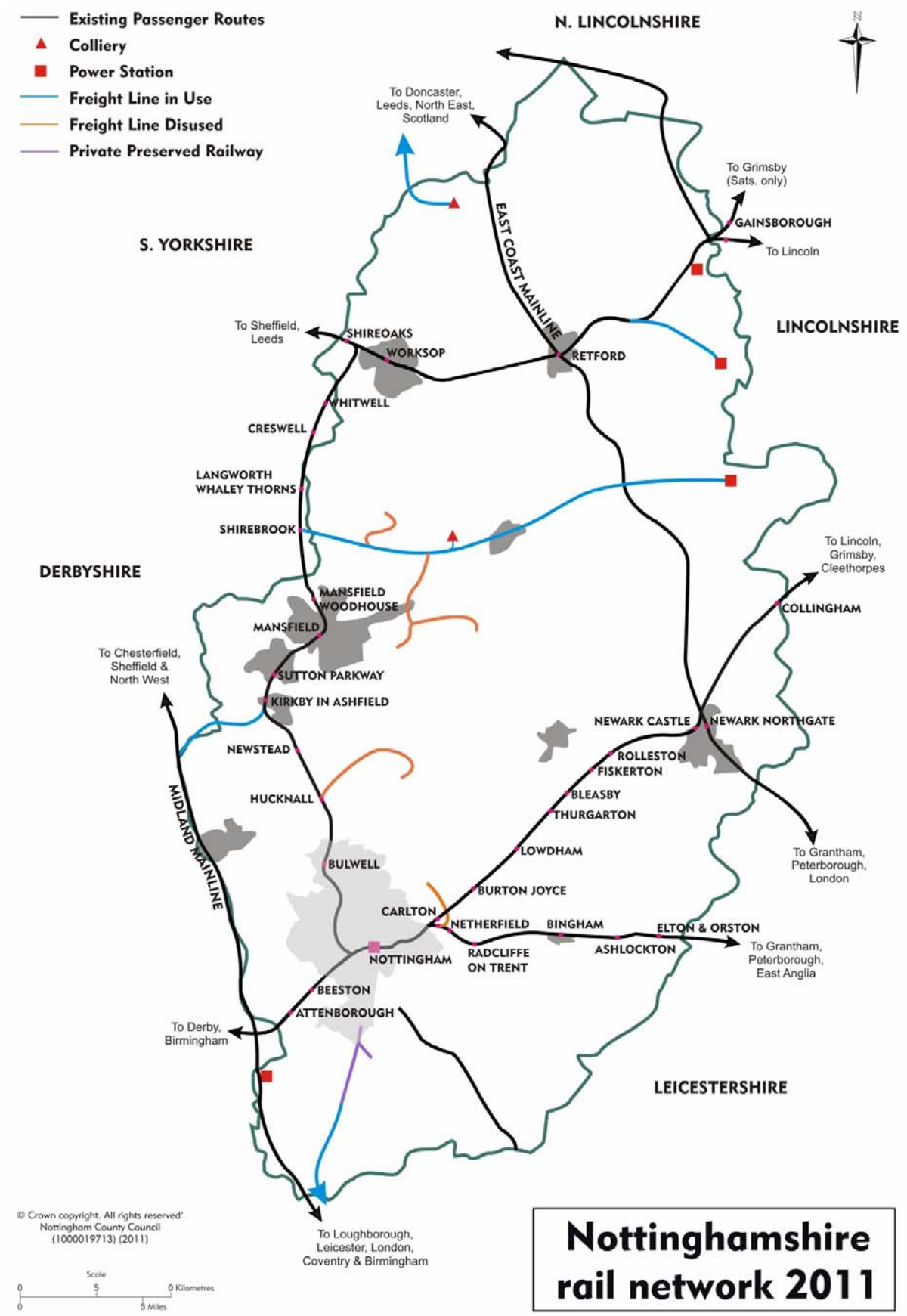


Figure 119: Nottinghamshire rail network
Source: Nottinghamshire County Council

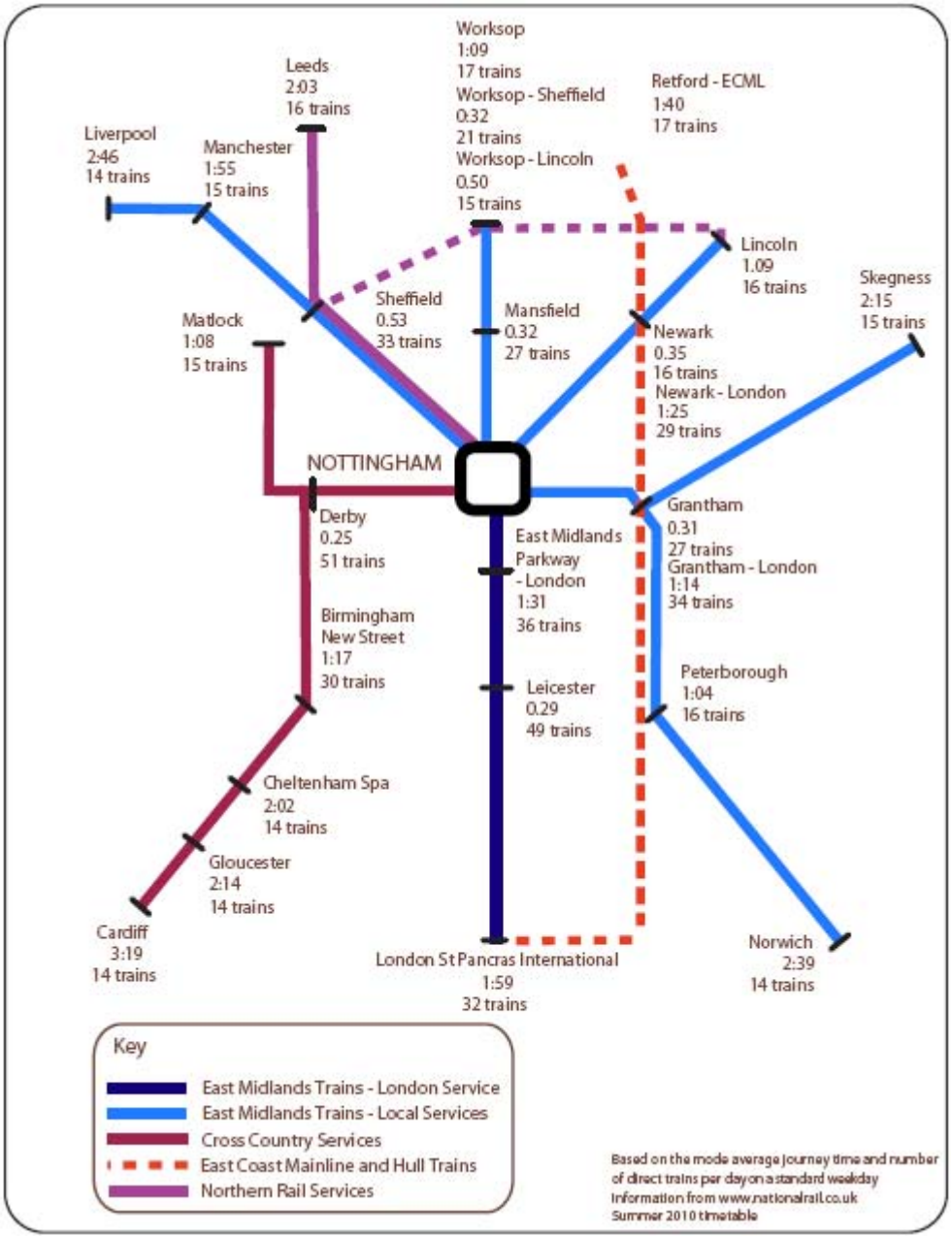


Figure 120: Direct rail journeys and times from Nottingham and the East Coast Mainline to London and selected Northern Rail services

10.4.2 Gaps (weaknesses) in the network

Nottingham station

The track layout at Nottingham station dates from 1969, when the railways were in decline, and it was designed to accommodate the 170 trains per day. With the huge growth of rail use since then the number of trains using the station has more than doubled to 412 trains per weekday (with further growth expected) resulting in the layout being severely congested. This leads to many arriving trains having to stop outside the station to wait for a clear path through the station.

The life of the track layout at Nottingham has also expired and is due for renewal in 2013. All of the track and signals will be stripped out and replaced providing an ideal opportunity to cost effectively enhance the layout. Following a submission from the County Council, the Office of Rail Regulation has approved Network Rail investment of £11.6m to provide layout enhancements when the renewals take place. This will provide more points and signals to create a layout with greater capacity and flexibility, minimising conflicting movements, and virtually eliminating the current delays that trains and passengers experience. Once completed, it will be possible to

remove the excess delay that is currently built in to many trains' schedules to accommodate the delays that trains currently experience. This should allow trains on all routes from Nottingham to run more quickly and reliably.

Midland Mainline

For decades the Midland Main Line (MML) has received much less investment than England's other Inter-City routes and this has significantly impacted on speeds on the network. In the 1970s 125mph 'high speed trains' (HST) were introduced on the Great Western Main Line (GWML) and the East Coast Main Line (ECML). At the same time, the track on both the GWML and ECML routes was upgraded to allow HSTs to travel at 125mph. The MML, however, was the last route to receive HSTs in the 1980s and none of its track has been upgraded to 125mph. Therefore for over 30 years, every MML train has run at below its capable top speed for the whole of its journey (this is not the case for any other Inter-City route)**.**

The historical underinvestment in the MML has continued during the past decade, during which it has received just 2% of the total spent on the Inter-City routes, as shown in figure 121 below.

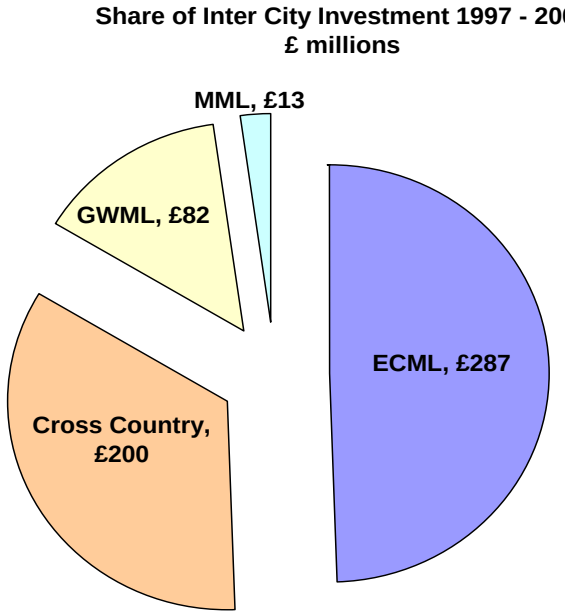
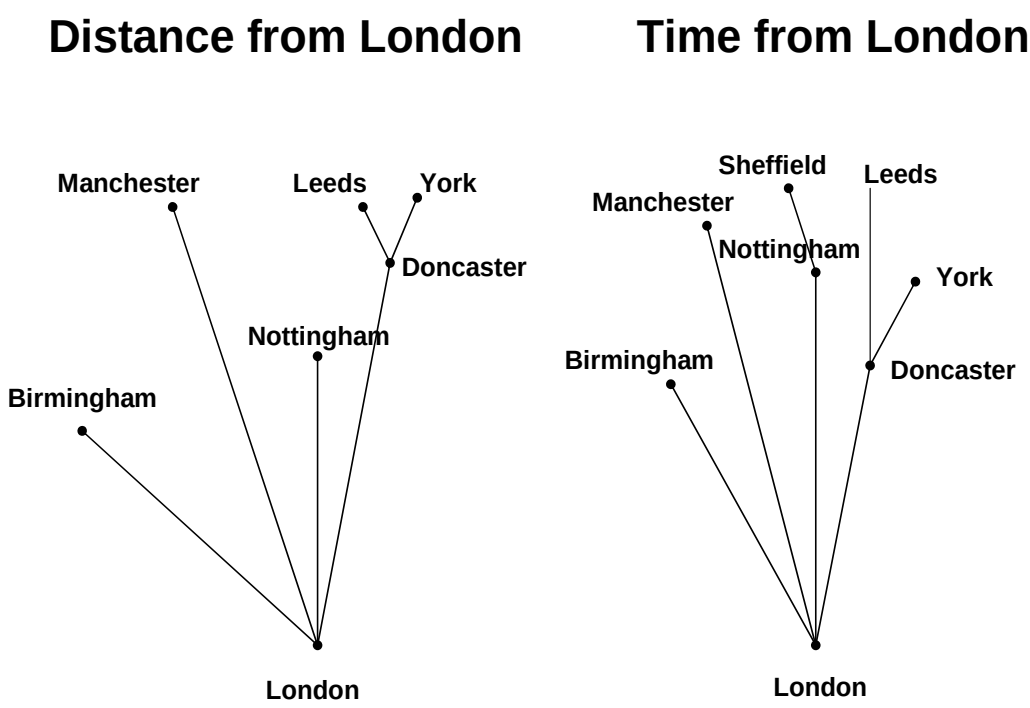


Figure 121: Share of Inter-City investment 1997-2008

The under investment in MML has resulted in slower speeds to London than on other Inter-City routes. For example, trains from London to York have the same journey time as London to Nottingham, despite travelling 50 miles further, and trains from London to Doncaster are 20 minutes quicker than trains from London to Nottingham despite it being 25 miles further north. Figure 122 below details the relative distances and journey times between London and other cities.



Source: National Rail timetable winter 2006/07, analysed by

Figure 122: Distances and times from London by train

Nottingham - Newark - Lincoln

The railway line from Nottingham through Newark to Lincoln is flat and straight, ideal terrain for a fast linespeed. Currently, however, it has a low linespeed limit – 60mph between Nottingham (Netherfield junction) and Newark, and a mixture of 55mph & 70mph between Newark and the outskirts of Lincoln. Journey times are therefore relatively slow, making the service less attractive than it could be. Table 69 below shows how the existing journey times and speeds on this route compare to those on similar routes.

Table 69: Journey times and speeds on similar routes

Route	Distance (miles)	Time taken (minutes)	Speed (mph)
Crewe- Shrewsbury	32.75	30	65.5
Hull – Selby	31.00	31	60
Stirling – Perth	34.50	33	62
Herefod – Pontypool	33.50	33	61
Nottingham - Newark - Lincoln	33.75	52	43

The topography would allow speeds to be raised to 90mph or possibly 100mph and the County Council is working with Network Rail on a scheme to achieve this which should reduce journey times for non-stop trains by 17 minutes between Nottingham and Newark; and 17 minutes between Newark and Lincoln. This would result in comparable journey times and speeds between places similar distances apart on other similar routes.

East Coast Main Line

Journey times to London from Newark and Retford are very variable. The journey time from Newark to London ranges from 77 minutes to 93 minutes (plus two slower trains), a variation of 16 minutes (21%). Even the best of the current times compare poorly with journey times achieved by British Rail in the 1980s, when the fastest time from London to Newark was 68 minutes (at an average speed of 106mph), 17.5 minutes faster than the average time taken now.

Journey times from Retford to London range from 85 minutes to 105 minutes (plus one slower night train), a variation of 20 minutes (23%).

Nottingham - Grantham - Skegness
The Nottingham to Skegness line is also mostly level and flat but also has slow linespeeds – a mixture of 60mph and 75mph between Nottingham (Rectory junction) and Grantham, and predominantly 60mph between Allington Junction and Skegness. It should be possible to raise the linespeed for much of the route to 90mph between Nottingham (Rectory junction) and Grantham, and then 75mph on to Skegness. The County Council is working with Network Rail on a scheme to achieve these speeds. Currently 30 Nottingham to Skegness trains call at Bingham but only 19 call at Aslockton, 10 at Radcliffe, and 5 at Netherfield. Time savings from higher speeds would allow Aslockton, Radcliffe and Netherfield to get the same service as Bingham (one train per hour each way at each station).

Lincoln - Retford - Worksop - Sheffield
Worksop to Sheffield (jointly with Sheffield to Barnsley) is the "most important (by patronage)" flow of local passengers within the South Yorkshire Passenger Transport Executive (PTE) area. It accounts for 6% of the total revenue and 4% of the total journeys within the PTE area. Frequency is, however, just one per hour, less than any other local service that runs into the PTE area. In addition, the general linespeed is only 60mph across nearly the whole route.

Crowding on the rail network
There is currently limited information available on the performance of the rail network in terms of passenger load factors. The East Midlands Route Utilisation Strategy (RUS) Draft for Consultation, however, identifies overcrowding on peak services between London, Nottingham and Leicester and overcrowding all day on the Norwich to Liverpool service on the section between Nottingham and Liverpool.

The DfT databook (2009) gives an indication of current crowding on the rail network. Loadings of over 40% are observed in Nottinghamshire between Nottingham and Birmingham via Derby; between Nottingham and Alfreton; and between Mansfield Woodhouse and Worksop.

10.4.3 Punctuality

Each rail operators' current punctuality performance is detailed below in table 70. East Midlands Trains (EMT) has significantly improved punctuality since taking over the franchise in November 2007. EMTs' Midland Main Line service has been the best performing long-distance operator in Britain since January 2009, and since taking over, EMT has improved the local services from being the worst performing regional operator to being the third best (out of 10). Punctuality on the East Coast Main Line has also improved, albeit from a much lower starting point.

Trend data is not available for all services but the available punctuality trend data is detailed below in table 71.

Table 70: Percentage of trains on time and cancelled in 2009/10

		Percentage of trains		
Service	**Operator**	**Within 5 minutes**	**Within 10 minutes**	**Cancelled**
London - Newark & Retford - Leeds/Edinburgh	East Coast	81.1	87.4	1.1
Nottingham - London	East Midlands Trains		93.9	
Nottingham to: • Mansfield & Worksop, • Derby & Matlock, • Grantham &Skegness • Newark & Lincoln, • Leicester stoppers	East Midlands Trains	92.6		0.8
Nottingham - Birmingham - Cardiff	Cross-Country	84.4	90.1	1.3
Nottingham - Leeds	Northern	91.6	95.6	0.9

Lincoln - Retford - Sheffield	Northern			

Source: For Cross-Country, East Coast & Northern - Office of Rail Regulation 'National Rail Trends 2009-2010 Yearbook, sections 8.4, 8.5 & 8.14; for East Midlands Trains, Office of Rail Regulation 'National Rail Trends 20010-11 Quarter 1, section 8.6'.

Table 71: Train punctuality trend data

	2005-06	Autumn 2007	20010/11 Quarter 1	Change
EMT Midland Main Line, inc Nottingham - London within ten minutes of right time		90.6%	93.9%	+ 3.3%
EMT Local services within five minutes of right time	Not available	83.0%	92.6%	+9.6%
East Coast Main Line within ten minutes of right time	83.5%	86.0%	87.4%	+ 3.9%

10.4.4 Light rail

The light rail system, Nottingham Express Transit (NET) Line 1, provides services between the city centre and the northern local centre of Hucknall. Line 1 is extensively within the city but serves two stops in the county (Butlers Hill and Hucknall). Two further lines (NET Lines 2 and 3) are proposed which would serve areas to the south (to Clifton) and west (via Beeston) of the city.

10.5 Rail infrastructure

10.5.1 Rail fleet

Each of the operators serving the county continue to invest in their rolling stock. Table 72 below gives details of each of the operators' current rolling stock.

Table 72: Train operators' rolling stock

Operator	Type of train	Number of units	Coaches per unit	Built	Refurbished & upgraded	Maximum speed	Services used on
East Midlands Trains	Class 222	27	5 or 7	2003 - 2005		125mph	Nottingham/Beeston - London semi fast
	HST	13	8	1976 - 1982	2009 - 10. £9million new carpets, upholstery & cctv	125mph	Nottingham - London expresses
	Class 158	25	2	1989 - 1992	2009-10. £10million. New seats, carpets, toilets, cctv & air-conditioning.	90mph	Nottingham to • Norwich • Liverpool
	Class 156	15	2	1987 - 1989	2010 - 11. £5million new carpets, upholstery & cctv	75mph	Nottingham to • Worksop • Skegness • Matlock, & Lincoln –Leicester
	Class 153	17	2	1987 - 1989		75mph	
Northern Rail	Class 158	A large fleet	2	1989 - 1992	Some partially upgraded with new seats & carpets	90mph	Nottingham- Leeds
	Class 142		2	1985 - 1987		75mph	Sheffield - Retford
Cross Country	Class 170	29	2 or 3	1999 - 2002		100mph	Nottingham - Birmingham- Cardiff
East Coast	HST	15	9	1976 - 1982	2007 - 09. New engines, & new seats, carpets, upholstery, cctv, & wi-fi	125mph	London - Newark - Retford - Leeds & Edinburgh
	Class 91	31	9	1991	2003 - 06. new seats, carpets, upholstery, cctv, & wi-fi.	140mph	

10.6 Taxis

Table 73 below details the number and type of licensed taxis that are available by district. The numbers in brackets give the numbers of those vehicles that are wheelchair accessible.

Table 73: The numbers of licensed taxis in Nottinghamshire

District	No. of licensed hackney carriages	No. of licensed private hire vehicles
Ashfield	129 (29)	66 (0)
Bassetlaw	44 (17)	89 (3)
Broxtowe	154 (3)	39 (4)
Gedling	225 (N/K)	255 (N/K)
Mansfield	83 (44)	146 (20)
Newark & Sherwood	106 (10)	25 (3)
Rushcliffe	11 (11)	201 (1)

Source: District councils

10.7 Air

10.7.1 Locations of airports

There are no commercial airports within Nottinghamshire. There are, however, two airports located just outside the county boundary – East Midlands and Robin Hood airports – which are shown in figure 123 below.

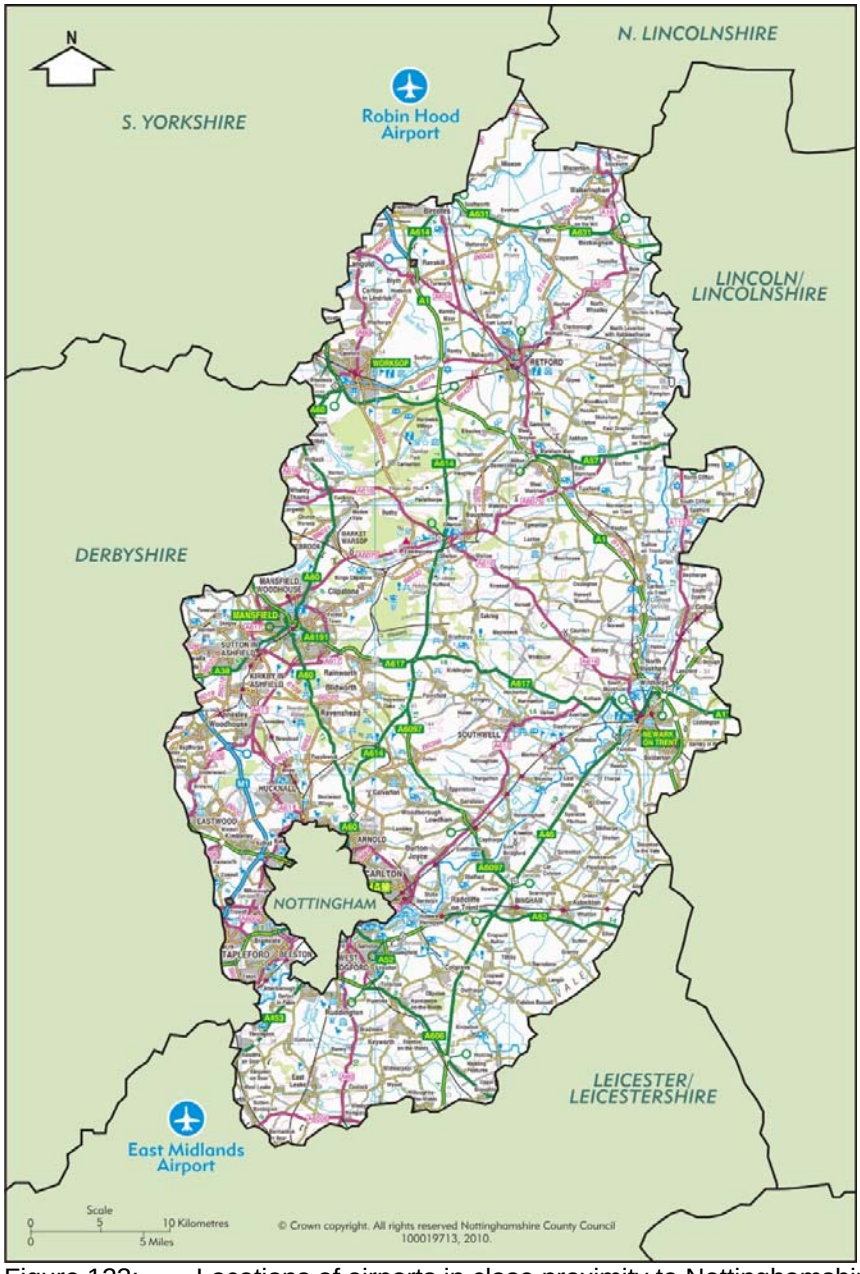


Figure 123: Locations of airports in close proximity to Nottinghamshire

10.7.2 Surface access to airports

The Civil Aviation Authority (CAA) carries out passenger travel surveys at each airport every three or four years. This survey includes questions on how the passengers travelled to/from the airport. Tables 74 and 75 below detail how passengers travel to East Midlands and Robin Hood airports respectively.

East Midlands Airport

In 2006 more passengers travelling to/from East Midlands Airport resided in Nottinghamshire (22.4%) than anywhere else. The numbers of passengers travelling to East Midlands Airport by public transport has risen in each of the last two CAA surveys with corresponding decreases in the numbers of car trips to the airport. Whilst the overall numbers of passengers being dropped of by private car has decreased by over 15%; the number of passengers driving to the airport and parking for the duration of their trip has increased by over 10% and accounts for almost 50% of all journeys to the airport.

Table 74: How passengers travel to East Midlands Airport

Passenger modal choice	1999	2003/04	2006
Car / taxi	97.31%	96.39%	90.91%
Bus / train / coach	2.33%	3.29%	8.71%
Other	0.36%	0.32%	0.38%

Source: East Midlands Airport Master Plan 2006 Monitoring and Implementation Report 2008

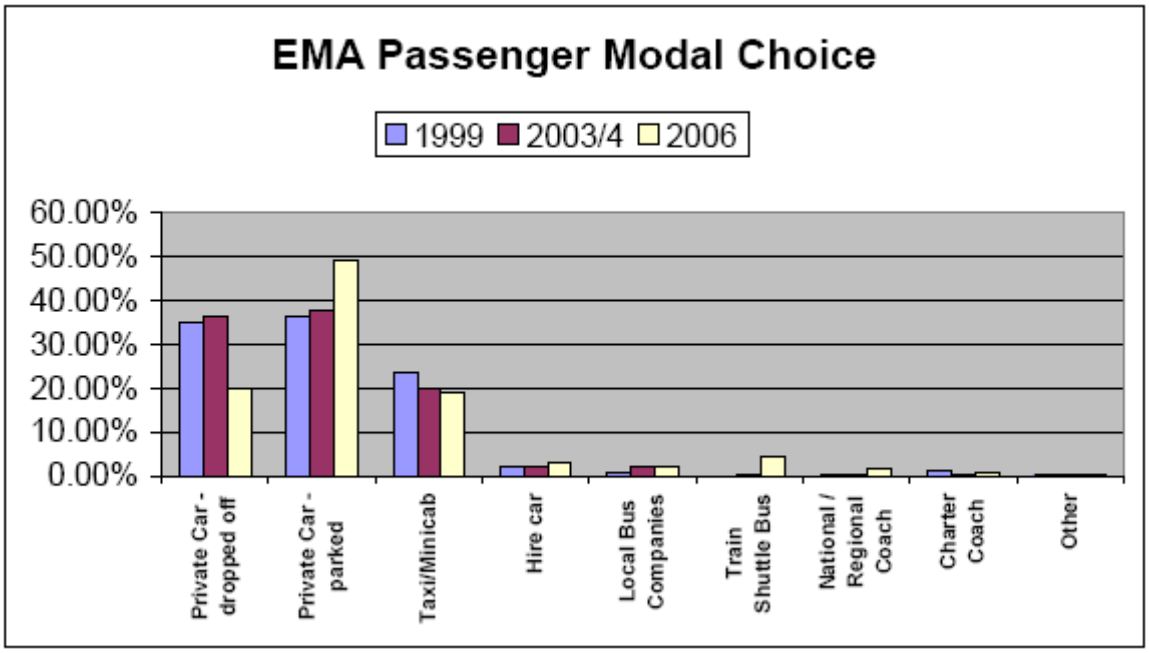


Figure 124: How passengers travel to East Midlands Airport
Source: East Midlands Airport Master Plan 2006 Monitoring and Implementation Report 2008

The airport is served by bus services to Nottingham (as well as Derby; Loughborough; Leicester; Coalville; and Swadlincote) and the East Midlands Parkway rail station was formally opened in January 2009.

The Skylink service to Nottingham has seen significant increases in passenger numbers since it commenced in 2004, as can be seen in figure 125 below. Whilst patronage fell in 2009 this reflects the decrease in air passengers at East Midlands Airport in 2009 due to the economic recession.

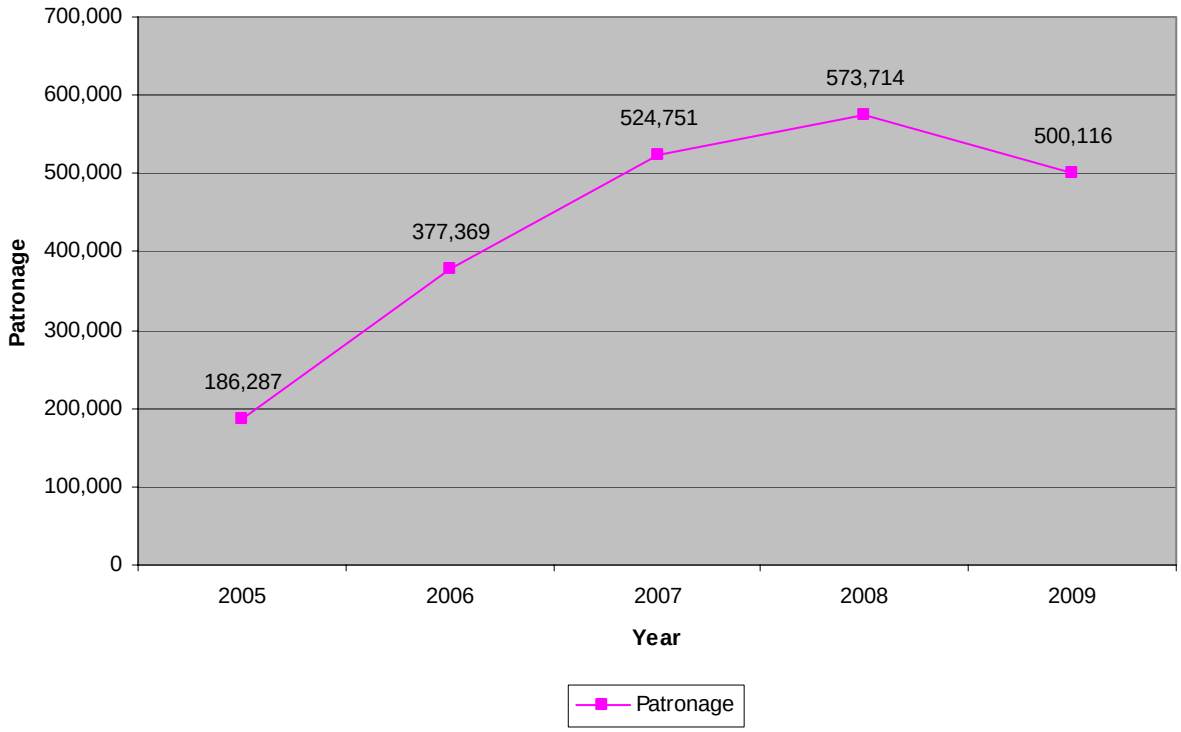


Figure 125: Nottingham Skylink patronage
Source: Nottingham City Council

Robin Hood Airport

In 2006 8% of passengers travelling to/from Robin Hood Airport resided in Nottinghamshire (the majority of passengers resided in South Yorkshire). The first CAA surveys at the airport were undertaken during 2007. Prior to these, the airport carried out small sample summer season passenger interview surveys in 2006. Comparison of the two years shows a small increase in public transport use.

Table 75: How passengers travel to Robin Hood Airport

Passenger modal choice	2006	2007
Car	94%	93%
Bus / coach	6%	7%
Other	0%	0.1%

Source: Robin Hood Airport Draft Master Plan 2007 and 2007/08 Civil Aviation Authority Passenger Survey Report

The airport is served by the Robin Hood Lynx bus services which started in May 2007 to Worksop, Langold and Harworth; as well as Retford, Blyth and Bawtry. The introduction of the dedicated service to Robin Hood Airport has proved to be very successful with a 296% increase in patronage in the year to April 2008 (2009 data was not available at the time of writing).

11. Transport assets

11.1 Length of the network

11.1.1 Roads

Table 76 below shows the lengths of the road network in Nottinghamshire split by district and road type.

Table 76: Length of the road network in Nottinghamshire

	Length of the road network							
Road type	**Ashfield**	**Bassetlaw**	**Broxtowe**	**Gedling**	**Mansfield**	**Newark**	**Rushcliffe**	**TOTAL**
Motorway	0	0	12	0	0	0	0	12
A(M)	0	5	0	0	0	0	0	5
A(Trunk)	0	19	6	0	0	42	62	129
A	39	170	65	38	48	146	53	559
B	56	84	27	26	21	55	3	272
C	45	178	24	41	14	244	219	765
Unclassified	289	488	298	331	328	516	304	2554
TOTAL	**429**	**944**	**432**	**436**	**411**	**1003**	**641**	**4296**
% of network	**10%**	**22%**	**10%**	**10%**	**10%**	**23%**	**15%**	

Source: Nottinghamshire County Council

11.1.2 Footways

The County Council is currently undertaking an audit to determine the full extent and condition of its footways. This work will be completed during 2010/11 and will be used for prioritisation of footway repairs and maintenance.

11.1.3 Cycle routes

There are over 350km of formal cycle network across the county. Further details including a breakdown of the types of routes and where they are located is included in Chapter 13 - Local cycle network, of this report.

11.1.4 Rights of Way network

There are over 4,000 designated Rights of Way in the county totalling over 2,500km in length. Table 77 below details the lengths and percentages of the Rights of Way network in Nottinghamshire. The number of footpaths far outweighs each of the other categories, which highlights that the network is much more accessible on foot than by any other means. 31% of the network length is available to equestrians and cyclists, which is higher than both the national (22%) and regional (20%) averages. These figures, however, assume that all of the routes are usable but the fragmentation and maintenance issues of the bridleway network means that routes are frequently not available to all users. Further details on the Rights of Way network can be found in the Rights of Way Improvement Plan, as well as the definitive map which is held by the County Council and is available to view by appointment.

Table 77: Rights of Way network breakdown by length and percentage (2010)

	Designation				
	Footpath	**Bridleway**	**BOAT**	**RUP/RB**	**TOTAL**
No.	3190 (78%)	730 (18%)	130 (3%)	27 (1%)	4077
Length (km)	1849.09 (69%)	696.56 (26%)	121.27 (4%)	32.45 (1%)	2699.37

Source: Nottinghamshire County Council 2010

Figure 126 below shows the network density of the Rights of Way network across the county whilst figure 127 shows the network density available to cyclists and equestrians.

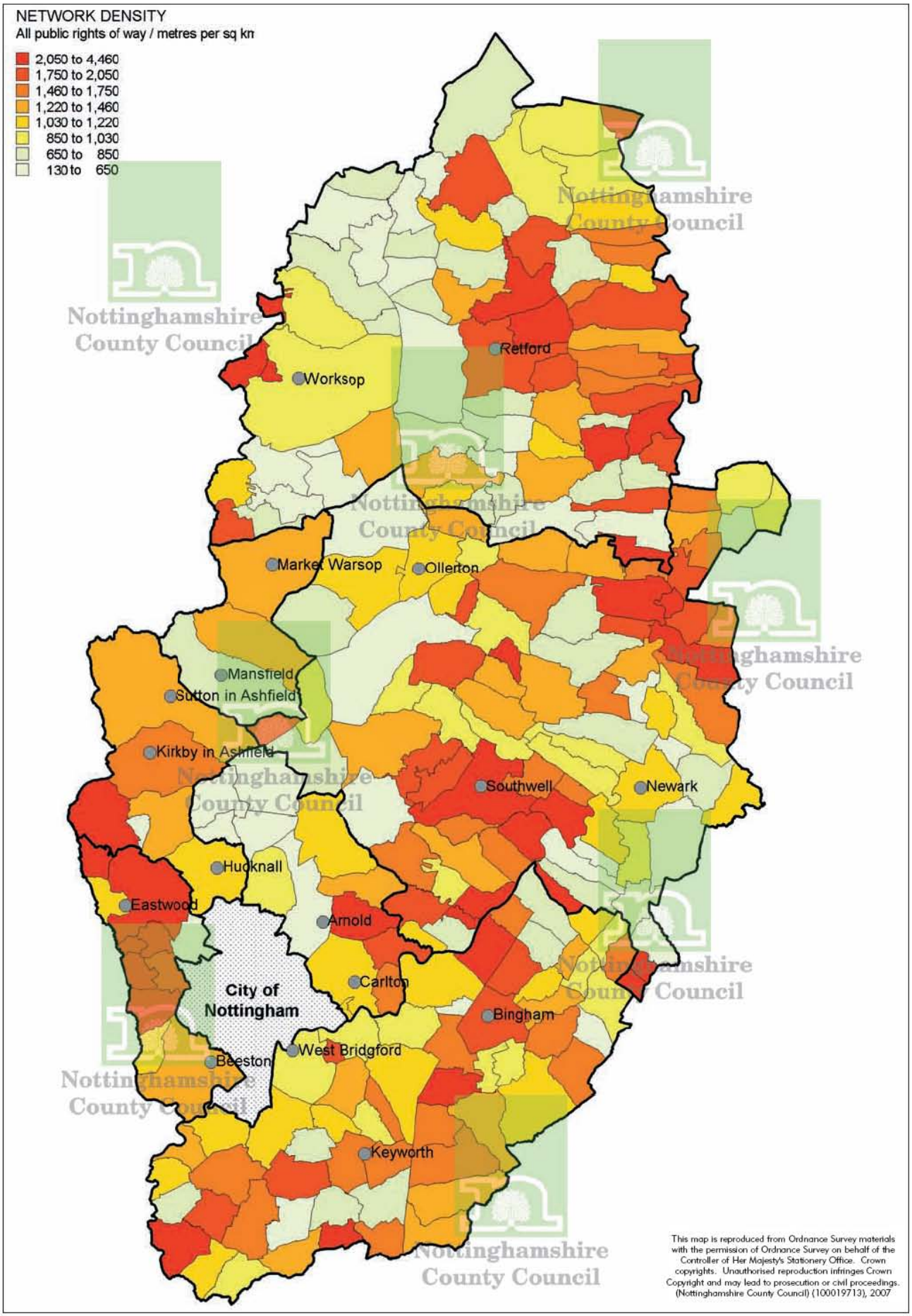


Figure 126: Network density of the Rights of Way network in Nottinghamshire by ward
Source: Nottinghamshire County Council Rights of Way Improvement Plan

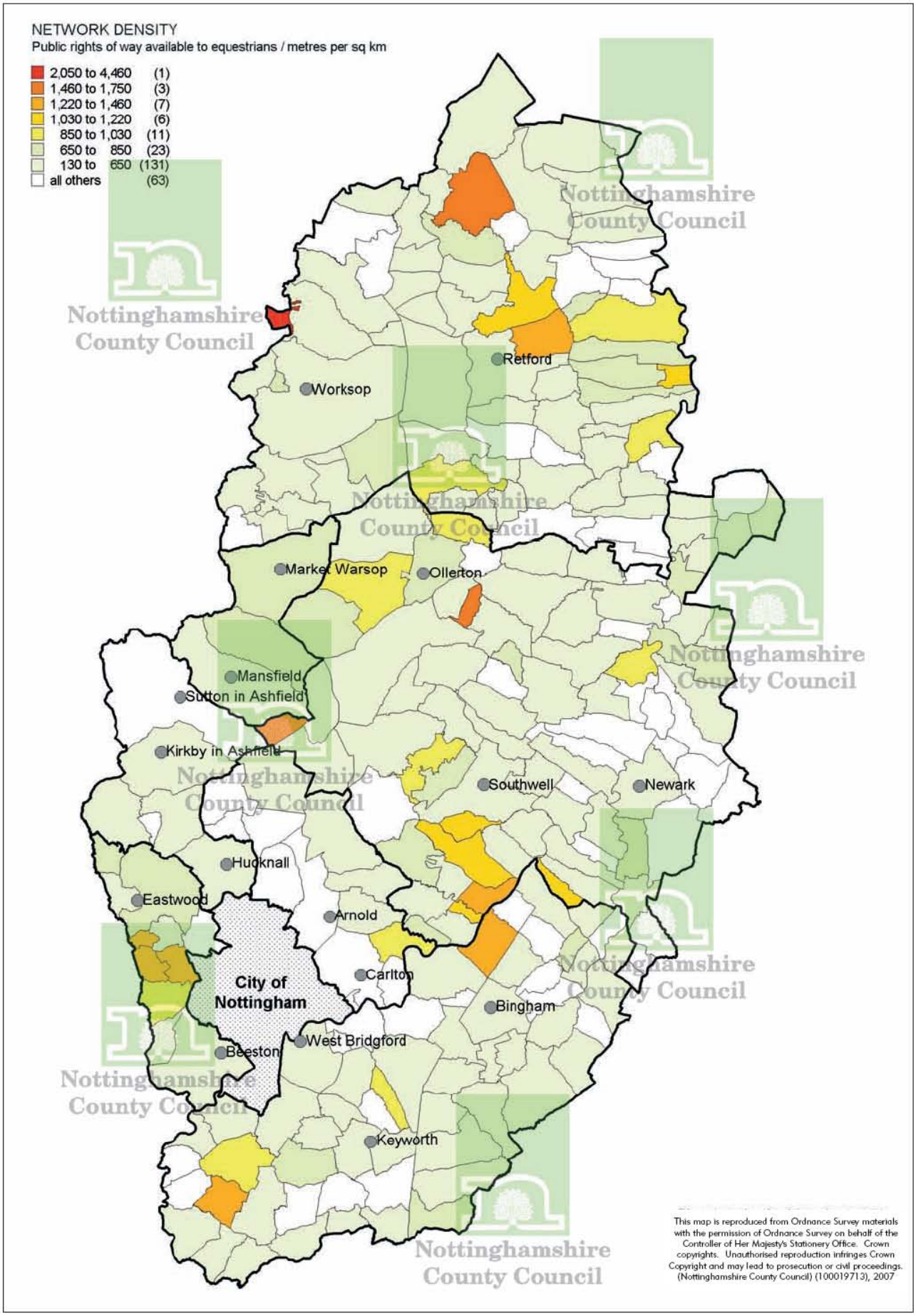


Figure 127: Network density of the Rights of Way network available to cyclists and equestrians in Nottinghamshire by ward

Source: Nottinghamshire County Council Rights of Way Improvement Plan

Figure 128 below shows the open access land in Nottinghamshire.

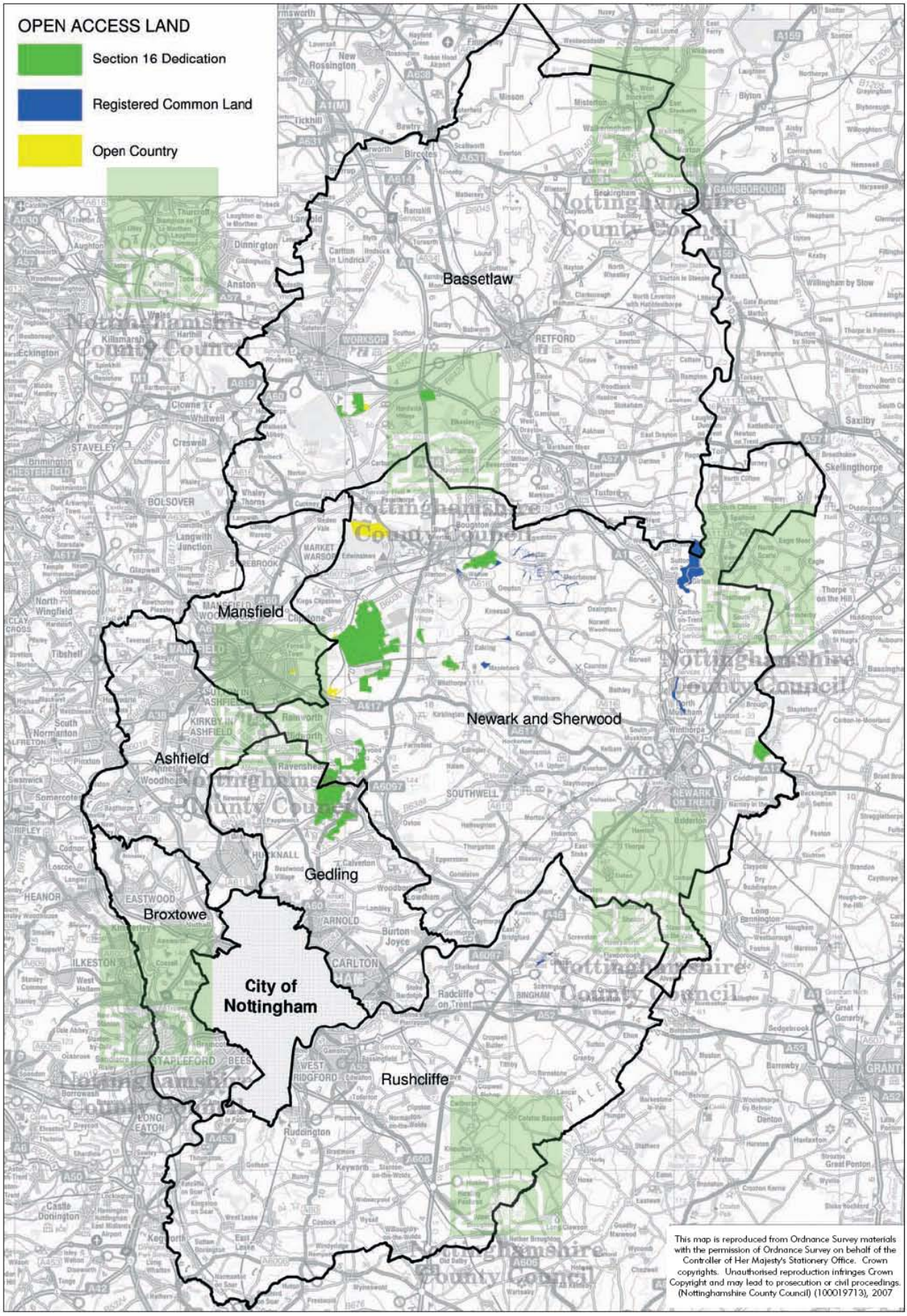


Figure xxxx: Open access land in Nottinghamshire
Source: Nottinghamshire County Council Rights of Way Improvement Plan

11.2 Condition of roads and footways

11.2.1 Condition of roads

The condition of A, B&C and unclassified roads is detailed in table 78 below. The table shows the percentage of the network requiring repair in each district for the period 2007/8-2009/10. The column 'percentage contributing to overall performance' shows how the percentage needing repair in each district affects the county's overall performance. For example, only 1% of Bassetlaw's A roads require repair but due to the amount of A roads in Bassetlaw, they account for 20.8% of all of the A roads in the county requiring repair.

In 2009/10:

- the percentage of the County's A road network where maintenance should be considered has remained at 1.5% of the network, although the condition is slightly worse in Broxtowe, Gedling and Mansfield districts
- the percentage of the County's B & C road network where maintenance should be considered has remained at 8.4% (although deterioration has been seen in Mansfield and Rushcliffe; and the condition has improved in Ashfield, Bassetlaw, and Gedling districts), and
- the County's unclassified road network has worsened in some districts.

Table 78: Condition of the A, B&C and unclassified road network

		Percentage of the network where maintenance should be considered					
		2007/08		2008/09		2009/10	
		Percentage within the area	Percentage contributing to overall performance	Percentage within the area	Percentage contributing to overall performance	Percentage within the area	Percentage contributing to overall performance
A roads (NI 168)	**Countywide**	**1.5%**	**100.0%**	**1.6%**	**100.0%**	**1.5%**	**100.0%**
	Ashfield	0.9%	4.1%	1.1%	4.8%	1.3%	5.8%
	Bassetlaw	1.0%	20.8%	1.3%	25.0%	1.0%	20.5%
	Broxtowe	3.6%	17.7%	1.8%	8.0%	2.3%	10.0%
	Mansfield	5.1%	32.2%	3.0%	18.6%	3.0%	19.1%
	Gedling	1.0%	18.8%	1.2%	21.1%	2.5%	11.6%
	Newark	1.4%	5.3%	2.0%	8.6%	1.1%	21.1%
	Rushcliffe	1.4%	8.9%	2.2%	14.0%	1.8%	11.8%
B & C roads (NI169)	**Countywide**	**7.3%**	**100.0%**	**8.4%**	**100.0%**	**8.4%**	**100.0%**
	Ashfield	8.0%	8.0%	8.7%	6.1%	7.6%	8.4%
	Bassetlaw	6.5%	26.2%	8.8%	22.7%	8.3%	24.1%
	Broxtowe	9.1%	2.5%	9.8%	3.7%	9.9%	5.6%
	Mansfield	2.5%	0.4%	2.4%	0.5%	3.5%	1.4%
	Newark	7.9%	42.4%	9.6%	36.9%	9.6%	32.7%
	Gedling	3.6%	1.6%	4.6%	2.9%	4.2%	3.5%
	Rushcliffe	7.7%	18.8%	7.7%	27.3%	9.0%	24.4%
Unclassified roads	**Countywide**	**15.7%**	**100.0%**	**17.0%**	**100.0%**	**19.5%**	**100.0%**
	Ashfield	17.5%	12.1%	17.5%	11.1%	17.5%	9.5%
	Bassetlaw	15.6%	19.1%	21.2%	24.8%	21.2%	21.2%
	Broxtowe	14.3%	10.9%	14.3%	10.0%	14.3%	8.6%
	Mansfield	12.6%	9.9%	14.3%	10.7%	14.3%	9.1%
	Newark	18.3%	20.3%	18.4%	18.6%	27.2%	24.5%
	Gedling	15.3%	12.3%	15.1%	11.1%	15.1%	9.5%
	Rushcliffe	15.3%	15.0%	15.3%	13.7%	21.7%	17.7%

The condition of the road networks in Nottinghamshire, shire authorities, regionally and nationally is shown below in table 79. The condition of the A road network in Nottinghamshire is better than the average shire authority, the East Midlands region and England. The condition of the B&C road network in Nottinghamshire is similar to the average shire authority, the East Midlands region and England. The condition of the unclassified road network in Nottinghamshire is slightly worse than the average shire authority and England.

Table 79: Comparison of the condition of the A, B&C and unclassified (Unc) road network

	Percentage of the network where maintenance should be considered								
	2006/07			2007/08			2008/09		
	A	B&C	Unc	A	B&C	Unc	A	B&C	Unc
Nottinghamshire	2%	6%	15%	2%	7%	16%	2%	8%	17%
Shire authorities	6%	13%	17%	4%	8%	16%	4%	8%	15%
East Midlands	5%	10%	N/A	3%	6%	N/A	3%	8%	N/A
England	7%	13%	16%	5%	8%	15%	5%	9%	15%

Source: DfT Transport Statistics 2009

Maps detailing the condition of the A, B and C road network in each of the districts are detailed below in figures 129 to 135.

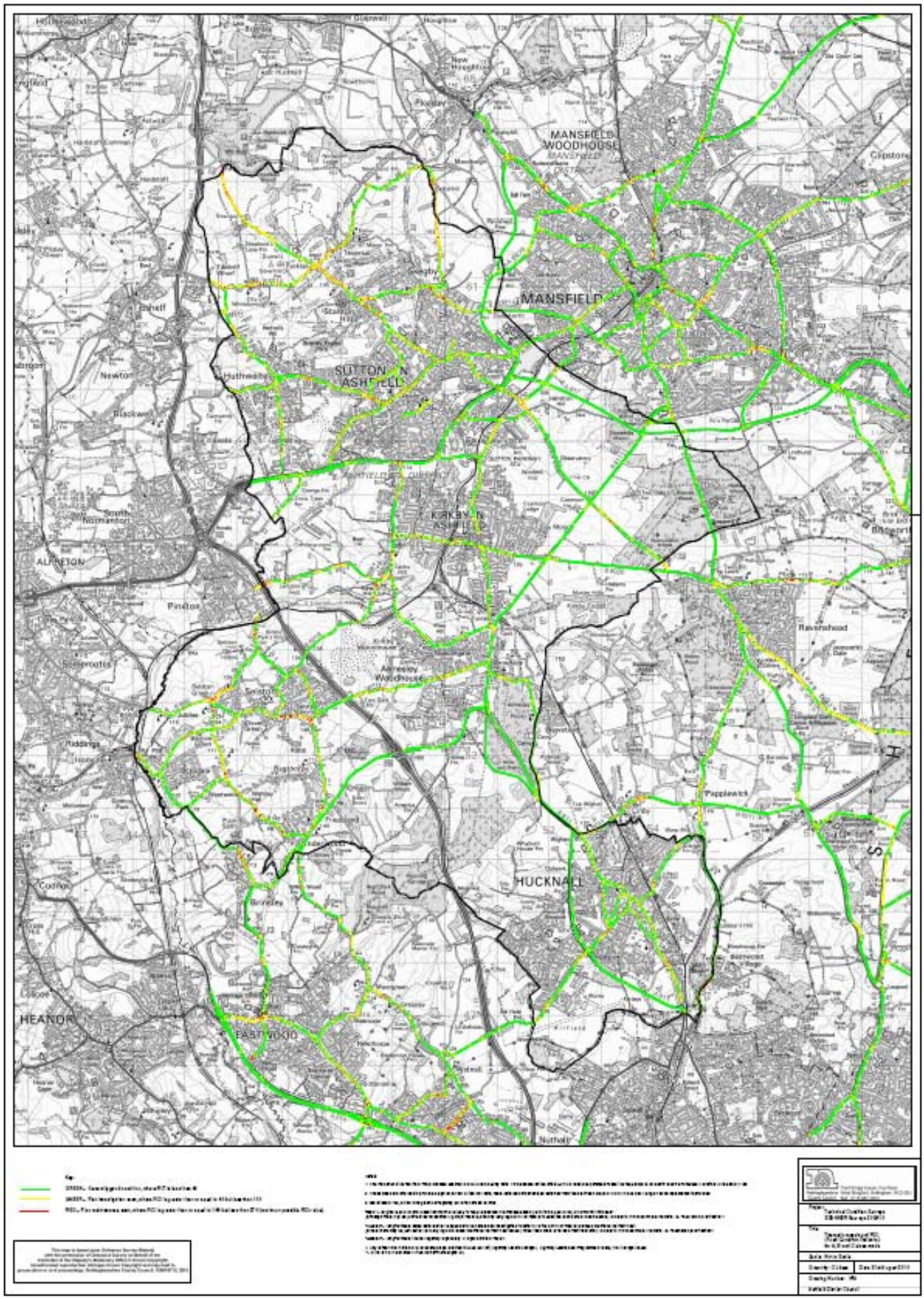


Figure 129: Condition of the A, B and C road network in Ashfield

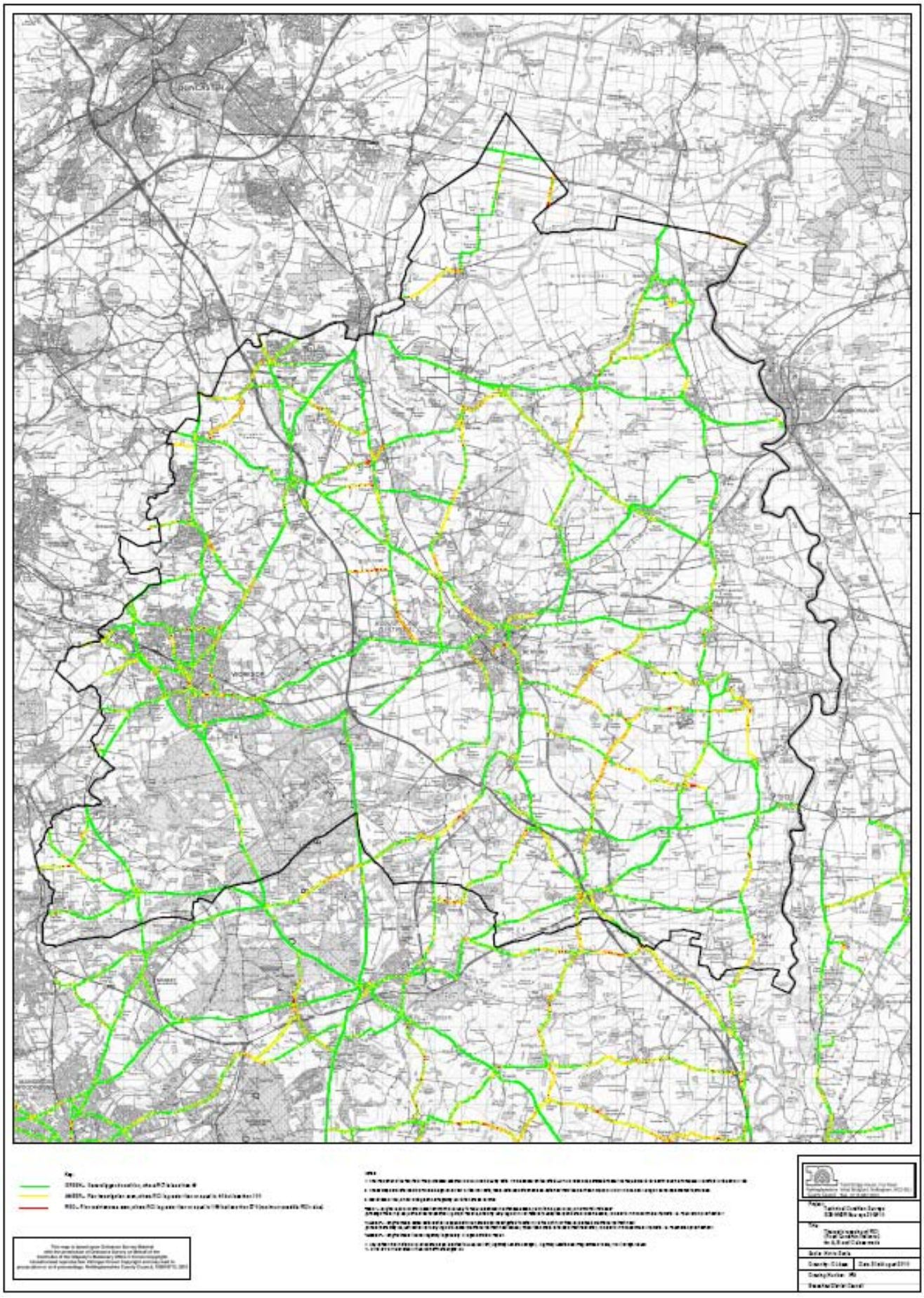


Figure 130: Condition of the A, B and C road network in Bassetlaw

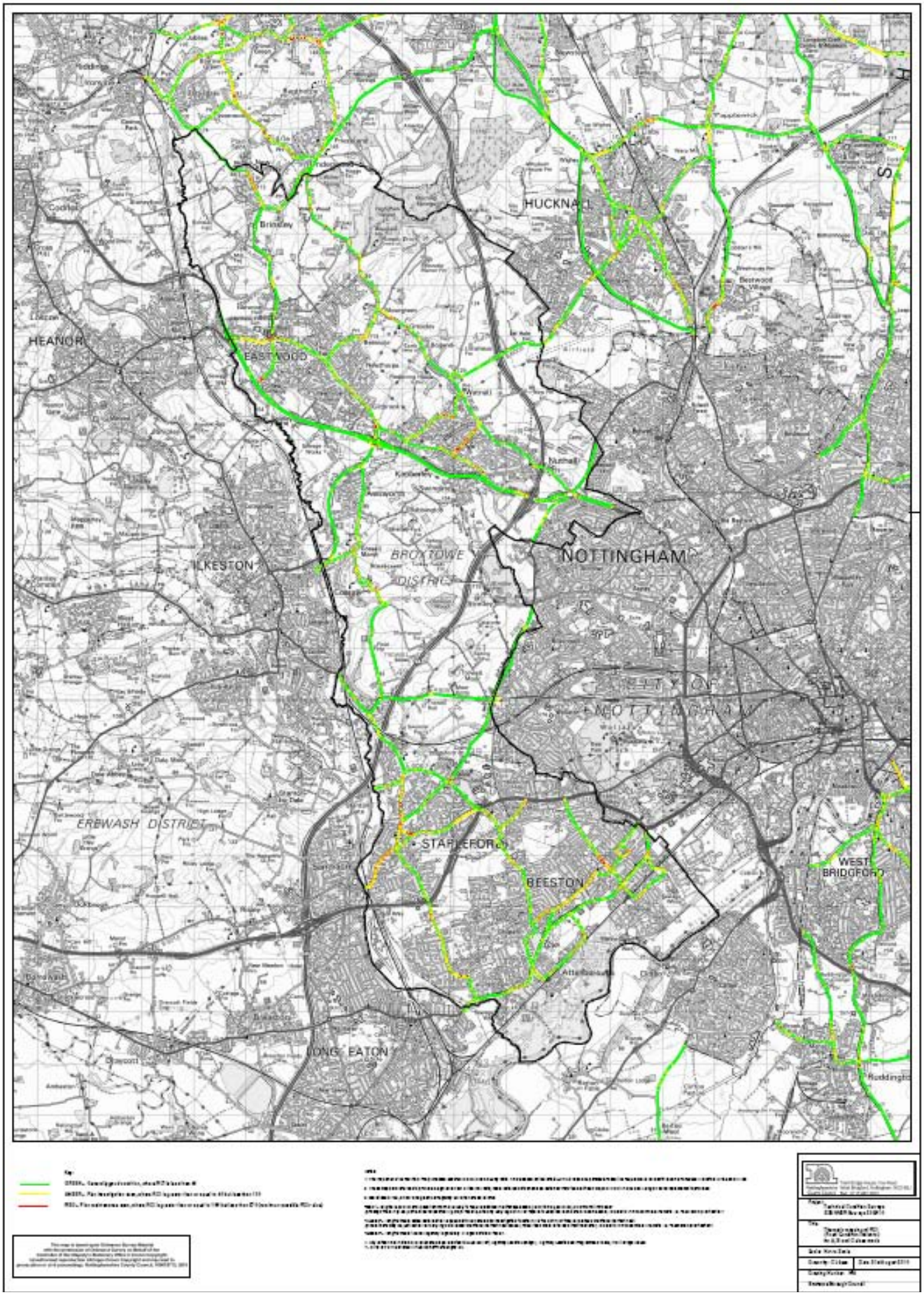


Figure 131: Condition of the A, B and C road network in Broxtowe

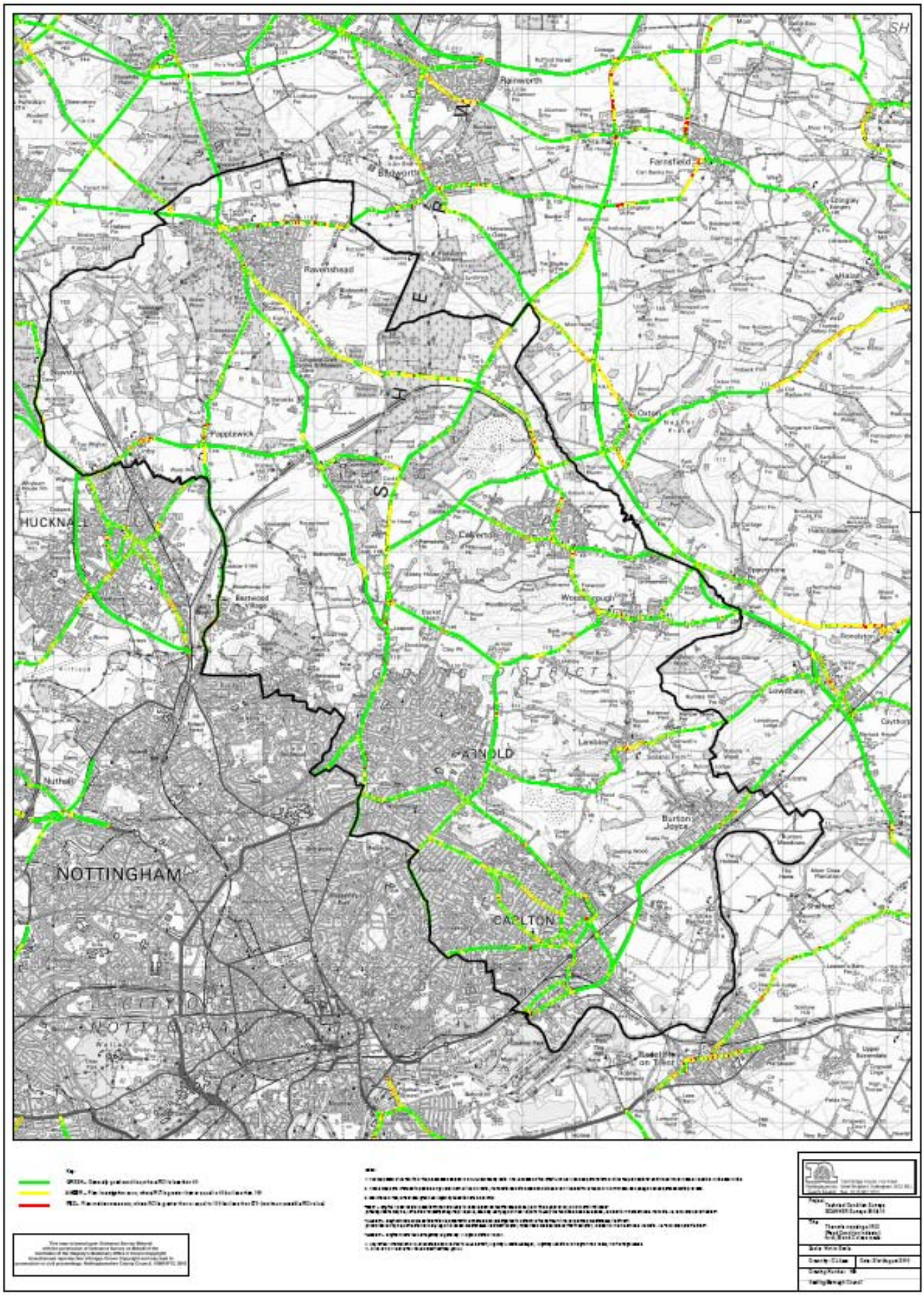


Figure 132: Condition of the A, B and C road network in Gedling

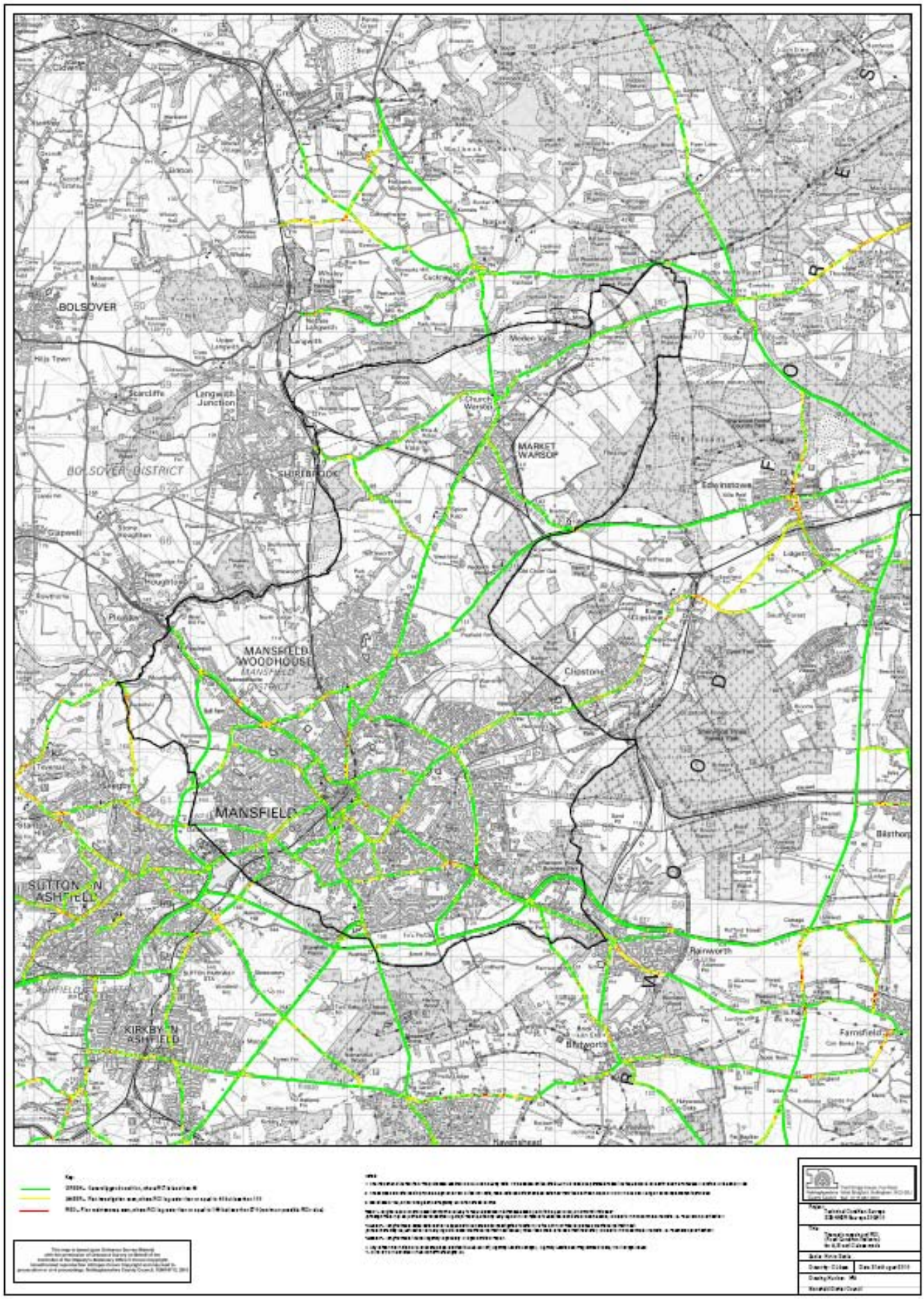


Figure 133: Condition of the A, B and C road network in Mansfield

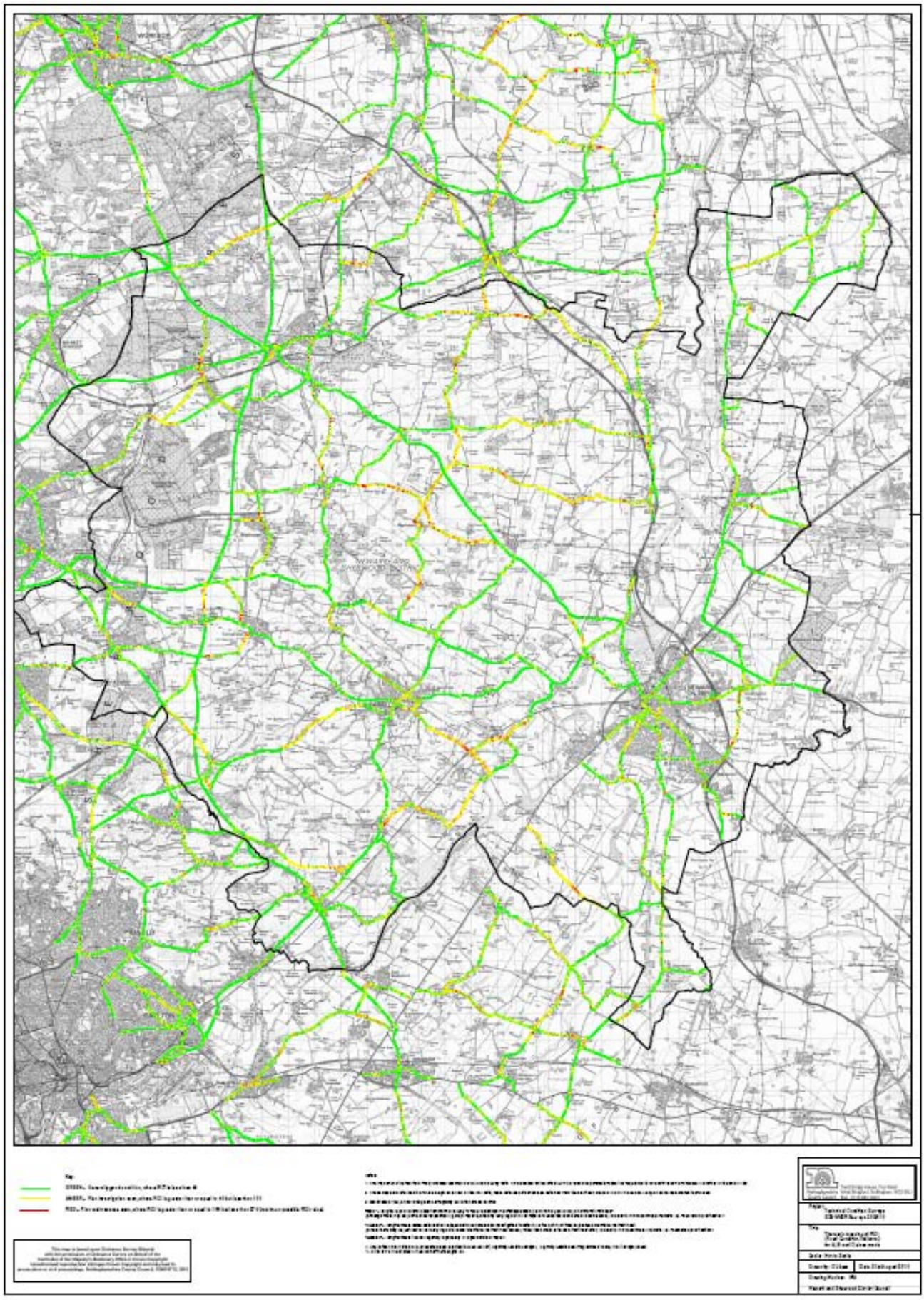


Figure 134: Condition of the A, B and C road network in Newark & Sherwood

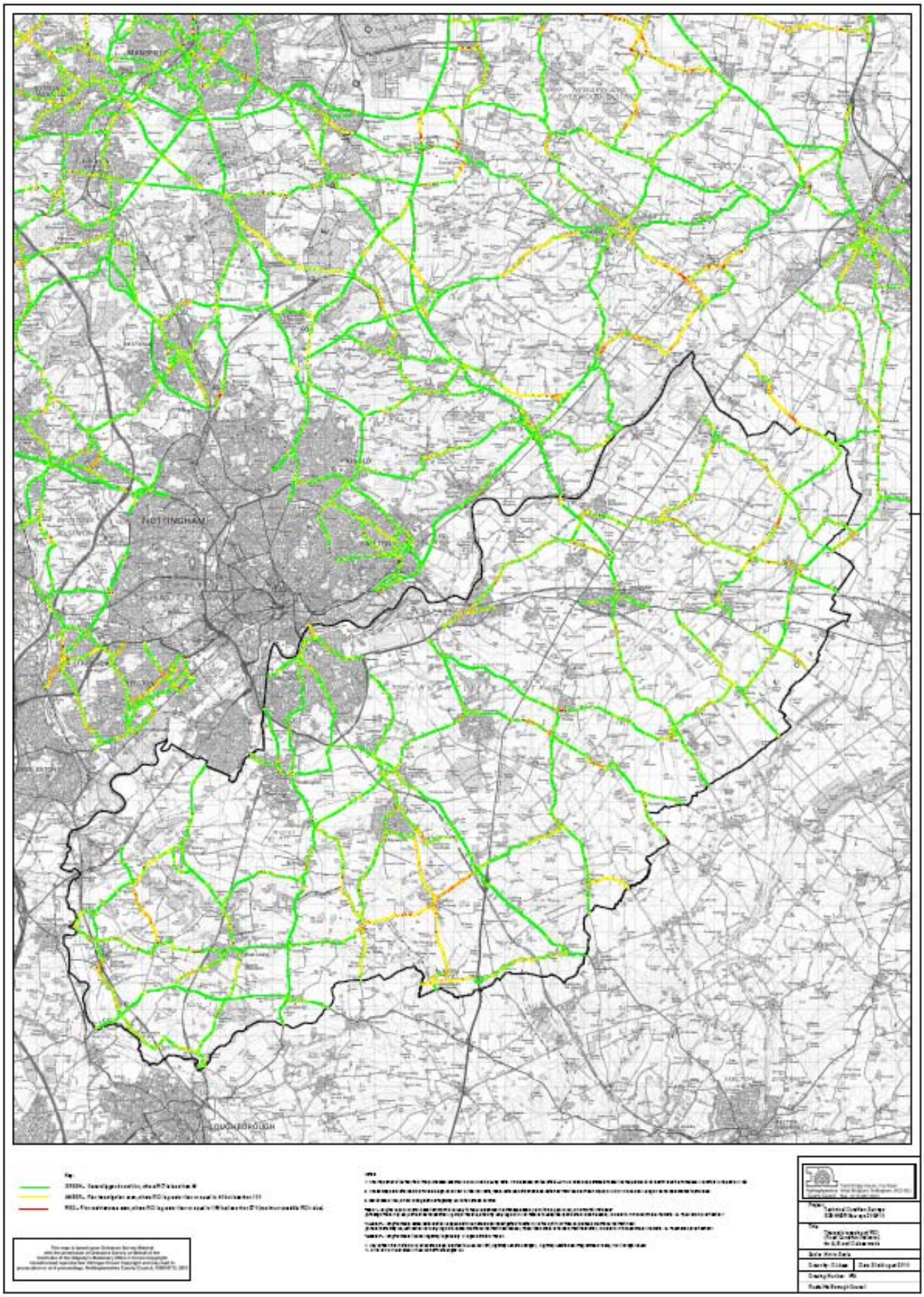


Figure 135: Condition of the A, B and C road network in Rushcliffe

11.2.2 Footways

The County Council is currently undertaking an audit to determine the full extent and condition of its footways. This work will be completed during 2010/11 and will be used for prioritisation of footway repairs and maintenance. The condition of the category 1, 1a and 2 footways (which are footways with medium to high usage – generally in local shopping areas) is currently monitored and is detailed below in table 80.

Table 80: Condition of the category 1, 1a and 2 footways in Nottinghamshire

	2005/06	2006/07	2007/08	2008/9	2009/10
Percentage of category 1, 1a and 2 footways where maintenance should be considered	26	26	22	27	24

11.2.3 Rights of Way network

There is no formal mechanism for recording and measuring the condition of the Rights of Way network. Until recently English and Welsh highway authorities used the national indicator (BVPI 178) to record and monitor performance. The national performance indicator, however, was found to be inadequate and inconsistent due to the methodology used to record data, particularly the random nature of the surveys which did not take into account strategic and targeted improvements.

Four local indicators are currently used in Nottinghamshire to record targeted Rights of Way functions:

- the number of rights of way signposted (from a metalled road)
- the accessibility of the network to all users, and
- two indicators recording the reinstatement of paths across and alongside arable cropped fields.

Table 81 below summarises the results of the local performance indicators.

Table 81: Condition of the Rights of Way network performance

Indicator	Description	Target (2009/10)	Actual (2009/2010)
BVLEN21a	The % of public Rights of Way directly affected by an improvement and the length of public rights of way subsequently made accessible	5.20%	5.28%
BVLEN22	Signposting of Rights of Way	90%	90%
DPO8a	Proportion of Rights of Way on arable land found to be compliant on first inspection with the requirements of the Highways Act, a) Spring	80%	81.80%
DP08b	Proportion of Rights of Way on arable land found to be compliant on first inspection with the requirements of the Highways Act, b) Autumn	70%	63.80%

To achieve the above results a number of initiatives have been employed by the County Council including signing and waymarking projects; replacing stiles for easy access kissing gates; an innovative and successful 'ploughing and cropping' initiative; refurbishment of bridges; surfacing (particularly utility paths serving local communities for accessing local services); and a strategic whole parish approach to improvements (working and identifying priorities with parishes).

Inspections and targeted surveys are regularly undertaken by officers and a number of volunteers. Defect reports are also collated through the County Council's Customer Service Centre, email accounts, phone calls and written communication. Defects and reports are prioritised by public safety and strategic and local importance. The current resource allows the County Council to provide the minimum service required to avoid possible legal challenge from members of the public and land owners.

11.3 Other assets

11.3.1 Lighting stock

Table 82 below details the numbers of lighting columns and their condition as at August 2010. Note the columns listed as dangerous are repaired immediately.

Table 82: Street lighting column condition

	Visual Condition							Percentage in
Area	**Excellent**	**Good**	**Average**	**Poor**	**Unknown**	**Dangerous**	**Total**	**poor condition**
Ashfield	0	13,325	739	228	101	0	14,393	1.5%
Bassetlaw	1,372	5,990	6,279	295	265	2	14,203	2%
Broxtowe	3,557	6,412	2,087	1,350	136	0	13,542	10%
Gedling	787	9,645	1,451	595	21	5	12,504	5%
Mansfield	2,005	7,497	2,347	297	77	0	12,223	2%
Newark & Sherwood	1,829	7,301	1,265	1,079	179	0	11,653	9%
Rushcliffe	665	6,665	4,535	418	117	0	12,400	3%
County	10,215	56,835	18,703	4,262	896	7	90,911	5%

11.3.2 Bridges

There are 715 bridges in the county with a span of over 1.5m as detailed below in table 83.

Table 83: Number of bridges over 1.5m span

	No. of bridges > 1.5m span		
Area	A roads	B roads	C and Unclassified roads
Ashfield	12	8	20
Bassetlaw	61	29	119
Broxtowe	24	3	18
Gedling	15	4	25
Mansfield	11	5	30
Newark & Sherwood	52	20	146
Rushcliffe	14	1	98
County	189	70	456

In order to improve the effective management of highway authority owned bridges, the Bridge Condition Indicator (BCI) has been used for all general bridge inspections since 2003. In 2010, Nottinghamshire's bridge stock condition scores are 82.4 for critical elements and 89.5 for overall bridge stock. When compared to 2005, the 2010 indicators show an improvement from 87.2 to 89.5 for the overall stock score and 77.4 to 82.4 for the critical stock score. The BCI scores for the period 2005 to 2010 are detailed below in table 84.

Table 84: Bridge Condition Indicator scores for Nottinghamshire

	Bridge Condition Indicator	
Year	**Overall**	**Critical**
2005	87.6	77.4
2006	88.4	78.2
2007	89.3	79.4
2008	89.7	81.2
2009	89.5	81.9
2010	89.5	82.4

Of the 715 bridges in the county, four currently require strengthening – two on the A road network in Bassetlaw; and two on the C and unclassified network in Newark & Sherwood. A further 17

bridges require upgrading (for example, parapet replacement, protection and improvement work); and a further 22 require waterproofing or re-waterproofing.

Table 85: Bridge repairs required in Nottinghamshire

	No. of bridges requiring strengthening			No. of bridges requiring upgrading			No. of bridges requiring waterproofing/ re-waterproofing		
Area	A roads	B roads	C and Unclassified roads	A roads	B roads	C and Unclassified roads	A roads	B roads	C and Unclassified roads
Ashfield	0	0	0	0	0	0	0	0	1
Bassetlaw	2	0	0	1	2	1	5	1	2
Broxtowe	0	0	0	0	0	1	0	0	0
Gedling	0	0	0	0	0	1	0	0	1
Mansfield	0	0	0	0	0	0	0	0	0
Newark & Sherwood	0	0	2	0	2	5	1	2	7
Rushcliffe	0	0	0	0	0	4	0	0	2
County	2	0	2	1	4	12	6	3	13

There are fourteen significant steel bridges in the county (detailed below in table 86) as well as many bridges with steel components such as parapets. Such bridges require frequent painting and the painting schedules are also included in table 86.

Table 86: Significant steel bridges in Nottinghamshire

Road	Bridge name	Last painted	Due to be painted
B6044	Albert Bridge	2004	2011
U/C	West Stockwith Bridge	2002	2017
C7	Bridgegate Bridge, Retford	2004	2012
A6009	Portland Street Footbridge	2001	2016
A617	Dawn House School Footbridge	2000	2015
B6326	Newark Town Bridge	2007	2017
A38	Fulwood Bridge	2005	2015
A611	Annie Holgate Footbridge	2007	2017
A38	Calladine Lane Bridge	1999	2014
A619	Gallows Inn Bridge	2006	2013
B5010	Station Road Bridge	2006	2016
C165	Padge Bridge	2007	2017
A60	Trent Bridge (Contribution)	2002	2017
A6211	Lady Bay Bridge	2010	2012

Bridge strikes

There are a number of locations in the county where bridge strikes are known to have regularly occurred. Table 87 details the locations of these bridges.

Table 87: Locations in Nottinghamshire where bridges are known to regularly occur

Road No.	Structure Name	Owner	Last time struck
A620	Railway Bridge Welham Road - East of Retford	Network Rail	21/04/2010
A619	Chesterfield Road - Notts/Derby Border	Network Rail	22/06/2010
B6079	Retford Road Railway Bridge, Manton, Worksop	Network Rail	17/11/2009
C156	Woodend Railway Br Adj. to Canal Bridge, Rhodesia	Network Rail	?
A60	Mansfield Road, Spion Kop,Warsop	Network Rail	22/02/2010
A6075	Debdale Lane Railway Bridge, Mansfield	Network Rail	22/03/2010
C140	Sheepbridge Lane Railway Bridge	Network Rail	?
C145	Hermitage Lane Railway Bridge, Mansfield	Network Rail	?
U/C	Vale Road Railway Bridge, Mansfield Woodhouse	Network Rail	?
B6003	Stapleford Road Railway Bridge, Trowell	Network Rail	29/01/2010
A606	Tollerton Railway Bridge	Network Rail	?
C33	East Leake/Bunny Road Railway Bridge	GCR Ltd	?
C131	Main Street, Kingston Railway Bridge	Network Rail	16/05/2008

11.3.4 Traffic signals

There are a total of 197 signals with vehicle detection – MOVA, SCOOT or vehicle actuated – in the county as detailed below in table 88. Several of these traffic signals have facilities to help pedestrians cross at the signal, table 88 also details those signals with full, part or no pedestrian facilities.

Table 88: Traffic signals with vehicle detection

	Type of signal											
	MOVA				SCOOT				Vehicle actuated			
Area	Full	Part	None	Total	Full	Part	None	Total	Full	Part	None	Total
Ashfield	1	10	7	18	7	5	1	13	6	2	2	10
Bassetlaw	2	0	0	2	5	6	0	11	4	1	2	7
Broxtowe	1	4	3	8	1	7	1	9	0	3	0	3
Gedling	1	8	3	12	1	10	1	12	3	7	2	12
Mansfield	4	5	2	11	6	13	2	21	4	6	1	11
Newark & Sherwood	0	3	4	7	0	3	0	3	1	4	4	9
Rushcliffe	3	3	4	10	4	4	0	8	0	0	0	0
County	12	33	23	68	24	48	5	77	18	23	11	52

In addition to the traffic signals with vehicle detection there are also a number of traffic signals that have been installed to help different types of road user to cross roads as detailed in table 89 below. Pegasus crossings are installed to help horse riders cross roads; pelican and puffin crossings are installed to help pedestrians cross roads; and toucan crossings are installed to help both cyclists and pedestrians cross roads.

Table 89: Vulnerable road user traffic signal crossings

	Type of signal			
Area	Pegasus	Pelican	Puffin	Toucan
Ashfield	0	1	15	2
Bassetlaw	1	2	12	4
Broxtowe	1	0	22	9
Gedling	0	2	22	4
Mansfield	2	4	12	8
Newark & Sherwood	0	2	5	3
Rushcliffe	0	1	4	8
County	4	12	92	38

12. Smarter choices

12.1 Workplace travel

12.1.1 Workplace travel plans

At the end of March 2009 there were travel plans at 140 workplaces in Nottinghamshire, including the County Council. This total is made up of travel plans which were required as part of planning consent on new developments as well as travel plans at existing developments.

A review of travel plans in the county is to be undertaken to establish the number of active plans and the numbers of employees covered by a travel plan.

12.1.2 How workers are travelling to work

Tables 90 and 91 below show the distance people travel to work and how people usually travel to work respectively. The most recent complete data that is available is from the 2001 Census. Car use was by far the most popular form of transport. At that time 43% of work journeys were under 5km (or 3.1 miles), and 60% were under 10km (or 6.2 miles), yet 64% of people drove to work.

Table 90: Distance travelled to work

	Distance travelled to work (percentage)					
District	Under 2km	2-4.99km	5-9.99km	10-19.99km	20-29.99km	Over 30km
Ashfield	25%	21%	20%	13%	4%	4%
Bassetlaw	25%	15%	16%	18%	7%	7%
Broxtowe	23%	21%	19%	12%	3%	5%
Gedling	25%	19%	17%	13%	3%	3%
Mansfield	23%	27%	18%	11%	5%	3%
Newark & Sherwood	25%	16%	12%	16%	8%	5%
Rushcliffe	19%	14%	21%	15%	6%	5%
Nottinghamshire	24%	19%	17%	14%	5%	5%
East Midlands	22%	21%	18%	14%	5%	6%
England	20%	20%	18%	15%	5%	7%

Source: 2001 Census data

Table 91: Usual mode of travel to work

	Usual mode of travel to work (percentage)							
District	Walking	Bicycle	Bus	Train	Motor-cycle	Car or van	Other	Work at home
Ashfield	11%	3%	7%	1%	1%	70%	0.5%	7%
Bassetlaw	11%	3%	3%	1%	1%	71%	0.5%	9%
Broxtowe	9%	4%	11%	1%	1%	66%	0.3%	8%
Gedling	8%	2%	15%	1%	1%	65%	0.3%	8%
Mansfield	10%	2%	7%	1%	1%	71%	0.4%	7%
Newark & Sherwood	9%	5%	4%	1%	1%	68%	0.4%	11%
Rushcliffe	7%	3%	10%	1%	1%	69%	0.3%	10%
Nottinghamshire	10%	3%	11%	1%	1%	64%	0.4%	8%
East Midlands	10%	3%	7%	1%	1%	68%	0.4%	9%
England	10%	3%	8%	4%	1%	62%	3.5%	9%

Source: 2001 Census data

12.1.3 Car share take-up

Nottinghamshire supports an online countywide car share database called Nottinghamshare. There are currently 1,899 registered members on the database. An additional 584 members have been removed since 2006 due to inactive accounts. Table 92 below details the numbers of new members who signed up each year since 2006.

Table 92: Numbers of new Nottinghamshare members since 2006

Year	No. of new members
2006	164
2007	248
2008	392
2009	438
2010 (up to August)	122

12.2 School travel

12.2.1 School travel plans

83% of all schools in Nottinghamshire had an approved school travel plan at the end of March 2010. Mansfield only has one school without an approved plan and table 93 details the numbers of schools with travel plans in the county.

Table 93: Numbers of approved school travel plans in Nottinghamshire

District	No. of schools	No. of schools with a travel plan	% of schools with a travel plan
Ashfield	48	38	79%
Bassetlaw	58	44	76%
Broxtowe	43	34	79%
Gedling	50	38	76%
Mansfield	42	41	98%
Newark	52	46	88%
Rushcliffe	46	40	89%
Nottinghamshire	339	281	83%

Source: Nottinghamshire County Council

Over 77% of school pupils in the county attended a school with an approved travel plan at the end of March 2010. The numbers of primary aged pupils with an approved plan is far greater than secondary aged pupils with a plan as seen in table 94 below.

Table 94: School pupils covered by a travel plan

	Primary	Secondary	All pupils
Percentage of pupils in Nottinghamshire with a travel plan	85%	67%	77%

Source: DfT School Census data January 2010, mode of travel to school

12.2.2 How pupils are travelling to school

When comparing 2006/07 with 2009/10, the percentage of school pupils travelling to school by car in Nottinghamshire has decreased slightly, by 1.5%. This decrease, however, is amongst the 5-10 age group and hides an increase of almost 1% amongst the 11-15 age group. This reflects that 85% of pupils at primary schools have a travel plan, whereas only 67% of pupils at secondary school have a travel plan. How all pupils travel to school is shown in table 95 below. Table 96 shows how pupils at schools with a travel plan travel to school; whilst table 97 shows how pupils at schools with no travel plan travel to school. 6.5% of pupils travelling to school by car are travelling less than 0.5miles and a further 13% are travelling less than a mile by car. Comparisons between schools with a travel plan and those without a travel plan in 2009/10 show that there is very little difference in how pupils travel to these schools.

Table 95: How all pupils travel to school

	Usual mode of transport					
	Walking	Cycling	Public transport	Car (including vans and taxis)	Car share	Other
2006/07 data						
Aged 5-10	56.3%	1.0%	3.9%	35.9%	2.8%	0.1%
Aged 11-15	55.8%	2.9%	26.6%	13.6%	1.0%	0.1%
All Ages	56.1%	1.8%	13.3%	26.7%	2.0%	0.1%
2007/08 data						
Aged 5-10	57.2%	0.8%	3.5%	35.3%	3.0%	0.2%
Aged 11-15	53.3%	2.8%	30.0%	12.4%	1.1%	0.5%
All Ages	55.4%	1.7%	15.6%	24.9%	2.2%	0.3%
2008/09 data						
Aged 5-10	57.9%	0.8%	3.2%	34.6%	3.2%	0.3%
Aged 11-15	52.2%	3.0%	28.4%	14.1%	1.2%	1.2%
All Ages	55.3%	1.8%	14.9%	25.1%	2.2%	0.7%
2009/10 data						
Aged 5-10	58.5%	0.9%	2.8%	34.7%	3.0%	0.2%
Aged 11-15	52.6%	2.8%	27.3%	14.5%	1.2%	1.7%
All Ages	55.7%	1.8%	14.3%	25.2%	2.1%	0.9%

Source: DfES survey data

Table 96: How pupils at schools with a travel plan travel to school

	Mode of travel					
	Walking	**Cycling**	**Public transport**	**Car (including vans and taxis)**	**Car share**	**Other**
2006/07 data						
Aged 5-10	57.0%	1.1%	3.3%	35.4%	3.0%	0.1%
Aged 11-15	51.3%	2.0%	31.7%	14.5%	0.4%	0.2%
All Ages	55.5%	1.3%	10.9%	29.8%	2.3%	0.1%
2007/08 data						
Aged 5-10	57.6%	0.8%	3.0%	35.0%	3.4%	0.2%
Aged 11-15	47.3%	2.6%	36.4%	12.9%	0.6%	0.2%
All Ages	54.3%	1.4%	13.5%	28.1%	2.5%	0.2%
2008/09 data						
Aged 5-10	58.1%	0.8%	2.9%	34.6%	3.4%	0.2%
Aged 11-15	51.7%	3.4%	28.8%	15.1%	0.9%	0.2%
All Ages	55.7%	1.8%	12.5%	27.4%	2.5%	0.2%
2009/10 data						
Aged 5-10	59.1%	0.9%	2.6%	34.1%	3.1%	0.2%
Aged 11-15	51.8%	3.1%	28.1%	14.9%	1.2%	0.9%
All Ages	56.0%	1.8%	13.3%	26.0%	2.3%	0.5%

Source: DfT School Census data January 2010, mode of travel to school

Table 97: How pupils at schools with no travel plan travel to school

	Mode of travel					
	Walking	**Cycling**	**Public transport**	**Car (including vans and taxis)**	**Car share**	**Other**
2006/07 data						
Aged 5-10	53.0%	0.4%	6.6%	38.4%	1.5%	0.0%
Aged 11-15	59.2%	3.7%	22.8%	12.9%	1.4%	0.1%
All Ages	57.4%	2.7%	18.0%	20.5%	1.4%	0.0%
2007/08 data						
Aged 5-10	55.5%	0.5%	5.5%	36.8%	1.6%	0.1%
Aged 11-15	58.2%	2.9%	24.7%	11.9%	1.5%	0.7%
All Ages	57.4%	2.2%	19.3%	18.9%	1.5%	0.5%
2008/09 data						
Aged 5-10	56.9%	0.6%	4.9%	34.4%	1.8%	1.4%
Aged 11-15	53.0%	2.4%	27.8%	12.7%	1.5%	2.6%
All Ages	54.1%	1.9%	21.3%	18.9%	1.6%	2.3%
2009/10 data						
Aged 5-10	54.3%	0.6%	4.2%	39.0%	1.8%	0.0%
Aged 11-15	54.6%	2.1%	25.2%	13.3%	1.3%	3.5%
All Ages	54.5%	1.6%	18.2%	21.9%	1.5%	2.3%

Source: DfT School Census data January 2010, mode of travel to school

13. Cycling

13.1 Cycle facilities

13.1.1 Local cycle network

There are over 350km of cycle route in Nottinghamshire, as detailed in table 98 below, of which 17% is lit. In addition to the formal cycle network detailed above there is also a suggested network of signed and unsigned advisory quieter roads to cycle on which avoid roads with large volumes of traffic. These are often used as an alternative where formal facilities cannot be provided because it is not feasible to do so.

Table 98: Length of cycle network in Nottinghamshire split by district

	Length of cycle network (km)			
District	**On-road cycle lane**	**Off-road shared use**	**Off-road cycle track**	**Total**
Ashfield	4.64	42.44	22.01	69.09
Bassetlaw	7.88	13.84	50.46	72.18
Broxtowe	1.30	12.12	9.08	22.50
Gedling	0.04	3.07	6.19	9.30
Mansfield	1.41	47.00	14.92	63.33
Newark & Sherwood	4.72	12.96	40.77	58.45
Rushcliffe	1.34	26.16	31.61	59.11
Nottinghamshire	21.33	157.58	175.04	353.95

13.1.2 Maps of Nottinghamshire's cycle network

Nottinghamshire has an extensive cycle network across the county made up of formal facilities such as on-road and off-road tracks, as well as signed routes along quieter roads. Map of the on-road and off-road tracks in each of the districts in Nottinghamshire are detailed below in figures 136-142.

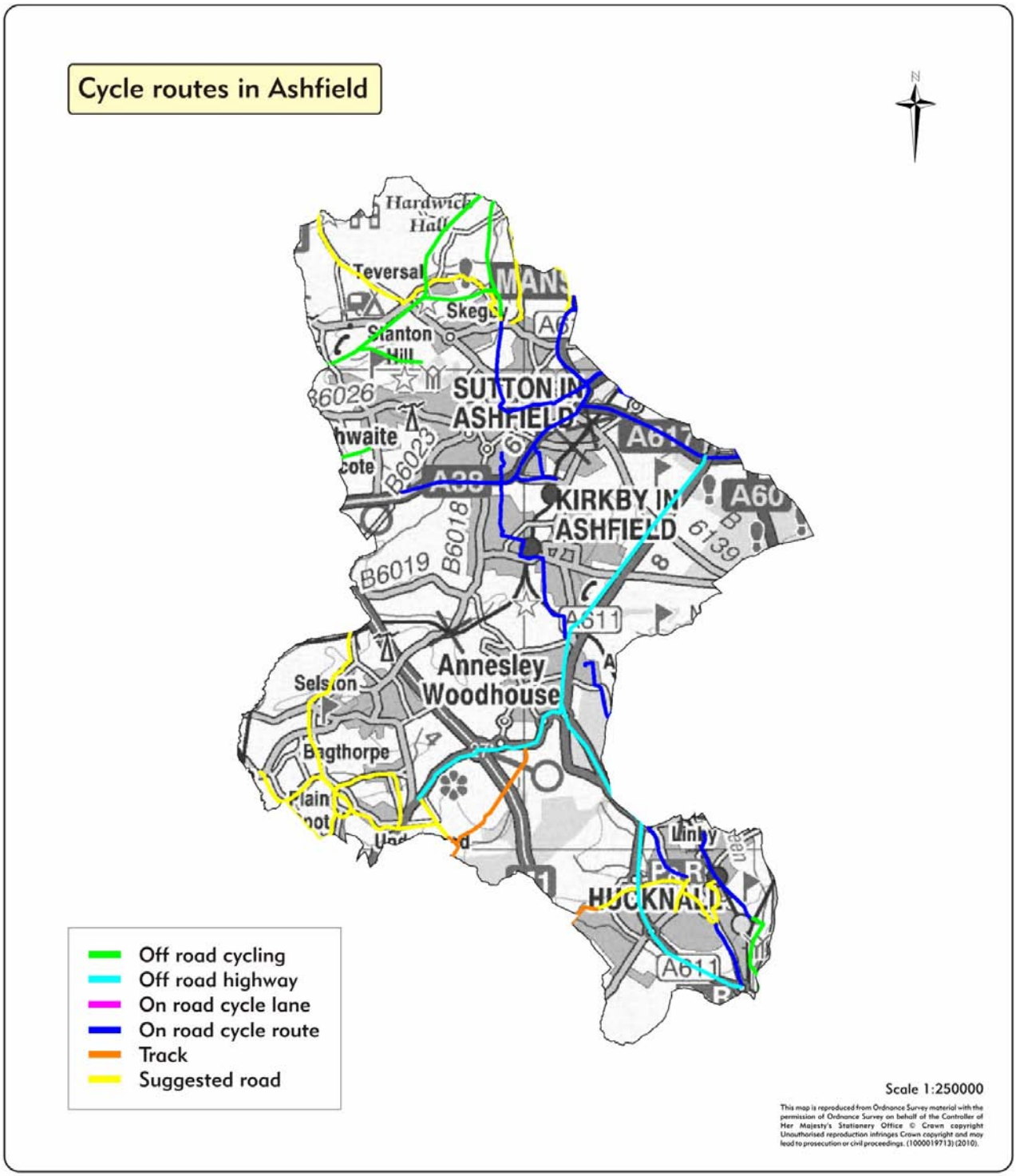


Figure 136: Cycling routes in Ashfield district

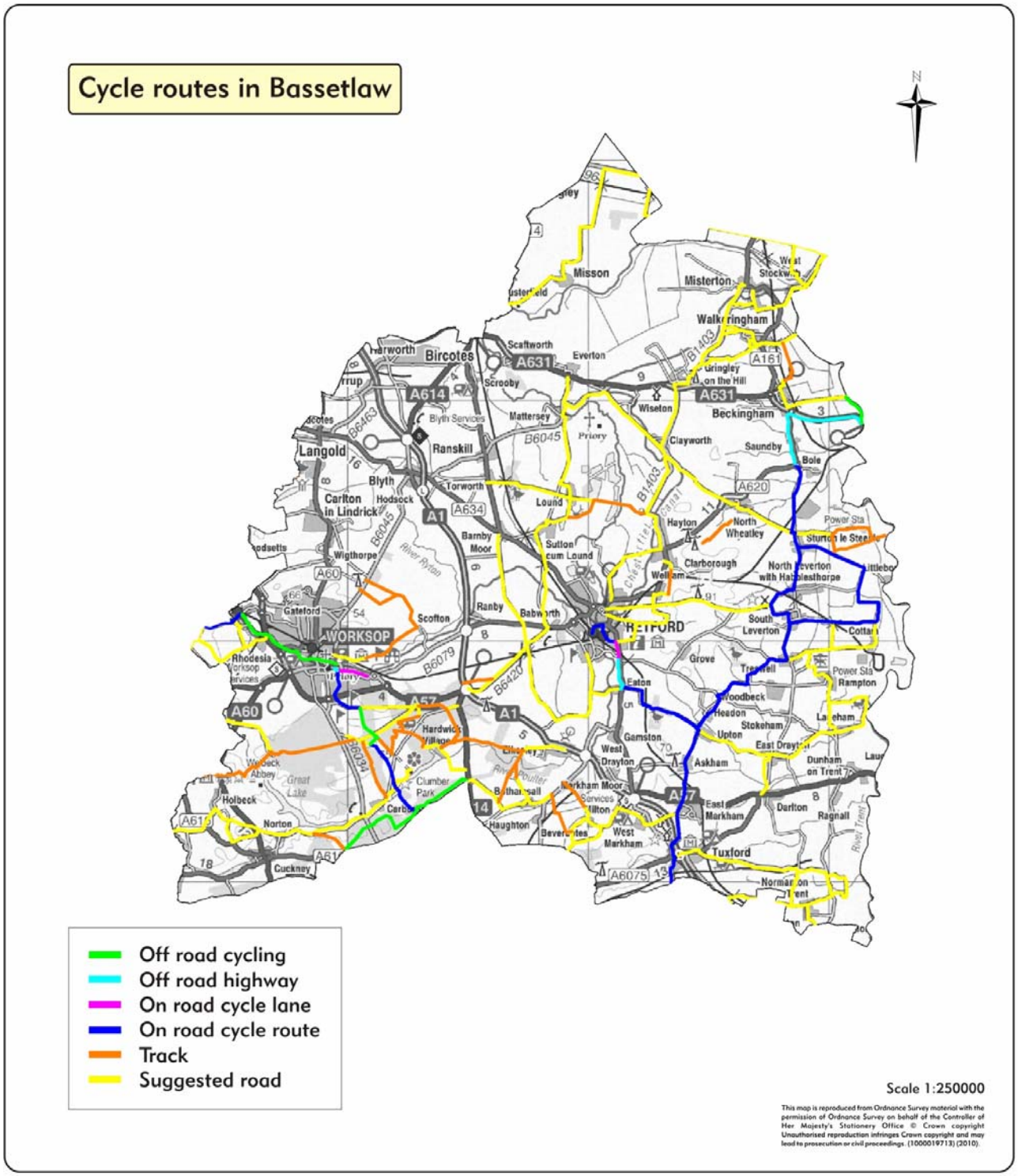


Figure 137: Cycling routes in Bassetlaw district

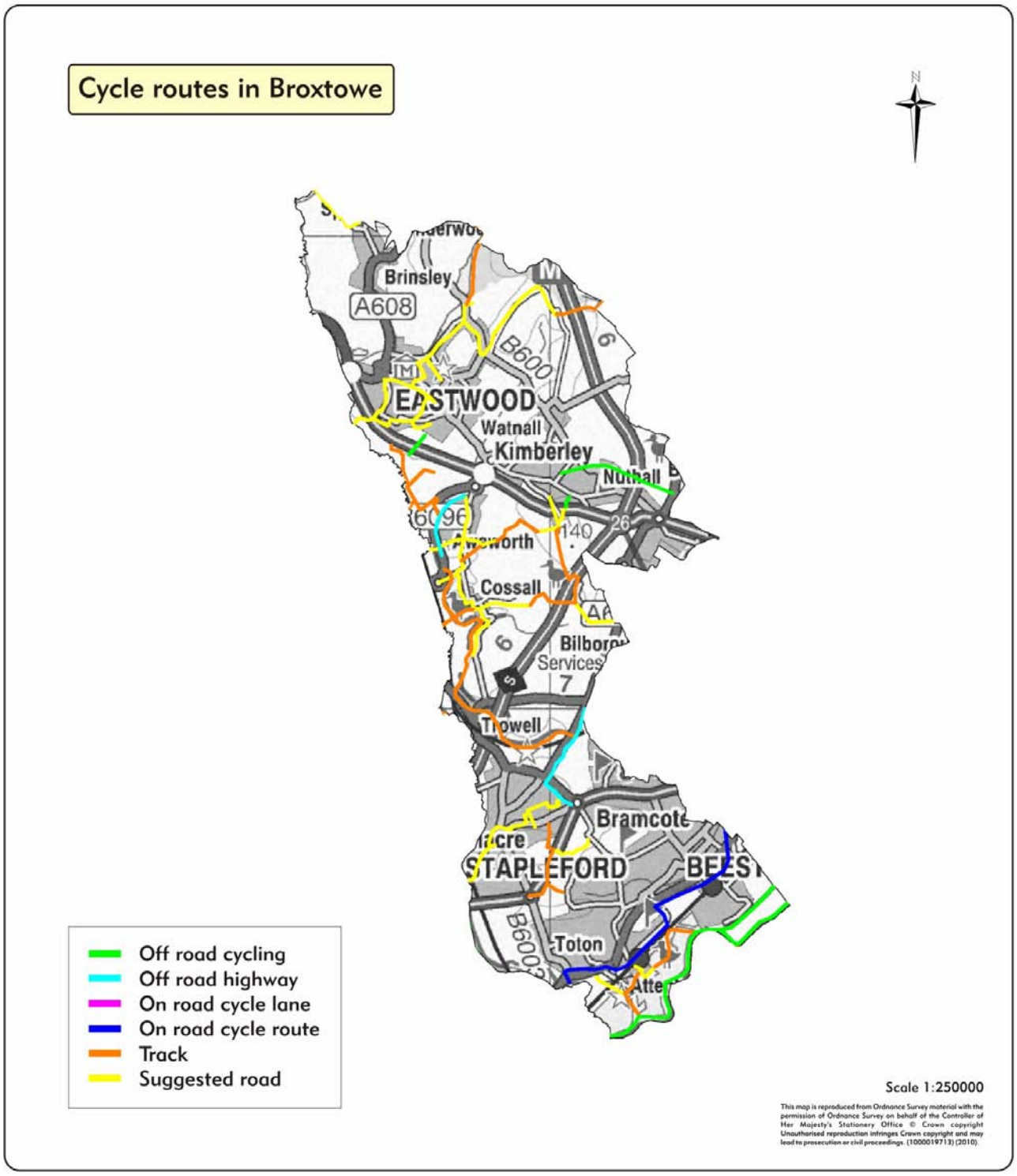


Figure 138: Cycling routes in Broxtowe district

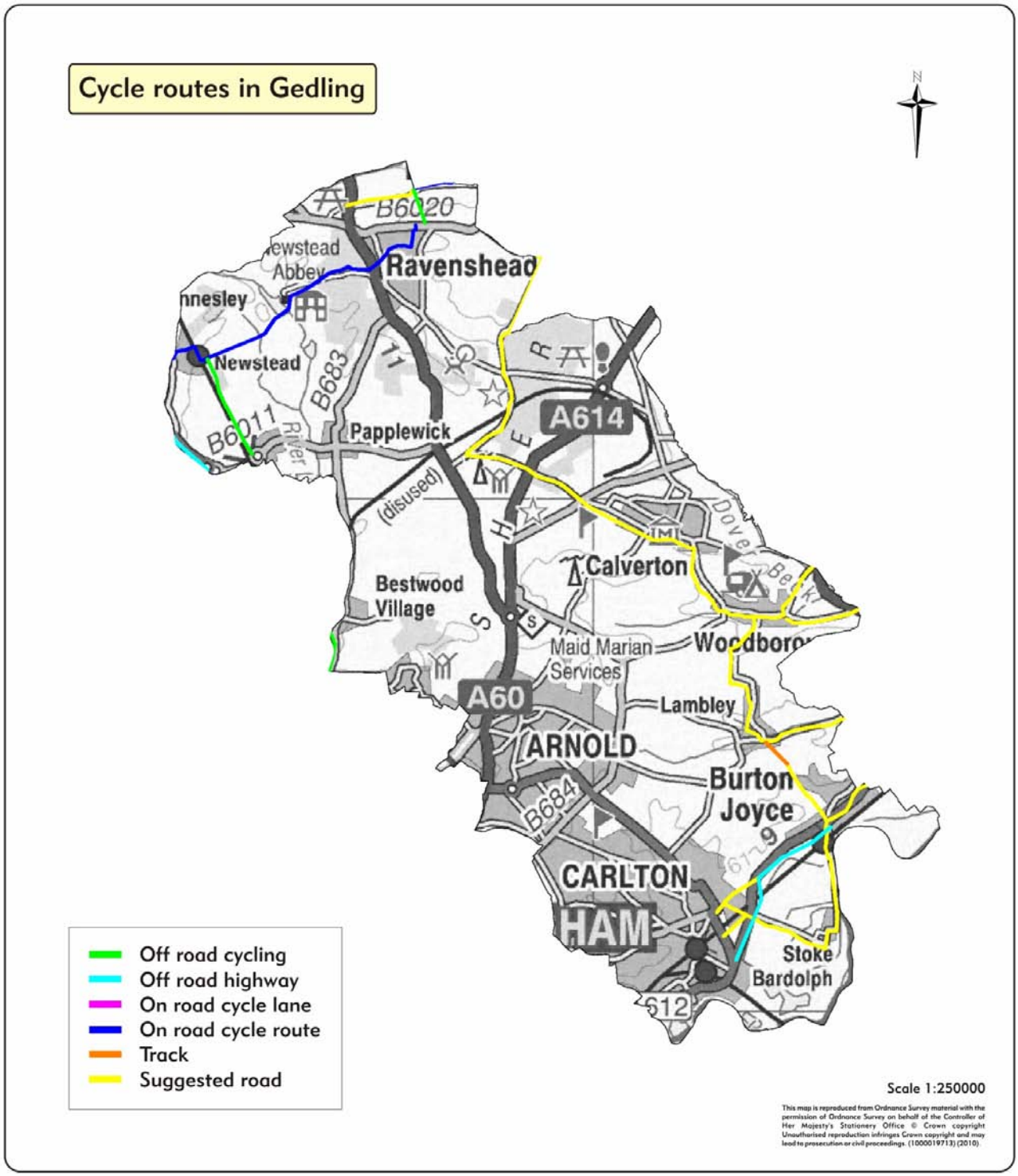


Figure 139: Cycling routes in Gedling district

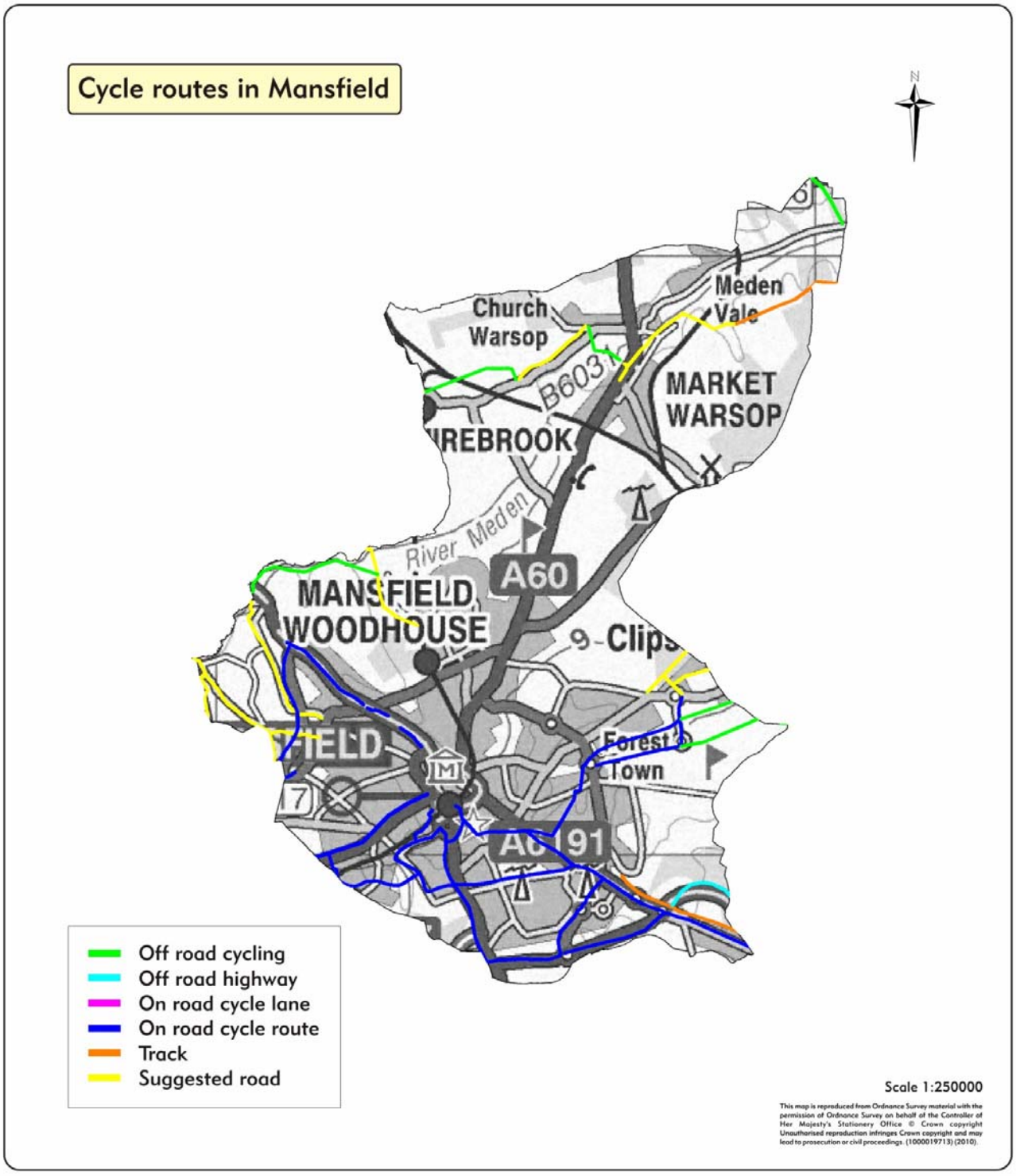


Figure 140: Cycling routes in Mansfield district

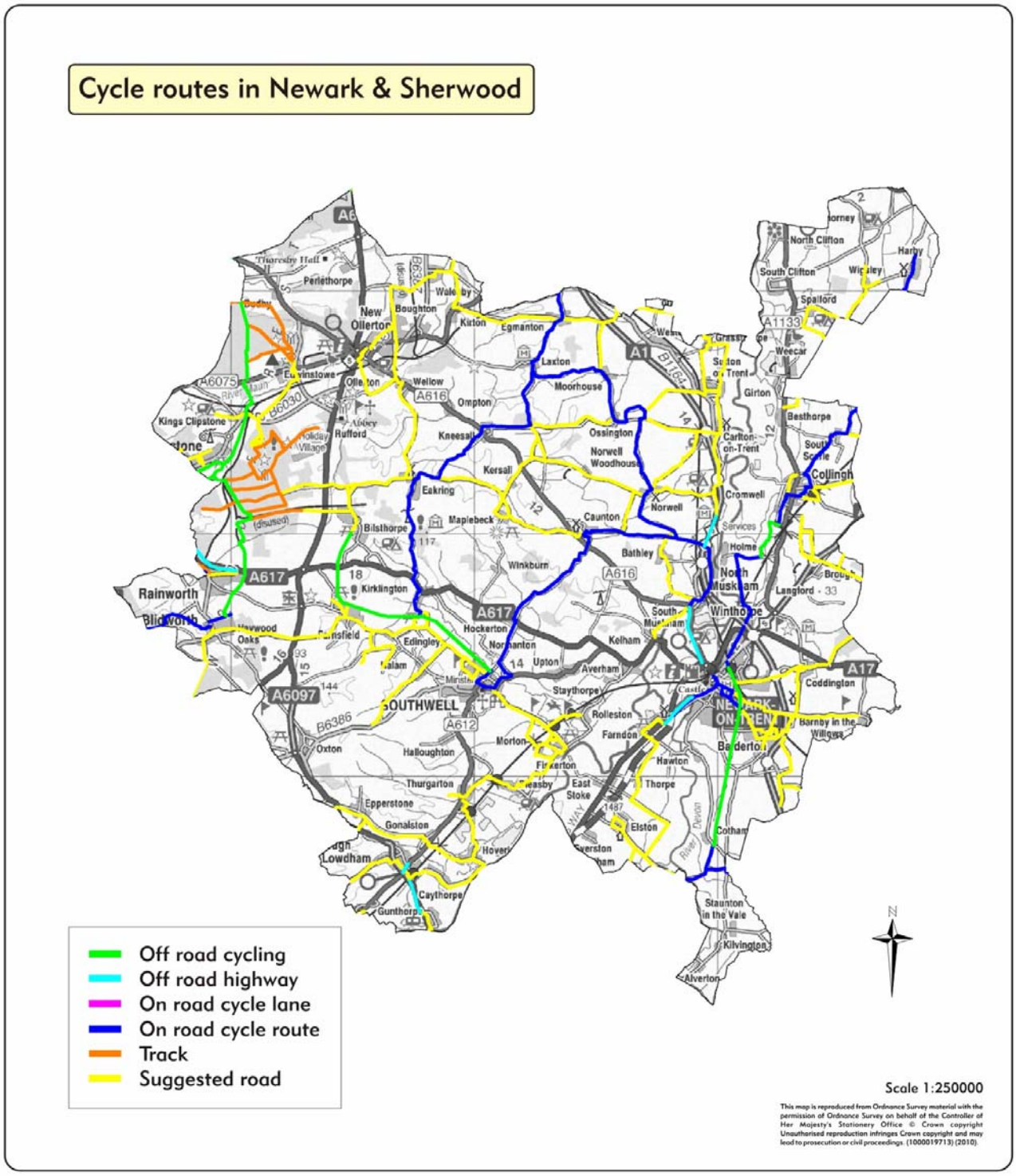


Figure 141: Cycling routes in Newark & Sherwood district

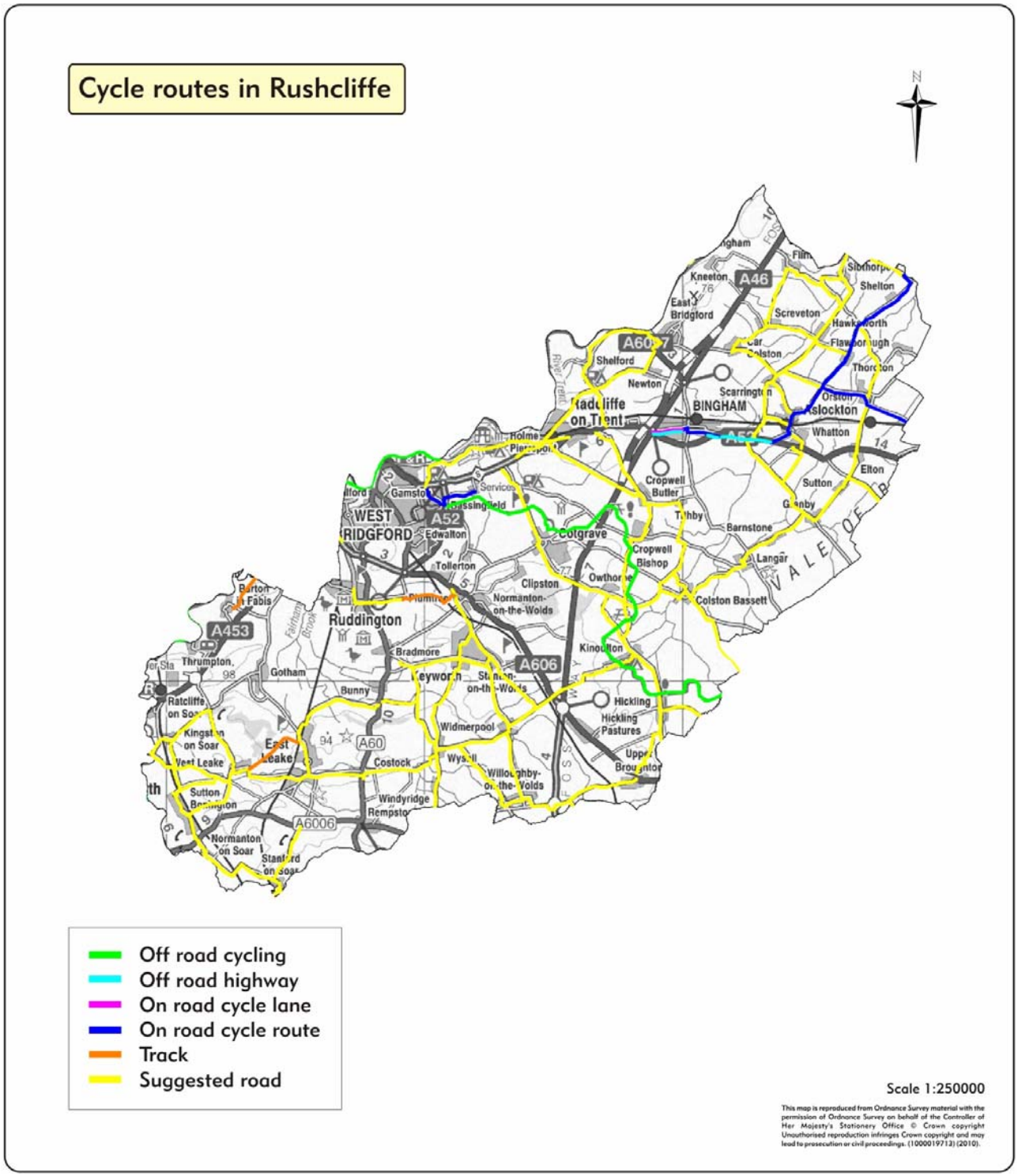


Figure 142: Cycling routes in Rushcliffe district

13.2 Cycling levels

13.2.1 Levels of cycling in each district

Table 98 and figure 143 below show the changes in cycling levels when compared to 2005 levels. Poor summer weather in 2008 and 2009 has impacted on cycling levels in Nottinghamshire and cycling levels across the whole county in 2009 have decreased slightly when compared to 2005 levels. Some districts have seen significant fluctuations in the levels of cycling during the period 2005 to 2009 but cycling levels have increased in the south of the county, whilst (with the exception of Ashfield) cycling levels have decreased in the north of the county.

Table 98: Changes in cycling levels when compared to 2005

	Changes in levels of cycling when compared to 2005 levels			
Area	**2006**	**2007**	**2008**	**2009**
Ashfield	-9%	-7%	0%	+6%
Bassetlaw	+1%	0%	-5%	-9%
Broxtowe	+5%	+5%	+2%	+5%
Gedling	-3%	-12%	+6%	+21%
Mansfield	+4%	-3%	-6%	-5%
Newark & Sherwood	-7%	-2%	-13%	-17%
Rushcliffe	+1%	+8%	+4%	+12%
Nottinghamshire	0%	+2%	-3%	-2%

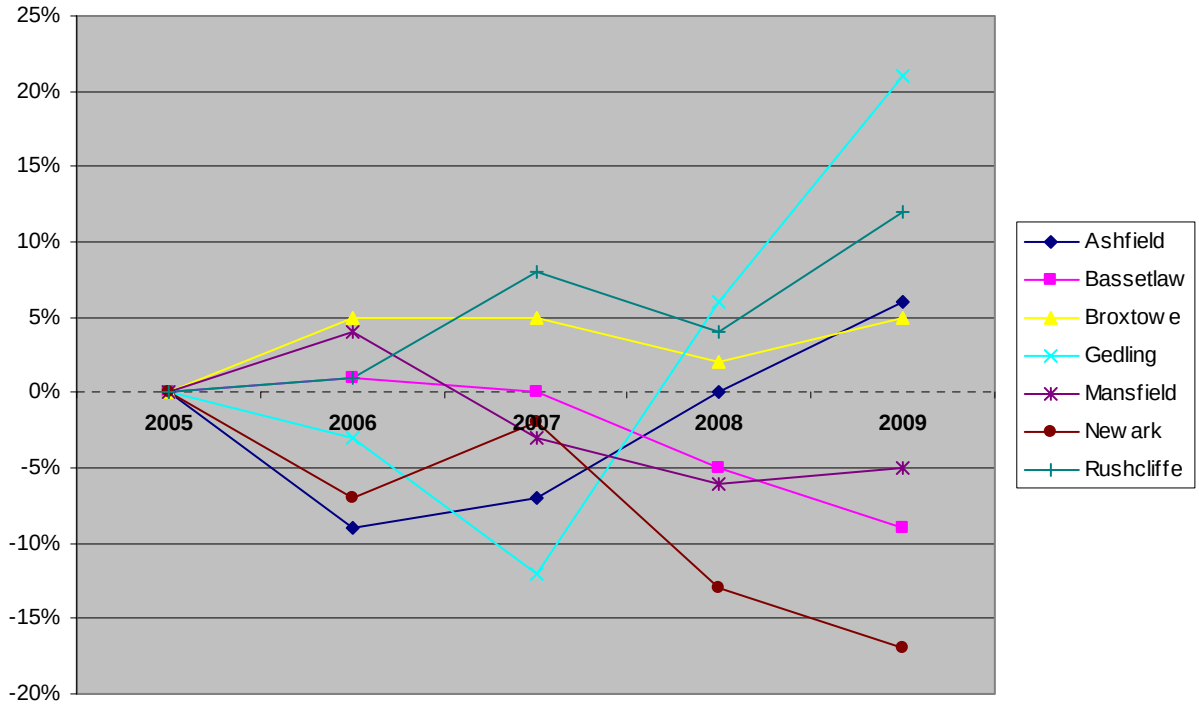


Figure 143: Changes in cycling levels when compared to 2005 levels

13.2.2 Rural and urban changes in cycling levels

When comparing 2009 with 2005, cycling levels in rural areas of Nottinghamshire have increased by 11%, whereas cycling levels in urban areas has decreased by 5%. Cycling levels in rural areas includes counts on leisure routes. Table 99 below shows the changes in cycling levels up to 2009 when compared with 2005 levels.

Table 99: Changes in cycling levels in rural and urban areas compared to 2005 levels

	Changes in cycling levels compared to 2005 levels			
	2006	**2007**	**2008**	**2009**
Urban	-1%	0%	-6%	-6%
Rural	5%	10%	11%	11%

Source: Nottinghamshire County Council

14. Walking

14.1 Primary pedestrian routes

The primary pedestrian routes in the main district centres across the county have been identified. These have been determined as the main shopping areas, as well as the links to bus and rail stations from the main shopping areas. Surveys of the numbers of pedestrians in each of the local centres have not been undertaken. Maps of the primary pedestrian routes are detailed below in figures 143 - 161.

14.1.1 Ashfield district primary pedestrian routes

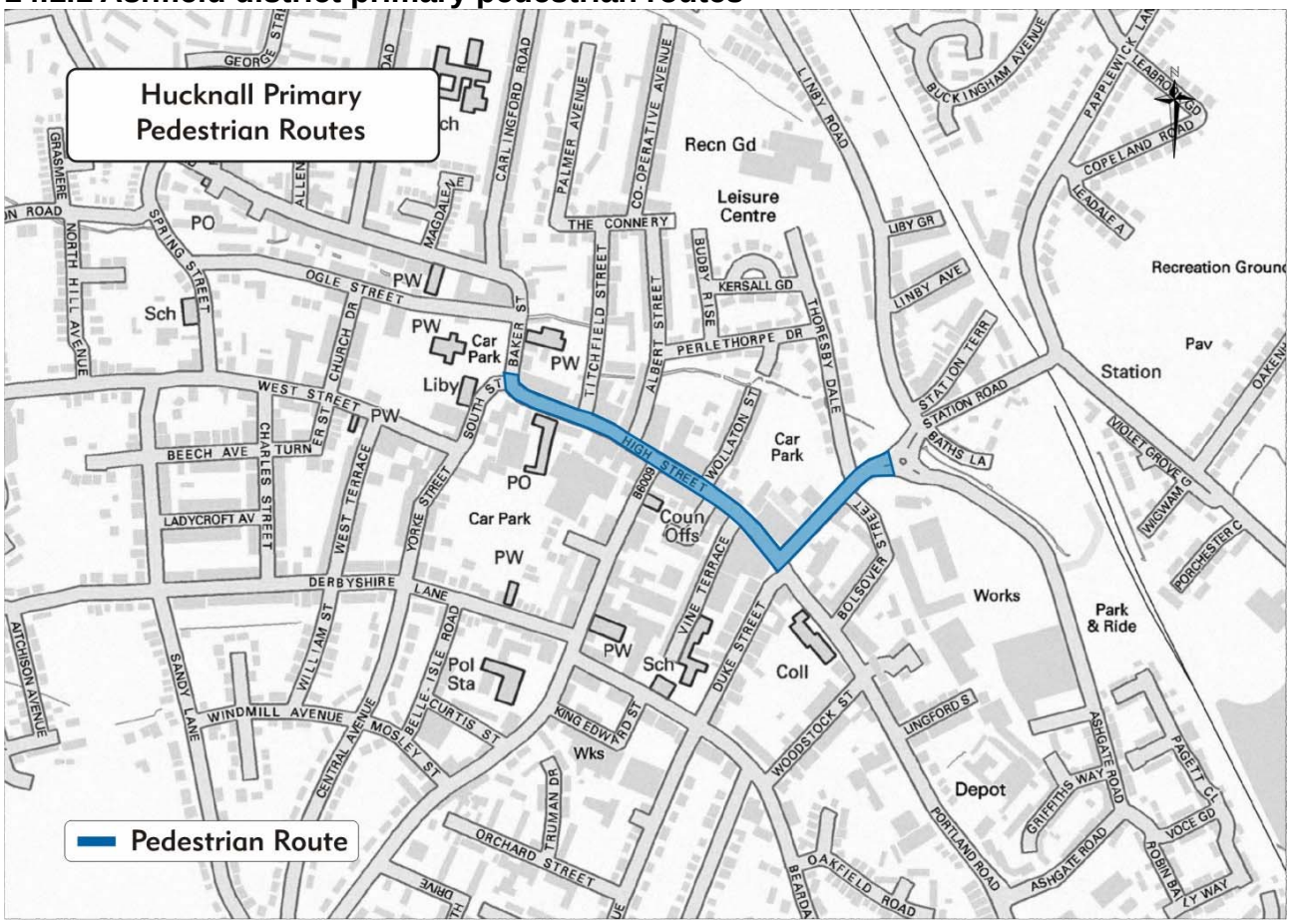


Figure 143: Hucknall primary pedestrian routes

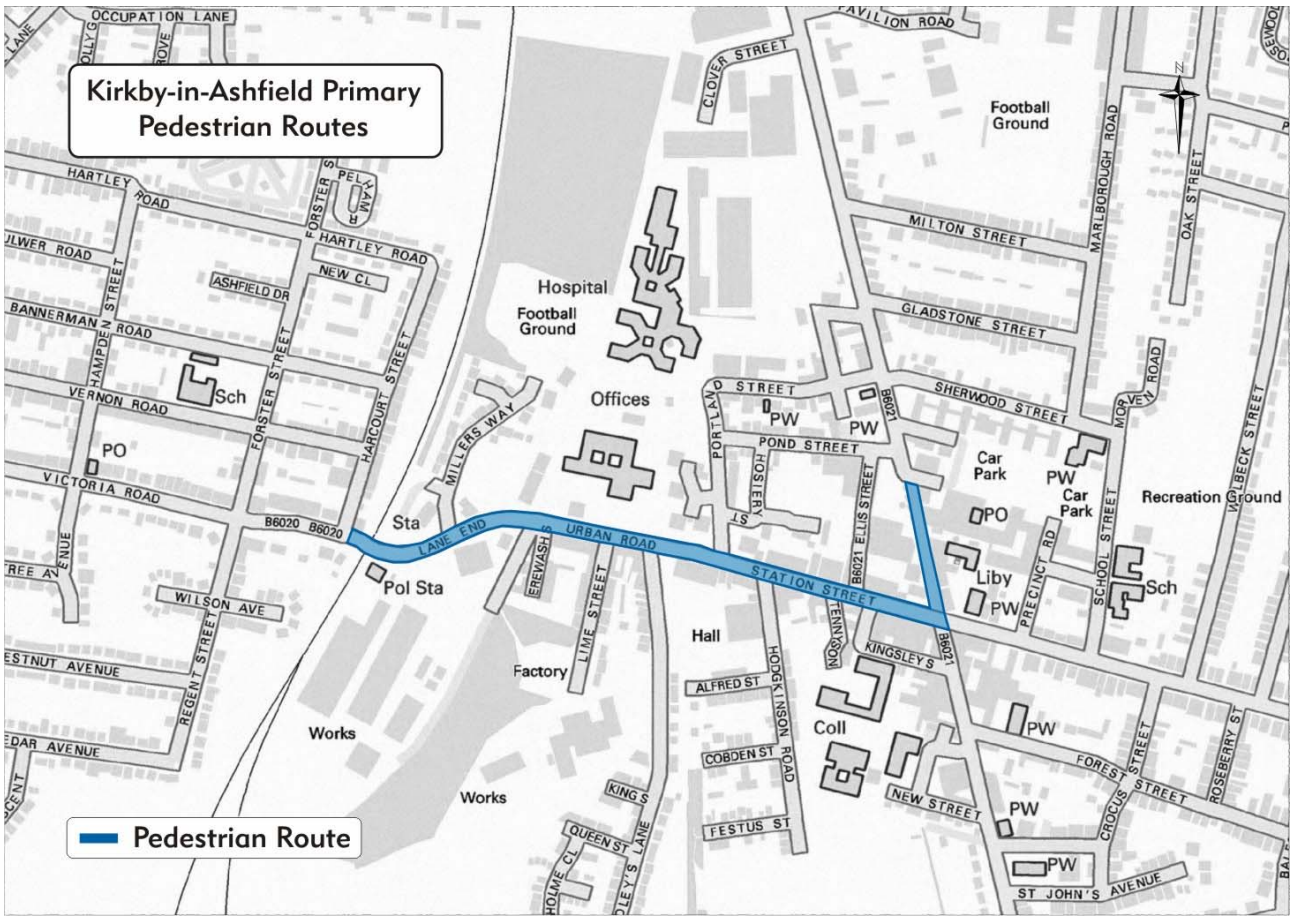


Figure 144: Kirkby in Ashfield primary pedestrian routes

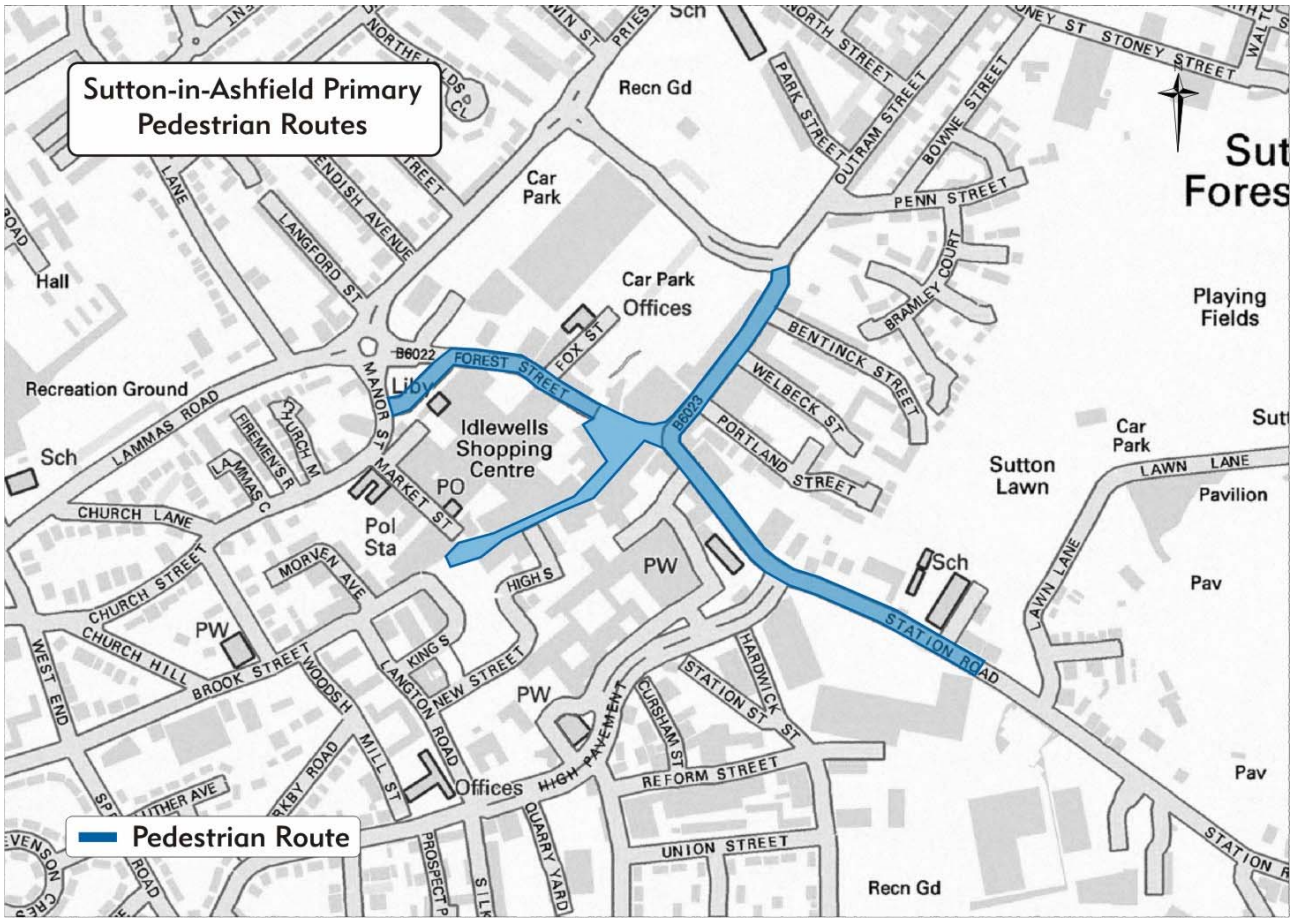


Figure 145: Sutton in Ashfield primary pedestrian routes

14.1.2 Bassetlaw district primary pedestrian routes

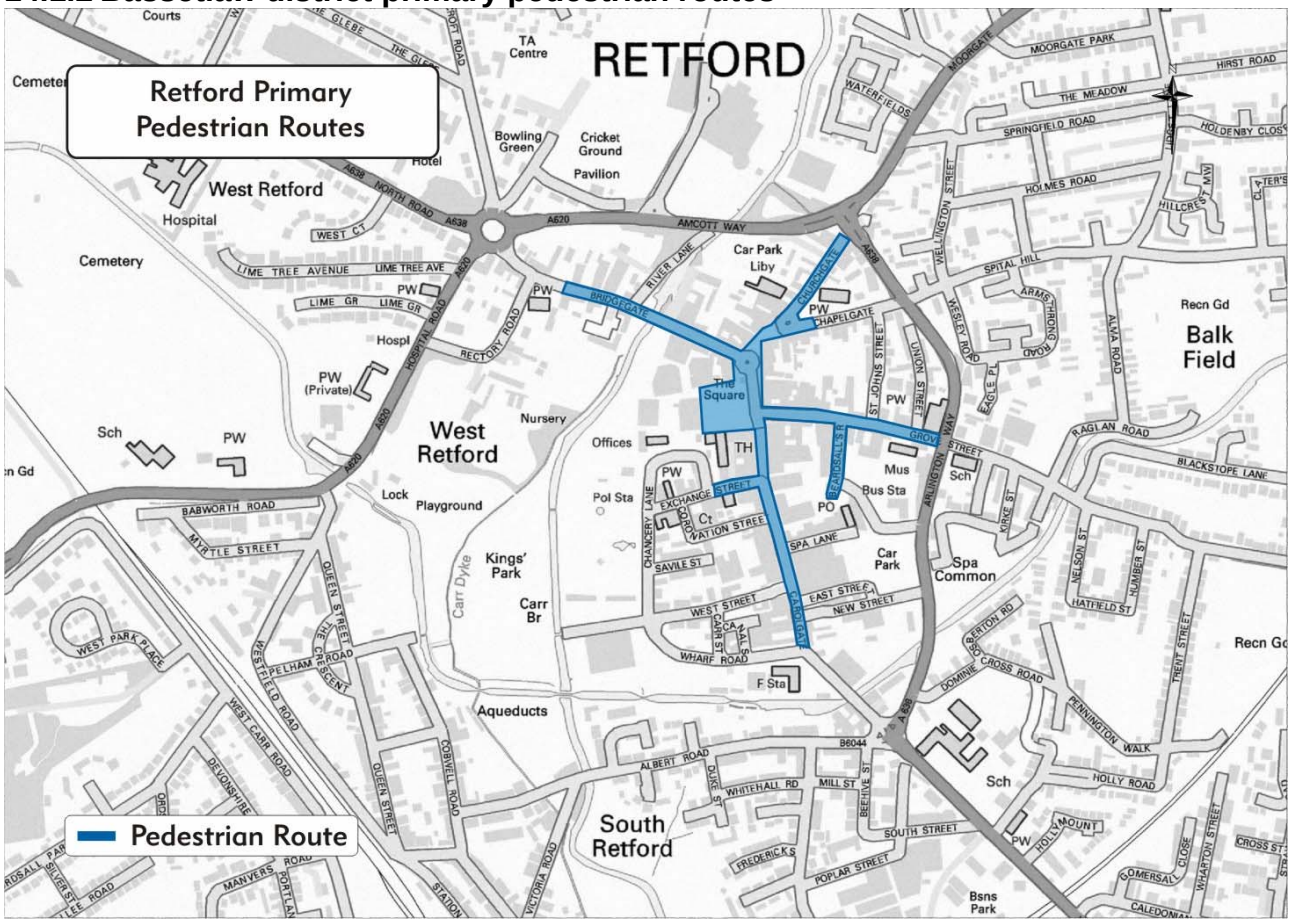


Figure 146: Retford primary pedestrian routes

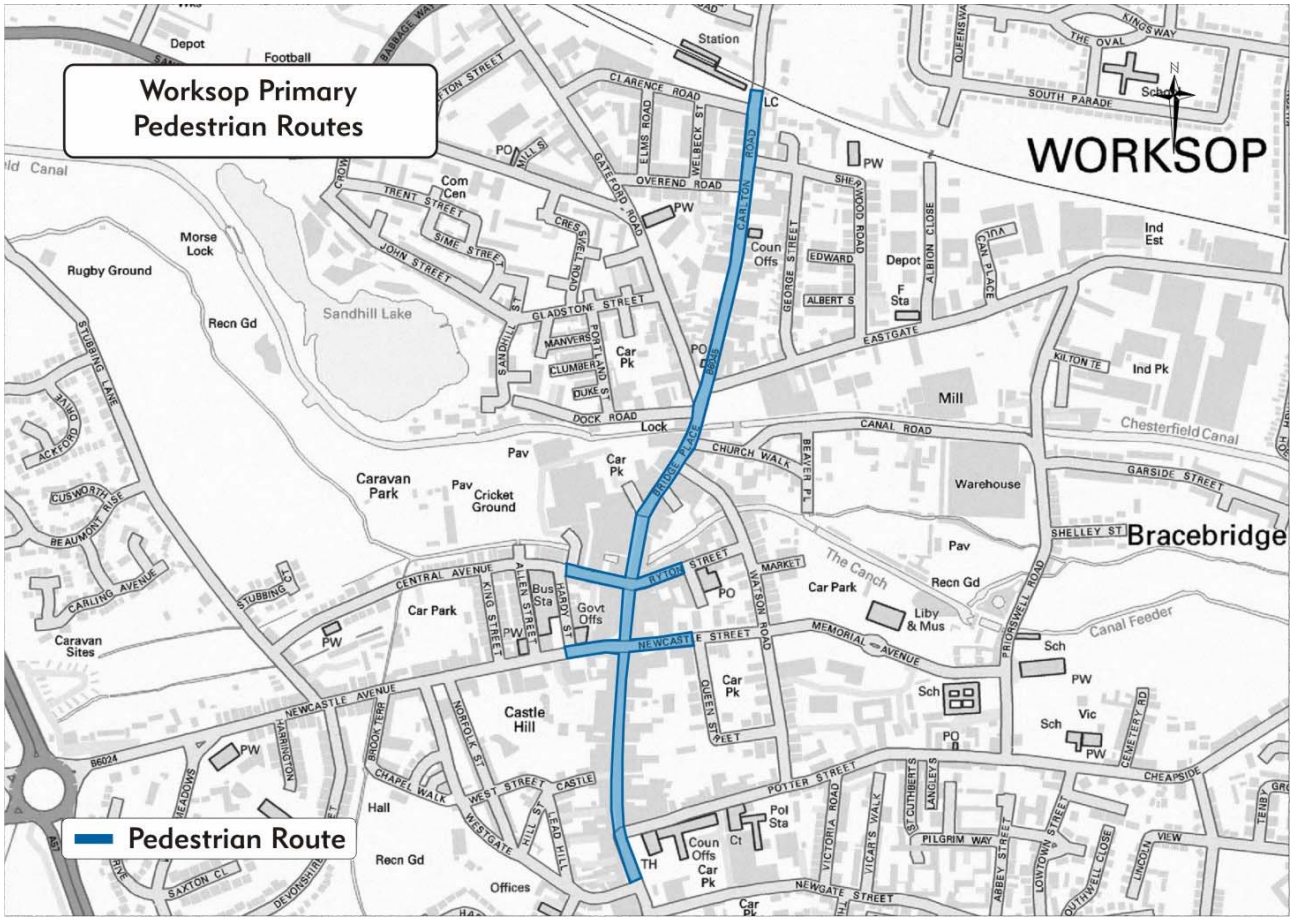


Figure 147: Worksop primary pedestrian routes

14.1.3 Broxtowe district primary pedestrian routes

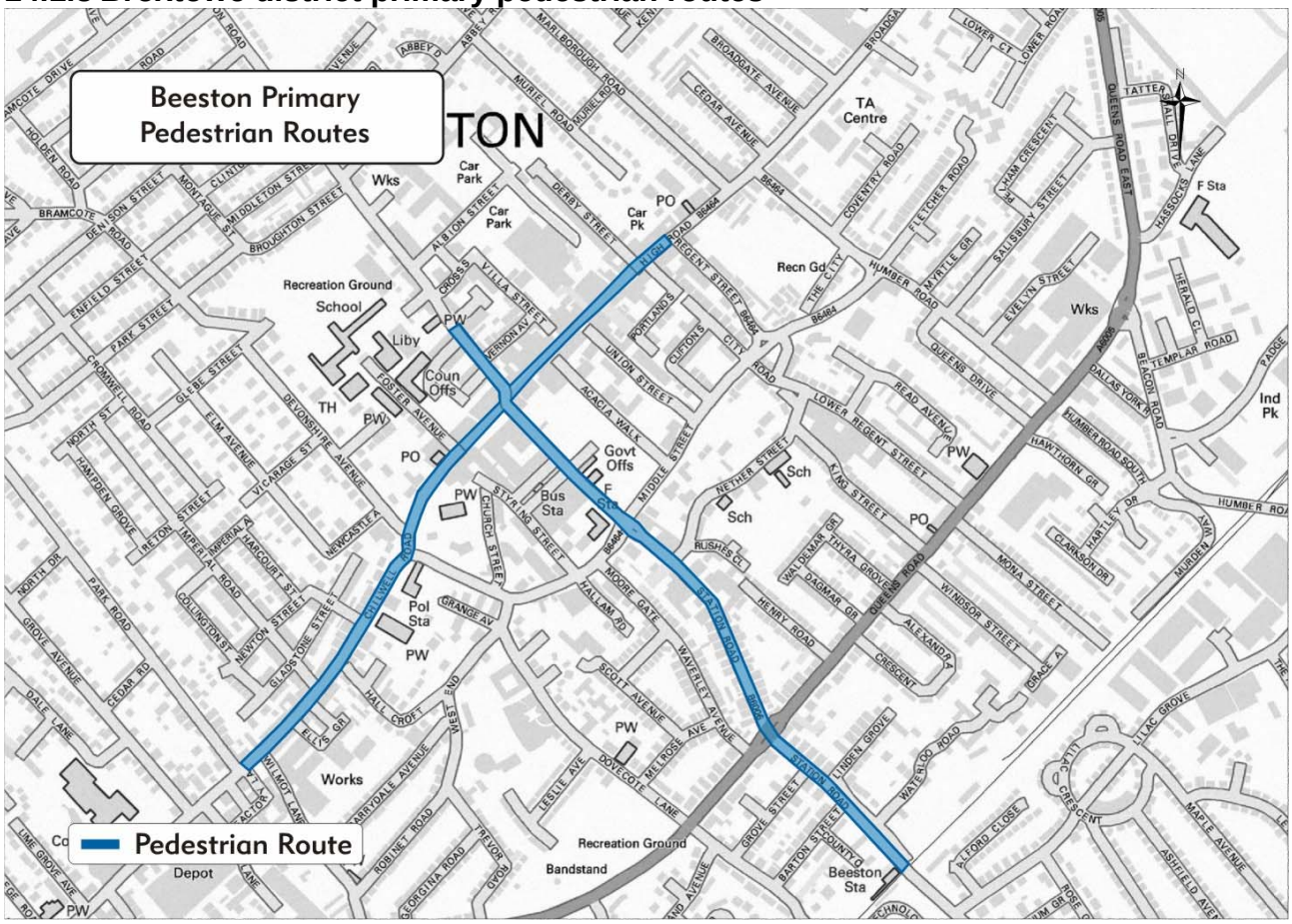


Figure 148: Beeston primary pedestrian routes

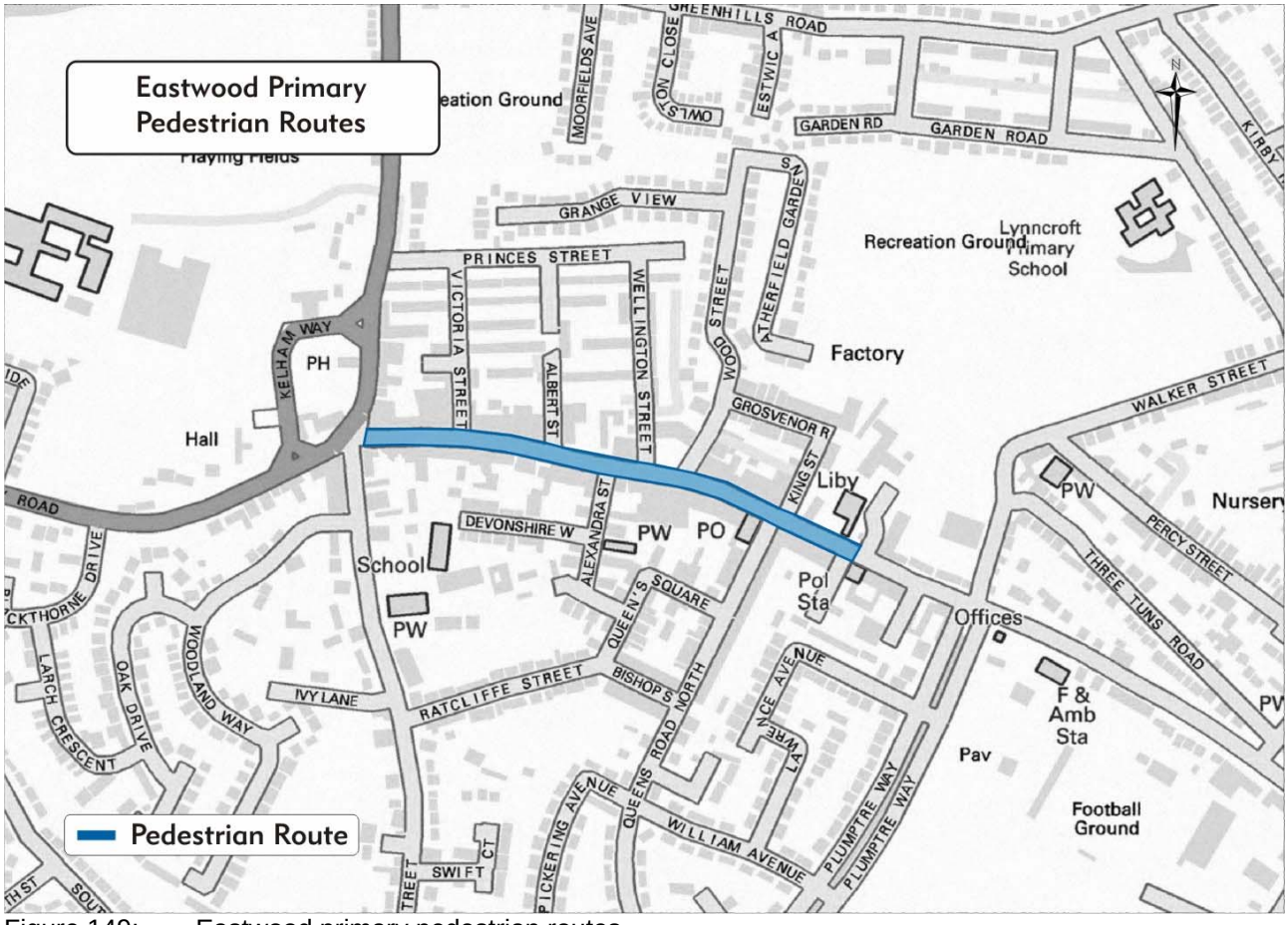


Figure 149: Eastwood primary pedestrian routes

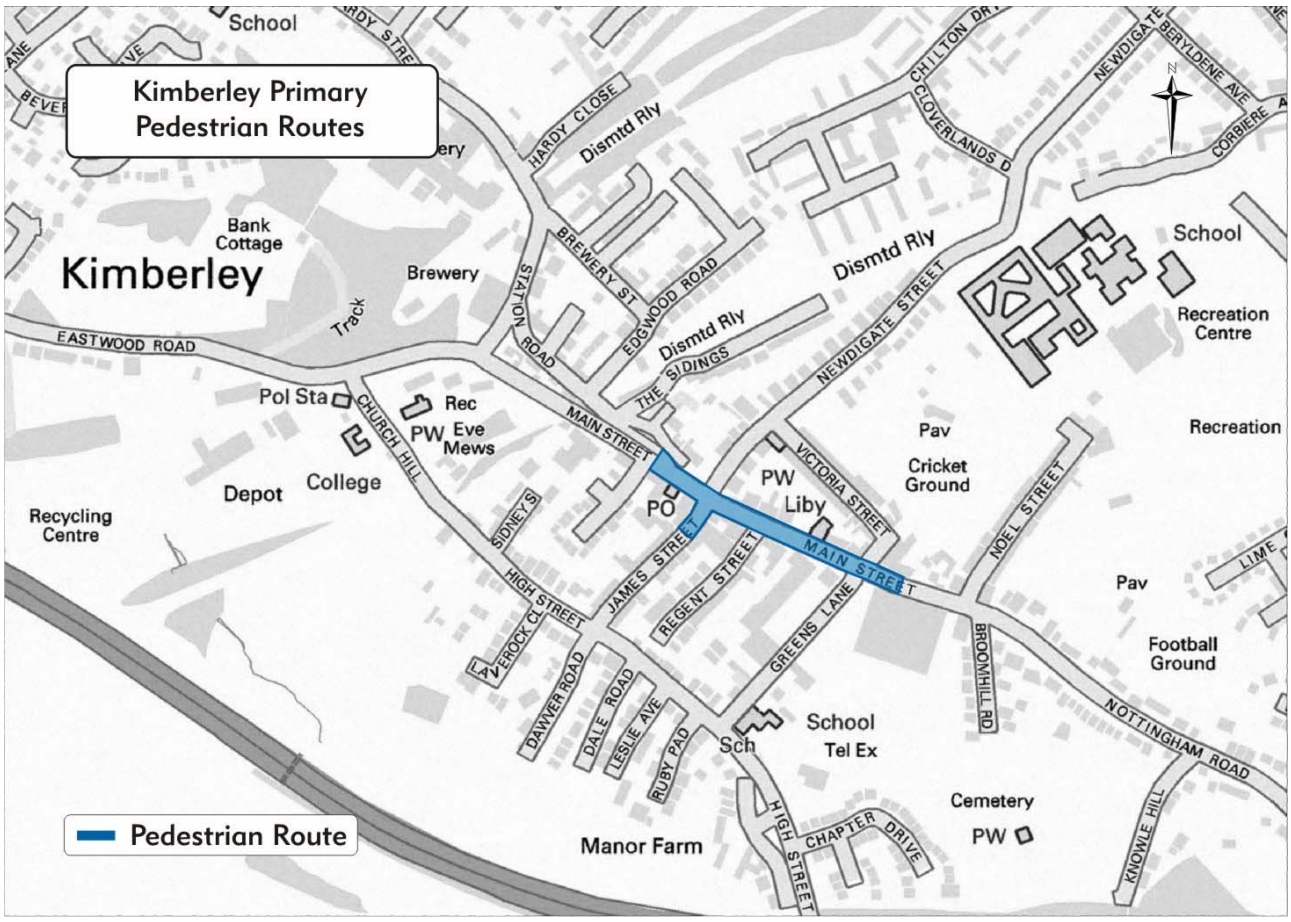


Figure 150: Kimberley primary pedestrian routes

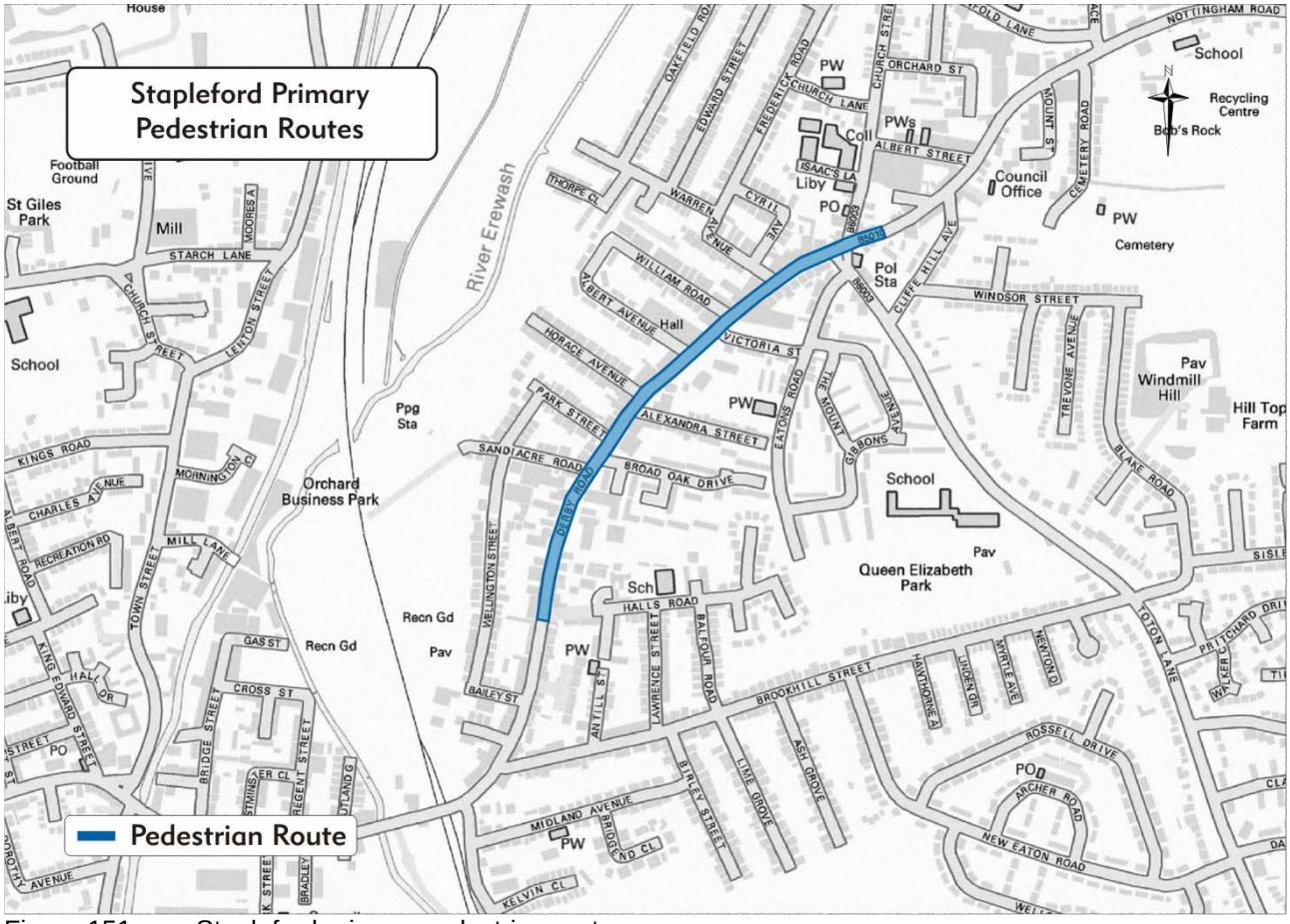


Figure 151: Stapleford primary pedestrian routes

14.1.4 Gedling district primary pedestrian routes

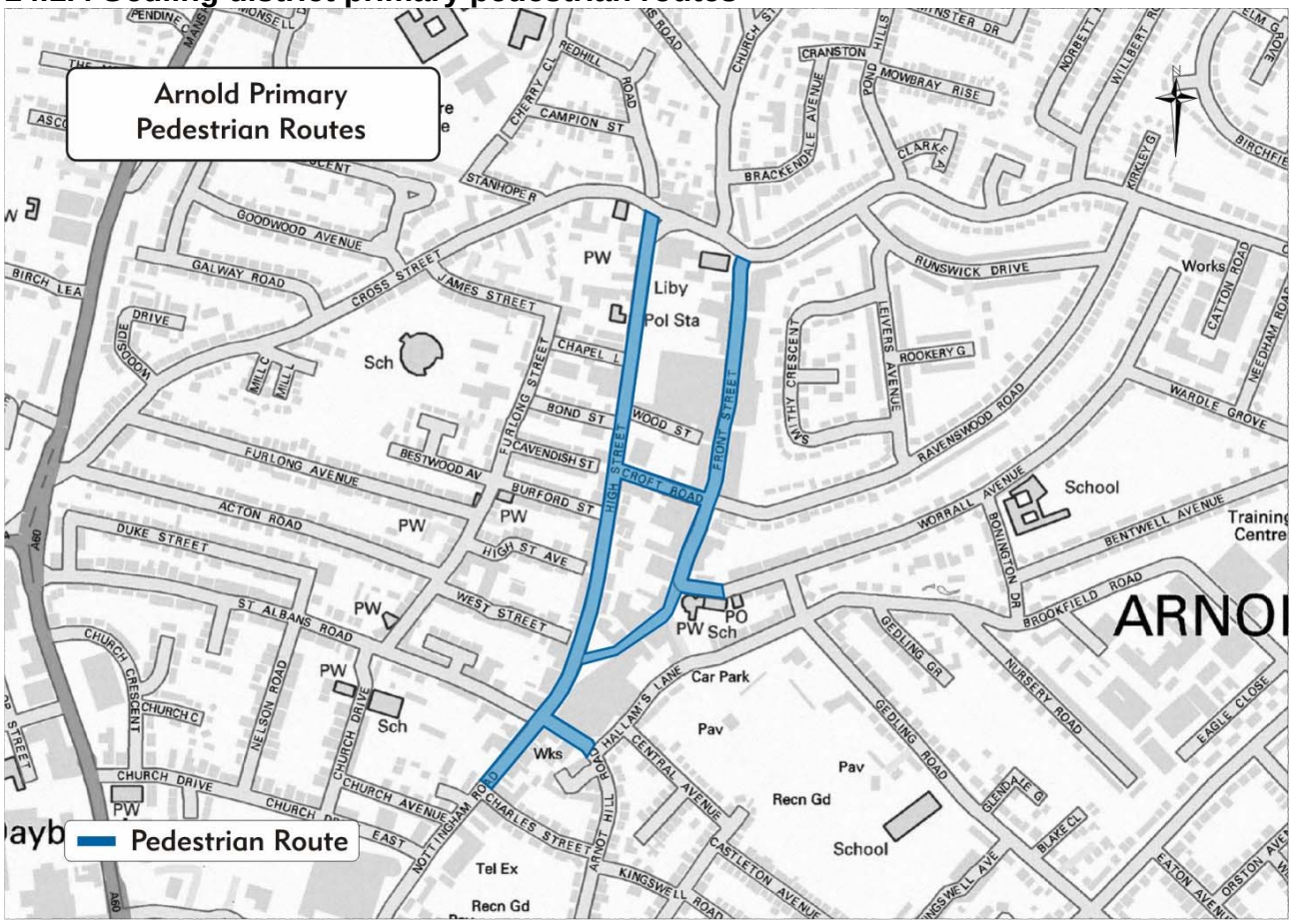


Figure 152: Arnold primary pedestrian routes

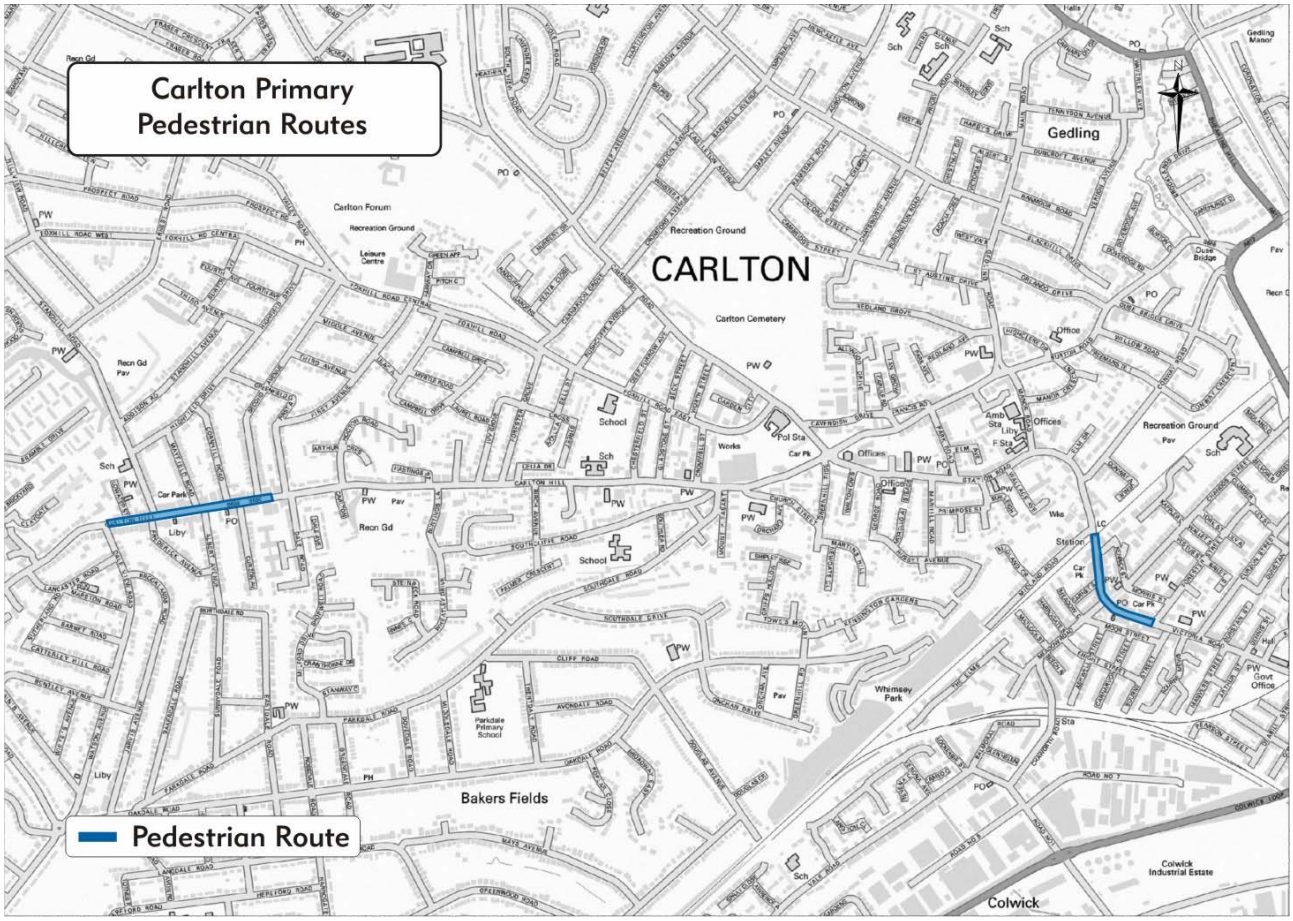


Figure 153: Carlton primary pedestrian routes

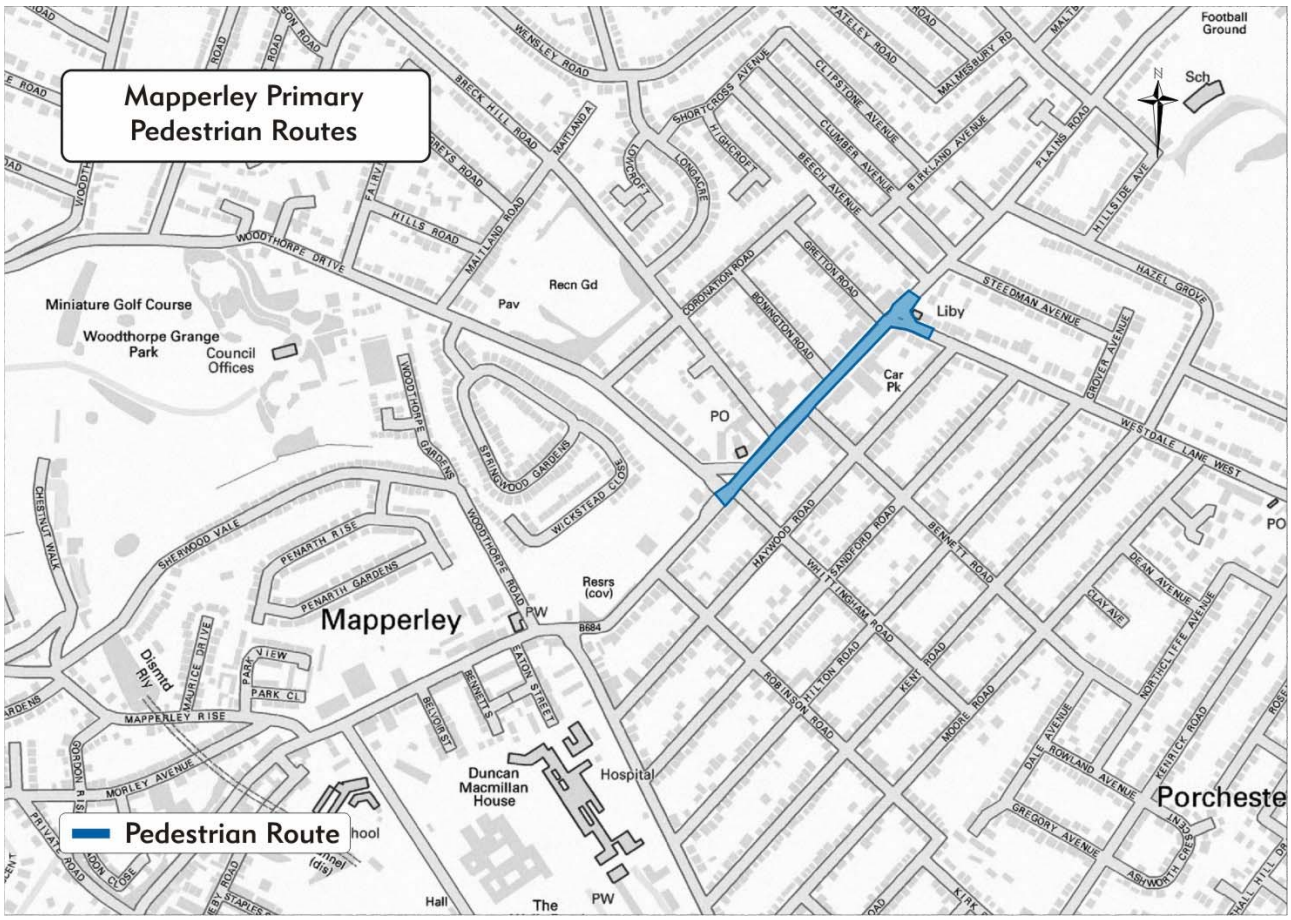


Figure 154: Mapperley primary pedestrian routes

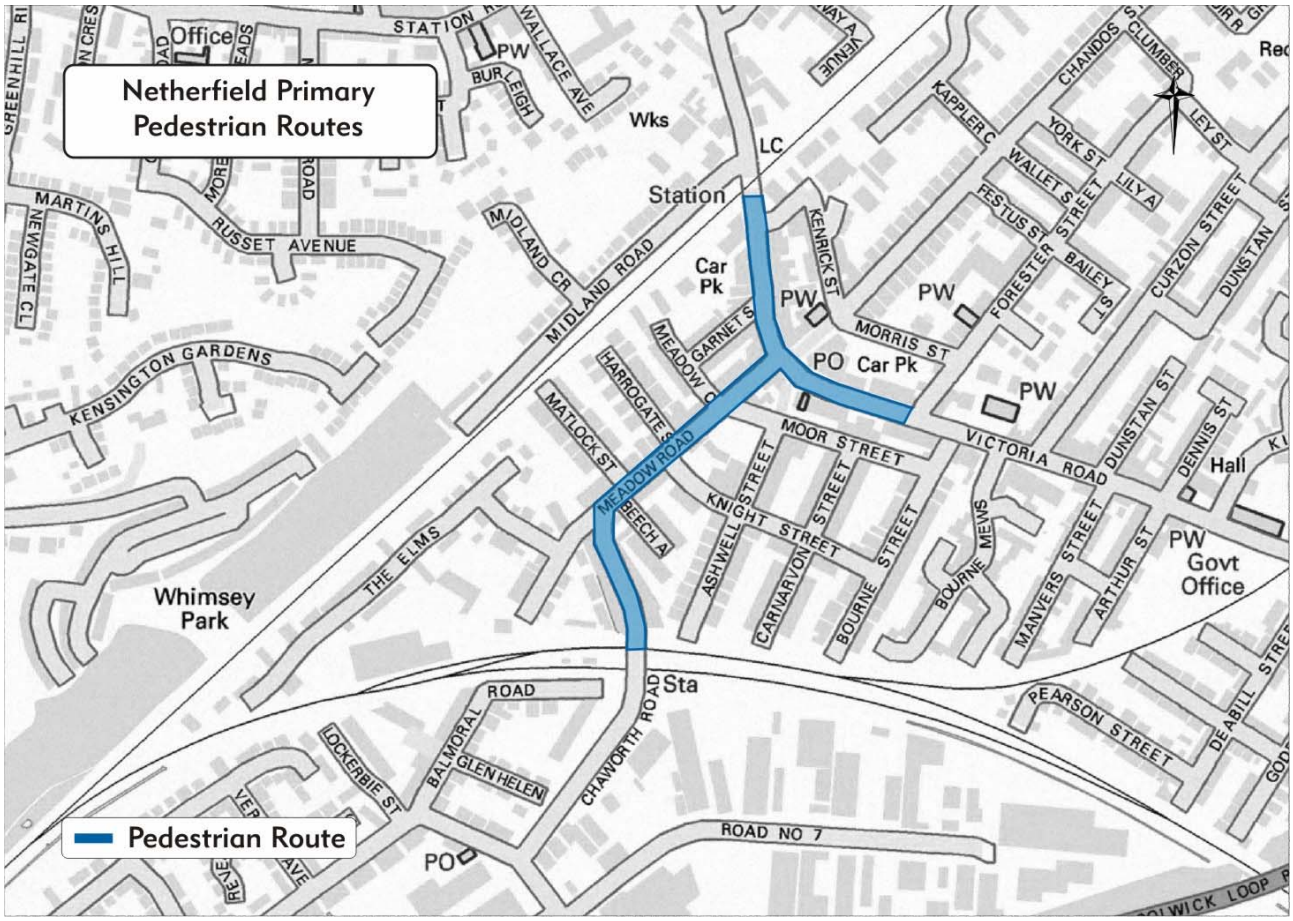


Figure 155: Netherfield primary pedestrian routes

14.1.5 Mansfield district primary pedestrian routes

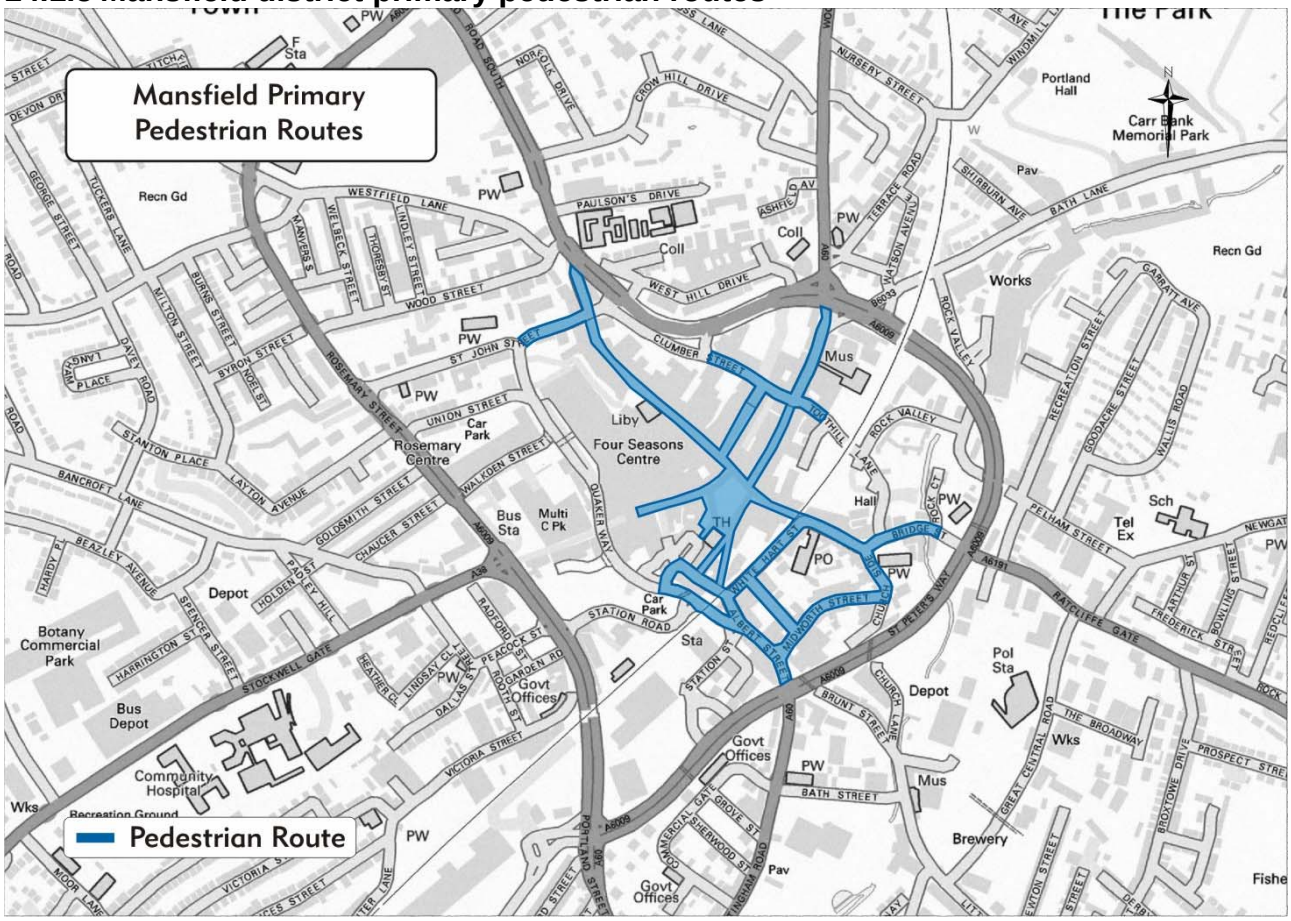


Figure 156: Mansfield primary pedestrian routes

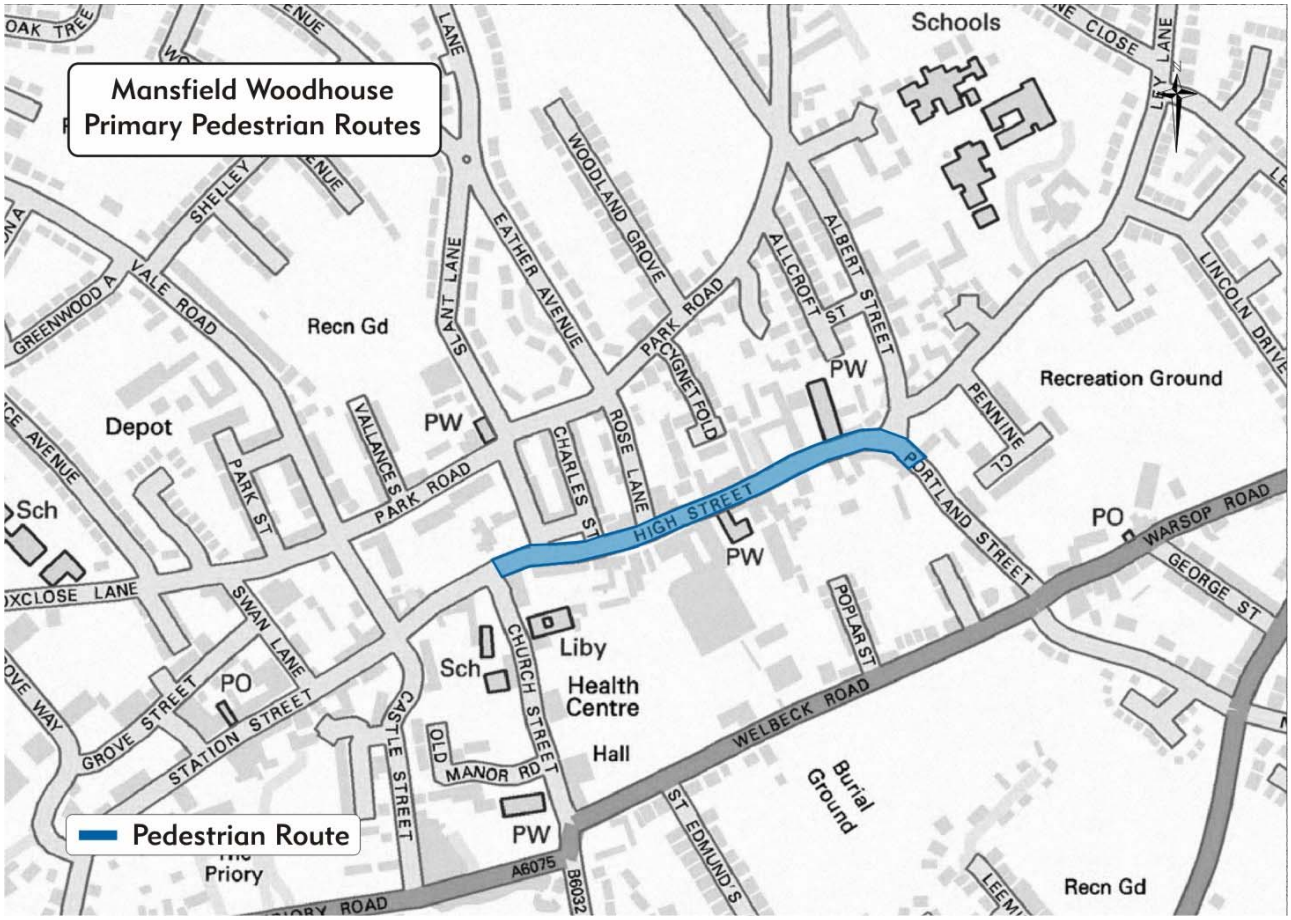


Figure 157: Mansfield Woodhouse primary pedestrian routes

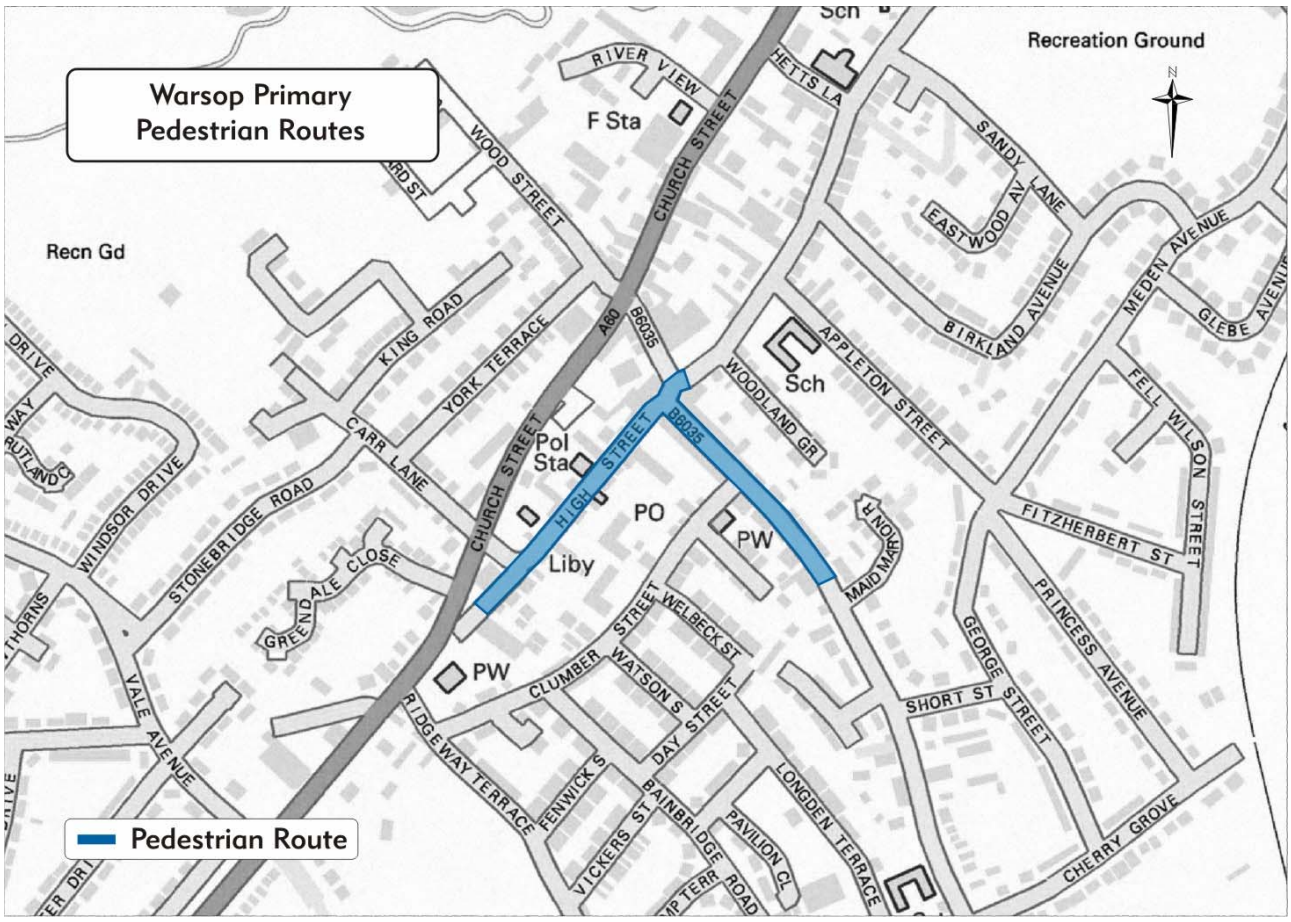


Figure 158: Warsop primary pedestrian routes

14.1.6 Newark & Sherwood district primary pedestrian routes

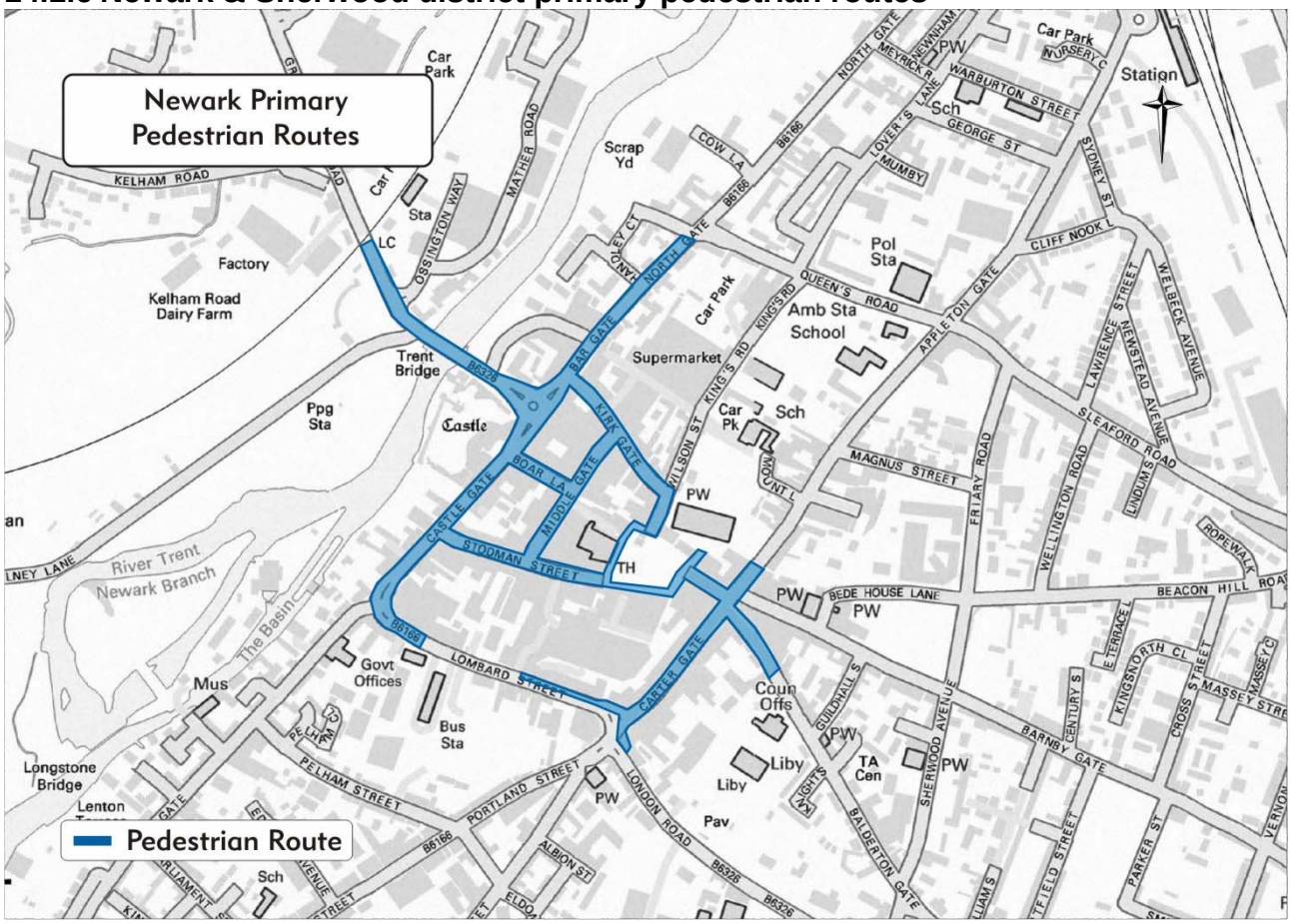


Figure 159: Newark primary pedestrian routes

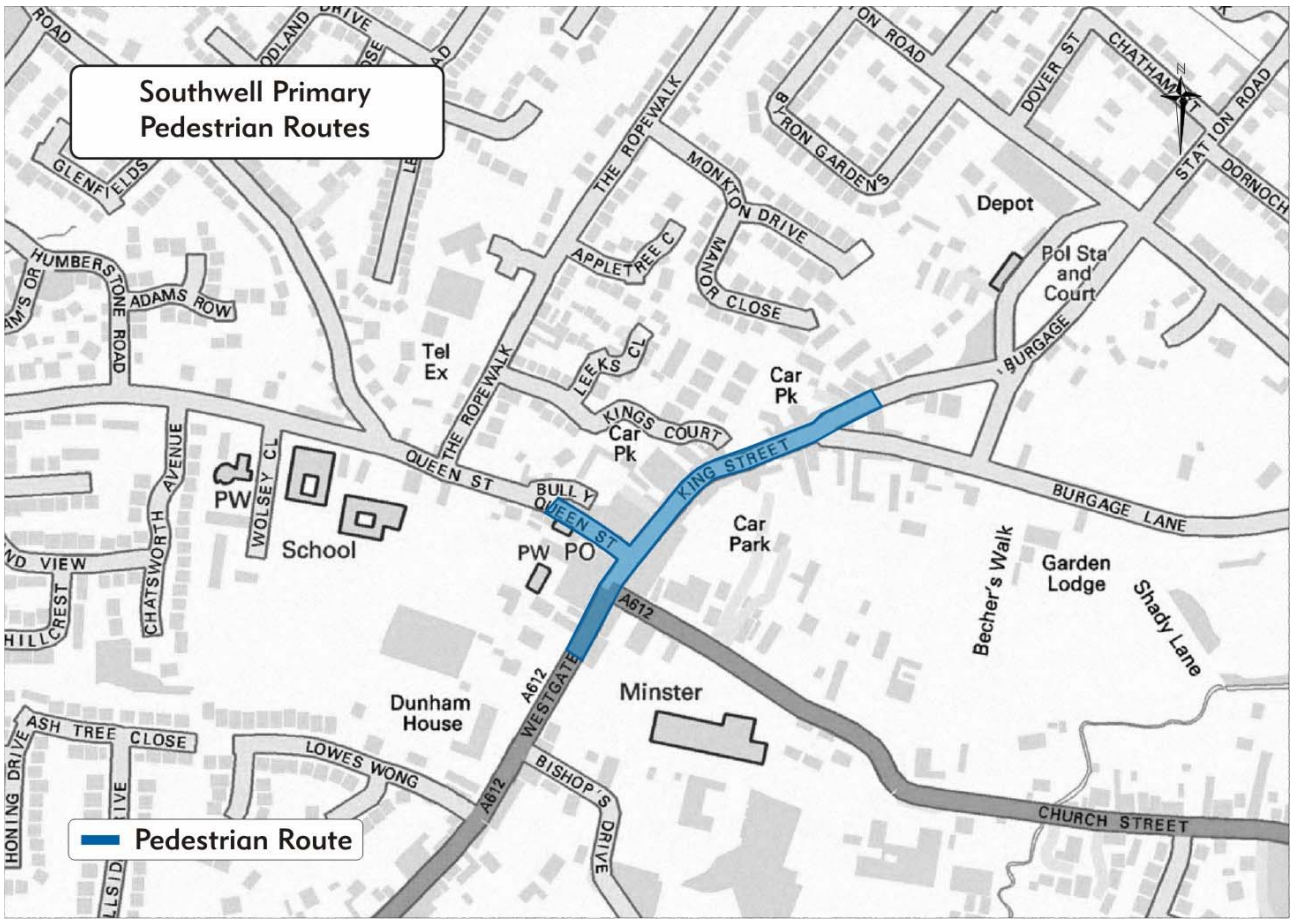


Figure 160: Southwell primary pedestrian routes

14.1.7 Rushcliffe district primary pedestrian routes

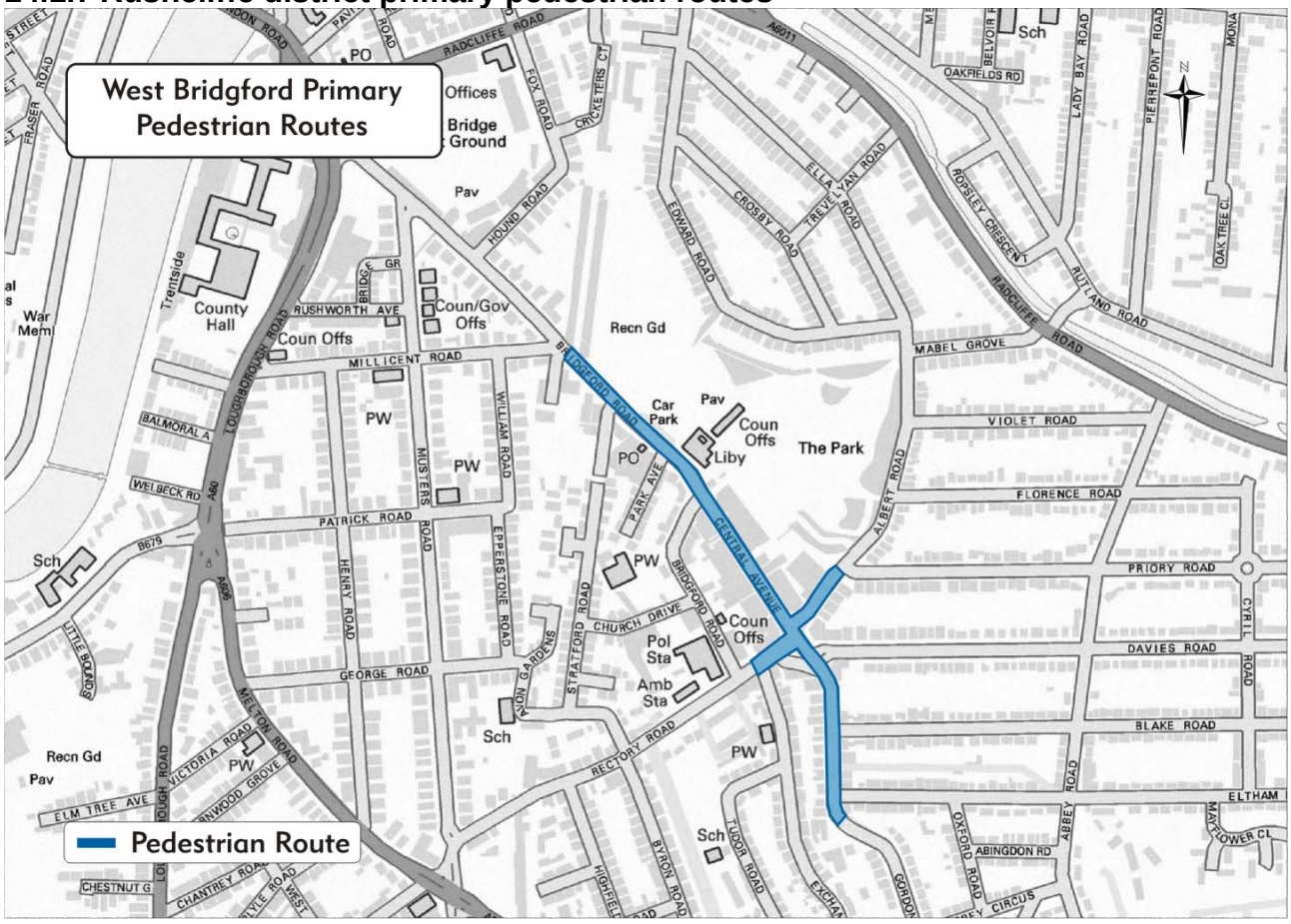


Figure 161: West Bridgford primary pedestrian routes

15. Parking

15.1 Park and Ride

15.1.1 Locations of existing sites

Park and ride sites are located along most of the main routes into Nottingham, with the exception of the A52 east and west of the City. There is also the potential for facilities further out of the City along the A60. Figure 162 below details the locations of the existing sites.

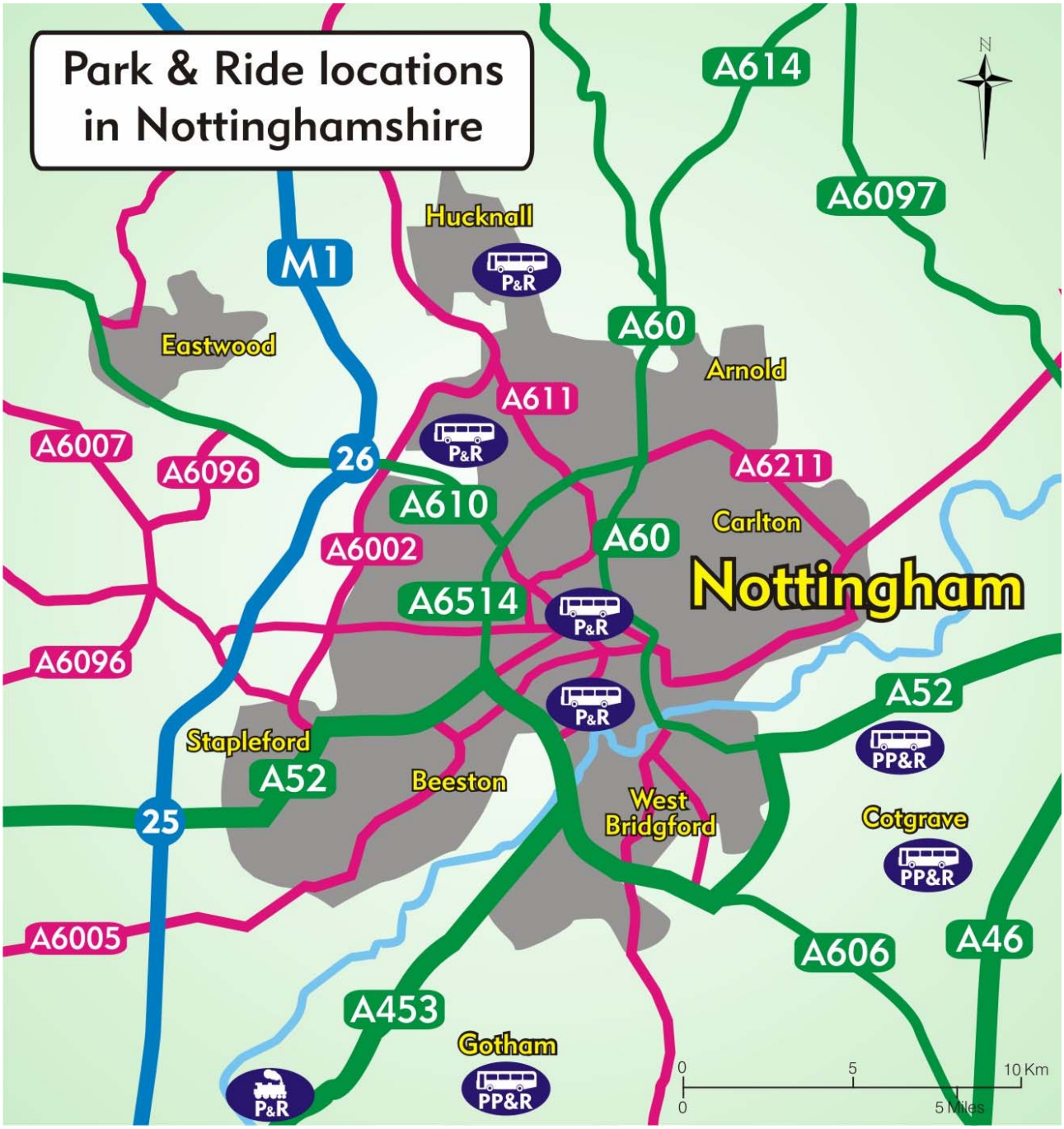


Figure 162: Locations of park & ride sites in Nottinghamshire

There are no permanent park & ride sites in the north of the county although temporary sites have been used in Mansfield to assist with large volumes of shoppers during December.

15.1.2 Pocket park & ride

The County Council are in the process of introducing three 'pocket park and ride' sites in the county. These are park and ride sites located at existing private car parks on existing bus service routes. The proposed sites are:

- Shepherds restaurant, Cotgrave
- Miners' Welfare, Cotgrave, and
- Royal British Legion, Gotham.

15.2 Public car parks

15.2.1 Locations of existing sites

Public car parks in the county are predominantly owned and run by the district councils. Such car parks are mainly in the district centres and table 100 below details the locations of district council owned car parks, as well as the approximate numbers of spaces. There are also some privately run public car parks in Mansfield town centre (mainly at shopping and retail centres) with an additional 1,190 spaces.

Table 100: The locations, number and number of spaces of district council owned car parks

District	Location	No. of car parks	Approximate no. of spaces
Ashfield	Hucknall	8	681
	Huthwaite	1	31
	Jacksdale	1	31
	Kirkby in Ashfield	4	114
	Sutton in Ashfield	3	36
Bassetlaw	Retford	7	586
	Worksop	11	1,102
Broxtowe	Beeston	10	863
	Eastwood	7	156
	Kimberley	4	57
	Stapleford	4	141
Gedling	Arnold	7	402
	Burnstump	2	120
	Carlton	5	105
	Calverton	2	55
	Gedling	1	27
	Mapperley	2	192
	Netherfield	2	68
Mansfield	Forest Town	2	74
	Mansfield	15	2,135
	Mansfield Woodhouse	1	104
	Warsop	3	94
Newark & Sherwood	Edwinstowe	3	74
	Newark	7	841
	Ollerton	1	84
	Southwell	2	135
Rushcliffe	Bingham	3	145
	Gamston	1	112
	Keyworth	2	29
	Radcliffe on Trent	2	97
	West Bridgford	3	276

Source: District councils

15.3 Freight parking

15.3.1 Locations of existing sites

Whilst lorries and coaches are able to use lay-bys and some other car parks throughout Nottinghamshire, there is one official lorry and coach park in the county. This facility is located close to the A1 on the A616 Great North Road at its junction with the A46 and the A617.

15.4 Civil parking enforcement

15.4.1 Impacts of the civil parking enforcement scheme

Civil parking enforcement (CPE) was introduced in Nottinghamshire in May 2008. The CPE powers gave the County Council the authority to enforce on-street parking violations. To determine the effects of the scheme, traffic surveys of parking patterns were undertaken before and after the introduction of the CPE scheme. Most of the 'before' surveys were undertaken in early 2008 although the surveys in Mapperley, Bingham and Beeston were undertaken only a few weeks before the introduction of CPE. The 'after' surveys were undertaken one year after the 'before' surveys were undertaken.

Impacts in commercial areas of district centres

Following the introduction of the CPE scheme, the percentage of vehicles violating parking restrictions on weekdays decreased in the commercial areas of all of the towns where monitoring was undertaken. The percentage of vehicles violating parking restrictions on weekends also decreased in the commercial areas of all of the towns where monitoring was undertaken with the exception of Bingham. Illegal parking in Bingham increased by 4% on Saturdays. The largest decreases in vehicles violating parking restrictions were seen in Retford (22% on weekdays and 26% on Saturdays). Smaller decreases were seen in Mapperley; Bingham and Beeston, probably because the 'before' surveys were undertaken after the publicity on the introduction of the scheme had started.

Figures 163 and 164 below show the percentage of vehicles violating parking restrictions on weekdays and Saturdays respectively in commercial areas before and after civil parking enforcement was introduced.

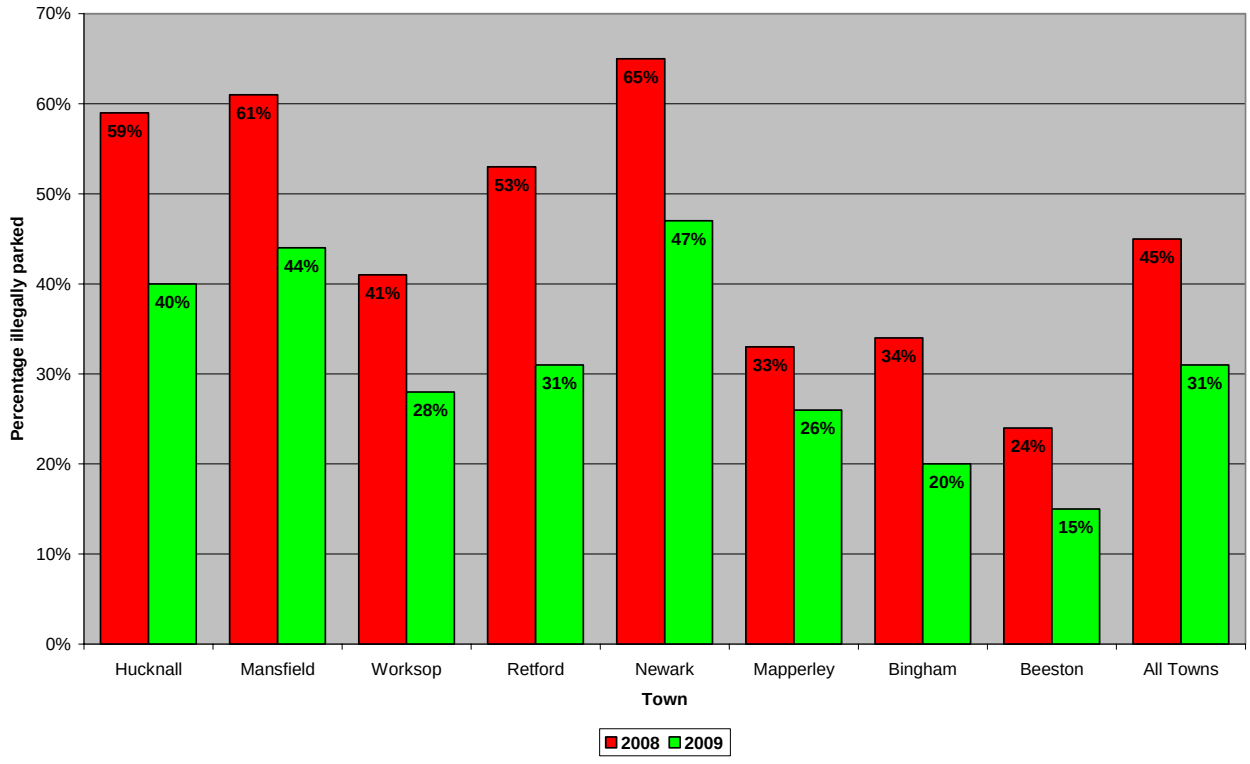


Figure 163: Percentage of illegally parked vehicles on weekdays in commercial areas before and after civil parking enforcement was introduced

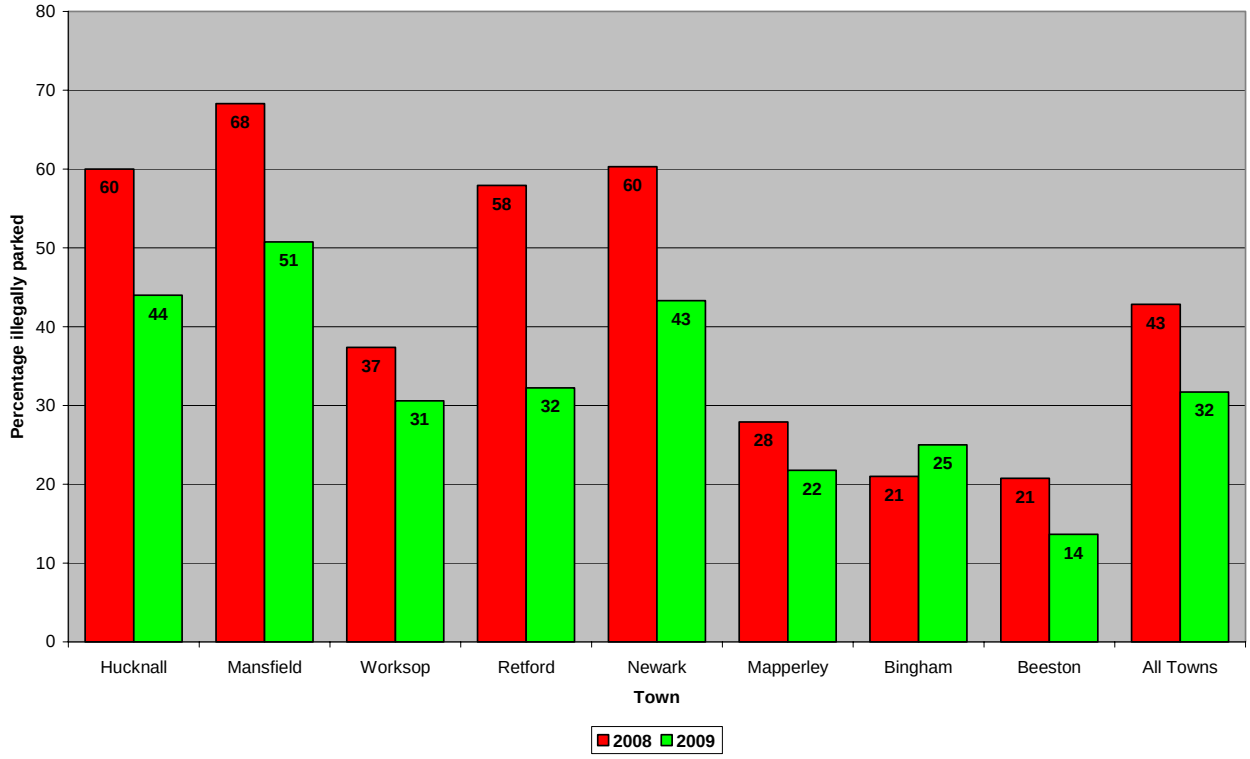


Figure 164: Percentage of illegally parked vehicles on Saturdays in commercial areas before and after civil parking enforcement was introduced

The length of time that vehicles violated parking restrictions was also monitored before and after CPE was introduced. On weekdays the length of time that vehicles violated parking restrictions decreased at each of the different types of locations except for violations at taxi bays, as shown below in figure 165. On Saturdays the length of time that vehicles violated parking restrictions decreased at each of the different types of locations except for violations at disabled bays, taxi bays and pedestrian zones, as shown below in figure 166.

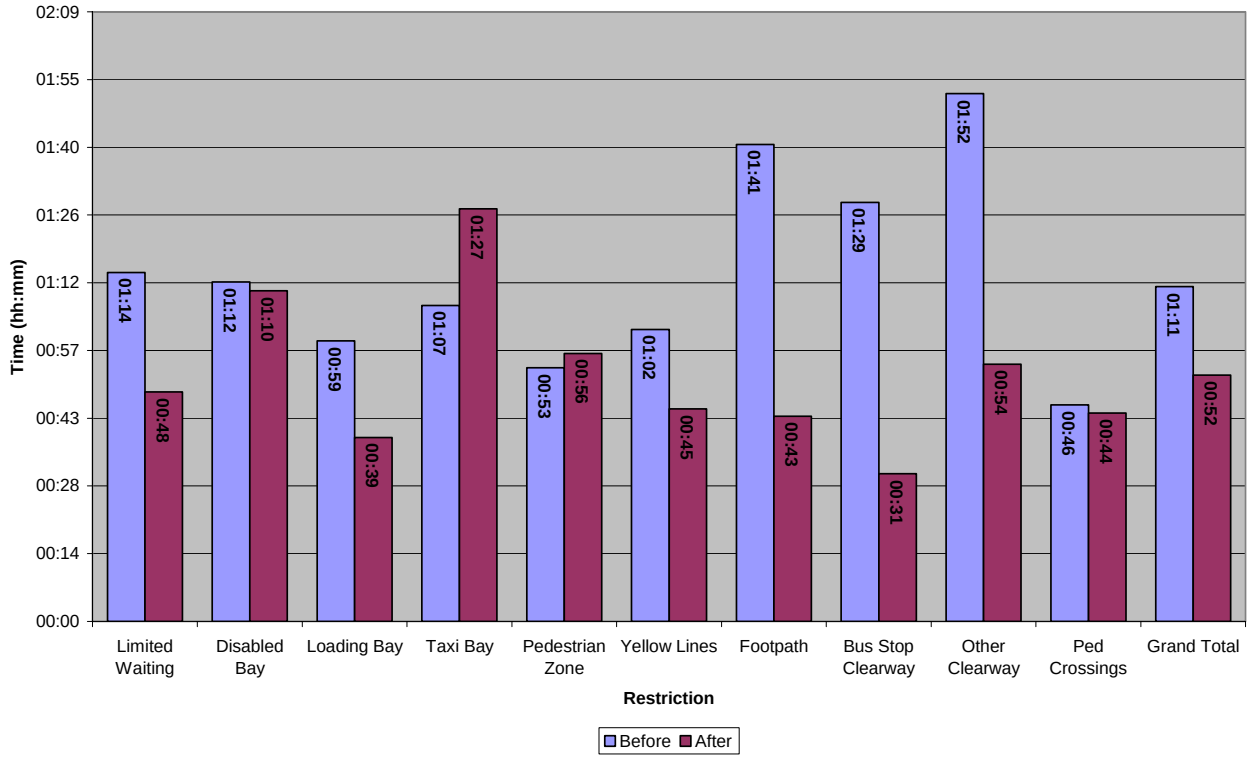


Figure 165: Length of stay by restriction across all towns on weekdays before and after the introduction of civil parking enforcement

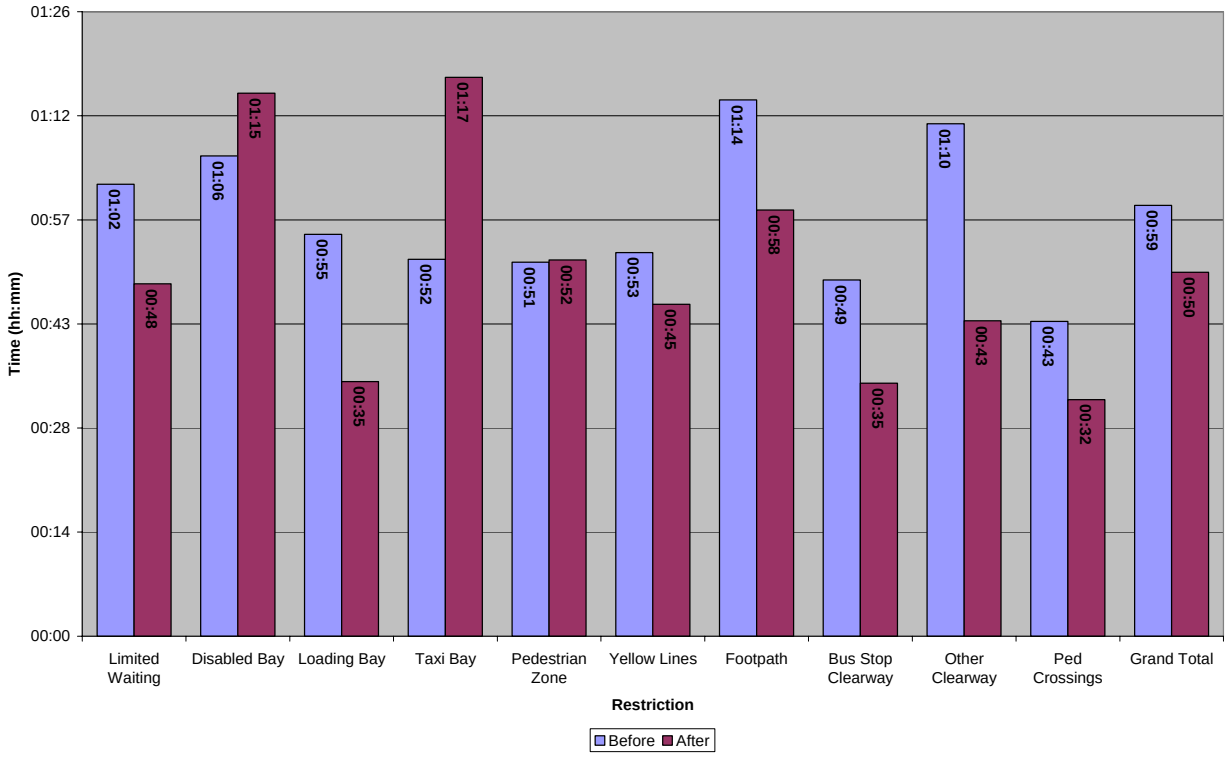


Figure 166: Length of stay by restriction across all towns on Saturdays before and after the introduction of civil parking enforcement

Impacts in residential areas

Surveys were also undertaken in residential areas close to district centres to determine the impact of CPE on residents' ability to park near their property. With the exception of Retford, the percentage of residents parking in residential areas on weekdays increased in all of the monitored locations. On Saturdays, however, the percentage of residents parking in residential areas decreased in Retford, Newark, Mapperley and Bingham. Figures 167 and 168 below detail the percentages of residents parking in residential areas on weekdays and Saturdays respectively.

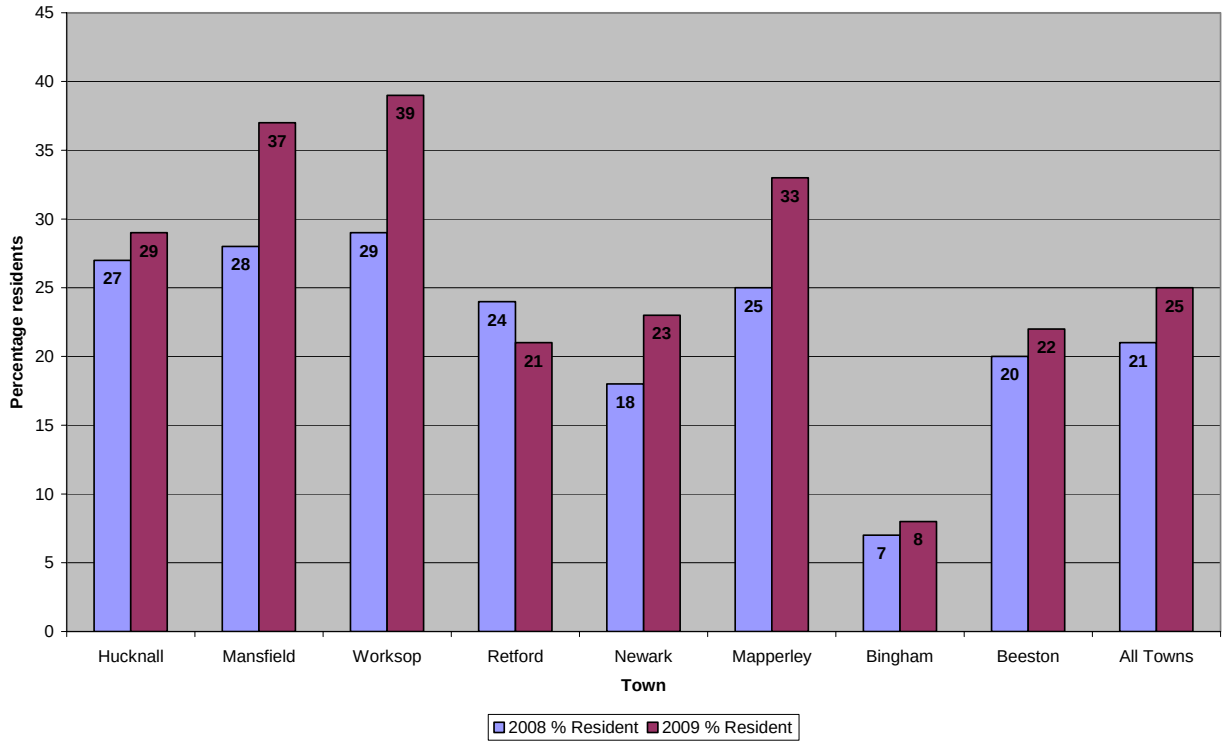


Figure 167: Percentage of vehicles parked on residential streets on weekdays who are residents (parked between 0600-0700 and during survey hours 0900-1700)

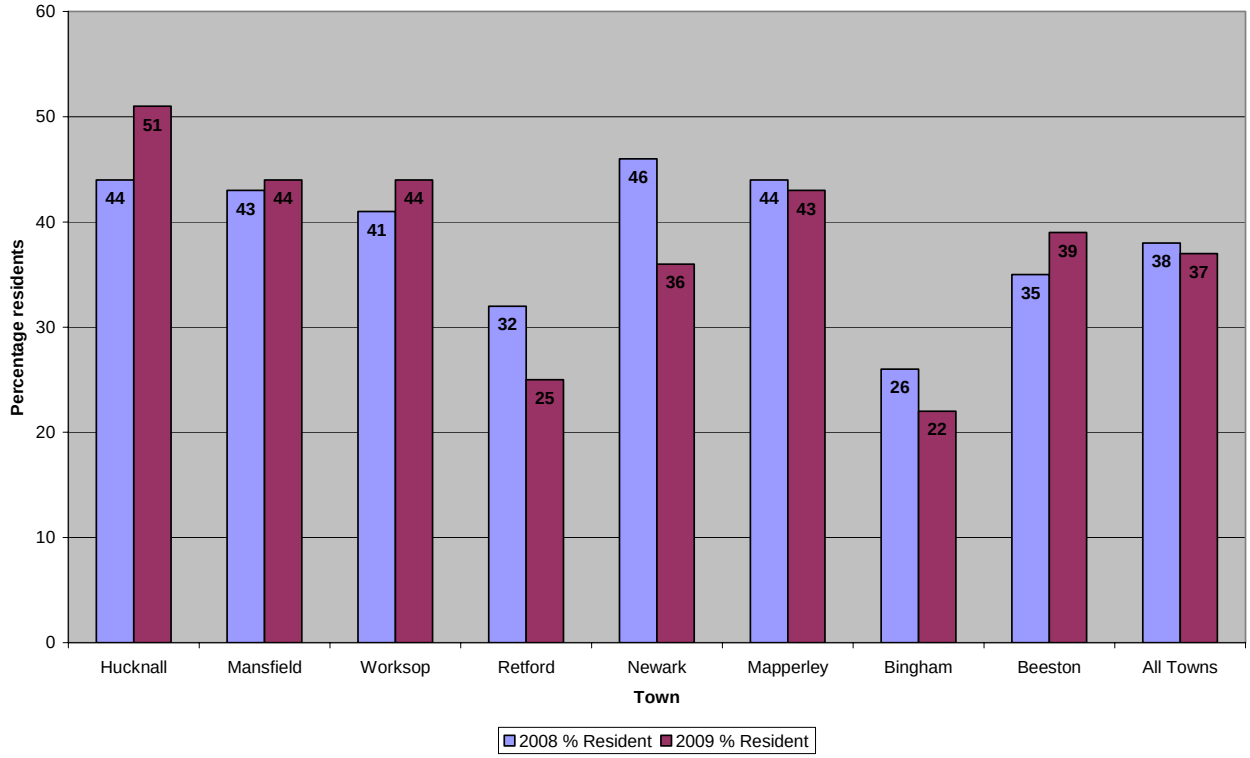


Figure 168: Percentage of vehicles parked on residential streets on Saturdays who are residents (parked between 0600-0700 and during survey hours 1000-1600)

16. Air quality

16.1 Updating and screening assessments

Air quality across the county is generally good but there are some locations which have transport related air quality issues. These sites are predominantly located adjacent to the motorway and trunk road network.

16.1.1 Air quality management areas

There are currently six transport related air quality management areas (AQMAs) in the county, five of which relate to the Highways Agency managed motorway and trunk road network. Details of each of the AQMAs are summarised below. Figures 169 and 170 below show the locations of the AQMAs in Broxtowe and Rushcliffe respectively. Further details on the monitoring and action plans to address the air quality in the AQMAs can be found at http://www.broxtowe.gov.uk/index.aspx?articleid=1292 and http://www.rushcliffe.gov.uk/doc.asp?cat=9659

Broxtowe

Air quality monitoring undertaken by the Borough Council in 2003 identified several locations adjacent to the M1 motorway where there were exceedences of levels of nitrogen dioxide (NO_2). Upon undertaking detailed assessment, the consultants report concluded that consideration be given to declare AQMAs in four locations, although the air quality objectives would be met prior to 2010 without any active intervention. In February 2006 Broxtowe Borough Council declared four AQMAs in the borough, all of which are related to the M1 motorway. Whilst there was also an exceedence of NO_2 at Trowell motorway services there was no need to declare an AQMA at this location as there were no permanent residential dwellings. The four locations of the AQMAs are shown in figure 169 and are located at:

- M1/A6007 closest houses to east of M1 in Iona Drive and Tiree Close, Trowell
- M1/A609 closest houses to west of M1 on Derbyshire Avenue, Trowell
- M1/A609 closest house to west of M1 on Nottingham Road, Trowell, and
- M1/B600 houses on the Nottingham Road and Back Lane, Nuthall closest to the M1.

Monitoring has shown that air quality is improving at each of the locations with NO_2 levels decreasing.

Rushcliffe

Following detailed review and assessment of air quality in 2003 and again in 2005, Rushcliffe Borough Council declared two traffic related AQMAs in September 2005 due to exceedences of NO_2. The two locations of the AQMAs are shown in figure 170 and are located at:

- houses adjacent to the approaches to Trent Bridge and Lady Bay Bridge, and
- houses adjacent to the A52 (trunk road) from Nottingham Knight roundabout northwest to the borough/city boundary.

Monitoring has shown that air quality is improving at each of the locations with NO_2 levels decreasing.

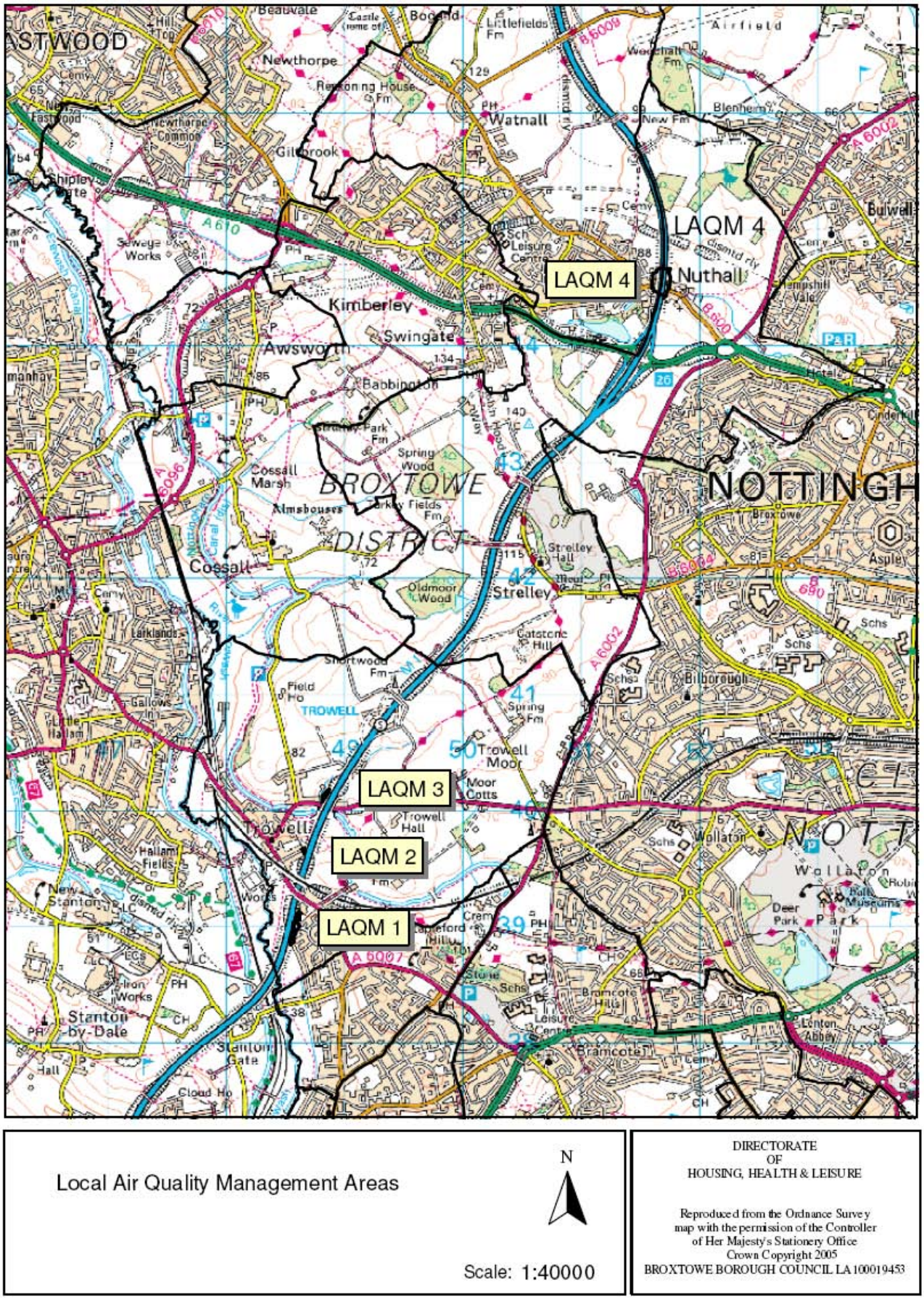


Figure 169: Locations of air quality management areas (AQMAs) in Broxtowe borough
Source: Broxtowe Borough Council Air Quality Action Plan

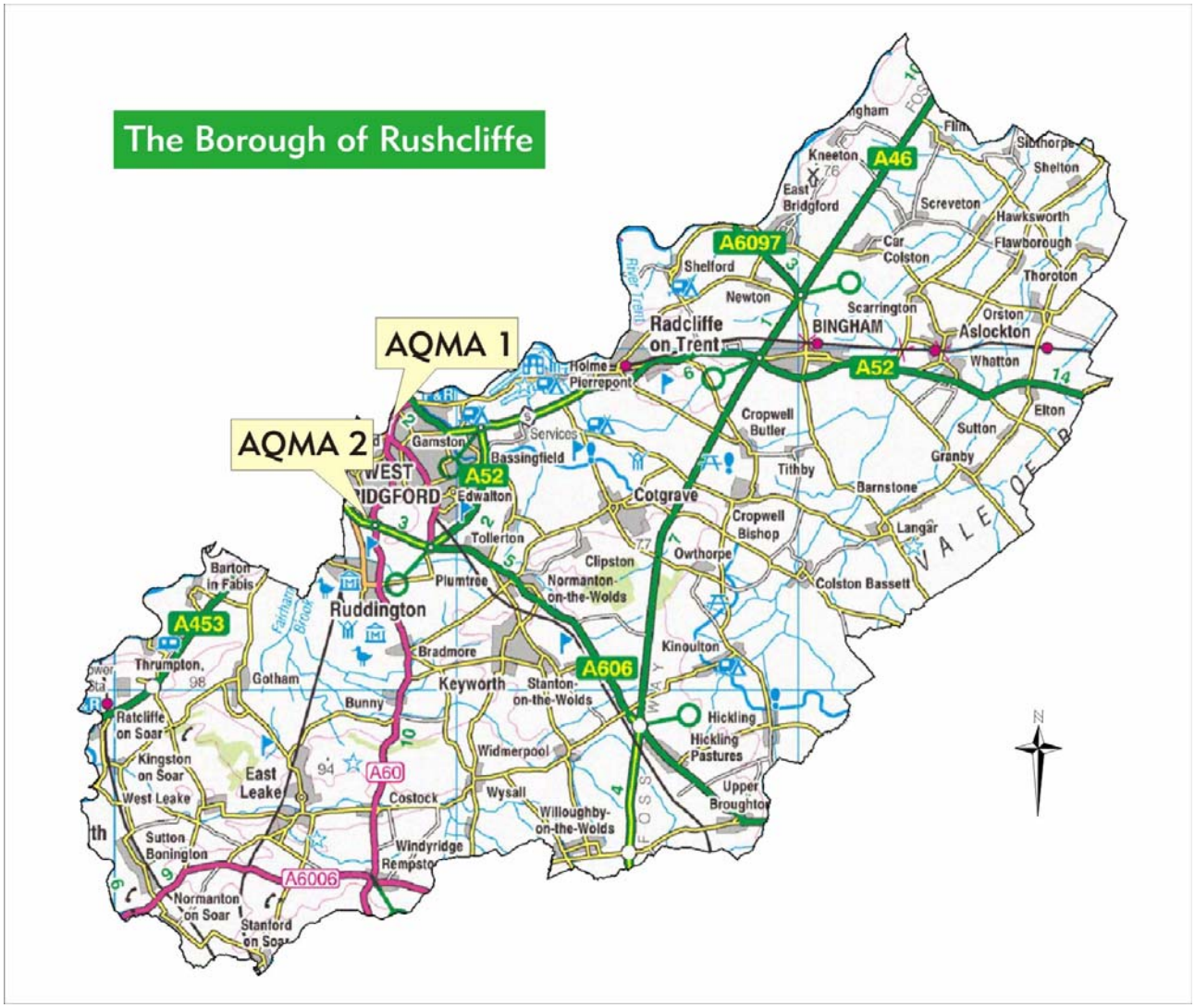


Figure 170: Locations of air quality management areas (AQMAs) in Rushcliffe borough

16.1.2 Locations of potential exceedences

Monitoring of air quality across the county has also identified two further locations where the borough councils may have to declare an AQMA.

Gedling

In 2009 Gedling Borough Council measured concentrations of NO_2 above the annual mean objective at locations on the A60 Mansfield Road, Daybrook. The Borough Council is currently in the process of carrying out a detailed assessment at this location to determine if an AQMA will need to be declared.

Rushcliffe

Rushcliffe Borough Council is currently undertaking further assessment work at a location on the A52 (trunk road) at Stragglethorpe to determine if an AQMA relating to NO_2 will need to be declared.

16.1.3 Locations that are close to exceedence

Ashfield

Assessment and monitoring undertaken in 2000 by Ashfield District Council highlighted potential particulate (PM_{10}) exceedences at properties adjacent to the M1 motorway at Selston and Pinxton. Further monitoring, however, determined that the number of exceedences at these locations was insufficient to exceed the PM_{10} objective.

Bassetlaw

The 2006 'Updating and Screening Assessment' identified a number of locations in Bassetlaw that could be considered '*narrow congested streets with residential properties close to the kerb'*. These locations have now either been screened out or monitored using diffusion tubes. One site on Watson Road, Worksop was the subject of a 'Detailed Assessment'. The 2007 and 2008 Annual Progress Reports identified two areas that required a 'Detailed Assessment' for the annual mean NO_2 objective. These were the A1 at Tuxford and Watson Road at Worksop. The detailed assessment in May 2009 concluded that the two locations currently comply with the annual mean objective, but recommended continued monitoring at these locations. Monitoring in 2008 also identified a location on Hospital Road, Retford but it is considered that this will comply with the annual NO_2 objective.

Mansfield

Assessment and monitoring undertaken in 2008 by Mansfield District Council highlighted that NO_2 levels on Chesterfield Road North, Mansfield are at the annual mean threshold. It should be noted, however, that there has been no deterioration in air quality at this location since 2007 and NO_2 levels have reduced since 2006.

Newark

Assessment and monitoring has indicated that sites on the Beaumond Cross junction in Newark recorded annual means that were relatively close to the NO_2 objective and this location is one of the busiest junctions in the Newark & Sherwood district. Results at The Lodge have been consistently close to the NO_2 objective since monitoring of the site began. The site lies between two busy roundabouts that link the A1, A46 to Lincoln and A17 to Sleaford and Lincoln Road back into Newark.

16.2 Carbon dioxide emissions from transport

Per capita carbon dioxide (CO_2) emissions from transport have reduced in all of the districts in Nottinghamshire. Transport, however, still accounts for a high proportion of CO_2 emissions in the county, 31% of the total CO_2 emissions in Nottinghamshire, ranging from 37% of emissions in Broxtowe borough to 19% of emissions in Gedling borough. The proportion of CO_2 emissions from transport in Broxtowe borough is higher than those from domestic and industry/commercial purposes. Similarly, in Bassetlaw and Newark & Sherwood districts, the proportion of CO_2 emissions from transport is higher than those from domestic purposes and almost as high as those from industry/commercial purposes. It should be noted, however, that the districts with the highest CO_2 emissions from transport in the county all have major nationally strategic roads running through them (Bassetlaw - A1; Broxtowe - M1 and A52; and Newark & Sherwood - A1 and A46).. Table 101 below details the CO_2 emissions from transport in the county, regionally and in England.

Table 101: CO_2 emissions from transport

		CO_2 emissions			
Area	**Year**	**Road transport**	**Percentage of total emissions**	**Population ('000s mid-year estimate)**	**Per capita transport emissions (t)**
Ashfield	2005	237	29%	114.6	2.1
	2006	234	28%	115.0	2.0
	2007	236	29%	115.3	2.0
	2008	219	27%	115.7	1.9
Bassetlaw	2005	378	32%	110.5	3.4
	2006	380	34%	110.6	3.4
	2007	386	37%	110.7	3.5
	2008	369	35%	111.3	3.3
Broxtowe	2005	319	37%	109.5	2.9
	2006	316	37%	109.8	2.9
	2007	320	38%	110.1	2.9
	2008	293	37%	110.9	2.6
Gedling	2005	113	20%	112.2	1.0
	2006	110	19%	111.8	1.0
	2007	112	20%	112.0	1.0
	2008	107	19%	112.3	1.0
Mansfield	2005	133	22%	99.0	1.3
	2006	128	22%	99.2	1.3
	2007	130	23%	99.3	1.3
	2008	124	21%	99.8	1.2
Newark & Sherwood	2005	405	35%	110.5	3.7
	2006	406	36%	111.2	3.7
	2007	419	37%	111.9	3.7
	2008	401	36%	112.5	3.6
Rushcliffe	2005	264	31%	108.6	2.4
	2006	258	29%	109.3	2.4
	2007	262	30%	110.0	2.4
	2008	250	32%	110.8	2.3
Nottinghamshire	2005	1,848	30%	764.7	2.4
	2006	1,833	31%	766.9	2.4
	2007	1,864	32%	769.3	2.4
	2008	1,763	31%	773.3	2.3
East Midlands	2005	11,180	28%	4,327.1	2.6
	2006	11,029	27%	4,362.6	2.5
	2007	11,151	28%	4,397.0	2.5
	2008	10,630	28%	4,429.4	2.4
England	2005	114,109	26%	50,466.2	2.3
	2006	111,879	26%	50,763.9	2.2
	2007	113,032	27%	51,106.2	2.2
	2008	108,527	26%	51,464.6	2.1

Source: AEA local and regional CO_2 emissions estimates for 2005-2008, September 2010

17. Noise

17.1 Noise Action Plans

The Nottingham Agglomeration Noise Action Plan is designed to address the management of noise issues and effects in the Nottingham agglomeration under the terms of the Environmental Noise (England) Regulations 2006 as amended (the 'Regulations'). These Regulations transpose Directive 2002/49/EC relating to the Assessment and Management of Environmental Noise. This directive is commonly referred to as the Environmental Noise Directive or END. In particular, the Action Plan covers the noise issues arising from road, railway, aviation and industrial sources (as described in the Directive) that affect the Nottingham agglomeration. The management of noise issues and effects from major roads, major railways and major airports that are located outside first round agglomerations are addressed within the Action Plans for those sources.

The following locations are identified as part of the 'First Priority Locations' identified in the First Round Agglomerations:

- sections of the M1 (Highways Agency managed road)
- sections of the A52 (Highways Agency managed road)
- sections of the A46 (Highways Agency managed road)
- rail line at Attenborough (managed by Network Rail), and
- A60 Trent Bridge and Loughborough Road, West Bridgford.

The DEFRA Noise Action Plan for Major Roads outside agglomerations identifies 'Important Areas' with respect to major road and rail noise where 1% of the population is affected by the highest noise levels. Locations where noise mapping indicates levels of at least 76 dB $L_{A10,18h}$ are to be investigated as a priority.

There are an estimated 7,300 dwellings to be investigated due to noise from major roads across the East Midlands with 2,100 to be investigated as 'First Priority Locations'. The Noise Action Plan requires local highway authorities (other than the Highways Agency) to investigate 'Important Areas' (giving priority to those containing 'First Priority Locations') during July 2010-June 2011. Relevant highway authorities are then required to implement any actions or secure budget for actions from April 2011 onwards. From April 2012 authorities are required to investigate and implement measures on the remaining 'Important Areas'.

The following locations are identified as part of the 'First Priority Locations' in Nottinghamshire (excluding the M1, A52 and A46):

- Awsworth Lane, Awsworth
- A6002 Nuthall
- A606 Tollerton
- A6097 Gunthorpe/Lowdham
- A608 Annesley Hall
- A611 Annesley
- A38 Sutton in Ashfield (3 sections)
- A6075 Mansfield (3 sections)
- A60 (5 sections between Leapool and Ravenshead)
- A614 Rufford Country Park
- A6075 New Ollerton
- A617 Kelham
- A57 Worksop, and
- A619 Worksop.

17.2 Tranquillity map

The Campaign to Protect Rural England (CPRE) has undertaken mapping exercises and produced tranquillity maps. The tranquillity map for Nottinghamshire is shown below as figure 171.

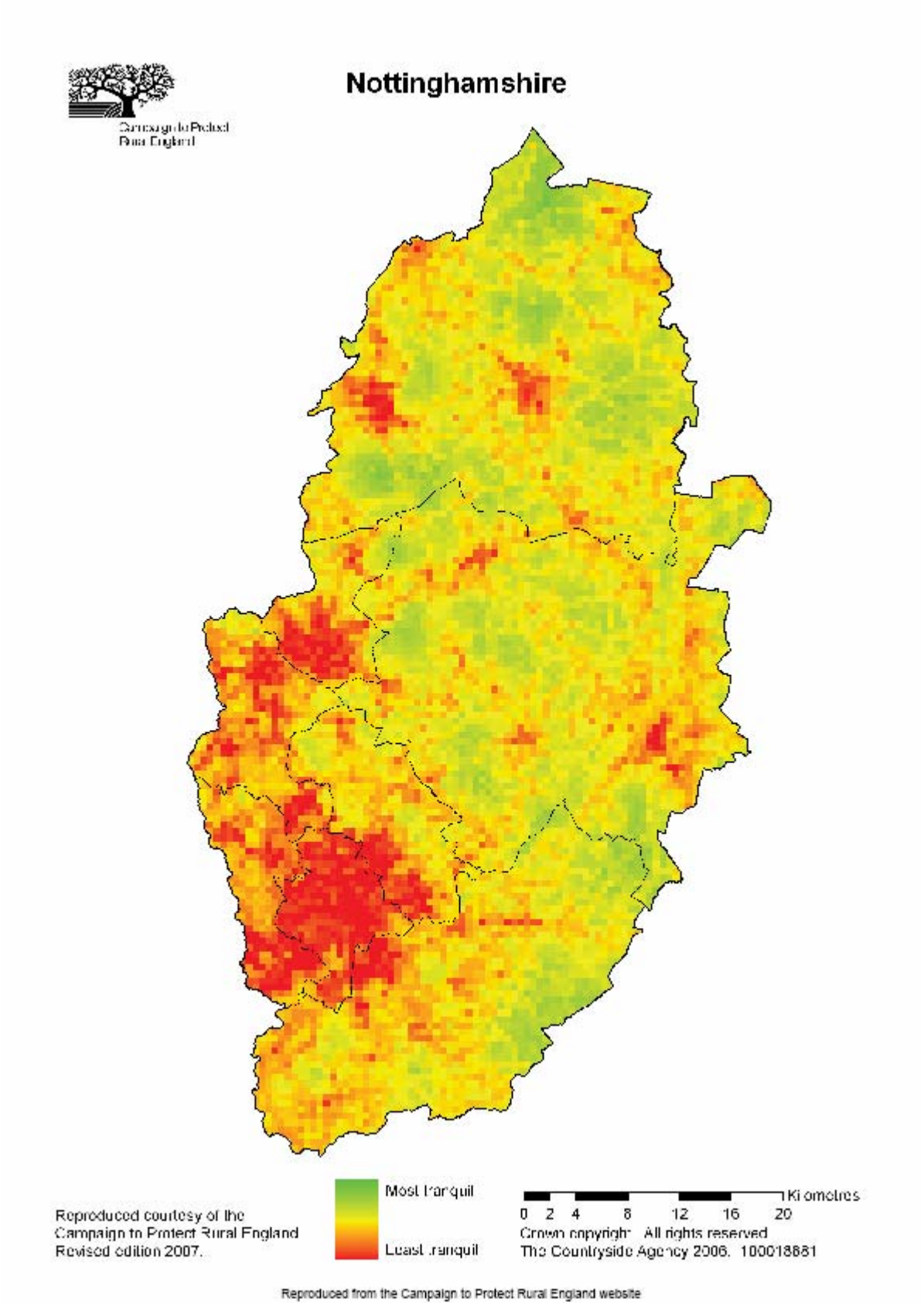


Figure 171: Tranquillity map for Nottinghamshire
Source: Campaign to Protect Rural England