

#### **Appendix 4 - Baseline information**

A4.1 The SEA Directive requires the collation of baseline information to provide a background to, and evidence base for, identifying sustainability problems and opportunities in the District and providing the basis for predicting and monitoring the effects of the Local Plan Review. To make judgements about how the Local Plan Review will contribute to or hinder sustainable development, it is necessary to understand the economic, environmental and social circumstances in the District today and their likely evolution in the future. It is intended to collect only relevant and sufficient data on the present and future state of the District to allow the potential effects of the Local Plan Review to be adequately predicted.

A4.2 The SA / SEA Guidance provided by Government (see web link below) defines baseline information as referring to 'the existing environmental, economic and social characteristics of the area likely to be affected by the Local Plan, and their likely evolution without implementation of new policies.' Collection of baseline information should be continuous as the IIA process guides plan making and as new information becomes available.

<http://planningguidance.planningportal.gov.uk/blog/guidance/strategic-environmental-assessment-and-sustainability-appraisal/>

A4.3 Baseline information on socio-economic trends in the District, as well as detailed descriptions of the area's characteristics, is presented below.

#### **Characteristics of Newark and Sherwood**

A4.4 Newark and Sherwood covers 65,132 hectares and makes nearly one third of the area of the County of Nottinghamshire. The Ward with the largest area is Collingham, representing 13.29% of the total area of the District. The most densely populated Ward is Devon with 40.98 persons per hectare; the least densely populated Ward is Sutton-on-Trent with 0.41 persons per hectare. The Districts of Bassetlaw and West Lindsey lie to the north, and North and South Kesteven to the east. The Boroughs of Rushcliffe and Melton are to the south, Gedling is south west and Mansfield and Ashfield Districts are on the western boundary.

A4.5 The total population of the District is 117,800, comprising 57,900 males and 59,800 females (Office for National Statistics (ONS) NOMIS website (<https://www.nomisweb.co.uk/>)). The District has a dispersed settlement pattern. Newark and contiguous Balderton are the most populous settlement with in excess of 35,000 inhabitants. The historic minster town of Southwell has a population of approximately 6,500 and Ollerton & Boughton has a population of 9,900. These settlements, along with Rainworth and Clipstone are classed as service centres. The principal villages of the District are Collingham, Blidworth, Bilsthorpe, Edwinstowe, Farnsfield, Lowdham and Sutton-on-Trent.

#### **Transport**

A4.6 Relatively good access to the primary road network is available throughout the District. On the east side of the District is the A1, one of the Country's main trunk roads, which runs north to south providing links with London, the north and East Anglia. At Newark, the A1 meets the A46 trunk road, with the A46 carrying on to Lincoln to the north-east and Leicester to the south-

west. The development of the Mansfield Ashfield Regeneration Route (MARR) has opened up the west of the District to Mansfield and Ashfield, although this has also led to increased traffic on the A617 as it serves as a proxy link road between the A1 and M1.

- A4.7 The District as a whole is well served by rail and Newark itself has two railway stations. The East Coast Main Line stops at Newark North Gate, providing good links to London, Edinburgh, Newcastle, York, Doncaster, Wakefield, Leeds, Darlington and Peterborough. The route forms a key artery on the eastern side of Great Britain and is broadly paralleled by the A1 trunk road. The journey time between Newark North Gate and London is usually one and a half hours or less. In addition Newark Castle and numerous village stations along the Lincoln-Nottingham line provide access to the region's main urban centres. Services between Nottingham, Newark Castle and Lincoln Central have recently been significantly improved following more than two million pounds of investment.
- A4.8 The pattern of bus transport in Newark and Sherwood is variable. Whilst the settlements of Newark, Southwell and Ollerton are relatively well served by a range of bus services, outside of these centres service provision can be poor. At present, large villages within rural hinterland areas of the District generally have service links with urban areas close by. However, most small villages have limited services only, and many of the District's settlements have no evening or Sunday service. Indeed, there are large areas of the District that, at best, have a bus service only every hour throughout the day.
- A4.9 The River Trent between Nottingham and Gainsborough is a commercial waterway known as the Trent Navigation. The use of waterways to transport freight, however, has been in a more or less steady decline since 1988. Despite this, the Canals and Rivers Trust advise that the Trent Navigation is a waterway of substance which still carries a considerable amount of commercial traffic - especially in its lower reaches (<https://canalrivertrust.org.uk/canals-and-rivers/river-trent>). The Trent Valley Way is a long-distance walking route, following the banks of the river. The scenery is mostly arable farmland, with villages, churches, watermills and old ferry crossings along the way. Newark Castle sits directly on the banks of the river, its high stone walls dropping straight down to the water.
- A4.10 According to the 2011 census, 81.4% of households in the District have a car or van. Car ownership rates tend to be higher outside the urban areas of the District – in three areas of Newark, fewer than 60% of households have a car or van, while in some rural areas car ownership rates exceed 95%. 17,340 people from outside the District work here, and 20,962 residents work elsewhere, meaning 3,622 more people commute out of the District than into it.
- A4.11 The dispersed and rural nature of the District is reflected in 'travel to work' patterns picked up in the 2011 census. Only 810 residents, less than 1%, use trains to get to work and 1,380 (1.6%) use buses, minibuses or coaches. 37,481 people, or 44.5%, travel in cars. 2,103 people cycle and 5,099 travel on foot (2.5% and 6.1% respectively). 35.2% of residents, or 29,590 people, were not in employment. This compares with figures for the whole of England of 3.3% of commuters using trains, 4.7% using bus, minibus or coach, and 38.1% travelling in a car or van. 1.9% of people nationally cycle to work and 6.3% travel on foot. Both locally and nationally, the vast

majority of people who get to work in a car or van drive rather than travel as passengers, suggesting that most vehicles have a single occupant.

#### **Leisure provision – green spaces**

- A4.12 Newark & Sherwood District is well provided with parks, public gardens and other attractive outdoor areas free for the public to use. Newark itself contains examples including Newark Castle and gardens, Sconce and Devon Park, Riverside Park, Sherwood Avenue Park, Fountain Gardens, Beaumont Gardens and Friary Gardens. Vicar Water Country Park is just to the south of Clipstone village and has been mainly formed on the site of former colliery spoil tips, near the headstocks of Clipstone Colliery. The District also contains Rufford Abbey Country Park which includes the ruins of a medieval monastery, gardens, woodland walks, a children's play village, a sculpture trail, and a lake. Sherwood Forest National Nature Reserve with some of the oldest trees in Europe, lies in the west of the District, and contains a 450 acre country park. Nearby is Sherwood Pines Forest Park, with trails for walking and cycling and other facilities.
- A4.13 The Newark & Sherwood Community Greenspace Provision Improvement Plans look at twenty-one settlement areas in the District. Green space provision is audited for quality and quantity, and improvement plans set out. These documents provide detailed information about green spaces around the District and can be viewed at the following web address: <http://www.newark-sherwooddc.gov.uk/media/newarkandsherwood/imagesandfiles/planningpolicy/pdfs/openspaceandgreeninfrastructure/communitygreenspaceimprovementplans/>
- A4.14 The Green Space Strategy (2007) identified the following District wide deficiencies in provision:
- Children and young people; deficiency of over 43 hectares.
  - Outdoor sports facilities; deficiency of over 30 hectares in the north western sub -area of the District.
  - Allotments; deficiency of 12 hectares.
  - Cemeteries and churchyards; deficiency of seven hectares.
- A4.15 The District contains a variety of formal and natural green and open spaces that includes but goes beyond those detailed in the documents mentioned above. The Green Infrastructure Strategy provides detailed information about these spaces and can be viewed at the following web address: <http://www.newark-sherwooddc.gov.uk/media/newarkandsherwood/imagesandfiles/planningpolicy/pdfs/openspaceandgreeninfrastructure/greeninfrastructurestrategy/CSEB18%20Green%20Infrastructure%20Strategy.pdf>

#### **Leisure provision - sports**

- A4.16 There are a total of 137 football pitches in Newark & Sherwood, of which 128 are available, at some level, for community use. The Playing Pitch Strategy 2014 (see web link below) describes 44 of the pitches available for community use as good quality, 54 as standard quality and 30 as poor quality. 215 teams were identified as playing on pitches within Newark & Sherwood.

<http://www.newark-sherwooddc.gov.uk/media/newarkandsherwood/imagesandfiles/leisure/strategies/Newark%20Sherwood%20Playing%20Pitch%20%20Strategy.pdf>

- A4.17 In total, there are 34 grass cricket grounds identified in Newark & Sherwood accommodating 116 teams (79 senior and 37 junior teams). 3 pitches are assessed as good quality, 31 as standard and none as poor. There are 3 rugby clubs in the District, 2 with their own home grounds, and 1 that leases a ground from Nottinghamshire County Council. 4 sand based artificial grass pitches are suitable for competitive hockey, serving 2 hockey clubs and one mixed team which currently only play friendly matches.
- A4.18 There are 20 bowling greens in Newark & Sherwood provided across 18 sites. There are 2 athletics tracks which both have cinder surfaces and are assessed as poor. Neither is able to host competition. There are 67 tennis courts identified within Newark & Sherwood, and 23 netball courts.

#### **Shopping provision**

- A4.19 The average distance to a supermarket or convenience store is one way assessing rurality and understanding the relationship between transport, accessibility and social exclusion. This indicator provides the distance by road to the nearest supermarket or convenience store:

**Table 1 – Average distance to a supermarket or convenience store in kilometres**

	<b>Newark &amp; Sherwood</b>	<b>Nottinghamshire</b>	<b>England</b>	<b>Newark &amp; Sherwood</b>
<b>Road distance to supermarket or convenience store (km)</b>	1.56	1.29	1.17	3 <sup>rd</sup> out of 8 in Nottinghamshire and 140 <sup>th</sup> out of 354 in England

Source: Newark & Sherwood State of the District 2009

- A4.20 Although the average distance to a supermarket or convenience store for the District is comfortably below 2km, there are wide variations across the District. There are 17 wards that have 2km or less to travel to the nearest supermarket or convenience store and of these, some 12 have less than 1 km to travel. The wards with the shortest average distance to a supermarket or convenience store are Castle, Devon and Southwell North and are all within the top 5% nationally. In stark contrast, Muskham, Trent and Caunton all have on average over 5km to travel to the nearest supermarket or convenience store, with Caunton residents having the furthest to travel with an average of 6.2 km. This places all three wards in the bottom 10% nationally.

#### **Town centre vitality**

- A4.21 The amount of vacant 'A Class' units in town centres can be taken as an indicator of vitality. There are five different types of A Class:

- **A1 Shops** - Shops, retail warehouses, hairdressers, undertakers, travel and ticket agencies, post offices, pet shops, sandwich bars, showrooms, domestic hire shops, dry cleaners, funeral directors and internet cafes.
- **A2 Financial and professional services** - Financial services such as banks and building societies, professional services (other than health and medical services) and including estate and employment agencies. It does not include betting offices or pay day loan shops - these are now classed as “sui generis” uses.
- **A3 Restaurants and cafés** - For the sale of food and drink for consumption on the premises - restaurants, snack bars and cafes.
- **A4 Drinking establishments** - Public houses, wine bars or other drinking establishments (but not night clubs).
- **A5 Hot food takeaways** - For the sale of hot food for consumption off the premises.

A4.22 Table 2, below, shows how many A Class were vacant when most recently surveyed, with figures for previous years for comparison. The primary shopping frontages are areas which contain the town’s key retailers, have strong pedestrian activity and are the focus for retail activity. Secondary frontages are those which contain more of a mix of uses including retail, leisure and service sector businesses. Although there were more vacant units in 2015 than in previous years, the percentages are not significantly different, and the figures go up and down and are not suggestive of a long term sustained decline in vitality.

**Table 2 - Newark town centre ‘A Class’ vacant units 2012 to 2015 comparison**

Year	Total units	Total vacant units	Primary Shopping Frontage	Secondary Shopping Frontage	Remainder of the town centre	Percentage of vacant units
2012	434	51	9	20	22	11.75%
2013	434	48	12	15	21	11.06%
2014	434	49	9	15	25	11.29%
2015	434	59	12	16	31	13.59%

Source: Retail and Town Centre Uses Monitoring Report 01/04/2014 to 31/03/2015 and Survey Data (March 2015)

A4.23 The most recent figures for vacant A Class units in District Centres are provided in Table 3.3, below. Core Policy 8 of the Core Strategy) identifies Edwinstowe, Rainworth, Ollerton and Southwell as the designated District Centres. Their role is primarily for convenience shopping, with some comparison shopping and they also provide a range of other services for the settlement and surrounding communities.

**Table 3 – District centre vacant units**

Settlement	Total units	Total vacant units	Percentage of vacant units
Edwinstowe	55	1	1.82%
Ollerton	92	3	3.26%
Rainworth	17	0	0%

Southwell	126	2	1.59%
-----------	-----	---	-------

Source: Retail and Town Centre Uses Monitoring Report 01/04/2014 to 31/03/2015 and Survey Data (March 2015)

### Population and age

A4.24 The population of Newark and Sherwood District in 2014 was 117,800, representing an increase of 4.62% on the 2007 total of 112,600. In 2001, the District's population was estimated to be 106,273. Figures from the 2011 census (when the total population was 112,526) show the ages and genders of District residents. The data shows there to be a marginally greater proportion of female residents, and that those falling into the two older age brackets make up the majority of the District's population. In both regards the picture mirrors that at a national level.

**Table 4 – District age structure**

	Newark & Sherwood			United Kingdom		
	All persons	Males	Females	All persons	Males	Females
<b>All ages</b>	112,526	55,204	57,322	61,082,500	28,926,500	32,156,000
<b>Age 0 to 15</b>	20,821	10,655	10,166	11,100,000	5,681,000	5,419,000
<b>Age 16 to 24</b>	11,220	5,736	5,484	6,191,500	2,102,500	4,089,000
<b>Age 25 to 34</b>	11,337	5,607	5,730	8,433,000	4,205,000	4,228,000
<b>Age 35 to 49</b>	24,655	12,010	12,645	13,461,000	6,658,000	6,803,000
<b>Age 50 and over</b>	44,493	21,196	23,297	21,897,000	10,280,000	11,617,000

Source: Office for National Statistics 2011

A4.25 Table 5, below, gives a broad age breakdown by ward in Newark and Sherwood. Edwinstowe & Clipstone ward has the highest number of 0-17 year olds representing over 9% of that age group within the District. Southwell ward has the highest number of people aged 65 and over representing almost 10% of that age group in Newark and Sherwood.

**Table 5 – Age brackets by ward**

	Population aged 0 to 17 (census)	Population aged 18 to 64 (census)	Population aged 65 and over (census)
	2011	2011	2011
	people	people	people
<b>Balderton North &amp; Cod-dington</b>	1,321	3,923	1,367
<b>Balderton South</b>	1,103	3,015	984

	Population aged 0 to 17 (census)	Population aged 18 to 64 (census)	Population aged 65 and over (census)
	2011	2011	2011
	people	people	people
<b>Beacon</b>	1,861	5,430	1,377
<b>Bilsthorpe</b>	792	2,005	578
<b>Boughton</b>	691	1,948	654
<b>Bridge</b>	1,448	4,300	820
<b>Castle</b>	503	2,269	513
<b>Collingham</b>	917	2,965	1,504
<b>Devon</b>	2,093	5,384	1,702
<b>Dover Beck</b>	603	1,717	659
<b>Edwinstowe &amp; Clipstone</b>	2,170	5,847	1,836
<b>Farndon &amp; Fernwood</b>	1,223	3,660	1,064
<b>Farnsfield</b>	517	1,538	676
<b>Lowdham</b>	554	2,480	609
<b>Muskham</b>	575	1,729	626
<b>Ollerton</b>	1,701	5,046	1,510
<b>Rainworth North &amp; Rufford</b>	1,213	3,629	869
<b>Rainworth South &amp; Blidworth</b>	1,422	3,978	1,114
<b>Southwell</b>	1,832	4,955	2,125

	<b>Population aged 0 to 17 (census)</b>	<b>Population aged 18 to 64 (census)</b>	<b>Population aged 65 and over (census)</b>
	<b>2011</b>	<b>2011</b>	<b>2011</b>
	<b>people</b>	<b>people</b>	<b>people</b>
<b>Sutton-on-Trent</b>	580	1,754	575
<b>Trent</b>	653	1,688	623

- A4.26 According to the Nottingham Outer 2014 Strategic Housing Market Assessment (June 2015), the latest projections suggest that the population in Newark and Sherwood will grow to 129,521 by 2033.
- A4.27 The terms ‘trans people’ and ‘transgender people’ are both often used as umbrella terms for people whose gender identity and/or gender expression differs from their birth sex, including transsexual people (those who intend to undergo, are undergoing or have undergone a process of gender reassignment to live permanently in their acquired gender), transvestite/cross-dressing people (those who wear clothing traditionally associated with the other gender either occasionally or more regularly), androgynous / polygender people (those who have non-binary gender identities and do not identify as male or female), and others who define as gender variant.
- A4.28 As acknowledged by the Office for National Statistics there is a lack of data on transgender people within the United Kingdom, and there is no obviously available information below this level. Estimates over the number of transgender people within the United Kingdom vary widely, the work carried out by the Gender Identity Research and Education Society in 2008 however represent the upper end of the scale with a figure of 300,000.
- A4.29 The Ward with the largest population is Edwinstowe & Clipstone, representing more than 8.5% of the total resident population of Newark and Sherwood. Farnsfield has the smallest population, with less than 2.5% of all residents. Table 3.6, below, shows how many people lived in each ward in 2011, the areas of the wards, and the percentage of residents of either sex.

**Table 6 – Ward areas and residents by number and sex**

	Area (census)	Number of all usual residents	Percentage of all usual residents - female	Percentage of all usual residents - male
	2011	2011	2011	2011
	hectares	people	%	%
<b>Balderton North &amp; Coddington</b>	2,000	6,611	51.1	48.9
<b>Balderton South</b>	260	5,102	51.9	48.1
<b>Beacon</b>	357	8,668	51.2	48.8
<b>Bilsthorpe</b>	640	3,375	50.0	50.0
<b>Boughton</b>	1,364	3,293	49.5	50.5
<b>Bridge</b>	360	6,568	49.8	50.2
<b>Castle</b>	421	3,285	48.6	51.4
<b>Collingham</b>	8,657	5,386	50.6	49.4
<b>Devon</b>	224	9,179	52.5	47.5
<b>Dover Beck</b>	5,038	2,979	51.3	48.7
<b>Edwinstowe &amp; Clipstone</b>	3,396	9,853	51.4	48.6
<b>Farndon &amp; Fernwood</b>	5,624	5,947	50.6	49.4
<b>Farnsfield</b>	1,909	2,731	50.6	49.4
<b>Lowdham</b>	955	3,643	39.3	60.7
<b>Muskham</b>	5,179	2,930	51.4	48.6
<b>Ollerton</b>	3,124	8,257	51.2	48.8
<b>Rainworth North &amp; Rufford</b>	5,547	5,711	50.2	49.8

	Area (census)	Number of all usual residents	Percentage of all usual residents - female	Percentage of all usual residents - male
	2011	2011	2011	2011
	hectares	people	%	%
<b>Rainworth South &amp; Blidworth</b>	1,793	6,514	51.6	48.4
<b>Southwell</b>	6,844	8,912	52.8	47.2
<b>Sutton-on-Trent</b>	7,097	2,909	50.5	49.5
<b>Trent</b>	4,344	2,964	51.2	48.8

### Ethnicity

A4.30 ONS figures from 2013 show the numbers of people with different ethnicities resident in the District. These are provided in the table below, along with figures for the East Midlands and the England:

**Table 7 – District residents by ethnicity**

Ethnic group:	Newark & Sherwood:	East Midlands:	England:
All Usual Residents	114,817	4,533,222	53,012,456
White; English /Welsh / Scottish / Northern Irish / British	108,208	3,871,146	42,279,236
White; Irish	641	28,676	517,001
White; Gypsy or Irish Traveller	253	3,418	54,895
White; Other White	2,856	143,116	2,430,010
Mixed/Multiple Ethnic Groups; White and Black Caribbean	491	40,404	415,616
Mixed/Multiple Ethnic Groups; White and Black African	133	8,814	161,550
Mixed/Multiple Ethnic Groups; White and Asian	308	21,688	332,708
Mixed/Multiple Ethnic Groups; Other Mixed	228	15,318	283,005
Asian/Asian British; Indian (Persons)	366	168,928	1,112,282
Asian/Asian British; Pakistani (Persons)	145	48,940	436,514
Asian/Asian British; Bangladeshi (Persons)	73	13,258	379,503

Asian/Asian British; Chinese (Persons)	220	24,404	819,402
Asian/Asian British; Other Asian (Persons)	232	37,893	977,741
Black/African/Caribbean/Black British; African (Persons)	166	41,768	591,016
Black / African / Caribbean / Black British; Caribbean (Persons)	270	28,913	277,857
Black/African/Caribbean/Black British; Other Black (Persons)	63	10,803	220,985
Other Ethnic Group; Arab (Persons)	39	9,746	327,433
Other Ethnic Group; Any Other Ethnic Group (Persons)	125	15,989	1,112,282
Asian/Asian British; Indian (Persons)	366	168,928	436,514

Source: Office for National Statistics 30 January 2013

### Ethnic mix

A4.31 This table shows the ethnic mix of each Ward in Newark and Sherwood. Lowdham Ward has the highest number of Asian / Asian British residents in the District and also the highest number of black / African / Caribbean /black British residents.

**Table 8 - Ethnic mix by ward**

	<b>Residents who are white</b>	<b>Residents who are mixed/multiple ethnic groups</b>	<b>Residents who are Asian/Asian British</b>	<b>Residents who are black/African/Caribbean/black British</b>	<b>Residents who are other ethnic group</b>
	<b>2011</b>	<b>2011</b>	<b>2011</b>	<b>2011</b>	<b>2011</b>
	<b>people</b>	<b>people</b>	<b>people</b>	<b>people</b>	<b>people</b>
<b>Balderton North &amp; Coddington</b>	6,476	49	61	21	4
<b>Balderton South</b>	4,980	52	48	16	6

	<b>Residents who are white</b>	<b>Residents who are mixed/multiple ethnic groups</b>	<b>Residents who are Asian/Asian British</b>	<b>Residents who are black/African/Caribbean/black British</b>	<b>Residents who are other ethnic group</b>
	<b>2011</b>	<b>2011</b>	<b>2011</b>	<b>2011</b>	<b>2011</b>
	<b>people</b>	<b>people</b>	<b>people</b>	<b>people</b>	<b>people</b>
<b>Beacon</b>	8,385	100	118	50	15
<b>Bilsthorpe</b>	3,322	35	8	3	7
<b>Boughton</b>	3,245	20	22	5	1
<b>Bridge</b>	6,311	100	113	35	9
<b>Castle</b>	3,138	51	63	29	4
<b>Collingham</b>	5,310	34	31	10	1
<b>Devon</b>	8,884	131	99	35	30
<b>Dover Beck</b>	2,910	47	10	9	3
<b>Edwinstowe &amp; Clipstone</b>	9,708	79	43	20	3
<b>Farndon &amp; Fernwood</b>	5,784	64	73	17	9
<b>Farnsfield</b>	2,673	25	23	5	5
<b>Lowdham</b>	3,236	116	129	145	17

	Residents who are white	Residents who are mixed/multiple ethnic groups	Residents who are Asian/Asian British	Residents who are black/African/Caribbean/black British	Residents who are other ethnic group
	2011	2011	2011	2011	2011
	people	people	people	people	people
<b>Muskham</b>	2,890	24	7	3	6
<b>Ollerton</b>	8,165	30	30	24	8
<b>Rainworth North &amp; Rufford</b>	5,629	33	33	11	5
<b>Rainworth South &amp; Blidworth</b>	6,429	45	26	10	4
<b>Southwell</b>	8,703	84	68	31	26
<b>Sutton-on-Trent</b>	2,885	10	12	2	0
<b>Trent</b>	2,895	31	19	18	1

### Religion

A4.32 Data on the religious beliefs of the District's residents is set out below.

**Table 9 - Religious beliefs**

	Newark & Sherwood	East Midlands	England
<b>Christian</b>	75,869	2,666,172	31,479,876
<b>Buddhist</b>	226	12,672	238,626
<b>Hindu</b>	194	89,723	806,199

<b>Jewish</b>	62	4,254	261,282
<b>Muslim</b>	456	140,649	2,660,116
<b>Sikh</b>	123	44,335	420,196
<b>Other Religion</b>	369	17,918	227,825
<b>No Religion</b>	29,453	1,248,056	13,114,232

Source: Census 2011, Office for National Statistics

### Marital and civil partnership status

A4.33 The table below provides details over the marital and civil partnership status of residents within the District. In line with regional and national trends the two single largest groupings of residents are those who are single and those who are within a marriage. A small proportion of residents are registered in a same-sex civil partnership – with the levels looking in line with the regional and national picture.

**Table 10 – Marital and civil partnership status**

	<b>Newark &amp; Sherwood</b>	<b>East Midlands</b>	<b>England</b>
<b>Total persons (aged 16 and over)</b>	99,957	3,694,767	42,989,620
<b>Single (never married or never registered a same-sex civil partnership)</b>	26,274	1,192,443	14,889,928
<b>Married</b>	48,390	1,790,916	20,029,369
<b>In registered same-sex civil partnership</b>	161	7,179	100,288
<b>Separated (but still legally married or still legally in a same-sex civil partnership)</b>	2,351	96,149	1,141,196
<b>Divorced or formerly in a same-sex civil partnership which is now legally dissolved</b>	9,404	342,665	3,857,137
<b>Widowed or surviving partner from a same-sex civil partnership</b>	7,377	265,415	2,971,702

Source: Census 2011, Office for National Statistics

### Sexual orientation

A4.34 It has proved difficult to obtain detailed information, particularly at a local level, on sexual orientation. The Office for National Statistics has however produced experimental data for 2010-2011 which goes down to a regional level. This shows that in the East Midlands less than 1% of the surveyed population identified as gay / lesbian or bisexual.

## Deprivation

A4.35 In the Indices of Multiple Deprivation published on 30 September 2015, Newark and Sherwood District ranks 158 out of 326 local authorities in England (with 1 being the most deprived). Table 11, below, shows how Newark & Sherwood compares with neighbouring authorities. It can be seen that there are significant differences in levels of deprivation, with Rushcliffe being the least deprived and Mansfield the most deprived of the authorities compared. Table 12 shows Newark & Sherwood's rank in terms of different aspects of deprivation.

**Table 11 – Deprivation in Newark & Sherwood and neighbouring authorities**

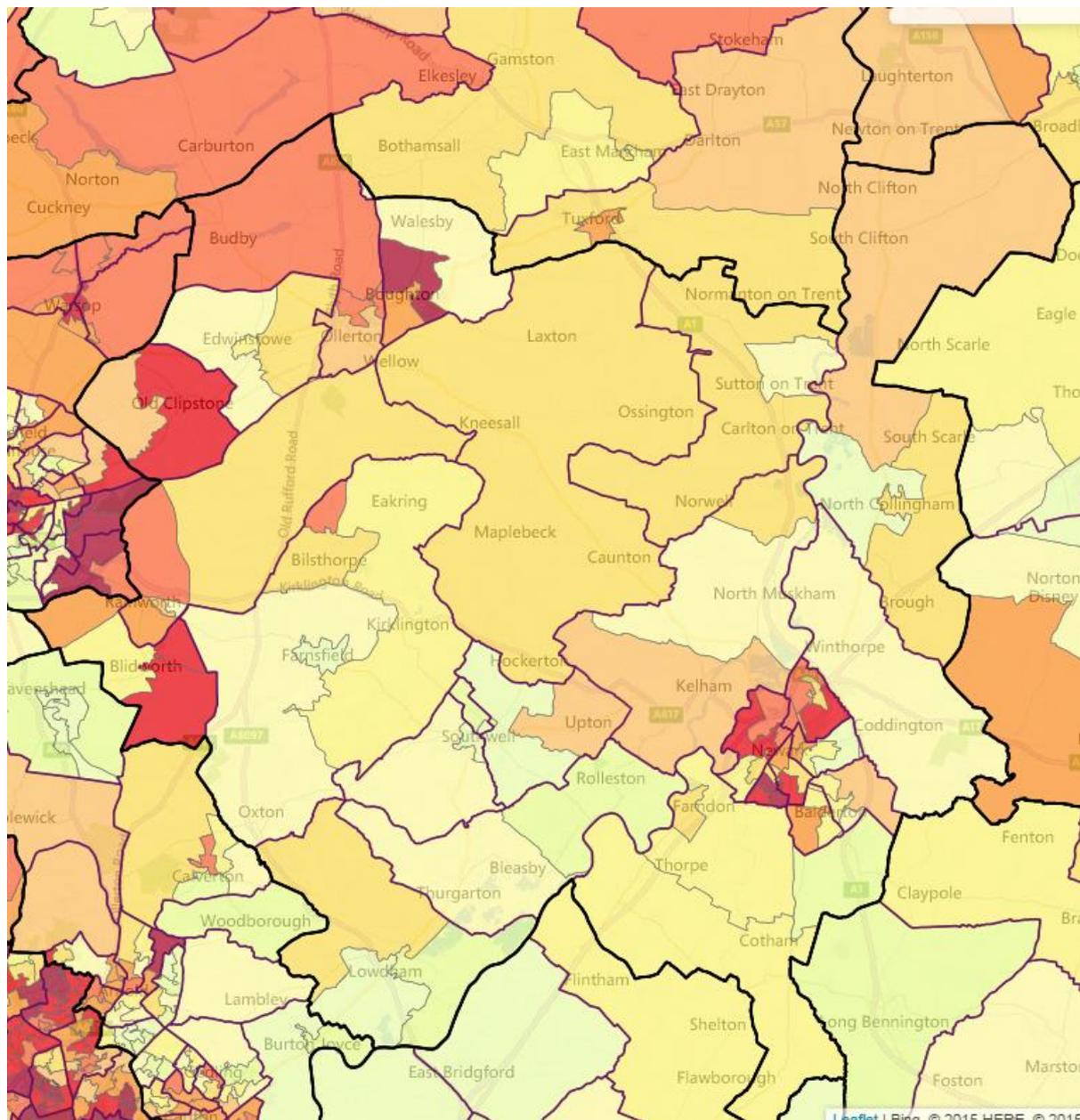
<b>Authority</b>	<b>IMD rank (with lower meaning more deprived)</b>
Newark & Sherwood	158
Bassetlaw	115
West Lindsey	152
North Kesteven	226
South Kesteven	223
Melton	236
Rushcliffe	318
Gedling	202
Mansfield	59

**Table 12 –Newark & Sherwood's deprivation rankings**

<b>Aspect of deprivation</b>	<b>IMD rank (with lower meaning more deprived)</b>
Income	173
Employment	130
Education	139
Health	145
Crime	202
Barriers to housing and services	185
Living environment	181
Income Deprivation Affecting Children Index (IDACI)	175
Income Deprivation Affecting Older People (IDAOPI)	212

A4.36 Figure 1, below, shows the levels of deprivation in and around Newark and Sherwood District, with the darkest red areas being the most deprived and the palest yellow areas the least deprived.

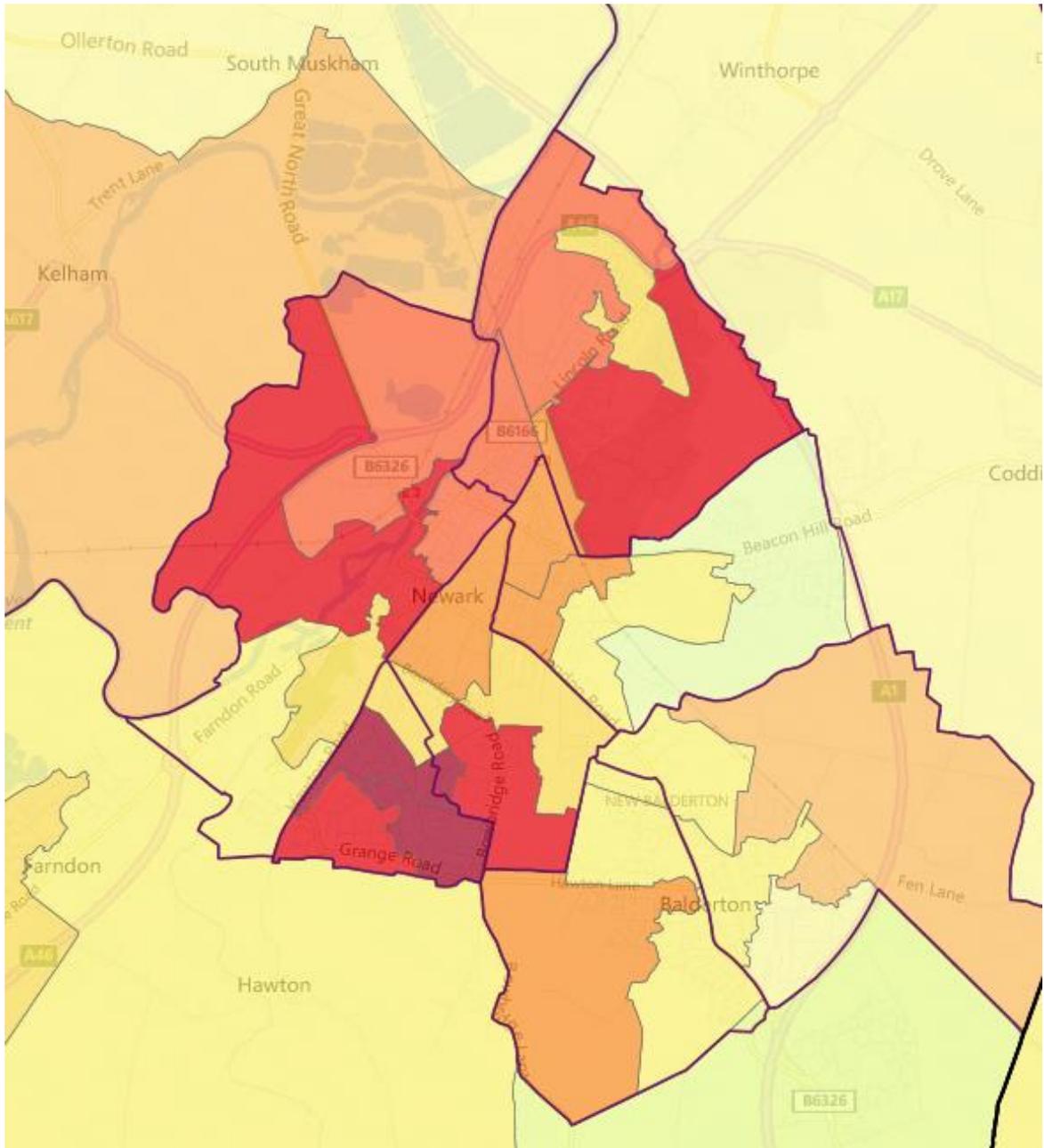
**Figure 1 – Deprivation in and around Newark and Sherwood District**



Source: Indices of Multiple Deprivation 2015

A4.37 Figure 2, below, shows the levels of deprivation in and around Newark, with the darkest red areas being the most deprived and the palest yellow areas the least deprived.

**Figure 2 – Deprivation in and around Newark**



Source: Indices of Multiple Deprivation 2015

A4.38 Within Newark and Sherwood there are relatively few areas within the 10% most deprived in England and only 18% of the Lower Layer Super Output Areas (LSOAs) (meaning a geographic area within the District fall within the 25% most deprived (12 areas). However, one LSOA within Devon Ward, centring on Cherry Holt, falls just outside the 5% most deprived in the Country

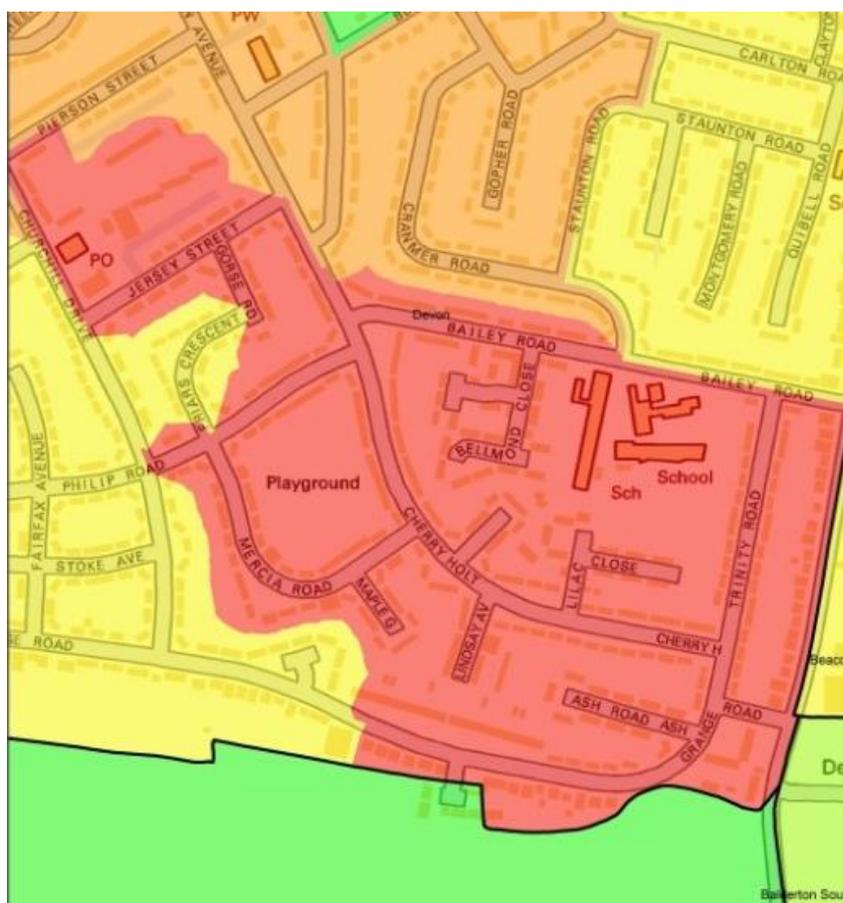


Figure 3:

### Cherry Holt

A4.39 A further two areas fall within the 10% most deprived. Again, one in is Devon Ward, centring on Greenway/Eton Avenue, which adjoins the Cherry Holt area. The second covers a larger geographical area in Ollerton and Boughton Wards, with three distinct residential areas (Hallam Road, Kirk Drive and Maun Way).

A4.40 The Income Deprivation Domain measures the proportion of the population in an area experiencing deprivation relating to low income. The definition of low income used includes both those people that are out-of-work, and those that are in work but who have low earnings. The domain is made up of four, non-overlapping, indicators:

- Adults and children in income-based Employment and Support Allowance families;
- Adults and children in Pension Credit (Guarantee) families ;
- Adults and children in Working Tax Credit and Child Tax Credit families not already counted; and
- Asylum seekers in England in receipt of subsistence support, accommodation support, or both

A4.41 In addition, two supplementary indices have been produced to focus specifically on income deprivation affecting children, and older people. The results for Newark and Sherwood are similar to those of the overall IMD with the District falling in the middle rankings against other English Councils and Nottinghamshire Councils. The only notable change in the rankings in the least deprived Council area, in terms of income, is South Northamptonshire.

A4.42 Across Newark and Sherwood, the majority of areas are among the 50% least deprived. However, the area in Devon ward identified as being the most deprived overall (Cherry Holt) is among the 5% most deprived areas in terms of income. Similarly, the area in Ollerton and Boughton is among the 10% most deprived in terms of income.

A4.43 A further 8 areas fall into the 25% most deprived:

- An area of Edwinstowe and Clipstone encompassing Kings Clipstone and the outskirts of Clipstone, around Intake Road.
- Two adjoining LSOAs in Rainworth South and Blidworth, which includes most of Blidworth village.
- Castle Ward around Tolney Lane and Mill Gate,
- Bridge Ward, around Strawberry Hall Lane / Yorke Drive
- Three areas bordering the Cherry Holt area within Devon Ward, which encompasses most of the area known as Hawtonville Estate.

### **Unemployment**

A4.44 Table 13, below, shows the numbers of District residents of working age who are not fully employed and are claiming benefits. 'Main out-of-work benefits' consists of the groups: job seekers, Employment Support Allowance (ESA) and incapacity benefits, lone parents and others on income related benefits. Disability Living Allowance (DLA) is paid to those needing help with personal care. If DLA claimants are also in receipt of Jobseekers Allowance (JSA), IS, ESA or Incapacity Benefits in addition to DLA they will be counted under the relevant statistical group. Carers benefits are paid to those with full time caring responsibilities, and are not 'main out-of-work benefits' as the Department of Work & Pensions (DWP) does not pursue active labour market policies for this group.

**Table 13 - Working-age client group - main benefit claimants (February 2015)**

	<b>Newark &amp; Sherwood (number)</b>	<b>Newark &amp; Sherwood (percentage)</b>	<b>East Midlands (percentage)</b>	<b>Great Britain (percentage)</b>
Total Claimants	8,710	12.1	12.0	12.6
<b>By Statistical Group</b>				
Job Seekers	1,140	1.6	1.9	2.0
ESA And Incapacity Benefits	4,330	6.0	5.9	6.4
Lone Parents	730	1.0	1.1	1.1
Carers	1,350	1.9	1.6	1.5
Others On Income Related Benefits	180	0.2	0.3	0.3
Disabled	840	1.2	1.1	1.1
Bereaved	150	0.2	0.2	0.2
Main Out-Of-Work Benefits	6,370	8.8	9.2	9.8

Source: DWP benefit claimants - working age client group (data from 2015)

A4.45 For comparison, the table below shows figures for the total working-age client group - main benefit claimants from February of previous years. Although there have been changes in the benefit system since 2000, trends can be recognised. Since 2000, unemployment has always been lower in the District than in Great Britain as a whole. Until 2008, unemployment was higher in the District than in the East Midlands as a whole, and after 2008 it has always been lower. The current total number of claimants, 8,710, is lower than at any time since 2000.

**Table 14 - Working-age client group - main benefit claimant's comparison**

<b>Date</b>	<b>Newark and Sherwood (number)</b>	<b>Newark and Sherwood (%)</b>	<b>East Midlands (%)</b>	<b>Great Britain (%)</b>
February 2014	9,230	12.8	12.9	13.3
February 2013	9,810	13.6	13.9	14.3
February 2012	9,870	13.8	14.3	14.8
February 2011	9,740	13.5	13.9	14.5
February 2010	10,180	14.1	14.4	14.9
February 2009	9,980	13.9	14.1	14.7
February 2008	8,910	12.4	12.3	13.2
February 2007	9,190	12.9	12.7	13.7
February 2006	9,140	12.9	12.8	14.0
February 2005	8,980	12.9	12.7	14.0
February 2004	9,170	13.3	13.1	14.4

February 2003	9,320	13.7	13.5	14.7
February 2002	8,960	13.4	13.0	14.1
February 2001	9,320	14.0	13.4	14.5
February 2000	9,270	14.0	13.5	14.9

Source: DWP benefit claimants - working age client group (data from 2015 time series)

A4.46 Nottinghamshire County Council provides monthly figures on people claiming Job Seekers Allowance in each ward of the County. It is important to note that this is a very different measure of unemployment to those used in the two tables above, and counts only a minority of the people counted in those. It does, however, provide the most up to date figures available broken down by ward and therefore provides a revealing picture of relative levels of unemployment within the District. The data is presented by the County Council using the wards that existed before May 2015, and it should be noted that from that date new wards have existed.

**Table 15 - JSA claimants by ward**

Ward	Number	Percentage
Castle	92	3.0
Devon	104	2.9
Boughton	80	2.6
Magnus	88	2.5
Bridge	75	2.2
Ollerton	77	1.8
Clipstone	57	1.8
Rainworth	75	1.6
Blidworth	40	1.4
Edwinstowe	41	1.3
Balderton West	35	1.2
Beacon	55	1.1
Farnsfield and Bilsthorpe	54	1.1
Balderton North	28	1.0
Farndon	35	0.9
Winthorpe	14	0.9
Collingham and Meering	19	0.8
Muskham	10	0.7
Southwell West	9	0.5
Sutton-on-Trent	8	0.5
Lowdham	15	0.4
Caunton	6	0.4
Southwell North	5	0.4
Trent	5	0.3
Southwell East	4	0.3

Source: Nottinghamshire County Council Employment Bulletin 8/15 July 2015

### **Crime and community safety**

A4.47 Table 16, below provides information about crime and fire service incidents in Newark and Sherwood District.

**Table 16 – crime and fire service incidents in Newark and Sherwood District by number**

<b>Incident type</b>	<b>Newark and Sherwood District</b>	<b>East Midlands</b>	<b>England</b>
Violence with Injury (Offences, Apr 12 – Mar 13)	485	23,713	291,851
Violence without Injury (Includes Harassment and Assault) (Offences, Apr 12 - Mar 13)	466	23,263	271,533
Robbery (Offences, Apr 12 – Mar 13)	19	3,008	63,888
Theft from the Person (Offences, Apr 12 - Mar 13)	27	5,525	98,142
Criminal Damage and Arson (Offences, Apr 12 – Mar 13)	923	43,128	493,620
Domestic Burglary (Offences, Apr 12 – Mar 13)	198	16,135	219,205
Non Domestic Burglary (Offences, Apr 12 – Mar 13)	390	18,931	219,523
Vehicle Offences (Includes Theft of and from Vehicles) (Offences, Apr 12 – Mar 13)	551	27,774	368,222
Drug Offences (Offences, Apr 12 – Mar 13)	246	12,141	191,692
Sexual Offences (Offences, Apr 12 – Mar 13)	76	4,108	50,020
Total Fire Service Incidents (Incidents, Jan 06 -Dec 06)	1,524	63,930	840,219
Primary Fires (Incidents, Jan 06 – Dec 06)	252	10,833	130,491
Secondary Fires (Incidents, Jan 06 – Dec 06)	471	14,391	201,936
Special Services - Other Incidents (Incidents, Jan 06 -Dec 06)	336	11,529	152,952
Fatal Casualties (Incidents, Jan 06 – Dec 06)	9	210	1,926
Non-Fatal Casualties (Incidents, Jan 06 – Dec 06)	147	3,996	37,095

Source: Home Office; Communities and Local Government (NOMIS website 2015)

A4.48 Table 17, below, shows how crime rates in Newark and Sherwood District have changed over time. It also shows how the average crime rates in what the police consider to be similar areas to Newark and Sherwood District have changed over time. The chart shows the quarterly crimes per thousand residents, over a three year period. Note that some crime types have distinct seasonal patterns and this should be borne in mind when viewing the chart. In the quarter ending March 2015, crime rates were up in Newark & Sherwood and up in the Nottinghamshire force area compared with the corresponding quarter in 2014. Crime rates have been higher in the two most recent quarters than in any others.

**Table 17 – Crime rates comparison**

Date		Crime rate	
	Newark and Sherwood District Most Similar Group average	Nottinghamshire	Newark and Sherwood District
March 2012	11.94	16.15	11.64
June 2012	12.49	15.44	11.66
September 2012	12.29	14.99	10.64
December 2012	11.15	15.56	10.76
March 2013	10.98	15.02	9.94
June 2013	12.17	16.21	11.04
September 2013	12.68	15.58	11.60
December 2013	11.48	14.96	10.50
March 2014	11.35	15.14	12.46
June 2014	12.29	16.21	12.48
September 2014	12.49	16.66	12.50
December 2014	11.80	16.94	12.86
March 2015	11.52	15.63	12.70

Source: Police.UK Compare your area 2015

### Housing

- A4.49 Research undertaken as part of the Nottingham Outer 2014 Strategic Housing Market Assessment (SHMA) (June 2015) provides information about housing in Newark and Sherwood. The District has the highest percentage of detached properties (38%) in the Housing Market Area (HMA), which consists of Ashfield, Mansfield and Newark and Sherwood Districts. At 36% Newark and Sherwood has the highest percentage of properties which are owned outright in the HMA. This tenure has seen a small increase since 2001. There has also been a significant growth in those privately renting.

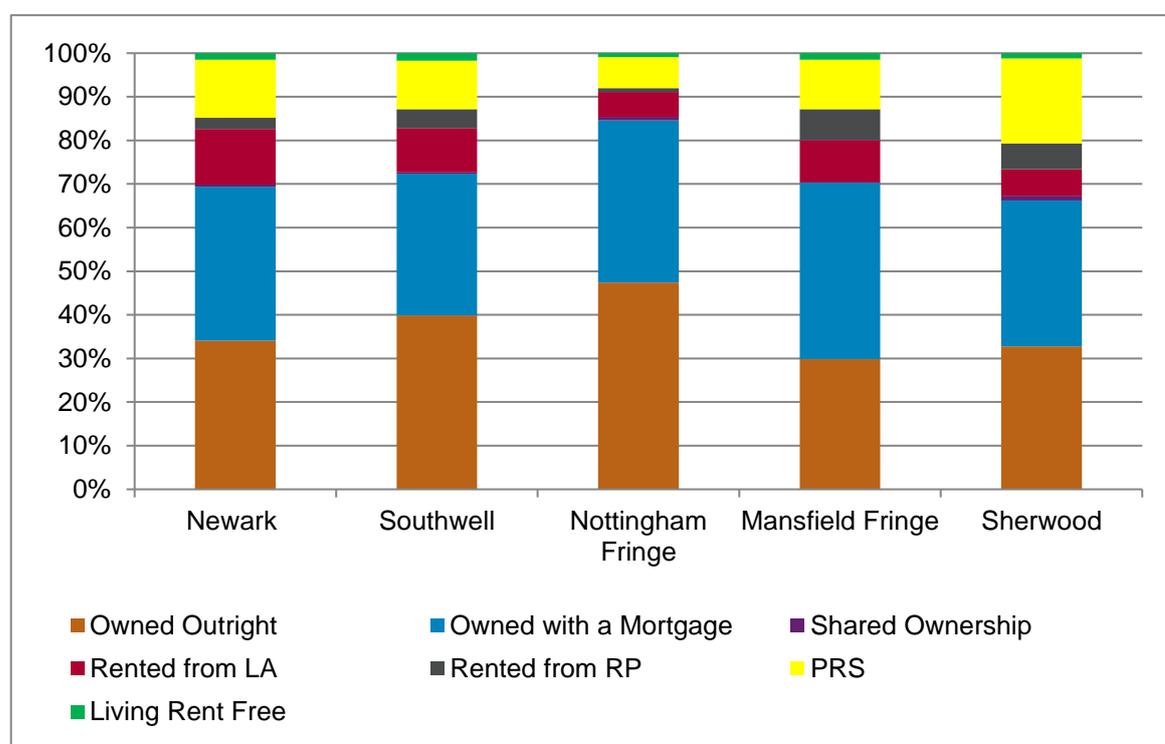
A4.50 Median house price in 2014 were £147,750, this is above the equivalent level in the HMA and region. House prices have increased over the last decade with affordability decreasing. Lower quartile affordability is now 6.4 times lower quartile earnings. Rental costs are also higher than the rest of the HMA although below national levels.

A4.51 58 affordable homes were delivered during 2013-2014, although 28 were a redevelopment of a scheme which was demolished a few years previously, so only 30 can be counted as a net gain. This equates to 9.6% of the total number of dwellings constructed (18.6 using the gross figure). Viability issues caused by the economic situation impacted upon the ability to secure affordable housing units. Of the 58 affordable dwellings, 22 were available on a social rent basis, 33 were affordable rent and 3 were intermediate.

A4.52 Newark has traditionally always had a large population of Gypsies and Travellers due to its position at the junction of the A46 and A1 roads, which were historically the main arterial routes east-to-west and north-to-south respectively. The majority of Gypsy and Traveller sites in the District are in Newark and the District Council calculates that there are a total of approximately 170 households in Newark & Sherwood.

A4.53 Table 18, below, provides information about housing tenure in the District. PRS stands for Private Rented Sector, LA is local authority and RP is Registered Provider.

**Table 18 – Tenure in the whole District and by area**



Source: Nottingham Outer 2014 Strategic Housing Market Assessment (June 2015)

A4.54 Table 19, below, shows the number of empty properties in Newark & Sherwood from 2004 up to 2014. Apart from 2004, when the data is for November, the figures come from October of each year.

**Table 19 – Total number of empty properties in the District by year**

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1,720	1,568	1,857	2,049	2,155	2,020	2,052	1,934	1926	1684	1686

Source: Empty homes agency 2015

A4.55 The average density of dwellings on sites where new homes were built in 2014 - 2015 is 18.48 per hectare. Some of the larger sites where new housing has been constructed contain areas of open space so the actual net density will be higher.

A4.56 Of the 462 new homes built in the District 2014 – 2015, 66 were 1 bedroom dwellings, 163 were 2 bedroom dwellings, 171 were 3 bedroom dwellings, 49 were 4 bedroom dwellings and 13 were 5 bedroom or more dwellings.

#### Previously developed land

A4.57 National planning policy requires planning policies and decisions to encourage the effective use of land by re-using land that has been previously developed (brownfield land), provided that it is not of high environmental value. Whilst there are no national or local targets for this the table below provides details over brownfield residential completions between 1<sup>st</sup> April 2001 and 31<sup>st</sup> March 2015. The data shows that the majority of residential completions have occurred on brownfield land.

**Table 20 – Previously developed land**

	Dwellings Completed on Brownfield Land	Dwellings Completed on Greenfield Land
<b>2001/2002 – 2010/2012</b>	3,425	1,721
<b>2011 - 2012</b>	196	139
<b>2012 - 2013</b>	234	149
<b>2013 - 2014</b>	208	104
<b>2014 -2015</b>	336	126
<b>Sub Totals</b>	<b>4,399</b>	<b>2,239</b>
<b>Total Dwellings Completed</b>	<b>6,638</b>	
<b>Proportion on Brownfield Land (%)</b>	<b>66.67</b>	

#### Health

A4.58 Table 21, below, provides information about health in the District. Fewer people are classed as being in very good health in the District than regionally and nationally. 94.2% of District residents are in very good, good or fair health, compared to 94.4% in the East Midlands and 94.5% in England. Male life expectancy is lower than in the wider region and the country, and female life expectancy is the same as the wider region and slightly lower than England as a

whole. One notable positive difference is that infant mortality is significantly lower than in either the region or the country.

**Table 21 – Health in Newark & Sherwood District**

Variable	Measure	Newark and Sherwood	East Midlands	England
Very Good Health (Persons, Mar11)	%	44.9	45.3	47.2
Good Health (Persons, Mar11)	%	34.6	35.1	34.2
Fair Health (Persons, Mar11)	%	14.7	14.0	13.1
Bad Health (Persons, Mar11)	%	4.6	4.3	4.2
Very Bad Health (Persons, Mar11)	%	1.3	1.2	1.2
All Usual Residents (Persons)	Count	114,817	4,533,222	53,012,456
Very Good Health (Persons)	Count	51,505	2,053,334	25,005,712
Good Health (Persons)	Count	39,671	1,593,206	18,141,457
Fair Health (Persons)	Count	16,874	634,414	6,954,092
Bad Health (Persons)	Count	5,246	196,010	2,250,446
Very Bad Health (Persons)	Count	1,521	56,258	660,749
Low Birthweight Live Births (Live Births, Jan 07 – Dec 07)	%	7.4	7.2	7.2
Infant Mortality (Live Births, Jan 08 - Dec 10)	Rate per 1000	3.5	4.5	4.4
Life Expectancy at Birth; Males (Persons, Jan 07 -Dec 09)	y	77.6	78.1	78.3
Life Expectancy at Birth; Females (Persons, Jan07-Dec09)	y	82.1	82.1	82.3
Incapacity Benefits (Persons, Aug10)	%	7	7	7
All Finished Admission Episodes (Admission Episodes, Apr 07 - Mar08)	Count	26,936	1,058,359	11,999,765
Coronary Heart Disease (CHD); Diagnosis (Admission Episodes, Apr 07-Mar 08)	Count	2,355	89,825	1,000,332
Cerebrovascular Disease (including Stroke); Diagnosis (Admission Episodes, Apr07-Mar08)	Count	499	15,453	187,962
Cancer (excluding non-melanoma skin cancer); Diagnosis (Admission Episodes, Apr07-Mar08)	Count	3,382	137,646	1,326,050
Hip Replacement; Operation (Admission Episodes, Apr07-Mar08)	Count	180	6,309	69,434
Cataract; Operation (Admission Episodes, Apr07-Mar08)	Count	782	31,026	326,758

Source: Office for National Statistics; The NHS Information Centre for Health and Social Care (NOMIS website 2015)

A4.59 Information about the use of mental health services can be seen in Table 22, below.

**Table 22 – Adults accessing NHS specialist mental health services**

<b>Variable</b>	<b>Newark and Sherwood</b>	<b>East Midlands</b>	<b>England</b>
Mental Health Service Users; Total (Persons)	2,737	113,960	1,259,650
Mental Health Service Users; Males (Persons)	1,149	49,766	560,395
Mental Health Service Users; Females (Persons)	1,588	64,163	698,807
Mental Health Service Users; Males 18-35 (Persons)	311	13,744	160,131
Mental Health Service Users; Males 36-64 (Persons)	474	22,361	252,441
Mental Health Service Users; Males 65 and over (Persons)	364	13,661	147,823
Mental Health Service Users; Females 18-35 (Persons)	407	15,969	177,596
Mental Health Service Users; Females 36-64 (Persons)	585	25,316	265,486
Mental Health Service Users; Females 65 and over (Persons)	596	22,878	255,725

Source: The NHS Information Centre for Health and Social Care 06 March 2012(NOMIS website 2015)

A4.60 Table 23, below, details the number of residents within the District with a long-term health problem or disability.

**Table 23 - Long-term health problem or disability**

	<b>Newark &amp; Sherwood</b>	<b>East Midlands</b>	<b>England</b>
<b>Day-to-day activities limited a lot (persons)</b>	10,966	393,242	4,405,394
<b>Day-to-day activities limited a little (persons)</b>	12,398	451,055	4,947,192

Source: Census 2011, Office for National Statistics

A4.61 Data on overall substance use within the District is difficult to obtain – however information has been collected, between 2006 and 2014, which details the number of deaths related to substance misuse (see following table). The figures are well below the Local Authority average for England.

**Table 24 - Deaths related to substance misuse**

	Newark & Sherwood	England (Local Authority average)
<b>2006 - 2008</b>	8	15.5
<b>2009 - 2011</b>	2	15.8
<b>2012 - 2014</b>	9	16.6

Source: Number of deaths and crude mortality rate for deaths related to drug misuse, by local authority, England and Wales 2006-2014, Office for National Statistics

A4.62 An estimate on the consumption of five or more portions of fruit and vegetables daily by residents in the District is detailed below. The estimated levels are slightly below those at a national level. These are the most recent figures available.

**Table 25 - Consumption of fruit and vegetables (2003 – 2005)**

	Newark & Sherwood	East Midlands (average)	England (average)
<b>Persons consuming fruit and vegetables (%)</b>	26.1	25.50	27.52

Source: Healthy Lifestyle Behaviours: Model Based Estimates, 2003-2005, Office for National Statistics

A4.63 The Department for Health have produced statistics on adults carrying excess weight and obesity in children (detailed below). In terms of excess weight in adults the District's data compares favourably with regional and national levels. The District also has a lower level of obesity in children.

**Table 26 - Excess weight in adults (2012)**

	Newark & Sherwood	East Midlands	England
<b>Count (000's)</b>	59.1	2,381.4	26,885.6
<b>Rate (%)</b>	64.8	65.6	63.8

Source: Source: Department of Health. Measure: Number and proportion of adults who are overweight (inc. obese)

**Table 27 - Obesity levels in children (2012-2013)**

	Newark & Sherwood	East Midlands	England
<b>Number</b>	176	7,6988	92,538
<b>Rate (%)</b>	16.7	18.4	18.9

Source: Department of Health. Measure: Number and proportion of children who are obese

A4.64 Data on physically active adults is set out below, with the District showing higher levels of activity than the regional and national figures.

**Table 28 - Physically active adults**

	Newark & Sherwood	East Midlands	England
<b>Active (%)</b>	62.3	57.6	57.0
<b>Inactive (%)</b>	24.7	27.5	27.7

Source: Public Health England - Public Health Outcomes Framework (2013)

A4.65 Information compiled by Sports England on adults (16+) who participate in sport at least once a week is provided below. On the basis of the figures the levels of adults participating in sport within the District has a degree of fluctuation and mirrors both the regional and national figures.

**Table 29 - Adult participation in sport**

Year	Newark & Sherwood	East Midlands	England
2005/06	34.0 %	34.0 %	34.6 %
2007/08	31.9 %	36.0 %	36.6 %
2008/09	38.4 %	36.4 %	36.5 %
2009/10	32.6 %	35.1 %	36.2 %
2010/11	34.4 %	34.2 %	35.6 %
2011/12	35.8 %	35.9 %	36.9 %
2012/13	31.7 %	34.8 %	36.6 %
2013/14	36.3 %	34.8 %	36.1 %
2014/15	33.2 %	34.6 %	35.5 %

Source: Active People Survey, Sports England

A4.66 Sports England have brought together data on access to different types of sports facilities and the split between public and private ownership (see table below). This shows there to be access to most types of sporting facility within the District, but with a higher proportion of that being private facilities than is found at a regional or national level.

**Table 30 - Access to sports facilities**

Facilities	Public	Private	Total	% Public	% Private
Athletics Tracks	2	0	2	100	0
Golf	13	1	14	92.9	7.1
Grass Pitches	170	47	217	78.3	21.7
Health and Fitness Suite	10	5	15	66.7	33.3
Ice Rinks	0	0	0	0	0
Indoor Bowls	2	0	2	100	0
Indoor Tennis Centre	0	0	0	0	0
Ski Slopes	0	0	0	0	0
Sports Hall	16	3	19	84.2	15.8
Squash Courts	9	2	11	81.8	18.2
Studio	10	1	11	90.9	9.1
Swimming Pool	9	2	11	81.8	18.2
Artificial Grass Pitch	7	3	10	70	30
Tennis Courts	12	7	19	63.2	36.8
<b>Newark and Sherwood</b>	<b>260</b>	<b>71</b>	<b>331</b>	<b>78.5</b>	<b>21.50%</b>
<b>East Midlands</b>	<b>8,668</b>	<b>1,423</b>	<b>10,091</b>	<b>85.9</b>	<b>14.10%</b>
<b>England</b>	<b>97,917</b>	<b>19,980</b>	<b>117,897</b>	<b>83.1</b>	<b>16.9</b>

**Education**

A4.67 Table 31, below, provides information about educational achievement in Newark & Sherwood, with comparison figures for the whole East Midlands and England.

**Table 31 – Educational achievement**

<b>Variable</b>	<b>Measure</b>	<b>Newark and Sherwood</b>	<b>East Midlands</b>	<b>England</b>
16-18 Year Old Students Entered for Level 3 Qualification (Equivalent to at least one A Level) (Persons, Sep 13 – Aug 14)	Count	736	29,763	362,952
Average Point Score Per Student (Persons, Sep 13 – Aug 14)	Score	667.6	674.4	696.3
All Pupils at the End of KS4 (GCSE or Equivalent) (Persons, Sep 13 – Aug 14)	Count	1,245	49,443	558,181
Pupils Achieving 5+ A* -C GCSEs or Equivalent, Including English and Mathematics (Persons, Sep 13 – Aug 14)	%	52.9	54.1	56.6
All Pupils Eligible for KS2 Assessment (Persons, Sep13-Aug14)	Count	1,181	47,295	554,843
Pupils Achieving Level 4+ at Key Stage 2; in English (Persons, Sep 11 – Aug 12)	%	85	85	85
Pupils Achieving Level 4+ at Key Stage 2; in Mathematics (Persons, Sep 13 – Aug 14)	%	87	86	86
Pupils Achieving Level 4+ at Key Stage 2; in Reading, Writing and Mathematics (Persons, Sep 13 – Aug 14)	%	79	78	78
All Pupils Eligible for KS1 Assessment (Persons, Sep 13 – Aug 14)	Count	1,284	51,923	616,374
Pupils Achieving Level 2+ at Key Stage 1; in Reading (Persons, Sep 13 – Aug 14)	%	89	89	90

Pupils Achieving Level 2+ at Key Stage 1; in Writing (Persons, Sep 13 – Aug 14)	%	85	86	86
Pupils Achieving Level 2+ at Key Stage 1; in Mathematics (Persons, Sep 13 – Aug 14)	%	92	92	92
Overall Absence in All Schools (Pupil Half Days, Sep 12 – Aug 13)	%	5.6	5.3	5.3
Unauthorised Absence in All Schools (Pupil Half Days, Sep 12 – Aug 13)	%	1.4	1.1	1.1
16-18 Year Old Students Entered for Level 3 Qualification (Equivalent to at least one A Level) (Persons, Sep 13 – Aug 14)	Count	736	29,763	362,952

Source: Department for Education (NOMIS website 2015)

### The economy

A4.68 The split between full-time and part-time employment within the District is different to that found at the regional and national levels, and shows a greater number of people occupying part-time jobs.

**Table 32 – Full-time and part-time employment split**

	Newark & Sherwood (Employee jobs)	Newark & Sherwood (%)	East Midlands (%)	Great Britain (%)
<b>Full-time jobs</b>	28,400	63.2	68.3	67.7
<b>Part-time jobs</b>	16,500	36.8	31.7	32.3
<b>Total Number of jobs</b>	44,900	-	-	-

Source: Office for National Statistics Business Register and Employment Survey (2013)

A4.69 Only data for the hourly and gross weekly pay of full-time male and female workers is available. This however does show that male and female full-time workers receive, on average, an hourly and gross weekly pay which is below regional and national levels. Secondly the statistics also show that within the District female full-time workers also receive lower average hourly and gross weekly pay when compared to males.

**Table 33 – Gross weekly and hourly pay**

	Newark & Sherwood (£)	East Midlands (£)	Great Britain (£)
<b>Gross Weekly Pay</b>			
Full-time workers	450.3	477.2	520.2

Male full-time workers	489.0	519.2	560.6
Female full-time workers	369.9	412.4	462.5
<b>Hourly pay – excluding overtime</b>			
Full-time workers	11.23	11.78	13.14
Male full-time workers	12.32	12.34	13.68
Female full-time workers	9.97	10.90	12.33

Source: ONS annual survey of hours and earnings - workplace analysis (2014)

- A4.70 In terms of the types of industry which residents are employed in it is worth noting that there have been marked changes in the profile of Newark and Sherwood's economic base over the last two decades. This change has been most notable in the Western area of the District with the decline of coal mining and, more generally across the District with the decline in manufacturing.
- A4.71 There has however been a reasonable level of diversification to the District's economy. In particular jobs in the service sector have been important in off-setting the decline within the mining and manufacturing industries. The service, public, retail, financial and other business services and accommodation and food service sectors provide the bulk of jobs within the District as demonstrated in the table below.

**Table 34 – Employment by sector**

Industry	Newark & Sherwood (employee jobs)	Newark & Sherwood (%)	East Midlands (%)	Great Britain (%)
Primary Services (agriculture and mining)	-	-	0.3	0.3
Energy and Water	-	-	1.6	1.1
Manufacturing	5,800	13.0	13.4	8.5
Construction	2,000	4.4	3.8	4.4
Services	35,400	78.9	81.0	85.7
Wholesale and retail, including motor trades	7,100	15.7	16.8	15.9
Transport storage	2,000	4.5	5.2	4.5
Accommodation and food services	5,400	12.0	6.3	7.0
Information and communication	1,500	3.3	2.7	4.0
Financial and other business services	6,400	14.3	18.3	21.8

Public admin, education and health	10,600	23.7	27.6	28.0
Other Services	2,400	5.4	4.1	4.6

Source: Office for National Statistics Business Register and Employment Survey (2013)

- Data unavailable

- A4.72 Job density figures illustrate the level of jobs per resident (aged 16-64); with a job density of 1.0 meaning that there is one job for every resident falling between 16 and 64. The total number of jobs is a workplace-based measure and comprises employee jobs, self-employed, government-supported trainees and HM forces. As evident from the table below the District has a job density level marginally below the regional average and further below that found at national level.

**Table 35 – Job density**

Newark & Sherwood Jobs	Newark & Sherwood Density	East Midlands Density	Great Britain Density
52,000	0.72	0.76	0.80

Source: Office for National Statistics (2013)

- A4.73 The figures below provide measurements of employment deprivation, i.e. involuntary exclusion of the working age population from the labour market, within Newark & Sherwood. This takes account of claimants of Jobseeker's Allowance (both contributory and income-based), claimants of Incapacity Benefit, claimants of Severe Disablement Allowance, participants in New Deal for the 18-24's (not in receipt of Jobseekers Allowance), participants in the New Deal for 25+ (not in receipt of Jobseekers Allowance) and participants in New Deal for Lone Parents (after initial interview).

**Table 36 – Employment deprivation**

	Newark & Sherwood	Nottinghamshire (avg.)	England (avg.)	Newark & Sherwood Rank (England) **
<b>Employment Domain Score</b>	6126	8920.88*	9218.51	155/326

Source: Department for Communities and Local Government, Indices of Deprivation 2010

\*City of Nottingham employment deprivation scale is 25875

\*\*With 1 being the least economically deprived

- A4.74 In terms of comparison Newark and Sherwood District ranks 155 out of 326 for the highest level of employment deprivation (with 1 being the least economically deprived). At a County level the District out performs Broxtowe, Gedling and the City of Nottingham. With an employment deprivation scale of 25875 the City of Nottingham somewhat skews the Nottinghamshire average. However with the City removed the average for the remaining Authorities stands at 6498.86 which the District compares relatively well to and indeed falls below.

### Business development and the economy

A4.75 Business counts provide a picture of the size of businesses operating within the District and are split into 'enterprise' and 'local unit' levels. An enterprise is the smallest combination of legal units (generally based on VAT and/or PAYE records) which has a certain degree of autonomy within an enterprise group. An individual site (for example a factory or shop) in an enterprise is called a 'local unit'. Unsurprisingly the overwhelming majority of businesses within the District fall within the micro and small categories. This appears to be largely in line with the regional picture, although the District does have slightly smaller percentages of small, medium and large businesses.

**Table 37 – Number of businesses**

	<b>Newark &amp; Sherwood (Numbers)</b>	<b>Newark &amp; Sherwood (%)</b>	<b>East Midlands (Numbers)</b>	<b>East Midlands (%)</b>
<b>Enterprises</b>				
<b>Micro (0-9)</b>	3,815	88.8	133,055	87.7
<b>Small (10-49)</b>	420	9.8	15,445	10.2
<b>Medium (50 – 249)</b>	55	1.3	2,655	1.8
<b>Large (250+)</b>	5	0.1	605	0.4
<b>Total</b>	4,295	-	151,770	-
<b>Local Units</b>				
<b>Micro (0-9)</b>	4,165	82.7	148,605	82.1
<b>Small (10-49)</b>	720	14.3	26,150	14.4
<b>Medium (50 – 249)</b>	135	2.7	5,585	3.1
<b>Large (250+)</b>	15	0.3	775	0.4
<b>Total</b>	5,035	-	181,115	-

A4.76 The figures here show the births of new enterprises from 2009 to 2013. The figures show the District to be comparing well to the County average and largely outperforming the East Midlands average. This is notable given the prevailing economic conditions over much of the monitoring period. In addition the figures from the City Unitary Authorities (Nottingham, Derby and Leicester) are significantly higher than those in comparable areas to Newark & Sherwood District, and so would tend to drag upwards the average County and East Midlands figures.

**Table 38 – Birth of new enterprises**

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Newark &amp; Sherwood (total)</b>	400	435	430	425	540
<b>Nottinghamshire (average)</b>	404	382	418	421	564
<b>East Midlands (average)</b>	372	358	401	416	551

Source: ONS Count of births of new enterprises 2009 - 2013

A4.77 Figures for the deaths of new enterprises from 2009 to 2013 are provided below. The District consistently posts a higher level than both the Nottinghamshire and East Midlands averages. Indeed apart from Rushcliffe and Nottingham City the District had a higher figure in each year than the remaining Nottinghamshire Authorities.

**Table 39 – Deaths of new enterprises**

	2009	2010	2011	2012	2013
<b>Newark &amp; Sherwood (total)</b>	505	445	430	415	410
<b>Nottinghamshire (average)</b>	428	372	341	356	326
<b>East Midlands (average)</b>	466	416	376	405	376

Source: ONS Count of deaths of new enterprises 2009 - 2013

A4.78 Data over the survival rates of new enterprises over a 4 year period show that 50% of those enterprises born in 2009 survived the period. The figures for the District closely follow those found at the County and East Midlands levels.

**Table 40 – New enterprise survival rates**

	Newark & Sherwood	Nottinghamshire	East Midlands
<b>Number of enterprises born (2009)</b>	400	2,375	14,860
<b>1 Year survival</b>	380	2,210	13,685
<b>1 Year survival (%)</b>	95.0	93.1	92.1
<b>2 Year survival</b>	300	1,785	11,150
<b>2 Year survival (%)</b>	75.0	75.2	75.0
<b>3 Year survival</b>	245	1,465	9,010
<b>3 Year survival (%)</b>	61.3	61.7	60.6
<b>4 Year survival</b>	200	1,215	7,465
<b>4 Year survival (%)</b>	50.0	51.2	50.2

Source: ONS Survival of newly born enterprises 2009 – 2013

### **Employment land in Newark & Sherwood**

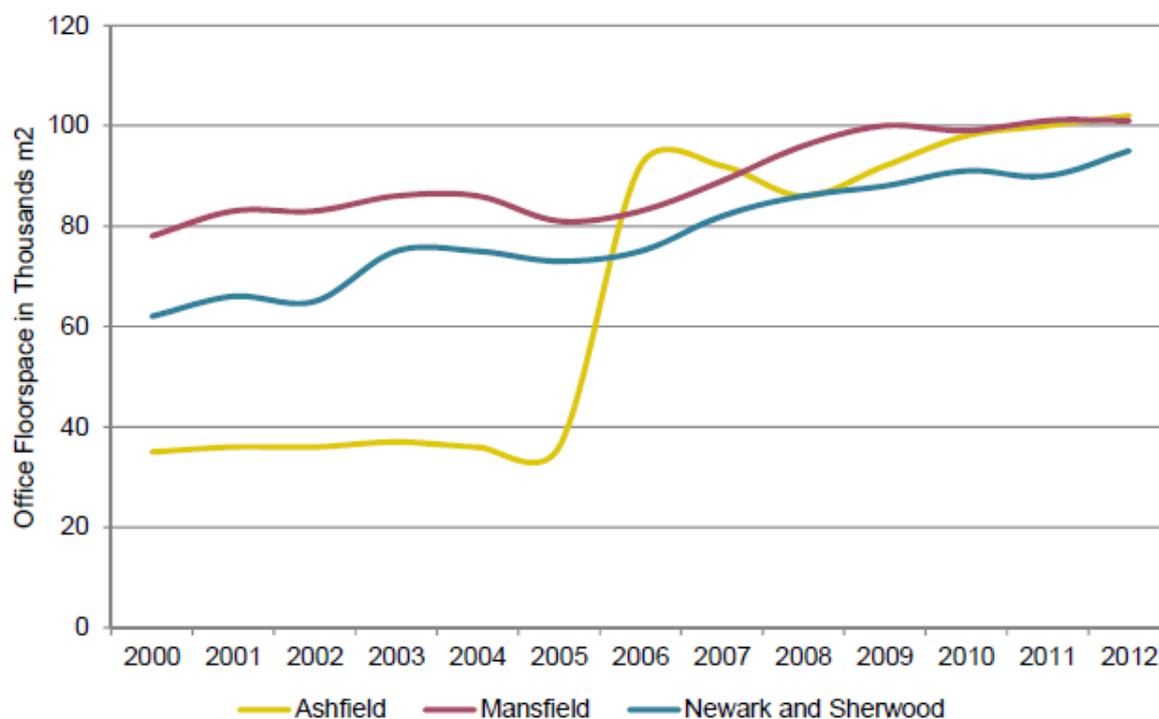
A4.79 Newark and Sherwood covers a diverse area which ranges from former colliery settlements in the West, a predominantly rural environment in the centre through to the Newark Urban Area (Newark, Balderton and Fernwood) in the south east of the District which fulfils a sub-regional role. There are particular business concentrations towards the south east of Newark-on-Trent, as well as along the A6075 (Blidworth, Ollerton & Boughton and Edwinstowe) to the north of the District. In addition, smaller clusters of businesses exist within the settlements of Southwell and Bilsthorpe.

A4.80 The historic allocation and take-up of employment land has tended to be focussed in a number of specific locations. This includes sites such as the Northern Road Industrial Estate (Newark), Mill Lane Industrial Estate (Southwell), Sherwood Energy Village (Ollerton), Boughton Industrial

Estate (Boughton) and Burma Road Industrial Estate (Blidworth). This has also involved the redevelopment of a number of the former colliery pit sites for employment use, with Sherwood Energy Village in Ollerton being an example of this.

- A4.81 Supplementing these historic concentrations of employment development has been that delivered via windfall (unidentified) sites, with the Dixons Mastercare National Distribution Warehouse, and its later extension, the most significant example. Indeed over the period 2002/03 – 2013/14 the site accounted for almost half of all of the District’s employment development. Given the District’s rural nature there are also a considerable number of agricultural businesses, although they tend to be scattered across the District.
- A4.82 To support housing growth within the Newark Urban Area significant amounts of employment land have been included as part of the Land South of Newark and Land around Fernwood strategic urban extensions. Land South of Newark and the Southern Link Road (connecting the A46 to the A1 to the south of Newark) now benefit from extant outline planning permission. As a result of this distribution of future growth a substantial amount of the future employment development is likely to take place in and around the Newark Urban Area.
- A4.83 The graph below, taken from the Draft Employment Land Feasibility Study (2015), shows the levels of office floorspace since 2000 across the three authorities in the Nottingham Outer Housing Market Area. Whilst all three authorities show an increase over the period Ashfield has witnessed substantial growth and by 2012 had overtaken Newark & Sherwood District.

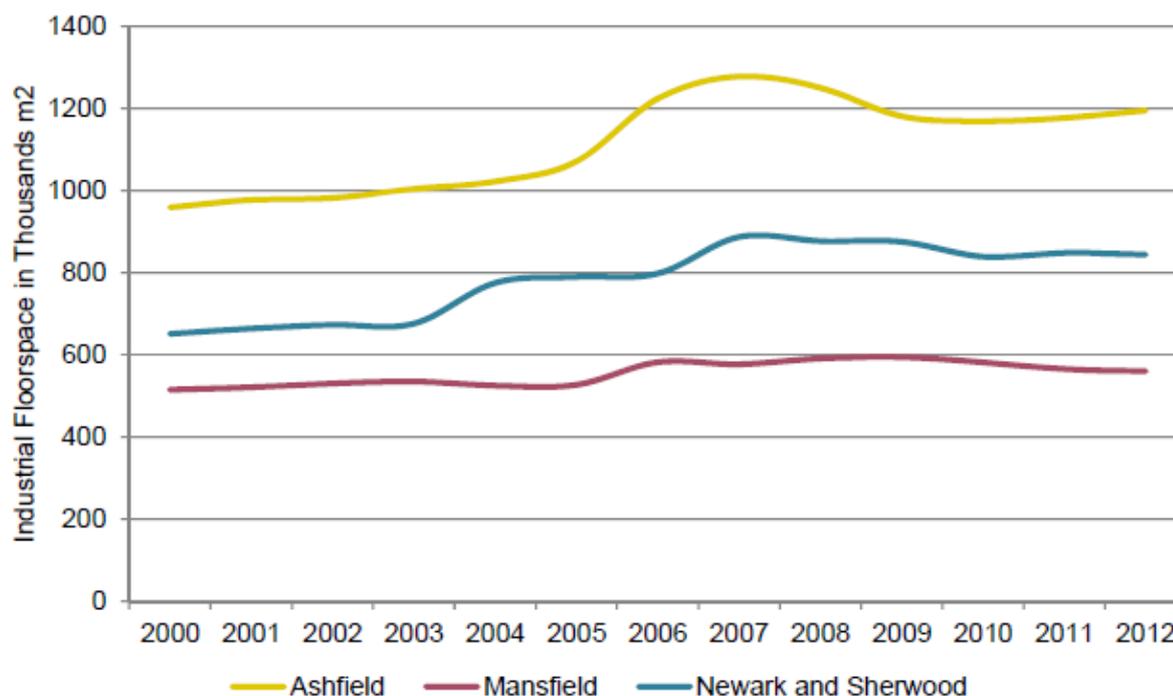
**Graph 1 – Office floorspace levels**



Source VOA Business Floorspace (Experimental Statistics) (2012)

A4.84 Again taking the Housing Market Area as the geographical level of comparison the graph overleaf shows the trends concerning industrial floorspace. Having shown steady growth (30% over the 12 year period) the District possesses more industrial floorspace than Mansfield but lags behind Ashfield

**Graph 2 – Industrial floorspace levels**



Source VOA Business Floorspace (Experimental Statistics) (2012)

A4.85 The Draft Employment Land Feasibility Study also provides data on office and industrial vacancy rates, based on a review of commercial property being actively marketed (see table below). Significantly the Study details that the office vacancy rates for Ashfield are inflated by virtue of a single site which when stripped out leaves a vacancy rate of 2.6%. This results in the District having higher office and industrial vacancy rates than the other authorities within the HMA.

**Table 41 – Office and industrial vacancy rates**

Local Authority	Office vacancy rate (%)	Industrial vacancy rate (%)
Ashfield	20.8	1.0
Mansfield	9.1	3.4
Newark & Sherwood	12.4	4.3

Source: Draft Employment Land Feasibility Study (2015)

A4.86 In terms of office floorspace completions for the District (table below) there was a peak in 2007/2008, largely attributable to a number of larger sites reaching completion. Since this date the trend has been more erratic, far more so than with the other Authorities in the HMA, though in line with improving economic conditions this appears to have stabilised from 2012/13 onwards.

**Table 42 – Office floorspace completions**

	2005/ 06 (sqm)	2006/ 07 (sqm)	2007/ 08 (sqm)	2008/ 09 (sqm)	2009/ 10 (sqm)	2010/ 11 (sqm)	2011/ 12 (sqm)	2012/ 13 (sqm)	2013/ 14 (sqm)
<b>Ashfield</b>	5,079	0	272	8,036	858	184	544	0	731
<b>Mansfield</b>	-	12,082	1,157	4,075	697	0	84	476	0
<b>Newark &amp; Sherwood</b>	-	7,615	15,185	0	6,738	342	4,436	1,870	1,494

Source: Draft Employment Land Feasibility Study (2015)

A4.87 The following table takes account of average losses of office floorspace to provide annual net completion figures within the HMA. Taken as an average the District's annual net completion rate for B1a/b office floorspace outperforms that of the other HMA Authorities, although the extent may be largely due to the notable returns in 2006/07, 2009/10 and 2011/12.

**Table 43 – Annual net office completions**

	Average Annual Gross Completions of B1a/b Office (Sqm)	Average Annual Losses of B1a/b Office (Sqm)	Average Annual Net Completions of B1a/b Office (Sqm)
Ashfield (2005/06-2013/14)	1,745	1,396	349
Mansfield (2006/07-2013/14)	2,321	855.5	1,465.5
Newark & Sherwood (2006/07-2013/14)	4,710)	1,893	2,817

Source: Draft Employment Land Feasibility Study (2015)

A4.88 In terms of average completion and loss of industrial land the take up through the Mastercare development and its later extension have significantly increased the District's figures. Once this has been corrected for then the District performance falls in-between the other two HMA Authorities.

**Table 43 – Annual net industrial completions**

	Average Annual Gross Completions of B1c/B2/B8 Industrial Land (Ha)	Average Annual Gross Losses of B1c/B2/B8 Industrial Land (Ha)	Average Annual Net Completions of B1c/B2/B8 Industrial Land (Ha)
Ashfield (2001/02-2013/14)	5.51	2.18	3.33
Mansfield (2006/07-2013/14)	1.15	0.51	0.64
Newark & Sherwood (2005/06-2013/14)	4.99*	1.32	3.67

\*2.61ha without Mastercare and its extension

Source: Draft Employment Land Feasibility Study (2015)

A4.89 In terms of forecast job growth the Draft Employment Land Feasibility Study drew on Experian data to produce the output below. The figures for the District show the biggest forecast growth within the office and other non B-class sectors.

**Table 44 – Forecast job growth by sector**

	Offices (B1a/b)	Manufacturing (B1c/B2)	Distribution (B8)	Total B- Class Jobs	Other Non B- Class Jobs*	Jobs in All Sectors
<b>Broxtowe</b>	2,669	1,818	120	<b>4,607</b>	2,567	<b>7,174</b>
<b>Erewash</b>	458	-1,175	-526	<b>-1,243</b>	4,252	<b>3,009</b>
<b>Gedling</b>	536	152	791	<b>1,479</b>	-172	<b>1,307</b>
<b>Nottingham</b>	10,668	-5,187	-374	<b>5,107</b>	14,806	<b>19,914</b>
<b>Rushcliffe</b>	6,586	685	1,174	<b>8,446</b>	1,388	<b>9,834</b>
<b>Core HMA</b>	<b>20,917</b>	<b>-3,707</b>	<b>1,185</b>	<b>18,397</b>	<b>22,841</b>	<b>41,238</b>
<b>Ashfield</b>	2,475	-2179	795	<b>1,091</b>	8,623	<b>9,714</b>
<b>Mansfield</b>	674	1,042	25	<b>1,741</b>	3,075	<b>4,816</b>
<b>Newark &amp; Sherwood</b>	3,054	1,744	135	<b>4,933</b>	2,430	<b>7,363</b>
<b>Outer HMA</b>	<b>6,203</b>	<b>607</b>	<b>955</b>	<b>7,765</b>	<b>14,128</b>	<b>21,893</b>

\*Jobs in other non-B Class sectors which typically utilise industrial or office space, such as some construction uses, vehicle repair, courier services, road transport and cargo etc.

Source: Experian 2014/NLP analysis from the Draft Employment Land Feasibility Study (2015)

A4.90 The Employment Land Feasibility Study reviewed the economic performance of the area and modelled three scenarios for future growth based on jobs or labour supply. Scenario 1 was based on an Experian data baseline taking account of forecasts of job demands across different employment sectors. Scenario 2 was also based on the Experian data but also took account of the ambitions of the Local Enterprise Partnership and its Growth Plan. Scenario 3 was focussed on labour supply housing requirements – addressing the growth of workplace population and based on assumptions over commuting rates. Scenario 4 was a sensitivity test which considered past completion rates. The conclusions in terms of future employment land requirements for the four scenarios are set out in the table below.

**Table 45 – Employment Land Feasibility Study employment land requirements**

	Scenario 1: Experian Baseline	Scenario 2: Experian Baseline and LEP jobs target	Scenario 3: Labour Supply Housing Requirements	Scenario 4: Projections Based on Past Completions
Hectares for B1c/B2 and B8	66.4	71.36	74.53	62.60
B1a/b Floorspace Square Metres	91,192	93,770	96,877	113,040

## **Biodiversity**

- A4.91 The analysis made in the 2003 'Newark and Sherwood Biodiversity Plan' still provides the most up to date information on the key biodiversity features of Newark & Sherwood. It describes the landscape and biodiversity resources of the District using Regional Character Areas (RCA), outlines targets for the key biodiversity habitats and species of the District, identifies key biodiversity opportunities for each RCA and lists priority features as a focus for action within the District.
- A4.92 **Woodlands** - Newark and Sherwood is very important within the County, regional, national and international context for its different woodland types. The District has highly valuable lowland wood pasture and parkland, particularly in the Sherwood RCA. The only European SAC (Special Area for Conservation) in Nottinghamshire is the lowland wood pasture area of the Birklands and Bilhaugh SSSI (Site of Special Scientific Interest), which is in Newark and Sherwood.
- A4.93 The ash woods of the Mid-Nottinghamshire Farmlands RCA and the wet woods of the Trent Washlands and Sherwood RCAs are also high biodiversity priorities for the District. Five of the eight SSSI mixed ash woodlands in the Mid Nottinghamshire Farmland RCA are within Newark and Sherwood. This high quality resource is supplemented by the presence of many other deciduous and mixed woodland habitats and ancient hedgerows. Some of these are designated as county-level SINCS (Sites of Importance for Nature Conservation).
- A4.94 Wet woods are a scarce resource across the whole County, so these are important wherever they occur. The alder woodlands of the Meden, Maun and Rainworth Water valleys (in the Sherwood RCA) are very limited in extent now, but are still important biodiversity resources. Similarly, the small damp willow woodlands and ash woods of the Trent Washlands RCA are also valuable remnants of a previously more widespread resource.
- A4.95 **Heathland and acid grassland** - Newark and Sherwood is important within the regional and national context for its lowland heathland and acid grassland. The District's main resource is within the Sherwood RCA but there is also a somewhat specialised resource in the East Nottinghamshire Sandlands RCA on the blown sands. Spalford Warren SSSI in the East Nottinghamshire Sandlands RCA was designated for the assemblages of heathland flora and fauna, which have survived there despite the historic commercial timber management objectives for the site.
- A4.96 There are other important heaths and acid grasslands in the two RCAs which, although not SSSI standards, play a vital role in maintaining the overall viability of this fragmented resource. These heath and acid grasslands are summarily documented in the Nottinghamshire Heathland Register (prepared by Nottinghamshire County Council on behalf of the County Heathland Forum, 1997).
- A4.97 **Neutral and lowland grassland** - The neutral and lowland wet grasslands of the Mid Nottinghamshire Farmlands, Sherwood (river valleys) and the Trent Washlands RCAs are important in the County and National context.

A4.98 Three of the five SSSI grasslands in the Mid Nottinghamshire Farmlands RCA (Laxton Sykes, Eakring and Maplebeck Meadows and Mansey Common) all fall within Newark and Sherwood. Hoveringham Pastures, the only SSSI grassland in the Trent Washlands RCA (in Nottinghamshire), is also located within the District.

A4.99 As well as the SSSIs there are areas of semi-improved grassland, road verges and green lane/tracks within these two RCAs, which increase the ecological viability of this fragmented resource.

A4.100 **The River Trent** – Although the river Trent is contained entirely within one of the District’s five RCAs, and has only a small SSSI associated with it, it should still be considered as a specialism of the District due to its national importance for migratory birds and for breeding waders and wildfowl.

A4.101 It also has two associated UK Biodiversity Action Plan and Local Biodiversity Action Plan species (the otter and water vole) and a tidal reach which provides an interesting link with more coastal species.

A4.102 **Hedges and cereal field margins** – The specialist and other semi-natural habitats of the District have all been greatly reduced in extent and have become fragmented, particularly in the second half of the last century. In intensive arable agricultural areas (i.e. most of the District) the only habitat for wildlife species is often the hedges (and hedgerow trees) and the margins of arable fields. These features also provide vital linkages between the remaining areas of semi natural habitat.

A4.103 The Newark and Sherwood Biodiversity Implementation Plan defines key biodiversity features of the District in relation to regional character areas. These are set out in the following tables.

**Table 46 - Key biodiversity habitats in Newark and Sherwood**

Habitat	Status (UK Biodiversity Action Plan habitats and/or Local Biodiversity Action Plan Habitats)	Regional Character Area(s)
Mixed Ash Woodland	LBAP	Mid- Nottinghamshire Farmlands
Unimproved neutral grassland	UKBAP	Mid-Nottinghamshire Farmlands Trent Washlands East Nottinghamshire Sandlands South Nottinghamshire Farmlands
Rivers and Streams	LBAP	Mid- Nottinghamshire Farmlands

		Trent Washlands Sherwood
Ancient species rich hedgerows	UKBAP	Mid- Nottinghamshire Farmlands South Nottinghamshire Farmlands
Cereal field margins	UKBAP	Mid- Nottinghamshire Farmlands Trent Washlands East Nottinghamshire Sandlands South Nottinghamshire Farmlands
Lowland wet grassland	UKBAP & LBAP	Trent Washlands
Reedbed	UKBAP & LBAP	Trent Washlands
Eutrophic and mesotrophic standing waters	UKBAP & LBAP	Trent Washlands East Nottinghamshire Sandlands
Urban and post industrial	LBAP	Trent Washlands Sherwood
Acid grassland	UKBAP & LBAP	East Nottinghamshire Sandlands
Lowland heathland	UKBAP & LBAP	East Nottinghamshire Sandlands Sherwood
Oak-birch woodland	LBAP	East Nottinghamshire Sandlands Sherwood
Wood pasture and parkland	UKBAP & LBAP	Sherwood
Lowland acid grassland	UKBAP & LBAP	Sherwood
Wet woodland	UKBAP & LBAP	Sherwood
Neutral grassland	UKBAP & LBAP	Sherwood

Source: Newark & Sherwood Biodiversity Implementation Plan, 2003

**Table 47 - Key biodiversity species in Newark and Sherwood**

<b>Species</b>	<b>Status</b> <b>(UK Biodiversity</b> <b>Action Plan species</b> <b>and/or Local</b> <b>Biodiversity Action</b> <b>Plan species</b>	<b>Regional Character Area(s)</b>
Water vole	UKBAP & LBAP	Mid-Nottinghamshire Farmlands Trent Washlands

		East Nottinghamshire Sandlands Sherwood
Bats (some species)	UKBAP & LBAP	Mid-Nottinghamshire Farmlands Trent Washlands East Nottinghamshire Sandlands Sherwood
Brown hare	UKBAP	Mid-Nottinghamshire Farmlands Trent Washlands East Nottinghamshire Sandlands South Nottinghamshire Farmlands Sherwood
Barn owl	LBAP	Mid-Nottinghamshire Farmlands Trent Washlands East Nottinghamshire Sandlands
Bullfinch	UKBAP	Mid-Nottinghamshire Farmlands East Nottinghamshire Sandlands South Nottinghamshire Farmlands Sherwood
Otter	UKBAP & LBAP	Trent Washlands
Reed Bunting	UKBAP	Trent Washlands
Great Crested Newt	UKBAP	Trent Washlands East Nottinghamshire Sandlands
Grizzled Skipper	LBAP	South Nottinghamshire Farmlands
Woodlark	UKBAP	Sherwood
Nightjar	UKBAP & LBAP	Sherwood

Source: Newark and Sherwood Biodiversity Implementation Plan, 2003

A4.104 In term of statutory designated sites, the District has one European designated Special Area of Conservation (Birklands and Bilhaugh) and 19 nationally important sites of Special Scientific Interest (SSSIs). These sites make up around 2% of Newark and Sherwood by area. At the National level, around 7% of England is designated as SSSIs. Two of the SSSIs are only partly in Newark and Sherwood (Rainworth Lakes SSSI and Sherwood Forest Golf Course SSSI); both are shared with Mansfield District Council. Furthermore, three SSSIs lie just beyond the District Boundary (Bevercotes SSSI and Clumber Park SSSI in Bassetlaw District; and Strawberry Hill Heaths SSSI in Mansfield District).

A4.105 The SSSI coverage largely reflects the biodiversity specialism's of the District. Inevitably the SSI coverage does not reflect some of the habitats of more local significance such as urban and post-industrial habitats, hedgerows, cereal field margins and rivers and streams. Neither is the national significance of the Trent Valley for birds reflected. It should also be noted that wet woodland habitat is not currently reflected on the SSSI series for the District.

A4.106 The table below summarises the main habitats and condition of SSSIs within Newark & Sherwood District.

**Table 48– Main habitats and condition of SSSIs in Newark & Sherwood**

Site	Main Habitat(s)	Condition
Besthorpe Meadows	Neutral Grassland - Lowland Acid grassland - Lowland	Unfavourable - No change
Birklands and Bilhaugh	Dwarf Shrub Heath – Lowland Broadleaved, Mixed and Yew Woodland - Lowland	Unfavourable - Recovering
Birklands West and Ollerton Corner	Broadleaved, Mixed and Yew Woodland – Lowland Dwarf Shrub Heath - Lowland	Unfavourable - Recovering
Clipstone Heath	Dwarf Shrub Heath - Lowland	Unfavourable - Recovering
Eakring and Maplebeck Meadows	Neutral Grassland - Lowland	Unfavourable - Recovering
Kirton Woods	Broadleaved, Mixed and Yew Woodland - Lowland	Favourable
Laxton Sykes	Neutral Grassland - Lowland	Unfavourable - Recovering
Mather Wood	Broadleaved, Mixed and Yew Woodland - Lowland	Unfavourable - Recovering
Newhall Reservoir Meadow	Neutral Grassland - Lowland	Favourable
Rainworth Heath	Dwarf Shrub Heath - Lowland	Unfavourable - Recovering
Redgate Woods and Mansey Common	Broadleaved, Mixed and Yew Woodland – Lowland Neutral Grassland – Lowland	Unfavourable - Recovering
Roe Wood	Broadleaved, Mixed and Yew Woodland - Lowland	Unfavourable - Recovering
Spalford Warren	Dwarf Shrub Heath - Lowland	Unfavourable - Recovering
Thoresby Lake	Acid Grassland – Lowland Standing Open Water and Canals	Unfavourable - Declining Unfavourable - Recovering Favourable Unfavourable - Recovering
Wellow Park	Broadleaved, Mixed and Yew Woodland - Lowland	Unfavourable - Recovering

Source: Natural England, SSSI Site Background Data, Condition of SSSI Units, (2015)

A4.107 With regards to designated nature reserves, the District has one of national importance, this is Sherwood Forest National Nature Reserve (223 hectares in total); it is one of only 15 regionally and 188 nationally. Locally, there are seven Local Nature Reserves, following the identification of a further four in 2005. There are now a total of 144 hectares. The District’s Local Nature Reserves are:

- Cockglode and Rotary Woods;
- Sherwood Heath;
- Farndon Ponds;
- Tippings Lane;
- Southwell Trail;
- Rainworth Water; and
- Devon Park Pastures.

A4.108 In addition to statutory designated sites, across the whole of Nottinghamshire there are also Local Wildlife Sites. Whilst not protected by law (unless there is overlap with statutory designated site), they identify sites of local nature conservation importance and are used as a tool to apply local planning policy preparation. There are 412 Local Wildlife Sites (LWS) in Newark & Sherwood, occupying a land area of 6414 hectares, which represents almost 10% of the total area of the District. Unfortunately, information on the relative qualitative state of LWS’s is not currently available in a form that could readily be fed into this document.

#### **Historic and cultural heritage**

A4.109 Newark and Sherwood has a rich and varied heritage which is evident across the District’s landscape and built environment. This includes Scheduled Ancient Monuments, Listed Buildings and Structures, Conservation Areas (designated for their ‘special architectural or historic interest’) and Registered Historic Parks and Gardens. The table below provides details on the numbers of such assets.

**Table 49 – Heritage assets in Newark & Sherwood (2011)**

<b>Scheduled Ancient Monuments</b>	72
<b>Listed buildings and structures</b>	1300+
<b>Conservation Areas</b>	47
<b>Registered historic parks and gardens</b>	4

A4.110 Whilst new buildings and structures may be listed, or Conservation Areas extended, the historic built heritage of the District is largely finite. Pressure for development and change in the District has the potential to adversely affect archaeological sites, or the features and character of historic buildings and areas. Newark & Sherwood District Council is keen to ensure that the effects of development on the District’s heritage are adequately assessed, minimised or where necessary mitigated.

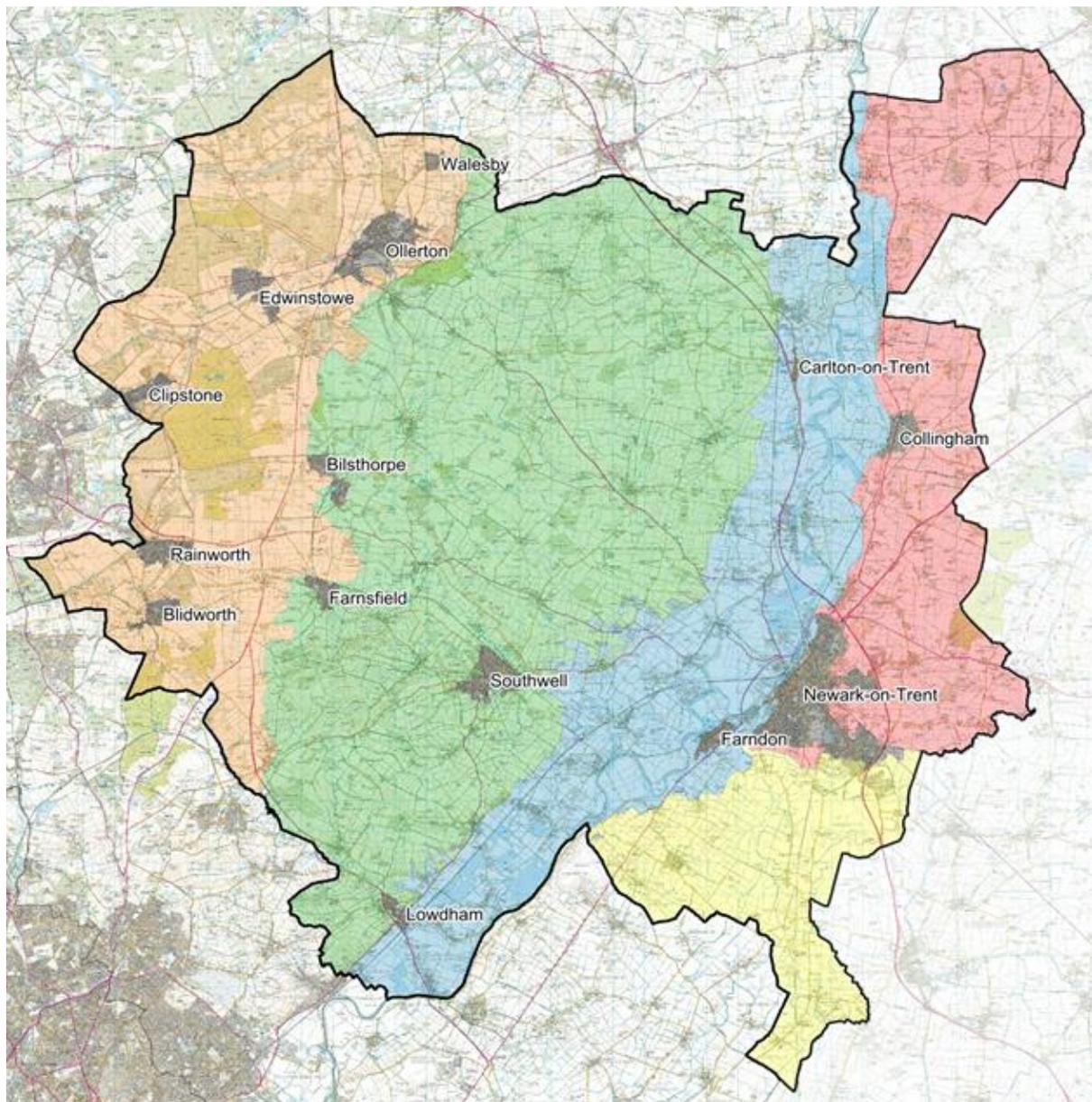
A4.111 In term of the threat to the built environment, the Buildings at Risk Register (covering nationally and locally designated heritage assets in the District) identified 11 assets at extreme risk, 34 at risk and 1 as vulnerable.

### **Landscape**

A4.112 The District does not have any statutory landscape designations. However in broad landscape character terms the eastern/southern area of the District falls mainly within the Trent Valley, which is characterised by a relatively flat and open landscape. The central part of the District is characterised by a gentle undulating landscape with hedged fields and small woods. The western side of the District lies within the area dominated by Sherwood Forest, where the landscape is more distinctly undulating, with a landscape that often offers longer distance views and is made up of a mix of intensively farmed land, broadleaved and mixed woodlands and large pine plantations.

A4.113 Newark & Sherwood is covered by two National Character Areas (NCAs) as defined by Natural England; Trent and Belvoir Vales and Sherwood. At a county level, Regional Character Areas (RCAs) have been defined by Nottinghamshire County Council. With a total of five RCAs falling within Newark & Sherwood; Sherwood, Mid-Nottinghamshire Farmlands, Trent Washlands, East Nottinghamshire Sandlands and South Nottinghamshire Farmlands (see Figure 3.3 below).

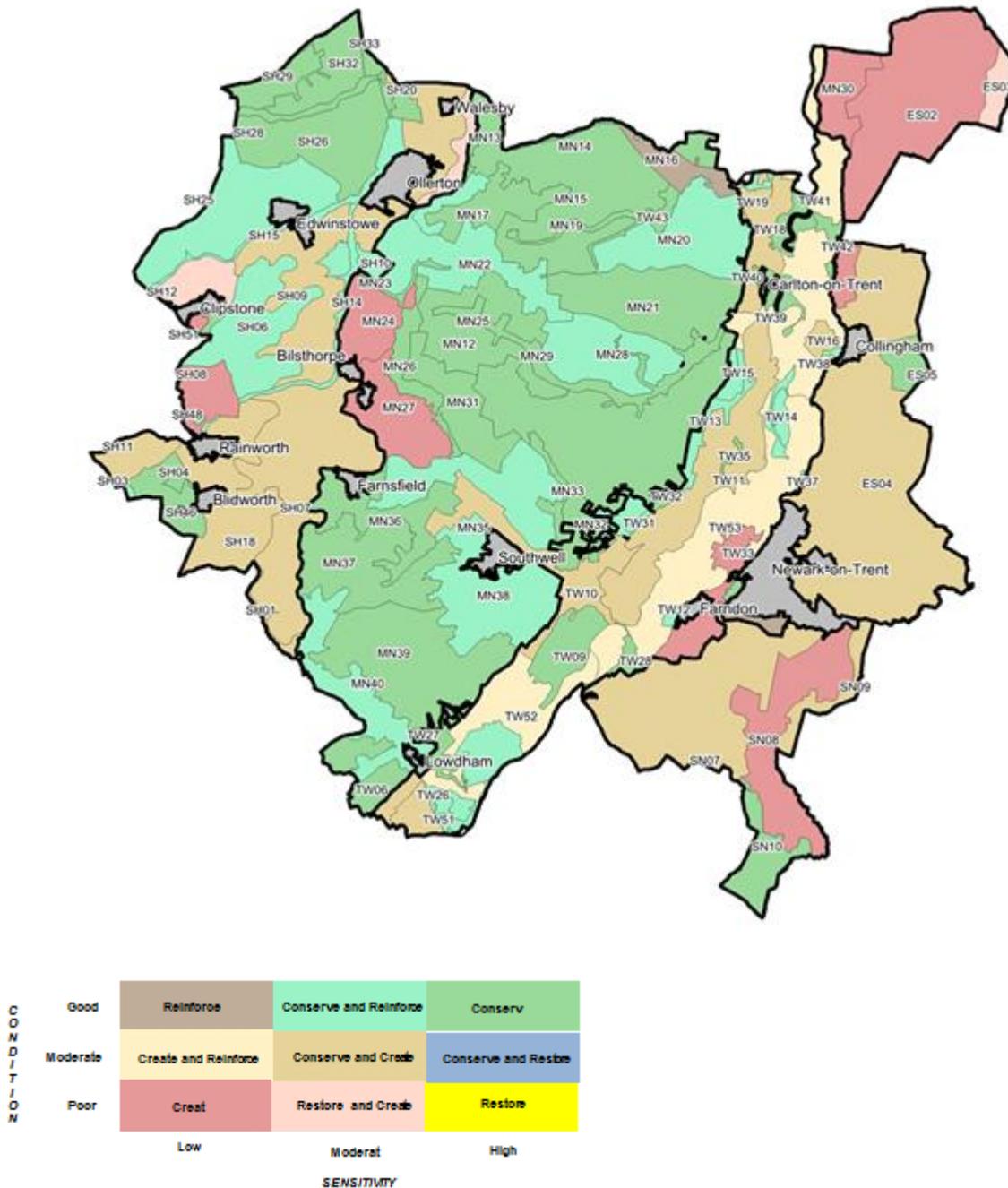
**Figure 3 - Regional Character Areas**



A4.114 Through the District’s Landscape Character Assessment each RCA has been subdivided into manageable survey units known as Landscape Character Parcels (LCPs). Each LCP has been assessed in terms of its individual landscape character. On the basis of key characteristics and obvious similarities the LCPs have been grouped into ‘Policy Zones’. Ultimately each Policy Zone was assessed in terms of its landscape condition and sensitivity and a landscape policy

developed providing a framework for the conservation and restoration of the parts of the Regional Character Areas. Ensuring that landscape character is reflected in decisions which affect its continuing evolution. The intention is not to fossilise change, but to provide a context that will enable policy making, planning and landscape management decisions to be made which respect and sustain the diversity and character of the District’s countryside.

**Figure 4 - Landscape Policy Zone condition and sensitivity**



### Air quality

- A4.115 The Local Air Quality Management (LAQM) process places an obligation on all Local Authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved.
- A4.116 The air quality objectives applicable to LAQM in England are set out in the Air Quality (England) Regulations 2000 (SI 928), The Air Quality (England) (Amendment) Regulations 2002 (SI 3043) and cover Benzene, 1 and 3-Butadiene, Carbon Monoxide, Lead, Nitrogen Dioxide, Particulate Matter (PM<sub>10</sub>) (Gravimetric) and Sulphur Dioxide.
- A4.117 On the basis of monitoring carried out throughout the District in 2014 the overview is that all concentrations were found to be below AQS Objectives. Both the NO<sub>2</sub> diffusion tube monitoring data and the PM<sub>10</sub> data were below their respective objectives at all sites. Most monitoring sites also showed reductions to further below the 40 µg/m<sup>3</sup> objective for NO<sub>2</sub>. It should, however, be noted that the PM<sub>10</sub> monitoring site showed a slight increase from the previous year.
- A4.118 Having considered road traffic sources, other transport sources, industrial sources, commercial and domestic sources and new developments with fugitive or uncontrolled sources the 2014 LAQM Progress Report concluded that there were no new or newly identified local developments which may have an impact on air quality.

### Climate change

- A4.119 The Climate Change Act 2008 carries the duty that net UK emissions for all six 'Kyoto Protocol greenhouse gases' (carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, hydrofluorocarbons and perfluorocarbons) will by 2050 be, at least, 80% lower than the 1990 baseline. Carbon dioxide (CO<sub>2</sub>) is the main greenhouse gas, accounting for about 82 percent of the UK greenhouse gas emissions in 2013.
- A4.120 Local estimates on per capita CO<sub>2</sub> emissions (measured in tonnes of CO<sub>2</sub>) produced by the Department for Energy and Climate Change are detailed below. This data shows that the District has a per capita level of CO<sub>2</sub> emissions that is consistently higher than regional and national figures. Notably the rate in reduction of per capita CO<sub>2</sub> emissions is also much slower than the regional and national levels. Clearly the characteristics of the District may be a contributing factor in both cases, with a large administrative area and population which outside of the main centres is fairly rural and dispersed.

**Table 50 – Per capita CO<sub>2</sub> emissions**

Year	Newark & Sherwood District				East Midlands Total Per Capita CO <sub>2</sub> Emissions	Great Britain Total Per Capita CO <sub>2</sub> Emissions
	Industry and Commercial	Domestic	Transport	Total Per Capita CO <sub>2</sub> Emissions		
2005	4.3	2.7	3.8	10.7	9.6	8.8
2006	4.1	2.7	3.8	10.5	9.5	8.7

2007	4.1	2.6	3.9	10.4	9.1	8.5
2008	4.1	2.6	3.6	10.2	8.8	8.2
2009	3.9	2.3	3.5	9.6	8.0	7.4
2010	4.2	2.5	3.5	10.1	8.3	7.6
2011	3.6	2.2	3.5	9.2	7.6	6.9
2012	4.0	2.3	3.5	9.7	7.8	7.1
2013	4.2	2.2	3.4	9.7	7.7	7.0

Source: Department for Energy and Climate Change, UK Local and Regional CO<sub>2</sub> Emissions Statistical Release (2015)

A4.121 Information on industrial and commercial, transport and domestic consumption of energy from coal, manufactured fuels, petroleum products, gas, electricity and bioenergy and wastes for 2012 is provided below. The data reveals that the District has higher levels of consumption than the regional average but below that found at the national level. Notably consumption by the industrial and commercial and transport sectors is higher than regional and national averages, although this is likely a reflection of the District having particularly energy intensive industries (British Sugar for instance) and its rural nature.

**Table 51 – Energy consumption by sector (measured in gigawatt hours)**

	Total Consumption	Consumption by Sector			Average Household Consumption
		Industry & Commercial	Domestic	Transport	
<b>Newark &amp; Sherwood</b>	3,904.9	1,512.9	946.5	1,417.9	19.2
<b>East Midlands (average)</b>	2,778.4	904.8	886.7	926.8	18.5
<b>Great Britain (average)</b>	3,603.8	1,322.6	1,166.2	1,074.2	20.8

Source: Department for Energy and Climate Change, Total sub-national final energy consumption - 2012 (2015)

A4.122 As recognised within national planning policy the planning system plays a key role in helping to shape places and to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate changes, and supporting the delivery of renewable and low carbon energy and associated infrastructure. Indeed to support the move to a low carbon future, local planning authorities are required to plan for new development in locations and ways which reduce greenhouse gas emissions, actively support energy efficiency improvements to existing buildings and where setting local requirements over the sustainability of buildings to do so in a way which is consistent with the Governments zero carbon buildings policy and adopt nationally described standards.

A4.123 Heat producing renewable energy technologies at the building scale, such as ground source heat pumps, wood heat and solar air or water heating can provide a lower carbon approach to meeting space-heating requirements that would be reflected in reduced consumption of electricity and lower carbon emissions. Small scale renewable electricity generation at the building scale, such as photovoltaic cells and micro wind turbines can contribute to a reduced

energy demand on the grid. Development scale district heating systems and other renewable technologies can also provide a path to carbon neutral development.

A4.124 The Trent Valley which falls within Newark and Sherwood has clear locational advantages in relation to major energy installations due to easy access to the national grid, cooling water and fossil fuel supplies. It has previously been suggested that some former power station and colliery sites could be suitable for re-use for new power generation such as bio-mass and clean coal technology. There is also perceived to be good opportunities for co-firing (using a mix of fossil fuels and bio-energy).

### Fuel poverty

A4.125 Rising energy costs have led to a growth in concerns over ‘fuel poverty’. The table below draws on data produced by the Department for Energy and Climate Change and provides estimates over levels of fuel poverty for the year 2013. Fuel poverty is taken to mean a household which require fuel costs above the national median level, and if they were to spend that amount then they would be left with a residual income below the official poverty line. Key drivers of fuel poverty include the energy efficiency of a property, the cost of energy and household income. As shown in the table the numbers of households in the District which are considered to be in fuel poverty is in line with the wider levels for Nottinghamshire, and below both regional and national figures. However was analysis to be made at a level lower than District-wide it is likely that this would highlight some locations where levels of fuel poverty are greater than the District level. For instance this could be the case in the rural centre of the District where many properties are not connected to a gas supply.

**Table 52 – Fuel poverty**

	Number of households	Number of households in fuel poverty	Proportion of fuel poor households (%)
<b>Newark &amp; Sherwood</b>	49,768	4,750	9.5
<b>Nottinghamshire</b>	341,078	32,120	9.4
<b>East Midlands</b>	1,933,861	201,405	10.4
<b>England</b>	22,582,745	2,346,715	10.4

Source: Department for Energy and Climate Change, Fuel Poverty Statistical Release (2015)

### Renewable energy

A4.126 Historically wind power has been the most prevalent form of renewable energy production within the District. Since 2006, 50 commercial wind turbines have become operational following the granting of planning consent. Significantly a large proportion of these have fallen within the medium-very large classification. Whilst wind power can make a useful contribution to reducing CO<sub>2</sub> emissions sensitivity is needed in considering visual and landscape impact, both individually and cumulatively. Indeed concerns over cumulative impact have been raised in the west of the District where the majority of implemented schemes are located.

**Table 53 - Operational wind turbines (2006 onwards)**

Typology	Number of operational wind turbines
Small (15-30m)	8
Small – Medium (31-50m)	2
Medium (51-80m)	8
Large (81-110m)	9
Very Large (111m+)	5
<b>Total</b>	<b>32</b>

A4.127 In addition to wind energy the number of proposals for large scale solar energy generation has greatly increased in recent years, with three such schemes having gone on to be operational (see table below) since 2011.

**Table 54 - Operational solar farms (2011 onwards)**

Application number	Site area (hectares)	Output (MW)
11/00333/FULM	16.06	4.6
14/00975/FULM	23.92	14.0
14/00839/FULM	27.11	11.65

A4.128 It should not be assumed that renewable energy schemes will continue to be developed in the District at the same rate as in the recent past. Changes to national planning policy on wind energy and cuts to renewable energy subsidies are likely to reduce the number of future applications for significant wind and solar based renewable energy projects.

### Waste management

A4.129 The adopted Waste Core Strategy (2013) covers the period 2011-2031 and estimates that Nottinghamshire and Nottingham produced just over 2.5 million tonnes of waste a year, a drop in the previous average of around 4 million tonnes per year. Construction and demolition waste from building and civil engineering projects, commercial and industrial waste from businesses and manufacturing, and municipal waste which comes mainly from households are the most significant waste streams.

A4.130 In terms of municipal waste Nottinghamshire and Nottingham produced 560,000 tonnes in 2009, down from a peak of 650,000 tonnes in 2006. Recycling rates have also increased significantly over the last ten years with 42% of municipal waste now being recycled or composted. Most of the waste is generated within the main urban areas of the County, though the remaining dispersed rural population also presents its own challenges from a waste management perspective.

A4.131 Businesses and industry across Nottinghamshire and Nottingham are estimated to produce around 900,000 tonnes of commercial and industrial waste each year. This has declined from an estimated 1.3 million tonnes in 2006. It is estimated that around 52% of this waste was recycled in 2009.

A4.132 Construction and demolition waste has historically made up more than half of the waste produced within Nottinghamshire and Nottingham, but this is estimated to have fallen in recent years to around 1 million tonnes per year. There are no local figures but national estimates suggest that the majority of construction and demolition waste (between 80% and 90%) is either re-used or recycled, in some way.

**Table 55 - Estimated amount of waste to be managed (Nottinghamshire and Nottingham) 2011- 2031 (thousand tonnes per annum)**

	<b>Recycling / composting (70%)</b>	<b>Energy recovery (20%)</b>	<b>Disposal (10%)</b>
<b>Municipal</b>	478	137	68
<b>Commercial / industrial</b>	1,030	294	147
<b>Construction / demolition</b>	1,908	-	273
<b>Total</b>	<b>3,416</b>	<b>431</b>	<b>488</b>

Source: Nottinghamshire and Nottingham Waste Core Strategy (2013)

**Table 56 - Indicative additional treatment capacity required (Nottinghamshire and Nottingham) 2011- 2031 (thousand tonnes per annum)**

	<b>Municipal</b>	<b>Commercial / industrial</b>	<b>Construction / demolition</b>	<b>Total</b>
<b>Recycling / composting</b>	93	430	908	<b>1,431</b>
<b>Energy recovery</b>	-	194	-	<b>194</b>

Source: Nottinghamshire and Nottingham Waste Core Strategy (2013)

A4.133 The Waste Core Strategy aims to provide sufficient waste management capacity to meet its needs. In terms of the broad locations for future waste treatment centres the development of small-scale waste treatment facilities are supported in all locations where they will help meet local needs and fit in with character. Beyond this Newark is identified as a location where small – medium sized facilities will be supported in, or close to, the built up area. Clearly it is important that an appropriate scale and distribution of waste management infrastructure is provided for to support future development across the District.

### **Geology and soils**

A4.134 Newark and Sherwood, as part of Nottinghamshire, lies within a broad belt of sedimentary rock, which dips gently eastwards from the Pennine axis of Derbyshire towards Lincolnshire and the North Sea basin. Rocks ranging in age from Upper Carboniferous Coal Measures to the Lower Jurassic form a series of north-south belts with the youngest rocks being found in the east. Outcrops of the Permo-Triassic rocks are by far the most widespread, extending across three-quarters of the county. Clays, sandstones and limestone are predominant rock types.

A4.135 These ancient rocks, which comprise the 'solid' geology of the county are partially buried beneath a relatively thin veneer of unconsolidated or 'drift' deposits, laid down in recent geological past by ice and rivers. These include sand and gravel, alluvium and glacial till.

- A4.136 Contained within the solid and drift formations is a rich and diverse assemblage of mineral resources, which have enabled the County to become one of the largest mineral producers in Great Britain (as discussed below). Deposits of sand and gravel and gypsum are of national importance, and deposits of limestone, clay and oil are also exploited.
- A4.137 In respect of soil quality, biodiversity and agriculture depends on healthy soil. However, changes in farming, pressure from development (including farm diversification) and climate change could threaten soil quality across the District in the future.
- A4.138 The Agricultural Land Classification mapping provided by Natural England is currently the most detailed data available on soil quality – and as advised by the body this is only suitable for strategic analysis. The top three grades (1, 2 and 3a) are taken to be the ‘best and most versatile’ land. This status is reflected in national planning policy which emphasises that where significant development of agricultural land is demonstrated to be necessary areas of poorer quality land should be used in preference to that of a higher quality. However, the mapping provides no differentiation between Grades 3a and 3b.
- A4.139 None-the-less taken at a strategic level the mapping shows the majority of the District, outside of urban areas, to fall within Grade 3 ‘good to moderate’. In addition there is also a substantial area of the centre of the District which is considered to be Grade 2 ‘very good’.

### **Minerals**

- A4.140 Newark and Sherwood District possesses a wide range of mineral resources, with extracted minerals including sand and gravel, clay and gypsum. Where sites are approaching the end of their useful life they will pose a challenge in terms of being returned to a beneficial use.
- A4.141 **Coal** – The coal industry has played a fundamental role in the social and economic development of Nottinghamshire. Many settlements, including a number in the western part of the District, developed principally to serve a particular colliery or collieries. The steady decline of the industry has therefore, had important implications for the social and economic well-being of the entire area.
- A4.142 Despite substantial remaining reserves, the last operational mine within the District (Thoresby Colliery) has now ceased operations. In 1984, the District had six collieries, employing some 7,900 people.
- A4.143 **Coal-bed Methane and Mine Gas** – Given the tradition of mining in the District there may be potential for the capture of coal-bed methane and mine gas from former collieries. Indeed there are active mine gas recovery schemes at Bilsthorpe and Clipstone.
- A4.144 **Sand and Gravel** – In Newark and Sherwood District sand and gravel are won from two geologically distinct resources: the alluvial (river terrace) sand and gravels of the Trent Valley and the sand deposits of Sherwood Sandstone. There are significant operational sites at Besthorpe and Cromwell, and given the resource present within the District the extension of existing and allocation of new sites to meet future need is likely.

- A4.145 **Gypsum** – Nottinghamshire is the largest producer of natural gypsum in the United Kingdom. One of the two main areas of gypsum production in the County lies to the south of Balderton on the east side of the District. In that area, the mineral is worked by opencast methods.
- A4.146 **Clay** – Nottinghamshire supports a locally important brick manufacturing industry. Existing or permitted clay reserves are expected to meet demand extending well beyond the Plan period. Clay is currently extracted from one site in the western part of the District, at the Hanson (formerly Butterly) Brick Works, to the east of Kirton.
- A4.147 **Oil** – Prior to major discoveries in Dorset in the late 1970's Nottinghamshire as a whole was United Kingdom's most important source of on-shore oil. Although the 1970's oil crisis prompted a national resurgence in on-shore oil exploration, no major new fields have yet been found in the County. There are however active oil fields close to Kirklington, Eakring and Egmanton.
- A4.148 **Shale Gas** – Shale gas is the natural gas found in shale rock over a mile underground. It is extracted by hydraulic fracturing which involves injecting water at high pressure to create tiny cracks so the shale gas can flow. From a planning perspective the process (under the control of the County Council as Minerals Authority) consists of three stages; first exploration which seeks to establish whether hydrocarbons are present, second appraisal to gather information over the extent of the deposit, its characteristics and whether it can be economically extracted, and thirdly production/extraction.
- A4.149 The Government is encouraging exploration to determine the potential of the resource. Indeed a first tranche of 'blocks' for exploration have been announced and offered to companies. This first tranche includes those blocks which do not require further environmental assessment under the Conservation of Habitats and Species Regulations 2010. Subject to the outcome of consultation it is expected that a second tranche of blocks for exploration will be announced in late 2015.
- A4.150 Included as part of the first tranche were two blocks within Newark & Sherwood District – including one centred on Harby (SK87b) and one to the north of Newark (SK86c) which includes Collingham and some of the smaller villages to the north and north east of the District. In addition a further block containing Sutton-on-Trent (SK76b) is subject to the appropriate assessment process outlined above and so may be included within any second tranche of exploration licences.

#### **Water Supply and Flood Risk**

- A4.151 The main basis of the District's water supply is a series of aquifer abstractions in a corridor extending northward from Nottingham through Mansfield and towards Worksop. In order to maintain water quality Source Protection Zones have been defined around the abstraction points. In terms of future capacity the Ravenshead South unit was, in 2009, classed as 'over-abstracted' and expected to remain so at least as far ahead as 2019. The Wollaton unit was defined as 'over-licensed' and expected to be re-classified as 'no water available' by 2019, whilst the Hucknall unit was already classed as 'no water available'. The conditions led the Environment Agency to describe the water supply situation as one of 'moderate water stress'.

- A4.152 Accordingly, the groundwater supplies that the District relied on were considered over-worked and future development would worsen the situation without remedial action. Measures were planned to supplement the existing supply, however, and to allow demand on groundwater aquifers to be lessened so that resources can be protected and sustained for the long term. The view of Severn Trent Water was therefore that there were sufficient resources in hand to meet future demand created by development within the District. Though the distribution capacity of infrastructure serving Newark was at the margins of its capacity and required improvement. The need to safeguard usable water resources and incorporate efficiency measures in new built development remains important.
- A4.153 The water quality of watercourses and groundwater / aquifers can be affected by a range of factors. In terms of groundwater and aquifers there are potential issues around intrusion of mine water and nitrate from agricultural practices. This has led to some borehole sources being abandoned – though reinstatement with additional treatment could be considered in the future.
- A4.154 With respect to watercourses the dominance of agricultural activity in the District can lead to nitrate pollution – in particular from fertiliser use on arable land. There is also the risk of spillage from farm chemical, fuel or animal slurry stores, though these are generally limited to discrete locations. As other sources of pollution (e.g. industrial discharges) decline or are better treated, other sources such as diffuse highway run-off pollution become more prominent in terms of the remaining contamination effects.
- A4.155 The rivers and other water bodies within the District form a significant element of the wider natural environment. There are considerable areas of the District which are in a natural or semi-natural stage. A number of such locations are covered by statutory designations, Sites of Special Scientific Interest for example, that are associated directly with water or wetland habitats. These habitats contain significant and wide-ranging biodiversity with past improvements in water quality having led to improvements and expansions in water-based eco-systems. Any future changes in flows or water quality could have significant impact on the existing ecology.
- A4.156 Future development can impact on water quality through demand which draws more upon the resources present in aquifers and rivers reducing the volumes present and exceeding the rate of natural replenishment. Growth in water use can increase volumes of effluent being treated and discharged back into the environment. Future development can help address this through being as water-efficient as possible and drawing on mechanisms which seek to reduce water use. The physical spread of future growth can also lead to impacts such as direct loss of habitat, culverting of watercourses, increased water abstraction and pollution etc.
- A4.157 Sources of flooding can include fluvial / tidal (river), groundwater, sewers, localised surface water and surface water runoff. In fluvial flood risk terms there are two main catchments within the District, the biggest being the River Trent which covers approximately 80% of the District. While the catchment is predominately rural it includes the urban areas of Newark and Trent side villages. The main rivers and watercourse within the Trent Catchment include the River Devon (and its tributary the Middle Beck) are the Beck, the River Greet, Car Dyke, the Fleet, Dover Beck and Cocker Beck.

- A4.158 Its tributaries arise through Eakring and drain predominantly in an easterly direction through Caunton and converge with the Trent just upstream of the Cromwell lock which is generally recognised boundary between the tidal and fluvial reaches of the Trent. The River Greet arises to the south of Farnsfield and flows through the north of Southwell to Rolleston before converging with the River Trent.
- A4.159 The Cocker Beck arises beyond the southern boundary of the District and flows through Lowdham before converging with the Trent near Gunthorpe. The River Devon flows northwards through the District boundary to the south and joins with the Trent to the southwest of Newark. The Middle Beck, a tributary of Devon flows to the south of Newark.
- A4.160 The River Maun and its tributaries forms part of the River Trent Catchment but can be described as a separate drainage catchment within the District. The Maun drainage catchment is served by approximately a fifth of the District area beyond the District boundary to the west and flows in a north westwards direction through Edwinstowe and Ollerton before its confluence with the River Meden at the District Boundary.
- A4.161 The main tributary of the Maun is Rainworth Water. Rainworth Water arises beyond the District Boundary and flows through Rainworth and Bilsthorpe before its confluence with the Maun to the south west of Ollerton. A smaller tributary, the Vicar Water, also arises beyond the District boundary to the west and flows to the south of Clipstone before its confluence with the Maun to the north east of Clipstone. The River Maun is maintained and controlled by the Environment Agency.
- A4.162 A relatively small area of the District in the east contributes to the River Witham which forms part of the District boundary to the east of Newark and Balderton. Minor tributaries, including the Shire Dyke, to the east of Newark and Balderton flow to the River Witham. The Internal Drainage of Upper Witham administers this sector of land drainage catchment.
- A4.163 Traditional fluvial flood risk remains a significant issue in the District with, in 2009, 5.2% of the District lying within the area of highest flood risk (Zone 3 - where the risk of flooding from rivers is 1.0% or greater annually; a 1:100 year probability) and 7.7% of the District within the next zone of flood risk (Zone 2 – where the risk of flooding from rivers is 0.1% to 1.0%). It should be noted however that there is some overlap between the two zones. Unsurprisingly there have been numerous incidences of fluvial flooding across the District. Recently, widespread flooding events in 2007 affected Balderton, Bilsthorpe, Bleasby, Bulcote, Carlton-on-Trent, Caunton, Edingley, Edwinstowe, Egmanton, Epperstone, Fiskerton-cum-Morton, Halam, Kirklington, Little Carlton, Lowdham, Norwell, Ompton, Oxton, Rolleston, Southwell, Staythorpe, Sutton-on-Trent, Thurgarton and Weston. The figure below shows Flood Zone 2 (light blue), Flood Zone 3 (dark blue) and the functional floodplain (yellow).

